

Release Notes

Nuance® Speech Suite

Version 11.0.4 for Linux and Windows

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New features and changes

New features and changes in this release:

- New feature – Krypton-only speech recognition
- Added support – MySQL version 8
- Added support – OpenJDK 8.0
- Management Station reports – added session-based report for PPU licensing. (Price Per Unit, also known as billing report licensing)
- Management Station reports – "Premium Add-on" is renamed to "Dragon Voice"

Nuance Speech Suite components and versions

The Nuance Speech Suite installation package is a complete platform that includes numerous components. The installer lets you decide which components to install on each host.

Product	Version	Description
Nuance Automation Assist	4.1.0	Supports voice applications by escalating difficult caller responses to live agents in real time.
Nuance Dragon Voice	Dragon Voice provides support for open-dialog (virtual assistant) applications. It includes these components:	
	3.4.4	Krypton recognition engine: Enables raw recognition and large vocabulary continuous speech recognition for open-dialogs. Krypton uses a single port-per-process architecture for efficient memory management. This means that you must configure the number of Krypton instances to match the number of Dragon Voice enabled channels being serviced simultaneously.
	3.3.7	Natural Language Engine (NLE): Provides semantic processing and meaning extraction.
	7.0.4	Nuance Meaning Extraction Engine (NMEE): Provides meaning extraction used by NLE.
	1.2.0	Natural Language Processing service (NLPS): New service that manages Dragon Voice components.
	1.0.3	Nuance Resource Manager: New implementation of Resource Manager that optimizes Dragon Voice resources for recognition and interpretation by managing traffic and service requests.
	3.3.3	Nuance Text Processing Engine (NTpE): Provides a framework for tokenization and normalization of text.
Nuance License Manager	11.14.3	Distributes licenses to Management Station, Recognizer, Vocalizer for Enterprise, Dragon Voice components, and Automation Assist.

Nuance Management Station	6.0.3	Configures, deploys, administers, and manages voice applications on a distributed network. Principal features include service management, system monitoring and control, system performance and analysis, capacity monitoring, billing usage reports, and data management.
Nuance Recognizer	11.0.3	Provides speech recognition. (The 11.0.3 recognizer synchronizes with Speech Suite 11.0.4.)
Documentation	11.0.3	Full documentation for Speech Suite products. (The 11.0.3 documentation synchronizes with Speech Suite 11.0.4.)
Nuance Speech Server	7.1.0	Provides an open, protocol-based mechanism (MRCP) for integrating recognition and text-to-speech functionality. A specific Speech Server must communicate with a specific Recognizer and Vocalizer, if using text-to-speech. You can configure additional Speech Server, Recognizer, and Vocalizer instances, depending on the number of ports you support.
Nuance Vocalizer Server	7.2.7	Provides text-to-speech.

You can get separate downloads from [Nuance Network](#). Store these downloads in one location, and point to that location when prompted by the Speech Suite installer. Additional downloads:

- Nuance license file — Required. You generate and download licenses based on a prior agreement with Nuance.
- Nuance Vocalizer for Enterprise voice packs — At least one voice pack is required if using Vocalizer.
- Nuance Recognizer language packs — At least one language pack is required if using Nuance Recognizer.
- Nuance data packs — At least one data pack is required if using Dragon Voice.

Third-party requirements and options

Requirements and options for Speech Suite hosts:

Requirements		Notes
Operating systems	<p>Required. You can install Speech Suite on these operating systems:</p> <ul style="list-style-type: none"> • CentOS 6 or 7 (7.4 or later), 64-bit. • Red Hat Enterprise Linux 6 or 7 (7.4 or later), 64-bit. • Windows Server 2016 Standard and Datacenter editions, including Server with Desktop Experience. • Windows Server 2012 R2 Standard and Enterprise editions. 	<p>Details:</p> <ul style="list-style-type: none"> • CentOS. Only command line versions are supported. • Red Hat Enterprise Linux . Only command line versions are supported. • Windows Server 2016. Other flavors are not supported. • Windows Server 2012. Only the R2 release are supported. <p>If installing to a drive other than the boot drive (C:), you must first enable 8.3 naming format on that drive.</p>
Virtualization	Optional. VMware ESX 6.x	You can run the supported operating systems on VMware. When designing your system, anticipate more CPU usage for virtual environments. Do not use nested VMware systems.
Databases	<p>Required if using the Management Station, one of these databases:</p> <p>MySQL Community Server or Enterprise Edition 5.7.x and 8.x, 64-bit. With:</p>	<p>Install the database on any host. The host does not require a Speech Suite installation. The host must be accessible to the Management Station host, and must use the same operating system. (Historically, sites install the database on the same host as the Management Station.)</p> <p>For MySQL:</p>

	<ul style="list-style-type: none"> • Java connector 5.1.x or 8.x. • C connector <p>SQL Server Standard or Enterprise 2014 SP1 and 2016.</p> <p>With:</p> <ul style="list-style-type: none"> • JDBC Driver 4.1 or greater • ODBC Driver 11 or 13 	<ul style="list-style-type: none"> • See Best practice for MySQL databases. • MySQL 8 is only supported for Management Station. Do not use v8 if also using Automation Assist. • All versions of Connector/J 5.1.x and 8.0.x are supported. Use the version of Connector/C that is bundled with your MySQL download.
Java 8	<p>Required on every Speech Suite host: Java Runtime Environment (JRE) 1.8.x, 64-bit</p> <p>Required on every Zookeeper host: any 64-bit Java supported by Zookeeper.</p>	<p>All Speech Suite components except the License Manager require the Java runtime environment. Nuance tests with the following:</p> <ul style="list-style-type: none"> • Zulu Enterprise OpenJDK (azul-webpage). • Oracle JDK (oracle-webpage). <p>Zookeeper is required if using Dragon Voice:</p> <ul style="list-style-type: none"> • Use Zookeeper documentation for the versions of Java that it supports. • If the Zookeeper Java is also supported by Speech Suite, you can install Zookeeper and Speech Suite on the same host and point both to the same Java during installation. • If the Zookeeper Java is not supported by Speech Suite, you can install both versions, Zookeeper, and Speech Suite on the same host, but you must point them to different Javas during installation.
Apache Tomcat	<p>Required if using the Management Station: Version 8.0, 8.5, or 9.0. Must be 64-bit.</p>	<p>Install Tomcat on the Management Station host. (Not needed on other Speech Suite hosts.)</p> <p>Download and extract Tomcat as a package file.</p> <p>For version 8.5 and higher, you must set read permissions on the Tomcat installation directory. See the documentation.</p>
Apache Zookeeper	<p>Required if using Dragon Voice: Version 3.4.9 or greater.</p>	<p>You must install Zookeeper if using Dragon Voice and the Resource Manager.</p> <p>Download from zookeeper-webpage.</p>
Web browser	<p>Required on any host that accesses these components:</p> <ul style="list-style-type: none"> • Management Station—recommended— Mozilla Firefox and Internet Explorer. • Nuance Automation Assist Live Agent— Firefox and Chrome. 	<p>To use Internet Explorer with the Management Station, you must add the Management Station address as a trusted site.</p> <p>Use the latest versions of the browsers.</p>
SNMP	<p>Optional. Any third-party SNMP manager.</p>	<p>In addition to writing call logs and diagnostic logs, Speech Suite can send alarms to third-party SNMP managers. Install your manager on any host in your network. To configure SNMP, see the documentation.</p> <p>Speech Suite supports SNMPv1 (RFC 1157), SNMPv2c (RFC 1901), and SNMPv3 (RFCs 3413 to 3415). Speech Suite does not support SNMPv2 classic (historic).</p>

Resolved issues

These issues are resolved in this release:

ID	Description
Speech Suite (general)	

