Nuance®

Dragon Medical One

Desktop Application

Installation and Administration Guide

NUANCE

Table of contents

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.

5. 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 11, 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, 10 and 11, 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
- Nuance PowerMic 4
- 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.

- Microsoft Edge WebView2 (starting in January 2022). Install the Microsoft Edge WebView2 Evergreen Standalone component; for more information, see WebView2 - Microsoft Edge Developer.

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.

- Microsoft Edge WebView2 for Cerner PowerChart
  Restrictions: Dragon Medical Advisor is not supported.

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 2022**

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|Intern
alMedicine|MentalHealth|Neurology|Orthopaedics|ObstetricsAndGynecology|Oncology|Pat
hology|Pediatrics|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.

2. 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: Select and hold (or right-click) the ZIP file and select **Properties**; on the **General** tab, select **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.
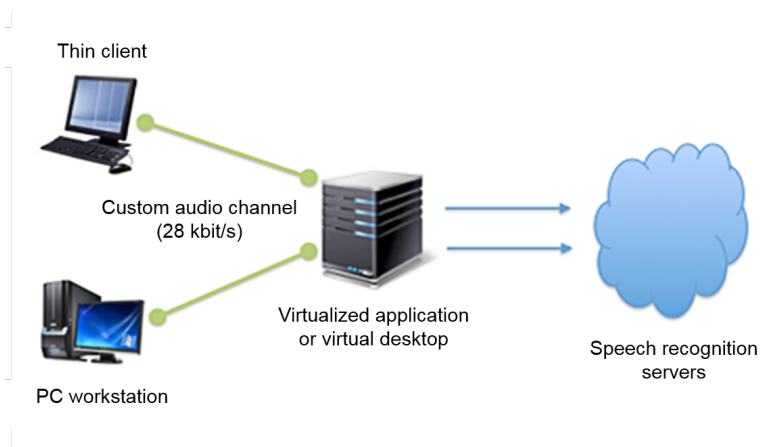
Supported virtualized environments

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

End point	Virtualized application or virtual desktop	Dragon Medical system

<50 ms   <200 ms
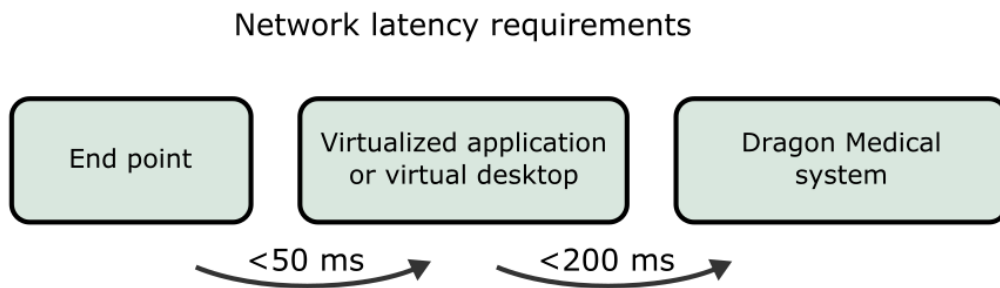
Memory

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}`):

```
<appender name="TheSoDAppender" type="log4net.Appender.RollingFileAppender">
    <param name="File" value="${APPDATA}\SoD.log"/>
```

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 select 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 macOS-based 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.

Web browser support

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 Google Chrome and Microsoft Edge.

To support text controls and dictation at the cursor in applications based on Google Chrome or Microsoft Edge, you must install the corresponding web extension for Dragon Medical One.

Architecture

Dragon Medical One and the web extension for Dragon Medical One use a dedicated process (`sodria_nmhost.exe`) for communication between Dragon Medical One and the browser. This process is delivered with Dragon Medical One and is started by the browser. Google Chrome/Microsoft Edge and Dragon Medical One rely on one of the following registry keys to connect the two applications:

- `HKEY_CURRENT_ USER\Software\Google\Chrome\NativeMessagingHosts\com.nuance.sodria` (written by Dragon Medical One to register the gateway)

- `HKEY_LOCAL_ MACHINE\Software\Google\Chrome\NativeMessagingHosts\com.nuance.sodria` (written by the Dragon Medical One MSI installer to register the gateway)

