# Nuance® Dragon Medical One



# Installation and Administration Guide



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# Getting started

Welcome to the Dragon Medical One Desktop Application Installation and Administration Guide.

## Setting up a working system

The following steps are required to set up a working Dragon Medical One system:

- 1. Make sure you fulfill all software and hardware requirements. For more information, see: Software and hardware requirements and Deploying in a virtual environment.
- 2. Dragon Medical One requires access to Dragon Medical Server (sas.nuancehdp.com) via port 443; make sure your firewall does not block this port.
- 3. Dragon Medical One requires access to the Nuance Management Server (nms.nuancehdp.com) via port 443; make sure your firewall does not block this port.
- 4. If your system is set up to use the PowerMic Mobile feature, Dragon Medical One requires access to the PowerMic Mobile Server (https://pmm.nuancehdp.com) via port 443; make sure your firewall does not block this port.
- If you are deploying Dragon Medical Advisor, make sure Dragon Medical One has access to the Advisor Service (https://<organization-specific prefix>.nuanceunderstanding.com) via port 443; your firewall must not block this port.
- 6. Deploy Dragon Medical One. The following options are available:

Deploy Dragon Medical One using the Windows Installer (MSI package).

Deploy Dragon Medical One via XCOPY deployment (manually copy the package to the destination path).

7. Configure the organization token in the SoD.exe.config file.

## Setting up Dragon Medical Advisor

Dragon Medical Advisor is accessed via Dragon Medical One; a speech recognition license is not required. To set up Dragon Medical One with Dragon Medical Advisor, follow the steps for setting up a working system, then import the required Dragon Medical Advisor and content pack licenses and configure your organization via the Nuance Management Center (NMC).

For more information, see: Dragon Medical Advisor - overview

## Customizing the system to your needs

Dragon Medical One offers a wide range of options to customize the system to your users' needs. The following customization options are available:

#### Customizing the application (all users)

- Providing different configurations for a single stand-alone deployment
- Disabling the crash dump notification to end users
- Configuring the user authentication

- Customizing the splash screen
- Starting Dragon Medical One from the command line
- Configuring logging

#### Customizing the system for speech recognition users

- Configuring the speech recognition topic
- Configuring microphones
- Disabling registration of the Microsoft Word add-in
- Disabling PowerMic Mobile support
- Defining auto-texts and configuring auto-text filters
- Configuring step-by-step commands

## Customizing the system for Dragon Medical Advisor users

- Application settings for Dragon Medical Advisor
- Configuring Dragon Medical Advisor
- Configuring advice filters
- HCC Guidance only: Configuring HCC filters

# Software and hardware requirements

Dragon Medical One supports the following hardware and software.

Be aware that not all configurations have been tested. For more information, contact Nuance Healthcare technical support or your Nuance account executive.

#### **Operating systems**

- 32-bit: Microsoft Windows 8.1 and Windows 10. Make sure that the latest service pack is always applied.
- 64-bit: Microsoft Windows 8.1, Windows 10, Windows Server 2012 R2, Windows Server 2016 and Windows Server 2019. Make sure that the latest service pack is always applied.

Microsoft .NET Framework 4.7.2 (or higher) is required.

In Microsoft Windows 8.1 and 10, you can only use Dragon Medical One in the desktop environment, the Microsoft design language-based user interface (Start screen) is not supported.

#### **Processor speed**

- Minimum: 1.7 Ghz
- Recommended: 2.8 Ghz

#### RAM

- Minimum: 512 MB
- Recommended: 2 GB

#### Display

If you are deploying Dragon Medical Advisor we recommend a minimum of 1280 x 1024 pixels; Dragon Medical One does not otherwise have a minimum display resolution requirement.

#### **Microphones**

Any microphone that can record audio data in 16 kHz, 16 bit mono format.

Nuance has tested and recommends the following microphones:

- Nuance PowerMic II and III
- Philips SpeechMike Air
- Philips SpeechMike Premium
- Philips SpeechMike III
- Grundig Digta SonicMic II
- Grundig Digta SonicMic 3
- Grundig Digta CordEx
- Grundig Digta 7
- Olympus DirectRec DR-1000, DR-1200, DR-2100, DR-2200 and DR-2300

To work with Dragon Medical One in hands-free mode, using a foot pedal in combination with a microphone, you must make changes to the Registry on your workstation. If you are working in a virtual environment, you must modify the registry settings on the virtual server for every Windows user that will be used to run Dragon Medical One. For more information, contact Nuance Technical Support.

#### Web browsers

For access to Nuance Management Center (NMC):

Microsoft Internet Explorer, Microsoft Edge, Google Chrome, Apple Safari

For the ClickOnce installer:

Microsoft Internet Explorer

For the personalization and help window:

• Microsoft Internet Explorer 11. In the Internet Options, make sure that cookies are enabled.

#### **Text editors**

The following text editors are supported for speech recognition and for basic Dragon Medical Advisor functionality without patient context:

- TX Text Control .NET for Windows Forms 10.0 X15
- Microsoft Word 2007, 2010, 2013 and 2016
- Microsoft Rich Text controls (including .NET Forms)
- Ter32, Ter13-Ter17 and Ter21-Ter23
- TEdit (for 32-bit applications), TMemo (for 32-bit applications) and TRichEdit (for 32-bit and 64-bit applications)
- Dragon Medical One Dictation Box
- WPF standard text controls

Restrictions: Speech focus anchoring is not supported.

TX Text Control .NET for WPF X15, X17 and X18 supported via Microsoft UI Automation

Restrictions: Text formatting can only be applied via standard keyboard shortcuts (for example, **Ctrl + B**) and depends on the capabilities of the integrating application; speech focus anchoring is not supported for TX Text Control .NET for WPF X15.

#### Dragon Medical Advisor - supported EHR systems

The following EHRs are supported:

- Epic Hyperspace
- Cerner Millennium
- Allscripts TouchWorks
- Allscripts Sunrise Clinical Manager (SCM)
- athenahealth athenaClinicals
- Meditech Expanse

**Note:** This list is subject to change; for more information on supported versions and components, contact Nuance technical support or your Nuance account executive.

#### **Dragon Medical Virtual Assistant**

Dragon Medical Virtual Assistant is directly integrated into Dragon Medical One and supports integrations with the following EHRs:

- Epic Hyperspace August 2020 or higher
- MEDITECH Expanse 2.1 or higher
- Cerner Millennium 2018 or higher

#### Virtualized environments

For information on supported virtualized environments, see: Deploying Dragon Medical One Desktop Application in a virtualized environment.

#### End-of-life: Third-party environments

Support for third-party environments is only valid as long as they are supported by the corresponding vendor and might be subject to other restrictions. Contact Nuance Technical Support for details. For more information, see the documentation delivered with the third-party product and supporting Nuance documentation.

When standard support by the vendor has stopped, Nuance will continue support if an issue is specific to the Nuance solution, within the limitations of the vendor's standard end-of-life and Nuance's policy. This means that issues that are a combination of the vendor's component and the Nuance solution cannot be supported.

# **Deploying Dragon Medical One**

The following options are available to deploy Dragon Medical One:

- Deploy Dragon Medical One using the Windows Installer (MSI package).
- Deploy Dragon Medical One via XCOPY deployment (manually copy the package to the destination path).
- Deploy Dragon Medical One using the Dragon Medical One Installer. This option is recommended for individual users who dictate into applications on Windows 10 operating systems; for more information, see the Dragon Medical One Resource Center.

For information on how to deploy Dragon Medical One in a virtual desktop/application environment, see: Deploying in a virtual environment.

#### **Deployment recommendations**

- We recommend deploying Dragon Medical One to a local folder. During runtime, Dragon Medical One frequently accesses files that are part of the deployment; loading those files from a network share would have a severe impact on performance.
- Make sure the application configuration file has the same version as the application; do not use an old configuration file when you update to a newer version of Dragon Medical One. The version number can be found in the first line in the application configuration file.

To keep your customized settings after an upgrade, save the existing application configuration file before you upgrade and then manually transfer the respective settings, or create an XML file containing your customized settings and start Dragon Medical One from the command line, specifying the path to this XML file via the config parameter. For more information, see: Providing different configurations for a single stand-alone deployment.

## The Windows Installer

The MSI package provided is command line-only; no installation wizard is available.

To customize the installation, set all mandatory parameters and any optional parameters you want, or use the CONFIGTEMPLATE parameter to deploy a configuration file containing all relevant settings (this is the recommended option). Values for parameters must be in double quotes.

Application binaries are by default installed to the following location: C:\Program Files (x86)\Nuance\Dragon Medical One

Dragon Medical One is not automatically added to the Microsoft Windows Start menu; to add it manually, use the SoD.exe file.

To support uninstallation, an entry is automatically created in the **Control Panel**, **Programs and Features** window.

#### Mandatory parameters

SERVERURL

The full URL of the Nuance-hosted Dragon Medical Server: "https://sas.nuancehdp.com/basic"

ORGANIZATIONTOKEN

The organization token assigned to the organization you are deploying to.

SUPPORTEDLANGUAGES

Currently only English (IETF language tag: en-US) is supported. For more information, see: Supported languages.

SUPPORTEDTOPICS

A list of speech recognition topics that the end user can select from on the startup screen. Separate values with the pipe character:

For more information, see: Configuring the speech recognition topic.

#### **Optional parameters**

CONFIGTEMPLATE

The full path to the configuration file containing all relevant settings. If this parameter is specified, all other command line parameters provided by Dragon Medical One are ignored (you can still use OEMSPLASHSCREEN and INSTALLDIR).

For more information, see Configuring Dragon Medical One.

INSTALLDIR

The deployment location. If this parameter is not set, the default location is used.

OEMSPLASHSCREEN

The custom splash screen overlay. The specified file is copied to the deployment location. Required size: 320x130 pixels; required format: PNG.

AUTHENTICATION

The user authentication type; for more information, see: User authentication.

LOGFILEPATH

The location of the log file. To prevent environment variables from being expanded when the setup is executed, the percent sign must be escaped by the ^ character and no quotes must be used; for example, ^%APPDATA^%.

For more information, see: Logging.

LOGLEVEL

The log level; for more information, see: Logging.

ALLOWEDMICS

A list of microphones the end user is allowed to use. Separate values with the pipe character: | For more information, see: Configuring Dragon Medical One.

POWERMICMOBILE

Enables/disables the PowerMic Mobile feature. Possible values: Yes, No. If this parameter is not set, the feature is enabled by default.

WPFSUPPORT

Enables/disables support for standard WPF text controls. Possible values: Yes, No. If this parameter is not set, the feature is disabled by default.

For more information, see: Enabling and disabling WPF support from the command line.

## Examples

msiexec /i Standalone.msi SERVERURL="https://sas.nuancehdp.com/basic" ORGANIZATIONTOKEN="your\_organization\_token" SUPPORTEDLANGUAGES="en-US" SUPPORTEDTOPICS="GeneralMedicine|ClinicalAdministration|Cardiology|Emergency|InternalMedi cine|MentalHealth|Neurology|Orthopaedics|ObstetricsAndGynecology|Oncology|Pathology|Pedia trics|Surgery"

msiexec /i Standalone.msi CONFIGTEMPLATE="C:\<path>\SoD.exe.config"
OEMSPLASHSCREEN=".\SoD.OEM.png"

## **XCOPY deployment**

To deploy Dragon Medical One using XCOPY, do the following:

- 1. Download the installation package.
- Depending on your Group Policy security settings, Microsoft Windows marks downloaded files as unsafe. Unblock the downloaded ZIP file, if necessary, to allow .NET to execute properly when the application is started: Right-click the ZIP file and select **Properties**; on the **General** tab, click **Unblock** and **Apply**.
- 3. Extract all files.
- 4. Customize the SoD.exe.config file template to configure the Dragon Medical One application. For more information, see: Configuring Dragon Medical One.
- 5. Make the **Standalone** folder available to your end users.

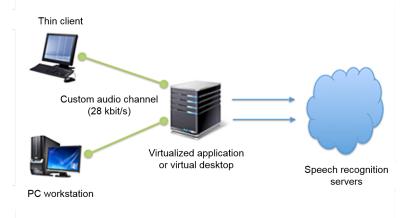
**Note:** Dragon Medical One is not automatically added to the Microsoft Windows Start menu; to add it manually, use the SoD.exe file.

## Upgrading using XCOPY

When an upgrade package is available, be sure to make it available to your end users.

# Deploying Dragon Medical One in a virtualized environment

Dragon Medical One can be deployed as a virtualized application or on a virtual desktop. The speech recognition is performed in secure Nuance data centers; Dragon Medical One has a small resource footprint on the application/desktop virtualization server.



## Supported virtualized environments

Dragon Medical One can be deployed in Citrix XenApp/XenDesktop, Microsoft Remote Desktop Services (RDS) and VMware Horizon View/RDSH virtualized environments. For more information on supported virtualized environments, see the release notes delivered with your version of Dragon Medical One.

## Edit control visibility

To write recognized text directly in the target application (instead of the Dictation Box) or for Dragon Medical Advisor to provide advice based on the user's documentation, Dragon Medical One must be able to directly access the application's edit controls. To enable this, Dragon Medical One must be co-installed and published with the target application.

This means the following:

- If you are using a virtual desktop solution, where all target applications are installed and run locally in the virtual desktop, Dragon Medical One must be installed in the virtual desktop image.
- If you are virtualizing applications that are accessed by a viewer or remote desktop application on a local workstation, make sure that Dragon Medical One and the virtualized applications will be launched in the same remote session.

