

Dragon Medical Network Edition

Administrator Guide

2.7



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Chapter 1: Introducing the NMC server

The Dragon Medical Network Edition with the NMC server helps you meet your expanding medical organization's enterprise level needs. You use the NMC console to manage not only the NMC server, but also multiple Dragon Medical Network Edition Clients from a single central location. This chapter introduces you to the components of the Dragon Medical Network Edition network.

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What's new in this release

What's new in NMC server 5.8

Feature	Description
Enable users to receive product release notifications	When a customer purchases a Nuance product, they can set user in their org to receive notifications about product updates. For more information, visit 'Receive notifications about product release updates'.
Configure Outbound server details and License Type & Partner mappings with Outbound Custom fields	An NMC administrator can configure settings to control how the NMC communicates with the Outbound system. An NMC administrator can also map a License type/partner to an Outbound custom field. For more information, visit 'Configure Outbound server details and License Type & Partner mappings with Outbound Custom fields'.
Disable users after a period of inactivity	An NMC administrator can disable user accounts for users that are inactive for a certain period of time. This feature can be useful to prevent inactive users from logging into NMS for security reasons. The administrator disables user accounts at the organization level. The default inactive period is 0 days. For more information, visit 'Disable user accounts after a period of inactivity'.
View system alerts and notifications	The NMC console now includes new information in alerts and notifications. For more information, visit 'View system alerts and notifications'.
Set the storage location of NMC server log files	An NMC administrator can set the storage location of NMC server log files. For more information, visit 'Setting the storage location of NMC server log files'.
An NMC user with a locked account cannot change their password	After an NMC user is locked out of their account, the user cannot change their password. For more information, visit 'User will be locked out after _ number of failed login attempts' in 'Configure product settings for an organization' in the NMC console Help.
The NMC server locks a user account after a specific number of incorrect password attempts	If an NMC user enters an incorrect password a specific number of times, the NMC server locks the user account of the NMC user. For more information, visit 'User will be locked

Feature	Description
	out after _ number of failed login attempts' in 'Configure product settings for an organ-ization'.
View information about important NMC events	In the NMC console, the Alerts table includes information about significant NMC events. Use this information to identify and monitor important and recurring server events. For more information, visit 'Monitor important NMC events' in 'Analyzing audit events'.
New name for the NMS Suite Installer for SAS on- premise	In NMC server 5.8, the filename for the NMS Suite Installer .exe file for SAS on-premise is: "NMS_Installer_DragonMedicalServer_On-premise.exe"
Viewing CAPD Content Pack licenses in the NMC console	In the NMC console, CAPD Content Pack licenses are only visible to NMC administrators that have the Product Manage CLU privilege.
Migrating Step-By-Step commands to the hosted NMS server	The cloud migration tool can now migrate Step-By-Step commands from an on-premise NMC server to the NMC server hosted by Nuance.
	For more details, view the Cloud Migration Tool guide.
Temporarily disable the ability to delete an organization	On the NMC server hosted by Nuance, the ability to delete an organization is now turned off temporarily.
License report email notification	A license report is now sent to customers that use the following products: -Dragon Medical Server -Dragon Medical Network Edition -Dragon Medical Advisor
	The report contains information about the number of assigned or granted licenses for each product.
	Reports sent to an enterprise customer do not show information about the enterprise mode license.
Dragon Medical Practice Edition license and privilege	A Dragon Medical Practice Edition license and privilege is available for customers that use the Dragon Medical Practice Edition product.
	An NMC server administrator with the privilege can view the Dragon Medical Practice Edition license in the License Type field and issue a Dragon Medical Practice Edition license when creating a new user account.

Feature	Description
Enable or disable support for rich Internet applications	You configure the 'Enable RIA support' option to enable or turn off support for rich Internet applications (RIA). You set the 'Enable RIA support' option at the group or user level in the NMC console. The option is enabled by default. For more information, view 'Setting Dragon voice command options for provider/user groups' or 'Setting user account Dragon options > 'Setting User Account options' in the NMC server Help.
New reset password message	When an administrator resets the password on the Forgot Password page, the NMC console displays the following message: "An email will be sent with a link to reset your password. If you do not receive this email in a few minutes, please check your spam folder.". For more information, view 'Reset the password for an NMC console user' in the NMC server Help.
Prevent client zero length passwords	Enable the 'Do not allow empty passwords' setting (System settings > Nuance Management server) to prevent client users from creating empty passwords. The setting overrides the 'Minimum password length_characters' setting (Organization Details > Products > Password Settings). The 'Do not allow empty passwords' setting is disabled by default.

Dragon Medical Network Edition Overview

The *NMC server* can help you meet your expanding medical organization's enterprise level needs. You use the *NMC server* to manage multiple *Dragon Clients* from a single central server.

Network setup is now straightforward and efficient when you use the *NMC server* to apply consistent settings to many workstations running *Dragon Client* throughout the facility, changing multiple settings on the *NMC server* with the click of a mouse on its *NMC console*.

You can take cross-network action on *Dragon* clients from a central *NMC server*.

- Create multiple sites where *Dragon Clients* are installed and assign the same backup location, master user profile storage location, and amount of archive storage/playback space to all users on one site in a single stroke.
- Grant, revoke, and manage all dictating users or healthcare providers (Physician Author and Non-Physician Author) and administrators (NMC Administrator) licenses, including viewing the number/type of licenses used/still available.
- Create groups of users and then assign entire groups to one or more sites, all at one time.
- Search through groups of users for those associated with a particular site.
- View/access *Dragon* logs on every *Dragon Client* workstation.
- Initiate, schedule, and monitor acoustic/language model adaptation processes—monitoring each process for active versus idle state, start time, completion time, duration, and priority.
- Audit session events across the entire network (who logged on when and other related events)
 for a particular slice of time or particular user.
- Display a complete list of all downloaded updates and approve or not approve installation of them—all from a single window.
- Create user accounts for users, then use simple software tools provided to quickly upgrade old user profiles, then associate upgraded profiles with new user accounts.
- Receive messages for command updates, medication updates, software updates, notifications, and license expiration notifications in a single location.
- Approve command and medication updates for download.

- Choose to encrypt all data for all dictating users in your organization.
- Choose to upload speech data to Nuance's Research department for particular users or all users in your organization.

These features help you to readily manage a network of Dragon Clients.

Dragon Medical Network Edition components

Dragon Medical Network Edition is made up of software modules that include clients, servers, databases, user profile directories, and web services that integrate with one another. The modules are in these groups:

- *NMC server* components
- *Profile Optimizer* components
- Dragon Medical Clients
- Master user profiles directory (on any server of the network or on its own machine)
- Nuance hosted servers

NMC server components

The NMC server components are:

- NMC server Main Web service that drives DM Network Edition and helps it interact with external clients and servers by carrying out several vital tasks involving allowing user access, determining settings on servers and clients, and storing information about user preferences and transcription formatting.
 - The NMC server also stores user identification and related administrative information centrally, keeping user profiles available at any site the user travels ("roams") to within the hospital and its affiliate facilities, whether the machines are located in different offices of the same site or at other sites in distant cities.
- NMC console An interface to the NMC server for managing set up of all Dragon Medical Clients on the network.
- NMC server SQL Database Houses the SQL database that stores NMC server information about your organization, licenses, sites, users, groups, tasks in process, and messages/downloaded package approvals.

You install the *NMC server* and the *NMC console* on the same machine; however, you have the option of installing the database on the same or a separate physical server on your network.

Profile Optimizer components Dragon Medical Clients

Profile Optimizer components of include:

- Profile Optimizer service Manages the iterative learning and integration of each user's unique speaking/pronunciation patterns by scheduling two processes, Acoustic Model Optimization (often referred to as simply *Acoustic Optimization* or ACO) and Language Model Optimization (LMO). The ACO process integrates information about how the individual dictating speaks and pronounces words while the LMO process integrates information about words and phrases most likely to occur in the context of the particular user's speech/composition (writing) style and combines that information with known data about speakers of that user's language with the user's accent, if an accent is applicable.
- **Profile Optimizer Speech Nodes** Modules that carry out the Acoustic Optimization (ACO) and Language Model Optimization (LMO) for each dictating healthcare provider.

Dragon Medical Client — Receives and interprets user or healthcare provider dictation, producing text corresponding to each user's speech. The *Dragon Medical Client* sends the text into a target application, such as an electronic health record (EHR) system, and also preserves text and audio in the speech profiles so that the optimizer can process it.

Master user profiles directory

Master User Profile Directory — Central storage area for master user profiles for dictating providers. A single central storage location applies to a particular site in DM Network Edition. A master user profile contains the accumulated speech information for a particular healthcare provider from all the *Dragon Medical* client workstations where that person has dictated, enveloping the language the user speaks, the accent (if applicable) used, vocabulary or vocabularies, and microphone and/or dictation recording device. As the user dictates, over time, the NMC server and its *Speech Nodes* learn the particular user's speech patterns and integrate them into that individual user profile. These user profiles are called *roaming user profiles* in other editions of *Dragon Medical*, because their existence at a central location allows speakers to "roam" from location to location and work with the same profile. (These profiles are unrelated to Microsoft Windows user profiles.)

Nuance hosted servers

Nuance hosts servers and services at its headquarters that your DM Network Edition network interacts with:

■ **NuanceLink** — Hosted by Nuance on the Internet. Automatically downloads various updates to the *NMC server* over the Internet.

Behind the scenes web services on the *NMC server* help it interact with all of these clients and servers as well as carry out its own processes to manage the entire DM Network Edition network.

Who works on the network

Two types of people work on the network:

- **System Administrators** Manage the entire system through the *NMC console*.
- Users or Healthcare Providers Dictate using the *Dragon Client*.

Planning your configuration

After you successfully install the NMC server and the NMC console (see the DM Network Edition Deployment and Installation Guide), you can begin to enter information about your organization. The procedure below walks you through the tasks you take and then refers you to other sections for more detailed information on each step.

Before you begin to enter specifics into the *NMC console*, you need to gather required information delineated below. Having these lists available in advance saves time and provides a framework you can use to develop the configuration that works best for your facility.

- Names of all people who will administer the system
- Names of all providers/users that will dictate using the *Dragon Medical Client*
- Groupings of providers/users based on the *Dragon* settings and options they will use
- Names of all locations within your organization where the system is deployed; a site in Dragon Medical Network Edition is one or more locations all storing master user profiles in the same directory folder
- Names/IP addresses of all the computers that will run the *Dragon Medical Client*
- Names of computers and full UNC paths to all locations where you expect to store the master user profiles for providers/users (formerly called master roaming user profiles)
- Names of computers and full paths to data distribution locations
- Names of computers and full paths to backup locations

Recommendations

Nuance recommends that you plan the naming of the components of your organization and the structure of your groups before you begin to configure *Dragon Medical* for your facility.

- Site names should reflect the set of master user profiles for providers/users associated with the site. For example, if you divide your user profiles by location, or by medical specialty, you should use that location or specialty in the name of the site, as it is more helpful than using Site 1, Site 2, and so on.
- Group names should reflect the user accounts that are members of each group. For example,
 you could use Cardiology, Pediatrics, or Emergency Medicine. However, if you have more

than one of these types of groups, you should distinguish the group name by, for example, adding the location; for example, **Pediatrics-Longwood**, **Pediatrics-Northwest**.

For your convenience we have included a Provider/user Groups Worksheet at the end of this section to help you analyze the needs of the groups in your organization. See *Provider/user Groups Worksheet* on page 15

Configuring your organization

As part of the initial configuration, Nuance provides the following default components:

- Organization
- Site
- NMC Administrators Group
- Dragon Medical Network Edition Group
- NMC Administrator User Account

You will rename these components to meet the needs of your organization.

Prerequisites:

- Encrypted license key: Nuance sends this key by e-mail to your designated contact person.
- **Default login credentials:** Use the following information to log in to the *NMC console*:

User Login: Admin

Password: password



To configure your organization

1. Log in to the *NMC console* using the credentials above.

See Accessing the NMC server: Logging in through the NMC console on page 18.

2. Rename the default site.

See Viewing, modifying, and deleting sites on page 98.

3. Rename the default administrator group.

See Viewing, modifying, and deleting groups on page 123

4. Rename or delete the default administrator user account.

See Viewing, modifying, and deleting a user account on page 192.

5. On the menu bar click **Licensing**, and then click the **Import License Key** icon.

The **Import License Key** window opens.

- 6. Copy and paste the encrypted license key from the e-mail into the **License Key** text box.
- 7. Click **Show Information**.
- 8. Click **Import**. The *NMC server* decrypts the license key and generates the licenses on your system where they become available for use.

Steps to configuring other objects in your organization

When you have finished the steps above, you are ready to create and configure user accounts, groups, and, if necessary, sites required by your facility. The list below summarizes the configuration process and the references give you access to more detailed information on each step.

- 1. Create and configure sites (see *Configuring a site in your facility* on page 68).
- 2. Create groups for individuals who will either administer the *NMC server* or use *Dragon Medical* for dictation (see *Understanding groups* on page 105).
- Create user accounts that assign each provider/user or server administrator in the *Dragon Medical* system a user name and password (see *Creating user accounts* on page 130).
- 4. Install *Dragon Medical* clients on local and remote workstations of your organization. For details, refer to the *DM Network Edition Installation Guide*.
- 5. Upgrade user profiles from previous versions of *Dragon Medical* (see *Upgrading a user profile to DM Network Edition Version 2.7* on page 235).

Organization (Facility Name) Site 1 Site 2 Uses 1 Master Profile Path Uses different Master Profile Path Group 3 Group 2 Group 1 Group 1 NMC Author Role **Author Role** Author Administrator Administers settings Dragon Settings Different Dragon **Dragon Settings** Settings for All sites, groups, and users Users Administrators & Users Administrators

Dragon Medical NMC server Configuration

Notes:

Users

- Nuance recommends that you place all master user profiles for a single site in the same subdirectory of the Master User Profiles directory.
- In most organizations, user accounts should only be added to more than one group if the same user will both dictate with *Dragon Medical* and administer the *NMC server*.
- If a user account belongs to two groups, the settings for the group listed first under *Group Memberships* supersede the settings for the other groups the provider/user or administrator belongs to. Likewise, if a group belongs to more than one site, the settings for the site listed first for that group supersedes the settings for other sites. For more information on relationships between settings for sites, groups, and user accounts, see *Understanding groups* on page 105.

Provider/user Groups Worksheet

Type of setting or option	Action controlled by setting or option
Vocabulary	Default vocabulary
Administrative settings	Anchor dictation box
	Mouse motion and speed
Types of commands	Mouse motion and speed
	Enable HTML support
	Enable commands in HTML (web page) windows
	Dictate "Click" to select hyperlinks
	Recognition mode switching
	Web search
	Desktop search
	Email/calendar
	Cut shortcuts
	Delete shortcuts
	Copy shortcuts
	Variable delimiters
	Microsoft Word
	Microsoft Excel
	Microsoft PowerPoint
	IBM Word Perfect
Auto-Formatting	General
	Capitalization
	Numbers, Units, Dates
	Abbreviations
	Miscellaneous
Schedules	LMO
	ACO

For information on all available settings, see Setting Dragon voice command options for provider/user groups on page 220.

Accessing the NMC console

The NMC console is a web-browser based site that is part of the overall NMC server system. The NMC console supports many functions for Nuance Healthcare applications, including reporting for iChart/DESS, and eScription.

When you install the NMC server, a default user account, called the admin account, is created automatically. The admin account has a license type of 'NMC Administrator'. The admin account includes elevated access to NMC server features and services, including Dragon Medical Mobile Recorder configuration.

Steps for accessing the NMC console

 Open Internet Explorer and type in the following address in the address bar: http://nms.nuancehdp.com/NMCHTML.

Accessing the NMC server: Logging in through the NMC console

Once the server is running, you use the IP address or name of the machine where the server was installed to access the server and configure it. After you have this required information, you can then access the server from any other machine on your network where you have installed Nuance certificates (see the *Dragon Medical Network Edition Installation Guide*) by taking these steps:

- 1. Open a browser window.
- 2. In the URL line of the browser, enter https://<servername>/NMCHTML.
- 3. Click **Log in**. (You should change the password before you exit the *NMC console*.
- 4. The **Home** page appears.

This page displays links to the various features of the server:

- 5. From here, you can view:
 - User Accounts—Each person who needs to use the NMC server (administrators) or to use a Dragon Client (users or healthcare providers who dictate) requires a user account with a user name and password to gain access. People who are administrator users interface with the NMC console only to manage the system and people who are Dragon Medical Author users (healthcare providers) access only Dragon Clients to dictate. As an administrator, you can add a user account, search for a particular user account, and/or change a provider's/user's user account information and/or settings.
 - Groups—You can assign users to logical groups, such as Cardiologists or

 Outpatient Clinic MDs, that identify either the specialty, locale, or another unifying characteristic of the group members, but you usually group members together who are using the same *Dragon* settings and options, including formatting options for the results of dictation.

 Users in a group should also store their user profiles in the same location. Once users are in groups, you can change the user settings for all members of the group at once. Once you assign the same settings to all group members, you can later modify those settings for a single user in the group. You also use groups to assign levels of NMC console administrator access.

- Licensing—You can view the number of administrator, Physician Author, and Non-Physician Author licenses that your organization has purchased from Nuance, how many are assigned, and how many are still available. In addition, you can grant and revoke those licenses.
- Utilities—View Profile Optimizer items, Speech Node collections, logs, the user profile
 association tool, launch the cloud migration tool, view and send messages, approve medication updates, and re-submit dictation.
- 12. Before you proceed, if you are not planning to configure the *NMC server* in Active Directory, you should change the password of the initial login account Nuance provides. To change the password, refer to *Change the administrator password* on page 21 and then return here.
- 13. To access and add to your organization information, proceed to Accessing and adding to your organization data on page 28.

Note:

A provider or user that is affiliated with multiple independent practices or organizations, will find that each practice or organization has a distinct organization ID. In addition, each practice or organization can assign that provider/user a different user name and password.

Logging into the NMC console using LDAP/AD credentials

You can enable a user to log into the NMC console using their LDAP/AD credentials.

Afterwards, to view the NMC console login page that displays the LDAP/AD login fields, the user must access https://<servername>/NMCHTML/?authMode=ad.

The user enters:

- 1. Domain\Login
- 2. Password

The NMC console logs the user into the system.

Requirements for enabling LDAP/AD logins

- 1. You must add a Domain with an LDAP address to your organization.
- Your on-premise NMC server must be able to communicate with the LDAP server.
 For NMC server in the cloud, the cloud NMC server must be able to communicate with your LDAP server.
- 3. You must add an NTLM credential for the Domain to the NMC server user account of each user.

To view details about how to set up these requirements, see **Configuring LDAP**.

Change the administrator password

- 1. In the upper left corner of the NMC console, click
- 2. Select Change Password and the Change Password dialog box opens. After you have logged in for the first time, this dialog box is where you change the password of the NMC Administrator account that Nuance provides for initial login. In the User name text box, you can change the name of the user ID that Nuance sent you. Enter your old password, then the new password. Then confirm the new password in the Confirm password text box and click OK).

Configure the NMC server to support the lost password and reset password workflows

- 1. Enable the NMC server to use SMTP mail delivery:
 - Log into the NMC console using a user account with access to change global System Settings.
 - ii. In the top left corner of the NMC console, click on and select **System Settings**.
 - iii. Expand the **SMTP** section.
 - iv. Enter in the appropriate details for the desired SMTP server.
 - v. To test mail delivery, fill in the **To** and **From** fields and click **Test**. Wait up to 5 minutes to ensure that the email address in the **To** field receives the email.
 - vi. Click Save.
- 2. Only for multi-node NMC server systems:

Note: The following steps are not required for single node systems. On single node systems, <servername> defaults to the server that the NMC server is on.

- i. In the System Settings, expand the Nuance Management Console section.
- ii. In the NMC Portal Base Address field, enter the root of the NMC console (i.e. https://<servername>/nmchtml). The NMC server uses this address to create the link that the user clicks on in the password reset email.

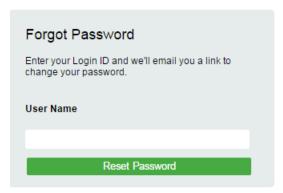
Reset your password on the NMC console Login screen

To be able to reset your password on the NMC console login screen:

- You must have an email address in your user account. An administrator sets your email address in the **Email** field in the **User Account Details** > **Messaging** > **Email** section.
- (NMC server on-premise only): An administrator must set the Password reset Email
 template option. For details, visit Set the template for the forgot password email that users
 receive.

Steps for re-setting your password

- 1. Perform the steps in <u>Configure the NMC server to support the "lost password" and "Reset password" workflows.</u>
- 2. On the NMC console login page, the NMC console user clicks the Forgot password button.
- 3. The NMC console displays a page that contains the **User Name** field. Enter your NMC console user id into the **User Name** field.



- 4. Click **Reset Password**. An email is sent to the email address that is associated with your NMC server user account. The reset password link is valid for 1 hour. If an error occurs, the NMC console displays a notification that contains information about the error.
- 5. Login to your email and open the 'forgot password' email sent to you from admin@nuance.com.

6. In the email, click 'Click here'. The NMC console displays a page that lets you enter a new password.



- 7. In the **New Password** field, enter the new password.
- 8. In the **Confirm Password** field, reenter the new password.
- 9. Click Submit. If the new password matches the confirm new password, the NMC console displays the NMC console login screen. Otherwise, the NMC console notifies you that the two passwords do not match, and allows you to go back to the 'Forgot password' screen to start again.

Reset the password for an NMC console user

To be able to reset a password for an NMC console user:

- The user must have an email address in their user account. You set the email address in the Email field in the User Account Details > Messaging > Email section.
- (NMC server on-premise only): You must set the **Password reset Email template** option. For details, visit Set the template for the forgot password email that users receive.
- You must have the "Create Organization" grant.

Steps for re-setting the passwords of NMC console users

- 1. Perform the steps in <u>Configure the NMC server to support the "lost password" and "Reset password" workflows.</u>
- 2. In the NMC console, in the **Sites** area, click **Organization Overview**.
- 3. On the **Manage Organizations** screen, in the navigation tree, expand a site to view the groups that are associated with the site.
- 4. Click on a group.
- 5. On the right-side of the screen, right-click a user, and select **Send reset password link**.
- 6. Click **Send reset password link**. The NMC console displays a message to notify you that the email has been sent to the user. The reset password link is valid for 14 days.

Set the template for the forgot password email that users receive

This topic is only for NMC server on-premise customers.

You can set the template of the 'forgot password' email.

The template is a .html document that contains the format and content of the email.

Content fields you can include in the email template

A link to the password reset page: id="nmsresetpwdlink"

The NMC server replaces the href for this link with the correct URL to the NMC console 'Forgot Password' page.

For example, if you include Visit the Password reset page in the html template, the following appears in the email:

```
<a id="nmsresetpwdlink" href='https://nms-qa2.nu-
ancehce.com/nmchtml/PasswordResetPage?key=20c17b4a-eea3-4847-86b3-
7e2e8fee9f84'>Visit the Password reset page</a>
```

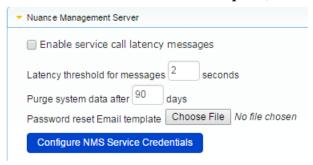
Default template content for the forgot password email

If the .html document for the template does not contain the id setting, the NMC console uses the following default template:

```
<html> <body> <h1>Nuance Account Reset </h1>To Complete your Account Reset, please visit the <a id=""nmsresetpwdlink"" href=""">NMS Account Reset Page</a> </body> </html>
```

Steps for setting the template for the forgot password email

- 1. In the NMC console, navigate to **System Settings** -> **Nuance Management Server**.
- 2. Beside Password reset Email template, click Choose File.



- 3. Browse to the location of the .html file that contains the formatting for the email.
- 4. Double-click the .html file.
- 5. On the **System Settings** screen, click **Save**.

Accessing and adding to your organization data

Once you have accessed the *NMC console*, you are in the **Home** tab. From here you can view your organization information and enter details about your organization by taking several steps.

Notes:

- Find and manage items and data in an organization. For details, see <u>Finding and managing</u> organization data.
- Many organization level options are now located on the Organizations Details screen on the
 Product tab. For details, see Configure product settings for an organization.
- Typical enterprises have only one Nuance organization GUID, a single string of numbers and letters that Nuance assigns to you as a customer. That identifier is for your entire organization.
- 1. The NMC console contains the **Manage Organization** screen where you can:
 - View a list of the organization's Sites. Initially, you see the Default site. You later change
 this site's name to match one of your sites and create additional sites as well.
 - View a group.
 - Expand a site.
 - View the users that belong to a group by selecting the group. Users are displayed on the right side of the screen.

More About Nuance Supplied Groups and Licenses

- The NMC Administration group includes two initial user accounts, one the account you used to log in for the first time. Nuance gives you both of these user accounts with gratis
 NMC Administrator licenses, the type of licenses required to set up the network in the NMC server through the NMC console.
- The Dragon Medical Network Edition group does not include any initial user accounts.
 When you create user accounts for dictating providers, you can add them to this group, or
 to other groups you create, and assign each provider either a Physician Author or NonPhysician Author license. Nuance embeds the author licenses you have purchased in your
 license key.
- To import author licenses and any additional **NMC Administrator** licenses you purchased, refer to either *Obtaining and applying licenses* on page 202.
- 2. To view or modify the organization's information, click the **Details** icon in the **Organizations** ribbon.

Organization Details—General tab

You need to fill in the following fields:

- **Organization name**: Change **Default** to the name of your organization.
- **Contact name**: Enter the name of the person Nuance should contact to interface with your organization.
- Email: Enter the email address of the person in your organization that Nuance should send email to.
- **Organization ID**: You see the organization identifier that Nuance assigned to you and that you entered during the installation process. You can always find this identifier here.
- **Date Created**: The date the organization was created.

Organization Details—Address tab

■ Street 1, 2, and 3: Enter the address of your organization's headquarters. Individual sites of the organization show the address of its other particular facilities.

■ City, State, Zip, Country: Fill in the City, the State (to the right of the City field), the Zip code (below the City field), and the Country of your organization's headquarters. Individual sites of the organization show the address of its other facilities.

Organization Details—Products tab

■ Use the settings on this page to set organization level options for your products. For more details, see <u>Configure product settings</u> for an organization.

Organization Details—Organization Tokens tab

■ Use the settings on this page to create a token for an organization. For more details, see Creating Organization Tokens.

Organization Details—Domains tab

■ Use the settings on this page to add an Active Directory connection string. For more details, see Set the Active Directory Connection String.

Using LDAP or Active Directory Single Sign authentication with NMC server in the cloud

If you want to use LDAP or Active Directory Single Sign On for your authentication, and are using NMC server in the cloud, you must install the Local Authenticator or Call Forwarder.

- Install the Call Forwarder if you are using NMC server 4.x client applications.
- Install the Local Authenticator if you are using NMC server 5.x client applications.

You install the Local Authenticator or Call Forwarder on a server that is accessible to both the cloud NMC server and your Dragon Clients. Once a client authenticates with the Local Authenticator or Call Forwarder, the cloud NMC server is used for all other client requests; using the session the client was granted during authentication.

If you want to use Dragon's native authentication, you do not need to install the Local Authenticator or Call Forwarder.

The cloud NMC server cannot test LDAP credentials inside your organization. The Local Authenticator or Call Forwarder fills this gap by testing LDAP credentials. If they pass verification, the Local Authenticator or Call Forwarder sends the credentials to NMC server in the cloud for processing.

The Local Authenticator or Call Forwarder is installed on premise. No SQL Server or configuration is required.

Local Authenticator or Call Forwarder logs

The Local Authenticator or Call Forwarder use the same service trace logs as the cloud NMC server. These logs can be found in the same location as the NMC server logs:

C:\ProgramData\NMS\Logs

Deciding where to Install the Local Authenticator or Call Forwarder

You install the Local Authenticator or Call Forwarder on a server that is accessible to both the NMC server and to the Dragon Clients. You cannot install the Local Authenticator or Call

Forwarder on an NMC server.

If you install Local Authenticator or Call Forwarder on a separate server:

- Advantages: You don't need to use a whole server just for the Local Authenticator or Call Forwarder.
- Disadvantages: Dragon clients will need to be reconfigured to point to the new server as a target.

Installing the Local Authenticator

What you require before you begin:

■ The organization token created in your cloud organization. You need to enter it during the Local Authenticator installation.

After you have your organization token, complete the following steps to install the Local Authenticator:

- 1. On the NMC console, navigate to **Utilities** > **Tools**.
- 2. Click Install local authenticator.
- 3. After the .exe file download is complete, double-click the .exe file.
- 4. Select the language for the installation and click **OK**.
- 5. Click Next.
- 6. Enter your user name and the name of your company, click **Next**.
- 7. Choose a location for the installation and click **Next**.
- 8. Enter your organization token and click **Next**.
- 9. Click Install.
- 10. On the **InstallShield Wizard Complete**, click **Finish**.

Installing the Call Forwarder

What you require before you begin:

■ The organization token created in your cloud organization. You need to enter it during the Call Forwarder installation.

After you have your organization token, complete the following steps to install the Call Forwarder:

- 1. On the NMC console, navigate to **Utilities** > **Tools**.
- 2. Click Install call forwarder.
- 3. After the .exe file download is complete, double-click the .exe file.
- 4. Click Next.
- 5. Choose a location for the installation and click **Next**.
- 6. Specify the user account to use.
- 7. To create a user during the Call forwarder installation, click **Create New User**, fill in the fields on the **New User Information** screen, and click **OK**.
- 8. Click Next.
- 9. Enter your customer token, and click **Next**.
- 10. Click Install.
- 11. When the installation process is complete, click **Finish**.

Setting up the NMC server to run Active Directory Services

You can use Active Directory Services to manage your DM Network Edition network. Ideally, you should decide to use Active Directory Services before you install the DM Network Edition network because enabling Active Directory Services requires that you perform specific steps during the installation process. However, you can enable Active Directory Services before or after you have installed the DM Network Edition network.

Enabling Active Directory Services

- 1. Install SQL Server 2008.
- 2. Creating NMC Administrator Account in NMC server for Active Directory Administrator:
 - Log in to *NMC server* using the admin login Nuance provides.
 - Prepare to create user accounts by changing the name of the organization/site Nuance provides to match your organization and site.
 - Create an NMC Administrator user account for the Active Directory administrator. See
 Create a user account.
 - If you would like, create all other user accounts now; or you can create user accounts later.
 - Create Single Sign-On User Accounts: If you want to set providers up to log in only
 once, you can set up Active Directory Single Sign-On user accounts (they are optional); see
 Creating Single Sign-On user accounts on page 44. You need to create these accounts before you
 can associate a user account with an already existing upgraded master user profile.
- 3. Set the Active Directory connection string.
- 4. Continue to configure the NMC server as Active Directory Administrator
 - Follow instructions in the NMC console Help.

Creating an NMC Administrator account for Active Directory

To create the **NMC Administrator** account for the Active Directory administrator:

- 1. Install the NMC server.
- 2. Log in to the NMC server through the NMC console.
- To prepare to set up user accounts required for Active Directory in NMC server, you need to first:
 - Change the name of the default organization to your organization's name. For more details, see *Accessing and adding to your organization data on page 28* in the NMC console Help.
 - Change the name of the default site in that organization to your site's name. For more details, see *Configuring a site in your facility on page 68* in the NMC console Help.
- 4. Create an **NMC Administrator** user account for the Active Directory administrator to use when logging in to the *NMC server*. Make sure the login you assign in *NMC server* matches an existing login in Active Directory.
- Assign an NMC Administrator license to the new account for the Active Directory administrator.
- 6. You can create other user accounts at this time, but if you are not ready to create them, you can create them later, as long as every NMC server user account login you assign matches an existing login in Active Directory.
- 7. Proceed to the next subsection.

Set the Active Directory Connection String

Complete the following steps to add an Active Directory connection string:

- 1. Log in to the *NMC server* through the *NMC console*.
- Once you have searched for and selected an Organization, in the **Organizations** section, click the **Details** icon, then click the **Domains** tab.
- 3. Click **Add**. The **Domain** dialog box appears.
- 4. Enter the following:
 - Name: Your domain name.
 - Active directory connection strings: The Active Directory connection string for that domain.

For example, LDAP://nuance.com.

Ask your Active Directory domain administrator for the appropriate string.

- 5. Click **Save** to save your changes.
- 6. Repeat steps 2-4 for every domain that you want to set up.

Once Active Directory is on, the *NMC server* sends all authentication requests to the server you specified in the connection string value. You can then take actions to set up and manage your network using Active Directory Services. For information on using Active Directory Services, refer to the documentation Microsoft provides.

Configuring LDAP

To configure LDAP, you must perform tasks with the NMC console and Computer Assisted Physician Documentation or DM Network Edition. Complete the following steps to configure LDAP.

Note: For DM Network Edition, if you upgrade your LDAP from a pre-SP6 implementation to the SP6 or higher, your NMC console logins will change from being authenticated by the LDAP system to being authenticated by the NMC console. This means that users must log in to the NMC console using their NMC console credentials, not their LDAP credentials.

For the most current information on how to configure LDAP, see the https://isup-port.nuance.com website.

Configure LDAP in the NMC console

Complete the following steps to configure LDAP in the NMC console.

Note: For DM Network Edition, if you are upgrading from DM Network Edition SP2 or earlier and already have single-domain LDAP configured and working, do **not** follow these steps. Pre Service Pack 6 single-domain LDAP will continue to work.

If you plan to upgrade from pre-SP6 single domain LDAP to multiple-domain LDAP, Setting up the NMC server to run Active Directory Services on page 37

See Setting up the NMC serverto run Active Directory Services for more information.

Configure the Site

Note: Nuance does not recommend having workstations where users log in with credentials for more than one site, where those sites' LDAP settings are different. Imagine, for example, that your system is configured with two sites, Site One and Site Two. Site One has single domain LDAP enabled and Site Two has multiple domain LDAP enabled. A user who has login credentials for both Site One and Site Two should only log in to a given workstation with credentials for one of the sites—she cannot log in to Site One and Site Two on the same workstation.

For each site you are configuring to use LDAP:

- 1. Under Sites, click Organization Overview.
- 2. In the left-side window, select the site that you want to configure for LDAP.

- 3. Right-click the site and select **Details**.
- 4. Click the **Dragon Medical Network Edition** tab.
- 5. Click the + to expand the **Miscellaneous** section of the tab.

In the LDAP authentication drop down, select Single Domain or Multi Domains.

6. Click **Save** to save your changes.

Configure the Domain(s)

Complete the following steps to add domains to your organization:

- 1. Under Sites, click Organization Overview. Click Details. Now, click the Domains tab.
- 2. Click **Add**. The **Domain** dialog box appears.
- 3. Enter the domain name in the **Name** field, and the Active Directory connection string for that domain in the **Active directory connection strings:** field.
- 4. Click **Save** to save your changes.
- 5. Repeat steps 2-4 for every domain that you want to set up.

Configure the User

Complete the following steps for each user you want to configure for LDAP.

Note: You can also import users and their LDAP domains and usernames in bulk. For details, see <u>Import multiple users into the NMC server</u> in the NMC console Help.

- 1. Under **User Accounts**, click **Search**. Search for and double-click a user.
- 2. In the **Credentials** tab, click the **NTLM** tab, and click **Add** to add a new domain mapping. The **New Credential** dialog appears.
- 3. The **User Name** and **Organization Name** are already filled out. Use the **Domain** drop down to choose the user's domain, and enter her LDAP login for that domain in the **Login** field.
- 4. Click **OK** to save your changes.
- 5. If you have enabled multi-domain LDAP, repeat steps 5-7 for each additional domain you want to configure for the user.

Note: If you are using multi-domain LDAP, be sure to provide your users with their usernames, domain(s) and the appropriate login syntax: <Domain Name>\<User Name>.

Install the client software with LDAP Enabled

Use the MSI installer to install the Computer Assisted Physician Documentation or DM Network Edition client software with LDAP enabled. Be sure to set the MSI command line option to enable the type of LDAP that you are configuring; NAS_LDAP_SIGN_ON=1 for single-domain LDAP, and NAS_LDAP_SIGN_ON=2 for multi-domain LDAP. See the NMC console Help for more information about the MSI installer and MSI command line options.

Notes:

Be sure that LDAP is enabled or disabled with the same setting in **both** the NMC console **and** the Computer Assisted Physician Documentation or DM Network Edition clients. If these settings are out of synch—for example, multi-domain LDAP is enabled in the NMC console, but single domain LDAP is enabled on the clients—unpredictable log in behavior results.

When installing an upgrade for DM Network Edition on a client machine, you can enter values in the command line for the Active Directory and EHR single sign-on settings. However, be aware that your values will overwrite any the user already entered for these settings.

Creating Single Sign-On user accounts

Dragon Medical Network Edition supports two types of single sign-on accounts:

- Active Directory Single Sign-On, which allows users to log in using their Windows credentials.
- EHR Single Sign-On, which allows users to log in from their EHR.

The following sections describe how to configure both types of Single Sign-On accounts.

Note: For the most current information on how to configure Single Sign-On accounts, see the https://isupport.nuance.com website.

Implementing Active Directory Single Sign-On

If the login credentials for an existing user account do not match the user's Windows login, you must delete the user account and create a new one. Make sure the login credentials for the new account match the user's Windows login credentials.

To configure Active Directory Single Sign-On

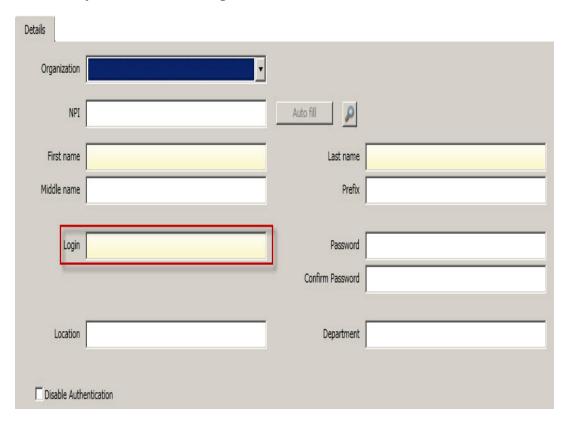
1. During the process of creating provider user accounts in the *NMC server*, be sure to assign a login name that matches the user name of the provider's Windows Domain login name (see the next illustration).

In the **Login** field, enter the user name of the provider's Windows Domain login name. The logins for Computer Assisted Physician Documentation or DM Network Edition and Windows must be identical.

For example, if a provider's Windows Domain login name is one of the following:

- "Domain\John_Doe"
- "John_Doe@domain.example.com"

You enter "John_Doe" in the **Login** field.



Implementing EHR Single Sign-On

To implement EHR Single Sign-On, you create the log in and log out code for Computer Assisted Physician Documentation or DM Network Edition. You then configure your EHR to call that

code; allowing providers to log in and out of Computer Assisted Physician Documentation or DM Network Edition from the EHR.

Steps

- (Optional) Ensure that vSync is installed on both the Citrix client and server
- Enable EHR Single Sign-On
- Generate a Client ID
- (Optional) Map the User's EHR log in to their Computer Assisted Physician Documentation or DM Network Edition log in credentials
- Write the log in/log out code
- Configure your EHR to call the log in/log out code

(Optional) Ensure that vSync is installed on the Citrix server

Enable EHR Single Sign-On in the NMC console

Complete the following steps for each site that you want to use EHR Single Sign-on:

- 1. Open the site in the NMC console.
- 2. On the ribbon, select **Organization Overview**.
- 3. In the **Organizations** screen, double-click a site.
- 4. In the **Site** screen, click the **Dragon Medical Network Edition** tab.
- 5. Expand the **Miscellaneous** section.
- 6. Check the **Enable SSO authentication** checkbox to enable EHR Single Sign-on for the site.
- 7. Click **Save** to save your changes.

Generate a Client ID

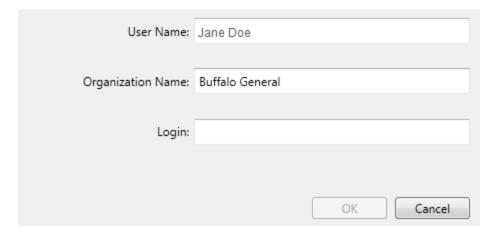
Generate a client ID for each organization that you want to use EHR Single Sign-on. For information about how to generate a Client ID, see <u>Creating Organization Tokens</u>. Your log in script for Computer Assisted Physician Documentation or DM Network Edition will use this ID as a parameter.

(Optional) Map the EHR User Names to the log in credentials for Computer Assisted Physician Documentation or DM Network Edition

If your users 'EHR usernames and user account usernames are the same, you can skip this step.

If your users 'EHR usernames and user account usernames are **not** the same, complete the following steps:

- 1. Open the user you want to configure.
- 2. Go to User Account Details > Credentials > Token:
- 3. Click **Add**. The **New Credential** dialog box appears:



- 4. Enter the user's EHR user name in the **Login** field.
- 5. Click **OK** to save your changes.

Write commands for logging in and out of Computer Assisted Physician Documentation or DM Network Edition

You use command line parameters to log in and out of Computer Assisted Physician Documentation or DM Network Edition using EHR Single Sign-on. You can integrate these commands with your EHR in a number of ways including:

- using a third party product
- using functionality that is built in to your EHR
- using an external scripting language.

Logging into the local machine

If you are going to run the log in command on the same machine where Computer Assisted Physician Documentation or DM Network Edition are installed, use the following syntax to login a user:

<Path to the product executable>\<product exe file>/SSOUser <Username> <Client ID>

where:

- <Path to the product executable> is the path to the directory that contains the product exe file.
- product exe file> is the name of the exe file that launches the product.
 - For DM Network Edition, the exe file is called natspeak.exe.
 - For the Standalone Query Viewer for DM M.D. Assist, the exe file is called MD Assist QVA.exe.
- <Username> is an EHR username.
- <Client ID> is the ID that you created. See <u>Creating Organization Tokens</u>.

For example:

On a 32 Bit machine:

C:\Program Files\Nuance\NaturallySpeaking12\Program\natspeak.exe /SSOUser jdoe eacd17e4-f0fb-4a2b-9b20-03a80231e9a0

On a 64 Bit machine:

```
C:\Program Files (x86)\Nuance\Nat-
urallySpeaking12\Program\natspeak.exe /SSOUser jdoe eacd17e4-f0fb-
4a2b-9b20-03a80231e9a0
```

Logging out of the local machine

If you are going to run the log out command on the same machine where Computer Assisted Physician Documentation or DM Network Edition are installed, use the following syntax to log out the currently loaded user:

On a 32 Bit machine:

C:\Program Files\Nuance\NaturallySpeaking12\Program\natspeak.exe /Logout

On a 64 Bit machine:

C:\Program Files (x86)\Nuance\NaturallySpeaking12\Program\natspeak.exe
/Logout

Logging in when running Computer Assisted Physician Documentation or DM Network Edition on a Citrix server

Use the following command to log users into Computer Assisted Physician Documentation or DM Network Edition:

<Path to the product SSO executable>\\product SSO exe file>/SSOUser <User-name> <Customer Token>

where:

- Path to the product SSO executable> is the path to the directory that contains the product SSO exe file.
- product SSO exe file> is the name of the SSO exe file for the product.
 - For DM Network Edition, the exe file is called natspeakSSO.exe.
 - For the Standalone Query Viewer for Computer Assisted Physician Documentation, the exe
 file is called.
- <Username> is an EHR username.
- Customer Token> is the organization token that you created. For details, see <u>Creating</u>
 Organization Tokens.

For example: (use 'Program files (x86)' for x64 bit systems)

C:\Program Files\Nuance\EHR Synchronizer\Program\natspeakSSO.exe
/SSOUser jdoe eacd17e4-f0fb-4a2b-9b20-03a80231e9a0

Logging out when running Computer Assisted Physician Documentation or DM Network Edition on a Citrix server

Use the following command to log out the currently loaded user:

<Path to the product SSO executable>\product SSO exe file> /Logout

where:

- <Path to the product SSO executable> is the path to the directory that contains the product SSO exe file.
- product SSO exe file> is the name of the SSO exe file for the product.
 - For DM Network Edition, the exe file is called natspeakSSO.exe.
 - For the Standalone Query Viewer for Computer Assisted Physician Documentation, the exe
 file is called.

For example: (use 'Program files (x86)' for x64 bit systems)

C:\Program Files\Nuance\EHR Synchronizer\Program\natspeakSSO.exe
/Logout

Configure your EHR to call the log in/log out code

Follow the instructions provided in your EHR documentation to configure the EHR to call the log in and log out code that you created in the *Write Dragon log in/log out commands* topic in the NMC console Help.

Install the client software with EHR SSO Enabled

Use the MSI installer to install the Computer Assisted Physician Documentation or DM Network Edition client software - with EHR Single Sign-On enabled Set the MSI command line option to enable EHR Single Sign-On by passing in NAS_SINGLE_SIGN_ON=1. See the NMC console Help for more information about the MSI installer and MSI command line options.

Notes:

Be sure that EHR Single-Sign On is enabled or disabled in **both** the NMC console **and** the client software for Computer Assisted Physician Documentation or DM Network Edition. If these settings are out of synch—for example, EHR Single Sign-On is enabled in the NMC console but not on the clients—unpredictable log in behavior results.

When installing an upgrade for DM Network Edition on a client machine, you can enter values in the command line for the Active Directory and EHR single sign-on settings. However, be aware that your values will overwrite any the user already entered for these settings.

Enabling Dragon client computers for Active Directory Single Sign-On

To enable the Active Directory Single Sign-on feature for Dragon users, perform the following actions on each Dragon client computer.

Create a new Dragon shortcut

- 1. Create a desktop shortcut to the natspeak.exe file. The location of the natspeak.exe file depends on the version of Microsoft Windows that is on the Dragon workstation.
- 2. Select the **Shortcut** tab.
- 3. In the Target field, enter the path to the natspeak.exe file, followed by /trusted. For example:

On a 32 Bit machine:

enter "C:\Program Files\Nuance\NaturallySpeaking12\Program\natspeak.exe" /trusted.

On a 64 Bit machine:

enter "C:\Program Files (x86)\Nuance\NaturallySpeaking12\Program\natspeak.exe" /trusted.

4. Click OK.

Modify the nssytem.ini file

1. Find and open the *nssystem.ini* file.

On Microsoft Windows Vista, Windows 7, Windows 8.x, and Windows 10, the file is located here:

On a 32 Bit machine:

C:\Program Files\Nuance\NaturallySpeaking12\nssystem.ini

On a 64 Bit machine:

C:\Program Files (x86)\Nuance\NaturallySpeaking12\nssystem.ini

2. In the *nssystem.ini* file, find the following line:

Default NAS Address=

- To the right of Default NAS Address=, append the actual hostname or IP address of the NMC server.
- 4. Save the nssystem.ini file. You do not need to restart Dragon.

To make sure providers use the correct Dragon shortcut, you or a provider may wish to delete the original Dragon shortcut (not the one created in the previous steps).

Once you have set up the user accounts this way, and the servers and workstations are running, providers do not have to enter their login credentials to run *Dragon Medical Client*. After the provider logs in to the Windows desktop and clicks the Dragon short cut, the *Dragon Medical Client* opens and establishes contact with the *NMC server*.

You can help Nuance improve the future quality of speech recognition by sending speech data from your network to Nuance on a regular basis. No personal information is ever sent to Nuance and participation in data collection is completely voluntary. The data transferred is encrypted.

Turning on data collection for your site

To turn on data collection for your entire site, take these steps:

- 1. On the menu bar, click **Organizations** > **Search**.
- 2. Enter search criteria and click **Search**.
- To see your organization's information and add details to it, click the Organization
 DetailsOrganization > Details icon in the ribbon.
- 4. Select the **Products** tab.
- 5. Expand the **Dragon Medical Network Edition** section.
- 6. Select the **Upload user data to Nuance for research purposes** option.
- 7. Click **OK** to save the change.

Turning on data collection for individual providers or users

You can also turn on data collection for individual healthcare providers in the **User Account**Details tab under the Network Edition US sub-tab:

- On the menu bar, click the User Accounts ribbon, then click the Search User AccountsSearch icon in the ribbon under User Accounts.
- 2. When the name of the provider appears in the **User Accounts** screen, double click the name to open the **User Account Details** for that healthcare provider.
- 3. Click the **Network Edition US** tab.
- 4. Expand the **User Account Options** section.
- Go to the bottom of the User account options section and click the Upload dictation data to Nuance for research purposes check box.
- 6. Click **Save** to save the change to the user account settings.
- 7. You can repeat these steps for selected individual user accounts in the NMC server.

Privacy of your healthcare data and Nuance data collection

When you implement Data Collection it is for sending recognition data to Nuance to improve the accuracy of this and future products. Nuance works with collected data because our software can learn from experience about the language you, and your fellow professionals, use. We track the vocabulary, syntax, and pronunciation used by professionals in practice, and our experience makes our products more accurate and easier to use for you and others.

Nuance will never pass your recognition data on to anyone else or use it for any other purpose other than as set out in this notice.

Nuance will only collect recognition data (on behalf of your organization), and will collate and combine it with recognition data collected from other health professionals using Data Collection. We will not store the recognition data under your name, the medical practice or hospital or an individual's name, although the database will contain a search function enabling such terms to be searchable within the database.

Nuance will use the recognition data in accordance with your organization's instructions. We use it to conduct research in order to enhance and improve the accuracy of this and future products. Nuance recognizes that the data may include medical information about patients and your professional opinion in relation to those patients.

The only people with access to this data will be our employees, permitted agents, sub-contractors, etc. on a need to know basis, all of whom are bound by obligations of confidentiality to keep the data strictly confidential.

Nuance will transfer the personal data to its Data Collection sites that may be located outside of the EEA. However, Nuance shall ensure that any such transfer is compliant with the EU Data Protection Directive.

Our corporate policies and practices, and our contractual commitments to your organization, require us to take appropriate technical and organizational measures against unauthorized or unlawful processing of any personal data that you have provided to us and against accidental loss or destruction of, or damage to, that personal data.

Chapter 2: Configuring sites

You can create and configure sites for your organization. Each site represents a location on a server where you store user profiles. Typically, each site corresponds to a physical location in your organization, such as a hospital, clinic, or data center. Often you need only one site for your entire organization. Sites help you define the structure of your *DM Network Edition Network*. The options that you choose for a site affect all of the user profiles stored in that location.

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Searching for an organization

The **Search Organizations** screen allows you to search for an organization by name, Organization ID, institution code, and/or license type.

To view and use the **Search Organizations** screen, you must have the rights to view more than one organization in the NMC console.

- 1. In the NMC console, click **Organizations**.
- 2. In the **Organizations** area, click **Search**.
- 3. On the **Search Organizations** screen, one or more of the following fields:
 - Name: The name of the organization.
 - Organization Id: An identifier that Nuance assigns to you as a customer.
 - **Status**: One of All, Enabled, or Disabled.
 - Institution code: The code for the transcription system used by the organization.
 - **License type**: A license type that the organization uses.
- 4. Click **Search**. The **Search Organizations** screen displays the search results with the following information:
 - Name: The name of the organization.
 - Organization Id: An identifier that Nuance assigns to you as a customer.
 - **Institution code**: The code for the transcription system used by the organization.
 - **Status**: One of All, Enabled, or Disabled.
 - **Users**: The number of users in the organization.
 - **Partner Name:** The name of the partner of the organization.
- 5. To view and modify sites, groups, and settings for an organization, select the organization and click **Manage** (the bottom right of the screen). Clicking **Manage** makes the selected organization the 'current' organization in the NMC console. All organization fields in the NMC console will use the selected organization as the default value.
- 6. To view details about an organization, select the organization and click **Details**. This action displays the **Organization Details** screen.

Finding and managing organization data

NMC server introduces changes to the **Manage Organization** screen to help you manage an organization's data.

The left side of the **Manage Organization** screen displays a tree-like representation of the current organization:

- The first node in the tree is the current organization.
- The second node in the tree is the sites node. To view the sites in the current organization, expand the sites node.
- The third node in the tree is the groups node. To view the groups in the current organization, expand the groups node.

To view information about users that are part of a site in the organization, or part of a group in the organization, in the tree, select the site or group. The NMC console displays the following information about the users at that level:

- First Name: The first name of the user.
- Last Name: The last name of the user.
- **Login Id**: The login name of the user.
- **Licenses**: The licenses that the user has.

Searching for sites, groups, and users in an organization

Above the tree structure on the left side of the **Manage Organization** screen, is a **Search** field. Use the **Search** field to search for sites, groups, and users in an organization.

1. In the **Search** field, enter search criteria. The search process looks for items that begin with the characters you enter. Enter in 'Def' for the search criteria and you get all Groups with names that begin with 'Def', all Sites with names that begin with Def, and all Users with a log-in name that begins with 'Def'.

Search for sites and groups by their name. Search for users by their login name. Search criteria

must be at least 3 characters in length.

- i. To search for a site, enter the name of the site.
- ii. To search for a group, enter the name of the group.
- iii. To search for a user, enter the log-in name of the user.
- 2. After you enter the search criteria, click the **Search** button.
- 3. The **Manage Organization** screen displays the search results at the bottom of the tree structure as follows, where x is the number of matched items for that object:
 - Sites (x)
 - Groups (x)
 - Users (x)
- 4. To view sites, groups, or users that matched the search criteria, in the search results, expand the Sites, Groups, or Users level.

Note: You can only view the top level search result objects. For example, if a site is found and displayed in the search results, you cannot click on the site to view it's groups.

Using right-click actions to find and manage organization data

In the **Manage Organization** screen, you can use right-click actions to find and manage objects in the organization tree.

Organization level

- To view details about an organization, right-click the organization and select **Details**.
- To set an organization as the default organization, right-click the organization and select **Set As**Default.
- To add a site to an organization, right-click the organization and select **Add Site**.
- To add a group to an organization, right-click the organization and select **Add Group**.

Site level

- To view details about a site, right-click the site and select **Details**.
- To add a site to an organization, right-click a site and select **Add**.

- To delete a site, right-click the site and select **Delete**.
- To add a group to an organization, right-click a site and select **Add Group**.

Group level

- To view details about a group, right-click the group and select **Details**.
- To copy a group, right-click a group and select **Copy**.
- To add a group to an organization, right-click a group and select **Add**
- To delete a group, right-click a group and select **Delete**.
- To add a user account to a group, right-click the group and select **Add User Account**.

User level

- To view details about a user, right-click the user and select **Details**.
- To add a user, right-click and select **Add**.
- To delete a user, right-click the user and select **Delete**.
- To view client logs for a user, right-click the user and select **Client Logs**.
- To create back up copies of one or more user profiles, right-click a user and select **Backup** user profiles.
- To restore one or more use profiles, right-click a user and select **Restore user profiles**.
- To request Dragon logs for a user, right-click the user and select **Request Dragon logs** (Only for Profile Optimizer 4.x).

Configure product settings for an organization

An administrator sets many product settings at the organization level. On the **Organizations Details** screen, the **Products** tab contains expandable areas that contain settings for different products that use the NMC server and the NMC console.

The settings for a product are only visible if the administrator has the "Manage" right for the particular product.

- 1. In the NMC console, click **Organizations** > **Search**.
- 2. Select an organization.
- 3. In the **Organizations** area, click **Details**.
- 4. On the **Organizations Details** screen, click **Products**.
- 5. Set one or more of the following settings.

General

NMC Inactivity timeout in __ minutes: The number of minutes the NMC server waits before logging out an inactive user.

Password Settings

Use the settings in this section to set criteria for the NMC server user password. The settings are at the Organization level.

You must have the view/modify organization grant to and modify these settings.

Password history - remember last _ passwords: The number of unique new passwords that must be associated with a user account before an older password can be reused. The value is between 0 and 24 passwords. This option enables an administrator to enhance security by ensuring that old passwords are not continuously reused.

Maximum password age - password will expire in _ days: The period of time (in days) that a user can use a password before the user must change the password. An administrator can set a password to expire after a number of days between 1 and 999. An administrator can also specify that a password never expires by setting the number of days to 0. If the maximum password age is

between 1 and 999 days, the **Minimum password age** must be less than the **Maximum password age** is set to 0, the **Minimum password age** can be any value between 0 and 998 days.

Note: It is a security best practice to have passwords expire every 30 to 90 days.

Minimum password age - password can be changed in _ days: The period of time (in days) that a user can use a password before the user is able to change the password. An administrator can set a value between 1 and 998 days, or, allow changes to become effective immediately by setting the number of days to 0.

The **Minimum password age** must be less than the **Maximum password age**, unless the maximum password age is set to 0, indicating that passwords never expire. If the **Maximum password age** is set to 0, the **Minimum password age** can be set to any value between 0 and 998.

Minimum password length _ characters: The least number of characters that a password for a user account may contain. An administrator can set a value of between 1 and 14 characters, or, can establish that no password is required by setting the number of characters to 0. The default value is 0.

Reset password link expires in _ hours: The number of hours that the password reset link in the password reset email is valid. Background: On the NMC console login page, if a user forgets their password, the user clicks a forget password link that sends them an email. In the email, the user clicks a link to reset their password. The maximum value is 8 hours. The default is 2 hours.

User will be locked out after _ number of failed login attempts: The number of login attempts before a user is logged out of the NMC console.

Password lockout duration _ minutes: The number of minutes that a user is locked out of the NMC console after a set number of failed login attempts.

Password must meet complexity requirements: The complexity requirements setting overrides the other password settings. If this option is checked, passwords must meet the following minimum requirements:

- Cannot contain the user login or part of the user's name (first and last) that exceeds 2 consecutive characters.
- Be at least six characters in length (if the minimum password length is not set, or is less).

- Contain characters from three of the following categories:
- English uppercase characters (A Z)
- English lowercase characters (a z)
- Base 10 digits (0 9)
- Non-alphabetic characters (for example, !, \$, #, %)

Complexity requirements are enforced when passwords are changed or created.

PS360 Mobile

You do not require a specific right to view and modify these settings.

NMC server On Premise server URL (PS360 only): The URL for the NMC server.

Silent mode start date: A read-only field that displays the silent mode start date.

Silent mode stop date: A date and time field that is enabled when the Silent Mode Enabled field is checked. Otherwise, the Silent Mode Stop Date field displays the date and time. Enter a stop date must be no more than three months from the current date/time.

Auto-processing enabled: Check this option to configure auto-processing frequency.

Auto-processing every [x] seconds: Enter an integer number between 2 and 10. This field is enabled when the Auto-processing enabled field is checked.

Dragon Medical Recorders and Nuance Clinician (Common)

You must have the 'Manage Dragon Medical Mobile Recorder' or 'Manage Dragon Medical Recorder.' right to view and modify these settings.

NMC server **On Premise server URL (Dragon Medical Recorders)**: the URL of the NMC server (on-premise).

In the Patient List section:

Patient search maximum number of results _ rows: Sets the maximum number of patient visits that a query returns and displays in Dragon Medical Recorders and Nuance Clinician (Common). Allowed values are 1 to 100.

