Dragon Medical One 2024.3

Installation and Administration Guide
Region: USA

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Getting started

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

For more information, software installation packages and end user training materials, see the Dragon Medical One Resource Center.

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 `https://*.nuancehdp.com` via port 443; make sure your firewall doesn't block this port.

3. Dragon Medical One requires access to `https://dragon.us.dmp.nuance.com` via port 443; make sure your firewall doesn't block this port.

4. Dragon Medical One requires access to a certificate revocation list (CRL) for authentication purposes. If your firewall blocks inbound data by default, make sure the URLs to the relevant CRLs are on your firewall allow list. To find these required URLs, follow the procedure on the DigiCert website.

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 and that your firewall doesn't block this port.

6. Links to the Learning Center require access to Nuance University; make sure your firewall allows access to `https://www.nuanceuniversity.com`.

7. Deploy Dragon Medical One.

8. 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 isn't 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).

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:

- Providing different configurations for a single standalone deployment

- Configuring the default options

- Enabling Basic Text Control

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- Disabling PowerMic Mobile support

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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 Technical Support or your Nuance account executive.

Operating systems

- 32-bit: Microsoft Windows 10. Make sure that the latest service pack is always applied.
- 64-bit: Microsoft Windows 10, Windows 11, Windows Server 2016, Windows Server 2019 and Windows Server 2022. Make sure that the latest service pack is always applied.

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

In Microsoft Windows 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

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, III and 4

- Philips SpeechMike Air, Philips SpeechMike Premium, Philips SpeechMike III

- Grundig Digta SonicMic II and 3, Grundig Digta CordEx, Grundig Digta 7

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 Edge, Google Chrome, Apple Safari

For the personalization and help window:

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

Text editors

The following text editors are supported:

- TX Text Control .NET for Windows Forms 10.0 - X15 and 30.0

- Microsoft Word 2007, 2010 and 2016

- Microsoft Rich Text controls (including .NET Forms)

- Ter32, Ter13-Ter17 and Ter21-Ter23

- TEdit (for 32-bit apps), TMemo (for 32-bit apps) and TRichEdit (for 32-bit and 64-bit apps)

- 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 app; 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.

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're 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 continues 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 can't 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 apps running on Windows 10 or higher. 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 app configuration file has the same version as the app; don't 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 app configuration file.

  To keep your customized settings after an upgrade, save the existing app 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 standalone 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 2023**

Dragon Medical One isn't 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

  A list of languages (as IETF language tags) that the end user can select from in the logon dialog box. Separate values with the pipe character: |

  For more information, see Supported languages and Configuring Dragon Medical One.

- SUPPORTEDTOPICS

  A list of speech recognition topics that the end user can select from in the logon dialog box. 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 isn't 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 isn't set, the feature is enabled by default.

- WPFSUPPORT

  Enables/disables support for standard WPF text controls. Possible values: Yes, No. If this parameter isn't 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|Cardiology|ClinicalAdministration"

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 app is started: Select and hold (or right-click) the ZIP file and select **Properties** > **General** > **Unblock** > **Apply**.

3. Extract all files.

4. Customize the SoD.exe.config file template to configure Dragon Medical One. For more information, see: Configuring Dragon Medical One.

5. Make the **Standalone** folder available to your end users.

Note: Dragon Medical One isn't 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.
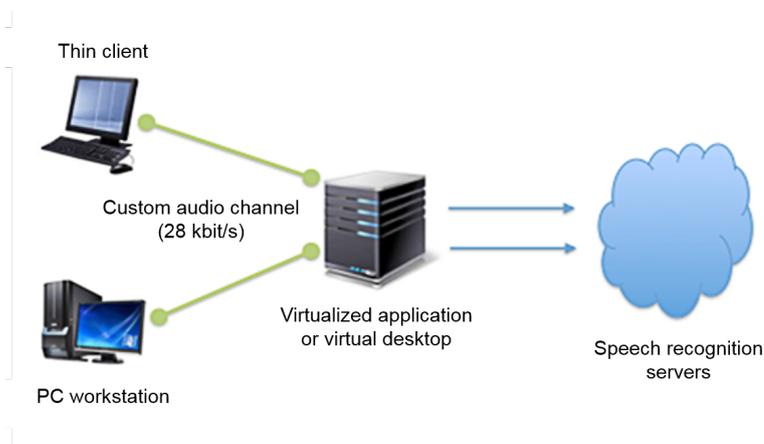
Supported virtualized environments

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 Dragon Medical One release notes.