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.
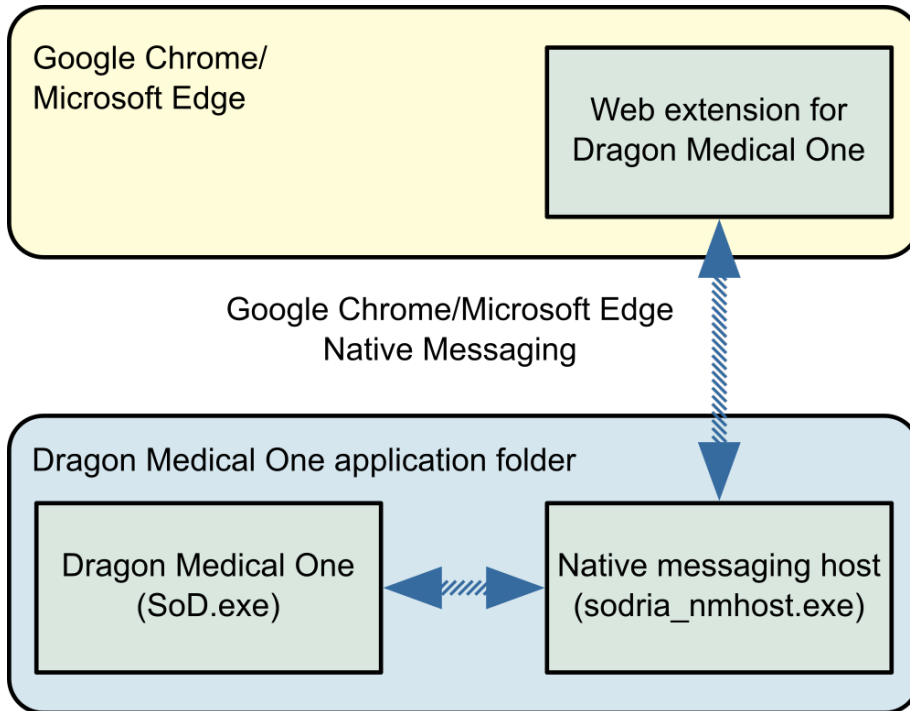
Installing the web extension for Google Chrome

The web extension for Dragon Medical One 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).

Installing the web extension via Google Chrome web store

To install manually, do the following:

1. Browse for the web store link to the extension: Dragon (DMO, DMD, DPA, DLA) Web Extension
2. Select **Add to Chrome**.
3. In Google Chrome, open the **Settings** menu and select **Extensions**.
4. Search for "Dragon (DMO, DMD, DPA, DLA) Web Extension" and make sure that the extension is enabled.

5. Select **Details**, go to the **Site access** setting and select the **On all sites** option.

6. Restart the Google Chrome browser.

Installing the web extension via Google Chrome policies

To install automatically, do the following:

1. Open the LOCAL_MACHINE registry hive.

2. Add the following to the registry:
   Key: `HKEY_LOCAL_`
   `MACHINE\SOFTWARE\Policies\Google\Chrome\ExtensionInstallForcelist\1`
   Value:
   `feolagkacappiaieohahjkeaikhjjcfa;https://clients2.google.com/service/upd`
   `ate2/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 Google Chrome, open the **Settings** menu and select **Extensions**.

2. Search for "Dragon (DMO, DMD, DPA, DLA) Web Extension", select **Details** and enable the **Allow access to file URLs** setting.

Installing the web extension for Microsoft Edge

The web extension for Dragon Medical One must be installed for each machine and operating system user using Microsoft Edge. Once the extension is installed, the browser must be restarted (or tabs reloaded).

Installing the web extension via the Microsoft Edge app store

To install manually, do the following:

1. In the Microsoft Edge app store, search for "Dragon (DMO, DMD, DPA, DLA) Web Extension".

2. Select **Get**, then **Add extension**.

3. On the Microsoft Edge toolbar, select 🧩 and select **Manage extensions**.

4. Search for "Dragon (DMO, DMD, DPA, DLA) Web Extension" and make sure that the extension is enabled.

5. Select **Details**, go to the **Site access** setting and select the **On all sites** option.

6. Restart the Microsoft Edge browser.

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. On the Microsoft Edge toolbar, select 🧩 and select **Manage extensions**.

2. Search for "Dragon (DMO, DMD, DPA, DLA) Web Extension", select **Details** and enable the **Allow access to file URLs** setting.

Microsoft Edge WebView2 support

Dragon Medical One provides built-in support for Microsoft Edge WebView2 text controls in Cerner PowerChart.