Manual refresh timeout _ minutes: Sets the amount of time that Manual Refresh button is disabled In the Dragon Medical Recorders and Nuance Clinician (Common) client application. When the provider presses the button, it is disabled for the amount of time you specify in the Manual Refresh button. Use this setting to control how often a provider can refresh the patient list information and to control the number of requests the server receives from the Dragon Medical Recorders and Nuance Clinician (Common) client application.

Periodic refresh interval _ minutes: Sets the minimal amount of time that elapses between automatic refreshes of patient list data in the Dragon Medical Recorders and Nuance Clinician (Common) client application. In the client application, a provider can set the amount of time that elapses between automatic refreshes. The Periodic Refresh Interval sets the minimum length for the time period.

In the In Patient Settings section:

Show patients Admitted in the last XX days: Sets the start date for the patient queries for in patient appointments. (How many days back in time the NMC server will query for inpatient appointments)

Show pre-admitted patients XX days in the future: Sets how many days into the future to show pre-admitted patients.

Keep patients on the list XX days after discharge: Sets the number of days after the discharge date that a patient visit displays in Dragon Medical Recorders and Nuance Clinician (Common). Allowed values are 1 to 100. The default value is 3.

Dragon Medical Mobile Recorder and Nuance Clinician

You must have the 'Manage Dragon Medical Mobile Recorder' right to view and modify these settings.

For details about inpatient support, see "Inpatient support." in the NMC console Help.

In the Out Patient Settings section:

Patient history _ **days**: Sets the start date for patient queries. Controls how far back the NMC server searches for active patients and appointments and how long an entry is kept in the patient

visit list that Dragon Medical Mobile Recorder and Nuance Clinician displays.

If this setting removes a patient visit from the list in Dragon Medical Mobile Recorder and Nuance Clinician, a provider can find the patient visit by using the last name or ID of the patient and the **Search Patient Database** option in Dragon Medical Mobile Recorder and Nuance Clinician. When a provider filters a dictation list, the **Search Patient Database** option appears as the last item in the filtered list. See the Dragon Medical Mobile Recorder and Nuance Clinician user documentation for details.

Patient visit search history_days: Sets how far back to search for patient Visits when the mobile recorder performs a patient search.

Time to mark delinquent _ **hours**: Sets the number of hours that elapse until the system flags a patient visit without dictation as delinquent. Delinquent Patient Appointments display on the Late Tab of the Dragon Medical Mobile Recorder and Nuance Clinician application.

Time to remove from list _ hours: Sets the number of hours that can elapse until the system removes a patient visit from the patient visit list after a dictation is created for that visit on the Dragon Medical Mobile Recorder and Nuance Clinician.

NMS on-premise server URL: The URL address for the server (NMC server Local AuthenticatorCall Forwarder) that Dragon Medical Direct uses to query the NMC server for an on-premise call redirector when utilizing LDAP/AD authentication.

Topic/ConText: This box displays mappings between a topic and a conText.

Move Up: In the Topic/ConText mapping list, select a mapping and press the Move Up button to move the mapping up in the list.

Move Down: In the **Topic/ConText** mapping list, select a mapping and press the **Move Down** button to move the mapping down in the list.

Delete: In the **Topic/ConText** mapping list, select a mapping and press the **Delete** button to delete the mapping from the list.

Map: Press this button to map a topic to a ConText. In the **Map Topic to ConText** dialog box, in the **Topic** field, enter a topic. In the **ConText** field, enter a conText. Click **Save**.

Configure product auto-provisioning settings

An administrator sets product auto-provisioning settings at the organization level. On the **Organizations Details** screen, the **Auto-provisoning** tab contains expandable areas that contain settings for different products that use the NMC server and the NMC console.

- 1. In the NMC console, click **Organizations** > **Search**.
- 2. Select an organization.
- 3. In the **Organizations** area, click **Details**.
- 4. On the **Organizations Details** screen, click **User Auto-provisoning**.
- 5. Set one or more of the following settings.

Restrict automatic license assignment to specific license types (recommended for expert users only): Select this checkbox to control automatic license assignment for CAPD applications based on license type and partner. When you check this checkbox, the NMC console displays two boxes.

The **Automatic license assignment disabled** box displays license type and partner combinations that have automatic license assignment is disabled.

The **Automatic license assignment enabled** box displays license type and partner combinations that have automatic license assignment is enabled.

Restrict automatic license assignment to specific license types (recommended for expert users only): Select this checkbox to control automatic license assignment for CAPD applications based on license type and partner. When you check this checkbox, the NMC console displays two boxes.

The **Automatic license assignment disabled** box displays license type and partner combinations that have automatic license assignment is disabled.

The **Automatic license assignment enabled** box displays license type and partner combinations that have automatic license assignment is enabled.

Dragon Medical Mobile Recorder and Nuance Clinician

Enable auto-provisioning for this product: Check this option to have the NMC server to automatically place a user into a group when the user is created.

Add users to group: If 'Enable auto-provisioning for this product' is checked, the NMC server automatically places a new user in the group you specify in 'Place users in group'. The default value is "Generated".

Configuring a site in your facility

A site represents a location on a server where you store user profiles. It typically corresponds to a physical location in your organization, such as a hospital, clinic, or data center. An organization can contain multiple sites. The options that you choose for a site affect all user profiles stored in that location. See *Setting site Data storage settings* on page 95.

To add a site to an organization

- 1. In the Sites area, click Add. The NMC console displays the Site screen.
- 2. Use the **General** tab to configure or view the following:
 - Organization: View the name of the account associated with the site.
 - **ID**: Enter the unique identification number that you want to associate with the site. This field is required. When you create a site (Click **Add** in the **Sites** area), the NMC console automatically creates a unique site ID and places it in the **ID** field. The ID is equal to the highest site ID that exists in the organization plus one. You can edit the automatically generated site ID.
 - Name: Enter the name of the site. This field is required.
 - **System Site Id**: The system id for the site.
- 3. Use the **Address** tab to configure the following:
 - Street 1: The first street address for the site.
 - Street 2: A second street address for the site.
 - **Street 3**: A third street address for the site.
 - **City**: The City associated with the site.
 - State: The state associated with the site.
 - **Zip**: The zip code associated with the site.
 - **Country**: The country associated with the site.
- 4. Use the **Dragon Medical Network Edition** tab to configure the following:
 - Miscellaneous settings For details, see Setting miscellaneous site settings on page 70
 - Master user profile settings For details, see <u>Setting general site settings for master user</u> <u>profiles</u> (used to be **Roaming** settings).

- Data settings For details, see Setting site Data storage settings on page 95.
- 5. Click **Save** to save the settings for this site. When you save the settings, the **Groups** list becomes visible on the **General** tab. It is empty until you add groups as members of the site. See <u>Creating groups</u>.

Setting miscellaneous site settings

On the **Dragon Medical Network Edition** tab, click **Miscellaneous** to view or hide these settings:

■ Prompt users to log out after __ minutes: The default is 30 minutes, the minimum is 5 minutes.

You can enter any value between 1 and 1440 minutes, but it should be long enough that *Dragon Medical* will not think that the users have finished dictating when they are only pausing. When dictating, users should be warned not to pause for more than the number of seconds you configure here. At the end of their dictation, users must record silence for at least that number of seconds.

■ Log out users who do not respond after __ seconds: By default enabled, set to a value of 60 seconds, and applied to all users associated with the site that this user account is associated with.

The option instructs the *Client* to log out this user after the client has been idle and the user has been prompted to respond, but the number of seconds you indicate here elapses without a response.

The **Log out users who do not respond after** __ **seconds:** field accepts a numeric value (seconds) up to three characters in length.

■ Insert Text & Graphics command using __: The default value is Type keys (SHIFT + INSERT). The correct setting depends on the EHR system that the user is dictating into. In most cases the default setting is sufficient.

This option enables the user to insert Text & Graphics command contents into the dictated document using one of the following:

- Type keys (Shift + Insert)
- Hook Paste
- Simulate Keystrokes
- Type keys (CTRL+V)

- Type keys (Ctrl+V) SDK
- Use Windows Paste Command
- LDAP Authentication This is disabled by default. Use the drop-down to enable, Single Domain, or Multi Domain LDAP. See *Configuring LDAP* on page 40
- Enable SSO authentication: This is disabled by default. Check this box to enable EHR Single Sign- on. For more information about configuring EHR Single Sign-on, see *Creating Single Sign-On user accounts* on page 44.
- Disable automatic switching dictation source to an available default: This is disabled by default.
 - If you select this option, the user will not automatically be switched to an available default dictation source if the currently configured source is unavailable.
- Hide Dragonbar when no user is loaded: This is disabled by default.

 If you select this option, the DragonBar displays in "Tray Icon" mode when a user is not loaded in the Dragon client.
- Upload custom words and auto-text: This is enabled by default. Set this option to control the sharing of custom words and auto-text, created in the Dragon client, with the NMC server.

Choosing a network location for master user profiles

At any installation of Dragon Medical Network Edition, you must determine where on the network the master user profiles for each site should be located.

Dragon Medical Network Edition lets you store master user profiles on a networked machine that is not a server, on a Windows server, or on a web server with or without SSL—allowing health-care providers to access their master user profiles over the Internet.

Caution:

To control the volume of traffic attempting to access the same location at once on your Dragon Medical Network Edition network, Nuance advises that each subdirectory representing a particular site inside that master user profiles storage location contain a maximum of 200 master user profiles.

1. If you choose to use a networked machine or Windows server, you should determine the path to where the master user profiles will reside. You can create multiple network storage locations, each location corresponding to a different site.

You can access your master user profiles through these types of connections:

- Mapped Drive—Connects to a shared network folder with a drive letter assigned to it.
- UNC Path—Connects to a shared network folder using the Universal Naming Convention (UNC). The UNC is a way to identify a shared file on a computer or network without having to know the storage device it is on. Format is:

- HTTP (http:)—Connects to machine on the Internet or your local intranet running a web server. Format is: http://<myserver.com>/<webdav>
- HTTP with SSL (https:)—Connects to machine on the Internet or your local intranet running a secure socket layer (SSL) web server. Format is: https://<myserver.com>/<webdav>
- 2. The location(s) you select must be accessible to all computers where healthcare providers dictate. Each location must have adequate storage space for the master user profiles.
- 3. The NMC server itself must be able to access each user profile location using a UNC path.
- 4. If you choose to use an HTTP server, choose one of the supported web servers:

Supported Web Servers

- Microsoft Internet Information Services (IIS) 7.0 or 7.5 on Windows Server 2008, (IIS) 8 or 8.5 on Windows Server 2012 R2
- Apache HTTP Server 2.16 or higher (on Windows Server 2008 or on Windows Server 2012
 R2)
- 5. Be sure you have information about how *Dragon Medical Clients* should access the web server:
 - **Network location:** The URL address of your HTTP server.
 - **HTTP settings:** For your **http** (or **https**) connection you need to know authentication, firewall, and proxy server information.

Notes:

- You must install the WebDAV web server application before you can set up an HTTP or SSL WebDAV server.
- Using Internet Information Server 7.0, 7.5, 8.0, or 8.5:
 - You should use Basic authentication, as Dragon Medical Network Edition does not support
 Digest authentication with the Internet Information Server.
- Using Apache HTTP Server 2.0.54 and higher:
 - Internet Master User Profiles—You must turn on redirects when using Digest authentication with Apache.
 - Be sure that the server has Web-based Distributed Authoring and Versioning (WebDAV)
 turned on. The WebDAV Apache module is available free of charge at http://www.web-dav.org/mod_dav/.

Setting general site settings for master user profiles

In the **Dragon Medical Network Edition** tab, under **Master user profile**, you enter information about where on the Dragon Medical Network Edition *Network* the servers and client workstations can find the master user profiles, stored at a central location on the network, whether on the *NMC server*, or on a separate workstation or server of their own.

Each master user profile initially contains information about only the user's language, vocabulary, accent, and audio input device—all data that comes from the *Dragon* client. Then, every time the provider dictates, these profiles gather information about the provider's unique pronunciation and speech patterns. The Nuance speech recognition processes collect and integrate this information into individual acoustic and language models. By integrating new data into acoustic and language models, the *Speech Nodes* make the results of the speech recognition process more accurate.

By storing the master user profiles at a network location accessible to all DM Network Edition components, including both servers and *Dragon* clients, Dragon Medical Network Edition allows each healthcare provider to dictate on any client in the network using the same user profile at every location. You can achieve consistently high quality speech recognition with Dragon.

Choosing master user profile settings

Master user profile directories

Master user profiles directories were called "Roaming user" directories in earlier editions of Dragon Medical.

Click the **Configure** button to set the information each machine in the network that needs to locate the master user profiles on the network. The **Master User Profile Directory Settings** appears. This dialog box is similar to the **Roaming Directory Settings** in other editions of *Dragon Medical*.

In the dialog box, you see three tabs:

- The General tab on page 75
- The HTTP Settings tab on page 77

■ The SSL Settings tabs on page 77

The General tab

	Name	Default
DMNE Version 1.x Speech Profile Location		Directory
OMNE Version 2.0 (or higher) Speech Profile Location		Directory
	as the UNC Path to Profiles settin	his setting will need to equate to the same location ing in the Speech Node collection identified below.
	Mapped network drive	S:\ or S:\Profiles
	UNC Path	\\DFSName\Profiles
	НТТР	http://ProfilesServer.com/webdav
	HTTPS	https://ProfilesServer.com/webdav

Under the **General** tab, you indicate the location where *Dragon Medical Client* workstations will later find the master user profiles:

Name—(Required) Name that you want dictating healthcare providers to see in the *Dragon Medical Client* GUI when it refers to the master user profiles location.

DMNE Version 1.x Speech Profile Location— Enter the location of the version 10.5 user profile. This is the user profile location that is used with DM Network Edition version 1.0 (SP3 or earlier). The *Dragon Medical Client* uses this path to access the master user profiles from the workstation.

The location must be accessible to all server machines and workstations on the network and can be a mapped drive, a UNC location, or a web server URL (http:// or https:// for a secure web server). If you cannot browse to the location, when you explicitly enter the path, be sure it is in the format shown below based on the way servers on your network will access the master user profiles location:

- **Mapped network drive**—Use this format: < *drive letter*>:\< *folder name*>. For example, Y:\Profiles.
- UNC Path—Use this format: \\servername\\sharename\\path\\filename. For example, \\MyServer\\Profiles
- **HTTP**—Use this format: http://myserver.com/webDAV. For example, http://Profiles/MasterUserProfilesDir
- **HTTPS**—The format is: https://myserver.com/WebDAV. For example, https://Profiles/UserProfilesDir

DMNE Version 2.0 (or higher) Speech Profile Location— enter the location of the version 12 user profile. This is the user profile location that is used with DM Network Edition, version 2.0 or higher. The *Dragon Medical Client* uses this path to access the master user profiles from the workstation.

The location must be accessible to all server machines and workstations on the network and can be a mapped drive, a UNC location, or a web server URL (http:// or https:// for a secure web server). If you cannot browse to the location, when you explicitly enter the path, be sure it is in the format shown below based on the way servers on your network will access the master user profiles location:

- **Mapped network drive**—Use this format: <*drive letter>*:\<*folder name>*. For example, Y:\Profiles.
- **UNC Path**—Use this format: \\servername\\sharename\\path\\filename. For example, \\MyServer\\Profiles
- **HTTP**—Use this format: http://myserver.com/webDAV. For example, http://Profiles/MasterUserProfilesDir
- **HTTPS**—The format is: https://myserver.com/WebDAV. For example, https://Profiles/UserProfilesDir

Speech Node Collection— Use this drop-down list to select the speech node collection for the master user profile location. See <u>Configuring Speech Node Groups</u> for more details.

DMNE v1.x (UNC)— Enter the UNC path for the Speech Node Collection for the version 10.5 user profile.

DMNE v2.0 or higher (UNC)— Enter the UNC path for the Speech Node Collection for the version 12 user profile.

The HTTP Settings tab

If Master User Profiles Are Located on a Web Server

If you have set up a web server (http) to house your master user profiles, then under the **HTTP Settings** tab, you set up access to that web server. For more information see *Setting site* HTTP connection settings for master user profiles on page 82.

The SSL Settings tabs

If Master User Profiles Are Located on an SSL Web Server

If you have set up a secure socket layer (SSL) web server (https) to house your master user profiles, then under the **SSL Settings** tab, you set up access to that secure web server. For more information see *Setting site SSL connection settings for master user profiles* on page 87.

Note: You must install a third-party web server application called WebDAV to set up a compatible WebDAV HTTP or SSL server. WebDAV software is required in order to access and secure master user profiles on the Internet location. The WebDAV application is available free of charge at www.webdav.org.

Configuring Dragon Settings

You check the options to indicate how each healthcare provider works with master and local user profiles when dictating at a *Dragon Medical Client* workstation:

Local cache directory

Caution:

Nuance recommends that you never change this directory, but retain the default location.

- If you allow users to dictate in **Disconnected** mode, you should not change this directory because it could lead to data loss and other unpredictable results.
- Remember that this setting applies to every client on the network; if you have workstations with different versions of Windows (XP, Vista, 7, 8, 8.1, and 10), the same path might not exist on all those workstations.

In a rare instance where Nuance advises you change this directory, you can click the **Browse** button to find or create a new location or explicitly enter the path into the text box.

When a healthcare provider logs in to the network, *Dragon* transfers a copy of the master user profile for that provider from the machine hosting the profiles on the network to the local machine. That local copy is called the *local user cache profile*. In this text box, you see the location where the copies of the user profiles are stored on the workstation where the *Dragon Medical Client* resides. This location, always called **<Master Local>** (equivalent to **<Roaming Local>** in earlier editions of *Dragon Medical*) is:

\Documents and settings\All Users\ Application
Data\NaturallySpeaking12\Roaming Users\display name\username

- The *display name* is the name of the site that the master user profiles location corresponds to.

 You can have multiple network locations for master user profiles, usually a distinct location for each site.
- The *username* is the name of an individual healthcare provider's user account, used to identify the corresponding master user profile. A separate directory exists for each dictating healthcare provider. You cannot change the name.

Allow disconnected mode

For Dragon users that work off the network. Permits providers to log on to a *Dragon Medical Client* even when the workstation is not connected to the network, such as when the healthcare provider is working off-site on a laptop, the network is down, or for some reason the master user profiles directory (where the master user profiles are stored) is unavailable.

If your providers never dictate on a laptop, you might want to set this option temporarily before you convert local user profiles to master user profiles on the network, and then clear it when you are finished.

If you choose to allow providers to dictate in **Disconnected** mode, do not enable the **Remove** local cache data after usage option in the **Data** settings for the site. If you enable both settings, when the provider logs out after dictating in **Disconnected** mode, the results of the provider's dictation end up being deleted from the local cache and all the work lost.

Allow DMNE Client Offline mode option

When the 'Allow DMNE Client Offline mode' option is enabled, an end-user can use the Dragon client in offline mode. Dragon does not download the user's profile from the network. By default, 'Allow DMNE Client Offline mode option' is enabled in the NMC console.

Save user profiles upon automatic logout

Select this box to have the Dragon client save profile changes to the master user profile when Dragon automatically logs off an idle user that is part of a site.

Saving the user also saves local acoustics

Select this box to have the client send both the acoustic model updates and the language model updates to the server.

If you do *not* select this option, the clients sends only the language model updates (changes to words and writing styles related changes) back to the server, not the acoustic model updates (changes based on the provider's correction of recognized text). Under these circumstances, since the acoustic model changes from the client are not saved, only the updates resulting from the ACO process on the NMC server are incorporated into the master user profile to avoid profile degradation.

Access network at user open/close only (Minimizes network traffic)

Integrates changes made in the local user cache profile into the master user profile only when a user logs out and not while the healthcare provider is dictating. If you do not select this box, then local changes to user configurable options are immediately transferred to the master user profile.

Ask before breaking lock on network users

Recommended for UNC and mapped drives. Select to keep the option of maintaining or breaking a network lock when opening a master user profile. Normally, network locks prevent a provider from opening a master user profile at the same time another provider is opening that profile. While this process does not take a long time, network problems can cause a lock to become "stuck" and not release when the opening process is completed. When this happens, the next time a provider tries to open his or her profile, the *Dragon Medical Client* displays a message stating that the profile is locked and offering the option of overriding the lock. If you do not want this message to appear and instead always want to break a network lock in this situation, you can clear this option to prevent the message from appearing. Because the presence of a lock can indicate a problem that needs to be addressed, Nuance recommends that you enable this option.

Notes:

- This option is valid for *Dragon Medical Clients* connecting to the master user profiles location using a mapped drive or UNC drive, but is not supported for users connecting over HTTP.
- Providers should be careful when in breaking a locked master user profile, because if the provider breaks a lock on one workstation when a provider on another workstation is writing to the master user profile, breaking the lock may corrupt the profile.

Set audio levels on each machine

Select this box to run the **Check your audio settings** option from the **Accuracy Center** window before your first session with a master user profile. This includes the **Volume Check** and the microphone **Quality Check**. Check this option if your providers are dictating on different machines or on a single machine, like a laptop, in many different locations. When a provider changes machines or locations, the audio setup data can vary depending on differences in the microphone and sound card, as well as differences in ambient sound levels of each master user

profile location. In situations where *Dragon* detects a significant difference between operating systems, sound cards, microphones, or other hardware, the program will prompt you to run **Check your audio settings** even if you do not have this option selected.

Copy Dragon Medical Network Edition log to network

Select this box to copy the **Dragon.log** file from the local workstation to the master user profile location whenever the program synchronizes the local and master user profiles. **Dragon.log** contains information that can help diagnose problems that your providers might encounter dictating with *Dragon Medical Clients*.

Note: The **Dragon.log** file will not be copied once the maximum size in the **Disk space** reserved for network archive option is reached.

Selecting this option can increase how long it takes the provider to log out. It can also limit the usefulness of acoustic and language model optimizations because it reduces the amount of acoustic data that can be stored in the network archive.

Save profile with background process

Set this option to improve the time it takes to save a profile and log out of Dragon. Setting the option allows dictation session data to upload separately from the main profile data 'in the background' while the user profile is open in the Dragon client.

For more details, see <u>Uploading dictation session data while a user profile is in use</u>.

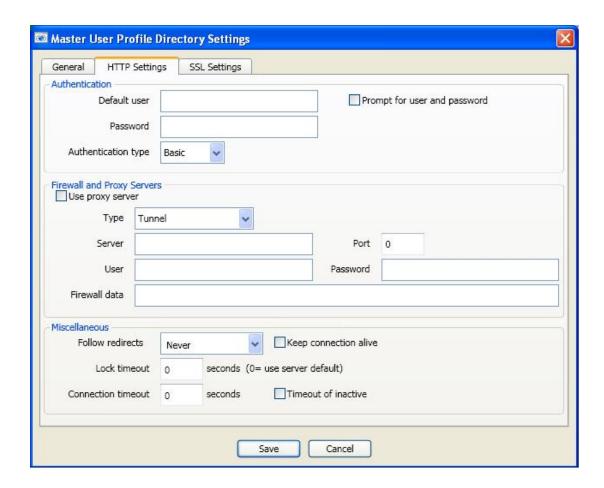
Setting site HTTP connection settings for master user profiles

Caution:

If you have never set up a web server before, do not attempt to do so; these instructions assume you have already installed the web server and have experience setting up a web server. Appropriate settings vary.

In the **Site** tab, under the **Dragon Medical Network Edition** tab, you enter information about where you store master user profiles for the site. If you are storing the profiles on a web server, to set up the HTTP settings:

- 1. Click Master user profile.
- 2. Click **Configure...**
- 3. In the Master User Profile Directory Settings dialog box, click HTTP Settings.
- 4. In the **HTTP Settings** tab, you define and configure the connection to your web (HTTP) server.



Enter information about your connection in the text boxes under the sections in the dialog box:

- Authentication on page 83
- Firewall and Proxy Servers on page 84
- Miscellaneous on page 85

Authentication

Prompt for user and password

Select if users will be prompted for a username/password when they connect to the HTTP server.

Default user/Password

Set to the default username/password needed to connect to the HTTP server. Be sure to put the domain name followed by a backslash in front of the user login name; for example:

Nuance\JWyman. This is not a local login.

Authentication type

Set the type of authentication used on the HTTP server you specified as the **Address** in the **Master user profile location** dialog box. Select the type that indicates how your server is configured:

- **Basic**—Choose if the server is configured for Basic authentication, where the username and password are passed over the network as clear text.
- **Digest**—Choose if the server is configured for Digest authentication, where the passwords are never transmitted across the Internet in unencrypted form.

Note: For security reasons, be sure that anonymous logins are disabled on the HTTP or HTTPS server.

Firewall and Proxy Servers

Use proxy server

Select **Use proxy server** if *Dragon Medical Client* workstations are connecting to the **http**server through a proxy server.

Type

Select the type of firewall used on the HTTP server from the drop-down list:

- HTTP —Select for a proxy server that specializes in HTML (web page) transactions.
- Tunnel—Select if client workstations are connecting to the server with tunneling software.
- Socks 4—Select for a SOCKS4 protocol that relays TCP sessions at a firewall host to allow application users transparent access across the firewall. SOCKS4 does not support authentication, UDP proxy. SOCKS4 clients require full Domain Name Service (DNS).
- Socks 5—Select for a SOCKS 5 protocol that relays TCP sessions at a firewall host to allow *NMC console* users transparent access across the firewall. SOCKS 5 supports multiple authentication methods. SOCKS 5 clients use the SOCKS 5 server to perform the Domain Name Service (DNS) lookup.

Server

Enter the server name provided by your server administrator.

Port

Enter the port number accessed to connect to the proxy server or firewall.

User

Enter any username needed to log on to the proxy server or firewall.

Password

Enter any password needed to log on to the proxy server or firewall.

Firewall data

Enter any special authentication string provided by your server administrator.

Miscellaneous

Follow redirects

If you are storing the master user profiles on a server that redirects incoming connections to another location, you can define how the *Dragon Medical Client* handles these redirects by selecting one of the check boxes. Nuance recommends that you set redirects to either **Always** or **Same Scheme Only**, but always follow them.

- **Never**—Never follow redirects; ignores them.
- **Always**—Always follow redirects.
- Same Scheme Only—Permit only redirects using the same scheme as the client request.

Keep Connection Alive

Selecting this check box tells the client and server to keep the connection alive after the current session ends. If you have **Follow Redirects** set to **Always** or **Same Scheme Only**, you should not select this check box.

Lock timeout

Set to the number of seconds the server should wait before breaking the lock on any the master user profiles for the logged on provider. Setting the lock to **0** uses the default setting from the server. Specifying another time overrides the server default.

A network lock prevents a provider from using a master user profile that another provider already has in use. While this process does not take a long time, network problems can cause a lock to become *stuck* and not release when the login process is completed. When this happens, the next time the provider tries to log on with that user account, the provider sees a message informing him or her of the lock.

Setting the "Lock timeout" option to a value greater than 255 will cause issues with Dragon clients from Service Pack 6 or earlier. The older Dragon clients only accept a value less than 255 for the "Lock timeout" the option.

Connection timeout

Set to number of seconds before the NMC server should close the Dragon Medical Client connection to the server either when the connection is idle or after the connection has been open for that duration.

Setting the "Connection timeout" option to a value greater than 255 will cause issues with Dragon clients from Service Pack 6 or earlier. The older Dragon clients only accept a value less than 255 for the "Connection timeout" the option.

Timeout of inactive

Check if the connection timeout in the previous text box applies when the logged in user has been inactive for the specified time period. Leave unchecked if the timeout applies after time elapses, regardless of activity of the logged in user. Leave the option unchecked only with great caution, as it could close the connection while the *Dragon Medical Client* is accessing the master user profile and corrupt the profile.

Recommended settings for web servers

For selections DM Network Edition requires you make while installing a particular type of web server, refer to the instructions for installing that web server in the *Dragon Medical Network Edition Installation Guide*.

Setting site SSL connection settings for master user profiles

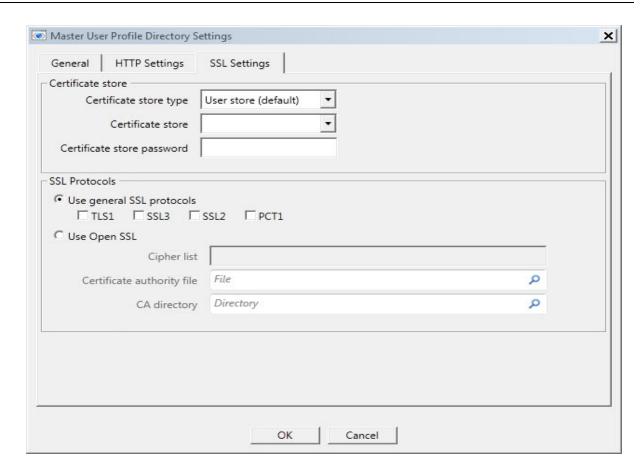
Caution:

If you have never set up a secure web server before, do not attempt to do so; these instructions assume you have already installed the secure web server and have experience setting up a secure web server. Appropriate settings vary.

Be sure that you install an SSL certificate that is trusted for directory on every workstation. You push install the SSL certificate as Trusted Root Certificate Authorities.

In the **Site** tab, under the **Dragon Medical Network Edition** tab, you enter information about where you store master user profiles. If you are storing the user profiles on a secure web server (HTTPS) to set up the SSL settings:

- 1. Click **Master user profile**.
- 2. Click **Configure...**.
- 3. Click SSL Settings.



- 4. In the **SSL Settings** tab, you define and configure the connection to your secure web (HTTPS) server. Enter information about your connection in the text boxes under these sections in the dialog box:
 - Certificate store on page 88
 - SSL Protocols on page 90

Certificate store

In this section, you indicate the type of certificate that provides server identity, certificate, and public key information to clients that try to establish a connection:

Certificate store type

Select the certificate store type used for the client certificate on the local machine:

■ User store (default)—Choose if the certificate store is a certificate store owned by the current user. For Java, choose if the certificate store is the name of a JKS (Java Key Store) file. If the provider is OpenSSL, choose if the certificate store is a file that contains the PEM encoded

certificate and private key.

- **Machine store**—Choose if the certificate store is a machine store (not available in Java or when provider is OpenSSL).
- **PFX file**—Choose if the certificate store is the name of a Private Key Server or PFX (PKCS12) file containing certificates. If the provider is OpenSSL, the file may contain only one certificate and private key.
- **PFX Blob**—Choose if the certificate store is a string (binary or base64 encoded) representing a certificate store in PFX (PKCS12) format.
- **PEM Key**—Choose if the certificate store is a string or file name that contains a Privacy Enhanced Mail (PEM) encoded certificate and private key. This store type is currently not supported in Java.

Certificate store

Enter the name of the certificate store for the client certificate on the local machine:

The storage location is called the *certificate store*. A certificate store will often have numerous certificates, possibly issued from a number of a different certification authorities:

- MY—A certificate store holding personal certificates with their associated private keys.
- **CA**—A certificate store holding Certifying Authority (CA) certificates.
- **ROOT**—A certificate store holding ROOT certificates.
- **SPC**—A certificate store holding Software Publisher Certificate (SPC) certificates.

Notes:

- If you select **PFX** file for the **Certificate Store Type**, for the **Certificate Store** select **Other** and enter the name of the file in the associated text box below it.
- If you select **PFX Blob** for the **Certificate Store Type**, for the **Certificate Store** select **Other** and enter the binary contents of a PFX file (for example, the PKCS12) in the associated text box below it.

Certificate store password

Enter the password for the **Certificate Store** on the local machine if one is required.

SSL Protocols

Use general SSL protocols

Use this section to enable/disable the supported security protocols on the HTTPS server.

- TLS1—Version 1 of the Transport Layer Security (TLS) protocol.
- **SSL3**—Version 3 of the Secure Sockets Layer (SSL) protocol.
- **SSL2**—Version 2 of the Secure Sockets Layer (SSL) protocol.
- **PCT1**—Version 1 of the Private Communications Transport (PCT) protocol.

Notes:

- Although a number of sites still support SSL2, Nuance recommends that you disable it because of potential security vulnerabilities.
- If you select **Using OpenSSL**, this functionality is provided by the **Cipher List**.

Use Open SSL

Select **Using OpenSSL** if the HTTPS server uses **OpenSSL** as a Certificate Authority. OpenSSL is a free non-commercial implementation of SSL.

When you select **Using OpenSSL**, you must provide:

■ Cipher List—A string that controls the ciphers to be used by SSL. The cipher list consists of one or more cipher strings separated by colons.

- Certificate Authority File—Name of the file containing the list of certificate authorities (CAs) trusted by your application. The file set by this property should contain a list of CA certificates in PEM format.
- **CA Directory**—Path to a directory containing CA certificates. The path set by this property should point to a directory on the server machine containing CA certificates in PEM format.

Recommended settings for SSL web servers

For selections that Dragon Medical Network Edition requires you to make while installing a particular type of secure web server, refer to the instructions for installing that secure web server in the *Dragon Medical Network Edition Installation Guide*.

Uploading dictation session data while a user profile is in use

During a dictation session, as a Dragon user dictates and corrects text, Dragon saves data from the dictation session locally. The data includes .dra and acarchive files.

When the Dragon user saves the user profile and logs out of Dragon, Dragon uploads the dictation and correction data from the dictation session to the master profile location on the network.

The acoustic optimizer and the language model optimizer can use this data to optimize the user profile.

If Dragon accumulates large amounts of session data, the time it takes to process the data and upload it to the master profile location could be significant. This may impact the time it takes to save a profile and log out of Dragon. This is especially pertinent to Dragon workstations that run on slower networks.

To improve the time it takes to save a profile and log out of Dragon, you can enable the **Save profile with background process** option. The **Save profile with background process** option allows dictation session data to upload separately from the main profile data 'in the background' while the user profile is open in the Dragon client.

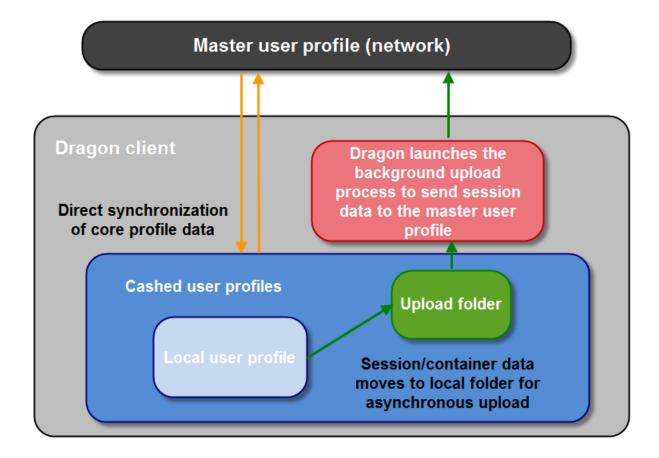
The **Save profile with background process** option uses the DgnProfileUpload.exe, located in the same directory as the natspeak.exe on the Dragon client workstation.

The background session data upload workflow

When a user profile is saved in Dragon, and the **Save profile with background** process option is enabled, the background session data process creates a local upload folder. Each profile gets its own upload folder.

After creating the folder, the process moves the accumulated dictation session data to the 'Upload' folder. The process then uploads the data asynchronously to the master user profile on the network. When the upload is complete, the process terminates.

The background data upload workflow



Events that trigger the background data session upload

When you enable the **Save profile with background process** option, the background upload process starts when one of the following events occur:

- Dragon saves the currently open user profile.
- A Dragon user logs out of Dragon.
- A Dragon user opens a profile.

The third event allows existing 'Upload' data to upload while Dragon opens the profile.

The background upload process does not start if the Windows operating system is about to shut down or restart or the Windows user is logging off the computer.

Background upload process timeouts

The background upload process times out if it runs for more than 15 minutes. This should normally be long enough to perform even large uploads. After fifteen minutes, the process stops. Any data that remains in the upload folder is uploaded the next time the background upload process starts.

Background upload process logs

When the background upload process begins, the following actions are recorded in the Dragon.log file:

- Setup activity when the process starts.
- The launch of the background process executable dgnprofileupload.exe on the Dragon client.
- The movement of files and folders to the 'Upload' folder during the profile save process.

Once the background process starts uploading data, the process logs activities in the dgn-profileupload.log file. The file is located in the root of the 'Upload' folder.

When the profile opens, the process creates a new dgnprofileupload.log file.

The process renames the log file from a previous session, if any, to 'dgnprofileupload.log.bak'.

The background upload process and the 'Remove local cache data after usage' setting

The 'Remove local cache data after usage' setting in the NMC console is not compatible with the background upload process. If the setting is enabled, local profile data can be deleted before the background upload process can upload the data.

If the background upload process is enabled and the 'Remove local cache data after usage' setting is also enabled, the background upload workflow does not execute and the session data is uploaded synchronously.

When Dragon saves a profile, Dragon records a warning message in the Dragon.log file if both the background upload process and the 'Remove local cache data after usage' setting are enabled.

The background upload process and virtual environments

When Dragon runs in a virtual environment, support for background upload depends on whether the user's virtual profile is saved when the user logs-out of the virtual session. The data that the background process uploads may be deleted before the process has can upload the data. You can enable the background upload process if the virtual environment supports saving local profile data across virtual sessions.

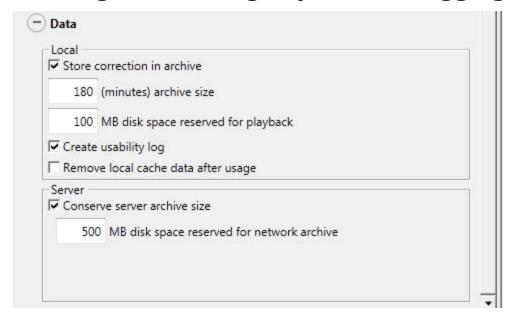
Otherwise, do not enable the background upload process.

The administrator must determine if the virtual environment settings can support the background upload process.

Setting site Data storage settings

On the **Dragon Medical Network Edition** tab, under **Data** you can configure local and server data storage settings.

Entering Data Storage Space and Logging Settings



Click **Data** to view or hide these settings:

Local settings

■ **Store correction in archive:** Enabled by default.

When you elect this option, *Dragon Medical* stores a list of corrections that the Acoustic and Language Model Optimizer uses in a local archive. If you do not select this option before you run the Acoustic Model Optimizer, you may see a message that there is not enough data for

the Acoustic Model Optimizer to process. Be sure to select this option whenever you use *Dragon Medical* for an extended period of time.

- Set the **archive size** to control how many minutes of information is stored. The default setting is 180 minutes.
- MB disk space reserved for playback: Adjusts the amount of disk cache space set aside for any overflow of dictation from a user's computer's memory (RAM). Increase the amount of disk space if you want to save more dictation data. If you do not want to keep any dictation (to conserve disk space) set the amount to 0 MB. The default is 100 MB.
- Create usability log: Instructs the software to create a log of all the menu commands, toolbar buttons, and voice commands that the providers use during a *Dragon Medical* session. This log can help technical support personnel solve software problems and should only be enabled if they instruct you to enable it. The *Dragon Medical Client* creates the usability log in:

C:\Documents and Settings\<username>\Application
Data\Nuance\NaturallySpeaking12\DgnUsability.log

■ Remove local cache data after usage: By default, disabled at site level.

Deletes the contents of the local cache when the provider logs out.

Note: If you want to enable this option, you must disable the **Allow disconnected** mode option in the **Master User Profile** settings to allow it to work. Conversely, if you want to enable the **Allow disconnected mode** option, then you must disable this option to allow it to work. The effects of one setting cancel out the effects of the other.

Server settings

■ Conserve server archive size: Off by default.

Select this option to prevent the copying of Dragon Recorded Audio (.**DRA**) files (files that contain the acoustic data from the latest dictation session) to the *Master User Profile* location when the program synchronizes the local cache user profile with the master user profile. If you leave this box unchecked, *Dragon* integrates the local .**DRA** files with the master user profile when synchronizing it with local cache, making the .**DRA** files available to the *NMC*

serverwhen it next instructs a Speech Node to optimize the master user profile, ultimately increasing dictation accuracy.

However, because **.DRA** files can be large, if you experience excessive network slowdowns, selecting this option may solve the problem by eliminating the copying of these files each time the master and local cache user profiles synchronize. You can still run the *Profile Optimizer* on the master user profile, but since it does not have the **.DRA** files to process, the accuracy gains are reduced.

The .DRA files are not copied once they grow to the maximum size you set in the Disk space reserved for network archive option.

Restore Defaults: Sets all the options in the **Data** tab back to their default values.

Viewing, modifying, and deleting sites

Once you have created and configured a site, you can return to it at any time and perform the tasks below: To refresh the data on the **Organizations** screen, press **Refresh** at the bottom right of the screen.

Note: You must have appropriate administrator security rights to perform these tasks.

Finding and viewing a site

- 1. Select **Organizations** > **Search**.
- 2. Search for an organization.
- 3. Select an organization and click Manage.
- 4. In the left-side panel, select a site.
- 5. In the **Site** area, click **Details**.
- 6. To view the site details you can double-click the name of the site on the list.
- 7. The **Site** tab opens and displays all of the settings for the site on the **General** and **Address** and **Dragon Medical Network Edition** tabs.

Deleting a site

In the NMC console:

- 1. Remove any groups that are associated with the Site you will delete. See <u>Viewing, modifying,</u> and deleting groups for details.
- 2. Remove the users that are associated with the groups you deleted. See <u>Viewing, modifying, and deleting user accounts</u> for details.
- 3. On the menu bar, **Organizations** > **Search**.
- 4. Search for and select an organization, and click **Manage**.
- 5. In the left-side panel, select a site.
- 6. On the ribbon, select **Delete**.
- 7. On the **Confirm Site Deletion** dialog box, click **Yes**.

Modifying a site

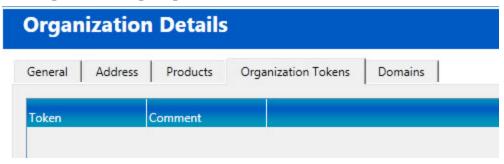
- 1. Find the site that you want to modify, using the procedure in **Finding and viewing a site** above.
- 2. You can make changes depending on your security rights, detailed in *Setting Privileges for groups* on page 118. Text boxes containing data that you cannot modify are gray to show they are inactive.
- 3. On the **General** tab, modify the **ID** and the **Name**. To add groups to or remove groups from a site, see <u>Creating groups</u>.
- 4. Use the **Address** tab to configure the following:
 - Street 1: The first street address for the site.
 - Street 2: A second street address for the site.
 - Street 3: A third street address for the site.
 - **City**: The City associated with the site.
 - **State**: The state associated with the site.
 - **Zip**: The zip code associated with the site.
 - **Country**: The country associated with the site.
- 5. Use the **Dragon Medical Network Edition** tab to configure the following:
 - Setting miscellaneous site settings on page 70
 - Setting general site settings for master user profiles (used to be Roaming settings)

6. Click **Save** to save the settings for this site. When you save the settings, the **Groups** list becomes visible on the **General** tab. It is empty until you add groups as members of the site. See <u>Creating groups</u>.

Creating Organization Tokens

Complete the following steps to create an organization token:

- 1. In the NMC console, go to **Organizations** > **Search**.
- 2. Search for and select an organization.
- 3. In the Organizations area, click the Details icon. The Organization Details screen appears.
- 4. In the **Organization Tokens** tab, click **Add** to generate a new organization token. The **Token** field is pre-filled. Optionally, enter a value in the **Comment** field. Click **Save**.
- 5. The new token appears in the **Token** table. Copy or make a note of this value; you will need it to configure EHR Single Sign-On.



See *Creating Single Sign-On user accounts* on page 44 for information on using the tokens to configure EHR Single Sign-On.

Chapter 3: Configuring groups and user accounts

In the *NMC console* you can create groups of user accounts and associate them with the sites that you have created within your organization. This chapter describes how to set up and work with groups and user accounts, and explains how they work together.

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Understanding groups

In the *NMC console* you can create groups of providers or administrator and associate them with the sites within your organization. Setting up groups makes it easier for you to manage the settings for large numbers of similar users. For instance, if you have a large group of Dragon Medical Client users or Dragon Medical Server users, you can change a setting for one member of the group and quickly apply that change to all members of the group, rather than changing that settings for each provider one at a time.

You use the **Groups** ribbon to:

- Create (add) and delete a group.
- Search for a group.
- Add a user account to a group.
- Access **Group Details** to configure, edit, copy, and delete a group.

When you first log in to the NMC console, it already contains two groups that Nuance provides:

- Dragon Medical Author
- Dragon Medical Server group
- NMC Administrator

When you log in to the *NMC server* for the first time, you used the default **Admin** user account, a member of the **NMC Administrator** group.

Generating Types of Groups

All groups that you can create fall into two broad categories:

- **Dragon Medical Author** groups—Medical practitioners who plan to dictate. Members of this type of group have access to the *Dragon Medical Client* to dictate but do not need access to the *NMC console* to make changes to the settings configured there.
- NMC Administration groups—Network/system administrators who plan to configure the NMC server and Dragon Medical Clients for your sites. Members of this type of group have access to the NMC console to configure particular settings based on the Security Rights you assign

them, but do not need access to the *Dragon Medical Client* because they are not dictating. (For more on administrator Security Rights, see *Setting Privileges for groups* on page 118

Nuance recommends that you have at least two groups, one of each of these two types.

Depending on the needs of your organization you might want to create more groups, for example, a clinic might choose to create these groups:

- Two groups with the role of **Dragon Medical Author**, each medical practitioners with different specialties that need different vocabularies and distinct formatting options. For instance, a group of cardiologists might need one format and a group of dermatologists might need a totally different one.
- Two groups with the role of **NMC Administrator**, the first a small group who can change all options in the *NMC console* and the second a larger group of administrators who can change only group settings.

Your organization can have more than one type of administrator group. For instance, administrator level user groups that Nuance recommends you create:

- **Super users**—Who can take all types of actions in the *NMC server*.
- License administrators—Who create and grant/revoke licenses.
- **Group administrators**—Who help decide on settings providers in their particular group need.
- **Help desk**—Who might have only view access to the information in *NMC server* to help them answer questions that arise.

Determining site or group settings for members of more than one site or group

Providers or users can be members of multiple groups. Groups belong to one specific site. Providers who are in more than one group can, logically, be subject to settings from several groups.

This situation raises the question of which site's or group's settings take precedence over those of the other sites or groups for the individual providers.

When group settings supersede those of other groups

- If a provider's user account is a member of more than one group, the group that appears first in the **User Account Details > Group Memberships > Selected Groups** list for that user account controls the settings that take effect for that provider. (See the illustration below.)
- You can reorganize the order of the groups in the list to put the correct group at the top.

Changes to Group roles

NMC server 3.0 introduces some changes to Group roles.

A new role called "User"

This is a role for groups that contain users that have user accounts but do not have rights/ privileges.

It is a catch-all role to be used for defaults and auto-setup of groups by the NMC server.

For example, for a product that uses the NMC server only for authentication and licensing, such as CLU, users can be placed in a group that is associated with the User role. These users have user accounts but do not have rights in the NMC server.

The User role is visible to all administrative users.

Creating groups

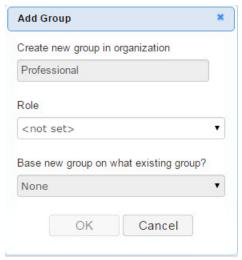
When you create a group, you configure the identifying information for the group and specify the group type.

Steps for creating a group

To create a group, you configure settings on the following tabs:

Details tab

- On the menu bar, click **Groups** and then click the **Add** icon on the **Groups** ribbon. The **Add Group** dialog-box opens.
- 2. In the **Add Group** dialog-box, fill-in the following fields:



- Create new group in organization: The organizations that the administrator can view. If the administrator can only view one organization, a non-editable text box displays the organization.
- Role: All roles that the administrator can select. The default value is "<not set>".

 The "OK" button is disabled until a role is selected.
- Base new group on what existing group? : Lists all available groups for the current site. Select a group that the new group is to be based on.

Note: If the Role field is set to a role other than "NMC Administrator" or "Reporting", the administrator does not need to select a group. In this case, the Base new group on what existing group? drop-down list is disabled and displays "None".

- 3. Press **OK**. The NMC console displays the **Group Details** page.
- 4. On the **Group Details** page, on the **Details** tab, fill-out the following fields as required:
 - Group name: Enter a name for the group. The name is required. You must choose a
 unique name and Nuance recommends that you choose one that is immediately recognizable.
 - Organization: Displays the organization that is associated with the group. The field is non-editable.
 - **Sites**: Displays the site that is associated with the base group. If a base group was not selected, the **Sites** field displays the default site. The administrator can change the value in the **Sites** field.
 - Role: Displays the role that the administrator selected for the group.
 - Privileges: Displays a collection of grants that other groups have on the group that the administrator is currently editing.

Grants tab

The **Grants** tab is where you view and control what group members can create, view, edit, or delete, and, the users, groups, and sites that group members can perform actions on.

The following are some examples of grants:

- Create Site: Allow an administrator to create a site in an organization.
- View Site: Allow an administrator to view the sites in an organization.
- Modify Site: Allow an administrator to modify the sites in an organization.
- **Delete Site**: Allow an administrator to delete the sites in an organization.

To add a grant to a group:

- 1. On the **Group Details** screen, click the **Grants** tab.
- 2. On the **Group Details** screen, click **Add**.
- 3. On the **Add Group Grant** screen, in the **Object Type** area, select the general type of object that the grant applies to:
 - Organization
 - Site

- Group
- Global
- 4. In the **Grants** area, select one or more grants. To select multiple grants, hold down the Ctrl key and select more than one grant. The grants you can select depend on the object you select in the **Object Type** area.
- 5. In the **Object** area, select one or more organizations, sites, or groups. The type of object you can select depends on the object you select in the **Object Type** area. For example, if you select "Group" in the **Object Type** area, the **Object** area displays all the groups that you can apply grants to.
- Click Add.

Note: If the Add button is disabled, you may have selected a grant that you are not able to add. You can only add grants that you already have.

To delete a grant

- 1. In the **Group Details** screen, click the **Grants** tab.
- 2. In the **Grants** area, select a grant.
- 3. In the **Delete** column, click the red x.

Network Edition US tab (only for the DM Network Edition product)

The following instructions only apply to the DM Network Edition product.

- 1. Select a medical vocabulary that you want this group to use. See *Selecting a medical vocabulary for a medical specialty* on page 315.
 - Later, providers dictating with the *Dragon Medical Client* are still able to select other vocabularies from the list, but the one you choose here becomes the default vocabulary for each new user account you create.
- 2. In the **Administrative Settings** section, configure the following settings:
 - Disable the use of Advanced scripting commands: Prevents group members from
 accessing Dragon Medical's Advanced scripting tools. For more information, see the Dragon
 Medical Client Help.

- Anchor dictation box to application: Selecting the Anchor dictation box to application option causes the Dictation Box to start in Anchored mode, where the Dictation Box is anchored to a particular application. When the Anchor dictation box to application option is unchecked (default), the Dictation Box is not linked to any particular application or window and can also be run in Hidden Mode. For more information, see the *Dragon Medical Client Help*.
- Optimize for Virtual Environments: Selecting the Optimize for Virtual Environments option makes all users in a site use BestMatch IV acoustic models when they create a profile. This is recommended for Citrix XenDesktop users that work in virtual environments.
- Use clipboard for Citrix basic dictation in v2.5.x client or older: Selecting the Use clipboard for Citrix basic dictation in v2.5.x client or olderoption sets the 'insert via clipboard' option for all users in a group in the NMC console. (For customers running DM Network Edition 2.5 or older and connecting to NMC server 5.5 or newer.)
- For Citrix basic dictation in v2.6 or newer client, use: Set this option to determine how Dragon inserts Citrix Basic dictation:

Keystrokes: Insert basic dictation through keystrokes.

Clipboard: Insert basic dictation through the clipboard.

Compatibility Module: Insert basic dictation through vSync.

- Enable Smart Phone Server: Set this option to enable or disable the Smart Phone server.

 The server allows the use of the Dragon iPhone as a microphone application.
- In the Commands section, configure voice commands that you want to be available to the members of this group. For more information, see Setting Dragon voice command options for provider/user groups on page 220
- 4. In the **Auto-Formatting** section, configure settings for the group to select the way that certain words spoken by any member of the group should be formatted. This includes general, capitalization rules, numbers, units, dates, abbreviations, miscellaneous, and other settings that you want rendered consistently in documents generated by the group. See *Setting Auto-Formatting Dragon options* on page 164

Saving a group

After you have finished entering all the information necessary to define the group:

- 1. Click **Save** to save your settings and complete the configuration of the group.
- 2. You can later return to the group at any time to modify any settings, change sites the group belongs to, or add and remove user accounts from the group.

Steps for viewing or modifying a group

Details tab

- 1. In the NMC console, search for a group.
- 2. On the **Groups** screen, double-click a group or select a group and click **Details**.
- 3. On the **Group Details** screen, click the **Details** tab.
- 4. On the **Details** tab, modify the fields as required.

Members tab

On the **Members** tab under **Group Details**, you can:

 Select individual user accounts to make those users members of the group. You can assign users to more than one group.

To add or remove users from a group - method 1

If a user is a member of only one group, you cannot delete the user from that group, because a user must belong to at least one group.

- 1. On the **Group Details** screen, click the **Members** tab.
- 2. A list of current group members (users) is displayed. The list of available users is constrained to users created manually or users that logged into Dragon and were assigned to the group
- 3. In the list of **Group members**, click on and highlight a user account, then click the **Add/Remove** button below the list.

To add or remove users from a group - method 2

- 1. On the ribbon, select **Groups**.
- 2. In the **Groups** area, click **Search**.
- 3. On the **Groups** screen, enter search criteria and click **Search**.
- 4. In the search results, select a group.
- 5. On the ribbon, in the **Groups > Membership** area, click **Add User Account to Group**.

6. On the **Group Member** screen:

- 1. To add someone to a group, in the **Member** column, check the check-box beside their name.
- 2. To remove someone from a group, in the **Member** column, un-check the check-box beside their name.

7. Click Save.

Security tab

On the **Security** tab under **Group Details**, you can view the permissions that control the actions (create, view, edit, delete) that members of a group can perform on specific objects (sites, groups, and users).

To add a permission to a group

- 1. On the **Group Details** screen, click the **Security** tab.
- 2. Click Add.
- 3. In the **Add Group Permission** dialog-box, under **Grants**, select one or more grants. To select multiple grants, press down the **Ctrl** key and select more than one grant.
- 4. In the **Groups** area, apply the grant(s) to one or more groups.
- 5. Click Add.

Grants tab

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- 6. Click Add.

Note: If the Add button is disabled, you may have selected a grant that you are not able to add. You can only add grants that you already have.

To delete a grant

- 1. In the **Group Details** screen, click the **Grants** tab.
- 2. In the **Grants** area, select a grant.
- 3. In the **Delete** column, click the red **x**.

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- 1. View or configure a medical vocabulary that you want this group to use. See *Selecting a medical vocabulary for a medical specialty* on page 315.
 - Later, providers dictating with the *Dragon Medical Client* are still able to select other vocabularies from the list, but the one you choose here becomes the default vocabulary for each new user account you create.
- 2. In the **Administrative Settings** section, configure the following settings:

- Data Distribution Location: The path to the Data Distribution Directory where you plan
 to place files containing new words, commands and vocabularies for this group. The *Dragon*Medical Client automatically downloads files from this location when a group member logs on
 to the *Dragon Medical Client*. For more information, see Using the Data Distribution Tool
- Disable the use of Advanced scripting commands: Prevents group members from accessing *Dragon Medical*'s Advanced scripting tools. For more information, see the *Dragon Medical Client Help*.
- Anchor dictation box to application: Selecting the Anchor dictation box to application option causes the Dictation Box to start in Anchored mode, where the Dictation Box is anchored to a particular application. When the Anchor dictation box to application option is unchecked (default), the Dictation Box is not linked to any particular application or window and can also be run in Hidden Mode. For more information, see the *Dragon Medical Client Help*.
- Optimize for Virtual Environments: Selecting the Optimize for Virtual Environments option makes all users in a site use BestMatch IV acoustic models when they create a profile. This is recommended for Citrix XenDesktop users that work in virtual environments.
- Use clipboard for Citrix basic dictation in v2.5.x client or older: Selecting the Use clipboard for Citrix basic dictation in v2.5.x client or olderoption sets the 'insert via clipboard' option for all users in a group in the NMC console. (For customers running DM Network Edition 2.5 or older and connecting to NMC server 5.5 or newer.)
- 3. In the **Commands** section, configure the voice commands that you want to be available to the members of this group. For more information, see *Setting Dragon voice command options for provider/user groups* on page 220
- 4. In the **Auto-Formatting** section, configure the settings for the group to select the way that certain words spoken by any member of the group should be formatted. This includes general, capitalization rules, numbers, units, dates, abbreviations, miscellaneous, and other settings that you want rendered consistently in documents generated by the group. See *Setting Auto-Formatting Dragon options* on page 164
- 5. In the **Diagnostics** section, configure these settings:

Upload Dragon.log file: Determines when the Dragon.log file is sent to the NMC server. The values for this option are:

- Never
- Only on Critical Errors
- Always

The default value is Only on Critical Errors.

Enable Problem Step Recorder (PSR): The default value is unchecked.

If enabled, an NMC server administrator can choose one of the following options:

- Max PSR screenshots: Takes an integer value where the default is 50 and the acceptable values range is from 0 to 1000.
- Show PSR Gui: A checkbox where the default value is unchecked.

Setting Privileges for groups

Privileges control the rights for a specific product. Privileges determine the UI elements and features that an administrator can view and use in the NMC console.

Setting privileges for a group

In the NMC console, search for a group.

On the **Groups** screen, double-click the group or select the group, and in the **Groups** section, select **Details**.

On the Group Details screen, in the Privileges area, select the privileges for the group.

The following are some of the privileges that an administrator can have:

Privilege	Description
Manage Organizations	Allows administrators to see the
	Organizations button group.
Manage Sites	Allows administrators to see the
	Sites button group.
Manage Groups	Allows administrators to see the
	Groups button group.
Manage Licenses	Allows administrators to see the
	Licenses button group.
Send Message	Allows administrators to use the
	Create Message button.
View Audit Entries	View the activities of users or
	administrators.
View Trends	View client device usage inform-
	ation, speech recognition metrics,
	and license usage.
Product Manage Dragon Medical	Allows administrators to see tabs
	related to Dragon Medical on vari-
	ous objects (Orgs, Sites, Groups,
	Users, etc.).
Product Manage NMS	Allows administrators to see set-
	tings and feature options for man-
	aging the NMC server.
Product Manage Dragon Medical Server	Allows administrators to see tabs
	related to Dragon Medical Server on

Privilege	Description
	various objects (Orgs, Sites,
	Groups, Users, etc.).
Product Manage DMMR	Allows administrators to see tabs
	related to Mobile Recorder on vari-
	ous objects (Orgs, Sites, Groups, Users, etc.).
Dur door Morros DC2/O	·
Product Manage PS360	Allows administrators to see tabs related to PS360 on various objects
	(Orgs, Sites, Groups, Users, etc.).
Product Manage Reporting	Allows administrators to see tabs
	related to reporting features.
Product Manage TR	Allows administrators to see tabs
	related to Desktop Recorder on vari-
	ous objects (Orgs, Sites, Groups, Users, etc.).
	·
Product Manage CAPD	Allows administrators to see tabs related to CAPD on various objects
	(Orgs, Sites, Groups, Users, etc.).
Product Manage CLU	Allows administrators to see tabs
	related to CLU on various objects
	(Orgs, Sites, Groups, Users, etc.).
Product Manage Capture Services	Allows administrators to see tabs
	related to Capture Service on vari-
	ous objects (Orgs, Sites, Groups,
	Users, etc.).
Product Manage Dragon Corporate	Allows administrators to see tabs
	related to Dragon Corporate on vari-

Privilege	Description
	ous objects (Orgs, Sites, Groups, Users, etc.).
Product Manage Workflow Edition	Allows administrators to see tabs related to DM Workflow Edition on various objects (Orgs, Sites, Groups, Users, etc.).
Product Manage PowerMic Mobile	Allows administrators to see tabs related to PowerMic Mobile on various objects (Orgs, Sites, Groups, Users, etc.).
Manage Clusters	Allows administrators to see the Clusters button group.