ESSUITE-1603	The documentation for the Task Completion report referred to speech documentation that does not exist.
ESSUITE-2018	When using Dragon Voice, it was not possible to override the default weight of a Domain Language Model (DLM) with a numeric value. (The default is defined in the manifest file, and the override is specified in the recognition URL.) This is fixed.
ESSUITE-2203	For 11.0.3 installations on CentOS, the LD_LIBRARY_PATH environment variable had an error that causes a failure with this message: "GLIBCXX_3.4.14 not found." The error is fixed.
ESSUITE-1097	In the Management Station interface, the logging level VD_INFO cannot be selected. This is by design, and only occurs for Recognition service and NSS service where the level is not applicable.
ESSUITE-1331	Added more documentation about ports used by Nuance speech products.
ESSUITE-1369	Inconsistency in Krypton behavior on CentOS and Windows after Upgrade. After upgrading to Speech Suite 11.0.1 on Linux, you must set the dataPack : s3Config parameter on the Krypton service to ndp-s3config-3.12.0, or the service might fail to start.
ESSUITE-1821	Reduced the severity of the alarm "The statistics collector server failed to connect to the statistics database".
ESSUITE-1845	The Krypton service was stopping because a host needed to configure more shared memory. The installation guide is updated with the configuration instructions.
ESSUITE-2119	The HotSpot report was not including calls terminated by user HANGUP. This is corrected.
ESSUITE-2276	The example of a session.xml configuration file omitted some parameter names. This is fixed.
Speech Server	
ENSS-2065	For users of Dragon Voice, the documentation has a syntax error for overriding the predefined dlm_weights in the nuance_package.json. The "weight" argument should be "dlm_weight". This is in the topic "Preloading artifacts under the sections "Loading wordsets and assigning weights," "Changing the weight of preloaded domain language models," and "Activating Krypton builtins." For example, this example is correct: <code><grammar src="http://base_path/?nlptype=config&1000_MainMenu_dlm_weight=low"/></code>
Nuance Recognizer	
ENR-1087	The grammar compiler terminates unexpectedly when there is an extremely large list of grammar constraints.
Krypton engine	
XASR-329 (EKRTN-329)	During initial startup of services, Krypton can terminate unexpectedly. The Watcher Service automatically restarts Krypton, and no action is needed by operators.
XASR-273 (EKRTN-273)	Upon upgrade to SS11.0.3 on windows, the older ndp-s3config-3.12.0 is not uninstalled. After upgrading to Speech Suite 11.0.1 on Linux, you must set the dataPack : s3Config parameter on the Krypton service to ndp-s3config-3.12.0, or the service might fail to start. (Although the Krypton upgrade leaves existing ndp-s3config files untouched, the dataPack should not use the older files.)
Management Station	
EMSTATION-1343 (ESSUITE-2201)	Documentation omission. Generally, the documentation shows examples for both version 6 and 7 of CentOS. A couple topics are missing the version 6 samples.
EMSTATION-1417	For security, the version of the Spring framework used by Management Station was upgraded.

Known issues and limitations

These defects are not yet resolved:

ID	Description
Automation Assist	
DE6376	Picklist update results in invalid answer key not detected during training run. To avoid this issue, do not modify the picklist while a training run is being executed, as this might cause failed escalations or

	miscalculation of the agent score.
DE11412	Decryption tool cannot decrypt call logs that contain mixed encrypted and unencrypted text.
DE12174	Spelling agent interface should show the user confidence level icon next to the ASR result, not the confidence number.
DE18406	Learning loop transcription – purge data is not done as per different time zone. After a purge, it may happen that errors remain even though the notification message says the purge was successful. As a workaround, choose the next day to purge data from the previous day.
DE18444	Default settings cause an alarm, "Unable to connect to the statistics collector." By default, the location of the statistics collector service is set to 127.0.0.1 (localhost). If this service is not co-located with Automation Assist, set sc.ServerIpAddress in the <i>application.properties</i> file to the IP address of the host running the statistics collector service.
DE18474	Learning loop transcription is not available in case of race condition. This situation happened with applications using Dragon Voice recognition when the application context was set to immediate escalation. This situation should not happen in a production environment since Automation Assist will be configured to escalate after recognition results are obtained rather than immediately.
DE18475	<p>Unable to find valid certification path to requested target.</p> <p>If a General SSLEngine error appears in Learning window (log section), it may be that Automation Assist lacks the server certificate for the Nuance Language Processing service (NLPS).</p> <p>To resolve this problem:</p> <ol style="list-style-type: none"> 1. On the NLPS host, enter this command: <code>> \$JAVA_HOME/bin/keytool -export -keystore \$NLPS_HOME/config/keystore.p12 -alias jetty -file nlps.cer</code> 2. When prompted for the export password, enter the password you used when creating the keystore. If you are using the self-signed certificate provided by Nuance Speech Suite installation, enter thisismypassword. 3. On the Automation Assist host, enter this command: <code>> \$JAVA_HOME/bin/keytool -import -keystore \$NUANCE_DATA_DIR/system/private/ssl.ks -alias nlps -file nlps.cer</code> 4. When prompted for the import password, enter the password you used when creating the Automation Assist server-authentication keystore, for example, changeit.
ENAA-298	<p>Automation Assist fails to populate the drop-down list of addresses.</p> <p>When you search an address and select from a list of candidates, you expect the Final Address fields to automatically populate with the selection. If this fails, it's probably because of a missing license key for the Google Maps API. Generating a key is not free and requires a billing account. See Google maps platform. After obtaining a key, add it to the application.properties configuration file: <code>googleGeocodeApiKey=key</code></p>
ENAA-240	[Active-Active] Admin user can not logout a live agent who is already logged in
ENAA-242	Decryption tool can not decrypt call logs which mixed encrypted and suppressed logs on caller input and agent outcome (IllegalBlockSizeException)
License Manager	
ENLM-72	License Manager sets global write permissions in /dev/shm. This presents a small security risk.
Management Station	
EMSTATION-383	User Interface error. When executing an operation in the Management Station interface, the expected page might appear, but its tab is not selected. For example, when you execute a task, the main content of the Task Manager page appears within the current page, showing the progress of the new task, but you do not see the entire Task Manager page since its tab is not selected. You can click the Task Manager tab to display its entire page.
EMSTATION-820	The network properties pop-up window is not wide enough to display the services dropdown arrow.
EMSTATION-884	On login to Management Station after auto logout due to session expiry, the error, HTTP Status [403] "Forbidden", is displayed.
EMSTATION-1005	On adding a new application in Nuance Speech Server Settings, an Access Forbidden Error 403 is returned.

EMSTATION-1011	Incorrect information is displayed to user when Management Station is not able to login to mserver database due to bad database credentials.
EMSTATION-1012	No information is displayed to user when Management Station is not able to connect to database server due to unavailable database server.
EMSTATION-1024	Transaction count is including calls that have a time value of zero in raw data.
EMSTATION-1051	<p>You cannot add a new parameter with a list value in Management Station for these services: Nuance Resource Manager, the NLP service, the Krypton service, the NTpE service. Management Station does not correctly save the list value. You must manually add a new parameter with the list value, using the format below, to the NRM configuration file for the service directly.</p> <p>Example format of a Krypton parameter (rmRegistration : urls) with two values:</p> <pre> rmRegistration: urls: - 'https://hostname:port' - 'https://hostname:port' </pre>
NLP service	
ENLPS-2046	There are missing tokens about cache activities for the KRvldd event in the Krypton call logs.
ENLPS-2052	You cannot use the HTTPS protocol when fetching DLMS and semantic models via the nuance_package.json file. Instead, your application must use HTTP in any URL that triggers Dragon Voice recognition.
ENLPS-2159	Cannot change default value of watcher.DaemonDatagramPort. (If changed, the watcher service initialization does not complete.)
Resource Manager	
ENRM-89	In Management Station, the state of the Krypton service might show as ready when Zookeeper registration fails. You can restart the Krypton service to try and re-register Zookeeper.
ENRM-341	When Krypton & NLE are communicating via HTTPS, the Nuance Resource Manager logs incorrectly report they are using the non-secure HTTP protocol.
ENRM-342	The Resource Manager should reject engines that register with a conflicting port number (for example, when they use the same port as the Resource Manager itself).
Speech Server	
ENSS-1548	Shutting down the Speech Server service from the command line might cause the service to crash. Only relevant when not using Management Station.
ENSS-1652	When an MRCP request ask for an invalid language in the Speech-Language header, NSS returns 000 normal instead of Completion-Cause: 005 language-unsupported. (Invalid language means either not installed or invalid language code.)
Speech Suite (General)	
ESSUITE-666	Software ID tags (.SWIDTAG) for Krypton, NLE, NTpE, and data packs are placed at the root of C:\ProgramData instead of subdirectories inside it.
ESSUITE-923	MS_DBTYPE=mysql and MS_DBSERVICE=mysql options for Windows silent installation duplicate each other.
ESSUITE-924	Silent command line installation on Windows can take up to an hour to complete.
ESSUITE-1122	<p>Removing Speech Suite from a Linux host running Nuance Voice Platform for Speech Suite 11 will remove packages that the Voice Platform needs to run. As a workaround:</p> <ol style="list-style-type: none"> 1. Change to the directory containing the Voice Platform installer. 2. Run <code>./setup.sh</code> to start the installer. 3. Enter 1 to upgrade the Voice Platform, which installs the removed packages. 4. Follow the on-screen instructions to perform the upgrade.
ESSUITE-1264	NLE/NTpE version info duplicate listing. After upgrading from Speech Suite 11.0.0 to 11.0.1 on Windows, the <code>nuance-version -p</code> command incorrectly shows two versions of the NLE, NTpE, or Krypton engines are present.