Enabling Microsoft Edge WebView2 support from the command line

Enabling WebView2 is required for establishing communication between Dragon Medical One and WebView2 text controls. This operation requires administration rights on that machine. Dragon Medical One will attempt to elevate rights; if the rights cannot be elevated you cannot proceed. For more information, see Dragon Medical One command line.

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

Parameter

enableHub

> Registers the Dragon Medical One communication hub and hub launcher modules under Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Nuance\SoD. After you have executed the command, start Dragon Medical One and Cerner PowerChart to establish communication between the two applications.
> You only need to enable WebView2 support once per deployment or if you change the deployment location.

Configuration

The communication hub and hub launcher can be configured in SoD\CommunicationHub\launcherappsettings.json. The following settings are available:

Setting identifier	Setting description
LauncherServiceLowerPort	Configures the lowest port that the hub launcher will try to use. The defined value needs to be equal to or less than `LauncherServiceUpperPort`. Value range: 1025-65535 Default value: 1025
LauncherServiceUpperPort	Configures the highest port that the hub launcher will try to use. The defined value needs to be equal to or greater than `LauncherServiceLowerPort`. Value range: 1025-65535 Default value: 65535
HubServiceLowerPort	Configures the lowest port that the communication hub will try to use. The defined value needs to be equal to or less than `HubServiceUpperPort`. Value range: 1025-65535 Default value: 1025
HubServiceUpperPort	Configures the highest port that the communication hub will try to use. The defined value needs to be equal to or greater than `HubServiceLowerPort`. Value range: 1025-65535 Default value: 65535
LaunchProcessRetryMaxLimit	Configures the number of consecutive attempts made to launch the communication hub over a free port after the first attempt has failed. Value range: 0-25 Default value: 0
PortReservationRetryCount	Configures the number of consecutive attempts made to reserve a port for the communication hub or the hub launcher. This prevents concurrency when multiple instances of the communication hub or the hub launcher are started at the same time and find the same port free. Value range: 0-99 Default value: 0 **Note:** This setting is hidden by default.
ShowHubAndLauncherConsole	Defines if the console window for the communication hub or the hub launcher is displayed. Values: `True`, `False` (default) **Note:** This setting is hidden by default.

Logging

The following log files are generated when using Dragon Medical One with WebView2 text controls:

- SoD.CommunicationHubyyyymmdd.log
- SoD.HubLauncheryyyymmdd.log

To configure logging for the hub launcher, edit the `Serilog` section in `SoD\CommunicationHub\launcherappsettings.json`.
To configure logging for the communication hub, edit the `Serilog` section in `SoD\CommunicationHub\appsettings.json`.

The following settings are the most relevant (for more information on these and additional settings, see https://github.com/serilog/serilog-sinks-file):

Setting identifier	Setting description
`path`	Configures the log file location. In a virtual desktop/application environment, we recommend configuring a user-specific folder; for example: `%USERPROFILE%\\Documents\\SoD.CommunicationHubyyyymmdd.log` Default location: The same as the SoD.log file.
`rollingInterval`	Configures the period after which a new log file is created. Values: `Minute`, `Hour`, `Day` (default), `Month`, `Year`
`retainedFileCountLimit`	Configures the number of log files retained before the oldest log file is deleted. Recommended value range: `1-31` Default value: `31`
`MinimumLevel`	Configures the log level. Values: `Verbose`, `Debug`, `Information`, `Warning`, `Error` (default), `Fatal`

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.

2. 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):

```
<?xml version="1.0" encoding="utf-8" ?>
<applicationSettings>
    <SoD.Settings>
        <setting name="Authentication" serializeAs="String">
            <value>native</value>
        </setting>
    </SoD.Settings>
    <SoD.DefaultOptions>
        <setting name="Microphone.Record" serializeAs="String"
        isLocked="True">
            <value>Toggle</value>
        </setting>
    </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 select **Manage**.

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. Select **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.

    ```
    <setting name="Hotkeys.NextField" serializeAs="String">
    ```

```
        <value>CtrlALTW</value>
    </setting>

    <setting name="Hotkeys.PreviousField" serializeAs="String">
        <value>Ctrl + ALT + Q</value>
    </setting>
```

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)`.