Privileges that are enabled when you import a license

Certain privileges are enabled when you import a particular license type. The privilege is enabled for all groups in the organization that have the role of NMC Administrator.

The privilege is enabled for everyone the first time you import a license of that type.

This will only occur if there is no group in the Organization with the specific "Product Manage" privilege.

After-wards, it is your responsibility to manage which groups can manage the product.

License type	Privileges enabled when license is imported
SAS	ProductManageSpeechAnywhere
	ManageSpeechObject
CLU	ProductManageCLU
CAPD	
CAC	

License type	Privileges enabled when license is imported
DMMR	ProductManageDMMR
TurboRecorder	ProductManageTurboRecorder
Author	ProductManageDragonMedical
NonPhysicianAuthor	ManageProfileOptimizer
	ManageProductUpdates
	ManageSpeechObjects
CaptureServicesForMobile	ProductManageCaptureServices
CaptureServicesForDesktop	
PhysicianQualityReportingSystem	ProductManageProductPS360
ClinicalGuidelines	
DragonCorporateEditionTypeA	ProductManageDragonCorporate
DragonCorporateEditionTypeB	
DragonCorporateEditionTypeC	
DragonCorporateEditionTypeD	
DM Workflow Edition	ProductManageDM360WorkflowEdition
DM Workflow Edition Export	
PowerMic Mobile	ProductManagePowerMicMobile

Viewing, modifying, and deleting groups

Once you have created and configured a group you can return to it at any time and perform the tasks below.

Note: You must have the appropriate administrator security rights to perform these tasks.

Finding and viewing a group

- 1. On the menu bar, click **Groups** and then click the **Search** icon. The **Groups** screen opens, allowing you to search by **Group name**, **Organization**, or **Role**.
- 2. Enter a group name in the **Group name** field, and/or select an organization or role to search on, then click **Search**.
- 3. The search results appear on the **Groups** screen.
- 4. Click on the name of the group that you want to view.

The **Group Details** window opens and displays all of the settings for the group on various tabs.

Deleting a group

1. On the menu bar, click **Groups** and then click the **Search** icon.

The **Groups** screen opens. To refresh the data on the **Groups** screen, press **Refresh** at the bottom right of the screen.

- 2. Use the procedure in Finding and viewing a Group to find the group you want to delete.
- 3. Select the group that you want to delete from the list and then click **Delete** on the **Groups** ribbon.

A message asks you to confirm that you want to delete the group.

4. Click Yes.

The group is removed from the system. User accounts associated with the group are not deleted. However, you should make sure to reassign the user accounts to other groups.

Modifying a group

- 1. Use the procedure in **Finding and viewing a Group** to find the group you want to modify.
- 2. The changes you can make to a group depend on your security rights.

Fields that you cannot modify are shaded gray and are inactive.

- 3. On the **Members** tab, you can:
 - Add or remove group members (user accounts)
- 5. Modify the Power Mic settings.
- 6. Configure profile optimizer scheduler settings.
- 7. When your modifications are complete, click **Save** to apply them to the group.

Setting Dragon voice command options for provider/user groups

The **Network Edition US** tab for a group includes a list of voice command options under **Commands** that control how the *Dragon Medical Client* interprets voice commands.

Once you configure commands for a group, the command settings then apply to all healthcare providers in the group.

- Enable mouse motion commands: By default, this feature is enabled. Allows the user to use mouse motion commands such as "Move Mouse left," "Faster," and "Slower." Use the Mouse movement slider to control how quickly the mouse pointer moves across the screen.
- **Enable HTML support:** By default, the group level setting applies.

Enabling this setting makes available a set of commands designed to help users surf the web by voice in web browsers. You may need to disable this setting for certain applications. For more information, see the client Help.

- Enable commands in HTML windows: By default the group level setting applies.
 - Enabling this option makes available a set of voice commands designed for users to use for creating or editing messages in HTML format in certain Microsoft Outlook dialog boxes. These dialog boxes appear with the Internet Explorer symbol (a small document icon with the letter "e" in it) in the left corner of the window header. You may need to disable this setting for certain applications. For more information, see the *Client* Help.
- Require click to select hyperlinks in HTML windows: By default, this feature is enabled and the group level setting applies.
 Requires that provider speak the word "Click" to select a hyperlink, such as "Click nuance.com" instead of just "nuance.com."
- Enable HTML custom API: Select this option to enable Dragon to have FullTextControl in applications that implement the Custom HTML API.
- Enable RIA support: Select this option to enable Dragon to support rich internet applications (RIA).

- Enable recognition mode switching commands: Enabling recognition mode switching allows users in the group to dictate and say the mode switching commands interchangeably. Turning off recognition mode switching disables the ability to switch between modes For example:
 - Dictation Mode: In Dictation Mode Dragon Medical interprets everything you say as dictation and nothing is interpreted as a command. Say "Start Dictation Mode" or "Switch to Dictation Mode."
 - Command Mode: In Command Mode *Dragon Medical* interprets everything you say as a command and nothing is interpreted as dictated text. Say "Start Command Mode" or "Switch to Command Mode."
 - **Spell Mode**: In Spell Mode *Dragon Medical* allows you to say any combination of letters, digits, or symbols as you might need to do dictating license plate or parts numbers. Say "Start Spell Mode" or "Switch to Spell Mode."
 - **Numbers Mode**: In Numbers Mode *Dragon Medical* interprets your dictation as numbers. Say "Start Numbers Mode" or "Switch to Numbers Mode."
 - Normal Mode: The most flexible mode in Dragon Medical is Normal Mode. In Normal
 Mode, Dragon distinguishes dictation from commands by analyzing what you say between
 pauses. Say "Start Normal Mode" or "Switch to Normal Mode."
 - For more information on modes, see Using Recognition Modes in the *Dragon Medical Client* Help.
- Enable Web search commands: Select this option to make available Web search commands that let providers in the group search the Internet using commands that are patterned on their natural speech. See Voice Shortcuts for Web Search in the *Dragon Medical Client* Help for more information.
- Enable desktop search commands: Select this option to make available Desktop search commands that let providers in the group search their Windows desktops using commands that are patterned on their natural speech. See Voice Shortcuts for Desktop Search in the *Dragon Medical Client* Help for more information.
- Enable Email and Calendar commands: Select this option to make available Voice

 Shortcuts for Email and Calendar that let providers in the group control Outlook's email and

calendar functions using commands that are patterned on their normal speech. See the *Dragon Medical Client* Help for more information.

■ Enable cut shortcut commands, Enable delete shortcut commands, Enable Copy shortcut commands: Select these options to enable the Cut, Copy and Delete Quick Voice Formatting Commands. Delete and Copy are enabled by default.

In versions 9 and earlier of the *Dragon Medical Client*, cutting, copying, or deleting was a two-step operation: you first had to select the text before you could operate on it. The Quick Formatting Commands let you perform many of these tasks with a single command.

If you turn off these commands, you can still cut, copy, and delete, but you have to first select the text with the "Select <text>" command and then issue a second command to perform the operation you want; for example, "delete that".

For more information, see the Dragon Medical Client Help.

■ Enable automatically select first field:

Select this option to enable the "automatically select the first field" feature for a group of users.

■ Variable delimiters: By default the group level setting applies.

The variable delimiters are used by Text and Graphics/auto-texts commands that incorporate Voice (variable) Fields. Voice Fields are variable fields where the provider can later type or dictate a specific value.

By default, Text and Graphics/auto-texts Voice commands use the square bracket [] characters to indicate the presence of a variable field. To change the variable delimiting characters, specify a character for the left and right delimiters.

The delimiting "characters" can each be up to 5 characters long. The left and right delimiters cannot be exactly the same as each other or, when you try to apply them, the *Dragon Client* displays a message that they are not valid.

Caution: Nuance recommends you set the delimiting characters once and never change them, because if, for instance, you use square brackets in several Text and

Graphics/auto-texts commands, then change the delimiting characters to */ and /*, the Text and Graphics/auto-texts commands that are using the square brackets then fail because the *Dragon Client* looks for variables only between */ and /*, not between [and].

For more information about using variables with Text and Graphics/auto-texts commands, see Using Voice Fields with Text and Graphics/auto-texts commands in the *Dragon Client* Help.

■ Enable Natural Language Commands: This series of four options enables the users in the group to use Natural Language commands with the applications Microsoft Word, WordPerfect, Microsoft Excel, and Microsoft PowerPoint. This feature uses an additional 8 MB of memory and requires that you restart your computer before it takes effect. Natural Language Commands are available by default only in Microsoft Word.

Configuring user accounts

Before medical professionals at your facility can begin using *Dragon Medical Client*, you must create a user account for each professional in the *NMC server*, through the *NMC console*. When one of these healthcare providers opens the *Dragon Medical Client*, the server checks to make sure that the provider has an account and a license associated with the account. After verifying the account and license, the server checks the *Master User Profiles Server* to find a user profile for that provider (for more information, see *Creating a user profile* on page 234

A user profile stores acoustic information about the voice of the individual provider. *Dragon Medical Client* uses this vocal data to help it recognize what the provider is saying. This profile also stores any changes that providers or the *Profile Optimizer Speech Nodes* make to the standard *Dragon Medical* vocabulary, such as specialized words, names, acronyms, and abbreviations.

If the provider does not have a user profile, *Dragon Medical Client* opens the **New Profile Wizard**, where the provider enters basic data, selects a medical vocabulary, and presses a button to have the client create a user profile. If a user profile exists, the *Dragon Medical Client* accesses that profile and the provider can begin dictating. If the provider's user profile is not associated with a valid account or the account does not have a license assigned to it, the provider cannot use that profile to dictate.

The *NMC server* lets you select the default language and accent that apply to providers creating a user profile, though the provider can change these settings in the wizard.

You can add or delete user accounts on the **User Accounts** ribbon. You can use this ribbon to modify existing user accounts and to edit their settings at any time. If you have the required security settings, you can also view the *Dragon Medical Client* logs through the **Client Logs** icon on the ribbon.

In DM Network Edition, you can use a text file to import multiple users into an existing group. You can also set the user account type and apply a license to each of the users you import. For details, see *Import multiple users into the NMC server* on page 141.

Note: If you delete a user account, you can reassign the license associated with it to another user account. See *Managing licenses* on page 201.

When you create user accounts, keep in mind:

- If a user account is a member of more than one group, you should be sure that the group whose settings you want to take precedence appears first in the Group Memberships > Selected
 Groups list for the user account.
- In most organizations, users should only be members of multiple groups because they use both the *Dragon Medical Client* and the *NMC console*. In this instance, the person would be both a healthcare provider and an administrator.
- Although it is less common, some users might belong to multiple groups. For instance, a provider might belong to both Walden-ER-Cardiologists and Walden-Cardiology-Clinic groups.

Creating user accounts

To create a user account in the *NMC console*, you configure the basic settings in the **User Account Details** window.

Creating a user account

 On the menu bar, click User Accounts and then click the Add icon on the User Accounts ribbon.

The **User Account Details** window opens.

- 2. Configure the options and settings on tabs in the **User Account Details** window:
 - **Details** and **Address**. See Configuring user account details and address settings on page 131
 - Specialty. See Assigning a specialty to a user.
 - **Group Memberships**. See Assigning user accounts to groups on page 139
 - Messaging. See Send a message to a user for details.
 - Network Edition US. (Only for the DM Network Edition product) See <u>Setting user</u> account Dragon options.
 - User Profile. (Only for the DM Network Edition product) See Viewing User Profile settings on page 182

- **CAPD**. (Only for the CAPD product). See *Set the location of the Query Viewer and the Query Notifier* on page 1.
- 3. Click **Save** to save the user account settings.

You are prompted to grant the new user a license.



- 4. Click **Yes** to assign a license to the user account. Click **No** to create the user without a license and remain on the **New User** tab.
- 5. If you click Yes, a message prompts you to select one or more license types. The NMC console displays all licenses for an organization and the licenses an administrator can see (based on product management rights). This includes partner-related licenses. The NMC console does not display Enterprise license types.
- 6. Select the license type for the user account and click **OK**. (The number in parentheses indicates how many licenses of that type are still available.)

Configuring user account details and address settings

On the **User Account Details > Details** and **Address** tabs, you store contact, identification, and login credentials for a user account.

- The **Details** tab displays the **Organization** associated with the user account that you are creating.
- Enter the information for the user associated with the user account. The First Name, Last Name, and Login are required. The Login must be unique.

The first name, last name, and login must be the same as the first name, last name, and login for

the user in the back end system. If the login ID already exists, "Login unavailable" appears in red under the Login field.

- 3. In the **Middle name** field, enter the middle name of the user.
- 4. Enter the **Password**.
- Enter the Location (usually the primary work site) and the Department of the medical professional.
- 8. To make the user reset their password the next time they log into NMC server, select **User** must change password on next Login.
- 9. To unlock a user, select **Unlock user**.
- 10. Click the **Address** tab and enter the home address information of the user associated with the account. This information is optional and is for your own convenience only, as the NMC server does not use it.
- 11. Continue to create the user account on the **Group Memberships** tab. .
- 12. To send email or a text message to the user when they receive an NMC server message, set the options in the **Messaging** tab. See *Enable sending messages to an administrator* on page 137

Assigning a medical specialty and user type to a user

On the **User Account Details > Specialty** tab, you set the medical specialties and user type for a user.

- 1. In the **Primary specialty** field, choose the main medical specialty type for the user that is associated with the user account. Available medical specialty types include:
 - Adult
 - Pediatric
 - General-Family Med Peds
 - Adult surgery
 - Pediatric surgery
- 2. In the **Primary sub-specialty** field, choose a medical sub-specialty type for the user. The medical sub-specialties that you can choose depend on the value in the **Primary specialty** field.
- 3. In the **Secondary specialty** field, choose a second main medical specialty type for the user. Available medical specialty types include:
 - Adult
 - Pediatric
 - General-Family Med Peds
 - Adult surgery
 - Pediatric surgery
- 4. In the Secondary sub-specialty field, choose a Secondary medical sub-specialty type for the user. The medical sub-specialties that you can choose depend on the value in the Secondary specialty field.
- 5. In the **User Type** field, choose the type of user that is associated with this user account. By default, the **User Type** field is set to 'Physician'. Available user types include:
 - User
 - Physician
 - Nurse

- Resident
- Physician Assistant
- NMC Administrator
- Other non physician

6.

Administrators can send messages to other administrators

An administrator can send messages to contacts in an organization. Organizations and their administrators can receive notifications about events including system upgrades, outages, notices, news, etc.

To use messaging with an on-premise NMC server, customer must have an SMTP server for NMC server to send emails. Nuance does not provide or support SMTP servers.

The administrator sets up an email address for an organization. The administrator also sets up an email address for the following NMC console Users:

- All users with an NMC Administration license that are in the NMC Administrator group (assuming NMC server Administration licenses have been imported for that organization).
- All users with a Dragon Medical Mobile Recorder license that are in the Dragon Medical Recorders group (assuming Dragon Medical Mobile Recorder licenses have been imported for that organization).
- All NMC Administrator groups (assuming NMC Administration licenses have been imported for that organization).
- All Dragon Medical Recorders groups (assuming Dragon Medical Mobile Recorder licenses have been imported for that organization).

Afterwards, the administrator can send NMC server messages to NMC server users (by licenses, group, or user accounts) and can send emails to organization(s).

Messages can be sent to one or more sites or NMC console users in one step, even if they are from different organizations.

Messages may be sent for a variety of reasons, including:

- a user has an NMC server message
- there are medication and command updates that require approvals
- a new NMC server patch is available for deployment
- the number of available licenses is low

- scheduled "trend" reports are available
- troubleshooting information is required by support personnel.
- system maintenance or outages are planned.
- other news or events

Enable sending messages to an administrator

You can configure the NMC server to send email messages and SMS messages to administrators when they receive a message from the NMC server. You can enable email messaging, SMS messaging, or both when you create a user or after you create a user.

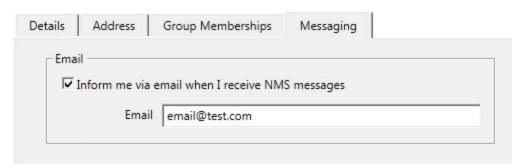
To use messaging with an on-premise NMC server, customer must have an SMTP server for NMC server to send emails. Nuance does not provide or support SMTP servers.

To use an SMTP server for messaging (for customers with an on-premise NMC server), you must configure SMTP in the NMC console in **System Settings** > **SMTP**.

Enable sending email to an administrator when they receive an NMC server message

To send an email to an administrator when they receive an NMC server message, perform the following steps:

- 1. On the User Account Details screen, click the Messaging tab.
- In the Email section, select Inform me via email when I receive NMC server messages.
 If you select this option, you must enter an email address in the Email field to be able to save the administrator.
- 3. In the **Email** field, enter an email address for the administrator.

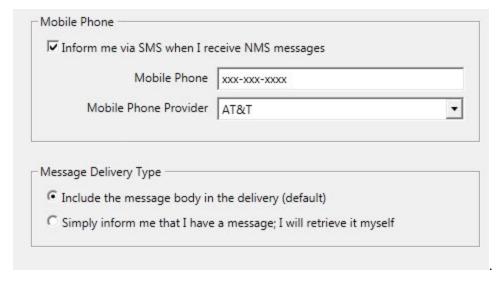


4. To save the changes and close the administrator, click **Save**. To save the changes and edit another administrator, click **Save & New**.

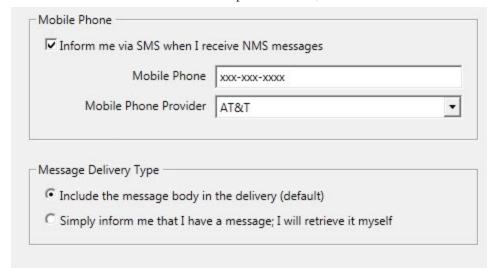
Enable sending an SMS message to an administrator's phone when they receive an NMC server message

To send an SMS message to an administrator's mobile phone when they receive an NMC server message, perform the following steps:

- 1. On the User Account Details screen, click the Messaging tab.
- 2. In the Mobile Phone section, select Inform me via SMS when I receive NMC server messages. If you select this option, you must enter values in the Mobile Phone field and the Mobile Phone Provider field to be able to save the administrator.



- 3. In the **Mobile Phone** field, enter the mobile phone number for the administrator.
- 4. In the **Mobile Phone Provider** drop-down field, select the administrator's mobile provider.



The following is the current list of supported mobile providers:

- Alltel
- AT&T
- Boost Mobile
- Sprint Nextel
- Sprint PCS
- T-Mobile
- US Cellular
- Verizon
- Virgin Mobile USA
- 5. In the **Message Delivery Type**, choose the message delivery type:
 - i. To include the body of the message in the email or SMS message, select **Include the message body in the delivery (default)**.
 - ii. To have the email or SMS message only inform the recipient that they have an NMC server message, select Simply inform me that I have a message; I will retrieve it myself.
- 6. To save the changes and close the administrator, click **Save**. To save the changes and edit another administrator, click **Save & New**.

Assigning user accounts to groups

Use the **User Account Details > Group Memberships** tab to make a user account a member of one or more groups by indicating group memberships for the user account.

Use the Site filter drop down to choose the appropriate site for the user.

The **Available Groups** list displays all available groups for the selected site.

Notes:

■ You must assign each user account to at least one group. If you do not assign a user account to a group, the *NMC server* does not let you save the user account.

- If a user account is a member of more than one group, the group whose settings take precedence over settings of other groups appears first in the User Account Details > Group Memberships > Selected Groups list for that user account.
- You can use the **Available groups** filter drop-down list to refine the list of groups that display in the **User Account Details** page.
- User accounts can only be added to groups by someone who is an **administrator** with the appropriate security rights. If you want users in your organization to be able to assign themselves to groups, you must create a group with the appropriate rights and add those users to the group.

Assigning a user account to a group

- 1. On the User Account Details screen, click Group Memberships.
- 2. In the **Available Groups** area, select a group name.
- 3. Click the right arrow button to move your selection to the **Selected Groups** area.
- 4. Repeat steps 1 and 2 until the user account is assigned to all of the groups that you require.
- 5. Click **Save** to save your selections.

Removing a user account from a group

There are two ways to remove a user account from a group:

- In the User Account Details > Group Memberships tab, select the group that you want to remove the user account from and click the left arrow button. The group is removed from the Selected Groups area.
- In the Group Details > Members tab click the Add/Remove button under the Group members list. Use the Group Membership User Accounts window to select the name of the user account from the Selected User Accounts list and move it to the Available User Accounts list using the left arrow button.

Import multiple users into the NMC server

In Dragon Medical Network Edition, you can use the *Import Users* wizard to import multiple users at one time into the system. You can also assign user account types and licenses to the users and assign the users to specific Groups.

To perform a mass import of users, you must perform the following two main tasks:

- 1. Create a comma-delimited text file or an XML file that contains information about the users, including user names and passwords.
- 2. Use the file to import users into the NMC server.

Creating a file with information about users to import

To import multiple users into the NMC server, you must create either a comma-delimited text file or an XML file that contains user information. The Import Users wizard supports both file types. However, each file must conform to specific formatting standards.

Creating a comma-delimited text file for importing users

The comma-delimited text file can contain the following fields for each user:

- First name (50 characters maximum)
- Last name (50 characters maximum)
- Login id (30 characters maximum)
- Password (30 characters maximum)

The fields must be separated by commas. The First name, Last name, and Login id fields must contain characters. The Password field can be blank.

Example: A comma-delimited text file with user information

The following is an example of a valid text file containing user information.

Notice there is no password in the second example. When importing a comma-delimited file, if the password is blank, you must still place a comma after the login id field and leave the password field blank. The NMC server expects four fields in the text file.

```
Jack, Degnan, jdegnan, pwd124

Tim, Roberts, troberts,

Frank, Fiddler, ffiddler, fflr2
```

Creating an XML file for importing users

The XML file must begin with the XML version declaration processing instruction, <?xml version="1.0"...?>.

The XML file can contain the following fields for each user. The fields can contain commas.

- First name (required: 1 character minimum, 50 characters maximum)
- Last name (required: 1 character minimum, 50 characters maximum)
- Middle name (50 characters maximum)
- Prefix (10 characters maximum)
- Login id (required: 3 characters minimum, 30 characters maximum)
- Password (required: 30 characters maximum)
- Location (50 characters maximum)
- Department (50 characters maximum)
- Email address (50 characters maximum)
- Street 1 (60 characters maximum)
- Street 2 (60 characters maximum)
- Street 3 (60 characters maximum)
- City (40 characters maximum)
- State (5 characters maximum)
- ZipCode (20 characters maximum)
- NTLMCredential (160 characters maximum) Syntax: <NTLMCredential><DomainName>\<UserName></NTLMCredential>

Note: The NTLM Credential element allows you to import a user's domain and user name pair for multi-domain LDAP. For this import to work, you must create an Active Directory connection string entry for each unique DomainName that you specify in the NTLMCredential element **before** you run the import. For example if you support two domains, Domain1 and Domain2, you must create an Active Directory connection string entry for each of these domains before you can do a bulk import of users on either domain. See the "Configure the Organization" section of the *Configuring LDAP* on page 40 for instructions on setting the Active Directory connection string.

XML file format

To view the XML schema that defines the file format for the user XML file, see <u>XML schema for the user XML</u> file.

Example: An XML file with user information

The following is an example of a valid XML file containing user information:

```
<?xml version="1.0" encoding="utf-8"?>
<Users xmlns="http://nuance.com/NAS/UserImport">
        <User
                FirstName="Jack"
                MiddleName="Phillip"
                LastName="Degnan"
                LoginId="jdegnan"
                Password="pwd124">
                <NTLMCredential>Domain1\Jack.Dragon</NTLMCredential>
        </User>
        <User
                FirstName="Tim"
                LastName="Roberts"
                LoginId="troberts"
                Password=""
                State="GA">
                <NTLMCredential>Domain2\Tim.Roberts</NTLMCredential>
        </User>
        <User
                FirstName="Frank"
                LastName="Fiddler"
                LoginId="ffiddler"
                Password="fflr2"
                Street1="205 2nd St"
                City="Newton"
                State="NC"
                ZipCode="23682"
                Department="Radiology">
                <NTLMCredential>Domain1\Frank.Fiddler</NTLMCredential>
        </User>
</Users>
```

If the user import field is not required, you can omit the attribute. The attributes can be placed in any order in the XML file. The Users and User elements are in the following default XML name space:

http://nuance.com/NAS/UserImport

Importing or updating user token credentials

When you import a new user an existing user, the Dragon Medical Network Edition includes or updates the user tokencredential information for the user. This feature is only supported when importing user data from an xml file.

Suported Use cases:

- Import new users with token credential information: The users and their token credentials are added to the NMC server.
- Import existing users with new token credentials information: The user token credentials are updated in the NMC server.

Note: An administrator can view user token credentials in the NMC console under User Account details > Credentials > Token.

Example: An XML file with user token credential information

The following is an example of a valid XML file containing user token credential information:

```
<?xml version="1.0" encoding="utf-8"?>

<Users xmlns="http://nuance.com/NAS/UserImport">

<User

FirstName="Jack"

MiddleName="Phillip"

LastName="Degnan"

LoginId="MImpor11"

Password="5678iqwe">

<NTLMCredential>MagfiDomain\magfi12</NTLMCredential>

<TokenCredential>magfi12</TokenCredential>

</User>

</User>
```

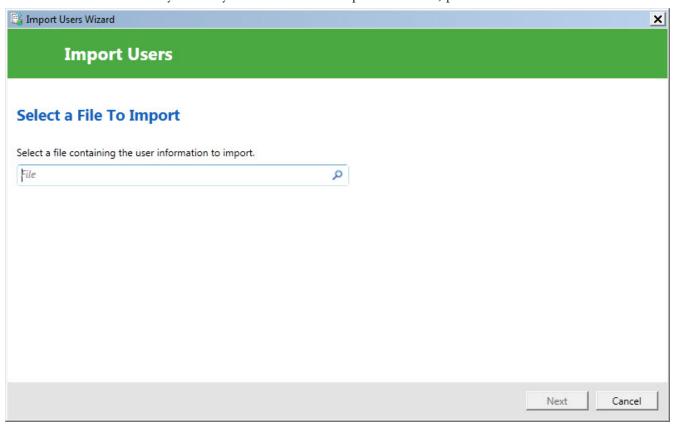
Importing users into the NMC server

After you create a comma-delimited text file or an XML file that contains user information, you must use the file and the NMC console to import users into the system.

At any time in the following steps, you can press **Cancel** to exit a step and stop the import process. You can also click the left arrow button to return to the previous screen in the *Import Users* wizard.

- 1. In the NMC console, select the **User Accounts** tab.
- 2. Select **Import**. The *Import Users* wizard appears.

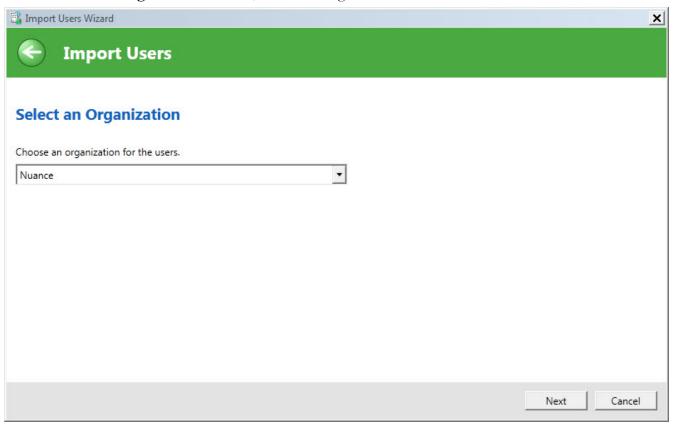
3. In the **Select a File To Import** screen, enter the path and name of the file that contains the user information. If for any reason you decide to not import the users, press **Cancel**.



- 4. If the path and name of the text file are valid, the **Next** button is enabled. Press **Next**. If the *Import Users* wizard has trouble parsing the data from the text file or simply cannot find any users in the text file, the wizard displays a message that tells you no users were found. Press **OK** to close the message. You may now re-enter the name of the text file or make changes to the existing text file and retry this step.
- 5. The **Users to Import** screen displays information about the users from the text file.
- 6. Review the list of users to import. Press **Next** to continue. If you wish to cancel the import of users, press **Cancel**. To return to the previous page, click the left arrow button.

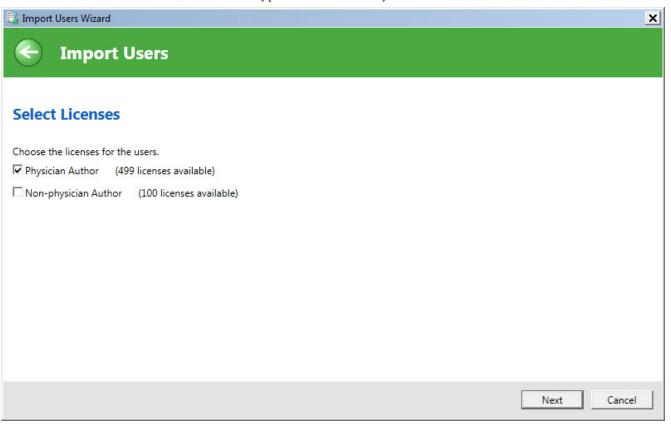
If the *Import Users* wizard encounters errors when importing the user data, the NMC console displays a message. Press **Close** on the dialog to leave this step.

7. On the **Select an Organization** screen, select the organization to associate with the users.



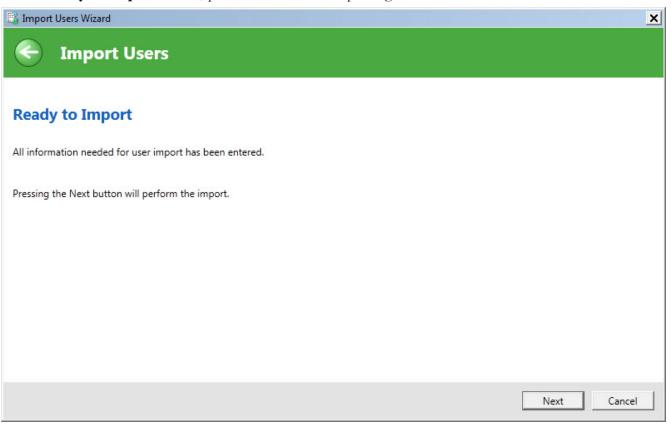
- 8. Press Next.
- 9. The **Select Group Membership** screen displays a list of groups that you can associate with the users.
- 10. In **Available Groups**, select one or more groups. Use the arrows to move the selected groups to the **Selected Groups** list. You must select at least one group.
- 11. Press Next.
- 12. If you have the administrative rights to grant licenses to users, the *Import Users* wizard displays the **Select Licenses** screen. The screen lists all the licenses that you can grant to the users. The list displays the license type and the number of available licenses for each license type. You cannot apply a license type to the users if the number of available licenses is less than the

number of users In this case, the license type is disabled and you cannot select it in the screen.



13. Optional: Select the licenses to apply to the users. Press Next.

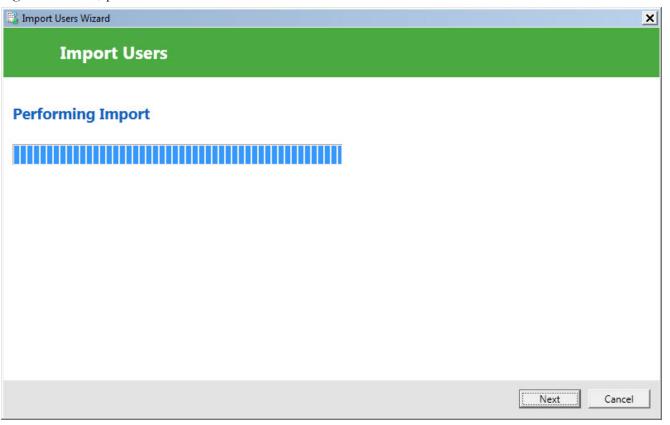
14. In the Ready to Import screen, press Next to start importing the users.



15. The *Import Users* wizard displays the **Performing Import** screen and starts to import the users.

A progress indicator displays the status of the import process. When the wizard finishes import-

ing all the users, press Next.



- 16. The **Import Results** screen displays a list of all the users that the *Import Users* wizard imported into the system. If the wizard could not import a user, the **Import Results** screen displays information about why the user was not imported.
- 17. Press Finish.

XML schema for the user XML import file

The following schema defines the file format for any XML file that contains user information for importing users into the system.

```
<?xmlversion="1.0"encoding="utf-8"?> <xs:schema</pre>
    id="UserImportSchema"
    targetNamespace="http://nuance.com/NAS/UserImport"
    elementFormDefault="qualified"
    xmlns="http://nuance.com/NAS/UserImport"
    xmlns:mstns="http://nuance.com/NAS/UserImport"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" >
    <!-- Users element -->
    <xs:elementname="Users"type="Users">
        <xs:annotation>
            <xs:documentation>A collection of users to import</xs:-</pre>
documentation>
        </xs:annotation>
    </xs:element>
    <!-- Users type definition -->
```

```
<xs:complexTypename="Users">
        <xs:annotation>
            <xs:documentation>This types defines the user collection</xs:-</pre>
documentation>
        </xs:annotation>
        <xs:sequence>
            <xs:elementname="User"type="User"minOccurs="1"maxOccurs="unboun-</pre>
ded">
                <xs:annotation>
                     <xs:documentation>One of more users to import</xs:-</pre>
documentation>
                </xs:annotation>
            </xs:element>
        </xs:sequence>
    </r></xs:complexType>
    <!-- User type definition -->
    <xs:complexTypename="User">
        <xs:annotation>
            <xs:documentation>This type defines the basic user information
that can be imported</xs:documentation>
        </xs:annotation>
```

```
<xs:attributename="LastName"type="NameString"use="required"/>
    <xs:attributename="FirstName"type="NameString"use="required"/>
    <xs:attributename="MiddleName"type="NameString" />
    <xs:attributename="Prefix"type="PrefixString"/>
    <xs:attributename="LoginId"type="LoginIdString"use="required"/>
    <xs:attributename="Password"type="PasswordString"use="required"/>
    <xs:attributename="Location"type="GeneralInfoString" />
    <xs:attributename="Department"type="GeneralInfoString"/>
    <xs:attributename="EmailAddress"type="GeneralInfoString"/>
    <xs:attributename="Street1"type="StreetAddressString"/>
    <xs:attributename="Street2"type="StreetAddressString"/>
    <xs:attributename="Street3"type="StreetAddressString"/>
    <xs:attributename="City"type="CityString"/>
    <xs:attributename="State"type="StateString"/>
    <xs:attributename="ZipCode"type="ZipString"/>
</xs:complexType>
<!-- Name String -->
<xs:simpleTypename="NameString">
    <xs:annotation>
```

```
<xs:documentation>A general string from names (50 characters
maximum) </xs:documentation>
        </xs:annotation>
        <xs:restrictionbase="xs:string">
            <xs:minLengthvalue="1"/>
            <xs:maxLengthvalue="50"/>
        </xs:restriction>
    </xs:simpleType>
    <!-- Login Id String -->
    <xs:simpleTypename="LoginIdString">
        <xs:annotation>
            <xs:documentation>A string that contains the user's login id
(30 characters maximum) </xs:documentation>
        </xs:annotation>
        <xs:restrictionbase="xs:string">
            <xs:minLengthvalue="3"/>
            <xs:maxLengthvalue="30"/>
        </xs:restriction>
    </xs:simpleType>
```

```
<!-- Password String -->
    <xs:simpleTypename="PasswordString">
        <xs:annotation>
             xs:documentation>A string for the user's login password (30
characters maximum) </xs:documentation>
        </xs:annotation>
        <xs:restrictionbase="xs:string">
            <xs:maxLengthvalue="30"/>
       </xs:restriction>
    </xs:simpleType>
    <!-- Prefix String -->
    <xs:simpleTypename="PrefixString">
        <xs:annotation>
            <xs:documentation>A user name prefix (10 characters maximum)
</xs:documentation>
        </xs:annotation>
        <xs:restrictionbase="xs:string">
            <xs:maxLengthvalue="10"/>
        </xs:restriction>
    </xs:simpleType>
```

```
<!-- General Info String -->
    <xs:simpleTypename="GeneralInfoString">
        <xs:annotation>
            <xs:documentation>A general information string (50 characters
maximum) </xs:documentation>
        </xs:annotation>
        <xs:restrictionbase="xs:string">
            <xs:maxLengthvalue="50" />
        </xs:restriction>
    </xs:simpleType>
    <!-- Street Address String -->
    <xs:simpleTypename="StreetAddressString">
        <xs:annotation>
            <xs:documentation>A street address string (60 characters max-
imum) </xs:documentation>
        </xs:annotation>
        <xs:restrictionbase="xs:string">
            <xs:maxLengthvalue="60"/>
        </xs:restriction>
```

```
</xs:simpleType>
   <!-- City String -->
    <xs:simpleTypename="CityString">
        <xs:annotation>
            <xs:documentation>A city string (40 characters maximum)/xs:-
documentation>
        </xs:annotation>
        <xs:restrictionbase="xs:string">
            <xs:maxLengthvalue="40"/>
        </xs:restriction>
    </xs:simpleType>
   <!-- State String -->
    <xs:simpleTypename="StateString">
        <xs:annotation>
            <xs:documentation>A state string (5 characters maximum)/xs:-
documentation>
        </xs:annotation>
        <xs:restrictionbase="xs:string">
            <xs:maxLengthvalue="5"/>
```

```
</xs:restriction>
    </xs:simpleType>
    <!-- Zip String -->
    <xs:simpleTypename="ZipString">
        <xs:annotation>
            <xs:documentation>A zip code string (20 characters maximum)
</xs:documentation>
        </xs:annotation>
        <xs:restrictionbase="xs:string">
            <xs:maxLengthvalue="20"/>
        </xs:restriction>
    </xs:simpleType>
     <!- -NTLM Credential String -->
     <xs:simpleType name="NTLMCredentialString">
          <xs:annotation>
               <xs:documentation>A NTLM Credential string (160 characters
max) </xs:documentation>
          </xs:annotation>
          <xs:restriction base="xs:string">
               <xs:maxLength value="160"/>
```

```
</xs:restriction>
</xs:simpleType>
</xs:schema>
```

Setting user account Dragon options

On the **User Account Details > Network Edition US** tab, you can configure settings for the individual user that override settings that you already selected for the site or group.

Setting User Account options

By default the effect of the settings is configured at the group or site level, indicated by the **Group** or **Site** circle to the right being pre-selected. To override the group or site settings for this user account, select the **Personal** option next to **Group** or **Site**.

■ Anchor dictation box to application: By default the group level setting applies.

Checking the **Anchor Dictation Box to application** option makes the Dictation Box start in Anchored mode, anchored to a particular application.

When you do not check the **Anchor Dictation Box to application** option (default), the Dictation Box is not linked to any particular application or window. In this case, the provider can also run the Dictation Box in Hidden Mode.

■ Enable HTML support: By default, the group level setting applies.

Enabling this setting makes available a set of commands designed to help users surf the web by voice in web browsers. You may need to disable this setting for certain applications. For more information, see the client Help.

■ Enable commands in HTML windows: By default the group level setting applies.

Enabling this option makes available a set of voice commands designed for users to use for creating or editing messages in HTML format in certain Microsoft Outlook dialog boxes.

These dialog boxes appear with the Internet Explorer symbol (a small document icon with the

letter "e" in it) in the left corner of the window header. You may need to disable this setting for certain applications. For more information, see the *Client* Help.

Require click to select hyperlinks in HTML windows: By default the group level setting applies.

If you select this option, it requires that the provider speak the word "Click" to select a hyperlink, such as "Click nuance.com" instead of just "nuance.com." You may need to disable this setting for certain EHR applications.

■ Enable HTML custom API:

Select this option to enable Dragon to have FullTextControl in applications that implement the Custom HTML API.

- Enable RIA support: Select this option to enable Dragon to support rich internet applications (RIA).
- Use clipboard for Citrix basic dictation in v2.5.x client or older:

Select this option to set the 'insert with clipboard' option for a user or group in the NMC console. (For customers running DM Network Edition 2.5 or older and connecting to NMC server 5.5 or newer.)

■ For Citrix basic dictation in v2.6 or newer client, use: Set this option to determine how Dragon inserts Citrix Basic dictation.:

Keystrokes: Insert basic dictation through keystrokes.

Clipboard: Insert basic dictation through the clipboard.

Compatibility Module: Insert basic dictation through vSync.

(For post-DMNE 2.5.x and NMS 5.5 or greater.)

■ Enable automatically select first field:

Select this option to enable the "automatically select the first field" feature for a group of users.

■ Variable delimiters: By default the group level setting applies. Usually you do not change delimiters for an individual user because they are most effective when they apply across an entire group's documents.

- Variable delimiters in Dragon templates (Text & Graphics commands that incorporate voice (variable) fields), are characters that surround each voice field location in the template/command where the provider can later type or dictate a specific value. For example, a template might contain Patient Name: [_____] with the space in square brackets after the name is a voice field where the provider dictates the patient name.
- By default, a pair of square brackets [] indicates the presence of a voice field. To use different characters to indicate a voice field, enter the characters you prefer to use for left and right delimiters.
- Delimiting "characters" can each be up to 5 characters long. The left and right delimiters cannot be exactly the same as each other or, when you try to apply them, *Dragon Medical Client* displays a message that they are not valid.
- Saving the user also saves local acoustics: (Formerly Roaming user save acoustics) By default the site level setting applies.

Select this option to save the user's acoustic information locally on the client. By saving the acoustic information, any corrections the provider makes are available even after a close and re-open of the user profile.

Log out users who do not respond after __ **seconds:** By default enabled, set to a value of 60 seconds, and applied to all users associated with the site that this user account is associated with.

The option instructs the *Client* to log out this user after the client has been idle and the user has been prompted to respond, but the number of seconds you indicate here elapses without a response.

The **Log out users who do not respond after** __ **seconds:** field accepts a numeric value (seconds) up to three characters in length.

The number of seconds that the client remains idle before *prompting* a provider is based on the number of seconds set in the **Miscellaneous** settings for the site in **Prompt users to log off after** __ minutes:. You cannot change that setting for individual providers or users. The number of seconds the client can be idle before prompting a provider to log off always applies to all providers across the entire site.

■ Remove local cache data after usage: By default the site level setting applies. Deletes the

contents of the local cache when the user logs out.

Note: If you want to enable this option, you must disable the **Allow disconnected mode** option in the **Site > Master user profile** settings to allow it to work. Conversely, if you want to enable the **Allow disconnected mode** option, you must disable this option to allow it to work. The effects of one setting cancel out the effects of the other.

- Save user profiles upon automatic logout: By default the Organization level setting applies.

 Select this option to automatically save user profile updates to the master user profile when the Dragon client automatically logs out an idle user.
- Upload dictation data to Nuance for research purposes: By default the Organization level setting applies.

Select this option to automatically upload data from a particular provider's dictation and user profile to Nuance so that the company can improve future versions of the product and further enhance speech recognition technology. You might want to turn on this option for a provider whose dictation is particularly difficult to recognize. For information about Nuance's patient information privacy policy, see the information on *Privacy of your healthcare data and Nuance data collection* on page 341.

Setting Auto-Formatting options

For each user account you can choose to apply the formatting rules that you configured for the group, or you can customize the rules for that individual provider. If you click the **Customize rules** button, the auto formatting settings expand, displaying several categories of formatting rules.

For details on changing these settings, see *Setting Auto-Formatting Dragon options* on page 164. You can use the **Restore** button at the bottom of each section to set the default value in the section, then **Save** your changes.

Setting Diagnostic options

In the **Diagnostics** section, configure these settings:

Upload Dragon.log file: Determines when the Dragon.log file is sent to the NMC server. The values for this option are:

- Never
- Only on Critical Errors
- Always

The default value is Only on Critical Errors.

Enable Problem Step Recorder (PSR): The default value is unchecked.

If enabled, an NMC server administrator can choose one of the following options:

- Max PSR screenshots: Takes an integer value where the default is 50 and the acceptable values range is from 0 to 1000.
- Show PSR Gui: A checkbox where the default value is unchecked.

Setting Profile Optimizer ACO and LMO schedules

By default, you set the **Profile Optimizer Scheduler Settings** at the group level. If you want to set them at user level, the same settings apply. For more information see *Scheduling optimization and medication updates* on page 190

Setting Auto-Formatting Dragon options

You use the **Auto-Formatting** options to set up text formatting that *Dragon Medical Clients* automatically apply to all provider dictation, producing consistently formatted medical reports across the entire organization. Changing these options for a group affects all members of that group exclusively. Customizing the options for a single provider's user account affects only that provider's dictation.

The **Auto-Formatting** options activate different forms of automatic word and number formatting. The automatic formats let providers dictate numbers in a natural way and also dictate different types of word formats, such as abbreviations, contractions, and e-mail addresses.

These formats do not have the last say on punctuation of numbers and currency; instead, numeric punctuation is ultimately controlled by settings on the **Regional Options** tab of the Windows Control Panel **Regional and Language Options** dialog box. (Although the numeric formats are usually standard for the country shown in that dialog box, you can click the **Customize...** button to find tabs for **Numbers** and **Currency** to customize the formats.)

Typically, *NMC server* administrators set all formatting options on the **Groups Details** product tab. However, providers can choose to override **Auto-Formatting** settings that apply to the documents that result from their dictation.

For more information on how the **Auto-Formatting** option settings are stored and whose setting of them takes precedence, refer to *Setting general auto-formatting options in Dragon or the NMC server* on page 313.

Setting Auto-Formatting options

To set auto formatting options, you access several tabs. You can use the **Restore** button at the bottom of each section/tab to set the default value in the section, then **Save** your changes.

General options

■ **Abbreviate common English units of measure:** Enabled by default. Automatically inserts abbreviations for units of measure. For example, "mm" for "millimeter".

- **Abbreviate titles:** Enabled by default. Inserts abbreviated versions of any title in the default lexicon. For example, "Mr." instead of "Mister."
- Allow pauses in formatted phrases: Enabled by default. Let's number and phrase formatting work together if you pause while speaking a number.
- Automatically add commas and periods: Disabled by default. Automatically adds commas and periods based on pause length and sentence structure.
- Caps Lock key overrides capitalization commands: Disabled by default. When this option is enabled and the keyboard Caps Lock key is active, several *Dragon Medical* capitalization commands are not active: "Cap <word>", "Caps On", "Caps Off" "All-Caps <word>", "No-Caps On", and "No-Caps Off".

When this feature is enabled and the Caps Lock is on, all the capitalization commands are disabled.

For more information, see the *Dragon Medical Client Help*.

- Expand common English contractions: Disabled by default. Enables *Dragon Medical* to recognize contractions while transcribing dictation. If you clear this box, *Dragon Medical* transcribes spoken contractions in a more formal manner. For example, if you say "Don't go near the water," *Dragon Medical* transcribes "Do not go near the water."
 - In some situations, the formal expression of a contraction might be ambiguous. For example, the phrase "It's always" could either mean "It is always" or "It has always" depending on the tense of the verb that follows. In this situation, *Dragon Medical* always expands the contraction, regardless of how this option is set.
- Format ISO currency codes: Disabled by default. Inserts currency codes rather than currency symbols. For example, "USD10.00" instead of "10 dollars," or "EUR50,00" instead of "50 euros."
- Format other numbers: Enabled by default. Inserts properly formatted decimals, negative numbers, and fractions. For example, "-1" instead of "negative 1."

- Format phone numbers: Enabled by default. Turns on automatic formatting of US telephone numbers when you speak a sequence of seven or ten numbers. For example, if you say "7815551234", Dragon Medical will transcribe "781-555-1234."
- Format prices: Enabled by default. Inserts prices and currencies in the proper format with the appropriate currency symbol. For example, "\$10.00" instead of "10 dollars," or " 50,00" instead of "50 euros."
- Format street addresses: Enabled by default. Inserts a properly formatted street address. For example:

"One seventy West one hundred south number fifty Salt_Lake_City Utah eight four seven zero zero"

becomes

"170 W. 100 S., #50, Salt Lake City, UT 84700"

■ Format times: Enabled by default. Turns on automatic standard time formatting. For example, if you say "Six Thirty PM," *Dragon Medical* transcribes "6:30 PM." Dictating standard time runs on a 12 hour clock, letting you make the distinction between AM and PM.

**Military time: With this option enabled, you can also dictate times in military format. For example, if you say "sixteen hundred hours," **Dragon Medical* transcribes "1600 hrs." If you say

"oh three oh five hours" or "zero three zero five hours," Dragon Medical transcribes "0305 hrs."

- Dictated Military time uses a 24 hour clock and abbreviates "hours" to "hrs."
- Format UK and Canadian postcodes: Disabled by default. Properly formats UK and Canadian postcodes. For example, "N1 8HQ" instead of "n18hq," or "L3X 1A4" instead of "l3x1a4." Note: This option is not available in the UK edition of Dragon Medical Network Edition.
- Format US Social Security Numbers: Disabled by default. Inserts hyphens in the appropriate location of a number that contains 9 digits when someone dictates it with pauses where the hyphens belong. Note: This option is not available in the UK edition of Dragon Medical Network Edition.

- Format web and e-mail addresses: Enabled by default. Applies correct formatting to Web and e-mail addresses. For example, "john_doe@acmecorp.com" instead of "john_doe at acme corp dot com."
- Insert two spaces after period: Disabled by default (disabled by default in the UK edition of Dragon Medical Network Edition). Adds two spaces after the end of a sentence instead of a single space. Having two spaces at the end of a sentence used to be standard with mono space fonts produced by typewriters, but is less common with proportional fonts used in word processing programs. If you do not select this option, Dragon Medical adds a single space after the period.
- **Prefer 5 million over 5,000,000:** Enabled by default. Inserts numbers as a combination of Arabic numerals and text. For example, "5 million" instead of "5,000,000."
- **Date format:** Controls how *Dragon Medical* formats dates when the day, month, and year have all been dictated. Select the format you want from the list.

If you use the default **Dates As Spoken** value, you need to dictate dates in an unambiguous way, using the name of the month not the digit for the month. For example, with **Dates As Spoken** selected, *Dragon Medical* correctly formats "January eleven two thousand nine" and "the seventh of February two thousand four" as dates but formats "eleven one two thousand nine" as a number.

If you prefer to dictate dates using digits for the month, try selecting the value that best matches how you dictate the date. For example, if you normally say "eleven one two thousand nine", you should set the date format to **D/M/YYYY** to have *Dragon Medical* correctly transcribe the date.

If you omit the year, for example, you say "July twelve", Dragon transcribes "July 12" ("The twelfth of July" becomes "12 July") regardless of the type of date formatting you select.

Valid values are:

- Do Not Format
- Dates As Spoken
- Month D,YYYY
- Month DD,YYYY
- Mon D,YYYYY
- Mon DD,YYYY
- M/D/YY
- M/D/YYYY

- MM-DD-YY
- MM/DD/YY
- MM/DD/YYYY
- YYYY-MM-DD
- D Month, YYYY
- D/M/YY
- D/M/YYYY
- DD/MM/YYYY
- DD/MM/YY
- DD-Mon-YY
- Numbers, if greater than or equal to __: Enabled by default. Inserts numbers as numerals if they are equal to or greater than the value shown in the drop-down list. If the number is less than the chosen value, the number is spelled out. For example, if you select "10," *Dragon Medical* transcribes "five" when you dictate "five" and "11" when you dictate "eleven".

Valid values are: **Do Not Format**, **0**, **2**, **10**, **100**. The default value is 10.

Capitalization

■ Capitalize the word after a new line: Enabled by default. Capitalizes the first character of every new line you create, whether you dictate "new line" or you press ENTER to create it.

Department name capitalization: Sets the type of capitalization applied to any words in your vocabulary where the **Special Capitalization** option is set to **Department name** in the **Word Properties** dialog box of the **Vocabulary Editor** in the *Dragon Client*. For more information, see the *Dragon Medical Client Help*.

Valid values are:

- **Standard** (applies capitalization settings specified in the *Dragon Medical* dictionary, in this case **YYYYY**.) Default.
- All Caps
- **Drug name capitalization:** Sets the type of capitalization applied to any words in your vocabulary where the **Special Capitalization** option is set to **Drug name** in the **Word Properties** dialog box of the **Vocabulary Editor** in the *Dragon Client*. For more information, see the *Dragon Medical Client Help*.

Valid values are:

- **Standard** (applies capitalization settings specified in the *Dragon Medical* dictionary, in this case initial caps for non-generic drugs and lower case for generics.) Default.
- Initial Caps
- All Caps
- Person name capitalization: Sets the type of capitalization to apply to any words in your vocabulary where the Special Capitalization option is set to Person name in the Word
 Properties dialog box of the Vocabulary Editor in the Dragon Client.

Valid values are:

- **Standard** (applies capitalization settings specified in the *Dragon Medical* dictionary, in this case initial caps.) Default.
- All Caps
- Medical capitalization list: This table lists the available capitalizations and there default values. You can unselect or select all the options by clicking Uncheck All or Check All.

Rule	Default value
Capitalize "against medical advice" as "AGAINST MEDICAL ADVICE"	Yes
Capitalize "allergy" and "allergies" as "ALLERGY" and "ALLERGIES"	No
Capitalize "code blue" as "CODE BLUE"	Yes
Capitalize "code R" as "CODE R"	Yes
Capitalize "code status" as "CODE STATUS"	Yes
Capitalize "code S" as "CODE S"	Yes
Capitalize "code T" as "CODE T"	Yes
Capitalize "do not intubate" and "do not resuscitate" as "DO NOT INTUBATE" and "DO NOT RESUSCITATE"	Yes
Capitalize "durable power of attorney" as "DURABLE POWER OF ATTORNEY"	Yes
Capitalize "fish" as "FISH"	No
Capitalize "left" and "right" as "LEFT" and "RIGHT"	No
Capitalize "living will" as "LIVING WILL"	No
Capitalize "PO2" and "PC02" as "pO2" and "pCO2"	No
Capitalize "RBC/hpf"and "WBC/hpf" as "RBC/HPF" and "WBC/HPF"	No
Capitalize "trauma alert" as "TRAUMA ALERT"	No

Numbers, Units, and Dates

Rule	Resulting Format	Default value
Expect temperatures to be dictated in Celsius rather than Fahrenheit Note: This option is only available in the UK edition of Dragon Medical Network Edition.	Formats temperatures as "C" rather than "F".	No
Treat ambiguous numeric strings as dates	Formats any strings of numbers without a clear function as if they are a date. If you enable this option, be sure to select the format you prefer in the Date format in General settings. Do not select Dates As Spoken , because if you do, when you say "five five oh eight," instead of 5/5/08, Dragon Medical gives you 5508 and when you say "oh five oh five oh eight," instead of 05/05/08, Dragon Medical gives you 050508. If, however, you select Month D, YYYY for Date Format then dictate "five five oh eight," Dragon inserts May 5, 2008.	Yes
Write single digit + "point" in hyphenated form when not followed by another digit	Inserts a digit, a hyphen, and the word "point" when someone dictates a digit and the word "point" not followed by another digit. For example, "5-point" instead of "5."	No
Format numbers as times when followed by phrases such as "in the morning"	Inserts numbers as times of day when followed by phrases like "in the morning" or "at night." For example, for "ten o'clock at night," Dragon transcribes "10:00 PM."	No
Write the word "number" as "#" prior to numerals	Inserts a hash symbol before a number. For example, "#28" instead of "number 28".	Yes
Write one digit ordinals from "third" to "ninth" in` hybrid form ("3rd" to "9th")	Inserts ordinals in a numeric-text hybrid form. For example, "3rd" instead of "third."	No
Use Roman numerals for diabetes types	Inserts Roman numerals instead of Arabic numerals for diabetes types. For example, "type II diabetes" instead of "type 2 diabetes".	No
Write "degree" and "degrees" after a number as "°" (and abbreviate "Fahrenheit" and "Celsius" to "F" and "C")	Inserts correctly formatted temperatures. For example, "98.6 °F" instead of "98.6 degrees Fahrenheit" and "37 °C" instead of "37 degrees Celsius."	Yes
Write "%" as "percent"	Inserts the % symbol instead of the word "percent."	No
Write out "positive" and "negative" before numbers and for blood types and Rh factors	Inserts the word "positive" or "negative" before numbers, and for blood types and Rh factors. For example, "negative 6" instead of "-6" or "A positive" instead of "A+."	No
Insert a hyphen between a number and the word	Inserts a hyphen when you say "5 French" to describe a type of equipment.	No

Rule	Resulting Format	Default value
"French"		
Insert a space between "mm" and "Hg"	Inserts a space between the letters in the abbreviations mm and Hg for "millimeter of mercury."	No
Rewrite "cc" after a number as "mL"	Inserts "mL" after a number if the user dictates "cc" followed by a number. For example, "10 mL" instead of "10 cc."	Yes
Format of expressions involving feet and inches	Select how to format expressions with feet and inches. Valid values in the drop-down list are: Leave Unchanged (5 feet 8 inches) Symbols with Spaces (5' 8") Symbols without Spaces (5'8")	leave unchanged (e.g. 5 feet 8 inches)
Write "o'clock" as a word	Select when the word should be inserted. Valid values in the drop-down list are: Never Only before "position" Always	Only before "position" Note: The default is Never in the UK edition of Dragon Medical Network Edition.
Military time suffix Note: This option is not available in the UK edition of Dragon Medical Network Edition.	Controls whether <i>Dragon Medical</i> inserts "hours" or "hrs." after military time. For example, "24:00 Hours." Valid values are: Keep "hours" Abbreviate as "hrs." Remove "hours"	Abbreviate as "hrs."

Abbreviations

The **Abbreviations** list contains options that determine whether or not *Dragon Medical* inserts the full text of an abbreviated term. Select the appropriate checkboxes to enable the options, click **Check all** to select all of the options, or click **Uncheck All** to remove any selections in the list.