	After uninstalling Speech Suite 11.0.0 or 11.0.1 on Windows, and then installing other Nuance speech products that support the nuance-version command, the command incorrectly shows the removed NLE, NTPe, or Krypton engines as present.
ESSUITE-1540	Dragon Voice recognition fails on Windows systems when you load a large Domain Language Model (DLM) at the start of a session. The failure is due to a no-input-timeout error .
ESSUITE-2389	If upgrading from 11.0.3 to 11.0.4 and using Management Station with the Chrome browser, you should clear the browsing history. Otherwise, you might get a browser error when navigating through the documentation: "The Management Station has encountered an error and the operation cannot be completed."
ESSUITE-2378	The setup.sh script on Linux does not correctly generate mserver_hosts.txt when multiple Management Station hosts are specified during installation. To address this, do one of the following: <ul style="list-style-type: none"> • Find the line: MSList=\$(echo \$MSList sed -e 's/ //g') in setup.sh and remove it. • After installation, edit mserver_hosts.txt and place each host:port pair on a separate line.
ESSUITE-2415	Vocalizer voices. To install TTS voices to a non-default location, you cannot use the Nuance voice installer. Instead, unzip the file to the desired location and then set the VOCALIZER_VOICE_PATH environment variable to the new location.
Vocalizer for Enterprise	
75170	xPremium-high voice with chunking enabled : wrong sample offsets in markers MARKER_PHONEME.
79644	Bad active prompt handling as long as XPremium/XPremium-nb and xPremium-high models of same voice exist on the stage.
110548	Event log text character encoding should be UTF-16, but some text characters are UTF-8.
XTTS-586 (EVOC-586)	The NVOCsyst and NVOCsysw call log events VDML and FREQ tokens are set to sample frequency full_vssq5f22 and 22050, instead of full_encryptf8 and 8000. System-generated and pre-recorded prompts work correctly.
XTTS-943 (EVOC-943)	Attempts to configure a binary ruleset via the session.xml file failed. Other configuration mechanisms are successful.
XTTS-933 (EVOC-933)	When using a ruleset to render text to speech, Vocalizer does not write the NVOCrlsp (ruleset) event token to the log. The correct action is to write NVOCrlst.
Natural Language Understanding engine	
XNLU-77 (ENLE-77)	The message for the 'Resource loading error' alarm shows inadequate information.

Best practice for MySQL databases

When you install Speech Suite with Management Station and a MySQL database, Nuance recommends creating the database user account with several hostname formats. By doing this, you avoid errors when MySQL receives a client request (from the Management Station) and validates the source host of that request.

As described in the installation guide instructions, you create the database user account and grant all privileges with these command formats:

```
mysql> CREATE USER 'username'@'MS_hostname' IDENTIFIED WITH MYSQL_NATIVE_PASSWORD BY 'password';
```

```
Mysql> GRANT ALL PRIVILEGES ON . TO 'username'@'MS_hostname' WITH GRANT OPTION;
```

Nuance recommends repeating the commands with MS_hostname in these formats:

- Hostname (for example "nuanceHost1")
- Fully qualified hostname (for example "nuanceHost1.nuance.com")
- IP address (for example "100.191.05.00")
- localhost (if the database is on the same host as the Management Station)

Automation Assist limitations

Automation Assist has these limitations:

- If an agent closes the browser without logging out, that session will remain open for 30 minutes. The same agent can log in again and re-use the license during this time, but the license will not be available to other agents for the full 30 minutes. Furthermore, the agent will be listed as logged in during this 30-minute period in reports.
- Do not modify a picklist while a training run is being executed, as this might cause failed escalations or miscalculation of the agent score.
- Automation Assist relies on the Apache web server installed on the Speech Server host to provide utterances for training or when using the web service integration API. On Windows, edit the Apache configuration file, *httpd.conf*, to add relevant content. This is not necessary on Linux.

Sample Apache 2.4.23 configuration for Windows:

```
Listen 90
<VirtualHost *:90>
    ServerAdmin root@localhost
    DocumentRoot C:\ProgramData\Nuance\Enterprise
    ErrorLog logs\NSS_90_httpd_error_log
    CustomLog logs\NSS_90_httpd_access_log common
    <Directory "C:\ProgramData\Nuance\Enterprise\*\callLogs">
        Options +Indexes
        AllowOverride All
        Require all granted
    </Directory>
    AddType application/x-swi-grammar .gram
    AddType application/x-swi-parameter .prxml
    AddType application/srgs+xml .grxml
    AddType text/srgs+xml .xml
    AddType audio/x-alaw-basic .alaw
    AddType audio/basic .ulaw
    AddType audio/basic .mulaw
    AddType audio/x-wav .wav
    AddType audio/L8;rate=8000 .L8
    AddType audio/L16;rate=8000 .L16
    AddType text/plain .txt
    AddType application/synthesis+ssml .ssml
    AddType application/vxml+xml .vxml
    AddType application/edct-bin-dictionary .bdc
    AddType application/edct-bin-dictionary .dcb
    AddType application/edct-text-dictionary .dct
    AddType application/edct-text-dictionary .tdc
</VirtualHost>
```

Database installation limitations

For installations using PPU licensing (price per unit, also known as billing report licensing), you must use the default database name (mserver) when setting up the Management Station database. Otherwise, the statistics collector service fails to connect to the database.

For installation using SQL server, you must create an additional role that is omitted from the Installation Guide instructions. Doing this significantly speeds first-time initialization of the Management Station:

- The Installation Guide instructs you to assign the dbcreator and public Server Roles.
- In addition, you must assign the bulkadmin role.
- Optional. After logging into the Management Station interface for the first time, you can unassign the dbcreator and bulkadmin roles.

Krypton engine limitations

The Krypton engine has this limitation: updating the NDP_HOME variable with a new data pack location

To update the NDP_HOME variable for the Krypton engine after re-installing Speech Suite to a custom location:

On Linux:

1. Run this command as root to remove the symlink to the old data pack location:
> `rm -f /etc/profile.d/500-SETUP-nuance-data-packs.sh`
2. Run this command as root to create a symlink to the new data pack location:
> `ln -sf <new_location>/Nuance/Data_Packs/SETUP-nuance-data-packs.sh /etc/profile.d/500-SETUP-nuance-data-packs.sh`

On Windows: Use the Environment Variables dialog to update the NDP_HOME variable with the new data pack location.

Recognizer limitations

The limit for running multiple languages simultaneously on a dedicated language host is 50.