> **Important:** For security reasons, make sure that VDI channel encryption is enabled between client end points and VDI servers or virtual desktops. Disabling encryption in a virtualized environment can lead to confidential data being exposed. Encryption is enabled by default.

Edit control visibility

This means the following:

- If you are using a virtual desktop solution, where all target apps 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 are 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 app 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're 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 is installed, we recommend you uninstall it unless it is still used by another product.

To allow the usage of Nuance audio channels in Citrix environments, you must update the Citrix policy settings. For more information, see the documentation included in 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 Dragon Medical One release notes.

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 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 and Grundig devices are also available.

For more information, see the documentation included in the Nuance virtual extensions package.

Server runtime requirements

Bandwidth

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

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

Latency

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

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

Network latency requirements
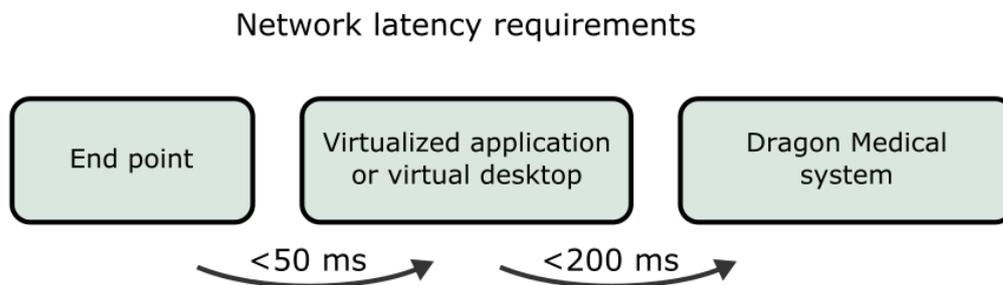
Memory

The Dragon Medical One app's memory usage, when in use, will fluctuate (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 can't 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 app 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 apps such as Microsoft Word, Microsoft Outlook or an EMR 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 apps.

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

Scenario

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

Prerequisites

- The primary app is hosted as a virtual application or published as a virtual application.

- Dragon Medical One is published in the same way as the primary app (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

- Local installations don't use the custom audio or microphone drivers, therefore there is no conflict.

Results

Due to our single, cloud-based profile, users have an identical speech experience, regardless of whether they're using the local app or the published instance. All the auto-texts, commands, custom words and app configuration parameters are 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, 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 apps, 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 microphone icon 🔴 on the corresponding DragonBar. Once an instance has the audio focus, users can continue to use their hardware microphone to control the app 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 app.

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.

Using Dragon Medical One with Mac

Dragon Medical One is a native Windows app; 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 apps.

Audio input devices

- Supported: PowerMic Mobile.
- Not supported: Nuance PowerMic II, III and 4, 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 apps 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 isn't supported in native macOS apps. To fully support this functionality, Dragon Medical One requires a deep integration with target apps; this level of integration isn't possible with native macOS apps. Dictating into the Dictation Box and then transferring text to macOS apps might be possible; however, this configuration isn't 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.

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 apps 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 apps:

- `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.
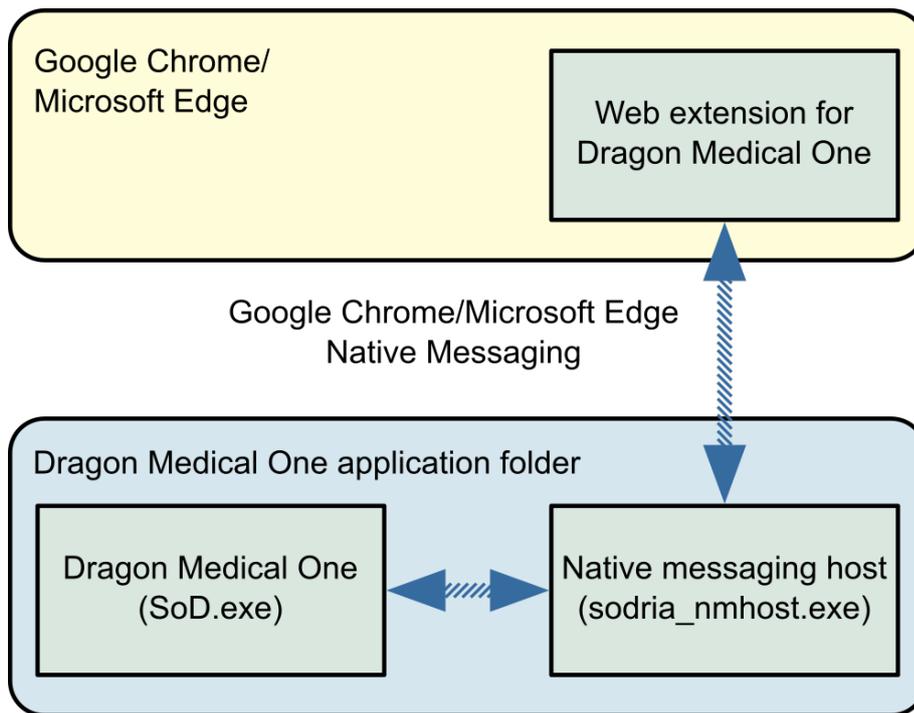
Installing the web extension for Google Chrome

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** > **Site access** > **On all sites**.

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/update`
   `2/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** > **Add extension**.

3.   On the Microsoft Edge toolbar, select the extensions icon ⊞ > **Manage extensions**.

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

5.   Select **Details** > **Site access** > **On all sites**.

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 the extensions icon ⊞ > **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 support for Microsoft Edge WebView2 text controls in Cerner PowerChart.

Prerequisites

- .NET 8.0 x86 runtime for Windows
- ASP.NET Core 8.0 x86 runtime for Windows

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 can't be elevated, you cannot proceed. For more information, see Dragon Medical One command line.

Note: regsvr32.exe is 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 apps.

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 tries to use. The defined value must be equal to or less than `LauncherServiceUpperPort`. Value range: `1025-65535` Default value: `1025`
`LauncherServiceUpperPort`	Configures the highest port that the hub launcher tries to use. The defined value must be equal to or greater than `LauncherServiceLowerPort`. Value range: `1025-65535` Default value: `65535`
`HubServiceLowerPort`	Configures the lowest port that the communication hub tries to use. The defined value must be equal to or less than `HubServiceUpperPort`. Value range: `1025-65535` Default value: `1025`
`HubServiceUpperPort`	Configures the highest port that the communication hub tries to use. The defined value must 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`
`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.
`LaunchHubAsServiceForFallback`	Enables the hub launcher to start as a service if the communication hub service has stopped responding. This allows the communication hub to be restarted without restarting the EHR. This setting can affect performance;

Setting identifier	Setting description
	please contact Nuance Technical Support before you enable it. 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 app configuration file has the same version as the app; don't 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 app configuration file.

To keep your customized settings after an upgrade, save the existing app 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 standalone 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 standalone deployment

To provide a single standalone 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 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're in the SoD.exe.config file.