Setting	Default value
Expand "A fib and V fib" to "atrial fibrillation and ventricular fibrillation"	Disabled
Expand "ACL" to "anterior cruciate ligament"	Enabled
Expand "ADHD" to "attention deficit/hyperactivity disorder"	Disabled
Expand "ADL" to "activities of daily living"	Disabled
Expand "AEC" to "aortic ejection click"	Disabled
Expand "AICD" to "automatic implantable cardiac defibrillator"	Disabled
Expand "AKA" to "above-knee amputation"	Disabled
Expand "ALF" to "assisted living facility"	Disabled
Expand "alk phos" to "alkaline phosphatase"	Enabled
Expand "ALS" to "amyotrophic lateral sclerosis"	Disabled
Expand "AMA" to "AGAINST MEDICAL ADVICE"	Disabled
Expand "AMI" to "acute myocardial infarction"	Disabled
Expand "AOC" to "aortic opening click"	Disabled
Expand "ASAP" to "as soon as possible"	Disabled
Expand "ASHD" to "atherosclerotic heart disease"	Disabled
Expand "ASM" to "atrial systolic murmur"	Disabled
Expand "AST" to "aspartate aminotransferase"	Disabled
Expand "AUS" to "artificial urinary sphincter"	Disabled
Expand "AVD" to "aortic valve disease"	Disabled
Expand "BCG" to "bacille Calmette-Guerin"	Disabled
Expand "BHP" to "benign hyperplasia prostate"	Disabled
Expand "bicarb" to "bicarbonate"	Enabled
Expand "bili" to "bilirubin"	Disabled
Expand "BKA" to "below-knee amputation"	Disabled
Expand "BM" to "bowel movement"	Disabled
Expand "BP" to "blood pressure"	Disabled
Expand "BPH" to "benign prostatic hypertrophy"	Disabled
Expand "BSO" to "bilateral salpingo-oophorectomy"	Disabled
Expand "BX" to "biopsy"	Disabled

Setting	Default value
Expand "C. diff" to "C. difficile"	Enabled
Expand "CABG" to "coronary artery bypass graft"	Disabled
Expand "CAD" to "coronary artery disease"	Disabled
Expand "CAF" to "chronic atrial fibrillation"	Disabled
Expand "CAT scan" to "computed axial tomography scan"	Disabled
Expand "cath" to "catheter"	Enabled
Expand "CBC" to "complete blood count"	Disabled
Expand "CCU" to "Critical Care Unit"	Disabled
Expand "chemo" to "chemotherapy"	Enabled
Expand "CHF" to "congestive heart failure"	Disabled
Expand "CMP" to "complete metabolic panel"	Disabled
Expand "CNS" to "central nervous system"	Disabled
Expand "coag" to "coagulation"	Disabled
Expand "COPD" to "chronic obstructive pulmonary disease"	Disabled
Expand "CPK" to "creatine phosphokinase"	Disabled
Expand "CPR" to "cardiopulmonary resuscitation"	Disabled
Expand "crit" to "hematocrit"	Disabled
Expand "CT scan" to "computed tomography scan"	Disabled
Expand "CVA" to "costovertebral angle"	Disabled
Expand "D&C" to "dilatation and curettage"	Disabled
Expand "DC\'d" to "discontinued"	Disabled
Expand "DESD" to "detrusor-external sphincter dyssynergia"	Disabled
Expand "DJD" to "degenerative joint disease"	Disabled
Expand "DM" to "diastolic murmur"	Disabled
Expand "DNI and DNR" to "DO NOT INTUBATE and DO NOT RESUSCITATE"	Disabled
Expand "DRE" to "digital rectal exam"	Disabled
Expand "DSM" to "delayed systolic murmur"	Disabled
Expand "DTR" to "deep tendon reflex"	Disabled
Expand "DVT" to "deep vein thrombosis"	Disabled
Expand "E. coli" to "Escherichia coli"	Enabled
Expand "EBL" to "estimated blood loss"	Disabled
Expand "EBV" to "Epstein-Barr virus"	Disabled
Expand "EC" to "ejection click"	Disabled
Expand "ECG" to "electrocardiogram"	Disabled

Setting	Default value
Expand "ED" to "Emergency Department"	Disabled
Expand "EES" to "erythromycin ethylsuccinate"	Disabled
Expand "EF" to "ejection fraction"	Disabled
Expand "EKG" to "electrocardiogram"	Disabled
Expand "EOMI" to "extraocular movements are intact"	Disabled
Expand "EPSS" to "E point to septal separation"	Disabled
Expand "ER" to "Emergency Room"	Disabled
Expand "ERT" to "estrogen replacement therapy"	Disabled
Expand "ESM" to "ejection systolic murmur"	Disabled
Expand "ESWL" to "extracorporeal shock wave lithotripsy"	Disabled
Expand "ex lap" to "exploratory laparoscopy"	Enabled
Expand "fem-pop" to "femoropopliteal"	Enabled
Expand "flex sig" to "flexible sigmoidoscopy"	Enabled
Expand "FT4" to "free T4"	Disabled
Expand "gastroc" to "gastrocnemius"	Disabled
Expand "GERD" to "gastroesophageal reflux disease"	Disabled
Expand "GI" to "gastrointestinal"	Disabled
Expand "GSW" to "gunshot wound"	Disabled
Expand "GU" to "genitourinary"	Disabled
Expand "H. pylori" to "Helicobacter pylori"	Disabled
Expand "H&H" to "hemoglobin and hematocrit"	Disabled
Expand "HCTZ" to "hydrochlorothiazide"	Disabled
Expand "HHD" to "hypertensive heart disease"	Disabled
Expand "HIV" to "human immunodeficiency virus"	Disabled
Expand "HPI" to "history of present illness"	Enabled
Expand "HPV" to "human papilloma virus"	Disabled
Expand "HRT" to "hormone replacement therapy"	Disabled
Expand "IBS" to "irritable bowel syndrome"	Disabled
Expand "IC" to "internal carotid"	Disabled
Expand "ICA" to "internal carotid artery"	Disabled
Expand "ICD" to "implantable cardiac defibrillator"	Disabled
Expand "ICU" to "Intensive Care Unit"	Disabled
Expand "IDA" to "iron deficiency anemia"	Disabled
Expand "IDDM" to "insulin-dependent diabetes mellitus"	Disabled

Setting	Default value
Expand "IDM" to "immediate diastolic murmur"	Disabled
Expand "IHD" to "ischemic heart disease"	Disabled
Expand "IHSS" to "idiopathic hypertrophic subaortic stenosis"	Disabled
Expand "IM" to "intramuscular"	Disabled
Expand "IMCU" to "Intermediate Care Unit"	Disabled
Expand "ISD" to "intrinsic sphincter deficiency"	Disabled
Expand "ITP" to "idiopathic thrombocytopenia purpura"	Disabled
Expand "IU" to "international units"	Enabled
Expand "IUD" to "intrauterine device"	Disabled
Expand "IVP" to "intravenous pyelogram"	Disabled
Expand "KCI" to "potassium chloride"	Disabled
Expand "KUB" to "kidney, ureter, and bladder"	Disabled
Expand "LAD" to "left anterior descending"	Disabled
Expand "LAE" to "left atrial enlargement"	Disabled
Expand "LAH" to "left anterior hemiblock"	Disabled
Expand "lap chole" to "laparoscopic cholecystectomy"	Enabled
Expand "LBBB" to "left bundle branch block"	Disabled
Expand "LCL" to "lateral collateral ligament"	Disabled
Expand "leuk trase" to "leukocyte esterase"	Disabled
Expand "lites" to "electrolytes"	Disabled
Expand "LLQ" to "left lower quadrant"	Disabled
Expand "LSM" to "late systolic murmur"	Disabled
Expand "LUQ" to "left upper quadrant"	Disabled
Expand "LVEDP" to "left ventricular end-diastolic pressure"	Disabled
Expand "LVH" to "left ventricular hypertrophy"	Disabled
Expand "MCL" to "medial collateral ligament"	Disabled
Expand "MDI" to "metered dose inhaler"	Disabled
Expand "meds" to "medications"	Disabled
Expand "MI" to "myocardial infarction"	Disabled
Expand "MMR" to "measles/mumps/rubella"	Disabled
Expand "MOM" to "Milk of Magnesia"	Disabled
Expand "MRI" to "magnetic resonance imaging"	Disabled
Expand "MVA" to "motor vehicle accident"	Disabled
Expand "MVP" to "mitral valve prolapse"	Disabled

Setting	Default value
Expand "MVR" to "mitral valve replacement"	Disabled
Expand "neb" to "nebulizer"	Disabled
Expand "NEC" to "nonejection click"	Disabled
Expand "neph" to "nephrostomy"	Disabled
Expand "NICU" to "Neonatal Intensive Care Unit"	Disabled
Expand "NIDDM" to "non-insulin-dependent diabetes mellitus"	Disabled
Expand "nitro" to "nitroglycerin"	Enabled
Expand "NKDA" to "NO KNOWN DRUG ALLERGIES"	Disabled
Expand "NSAID" to "nonsteroidal anti-inflammatory drug"	Disabled
Expand "NSR" to "normal sinus rhythm"	Disabled
Expand "NSVD" to "normal spontaneous vaginal delivery"	Disabled
Expand "O2" to "oxygen"	Disabled
"ObGyn" written "OB/GYN"	Enabled
Expand "OR" to "Operating Room"	Disabled
Expand "OS" to "opening snap"	Disabled
Expand "OTC" to "over-the-counter"	Disabled
Expand "PAF" to "paroxysmal atrial fibrillation"	Disabled
Expand "PCL" to "posterior cruciate ligament"	Disabled
Expand "PCN" to "percutaneous nephrolithotomy"	Disabled
Expand "PEC" to "pulmonary ejection click"	Disabled
Expand "PERRLA" to "pupils are equal, round and reactive to light and accommodation"	Disabled
Expand "PFT" to "pulmonary function test"	Disabled
Expand "PID" to "pelvic inflammatory disease"	Disabled
Expand "PIH" to "pregnancy-induced hypertension"	Disabled
Expand "PMI" to "point of maximal impulse"	Disabled
Expand "postop" to "postoperative"	Disabled
Expand "PRI" to "PR interval"	Disabled
Expand "pro time" to "prothrombin time"	Disabled
Expand "PSA" to "prostate-specific antigen"	Disabled
Expand "PSIS" to "posterior superior iliac spine"	Disabled
Expand "PSM" to "pansystolic murmur"	Disabled
Expand "PTCA" to "percutaneous transluminal coronary angioplasty"	Disabled
Expand "pulse ox" to "pulse oximetry"	Disabled
Expand "PVR" to "post-void residual"	Disabled

Setting	Default value
Expand "RBBB" to "right bundle branch block"	Disabled
Expand "rehab" to "rehabilitation"	Enabled
Expand "RLQ" to "right lower quadrant"	Disabled
Expand "RPOC" to "retained products of conception"	Disabled
Expand "RPR" to "RPR test"	Disabled
Expand "RSR" to "regular sinus rhythm"	Disabled
Expand "RSV" to "respiratory syncytial virus"	Disabled
Expand "RUQ" to "right upper quadrant"	Disabled
Expand "SBE" to "subacute bacterial endocarditis"	Disabled
Expand "SC" to "systolic click"	Disabled
Expand "SDM" to "systolic-diastolic murmur"	Disabled
Expand "sed rate" to "sedimentation rate"	Enabled
Expand "segs" to "segments"	Disabled
Expand "SEM" to "systolic-ejection murmur"	Disabled
Expand "SI" to "sacroiliac"	Disabled
Expand "SIDS" to "Sudden Infant Death Syndrome"	Disabled
Expand "SLE" to "systemic lupus erythematosus"	Disabled
Expand "SLR" to "straight leg raising"	Disabled
Expand "SM" to "systolic murmur"	Disabled
Expand "SOB" to "shortness of breath"	Disabled
Expand "SS" to "summation sound"	Disabled
Expand "SSRI" to "selective serotonin reuptake inhibitor"	Disabled
Expand "STD" to "sexually transmitted disease"	Disabled
Expand "subcu" to "subcutaneous"	Enabled
Expand "SVD" to "spontaneous vaginal delivery"	Disabled
Expand "SVG" to "saphenous vein graft"	Disabled
Expand "SVT" to "supraventricular tachycardia"	Disabled
Expand "T&A" to "adenotonsillectomy"	Disabled
Expand "TAH" to "total abdominal hysterectomy"	Disabled
Expand "TAH/BSO" to "total abdominal hysterectomy with bilateral salpingo-oophorectomy"	Disabled
Expand "TB" to "tuberculosis"	Disabled
Expand "TEE" to "transesophageal echocardiogram"	Disabled
Expand "temp" to "temperature"	Disabled
Expand "TIA" to "transient ischemic attack"	Disabled

Setting	Default value
Expand "tib-fib" to "tibia-fibula"	Disabled
Expand "TM" to "tympanic membrane"	Disabled
Expand "T-max" and "T-current" to "MAXIMUM TEMPERATURE" and "CURRENT TEMPERATURE"	Enabled
Expand "TMJ" to "temporomandibular joint"	Disabled
Expand "TSH" to "thyroid-stimulating hormone"	Disabled
Expand "TTE" to "transthoracic echocardiogram"	Disabled
Expand "TURB" to "transurethral resection of the bladder"	Disabled
Expand "TURP" to "transurethral resection of the prostate"	Disabled
Expand "UA" to "urinalysis"	Disabled
Expand "UC" to "urinary culture"	Disabled
Expand "URI" to "upper respiratory infection"	Disabled
Expand "UTI" to "urinary tract infection"	Disabled
Expand "V tac" and "sinus tach" to "ventricular tachycardia" and "sinus tachycardia"	Disabled
Expand "VBAC" to "vaginal birth after cesarean section"	Disabled
Expand "VCUG" to "voiding cystourethrogram"	Disabled
Expand "VL" to "vastus lateralis"	Disabled
Expand "VMO" to "vastus medialis oblique"	Disabled
Expand "WNL" to "within normal limits"	Disabled

Miscellaneous

Rule	Resulting format	Default value
Expand dosage abbreviations	Inserts the full word when the user dictates a dosage abbreviation. For example, "qd" is written "once a day."	Yes
Insert commas or spaces into oncology "T N M" expressions	Uses commas to separate T N M values. For example, "pT1, pN0, M0, R0, G1" instead of "pT1 pN0 M0 R0 G1." Options are: -no separator -spaces -commas.	spaces
Remove period from dosage	Removes periods from dosage abbreviations. For example, "q.d." (once a day) will be written "qd" and "t.i.d" (three times a day) will be written "tid." Selecting "Expand dosage abbreviations" overrides this setting.	No
Remove spaces from dosage abbreviations Note: This option is only available in the UK edition of Dragon Medical Network Edition.	Removes spaces from dosage abbreviations. For example, "q d" (once a day) will be written "qd" and "t i d" (three times a day) will be written "tid." Selecting "Expand dosage abbreviations" overrides this setting.	No
Replace "&" with "and"	Replaces ampersands with the word "and."	No
Rewrite "dad", "kid", "mom", "sib", as "father", "child", "mother", "sibling"	Inserts "father," "child," "mother," or "sibling" when the user dictates "dad," "kid," "mom," or "sib."	No
Rewrite "hours" as "h." in dosage abbre- viations like "q.2 hours"	Inserts "h." in dosage abbreviations when the user dictates "hours." For example, "q.2 hours" (every two hours) will be written "q.2h."	No
Note: This option is only available in the UK edition of Dragon Medical Network Edition.		
Rewrite "I to E" as "I:E"	Inserts a colon when the user dictates "to" between two letters.	No
Rewrite "off of" as "off"	Inserts "off" when the user dictates "off of."	No
Spell "BI-RADS" as "BIRADS"	Inserts "BI-RADS" when the user dictates "BIRADS".	No
Spell "calyx" and related words with an "i"	Spells "calyx" and related words with an "i". For example, "calix" instead of "calyx".	No
Spell "disc" and related words with a "k"	Spells "disc" and related words with a "k". For example, "disk" instead of "disc."	No
Spell "orthopedics"	Spells "orthopedics" and related words with "ae". For example,	No

Rule	Resulting format	Default value
and related words with "ae"	"orthopaedics" instead of "orthopedics."	Note: This is enabled by default in the UK edition of Dragon Medical Network Edi- tion.
Treat "bracket" as equivalent to "parenthesis"	Inserts a parenthesis when the user dictates "bracket."	No
Treat "paragraph" as a paragraph break, not as the word Note: This option is only available in the UK edition of Dragon	Saying "paragraph" inserts a paragraph break instead of the word "paragraph."	Yes
Medical Network Edition.		
Treat paragraph breaks as equivalent to line breaks	Saying "New paragraph" inserts line breaks instead of paragraph breaks, obliterating the effect of the previous check box.	No
Write "AP" before the word "diameter" as "A-P"	Inserts "A-P" when the user dictates "AP diameter."	No
Write accented characters with their non-accented forms	Inserts accented characters in their non-accented forms. For example, "e" instead of "é".	No
Automatically insert second letter into vertebra range when not dictated	Disabled by default. Inserts a second letter into the range when the user does not enter it. For example, when enabled, "C one to two" becomes "C1-C2" rather than "C1-2".	No
Place within the ver- tebra ranges	One of the following: -Blank -Hyphen -Slash	Note: The default is Slash in the UK edition of Dragon Medical Network Edition.
Write "dash" as	Determines what Dragon inserts when a user dictates the word "dash." Valid values are: Single Hyphen Single Hyphen Surrounded by Spaces Double Hyphen Double Hyphen Surrounded by Spaces	Single Hyphen

Vertebrae

Rule	Resulting format	Default value
Hyphenate ver- tebra ranges	Enabled by default. Inserts a hyphen between ranges in vertebra data. For example, when enabled, "C1 to 2 becomes "C1-2" and "C1 to C2" becomes "C1-C2".	Yes
Automatically insert second let- ter into vertebra range when not dic- tated	Disabled by default. Inserts a second letter into the range when the user does not enter it. For example, when enabled, "C one to two" becomes "C1-C2" rather than "C1-2".	No
Place slashes within vertebra ranges	Disabled by default (enabled by default in the UK edition of Dragon Medical Network Edition). Inserts a slash character between each vertebra range in a set of vertebra ranges. For example, when enabled, C1 to 2 becomes C1/2", "C1 to C2" becomes "C1/C2".	Note: This option is enabled by default n the UK edition of Dragon Medical Network Edition

Viewing User Profile settings

In the **User Account Details > User Profile** tab, you view current settings for a User Profile. This information is 'read only' in the NMC console.

The settings that you can view in the **User Profile** tab are:

- Language: The language or dialect (such as US English or UK English) that the user uses for dictation. Your choices will depend on the Dragon Medical edition you are using.
- Language Accent: The type of accent that the user uses for dictation.
- Vocabulary: The Vocabulary list shows the different types of vocabularies available with Dragon Medical and shows the vocabulary selected for the user profile associated with the user account. For a list of available Medical vocabularies, see Selecting a medical vocabulary for a medical specialty on page 315.
- **Input Devices:** The type of device into which the user will be speaking.

The fields in the **User Account Details** > **User Profile** tab display language specific information for DM Network Edition US or DM Network Edition UK.

The following text is displayed above the Language field:

'When a profile is linked to this user account, this section will be populated with the profile settings the user selected in Network Edition'.

Language:

- If the user is using US settings, the field displays "Language: English (US)".
- If the user is using UK settings, the field displays "Language: English (UK)".
- If the user's language settings are not know, the field displays "Language: ".

Language Accent:

■ If the user's language settings are not know, the field displays "Language Accent: ".

Vocabulary:

■ If the user's language settings are not know, the field displays "Vocabulary: " and is disabled.

Input Devices:

■ If the user's language settings are not know, the field displays "Input devices: " and is disabled.

Profile folder name:

■ The name of the folder that contains the profile.

Automatically log out an administrator after a period of inactivity

You can set the NMC server to automatically log out a user after a specific time of inactivity.

After you set the timeout value, the NMC server applies the value the next time a user logs into the NMC server.

When the NMC server logs out a user, it discards all unsaved data.

- 1. In the NMC console, click **Organizations**.
- 2. In the click **Organizations** area, click **Search**.
- 3. Enter search criteria and click click **Search**.
- 4. Select an organization.
- 5. In the **Organizations** area, select **Details**.
- 6. On the **Organization Details** screen, click **Products**.
- 7. Expand the **Nuance Management Server** section.
- 8. In the **NMC Inactivity timeout in __ minutes** field, enter a value.
- 9. Click **OK**.

Scheduling the optimization of acoustic and language models

The accuracy of dictation depends on how well-tuned the master user profile is for a particular healthcare provider. Dragon Medical Network Edition tunes each provider's master user profile with data from his or her unique acoustic model and language model.

Understanding ACO and LMO processes

The *Profile Optimizer* service manages the aspect of speech recognition that involves learning each healthcare provider's individual pronunciation and speaking patterns. The server controls this learning process (called *adaptation*) by scheduling two processes, Acoustic Model Optimization (ACO) and Language Model Optimization (LMO), which run on the *Profile Optimizer Speech Nodes*. After an optimization process completes, the *NMC server* updates that healthcare provider's master user profile, integrating the ACO and LMO results.

The accuracy of dictation depends on how well-tuned the master user profile is for a particular healthcare provider. Research has shown that running both ACO and LMO processes regularly reduces the relative word error rate for the provider by 10 to 30% and can produce even greater improvements in recognition accuracy for providers who speak with an accent.

When you are determining how often to schedule Acoustic Model and Language Model Optimizations (ACO and LMO processes), you take into account several factors. But how often should the server carry out an ACO or LMO for a particular healthcare provider?

First, let's understand the purpose of each process.

Defining ACO/LMO processes and their impact on recognition

To help you assess how often an ACO or LMO process should occur, let's first look at what each process does:

■ Acoustic Model Optimization (ACO) — This task optimizes the model used to recognize the way the provider speaks. The model incorporates characteristics such as the accent, dialect, tone of voice, and other aspects of how the speech sounds. When a speaker is new to *Dragon Medical*, you should run the optimization more often than after the speaker has worked with the

product for a while.

■ Language Model Optimization (LMO) — This task optimizes the language model used to help recognize the patterns of the provider's speech. The model incorporates how the provider dictates particular words and sequences of words his or her speech frequently employs.

Both of these processes run in the background and strictly on the *Speech Nodes*, so they do not affect the speed of recognition during dictation on *Dragon Medical Clients*.

You can and should run the ACO and LMO processes at different intervals for the same provider.

Factors in how often to run ACO processes

The ACO process, by contrast with LMO, is time intensive—it runs for 1 hour to process 1 hour of dictation. *Speech Nodes* spend more than 80% of their time running ACO processes.

Some of the factors to consider when deciding how often to carry out an ACO process are:

- Whether or not a particular provider has an accent
- Whether or not the product frequently has trouble interpreting a particular provider's speech
- How much dictation a provider or group of providers generates

To get the most out of the ACO process, you should schedule the process to take place every time the provider has dictated 5 hours of audio. A medical practitioner does not produce 5 hours of audio by working 5 hours, but may produce that much audio over a period of a month or two, while dictating as needed.

The absolute minimum frequency recommended for ACO is once every 6 months. However, if the provider dictates 10 hours of audio in those 6 months, the ACO process will incorporate only the last 5 hours of his or her dictation, so in such a case you would want to schedule the ACO every 3 months instead of every 6 months.

The best practice recommendation is to schedule an ACO every week only while the provider is new to *Dragon Medical*. After the provider has been dictating for a month or has dictated 5 hours of total audio, the provider is no longer considered new to dictation. You can then back off to scheduling the ACO once a month or as often as you find that the provider dictates 5 hours of new audio.

If the *Profile Optimizer Speech Node* does not find enough speech data for that provider in a given month, the node terminates the process and waits until the next scheduled ACO.

If a professional uses more than one audio input device (dictation source), such as one USB microphone and one PowerMic, then the *Speech Node* needs to carry out a separate ACO process for each of those devices

After a provider has dictated his or her first 5 hours of total audio, if the provider has an accent, you might want to schedule the provider for more frequent ACOs that you would schedule for providers who do not have an accent.

Running a maintenance ACO process periodically keeps the provider's master user profile synchronized with his or her voice.

Factors in how often to run LMO processes

Since an LMO process runs quickly, not tying up network or *Speech Node* resources, you can schedule an LMO for every user every day. Guidelines state at minimum to run an LMO process:

- Every day (or night) for providers whose speech *Dragon Medical* has difficulty recognizing or providers who have *ever* had their profile becomes corrupted.
- At least every week (but preferably every day) for providers new to dictating (who do not have a previously existing user profile or who have not yet dictated 5 full hours of audio).
- At least every month for providers with more experience dictating (who already have a user profile and have already dictated a minimum of 5 hours of audio) and who have *never* had profile corruption issues.

Some of the factors to consider when deciding how often to carry out an LMO process are:

- How much dictation a provider or group of providers generates
- How often you add new words to vocabularies
- How often you would like the *Profile Optimizer* to check for corrupted user profiles, because it checks for corruption every time it carries out an LMO process on the profile

Scheduling LMO and ACO processes for a group or user account

To set how often an LMO or ACO process should occur, you can set the *Profile Optimizer Scheduler* settings. You can set the frequency of the processes for a particular group or for each individual user account.

In the **Profile Optimizer Scheduler Settings** window, you can set the interval for each of these optimizations:

DM360 Network Edition LMO interval: Select a frequency from the drop-down list to set the interval that defines how often the Language Model Optimization (LMO) takes place for the group or user account. Nuance recommends you set this process to run at least **Weekly**, but preferably **Every day**, because this setting controls how often the *Profile Optimizer* checks for corrupted profiles.

DM360 Network Edition ACO interval: Select a frequency from the drop-down list to set the interval that defines how often the Acoustic Optimization (ACO) takes place. You should set this interval to **Weekly** for the first month that the provider is dictating and then set it to **Monthly** after that if there are no issues with the user profile.

If a user profile often becomes corrupted, you should increase the frequency of these optimization processes both to **Every day** as a preventive measure.

You can run the optimizations immediately by clicking the **Execute Now** button next to the optimization, and you can set the frequency by selecting an interval from the list:

- Disabled
- Every day
- . Every other day
- Every third, fourth, fifth, or sixth day
- Weekly
- Every eight, nine, 10, 11, 12, or 13 days
- Biweekly
- Every three weeks
- _ Monthly
- BiMonthly
- Every 3, 4, 5, or 6 months

Factors that have no effect on regularly scheduled processes

After you approve medication, command, and other updates from the *NuanceLink*, you do not take any other action. The *NMC server* automatically schedules processes that integrate these updates into the appropriate models and master user profiles.

Scheduling optimization and medication updates

In the **Profile Optimizer Schedule Settings** dialog box, you can set the Profile Optimizer to run LMO or ACO processes according to a schedule. You can also run medication and command updates immediately from the dialog box.

Scheduling the Profile Optimizer

For information on how often to run LMO and ACO for a particular group or for an individual, see *Scheduling the optimization of acoustic and language models* on page 185.

In the **Profile Optimizer Scheduler Settings** dialog box, you can set the interval for each of these optimizations:

- Dragon Medical Network Edition LMO interval: Select a frequency from the drop-down list to set the interval to define how often the Language Model Optimization (LMO) should take place for the group or user account. Nuance recommends you set this process to run at least Weekly, but preferably Daily, because this setting controls how often the *Profile Optimizer* checks for corrupted profiles.
- **Dragon Medical Network Edition ACO interval:** Select a frequency from the drop-down list to set the interval that defines how often the Acoustic Optimization (ACO) takes place. You should set this interval to **Weekly** for the first month that the provider is dictating and then set it to **Monthly** after that if there are no issues with the user profile.

If a user profile often becomes corrupted, you should increase the frequency of these optimization processes both to **Daily** as a preventive measure.

You can run the optimizations immediately by clicking the **Execute Now** button next to the optimization, and you can set the frequency by selecting an interval from the list:

- Disabled
- Every day

- . Every other day
- Every third, fourth, fifth, or sixth day
- Weekly
- Every eight, nine, 10, 11, 12, or 13 days
- Biweekly
- Every three weeks
- Monthly
- . Bimonthly
- Every 3, 4, 5, or 6 months

Scheduling the medication and command updates

You can receive immediate medication and updates by using options in the Profile Optimizer Schedule Settings dialog box.

To receive available Medication updates, beside Medications, click Execute Now.

Understanding how local cache user profile updates on client

When a provider logs in and has been speaking into the microphone, after the provider finishes dictating and logs out, the *Dragon Medical Client* sends data about the provider's speech to the corresponding master user profile on the network. If that provider has accumulated 5 hours of dictation and you have scheduled an ACO for the provider, the *Profile Optimizer Speech Node* then carries out an ACO process on the acoustic model for that provider and updates that master user profile accordingly. Later, when the provider logs on to dictate again, the *Dragon Medical Client* retrieves the optimized master user profile from the network and places it in its local cache. The provider should then see improved recognition. (These data transfers and ACO processes occur without the provider even knowing about them.)

The provider may require more than one session to accumulate enough dictation time for the ACO process to take place. For instance, you might schedule an ACO monthly, but if the *Profile Optimizer Speech Node* does not find enough speech data has accumulated for that provider during

that month, the node terminates the process and waits until the next ACO that you have scheduled.

Viewing, modifying, and deleting a user account

Once you have created and configured a user account you can return to it at any time and perform the tasks below:

Notes:

■ You must have the appropriate *NMC console* Administrator security rights to perform these tasks.

Finding and viewing a user account

- On the menu bar, click User Accounts and then click the Search Accounts Search icon on the User Accounts ribbon.
- 2. Enter your search criteria on the **User Accounts** tab.

You can search for user accounts based on the information that you entered on the **User Account Details** tab. You do not have to fill out all of the fields; you can search on a single field or even a few letters in that field.

3. Click **Search**.

The system displays a list of user accounts that meet your search criteria. If you click **Search** without entering any search criteria, the system displays a list of all of the user accounts in the system.

4. In the list, double-click on the name of the user whose account information you want to view, or select the user on the list and then click **Details** in the **User Accounts** ribbon.

The **User Account Details** window opens and displays all of the settings for the selected user account on the **Details**, **Address**, **Group Memberships**, **Messaging**, tabs. For more details about these tabs, see *Creating user accounts* on page 130

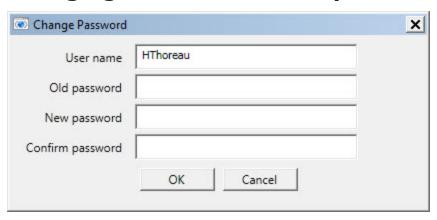
Deleting a user account

- 1. On the menu bar, click **User Accounts** and then click the **Search User AccountsSearch** icon on the **User Accounts** ribbon.
- 2. In the **User Accounts** window, enter your search criteria.
- 3. You can search for user accounts based on the information that you entered on the User Account Details tab. You do not have to fill out all of the fields; you can search on a single field or even a few letters in that field.
- 4. Click Search.
- Select the user Account that you want to delete from the list and then click **Delete User** Account Delete on the User Accounts ribbon.
- A message displays and asks if you want to delete the user account. Click Yes to delete the account.

Modifying a user account

- 1. Use the procedure above to find the user account.
 - The changes you can make to a user account depend on your security rights. Fields that you cannot modify are shaded in gray and are inactive.
- 2. On the **Details** and **Address** tabs (see *Configuring user account details and address settings* on page 131) you can:
 - Change contact information for the user
 - Change the user account password.
- 3. On the **Group Memberships** tab you can:
 - Add or remove the user account from a group. See Assigning user accounts to groups on page
 139
 - Set the default group for a user by moving it to the top of the Selected Groups list.
- 4. On the **Messaging** tab you can:
 - Set email and mobile messaging options. See Enable sending messages to an administrator on page 137.
- 6. When your modifications are complete, click **Save** to apply them to the user account.

Changing the user account password



- 1. On the User Account Details screen, click the Details tab.
- 2. Click the **Change password** button.
- 3. In the **Change Password** dialog box, enter the new password and then confirm it by entering it a second time.
- 4. Click **OK** to save the password and return to the **User Account Details** tab

Encryption of patient health information

To access settings for your organization where you can choose to **Encrypt patient information** and **Upload user data to Nuance for research purposes**, see *Accessing and adding to your organization data* on page 28.

Understanding how Dragon encrypts data

When you have selected the **Encrypt patient info** check box, *Dragon Medical Client* software takes particular actions delineated here:

When a user dictates using the *Dragon Medical Client*, *Dragon Medical* automatically saves all audio and transcribed text in Dragon Recorded Audio (.**DRA**) files. If the healthcare provider corrects any of the dictated text, *Dragon Medical* automatically stores these corrections in .**enwv** files. *Dragon Medical* saves both the .**DRA** and .**enwv** files in the background.

The *Profile Optimizer* uses these automatically created **.DRA** and **.enwv** files during the Acoustic Model Optimization (AMO) and Language Model Optimization (LMO) processes that optimize the user profile.

When this option is enabled, *Dragon Medical* encrypts these automatically created **.DRA** and **.enwv** files before storing them in the Local cache or Master user profile directories to ensure they do not become a back door into patient data and violate the patient's privacy. *Dragon Medical* also encrypts these files when a user dictates into a supported application like Microsoft Word or an Electronic Healthcare Record (EHR) application.

Due to the restrictions mandated by privacy regulations (such as the Health Insurance Portability and Accountability Act (HIPAA) in the United States and EC 95/46 Directive in Europe), only *Dragon Medical* can open these encrypted .**DRA** and .**enwv** files and only for internal use. As a result of these restrictions, non-Medical versions of *Dragon* and *Dragon* toolkits like the *Dragon SDK Client Edition* (DSC) and *Dragon SDK Server Edition* (DSS) cannot open these encrypted files. In addition, **DragonPad**, even within the *Dragon Medical Client*, can never open these encrypted interim .**DRA** and .**enwv** files.

Caution: Limitations of Dragon Encryption

- *Dragon Medical* does not encrypt .**DRA** files that the user explicitly saves. For example, if a user saves recorded dictation when saving a document (for example, in Word, WordPerfect, or DragonPad), these saved .**DRA** files are not encrypted. The user who created these files is responsible for saving these files in a secure location.
- Nuance does not guarantee that the file encryption provided in *Dragon* ensures total compliance with privacy regulations. Other security measures are required for full compliance.

Saving space otherwise occupied by excess data that might not enhance security

As long as other adequate security protections are in place to protect patient data, you can avoid saving excess patient data by:

- Deactivating encryption of patient health information
- Deactivating creation of DRA files and set options to conserve disk space
- Deactivating creation of unencrypted .nwv files

Deactivating encryption of patient health information

This option is activated by default. To deactivate the encryption of these background speech recognition files, you must deselect the **Encrypt patient info** option.

- 1. In the NMC console, click **Organization Overview**.
- 2. On the **Organizations Details** screen, click **Products**.
- 3. Expand the **Dragon Medical Network Edition** section.
- 4. **Encrypt patient info** is enabled by default. Click the check box to uncheck the option.

Note: When this feature is deactivated, Nuance does not contribute to HIPAA or EC 95/46 Directive compliance.

Deactivating creation of .dra patient data files/setting system to conserve disk space

.DRA files are created when the option Upload user data to Nuance for research purposes is

selected. This option can be selected at Account level or at User level.

When other security measures are in place, you can deactivate the creation of the .**DRA** files to further protect the patient's privacy.

1. On the ribbon, in the **Organizations** area, click **Search**.

On the **Search Organizations** screen, enter search criteria, and click **Search**.

In the search results, select an organization.

On the ribbon, in the **Organizations** area, click **Details**.

- 2. On the **Organization Details** screen, click **Products**.
- 3. Expand the **Dragon Medical Network Edition** section.

Deselect **Upload user data to Nuance for research purposes**. This deactivates this option as the default setting for all users. You can override it at the user level in the **User Account**Details > Network Edition US tab.

Deactivating creation of unencrypted text collection .nwv archive files

To further ensure privacy, you can deactivate the creation of archive files that might contain patient data from the *Dragon Medical Client* in the site configuration:

- 1. Open the site that you want to modify
- 2. Click the **Dragon Medical Network Edition** tab.
- 3. Expand the **Data** section.
- 4. De-select the **Store correction in archive** option.
- 5. Click **Save** to save your settings.

Applying Dragon Settings to organizations, sites, or groups

You can apply DM Network Edition Settings at the following levels:

- For the organization
- For the site

- For the group
- For the user account

One feature that you must set on the *Dragon Medical Client* is the Medical Vocabulary.

If you set the feature for a group, and the group is the first on the **Group Details > Members > Group members** list, it applies to all user accounts in that group.

If you set feature for a user account, it applies only to that user account and the user account level setting overrides the group or site setting.

Configuring the Dragon settings

The following links provide more information on the how to configure the Dragon settings:

- Encryption of patient health information on page 224
- Turning on data collection for your site on page 339
- Setting Dragon voice command options for provider/user groups on page 220
- Setting Auto-Formatting Dragon options on page 164
- Scheduling the optimization of acoustic and language models on page 185

You can also select the best medical vocabulary, but you must take this action on the *Dragon Medical Client*. Refer to *Selecting a medical vocabulary for a medical specialty* on page 315

Chapter 4: Managing licenses

You can quickly and easily assign licenses to individuals who are managing the system or dictating using the *Dragon Medical Client*. This chapter describes how to grant and revoke licenses and how to obtain information on the licenses being used by your organization.

Use this chapter to configure settings in the NMC console that are common for most products that use the NMC server.

The information in this chapter is for administrators that have the privileges to configure settings for Dragon Medical Network Edition.

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Automatically grant permission to use the Dragon Medical client when you create a user account

An organization that uses DM Network Edition can use a new enterprise level license to automatically grant new users permission to use the Dragon client.

After receiving and importing the license key for the Enterprise License, when an administrator creates a user account, the user account is automatically granted permission to use the Dragon client.

This avoids having to manually assign the Physician Author license every time an administrator creates a new user account.

With the enterprise license, any user in the organization can use Dragon.

Note: Enterprise licenses have expiration dates, just like user-based licenses.

Obtaining and using the DM Network Edition enterprise license

- 1. Purchase the Enterprise License for Dragon from Nuance.
- 2. Nuance sends you the license key for the Enterprise License.
- 3. In the NMC console, import the license key.
- 4. When a user logs into the Dragon client, the NMC server checks the license for the user.
- 5. The NMC server confirms that the user has permission to use Dragon.

For more information about the DM Network Edition Enterprise License, and how to obtain it, contact your Nuance representative.

Managing licenses

When you first install Dragon Medical Network Edition, you enter the organization number that Nuance provides, and after the installation is complete, you already have a user account named admin that you can use to log on.

You purchase three types of licenses:

- **NMC Administrator**—License to access the *NMC server* and configure the system. Nuance provides two free licenses of this type.
- Physician Author—License for a physician healthcare provider to dictate using the *Dragon Medical Client*.
- Non-Physician Author—License for any type of healthcare provider other than a physician (nurse practitioner, physical therapist, or similar professional) to dictate using the *Dragon Medical Client*.

DM Network Edition allows only **NMC Administrator** users with particular privileges to manage licenses for all other users.

Types of license upgrades available

If you are an existing customer and would like to purchase additional licenses or upgrade your existing licenses, you can contact your Nuance representative.

Obtaining and applying licenses

When you first purchase the product, you also usually purchase some initial licenses. To later purchase additional licenses, contact your Nuance representative.

Importing licenses included with Dragon Medical Network Edition

You can purchase as many licenses as you need up front when you purchase the product. Later, when you start the *NMC server*, to download the licenses purchased for your account:

- On the menu bar click Licensing, and then click the Import License Key icon. The Import License Key window opens.
- 2. Copy and paste the encrypted license key you received in e-mail into the License Key box.
- 3. Click **Show Information**.
- 4. Click **Import**. The *NMC server* decrypts the license key and generates the licenses on your system where they become available for you to grant to the user accounts you create.

Purchasing and obtaining new licenses

When you purchase additional licenses through your Nuance representative, once the licenses have been issued, you see a message about the license or licenses in **Utilities**> **Messages**. You do not have to take any action to receive those licenses. You are not required to approve them to initiate download of those licenses; instead, the licenses appear in the **Licenses Summary** when you click **Licensing** > **View Licenses** tab, where you can grant those licenses to particular administrators or providers. To refresh the data on the **Licenses Summary** screen, press **Refresh** at the bottom right of the screen.

For more information on working with the licenses in the Licenses Summary, see:

- Granting licenses on page 208
- Receiving expiration alerts and renewing licenses on page 210
- Revoking licenses on page 212

Viewing licenses

After you have purchased licenses and prepared to grant those licenses, any individual with an **NMC Administrator** user account that you assigned the appropriate security rights can take steps to view the licenses that are in the *NMC server*.

Viewing existing licenses

- 1. Click **Licensing** on the menu bar.
- 2. Click the **View Licenses** icon.
- 3. On the **License Summary** screen, enter information and click **Search**.
- 3. The License Summary screen displays information about each license:
 - Organization name—Each license is associated with a particular organization for a particular product.
 - Mode—This field is always set to Account or Enterprise.
 - **Site Name** The Site associated with the license.
 - **OEM Name** Ignore this field.
 - **Partner Name** The name of the partner of the organization.
 - Product name—For an NMC Administrator license, the product name is the Nuance
 Mgt Console (NMC); for a Physician Author or Non-Physician Author license, the
 product type is Dragon Medical Network Edition.
 - License Type—All licenses are NMC Administrator (for using the NMC console), and
 Physician Author, or Non-Physician Author (for dictating on client workstations).
 - **Expires on**—The expiration date for the license.
 - **Total licenses** Total number of licenses of the particular type that you have, whether or not you have granted them to anyone.
 - Used licenses—Total number of licenses of the particular type that you have granted to
 user accounts.

4. From this table, you can now grant or revoke licenses.

As you grant the licenses, the number of that type of licenses available automatically adjusts in the table. Likewise, when you receive the new licenses from Nuance, the *NMC server* adjusts the number of licenses of that type in the **Licenses Summary** table.

- 5. To grant licenses using this table, see Granting licenses on page 208.
- 6. To revoke licenses using this table, see Revoking licenses on page 212.

Viewing license usage information

In the NMC console, you can create a report and view data about how your DM Network Edition licenses are being used in your network by indicating how often and when users last logged in to either the Dragon Client (Author licenses) or the NMC server (Administrator licenses).

You can view usage information for available license types. The following license types are specific to DM Network Edition:

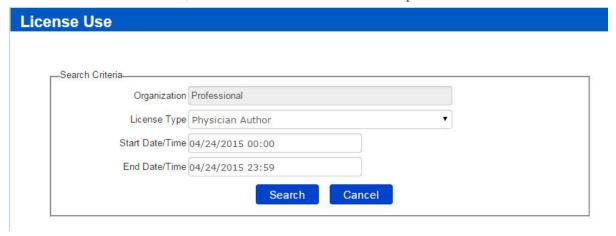
- NMC Administrator
- Physician Author license
- Non-Physician Author license

. You can use the license usage information in the report to manage and optimize the use of DM Network Edition licenses in your organization. For example, if a user with a DM Network Edition license does not use the license frequently, you can re-assign the DM Network Edition license to another user.

You can also use the license usage information to plan the future license requirements for your organization.

To generate and view the usage report, you must have the proper administrative rights in the NMC server.

- 1. Open the NMC console.
- 2. In the **Reports** section, under **Usage**, select **License Use**.
- 3. On the **License Use** screen, select the search criteria for the report:



- License Type: Select a license type.
- Start Date/Time: Select a start date and time.
- End Date/Time: Select an end date and time.

5. Click Search.

The NMC console generates a report using data from the NMC server.

License U	Jsage					
Login Last Name	First Name	Last Login	Days Since La	st Login	Login Count	

The NMC console displays the report as a grid with the following information:

- Login The login information of the user.
- Last Name The last name of the user.
- First Name The first name of the user.
- Last Login The date and time that the user last logged into the system.
- Days Since Last Login The number of days since the last date the user logged into the system.
- Login Count If the search returns data from an NMC server that is older than NMC server 5.0, the Login Count column displays the total number of logins up until the current date, provided the current date is within the search start date and search end date.
 If the search returns data from an NMC server that is version 5.0 or greater, the Login Count column displays the total number of logins from the search start date to the search end date.

View user license grant and expiration dates

To monitor license usage over time and by user, you can view when licenses were granted to a user, and, when those licenses expire.

- 1. On the NMC console ribbon, click **Licensing**.
- 2. In the **View** area on the NMC console ribbon, click **View Licenses**.
- 3. On the **License Summary** screen, enter a license type and click **Search**.
- 4. In the search results, select a license.
- 5. In the License Allocation area on the NMC console ribbon, click List User Accounts. The Licensed User Accounts screen displays the users in the organization that have the license type you selected. The Licensed User Accounts screen displays the following user information:
 - Last Name: The last name of the user.
 - First Name: The first name of the user.
 - Login Id: The login id of the user.
 - **Groups**: The groups that the user belongs to.
 - **Sites**: The sites that the user belongs to.
 - **Granted on**: The date the license was granted to the user.
 - **Expires on**: The date the license expires.

Notes:

- On the Licensed User Accounts screen, you can use the Last name, Group name, Site, and Partner Name name fields to filter the search results.
- To save the search results, on the **Licensed User Accounts** screen, below the search results, click . The NMC console creates a .csv file that contains the search results.

Granting licenses

You can grant licenses when you create a user account or after you create the account.

You can grant licenses for multiple users at the same time.

- To select all users, on the keyboard, press CTRL+A.
- To select specific users, on the keyboard, press Shift+Up or Down.

If you delete a user account for a professional who still has an active license, the license becomes available for you to grant to another user.

Granting a license immediately after creating a user account

1. When you first create a new user account, if you have already downloaded licenses, when you save the user account, in the dialog box pops up asking **Do you want to grant the new user a license now?**, select **Yes**.



- In the next dialog that appears, select one or more types of licenses to assign to the user account.
- 3. Once you select the license types, if purchased licenses of that type are available on the server, NMC server automatically assigns them to the user account. Otherwise, it pops up a message, saying the license is not available. If the license is not available, that's not a problem, as you can grant the license later, after you either purchase or download more licenses or free up a license from another user account by revoking that account's license or deleting the user account.

Granting a license to an existing user account

To grant a license to an existing user account:

- 1. Click **Licensing** on the menu bar.
- 2. In the ribbon below the **Licensing** tab, click the **View Licenses** icon.

- 3. Enter search criteria and click **Search**.
- 4. Click on a license.
- 5. In the Licensing ribbon, click the **Grant** icon.
 - When the **Grant License** screen opens, you see your organization's name to the top left and the type of license (such as **Physician Author**) to the top right. Below the organization name, you see a list of **Available Users** containing the names of people whose user accounts you have not yet granted licenses and to the right of it you see an empty list of **Selected Users** with a small box above it labeled **Available licenses** that contains the number of licenses of this type still available for you to assign.
- 6. Below the **Organization** text box, to filter the list of users, enter values in the **Last name**, **Group name**, and **Site name** fields and click **Search**.
- 7. Select one or more users in the **Available Users** list.
- 8. Click the > button between the two lists to move that user's name to the Selected Users list. The user name(s) move to the Selected Users list on the right and the number of available licenses then reduces to show that fewer licenses are available.
- 9. If you missed any names, repeat the last three steps for other users in the **Available Users** list who you'd like to grant the same type of license.
- 10. If you make a mistake or change your mind about granting one of these licenses while the tab is still open, you can click on the name in the **Selected Users** list and click the < button to return that name to the **Available Users** list.
- 11. When you are satisfied that licenses listed are those you want to grant, click **OK** to save the information and grant the licenses. The tab closes and you return to the **Licenses Summary** screen.
- 12. Repeat this process for each type of license you want to grant.

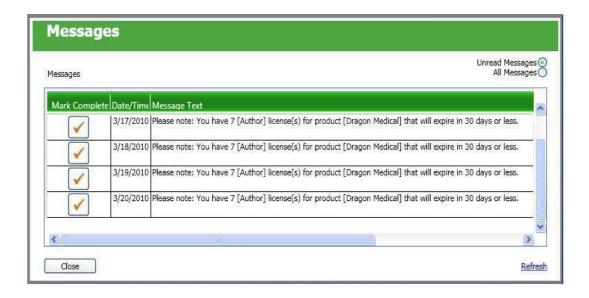
Receiving expiration alerts and renewing licenses

Thirty days before a Dragon Medical Network Edition license is going to expire, you start receiving alerts about that fact. You should be sure to renew the license before it expires.

Viewing messages about expired licenses

If a license is close to expiring, you receive a reminder message. To view messages that might contain alerts about licenses that are expiring soon:

- 1. Click the **Utilities** tab on the ribbon.
- 2. Click **Messages**.
- 3. In the **Messages** window, search for messages that are related to licenses. Expiration messages look like the following messages:



4. If the message says a license or set of licenses are about to expire, you should follow the renewal process below to renew the license.

Renewing the License

To renew an existing license:

- 1. Contact your Nuance representative. The representative should be able to verify your official organization number and take you through the process of purchasing renewal licenses and any additional licenses you would like.
- 2. Once the renewal is approved, the licenses download to the NMC server. You can then see the licenses in your *NMC console*.

Revoking licenses

You can revoke licenses for multiple users at the same time.

- To select all users, on the keyboard, press CTRL+A.
- To select specific users, on the keyboard, press Shift+Up or Down.

To revoke a license that is associated with a user account:

- Click Licensing on the menu bar and in the ribbon below the Licensing tab you see the View Licenses icon.
- 2. Click the **View Licenses** icon.
- 3. Enter search criteria and click **Search**.
- 4. Select an organization.
- 5. Click on a license that you want to revoke. Several more icons become available in the ribbon above.
- 6. To revoke the license from one or more uses, in the License Allocation area, click the Revoke icon. The NMC console displays the Revoke License screen. In the screen, you see a list of Available Users to the left and an empty Selected Users list to the right.
- 7. Below the **Organization** text box, to filter the list of users, enter values in the **Last name**, **Group name**, and **Site name** fields and click **Search**.
- 8. In the **Available Users** list, select one or more users to revoke that type of license from, then click the button between the two lists with a > symbol in it. The names move to the **Selected Users** list.
- 9. Click **OK** to save the change. The screen closes and you return to the **Licenses Summary** screen. The newly revoked licenses should be added to the number of licenses on the screen.
- 10. Repeat this process for each type of license you want to revoke.

Dictating with Author licenses while disconnected from network

Because licenses to dictate with a *Dragon Medical Client* are always stored on the *NMC server*, each healthcare provider with a **Physician Author** or **Non-Physician Author** license must log on to the network at least every 90 days. The 90 day limit is how long the professional can dictate (usually on a laptop) without connecting to the server to *refresh* the license.

If the provider tries to dictate for longer than 90 days without connecting to the server, Dragon Medical Network Edition rejects that provider's user name and password, and prompts the professional to connect to the network.

The *Dragon Medical Client* continues to refuse the provider access until after the dictation equipment has been reconnected to the network, where the *NMC server* can confirm authorization to use the license.

View user license grant and expiration dates

To monitor license usage over time and by user, you can view when licenses were granted to a user, and, when those licenses expire.

- 1. On the NMC console ribbon, click **Licensing**.
- 2. In the **View** area on the NMC console ribbon, click **View Licenses**.
- 3. On the **License Summary** screen, enter a license type and click **Search**.
- 4. In the search results, select a license.
- 5. In the License Allocation area on the NMC console ribbon, click List User Accounts. The Licensed User Accounts screen displays the users in the organization that have the license type you selected. The Licensed User Accounts screen displays the following user information:
 - Last Name: The last name of the user.
 - First Name: The first name of the user.
 - Login Id: The login id of the user.
 - **Groups**: The groups that the user belongs to.
 - **Sites**: The sites that the user belongs to.
 - **Granted on**: The date the license was granted to the user.
 - **Expires on**: The date the license expires.

Notes:

- On the Licensed User Accounts screen, you can use the Last name, Group name, Site, and Partner Name name fields to filter the search results.
- To save the search results, on the **Licensed User Accounts** screen, below the search results, click ■. The NMC console creates a .csv file that contains the search results.

Applying Dragon Settings to organizations, sites, or groups

You can apply DM Network Edition Settings at the following levels:

- For the organization
- For the site
- For the group
- For the user account

One feature that you must set on the Dragon Medical Client is the Medical Vocabulary.

If you set the feature for a group, and the group is the first on the **Group Details > Members > Group members** list, it applies to all user accounts in that group.

If you set feature for a user account, it applies only to that user account and the user account level setting overrides the group or site setting.

Configuring the Dragon settings

The following links provide more information on the how to configure the Dragon settings:

- Encryption of patient health information on page 224
- Turning on data collection for your site on page 339
- Setting Dragon voice command options for provider/user groups on page 220
- Setting Auto-Formatting Dragon options on page 164
- Scheduling the optimization of acoustic and language models on page 185

You can also select the best medical vocabulary, but you must take this action on the *Dragon Medical Client*. Refer to *Selecting a medical vocabulary for a medical specialty* on page 315

Selecting a medical vocabulary for a medical specialty

You should select and use a medical specialty that is based on the appropriate vocabulary.

Medical specialties and medical vocabularies - US and UK English Dragon Medical

The following table correlates Medical specialties with Dragon Medical vocabularies available in US and UK English. Items that are not available in UK English are marked with an asterisk (*).

Specialty	Medical Vocabulary	
Addiction Psychiatry	Mentalhealth	
Allergy and Immunology	Generalpractice	
Anesthesiology	Neurology	
Bariatric Surgery *	Surgery	
Behavioral Health *	Psychiatry	
Blood Banking/Transfusion Medicine *	Pathology	
Breast Surgery *	Surgery	
Cardiac Surgery	Surgery	
Cardiology	Cardiology	
Cardiothoracic Surgery *	Surgery	
Cardiovascular Disease *	Generalpractice	
Case Management *	General Medical	
Chiropractic *	Neurology	
Clinical Cardiac Electrophysiology *	Cardiology	
Colon and Rectal Surgery	Surgery	
Dentistry	Orthopaedic	
Dermatology	Generalpractice	
Dermatopathology *	Pathology	
Developmental-Behavioral Pediatrics *	Pediatrics	
Diagnostic Radiology *	Radiology	
EEG*	Psychiatry	

Specialty	Medical Vocabulary
Emergency Medicine	Emergency
EMG Examinations *	Neurology
Empty Dictation	empty dictation
Endocrinology Diabetes and Metabolism	Mentalhealth
ENT	Obgyn
Epidemiology	Generalpractice
Family Medicine	Generalpractice
Fetal Medicine	Obgyn
Gastroenterology	Gastroenterology
General	General
General Medical	Medical
Geriatric Medicine	Generalpractice
Hand Surgery	Orthopaedic
Hematology	Generalpractice
Infectious Disease	Generalpractice
Internal Medicine	Generalpractice
Interventional Cardiology *	Generalpractice
Medical Education and Writing	Generalpractice
Medical Microbiology *	Pathology
Medical Toxicology *	Emergency
Midwifery	Obgyn
Neonatal and Perinatal Medicine	Pediatrics
Nephrology	Generalpractice
Neurodevelopmental Disabilities *	Pediatrics
Neurology	Neurology
Neuromuscular Medicine *	Neurology
Neuropathology *	Pathology
Neurosurgery	Orthopaedic
Neurotology *	Obgyn
Nuclear Medicine	Radiology
Nursing	Generalpractice

Specialty	Medical Vocabulary
Obstetrics and Gynecology	Obgyn
Oncology	Oncology
Ophthalmology	Medical
Oral and Facial Surgery	Orthopaedic
Orthopaedic Surgery	Orthopaedic
Osteopathy	Generalpractice
Otolaryngology *	Obgyn
Pain Medicine	Neurology
Pathology	Pathology
Pediatric Cardiology	Cardiology
Pediatric Dentistry	Pediatrics
Pediatric Gastroenterology	Gastroenterology
Pediatric Otolaryngology *	Obgyn
Pediatric Pathology *	Pathology
Pediatric Pulmonology *	Pediatrics
Pediatric Rheumatology *	Pediatrics
Pediatric Transplant Hepatology *	Pediatrics
Pediatrics	Pediatrics
Physical Medicine and Rehabilitation *	Neurology
Plastic Surgery	Orthopaedic
Podiatry	Orthopaedic
Proctology	Surgery
Psychiatry	Mentalhealth
Psychology	Mentalhealth
Pulmonary Disease	Generalpractice
Radiation Oncology *	Radiology
Radiation Therapy	Oncology
Radiology	Radiology
Rheumatology	Generalpractice
Sleep Lab	Generalpractice
Social Worker *	General Medical

Specialty	Medical Vocabulary
Speech and Language Pathology *	Neurology
Spinal Cord Injury Medicine *	Neurology
Surgery	Surgery
Thoracic Surgery	Surgery
Transplant Hepatology *	Generalpractice
Undersea and Hyperbaric Medicine *	Emergency
Urology	Surgery
Vascular and Interventional Radiology	Neurology
Vascular Surgery	Surgery

Setting Dragon voice command options for provider/user groups

The **Network Edition US** tab for a group includes a list of voice command options under **Commands** that control how the *Dragon Medical Client* interprets voice commands.

Once you configure commands for a group, the command settings then apply to all healthcare providers in the group.

- Enable mouse motion commands: By default, this feature is enabled. Allows the user to use mouse motion commands such as "Move Mouse left," "Faster," and "Slower." Use the Mouse movement slider to control how quickly the mouse pointer moves across the screen.
- **Enable HTML support:** By default, the group level setting applies.

Enabling this setting makes available a set of commands designed to help users surf the web by voice in web browsers. You may need to disable this setting for certain applications. For more information, see the client Help.

- Enable commands in HTML windows: By default the group level setting applies.
 - Enabling this option makes available a set of voice commands designed for users to use for creating or editing messages in HTML format in certain Microsoft Outlook dialog boxes. These dialog boxes appear with the Internet Explorer symbol (a small document icon with the letter "e" in it) in the left corner of the window header. You may need to disable this setting for certain applications. For more information, see the *Client* Help.
- Require click to select hyperlinks in HTML windows: By default, this feature is enabled and the group level setting applies.
 Requires that provider speak the word "Click" to select a hyperlink, such as "Click nuance.com" instead of just "nuance.com."
- Enable HTML custom API: Select this option to enable Dragon to have FullTextControl in applications that implement the Custom HTML API.
- Enable RIA support: Select this option to enable Dragon to support rich internet applications (RIA).