## Nuance virtual extensions

High quality audio is required for accurate speech recognition. Regardless of the virtualization technology and architecture, you must be able to deliver audio from the client workstation/terminal to the Dragon Medical One application in the virtual environment.

The Nuance virtual extensions package provides custom audio channels to reduce the audio bandwidth requirements between the client end point and the virtualized application. The custom audio channels require 28 kbit/s for each user while they are dictating (native audio channels often require up to 1.4 Mbit/s).

**Citrix, RDS and VMware environments:** Dragon Medical One already integrates the server/virtual desktop component of the Citrix, RDS and VMware audio channels. Install the Nuance Citrix Client Audio Extension, Nuance RDS Client Audio Extension or Nuance VMware Client Audio Extension on the client PC.

**Note:** If the Nuance Citrix Server & Virtual Desktop Audio Extension, Nuance RDS Server & Virtual Desktop Audio Extension or Nuance VMware Server & Virtual Desktop Audio Extension is installed, we recommend you uninstall it unless it is still used by another product.

For more information, see the Docs & Guidelines folder of the Nuance virtual extensions package.

#### Thin clients

To use the custom audio channel in a thin client environment, the client component of the corresponding Nuance virtual extension must be installed on the thin client. For more information on supported thin clients, see the release notes delivered with your version of Dragon Medical One.

#### **Backward compatibility**

The server/virtual desktop components of the Nuance virtual extensions are integrated in Dragon Medical One. The Nuance virtual extensions are designed to be backward compatible from Dragon Medical One to the client end point. This means that you can run newer versions of Dragon Medical One in your virtual environment and they will work with older versions of the corresponding client end point extension with the following restrictions:

- New versions of Dragon Medical One are backward compatible with the corresponding end point virtual extensions for up to one year.
- It is recommended to upgrade the client end point extension to the latest version.

#### **Microphone controls**

The Nuance virtual extensions package provides custom PowerMic control channels to redirect PowerMic button presses to the virtualized Dragon Medical One instance.

**Citrix, RDS and VMware environments:** Dragon Medical One already integrates the server/virtual desktop component of the PowerMic button channel. Install Nuance PowerMic Citrix Client Extension, Nuance PowerMic RDS Client Extension or Nuance PowerMic VMware Client Extension on the client PC.

**Note:** If the Nuance PowerMic Citrix Server & Virtual Desktop Extension is installed, we recommend you uninstall it unless it is still used by another product.

Redistributable packages for Philips, Grundig and Olympus devices are also available.

For more information, see the Docs & Guidelines folder of the Nuance virtual extensions package.

## Server runtime requirements

#### Bandwidth

Audio transmission between the end point and the virtualized application/virtual desktop: If the Nuance custom audio channel is used, expect 28 kbit/s per active user; if the native virtual audio channel is used, expect up to 1.4 Mbit/s per active user.

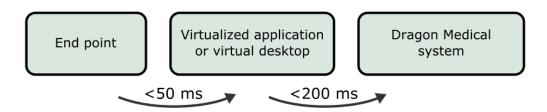
Audio transmission between the virtualized application/virtual desktop and the Dragon Medical system: Expect 80 kbit/s per active user.

#### Latency

Network latency between the client PC and the virtualized application/virtual desktop must not exceed 50 ms.

Network latency between the virtualized application/virtual desktop and the Dragon Medical system must not exceed 200 ms.

#### Network latency requirements



## Memory

The Dragon application's memory usage, when in use, will fluctuate (increase and decrease based on user behavior and Microsoft Windows memory management behavior). For sizing and planning purposes we estimate memory utilization of 220 MB (full working set), of which approximately 70 MB (shared working set) are shared between all instances of the SoD.exe process on the same machine - the real physical memory impact therefore is approximately 150 MB per instance.

When Dragon Medical One is in standby mode, the memory usage increases by approximately 32 MB on the client end point in virtualized environments (if the Nuance custom audio channel is used) and by approximately 15 MB in local environments, compared to when the microphone is turned off.

## CPU

Due to the many factors that can have an impact on CPU usage (processor speed, number of cores assigned to a given virtual instance, etc.), exact guidelines cannot be given. In general, the CPU requirements for the virtualized sod.exe executable are very low. As Dragon Medical One leverages Nuance's cloud-based speech recognition services, the local client performs very light-weight duties such as streaming speech and inserting recognition results.

With modern multi-core CPU architecture and provided that a given virtual session has been assigned at least one core, Dragon Medical One consumes between 1% and 3% of the available CPU per user session while the user is dictating.

When Dragon Medical One is in standby mode, the CPU usage increases by approximately 5% in local environments compared to when the microphone is turned off; it does not increase in virtualized environments (if the Nuance custom audio channel is used).

## **Deployment options**

The following options are available to deploy Dragon Medical One in a virtual desktop/application environment:

- Deploy Dragon Medical One using the Windows Installer (MSI package).
- Deploy Dragon Medical One via XCOPY deployment (manually copy the package to the destination path).

## Logging

In a virtual desktop/application environment, we recommend configuring a user-specific folder as the log file location; for example, %APPDATA%.

If you deploy Dragon Medical One using the Windows Installer, you can specify the location of the log file via the LOGFILEPATH parameter. For more information, see: Windows Installer.

If you deploy Dragon Medical One via XCOPY deployment, you can specify the location of the log file in the log4net section of the SoD.exe.config file (use the following syntax to specify environment variables: \${APPDATA}):

For more information, see: Logging.

# Coherence mode

Dragon Medical One Desktop Application is designed to work in a virtualized environment, which significantly lowers administration overhead for installation and maintenance. Additionally, virtual deployments increase the availability of the application as users can access Dragon Medical One from any secure end point (office, clinic or home).

Dragon Medical One can also be installed locally on a Windows desktop using either an XCOPY installer or a traditional MSI. This is necessary when users need to record into locally installed applications such as Microsoft Word, Microsoft Outlook or an EMR application that is deployed as a "fat" client.

Occasionally, users want to work both locally and virtually. They use a published version of Dragon Medical One to record into a published EMR and a local version of Dragon Medical One to dictate into local applications.

Note: Coherence mode is only supported in Citrix virtualization environments.

## Scenario

The user wants to record into the primary virtual EMR application and into applications that are published locally.

## Prerequisites

- The primary EMR application is hosted as a virtual application or published as a virtual application.
- Dragon Medical One is published in the same way as the primary EMR application (as a virtual application or as part of the virtual desktop image).
- The end point used to access the virtual applications is a desktop machine running a supported Microsoft Windows operating system (for information on supported operating systems, see: Software and hardware requirements).

## Procedure

- 1. Install Dragon Medical One on the server.
- 2. Install the technology-specific custom audio and microphone channels on the server.
- 3. Install the corresponding technology-specific custom audio and microphone channels on all client end points.
- 4. Install Dragon Medical One on the local workstation, using either the XCOPY or MSI installation package.

#### Remarks

- We do not recommend using the ClickOnce package; it could result in the local installation being newer than the virtual instance. Using the XCOPY or MSI installation method enables you to keep both versions of the application synchronized.
- Local installations do not use the custom audio or microphone drivers, therefore there is no conflict.

## Results

Dragon Medical Connect ensures that users have an identical speech experience, regardless of whether they are using the local application or the published instance. Due to our single, cloud-based profile, users have an

identical speech experience, regardless of whether they are using the local application or the published instance. All the auto-texts, commands, custom words and application configuration parameters will be consistent across both instances.

**Note:** For performance reasons, each instance of Dragon Medical One maintains a cache of auto-texts, custom words and commands. If a user adds a word, auto-text or command in one instance, it will be available in the second instance when that cache is refreshed (by closing and running that instance).

When a user only has one instance of Dragon Medical One running at a particular moment, a local instance or a virtual instance, but not both at the same time, there are no usability concerns.

## Running both instances

If a user is running both the local and published instances concurrently and wants to dictate into local and published applications, consider the following good practice:

- To visually differentiate the local and virtual instances of Dragon Medical One, we recommend setting a different color theme for each instance.
- To switch the audio and device button focus between instances, users must click the 👧 icon on the

corresponding DragonBar. Once an instance has the audio focus, users can continue to use their hardware microphone to control the application as normal.

**Note:** When using Nuance PowerMic II or PowerMic III as an input device, users can automatically switch the audio and device button focus from a local instance to a published one by placing the cursor in the corresponding local or published application.

## PowerMic Mobile

When using PowerMic Mobile as an input device, users need to switch audio focus by pairing the mobile app with their preferred instance of Dragon Medical One.

We recommend enabling the following PowerMic Mobile features:

- Targets: The user can browse a list of available targets and switch the pairing from one instance to another without exiting the mobile app or logging out of Dragon Medical One.
- Favorites: The user can save a personal list of pairing targets that they use regularly.

**Note:** These features are disabled by default in PowerMic Mobile; contact Nuance support if you would like these features enabled.

# Using Dragon Medical One with Mac

Dragon Medical One is a native Windows application; it cannot be installed and used directly on a macOS-based computer. Dragon Medical One can be configured for use with macOS.

## Accessing Dragon Medical One as a published virtual application

Dragon Medical One can be published as a server-based virtual application using virtualization technology such as Citrix XenApp. A macOS-based computer can be used as an end point to access the published virtual instance of Dragon Medical One. A virtualization client such as Citrix Receiver must be installed on the macOSbased computer to view and interact with Dragon Medical One and other published applications.

## Audio input devices

- Supported: PowerMic Mobile. For more information, see the documentation delivered with the product.
- Not supported: Nuance PowerMic II, Nuance PowerMic III and third-party microphones and headsets.

## **Running Windows on macOS**

A user can run a full instance of a Windows operating system on a macOS-based computer via virtual machine solutions such as Parallels Desktops for Mac or VMware Fusion. These solutions allow using Windows and macOS applications side-by-side.

Dragon Medical One must be installed on a Windows virtual machine. This configuration is identical to Dragon Medical One installed on a native Windows machine and provides full functionality with the following conditions:

- Dictation at the cursor is not supported in native macOS applications. To fully support this functionality, Dragon Medical One requires a deep integration with target applications; this level of integration is not possible with native macOS applications. Dictating into the Dictation Box and then transferring text in target macOS applications might be possible; however, this configuration is not officially supported by Nuance.
- Hardware microphone "pass-through" must be supported by the virtualization solution. This allows the hardware device to be recognized by the Windows operating system and made available to Dragon Medical One.
- Nuance will officially test and support PowerMic II and PowerMic III hardware microphones. For issues specific to third-party microphones, contact the device vendor.
- PowerMic Mobile is fully supported. For more information, see the documentation delivered with the product.

## Running Windows in native mode on Mac hardware

A user can run a Windows operating system on a macOS-based computer via Boot Camp. Boot Camp eliminates the virtual machine layer introduced by virtual machine solutions such as Parallels.

If a user is running Windows in native mode on a macOS-based computer, there are no additional requirements or restrictions in using PowerMic Mobile with this configuration.

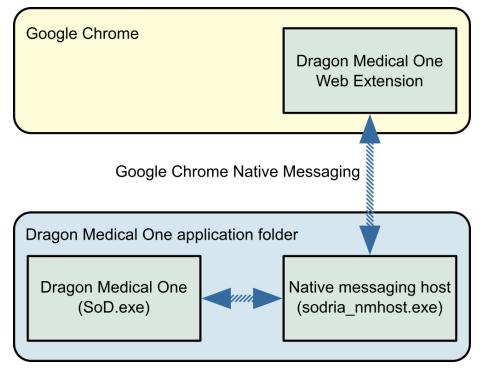
# Google Chrome

Dragon Medical One supports dictation at the cursor in standard text controls (these include text input, text area and standard content-editable controls) hosted in the Google Chrome browser.

To support text controls and dictation at the cursor, in Google Chrome-based applications, you must install the Dragon Medical One Web Extension.

## Architecture

Dragon Medical One and the Dragon Medical One Web Extension use a dedicated process (sodria\_ nmhost.exe) for communication between Dragon Medical One and Google Chrome. This process is delivered with Dragon Medical One and is started by Google Chrome. Google Chrome and Dragon Medical One rely on a registry key (HKEY\_CURRENT\_USER\Software\Google\Chrome\NativeMessagingHosts\com.nuance.sodria or HKEY\_LOCAL\_MACHINE\Software\Google\Chrome\NativeMessagingHosts\com.nuance.sodria) to connect the two applications. Dragon Medical One automatically creates and updates the registry key to connect the two processes while starting; this is usually only needed once per deployment and operating system user.



## Installation

Dragon Medical One Web Extension must be installed for each machine and operating system user using Google Chrome. Once the extension is installed, the browser must be restarted (or tabs reloaded). The user is informed if the browser needs to be restarted.

## Installing Dragon Medical One Web Extension via Google Chrome web store

To install manually, do the following:

- 1. Browse for the Dragon Medical One Web Extension web store link: https://chrome.google.com/webstore/detail/dragon-medical-one-webex/feolagkacappiaieohahjkeaikhjjcfa
- 2. Click Add to Chrome.
- 3. In Google Chrome settings, make sure that the Dragon Medical One Web Extension is enabled.
- 4. Restart the Google Chrome browser.

#### Installing Dragon Medical One Web Extension via Google Chrome policies

To install automatically, do the following:

- 1. Open the LOCAL\_MACHINE registry hive.
- Add the following to the registry: Key: HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Google\Chrome\ExtensionInstallForcelist\1 Value: feolagkacappiaieohahjkeaikhjjcfa;https://clients2.google.com/service/update2/crx
- 3. Restart the Google Chrome browser.

For more information on automatic installation, see Google Chrome policy documentation.