```
<setting name="Microphone.EnterSelect" serializeAs="String"
isLocked="True">
        <value>PressHotkey (CtrlShiftAltA)</value>
    </setting>
```

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. Values: `None`, `DragonBar` (default), `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

Setting identifier	Setting description
	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. Values: `ShiftInsert` (default), `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.

Setting identifier	Setting description
	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
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.

Setting identifier	Setting description
	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. Nuance PowerMic 4 only: Configures the Rear Function button. 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. Nuance PowerMic 4 only: Configures the Function D 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. Nuance PowerMic 4 only: Configures the Function B button's behavior. Values: `none` (default), `ClearDictationBox`, `RecallText`, `TransferText`, `AnchorReleaseSpeechFocus`, `ShowHideDragonBar`,

Setting identifier	Setting description
	ShowHideDictationBox, NextField, PreviousField, AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow
Microphone.FunctionA	Configures the Function A button's behavior on Nuance PowerMic 4. Values: none (default), ClearDictationBox, RecallText, TransferText, AnchorReleaseSpeechFocus, ShowHideDragonBar, ShowHideDictationBox, NextField, PreviousField, AcceptDefaults, FieldComplete, PressHotkey, OpenDMAWindow, CloseDMAWindow
Microphone.FunctionC	Configures the Function C button's behavior on Nuance PowerMic 4. 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,

Setting identifier	Setting description
	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
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

Setting identifier	Setting description
	(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.

If there are issues with Full Text Control, this configuration setting can also be used to enable Basic Text Control in specific, fully supported text controls.

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 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>

          <ProcessName name="*">
               <WindowClass>Sample_class_2</WindowClass>
               <WindowClass>Sample_class_3</WindowClass>
          </ProcessName>

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

Enabling Basic Text Control for Google Chrome

Note: The web extension for Dragon Medical One 2021.3 or higher must be installed.

You can enable dictation at the cursor using Basic Text Control for applications hosted in the Google Chrome browser that are not fully supported by Dragon Medical One.

Proceed as follows:

1. Open the SoD.exe.config file.

2. In the **SoD.Settings**, **BasicTextControls** setting, add the `chrome` attribute in the **ProcessName** element and specify the URLs you want to enable Basic Text Control for in the **UrlTextToMatch** elements. The setting will be applied to any URL containing the value specified in the **UrlTextToMatch** element.

Example:

```
<setting name="BasicTextControls" serializeAs="String">

<value>
     <BasicTextControls>

          <ProcessName name="chrome">
              <UrlTextToMatch>medical</UrlTextToMatch>
          </ProcessName>

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

Basic Text Control will be enabled for any URL containing `medical`. For example, `https://your.medical.web.application.com`, `https://medical.services.com` or `https://medical.data.com`.

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:

```
<setting name="BasicTextControls" serializeAs="String">
<value>
     <BasicTextControls>

          <ProcessName name="*" textTransferMethod="ShiftInsert">
               <WindowClass textTransferMethod="SimulateKeystrokes">Sample_class_
               2</WindowClass>
               <WindowClass>Sample_class_3</WindowClass>
          </ProcessName>

          <ProcessName name="Process_1">
               <WindowClass textTransferMethod="CtrlV">Sample_class_
               1</WindowClass>
          </ProcessName>

          <ProcessName name="chrome" textTransferMethod="ShiftInsert">>
               <UrlTextToMatch>your.web.application</UrlTextToMatch>
          </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:

   ```
   <setting name="AutoLogOffTimeout" serializeAs="String">
        <value>10</value>
   </setting>
   ```

   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

The following topics are available:

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:

```
<setting name="RegisterWordAddIn" serializeAs="String">
    <value>False</value>
</setting>
```

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`):

    ```
    <setting name="DefaultTheme" serializeAs="String">
        <value><theme_identifier></value>
    </setting>
    ```

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, select ☰ and select **Change password**.

For more information on NMC, select ⍰ in the upper right of the NMC page to open the *Nuance Management Center Help*.

Licensing

To monitor licenses, open the **Licensing** ribbon, select **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 auto-provisioning is disabled, this must be done manually. To assign a license to a user account, do the following:

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

To revoke a license, do the following:

1. Open the **Licensing** ribbon and select **View Licenses**.
2. Select **Search**; all licenses are displayed.
3. Select the license that you want to revoke.
4. In the **License Allocation** group, select **Revoke**.
5. Select the user account from the list of **Available Users** and select **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, select **Organization Overview** and then **Details**.
2. Open the **Provisioning** tab and select **Dragon Medical Server** in the left pane.
3. Select **None**.
4. Select **Save**.

To disable automatic license assignment, do the following:

1. Open the **Sites** ribbon, select **Organization Overview** and then **Details**.
2. Open the **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 select **Add**.
2. In the **User Account Details** dialog box, enter the **First name**, **Last name** and **Login**; the other fields are optional.
If you use native authentication, enter the **Primary email address** to enable users to reset their password if they forget it; instructions on how to reset the password will be sent to this email address.

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. Select **Save** and select the license that you want to assign to the user in the **Licenses** dialog box, or select **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 select **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 select **Client Version**.

2. Enter search criteria and select **Search**.

3. To export the results as a CSV file, select .

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. Select **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 select **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 select **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. Select **Save**.

9. Open the **Groups** ribbon and select **Search**.

10. Enter the name of the group you just created and select it in the list of search results.

11. Select **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. Select **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 select **Add**.

3. Select the new group's organization.

4. In the **Role** field, select **Speech Recognition User** and select **OK**.

5. Enter a **Group name** and make sure the correct **Site** is selected.

6. Select **Save**.

7. Open the **Groups** ribbon and select **Search**.

8. Enter the name of the group you just created and select it in the list of search results.

9. Select **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. Select **Save**.

Logging

Dragon Medical One creates log files that can help Nuance 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.

Note: To enable users to reset their password if they forget it, make sure you provide their primary email address when you create the user accounts in NMC; for more information, see: Creating user accounts.

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, select and hold (or 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 select **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, select and hold (or 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, select and hold (or right-click) it and select **Organization details**.

2. Open the **Products** tab and expand **Dragon Medical Server**.

3. 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): <http://nms.organization.com:8731>, and select **Save**.

4. Open the **Domains** tab and select **Add**.

5. Enter the name and the LDAP Active Directory connection string, and select **Save**.

Configuring user accounts in NMC

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

1. Search for the user account, select and hold (or right-click) it and select **User Account Details**.

2. Open the **Credentials** tab.

3. On the **NTLM** tab, select **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. Select **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, select and hold (or right-click) it and select **User Account Details**.

2. Open the **Credentials** tab.

3. On the **Token** tab, select**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, select and hold (or right-click) it and select **User Account Details**.

2. Open the **Credentials** tab.

3. On the **NTLM** tab, select **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. Select **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.

6. In the **SoD.Settings**, **RedirectUri** setting, specify:
   `<value>https://nuancehdpdev.auth0.com/mobile</value>`.

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

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 **quit smoking** to insert the information.

Procedure

1. Open the **Speech Recognition** tab on the ribbon.

2. Select **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, select **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. Select **Save**.

Name

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.

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.

Spoken phrase

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).

If you want to give your users more than one way to insert an auto-text, select and enter another **Spoken Phrase**.

When you enter a spoken phrase, follow these rules:

- Use alphabetic characters only. Do not use:

  Digits (for example, use 'twelve' instead of '12') unless they are part of common words (for example, use '3D' instead of 'three D').
  Punctuation marks (for example, ., ", ! or ?).
  Symbols (for example, +, & or $) except for hyphens used in compound words (for example, 'C-spine').