Speech Server limitations

Speech Server has these limitations:

Recognizer and Vocalizer license port parameters – When setting `swirec_license_ports` and `swiep_license_ports` on the Nuance Recognition Service and, if using Vocalizer, `tts_license_ports` and `tts_license_ports_overdraft_thresh` on the Nuance Vocalizer Service, you must also restart the Nuance Speech Server for the changes to take effect. In Management Station, you can go to System Analysis > Capacity Management, select your host, and then configure the license ports without having to restart the services.

SSML validation limitations – Strict SSML validation is the default Vocalizer configuration. In strict SSML validation, Vocalizer validates the input against the SSML 1.0 Recommendation with Nuance extensions, logs error messages, and returns an error if validation fails. The SSML strings that come from the client application/platform are not parsed and are not modified by Speech Server. Therefore, the client application/platform must ensure its SSML strings comply with the SSML 1.0 standard, or change the default Vocalizer configuration to use non-strict SSML validation. Set the SSML validation to warn on the Vocalizer service via Management Station.

Miscellaneous Speech Server limitations:

- If you are using encryption, the `nr_decrypt` tool does not accept the ".log" file extension as input when decrypting more than one file. For >1 file, you must add the `.enc` extension.
- Nuance Speech Server requires an HTTP server for fetching files. These operations are logged by the HTTP server and they can contain sensitive data: URLs and query strings. Related to ENLPS-2052, customers must configure the HTTP server used by the Speech Server in order to ensure PCI compliance as required.
- You can load Vocalizer ActivePrompt databases and user rulesets by using the SSML `<lexicon>` or the Vocalizer `<default_rulesets>` in your voice application. You can use the MRCP DEFINE-LEXICON request to load Vocalizer dictionaries, but not to load ActivePrompt databases or user rulesets.
- Quality of Service for SIP, MRCP, and RTP is fully supported for Linux, but is not supported for Windows.
- DTMF detection is supported at Beta quality for UDP and at GA quality for TCP.
- If a parameter is set under the `<speechrecog>` section of `session.xml`, GET-PARAMS does not return the correct value, unless SET-PARAMS is first called for that parameter. This does NOT affect parameters set under `<speechserver><speechrecog>`, but only those set under the top level `<speechrecog>` section.

Speech Suite limitations

On Windows, the installation might take a long time to complete. If you cancel the installation, you must manually remove any installed Speech Suite components before restarting the installation. For component removal instructions, see *Installing Speech Suite*, available from the [Nuance Network](#).

Vocalizer for Enterprise limitations

The limit for running multiple voices simultaneously on a dedicated voice host is 50.

Upgrading Speech Suite

You can upgrade Speech Suite 11.0.0, 11.0.2, or 11.0.3 to this release. You cannot upgrade directly from any other version.

If you are running Speech Suite 10.5.3 or earlier, you must upgrade all components to 10.5.4, and then from 10.5.4 to 11.0.0, before upgrading to this release. Get the instructions in the Speech Suite 10.5.4 installation documentation on [Nuance Network](#).

Required changes for the Watcher service

If you upgrade from 11.0.2 to this release and are using Management Station, you must reassign all current role files (those role files in use before the upgrade) that contain the Nuance Resource Manager, Krypton, Natural Language Engine, or Nuance Text Processing Engine services. Do this after the upgrade, and before starting services. If the commands are not updated, services will fail to start after the 11.0.3 upgrade. See the Speech Suite documentation topic called "Reassigning role files" for instructions.

Legacy change history

This section lists changes from previous releases of Speech Suite.

Speech Suite 11.0.3

New features and changes in this release:

- Most Speech Suite engines communicate via HTTPS by default. (In previous releases, they used HTTP.) The installer sets up the ports and protocols automatically, and the documentation is updated appropriately.
- For better security, all Speech Suite services run as user "nuance". Previously, they ran as "root".
- The SSL support is updated. Speech Suite now uses OpenSSL1.0.2p.
- Tomcat updates do not require the Speech Suite installer. You can upgrade Tomcat without executing the Speech Suite installer.
- The NLE engine has new parameters to force a complete validation of your CA signed SSL certificate. See the documentation for `rm.hostNameVerificationEnabled` and `ntpt.hostNameVerificationEnabled`.
- Nuance has a new ability to map confidence scores in the NLE engine when generating models.

Resolved issues

These issues are resolved in this release:

ID	Description
Speech Suite (general)	
ESSUITE-1261	Before running the unlockuser.bat script on Windows, you must set the TOMCAT_HOME environment variable to point to your Apache Tomcat location.
ESSUITE-1566	Licensing quorums are supported. This information was missing from documentation in the previous release.
EIREV-2204	After installing Speech Suite on CentOS 7, starting the Watcher before starting License Manager might prevent License Manager from starting successfully.
ESSUITE-589	In a previous release, the Speech Suite installer failed on Windows Server Core due to a check for Internet Explorer 5.0 by the Recognizer package.
Speech Server	
ENSS-738	Speech Server could terminate unexpectedly upon encountering unsupported configuration parameters in MRCP scripts. The parameters <code>swirec_application_name</code> and <code>swirec_company_name</code> were deprecated in previous releases. The termination issue is corrected, and the parameters are rejected if sent in MRCP requests.
ENSS-1938	If the Speech Server disconnected abruptly when there were pending calls to the Vocalizer service, the Speech Server would reject some calls after reconnection to Vocalizer because of a lack of available Vocalizer licenses.
ESSUITE-1252	A memory leak in Speech Server was found through customer load tests, and is fixed.
ESSUITE-1525	On Windows, when the Krypton service takes more than 10 seconds to respond, the Speech Server service might freeze. You must restart the Speech Server service.
ECORESVCS-260	On Linux, the needed coredump file was not created after unexpected terminations of Speech Server and the voice browser service.
Nuance Recognizer	
ENR-1081	A misleading warning is fixed. The warning appears when you set language specific parameters in <code>user-nrs01.xml</code> . Originally, the message indicated that your language is "currently not an installed language" and that the settings will be ignored. The new text indicates that the language is not yet loaded, and the settings will be applied when it is.
Krypton engine	
ENLE-407	Support confidence score mapping in semantic model generation.
EKRTRN-61	KR 3.2 - Domain concept DLMs produces errors after recognition when using wordset in conjunction. When

	using a DLM trained with domain concepts with a wordset, an unexpected error appears.
ESSUITE-1737	When preloading artifacts for Dragon Voice recognition, the URL must not include the nuance_package.json filename. In the previous release, the documentation examples incorrectly included the name.
Management Station	
EMSTATION-1007	In a previous release, there was a warning about an unknown environment variable when starting the NSS service. ST-201807060191. The errant variable no longer exists and the warning no longer occurs.
EMSTATION-1188	A new documentation topic is added to describe how to change log files location with Management Station on Linux.

Known issues and limitations

These defects are not yet resolved:

ID	Description
Automation Assist	
DE6376	Picklist update results in invalid answer key not detected during training run. To avoid this issue, do not modify the picklist while a training run is being executed, as this might cause failed escalations or miscalculation of the agent score.
DE11412	Decryption tool cannot decrypt call logs that contain mixed encrypted and unencrypted text.
DE12174	Spelling agent interface should show the user confidence level icon next to the ASR result, not the confidence number.
DE18406	Learning loop transcription – purge data is not done as per different time zone. After a purge, it may happen that errors remain even though the notification message says the purge was successful. As a workaround, choose the next day to purge data from the previous day.
DE18444	Default settings cause an alarm, "Unable to connect to the statistics collector." By default, the location of the statistics collector service is set to 127.0.0.1 (localhost). If this service is not co-located with Automation Assist, set sc.ServerIpAddress in the <i>application.properties</i> file to the IP address of the host running the statistics collector service.
DE18474	Learning loop transcription is not available in case of race condition. This situation happened with applications using Dragon Voice recognition when the application context was set to immediate escalation. This situation should not happen in a production environment since Automation Assist will be configured to escalate after recognition results are obtained rather than immediately.
DE18475	Unable to find valid certification path to requested target. If a General SSLEngine error appears in Learning window (log section), it may be that Automation Assist lacks the server certificate for the Nuance Language Processing service (NLPS). To resolve this problem: <ol style="list-style-type: none"> 1. On the NLPS host, enter this command: <code>> \$JAVA_HOME/bin/keytool -export -keystore \$NLPS_HOME/config/keystore.p12 -alias jetty -file nlps.cer</code> 2. When prompted for the export password, enter the password you used when creating the keystore. If you are using the self-signed certificate provided by Nuance Speech Suite installation, enter thisismypassword. 3. On the Automation Assist host, enter this command: <code>> \$JAVA_HOME/bin/keytool -import -keystore \$NUANCE_DATA_DIR/system/private/ssl.ks -alias nlps -file nlps.cer</code> 4. When prompted for the import password, enter the password you used when creating the Automation Assist server-authentication keystore, for example, changeit.
ENSS-240	Nuance Speech Server alarm communicating with Live Assist server (Automation Assist). When using a Speech Server integration under a heavy load, a small percentage of calls may fail to escalate to an agent. If this happens, an alarm is generated: "An error occurred communicating with the Live Assist