#### Enabling dictation at the cursor in local HTML pages

To enable dictation at the cursor in HTML pages stored in the local file system, do the following:

- 1. In the Google Chrome menu, expand More tools and click Extensions.
- 2. Search for Dragon Medical One Web Extension and select Allow access to file URLs.

# **Configuring Dragon Medical One**

Make sure the application configuration file has the same version as the application; do not use an old configuration file when you update to a newer version of Dragon Medical One. The version number can be found in the first line in the application configuration file.

To keep your customized settings after an upgrade, save the existing application configuration file before you upgrade and then manually transfer the respective settings, or create an XML file containing your customized settings and start Dragon Medical One from the command line, specifying the path to this XML file via the config parameter. For more information, see: Providing different configurations for a single stand-alone deployment.

## Configuring the organization token

To set the organization token for Dragon Medical One, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.Settings, OrganizationToken setting, specify the organization token.

## Providing different configurations for a single stand-alone deployment

To provide a single stand-alone package of Dragon Medical One to different user groups using different configuration settings, do the following:

- 1. Deploy Dragon Medical One using the Windows Installer (MSI package) or via XCOPY deployment.
- Create a new XML file containing only the configuration settings that are different from the settings in the SoD.exe.config file.
- 3. Start Dragon Medical One from the command line and use the config parameter to specify the path to this XML file. The settings in this file will override the settings specified in the SoD.exe.config file.

#### Remarks

• For a list of **setting** elements you can specify, see the **SoD.Settings** section in the SoD.exe.config file. The elements must be stated exactly as they are in the SoD.exe.config file.

The setting elements that you add to the SoD.DefaultOptions section will override the default settings.

For example (mandatory XML elements and structure in bold):

</SoD.DefaultOptions>
</applicationSettings>

 Dragon Medical One will access the XML file during startup; hosting the file on a network share can impact startup performance.

## Configuring the default options

Dragon Medical One enables you to configure the default settings that the user logs on with. By default, the user can change all settings in the **Options** dialog box; you can lock specific settings to prevent the user from changing them.

You can configure default options via the Nuance Management Center (NMC) or via the configuration file. Options configured via the configuration file overwrite options configured via NMC.

## Configuring default options via NMC

Proceed as follows:

- 1. Log on to NMC with your administration credentials.
- 2. Open the **Dragon Medical One** ribbon and click **Manage**; the **Manage Dragon Medical One User Options** page opens.
- 3. Select an organization, site or group in the left pane.
- 4. Select a tab and configure a setting.
- 5. Optional: Select the Lock check box to prevent the users from changing the configured setting.
- 6. Click Save.

For more information about configuring default options via NMC, see the Nuance Management Center Help.

## Configuring default options via the configuration file

Proceed as follows:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.DefaultOptions section, configure the default settings:

Specify the **setting** elements that you want to customize. For a list of setting identifiers and their corresponding values, see the table below.

#### Example 1: Locking a setting

In the **setting** element that you want to lock, add the isLocked attribute and set the value to True.

```
<setting name="Microphone.Record" serializeAs="String" isLocked="True">
<value>PressAndHold</value>
```

</setting>

#### **Example 2: Configuring hotkeys**

A hotkey value can be specified as a sequence of keys, either separated by spaces and/or plus signs or joined.

#### Example 3: Defining a hotkey as the default value of a microphone button

Specify the corresponding **setting** element and set the value to PressHotKey (key\_sequence).

The following table lists the setting identifiers, their descriptions, possible values and the default values the application is delivered with; the setting identifier has the following format: OptionCategory.IdentifierName:

Setting identifier	Setting description
General.AnchorSpeechFocusRecStarted	Decides if the speech focus should be anchored when recording is started.
	Values: True, False (default)
General.VisualFeedbackVoiceCommandsRecognized	Decides if visual feedback should be provided when a voice command is recognized and specifies where the voice command bubble should be anchored.
	<b>Values</b> : None, DragonBar <b>(default)</b> , Mouse, Text, SystemTray
General.AudioFeedbackVoiceCommandsRecognized	Decides if audio feedback should be provided when a voice command is recognized.
	Values: True, False (default)
General.EnableHandsFree	Decides if the wake word feature is enabled so the user can switch between dictation and standby mode. For more information on the wake word feature, see the end user help.
	Values: True (default), False
General.StartInStandbyMode	Decides if the application starts in standby mode when the user logs on. For more information on the wake word feature, see the end user help.
	Values: True (default), False
General.LeftFieldDelimiters	Configures the left embedded field delimiter.
	Values: [ (default)
General.RightFieldDelimiters	Configures the right embedded field delimiter.
	Values: ] (default)
General.OptimizeForRapidNavigation	Decides if the text should be inserted at the current cursor position when the position of the cursor is changed manually during recording.
	Values: True, False (default)
DictationBox.UnsupportedControlHandling	Decides if the Dictation Box is opened or if Basic Text Control is used when the cursor is placed in an unsupported text control.
	Values: DictationBox (default), BasicTextControl
DictationBox.TransferMethod	Configures the text transfer method.
	<b>Values</b> : ShiftInsert ( <b>default</b> ), CtrlV, WindowsPaste, SimulateKeystrokes

Setting identifier	Setting description
DictationBox.TransferRecStopped	Decides if the text should be transferred from the Dictation Box when recording is stopped.
	Values: True, False (default)
DictationBox.ClearAfterTransfer	Decides if the transferred text should be cleared from the Dictation Box.
	Values: True (default), False
DictationBox.KeepTextClipboardAfterTransfer	Decides if the transferred text should be kept on the clipboard.
	Values: True, False (default)
DictationBox.AddTextFromTargetApp	Decides if the text selected in the target application should be added to the Dictation Box.
	Values: True, False (default)
DictationBox.ShowWhenDragonMinimized	Decides if the Dictation Box should be shown when the DragonBar is minimized.
	Values: True (default), False
DictationBox.AudioAlertWhenOpens	Decides if an audio alert should be played when the Dictation Box opens automatically.
	Values: True, False (default)
DictationBox.TextAppearance	Configures the text appearance.
	Values: Plain (default), Formatted
DictationBox.FontType	Configures the font type.
	Default value: Arial
DictationBox.FontSize	Configures the font size.
	Default value: 10
Hotkeys.ShowHideDragonBar	Configures the hotkeys used to show/hide the DragonBar.
	Default value: CtrlALTH
Hotkeys.StartStopRecording	Configures the hotkeys used to start/stop recording.
	Default value: NUM-Add
Hotkeys.AnchorReleaseSpeechFocus	Configures the hotkeys used to anchor/release the speech focus.
	Default value: CtrlALTA
Hotkeys.ShowHideDictationBox	Configures the hotkeys used to show/hide the Dictation Box.
	Default value: CtrlALTD

Setting identifier	Setting description
Hotkeys.TransferText	Configures the hotkeys used to transfer the text from the Dictation Box.
	Default value: CtrlALTT
Hotkeys.ClearDictationBox	Configures the hotkeys used to clear the Dictation Box.
	Default value: none
Hotkeys.RecallText	Configures the hotkeys used to recall the text.
	Default value: none
Hotkeys.PreviousField	Configures the hotkeys used to navigate to the previous field in an auto-text.
	Default value: none
Hotkeys.NextField	Configures the hotkeys used to navigate to the next field in an auto-text.
	Default value: none
Hotkeys.FieldComplete	Configures the hotkeys used to accept a field's default text.
	Default value: none
Hotkeys.AcceptDefaults	Configures the hotkeys used to accept the default text in all fields.
	Default value: none
Hotkeys.OpenDMA	Configures the hotkeys used to open Dragon Medical Advisor.
	Default value: none
Hotkeys.CloseDMA	Configures the hotkeys used to close Dragon Medical Advisor.
	Default value: none
Microphone.Record	Configures the Record button's behavior.
	Values: Toggle, PressAndHold (default)
Microphone.Transcribe	Configures the Transcribe button's behavior.
	Values: none, ClearDictationBox, RecallText, TransferText (default), AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox, NextField, PreviousField, AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow

Setting identifier	Setting description
Microphone.EnterSelect	Configures the Enter/Select button's behavior.
	Values: none, ClearDictationBox, RecallText, TransferText, AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox, NextField, PreviousField, AcceptDefaults (default), FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow
Microphone.CustomRight	Configures the Custom Right button's behavior.
	Values: none, ClearDictationBox, RecallText, TransferText, AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox (default), NextField, PreviousField, AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow
Microphone.CustomLeft	Configures the Custom Left button's behavior.
	Values: none (default), ClearDictationBox, RecallText, TransferText, AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox, NextField, PreviousField, AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow
Microphone.TabBackward	Configures the Tab Backward button's behavior.
	Values: none, ClearDictationBox, RecallText, TransferText, AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox, NextField, PreviousField (default), AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow
Microphone.TabForward	Configures the Tab Forward button's behavior.
	Values: none, ClearDictationBox, RecallText, TransferText, AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox, NextField (default), PreviousField, AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow

Setting identifier	Setting description
Microphone.PlayStop	Configures the Play/Stop button's behavior.
	Values: none (default), ClearDictationBox, RecallText, TransferText, AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox, NextField, PreviousField, AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow
Microphone.FastForward	Configures the Fast Forward button's behavior.
	Values: none, ClearDictationBox, RecallText, TransferText, AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox, NextField (default), PreviousField, AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow
Microphone.FastRewind	Configures the Fast Rewind button's behavior.
	Values: none, ClearDictationBox, RecallText, TransferText, AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox, NextField, PreviousField (default), AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow

## **Enabling Basic Text Control**

By default, if users place the cursor in a text control that is not fully supported by Dragon Medical One, the Dictation Box opens automatically and the text is written there.

Basic Text Control enables users to dictate at the cursor in unsupported text controls. Only basic speech recognition functionality will be supported, users will not be able to navigate, edit or format the text using their voice.

**Note:** Users can configure Dragon Medical One via the **Options** dialog box if they prefer to work in the Dictation Box or using Basic Text Control. These settings will be overwritten by the settings configured via the configuration file.

To enable dictation at the cursor using Basic Text Control, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the **SoD.Settings**, **BasicTextControls** setting, specify all text controls (defined as **WindowClass** elements specific to a process) you want to enable Basic Text Control for.

If you do not specify **WindowClass** elements for a process, Basic Text Control is enabled for all window classes of that process.

If you specify a wildcard character (\*) for a process, Basic Text Control is enabled for all specified **WindowClass** elements, independent of the process.

#### Example:

```
<setting name="BasicTextControls" serializeAs="String">
<value>
<BasicTextControls>
<ProcessName name="Process_1">
<WindowClass>Sample_class_1</WindowClass>
</ProcessName>
<ProcessName name="Process_2">
</ProcessName name="Process_2">
</ProcessName>
<ProcessName name="*">
<WindowClass>Sample_class_2</WindowClass>
<WindowClass>Sample_class_3</WindowClass>
</ProcessName>
</BasicTextControls>
</value>
```

```
</setting>
```

# Configuring the text transfer method for text controls that Basic Text Control is enabled for

By default, the text is inserted in the text controls via SimulateKeystrokes; other possible text transfer methods are ShiftInsert, CtrlV and WindowsPaste. Dragon Medical One enables you to configure the text transfer method for all text controls of a process or for specific text controls.

Proceed as follows:

- 1. Open the SoD.exe.config file.
- 2. In the **SoD.Settings**, **BasicTextControls** setting, configure the text transfer method:

To apply the setting to all window classes of the process, add the textTransferMethod attribute in the **ProcessName** element and set the value.

To apply the setting on a window class level, add the textTransferMethod attribute in the **WindowClass** element and set the value. The attribute that you set in the **WindowClass** element will override the **ProcessName** text transfer method.

#### Example:

```
<WindowClass textTransferMethod="CtrlV">Sample_class_1</WindowClass>
</ProcessName>
```

```
</BasicTextControls>
</value>
```

</setting>

## Configuring timeout for end users

You can configure Dragon Medical One to automatically log a user off, if they have not worked with the application for the specified period of time. When a user is logged off automatically any unsaved changes are lost.

By default, this setting is empty and a user is never logged off automatically, no matter how long they do not use Dragon Medical One.

Proceed as follows:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.Settings, AutoLogOffTimeout setting, set the time period in minutes. Range: 5-120 minutes.

Example:

If the user does not work with Dragon Medical One for more than 10 minutes, they are logged off.

## **Configuring Dragon Medical Advisor**

Dragon Medical Advisor analyzes clinicians' documentation in real time and displays additional information to help make the documentation more complete and accurate. Information is displayed to the user via the Advisor window in Dragon Medical One.

Dragon Medical Advisor can be configured via NMC and via the application configuration file; for more information, see: Configuring Dragon Medical Advisor.

## **Enabling Clinical Content Search**

Clinical Content Search is part of the virtual assistant capabilities embedded in Dragon Medical One. It enables users to retrieve clinically relevant information from the clinical decision support resource UpToDate by Wolters Kluwer. For more information, see the Fact Sheet on Clinical Content Search.

**Note:** To be able to use this feature, your organization must have an UpToDate Enterprise Anywhere license.

To enable Clinical Content Search for your organization, Nuance Technical Support requires the following information:

- Your organization's UpToDate Site ID, if your organization has given UpToDate its IP address.
- Your organization's Security Agent URL and UpToDate Site ID, if your organization authenticates using a Security Agent URL.

If you do not have the required information, please contact UpToDate support to obtain it.