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

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

```xml
<?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 accesses 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. On the **Dragon Medical One** ribbon, select **Manage**.

3. Select an organization, site or group in the tree view.

4. Select a tab and configure a setting.

5. Optional: Select the **Lock** check box to prevent users from changing the configured setting.

6. Select **Save**.

For more information on NMC, select the help icon in the upper right of the NMC page to open 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 app is delivered with; the setting identifier has the following format: `OptionCategory.IdentifierName`:

Setting identifier	Setting description
`General.AnchorSpeechFocusRecStarted`	Determines if the speech focus is anchored when recording is started. Values: `True`, `False` (default)
`General.VisualFeedbackVoiceCommandsRecognized`	Determines if visual feedback is provided when a voice command is recognized and specifies where the voice command bubble is anchored. Values: `None`, `DragonBar` (default), `Mouse`, `Text`, `SystemTray`
`General.AudioFeedbackVoiceCommandsRecognized`	Determines if audio feedback is provided when a voice command is recognized. Values: `True`, `False` (default)
`General.EnableHandsFree`	Determines if the wake word feature is enabled so the user can switch between dictation and standby mode. For more information on the wake word feature, see the end user help. Values: `True` (default), `False`
`General.StartInStandbyMode`	Determines 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.

Setting identifier	Setting description
	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`	Determines if the text is inserted at the current cursor position when the position of the cursor is changed manually during recording. Values: `True`, `False` (default)
`DictationBox.UnsupportedControlHandling`	Determines 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`
`DictationBox.TransferRecStopped`	Determines if the text is transferred from the Dictation Box when recording is stopped. Values: `True`, `False` (default)
`DictationBox.ClearAfterTransfer`	Determines if the transferred text is cleared from the Dictation Box. Values: `True` (default), `False`
`DictationBox.KeepTextClipboardAfterTransfer`	Determines if the transferred text is kept on the clipboard.

Setting identifier	Setting description
	Values: `True`, `False` (default)
`DictationBox.AddTextFromTargetApp`	Determines if the text selected in the target app is added to the Dictation Box.

Values: `True`, `False` (default) |
| `DictationBox.ShowWhenDragonMinimized` | Determines if the Dictation Box is displayed when the DragonBar is minimized.

Values: `True` (default), `False` |
| `DictationBox.AudioAlertWhenOpens` | Determines if an audio alert is played when the Dictation Box opens automatically.

Values: `True`, `False` (default) |
| `DictationBox.TextAppearance` | Configures the text appearance.

Values: `Plain` (default), `Formatted` |
| `DictationBox.FontType` | Configures the font type.

Default value: `Arial` |
| `DictationBox.FontSize` | Configures the font size.

Default value: `10` |
| `Hotkeys.ShowHideDragonBar` | Configures the hotkeys used to show/hide the DragonBar.

Default value: `CtrlALTH` |
| `Hotkeys.StartStopRecording` | Configures the hotkeys used to start/stop recording.

Default value: `NUM-Add` |
| `Hotkeys.AnchorReleaseSpeechFocus` | Configures the hotkeys used to anchor/release the speech focus.

Default value: `CtrlALTA` |
| `Hotkeys.ShowHideDictationBox` | Configures the hotkeys used to |

Setting identifier	Setting description
	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. 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.

Setting identifier	Setting description
	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`
`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`,

Setting identifier	Setting description
	`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, 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,`

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

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

Disabling CRL validation

By default, Dragon Medical One checks that the SSL certificate used for authentication contains a certificate revocation list (CRL). If you're using a self-signed certificate or a signed certificate from an internal CA, this check can cause authentication issues. To disable CRL validation, do the following:

1. Open the SoD.exe.config file.

2. In the **appSettings**, add the setting **CRLValidationEnabled** and specify as follows:

   ```
   <appSettings>
           <add key="CRLValidationEnabled" value="False"/>
   </appSettings>
   ```

Note: This configuration setting is optional.

Enabling Basic Text Control

By default, if users place the cursor in a text control that isn't 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 is supported; users won't 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 are 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 don't 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 apps hosted in the Google Chrome browser that aren't 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 is 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 is 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 overrides 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>
```

Disabling auto-text formatting for specific text controls

By default, if users insert a formatted auto-text in a text control that doesn't support text formatting, the formatting isn't displayed correctly. To avoid any issues, this configuration setting can be used to disable auto-text formatting for specific text controls.

To disable auto-text formatting for specific text controls, do the following:

1. Open the SoD.exe.config file.

2. In the **SoD.Settings**, **TextControlsWithFormattedAutoTextsDisabled** setting, specify all text controls (defined as **WindowClass** elements specific to a process) where you want to disable formatting in auto-texts.

If you don't specify **WindowClass** elements for a process, formatting is disabled for all formatted auto-texts for all window classes of that process.
If you specify a wildcard character (*) for a process, formatting is disabled for all formatted auto-texts for all specified **WindowClass** elements, independent of the process.