	server". To resolve, try increasing the Speech Server parameter, <code>server.naa.timeout</code> , to 3000 from the default of 1000.
Krypton engine	
ELANG-46	<p>When you uninstall Speech Suite, including all data packs, on Linux, the symlink to the current data pack location still exists. You can run this command as root to remove the symlink:</p> <pre>> rm -f /etc/profile.d/500-SETUP-nuance-data-packs.sh</pre> <p>If you re-install Speech Suite to a different location on the same Linux or Windows host, you need to update the <code>NDP_HOME</code> environment variable to point to the new data pack location.</p> <p>The Krypton service cannot start if the wrong path is specified. See Krypton engine limitations and update <code>NDP_HOME</code>.</p> <p>This issue is fixed in versions higher than 3.7.1 of the <code>eng-USA</code> data pack.</p>
ESSUITE-1369 EKRTN-273	<p>Upon upgrade to SS11.0.3 on windows, the older <code>ndp-s3config-3.12.0</code> is not uninstalled.</p> <p>After upgrading to Speech Suite 11.0.1 on Linux, you must set the <code>dataPack : s3Config</code> parameter on the Krypton service to <code>ndp-s3config-3.12.0</code>, or the service might fail to start. (Although the Krypton upgrade leaves existing <code>ndp-s3config</code> files untouched, the <code>dataPack</code> should not use the older files.)</p>
EKRTN-329	During initial startup of services, Krypton can terminate unexpectedly. The Watcher service automatically restarts Krypton, and no action is needed by operators.
ESSUITE-1540	With a large, preloaded <code>d1m</code> the recognition fails due to a <code>no-input-timeout</code> error.
License Manager	
ENLM-72	License Manager sets global write permissions in <code>/dev/shm</code> . This presents a small security risk.
Management Station	
EMSTATION-383	User Interface error. When executing an operation in the Management Station interface, the expected page might appear, but its tab is not selected. For example, when you execute a task, the main content of the Task Manager page appears within the current page, showing the progress of the new task, but you do not see the entire Task Manager page since its tab is not selected. You can click the Task Manager tab to display its entire page.
EMSTATION-820	The network properties pop-up window is not wide enough to display the services dropdown arrow.
EMSTATION-884	On login to Management Station after auto logout due to session expiry, the error, HTTP Status [403] "Forbidden", is displayed.
EMSTATION-1005	On adding a new application in Nuance Speech Server Settings, an Access Forbidden Error 403 is returned.
EMSTATION-1011	Incorrect information is displayed to user when Management Station is not able to login to <code>mserver</code> database due to bad database credentials.
EMSTATION-1012	No information is displayed to user when Management Station is not able to connect to database server due to unavailable database server.
EMSTATION-1024	Transaction count is including calls that have a time value of zero in raw data.
EMSTATION-1051	<p>You cannot add a new parameter with a list value in Management Station for these services: Nuance Resource Manager, the NLP service, the Krypton service, the NTPe service. Management Station does not correctly save the list value. You must manually add a new parameter with the list value, using the format below, to the NRM configuration file for the service directly.</p> <p>Example format of a Krypton parameter (<code>rmRegistration : urls</code>) with two values:</p> <pre>rmRegistration: urls: - 'https://hostname:port' - 'https://hostname:port'</pre>
EMSTATION-1343	Documentation omission. Generally, the documentation shows examples for both version 6 and 7 of CentOS. A couple topics are missing the version 6 samples.
ENLE-77	The message for the 'Resource loading error' alarm shows inadequate information.
ENRM-88	If you restart Resource Manager when the Krypton, NLE, or NLP services are shutdown, Management Station might display Major alarms because Resource Manager is unable to connect to these services. You can ignore

	these alarms as they are only Minor.
ENRM-89	In Management Station, the state of the Krypton service might show as ready when Zookeeper registration fails. You can restart the Krypton service to try and re-register Zookeeper.
Nuance Language Engine (NLE) service	
ENLE-93	You can only run a single instance of the NLE service on the same host.
ENLE-478	NLE should return error or warning message when loading models with the same ID but different URIs.
ENLE-506	In a custom DLM, speech with more than 10 cardinal digits is not returned to the application (even though Krypton successfully recognizes the string).
DE10365	The rec_test tool hangs randomly on Windows 64-bit.
NLP service	
ENLPS-2046	There are missing tokens about cache activities for the KRvdId event in the Krypton call logs.
ENLPS-2052	You cannot use the HTTPS protocol when fetching DLMs and semantic models via the nuance_package.json file. Instead, your application must use HTTP in any URL that triggers Dragon Voice recognition.
Resource Manager	
ENRM-270, ENRM-88	Major Alarms for service (Krypton, NLE, NLPS) appear when NRM is shutdown.
ENRM-341	When Krypton & NLE are communicating via HTTPS, the Nuance Resource Manager logs incorrectly reports they are using the non-secure HTTP protocol.
ENRM-342	The Resource Manager should reject engines that register with a conflicting port number (for example, when they use the same port as the Resource Manager itself).
Nuance Recognizer	
ENR-1087	The grammar compiler terminates unexpectedly when there is an extremely large list of grammar constraints.
Speech Server	
ENSS-1490	NSS intermittently doesn't try to connect to NLPS. Restart NSS to fix.
ENSS-1548	Shutting down the Speech Server service from the command line might cause the service to crash.
ENSS-1652	When an MRCP request ask for an invalid language in the Speech-Language header, NSS returns 000 normal instead of Completion-Cause: 005 language-unsupported. (Invalid language means either not installed or invalid language code.)
ENSS-2065	For users of Dragon Voice, the documentation has a syntax error for overriding the predefined dlm_weights in the nuance_package.json. The "weight" argument should be "dlm_weight". This is in the topic "Preloading artifacts under the sections "Loading wordsets and assigning weights," "Changing the weight of preloaded domain language models," and "Activating Krypton builtins." For example, this example is correct: <pre><grammar src="http://base_path/?nlptype=config&1000_MainMenu_dlm_weight=low"/></pre>
Speech Suite (General)	
DE10779	On Windows, upgrading from 10.5 to 11.0 might reset the Recognizer and Speech Server settings for a remote Nuance License Manager back to localhost.
ESSUITE-529	Invalid license error when logging in to a Management Station hosted on Linux. You can run this command on the License Manager host to reset License Manager and then re-try logging in to Management Station: <pre>> ./set-new-tic-file.sh /var/local/Nuance/your_license_file.tic</pre>
ESSUITE-666	Software ID tags (.SWIDTAG) for Krypton, NLE, NTPe, and data packs are placed at the root of C:\ProgramData instead of subdirectories inside it.
ESSUITE-923	MS_DBTYPE=mysql and MS_DBSERVICE=mysql options for Windows silent installation duplicate each other.
ESSUITE-924	Silent command line installation on Windows can take up to an hour to complete.
ESSUITE-1122	Removing Speech Suite from a Linux host running Nuance Voice Platform for Speech Suite 11 will remove