## Disabling PowerMic Mobile support

The PowerMic Mobile feature enables users to use their mobile devices as a microphone. If your system is set up to use this feature, users can select PowerMic Mobile from the list of available microphones during logon. To hide PowerMic Mobile from the list, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.Settings, EnablePowerMicMobile setting, set the value to False.

**Note:** This setting will only disable the installation-free PowerMic Mobile feature. If a user has installed the corresponding components of PowerMic Mobile on their mobile device and on the desktop, their device will still be available in the list.

## Configuring the speech recognition topic/specialty

To configure the speech recognition topic for Dragon Medical One, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.Settings, SupportedTopics setting, specify the speech recognition topic.

If you want to present a list of available speech recognition topics to the end user, specify all supported speech recognition topics in the setting and separate them with the pipe (|) character (for example, GeneralMedicine|Surgery). The end user is then able to choose a topic when they start the application.

#### Supported speech recognition topics

GeneralMedicine, ClinicalAdministration, Cardiology, Emergency, InternalMedicine, MentalHealth, Neurology, ObstetricsAndGynecology, Oncology, Orthopaedics, Pathology, Pediatrics, Surgery.

## Configuring microphones

To configure the microphones the end user is allowed to use in Dragon Medical One, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the **SoD.Settings**, **AllowedMicrophones** setting, specify all microphones the end user is allowed to use and separate them with the pipe (|) character.

When the end user starts the application, the list of connected microphones is filtered based on this setting. If you do not configure this setting, the end user can choose from all connected microphones.

**Note:** Unless PowerMic Mobile support has been disabled, PowerMic Mobile devices are always available regardless of this setting.

## Disabling the crash dump notification to end users

When Dragon Medical One shuts down unexpectedly, crash dump information is saved. The next time the user starts the application, they are informed that log files containing information about the crash are available and can be sent to their system administrator for analysis.

We recommend that you ask your users to send crash dump files to you; send the files, along with an error report if possible, to Nuance Technical Support for further analysis.

If you do not want your users to receive this crash dump notification, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the **SoD.Settings**, **EnableCrashNotification** setting, set the value to False.

**Note:** The crash dump notification interacts with the troubleshooting data collection feature. For more information, see Interaction with crash dump notification.

## Enabling the troubleshooting data collection for end users

You can enable Dragon Medical One to automatically collect and send troubleshooting data (minidump and log files containing information about a crash) to Nuance for further analysis.

If you want to enable the troubleshooting data collection for your users, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.Settings, EnableTroubleshootingDataCollection setting, set the value to True.

When the troubleshooting data is available, the user will be asked if they want to send it to Nuance; the user can change this setting via the **Data Collection** pane in the **Options** dialog box.

#### Interaction with crash dump notification

- If the EnableTroubleshootingDataCollection and EnableCrashNotification settings are set to True, a message asking the user if they want to send the troubleshooting data to Nuance will be displayed.
- If the EnableTroubleshootingDataCollection setting is set to True and the EnableCrashNotification setting is set to False, no message will be displayed to the user and the troubleshooting data will be automatically sent to Nuance.
- If the EnableTroubleshootingDataCollection setting is set to False and the EnableCrashNotification setting is set to True, a crash dump notification will be displayed to the user and the troubleshooting data will not be sent to Nuance.
- If the EnableTroubleshootingDataCollection and EnableCrashNotification settings are set to False, no message will be displayed to the user and the troubleshooting data will not be sent to Nuance.

## Disabling registration of the Microsoft Word add-in

When starting Dragon Medical One calls the regsvr32.exe executable to register the Microsoft Word add-in. To disable registration of the Microsoft Word add-in, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.Settings, add the setting RegisterWordAddIn and specify as follows:

Note: This configuration setting is optional.

#### Registering the Microsoft Word add-in for individual users

If registration of the Microsoft Word add-in is disabled, you can enable it for an individual user. Log on to the corresponding user account and run the following command:

regsvr32.exe /s SoD.WordAddin.dll

If a user works with a 64-bit version of Microsoft Word, run the following command:

regsvr32.exe /s SoD.WordAddin\_x64.dll

Note: If you update Dragon Medical One, you must run the corresponding command again.

## Customizing the splash screen

You can lay a custom image over the Dragon Medical One splash screen; the overlay image will be placed in the lower left corner of the splash screen.

Requirements: Size: 320x130 pixels Format: PNG File name: SoD.OEM.png Location: ClickOnce: The deployment location (same location as the application package) Stand-alone: The application directory (same location as the configuration file)

## Configuring the user interface color theme

By default this setting is empty and the Blue (default theme) is used. To configure the color theme for Dragon Medical One, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the **SoD.Settings**, **DefaultTheme** setting, specify the theme identifier (Blue, Light, Dark):

# Dragon Medical One command line

## Starting Dragon Medical One from the command line

You can configure the stand-alone Dragon Medical One package so that your users do not need to log on separately to the application. By starting Dragon Medical One with the mandatory parameters specified, the logon dialog box will not be shown and any logged on user will be automatically logged off.

**Note:** Make sure you specify the full path to the application; using the short 8.3 form of the path will cause problems.

## Example

Dr. Chris Smith speaks with an American English accent, works in the field of general medicine and records using a SpeechMike III.

SoD.exe -user "chrissmith" -lang "en-US" -topic "GeneralMedicine" -mic "SpeechMike III"

When Dr. Smith logs on to a PC, Dragon Medical One is available, in the notification area, with their preferred settings applied.

#### Parameters

#### user

The speech recognition user profile name.

This parameter is mandatory; you must specify the user before any of the other parameters are applied. If trusted authentication is enabled, Dragon Medical One will ignore this parameter.

#### lang

The speech recognition language.

This parameter is mandatory; you must specify the language as an IETF language tag. For more information, see: Supported languages.

Currently only English (IETF language tag: en-US) is supported.

#### topic

The speech recognition topic (medical specialty). For a list of available topic names, see: Configuring the speech recognition topic.

If only one topic is specified in the configuration file and this parameter is not set, this topic will be selected automatically and Dragon Medical One will start without displaying the logon dialog box.

If more than one topic is specified in the configuration file and this parameter is not set, Dragon Medical One will start without displaying the logon dialog box and will use the topic the user last logged on with. If the user has not logged on successfully before, or if the topic the user last logged on with is no longer available, the logon dialog box is opened and the user must select a topic manually.

mic

The microphone identifier.

This parameter is mandatory. If you do not know the exact microphone identifier, you can specify part of the name, for example, "SpeechMike". If only one connected microphone contains the specified string in its name, this microphone will be used. If no connected microphone or more than one connected microphone contains the specified string in its name, the logon dialog box is opened and the user must select a microphone.

If you have configured a list of allowed microphones, the mic parameter is optional. Dragon Medical One will go through the allowed microphones, in the order that you listed them, and use the first specified microphone it finds that is connected. If you specify the mic parameter, this microphone must be included in the list of allowed microphones.

password

The user's password.

If trusted authentication is enabled, Dragon Medical One will ignore this parameter.

nologo

Disables the splash screen.

config

The path to the XML file containing custom configuration settings. For more information, see: Configuring Dragon Medical One.

# Logging off and closing Dragon Medical One from the command line

You can configure the stand-alone Dragon Medical One package so that your users do not need to log off or close the application manually.

#### Parameters

logoff

Logs off the currently logged on user. This parameter is exclusive and cannot be used together with other parameters.

If trusted authentication is enabled, this parameter is ignored by Dragon Medical One.

shutdown

Shuts down the currently running instance of Dragon Medical One. This parameter is exclusive and cannot be used together with other parameters.

# Enabling and disabling WPF support from the command line

Dragon Medical One provides built-in support for applications based on Windows Presentation Foundation (WPF) TextBox class text controls. You need to enable WPF only if your users cannot dictate at the cursor in these applications.

You can enable/disable WPF support, for a specific machine, in the stand-alone Dragon Medical One package. By enabling/disabling WPF support, you will register/deregister a Microsoft Text Services Framework plugin on the machine that you have deployed to. This operation requires administration rights on that machine. To perform the registration, Dragon Medical One will attempt to elevate rights; if the rights cannot be elevated you cannot proceed.

Note: regsvr32.exe will be invoked for this operation.

These parameters are mutually exclusive and will override any other parameters passed to the SoD.exe process during start-up. For example, passing the parameters during standard logon procedure is not supported and will cause Dragon Medical One to shut down after registration/deregistration.

#### Parameters

enableWPF

Registers the Text Services Framework (TSF) plugin. To perform the registration, the SoD. exe process will be started, and once this operation is performed, it will shut down.

You only need to enable WPF support once per deployment or if you change the deployment location.

#### disableWPF

Deregisters the Text Services Framework (TSF) plugin. To perform the deregistration, the SoD.exe process will be started, and once this operation is performed, it will shut down.

# Nuance Management Center - overview

The Nuance Management Center (NMC) is the central administration component for Dragon Medical One. NMC enables you to perform a variety of administration tasks, such as licensing and managing auto-texts, users, groups and organizations.

For information on how to define auto-texts and set auto-text filters in NMC, see: Auto-texts.

# Prerequisites for running NMC

Microsoft Internet Explorer, Microsoft Edge, Google Chrome, Apple Safari

**Note:** NMC requires HTTPS access to https://nmc-hc-prod-us.nuancehdp.com (port 443); make sure your firewall does not block this port. This port must be accessible from the workstations used to access NMC.

# Launching NMC

- 1. To access NMC, browse to: https://nmc-hc-prod-us.nuancehdp.com.
- 2. To log on for the first time, use the credentials in your welcome kit.

Note: To change your password, click = and select Change password.

For more information on NMC, click on in the upper right of the NMC page to open the Nuance Management

Center Help.

### Licensing

To monitor licenses, open the **Licensing** ribbon, click **View Licenses** and search for the license type. You can see a summary of license information.

If auto-provisioning is enabled, user accounts are automatically created and licenses are assigned. If autoprovisioning is disabled, this must be done manually. To assign a license to a user account, do the following:

- 1. Open the Licensing ribbon and click View Licenses.
- 2. Click Search; all licenses are displayed.
- 3. Select the license that you want to assign to the user.
- 4. In the License Allocation group, click Grant.
- 5. Select the user account from the list of Available Users and click OK.

To revoke a license, do the following:

- 1. Open the Licensing ribbon and click View Licenses.
- 2. Click Search; all licenses are displayed.
- 3. Select the license that you want to revoke.
- 4. In the License Allocation group, click Revoke.
- 5. Select the user account from the list of Available Users and click OK.

### Users

#### Auto-provisioning

Auto-provisioning is enabled by default. This means that the first time a user connects to Dragon Medical One, a user account is automatically created and a license is assigned. If no more licenses are available, a user account is created but the user will not be able to use speech recognition.

User accounts that are generated automatically are assigned to the **Dragon Medical** group; their first name in the system is *Generated>*. To add a user account to another group, open the **Group Memberships** tab in the **User Account Details** dialog box; use the arrow buttons to assign and organize the groups the user account is assigned to.

We recommend keeping auto-provisioning enabled; however, creating accounts manually enables you to enter more information on each user (for example, location and department) and control license allocation.

To disable auto-provisioning, do the following:

- 1. Open the Sites ribbon, click Organization Overview and then Details.
- 2. Open the Auto-provisioning tab and select Dragon Medical Server in the left pane.
- 3. Select None.
- 4. Click Save.

To disable automatic license assignment, do the following:

- 1. Open the Sites ribbon, click Organization Overview and then Details.
- 2. Open the Auto-provisioning tab and select Dragon Medical Server in the left pane.
- 3. Activate Restrict automatic license assignment to specific license types; to keep automatic license assignment enabled for specific license types, use the arrow buttons to move license types from Automatic license assignment disabled to Automatic license assignment enabled.
- 4. Optionally, activate Enable automatic license assignment for newly imported license types.

#### Creating user accounts

To create a user account, do the following:

- 1. Open the User Accounts ribbon and click Add.
- 2. In the User Account Details dialog box, enter the First name, Last name and Login; the other fields are optional.
- 3. Open the **Group Memberships** tab and assign the user account to at least one group. If you are not currently working with groups, assign the user account to the **Dragon Medical** group.
- 4. Click **Save** and select the license that you want to assign to the user in the **Licenses** dialog box, or click **Save & New** (to create another user account).

#### Viewing user account information

To view a list of users, do the following:

- 1. Open the User Accounts ribbon and click Search.
- 2. Select an **Organization** and enter search criteria. If you do not enter any search criteria, all users in the organization are displayed.

To view a report of client versions used in your Dragon Medical system, do the following:

- 1. Open the **Reports** ribbon and click **Client Version**.
- 2. Enter search criteria and click Search.
- 3. To export the results as a CSV file, click E.

#### **Resetting user profiles**

Resetting a user profile might be necessary when a user's role or environment changes significantly; for example, a doctor moves to an administrative role or a user moves from an environment with a lot of background noise to a quiet environment. The adaptation process can improve speech recognition quality faster after the user profile is reset.

To reset a user profile, do the following:

- 1. In the User Account Details dialog box, open the User Profile tab.
- 2. Expand the Dragon Medical Server pane and select Reset speech recognition user profile.
- 3. Click Save.

Be careful when resetting a user profile; this action has the following consequences:

- The user profile must be readapted to the user's voice; this will have a short-term impact on speech recognition quality.
- Words previously added to the vocabulary by the user are not available immediately after resetting the user profile. It can take up to a few minutes of dictation for words previously added to the vocabulary to be available again.
- The user cannot add or edit words until all words previously added to the vocabulary become available again.

**Note:** The user vocabulary is not reset when you reset a user profile. Any words added or disabled by the user remain added or disabled.