Example:

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

                <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>

        </TextControlsWithFormattedAutoTextsDisabled>
</value>
</setting>
```

Configuring timeout for end users

You can configure Dragon Medical One to automatically log a user off if they haven't worked with the app 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 don't 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 doesn't work with Dragon Medical One for more than 10 minutes, they're logged off.

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 don't 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 only disables 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 is still available in the list.

Configuring the language

You can configure the language used for speech recognition and the user interface. Proceed as follows:

1. Open the SoD.exe.config file.

2. In the **SoD.Settings**, **SupportedLanguages** setting, specify the language as an IETF language tag.

If you specify a language that is only available for speech recognition, the user interface is displayed in a related language.

If you want to present a list of available languages to the end user, specify all supported languages in the setting and separate them with the pipe (|) character (for example, `de-DE|en-US|sv-SE`). The end user can then choose one of the specified languages when they start the app.

Note: You can provide multiple download links to enable your users to choose a language.

For more information, see: Supported languages.

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|ClinicalAdministration`). The end user is then able to choose a topic when they start the app.

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 app, the list of connected microphones is filtered based on this setting. If you don't 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 app, they're 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`.

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 is placed in the lower left corner of the splash screen.

> Requirements:
> > Size: 320x130 pixels
> > Format: PNG
> > File name: SoD.OEM.png
> Location:
> > Standalone: The app directory (same location as the configuration file)

Configuring the user interface color theme

The color theme for Dragon Medical One can be one of the following:

- `Blue`: Default color theme, used when this setting is empty.

- `Light` / `Dark`: Monochrome color themes with high contrast.

- `System`: Follows the monochrome color theme set in Microsoft Windows under **Choose your default app mode**.

To configure the color theme, do the following:

1. Open the SoD.exe.config file.

2. In the **SoD.Settings**, **DefaultTheme** setting, specify the color theme, for example:

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

Dragon Medical One command line

Starting Dragon Medical One from the command line

You can configure the standalone Dragon Medical One package so that your users don't need to log on separately to the app. By starting Dragon Medical One with the mandatory parameters specified, the logon dialog box is not displayed and any logged on user is automatically logged off.

Note: Make sure you specify the full path to the app, not just the short 8.3 form.

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, this parameter is ignored.

lang
>   The speech recognition language. This parameter is optional.
>   Specify the language as an IETF language tag. For more information, see: Supported languages.
>   If only one language is specified in the configuration file and this parameter isn't set, this language is selected automatically and Dragon Medical One starts without displaying the logon dialog box.
>   If more than one language is specified in the configuration file and this parameter isn't set, Dragon Medical One starts without displaying the logon dialog box and uses the

language the user last logged on with. If the user hasn't logged on successfully before, or if the language the user last logged on with is no longer available, the logon dialog box is displayed and the user must select a language manually.

topic

The speech recognition topic (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 isn't set, this topic is selected automatically and Dragon Medical One starts without displaying the logon dialog box.

If more than one topic is specified in the configuration file and this parameter isn't set, Dragon Medical One starts without displaying the logon dialog box and uses the topic the user last logged on with. If the user hasn't logged on successfully before, or if the topic the user last logged on with is no longer available, the logon dialog box is displayed and the user must select a topic manually.

mic

The microphone identifier.

This parameter is mandatory. If you don't 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 is used. If no connected microphone or more than one connected microphone contains the specified string in its name, the logon dialog box is displayed and the user must select a microphone.

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

password

The user's password.

If trusted authentication is enabled, this parameter is ignored.

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 standalone Dragon Medical One package so that your users don't need to log off or close the app manually.

Parameters

`logoff`

Logs off the currently logged on user. This parameter is exclusive and can't be used together with other parameters.
If trusted authentication is enabled, this parameter is ignored.

`shutdown`

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

Enabling and disabling WPF support from the command line

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

You can enable/disable WPF support, for a specific machine, in the standalone Dragon Medical One package. By enabling/disabling WPF support, you 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 attempts to elevate rights; if the rights cannot be elevated you cannot proceed.

Note: regsvr32.exe is invoked for this operation.