- Enable recognition mode switching commands: Enabling recognition mode switching allows users in the group to dictate and say the mode switching commands interchangeably. Turning off recognition mode switching disables the ability to switch between modes For example:
 - Dictation Mode: In Dictation Mode Dragon Medical interprets everything you say as dictation and nothing is interpreted as a command. Say "Start Dictation Mode" or "Switch to Dictation Mode."
 - Command Mode: In Command Mode *Dragon Medical* interprets everything you say as a command and nothing is interpreted as dictated text. Say "Start Command Mode" or "Switch to Command Mode."
 - **Spell Mode**: In Spell Mode *Dragon Medical* allows you to say any combination of letters, digits, or symbols as you might need to do dictating license plate or parts numbers. Say "Start Spell Mode" or "Switch to Spell Mode."
 - **Numbers Mode**: In Numbers Mode *Dragon Medical* interprets your dictation as numbers. Say "Start Numbers Mode" or "Switch to Numbers Mode."
 - Normal Mode: The most flexible mode in Dragon Medical is Normal Mode. In Normal
 Mode, Dragon distinguishes dictation from commands by analyzing what you say between
 pauses. Say "Start Normal Mode" or "Switch to Normal Mode."
 - For more information on modes, see Using Recognition Modes in the *Dragon Medical Client* Help.
- Enable Web search commands: Select this option to make available Web search commands that let providers in the group search the Internet using commands that are patterned on their natural speech. See Voice Shortcuts for Web Search in the *Dragon Medical Client* Help for more information.
- Enable desktop search commands: Select this option to make available Desktop search commands that let providers in the group search their Windows desktops using commands that are patterned on their natural speech. See Voice Shortcuts for Desktop Search in the *Dragon Medical Client* Help for more information.
- Enable Email and Calendar commands: Select this option to make available Voice

 Shortcuts for Email and Calendar that let providers in the group control Outlook's email and

calendar functions using commands that are patterned on their normal speech. See the *Dragon Medical Client* Help for more information.

■ Enable cut shortcut commands, Enable delete shortcut commands, Enable Copy shortcut commands: Select these options to enable the Cut, Copy and Delete Quick Voice Formatting Commands. Delete and Copy are enabled by default.

In versions 9 and earlier of the *Dragon Medical Client*, cutting, copying, or deleting was a two-step operation: you first had to select the text before you could operate on it. The Quick Formatting Commands let you perform many of these tasks with a single command.

If you turn off these commands, you can still cut, copy, and delete, but you have to first select the text with the "Select <text>" command and then issue a second command to perform the operation you want; for example, "delete that".

For more information, see the Dragon Medical Client Help.

■ Enable automatically select first field:

Select this option to enable the "automatically select the first field" feature for a group of users.

■ Variable delimiters: By default the group level setting applies.

The variable delimiters are used by Text and Graphics/auto-texts commands that incorporate Voice (variable) Fields. Voice Fields are variable fields where the provider can later type or dictate a specific value.

By default, Text and Graphics/auto-texts Voice commands use the square bracket [] characters to indicate the presence of a variable field. To change the variable delimiting characters, specify a character for the left and right delimiters.

The delimiting "characters" can each be up to 5 characters long. The left and right delimiters cannot be exactly the same as each other or, when you try to apply them, the *Dragon Client* displays a message that they are not valid.

Caution: Nuance recommends you set the delimiting characters once and never change them, because if, for instance, you use square brackets in several Text and

Graphics/auto-texts commands, then change the delimiting characters to */ and /*, the Text and Graphics/auto-texts commands that are using the square brackets then fail because the *Dragon Client* looks for variables only between */ and /*, not between [and].

For more information about using variables with Text and Graphics/auto-texts commands, see Using Voice Fields with Text and Graphics/auto-texts commands in the *Dragon Client* Help.

■ Enable Natural Language Commands: This series of four options enables the users in the group to use Natural Language commands with the applications Microsoft Word, WordPerfect, Microsoft Excel, and Microsoft PowerPoint. This feature uses an additional 8 MB of memory and requires that you restart your computer before it takes effect. Natural Language Commands are available by default only in Microsoft Word.

Encryption of patient health information

To access settings for your organization where you can choose to **Encrypt patient information** and **Upload user data to Nuance for research purposes**, see *Accessing and adding to your organization data* on page 28.

Understanding how Dragon encrypts data

When you have selected the **Encrypt patient info** check box, *Dragon Medical Client* software takes particular actions delineated here:

When a user dictates using the *Dragon Medical Client*, *Dragon Medical* automatically saves all audio and transcribed text in Dragon Recorded Audio (.**DRA**) files. If the healthcare provider corrects any of the dictated text, *Dragon Medical* automatically stores these corrections in .**enwv** files. *Dragon Medical* saves both the .**DRA** and .**enwv** files in the background.

The *Profile Optimizer* uses these automatically created **.DRA** and **.enwv** files during the Acoustic Model Optimization (AMO) and Language Model Optimization (LMO) processes that optimize the user profile.

When this option is enabled, *Dragon Medical* encrypts these automatically created **.DRA** and **.enwv** files before storing them in the Local cache or Master user profile directories to ensure they do not become a back door into patient data and violate the patient's privacy. *Dragon Medical* also encrypts these files when a user dictates into a supported application like Microsoft Word or an Electronic Healthcare Record (EHR) application.

Due to the restrictions mandated by privacy regulations (such as the Health Insurance Portability and Accountability Act (HIPAA) in the United States and EC 95/46 Directive in Europe), only *Dragon Medical* can open these encrypted .**DRA** and .**enwv** files and only for internal use. As a result of these restrictions, non-Medical versions of *Dragon* and *Dragon* toolkits like the *Dragon SDK Client Edition* (DSC) and *Dragon SDK Server Edition* (DSS) cannot open these encrypted files. In addition, **DragonPad**, even within the *Dragon Medical Client*, can never open these encrypted interim .**DRA** and .**enwv** files.

Caution: Limitations of Dragon Encryption

- Dragon Medical does not encrypt .DRA files that the user explicitly saves. For example, if a user saves recorded dictation when saving a document (for example, in Word, WordPerfect, or DragonPad), these saved .DRA files are not encrypted. The user who created these files is responsible for saving these files in a secure location.
- Nuance does not guarantee that the file encryption provided in *Dragon* ensures total compliance with privacy regulations. Other security measures are required for full compliance.

Saving space otherwise occupied by excess data that might not enhance security

As long as other adequate security protections are in place to protect patient data, you can avoid saving excess patient data by:

- Deactivating encryption of patient health information
- Deactivating creation of DRA files and set options to conserve disk space
- Deactivating creation of unencrypted .nwv files

Deactivating encryption of patient health information

This option is activated by default. To deactivate the encryption of these background speech recognition files, you must deselect the **Encrypt patient info** option.

- 1. In the NMC console, click **Organization Overview**.
- 2. On the **Organizations Details** screen, click **Products**.
- 3. Expand the **Dragon Medical Network Edition** section.
- 4. **Encrypt patient info** is enabled by default. Click the check box to uncheck the option.

Note: When this feature is deactivated, Nuance does not contribute to HIPAA or EC 95/46 Directive compliance.

Deactivating creation of .dra patient data files/setting system to conserve disk space

.DRA files are created when the option Upload user data to Nuance for research purposes is

selected. This option can be selected at Account level or at User level.

When other security measures are in place, you can deactivate the creation of the .**DRA** files to further protect the patient's privacy.

1. On the ribbon, in the **Organizations** area, click **Search**.

On the **Search Organizations** screen, enter search criteria, and click **Search**.

In the search results, select an organization.

On the ribbon, in the **Organizations** area, click **Details**.

- 2. On the Organization Details screen, click Products.
- 3. Expand the **Dragon Medical Network Edition** section.

Deselect **Upload user data to Nuance for research purposes**. This deactivates this option as the default setting for all users. You can override it at the user level in the **User Account**Details > Network Edition US tab.

Deactivating creation of unencrypted text collection .nwv archive files

To further ensure privacy, you can deactivate the creation of archive files that might contain patient data from the *Dragon Medical Client* in the site configuration:

- 1. Open the site that you want to modify
- 2. Click the **Dragon Medical Network Edition** tab.
- 3. Expand the **Data** section.
- 4. De-select the **Store correction in archive** option.
- 5. Click **Save** to save your settings.

Configuring default PowerMic settings for a group

The Dragon Client can obtain default group level PowerMic settings from the NMC server. An administrator configures default PowerMic button settings at the group level. When a new user is created, the user is given the default values from the NMC server instead of the default settings from the Dragon Client.

The impact of NMC server PowerMic settings on new and existing users

When an administrator sets the default PowerMic button settings for a group, new users receive the default PowerMic button settings configured by the administrator. The new users can use the PowerMic options dialog in the Dragon client to modify the NMC server PowerMic settings.

The PowerMic settings for existing users are not directly affected when an administrator sets the default PowerMic settings for the user's group.

If an existing user wants to synchronize their PowerMic settings with the defaults PowerMic settings from the NMC server, the user can click the "Restore defaults" button in the PowerMic options dialog in the Dragon client.

Configuring default PowerMic settings for a group

In the NMC console, you set the default PowerMic settings for a group. In the **Network Edition US** tab, the **PowerMic** section lets you configure a PowerMic's buttons, associating them with different commands.

You must have the product rights to manage DM Network Edition.

- 1. In the NMC console ribbon, click **Groups**.
- 2. In the **Groups** area, click **Search**.
- 3. Enter search criteria and click **Search**.
- 4. In the search results, double-click a group.
- 5. On the **Group Details** screen, select the **Network Edition US** tab.

- 6. Expand the **PowerMic** section.
- 7. To set the application that a PowerMic button's actions apply to, click one of the following tabs:
 - **Global**: Microphone button commands apply to any application other than the Dictation Box. Default setting.
 - **DictationBox**: Microphone button commands apply to the Dictation Box only.
- 8. To apply an <u>action</u> to a PowerMic button, click the drop-down list beside a button, and select an option. You can set the following buttons.
 - **Transcribe**: The default value is 'Show dictation box'. ('Transfer text' if the application level is set to DictationBox).
 - **Tab Backward**: The default value is 'Tab backward'.
 - **Tab Forward**: The default value is 'Tab forward'.
 - **Dictate**: The default value is 'Press-to-talk'.
 - **Rewind**: The default value is 'Previous field'.
 - Fast Forward: The default value is 'Next field'.
 - **Stop/Play**: The default value is 'Accept defaults'.
 - **Custom Left**: The default value is 'Force command recognition'. ('Press Cancel button' if the application level is set to DictationBox).
 - Enter/Select: The default value is 'Transfer Text'. ('Hidden Mode on/off' if the application level is set to DictationBox).
 - **Custom Right**: The default value is 'Force dictation recognition'.
- 9. To set PowerMic III options, click **Additional**. Set the following options:
 - Mouse Left or Touchpad Press: The default value is 'Left click'.
 - Mouse Right: The default value is 'Right click'.
 - **Trigger**: The default value is 'Left click'.
 - Enable Touchpad Swipe: The default value is 'Checked'.

Actions that a PowerMic button can perform

Click the drop-down list beside a button and select one of the following options.

- Applications
 - Show DragonBar menu: To open the menu selected on the DragonBar.
 - **Show dictation box**: To open the Dictation Box.
- Dictation
- Microphone on/off: To turn the microphone on and off.
- **Show correction window**: To open the Correction dialog box.
- Microphone sleep/on: To awaken the microphone or make the microphone sleep.
- Press-to-talk: To capture dictation.
- Train new word: To open the Add Individual Word dialog box.
- Transcribe recording: To open the Transcribe from dialog box.
- Transfer Text: To move text from the Dictation Box to an application.
- Navigation
- Skip backward
- Skip forward
- Press OK button
- Press Cancel button
- Tab forward
- Previous field
- Next field
- Accept defaults
- . Tab backward
- Recognition mode
 - Force normal recognition: Puts the Dictation Box into Normal mode.
 - Force dictation recognition: Puts the Dictation Box into Dictation mode.
 - Force command recognition: Puts the Dictation Box into Command mode.
 - Force numbers recognition: Puts the Dictation Box into Numbers mode.
 - Force spell recognition: Puts the Dictation Box into Spell mode.
 - **Hidden Mode on/off**: Puts the Dictation Box into Hidden mode.

Playback

- Playback: Plays current dictation audio.
- Fast playback: Speeds up playback of current dictation.
- **Fast forward**: Speeds up reversal of current dictation.
- **Rewind**: Reverse current dictation audio.

User commands

• **Specify**: The user selects this option to associate a button with a custom command.

To set PowerMic III options, click **Additional**. If you de-select "Mouse Action", you can set the Global and Dictation Box options.

Set the following options:

- Mouse Left or Touchpad Press: Simulates pressing the left mouse button or touching the touchpad.
- Mouse Right: Simulates pressing the right mouse button.
- Trigger: Same function as left mouse button.
- Enable Touchpad Swipe: Move mouse by swiping (or when pressed, acts like Left Mouse button)

Viewing PowerMic settings for a user

You can view a user's personal PowerMic settings. These settings may be different than the Power-Mic group settings you set in the NMC console.

- 1. In the NMC console ribbon, click **User Accounts**.
- 2. In the **User Accounts** area, click **Search**.
- 3. Enter search criteria and click **Search**.
- 4. In the search results, double-click a user.
- 5. Select the **Network Edition US** tab.
- 6. Expand the **PowerMic** section.

Language-specific settings for DM Network Edition

A large number of Dragon Medical Network Edition settings are configured in the NMC console and then retrieved by the Dragon client. These settings include administrative settings, configuration options, and many formatting options.

You can specify DM Network Edition settings for a specific language. Each language has its own complete set of DM Network Edition settings. You can only configure language-specific settings at the user and group level.

Changing a setting in one language does not change the setting in a different language.

User setting and group setting priority occurs within the same language.

Setting language-specific DM Network Edition settings

You must have the rights to manage groups and users, and, the appropriate licenses and rights to see DM Network Edition settings.

- 1. In the NMC console, in the **Organizations** area, click **Details**.
- 2. On the **Organization Details** screen, click **Products**.
- 3. Expand the **Dragon Medical Network Edition** section.
- To manage DM Network Edition US settings, select Enable US Settings. The option is checked by default.
- 5. To manage DM Network Edition UK settings, select **Enable UK Settings**.
- To manage both DM Network Edition US and DM Network Edition UK settings, select
 Enable US Settings and Enable UK Settings.
- To manage DM Network Edition US user settings, select a user, and navigate to the User
 Account Details > Network Edition US tab.
- To manage DM Network Edition UK user settings, select a user, and navigate to the User
 Account Details > Network Edition UK tab.

- To manage DM Network Edition US group settings, select a group, and navigate to the Group
 Details > Network Edition US tab.
- 10. To manage DM Network Edition UK group settings, select a group, and navigate to the GroupDetails > Network Edition UK tab.
- 11. Change the user or group level settings and click **Save**.

Chapter 5: Managing user profiles and Speech Nodes

Dragon Medical Network Edition stores the information about how a particular healthcare provider speaks and pronounces words and phrases in the master user profile for that provider.

The sections in this chapter help you understand actions that you carry out to upgrade user profiles from earlier versions of *Dragon* and then continue to optimize those profiles over time.

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Creating a user profile

On the *NMC server* you create user accounts that later associate with user profiles, but you do not create any actual user profiles on the server. Only *Dragon* creates user profiles. As long as you have created a user account for a healthcare provider to log on to *Dragon*, *Dragon* takes it from there.

Every time a provider dictates for the first time, *Dragon* creates a user profile based on a combination of the provider's language, accent, audio input device, and vocabulary with the provider's voice and speech patterns.

Over time, as *Dragon* collects more data about the provider's voice and speech patterns, the NMC server initiates periodic optimization processes that analyze the data collected and integrate the information into acoustic and language models it builds for that provider. The server launches the processes based on the schedule you set up in the **Profile Optimizer Scheduler** in the **User Account Details > Network Edition US** tab. For more information on optimizations and scheduling them, see:

- Scheduling optimization and medication updates on page 190
- Scheduling the optimization of acoustic and language models on page 185

Although the NMC server launches the optimization processes, the processes actually take place on *Profile Optimizer Speech Nodes*. If you have more than one *Speech Node*, the NMC server selects the node that can take on more work. By spreading the optimization work over multiple speech nodes, the *NMC server* ensures that the processes complete efficiently.

Upgrading a user profile to DM Network Edition Version 2.7

If you are upgrading from:

- Dragon Medical Enterprise Edition Version 10.1
- Dragon Medical Practice Edition Version 11
- DM Network Edition Version 10.5

to DM Network Edition, version 2.7, you must upgrade your user profiles.

Note:

If you are upgrading from a version of DM Network Edition that is not Service Pack 6 or higher, you must first upgrade to Service Pack 6. See the *DM Network Edition SP 6 Installation Guide* for more information.

Complete the following steps to upgrade your user profiles:

Before upgrading Dragon user profiles

Notes:

- Before you upgrade them, Nuance recommends you back-up your user profiles.
- Profile upgrades can take a long time. Because of this, Nuance recommends that you plan to upgrade the user profiles at a time when healthcare providers are not using them to dictate, such as at night or on a weekend. If there is no time when all your user profiles are not in use (because healthcare providers dictate 24/7), you can upgrade multiple sets of user profiles at appropriate times.
- Export your Dragon Medical Enterprise Edition and Dragon Medical Practice Edition profiles to the NMC console, as described in the Converting local user profiles to master user profiles section of the Dragon Medical Network Edition Installation and Upgrade Guide.
- Nuance recommends upgrading user profiles on multi-core machines for better throughput.
 Profiles upgraded on machines with a number of cores that is different than the number of

cores on the speech nodes that run the profiles generates a warning message about recognition accuracy. For example, if you upgrade your profiles on a dual core machine but run them on a single core speech node, the warning message appears when the profile is opened.

To prevent the warning message from appearing, use machines with the same number of cores to upgrade speech profiles and for the speech nodes. For example, if you upgrade the profiles on a dual core machine, run those profiles on dual core speech nodes.

- 1. Start the NMC console and log in.
- Go to the site that contains the user profiles that you want to upgrade and click the **Dragon** Medical Network Edition tab. The DM Network Edition settings interface appears.
- 3. Click the + icon next to **Master user profile** to expand the Master user profile options:
- 4. Click the **Initiate Speech Profile Upgrade to DMNE Version 2.0** button. A dialog appears asking if you want to upgrade the speech profiles. Click **OK** to start the upgrade.
- 5. When the profile upgrade is complete, the NMC console sends a confirmation message to the Administrator.
- 6. Associate the upgraded user profiles with user accounts, as described in *Associating new user accounts with existing user profiles* on page 239.

Configuring the location of user profiles

The NMC server supports multiple versions of user profiles:

- Dragon Medical Network Edition 10.1
- Dragon Medical Network Edition, version 2.0 or higher

Each version has its own user profile location.

When an end user logs into Dragon through the NMC server, the NMC server sends the location of the user's profile to Dragon. This allows Dragon to find and access the user profile.

Note: In NMC server 4.1, the "New User Accounts will use DMNE Version 1.0 speech profiles" option lets you set all new user accounts to use either:

- version 10 profiles: for a site that has not yet upgraded to DM Network Edition, version 2.0 or higher
- version 12 profiles: for a site that has upgraded to DM Network Edition, version 2.0 or higher

For details, see New User Accounts will use DMNE Version 1.0 speech profiles.

An administrator can configure these locations in the NMC console.

Setting the location of profiles for Dragon

- 1. In the NMC console, search for and select a site.
- 2. In the **Sites** area, click **Details**.
- 3. Select the **Dragon Medical Network Edition** tab.
- 4. Expand the **Master user profile** section.
- Beside Master user profile directories, select Configure. Perform step 6 if the site uses DM Network Edition SP5 or earlier. Perform step 7 if the site uses DM Network Edition, version 2.0 or greater.
- 6. In the **General** tab, in the **DMNE Version 1.x Speech Profile Location** field, enter the location of the Dragon Medical Network Edition 10.1 user profile. This is the user profile that

Dragon uses when an end-user logs into DM Network Edition SP6 or earlier through the NMC server.

7. In the DMNE Version 2.0 (or higher) Speech Profile Location field, enter the location of the Dragon Medical Network Edition, 2.0 or higher user profile. This is the user profile that Dragon uses when an end-user logs into DM Network Edition, 2.0 or higher through the NMC server.

Setting the location of profiles for the Profile Optimizer

- 1. In the NMC console, under **Utilities** > **Profile Optimizer**, click **DashBoard**.
- 2. In the left tree view, select the name of the organization.
- 3. Right-click a speech node and select **Node collection details**.
- 4. In the **DMNE v1.x (UNC)** field, enter the UNC path for the Speech Node Collection for the Dragon Medical Network Edition 10.1 user profile.
- 5. In the **DMNE v1.x (HTTP WebDAV)**, enter the http(s) path for the speech node to access the Master User Profiles directory for the Dragon Medical Network Edition 10.1 user profile only if webDAV is used. Also include webDAV credentials.
- 6. In the **DMNE v2.0** or higher (**UNC**) field, enter the UNC path for the Speech Node Collection for the Dragon Medical Network Edition, 2.0 or higher user profile.
- 7. In the **DMNE v2.0** or higher (HTTP WebDAV) field, enter the http(s) path for the speech node to access the Master User Profiles directory for the Dragon Medical Network Edition, 2.0 or higher user profile only if webDAV is used. Also include webDAV credentials.

Associating new user accounts with existing user profiles

If you have not already done so, you should upgrade any roaming user profiles from *Dragon Medical* Versions 8.x or 9.x before you proceed. If you have roaming user profiles from Dragon versions 10.0 or 10.1, you need only copy those profiles to the new master user profiles location on the *NMC server* before you proceed. Then to allow healthcare providers to dictate with their newly upgraded user profiles, you need to:

- In the *NMC console*, create a DM Network Edition user account for each healthcare provider. For more information, see *Configuring groups and user accounts* on page 103.
- Associate that user with the corresponding master user profile.

Installing the Profile Association Tool

The Profile Association tool is only required for US customers that are upgrading from Dragon Medical US Enterprise Edition.

Notes:

- If the NMC console detects that the tool is not installed, you are prompted to install it.
- If the NMC console detects that the tool not current, you are prompted to update it.
- Once the tool installation or upgrade is complete, the NMC server launches the tool
- 1. Start the NMC console and log in.
- 2. On the menu bar, click **Utilities** > **Tools**.
- 3. Click Launch user profile association tool.
- 4. If you are running the user profile association tool for the first time, the *NMC console* displays a dialog box that asks if you want to install the tool. Click **Yes**.
- 5. On the **Profile Association Tool InstallShield Wizard**, click **Next**.
- 6. Click Next.
- 7. Click Install.
- 8. When you see the **InstallShield Wizard Complete** screen, click **Finish**.

Associating user accounts with upgraded user profiles

In Dragon Medical Network Edition, 2.7, the profile association tool is available as a separate tool from the NMC console. You can still access the tool from the NMC console but it is installed and run locally.

The main functionality of the profile association tool has not changed.

However, there are some new features:

- The tool prompts you for the address of the server with the users you want to associate to profiles.
- You must provide your login credentials to connect to the server.
- The tool only displays the users that are part of your organization.
- The tool only displays information about: users that are a member of a group with the "Dragon Author" role, and that have a Physician Author or Non-Physician Author license.

To run the user profile association tool, you must have the Dragon – Able to run Dragon Medical Network Edition tools rights.

To associate new user accounts with upgraded master user profiles:

- 1. Start the *NMC console* and log in.
- 2. On the menu bar, click **Utilities** > **Tools**.
- 3. Click Launch user profile association tool.
- 4. Fill out the fields in the following dialog box:
 - Login: The login id for the server with the users you will associate to profiles.
 - Password: The password for the server with the users you will associate to profiles.
 - **Server**: The address of the server that contains the users you will associate to profiles.
- 5. Click **OK**.
- 6. If you do not see the names or profiles you are looking for in the **Users** or **Profiles** lists, click the **Scan now** button and wait for the lists to update.
- 7. Click the login for the user account in the **Users** list, then click the corresponding user profile in the **Profiles** list, and click the **Associate** button to tie the profile to the user account. The

- user account and the associated user profile appear in the **Associations** list in the lower portion of the screen.
- 8. Repeat the above steps until you have associated all provider user accounts with profiles.
- To undo the association, you can select a user account in the Associations list and click the Remove Association button; the user account and profile return to the lists above, and you can try again.
- 10. Click Finish and Save All Associations.

Synchronization of Master and Local cache profiles

The NMC server manages synchronization of the local cache user profiles (on the Dragon Medical Client workstation) with master user profiles stored on the server.

When a healthcare provider exits the *Dragon Medical Client*, switches user profiles, closes a user profile, or saves a user profile, *Dragon Medical* saves changes to the local cache and then synchronizes these changes with the master user profile on the network.

When a provider dictates using a computer not currently connected to a network, *Dragon* saves all changes to the local cache of the client computer and synchronizes those changes when the provider reconnects the client computer to the DM Network Edition network where the *Master User Profile Server* resides and opens that user profile again.

For more information on how setting options affects the particular data synchronized between the master and local cache user profiles, see Setting site master user profile General settings.

Note:

If a provider who is not on the network has made changes to recognized text that affect the user profile, the changed user profile is stored only in the local cache. When that provider later re-connects that computer to the network, several actions might occur depending on whether the most recent changes were made to the local cache or the master user profile:

- If the local cache has changed, but the master user profile has not, *Dragon* writes the changes in the local cache to the master user profile.
- If the master user profile has changed (because the provider affected the profile, for instance, while dictating on a disconnected laptop and then affected the profile again by dictating on a PC in an examining room), the more recent changes to the master user profile override the changes made to the local cache on the laptop.
- If the provider works on a disconnected laptop and that individual makes a change to a configuration option, and then an administrator makes a change to the same configuration option in the *NMC console*, when *Dragon* later synchronizes the local cache with the master user profile, the more recent change is stored in the master user profile.

Notes about acoustic models and user profiles and DM Network Edition version 2.7

- When you upgrade a profile to DM Network Edition version 2.7, the Acoustic optimizer processes several ..dra files. The processed .dra files are larger than the original .dra files.
- When you upgrade a profile to DM Network Edition version 2.7, the upgrade process copies the full contents of the backup directory. The size of the folder depends on the size of the current folder that was present when the backup was made.

What happens during synchronization

The following changes take place when local cache and master user profiles are synchronized.

Actions that synchronization takes:

- Combines words added to the local cache during a dictation session with the master user profile vocabulary.
- Removes words deleted from the local cache from the master user profile vocabulary.
- Copies acoustic data (from files with a .DRA or .NWV extension) from the local cache and adds them to the master user profile, where the information becomes available to the Acoustic Optimizer. *Dragon* does not add .DRA files that the provider saved voluntarily with a document to the master user profile.

Note: The .DRA files that *Dragon Medical* automatically creates for use by the optimizer are the only ones it adds to the master user profile. For more information on running the Acoustic Optimizer, see the Dragon Help.

 Copies any custom commands created or modified locally (using the MyCommands editor) to the master user profile.

Changes not synchronized:

The following options are *not* synchronized with the master user profile; they remain exclusively on the local computer in the local cache:

Locally set options in the **Options** dialog box:

- On the **Miscellaneous** tab:
 - Use Active Accessibility for menu and dialog control option

- Launch in QuickStart mode on Windows startup option
- On other tabs of the **Options** dialog box:
 - All options on the **Text-to-speech** tab
 - All options on the **Hot keys** tab

Specific information synchronized:

The table that follows explains how and when *Dragon* copies or updates individual files to the master user profile or to the local cache when it synchronizes them.

For more information on option settings that affect what data *Dragon* synchronizes between the master user profile and local cache, see <u>Setting general site settings for master user profiles</u>.

These options can affect how much data is transferred across your network when the master user profile and local cache are synchronized. For more information, see *Estimating Network traffic caused by synchronization* in the *Dragon Medical Client* Help.

File Name or Type	Copied or Updated to Master User Profile	Copied or Updated to Local Cache
Vocabulary files: *.voc	Copied only after the vocabulary files for the user profile have been modified with information from Add Words From Documents, Add Words from Email, Add Lists of Words, and similar procedures.	Copied if the version number of the file on the server is different
Acoustic archive created for each dictation session: archive.nwv, archive.enwv	Copied to the session folder if it exists; once the master user profile's voice_container limit is reached, nothing more is copied. The local copy is deleted and a zero-length file is created to receive new dictation.	Never
Audio.ini	Copied to the master user profile after running the Audio Setup Wizard. If copying after running the Audio Setup Wizard is not successful, the file is copied when the user profile is closed.	Copied if the version number of the file on the server is different; also copied just before running the Audio Setup Wizard
DRA files created during dictation: DRA files, aco.ini; drafiles.ini	Copied to session folder if the master voice_container has space. Files are deleted after being copied and new aco.ini and drafiles.ini are recreated at zero-length to receive new data.	Never
Custom commands created on client PC: MyCommands.dat	Copied when user profiles are saved, or user is closed and saved.	Copied at user open
.INI file changes on client PC: Options.ini, soptions.ini,	Copied at user close and options dialog close when the timestamp on the local file has changed.	Copied on user open, options dialog open if version number is dif-

itnoptions.ini		ferent on the server
History of changes to the vocabulary: Vocdelta.dat	Merged to master copy on user save and log in. When vocabularies are copied up, vocdelta.dat is reset to zero in the master copy for that topic.	Copied to local cache on user log in and merged into the voc if version number is different on the server
.INI file changes on client PC: nsuser.ini, local.ini, nssystem.ini, natspeak.ini	Never (machine dependent).	Never

Uploading dictation session data while a user profile is in use

During a dictation session, as a Dragon user dictates and corrects text, Dragon saves data from the dictation session locally. The data includes .dra and acarchive files.

When the Dragon user saves the user profile and logs out of Dragon, Dragon uploads the dictation and correction data from the dictation session to the master profile location on the network.

The acoustic optimizer and the language model optimizer can use this data to optimize the user profile.

If Dragon accumulates large amounts of session data, the time it takes to process the data and upload it to the master profile location could be significant. This may impact the time it takes to save a profile and log out of Dragon. This is especially pertinent to Dragon workstations that run on slower networks.

To improve the time it takes to save a profile and log out of Dragon, you can enable the **Save profile with background process** option. The **Save profile with background process** option allows dictation session data to upload separately from the main profile data 'in the background' while the user profile is open in the Dragon client.

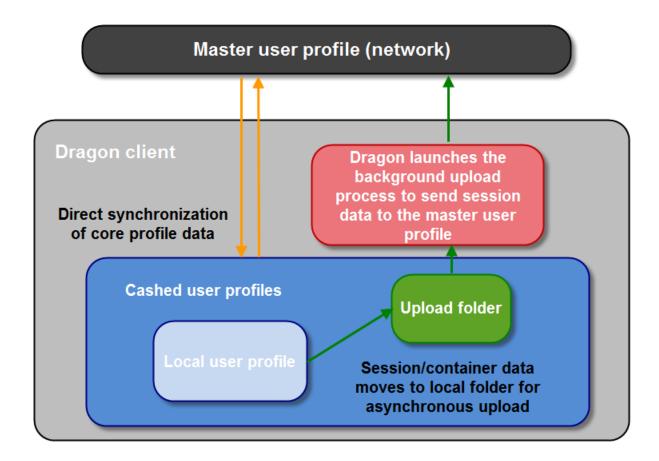
The **Save profile with background process** option uses the DgnProfileUpload.exe, located in the same directory as the natspeak.exe on the Dragon client workstation.

The background session data upload workflow

When a user profile is saved in Dragon, and the **Save profile with background** process option is enabled, the background session data process creates a local upload folder. Each profile gets its own upload folder.

After creating the folder, the process moves the accumulated dictation session data to the 'Upload' folder. The process then uploads the data asynchronously to the master user profile on the network. When the upload is complete, the process terminates.

The background data upload workflow



Events that trigger the background data session upload

When you enable the **Save profile with background process** option, the background upload process starts when one of the following events occur:

- Dragon saves the currently open user profile.
- A Dragon user logs out of Dragon.
- A Dragon user opens a profile.

The third event allows existing 'Upload' data to upload while Dragon opens the profile.

The background upload process does not start if the Windows operating system is about to shut down or restart or the Windows user is logging off the computer.

Background upload process timeouts

The background upload process times out if it runs for more than 15 minutes. This should normally be long enough to perform even large uploads. After fifteen minutes, the process stops. Any data that remains in the upload folder is uploaded the next time the background upload process starts.

Background upload process logs

When the background upload process begins, the following actions are recorded in the Dragon.log file:

- Setup activity when the process starts.
- The launch of the background process executable dgnprofileupload.exe on the Dragon client.
- The movement of files and folders to the 'Upload' folder during the profile save process.

Once the background process starts uploading data, the process logs activities in the dgn-profileupload.log file. The file is located in the root of the 'Upload' folder.

When the profile opens, the process creates a new dgnprofileupload.log file.

The process renames the log file from a previous session, if any, to 'dgnprofileupload.log.bak'.

The background upload process and the 'Remove local cache data after usage' setting

The 'Remove local cache data after usage' setting in the NMC console is not compatible with the background upload process. If the setting is enabled, local profile data can be deleted before the background upload process can upload the data.

If the background upload process is enabled and the 'Remove local cache data after usage' setting is also enabled, the background upload workflow does not execute and the session data is uploaded synchronously.

When Dragon saves a profile, Dragon records a warning message in the Dragon.log file if both the background upload process and the 'Remove local cache data after usage' setting are enabled.

The background upload process and virtual environments

When Dragon runs in a virtual environment, support for background upload depends on whether the user's virtual profile is saved when the user logs-out of the virtual session. The data that the background process uploads may be deleted before the process has can upload the data. You can enable the background upload process if the virtual environment supports saving local profile data across virtual sessions.

Otherwise, do not enable the background upload process.

The administrator must determine if the virtual environment settings can support the background upload process.

Importing and exporting user profiles

You import and export user profiles in order to move them from one server to another or from one organization to another.

In Dragon Medical Network Edition, 2.7, you use the Dragon client to import and export user profiles. For details, see the Dragon Help.

Approving updates of user profiles and language models

When you receive command, medication, or other updates from the *NuanceLink*, you see corresponding messages appear in the **Messages** tab.

For details on how to find and respond to these messages, refer to Managing Update and License messages.

The Profile Optimizer DashBoard

In the NMC console, Clicking the **DashBoard** button under **Utilities** > **Profile Optimizer** opens the **Profile Optimizer Systems** page.

On this page, an administrator can:

- View Speech Nodes status.
- View Profile Optimizer status.
- Request Profile Optimizer logs.
- Request Task logs, Speech node logs, and Dragon SDK Logs.
- Search Tasks for a Speech node.
- View all available speech nodes in a tree view.

The left side of the DashBoard contains a tree view for navigating organizations, and speech node collections.

If an administrator can view more than one organization, the **Organization** a drop-down list is visible. The administrator can select an organization to manage.

If an administrator can only access one organization, the organization name appears in the Organization field (read only).

Click the organization name to view all Speech Node Collections for the organization.

View Profile Optimizer tasks and status

Right-click the organization name to view and select the following items:

- **Profile Optimizer Status** Displays the Profile Optimizer screen. The Results screen displays the status of all speech nodes based on search criteria.
- Profile Optimizer Tasks Displays the Profile Optimizer Tasks screen. The Results screen displays all tasks based on search criteria.

View, add, or delete speech node collections

Click on a speech node collection and the left tree view expands and displays all speech nodes in the collection by server name. The NMC console displays all speech nodes that are assigned to the node collection.

Right click on a speech node collection to view and select the following items:

- **Node collection details** Displays the **Speech Node Collection** details page with details populated in fields.
- Add node collection Displays the Speech Node Collection details page with only the
 Organization field populated.
- **Delete node collection** A prompt that asks you if you want to delete the speech node. You must enter the word "DELETE" and click **OK** to delete the speech node.

View Profile Optimizer information

You can view and select the following information:

- Last Check In Time The time of the last check in from the Profile Optimizer.
- Number of Speech Nodes The number of speech nodes associated with the Profile
 Optimizer.

To request Profile Optimizer logs, right-click on **Profile Optimizer Server** and select **Request Logs**.

View speech node information

To view status information for the node, click on a speech node.

To request speech node logs, right-click a speech node and select **Request Logs**.

To view a list of speech nodes that are not assigned to a speech node collection or a profile location, click **Available Speech Nodes**. A speech node collection that does not have specific nodes assigned to it can use the available nodes. These nodes can service many profile locations without being assigned to a specific location.

To display all nodes in an organization in the right-hand side of the screen, click **All Speech Nodes**.

Checking the status of Profile optimization and speech nodes

Administrators can check the status of profile optimization and speech nodes.

- In the NMC console, under Utilities > Profile Optimizer, click the Dashboard icon. The NMC console displays the Profile Optimizer Systems screen.
- 2. In the left tree view, click the organization name and select **Profile Optimizer Status**.
- 3. The NMC console displays the following search results:
 - Last Check in Time: The time of the last check in from the Profile Optimizer service.
 - Number of Speech Nodes: The number of speech nodes associated with the NMC server.
- 4. To view profile optimizer task information, in the left tree view, right-click the organization name and select **Profile Optimizer Tasks**.

Viewing the status of scheduled optimizations

To see the status of a scheduled or automatic Acoustic Model Optimization (ACO) or Language Model Optimization (LMO) process on a *Speech Node*, you can access related tabs under **Utilities**.

Uploading Profile Optimizer task logs

- 1. In the NMC console, select **Utilities > Profile Optimizer > Dashboard**.
- 2. In the left tree view, right-click Profile Optimizer Speech Node and select Request Logs.
- 3. Specify the **Start Date/Time** and the **End Date/Time**.
- 4. Click **OK**. The request is sent to the NMC server. The server processes the request and uploads the Profile Optimizer log file and the Dragon log file to the NMC server. It may take a few minutes for the logs to appear in the NMC console.
- 5. To view the logs, under **Utilities** > **View**, click **Server Logs**.

Viewing Profile Optimizer Speech Node status

1. Select Utilities > Profile Optimizer > DashBoard.

- 2. In the left tree view, click **Available Speech Node**. The columns in the table tell you information about each process:
- **Node Name**: Name of the computer or virtual machine hosting the *Speech Node*.
- **Physical host name**: Name of the computer running the *Speech Node* or hosting the virtual machine for the *Speech Node*.
- **SDK Version**: The version of the Dragon Medical client SDK.
- **Service start time**: The date and time that the service started.
- **Idle since**: The date and time that the service entered idle mode.
- State: Action the node is engaged in right now: Idle, Running, Error, or Maintenance. Idle and Running are self-explanatory; Error requires your attention and Maintenance might or might not:
 - Error appears when the Speech Node encounters a condition it cannot recover from and stalls. To determine what the error is, right click on the link in the task list and select View Log. A service attempts to restart the Speech Node, but if that service fails or if the Error state persists, you should have the log file handy and contact Technical Support.
 - Maintenance appears when the node is starting up or attempting to restart after an error
 condition. The Maintenance state should resolve itself. If it does not, you can take the
 same steps you took for Error and contact Technical Support.
- **Profile Name**: Name of the *Dragon* master user profile that the process is optimizing (matches the user account login name of the provider).
- Task Type: ACO for an Acoustic Model Optimization or LMO for a Language Model Optimization.
- Task status: Idle, In Progress, Completed, Failed, Canceled, Postponed, or Waiting.

 Waiting means that the process has completed and is waiting to update the user profile.
- Task Progress: Between 1% and 100%.
- **Task Started**: Date and time that the process started.
- **Progress Updated**: Date and time when the most recent previous progress update occurred.
- Last day utilization: Percentage of the *Speech Node* utilized during the last 24 hours.
- Last 7 days utilization: Percentage of the *Speech Node* utilized during the 168 hours.

Viewing Profile Optimizer task details

Select **Utilities** > **Profile Optimizer** > **DashBoard**. The NMC console displays the following information:

- **Organization**: The organization under which the profile tasks run.
- Task Type
- All: search for all task types
- ACO: search for an Acoustic Model Optimization task
- LMO: search for a Language Model Optimization task
- Update Medication : search for a medication update task
- Update Command: search for a command update task
- BackUpProfile: search for a profile back up task
- Restore Last Known Good DNSProfile: search for a profile restoration task
- Upgrade Profile: search for a profile upgrade task
- Batch Word Update: search for a batch word update task
- **User Login**: The user account you wish to see tasks for.
- Task Status:
 - All: search for task status types
 - Free: search for active tasks not yet run by the system
 - **Running**: search for tasks that are currently running
 - **Completed**: search for tasks that completed successfully
 - Failed: search for tasks that did not run successfully
 - Canceled: search for tasks that were cancelled
 - **Postponed**: search for tasks that are postponed.
 - Inactive: search for tasks that are not currently active
 - Maintenance : search for currently active tasks
- **Task Progress**: Between 1% and 100%.
- **Progress Updated**: Date and time that the progress of the active task was last updated.
- **Node Name**: Name of the machine that the *Speech Node* is running on. More than one process can be running simultaneously on the same *Speech Node*
- Last successful run: Date and time of the last successfully completed execution of the task.

- **Duration**: How long the completed task ran or the active task has been running.
- **Task ID**: Unique GUID that identifies the task's process.
- **Task Started**: Date and time that the process started.
- **Task Completed**: Date and time that the process completed.
- **Profile Name**: The name of the user profile
- **Reason**: The cause of task failure or postponement.

Searching and filtering Profile Optimizer task details

You can obtain detailed information about Profile Optimizer tasks. Information about tasks related to ACO, LMO, Command and Medication Updates are easier to access and view. The NMC console only retrieves information for tasks that an administrator has the authority to view.

- 1. In the NMC console, select the **Utilities** tab.
- 2. In the **Search Criteria** fields, enter search criteria and click **Search**.
- 3. The NMC console displays results based on search criteria, for example:
 - **Organization**: the name of the organization associated with a task.
 - Task Type:
 - All: search for all task types
 - ACO: search for an Acoustic Model Optimization task
 - **LMO**: search for a Language Model Optimization task
 - **UpdateMedication**: search for a medication update task
 - **UpdateCommand**: search for a command update task
 - User Login: the login for the user associated with a task.
 - Task Status:
 - All: search for task status types
 - Free: search for active tasks not yet run by the system
 - **Running**: search for tasks that are currently running
 - **Completed**: search for tasks that completed successfully
 - Failed: search for tasks that did not run successfully

- Canceled: search for tasks that were cancelled
- Postponed: search for tasks that are postponed.

Configuring Speech node collections

You can assign one or more speech nodes to a speech node collection and associate the node collection with a Site. The speech nodes in the node collection run optimization tasks for the user profiles in the Master User Profile directory for the Site. This allows for the partitioning of speech nodes based on a particular set of user profiles. By design, speech node collections optimize network performance by allowing you to physically co-locate speech nodes with the user profile locations for a site.

You can assign multiple Sites to a collection of Speech nodes provided each Site uses the same user profile location. This allows for user profiles in Sites that are in different geographical locations to be served by speech nodes that are all in the same location.

Organizations with remote sites can assign speech nodes at the remote site to the master user profile location for the remote site. Assigning the speech nodes at the remote site to optimize the profiles at the remote site can improve network performance and experience the following benefits:

- faster opening, closing of user profiles
- faster synchronization of master and local user profiles
- faster optimization of user profiles

When you create a Speech Node collection and associate it with a site, the user profiles in the Master User Profile directory for the site are associated with the node collection. All tasks for user profiles at the site are handled by the speech nodes in the speech node collection that is associated with the site.

When the NMC server sends a task request to the NMC server, the NMC server provides the node collection ID with the task request. The NMC server uses the ID to assign the task to an idle speech node within the node collection that is associated with the task.

Administrators use the NMC console to create, edit, and delete speech node collections and to assign a collection to a specific site.

You can assign speech nodes to the default node collections, edit the node collections, or delete them.

Using Speech Node collections without adding more speech nodes to your network

In an organization that has multiple sites that each use unique profile locations, you must assign a speech node collection to each site.

If the number of sites with unique master profile locations is greater than the number of speech nodes in the organization, you have two options:

- Add more speech nodes until each required node collection contains at least one speech node
- Configure the sites to share the same speech nodes even though there are multiple Speech Node collections.

Organizations may prefer the second option if they do not need or want to add more speech nodes to their network.

In the second option, the 'empty' speech node collections will use the unassigned speech nodes to optimize the user profiles that the node collections are associated with.

The steps to implement the second option are straight forward:

- Create one speech node collection for each unique profile location
- Do not assign any speech nodes to the node collections.

Example: Using Speech Node collections without adding more speech nodes

An organization has four sites; each with a unique master user profile location. The organization currently requires and has only two speech nodes.

You must create four speech node collections and assign each collection to a site.

If you assign each of your speech nodes to a node collection, two of the speech node collections will not contain speech nodes.

Alternately, you can create four empty speech node collections and assign each collection to a unique master user profile location.

The speech node collections will use the unassigned speech nodes to optimize the user profiles.

Setting up speech node collections during an upgrade to Service Pack 2

When you upgrade from DM Network Edition 10.1 or Service Pack 1, the upgrade automatically configures the system to support speech node collections. You will have at least one default speech node collection for each user profile location in the organization.

The default speech node collections use the naming convention *AutoCreatedn*, when **n** is the number of user profile locations in the organization. For example, if your organization has three user profile locations, after you upgrade to DM Network Edition Service Pack 2, you have three default speech node collections that you can use: **AutoCreated1**, **AutoCreated2**, and **AutoCreated3**. The DM Network Edition Service Pack 2 upgrade process always creates one default speech node collection called **AutoCreated1**. For example:

Before upgrading to DM Network Edition Service Pack 2, an organization has 3 sites with 3 different profile locations.

- Site 1 Profile Location X
- Site 2 Profile Location Y
- Site 3 Profile Location Z

After upgrading to Dragon Service Pack 2 or higher, the NMC server creates three speech node collections and automatically assigns them to sites.

- Site 1 AutoCreated1
- Site 2 AutoCreated2
- Site 3 AutoCreated3

Speech nodes are not automatically assigned to speech node collections.

DM Network Edition and the NMC server function exactly as they did prior to the upgrade. All jobs that the NMC server is processing are sent to the next available speech node.

After you upgrade to DM Network Edition Service Pack 2, you can add speech nodes to the speech node collections, if desired. See <u>Creating a Speech node collection</u> for details.

Setting up speech node collections after an upgrade to Service Pack 2

To have specific speech nodes optimize the user profiles at a specific location, you can assign the speech nodes to a speech node collection. Afterwards, you associate the collection with the use profile location for the site. If multiple sites use the same profile location, you can assign the same speech node collection to each of the sites.

Notes:

- You can only assign a speech node to one speech node collection.
- If you assign all available speech nodes to speech node collections, and there are user profile locations that are not associated with a speech node collection (or are associated with an empty collection), the profiles in those locations will not be optimized. This is because all speech nodes are already assigned to other profile locations and there are no free speech nodes to optimize the other profile locations. You must either create a new speech node or remove an existing node from one of the speech node collections.

For example, assume a DM Network Edition system has seven speech nodes and uses the following system configuration:

DMENE Site 1 Site 2 Site 3 Speech node collection 3 collection 2 collection 1

Setting up speech node collections after upgrading

An administrator would configure the system as follows:

- Add speech nodes 1, 2, and 3 to speech node collection 1.
- Add speech node 4 to speech node collection 2.
- Add speech nodes 5, 6, and 7 to speech node collection 3.

Running out of free speech nodes

Let's assume that all the speech nodes in an organization are assigned to speech node collections. Assume that each user profile location in the organization is associated with a speech node collection. In this scenario, all the user profiles in the locations that are associated with a node collection will be optimized.

If you add or create a new user profile location, and all speech nodes are assigned to speech node collections for other profile locations, then there are no 'free' speech nodes available to optimize the profiles in the new location.

If there are no 'free' speech nodes available for the new profile location, the NMC console displays the message "The last Speech Node has been assigned to a collection and Speech collections still exist. A situation exists where User Profiles may not be optimized. Please review that all User Profiles Locations are assigned to Collections with speech nodes."

You must either create one or more speech nodes or remove one or more speech nodes from an existing speech node collection. See Editing a speech node collection for details.

Creating a Speech node collection

When you assign the last available speech node to a speech node collection, the NMC console displays the message "The last Speech Node has been assigned to a collection and Speech collections still exist. A situation exists where User Profiles may not be optimized. Please ensure that all user profile locations are assigned to collections". You must make sure that each speech node collection has at least one speech node or there is at least one speech node available to service those user profile locations that are assigned to a speech node collection without a specific speech node assigned.

In Dragon Medical Network Edition, 2.7, speech node collections are defined at the organization level.

- 1. In the NMC console, in **Utilities > Profile Optimizer**, select **DashBoard**.
- 2. In the left tree view, click **Available Speech Nodes**.
- 3. In the results grid, right-click a speech node and select **Add node collection**.
- 4. In the **Name** field, enter a name for the node collection.

- 5. In the **DMNE v1.x (UNC)** field, enter the UNC location of the Master User Profiles directory.
- 6. In the **DMNE v1.x (HTTP WebDAV)** field, enter the http(s) path for the speech node to access the Master User Profiles directory only if webDAV is used. Also include webDAV credentials.
- 7. To add Speech nodes to the node collection:
 - i. In the **Available Speech Nodes** box, select one or more speech nodes.
 - ii. Press the > arrow to move the nodes to the **Assigned Speech Nodes** box.
- 8. To remove speech nodes from the node collection:
 - i. In the **Assigned Speech Nodes** box, select one or more speech nodes.
 - ii. Press the < arrow to move the nodes to the Available Speech Nodes box.
- 9. When you are done creating the node collection, press **Save**.

Searching for a Speech node collection

You can use the NMC console to search for all the Speech node collections that exist in an organization.

- 1. In the NMC console, in **Utilities** > **Profile Optimizer**, select **DashBoard**.
- 2. In the left tree view, select the organization name. The NMC console displays the following information for each speech node collection in the organization:
 - Speech Node Collection: the name of the node collection
 - **DMNE v1.x (UNC)**: the UNC path for the Speech Node Collection for the version 10.5 user profile.
 - **DMNE v1.x (HTTP WebDAV)**: the http(s) path for the speech node to access the Master User Profiles directory for the version 10.5 user profile only if webDAV is used. Also include webDAV credentials.
 - **DMNE v2.0** or higher (**UNC**): the UNC path for the Speech Node Collection for the version 12 user profile.
 - DMNE v2.0 or higher (HTTP WebDAV): the http(s) path for the speech node to access the Master User Profiles directory for the version 12 user profile only if webDAV is used. Also include webDAV credentials.

- Web DAV Login: the name of the login account for the Web DAV server that hosts the Master User Profiles directory (if applicable)
- Number of Nodes: the number of nodes in the speech node collection

Editing a Speech node collection

- 1. In the NMC console, in **Utilities > Profile Optimizer**, select **DashBoard**.
- 2. In the left tree view, select the organization name.
- 3. Right-click a node collection and select **Node collection details**.
- 4. On the **Speech Node Collection** screen, modify field values.
- 5. When you are done editing the node collection, press **Save**.

Deleting a Speech node collection

You can only delete a speech node collection if the collection does not contain any speech nodes.

- 1. In the NMC console, in **Utilities > Profile Optimizer**, select **DashBoard**.
- 2. In the left tree view, select the organization name.
- 3. Right-click a node collection and select **Delete node collection**.
- 4. Type 'DELETE' in the box and press **OK**.

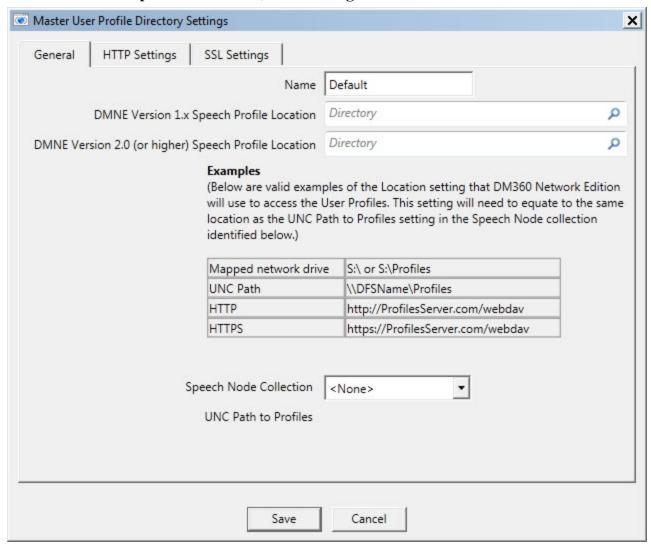
Assigning a Speech node collection to a Site

You can associate a speech node collection with a Site through the NMC console. The speech nodes in a node collection only perform tasks against the user profiles from the site the collection is associated with.

To refresh the data on the **Organizations** screen, press **Refresh** at the bottom right of the screen.

- 1. On the ribbon, in the **Organizations**, area, click **Search**.
- 2. On the **Search Organizations** screen, enter search criteria, and click **Search**.
- 3. In the search results, double-click an organization.
- 4. On the left-side of the **Manage Organization** screen, in the tree structure, select a site.
- 5. On the ribbon, in the **Sites** area, click **Details**.
- 6. Select **Dragon Medical Network Edition**.

- 7. Expand the **Master user profile** area.
- 8. Beside Master user profile directories, select Configure.



- 9. In the **Master User Profile Directory Settings** dialog box, in the **Name** field, enter a name for the new Master user profiles location. You may also choose to keep the existing name.
- 10. In the **General** tab, in the **Speech Node Collection** field, select a speech node collection to associate with this site. **Note**: If you associate the "<None>" Speech Node Collection with a site, optimization will not run on the user profiles at that site.
- 11. Set the **DMNE Version 1.x Speech Profile Location** field to equate to the **DMNE v1.x**(UNC) in the speech node collection. The **DMNE v1.x** (UNC) field displays the UNC path for the Speech Node Collection you select. To view valid values for the **DMNE Version 1.x**Speech Profile Location field, look in the Examples section under the **DMNE Version 1.x**Speech Profile Location field.

If the **DMNE Version 1.x Speech Profile Location** field is not set to equate to the UNC path for the collection, the NMC console displays an error message.

To save the settings and close the dialog, select Yes.

To return to the dialog and reset the Location field, select ${\bf No}.$

12. Press **OK** to save the new configuration.

Chapter 6: Using the Dragon client through a remote desktop connection

This chapter contains information on setting up and using the Dragon client through a remote desktop connection.

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Use Dragon through a remote desktop connection

Tasks to perform	Topic associated with the task	
Overview of how client users can remotely connect to Dragon through a remote desktop connection.	Allow client users to connect to Dragon through a remote desktop connection	
Install Dragon on the server and install Dragon Client For Remote Desktop	Installing Dragon software on the server and the client computer	
Set up the Windows server options	Configuring the Windows server	
Set up client computers by setting audio policies and the Remote Desktop Connection 7.	Configuring the client computer to connect to Dragon on a server through a remote desktop connection	
(Medical products only) Use a PowerMic with Dragon through a remote desktop connection	Using the PowerMic through a remote desktop connection	
System Requirements for using Dragon through a remote desktop connection	System Requirements for using Dragon through a remote desktop connection	

Allow client users to connect to Dragon through a remote desktop connection

Microsoft Windows Server 2008 R2, Windows Server 2012 R2, Windows 7 Ultimate Server, and Windows Server 2016 include the ability to enable audio redirection from a remote desktop connection into the server. For Dragon Medical users, this allows speech recognition to take place over the network when Remote Desktop Connection version 7 (or higher) is used to connect the Windows client to the server. When Dragon Medical is installed on Windows Server 2008 R2, Windows Server 2012 R2, Windows 7 Ultimate Server, or Windows Server 2016, Dragon detects when the RDC 7 client session starts and allows users to dictate into remote applications that are published on the server.

Windows 7 Ultimate Server allows only one client connection at a time. Windows Server 2008 R2, Windows Server 2012 R2, and Windows Server 2016 allow multiple client connections at once. Keep this in mind as you plan your configuration.

Supported client and server operating systems

You can use Dragon through a remote desktop connection with the following operating systems:

Server Operating Systems	Description	Client Operating systems
Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016	Supports multiple client connections at the same time.	 Windows 10, (32-bit and 64-bit) Windows 8, (32-bit and 64-bit) Windows 7, (32-bit and 64-bit) Windows Vista Service Pack 2 (32-bit and 64-bit)
Windows 7 Ultimate Server	Supports only a single client connections at one time.	

In order to transmit audio from the client computer to Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, or Windows 7 Ultimate Server running Dragon Medical, you must:

- enable the audio recording option on the remote client software
- enable the audio recording redirection policy on the server

This configuration allows one Windows client computer to access and use a single installation of Dragon Medical on the server.

Support for dictation sources over a remote desktop connection

In Dragon Medical, you can use the following dictation sources over a remote desktop connection:

- **USB microphones**: including (Medical products only) PowerMic II, PowerMic III and the Philips SpeechMike
- Other microphones: Microphone plugged into Mic-In jack
- **Headset**: Andrea NC-181
- **Bluetooth**: Plantronics Calisto Bluetooth Headset

(Medical products only) To use the PowerMic over the RDC connection, you install the Power-Mic Button Control application to enable button support.

Notes: Using Dragon Medical on Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, or Windows 7 Ultimate Server:

- When you create a User Profile, you will not see a choice for the PowerMic dictation source. You must use the USB selection.
- (Medical products only) When you use the USB dictation source, you cannot use hot keys for the PowerMic unless you manually configure the buttons using the PowerMic Button Control application, which is available in this release.
- If you are using the Remote Application web interface When you launch Dragon Medical from the Remote Desktop Connection, if you launch the DragonBar in Docked-to-Top or Docked-to-Bottom mode, the Dragon menus will not be visible. To access the menus, you need to switch to work with Floating, Clinging, or the Tray Icon mode.

Installing Dragon software on the server and the client computer

To enable audio redirection through a remote desktop connection, and allow users to connect and use Dragon Medical on Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, or Windows 7 Ultimate Server, you install and configure software on both the client computers that will connect to Dragon on the server, and on the server machines. You can expect to spend around thirty minutes installing and configuring the required software.

Perform the following steps:

- Install Dragon on Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, or Windows 7 Ultimate Server.
 - You can also perform remote dictation from Windows 7 Enterprise and Windows 7 Ultimate servers. For Windows Server 2008 R2, Windows Server 2012 R2, and Windows Server 2016, , it is possible for multiple users to connect at the same time. For Windows 7 servers, only a single client can connect at a time.
- Install the Dragon Client For Remote Desktop on each client computer that will connect to Dragon on a server.

If you are installing Dragon Client for Remote Desktop using the MSI Windows Installer, run dragonclientinstaller.msi; otherwise, run setup.exe. These files are located on the Dragon DVD in the "DragonClientForRemoteDesktop" folder.

The Dragon Client For Remote Desktop installation consists of two components that you install on the client computer:

- Audio Setup Wizard: a stand-alone application that provides a way to check that your microphone sound levels and signal quality are suitable for using Dragon Medical with a remote desktop connection.
- (Medical products only) PMIIControl.exe the PowerMic Button Control application: a stand-alone application that provides a way to customize the buttons on the PowerMic II or the PowerMic III. The buttons can be used with Dragon

Medical while working across the remote desktop connection, and can also be used with local applications, independent of installing and using Dragon.