### Groups

When you first log on to NMC the following groups are available:

- NMC Administration: For users performing administration tasks in NMC.
- Dragon Medical: For users accessing speech recognition.

**Note:** The **Dragon Medical** group does not exist until the first end user connects via a Dragon Medical One client; the group is then automatically created.

#### Working with groups

Groups are useful for the following:

- To assign the rights to create auto-texts to specific users.
- To make certain auto-texts available to specific users. To assign an auto-text to a group, make sure that the **Group** level is selected when you create an auto-text.

To group users who have rights to create auto-texts, do the following:

- 1. Log on to NMC with your administration credentials.
- 2. Open the Groups ribbon and click Add.
- 3. Select the new group's organization.
- 4. In the Role field, select NMC Administrator.
- 5. Base the new group on the existing NMC Administration group and click OK.
- 6. Enter a Group name and make sure the correct Site is selected.
- 7. In the Privileges list, select Product Manage Dragon Medical Server.
- 8. Click Save.
- 9. Open the Groups ribbon and click Search.
- 10. Enter the name of the group you just created and select it in the list of search results.
- 11. Click Add User Account to Group in the Membership ribbon.
- 12. To add a user account to the group, enable the check box in the **Member** column in the corresponding row.
- 13. Click Save.
- To group users of auto-texts, do the following:
- 1. Log on to NMC with your administration credentials.
- 2. Open the **Groups** ribbon and click **Add**.
- 3. Select the new group's organization.
- 4. In the Role field, select Speech Recognition User and click OK.
- 5. Enter a Group name and make sure the correct Site is selected.
- 6. Click Save.
- 7. Open the **Groups** ribbon and click **Search**.
- 8. Enter the name of the group you just created and select it in the list of search results.
- 9. Click Add User Account to Group in the Membership ribbon.
- 10. To add a user account to the group, enable the check box in the **Member** column in the corresponding row.
- 11. Click Save.

# Logging

Dragon Medical One creates log files that can help Nuance to analyze issues reported by end users or administrators. Log files are uploaded to Dragon Medical Server, and a limited amount of information is written to the local file system of the client PC. The information written to the local file system does not contain any sensitive data; the amount of data kept on the local PC can be configured and usually spans data for the last few days.

# Log file location

#### Local PC

Local log file (does not contain sensitive data):

```
Dragon Medical One ClickOnce directory (C:\Users\<User_Name>\AppData\Local\Apps\...)
```

or

Dragon Medical One stand-alone directory

Crash dump: %APPDATA%\Nuance\SoD\

#### Virtual desktop/application environment

For information on logging in a virtual desktop/application environment, see: Logging in a virtual environment.

# Setting the logging level

The log level is set in the log4net section of the SoD.exe.config file. The log level should be set for both logger names specified in the configuration section:

```
<logger name="Nuance.SoD.Generic">
<logger name="Nuance.SoD.Text">
```

The default log level is ERROR which creates the least amount of data. You can change the logging level to one of the following (amount of data collected in descending order):

DEBUG INFO WARN ERROR

# User authentication

The following options are available for user authentication in Dragon Medical One:

- No authentication: The user enters a unique user name and must always use this name; a password is not required.
- Native authentication: The user must enter a user name and password provided by the administrator. The credentials are checked via the Nuance Management Server (NMS).
- LDAP authentication: The user must enter a user name and password, and the credentials are checked via an LDAP server.
- Trusted authentication: The user, logged on to Microsoft Windows with their Active Directory user name and password, is automatically logged on to Dragon Medical One. The credentials are checked via the Nuance Management Server (NMS).
- SSO authentication: The user is redirected to your corporate identity provider for authentication. If the user
  is not logged on to the corporate identity provider domain, they are prompted for credentials. If the user is
  already logged on to the corporate identity provider domain, they are redirected and logged on to Dragon
  Medical One without being prompted for credentials.

### No authentication

This is the default configuration for authentication. Dragon Medical One prompts the user to enter a new user name when logging on for the first time; using a password is not possible. NMS automatically creates a user profile if a profile for the user name does not yet exist. The user is granted access to Dragon Medical One and a license is assigned. The user must enter the same user name every time they log on to Dragon Medical One.

#### Procedure

In the SoD.exe.config file, SoD.Settings, Authentication setting, specify: <value>none</value>.

### Native authentication

You must create a user account in NMC before the user can log on to Dragon Medical One. The user enters the user name and password provided by the administrator, and the credentials are sent to NMS for authentication.

#### Procedure

In the SoD.exe.config file, SoD.Settings, Authentication setting, specify: <value>native</value>.

#### Configuring password settings in NMC

To define password expiration and complexity criteria for users of an organization, do the following:

- 1. Search for the organization, right-click it and select Organization details.
- 2. On the Products tab, open the General tab and expand Password Settings.
- 3. Define the criteria.
- 4. Select Password must meet complexity requirements and click Save.

# LDAP authentication

The user credentials are sent to NMS to authenticate against an LDAP server hosted in your organization. The authentication calls from Dragon Medical One to NMS go through an NMS local authenticator.

#### Deploying the NMS local authenticator

To deploy the on-premise NMS local authenticator, do the following:

- 1. In NMC, search for the organization, right-click it and select **Organization details**.
- 2. Open the **Organization Tokens** tab and add a new token; this will be used to connect the local authenticator to your NMS organization.
- 3. Install the local authenticator using the organization token generated above.
- 4. In the SoD.exe.config file, check that the NMS organization token and the NMS URL are correct.

#### **Configuring Dragon Medical One**

In the SoD.exe.config file, SoD.Settings, Authentication setting, specify <value>ldaplocal</value>.

#### Configuring your NMS organization in NMC

To connect Dragon Medical One with your on-premise local authenticator, do the following:

- 1. Search for the organization, right-click it and select Organization details.
- 2. Open the Products tab and expand Dragon Medical Server.
- In the NMS on-premise server URL field, enter the URL of the on-premise NMS local authenticator including the port that hosts the authentication interface on the local authenticator (default port number: 8731): <a href="http://nms.organization.com">http://nms.organization.com</a>:8731>, and click Save.
- 4. Open the **Domains** tab and click **Add**.
- 5. Enter the name and the LDAP Active Directory connection string, and click Save.

#### Configuring user accounts in NMC

To configure a user account for LDAP authentication, do the following:

- 1. Search for the user account, right-click it and select User Account Details.
- 2. Open the Credentials tab.
- 3. On the NTLM tab, click Add; the User name and Organization Name are already filled out.
- 4. From the **Domain** list, select the domain added above.
- 5. In the **Login** field, enter the LDAP login ID.
- 6. Click Save.

If a user already exists in NMS with a different NMS login ID, the LDAP login ID and the NMS login ID need to be connected. Proceed as follows:

- 1. Search for the user account, right-click it and select User Account Details.
- 2. Open the Credentials tab.
- 3. On the **Token** tab, click **Add** and enter the LDAP login ID.

# **Trusted authentication**

The Active Directory credentials of the user currently logged on to Microsoft Windows are sent to NMS for authentication. The user can work with Dragon Medical One without entering a user name and password; the logon dialog box is not displayed.

The authentication calls from Dragon Medical One to NMS go through an NMS local authenticator. For information on how to deploy the NMS local authenticator and configure your NMS organization, see LDAP authentication.

#### Configuring Dragon Medical One

In the SoD.exe.config file, SoD.Settings, Authentication setting, specify: <value>trusted</value>.

#### Configuring user accounts in NMC

To configure a user account for authentication in the Active Directory, do the following:

- 1. Search for the user account, right-click it and select User Account Details.
- 2. Open the Credentials tab.
- 3. On the NTLM tab, click Add; the User name and Organization Name are already filled out.
- 4. From the Domain list, select the user's domain.
- 5. In the Login field, enter the Active Directory login ID.
- 6. Click Save.

# Single sign-on (SSO) authentication

SSO authentication enables users to log on to Dragon Medical One using their corporate identity (for example, Windows Active Directory credentials). The authentication is performed via a central authentication service, which interacts with your corporate identity provider to validate the user credentials. The central authentication service passes a secure token to Dragon Medical One, which then grants the user access. When Dragon Medical One is started, users are redirected to the corporate identity provider. If the user is not logged on to the corporate identity provider domain, they will be prompted for credentials. If the user is logged on to the domain, they will be automatically granted access to Dragon Medical One.

#### Configuring SSO authentication using Auth0

#### Proceed as follows:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.Settings, Authentication setting, specify: <value>sso</value>.
- 3. In the **SoD.Settings**, **Domain** setting, specify: <value>nuancehdp.auth0.com</value>.
- 4. In the **SoD.Settings**, **ClientId** setting, specify: <value>rtsoCXxRETvN3a0SavF6B5srHn3CXbwa</value>.
- 5. In the **SoD.Settings**, **Connection** setting, specify the connection name provided by your Nuance technical contact.
- In the SoD.Settings, RedirectUri setting, specify: <value>https://nuancehdpdev.auth0.com/mobile</value>.

Note: The specified values might change depending on your environment.

#### Configuring SSO authentication using Active Directory Federation Services (ADFS)

Proceed as follows:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.Settings, Authentication setting, specify: <value>sso\_adfs</value>.
- 3. In the **SoD.Settings**, **ADFSClientId** setting, specify the ADFS identifier of Dragon Medical One.
- 4. In the SoD.Settings, ADFSAudience setting, specify the NMS URL.
- 5. In the **SoD.Settings**, **ADFSRedirectUri** setting, specify the redirect URL where authentication responses can be sent and received by Dragon Medical One once the request is completed; it must match one of the redirect URIs registered in ADFS.
- 6. In the **SoD.Settings**, **ADFSMetadataUri** setting, specify the URL providing meta data required for the ADFS setup.

# Speech recognition settings: Auto-texts

The auto-text feature enables you to define standard blocks of text (also called 'normals' or 'canned text') that Dragon Medical One users can insert into their document with a short voice command. Using auto-texts reduces the time the user needs to dictate and improves the consistency of documentation. Available auto-texts are displayed to end users on the **What You Can Say** page. You define auto-texts in the Nuance Management Center (NMC). Users can create their own auto-texts in Dragon Medical One in the **Manage Auto-texts** dialog box.

# Defining an auto-text in NMC

#### Scenario

- Your users often speak to their patients about the dangers of smoking. In the report, they will say The patient was advised to quit smoking and counseled on effective smoking cessation strategies.
- You define an auto-text called *Quit smoking* that contains this information.
- A doctor says the voice command insert quit smoking to insert the information.

#### Procedure

- 1. Open the **Speech Recognition** tab on the ribbon.
- 2. Click Manage.
- 3. Select your Organization.
- 4. In the Auto-texts tree view, select the level you want to create the auto-text for (site, group or user).
- 5. In the Auto-text group on the ribbon, click Add.
- 6. Enter a Name (Quit smoking), a Description (optional) and select a Language.
- 7. Optional: change the **Spoken Phrase**.
- 8. In the contents section, enter:

The patient was advised to quit smoking and counseled on effective smoking cessation strategies.

9. Click Save.

#### Remarks

- To make the auto-text available for specific users, make sure to select the corresponding site or group in the tree view.
- Actions on the group level (for example deleting an auto-text) override those on the site level. Actions on the user account level override group and site levels.
- A keyword is what the user says to tell the system that an auto-text is to be processed. The default keyword is insert; you can change it in NMC.
- The Name field contains the title of the auto-text (this is generally what users must say to insert the auto-text); make sure it is unambiguous and easy to pronounce. It is strongly recommended that you give the auto-text a distinctive name that cannot be misinterpreted as speech to be recognized. This helps to ensure that it is correctly inserted.

By default, the Spoken Phrase is the same as the Name. If how the auto-text name is written and how it is pronounced are very different, change the Spoken Phrase (how it is pronounced). You can only use alphabetic characters in spoken phrases. For acronyms that are spelled out use capital letters, separated by spaces.

For spoken phrases do not use:

Very short phrases (such as one syllable only) Capital letters (except for acronyms, for example, C I A) Abbreviations Digits (use 'twelve' and not '12') Punctuation marks (for example, ", !, ?, etc.) Symbols (for example, +, -, &, \$, etc.)

- If you want to give your users more than one way to insert an auto-text, click and enter another Spoken Phrase.
- You cannot create two auto-texts with the same name, even if different spoken phrases are defined.
- You cannot create two auto-texts with the same spoken phrase, even if different names are defined.
- Activate **Display all levels** to list the auto-texts for the level selected in the tree view and its higher levels.
- Auto-texts can contain fields. Fields are gaps in the auto-text where users can enter specific text, for example, patient data. To add a field to an auto-text, enter [] in the relevant place of the auto-text's contents; you can enter any text between the field delimiters as default content, for example, CBC results [within normal limits], vital signs [within normal limits]. When users insert the auto-text, they can decide whether they want to replace the default values with specific text or use the default values.
- By default, fields are indicated by square brackets. Users can change the characters used as field delimiters in Dragon Medical One on the General pane of the Options dialog box; any previously defined fields using different delimiters will then no longer work.

# Defining a keyword in NMC

#### Scenario

- You define the keyword: insert.
- When the user says insert, the system identifies that an auto-text is to be processed and displayed.

#### Procedure

- 1. Open the Speech Recognition ribbon and click Keywords.
- 2. Select your **Organization** and enter *insert* as the **Leading Keyword** for English.
- 3. Click **OK** to save your settings.