- Follow standard capitalization rules (for example, use capital letters for proper names).

- Avoid using capital letters (except for acronyms or if the standard capitalization rules require it, see above).

- For acronyms that are spelled out, use capital letters (for example, CIA); if they are not recognized, separate the capital letters by spaces (for example, C I A).

- For acronyms that are pronounced as words, use lowercase (for example, use 'pet CT' for 'PETCT' or 'pick' for 'PICC').
- Do not use very short names that are acoustically difficult to capture (such as one syllable only).
- Use full words instead of abbreviations (for example, use 'without' instead of 'wo').
- Check for typos.

Fields

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.

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. You can configure a keyword in NMC.
- Activate **Display all levels** to list the auto-texts for the level selected in the tree view and its higher levels.

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 select **Keywords**.

2. Select your **Organization** and enter *insert* as the **Leading Keyword** for English.

3. Select **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).

- 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. Select **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, select **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, select **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. Select **Save**.

Spoken form

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).

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.

When you enter a spoken form, follow these rules:

- Use alphabetic characters only. Do not use:

  Digits (for example, use 'twelve' instead of '12') unless they are part of common words (for example, use '3D' instead of 'three D').
  Punctuation marks (for example, ., ", ! or ?).
  Symbols (for example, +, & or $) except for hyphens used in compound words (for example, 'C-spine').

- Follow standard capitalization rules (for example, use capital letters for proper names).

- Avoid using capital letters (except for acronyms or if the standard capitalization rules require it, see above).

- For acronyms that are spelled out, use capital letters (for example, CIA); if they are not recognized, separate the capital letters by spaces (for example, C I A).

- For acronyms that are pronounced as words, use lowercase (for example, use 'pet CT' for 'PETCT' or 'pick' for 'PICC').

- Do not use very short names that are acoustically difficult to capture (such as one syllable only).

- Use full words instead of abbreviations (for example, use 'without' instead of 'wo').

- Check for typos.

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.

- 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).

- 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. Select **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, select **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-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, including third-party 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 select **Submit**.

4. You will receive a confirmation email; select 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, select **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 select 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, select **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 select 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 in the Advisor window in Dragon Medical One.

You can manage licenses and configure organization-level settings via NMC.

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

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.

Concepts

Dragon Medical Advisor is provided as a feature set relevant for a specific care setting. Each feature set consists of a bundle of individually licensed content packs, which enable individual Dragon Medical Advisor features, for example a set of diagnoses for which specificity advice is available, or an advice type in the Advisor window.

Feature sets

Depending on your organization's care setting, Dragon Medical Advisor is provided as one of the following feature sets:

- **Inpatient Guidance:** Identifies undocumented and unspecified diagnoses and comorbidities in an inpatient care setting.

- **Pediatric Guidance:** Identifies undocumented and unspecified diagnoses and comorbidities in a pediatric care setting.

- **Outpatient Guidance:** Drives appropriate reimbursement and RAF scores in ambulatory, clinic and physician practice settings by identifying chronic conditions and prioritizing focus.

- **ED Guidance:** Creates more efficient emergency department workflows, aligns clinical decision support and promotes patient safety by providing risk alerts, specificity advice and links to reference material.

Advice types

Depending on the user's content pack licenses and EHR, the Advisor window displays recommendations grouped into cards under the following categories:

- **Specificity:** Dragon Medical Advisor checks the documented diagnoses and provides advice if a diagnosis could be more specific.

- **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 will list the clinical evidence and prompt the clinician to add diagnoses as

required.

- **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 Advisor window will display the diagnosis and the supporting evidence. For this advice type to be available, it must be configured in NMC.

- **HCC Opportunities:** Dragon Medical Advisor lists possible HCCs when a patient has been flagged for potential Hierarchical Condition Category (HCC) diagnoses.

- **ED Guidance:** Dragon Medical Advisor provides risk alerts, specificity advice and links to reference material for the emergency department care setting.

- **Coding Assistant:** On a separate **Coding Assistant** tab in the Advisor window, Dragon Medical Advisor displays ICD-10 diagnosis codes and Intelligent Medical Objects (IMO) descriptions, which users can copy into their EHR or charge capture system.

Content packs

Depending on the feature set provided to your organization, you will have one or more of the following content pack licenses available. Some content packs require more than one license to be enabled; for more information, see: Feature set licensing.