	<p>packages that the Voice Platform needs to run. As a workaround:</p> <ol style="list-style-type: none"> 1. Change to the directory containing the Voice Platform installer. 2. Run <code>./setup.sh</code> to start the installer. 3. Enter 1 to upgrade the Voice Platform, which installs the removed packages. 4. Follow the on-screen instructions to perform the upgrade.
ESSUITE-1208	Final results for Recognition on short, simple utterances (“ok”, “Sure”) are failing.
ESSUITE-1264	<p>NLE/NTpE version info duplicate listing. After upgrading from Speech Suite 11.0.0 to 11.0.1 on Windows, the <code>nuance-version -p</code> command incorrectly shows two versions of the NLE, NTpE, or Krypton engines are present.</p> <p>After uninstalling Speech Suite 11.0.0 or 11.0.1 on Windows, and then installing other Nuance speech products that support the <code>nuance-version</code> command, the command incorrectly shows the removed NLE, NTpE, or Krypton engines as present.</p>
ESSUITE-1369	<p>Inconsistency in Krypton behavior on CentOS and Windows after Upgrade.</p> <p>After upgrading to Speech Suite 11.0.1 on Linux, you must set the <code>dataPack : s3Config</code> parameter on the Krypton service to <code>ndp-s3config-3.12.0</code>, or the service might fail to start.</p>
ESSUITE-1805	If using Dragon Voice, and running the Krypton recognition engine and Resource Manager on different hosts, you must update the value of the Krypton property <code>rmRegistration : urls</code> . Otherwise, the system raises a failed connectivity alarm.
ESSUITE-1963	<p>Upgrade to SS11.0.3 with <code>apache-tomcat-8.5.38</code> from SS11.0.0 with <code>apache-tomcat-8.5.12</code> fails with Catalina permission issues.</p> <p>For users of Management Station, the documentation for installation upgrades instructs you to use the <code>\$TOMCAT_HOME</code> environment variable when setting Tomcat permissions. This is misleading if you have two versions of Tomcat on your system. (The Speech Suite installer updates the environment variable path to the newer Tomcat. So depending when you access the variable, you might point to the old or new Tomcat.) When following the instructions, set permissions on the newer Tomcat.</p>
ESSUITE-1925	Documentation error. The default value of the Krypton property <code>httpClient : cache : enable</code> is true (enabled). The documentation incorrectly says false (disabled).
EIREV-2204	On CentOS 7, starting the Watcher service before the License Manager might prevent the License Manager from starting successfully.
Vocalizer for Enterprise	
75170	xPremium-high voice with chunking enabled : wrong sample offsets in markers MARKER_PHONEME.
79644	Bad active prompt handling as long as XPremium/XPremium-nb and xPremium-high models of same voice exist on the stage.
110548	Event log text character encoding should be UTF-16, but some text characters are UTF-8.
EVOC-586	The NVOCsyst and NVOCsysw call log events VDML and FREQ tokens are set to sample frequency <code>full_vssq5f22</code> and <code>22050</code> , instead of <code>full_encryptf8</code> and <code>8000</code> . System-generated and pre-recorded prompts work correctly.
EVOC-933	When using a ruleset to render text to speech, Vocalizer does not write the NVOCrlsp (ruleset) event token to the log.
EVOC-943	Attempts to configure a binary ruleset via the <code>session.xml</code> file failed. Other configuration mechanisms are successful.

Automation Assist limitations

Automation Assist has these limitations:

- If an agent closes the browser without logging out, that session will remain open for 30 minutes. The same agent can log in again and re-use the license during this time, but the license will not be available to other agents for the full 30 minutes. Furthermore, the agent will be listed as logged in during this 30-minute period in reports.

- Do not modify a picklist while a training run is being executed, as this might cause failed escalations or miscalculation of the agent score.
- Automation Assist relies on the Apache web server installed on the Speech Server host to provide utterances for training or when using the web service integration API. On Windows, edit the Apache configuration file, *httpd.conf*, to add relevant content. This is not necessary on Linux.

Sample Apache 2.4.23 configuration for Windows:

```
Listen 90
<VirtualHost *:90>
    ServerAdmin root@localhost
    DocumentRoot C:\ProgramData\Nuance\Enterprise
    ErrorLog logs\NSS_90_httpd_error_log
    CustomLog logs\NSS_90_httpd_access_log common
    <Directory "C:\ProgramData\Nuance\Enterprise\*\callLogs">
        Options +Indexes
        AllowOverride All
        Require all granted
    </Directory>
    AddType application/x-swi-grammar .gram
    AddType application/x-swi-parameter .prxml
    AddType application/srgs+xml .grxml
    AddType text/srgs+xml .xml
    AddType audio/x-alaw-basic .alaw
    AddType audio/basic .ulaw
    AddType audio/basic .mulaw
    AddType audio/x-wav .wav
    AddType audio/L8;rate=8000 .L8
    AddType audio/L16;rate=8000 .L16
    AddType text/plain .txt
    AddType application/synthesis+ssml .ssml
    AddType application/vxml+xml .vxml
    AddType application/edct-bin-dictionary .bdc
    AddType application/edct-bin-dictionary .dcb
    AddType application/edct-text-dictionary .dct
    AddType application/edct-text-dictionary .tdc
</VirtualHost>
```

Database installation limitations

This limitation affects installations using PPU licensing (price per unit, also known as billing report licensing): if using the Management Station and running the Statistics collector service, you must use the default database name (mserver) when setting up the database. Otherwise, the statistics collector service fails to connect to the database.

ID	Description
EMSTATION-1138	MySQL 5.7.25 (and above) is not supported.

Krypton engine limitations

The Krypton engine has this limitation: updating the NDP_HOME variable with a new data pack location

To update the NDP_HOME variable for the Krypton engine after re-installing Speech Suite to a custom location:

On Linux:

1. Run this command as root to remove the symlink to the old data pack location:


```
> rm -f /etc/profile.d/500-SETUP-nuance-data-packs.sh
```
2. Run this command as root to create a symlink to the new data pack location:


```
> ln -sf <new_location>/Nuance/Data_Packs/SETUP-nuance-data-packs.sh /etc/profile.d/500-SETUP-nuance-data-packs.sh
```

On Windows: Use the Environment Variables dialog to update the NDP_HOME variable with the new data pack location.

Recognizer limitations

The limit for running multiple languages simultaneously on a dedicated language host is 50.

Speech Server limitations

Speech Server has these limitations:

Recognizer and Vocalizer license port parameters – When setting `swirec_license_ports` and `swiep_license_ports` on the Nuance Recognition Service and, if using Vocalizer, `tts_license_ports` and `tts_license_ports_overdraft_thresh` on the Nuance Vocalizer Service, you must also restart the Nuance Speech Server for the changes to take effect. In Management Station, you can go to System Analysis > Capacity Management, select your host, and then configure the license ports without having to restart the services.

SSML validation limitations – Strict SSML validation is the default Vocalizer configuration. In strict SSML validation, Vocalizer validates the input against the SSML 1.0 Recommendation with Nuance extensions, logs error messages, and returns an error if validation fails. The SSML strings that come from the client application/platform are not parsed and are not modified by Speech Server. Therefore, the client application/platform must ensure its SSML strings comply with the SSML 1.0 standard, or change the default Vocalizer configuration to use non-strict SSML validation. Set the SSML validation to warn on the Vocalizer service via Management Station.

Using MRCP to pass audio input/output (SPEECHDATA requests) – If using SPEECHDATA to perform audio I/O, as described in the documentation, these features are not supported:

- DTMF (for input or output)
- Playsilence
- Whole Call Recording (WCR)
- MRCPv1

Miscellaneous Speech Server limitations:

- If you are using encryption, the `nr_decrypt` tool does not accept the ".log" file extension as input when decrypting more than one file. For >1 file, you must add the .enc extension.
- Nuance Speech Server requires an HTTP server for fetching files. These operations are logged by the HTTP server and they can contain sensitive data: URLs and query strings. Related to ENLPS-2052, customers must configure the HTTP server used by the Speech Server in order to ensure PCI compliance as required.
- Although Nuance Speech Server supports MRCPv1, features that require SIP are not available.
- You can load Vocalizer ActivePrompt databases and user rulesets by using the SSML `<lexicon>` or the Vocalizer `<default_rulesets>` in your voice application. You can use the MRCP DEFINE-LEXICON request to load Vocalizer dictionaries, but not to load ActivePrompt databases or user rulesets.
- Quality of Service for SIP, MRCP, and RTP is fully supported for Linux, but is not supported for Windows.
- DTMF detection is supported at Beta quality for UDP and at GA quality for TCP.
- If a parameter is set under the `<speechrecog>` section of `session.xml`, GET-PARAMS does not return the correct value, unless SET-PARAMS is first called for that parameter. This does NOT affect parameters set under `<speechserver><speechrecog>`, but only those set under the top level `<speechrecog>` section.