#### Remarks

- You can define a leading keyword (said before the spoken phrase) and/or a trailing keyword (said after the spoken phrase).
- insert is the default leading keyword for English.
- If a keyword is added or deleted, it is applied to all auto-texts that are defined in your organization.
- The maximum number of characters for a keyword is 25.

 You can only use alphabetic characters to define a keyword; as for spoken phrases, special characters are not allowed.

### Configuring the auto-text filter

A system with many auto-texts can be complex for users; they might have difficulty remembering all the names and which ones are relevant for them.

Filtering is set up in the SoD.exe.config file and then set in NMC.

In the configuration file, enter the filter key/value pairs you need. For example:

```
<filterSettings>
<filter>
<add key="department" value="radiology" />
<add key="modality" value="X-ray|CT|MRI" />
</filter>
```

</filterSettings>

#### Remarks

- You can configure as many key/value filter pairs as you want.
- Use the character to separate multiple values for a key.

### Setting an auto-text filter in NMC

You can filter specific auto-texts to be active for specific forms.

#### Scenario

- Dragon Medical One supports an auto-text filter with the key 'modality' and values 'X-ray', 'CT' and 'MRI' and it will set this filter for all radiology reports.
- You want to set the 'normal chest' auto-text to be active for x-rays only.

#### Procedure

- 1. Search for the 'Normal chest' auto-text.
- 2. Open the Meta Data tab.
- 3. In the **Name** field enter *modality* and in the **Value** field enter *X-ray*.
- 4. Click OK and then Save.

#### Remarks

By default, auto-texts are always active. Be aware that:

If no auto-text filter has been set for a document or form, all auto-texts that have been defined in the system will be active.

All auto-texts that you do not define meta data entries for will always be active.

If an auto-text filter with a specific name has been set for a document or form but no corresponding meta data entry with this name has been applied to an auto-text, then this auto-text will always be active.

 An auto-text is deactivated (filtered out) for a specific document or form only if: The application has defined an auto-text filter with a specific name and value for the document or form. You have set a meta data entry for the auto-text with this name but with a different value.

# Speech recognition settings: Voice commands

Voice commands enable Dragon Medical One users to say a word or phrase that initiates an action and control the application without using the mouse or the keyboard. This reduces the time the user needs to complete their work.

The custom command feature in Dragon Medical One was extended to enable users to create more feature-rich commands and are now called step-by-step commands. Users define step-by-step commands in the **Manage Step-by-step Commands** dialog box and they are displayed on the **What You Can Say** page; for more information, see the end user help.

Existing user-level custom commands created in the Nuance Management Center will be automatically migrated to step-by-step commands.

# Speech recognition settings: Managing the vocabulary

Managing the vocabulary your users are using enables you to improve speech recognition by explicitly tailoring the system to your requirements. This might be necessary if words or phrases are repeatedly misrecognized.

In the Nuance Management Center (NMC), you can add words and phrases to the vocabulary or delete existing words and phrases from it.

# Adding a word in NMC

#### Scenario

Your users frequently prescribe the drug Xanax and recognition has been problematic.

#### Procedure

- 1. Open the Speech Recognition tab on the ribbon.
- 2. In the Word group, click Manage.
- 3. In the Words tree view, select the level you want to associate the word with (site, group or user).
- 4. In the Word group on the ribbon, click Add.
- 5. Enter a Written form (Xanax) and, if necessary, a Spoken form (zanacks).
- 6. Select the Language you want to associate the word with.
- 7. Click Save.

#### Remarks

- To make the word available for specific users, make sure to select the corresponding site or group in the tree view.
- Actions on the group level (for example deleting a word) override those on the site level. Actions on the user account level override group and site levels.
- The spoken form is optional. If how the word is written and how it is pronounced are very different, enter a spoken form (how it is pronounced) and define a Written form (how it is inserted into the document). You can only use alphabetic characters in spoken form; special characters are not allowed. For acronyms that are spelled out use capital letters, separated by spaces.

For spoken phrases do not use:

Very short phrases (such as one syllable only) Capital letters (except for acronyms, for example, C I A) Abbreviations Digits (use 'twelve' and not '12') Punctuation marks (for example, ", !, ?, etc.) Symbols (for example, +, -, &, \$, etc.)

- Words can only occur once within a site, group or user account, but the same word can occur in different entities on the same level (for example, two groups) or on different levels (group and user of that group).
- Two words with the same written form but different spoken forms are treated as separate words.

- Two words with different written forms but the same spoken form are treated as separate words.
- Activate Display all levels to list the words that have been added for the level selected in the tree view and its higher levels.

# Searching for words in NMC

Search for a word in the Manage Words screen via its written form.

To view the list of words associated with a user, group or site, do the following:

- 1. Open the Speech Recognition ribbon.
- 2. Click Manage.
- 3. Expand the tree structure for **Words** for the corresponding level.
- 4. Select a site, group or user.

### Importing words

To add multiple words it can be convenient to import a text file. To import a list of words for a specific site, group or user account, do the following:

1. Create a text file containing the list of words to add, with each word on a new line.

Optional: Type the spoken form after the written form on the same line, separated by two backslashes; for example: Xanax\\zanacks.

- 2. Open the Speech Recognition ribbon and, in the Words group, click Import.
- 3. Follow the **Import Words** wizard. You can select words to add from your text file and select the specific site, group or user account to associate them with.

# Speech recognition settings: Dragon Medical Connect

Dragon Medical Connect is a powerful feature that allows all speech-enabled, cloud-based applications - (Nuance-branded and third-party partner applications) - to share a single cloud-based user profile. The single-profile architecture means that any changes a user makes to custom words, auto-texts or commands are immediately available, to that user, in any application, on any device - anytime and anywhere.

From a user's perspective, this feature provides a consistently superior experience when using Dragon Medical One, Dragon Medical Network Edition or any one of the speech-enabled, third-party applications that leverage Nuance's cloud-based platform.

Dragon Medical Connect is built into all Nuance and partner cloud-enabled products and does not require additional licensing or configuration. However, given the breadth and depth of the Nuance partner ecosystem, it is important to understand how this feature works in the context of the applications you use.

# **Dragon Medical One**

When using Dragon Medical One, the following profile sharing features and functions are available:

- Dragon Medical One: Users can add their own custom words, auto-texts and commands via the application menu. Words and auto-texts are shared with any other cloud connected product including third-party applications. Step-by-step commands are proprietary to and can only be shared with the Nuance products Dragon Medical One and Dragon Medical Network Edition.
- Dragon Medical Network Edition (with Nuance-hosted Nuance Management Server): Users can add their own custom words, auto-texts and commands via Dragon command and vocabulary editors. Words and auto-texts are shared with any other cloud-connected products including third-party applications. Step-bystep commands are proprietary to and can only be shared with the Nuance products Dragon Medical One and Dragon Medical Network Edition.
- Third-party applications: Users can add their own custom words and auto-texts via the Nuance personalization and help window. To create auto-texts in mobile applications the user must have a Dragon Medical One license. Words and auto-texts are shared with any cloud-connected product including other third-party applications.
- Nuance Management Center (NMC): Administrators can add words or auto-texts at the site, group or user level. Words and auto-texts defined in NMC are shared with any cloud-connected product, including thirdparty applications.

# Dragon Medical Network Edition

#### Nuance-hosted Nuance Management Server

If your facility is using Dragon Medical Network Edition with a Nuance-hosted NMS, and Dragon Medical One is not yet licensed, the following profile sharing features and functions are available:

 Dragon Medical Network Edition: Users can add their own custom words, auto-texts and commands via Dragon command and vocabulary editors. Words and auto-texts are shared with other cloud-connected products including third-party applications. Step-by-step commands are proprietary to and can only be shared with the Nuance products Dragon Medical One and Dragon Medical Network Edition.

- Third-party applications: Users can add their own custom words and auto-texts via the Nuance personalization and help window. To create auto-texts in mobile applications the user must have a Dragon Medical One license. Words and auto-texts are shared with any cloud-connected product including other third-party applications.
- Nuance Management Center (NMC): Administrators can add words or auto-texts at the site, group or user level. Words and auto-texts defined in NMC are shared with any cloud-connected product include third-party applications.

#### **On-premise Nuance Management Server**

All cloud enabled offerings, including third-party applications, use a Nuance-hosted instance of NMS for a transparent single profile experience. If you are using Dragon Medical Network Edition but have not yet migrated your NMS instance to the Nuance cloud, your profile sharing options are limited. The only option available is to periodically export custom words and auto-texts from your on-premise NMS instance and import them into the Nuance-hosted NMS instance. Be aware that this approach is labor intensive and does not deliver a true single user profile experience.

You are strongly encouraged to migrate your on-premise NMS instance to the Nuance cloud or consider moving to Dragon Medical One.

# Third-party applications only

If you are using one or more cloud-enabled third-party applications, but not a Nuance solution, you can still benefit from a single user profile.

- Third-party applications: Users can add their own custom words and auto-texts via the Nuance personalization and help window. To create auto-texts in mobile applications the user must have a Dragon Medical One license. Words and auto-texts are shared with any cloud-connected product including other third-party applications.
- NMC: Administrators can add words or auto-texts at the site, group or user level. Words and auto-texts
  defined in NMC are shared with any cloud-connected product.

# Nuance Healthcare ID

The Nuance Healthcare ID is a unique identifier that enables clinicians to personalize their Dragon Medical One experience and access their personal speech profile and speech-enabled products in a selection of mobile apps.

# Registering the Nuance Healthcare ID

Your users can register their Nuance Healthcare ID when they first log on to Dragon Medical One Desktop Application or later via the **Nuance Healthcare ID** option on the DragonBar menu.

#### Procedure for the end user

- 1. Start Dragon Medical One Desktop Application.
- 2. On the DragonBar menu, select Nuance Healthcare ID.
- 3. Complete the registration form and click Submit.
- 4. You will receive a confirmation email; click the link in this email to complete the registration.

#### Remarks

- Nuance Healthcare ID registration is optional. Users register once.
- Registration can only be done individually by each Dragon Medical One Desktop Application user; batch registration is not possible.
- During registration, the user specifies their Nuance Healthcare ID user name (a personal email address) and password; these are needed to activate it.
- After registration, the user activates the Nuance Healthcare ID separately for each app to speech-enable that app.
- The *My Nuance Healthcare ID* website lists all available mobile apps where users can activate their Dragon Medical speech recognition profile and access speech-enabled products.
- There is no additional cost for Dragon Medical in the mobile apps listed on the *My Nuance Healthcare ID* website but you must have an app installed on your mobile device, and have a license/rights to access it, before you activate your Nuance Healthcare ID.

# Activating the Nuance Healthcare ID for an app

Once a user has registered for their Nuance Healthcare ID, they can access the *My Nuance Healthcare ID* website via Dragon Medical One Desktop Application or via a web browser.

#### Procedure for the end user

#### Via Dragon Medical One Desktop Application

- 1. On your desktop/laptop, start Dragon Medical One Desktop Application.
- 2. On the DragonBar menu, select Nuance Healthcare ID; the My Nuance Healthcare ID website opens.
- 3. Browse for the available mobile apps.
- 4. For the app you want, click Activate NHID; you will receive an activation link via email.
- 5. On your mobile device, make sure the app is installed.

6. On your mobile device, open the email you received and click the activation link; Dragon Medical is activated for this app.

#### Via web browser on your mobile device

- 1. Open your web browser and go to healthcareid.nuance.com.
- 2. Log on using your Nuance Healthcare ID user name and password.
- 3. Browse for the available mobile apps.
- 4. On your mobile device, make sure the app is installed.
- 5. On the *My Nuance Healthcare ID* website, select the app and tap **Activate NHID**; Dragon Medical is activated for this app.

#### Via web browser on your desktop/laptop

- 1. Open your web browser and go to healthcareid.nuance.com.
- 2. Log on using your Nuance Healthcare ID user name and password.
- 3. Browse for the available mobile apps.
- 4. For the app you want, click Activate NHID; you will receive an activation link via email.
- 5. On your mobile device, make sure the app is installed.
- 6. On your mobile device, open the email you received and click the activation link; Dragon Medical is activated for this app.

#### Remarks

- When users access the My Nuance Healthcare ID website via Dragon Medical One Desktop Application they do not need to log on.
- When users access the *My Nuance Healthcare ID* website via healthcareid.nuance.com, they must log on with their Nuance Healthcare ID user name and password.

# **Dragon Medical Advisor overview**

Dragon Medical Advisor analyzes clinicians' documentation in real time and displays additional information to help make the documentation more complete and accurate. Information is displayed to the user via the Advisor window in Dragon Medical One.

**Note:** Although clinicians access Dragon Medical Advisor via Dragon Medical One, a speech recognition license is not needed.

Manage licenses and configure organization-level settings via NMC. For more information, see: Configuring Dragon Medical Advisor.

Configure application-level settings via the Dragon Medical One configuration file (sod.exe.config) or via NMC. For more information, see: Configuring Dragon Medical Advisor.

For information on filtering advice for specific conditions at the user and group level, see: Advice filters.

# Advice types

Depending on your license and the EHR you are using, Dragon Medical Advisor provides recommendations in the following categories:

#### Specificity

To improve documentation completeness and coding compliance, Dragon Medical Advisor checks the documented diagnoses and provides advice if a diagnosis could be more specific. For example, if the user documents *acute renal failure* without specifiers, the advisor will display an **Acute Renal Failure** pane with a list of specificity recommendations. In this case it will recommend adding the cause, injury site, setting, lab support and POA status.

#### **Clinical Evidence**

If Dragon Medical Advisor finds important symptoms, treatments or lab results that are not explained by the diagnoses in the documentation, the Advisor window lists the clinical evidence and prompts the clinician to add diagnoses as required.