3. Proceed to Configuring the Windows server.

Configuring the Windows server

- Ensure the server computer meets the system requirements. See <u>System Requirements for</u>
 <u>Dragon on Windows Server</u> for more information.
- 2. On the windows server, make sure that the "Remote audio" recording device already exists.
- 3. If you are using Windows Server 2008 R2, perform the steps in Configuring Remote Desktop

 Connection for Windows Server 2008 R2.
- 4. If you are using Windows Server 2012 R2, perform the steps in <u>Configuring Remote Desktop</u>

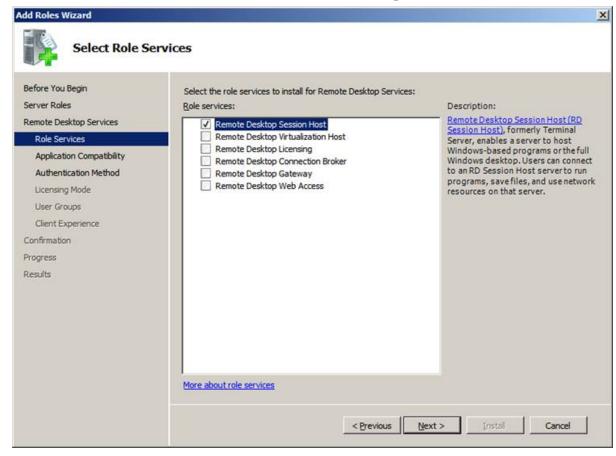
 <u>Connection for Windows Server 2012 R2.</u>
- 5. If you are using Windows Server 2016:
 - i. Perform all the steps, except the last step, in <u>Configuring Remote Desktop Connection for</u> Windows Server 2012 R2.
 - ii. Continue at step 5 in <u>Configuring the client computer to connect to Dragon through a remote desktop connection</u>.
- 6. If you are using Windows 7 Ultimate Server, perform the steps in <u>Configuring Remote Desktop</u>

 Connection for Windows 7 Ultimate Server.
- 7. Optionally, you can publish all applications and EMRs on Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, or Windows 7 Ultimate Server using Remote Application Manager. This provides full support for dictation and playback.
- 8. Proceed to Configuring the client computer to connect to Dragon through a remote desktop connection.

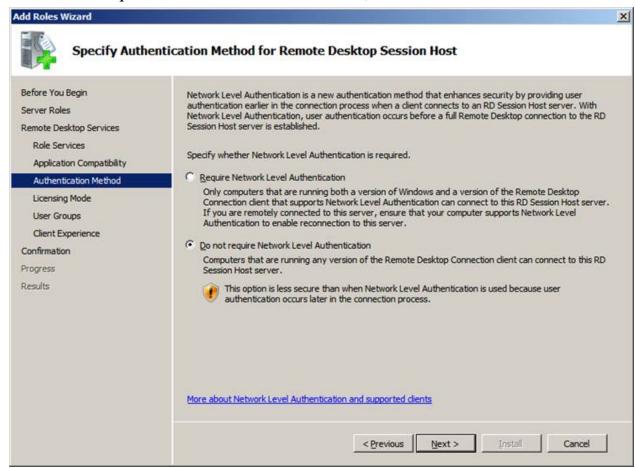
Configuring Remote Desktop Connection for Windows Server 2008 R2 Part 1

Perform the following steps to install and configure the Remote Desktop Services role.

- 1. Open Remote Desktop Connection.
- 2. Open the Server Manager.
- 3. Select Roles.
- 4. Select Add Roles.
- 5. On the **Before You Begin** screen, click **Next**.
- 6. On the Select Server Roles screen, select Remote Desktop Services, click Next.
- 7. On the **Remote Desktop Services** screen, click **Next**.
- 8. On the Select Role Services screen, select Remote Desktop Session Host, click Next.

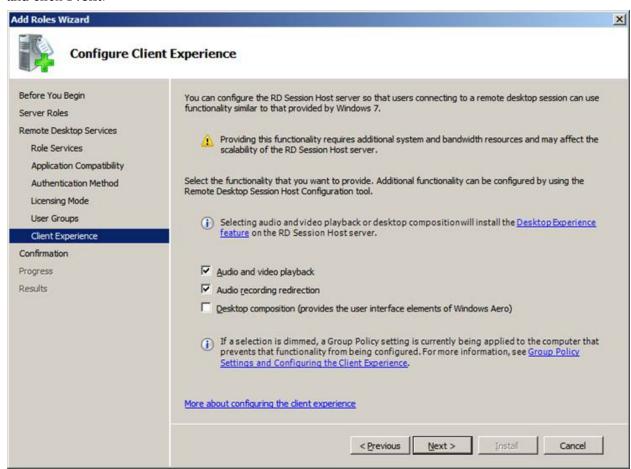


- 9. On the Uninstall and Reinstall Applications for Compatibility screen, click Next.
- 10. Select Do not require Network Level Authentication, click Next.

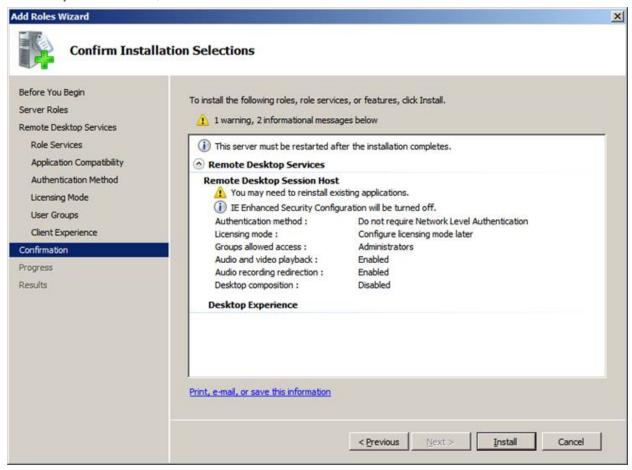


- 11. On the Specify Licensing Mode screen, click **Next**.
- 12. Click Next.

13. Select the **Audio and video playback** option and the **Audio recording redirection** option and click **Next**.



14. Confirm your selections, and click **Install**.



The **Installation Progress** screen display the status of the installation.

- 15. On the Installation Results screen, verify that the installation was successful. Click Close.
- 16. Restart the computer.
- 17. Proceed to Configuring Remote Desktop Connection for Windows Server 2008 R2 Part 2.

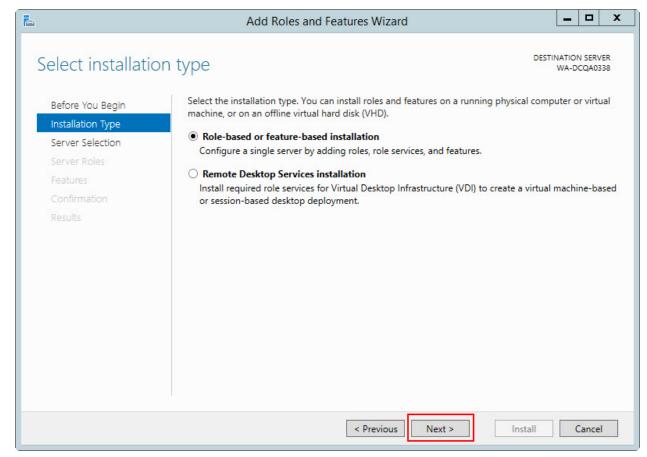
Configuring Remote Desktop Connection for Windows Server 2008 R2 Part 2

Perform the following steps to configure the local group policy on the server and to allow connections from client computers.

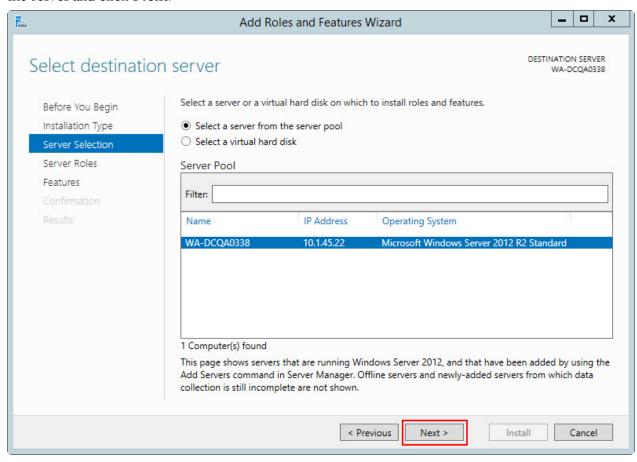
- 1. On the server, in a command prompt, run **gpedit.msc**.
- Navigate to Computer Configuration > Administrative Templates > Windows Components > Remote Desktop Services > Remote Desktop Session Host > Device and resource redirection.
- Enable the Allow audio and video playback redirection option: on the Allow audio and video playback redirection screen, select Enabled and Press OK.
- 4. Enable the Allow audio recording redirection option: on the Allow audio recording redirection screen, click Enabled and Press OK.
- 5. Launch regedit on the client PC and set the following registry setting to 0: HKLM\SYSTEM\CurrentControlSet\Control\Terminal Server-\WinStations\RDP-Tcp fDisableAudioCapture REG DWORD 0x0000000
- 6. On the server, open the Control Panel.
- 7. Navigate to System and Security > System.
- 8. Select **Remote**.
- 9. Allow remote connections by choosing your preferred configuration.
- 10. Click **OK**.
- 11. Continue at step 5 in Configuring the client computer to connect to Dragon through a remote desktop connection.

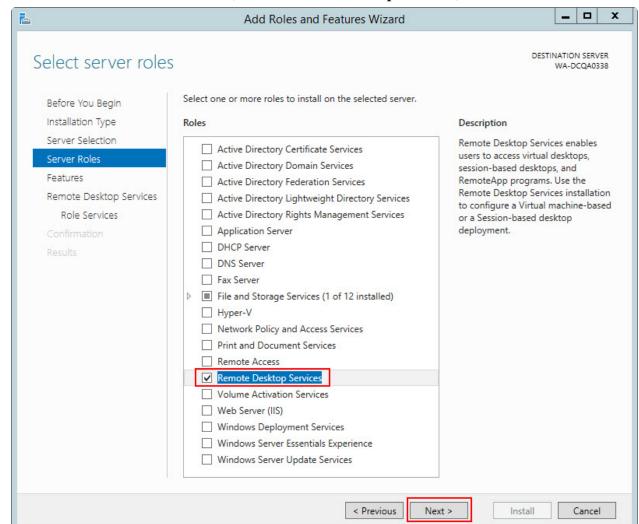
Configuring Remote Desktop Connection for Windows Server 2012, 2012 R2, and 2016

- 1. Open Remote Desktop Connection to the server or go directly to the server console.
- 2. Open the server, open the **Server Manager**.
- 3. On the Dashboard, select **Add roles and features** to open the **Add Roles and Features** wizard.
- 4. Click Before You Begin and click Next.
- 5. Select Role-based or feature-based installation and click Next.



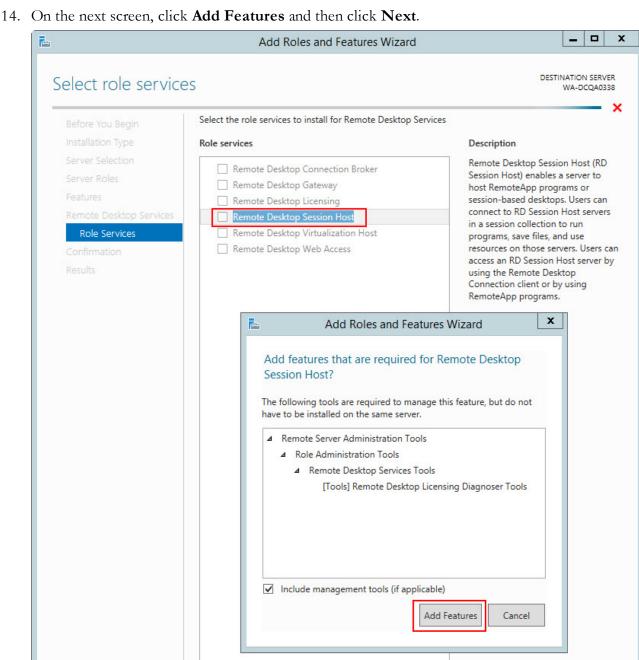
6. On the **Select destination server** screen, select **Select a server from the server pool**. Select the server and click **Next**.





7. On the Select Server Roles screen, select Remote Desktop Services, click Next.

- 8. On the **Select features** screen, open the **Remote Server Administration Tools** submenu.
- 9. Open the Role Administration Tools submenu.
- 10. Open the **Remote Desktop Services Tools** submenu.
- 11. Select **Remote Desktop Licensing Tools** and click **Next**.
- 12. On the **Remote Desktop Services** screen, click **Next**.
- 13. On the **Select role services** screen, select **Remote Desktop Session Host**.



15. On the Confirm installation selections screen, check the Restart the destination server automatically if required option.

< Previous

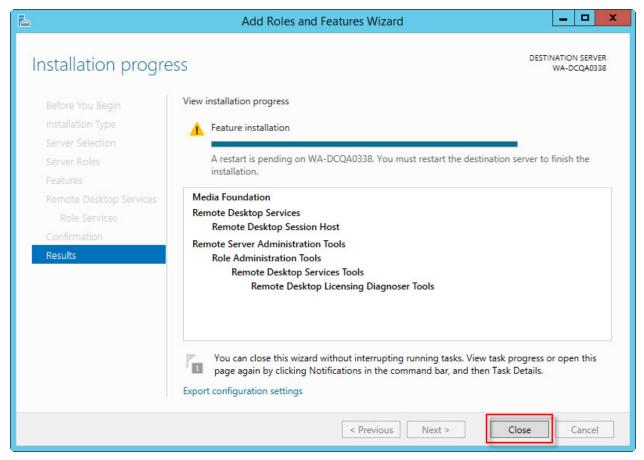
Next >

Install

Cancel

- 16. In the Add Roles and Features wizard, click Yes.
- 17. Confirm your selections, and click **Install**.
- 18. The **Installation Progress** screen displays that status of the installation.

- 19. On the **Installation progress** screen, verify that the installation was successful.
- 20. Click Close.



- 21. Restart the computer (even if the server was not restarted automatically).
- 22. (Only for Windows Server 2012) Proceed to <u>Configuring Remote Desktop Connection for Windows Server 2012</u>, and 2012 R2.

Configuring Remote Desktop Connection for Windows Server 2012, and 2012 R2

Perform the following steps to configure the local group policy on the server and to allow connections from client computers.

- 1. On the server, in a command prompt, run **gpedit.msc**.
- Navigate to Computer Configuration > Administrative Templates > Windows Components > Remote Desktop Services > Remote Desktop Session Host > Device and resource redirection.
- 3. Enable the **Allow audio and video playback redirection** option: right-click on the **Allow audio and video playback redirection** screen and choose **Edit**.
- 4. Select **Enabled** and click **OK**.
- 5. Launch regedit on the client PC and set the following registry setting to 0: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Terminal Server\WinStations\RDP-Tcp fDisableAudioCapture REG DWORD 0x0000000
- 6. On the server, open the **Control Panel**.
- 7. Navigate to **System and Security > System**.
- 8. Select the **Remote settings** > **Remote** tab.
- 9. Allow remote connections by choosing your preferred configuration.
- 10. Click **OK**.
- 11. Continue at step 5 in Configuring the client computer to connect to Dragon through a remote desktop connection.

Configuring Remote Desktop Connection for Windows 7 Ultimate Server

- 1. On the Windows 7 Ultimate Server, open the Control Panel.
- 2. Open **System Properties**.
- 3. Click the **Remote** tab.
- 4. Allow remote connections by choosing your preferred configuration.
- 5. Proceed to Configuring the client computer to connect to Dragon through a remote desktop connection.

Configuring the client computer to connect to Dragon on a server through a remote desktop connection

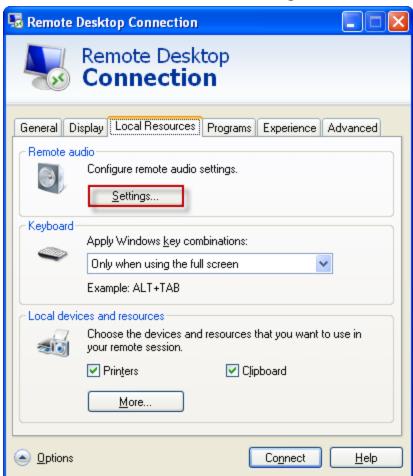
After you install Dragon Medical on the server and Dragon Client for Remote Desktop on each client computer, perform the following steps on each client computer that will connect to Dragon Medical on the server.

- 1. Ensure the client computer meets the system requirements. See <u>System Requirements for using</u>

 Dragon through a remote desktop connection for more information
- On the client, plug in the microphone that you will use to dictate with Dragon Medical. Then run the Audio Setup Wizard to check that microphone sound levels and signal quality are suitable.
- Ensure Remote Desktop Connection 6.1 (RDC 6.1) or higher is installed on the client computer. If it is not, visit the following link to download Remote Desktop Connection 7.0 client update http://support.microsoft.com/kb/969084.
- 4. When you start Remote Desktop Connection 7, in the Remote Desktop Connection dialog box, click **Options**.



5. Select the Local Resources tab, click Settings.

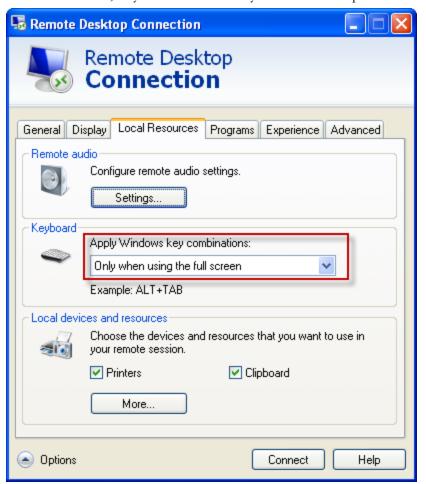


6. Select **Play on this computer** and **Record from this computer**, and click **OK**. Selecting these options enables audio support each time the user opens the remote connection to use

Dragon Medical the Windows Server.



7. (Medical products only) Recommended only for the PowerMic: On the **Local Resources** tab, set the **Apply Windows key combinations** field to **Only when using the full screen**. Using full screen lets you use the PowerMic Button Control application correctly. **Note**: If not using



full screen mode, key combinations may not work as expected and may be limited.

8. (Medical products only) Recommended only for the PowerMic: On the **Local Resources** tab, set the **Apply Windows.key combinations** field to **Only when using the full screen**. Using full screen lets you use the PowerMic Button Control application correctly. **Note**: If not using

Options

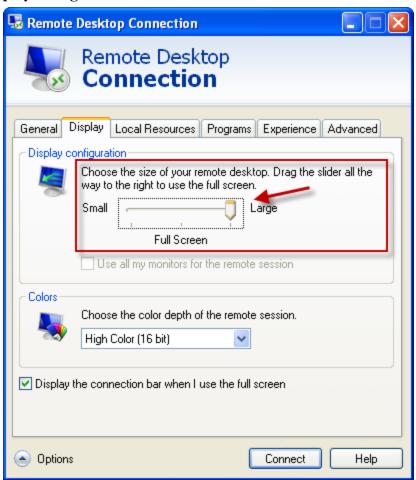


full screen mode, key combinations may not work as expected and may be limited.

Help

Connect

9. (Medical products only) Recommended only for the PowerMic: On the **Display** tab, set the **Display configuration** to Full Screen.





10. In the Windows sound settings, verify that Remote Audio device appears.

User Profiles and using Dragon through a Remote Desktop session

Dragon users must perform four minutes of Short training when they create a User Profile. It is not possible to skip User Profile training when Dragon Medical is installed on Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, or Windows 7 Ultimate Server and when using Remote Desktop Connection 7.

Dragon users can Use Profiles created on Dragon workstations without performing additional training on Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, or Windows 7 Ultimate Server.

Nuance recommends that you create and train a User Profile (or add a dictation source to an existing User Profile) while Dragon is running in a Remote Desktop session. If an end-user uses an existing profile with a dictation source that was trained while Dragon was running on the end-user's workstation, poor accuracy may result.

(Medical products only) If an end-user works both locally and remotely, they should create two separate dictation sources. This can be done with the PowerMic:

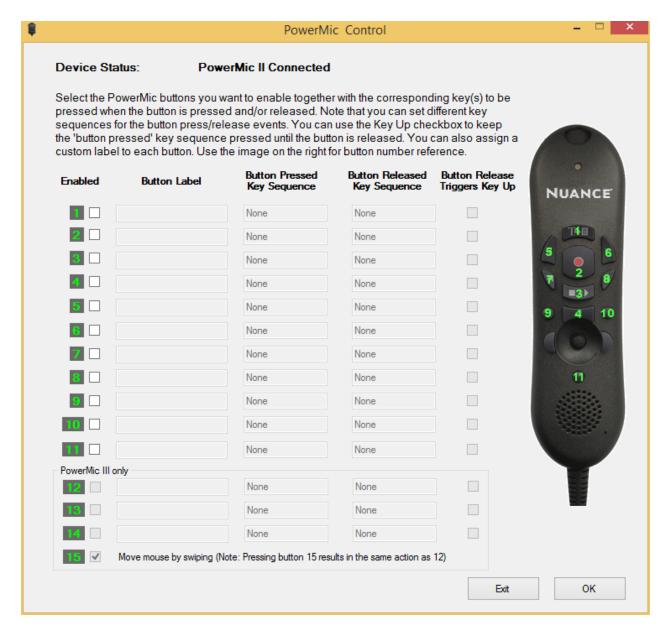
- 1. Create a dictation source called "PowerMic" to use when Dragon is running on the end-user's workstation.
- 2. Create a dictation source called "USB Microphone" to use when Dragon is running through a Remote Desktop session.

Using the PowerMic through a remote desktop connection

If you use the Nuance PowerMic microphone to dictate with Dragon Medical, the buttons will not work with Remote Desktop Connection unless you customize button settings using the PowerMic Button Control application. You use the PowerMic Button Control application to assign the buttons for use in any application that accepts hot keys, such as EMRs, audio recorders, etc. You do not need to start the Remote Desktop Connection to assign hotkey settings to the buttons. See Keyboard keys you can assign to PowerMic buttons for more information.

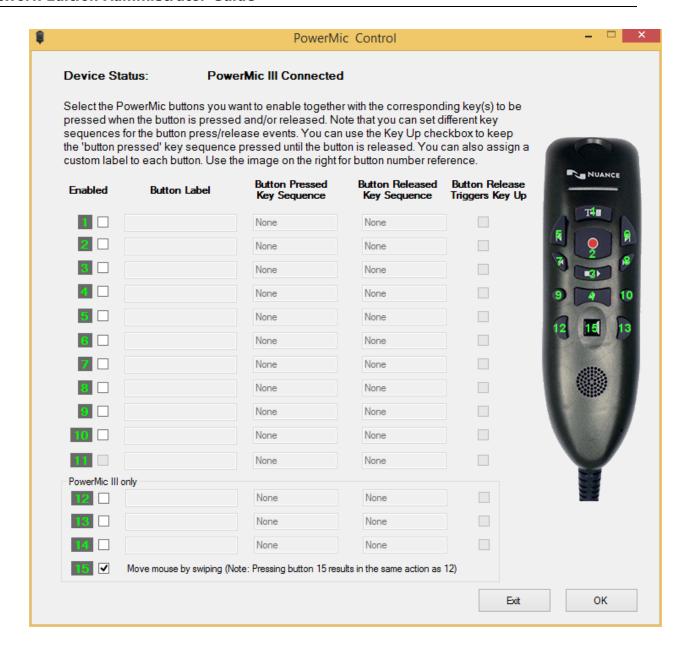
Configuring the PowerMic buttons

- In Windows explorer, navigate to the folder that contains PMIIControl.exe. The default location of PMIIControl.exe in Windows 7 64-bit, Windows 8.x, and Windows 10 is:
 C:\Program Files (x86)\Nuance\Dragon Client For Remote Desktop\PMIIControl
- 2. Double-click PMIIControl.exe (supports the PowerMic II and the PowerMic III). If you plugin a PowerMic II, the following screen appears:



Controls in the **PowerMic III only** section are disabled.

If you plug-in a PowerMic III, the following screen appears:



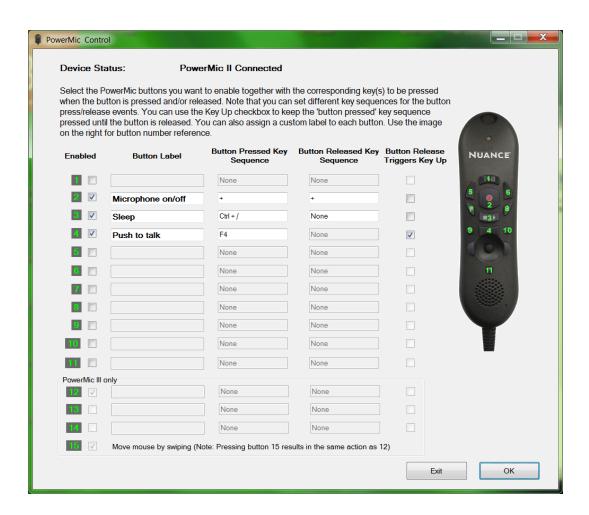
All existing PowerMic III controls (Button 11 is not available in PowerMic III) on the **PowerMic Control** screen are enabled.

- 3. To configure a PowerMic button:
 - i. On the row beside the button, click the **Enabled** check-box.
 - ii. In the **Button Label** column, add text that describes the action the button performs.
 - iii. Place your cursor in the text box under **Button Pressed Key Sequence**.
 - iv. Enter the Windows keystrokes to send to the server when you press the microphone button, release the button, or press and release the button. See **Example button configuration** below.

v. PowerMic III only: By default, the button on Row 15 is checked to enable moving the mouse by swiping the touchpad on the PowerMic III. If you do not want to use swiping, de-select this option. Pressing Button 15 performs the same action as Button 12 (if defined).

To view existing key sequences or setup new Button key sequences, in Dragon, navigate to **Tools** > **Options** > **Hotkeys**.

Example button configuration for PowerMic II



Button 1: Since button 1 is not checked, nothing happens when you press button 1 or when you let go of button 1.

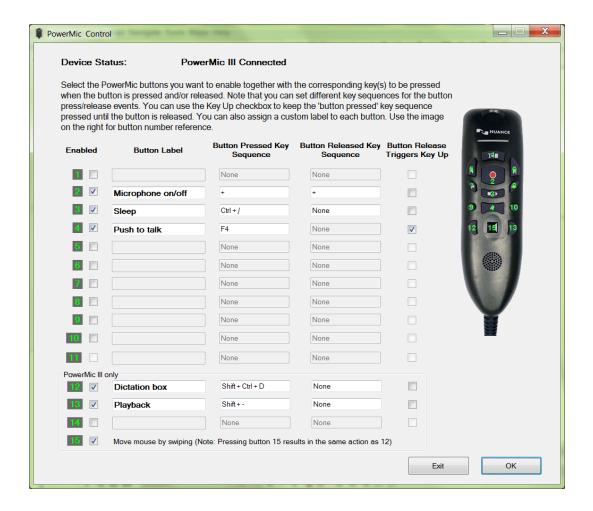
Button 2: This button is set to send two key sequences to simulate turning a feature on and off. The Button Pressed Key for Button 2 is set to send the sequence NumKey {+}, which is assigned to turn the microphone on. The Button Released Key Sequence is also set to NumKey {+}, which turns the microphone off upon releasing button 2. It is not necessary to enable the Button Release Triggers Key Up checkbox, since the key sequence itself defines the action.

Button 3: The Button Pressed Key for Button 3 is set to send the sequence { Cntr+/}, which is assigned to put the microphone into sleep mode. The Button Released Key Sequence is also set to None; nothing happens when you let go of the button.

Button 4: This button is set to simulate the Dragon Medical Press-to-Talk button by pressing the function key F4. For example, if an administrator assigns F4 in Dragon as the hotkey setting for using Press-to-Talk: for a Remote Desktop Connection, the user must also set F4 in the Power-Mic Button Control application. In order for the microphone to turn off when the user lets go of Button 4, you must enable the Button Release Triggers Key Up checkbox. No additional key sequence is required. When the Button Release Trigger Key Up is checked, DNS performs the Button Pressed Key sequence (in this case F4) until you release Button 4 is released.

Example button configuration for PowerMic III

Note: The PowerMic III Button 11 option is greyed out.



Button 12: This button opens the Dictation Box with the assigned Button Pressed Key Sequence setting {Shift+Ctrl+D}; nothing happens when you let go of the button since the Button Release Key Sequence is set to None.

Button 13: This button is set to simulate the Dragon Medical Playback function with the assigned setting {Shift+-}. The Button Released Key Sequence is set to None; nothing happens when you let go of the button.

Button 15: This button is checked on by default. This button is used for mouse swiping when it is selected. Pressing this button (instead of swiping it), behaves like the button functions of Button 12. In this example it opens the Dictation Box with the assigned setting {Shift+Ctrl+D (see Button 12).

Notes: Configuring the PowerMic buttons

- If you type a letter key (A-Z), the system automatically adds "Ctrl+Alt" as a modifier.
- If you type a digit (0-9), the system adds "Shift+Alt" as a modifier.

- Support is present for the Ctrl and Alt modifiers for all keys; Shift can only be allowed with another modifier, followed by a letter or digit key. For example, you can assign "{Shift+Extended -}," but not "{Shift -}.
- It is not possible to assign key sequences for mouse control features, or map the predefined mouse buttons. However, you may modify the mouse speed by changing the Mouse settings in the Windows Control Panel.
- If you use the PowerMic Button Control application on a computer where Dragon Medical is installed, you will receive a warning if you try to assign a key sequence that is already assigned in Dragon Medical.
- The PowerMic Button Control application will not run if an installation of Dragon other than Dragon Medical is running on the local computer. In this case, the user will receive a warning.
- PowerMic II only: You can assign a key sequence for the **Scan** button, located just below the joystick on the PowerMic II.

Keyboard keys you can assign to PowerMic buttons

You can use the PowerMic Button Control application to assign the following keyboard keys to buttons on a PowerMic:

- BACKSPACE
- DOWNARROW
- END
- ENTER
- ESC
- **■** F1
- F10
- F11
- F12
- F2
- F3
- **■** F4
- F5
- **■** F6
- **■** F7
- **■** F8
- **■** F9
- HOME
- INS
- LEFTARROW
- MINUSKeyPad
- PAGEDOWN
- PAGEUP

- PLUSKeyPad
- RIGHTARROW
- SLASHKeyPan
- STARKeyPad
- TAB
- UPARROW

System Requirements for Dragon on Windows Server

- Server Operating System: Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, or Windows 7 Ultimate Server.
 - Window Server 2008 R2, Windows Server 2012 R2, and Windows Server 2016 support multiple client connections at the same time. Windows 7 servers supports only a single client connections at one time.
- Client Operating System: The following operating systems support Remote Desktop Connection 7:
 - Windows 10, 32-bit and 64-bit
 - Windows 8.x, 32-bit and 64-bit
 - Windows 7, 32-bit and 64-bit
 - Windows Vista Service Pack 2, 32-bit and 64-bit
- Client Hardware:
 - Disk space:
 - 2 MB for the Remote Desktop Client version 7 (from Microsoft)
 - 8 MB for the Dragon client
 - USB port for the microphone
- Server Hardware: To support 6 concurrent users connecting to Dragon Medical on a server, the minimum requirements are:
 - Cache: 1 MB L2 cache per CPU
 - **CPU**: 3.x Ghz
 - **Disk space**: 5 GB
 - **Processor**: Multi-core processor with 4 cores
 - **RAM**: 16 GB DDR2 RAM
- Microphone:
 - **USB microphones**: including (Medical products only) PowerMic II, PowerMic III, and the Philips SpeechMike
 - Other microphones: Microphone plugged into Mic-In jack

- Headset: Any Nuance-approved headset. For details, visit
 http://support.nuance.com/compatibility/ to view the Hardware Compatibility
 List.
- Bluetooth: Plantronics Calisto Bluetooth Headset

■ Software:

Remote Desktop Connection 7 (RDP 7). The RDP 7 download is available here,
 and works for all operating systems: http://support.microsoft.com/kb/969084

■ Network:

- 100 Mbps connection speed
- Network bandwidth required per active user is 1.3 Mbps

Chapter 7: Managing Dragon Medical Clients

From the NMC server, you can manage individual client computers. The process of managing clients can begin with installing the client using the NMC console, then setting several options for the client. You can take several actions to manage clients:

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System Requirements for DM Network Edition

What Hardware Recommendations

See the *Dragon Medical Network Edition Planning Guide* for additional information on hardware and sizing.

Dragon Client Hardware Recommendations

CPU: 2.4 GHz Intel Dual Core or equivalent AMD processor. (IMPORTANT: SSE2 instruction set required) **Processor Cache**: 2 MB

DVD-ROM: drive required for installation

Sound Card: Creative® Labs Sound Blaster® 16 or equivalent sound card supporting 16-bit recording.

Free hard disk space: 5 GB required, 8 GB recommended

RAM:

4 GB for:

- Microsoft® Windows® 10, 32-bit and 64-bit
- Microsoft® Windows® 8 and 8.1, 32-bit and 64-bit
- Microsoft® Windows® 7, 32-bit and 64-bit
- Microsoft® Windows Vista®, 32-bit and 64-bit
- Microsoft® Windows® Server 2016
- Microsoft® Windows® Server 2012, 64-bit R2
- Microsoft® Windows® Server 2012, 64-bit
- Microsoft® Windows® Server 2008, 64-bit

Microphone: Nuance-approved microphone (included in purchase)

For details on Bluetooth microphones, recorders, Tablet PCs, and other hardware, please go to http://support.nuance.com/compatibility/.

You can also use an iOS or Android device as a microphone using the <u>Dragon Remote Microphone app.</u>

Bluetooth (Optional): For Bluetooth wireless microphone support, visit http://support.nuance.com/compatibility/

Web Connection: A web connection is required for activation during installation.

Software Requirements

Software Requirements for the Dragon Client

The Dragon Client installer checks your system for minimum requirements. If the minimum requirements are not met, the installer will not install the client.

Operating system:

- Microsoft® Windows® 10 (including Professional and Enterprise), 32 bit and 64 bit
- Microsoft® Windows® 8.1, 32 bit and 64 bit
- Microsoft® Windows® 8 (including Professional and Enterprise), 32 bit and 64 bit
- Microsoft® Windows® 7, 32-bit and 64-bit
- Microsoft® Windows Vista® Service Pack 2, 32-bit and 64-bit
- Microsoft® Windows Server 2008 R2, 32-bit and 64-bit
- Microsoft® Windows Server 2008 R2 64 bit Service Pack 2
- Microsoft® Windows Server 2012
- Microsoft® Windows Server 2012 R2
- Microsoft® Windows® Server 2016

Software Requirements for the NMC server

Operating system:

Choose one of the following:

- Microsoft® Windows Server 2008, Service Pack 1, Service Pack 2
- Microsoft® Windows Server 2008 R2, 32-bit and 64-bit
- Microsoft® Windows Server 2008 R2 64 bit Service Pack 2

- Microsoft® Windows Server 2012
- Microsoft® Windows Server 2012 R2 (64 bit)
- Microsoft® Windows® Server 2016

Whichever operating system you choose, you should have all service packs installed, up to the most current one.

Microsoft PowerShell: Install the PowerShell feature along with Windows Server.

Microsoft .NET:

Install both versions and any updates:

- Microsoft .NET Framework 3.5 SP1
- Microsoft .NET Framework 4.0 Extended Version

Web Server

• Internet Information Services (IIS): Version 7.0, 7.5, 8.0, or 10.

Internet Browser: Microsoft Internet Explorer 8, 9, 10, and 11 (free download at <u>www.-microsoft.com</u>)

SQL Server

- SQL Server 2008
- SQL Server 2012
- SQL Server 2016

Software Requirements for the Profile Optimizer Nodes

Operating system:

Choose one of the following:

- Microsoft® Windows Server 2008, Service Pack 1, Service Pack 2
- Microsoft® Windows Server 2008 R2, 32-bit and 64-bit
- Microsoft® Windows® Server 2012
- Microsoft® Windows® Server 2016

Whichever operating system you choose, you should have all service packs installed, up to the

most current one.

Microsoft .NET:

■ Microsoft .NET Framework 4.5 or higher

Windows Installer 3.1 If you are installing a *Speech Node* on a machine with any supported operating system other than Windows Server 2008, the installer requires that the machine have Windows Installer 3.1 or greater on it. (Windows Server 2008 automatically installs a later version of Windows Installer.) For information on operating systems that support *Speech Nodes* refer to *Dragon Medical Enterprise Planning and Deployment Guide*.

Dragon Medical SDK Client You must install the latest version of the Dragon Medical SDK Client software on workstations where you plan to install *Speech Nodes*. This software is included on the *NMC serverSoftware and Documentation* DVD.

Supported Virtual Desktop Infrastructure Applications and Terminal Emulators

- XenDesktop 7.11 and 7.13
- Wyse terminals

Supported non-EHR Applications

Once you have installed Dragon Medical, you can use it to control the following applications using your voice:

- WordPad
- NotePad
- Microsoft® Word 2007, 2010 (32 & 64 bit), 2013 (32 & 64 bit), 2016 (32 & 64 bit)
- Microsoft® Outlook® 2007, 2010, 2013, 2016
- Microsoft® Excel® 2007, 2010, 2013, 2016
- WordPerfect® x5, x6
- Apache OpenOffice Writer 3.4
- Open Office Writer v3.1, 3.2
- Internet Explorer 9, 10, 11 (11 supported when Enhanced Protective Mode is disabled)

- Rich Internet Application IE9, IE10, IE11
- Mozilla® Firefox® 8+
- Rich Internet Application Firefox® 12+
- Rich Internet Application Google Chrome 16+
- Windows Live Mail v15 & v16
- Mozilla® ThunderbirdTM x3 and up
- Lotus Notes 8.5

Installing Dragon and documentation from the NMC console

After you create your own MSI installer for *Dragon Medical Client*, from any workstation on the network where you have installed the appropriate certificates, you can access the NMC console, then download the *Dragon Medical Client* MSI installer through the NMC console for installation on that workstation:

Note:

For details on how to create your own MSI installer for *Dragon Medical Client*, refer to the DM Network Edition *Installation Guide*.

- 1. Be sure that the computer you are installing the *Dragon* client on meets the system requirements for installing and running *Dragon*. See *System Requirements for DM Network Edition* on page 308.
- 2. Log in to the computer as a Windows administrator.
- 3. On the workstation where you are installing *Dragon*, open Internet Explorer and enter the URL to access the *NMC console* (see *Accessing the NMC server*: Logging in through the NMC console on page 18).
- 4. Once the client GUI displays its log-in page, log on.

Setting general auto-formatting options in Dragon or the NMC server

Typically, *NMC server* administrators set all formatting options on the **Groups Details** > **Network Edition US** tab or the **User Account Details** > **Network Edition US** tab.

However, healthcare providers can use the Dragon client to override **General Auto-Formatting** options. Providers cannot set other types of auto-formatting options; including **Capitalization**; **Numbers, Units, and Dates**; **Abbreviations**, and **Miscellaneous**) formatting options. Only administrators can set non-general auto-formatting options. This helps to ensure consistency across an organization.

If a provider changes **General Auto-Formatting** options in the *Dragon Client*, the provider's changes override the administrator's settings, unless an administrator subsequently makes changes to them. Basically, *Dragon* applies the **General Auto-Formatting** option settings of last person that changed those option settings—whether that person is the dictating provider or an administrator using the *NMC console*.

The **General Auto-Formatting** options that either a provider or an administrator can set are shown in the illustration on the next page. For more information on setting these options, see *Setting Auto-Formatting Dragon options* on page 164.

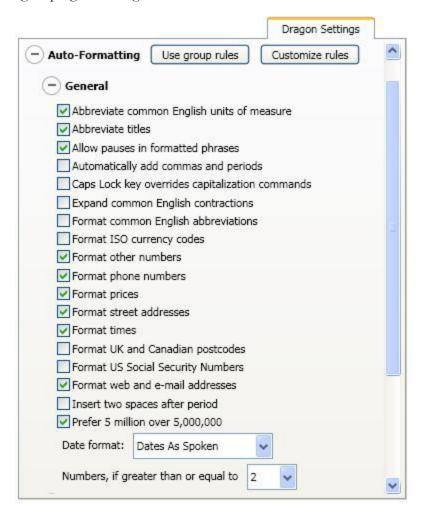
You can use the **Restore** button at the bottom of each section/tab to set the default value in the section, then **Save** your changes.

Status of General Formatting settings on recently reconnected laptops

By default, if the provider does not change them, **General Formatting** options automatically take the values last set by the *NMC server* administrator in the *NMC console*.

If the administrator changes them at any time, new **General Formatting** option settings take effect as soon as a provider logs on to the *Dragon Client*.

If a provider has been dictating in Disconnected mode (off-site or otherwise off the network), the **General Formatting** option settings from the *NMC server* take effect as soon as the provider again plugs the *Dragon Client* machine in to the network.



Note:

Providers can only set general **Auto-Formatting** options in the *Dragon* client

Selecting a medical vocabulary for a medical specialty

You should select and use a medical specialty that is based on the appropriate vocabulary.

Medical specialties and medical vocabularies - US and UK English Dragon Medical

The following table correlates Medical specialties with Dragon Medical vocabularies available in US and UK English. Items that are not available in UK English are marked with an asterisk (*).

Specialty	Medical Vocabulary
Addiction Psychiatry	Mentalhealth
Allergy and Immunology	Generalpractice
Anesthesiology	Neurology
Bariatric Surgery *	Surgery
Behavioral Health *	Psychiatry
Blood Banking/Transfusion Medicine *	Pathology
Breast Surgery *	Surgery
Cardiac Surgery	Surgery
Cardiology	Cardiology
Cardiothoracic Surgery *	Surgery
Cardiovascular Disease *	Generalpractice
Case Management *	General Medical
Chiropractic *	Neurology
Clinical Cardiac Electrophysiology *	Cardiology
Colon and Rectal Surgery	Surgery
Dentistry	Orthopaedic
Dermatology	Generalpractice
Dermatopathology *	Pathology
Developmental-Behavioral Pediatrics *	Pediatrics
Diagnostic Radiology *	Radiology
EEG*	Psychiatry

Specialty	Medical Vocabulary
Emergency Medicine	Emergency
EMG Examinations *	Neurology
Empty Dictation	empty dictation
Endocrinology Diabetes and Metabolism	Mentalhealth
ENT	Obgyn
Epidemiology	Generalpractice
Family Medicine	Generalpractice
Fetal Medicine	Obgyn
Gastroenterology	Gastroenterology
General	General
General Medical	Medical
Geriatric Medicine	Generalpractice
Hand Surgery	Orthopaedic
Hematology	Generalpractice
Infectious Disease	Generalpractice
Internal Medicine	Generalpractice
Interventional Cardiology *	Generalpractice
Medical Education and Writing	Generalpractice
Medical Microbiology *	Pathology
Medical Toxicology *	Emergency
Midwifery	Obgyn
Neonatal and Perinatal Medicine	Pediatrics
Nephrology	Generalpractice
Neurodevelopmental Disabilities *	Pediatrics
Neurology	Neurology
Neuromuscular Medicine *	Neurology
Neuropathology *	Pathology
Neurosurgery	Orthopaedic
Neurotology *	Obgyn
Nuclear Medicine	Radiology
Nursing	Generalpractice

Specialty	Medical Vocabulary
Obstetrics and Gynecology	Obgyn
Oncology	Oncology
Ophthalmology	Medical
Oral and Facial Surgery	Orthopaedic
Orthopaedic Surgery	Orthopaedic
Osteopathy	Generalpractice
Otolaryngology *	Obgyn
Pain Medicine	Neurology
Pathology	Pathology
Pediatric Cardiology	Cardiology
Pediatric Dentistry	Pediatrics
Pediatric Gastroenterology	Gastroenterology
Pediatric Otolaryngology *	Obgyn
Pediatric Pathology *	Pathology
Pediatric Pulmonology *	Pediatrics
Pediatric Rheumatology *	Pediatrics
Pediatric Transplant Hepatology *	Pediatrics
Pediatrics	Pediatrics
Physical Medicine and Rehabilitation *	Neurology
Plastic Surgery	Orthopaedic
Podiatry	Orthopaedic
Proctology	Surgery
Psychiatry	Mentalhealth
Psychology	Mentalhealth
Pulmonary Disease	Generalpractice
Radiation Oncology *	Radiology
Radiation Therapy	Oncology
Radiology	Radiology
Rheumatology	Generalpractice
Sleep Lab	Generalpractice
Social Worker *	General Medical

Specialty	Medical Vocabulary
Speech and Language Pathology *	Neurology
Spinal Cord Injury Medicine *	Neurology
Surgery	Surgery
Thoracic Surgery	Surgery
Transplant Hepatology *	Generalpractice
Undersea and Hyperbaric Medicine *	Emergency
Urology	Surgery
Vascular and Interventional Radiology	Neurology
Vascular Surgery	Surgery

Configuring and running Dragon from a command line

You can run the *Dragon Medical Client* from the command line by running **natspeak** from the following location on the workstation:

C:\Program Files\Nuance\NaturallySpeaking<Version Number>\Program\

where **<Version Number>** is the version number of your installation of DM Network Edition. For example:

On a 32 Bit machine:

C:\Program Files\Nuance\NaturallySpeaking12\Program\

On a 64 Bit machine:

C:\Program Files (x86)\Nuance\NaturallySpeaking12\Program\

natspeak switches

You can use the following options on the command line with **natspeak** to modify the way that *Dragon Medical Client* starts up.

Switch	Function
/diagnose	Runs the <i>Dragon Medical Client</i> in diagnostic mode. Outputs information into the Dragon.log file and exits. The diagnostic information shown in the log includes file version verifications. The diagnostic results end with a line that says Diagnoses: Passed .
/trusted	Automatically logs in to the Dragon Medical Client with the user account of the logged in Windows user (also known as Active Directory Single Sign-On). The user account must be set up in Active Directory and have a corresponding user account in the NMC server. See the Administrator Guide for more information. The /trusted command line option works on the server as well as the client.
/trustedOffline	Use this option to perform a trusted login in offline mode. Example command line instruction: /natspeak.exe /trustedOffline
/trustedDeleteCache	Use this option to perform a trusted login and delete the local cache.

Switch	Function
	Example command line instruction: /natspeak.exe /trustedDeleteCache
/trustedDeleteProfile	Use this option to perform a trusted login and delete a user's profile. Example command line instruction: /natspeak.exe /trustedDeleteProfile
/logout	Logs the current user out.
	If a user is logging out of Dragon, any command line log in request (/user or /SSOUser) received during that log out goes into a queue and is executed once the log out is complete.
/save	Saves the current user's profile.
	You can specify a time out value for the /save command with natspeak.exe and natspeaksso.exe.
	If you call natspeak.exe /save <timeout> using a script, the script will not continue processing until the save command is completed, or the timeout value elapses, whichever comes first.</timeout>
	Valid values for the timeout parameter are between 30 and 120 seconds and use the following syntax:
	<pre>natspeak.exe /save <timeout> where <timeout> is the time out in seconds.</timeout></timeout></pre>
	The default timeout—which Dragon uses when given a value less than 30 or greater than 120—is 60 seconds.
	If you supply a non-numeric value or a value of zero, the time out feature is disabled for the current run.
/SSOUser <ehr username=""> <clientid></clientid></ehr>	Automatically logs in to the <i>Dragon Medical Client</i> with the user account named. The switch expects you to supply the EHR username and a Client ID. See <i>Creating Customer Tokens</i> in the Administrator's Guide for more information. The user account must be set up in the <i>NMC server</i> as described in See "Creating Single Sign-On user accounts" on page
/user <username> <password></password></username>	Automatically logs in to the <i>Dragon Medical Client</i> with the user account named. The password is optional if the account does not have a password. The user account must be set up in the <i>NMC server</i> .
	Note that Nuance always recommends each user account have a password.
/ShutDown	Closes Dragon without saving user profile changes. This command works even if the Automatically save user files on close option is enabled in the Dragon Client.
/SaveAndShutdown	Closes Dragon after saving user profile changes. This command works even if the Automatically save user files on close option is disabled in the Dragon Client.
	You can specify a time out value for the /saveandshutdown commands with natspeak.exe and natspeaksso.exe.

Switch	Function
	If you call natspeaksso.exe /saveandshutdown <timeout> using a script, the script will not continue processing until the save command is completed, or the timeout value elapses, whichever comes first.</timeout>
	Valid values for the timeout parameter are between 30 and 120 seconds and use the following syntax:
	natspeak.exe /saveandshutdown <timeout> where <timeout> is the time out in seconds.</timeout></timeout>
	The default timeout—which Dragon uses when given a value less than 30 or greater than 120—is 60 seconds.
	If you supply a non-numeric value or a value of zero, the time out feature is disabled for the current run.

natspeak command line options

Via the SDK installed on your speech node, you can use the following option on the command line with **natspeak** to modify the *Dragon Medical Client* options settings in the **nsdefaults.ini** file before installing the client on multiple machines. See the *MSI Installation of multiple clients with the same default options* section of the Installation Guide for more information.

Switch	Function
/SetDefaultOptions	Opens the <i>Dragon Medical Client</i> 's Options dialog box, where you can pre-set the options. When you apply the setting changes and save them, Dragon saves the settings in the nsdefaults.ini file.

Starting Dragon Medical Clients from Command Line

On any workstation where you installed the client, you can start the *Dragon Medical Client* from the command line and login/connect to the *NMC server*, as long as you know the login name and password of the user account on the server:

- 1. Select **Start > Run...** and enter **cmd** in the **Run** dialog box that pops up.
- 2. Switch directories to the following path:

On a 32 Bit machine:

<drive>:\Program Files\Nuance\NaturallySpeaking12\Program

On a 64 Bit machine:

<drive>:\Program Files (x86)\Nuance\NaturallySpeaking12\Program

3. Enter the command line shown below, passing either the -user option or the /user option followed by the user name and password, in that order. The user name and password must be from a user account created on the NMC server:

```
natspeak.exe /user <username> <password>
```

- 4. The password is optional if a provider does not have a password, but Nuance recommends that you assign all providers using *Dragon Medical* a password.
- 5. To log in using an Active Directory single sign-on user account (when the *NMC server* has been set up to run in Active Directory and the user accounts correspond to Windows user accounts), once the provider has logged in to Windows, he or she can use the /trusted switch on the command line:

```
natspeak.exe /trusted
```

To log in using an EHR single sign-on user account use the /SSOUser switch on the command line.

If you are running the command on the same machine where Dragon is installed use:

```
natspeak.exe /SSOUser <username> <ClientID>
```

If you are running the command where Dragon is installed on a Citrix machine, use:

```
natspeakSSO.exe /SSOUser <username> <ClientID>
```

Where <username> is an EHR username, and <Client ID> is the token that you created in *Creating Organization Tokens* on page 101.

The user account must be set up in the NMC server, as described in *Creating Single Sign-On user accounts* on page 44.

7. You can also use **natspeak** to install the client from the command line. To receive diagnostic messages about the *Dragon Medical Client* installation process, you can use the diagnostic option shown below:

```
natspeak.exe /diagnose
```

When you use the **/diagnose** option, *Dragon Medical* sends any information about errors that occur during the installation into the **Dragon.log** file.

Closing the Dragon Medical client from a command line

Closing Dragon from a command line is the same as closing Dragon from the Dragonbar menu and closes all Dragon related processes.

This feature is useful for customers that use Dragon in a virtual environment as it allows administrators to close Dragon without using the Task Manager.

- 1. Select **Start > Run...** and enter **cmd** in the **Run** dialog box that pops up.
- 2. Switch directories to the following path:

On a 32 Bit machine:

<drive>:\Program Files\Nuance\NaturallySpeaking12\Program

On a 64 Bit machine:

<drive>:\Program Files (x86)\Nuance\NaturallySpeaking12\Program

3. To close Dragon without saving user profile changes, enter the command line shown below.
This command works even if the Automatically save user files on close option is enabled in the Dragon client.

natspeak.exe /ShutDown

4. To close Dragon and save user profile changes, enter the command line shown below. This command works even if the Automatically save user files on close option is disabled in the Dragon client.

natspeak.exe /SaveandShutDown

Notes:

- If Dragon is running and a user profile is not open, running natspeak.exe /ShutDown or natspeak.exe /SaveandShutDown simply closes Dragon and all related processes.
- If Dragon is running and a user profile is open, running natspeak.exe /ShutDown closes Dragon and all related processes and **does not** save user profile changes.

■ If Dragon is running and a user profile is open, running natspeak.exe /SaveandShutDown closes

Dragon and all related processes and saves user profile changes.

Running natspeak.exe/ShutDown during General Training

If natspeak.exe /ShutDown executes while the General training wizard is running, Dragon displays a dialog box that asks the end-user if they want to interrupt the training session without saving changes.

Workaround 1

- 1. The Dragon end-user provides a 'Yes' response in the dialog. This closes the General Training wizard.
- 2. The Dragon end-user closes and re-starts Dragon.

Workaround 2

- 1. The Dragon user does not respond to the dialog box. After few seconds, Dragon hides and redisplays the dialog box several times until the DragonBar becomes hidden.
- 2. The Dragon user closes the General Training wizard.
- 3. The Dragon end-user closes and re-starts Dragon.

Viewing user activity

As an NMC server administrator, you need to be aware of the activities of users in your Dragon Medical Network Edition Network. The NMC console provides several ways to view this information:

- To view all the users (both **NMC Administrators** and **Dragon Medical Authors**) in your system or to find a particular user, see <u>Viewing</u>, modifying, and deleting user accounts.
- To view all of the users (administrators) who are logged on to the *Profile Optimizer Scheduler*, see *Viewing the status of scheduled optimizations* on page 254
- To view how often users log on to and log out of the system see *Auditing Events* on page 326
- To view Dragon Medical log files see Viewing Dragon log files on page 441

Auditing Events

The NMC console provides the **Audit Events** utility for you to track the activity of dictating providers using Dragon Medical Client or other administrators accessing the NMC server.

Viewing how often users or administrators log in or out of the system

- 1. On the menu bar, click **Utilities** and then click the **Audit Events** icon
- 2. On the **Events** screen, enter information in the following fields:
 - Start Date/Time: The start date and time for the search. This is a required field.
 - End Date/Time: The end date and time for the search. This is a required field.
 - Organization: The Organization to search on. This is a required field.
 - **User login**: The user login associated with the events.
 - Event ID: The ID associated with the event.
- 3. To view the report results using UTC, select the **Display results in UTC** option.
- 4. Click **Search**. The **Events** screen displays the list of audit events that match the search criteria.

Audit Event messages

The list of audit event messages gives the date and time that each session start/end event occurred, the login name of the user who triggered the event, and the organization of that user. You can sort the list using any of the columns. For example: To sort the list by user account, click the **User Account** column heading. To reverse the sort order, click the column heading a second time.

The following table shows the four types of audit event messages that you may see:

Audit Event Message	Description
Session begins for user < user name > , application < application name > , on computer < computer name >	When the user logged on to the system
Session ends for user < user name > , application < application name > , on computer < computer name >	When the user logged out of the system
Session timed out for user <user name="">, application <application name="">, on computer <computer name="">, session was idle for more than 10 minutes.</computer></application></user>	When the user was automatically logged out by the system because the session timed out.
Session refused for user < user name > , application < application name > , on computer < computer name >	When the user's attempt to log on to the system was not successful

Control when the NMS server purges Audit Events

You can set when the NMC server purges Audit Event data.

- The default value is 13 months.
- The minimum value is 90 days.
- The maximum value is 7 years.
- 1. In the NMC console, navigate to **System Settings** > **Nuance Management Server**.
- 2. Enter year and month values in the **Purge audit events time _ years _ months** setting. If you enter a purge date that is less than the current purge date, the NMC console displays a warning about losing audit events beyond the new date. In this case, to accept the new date, click **OK**.
- 3. Click Save.

Chapter 8: Managing update and license messages

This chapter explains how you can receive, review, and respond to notifications about update packages, licenses, and more.

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Security of NuanceLink servers

NuanceLink messages include descriptive information for a wide range of updates.

Prior to NMC server 4.1, NuanceLink messages included the following descriptive information:

- NMC Medication Updates—Vocabulary update files that contain names of new medications
- NMC Command Updates—Command update files that contain new custom medical commands
- Dragon Client Updates—Update files for the Dragon client.
- Dragon Medical Network Edition—Update files for the DM Network Edition.

In NMC server 4.1, each message contains the following details:

- Text of Message: A new software update for package <update_Type> has been delivered to your NMC server. Where update_Type is one of:
 - NMC Medication Updates
 - Software Updates
 - Notifications
 - NMC Command Updates
- Description: A description of the update.
- Details: (NMC Medication Updates and Software Updates only) The title and size of the update.
- File downloaded to: The file download location.

Managing, enabling, and disabling product updates

You can now receive and apply client updates through the NMC console, and choose the types of updates the NMC console downloads.

If updates for a package type are turned off, the **Enable** button appears beside the package and the **Enabled** column is not checked. If updates for a package type are turned on, the **Disable** button appears beside the package and the **Enabled** column is checked.

You can enable or disable downloading one or more package types based on your organization's needs.

Enabling and disabling product updates

You must have the "Configure Update Manager" privilege to perform the following steps.

- 1. In the ribbon in the NMC console, select **Utilities**.
- In the Updates section, select Approvals. The Approvals screen displays the different package updates the NMC server can receive.
- To allow the NMC server to download a package type, click the Enable button beside the package.
- To prevent the NMC server from downloading a package type, click the **Disable** button beside the package.
- To check for more updates, in the bottom right of the Approvals screen, click Check for Updates.
- 6. When you are done, click **Close**.

Receiving notifications from the NuanceLink

You view messages sent to the NMC server in the Messages tab in the NMC console.

The list of messages resembles an email inbox. The message list updates on login and every hour or when you manually refresh the list by clicking the **Refresh** link to the lower right.

Opening/viewing the list of messages

To open the list of messages that the NMC server has received:

- 1. On the menu bar, click **Utilities**.
- 2. In the Utilities ribbon, click the Messages icon in the ribbon. A Messages screen opens below the ribbon, displaying a list of existing messages. Initially this list of messages shows only unread messages. To mark a message as read, check the box to the right of the message and click the Mark complete button on the right-side of the screen. The NMC server hides the message to as long as you have the Unread Messages radio button (top-right of the screen) selected.
- 3. If you want to again view a message or messages that you marked complete and no longer see in the list, click the **All Messages** option to the far right above the list.
- 4. You can also sort the messages in the list by clicking the column heading that contains the information to sort by. You click the column heading once to sort in ascending order and click it.
- 5. Other actions you can perform with messages:
 - Check All—Click this button to select all messages in the Messages screen.
 - Uncheck All—Click this button to de-select all messages in the **Messages** screen.
 - Mark complete—Click this button to mark all selected messages as read.

Understanding types of messages NMC server receives

These are the types of update packages the *NMC server* receives messages about. The *NuanceLink* sends these messages:

- Medical updates (require your approval).
- Command updates (require your approval).
- Dragon client updates

NuanceLink messages include descriptive information for a wide range of updates.