The following content packs are available:

- **Base Content Pack:** Enables a core set of conditions and specifiers for the **Specificity** advice type.

- **Pediatric Content Pack:** Enables advice on pediatric conditions and specifiers for the **Specificity** advice type.

- **HCC Content Pack:** Enables advice on Hierarchical Condition Category (HCC) diagnoses for the **Specificity** advice type.

- **Quality Indicator Content Pack:** Enables advice to measure and track clinical performance and outcomes, as part of the **Specificity** advice type.

- **Clinical Evidence Content Pack:** Enables the **Clinical Evidence** advice type.

- **Pediatric Clinical Evidence Content Pack:** Enables pediatric advice for the **Clinical Evidence** advice type.

- **Clinical Strategy Content Pack:** Enables the **Clinical Clarification** advice type.
- **HCC Guidance Talix Content Pack:** Enables the **HCC Opportunities** advice type.
- **ED Guidance Content Pack:** Enables the **ED Guidance** advice type.
- **Coding Assistant:** Enables the **Coding Assistant** tab in the Advisor window.

Feature set licenses

The following table shows which content packs the feature sets contain:

Content pack	Feature sets			
	Inpatient Guidance	Pediatric Guidance	Outpatient (HCC) Guidance	ED Guidance
Base Content Pack	✓			
Pediatric Content Pack	✓	✓		
HCC Content Pack	✓		✓	
Quality Indicator Content Pack	✓			
Clinical Evidence Content Pack	✓			
Pediatric Clinical Evidence Content Pack	✓	✓		
Clinical Strategy Content Pack	✓			
HCC Guidance Talix Content Pack			✓	
ED Guidance Content Pack				✓
Coding Assistant			✓	

The following table shows how content packs map to advice types:

Advice type	Content Pack
Specificity	Base Content Pack
	Pediatric Content Pack
	HCC Content Pack
	Quality Indicator Content Pack
Clinical Evidence	Clinical Evidence Content Pack
	Pediatric Clinical Evidence Content Pack
Clinical Clarification	Clinical Strategy Content Pack
HCC Opportunities	HCC Guidance Talix Content Pack
ED Guidance	ED Guidance Content Pack

The following table shows which licenses must be assigned to a user in NMC to enable a specific content pack in Dragon Medical Advisor:

Content packs	Licenses
Base Content Pack	Dragon Medical Advisor license
Pediatric Content Pack	Dragon Medical Advisor license + Pediatric Content Pack license
HCC Content Pack	Dragon Medical Advisor license
Quality Indicator Content Pack	Dragon Medical Advisor license + Quality Indicator Content Pack license
Clinical Evidence Content Pack	Dragon Medical Advisor license + Clinical Evidence Content Pack license
Pediatric Clinical Evidence Content Pack	Dragon Medical Advisor license + Clinical Evidence Content Pack license
Clinical Strategy Content Pack	Dragon Medical Advisor license + Clinical Strategy Content Pack license
HCC Guidance Talix Content Pack	Dragon Medical Advisor license + HCC Guidance Talix Content Pack license

ED Guidance Content Pack	Dragon Medical Advisor license + ED Guidance Content Pack license
Coding Assistant	Dragon Medical Advisor license + Code Extractor license

Dragon Medical Advisor: Licensing

Dragon Medical Advisor license management is done in the Nuance Management Center (NMC).

An organization-level Dragon Medical Advisor or contact pack license enables 5000 user licenses. For information which licenses are required to enable a specific content pack, see: Feature set licensing.

Note: 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 select the advice icon on the DragonBar to open the Advisor window.

Assigning a license

To assign a license to a user account, do the following:

1. In NMC, open the **Licensing** ribbon and select **View Licenses**.

2. Select **Search**; all licenses are displayed.

3. Select the license that you want to assign to the user.

4. In the **License Allocation** group, select **Grant**.

5. Select the user account from the list of **Available Users** and select **OK**.

Revoking a license

To revoke a license, do the following:

1. In NMC, open the **Licensing** ribbon and select **View Licenses**.

2. Select **Search**; all licenses are displayed.

3. Select the license that you want to revoke.

4. In the **License Allocation** group, select **Revoke**.

5. Select the user account from the list of **Available Users** and select **OK**.

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 do the following:

- Configure inactivity timeouts
- Configure the Advisor window to open automatically
- Disable Dragon Medical Advisor in Dragon Medical One
- Disable auto-processing

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 select **Details**.
2. Open the **Products** tab and select **Dragon Medical Advisor** from the left panel.
3. 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 select **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.

Configuring the inactivity timeout

To ensure that users only work with up-to-date information, you can configure the Advisor window to be grayed out after a defined period of inactivity. The window becomes active again when the document is submitted to Dragon Medical Advisor, or the user selects **Resume**.

To configure the inactivity timeout, do the following:

1. In NMC, open the **Sites** ribbon and select **Details**.

2. Open the **Products** tab and select **Dragon Medical Advisor** from the left panel.

3. Configure the **Advisor window inactivity timeout** and **Document inactivity timeout** settings. You can set both timeouts or only the **Document inactivity timeout**. If you configure both settings, the Advisor window will become inactive when both timeouts have been reached.

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 is reached, the user can open it via the advice icon or by saying **run Advisor**.

Proceed as follows:

1. In NMC, open the **Dragon Medical One** ribbon and select **Manage**; the **Manage DMO 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. Select **Save**.

Remarks

- Settings for lower levels (group, site) have priority over settings for higher levels (site, organization).

- This feature can also be configured via the application configuration file; settings in the configuration file will override settings in NMC. We recommend configuring this feature in NMC and not in the configuration file.

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>
```