Make sure the Clinical Evidence Content Pack license is installed and assigned to your users.

#### **Clinical Clarification**

Dragon Medical Advisor identifies when the patient's documentation supports a diagnosis that has not yet been documented. The supporting evidence can include reported symptoms, measured values such as lab results or vitals, examination findings and documented treatments. When a diagnosis would explain the clinical evidence with high statistical confidence, the diagnosis is listed in the Advisor window. For each item in the list, the clinician can view the supporting evidence in the documentation, agree with the diagnosis and copy it to the clipboard, reject the diagnosis, defer the decision or hide the diagnosis from their own advice list.

Make sure the Clinical Strategy Content Pack license is installed and the Dragon Medical Advisor endpoint configuration in NMC (this is separate from the connection to the Advisor Service URL) is completed.

#### **HCC Opportunities**

When a patient has been flagged for potential Hierarchical Condition Category diagnoses, Dragon Medical Advisor will notify the clinician. The clinician can review the evidence and accept or reject the diagnoses.

Make sure the HCC Talix license is installed.

# **Coding Assistant**

When this feature is enabled, the clinician can open the **Coding Assistant** window, which displays ICD-10 diagnosis codes and Intelligent Medical Objects (IMO) descriptions for diagnoses in the documentation. The user can copy the descriptions into the EHR or charge capture system. Additionally, the clinician can refine the codes and find new codes via the IMO natural language search capabilities.

Make sure the Code Extractor license is installed.

### **Content packs**

Content packs provide specific Dragon Medical Advisor features, for example a set of diagnoses for which specificity advice is available, or an advice type in the Advisor window. Make sure the corresponding license is installed and assigned to your users.

Base content pack

Specificity recommendations for the core set of conditions and specifiers.

Pediatric content pack

Specificity recommendations for pediatric conditions and specifiers.

HCC content pack

Specificity recommendations for Hierarchical Condition Category diagnoses.

Clinical Evidence content pack

Enables Potential missing diagnoses advice.

Clinical Strategy content pack

Enables Clinical clarification advice.

# System requirements

The following EHRs are supported:

- Epic Hyperspace
- Cerner Millennium
- Allscripts TouchWorks
- Allscripts Sunrise Clinical Manager (SCM)
- athenahealth athenaClinicals
- Meditech Expanse

**Note:** This list is subject to change; for more information on supported versions and components, contact Nuance technical support or your Nuance account executive.

Make sure Dragon Medical One has access to the Advisor Service (https://<organization-specific prefix>.nuanceunderstanding.com) via port 443; your firewall must not block this port.

Recommended minimum display size: 1280 x 1024 pixels.

# **Dragon Medical Advisor licensing**

To be able to open the Advisor window, the user must have either the Dragon Medical Advisor license or the HCC Talix license assigned.

Some features are enabled by default when either of these two licenses is assigned; some features require additional licenses. The following tables indicate the licenses required by each feature, with the license names as displayed by NMC.

#### Advisor window

The user can select the Advisor tab or the Coding Assistant tab.

Feature	Required licenses	
Advisor window	Dragon Medical Advisor	
Advisor window (UK users)	Dragon Medical Advisor + Dragon Medical Advisor UK	
Coding Assistant	Dragon Medical Advisor + Code Extractor	

#### Advice types

The Advisor window displays the following advice types as expandable panes.

Feature	Required licenses	
Specificity	Dragon Medical Advisor	
Clinical Evidence	Dragon Medical Advisor + Clinical Evidence Content Pack	
<b>Clinical Clarification</b>	Dragon Medical Advisor + Clinical Strategy Content Pack	
HCC Opportunities	HCC Talix	

#### Content packs for specificity advice

The following content packs enable specificity advice for a set of diagnoses and specifiers.

Feature	Required licenses
Base content pack	Dragon Medical Advisor
HCC content pack	Dragon Medical Advisor
Pediatric content pack	Dragon Medical Advisor

### Granting licenses to users

An organization-level Dragon Medical Advisor license enables 5000 user licenses.

#### Granting and revoking licenses

To grant or revoke a license to/from a user, do the following:

- 1. In NMC, open the Licensing ribbon and click View Licenses, then click Search.
- 2. Right-click the license and select Grant Licenses or Revoke Licenses.
- 3. Click > to move users from Available Users to Selected Users and click OK.
- 4. Repeat steps 2 to 4 for your content pack licenses.

# Using Dragon Medical Advisor without speech recognition

If a user has a Dragon Medical Advisor license but no speech recognition license, they can log on to Dragon Medical One to use only Dragon Medical Advisor functionality. Speech recognition and voice commands will not be available, but Dragon Medical One can read the text and patient context from supported EHRs and the user can click the advice icon on the DragonBar to open the Advisor window.

# **Configuring Dragon Medical Advisor**

Depending on your Dragon Medical Advisor features and EHR, you might need to perform the following configuration settings in the Nuance Management Center (NMC):

- Connecting to the Advisor Service
- Configuring Clinical Clarification

In addition, you can configure the Advisor window to open automatically, or disable Dragon Medical Advisor in Dragon Medical One.

The following settings in NMC are usually configured by Nuance:

- EHR-specific patient context and case model configuration
- The EHR type to enable Dragon Medical Advisor to interact with the organization's EHR
- The Talix connection for Outpatient (HCC) Guidance

# Connecting to the Advisor Service

This setting is a prerequisite for Dragon Medical Advisor. Proceed as follows:

- 1. In NMC, open the Sites ribbon and click Details.
- 2. Open the Products tab and select Dragon Medical Advisor from the left panel.
- Enter the Advisor token and the Advisor Service URL. These values are unique to each organization. If you do not know your Advisor token or your Advisor Service URL, contact Nuance technical support or your Nuance account executive.

# **Configuring Clinical Clarification**

This setting is a prerequisite for the Clinical Clarification advice type in the Advisor window. Proceed as follows:

- 1. In NMC, open the Sites ribbon and click Details.
- 2. Open the Products tab and select Dragon Medical Advisor from the left panel.
- 3. Expand the **Dragon Medical Advisor Endpoint Configuration** pane and enter the **Endpoint URL** and the **Authentication GUID**. These values are unique to each organization. If you do not know your Endpoint URL or your Authentication GUID, contact Nuance technical support or your Nuance account executive.

To enable silent mode, activate the Silent mode check box and set the Silent mode stop date.

# **Disabling Dragon Medical Advisor**

To disable Dragon Medical Advisor completely, do the following:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.Settings, add the setting EnableAdvisor and specify as follows:

<setting name="EnableAdvisor" serializeAs="String"> <value>False</value> </setting>

# Configuring the Advisor window to open automatically

You can configure Dragon Medical One to automatically open the Advisor window once per day or once per session, the first time advice is generated via auto-processing. Auto-processing must be enabled and Dragon Medical One must be able to capture the patient context from the EHR. You can also specify the number of days this behavior is applied for.

**Note:** If Dragon Medical One is not configured to open the Advisor window automatically or the number of days set via **DMA.AutoOpenDays** is reached, the user can open it via the advice icon or by saying **run Advisor**.

#### Configuring the Advisor window via the Dragon Medical One configuration file

Proceed as follows:

- 1. Open the SoD.exe.config file.
- 2. In the SoD.DefaultOptions section, configure the behavior of the Advisor window:

Add the setting **DMA.AutoOpen** and specify if the Advisor window will automatically open once per day (value: 1) or once per logon session (value: 2). To disable the automatic opening of the Advisor window, set the value to Ø.

Add the setting **DMA.AutoOpenDays** and specify the number of days the Advisor window will automatically open.

#### Example:

<SoD.DefaultOptions>

```
<setting name="DMA.AutoOpen" serializeAs="String" isLocked="True">
  <value>1</value>
  </setting>
  <setting name="DMA.AutoOpenDays" serializeAs="String" isLocked="True">
  <value>3</value>
  </setting>
  </setting>
  </setting>
</SoD.DefaultOptions>
```

#### Configuring the Advisor window in NMC

Proceed as follows:

- 1. In NMC, open the **Dragon Medical One** ribbon and click **Manage**; the **Manage Dragon Medical One User Options** page opens.
- 2. Select an organization, site or group in the left pane.
- 3. Select the **Dragon Medical Advisor** tab, configure the **Display the Advisor window automatically** setting and enter the **Number of days the Advisor window opens automatically**.
- 4. Click Save.

# Configuring the patient context

**Note:** Nuance typically performs this configuration for customer organizations. For more information, contact Nuance Healthcare technical support or your Nuance account executive.

#### About patient context

Dragon Medical Advisor captures patient and visit information from the EHR (patient name, MRN, visit ID, encounter ID). This enables the following:

- Dragon Medical Advisor does not repeat the same advice multiple times in one document, even if the documentation is divided between multiple text controls. If the user enters a specific diagnosis in one form field, when the user then refers to the same condition in another form field, Dragon Medical Advisor will suppress the duplicate advice.
- Dragon Medical Advisor does not repeat the same advice multiple times in one patient encounter (from admission to discharge), even if several providers recorded the documentation.
- Auto-processing takes place as soon as the EHR has the focus; the user does not need to open the Advisor window.
- Dragon Medical One can open the Advisor window automatically when the EHR has the focus. To enable this, update your Dragon Medical Oneconfiguration file, sod.exe.config.

#### Configuring patient context via an EHR interface (Epic Hyperspace only)

- 1. In NMC, open the Sites ribbon and click Details.
- 2. Open the Products tab and select Dragon Medical Advisor from the left panel.
- 3. Enter the **EHR interface adapter**, **EDServiceDescriptor** and **EnvironmentID**. These settings depend on the specific Epic Hyperspace system used by the organization.

#### Configuring patient context via screen capture

- 1. In NMC, open the Sites ribbon and click Details.
- 2. Open the Products tab and select Dragon Medical Advisor from the left panel.
- 3. For Cerner Millennium, Allscripts TouchWorks, Allscripts SCM, athenahealth athenaClinicals and Meditech Expanse, upload a **Patient context configuration** JSON file. The file contains screen capture rules to find the patient information and visit ID in the application window.

Epic Hyperspace: If an EHR interface is available, the required settings can also be encoded in the JSON file.

#### Group-level EHR interface settings

You can also configure the EHR interface parameters for Epic Hyperspace at the group level. Proceed as follows:

- 1. In NMC, open the Groups ribbon and click Search.
- 2. Select your organization from the drop-down list and click Search.
- 3. Right-click the group and select Group Details.

- 4. Open the **Dragon Medical Advisor** tab and enter the **EHR interface adapter**, **EDServiceDescriptor** and **EnvironmentID** values.
- 5. Click Save.

#### Remarks:

- The EHR interface adapter, EDServiceDescriptor and EnvironmentID settings have priority over the patient context configuration file if any settings overlap.
- Group-level settings for EHR interface adapter, EDServiceDescriptor and EnvironmentID have priority over organization-level settings.
- If Dragon Medical Advisor cannot retrieve a valid patient context configuration from NMS, it will display advice based on individual text controls and not based on the patient encounter.

# Configuring the EHR type

**Note:** Nuance typically performs this configuration for customer organizations. For more information, contact Nuance Healthcare technical support or your Nuance account executive.

Dragon Medical Advisor displays different options to users depending on the EHR the organization is using. To configure the EHR your organization is using and enable Dragon Medical Advisor to interact with it, do the following:

- 1. In NMC, open the Sites ribbon and click Details.
- 2. Open the Products tab and select Dragon Medical Advisor from the left panel.
- 3. Expand the EHR Type Configuration pane and select the EHR Type your organization is using. If you are using an EHR other than Epic or Cerner, select Not Configured.
- 4. If you have selected **Epic** or **Cerner**, enter the values required for the selected EHR; for more information, contact Nuance technical support or your Nuance account executive.

# Configuring the Talix connection for Outpatient (HCC) Guidance

**Note:** Nuance typically performs this configuration for customer organizations. For more information, contact Nuance Healthcare technical support or your Nuance account executive.

To configure Dragon Medical Advisor to connect to Talix for customers to be able to work with HCC diagnoses, do the following:

- 1. In NMC, open the Sites ribbon and click Details.
- 2. Open the Products tab and select Dragon Medical Advisor from the left panel.
- 3. Expand the **Talix integration** pane and enter the **Shared key** and **Client ID** values; for more information, contact Nuance technical support or your Nuance account executive.

# Dragon Medical Advisor: Advice filters

# Overview

Use the **Manage Advice Filters** screen in NMC to control how much advice Dragon Medical Advisor displays to your users. This can be useful if users find the large amount of advice they receive distracting, or if users find that not all the advice they receive is relevant to their documentation.

When you introduce Dragon Medical Advisor to your organization, we recommend configuring advice filters so that only the most relevant conditions and specifiers are enabled. You can enable more conditions and specifiers subsequently, based on user feedback and observed usage patterns in your organization.

**Note:** Although some of the NMC user interface elements refer to speech recognition, advice filters do not require a speech recognition license.

# Enabling and disabling advice

Advice filters can be configured at the organization, site, group or user level.

#### Example 1: Enabling specificity advice for **asthma** at the organization level

Proceed as follows:

- 1. Open the Speech Recognition ribbon and click Manage Advice Filters.
- 2. In the left panel (tree view) select your organization. The right panel lists all diagnoses and specifiers included in the organization's content pack licenses.
- 3. Scroll down to **Asthma** in the **Advice** column. In the base content pack, asthma is listed with two specifiers: **Severity** and **Smoking status**.
- 4. Activate the **Display** check box for both specifiers.
- 5. Click Save.