Speech Suite limitations

Speech Suite has these limitations:

- Nuance currently tests and supports Speech Suite on hosts set to the en-US locale. Running on other locales might affect recognition accuracy and application performance.
- On Windows, the installation might take a long time to complete. If you cancel the installation, you are required to manually remove any installed Speech Suite components before restarting the installation. For component removal instructions, see *Installing Speech Suite*, available from the [Nuance Network](#).

Vocalizer for Enterprise limitations

The limit for running multiple voices simultaneously on a dedicated voice host is 50.

Speech Suite 11.0.2

This section lists changes in version 11.0.2.

Resolved issues

ID	Description
Natural Language Processing (NLP) service	
ENLPS-	When adding the NLP service using a role file in Management Station, it now uses the secure port 8443 as the default. After

1391	upgrading from Speech Suite 11.0.0, the port value still shows 9090. You can unassign and then reassign the role file to show the port value of 8443. See the online documentation topic called "Reassigning role files" for details.
ENLPS-1771	You might see alarms related to transport errors in the NLP service and removal of inactive sessions in Speech Server. These alarms are due to the no-input timer occasionally firing prematurely, within milliseconds from the beginning of recognition, in Speech Server. The no-input timer fires regardless of the value set in no-input timeout. During these times, Speech Server might reject calls for a few moments.
ENLPS-1788	Long audio files (~8 seconds) cause Krypton recognition to fail. In NLPS logs, VD_INFO shows "Connection closed: 1009 - Text message size [73728] exceeds maximum size [65536]".
ESSUITE-1091	Duplicate object IDs for Krypton grammars in NLPS cause a URI failure. In NLPS logs, {"message":"Duplicate objects:"}.
ESSUITE-1521	Do not shutdown or restart the NLP service when Speech Server is handling calls. When shutting down or restarting these services, perform the operation on Speech Server first.
Speech Server	
ENSS-1599	Cannot disable Dragon Voice engine recognition, so that Speech Suite uses only the Tier 1-4 engines. For example, in NSServer.cfg, commenting-out the NLPS address parameter server.nlps.serverAddress, or setting the parameter value as blank, does not disable Dragon Voice recognition.

Speech Suite 11.0.1

This section lists changes in version 11.0.1.

Resolved issues

ID	Description
Krypton engine	
DE16986	Diagnostic log file rollover for Krypton might fail on Windows.
DE17068	Cannot enable HTTP caching when using wordset objects. You can set parameter httpClient.cache.enable to false (default) to ensure HTTP caching remains disabled.
EKTRN-42	Under certain circumstances, the Krypton engine might create temporary directories that continually consume disk space.
Management Station	
EIREV-1745	The Management Station sample roles for hosts running standard Nuance speech products plus Dragon Voice middleware components are limited to two channels. You can modify these role files as described in the "Creating roles" topic in the documentation.
EMSTATION-840	In the alarm details window, the detail alarm command adds extra hyphens when copied from Firefox. You can delete the extra hyphens before running the command.
EMSTATION-847	Some tables in the billing reports might show values of '0' when there is no data to display. You can ignore these values.
EMSTATION-861	In Management Station, under Nuance Network, select a host > Network Design > Host Properties > Advanced Tab > Service Properties Help. The help page does not display.
EMSTATION-870	The message for the NLE 'Internal pipeline error' alarm shows inadequate information.
EMSTATION-871	When removing Management Station from a Windows host, the directory <i>C:\Program Files\Nuance\Management Station\userdata</i> is not renamed with a timestamp of the removal time. You can manually rename this directory for archiving.
EMSTATION-996	Management Station displays an error message if it detects a version mismatch between it and its database. You can run the provided database table scripts to correct the error. See the Speech Suite documentation for instructions or contact Nuance technical support.
ENRM-157	On Windows hosts, when the log files for Resource Manager, Krypton engine, and the NTpE service first reach the

	maximum file size, they do not rotate correctly. You can increase the value for log : maxSize for each of these services. See the documentation.
ESSUITE-841	Keystore passwords cannot contain "+". Generating a password that contains "+" results in a space in the encrypted property string, which prevents Management Station from starting the NLE service. You can re-run the script to generate a password without a "+". See the documentation for information about the script.
ESSUITE-1010	When installing Management Station on Windows, the installer incorrectly saves the default host information for the License Manager host, instead of the host information specified in the installer. If you install Management Station on a different host than License Manager, you need to point it to the License Manager host after the installation.
Natural Language Processing (NLP) service	
ENLPS-820	Unable to start NLP service from command line.
ENLPS-1305	Random CPL latency occurs during Voice XML Dragon Voice call with preloaded domain language models.
ENLPS-1454	The NLP service might not shut down properly after receiving a quiesce from the Watcher service. After 30 seconds, the Watcher service stops the quiesce process.
ENLPS-1460	The NLP service incorrectly calculates the values for call log event tokens DURS and EOSS. Krypton reports the values in milliseconds, rather than number of units.
ENLPS-1488	NLP service recognize command with audioOnly set to true incorrectly sends Krypton final result to NLE.
Nuance Meaning Extraction Engine (NMEE)	
ENMEE-174	NMEE reads its logging configuration from Recognizer.
ENMEE-175	NMEE logs go to watcher.log.
Nuance Text Processing Engine (NTpE)	
ESSUITE-869	NTpE logging on Windows might stop unexpectedly.
Recognizer	
DE6385	The Nuance Recognition Service (NRS) crashes on Windows when disabling (DTMF) barge-in of a DTMF recognition for MRCPv1 (that is, when server.mrcp1.osrspeechrecog.startOfSpeechOnDTMF is set to 0 in <i>%NSSVRSDK%/config/NSSserver.cfg</i>).
ENR-325	SWIrecGetKeyValueInternal might return an error. You can ignore this error.
Speech Server	
ENSS-1030	In Management Station, the following alarm message for Krypton incorrectly shows Recognizer information: Nuance Speech Server reported that the Nuance Recognizer at localhost:8200 failed to load grammar http://MyHost:8080/USAA.zip.semmod?mode=nlu_text . SWIrecGrammarLoad returned code 'SWIrec_ERROR_INVALID_DATA'
ENSS-1252	The logs might contain errors indicating Recognizer grammars cannot be unloaded, deactivated, or recognition results cannot be retrieved. You can ignore these errors.
ENSS-1366	Call log SWIendp BRGN token has a '0' value when BARGEIN is encountered.
ENSS-1392	SCPU token in call logs always set to '0' on CentOS.
ENSS-1442	In <i>NSSserver.cfg</i> the server.nlps.serverAddress parameter value should use the wss : (WebSocket Secure) URI scheme rather than ws : (WebSocket). Management Station sets this property correctly in roles that include both Speech Server and the NLP service. Should you need to modify <i>NSSserver.cfg</i> to make this change, the file is located under: <ul style="list-style-type: none"> Linux: <i>/usr/local/Nuance/Speech_Server/server/config/</i> Windows: <i>C:\Program Files (x86)\Nuance\Speech Server\Server\config</i>
ENSS-1566	Clicking the event ID in the message for this Speech Server alarm displays an error "SWIrec_ERROR_GENERIC_ERROR".
Vocalizer for Enterprise	
125834	SAPI fails with Vocalizer 6 vop-based voices.