Disabling auto-processing

Note: Auto-processing is enabled by default; we recommend keeping it enabled and leaving the default auto-processing interval unchanged.

When auto-processing is enabled, Dragon Medical Advisor analyzes the user's text at regular intervals (by default every 4 seconds). When new advice is available, the Advisor window is automatically updated with that advice.

When auto-processing is disabled, the user must select the advice icon in the application or say **run Advisor** to receive updated advice.

To disable auto-processing, do the following:

1. In NMC, open the **Sites** ribbon and select **Details**.
2. Open the **Products** tab and select **Dragon Medical Advisor** from the left panel.
3. Clear the **Auto-processing enabled** check box.

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.

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

1. In NMC, open the **Sites** ribbon and select **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 select **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 select **Search**.

2. Select your organization from the drop-down list and select **Search**.

3. Select and hold (or 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. Select **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 select **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 select **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 select **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. Select **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 select **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. Select **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, select **Select All**.

- To clear the **Display** check box for all diagnoses and specifiers, select **Clear All**, then select **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 select **Add**.

2. Select the new group's organization from the drop-down list.

3. In the **Role** field, select **Speech recognition user** and select **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. Select **Save**.

7. Open the **Speech Recognition** ribbon and select **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. Select **Save**.

Assigning multiple users to a group

Proceed as follows:

1. Open the **Groups** ribbon and select **Search**.

2. Enter search criteria, select a group and select **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. Select **Save**.

Assigning a user to multiple groups

Proceed as follows:

1. Open the **Sites** ribbon and select **Organization Overview**.

2. In the left panel (tree view) select your organization; all the organization's users are listed.

3. Select and hold (or 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 select ＞ to move it to the **Selected Groups** list.

6. In the **Selected Groups** list, select a group and select ∧ or ∨ to make its priority higher or lower.

7. Select **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 select **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. Select **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 select **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. Select **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, select **Select All**.

- To clear the **Display** check box for all HCC categories, select **Clear All**, then select **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 select **Add**.

2. Select the new group's organization from the drop-down list.

3. In the **Role** field, select **Speech recognition user** and select **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. Select **Save**.

7. Open the **Speech Recognition** ribbon and select **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. Select **Save**.

Assigning multiple users to a group

Proceed as follows:

1. Open the **Groups** ribbon and select **Search**.

2. Enter search criteria, select a group and select **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. Select **Save**.

Assigning a user to multiple groups

Proceed as follows:

1. Open the **Sites** ribbon and select **Organization Overview**.

2. In the left panel (tree view) select your organization; all the organization's users are listed.

3. Select and hold (or 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 select > to move it to the **Selected Groups** list.

6. In the **Selected Groups** list, select a group and select ^ or v to make its priority higher or lower.

7. Select **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 selecting **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 selecting **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.

- Incorrect text is transferred when the user dictates at the cursor using Basic Text Control.

    In the Dragon Medical One configuration file, **SoD.Settings** element, add the following setting to keep the text on the user's clipboard after transfer:

    ```
    <setting name="BasicTextKeepTextOnClipboardAfterTransfer"
    serializeAs="String">
        <value>True</value>
    </setting>
    ```

- 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/en-us/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 select Refresh.**

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

- A message is displayed when the user opens the personalization and help window: **Software update required. Starting in January 2022, this application requires Microsoft WebView2. For more information, contact your administrator.**

    Install the Microsoft Edge WebView2 Evergreen Standalone component; for more information, see WebView2 - Microsoft Edge Developer.

- In a Citrix environment, the personalization and help window is not displayed properly or closes unexpectedly with an error message.

    Disable the Citrix 'special folder redirection' setting for the Microsoft Edge WebView2 runtime process. To do so, add the following registry keys to your Citrix environment configuration:

    ```
    [HKEY_LOCAL_MACHINE\SOFTWARE\Citrix\CtxHook\AppInit_
    DLLs\SfrHook\msedgewebview2.exe]
    [HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Citrix\CtxHook\AppInit_
    DLLs\SfrHook\msedgewebview2.exe]
    ```

    For more information, see the Citrix documentation on how to disable Citrix API hooks on a per-application basis.

- 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.

- When working with a Philips SpeechMike or Nuance PowerMic 4 device, the screen saver is not displayed after the configured period of inactivity when recording is in standby mode.

  To disable this behavior, press and hold the left mouse and touchpad buttons on the recording device for five seconds. When the firmware setting has been changed successfully, the device provides visual and audio feedback. This setting is stored on the device and needs to be changed individually on each device.