These parameters are mutually exclusive and override any other parameters passed to the SoD.exe process during start-up. For example, passing the parameters during standard logon procedure isn't supported and causes 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 is started, and once this operation is performed, it shuts 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 is started, and once this operation is performed, it shuts 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 in NMC, see: Auto-texts.

Prerequisites for running NMC

- Microsoft Edge, Google Chrome, Apple Safari

Note: NMC requires access to `https://*.nuancehdp.com` via port 443; make sure your firewall doesn't block this port. This port must be accessible from the workstations used to access NMC.

Launching NMC

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

Note: To change your password, select the menu icon ▤ > **Change password**.

For more information on NMC, select ⑦ in the upper right of the NMC page to open the *Nuance Management Center Help*.

Licensing

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

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. On the **Licensing** ribbon, select **View Licenses**.

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

3. Select the license that you want to assign to the user and select **Grant**.

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

To revoke a license, do the following:

1. On the **Licensing** ribbon, select **View Licenses**.

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

3. Select the license that you want to revoke and select **Revoke**.

4. 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 won't 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 on the **User Account Details** page; 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 for each user (for example, location and department) and control license allocation.

To disable auto-provisioning, do the following:

1. On the **Sites** ribbon, select **Organization Overview** > **Details**.

2. On the **Provisioning** tab, select **Dragon Medical Server** > **None** > **Save**.

To disable automatic license assignment, do the following:

1. On the **Sites** ribbon, select **Organization Overview** > **Details**.

2. On the **Provisioning** tab, select **Dragon Medical Server**.

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. On the **User Accounts** ribbon, select **Add**.

2. On the **User Account Details** page, 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 are sent to the specified email address.

3. On the **Group Memberships** tab, assign the user account to at least one group. If you aren't 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. On the **User Accounts** ribbon, select **Search**.

2. Select an **Organization** and enter search criteria. If you don't 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. On the **Reports** ribbon, select **Client Version**.

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

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

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 has been reset.

To reset a user profile, do the following:

1. On the **User Account Details** page, open the **User Profile** tab.

2. Select **Dragon Medical Server** > **Reset speech recognition user profile** > **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 has a short-term impact on speech recognition quality.

- Words previously added to the vocabulary by the user aren't 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 can't add or edit words until all words previously added to the vocabulary become available again.

Note: The user vocabulary isn't 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 doesn't 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 the auto-text.

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

1. Log on to NMC with your administration credentials.

2. On the **Groups** ribbon, 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. On the **Groups** ribbon, 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. On the **Groups** ribbon, 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. On the **Groups** ribbon, 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 (doesn't contain sensitive data):
      Dragon Medical One standalone 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 isn't 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 isn't logged on to the corporate identity provider domain, they're prompted for credentials. If the user is already logged on to the corporate identity provider domain, they're 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 doesn't 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 app configuration file (for example, SoD.exe.configuration on your web server or SoD.exe.config for the stand-alone package), **SoD.Settings**, **Authentication** setting, specify: `<value>none</value>`.

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 **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**.
5. 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-premises NMS local authenticator, do the following:

1. In NMC, search for the organization, select and hold (or right-click) it and select **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-premises local authenticator, do the following:

1. Search for the organization, select and hold (or right-click) it and select **Details**.

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

3. In the **NMS on-premises server URL** field, enter the URL of the on-premises NMS local authenticator including the port that hosts the authentication interface on the local authenticator (default port number: 443): <https://nms.organization.com:443>, and select **Save**.

4. On the **Domains** tab, 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.

Note: If you use self-signed certificates or a signed certificate from an internal CA for authentication, you can disable CRL validation to avoid authentication errors.

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 isn't logged on to the corporate identity provider domain, they're prompted for credentials. If the user is logged on to the domain, they're 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.

Configuring Dragon Medical One to require re-authentication

When Dragon Medical One is used in an environment where users share workstations, Dragon Medical One can be configured to prompt users for their credentials every time they sign in. To enable this feature, do the following:

1. Open the SoD.exe.config file.