Prior to NMC server 4.1, NuanceLink messages included the following descriptive information:

- NMC Medication Updates—Vocabulary update files that contain names of new medications
- NMC Command Updates—Command update files that contain new custom medical commands
- Dragon Client Updates—Update files for the Dragon client.
- Dragon Medical Network Edition—Update files for the DM Network Edition.

In NMC server 4.1, each message contains the following details:

- Text of Message: A new software update for package <update_Type> has been delivered to your NMC server. Where update_Type is one of:
 - NMC Medication Updates
 - Software Updates
 - Notifications
 - NMC Command Updates
- Description: A description of the update.
- Details: (NMC Medication Updates and Software Updates only) The title and size of the update.
- File downloaded to: The file download location.

The NMC server also receives message that do not include packages:

- License expiration messages.
- License update messages.

Approving command and medication updates

The NMC server downloads update packages only after you approve them.

Responding to license expiration messages

A process that checks to see if you have licenses that are about to expire runs every day at 12:01 AM. When a user license is about to expire, you should receive a message in the **Messages** tab 30 days in advance of the expiration date.

To open the **Messages** tab:

- 1. On the menu bar, click **Utilities**.
- 2. Under the **Utilities** tab, click the **Messages** icon in the ribbon. A **Messages** tab opens below the ribbon, displaying a list of existing messages.
- The Message Text column displays a message about a new software update having been delivered to the NMC server.
- 4. If you would like to indicate that you have read the message, check the box to the right of the message and click the Mark complete button on the right-side of the screen. The NMC server hides the message to as long as you have the Unread Messages radio button (top-right of the screen) selected.
- 5. Other actions you can perform with messages:
 - Check All—Click this button to select all messages in the Messages screen.
 - Uncheck All—Click this button to de-select all messages in the Messages screen.
 - Mark complete—Click this button to mark all selected messages as read.
- 6. If you would like to renew the licenses before they expire, see the instructions under Receiving expiration alerts and renewing licenses on page 210.

Downloading and distributing command and medication updates to clients

The *NMC server* manages distribution of command and medication updates by integrating them with master user profiles on the machine hosting those profiles. In this section you learn about:

- Downloading command and medication updates on page 335
- Distributing command and medication updates to clients on page 335

Downloading command and medication updates

Before you approve the update, the *Update Server* has already downloaded it to the *NMC server*. Once you have approved the command and medication updates, the *NMC server* distributes the updates automatically to the master user profiles.

Each time the *NMC server* receives an approved update, the NMC server automatically creates jobs that the *Speech Nodes* run to integrate the new commands and medication names into the master user profile vocabularies for each healthcare provider.

Distributing command and medication updates to clients

Each time a provider logs on to the *Dragon Medical Client* to dictate, the *NMC server* automatically downloads the latest master user profile to the client workstation. The client machine retains any incremental changes to the local cache user profile until the next opportunity for the *NMC server* to synchronize the master user profile and local cache user profile. As a result, the local cache copy of the user profile always contains the latest command and medication updates, without compromising quality of speech recognition that might be influenced by recently accrued dictation data.

Applying medication updates to clients

Before the NMC server applies a medication update to a master user profile, the server checks the profile to make sure it is not corrupt. The server considers a profile to be corrupt if the profile does not have a vocabulary or does not have any dictation sources.

If the NMC server determines that a master user profile is not corrupt, it applies the medication update to the profile. Otherwise, the server does not apply the medication update to the profile and the server logs an error for the task.

Downloading Dragon updates to clients

Each messages you receive from the NuanceLink includes the UNC path on the NMC server where the Dragon update file was downloaded.

You can either use Microsoft's SMS or SCCM to download the client updates to all *Dragon* client installed workstations or you can install the updates manually.

Nuance advises that you carry out the update installations during off-hours, when providers are not dictating.

For more information on using SMS or SCCM in *Dragon Medical Client* installations, refer to the *Dragon Medical Network Edition Installation Guide* and Microsoft's SMS or SCCM documentation.

Purging messages

The *NMC server* purges messages about updates and approvals of updates from the **Messages** and **Approval** lists after 30 days by default.

This process occurs automatically and you receive an event message telling you that the action is beginning, then another telling you that it has completed. You can monitor event messages in the **Audit Events** page. The *NMC server* also purges these **Event** messages after 30 days by default.

Messages that have not been read by you or another administrator are never deleted.

If you would like to retain messages for fewer or more than 30 days, you can change the schedule for purging messages.

Changing the Schedule for Purging Messages

To change the number of days to retain messages in the **Messages** and **Approval** screens or messages in the **Audit Events** tab, take these steps:

- 1. On the menu bar, click **Sites**, then click the **Organizations Overview** icon.
- 2. In the **Organizations** ribbon, click **Details**.
- 3. On the **Organizations Details** screen, click **Products**.

- 4. Expand the **Nuance Management Server** section.
- 5. Modify the number of days for retaining each type of message.
- 6. Click \mathbf{OK} to save the change.

Chapter 9: Managing uploads to Nuance

You can help Nuance improve the future quality of speech recognition by sending speech data from your network to Nuance on a regular basis. This chapter explains how to upload data to Nuance.

You can help Nuance improve the future quality of speech recognition by sending speech data from your network to Nuance on a regular basis. No personal information is ever sent to Nuance and participation in data collection is completely voluntary. The data transferred is encrypted.

Turning on data collection for your site

To turn on data collection for your entire site, take these steps:

- 1. On the menu bar, click **Organizations** > **Search**.
- 2. Enter search criteria and click **Search**.
- To see your organization's information and add details to it, click the Organization
 DetailsOrganization > Details icon in the ribbon.
- 4. Select the **Products** tab.
- 5. Expand the **Dragon Medical Network Edition** section.
- 6. Select the **Upload user data to Nuance for research purposes** option.
- 7. Click **OK** to save the change.

Turning on data collection for individual providers or users

You can also turn on data collection for individual healthcare providers in the User Account

Details tab under the Network Edition US sub-tab:

- On the menu bar, click the User Accounts ribbon, then click the Search User AccountsSearch icon in the ribbon under User Accounts.
- 2. When the name of the provider appears in the **User Accounts** screen, double click the name to open the **User Account Details** for that healthcare provider.
- 3. Click the **Network Edition US** tab.
- 4. Expand the **User Account Options** section.
- Go to the bottom of the User account options section and click the Upload dictation data to Nuance for research purposes check box.
- 6. Click **Save** to save the change to the user account settings.
- 7. You can repeat these steps for selected individual user accounts in the NMC server.

Privacy of your healthcare data and Nuance data collection

When you implement Data Collection it is for sending recognition data to Nuance to improve the accuracy of this and future products. Nuance works with collected data because our software can learn from experience about the language you, and your fellow professionals, use. We track the vocabulary, syntax, and pronunciation used by professionals in practice, and our experience makes our products more accurate and easier to use for you and others.

Nuance will never pass your recognition data on to anyone else or use it for any other purpose other than as set out in this notice.

Nuance will only collect recognition data (on behalf of your organization), and will collate and combine it with recognition data collected from other health professionals using Data Collection. We will not store the recognition data under your name, the medical practice or hospital or an individual's name, although the database will contain a search function enabling such terms to be searchable within the database.

Nuance will use the recognition data in accordance with your organization's instructions. We use it to conduct research in order to enhance and improve the accuracy of this and future products. Nuance recognizes that the data may include medical information about patients and your professional opinion in relation to those patients.

The only people with access to this data will be our employees, permitted agents, sub-contractors, etc. on a need to know basis, all of whom are bound by obligations of confidentiality to keep the data strictly confidential.

Nuance will transfer the personal data to its Data Collection sites that may be located outside of the EEA. However, Nuance shall ensure that any such transfer is compliant with the EU Data Protection Directive.

Our corporate policies and practices, and our contractual commitments to your organization, require us to take appropriate technical and organizational measures against unauthorized or unlawful processing of any personal data that you have provided to us and against accidental loss or destruction of, or damage to, that personal data.

Chapter 10: Managing the NMC server

This chapter presents information about managing multiple NMC server and configuring network traffic switch to ping NMC server for load balancing:

Managing multiple NMC servers	.343
Using and configuring the FileStore location for multiple NMC server	.344
Use a network traffic switch to balance the load on the NMC server	345

Managing multiple NMC servers

In a large network, you might choose to have multiple NMC server, one for every 1,000 dictating healthcare providers.

For some illustrations of larger *DM Network Edition Networks* and guidelines on when to deploy such a structure, refer to the DM Network Edition *Planning and Deployment Guide*.

On a large network, you should include a network traffic switch to help route server requests to the appropriate *NMC server* More details on configuring the network traffic switch to work with *NMC server* are provided in *Use a network traffic switch to balance the load on the NMC server* on page 345.

Using and configuring the FileStore location for multiple NMC server

The NMC server FileStore is a common location for files that need to be shared between the nodes/servers of the NMC server. If only one node/server is used, you can use the default FileStore location (which is the local system). If more than one node/server is used, you must create a common location for the nodes/servers to use as a FileShare.

You must configure each NMC server node to use this common location. It is recommended that you not use one of the NMC server nodes as the common location. If the server were to fail, the other nodes will not be able to access the FileShare location.

In DM Network Edition, the NMC server uses the FileStore to store temporary files that upload and download to the NMC console. For example, log files from various client applications.

Space requirements for the FileStore will depend on your system configuration.

You use the Nuance.NAS.Server.exe.config file to configure the FileStore location. There is a key in the "appSettings" section called FileStorePath that controls the location of the NMC server FileStore.

Look for the following line:

```
<add key="FileStorePath" value="" />
```

A empty string ("") means to use the default. The default location is

%ALLUSERSPROFILE%\NMS\FileStore

where %ALLUSERSPROFILE% is an environmental variable.

The value of the environmental variable depends on the operating system. The following is a list of default locations for the environmental variable %ALLUSERSPROFILE% based on Operating Systems:

- Windows 2008: C:\ProgramData
- Windows 7, 8.x, and 10: C:\ProgramData
- Windows Vista: C:\ProgramData
- Windows XP: C:\Documents and Settings\All Users\Application Data

The NMC server creates an Upload, Download, and Completed folder in the FileStorePath location.

For example. in Windows 2008, if "" is used in the configuration file, the NMC server uses c:\ProgramData\NMS\FileStore as the location of the FileStore. If "D:\NMS\FileStore" is used, the NMC server uses D:\NMS\FileStore as the FileStore location.

To change the FileStorePath:

- 1. Determine where you want to put the FileStorePath.
- 2. Shutdown the NMC server Service. You can't move an existing FileStorePath while the service is running.
- 3. Create the FileStorePatch folder that you chose in step 1.
- 4. Copy the current ClientLogs, Completed, Download, and Upload folders to the folder you created in step 3.
- 5. Delete the current FileStore folder.
- 6. Modify the FileStorePath key value to use the folder you picked in step 1.
- 7. Save the FileStorePath key value.
- 8. Restart the NMC server Service.

Use a network traffic switch to balance the load on the NMC server

If you have a large network with multiple NMC server, you can include a network traffic switch in your network to balance the load on the NMC server. The network traffic switch can be an F5 or similar switch.

To configure the network traffic switch to send a message to the NMC server to see if the server is operational, you would have the network traffic switch send the following message in the URL line of the browser:

http://<NMS-Server-Name>:443/Nuance.NMS.Services/__NMSServiceStatus/Rest/Status

The NMC server delivers the following XML-formatted response to the network traffic switch:

<ServiceStatusResponse xmlns=</pre>

[&]quot;http://schemas.datacontract.org/2004/07/Nuance.NAS.Connector.

If the NMC server is down, the switch receives an error. If the network traffic switch makes this call and the NMC server sends anything other than the expected response, the switch can tag that server as down and reroute the traffic accordingly.

Chapter 11: Backing up databases, user profiles, and logs

This chapter presents information about backups of the NMC server SQL Database and also presents the structure of the master user profiles, in these sections:

Backing up the NMC server database	
Backing up Master user profiles	349
Restoring a Master User Profile from backup	350
Removing a master user profile folder for a deleted user account	353

Backing up the NMC server database

When you look in the SQL Server explorer, to find the NMC server SQL Database, look for a database named **NuanceMC** by default. If you name the database differently during the installation process, NMC server retrieves the database name from SQL Server and uses its name as the root for the backup files.

The installation process uses the SQL Server default locations for the database and the log devices. The dump device uses the default database location.

The NMC server automatically backs up the data you have entered into it on sites, users, groups, and other objects into the backup folder. It also backs up all Windows communication foundation service logs that it creates.

(For more information on logs that clients and servers in Dragon Medical Network Edition create, refer to *Viewing speech node, Profile Optimizer, Dragon, and NMC server logs* on page 437.)

Scheduled NMC server log and database backups

The NMC server schedules these backups:

- Transaction log backups—Scheduled hourly
- Differential database backups—Scheduled daily
- Full database backups—Scheduled weekly

The *NMC server*stores up to one month of backups on its hard disk.

To retain more than one month of backups, you must copy the data before the month is over.

File names of database backups

Each time it carries out a full database backup, the NMC server takes the following steps:

- 1. Deletes database files older than 1 month.
- Renames the NuanceMCDump.BAK file currently in the folder to
 NuanceMCDump_YY_MM_DD_hh_mm_ss.BAK, using the current date- and timestamp.
- 3. Generates a new database backup and names it **NuanceMCDump.BAK**.

Backing up Master user profiles

The master user profiles file structure follows a particular pattern. Understand this structure can help you better plan to back up the master user profiles.

Caution: Nuance recommends that you:

- Back up all master user profiles weekly. You should retain these backups for several weeks in case you need them.
- Schedule an LMO process of every user profile weekly to ensure that the *Profile Optimizer* checks for a corrupted profile every week.
- Immediately after the *Dragon Medical Client* creates the user profile or after you associate the user profile with a user account, manually execute ACO and LMO processes on that profile.

The first backup of a user profile occurs the first time a user logs into the Dragon client. Afterwards, you can schedule ACO and LMO processes to run on that profile.

To force a backup of the user profile, you can execute manual ACO and LMO processes on the user profile. You execute an ACO or LMO manually by clicking the **Execute Now** button (**User Account Details > Network Edition US > Profile Optimizer Scheduler Settings > Configure**). For details, see *Scheduling optimization and medication updates* on page 190

Each master user profile is stored in its own subdirectory of the *Master User Profiles Server* (can be a dedicated server or the *NMC server*, or database server), as shown below:

\\<ServerName>\<ProfilesDir>\<NMSuserLoginName>\last known good\profile1

The first profile for the provider is under **profile1**. If the provider has more than one profile, the next is under **profile2**.

If a profile becomes corrupted, you receive a notification about it in the **Messages** box on the NMC server, the NMC server moves the profile to the following location:

\\<ServerName>\<ProfilesDir>\<NMSuserLoginName>\BAD\profile1

The next time the provider starts to dictate, the *Dragon Medical Client* automatically retrieves the restored user profile for that provider.

The corrupted profile remains on the *Master User Profiles Server* until you remove it. When you have any corrupted profiles (you receive a notification about them in the *NMC console* **Messages** box), you should contact Nuance, as these profiles are not automatically uploaded to the Nuance data collection site. Avoid removing these profiles until Nuance subsequently notifies you that it has retrieved the profiles for analysis.

To manually back up a User Profile

- 1. Log in to the NMC console and open the **User Account** ribbon.
- 2. Click the **Search** icon and search for Dragon Medical Author user accounts.
- 3. When the list of user accounts appears, select a user account.
- 4. To back up the user profile, perform one of the following steps:
 - i. Right-click the user account and select **Backup user profiles**.
 - ii. On the ribbon, under User Profile Management, select Backup.
 A dialog box appears, informing you that a User Profile Backup task is now scheduled. To view the status of the task, you can View Profile Optimizer task details.
- 5. Click **OK**.

Restoring a Master User Profile from backup

If a healthcare provider cannot log in to the *Dragon Medical Client*, it might be because the master user profile has become corrupted.

If the profile is corrupted or if you simply want to restore a back up of a user profile, you can open the user account for that provider and restore the profile. Restoring a user profile overwrites the current profile with the backup copy.

In the NMC console, the **Restore Last Known Good User Profile** button under **User Account Details** > **User Profile** is replaced by the following two items (see step 4 below):

- the **Restore user profiles** right-click option
- the Restore ribbon item in User Profile Management

To restore a user profile

- 1. Log in to the NMC console and open the **User Account** ribbon.
- 2. Click the **Search** icon and search for Dragon Medical Author user accounts.
- 3. When the list of user accounts appears, select a user account.
- 4. To restore a user profile perform one of the following steps:
 - i. Right-click the user account and select **Restore user profiles**.
 - ii. On the ribbon, under User Profile Management, select Restore.A dialog box appears, informing you that a User Profile Restore task is now scheduled. To view the status of the task, you can View Profile Optimizer task details.
- 5. In the **Restore DM Profile** dialog box, click **Yes**.

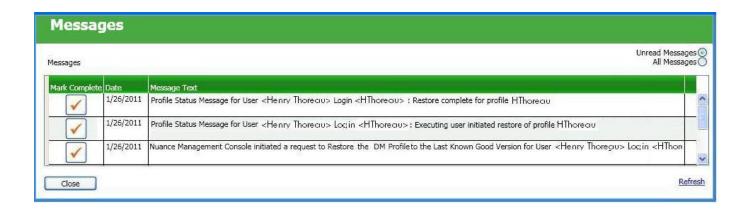
You can now open the **Messages** list in the **Utilities** ribbon to view a message that indicates that you initiated a request to restore the profile. When the restoration is successful, you receive two more messages, **Executing restore** and **Restore complete**, as illustrated below:

Save search results to a .csv file

On screens that display search results, you can save the search result data for future use.

A status bar at the bottom right of the screen displays:

- \blacksquare The number of rows on the screen, for example: Items: 104.
- An icon that refreshes the search results 💆 .
- The save icon.
 - i. Press the icon.
 - ii. In the dialog box, browse to a location to save the file.
 - iii. Press Save.



Note:

To ensure that a known good profile is available soon after the provider begins dictating, as soon as you have associated a user profile with the provider's user account, Nuance recommends that you immediately execute manual ACO and LMO processes on that user profile. (Note that you can execute the processes on an entire group of user profiles as well.)

To force a backup of the user profile, you can execute manual ACO and LMO processes on the user profile. You execute an ACO or LMO manually by clicking the **Execute Now** button (**User Account Details > Network Edition US > Profile Optimizer Scheduler Settings > Configure**). For details, see *Scheduling optimization and medication updates* on page 190

Clicking the **Execute Now** button initiates a backup of the user profile and, if no previous backup existed, forms the *first* known good user profile, then available to restore.

Removing a master user profile folder for a deleted user account

Before you delete a user account, you should be sure to export the user profile for the account first. Exporting the user profile saves the information accrued about that particular provider's voice and speech patterns. Should you ever need that user profile again, you can then import the exported user profile to bring the provider back up to speed more quickly.

In DM Network Edition, Service Pack 2, when you try to delete a user account, the NMC console displays a dialog that lets you choose to either delete the account and its user profile at the same time, or, export the profile before deleting the account. If you want to export the profile before deleting the user account, select **No** and export the profile. Then you can go back and delete the user account. In Dragon Medical Network Edition, 2.7, you use the Dragon client to export and import user profiles. For details, see the Dragon Help.

For details on how to export a user profile, then delete the associated user account, refer to the sections indicated for each task below:

- To export the user profile: see the Dragon Help.
- See Viewing, modifying, and deleting user accounts for more information.

After you delete a user profile and user account from the NMC server (in the NMC console), the folder for that provider's user profile remains in the master user profiles directory.

To later reuse the deleted user account's login name for another user account, you must first remove the original user profile folder with that name from the master user profiles directory. You can copy it to a **Deleted** or similar folder, so that you can restore it if the need arises.

Chapter 12: Working with commands and custom words

This chapter describes how administrators and providers create and manage commands and custom words in the NMC console.

Overview of managing commands and custom words	356
Creating shared and personal commands and custom words	358
Importing commands and custom words	361
Viewing and modifying the data of step-by-step Speech Commands	364

Overview of managing commands and custom words

Note: Text and Graphics and Text and Graphics DragonTemplates are supported. Text and Graphics with Lists are supported if they are in Command Sets.

- Centralized management for ALL users across all client applications. If you create Text and Graphics or custom words in the NMC server, they are immediately available to all users regardless of the client application they use.
- Increased standardization of documentation. By centrally defining profile customizations, administrators can ensure that all users are documenting in a standardized manner.
- Increased control and granularity:
 - Common customizations (commands, custom words, speech settings) can be defined at the Site level to enforce standardization.
 - Customizations can be added at the group level to support practice or location specific customizations.
 - Personal customizations can be created at the user level.
- Commands and custom words that are shared by multiple users should be exported from DM
 Network Edition and imported into the NMC server at the Site or Group level.
- Any new shared commands and custom words should be created in the NMC console at the Site or Group level.
- An administrator can define and manage commands and custom words at the Site, Group, or personal (user) level using the NMC console. This impacts the commands and custom words that are available to other providers.
- A provider defines and manages "personal" commands and custom words using the client application (Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application). This does not impact the commands and custom words that are available to other providers.
- An administrator can view all shared and personal commands and custom words that are associated with a provider.

- Commands that are available to a provider depend on that provider's Site and Group membership. For example, a provider that belongs to Group-1 in Site-1 can "see" all Text and Graphics/auto-texts defined at the Site level for Site-1, all Text and Graphics/auto-texts at the Group level for Group-1 and any Text and Graphics/auto-texts defined at the personal level.
- Any commands that are marked as protected are not uploaded to the NMC server from the Dragon client. If you wish to share protected commands with end-users in a site or group, you should place the commands in a Command Set.
- Commands and custom words with the same name can be defined at the Site, Group, or Personal (user) levels. The only requirement is that the names of the commands and custom words must be unique within the level it is defined in.
- If "duplicate" names exist in the list of commands and custom words that a provider can use, the NMC server will return the most specific objects. For example, the NMC server returns personal Text and Graphics/auto-texts before group Text and Graphics/auto-texts.

Creating shared and personal commands and custom words

Synchronizing commands after importing a user profile

After a user imports a User Profile, to synchronize their commands with the NMC server, they must log out of the Dragon client. This does not have to occur right after the profile import unless they want to synchronize the commands immediately after the profile import.

If the Dragon client logs the user out due to a period of inactivity, the commands still synchronize with the NMC server the next time the client loads the profile.

Administrators create and manage common shared commands and custom words

An administrator uses the NMC console to create and manage common commands and custom words at the Group or Site levels. These objects are available to all providers that are part of these sites and groups. The Administrator changes speech settings that impact speech recognition behavior and formatting. As an administrator adds, or edits commands and custom words, the changes are captured by the NMC server.

When a provider logs into the client application (Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application), the application queries the NMC server for a list of all commands and custom words that the provider can access. The NMC server makes all of the common commands and custom words available to the provider. The NMC server applies settings that impact speech recognition and formatting to all recognized text for the provider.

Example Workflow - Administrator adds individual Text and Graphics/auto-texts and custom words

- 1. An administrator adds Text and Graphics/auto-texts and custom words at the Site / Group or User level using the NMC console.
- 2. A provider logs into the client application (Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application).

3. Custom Text and Graphics/auto-texts and custom words are available to the provider for dictation.

Example Workflow - Administrator deletes Text and Graphics/autotexts and custom words

Since the same Text and Graphics/auto-texts and custom words can exist at the Site, Group or Personal level, deleting an instance of Text and Graphics/auto-texts and custom words does not remove it from all user vocabularies.

Providers or users create and manage personal commands and custom words

In addition to "shared" customizations such as group commands and custom words, providers or users may further customize their speech experience by creating and managing "personal" commands and custom words. The provider still has full access to Site and Group level customizations, in addition to their personal customizations. A provider can create personal commands and custom words using Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application.

If an administrator makes changes to commands and custom words, Dragon settings, those changes are available to the NMC server whenever a provider session is "refreshed". The NMC server automatically refreshes a session after period of provider/user inactivity or when a user logs out and back into the client application (Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application).

When a provider creates commands and custom words, the objects are stored locally and in the NMC server. The next time the provider logs into the client application (Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application), the application queries the hosted NMC server for a list of all commands and custom words that the provider can access and makes them available to the provider. The personal (user level) commands and custom words are visible to administrators in the NMC console.

Example Workflow - Provider deletes Text and Graphics/auto-texts and custom words

Providers can maintain their own vocabulary by deleting Text and Graphics/auto-texts and custom words that are not useful or required for their dictations.

A provider can only delete Text and Graphics/auto-texts and custom words from their personal vocabulary. If Text and Graphics/auto-texts and custom words are defined at the site or group level, they must be deleted by an administrator.

Importing commands and custom words

Importing common shared commands and custom words

Note: You can only import XML files. You cannot import .DAT files.

Administrators use the NMC console to import commands and custom words from an export of a Dragon user profile and make the commands and custom words available to providers.

The first time a provider logs into the Dragon client application, Dragon uploads the customizations from the local profile to the NMC server.

In subsequent log in attempts, redundant personal commands and custom words are deleted in favor of the common commands and custom words at the Site or Group level. The redundant commands and custom words can either be deleted using the NMC console (by an administrator) or using the client application (by a provider).

Example Workflow - Importing common shared Text and Graphics/auto-texts and custom words

Pre-conditions:

 Customer has previously purchased and installed Dragon Medical Network Edition and is using the product.

After these steps, a provider logs into the client application (Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application) and has access to all "common" Text and Graphics/auto-texts and custom words.

- An administrator reviews common Text and Graphics/auto-texts and custom words that are already defined by examining the Text and Graphics/auto-texts and custom words that are defined in a typical Dragon user profile.
- 2. An administrator exports the common auto-texts and custom words from the client application into an XML export file.

- 3. An administrator imports the common auto-texts and custom words into the NMC console at the appropriate Site or Group level so they can be shared by multiple providers that use Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application.
- 4. An administrator defines any remaining common Text and Graphics/auto-texts and custom words at the Site or Group level using the NMC console.

Importing custom commands and custom words

An administrator may need to import a large number of commands and custom words to augment the standard vocabulary.

The NMC server determines the commands and custom words that a provider should receive; including Site, Group, and User level commands and custom words. The NMC server only returns the commands and custom words that the provider can access based on the provider's group and site membership.

Workflow - Importing custom Text and Graphics/auto-texts and custom words

- An administrator imports <u>a large number of auto-texts</u> and custom words at the Site / Group or User level using the cloud NMC console.
- 2. The NMC console marks these Text and Graphics/auto-texts and custom words as "batch", since they were loaded in an "en-masse" fashion.
- 3. Provider A logs into the client application (Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application).
- 4. The client application queries the NMC server for all available common "interactive" Text and Graphics/auto-texts and custom words.
- 5. The NMC server does not return any Text and Graphics/auto-texts and custom words because the large vocabulary was loaded in "batch" fashion.
- Running at a pre-scheduled time, the NMC server looks for all new "batch" custom Text and Graphics/auto-texts and custom words.
- 7. The NMC server returns a list of Text and Graphics/auto-texts and custom words that were imported by the administrator.

- 8. The NMC server adds these custom Text and Graphics/auto-texts and custom words to the profiles for all eligible providers
- 9. Provider A logs into the client application (Dragon, Dragon Medical Direct, or a Dragon Medical Server powered third party application).
- 10. The client application queries the NMC server for all available common "interactive" Text and Graphics/auto-texts and custom words.
- 11. The provider dictates one or more custom Text and Graphics/auto-texts and custom words that were added by the administrator.
- 12. The client application recognizes all "batch" custom Text and Graphics/auto-texts and custom words as they were added to their profile by the NMC server.

Importing vendor or third-party commands and custom words

Dragon Medical Network Edition has Third-party vendors / integrators that create productivity packages that contain proprietary commands and custom words. The NMC server and server based customization sharing provides an efficient way to distribute and manage third-party/vendor packages.

Example Workflow - Importing vendor or third-party Text and Graphics/auto-texts and custom words

Pre-Conditions:

- Customer has installed and configured Dragon Medical Network Edition
- Customer has purchased a customization package from Integrator-X
- An administrator imports auto-texts and custom words from a customization package into the NMC console at the Site or Group level.
- 2. The NMC server marks the imported Text and Graphics/auto-texts and custom words as "read-only" they cannot be modified or exported.

Viewing and modifying the data of step-by-step Speech Commands

An administrator can view and edit details for a step-by-step command provided the following is true:

- The command is not part of a command set.
- The command does not have the protected flag set.
- The command is not tagged as deleted.

Step-by-step commands that are part of a command set can be viewed provided the following is true:

- The command does not have the protected flag set.
- The command is not tagged as deleted.

For commands that are view only, the Save button is disabled.

The administrator performs one of the following actions:

- Right clicks a command and selects Details.
- Use the Details button on the NMC console ribbon.

The NMC console displays a view where the administrator can view the XML within a command, with the command body and Language field in a read-only mode. The administrator can modify the following properties of a command:

- Name
- Description
- Spoken Phrase
- Display String

The administrator can use the Meta Data tab to modify the meta data associated with the command.

Chapter 13: Working with Text and Graphics/auto-texts

This chapter describes how to work with and manage Text and Graphics/auto-texts.

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Overview of Text and Graphics/autotexts

This section provides general information about Text and Graphics/auto-texts.

The Text and Graphics/auto-texts feature enables you to define standard blocks of text (in Rich Text Format (RTF)) that your users can insert into their document with a short voice command. Text and Graphics/auto-texts often consists of one or more paragraphs, also called 'normals' or 'canned text'. Using Text and Graphics/auto-texts reduces the time the user needs to dictate and improves the consistency of documentation.

If the application that your users are using supports the Text and Graphics/auto-texts filtering feature, you can also specify that certain Text and Graphics/auto-texts should only be active for certain documents or forms.

Important: When defining Text and Graphics/auto-texts, it is strongly recommended that you give it a distinctive name that cannot be misinterpreted as speech to be recognized. This helps to ensure that the Text and Graphics/auto-texts is correctly inserted.

Text and Graphics/auto-texts enable a user to say a command that inserts text (in Rich Text Format (RTF)) into a form with multiple fields, a document in a text editor such as Microsoft Word, or a single line text field. The text can be plain text or formatted text. For this discussion, we refer to the inserted text or data as 'auto-text content'.

In the NMC console, an administrator creates Text and Graphics/auto-texts and associates each Text and Graphics/auto-texts with 'auto-text content'. After-wards, a user can say the name of the Text and Graphics/auto-texts to insert the associated 'auto-text content' at the cursor position. For example, an administrator creates Text and Graphics/auto-texts called "normal chest" and associates it with the text "PA and lateral views of the chest revealed a normal-sized heart." When a user says "insert", the associated text is inserted at the cursor location.

When an administrator creates Text and Graphics/auto-texts, they should choose a name for the Text and Graphics/auto-texts that is easy to remember; and pronounce, and that reflects the 'auto-text content' that is associated with the Text and Graphics/auto-texts.

For more information about how to use Text and Graphics/auto-texts, see your product's s user documentation.

Administrators associate Text and Graphics/auto-texts with sites, groups and users. If Text and Graphics/auto-texts with the same name exist on more than one level (site, group, or user) in an organization, the lower level settings override the higher level settings. For example, Text and Graphics/auto-texts settings at the user level override Text and Graphics/auto-texts settings at the group level.

Dragon Text and Graphics/auto-texts

Dragon stores Text and Graphics/auto-texts locally and synchronizes them with the NMC server.

Text and Graphics/auto-texts greater than 4 MB in size do not synchronize with the NMC server.

Only global Text and Graphics/auto-texts are synchronized; Text and Graphics/auto-texts for Application or Window are not synchronized

Dragon considers Text and Graphics/auto-texts as Global if they were created in the NMC console or another client application.

Valid characters and size limitations for Text and Graphics/auto-texts names and spoken forms

Valid characters for Text and Graphics/auto-texts names

The following are valid characters you can enter in the fields for Text and Graphics/auto-texts:

Name:

- all alpha characters.
- all numbers
- apostrophes
- periods
- hyphens
- opening and closing angle braces
- blank characters
- spaces

Description: all characters and blanks

Spoken Phrase: all spaces, periods, apostrophes, hyphens, numbers and letters.

Display String: all characters and blanks

Valid characters for Text and Graphics/auto-texts spoken forms

All characters and numbers, including blank characters, except for EMEA using the Speech Magic engine with Dragon Medical Server.

- spaces
- periods
- apostrophes
- hyphens
- numbers
- letters
- Underscores are not allowed.

Size limitations for Text and Graphics/auto-texts names

The following are the maximum lengths of fields for Text and Graphics/auto-texts and do not apply to other types of commands.

- Name: The maximum is 80 characters.
- **Description**: The maximum is 1024 characters.
- **Spoken Phrase**: The maximum is 150 characters plus an additional 50 characters for keywords.
- **Display String**: The maximum is 150 characters.

Defining Text and Graphics/autotexts

Scenario

- Your users are radiologists who frequently read chest x-rays. Most of these are normal and the doctors frequently say "PA and lateral views of the chest revealed a normal-sized heart. The lungs are clear of any active infiltrations".
- You define Text and Graphics/auto-texts called 'normal chest' that contains this information.
- A doctor says the voice command "auto-text normal chest" to insert the information.

Procedure

For more information on creating Text and Graphics/auto-texts, see <u>Creating an Text and Graphics</u>, see <u>Creating an Text and Graphics</u>.

Remarks about creating Text and Graphics/auto-texts

- To set the **Owner name** to the site that users are assigned to, click **Update Auto-text Level**; usually this will be the **Default Site** in the left folder panel, select the site.
- The **Name** field contains part of the voice command that users must say to insert the Text and Graphics/auto-texts; make sure it is unambiguous and easy to pronounce.

For example, you enter "normal chest" in the **Name** field; when a user says "auto-text normal chest" or "insert normal chest" the text 'PA and lateral views of the chest revealed a normal-sized heart. The lungs are clear of any active infiltrations.' is inserted into their document (the Text and Graphics/auto-texts name is not inserted into the document).

Adding and managing keywords for auto-texts

Overview of keywords for Text and Graphics/autotexts

A keyword for Text and Graphics/auto-texts consists of a leading keyword and trailing keyword.

The leading keyword is placed before the auto-text/Text-and-Graphic and the trailing keyword is placed after the auto-text/Text-and-Graphic.

For Text and Graphics/auto-texts created using the NMC console, Dragon Medical Direct, or Dragon Medical Server, the Text and Graphics/auto-texts automatically adds the leading keyword to the spoken form phrase. To use the auto-text/Text-and-graphic, end-users must say the leading keyword followed by the name of the auto-text/Text-and-graphic.

Notes:

The leading keyword and trailing keyword are optional.

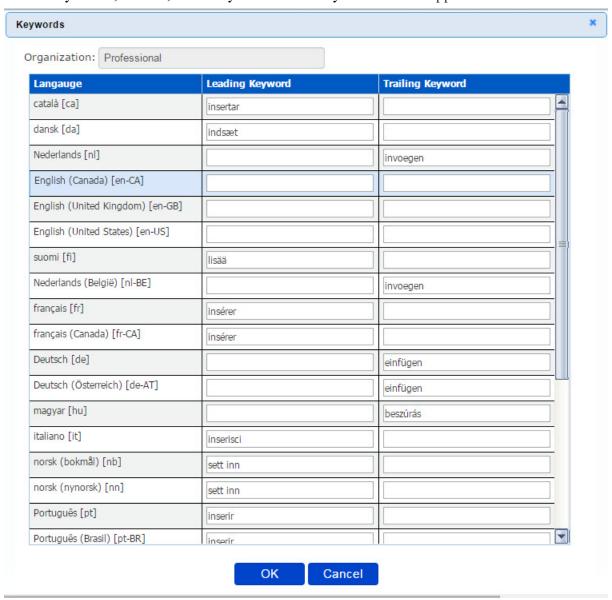
- Auto-texts created using the Dragon client (Dragon Medical Network Edition) do not get a leading keyword.
- If a leading keyword is configured for the language that is chosen when creating the Text and Graphics/auto-texts, the Text and Graphics/ auto-texts created using the NMC console, Dragon Medical Direct, or Dragon Medical Server, get a prefix.
- The NMC server stores keywords as part of the Text and Graphics/auto-texts.
- Text and Graphics/auto-texts only includes a keyword if it has been configured to include one.
- Editing Text and Graphics/auto-texts created using the NMC console or Dragon Medical Direct preserves the existing keywords.
- DM Network Edition ignores keywords. The Dragon client has the ability to alter, edit and remove the keywords for Text and Graphics/auto-texts. When Dragon sends the auto-text to the NMC server, the NMC server inserts the auto-text as is and does not add a keyword.
- You can create keywords in the NMC console and they appear as leading and trailing keywords when viewing auto-text in NMC console. In Dragon, you also see these same keywords but they just appear as part of the auto-text in Dragon.

- Updating organization keywords updates all Text and Graphics/auto-texts in the NMC server for the organization.
- The Text and Graphics/auto-texts automatically places keywords in the **Leading Keyword** and **Trailing Keyword** columns. The keyword values are not be editable in these columns.

Create keywords for an organization

Updating a keyword for a language, for an auto-text/Text-and-graphic, updates the keyword for all Text and Graphics/auto-texts in an organization for that language.

- 1. On the ribbon, click **Speech Recognition**.
- 2. In the **Keywords**, section, click **Keywords**. The **Keywords** screen appears.



- 3. In the **Leading Keyword** column, beside a particular language, enter a prefix. The maximum number of characters for a prefix is 25. The default value for US English is "insert".
- 4. Enter a postfix in the **Trailing Keyword** column. The maximum number of characters for a postfix is 25. The default value is "".
- 5. Click **OK**.

Change keywords for an organization

- 1. On the ribbon, click **Speech Recognition**.
- 2. In the **Keywords**, section, click **Keywords**.
- On the Keywords screen, edit one or more values in the Leading Keyword and/or the Trailing Keyword columns.
- 4. Click **OK**.

Searching for auto-texts that are associated with a site, group, or user

You must have the Speech Recognition – Manage Auto-texts right to perform the tasks in this topic.

- 1. In the NMC console, in the **Speech Recognition** section, click **Manage**. Use the 'Organization' drop-down list to filter the tree.
- In the window on the left-side of the Manage Auto-texts screen, click on the arrow beside Auto-texts.
- 3. Select the 'level' that you want to work with (Site, group, or user):
 - i. To work with all users in a site, select a site.
 - ii. To work with all users in a group, click on the arrow beside a site, select a group.
 - iii. To work with a specific user, click on the arrow beside a site, click on the arrow beside a group, select a user.
- 4. The NMC console displays the auto-texts that exist for the user level you select.
- 5. To view all the hierarchy levels that are associated with the auto-texts, click **Display all levels**.
- 6. To view auto-texts that have been disabled, click **Show disabled auto-texts**.
- 7. To view details about a specific auto-text, double-click the auto-text.

The Manage Auto-texts screen displays the following information about each auto-text:

- **Auto-text Name**: The name of the auto-text.
- **Spoken Phrase**: The spoken phrase for the auto-text. If there is more than one phrase for the auto-text, this column displays "{multiple}".
- **Language**: The language of the auto-text.
- Owner Type: The hierarchy level associated with the auto-text; one of site, group, or user.
- Owner Name: The name of the site, group, or user that is associated with the auto-text.
- **Description**: Information that describes the auto-text.
- Application Target: The name of the application associated with the auto-text. For example, "Microsoft Word".

- **Command Set**: The name of the Command Set that contains the auto-text.
- **Protected**: Whether the auto-text can or cannot be viewed in the NMC console.
- **Status**: The state of the auto-text.
- **Modified**: The last time the auto-text was modified.

Search for a specific auto-text, site, group, or user

You must have the Speech Recognition – Manage Auto-texts right to perform the tasks in this topic.

- In the NMC console, in the Speech Recognition section, click Manage. Use the 'Organization' drop-down list to filter the tree.
- 2. In the window on the left-side of the **Manage Auto-texts** screen, in the search field, enter search criteria. Search for auto-texts, sites, and groups by their name. Search for users by their login name. Search criteria must be at least 3 characters in length.
 - i. To search for a site, enter the name of the site.
 - ii. To search for a group, enter the name of the group.
 - iii. To search for a user, enter the login name of the user.
 - iv. To search for an auto-text, enter the name of the auto-text.
- 3. After you enter the search criteria, click **Search**.
- 4. The tree on the left-side of the **Manage Auto-texts** screen displays the search results under the 'Search Results' heading. The search results appear as follows, where x is the number of matched items for that object:
 - Sites (x)
 - Groups (x)
 - Users (x)
 - Auto-texts (x)
- 5. To view sites, groups, users, or auto-texts that matched the search criteria, under the 'Search Results' heading, expand the Sites, Groups, Users, or Auto-texts level.
- 6. To view the auto-texts that are associated with one of these expanded objects (Sites, Groups, Users), click on the object.
- 7. To view all the hierarchy levels that are associated with the auto-texts, click **Display all levels**.

- 8. To view auto-texts that have been disabled, click **Show disabled auto-texts**.
- 9. To view details about a specific auto-text in the search results, double-click the auto-text.

Viewing Text and Graphics/auto-texts details

If you have the "Product – Manage Dragon Medical Network Edition" right but do not have the "Product Manage Dragon Medical Server" right:

- The **Display String** column is not visible
- The **Auto-text** screen displays only one row DM Network Edition Text and Graphics/auto-texts can only have one spoken form.

If you have the "Product Manage Dragon Medical Server" right:

- -The **Auto-text** screen displays the **Display String** column
- -The **Auto-text** screen displays a grid that can contain up to five rows of spoken forms for an Text and Graphics/auto-texts and their display strings. Dragon Medical Server Text and Graphics/auto-texts can have up to five different spoken forms.

To view details about Text and Graphics/auto-texts, you must first search for the Text and Graphics/auto-texts.

- Search for Text and Graphics/auto-texts by performing the steps described in Searching for
 <u>Auto texts</u>. To view details about a specific Text and Graphics/auto-texts, perform one of the
 following actions:
 - In the search results, double click the name of the Text and Graphics/auto-texts in the
 Auto-text Name column.
 - In the search results, select the Text and Graphics/auto-texts. On the ribbon, in the Auto-texts section, click Details.

The NMC console displays the following information:

- Name: The name of the Text and Graphics/auto-texts.
- **Description**: Information that describes the Text and Graphics/auto-texts.
- Language: The language associated with the Text and Graphics/auto-texts. Enter an IETF language tag, for example, "en-US" for U.S English.

- leading keyword: A keyword that appears before an auto-text/Text-and-graphic. For details, see Adding and managing keywords for auto-texts.
- trailing keyword: A keyword that appears after an auto-text/Text-and-graphic. For details, see Adding and managing keywords for auto-texts.
- Spoken Phrase: The value from the Name field, minus any special characters. Dragon Medical Server recognizes spoken phrases as the spoken forms of the auto-text. For Dragon Medical Network Edition, the Auto-text screen only displays the single/primary spoken form for the auto-text/Text-and-Graphic.
- **Display String**: The text to display.

Note: If you have the "Product – Manage Dragon Medical Network Edition" right but do not have the "Product Manage Dragon Medical Server" right:

- The "Display String" column is not visible
- The Auto-text screen displays only one row DM Network Edition Text and Graphics/auto-texts can only have one spoken form.

You can modify characteristics of the Text and Graphics/auto-texts in the lower part of the **Auto-text** screen. See Editing Text and Graphics/auto-texts for details.

Creating Text and Graphics/autotexts

If you have the "Product – Manage Dragon Medical Network Edition" right but do not have the "Product Manage Dragon Medical Server" right:

■ The **Auto-text** screen displays only one row DM Network Edition Text and Graphics/auto-texts can only have one spoken form.

If you have the "Product Manage Dragon Medical Server" right:

- The **Auto-text** screen displays the **Display String** column.
- The **Auto-text** screen displays a grid that can contain up to five rows of hold spoken forms for each Text and Graphics/auto-texts and their display strings. Dragon Medical Server Text and Graphics/auto-texts can have up to five different spoken forms.

To create Text and Graphics/auto-texts, perform the following steps:

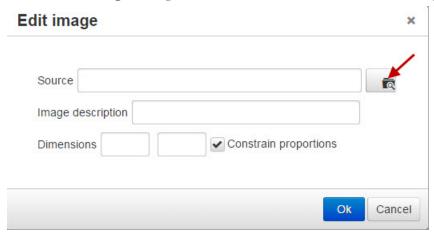
You must have the Speech Recognition – Manage Auto-texts right to perform the tasks in this topic.

- 1. In the NMC console, select **Speech Recognition**.
- 2. In the **Auto-texts** section, click **Manage**.
- 3. In the tree on the left-side of the screen, expand the **Auto-texts** section.
- 4. Select a site, group, or user.
- 5. In the **Speech Recognition** area, click **Add**.
- 6. In the **New Auto-text** screen, set the following fields:
 - Name: The name of the Text and Graphics/auto-texts. When the user says "insert" followed by the name of the Text and Graphics/auto-texts, the application inserts the Text and Graphics/auto-texts content at the current cursor position. In the Auto-text screen, the Text and Graphics/auto-texts content is the text in the field under the formatting bar. See Overview of Text and Graphics/auto-texts and your product's administrator documentation for details about how to define a good Text and Graphics/auto-texts name.

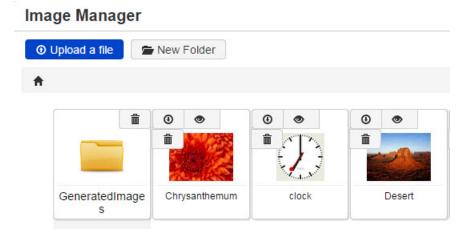
- Make sure you enter valid characters into this field. The NMC console
 removes special characters as they are entered into the field. For details, see
 Valid characters for Text and Graphics/auto-texts names and spoken forms.
- **Description**: Information that describes the Text and Graphics/auto-texts.
- Language: The language associated with the Text and Graphics/auto-texts. Enter an IETF language tag, for example, "en-US" for U.S English.
- 7. In the rich text field under the formatting buttons, enter the Text and Graphics/auto-texts content. You can add tables, audio files, .xls files, movie files, and images to Text and Graphics/auto-texts. For steps for adding an image, see Add an image to an Auto-text.
- 8. To set the format of the Text and Graphics/auto-texts as plain text, check the **Plain-text** option.
- 9. When you enter text in the Name field, the NMC console updates the Spoken Phrase field in the first grid row with the text, minus special characters. The NMC console automatically places the system prefix and postfix (if available) in the Leading Keyword and Trailing Keyword columns for the spoken phrase. For DM Network Edition only, the Auto-text screen only displays the single/primary spoken form for the auto-text/Text-and-Graphic.
 To add a spoken phrase for the Text and Graphics/auto-texts, you must have the Product Manage NSA right. Perform the following steps:
 - i. Click the plus sign on the left side of the grid. The NMC console adds a new row to the spoken phrase grid
 - ii. In the Spoken Phrase column, enter a phrase that the end user says to trigger the Text and Graphics/auto-texts. Dragon Medical Server supports multiple spoken phrases per autotext.
 - Make sure you enter valid characters into this field.
 - iii. (Optional) In the **Display String** column, enter text to display. This field can be blank.
- For Text and Graphics/auto-texts to be available to EPIC users on Cantu or Hiaku, perform the procedures in <u>Special information for EPIC users</u>.
- 11. Click **Save**. You can also click **Save & New** to save your changes and create new Text and Graphics/auto-texts. The **Save** and **Save & New** buttons are not enabled until at least one spoken phrase is added to the Text and Graphics/auto-texts.

Add an image to an Auto-text

- 1. Upload the image to the web server.
- 2. While adding or editing an Auto-text, on the menu above the content area, click the **Inser- t/edit image** button.
- 3. On the **Edit image** dialog-box, beside the **Source** field, click the **Upload image** folder.



4. In the Image Manager, click an image file.



- 5. To add an image file to the **Image Manager**:
 - i. Click **Upload a file**.
 - ii. In Windows Explorer, drag and drop an image file into the 'Drop files to upload' area.

 Or

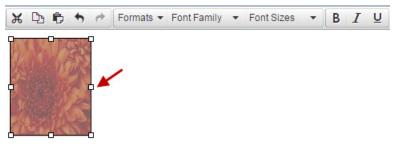
 Click on the text (or click), and in Windows Explorer, select the an image file, and cl

Click on the text (or click), and, in Windows Explorer, select the an image file, and click **Open**.

- 6. In the Image Manager, when you are finished selecting an image, click Return to files list.
- 7. (Optional) In the **Image description** field, enter a description for the image.
- 8. (Optional) In the **Dimensions** fields, enter the width and height (in pixels) of the image.
 If you want to link the width and height (changing one changes the other), select **Constrain proportions**.

If you want to be able to change the width and height separately, do not check **Constrain proportions**.

- 9. Click **OK**. The image appears in the rich-text field.
- 10. You can use the re-size handles to change the size of the image.



Editing Text and Graphics/auto-texts

If you have the "Product – Manage Dragon Medical Network Edition" right but do not have the "Product Manage Dragon Medical Server" right:

- The **Display String** column is not visible.
- The **Auto-text** screen displays only one row DM Network Edition. Text and Graphics/auto-texts can only have one spoken form.

If you have the "Product Manage Dragon Medical Server" right:

- The **Auto-text** screen displays the **Display String** column.
- The **Auto-text** screen displays a grid that can contain up to five rows of hold spoken forms for each Text and Graphics/auto-texts and their display strings. Dragon Medical Server Text and Graphics/auto-texts can have up to five different spoken forms.

Note: You cannot modify an auto-text that is linked to a Command Set. The **Delete**, **Cut**, **Copy**, and **Export** buttons are disabled in the NMC console.

To edit Text and Graphics/auto-texts, perform the following steps:

You must have the Speech Recognition – Manage Auto-texts right to perform the tasks in this topic.

- 1. In the NMC console, select **Speech Recognition**.
- 2. In the **Auto-texts** section, click **Manage**.
- 3. In the tree on the left-side of the screen, expand the **Auto-texts** section.
- 4. Double-click an auto-text.
- 5. Edit the fields on the screen. For more information about the fields, see <u>Creating auto-texts</u>.

Using Text and Graphics/auto-texts

Scenario

- A doctor is working on a form with the cursor in the **Impression** field.
- The doctor says "auto-text normal chest", the text you defined is inserted.
- The doctor has saved time and the information is written consistently every time.

Procedure

For more information on how to insert Text and Graphics/auto-texts, see your product's end user documentation.

Delete Text and Graphics or autotexts

You can delete Text and Graphics/auto-texts at the group, site, or user level.

To delete Text and Graphics/auto-texts

You must have the Speech Recognition – Manage Auto-texts right to perform the tasks in this topic.

- 1. Search for the Text and Graphics/auto-texts by performing the steps described in Searching for auto texts.
- 2. Select one or more Text and Graphics/auto-texts.
- 3. In the **Auto-texts** section of the ribbon, click **Delete**.
- 4. In the dialog-box, click **Yes**.

Cutting, copying, and pasting Text and Graphics/auto-texts or words

In Dragon Medical Network Edition, version 2.7, Dragon Medical Direct 1.4, and Dragon Medical Server, Text and Graphics/auto-texts and words are stored in the NMC server and can be shared between healthcare products.

An administrator can use the NMC console to copy or cut and then paste Text and Graphics/auto-texts and words from one level (user, group, or site) to another level.

Notes:

You cannot cut and paste Text and Graphics/auto-texts and words into a new level if:

- Text and Graphics/auto-texts and words with the same name already exist there.
- The spoken phrase of the Text and Graphics/auto-text or word are the same as the spoken phrase of the Text and Graphics/auto-texts or word in the paste location.

In the above two cases, the **Cut** button is grayed out/disabled and the source Text and Graphics/auto-texts and words are not deleted.

■ If you select Text and Graphics/auto-texts or words, click **Cut**, and proceed to modify or delete the Text and Graphics/auto-text or words, none of these actions are taken into account by the cut operation. The cut Text and Graphics/auto-texts or words do not reflect any of these operations.

You cannot copy and paste Text and Graphics/auto-texts or words into a new level if:

- Text and Graphics/auto-texts or words with the same name already exist there.
- The spoken phrase of the Text and Graphics/auto-text or words are the same as the spoken phrase of the Text and Graphics/auto-texts or words in the paste location.

In the above two cases, the **Copy** button is grayed out/disabled and the source Text and Graphics/auto-texts or words are not copied.

■ If you select Text and Graphics/auto-texts or words, click **Copy**, and proceed to modify or delete the Text and Graphics/auto-texts or words, none of these actions are taken into account

by the copy operation. The copied Text and Graphics/auto-texts or words do not reflect any of these operations.

Cutting or copying and pasting Text and Graphics/auto-texts or words

You must have the Speech Recognition – Manage Auto-texts right to perform the tasks in this topic.

- Use the NMC console to create one or more Text and Graphics/auto-texts or words. The Text
 and Graphics/auto-texts or words are saved to the NMC server.
- Use the Manage Auto-texts screen or Manage Words screen to view and select one or more
 Text and Graphics/auto-texts or words.
- 3. On the ribbon, in the Auto-texts area or the Words area, click Cut or Copy. You can also right-click the Text and Graphics/auto-texts or words and select Cut or Copy. The NMC console stores the list of Text and Graphics/auto-texts and words selected for the cut operations.
- 4. Use the tree on the left of the screen to select a new location for the Text and Graphics/auto-texts or words.
- 5. On the ribbon, in the **Auto-texts** area or the **Words** area, click **Paste** or right-click the Text and Graphics/auto-texts or words and select **Paste**.
- 6. In the Paste auto-texts dialog-box, click Yes.
- 7. In the **Auto-text Paste Results** dialog box, click **OK**.

The NMC console cuts or copies the selected Text and Graphics/auto-texts or words from the source level to the target level. If this is a cut operation, the Text and Graphics/auto-texts or words are removed from the source level. If this is a copy operation, the Text and Graphics/auto-texts or words are retained at the source level.

Importing or exporting Text and Graphics/auto-text

In the NMC console, you can import and export Text and Graphics/auto-texts using an XML schema based file.

Import Text and Graphics/auto-texts

Note: You can only import an auto-text if it is part of a Command Set.

You must have the Speech Recognition – Manage Auto-texts right to perform the tasks in this topic.

To import a list of Text and Graphics/ auto-texts from an XML file, perform the following steps:

- 1. In the NMC console, select the **Speech Recognition** tab.
- 2. In the tree on the left-side of the screen, expand the **Auto-texts** section.
- 3. Select a site, group, or user.
- 4. In the ribbon, click **Import**.
- 5. On the **File To Import** screen:
 - i. To import auto-texts information exported from Dragon, select **Dragon Format (XML)**.
 - ii. To import auto-texts information exported from the NMC console, select **Nuance Management Server format (XML)**.
 - iii. Click Choose file and select an XML file that contains the auto-texts information.
 - iv. Click Open.
 - v. Click **Next**.
- 6. On the **Auto-Texts to Import** screen, select the auto-texts to import.
- 7. Click Next.
- 8. If you chose **Nuance Management Server format (XML)**, and the XML file contains the object level for each record in the file, on the **Level** screen:
 - i. To use the auto-text level information from the XML file, choose the first option.
 - ii. To manually specify the auto-text level, select the second option and choose one of: Site, Group, or User.

- 9. If you chose **Nuance Management Server format (XML)** in step 3, and the XML file does not contains the object level for each record in the file, on the **Level** screen, choose the second option, and choose one of: Site, Group, or User.
- 10. Click Next.
- 11. On the **Ready to Import** screen, click **Next**.
- 12. On the **Performing Import** screen, when the progress bar is full, click **Next**.
- 13. On the **Import Results** screen, verify the information.
- 14. Click Finish.

Export Text and Graphics/auto-texts

You must have the Speech Recognition – Manage Auto-texts right to perform the tasks in this topic.

To export a list of Text and Graphics/auto-texts to an XML file, perform the following steps:

- Search for Text and Graphics/auto-texts by performing the steps described in <u>Searching for</u> auto texts.
- Select one or more Text and Graphics/auto-texts.
- 3. On the ribbon, click **Export**.
- 4. On the **Export Auto-texts** dialog-box, click **Export**.
- On the Export Auto-text dialog-box, click Download. The NMC console saves the file with the following file-name: exportedAutoTexts_<YYYYMMDD>.xml.
- 6. On the **Export Auto-texts** dialog-box, click **Close**.

Chapter 14: Working with custom words

This chapter describes how to work with and manage custom words.

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Overview of custom words

NMC server provides support for custom words for multiple Nuance products, including Dragon Medical Network Edition, Dragon Medical Direct, or a Dragon Medical Serverpowered third party application). The client applications for these products obtain custom words from the NMC server and add them to an end-user's vocabulary.

Words are associated with users and are added to all user vocabularies.

Like with auto-texts, custom words must be unique in each level (Site, Group, User) in the NMC server. For example, word X can exist at the Site level and at the Group level, but only one instance of word X can exist at each level.

An administrator can delete words but not necessarily for large quantities.

The Dragon client and words

The Dragon client allows users to create and manage words. Users can create words by specifying the written and spoken forms of a word in the word browser or by importing words.

Users use the vocabulary editor to set word properties or train words. As well, the **Words** menu on the DragonBar provides many options for working with words.

For details, see the Dragon Help.

Using the Word sharing feature instead of the DDT when upgrading to DM Network Edition 2.1 or higher

In DM Network Edition, version 2.1 or higher, you use the word sharing feature instead of the Data Distribution Tool (DDT) to share custom words across your organization.

If your organization has used the DDT to share custom words, before you upgrade to DM Network Edition 2.1, you should <u>import these DDT custom words</u> into the NMC server. This can prevent the NMC server from unnecessarily sharing custom words to a user's vocabulary. Sharing a large number of custom words can delay the loading of a user's profile and thus slow down the log in process.

It is important that the end-user save the profile after word sharing occurs. This action prevents the word sharing process from repeating unnecessarily in the future and ensures log in delays only occur once per vocabulary for each word added or deleted.

Neglecting to save a profile after the word sharing process will result in the words sharing process having to occur again the next time the vocabulary is loaded.

Searching for custom words

You must have the Product Manage Dragon Medical Network Edition privilege or the Product Manage Dragon Medical Server privilege to perform the tasks in this topic.

- 1. In the NMC console, in the **Speech Recognition** section, click **Manage**. Use the 'Organization' drop-down list to filter the tree.
- In the window on the left-side of the Manage Auto-texts screen, click on the arrow beside Words.
- 3. Select the 'level' that you want to work with (Site, group, or user):
 - i. To work with all users in a site, select a site.
 - ii. To work with all users in a group, click on the arrow beside a site, select a group.
 - iii. To work with a specific user, click on the arrow beside a site, click on the arrow beside a group, select a user.
- 4. The NMC console displays the words that exist for the user level you select.
- 5. To view all the hierarchy levels that are associated with the words, click **Display all levels**.
- 6. To view words that have been disabled, click **Show disabled words**.
- 7. To view words that have been deleted, click **Show deleted words**.
- 8. To view details about a specific word, double-click the word.