147270	Japanese voices might not stream audio according to the provided audio buffer size.
152800	Vocalizer Server might fail when switching between different operating points (voice models) of the same voice.
155072	When inserting a digital audio recording using <esc>\audio\ or <audio> in SSML input, if the sampling rate does not match the current voice, Vocalizer does not resample it before inserting it in the speech output.
127304	vop3 Amira-xPremium-nb is not listed in Programs and Features of Windows Control Panel.

Features

Automation Assist

Automation Assist has this new feature:

The learning feature has been enhanced to transparently use the Natural Language Processing service (NLPS). NLPS provides an interface to the Krypton recognition engine. By default, Automation Assist uses the eng-USA language and the 3.7.1 data pack for transcription. The data pack is required by Krypton.

If NLPS is configured on a different host from Automation Assist, you must update the *application.properties* configuration file by adding `learning.transcriptionUrl=wss://hostname_or_IP_address:8443/nlps`.

To use a different language or data pack, contact Nuance Professional Support to get custom values to substitute into the following entry for the *application.properties* configuration file:

```
learning.nlpsLoadBody={"configVersion":"11.0.1","domain":"DomainName","project":"ProjectName","language":"eng-USA","version":"1.2.3","krypton":{"dpTopic":"GEN","dpVersion":"3.7.1"}}
```

Management Station

Management Station is now an optional component. If you do not install Management Station, you must configure configuration files for each engine you run. See the Speech Suite documentation for detailed instructions.

Vocalizer for Enterprise

Vocalizer for Enterprise has these new features and changes:

- Improved latency for xPremium-high voices.
- Added the `early_emission_allowed` parameter for enabling additional latency improvements when using xPremium-high voices. Currently, this parameter does not apply to Chinese languages or dialects.

Speech Suite 11.0.0

This section lists changes in version 11.0.0.

Resolved issues

ID	Description
Automation Assist	
DE11147	Agents may now use the numeric keypad to enter numeric keyboard shortcuts.
DE11326	When editing the filter criteria of reports, the application context list is no longer empty.
Management Station	
EMSTATION-822	When purging call logs, the hostID now shows the host ID instead of the hostname in the Task manager history.
EMSTATION-826	Select System View > Alarms view. Sort alarms via Level, Time, Host, etc. and a 403 error no longer appears.
Recognizer	
ENR-648	Recognizer now returns recognition durations in statistics messages as seconds, instead of milliseconds.
ENR-776	Recognizer no longer crashes in SWIrecGetKeyValueInternal API function.

Speech Server	
ENSS-225	The NSServer.exe process causes a memory leak.
ENSS-338	When a client sends BYE immediately after INVITE, Speech Server no longer returns error "SIP session was not found".
ENSS-391	Fixed an issue where exceeding licenses caused a memory leak and Speech Server to crash.
ENSS-410	Speech Server no longer crashes when suppressing sensitive data in diagnostic logs.
ENSS-571	When Speech Server receives INVITE with an unsupported codec, it now returns SIP error "488 Not Acceptable Here".
ENSS-592	The file ttsrschclient_userconfigfile.xml now has the correct version.
ENSS-619	Speech Server now replaces spaces in callLog URI with "%20".
ENSS-781	Audio is no longer distorted when running 20 ms packets on Windows 2012 host.
ENSS-829	Temporary call logs are now cleaned up and no longer take up hard drive space.
ENSS-910	If strongest cipher suite is set in Speech Server, 3DES cipher is now disabled.
Vocalizer for Enterprise	
100657	When using the Microsoft SAPI interface, text in the Windows Speech Properties panel is now in the correct position.
115151	Resampler inside audiocvt component now resets its status when reopening a voice.
116594	nvnload now reports the correct latency when using audio buffer size larger than first audible segment.
116648	Vocalizer 6.5.0 with Ina xPremium-high voice now produces audio packets that are audible segments using large audio buffers.
124316	Updated OPUS codec library to version 1.1.4.
125889	[VoCS 6.5.3] \!\eos=0\ now works correctly.
126774	xPremium-high voices trigger segfault in pitch_syl_trans code.
126913	Li-Li xPremium-high no longer returns synthesis error (Infinite loop detected during synthesis).
133044	Fixed issues at TAP boundaries.
133921	Fixed handling of SSML element "break" with a floating point value of time.
135401	Fixed crash in igtree in case of many voice switches in multithread mode.
137072	Audio/basic output format is now produced at the correct sample rate when resampling is active.

Features

Automation Assist

Automation Assist has these new features and enhancements:

- The Learning feature provides a way to train models to improve understanding. The data from multiple interactions is tagged and used to train the virtual assistant to interpret future requests with greater accuracy, thus decreasing the number of calls that need to be escalated to agents. This learning loop mechanism collects transcribed caller utterances and agent-suggested intents that can be uploaded into Nuance Experience Studio to create an updated Natural Language Understanding (NLU) model. The model is then redeployed into your environment. This approach makes it possible to deploy new applications to a production environment as quickly as possible, dramatically reducing the time required for development and training.
- The intents-composition page displays a list of action and object keywords that agents choose to compose the intent. For example, the agent selects the action (pay), the object (bill) to create the intent, pay bill.
- The new and improved keyword selection page displays a list of keywords comprised of actions plus objects that represent outcomes, for example, pay bill.
- Automation Assist supports escalating calls to agents from applications using Nuance Dialog Modules. This aids in faster resolution on escalated calls. The application must already be "Automation Assist-enabled", done as part of designing the application in Nuance Application Studio. You must also use the correct versions of the Dialog Modules that support this feature: Core DM v6.1.9, Email DM v6.1.4, and Spelling DM v6.1.3.

- Automation Assist uses TLS version 1.2 for secure communications. TLS version 1.1 is no longer supported.
- A problem where the Tableau export image feature was only able to fit a limited number of report rows into a single image file has been fixed. It is no longer necessary to export results to a CSV file when the report is longer than a single page.
- It is no longer necessary to use distinct application contexts training, nor always set the escalation criteria to always escalate.

Dragon Voice

This version of Speech Suite introduces Dragon Voice. Dragon Voice provides a rich conversational voice experience by leveraging AI-based speech technology to support a more natural, open-dialog flow. Capable of extracting both intention as well as concepts (and values) from a caller's request, Dragon Voice engines enable the creation of a highly intelligent, contextually aware, natural conversational experience. See the documentation for details about the Dragon Voice components.

Management Station

Management Station has these new features and changes:

- Management and monitoring of the new Dragon Voice components.
- Billing reports show usage data for Dragon Voice components and Automation Assist.
- On startup, Management Station now uses JAVA_HOME, instead of the absolute path, to locate 64-bit Java.

Speech Server

Speech Server has these new features and changes:

- Support of the new Dragon Voice components and recognition for configurations with a mix of Dragon Voice and other services, such as Recognizer and Vocalizer.
- Enhancements to the speech recognizer plugin, call log server, statistics collector service, grammar manager, audio processor, and support for Automation Assist.

Speech Suite installer

The -E option that specifies an external Management Station database for a silent installation on Linux has been removed.

Vocalizer for Enterprise

Vocalizer for Enterprise has these new features and changes:

- Integration of neural network (NN) technology in several linguistic processing components, which, for example, improves homograph disambiguation and pausing.
- Support for Enhanced Deep Learning TTS voices.
- Support for Voice Add-Ons, an additional voice specific Vocalizer tuning resource.
- The makecprvoice utility is no longer supported.
- Resampling of PCM output: Audio can be produced at any sample rate, regardless of the voice sample rate. For example, instance audio can be produced at 8khz even if the voice is 22Khz.
- The HTML and EMAIL input formats have been deprecated. Only plain/text and SSML formats are available.

Online documentation and technical support

This release includes online documentation in HTML format. Documentation is available from the Start->All Programs->Nuance->Speech Product Documentation link or by opening *install_path\Documentation\index.html* in your browser. You can also access the documentation via the "Help" link in Management Station. To view service properties you can set on a particular service, click "Service Properties Help" on the Advanced properties tab in Management Station.

Send comments on the documentation to [Technical Publications](#).

Technical support is provided online at the [Nuance Network](#).