2. In the **SoD.Settings**, add the setting **ForceAuthenticationPromptOnStartup** and specify as follows:

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

Auto-texts

The auto-text feature enables you to define standard blocks of 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 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. On the **Speech Recognition** ribbon, select **Manage**.

2. Select your **Organization**.

3. Expand the **Auto-texts** node in the tree view and select the level you want to create the auto-text for (site, group or user).

4. Select and hold (or right-click) the level and select **Add Auto-text**.

5. Enter a **Name** (*Quit smoking*), a **Description** (optional) and select a **Language**.

6. Optional: change the **Spoken Phrase**.

7. In the contents section, enter:

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

8. 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's strongly recommended that you give the auto-text a distinctive name that can't be misinterpreted as speech to be recognized. This helps to ensure that it is correctly inserted.

You can't create two auto-texts with the same name, even if different spoken phrases are defined.
You can't 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's pronounced are very different, change the **Spoken Phrase** (how it's pronounced). If you want to give your users more than one way to insert an auto-text, select the plus icon and enter another **Spoken Phrase**.

When you enter a spoken phrase, follow these rules:

- Use alphabetic characters and single spaces only. Don't use:

  Digits (for example, use 'twelve' instead of '12') unless they're 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').
  Double spaces.

- 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're 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').

- Don't 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]**. To automatically apply formatting to the field contents, add the formatting to the field delimiters. 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 no longer work then.

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.
- To make auto-text formatting available for specific users, make sure you have enabled auto-text formatting in NMC.
- Some text controls can't process formatted auto-texts. To test if a text control supports formatting, copy and paste formatted text into it. If the formatting isn't displayed correctly, you can disable auto-text formatting for specific text controls in the configuration settings.

Important: For security reasons, auto-texts must not contain sensitive information, such as user names or passwords.

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. On the **Speech Recognition** ribbon, 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).
- Keyword changes are applied to all auto-texts defined in your organization.
- The maximum number of characters for a keyword is 25.
- You can only use alphabetic characters in keywords; as for spoken phrases, special characters are not allowed

Enabling auto-text formatting in NMC

You can configure default settings in NMC. To enable or disable auto-text formatting for all users in a specific organization, site or group, do the following:

1. On the **Dragon Medical One** ribbon, select **Manage**.
2. Select an organization, site or group in the tree view.
3. In the **General** tab, select the **Support formatted auto-texts** check box.
4. Optional: Select the **Lock** check box to prevent users from changing the configured

setting.

5. Select **Save**.

Voice commands

Voice commands enable Dragon Medical One users to say a word or phrase that initiates an action and control the app 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, they're now called step-by-step commands. Users define step-by-step commands in the **Manage Step-by-step Commands** dialog box and they're displayed on the **What You Can Say** page; for more information, see the end user help.

> **Important:** For security reasons, step-by-step commands must not contain sensitive information, such as user names or passwords.

Existing user-level custom commands created in the Nuance Management Center are 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.

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

Adding a word in NMC

Scenario

Your users frequently prescribe the drug *Xanax* and recognition is problematic.

Procedure

1. On the **Speech Recognition** ribbon, select **Manage**.
2. Expand the **Words** node in the tree view and select the level you want to associate the word with (site, group or user).
3. Select and hold (or right-click) the level and select **Add Word**.
4. Enter a **Written form** (*Xanax*) and, if necessary, a **Spoken form** (*zanacks*).
5. Select the **Language** you want to associate the word with.
6. Select **Save**.

Spoken form

The spoken form is optional. If how the word is written and how it's pronounced are very different, enter a spoken form (how it's pronounced) and define a **Written form** (how it's 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 and single spaces only. Don't use:

  Digits (for example, use 'twelve' instead of '12') unless they're 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').
  Double spaces.

- 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're 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').

- Don't 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, 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

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

1. On the **Speech Recognition** ribbon, select **Manage**.

2. Expand the **Words** node in the tree view and select a level (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. On the **Speech Recognition** ribbon, 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 apps - (Nuance-branded and third-party partner apps) - to share a single cloud-based user profile. The single-profile architecture means that any changes a user makes to their vocabulary, auto-texts or commands are immediately available to that user in any app, on any device.