The right side of the **Manage Words** screen displays the following information about each word:

- **Written Form**: The text description for the word.
- **Spoken Form**: The phrase that a user speaks to apply the word.
- **Language**: The language that is associated with the word.
- Owner Type: The hierarchy level associated with the word; one of site, group, or user.
- Owner Name: The name of the site, group, or user that is associated with the word.
- **Status**: The state of the word.
- Modified: The last time the word was modified.
- **Batch**: Indicates if the word was processed by a batch process or interactively.

Search for a specific word, site, group, or user

You must have the Product Manage Dragon Medical Network Edition privilege or the Product Manage Dragon Medical Server privilege to perform the tasks in this topic.

- 1. In the NMC console, in the **Speech Recognition** section, click **Manage**. Use the 'Organization' drop-down list to filter the tree.
- 2. In the tree on the left-side of the screen, click the arrow that appears to the left of **Words**.
- 3. In the search field, enter search criteria. Search for words, sites, and groups by their name. Search for users by their login name. Search criteria must be at least 3 characters in length.
 - i. To search for a site, enter the name of the site.
 - ii. To search for a group, enter the name of the group.
 - iii. To search for a user, enter the login name of the user.
 - iv. To search for a word, enter the name of the word.
- 4. After you enter the search criteria, click **Search**.
- 5. The tree on the left-side of the **Manage Words** screen displays the search results under the 'Search Results' heading. The search results appear as follows, where x is the number of matched items for that object:
 - Sites (x)
 - Groups (x)
 - Users (x)
 - Words (x)
- 6. To view sites, groups, users, or words that matched the search criteria, under the 'Search Results' heading, expand the Sites, Groups, Users, or Words level.
- 7. To view the words that are associated with one of these expanded objects (Sites, Groups, Users), click on the object.
- 8. To view all the hierarchy levels that are associated with the words, click **Display all levels**.
- 9. To view words that have been disabled, click **Show disabled words**.
- 10. To view words that have been deleted, click **Show deleted words**.
- 11. To view details about a specific word in the search results, double-click the word.

Re-synchronize words between a Dragon User Profile and the NMC server

In Dragon Medical Network Edition, an administrator may need to re-synchronize custom words between the NMC server and a user profile after:

- Importing profiles
- Exporting profiles
- Associating a user profile using the Profile Association tool
- An end-user works off-line with a local profile
- A user profile is restored Automatically by the NMC server Backup/Restore feature.
- User profile corruption issues
- DM Network Edition fails while writing data to a user profile

Re-synchronization examines all custom words in a user profile that are not stored in the NMC server and upload those words to the NMC server.

Re-synchronization also looks at all custom words in the NMC server that do not exist in the user profile and adds them to the profile.

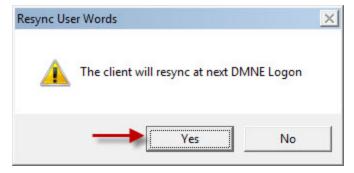
You must have the "Dragon – Resync user words" role to perform the following steps.

The "Dragon – Resync user words" role is part of the NMC Administrators role and granted to all NMC administrators that currently have the "Manage Dragon Medical Network Edition" right.

You must have the Product Manage Dragon Medical Network Edition privilege or the Product Manage Dragon Medical Server privilege to perform the tasks in this topic.

- 1. In the NMC console, select **Speech Recognition**.
- 2. In the **Auto-texts** section, click **Manage**.
- 3. Find and select a user by performing the steps in Searching for custom words.
- 4. Right-click the user and select **Resync User Words**.

5. The NMC console displays the **Resync User Words** dialog box dialog. Click **Yes**.



Creating custom words

Both the written form and the spoken form of a word:

- are case sensitive
- can only contain one consecutive space

You must have the Product Manage Dragon Medical Network Edition privilege or the Product Manage Dragon Medical Server privilege to perform the tasks in this topic.

- 1. In the NMC console, select **Speech Recognition**.
- 2. In the **Auto-texts** section, click **Manage**.
- 3. Find and select a site, group, or user by performing the steps in Searching for custom words.
- 4. In the Speech Recognition section, in the Words section, click Add. If you selected a site, the NMC console adds the word to that site. If you selected a group, the NMC console adds the word to the Group.
- 5. On the **Word** screen, set the following fields:
 - Written Form: The text version of the word.
 - **Spoken Form**: The phrase that a user speaks to apply the word.
 - Language: The language associated with the word. Enter an IETF language tag, for example, "en-US" for U.S English.
- 6. To save the new word, click Save or Save & New.

Delete or enable custom words

You must have the Product Manage Dragon Medical Network Edition privilege or the Product Manage Dragon Medical Server privilege to perform the tasks in this topic.

- 1. In the NMC console, select **Speech Recognition**.
- 2. In the **Auto-texts** section, click **Manage**.
- 3. Find and select a site, group, or user by performing the steps in <u>Searching for custom words</u>.
- 4. In the search results area, select a word.
- 5. Perform one of the following actions:
 - i. To delete the word, in the **Word** section, click **Delete**.
 - ii. To enable the word, right-click the word and select **Enable Word**.
- 6. In the dialog-box, click **Yes**.

Importing or exporting custom words

In the NMC console, you can import and export words using a TXT file with:

For individual words: each word on a separate line.

For phrases: multiple words on each line. For example, "Pittsburgh Press".

For spoken forms: the word followed by a backslash and the spoken form. For example, "John Doe/jdoe"

Import words

You must have the Product Manage Dragon Medical Network Edition privilege or the Product Manage Dragon Medical Server privilege to perform the tasks in this topic.

To import a list of words from a text file, perform the following steps:

- 1. In the NMC console, select the **Speech Recognition** tab.
- 2. In the tree on the left-side of the screen, select **Words**.
- 3. On the ribbon, in the **Words** section, select **Import**.
- 4. On the File To Import screen, click Choose file.
- 5. Select a text file to import.
- Click Open.
- 7. Click Next.
- 8. On the **Words to Import** screen, select the word(s) to import.
- 9. Click **Next**.
- 10. On the **Level** screen, choose a level for the imported words: Site, Group, or User.
- 11. In the drop-down list beside the level you selected, choose a specific site, group, or user to associate with the imported words.
- 12. Click Next.
- 13. On the **Language** screen, in the **Language** drop-down list, select a language for the imported words.
- 14. Click Next.

- 15. On the **Ready to Import** screen, click **Next**. The NMC console imports the words. The words are tagged as batch words. The progress bar on the **Performing Import** screen displays the status of the import action.
- 16. When the screen displays 'Speech words import successfully completed'. click **Next** to view the import results.
- 17. After you view the import results, click **Finish**.

Export words

You must have the Product Manage Dragon Medical Network Edition privilege or the Product Manage Dragon Medical Server privilege to perform the tasks in this topic.

To export a list of words to a text file, perform the following steps:

- 1. Find and select one or more words by performing the steps in Searching for custom words.
- 2. On the ribbon, in the **Words** section, select **Export**.
- 3. In the **Export Words** dialog, select a location to save the file.
- 4. Click **Export**. The NMC console saves the file with the following filename: exportedWords_<YYYYMMDD>.txt.
- 5. When the **Export Words** dialog displays "Export successful", click **Close**.

Chapter 15: Working with Command Sets

This chapter describes how to work with and manage command sets.

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Working with Command Sets

The Data Distribution tool is now replaced by Command Sets.

A command set is a collection of voice commands and lists:

- Voice Commands
 - Text and Graphics/auto-texts (from mycmds.dat), DragonTemplates
 - Step by Step commands
 - Macro Recorder commands
 - Advanced Scripting commands
 - DVCKeys
 - DVCscript
- Lists
 - All the above commands that include lists

The NMC server stores these objects at the site and group levels.

Text and Graphics/auto-texts commands contained in command sets are not shared between the NMC server and the Dragon client.

Objects that are part of a Command Set cannot be modified or deleted individually. However, you can delete a Command Set. This action deletes all the objects that are associated with the Command Set.

Auto-texts and Commands that are tagged as protected in a .DAT/.XML file cannot be exported or be viewed in the NMC console.

Command sets at the group level override command sets at the site level. For example, say we have Site 1 that contains Group X. Site 1 contains command set 'A'. Group X also contains a command set called 'A'. When a user that is a member of Group X logs into DM Network Edition, they receive and can use the group level command set 'A'.

The actions an administrator can perform with command sets are similar to the actions available for auto-texts and words.

Advantages of using Command Sets instead of creating Auto-text commands in the NMC console

To distribute commands to users, you have two options:

- Place commands into a Command set and apply the set to a site or group
- Create individual commands and apply them to a site, group or user

The first time a user logs into Dragon through the Dragon client, the client interacts with the NMC server to process and share commands or command sets with the user.

If individual commands were created by an administrator in the NMC console, and there hundreds of these commands, the user login process may take longer than expected.

To share a set of commands, consider placing commands into Command Sets.

The NMC server processes and shares Command sets faster than individual commands. This will speed up the user login time.

Advantages of using Command Sets instead of the Dragon Data Distribution Tool

The Data Distribution Tool in the Dragon client and Command Sets use command .dat files to distribute commands to end-users. However, there are advantages of using Command Sets instead of the Data Distribution Tool

Command files created using the Data Distribution Tool are placed in a specific directory, typically a network location that is 'unmanaged'. When an end-user logs into DM Network Edition, Data Distribution Tool downloads the files to the DM Network Edition system.

Command Set files are command files that are created, uploaded and managed in NMC console. They can be assigned to sites and groups, and updated, and removed from a central database managed from the NMC console.

After logging in to the NMC console, the set of assigned files are downloaded to the DMNE client and placed in the user's profile but they are kept separate from custom commands. The files

and the commands within them can be updated and removed, as needed, without affecting the custom commands.

The main drawback to the DDT workflow is that once completed, all of the commands are now part of the user's custom commands (MyCommands) and it is difficult to manage these commands or remove these commands at a later time without manually deleting them from the user's profile.

Searching for Command Sets

You must have the Speech Recognition – Manage Speech Command Sets right to perform the tasks in this topic.

- 1. In the NMC console, in the **Speech Recognition** section, click **Manage**. Use the 'Organization' drop-down list to filter the tree.
- In the window on the left-side of the Manage Auto-texts screen, click on the arrow beside Command Sets.
- 3. Select the 'level' that you want to work with (Site, group, or user):
 - i. To work with all users in a site, select a site.
 - ii. To work with all users in a group, click on the arrow beside a site, select a group.
 - iii. To work with a specific user, click on the arrow beside a site, click on the arrow beside a group, select a user.
- 4. The NMC console displays the command sets that exist for the user level you select.
- 5. To view all the hierarchy levels that are associated with the words, click **Display all levels**.
- 6. To view details about a specific command sets, double-click the command sets.

The right side of the **Manage Command Sets** screen displays the following information about each command set:

- Command Set Name: The name of the Command Set.
- Language: The language associated with the Command Set.
- Owner Type: The hierarchy level associated with the Command Set; one of site or group.
- Owner Name: The name of the site or group that is associated with the Command Set.
- **Description**: Information that describes the Command Set.
- Modified: The last time the Command Set was modified.

Search for a specific command set, site, group, or user

You must have the Speech Recognition – Manage Speech Command Sets right to perform the tasks in this topic.

- 1. In the NMC console, in the **Speech Recognition** section, click **Manage**. Use the 'Organization' drop-down list to filter the tree.
- 2. In the tree on the left-side of the screen, click the arrow that appears to the left of **Command Sets**.
- 3. In the search field, enter search criteria. Search for command sets, sites, and groups by their name. Search for users by their login name. Search criteria must be at least 3 characters in length.
 - i. To search for a site, enter the name of the site.
 - ii. To search for a group, enter the name of the group.
 - iii. To search for a user, enter the login name of the user.
 - iv. To search for a command sets, enter the name of the command sets.
- 4. After you enter the search criteria, click **Search**.
- 5. The tree on the left-side of the **Manage Command Sets** screen displays the search results under the 'Search Results' heading. The search results appear as follows, where x is the number of matched items for that object:
 - Sites (x)
 - Groups (x)
 - Users (x)
 - Command Sets (x)
- 6. To view sites, groups, users, or command sets that matched the search criteria, under the 'Search Results' heading, expand the Sites, Groups, Users, or Command Sets level.
- 7. To view the command sets that are associated with one of these expanded objects (Sites, Groups, Users), click on the object.
- 8. To view all the hierarchy levels that are associated with the command sets, click **Display all** levels.
- 9. To view details about a specific command set in the search results, double-click the command set.

Viewing Command Set details in the NMC console

Perform the steps described in Searching for Command Sets.

Considerations before creating or importing commands or command sets

Recommended naming conventions for a command set

When you create a command set, give the command set a descriptive name that indicates the organization, group, application, or department it is meant for:

OrgID_Department_App_Commands

Where:

- --OrgID is the organization ID for the overall organization
- --Department is the specific department the Command Set is meant for
- --App is the application that the commands apply to.

For example: 123456_Radiology_EMR_Commands

Recommended naming conventions for a list

When you create a new list, give it a name that is specific to its deployment context.

During a DM Network Edition dictation session, active command set commands, custom commands, and built-in commands are loaded into memory.

For commands with lists, if two lists have the same name but are from different command sets, then they could potentially conflict. To minimize list name conflicts, it is recommended that lists within each command set have their own prefix or extension.

The complexity of the prefix or extension depends on the context of the intended deployment and parent command set.

Recommended naming conventions for a command

Check for naming conflicts between commands and especially conflicts between lists used by commands, both in the name of the lists and the contents of the lists.

Try to make command names very unique and specific, especially if they are likely to conflict with other commands.

To avoid conflicts between Command Sets and with custom and built-in commands, it is important that the name (and spoken form) of the command be different from other commands that are at the same availability level (global, application-specific, window-specific).

Try to avoid generic command names, especially for global commands where the chance of unintended conflicts is higher.

Cross-Department Commands and Lists

You should add a short organizational ID for all lists within the intended organization, including 'global' commands and commands that are for applications and windows that are available for multiple (or all) departments\groups.

For example:

mgh_referral_source

In this case, 'mgh' is the organization id and 'referral_source' is the root name of the list.

Department-specific commands and lists

For command set lists that are unique to specific departments or groups within the organization, you should add an additional ID to minimize conflicts between the groups.

For example:

mgh_rad_position

In this case, 'rad' is the department and 'position' is the root name of the list.

Application-specific commands and lists

For lists that are intended for specific applications, you should add an ID for that application to minimize conflicts between applications.

For example:

mgh_rad_ehr_function

In this case 'ehr' (i.e. - 'electronic health record') could be the prefix for a specific EHR system used at the organization and 'function' is a list of specific functions to access in that EHR.

Update existing Command Sets instead of creating new ones

Before you create a new Command Set, consider adding the new commands to an existing Command Set.

This is especially recommended if:

- you need to add new commands for users
- the commands are logically related.
- the commands use the same lists.

This can help minimize the occurrence of list conflicts. The lists in different Command Sets should hopefully have different names and contents.

How conflicts between commands are identified and displayed

Conflict Checking in the Dragon client when loading Command Sets

The commands can conflict by having the same name and availability or by using a conflicting list name. The contents of a command (For example, steps or text) do not have to be the same to cause a conflict. Commands that are identical to Command Set commands (name, availability, type, and contents) can be identified using the 'Purge Identical MyCommands' tool in the Dragon Client. For details, see the Dragon Help.

When comparing commands from different command sets or with MyCommands, the names of lists used by the command are ignored so that the keywords and 'signature' of the command are compared. This avoids conflicts in cases where the only difference is the values within the lists, which could have conflicting values and unintended results when loaded into the vocabulary. This comparison is performed because list-value-level conflicts can be expensive to determine, and this type of conflict detection is currently not supported.

Example 1:

CmdSet1: Do this < list1 > then < list2 >

CmdSet2: Do this < list3> then < list4>

CmdSet3: Do this then

CmdSet4: Do this

Dragon treats the commands as follows when comparing across Command Sets:

CmdSet1: Do this <> then <>

CmdSet2: Do this <> then <> // Conflicts with CmdSet1 command

CmdSet3: Do this then

CmdSet4: Do this

In this case, the command in CmdSet2 conflicts with the CmdSet1 command because the only dif-

ference is the name of the lists.

If the first two commands were defined in the SAME command set then this restriction would be

loosened, as the chances for an unintended conflict are lower.

The goal is to avoid unexpected results when commands from different command sets (including

MyCmds) end up resulting in the same spoken form in the vocabulary due to conflicting list val-

ues.

To avoid these problems the commands and lists from each command set need to be distinct, as

much as possible.

Example 2:

An important exception to the above comparison rules is the case when the commands are list-

only, and have no other keywords. For example:

CmdSet1: <list5> <list6>

CmdSet2: <list7> <list8>

CmdSet3: <list5> <list6>

These commands have no keywords other than the list values themselves. If the list names are

eliminated the command signatures would look like this:

CmdSet1: <> <>

CmdSet2: <> <>

CmdSet3: <> <>

In this case, all of the two-list-only commands would look exactly the same and there is no other

context to differentiate them, other than comparing the list values.

We do not want to consider all commands with this pattern to be in-conflict, so a direct com-

parison with the list names is performed.

Example 3:

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Commands with different list names are not considered to be in conflict as long as the remaining spoken form of the command does not match another command in a previously loaded command set or in MyCommands (have the same 'signature'). However, the resulting commands in the vocabulary could conflict at the list-value-level with unpredictable results.

So in the above case, the commands are treated as follows:

CmdSet1: <list5> <list6> // Loaded first. No Conflict.

CmdSet2: list7> // Differs from CmdSet1, so no conflict.

CmdSet3: Slist5> Conflicts with command from CmdSet1

The command in CmdSet3 conflicts with the previously loaded command from CmdSet1, so there is a conflict and the command is treated as Not Active.

Conflict checking sequence for Command Sets

The following is the typical conflict checking sequence performed for Command Set commands:

- 1. As each Command Set is loaded (in alphabetical order), the commands and lists in the currently loading Command Set are compared against previously loaded commands and lists.
- Commands with the same name and availability (Global, Application, Window) conflict as will commands that use a list with the same name as a list that is from a different, previously loaded, Command Set.
- 3. If a conflict is detected, the commands that are in-conflict are marked as 'not active' and are not loaded into the vocabulary. The first command loaded with the same name/availability is the 'active' one.
- 4. Once all of the Command Set commands are loaded into the 'Master Command Set', the entire collection of commands is then compared to any custom commands that are defined in MyCommands (MyCmds.dat). If there is a conflict, the command in MyCommands is treated as the active command.

Custom commands in MyCommands override any conflicting commands and lists from the command sets.

Conflict Detection during a Session

If changes are made to custom commands (MyCommands) during a user session, the commands in the 'Master Command Set' collection are reevaluated to determine if the active state of any of the commands should change.

If a new command conflicts with commands in the Command Sets, then those Command Set commands become inactive.

If a command is removed from MyCommands, it is possible for Command Set commands to become active without requiring the end-user to log in again. An exception to this is that deleting a command that uses a list that is conflicting with Command Sets does not immediately remove the list from the vocabulary, even if the deleted command is the last command to use the list. In this case the unused list is removed when MyCommands is reloaded the next time the end-user logs in.

Command Sets 'New Copy' and Avoiding Command and List Conflicts

One way to create a custom command is to use 'New Copy' on an existing Command Set command from within the Command Set view of the Command Browser (Dragon client). It is important to remember that the custom command that is created may now conflict with an existing command in the Command Sets and cause a previously active Command Set command to become not active.

Make sure to give the new command a name that does not conflict with existing Command Set commands. If you are copying a command that uses lists you need to rename the lists to something other than a name of an active Command Set list or the copied list will conflict with the Command Set list and cause commands to become inactive.

Removing duplicate custom commands

In the Dragon client, the **Purge Identical MyCommands** feature finds and deletes duplicate custom commands that are also available in the loaded Command Sets.

To access this feature, a user must have at least one command set loaded on their Dragon workstation. Otherwise, the **Purge Identical MyCommands** menu item is disabled.

For details including step-by-step instructions, see 'Purging identical MyCommands in the Dragon client' in the Dragon Help.

Viewing information about Command and Command Set conflicts

When loading command sets, commands that are found to be in-conflict are marked as not active and are not be loaded into the vocabulary. You can view information about the conflicts in two places:

- The Command Browser 'Active' column
- The Dragon log

The Command Browser 'Active' column

In the Command Browser, the Command Sets' View/Mode has columns that display the 'Command Set' for the command that was loaded and an Active column that displays the status of the command (active or not active). In addition to the 'Yes' or 'No' value, if you hover the mouse cursor over the Active column of a command that displays 'No', Dragon displays a tool tip that contains information about the conflict.

- Command Conflict information displays when there is another command with the same name and availability in a previously loaded Command Set or in MyCommands (MyCmds.dat).
- List Conflict information displays when the command uses a list that has the same name as a list in a previously loaded Command Set or in MyCommands (MyCmds.dat).

One or both conflict types can occur for a command.

Example 1: A command conflicts with one other command

Active: No

Command Conflict: LP Note Commands.dat

The first line Active: No', means that there is a conflict and the command is not active in the current vocabulary.

The second line 'Command Conflict: LP Note Commands.dat' means that a command with the same name and availability was already defined in a previously loaded command set 'LP Note Commands.dat'.

Example 2: A command conflicts with more than one command

In the case of a conflict with more than one Command Set, multiple Command Set conflicts are displayed:

Active: No

Command Conflict: LP Note Commands.dat, MyCmds.dat

The first line 'Active: No', means that there is a conflict and the command is not active in the current vocabulary.

The second line 'Command Conflict: LP Note Commands.dat, MyCmds.dat', means that a command with the same name and availability was already defined in the previously loaded command set 'LP Note Commands.dat', as in the first case, and is also defined in 'MyCmds.dat' (MyCommands).

The Dragon Log

The Dragon.log file contains information about conflicts encountered during Command Set loading during DM Network Edition user login. The Dragon.log file is located in the current Windows User folder.

For example:

Log Entries prefixed with '[Command Sets]' show command set file loading information and '<Command Conflict>' and '<List Conflict>' warnings for conflicts that occurred. This data can be used to troubleshoot conflicts between Command Sets and also with custom commands (MyCommands).

Creating Command Sets In the Dragon Client

Note: You, the administrator, perform the steps in this topic in the Dragon client. However, if an end-user has useful commands that would be useful to others, you may ask the end-user to export those commands to a .dat file. The end-user's .dat file can then be imported to your profile and combined with other commands to create the final Command Set file or can be used as a Command Set file itself, if deemed appropriate.

Command Sets are groups of custom commands that you, the administrator, can upload to the NMC server for distribution to multiple users. You cannot edit existing command sets in the Dragon client, but you can create new ones by exporting commands to a .dat file that you later use to create a new Command Set.

You must also determine:

- The commands that will go into a new Command Set.
- The name the Command Set.
- The commands to add to the Command Set.
- The directory to export those commands to.

A Command Set is created by exporting selected commands from a group of custom commands that are contained in a user profile. This user profile is typically a profile created specifically for administrative reasons to avoid altering a non-administrator's user profile and also to minimize end-user command conflicts once the Command Set is deployed. The commands for a Command Set can be created by importing existing commands, creating new commands in the Command Browser, or by copying a command from an existing Command Set. See "Creating new commands in the Command Browser" in the Dragon Help for instructions on how to create custom commands.

To create a Command Set .dat File

 Open the Command Browser (say "Command Browser" or click Command Browser on the Tools menu of the DragonBar).

- Select Mode > Manage from the Command Browser menu bar. A list of available commands
 appears.
- 3. Create any commands that you need to be in the Command Set that do not already exist in the list of available commands (via import, create, edit, or copy).
- 4. Select the commands that you want to be in the Command Set.
- Click the Export button, located in the Task pane. The Export Commands dialog box appears.
- Use the Export Commands dialog to browse to the directory that you will export the commands to.
- 7. Enter the name of the Command Set in the **Name** field.
- 8. Click **Save** to save the Command Set.

Note: If a Command Set contains commands with the same names and availability as commands that an end user created or copied on his local machine, or if the Command Set contains commands that have lists in them, and those lists have the same name as lists contained in custom commands that an end user created on his local machine, this will cause a conflict.

In this case, the version of the command that the end user created takes precedence over the version in the Command Set, and the Command Set version will be inactive. For more details, see "Organizing Command Sets by Availability" in "Viewing Command Sets in the Dragon Client" in the Dragon Help.

If the user's custom commands contains commands that are exactly the same as commands available in Command Sets, these duplicate commands can be deleted using the Purge Identical MyCommands feature. For more details, see "Purging Identical MyCommands" in the Dragon Help.

Adding Command Sets in the NMC console

When you import a Command Set, the commands contained within the Command Set (auto-text, step by step, advanced scripting) are linked to that Command Set.

When you import a Command Set at a particular level, the NMC server stores the objects that are associated with the set at that same level. For example, if you import a Command Set at the Site level, the NMC server stores the objects in that Command Set at the Site level.

When you import a Command Set, if a command name contains angle brackets (e.g. "insert normal "), the NMC server identifies the command as containing an associated list."

A Command Set import job will fail if:

- The set contains objects with names with unsupported characters.
- Imported objects have the same name as existing objects at the level you are importing into.

When a Command set is imported, the NMC console displays a message in the **Utilities > Messages** section that indicates if the import was successful or if there was an error.

If importing a Command Set fails, an error message is added to the NMC server log.

Updating a Command Set

You can use the Command Set import process to update a previously imported command set, for example, to update and add commands to a command set after it was deployed.

When you update a Command Set by importing a new Command Set, all the objects that are associated with the Command Set are updated.

Steps for adding Command Sets

When you import an XML command set, square brackets ([]) are accepted and converted to angle brackets (<>).

Note: Before you perform the following steps, it is recommended that you create or use a special user profile explicitly for creating command sets and testing commands. This is to avoid adversely affecting an end-user's profile. You must log into DM Network Edition with this profile and

import Command Sets into the profile. If the profile is an end-user's profile, be sure to remove commands created for the Command Set process and return the profile to its previous state.

You must have the Speech Recognition – Manage Speech Command Sets right to perform the tasks in this topic.

- 1. In the NMC console, select **Speech Recognition**.
- 2. In the **Auto-texts** section, click **Manage**.
- 3. Find and select a site or group by performing the steps in Searching for Command Sets.
- 4. On the ribbon, in the **Command Sets** section, click **Import**. If you selected a site, the NMC console adds the Command Set to that site. If you selected a group, the NMC console adds the Command Set to the Group.
- 5. In the **Speech Command Set** screen, the **Name** field is only automatically filled in when 'Update' is selected in the previous step. For example, if the imported file is my_command_ set.xml, then the **Name** field will contain my_command_set.xml. The **Name** field is left blank when 'Import' is selected in the previous step.

Set the following fields:

- **Description**: Information that describes the Command Set.
- Path to .DAT/.XML file: The .dat or xml file that contains the Command Set information.
- 6. Click Import Dragon Command Set.
- 7. In the **Import Command Set** dialog box, click **OK**.

Modifying Command Sets in the NMC console

You must have the Speech Recognition – Manage Speech Command Sets right to perform the tasks in this topic.

- 1. In the NMC console, select **Speech Recognition**.
- 2. In the **Auto-texts** section, click **Manage**.
- 3. Find and select a site or group by performing the steps in <u>Searching for Command Sets</u>.
- 4. Select a Command Set.
- 5. In the ribbon, in the **Command Sets** section, click **Update**.
- 6. In the **Speech Command Set** screen, the **Name** field is automatically filled with the name of the .dat/.xml file. For example, if the imported file is my_command_set.xml, then the **Name** field will contain my_command_set.xml.
- 7. Click **Update**.
- 8. In the **Update Command Set** dialog box, click **OK**.

Deleting Command Sets in the NMC console

You can delete Command Sets at the site or group level.

To delete Command Sets

You must have the Speech Recognition – Manage Speech Command Sets right to perform the tasks in this topic.

- 1. Search for the Command Set by performing the steps in <u>Searching for Command Sets</u>.
- 2. Select one or more Command Sets.
- 3. In the ribbon, in the **Command Sets** section of the ribbon, click **Delete**.
- 4. In the dialog-box, click **Yes**.

Chapter 16: Working with Lists

This chapter describes how to work with and manage Lists.

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Working with Lists

Lists are text noted by open/close angle bracket, ("< >") in the Dragon client. When a command set is imported from Dragon, any command that had an embedded list in the MyCommand Name field, is tagged in the List section under Speech Recognition in the NMC console. You can view the list contents in this section in the NMC console.

You must have the "Manage Speech Command Set" and "Manage Speech List" rights to perform actions with Lists in the NMC console.

When you upgrade the NMC server to version 4.1 and higher, the "Manage Speech Command Set" and "Manage Speech List" rights are given to all NMC server administrator groups that have a Dragon Medical Network Edition.

Searching for Lists

You must have the "Manage Speech Command Set" and "Manage Speech List" rights to perform actions with Lists in the NMC console.

When you upgrade the NMC server to version 4.1 and higher, the "Manage Speech Command Set" and "Manage Speech List" rights are given to all NMC server administrator groups that have a Dragon Medical Network Edition.

You must have the Speech Recognition – Manage Speech Lists right to perform the tasks in this topic.

- 1. In the NMC console, in the **Speech Recognition** section, click **Manage**. Use the 'Organization' drop-down list to filter the tree.
- In the window on the left-side of the Manage Auto-texts screen, click on the arrow beside Lists.
- 3. Select the 'level' that you want to work with (Site, group, or user):
 - i. To work with all users in a site, select a site.
 - ii. To work with all users in a group, click on the arrow beside a site, select a group.
 - iii. To work with a specific user, click on the arrow beside a site, click on the arrow beside a group, select a user.
- 4. The NMC console displays the lists that exist for the user level you select.
- 5. To view all the hierarchy levels that are associated with the lists, click **Display all levels**.
- 6. To view details about a specific list, double-click the list.

The right side of the Manage Lists screen displays the following information about each list:

- **List Name**: The text description for the List.
- Language: The language that is associated with the List.
- Owner Type: One of site or group.
- Owner Name: The name of the site or group.
- Command Set: The name of the Command Set that contains the List.

- Modified: The last time the List was modified.
- Contents: The objects (auto-texts, commands, etc.) that are part of the List.

Search for a specific word, site, group, or user

You must have the Speech Recognition – Manage Speech Lists right to perform the tasks in this topic.

- In the NMC console, in the Speech Recognition section, click Manage. Use the 'Organization' drop-down list to filter the tree.
- 2. In the tree on the left-side of the screen, click the arrow that appears to the left of **Lists**.
- 3. In the search field, enter search criteria. Search for lists, sites, and groups by their name. Search for users by their login name. Search criteria must be at least 3 characters in length.
 - i. To search for a site, enter the name of the site.
 - ii. To search for a group, enter the name of the group.
 - iii. To search for a user, enter the login name of the user.
 - iv. To search for a list, enter the name of the word.
- 4. After you enter the search criteria, click **Search**.
- 5. The tree on the left-side of the **Manage Lists** screen displays the search results under the 'Search Results' heading. The search results appear as follows, where x is the number of matched items for that object:
 - Sites (x)
 - Groups (x)
 - Users (x)
 - Lists (x)
- 6. To view sites, groups, users, or lists that matched the search criteria, under the 'Search Results' heading, expand the Sites, Groups, Users, or Lists level.
- 7. To view the lists that are associated with one of these expanded objects (Sites, Groups, Users), click on the object.
- 8. To view all the hierarchy levels that are associated with the lists, click **Display all levels**.
- 9. To view details about a specific list in the search results, double-click the list.

Viewing list details

You must have the "Manage Speech Command Set" and "Manage Speech List" rights to perform actions with Lists in the NMC console.

When you upgrade the NMC server to version 4.1 and higher, the "Manage Speech Command Set" and "Manage Speech List" rights are given to all NMC server administrator groups that have a Dragon Medical Network Edition.

You must have the Speech Recognition – Manage Speech Lists right to perform the tasks in this topic.

- 1. Perform the steps described in <u>Searching for Lists</u>.
- 2. To view details about a specific list, in the search results, double-click the list.

Chapter 17: Troubleshooting issues

This chapter provides information on how to troubleshoot issues using the NMC console.

The default logging settings in Dragon Medical products produce log data that comply with privacy standards. Dragon Support may instruct you to change these logging settings to produce logs that provide more information. In this case, the log data may include patient relevant data, for example, patient name. To remain compliant to local privacy standards, you should only use these logging settings in a test environment, or with test patient data.

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Analyzing audit events

To track events that occur on the NMC server, perform the following steps:

- 1. On the menu bar, click **Utilities**.
- 2. In the **View** area, click the **Audit Events** icon.
- 3. On the **Events** screen, fill out the search criteria fields.
- 4. To select a specific event ID to search for, click the **Select Events** button, located to the right of the **Event id** field.
 - The Audit Events dialog appears. Click the audit event that you want to search for.
 - ii. Click **OK**. The audit event ID appears in the **Event id** field.
- Click Search. The Events window displays a list of events. Click Refresh to update the information on the screen.

The types of message you might see in the list are delineated below, along with how the message will be worded, to give you an idea how much information it provides.

General Event types

Session Start

Session begins for user *name*, application NMC console on computer *machine-name*. Indicates that a user successfully authenticated and logged into the NMC server.

Session End

(for DM Network Edition) Session ends for user *name*, application NMC console on computer *machine-name*. Indicates a successful logout from the NMC server. The NMC server only creates this message when a user logs out of the Dragon client.

Session Refused

Session refused for user *name*, application NMC console on computer *machine-name*. Indicates that a user did not successfully authenticate with the NMC server. Reasons for authentication failure could be:

- Invalid login (Invalid Credentials)
- Invalid Password (Invalid Credentials)
- Invalid License status -- No License or Expired License (Invalid License)

This Audit message is for Server Side login failures. If a user enters the wrong server name and receives an error about not being able to connect to the server, an event message is not generated.

Session Timed Out

Session timeout for user *name*, application NMC console on computer *machine-name*. In DM Network Edition, Service Pack 2, the NMC server does not create this type of audit message.

Important Event types

The Alerts table includes information about significant NMC events. Use this information to identify and monitor important and recurring server events.

ID	Name	Description	Severity	Log to Windows Event
NMC File	Storage events			
1	Error while load- ing Plugin Assemblies	An unrecoverable exception occurred loading one or more Plugin assemblies. NMC application cannot run until the issue has been corrected.	Critical	Yes
2	Configuration File error	An unrecoverable exception occurred while reading components in Configuration files.NMC application may not function properly until the issue has been corrected.	Critical	Yes
NMC IIS	Errors			
100	NMC Shut- down_Bin Dir- ectory Change	BinDirChangeOrDirectoryRename	Information	Yes
101	NMC Shut- down_Browser Directory Change	BrowsersDirChangeOrDirectoryRename	Information	Yes
102	NMC Shut- down_Glob- alAsax Change	ChangeInGlobalAsax	Information	Yes
103	NMC Shut- down_Security Policy file Change	ChangeInSecurityPolicyFile	Information	Yes
104	NMC Shut-	CodeDirChangeOrDirectoryRename	Information	Yes

TD	Nama	Description	Soverity	Log to Windows Event
ID	down_Code Directory Change	Description	Severity	
105	NMC Shut- down_Con- figuration	ConfigurationChange	Information	Yes
106	NMC Shut- down_Hosting Environment	HostingEnvironment	Information	Yes
107	NMC Shut- down_Idle Timeout	Idle Timeout	Error	Yes
108	NMC Shut- down_Max Recompilations Reached	MaxRecompilationsReached	Information	Yes
109	NMC Shut- down_Physical Application Path Changed	PhysicalApplicationPathChanged	Information	Yes
110	NMC Shut- down_Resource Directory Change	ResourcesDirChangeOrDirectoryRename	Information	Yes
111	NMC Shut- down_ App Domain Unload	UnloadAppDomainCalled	Information	Yes
112	NMC Shut- down_ Ini- tialization Error	InitializationError	Error	Yes
113	NMC Shut- down_ Http Runtime Close	HttpRuntimeClose	Error	Yes
NMC U	Inhandled Errors		-	
300	NMC unhandled exception	An unhandled exception has occurred.	Error	No

View log files for a variety of products and product components

The default logging settings in Dragon Medical products produce log data that comply with privacy standards. Dragon Support may instruct you to change these logging settings to produce logs that provide more information. In this case, the log data may include patient relevant data, for example, patient name. To remain compliant to local privacy standards, you should only use these logging settings in a test environment, or with test patient data.

View client logs for a variety of products

You use the **Client Logs** screen to view log files for a variety of products and items.

The screen allows you to search for log files using a user login, within a date range, and one or all products.

You must first upload the log before you can access it in the NMC console.

(Only for Profile Optimizer 4.x)

View a client log

Perform these steps to view a client log, including a Dragon client log.

- 1. Click Utilities.
- 2. In the **View** area, click **Client Logs**.
- 3. On the **Client Logs** screen, fill in the following fields:
 - i. To search by user login name, enter a value in the **User Login** field.
 - ii. In the **Start Date/Time** and **End Date/Time** fields, enter the date range for the search.
 - iii. In the **Product** field, select a product.
- 4. Click Search.
- 5. In the search results, select a log.
- 6. To view the log, press **Ctrl+O** or right-click the log and select **View**.
- 7. To download the log:
 - i. Double-click the log or right-click the log and select **Download**.

- ii. In the **Download Client Log** dialog box, in the **Download to** field, select a location for the log file and press **OK**.
- iii. Click Start.
- iv. When you see 'Download Complete', close the dialog box.

View server logs for a variety of products

Prior to NMC server 3.0, administrators needed to VPN into the Nuance data center to find server log files. They may also have had to check multiple node machines for log files.

In NMC server 3.0 and higher, the NMC server stores log files; allowing administrators to easily find and download them.

To save all current server logs in the NMC server, click **Store current logs now**.

- 1. Log into the NMC console.
- 2. Click Utilities.
- 3. In the **View** area, click **Server Logs**.
- 4. In the **Product** field, select a product. If you select 'Profile Optimizer', the **Type** field appears. Select the type of Profile Optimizer log file.
- 5. In the previous step, if you select 'Profile Optimizer' and 'Task / PO' or 'Task / Dragon', the **Task ID** field appears. To search for a Profile Optimizer or Dragon log file by task id, enter the id in the **Task ID** field.
- 7. In the **Start Date/Time** field, select the start date and time for the query.
- 8. In the **End Date/Time** field, select the end date and time for the query.
- 9. Click Search.

Viewing speech node, Profile Optimizer, Dragon, and NMC server logs

To troubleshoot issues, you can view logs that servers and Dragon clients in Dragon Medical Network Edition generate.

The default logging settings in Dragon Medical products produce log data that comply with privacy standards. Dragon Support may instruct you to change these logging settings to produce logs that provide more information. In this case, the log data may include patient relevant data, for example, patient name. To remain compliant to local privacy standards, you should only use these logging settings in a test environment, or with test patient data.

Upload Profile Optimizer logs

- 1. In the NMC console, click **Utilities**.
- 2. In the **Profile Optimizer** section, click **Dashboard**.
- 3. In the left tree view, right-click **Profile Optimizer Server** and select **Request logs**.
- 4. Enter start and end dates for the logs.
- 5. Click **OK**. The request is sent to the NMC server. The server processes the request. It may take a few minutes for the logs to appear in the NMC console.
- 6. To view the logs, under **Utilities**, click **Server Logs**.

Dragon and Profile Optimizer Speech Node logs

The Profile Optimizer Speech Node generates two log files for each ACO and LMO task it carries out:

- Dragon log file—Dragon Medical SDK Client writes this file
- Speech Node service log file—Profile Optimizer services write these files

The *NMC server* stores these files for 30 days. After 30 days, the *NMC server* purges old log files. If you would like to preserve them, you can back them up.

The job log files on the NMC server are no longer use Guids as a file name. The file names are now based on the Job Id (which is now an integer), the profile name, the job type, and the type of log file (Speech node service log file or Dragon log file).

The names of Job log files use the following form:

```
jobId profileName JobTypeId.logFileType
```

If multiple log files exist for the same jobId, the names of the log files are named jobId(n)_... where 'n' increments sequentially from 1.

Example:

```
jobId(1)_User1_JobTypeId.logFileType
jobId(2)_User1_JobTypeId.logFileType
.
.
.
jobId(10) User1_JobTypeId.logFileType
```

Upload Speech Node service logs

You must upload the logs before you can view them in the NMC console.

- 1. In the NMC console, click **Utilities**.
- 2. In the Profile Optimizer section, click DashBoard.
- 3. In the left tree view, right-click a speech node and select **Request Logs**.
- 4. Enter start and end dates for the logs.
- 5. Click **OK**. The request is sent to the NMC server. The server processes the request. It may take a few minutes for the logs to appear in the NMC console.
- 6. To view the logs, under **Utilities**, click **Server Logs**.

View Speech Node service logs

You can view the *Dragon* log files and *Speech Node* service log files in the *NMC console*.

To view the *Speech Node* service log file by taking these steps:

- 1. On the Menu bar, click the **Utilities** tab.
- 2. In the **Profile Optimizer** section, click **DashBoard**.
- 3. In the left tree view, right-click the organization name and select **Profile Optimizer Tasks**.
- 4. In the **Search Criteria** section, enter information into the fields.
- 5. Click Search.
- 6. In the **Profile Optimizer Tasks** screen, double click on the task of the *Speech Node* whose log you would like to view. For details, see <u>Viewing status of scheduled and automatic optimizations</u>. The **Profile Optimizer Task Log** opens and displays a history of the actions the *Speech Node* has taken.

Viewing Dragon logs

To view the *Dragon* log files, refer to *Viewing Dragon log files* on page 441.

NMC server logs

The NMC server generates a Windows communication foundation service log file for each individual NMC server user account. You can find the files on the NMC server under a separate path for each user account:

Windows 7, Windows 8, Windows 8.1, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, Windows Server 2016, Windows Vista:

C:\ProgramData\NMS\Logs\NMS Server\

If you call Technical Support, you might be asked to provide one or more of these logs to help Nuance engineers work on any issues with your network.

NMC console logs

The default logging settings in Dragon Medical products produce log data that comply with privacy standards. Dragon Support may instruct you to change these logging settings to produce logs that provide more information. In this case, the log data may include patient relevant data, for example, patient name. To remain compliant to local privacy standards, you should only use these logging settings in a test environment, or with test patient data.

The NMC console stores user session data in a NMC console log file. The log file includes data that could be useful for troubleshooting NMC console exceptions or issues.

If an administrator performs an action that causes a NMC console error or crash, the next time the NMC console starts, it sends the NMC console Log file to the NMC server. Technical support can then analyze the log file. An administrator can also manually upload the NMC console log file to the NMC server.

A NMC console log file is kept until it becomes larger than 10 MB in size. At that time, the NMC console discards the log file and creates a new one. The NMC console also creates a new log file after it uploads the current one to the NMC server.

Upload the NMC console log file to the NMC server

- 1. In the NMC console, click the Nuance icon (top left of the screen).
- 2. Select **Upload NMC Log File**.

Viewing Dragon log files

The default logging settings in Dragon Medical products produce log data that comply with privacy standards. Dragon Support may instruct you to change these logging settings to produce logs that provide more information. In this case, the log data may include patient relevant data, for example, patient name. To remain compliant to local privacy standards, you should only use these logging settings in a test environment, or with test patient data.

To help you diagnose specific problems, the *Dragon Medical* client creates a file named **Dragon.log** for each healthcare provider. You can view this file in the *NMC console*. In this file *Dragon Medical* records all of its actions during each dictation session that the provider dictated. If you contact *Nuance* Technical Support, you may be asked to supply this file.

Note: To have the *Dragon Medical Client* place the log files in a location where they are accessible for viewing on the *NMC console*, you must enable the option **Copy Dragon Medical Network Edition log to network** located under (**Site > Dragon Medical Network Edition > Master user profile**). For details, see <u>Setting site master user profile General settings</u>.

To view Dragon log files

Use the following procedure for versions of Dragon Medical Network Edition that are earlier than Service Pack 5.

In Service Pack 5, you cannot view Dragon log files in the NMC console.

- On the User Accounts screen, search for the provider whose log files you want to view.
 See Viewing, modifying, and deleting user accounts.
- 2. Select the provider in the list and click the **Client Logs** icon on the ribbon.
- 3. Double click on the log file you want to view.

The log file opens and displays user activity information.

Finding Dragon log files in the file system

You can also find the Dragon logs in the file system. Note that the location of the files depends on the operating system.

Location of Dragon logs on Windows 7, Windows 8, Windows 8.1, Windows Server 2008, Windows Server 2018 R2, Windows Server 2012, Windows Server 2012 R2, Windows Server 2016, Windows Vista::

C:\Users\Administrator\AppData\Local\Temp\dgnsetup.log

C:\Users\Administrator\AppData\Roaming\Nuance\Dragon SDK Client
Edition12\dragon.log

Viewing client device usage information

You can create a report and view session usage data per client computer. When a Dragon sessions starts on a client computer, the NMC server captures the computers name and starts capturing session information. You use the NMC console to view information about the computer-specific session.

You can view session usage information per computer for many license types, including:

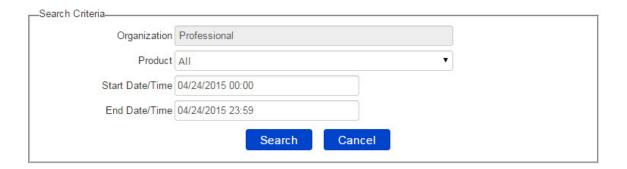
- Physician Author
- NMC Administrator
- Non-physician Author
- Dragon Medical Server
- Dragon Medical Mobile Recorder
- CLU
- Dragon Medical Recorder
- CAC
- Capture Services for Mobile
- Capture Services for Desktop

To generate and view the usage report, you must have the proper administrative rights in the NMC server.

- 1. Open the NMC console.
- 2. In the **Reports** section, under **Usage**, select **Device Use**.

3. On the **Device Use** screen, enter search criteria:

Device Use



- **Product**: The name of the product.
- Start Date/Time: The start date and time.
- End Date/Time: The end date and time.
- 4. Click Search.

The NMC console displays the report as a grid with the following information:

- Device Name The name of the computer or device.
- Last Login The date and time when a user last logged into the system from the computer or device.
- Days Since Last Login The number of days since the last date a user logged into the system from the computer or device.
- Login Count If the search returns data from an NMC server that is older than NMC server 5.0, the Login Count column displays the total number of logins up until the current date, provided the current date is within the search start date and search end date.
 If the search returns data from an NMC server that is version 5.0 or greater, the Login Count column displays the total number of logins from the search start date to the search end date.

Viewing Speech Recognition Metrics for DM Network Edition

The Dragon client sends usage metrics to the NMC server.

In the NMC console, you can design and run queries about speech metrics for DM Network Edition users.

You can export the Dragon usage metrics to a comma delimited files.

Creating a speech recognition metrics query

To perform the following steps, you must have the Manage Dragon Medical Network Edition right.

- 1. Log into the NMC console.
- 2. In the Reports area, under Dragon Speech Usage, select Desktop Usage.
- 3. On the **Desktop Usage** screen, enter search criteria:
 - Last name: Search for speech recognition metrics that are associated with a user with a specific last name.
 - **First name**: Search for speech recognition metrics that are associated with a user with a specific first name.
 - **Group by (first)**: Specify the first sort level for the query results one of:
 - Site
 - Group
 - User
 - Group by (second): Specify a second sort level for the query results one of:
 - None
 - Site
 - Group
 - User
 - Start Date/Time: Search for speech recognition metrics create on or after a specific date and time.

- End Date/Time: Search for speech recognition metrics create on or before a specific date and time.
- **Site**: The site associated with the speech metric.
- **Group**: The group associated with the speech metric.
- **Product**: The product associated with the speech metric. The items you can select depend on your product management privileges. For example:
 - <all Products>: (Only displayed if you have both the Manage Dragon Medical Network Edition privilege and the Manage Dragon Professional privilege)
 - Dragon Medical Network Edition: (Only displayed if you have the Manage Dragon Medical Network Edition privilege)
 - Dragon NaturallySpeaking: (Only displayed if you have the Manage Dragon Professional privilege)
- To display search results in a grid:
 - i. Select Display results in a grid format by.
 - ii. Select one of the following options:
 - Hour
 - Day
 - Week
 - Month
- To display search results in a graph:
 - i. Select Display results in a graph format by.
 - ii. Select one of the following options:
 - Word
 - Minutes
 - Characters
- 4. Click **Search**. The **Desktop Usage** screen displays the results of the query.

The columns that the search results display depend on the information you enter in the search criteria.

For example, the **Desktop Usage** screen can display the following columns:

- **Site** The site associated with the dictation.
- **Organization** The organization associated with the dictation.
- **Day** The day the dictation occurred.
- **Length (minutes)** The total number of minutes of dictation for the user (to two decimal places).
- Total Words The total number of words in the dictation.
- Total Characters The total number of characters in the dictation.
- **Custom Commands** The number of custom commands in the dictation. Custom commands are found in MyCmds or Command Sets, and include sample and template commands.
- **Dictation Commands Commands** The number of Dictation Commands commands in the dictation. Dictation Commands include most text/dictation manipulation commands that select, format, and correct text.

Dictation Commands include two subcategories of commands:

- Static commands: Commands that are often followed by the keyword 'that'. For example, 'select that'
- SelectXYZ commands: Commands that precede the word they manipulate. For example, 'bold Tuesday'.
- Navigation/Action Commands The number of Navigation/Action Commands in the dictation. Navigation/Action Commands are non-dictation commands that include:
 - Dragon commands
 - Windows commands
 - Third-party application (tracking) commands
 - UI and document navigation commands.
 Navigation/Action Commands also include text manipulation commands that are not Dictation Commands.
- System and Web Commands The number of intuitive commands in the dictation. System and Web Commands are commands with user-provided context:
 - Search the Web' type commands
 - Desktop commands

- Email commands
- Social Media commands, such as those for Facebook and Twitter
- Dictation Select/Format Commands The number of Dictation Select/Format Commands in the dictation. Dictation Select/Format Commands are SelectXYZ commands: Commands that precede the word they manipulate. For example, 'bold Tuesday'.
- User Count The total number of active users during the search criteria time period.

Restoring vSync support after updating a Citrix client

Dragon uses vSync support to provide Dragon users with Full Text Control when they work with applications published from a Citrix server. An administrator updates or reinstalls one or more Citrix ICA clients on a workstation with Dragon.

Updating or reinstalling a Citrix ICA client deletes and un-registers Dragon Citrix client and vSync components. This disables and removes vSync support.

The vSync Restoration Patch provides a quick and simple way to reinstall vSync support after updating or re-installing a Citrix ICA client. After updating or reinstalling a Citrix ICA client on a workstation, run the patch on the workstation or push the patch install to the workstation.

In DM Network Edition Service Pack 6, only use the vSync Restoration Patch to repair damaged vSync client components or to install the vSync client components for the first time.

To upgrade vSync client components. use the patch installer. Do not use the vSync Restoration Patch to upgrade these components.

Note: You must upgrade vSync on your Citrix servers before you upgrade vSync on Dragon client computers.

The patch can be run on a 32-bit or 64-bit workstation where all, some, or none of the vSync components are installed. The patch installer can also be run in 'silent' mode.

When you run the patch installer, it successfully patches and re-registers the relevant dll and component files. The installer also displays messages about installation success or errors.

You can run or push the vSync Restoration Patch using any version of the DM Network Edition Dragon client (Service Pack 6 or higher). If you do not have Service Pack 6, you must install it before you can install the patch.

Pre-requisites for installing the DM Network Edition vSync Restoration Patch

Ensure the following items are met before you run the patch. Otherwise, the patch installation will fail and log error messages to the DgnSetup log file.

- The Dragon client must be installed on the workstation
- Dragon must not be running on the workstation
- A Citrix ICA client must be installed on the workstation
- Citrix ICA Client Engine process must not be running on the workstation

You can install the patch even if the vSync components in the patch are the same version as the vSync components currently installed on the workstation.

Steps for installing the DM Network Edition vSync Restoration Patch on a workstation

Perform the following steps after updating or reinstalling a Citrix ICA client on a workstation.

- 1. Ensure all the installation pre-requisites are met. See <u>Pre-requisites for installing the DM Net-work Edition vSync Restoration Patch</u> for details.
- On the DVD, find and run the vSyncRestore.exe file on the Dragon client workstation. Alternately, you can push the patch install to the workstation.

DM Network Edition vSync Restoration Patch Logging

When you run the vSync Restoration Patch, it logs success and error messages to the DgnSetup log. It also logs the version numbers of the currently installed Citrix support components and the components in the patch.

Contacting Technical Support

When you purchase Dragon Medical Network Edition, you also purchase a *Dragon Medical Premium Support* maintenance contract. This maintenance contract gives you access to the Technical Support center, which provides our customers with coverage 24-hours a day, seven days a week. We provide direct remote support, product operational assistance and corrective action. The Technical Support Center is the place for customers to call with technical questions — either in response to a problem, or simply when assistance is needed. This organization can offer assistance via a remote on-line connection to your systems, and is available toll-free at **800 833-7776** via our "Say Anything" menu, so say "Dragon Medical" at the prompt. Or save the call and access our Technical Support Center through **iSupport**, our premium support website at https://isupport.nuance.com.

When you call our support line or access iSupport via the Web, you will need to provide the unique customer ID number that Nuance supplied to you.

If you are calling in relation to an issue, you may want to gather some information first, so that Technical Support can assist you more efficiently. Print this page and collect the following information. If you can't find the information, Technical Support can help you locate it.

Technical Support Issue Logging Templates

If your issue is NMC console-related you will need this information	Add information here
Your <i>NMC server</i> license information (located on Licenses > View Licenses > Licenses Summary tab)	
What you were doing when the problem happened (For example: Configuring group settings, checking Audit Events, or Using the Profile Optimizer Scheduler.)	
The text of any error message	
Operating system	
Processor type and speed	
Amount of memory (RAM)	
Amount of free hard-disk space	
NMC server operating system	
Operating system of the computer where the NMC console is running	
Internet browser being used to view the client	
SQL Server version	

If your issue is related to Dragon Medical you will also need this information:	Add information here
What you (or the Dragon Medical user) were doing when the problem happened (checking your microphone, training the program, and so on)	
The text of any error message	
Operating system	
Processor type and speed	
Amount of memory (RAM)	
Amount of free hard-disk space	
Sound card name and model	
Microphone name and model	
Program log file (Dragon.log). To find the Dragon.log, see <i>Viewing Dragon log files</i> on page 441. Attach the log file if you send e-mail to technical support.	

Additional support on the Web

- http://www.nuance.com/dragonmedical/
 This is the customer information page for *Dragon Medical* and includes links to useful downloads and the *Dragon Medical ListServ*.
- For developer support, go to http://support.nuance.com/

Chapter 18: Appendix

This section presents information on Basic Text Control support through vSync, options you set in the NMC console or the Dragon Client, support for edit controls, and support for EMRs and utility programs.

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Support for edit controls	455

Applications with Basic Text Control support through vSync

While vSync supports Full Text Control with certain applications published from Citrix, there are some applications where vSync provides only Basic Text Control support. If you use Dragon with these published applications over a vSync connection, features such as using voice to correct text and move the cursor may not work as expected. The Dragon user may need to use the DictationBox to make corrections and move the cursor.

The following is a non-exhaustive list of common applications where only Basic Dictation Control is available over a vSync connection If you are using Dragon from a client computer and these applications are published from a Citrix server, you can only use Basic Dictation Control with these applications.

- Microsoft Outlook (with Microsoft Word as the editor)
- Microsoft Excel

Note: You can use Full Text Control with these applications if Dragon is on the Citrix server that the applications publish from.

Support for edit controls

When a user dictates into an application that is local or published from a Citrix server, they are working with text in the edit controls of the application. Edit controls are areas in applications that accept text input.

Supported Edit controls

You can use Full Text Control (formerly Select-And-Say) with the following edit controls:

		Local and vSync Dragon
Edit Control	Description	support
Edit (NotePad)	A Microsoft edit control	Yes
EmrTerClass (version 9.2.2 and higher)	A Ter edit control from GE	Yes
EpicTer78Class	An Epic edit control	Yes
EpicTer81Class	An Epic edit control	Yes
EpicTer79Class (EPIC 2012)	An Epic 2012 edit control	Yes
EpicTer82Class	An Epic edit control	Yes
EpicTer83Class	An Epic edit control	Yes
Excel	A Microsoft edit control for Excel	Yes (up to 2016) - local only
IE_S	A Microsoft edit control for Internet Explorer Server	Yes
INKTEXTBOX	A Microsoft edit control	Yes
INKEDIT	A Microsoft edit control	Yes
McKesson Paragon	McKesson Corporation	Yes
Meditor	A Meditech edit control	Yes
RichEdit20A	A Microsoft rich edit control	Yes
RichEdit20W	A Microsoft rich text box edit control	Yes
RichEdit50W (Word Pad)	A Microsoft rich edit control	Yes
RichEdit20WPT	A Microsoft Outlook edit control	Yes
RichTextWndClass	A Microsoft RichTextBox edit control	Yes
TEdit	An edit control from Borland International	Yes
ThunderRT5TextBox	A Visual Basic edit control	Yes
ThunderRT6TextBox	A Visual Basic edit control	Yes
TMemo	An edit control from Borland International	Yes
TRichEdit	An edit control from Borland International	Yes
Ter13 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter14 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter15 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter16 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter17 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter22 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter23 Class	A TE edit control from Sub Systems, Inc.	Yes
Ter32 Class	A TE edit control from Sub Systems, Inc.	Yes
TERN16	A TE edit control from Sub Systems, Inc.	Yes
Tern17 version 17.0.6.8 or higher edit controls	An edit control from Sub Systems, Inc.	Yes
TERN21	A TE edit control from Sub Systems, Inc.	Yes
TX10 / Txedit10	A TX text control from Text Control GmbH	Yes
TX11 / TXedit11	A TX text control from Text Control GmbH	Yes

Edit Control	Description	Local and vSync Dragon support
TX12 / TXedit12	A TX text control from Text Control GmbH	Yes
TX13 /TXedit13	A TX text control from Text Control GmbH	Yes
TX14 / TXedit14	A TX text control from Text Control GmbH	Yes
TX15 / TXedit15	A TX text control from Text Control GmbH	Yes
TX15.1 / TXedit15.1	A TX text control from Text Control GmbH	Yes
TX16/TXedit16	A TX text control from Text Control GmbH	Yes
TX17 / TXedit17	A TX text control from Text Control GmbH	Yes
TX18 / TXedit18	A TX text control from Text Control GmbH	Yes
TX19 / TXedit19	A TX text control from Text Control GmbH	Yes
TX32 / TXedit32	A TX text control from Text Control GmbH	Yes
Windows edit	A Microsoft Windows edit control	Yes
Windows rich edit	A Microsoft Windows rich edit control	Yes
Word	A Microsoft Word edit control	Yes - up to 2016
WPF	A Windows Presentation Framework edit control	Yes

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