Specificity advice is now enabled for asthma (severity) and asthma (smoking status) for all sites, groups and users in the organization, and the corresponding **Display** check boxes are activated at those levels.

#### Example 2: Disabling specificity advice for asthma at the group level

**Prerequisite:** Asthma (severity) and asthma (smoking status) have been enabled at the organization level, following example 1.

Proceed as follows

- 1. Open the Speech Recognition ribbon and click Manage Advice Filters.
- 2. In the left panel (tree view) expand your organization and site and select a group. The right panel lists all diagnoses and specifiers included in the content pack licenses assigned to any users in that group.
- 3. Scroll down to **Asthma** in the **Advice** column. Because asthma advice was enabled at the organization level in example 1, the **Display** check box is also activated for **Severity** and **Smoking status** at the group level.
- 4. Clear the **Display** check box for both specifiers.
- 5. Click Save.

Specificity advice is now disabled for asthma (severity) and asthma (smoking status) for this group and for all users in this group. At the user level, the cleared state of the **Display** check box for the two asthma specifiers is now inherited from the group level. The asthma advice is still enabled for users in the organization that are not assigned to this group.

#### Remarks

- Activating the Mandatory check box for a diagnosis/specifier at the organization, site or group level means that the corresponding Display check box cannot be cleared at lower levels (site, group or user).
- By default, all check boxes are cleared for new organizations.
- To activate the **Display** check box for all diagnoses and specifiers, click **Select All**.
- To clear the **Display** check box for all diagnoses and specifiers, click **Clear All**, then click **OK**.

# Working with advice filter groups

An efficient way to manage advice filters for a large number of users is to create groups corresponding to their specialties and enable/disable advice at the group level.

To enable/disable advice at the user level, assign users to these groups.

#### Creating an advice filter group

To create an advice filter group (for example, for cardiologists), do the following:

- 1. Open the **Groups** ribbon and click **Add**.
- 2. Select the new group's organization from the drop-down list.
- 3. In the Role field, select Speech recognition user and click OK.
- 4. In the Sites field, select the new group's site from the drop-down list.
- 5. Enter a group name; for example: Cardiology advice filters
- 6. Click Save.
- 7. Open the Speech Recognition ribbon and click Manage Advice Filters.
- 8. In the left panel (tree view) expand your organization and site and select the new **Cardiology advice filters** group.
- 9. Activate the **Display** check box for each diagnosis and specifier relevant to your cardiologists and clear the **Display** check box for each diagnosis and specifier that they are less likely to document.
- 10. Click Save.

#### Assigning multiple users to a group

Proceed as follows:

- 1. Open the **Groups** ribbon and click **Search**.
- 2. Enter search criteria, select a group and click Add User Account to Group (on the Membership ribbon). All users in the group's site are listed.
- 3. To add user accounts to the group, activate the corresponding Member check boxes.
- 4. Click Save.

#### Assigning a user to multiple groups

Proceed as follows:

- 1. Open the Sites ribbon and click Organization Overview.
- 2. In the left panel (tree view) select your organization; all the organization's users are listed.
- 3. Right-click the user whose group assignments you want to edit and select Details.
- 4. Open the Group Memberships tab.
- 5. Select one or more of the available groups and click > to move it to the **Selected Groups** list.
- 6. In the **Selected Groups** list, select a group and click  $\land$  or  $\lor$  to make its priority higher or lower.
- 7. Click Save.

#### Remarks

• When a user is assigned to multiple groups, groups higher up the **Selected Groups** list have higher priority.

For example:

Asthma (severity) advice has been enabled for *Group A* but disabled for *Group B*. The user *Chis Smith* has been assigned to both groups. In Chris Smith's **Selected Groups** list, Group B is higher than Group A. When asthma appears in Chris Smith's documentation, the Advisor window will not prompt Chris Smith for the severity specifier.

# Dragon Medical Advisor: HCC filters

# Overview

Use the **Manage HCC Filters** screen in NMC to control which HCC categories Dragon Medical One displays to your users. This can be useful in scenarios where the HCCs that have been flagged for a patient are not relevant to a site, group or specific provider's specialty.

Note: This functionality is only available to Outpatient (HCC) Guidance customers.

#### Remarks

- NMC enables filtering by HCC categories but not by specific HCC codes.
- By default, all HCC groups are enabled for all users.
- Although some of the NMC user interface elements refer to speech recognition, HCC filters do not require a speech recognition license.

# Enabling and disabling HCC categories

HCC filters can be configured at the organization, site, group or user level.

#### Example 1: Disabling HCCs for hypertension at the organization level

Proceed as follows:

- 1. Open the **Speech Recognition** ribbon and click **Manage HCC Filters**.
- 2. In the left panel (tree view) select your organization. The right panel lists all available HCC categories.
- 3. Scroll down to Hypertension in the HCC Name column and clear the corresponding check box.
- 4. Click Save.

Hypertension HCCs are no longer listed in the Advisor window for any users in your organization.

#### Example 2: Enabling HCCs for hypertension at the group level

Prerequisite: Hypertension has been disabled at the organization level, following example 1.

Proceed as follows:

- 1. Open the **Speech Recognition** ribbon and click **Manage Advice Filters**.
- 2. In the left panel (tree view) expand your organization and site and select a group. The right panel lists all available HCC categories.
- 3. Scroll down to **Hypertension** in the **HCC Name** column; because hypertension was disabled at the organization level in example 1, the **Display** check box is also cleared at the group level.
- 4. Activate the **Display** check box.
- 5. Click Save.

Where hypertension HCCs have been flagged for review, they will now be listed in the Advisor window for all users in this group. At the user level, the activated state of the **Display** check box for hypertension is now

inherited from the group level. Hypertension HCCs are still hidden from users in the organization who are not assigned to this group.

#### Remarks

- Activating the Mandatory check box for an HCC category at the organization, site or group level means that the corresponding Display check box cannot be cleared at lower levels (site, group or user).
- To activate the **Display** check box for all HCC categories, click **Select All**.
- To clear the **Display** check box for all HCC categories, click **Clear All**, then click **OK**.
- The **Source** column indicates the level from which the current display setting is inherited (organization, site, group).
- The Average RAF Score column indicates the average Risk Adjustment Factor of the diagnoses within an HCC category.

# Working with HCC filter groups

An efficient way to manage HCC filters for a large number of users is to create groups corresponding to their specialties and enable/disable HCC categories at the group level.

To enable/disable HCC categories at the user level, assign users to these groups.

#### Creating an HCC filter group

To create an HCC filter group (for example, for cardiologists), do the following:

- 1. Open the **Groups** ribbon and click **Add**.
- 2. Select the new group's organization from the drop-down list.
- 3. In the Role field, select Speech recognition user and click OK.
- 4. In the Sites field, select the new group's site from the drop-down list.
- 5. Enter a group name; for example: Cardiology HCC filters
- 6. Click Save.
- 7. Open the Speech Recognition ribbon and click Manage HCC Filters.
- 8. In the left panel (tree view) expand your organization and site and select the new **Cardiology HCC filters** group.
- 9. Activate the **Display** check box for each HCC category that your cardiologists would review and clear the **Display** check box for each HCC category that they do not need listed.
- 10. Click Save.

#### Assigning multiple users to a group

Proceed as follows:

- 1. Open the **Groups** ribbon and click **Search**.
- 2. Enter search criteria, select a group and click Add User Account to Group (on the Membership ribbon). All users in the group's site are listed.

- 3. To add user accounts to the group, activate the corresponding Member check boxes.
- 4. Click Save.

#### Assigning a user to multiple groups

Proceed as follows:

- 1. Open the Sites ribbon and click Organization Overview.
- 2. In the left panel (tree view) select your organization; all the organization's users are listed.
- 3. Right-click the user whose group assignments you want to edit and select **Details**.
- 4. Open the Group Memberships tab.
- 5. Select one or more of the available groups and click > to move it to the **Selected Groups** list.
- 6. In the **Selected Groups** list, select a group and click  $\land$  or  $\lor$  to make its priority higher or lower.
- 7. Click Save.

#### Remarks

• When a user is assigned to multiple groups, groups higher up the **Selected Groups** list have higher priority.

For example:

Hypertension has been enabled for *Group A* but disabled for *Group B*. The user *Chis Smith* has been assigned to both groups. In Chris Smith's **Selected Groups** list, Group B is higher than Group A. When Chris Smith's patient has been flagged for a hypertension HCC, the Advisor window will not list this HCC.

# Documentation

Dragon Medical One is delivered with documentation for system administrators and end users.

### System administrators

The *Dragon Medical One Installation and Administration Guide* describes the installation and system configuration procedures. This guide also covers information on the Nuance Management Center.

### End users

Users access the end user help by saying **launch help** or by clicking **Help** on the DragonBar menu. The **Dragon Help** tab of the personalization and help window contains information on how to use the application features (for example, anchoring the speech focus); the **Speech Recognition Help** tab contains information on speech recognition features and how to use them.

The What You Can Say page contains a list of all available voice commands and auto-texts. Users can open it by saying what can I say or clicking What You Can Say on the DragonBar menu.

# Supported languages

The speech recognition language is the language the user records in and that Dragon Medical One recognizes.

Currently only English (IETF language tag: en-US) is supported.

The user interface language is the language in which Dragon Medical One displays menus, help files, error messages and dialog boxes.

Currently only English (IETF language tag: en-US) is supported.

# Troubleshooting

• A client cache error is displayed after installing the ClickOnce package, and the application won't run.

Delete the ClickOnce application cache in the user's AppData directory.

After Dragon Medical One has been deployed via XCOPY deployment, the application does not start and an exception is thrown: "System.Configuration.ConfigurationErrorsException: Insufficient permissions for setting the configuration section 'defaultProxy'. ---> System.Security.SecurityException: Request for the permission of type 'System.Net.WebPermission, System, Version=4.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089' failed."

Depending on your Group Policy security settings, Microsoft Windows marks downloaded files as unsafe. This prevents .NET from executing properly, which causes the exception. Unblock the downloaded ZIP file before you extract it; for more information, see: XCOPY deployment.

Dragon Medical One crashes when the application is started.

Check the configuration file and the log file for configuration-related issues. Make sure that your system conforms to the software and hardware requirements. Make sure you followed all steps required to set up a working system.

An error occurs when Dragon Medical One is started: An error has occurred, it is not possible to use the application. Please contact your administrator. The specified server URL cannot be reached, check your network connection.

Check the network connection to Dragon Medical Server.

The automatic gain control (AGC) of the recording device or the device driver/sound card driver interferes with the automatic audio adjustment feature of Dragon Medical One.

Disable the interfering AGC.

• An error occurs when the user starts recording: Speech recognition is temporarily not available in this application because there are no licenses available.

If auto-provisioning of users is not enabled for your organization in NMC, make sure that the user exists in NMC and the user name is spelled correctly (user names are case sensitive), and that the user's token credentials (**User Account Details** dialog box, **Credentials** tab, **Token** tab) are the same as the user name or empty.

In NMC, check if your organization has run out of licenses. For more information, see Licensing.

Dragon Medical One inserts text in the wrong place in a Microsoft Word document.

This might be caused by a version incompatibility. Make sure you use a Microsoft Word version officially supported by Dragon Medical One. For more information, see: Software and hardware requirements.

 The text cursor and/or elements of the document flicker when the user dictates in a Microsoft Word 2013 document.

Follow the instructions in the Microsoft Knowledge Base article: https://support.microsoft.com/enus/kb/2768648.

• The user changed their settings in the **Options** dialog box, but the changes are not saved.

Make sure that Dragon Medical One can communicate with the Nuance Management Server; for information on the ports Dragon Medical One requires access to, see: Setting up a working system.

 An error occurs when Dragon Medical One is started: No supported audio device is available. To start Dragon, connect a device and click Refresh.

Connect a microphone the end user is allowed to use, and click **Refresh**.

In a virtual desktop/application environment, make sure the connected microphone is set as the default device in Microsoft Windows on the end point.

In a virtual desktop/application environment, make sure the Nuance custom audio channel has been deployed on the client end point and on the virtual server hosting the application.

Dragon Medical One shuts down unexpectedly; no error message is displayed.

Collect the crash dump (location: %APPDATA%\Nuance\SoD\) and send it, along with an error report if possible, to Nuance Technical Support for analysis.

 The ClickOnce deployment of Dragon Medical One does not update automatically when pinned to and launched from the task bar.

Launch the ClickOnce Dragon Medical One application from the Windows **Start** menu. Make sure you do not start the ClickOnce Dragon Medical One application by running SoD.exe.

• A message is displayed when the user opens the personalization and help window: The help needs to be refreshed. Please close and open it again.

In the **Internet Options**, make sure that cookies are enabled for the corresponding users/machines. If your organization works in virtualized environments, this setting must be applied to the virtual server.

 The user cannot dictate at the cursor in applications based on Windows Presentation Foundation (WPF) TextBox class text controls.

Make sure to enable WPF support from the command line. For more information, see: Enabling and disabling WPF support from the command line.

 The user cannot switch the speech focus between applications running at the same time in a Citrix environment.

Launch the FarmTWIHelper - Seamless Configuration Helper Tool on the Citrix server where the issue occurs and make sure to deselect all the settings (do not change the **Disable Active Accessibility Hook (0x4)** setting). Restart the server before starting Dragon Medical One. For more information on how to use the helper tool, see https://support.citrix.com/article/CTX115146

 Dragon Medical One is no longer in standby mode when a user, working in a Citrix environment, locks and unlocks the screen.

Make sure that the latest version of the Nuance custom audio channel has been installed on the client end point.