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 apps 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 DragonBar menu. Custom words and auto-texts are shared with any other cloud-connected product including third-party apps. 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. Custom words and auto-texts are shared with any other cloud-connected products including third-party apps. 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 apps: Users can add their own custom words and auto-texts via the Nuance personalization and help window. To create auto-texts in mobile apps, users must have a Dragon Medical One license. Custom words and auto-texts are shared with any cloud-connected product including other third-party apps.

- Nuance Management Center (NMC): Administrators can add words or auto-texts at the site, group or user level. Custom words and auto-texts defined in NMC are shared with any cloud-connected product, including third-party apps.

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 isn't 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. Custom words and auto-texts are shared with other cloud-connected products including third-party apps. 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 apps: Users can add their own custom words and auto-texts via the Nuance personalization and help window. To create auto-texts in mobile apps, users must have a Dragon Medical One license. Custom words and auto-texts are shared with any cloud-connected product including other third-party apps.

- Nuance Management Center (NMC): Administrators can add words or auto-texts at the site, group or user level. Custom words and auto-texts defined in NMC are shared with any cloud-connected product include third-party apps.

On-premises Nuance Management Server

All cloud-enabled offerings, including third-party apps, 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-premises NMS instance and import them into the Nuance-hosted NMS instance. Be aware that this approach is time-consuming and does not deliver a true single user profile experience.

We recommend migrating your on-premises NMS instance to the Nuance cloud.

Third-party apps only

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

- Third-party apps: Users can add their own custom words and auto-texts via the Nuance personalization and help window. To create auto-texts in mobile apps, users must have a Dragon Medical One license. Custom words and auto-texts are shared with any cloud-connected product including other third-party apps.

- NMC: Administrators can add words or auto-texts at the site, group or user level. Custom words and auto-texts defined in NMC are shared with any cloud-connected product.

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 app 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.

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

Which languages are supported in your organization depends on your region and your Dragon Medical One license; for more information, contact Nuance Technical Support or your Nuance account executive.

Troubleshooting

- After Dragon Medical One has been deployed via XCOPY deployment, the app doesn't 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 app 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.

- An error occurs when Dragon Medical One is started: **Failed to initialize server.**

  > The SSL certificate doesn't contain a certificate revocation list (CRL). If you use self-signed certificates for authentication or a signed certificate from an internal CA, you can disable CRL validation.

- A message is displayed when the user logs on to Dragon Medical One: **The system is currently unable to retrieve your full speech profile. You can still log on and record, but some customized settings and features might be unavailable. This issue is temporary; your settings should be restored soon.**

  > This message indicates that Dragon Medical One is started in resiliency mode because the Nuance Management Server (NMS) is currently unavailable. Resiliency mode enables users to log on and use speech recognition even when their user credentials can't be verified in NMS.
  >
  > Users encounter the following restrictions in resiliency mode:
  >
  > > Auto-texts and step-by-step commands might not work.

The **Options**, **Manage Auto-texts** and **Manage Step-by-step Commands**
dialog boxes aren't available.
Users can't change or reset their password.

Full functionality will be restored when Dragon Medical One can connect to NMS
again and the user then logs on to Dragon Medical One.

- 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 isn't 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** page,
    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 user changed their settings in the **Options** dialog box, but the changes aren't 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 app.

- 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.

- 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 isn't 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 can't dictate at the cursor in apps based on Windows Presentation Foundation (WPF) TextBox class text controls.

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

- The user can't switch the speech focus between apps running at the same time in a Citrix environment.

  Launch the Citrix Application Experience (CAX) Troubleshooting Tool on the Citrix server where the issue occurs and deselect all the settings (do not change the **Disable Active Accessibility Hook (0x00000004)** setting). Restart the server before starting Dragon Medical One. For more information on how to use the troubleshooting tool, see the Citrix Knowledge Base.

- 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 isn't 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.

- The user sees unreadable code instead of the expected auto-text formatting.

  Some text controls can't process formatted auto-texts. To test if a text control supports formatting, copy and paste formatted text into it. If the formatting isn't displayed correctly, you can disable auto-text formatting for specific text controls in the configuration settings.

- When the user inserts an auto-text into Microsoft Word, they do not see the expected formatting.

  In Microsoft Word, open **File > Options > Advanced**. In the **Cut, copy and paste** section, change the **Pasting from other programs** setting to **Keep Source Formatting**.

  If your auto-text contains fields, make sure that the required formatting is applied to the field delimiters.