Getting Started with Avaya Aura® Orchestration Designer

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Contents

Chapter 1: Introduction ... 7
Purpose ... 7
New in this release ... 7
Warranty ... 7
Viewing the Eclipse documentation ... 8
Viewing the Orchestration Designer documentation ... 8
Documentation for related products and technologies ... 8
Chapter 2: Installation and configuration ... 10
Overview ... 10
Features and benefits ... 11
System requirements ... 12
License requirements ... 12
Hardware requirements ... 13
Software requirements ... 13
About the WebLM license server installation and configuration ... 17
Installing Orchestration Designer manually ... 17
Installing Orchestration Designer using pre-packaged installation ... 20
Viewing the version number of an installed Orchestration Designer software ... 20
Basic configuration ... 21
Creating an Eclipse shortcut ... 21
Setting up the workspace ... 21
Settings configuration ... 22
Configuring the default perspective ... 22
Configuring Tomcat preferences ... 22
Orchestration Designer preferences management ... 23
Considerations for enabling an HTTP or HTTPS proxy connection ... 23
Enabling an HTTP or HTTPS proxy connection ... 24
Configuring the run-time license server ... 24
Removing the context files on closing a project ... 25
Configuring the fetch secure port ... 26
Orchestration Designer preferences field descriptions ... 26
Verifying the Java JRE ... 28
Setting the Java JDK compiler compliance level ... 29
Configuring Microsoft SAPI Speech for microphone input ... 29
Installing sample applications ... 30
About Orchestration Designer Upgrade ... 30
Maintaining the 7.0 environment while installing 7.2.0 ... 31
Maintaining the 7.0.1 environment while installing 7.2.0 ... 32
Maintaining the 7.1 environment while installing 7.2.0 ... 33
Recommended installation paths for multiple Orchestration Designer and Eclipse versions ... 34

Installing 7.2.0 without retaining the 7.0 environment..... 34
Installing 7.2.0 without retaining the 7.0.1 environment..... 35
Installing 7.2.0 without retaining the 7.1 environment..... 36
About Orchestration Designer patch updates..... 37
Before installing an Orchestration Designer patch update..... 37
Installing an Orchestration Designer patch update..... 38
Adding the website for Orchestration Designer patch updates..... 39
Chapter 3: Resources..... 40
Related resources..... 40
Documentation..... 40
Training..... 42
Viewing Avaya Mentor videos..... 42
Support..... 43
Glossary..... 44

Chapter 1: Introduction

Purpose

This document describes the methods and the system requirements used to create speech applications that comply with VoiceXML version 2.1, call control applications that comply with CCXML specification and, message applications that comply with TextXML, and mobile applications that comply with the HTML5 specification.

Intended audience

This document is intended for anyone who wants to gain a high-level understanding of the product features, functionality, capacities, and limitations within the context of solutions and verified reference configurations.

New in this release

The following changes are introduced for Orchestration Designer 7.2:

- Engagement Development Platform is referred as Avaya Breeze™.
- Updated the system requirements to support Orchestration Designer 7.2.
- Added the procedure to install Orchestration Designer 7.2.
- Added the procedure to upgrade Orchestration Designer 7.2.

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Viewing the Eclipse documentation

About this task

The documentation for Eclipse and supporting Eclipse components (GEF and WTP) is available at http://www.eclipse.org/documentation/, and in the form of an online Help.

- On the **Help** menu > click **Help Contents**.

Viewing the Orchestration Designer documentation

About this task

The *Getting Started with Avaya Aura® Orchestration Designer* guide is available on the Orchestration Designer installation ISO image.

You can view the Orchestration Designer documentation on the Avaya support website:

http://support.avaya.com

The Orchestration Designer documentation is also available in the form of an online Help.

- On the **Help** menu, click **Help Contents** > **Avaya Aura® Orchestration Designer - Self Service**.

Documentation for related products and technologies

Orchestration Designer depends on the use of several closely related software products and technologies. When using Orchestration Designer, review the documentation of these related products and technologies.

Avaya does not reproduce or package the documentation for these related products and technologies. However, to help locate the appropriate documentation, review the following resources:

Note:

The following URLs were valid at the time of publication of this document. Avaya is not responsible if these URLs have changed. For more updated URLs, perform a search operation online.

- For Eclipse and supporting Eclipse components (GEF and WTP), go to:

  http://www.eclipse.org/documentation/

  For more information, see Viewing the Eclipse documentation on page 8.

- For the Java SDK (Software Developer's Kit), go to:

  http://docs.oracle.com/javase/8/docs/index.html

- For Tomcat 7.0, or 8.0, go to:
  http://tomcat.apache.org/tomcat-7.0-doc/index.html
  http://tomcat.apache.org/tomcat-8.0-doc/index.html
- For IBM WebSphere or WebSphere Express, go to:
  http://www.ibm.com/websphere
- For WebLogic, go to:
  http://www.oracle.com/technetwork/middleware/weblogic/documentation/index.html
- For Redhat JBoss EAP, go to:
  https://developers.redhat.com/products/eap/overview/
- For JBoss Wildfly, go to:
  http://wildfly.org/
- For databases and JDBC implementation, go to:
  http://www.sql.org/
  http://www.firstsql.com/tutor.htm
  http://java.sun.com/developer/onlineTraining/Database/JDBCShortCourse/jdbc/sql.html
- For Web services, go to:
  http://www.w3.org/TR/wsdl
  http://www.ws-i.org/Profiles/BasicProfile-1.1-2004-08-24.html
- For the W3C VoiceXML 2.0 Recommendation, go to:
  http://www.w3.org/TR/voicexml20/
- For the W3C VoiceXML 2.1 Recommendation, go to:
  http://www.w3.org/TR/voicexml21/
- For the W3C CCXML 1.0 Recommendation (January 19, 2007), go to:
  http://www.w3.org/TR/ccxml/
- For the Speech Recognition Grammar Specification version 1.0, go to:
  http://www.w3.org/TR/speech-grammar/#AppJ.5

Chapter 2: Installation and configuration

Overview

Avaya Aura® Orchestration Designer (Orchestration Designer) is a Java-based tool that you can use to create:

- Speech applications that comply with VoiceXML version 2.1.
- Call control applications that comply with CCXML version 1.0 January 19, 2007, specification.
- Message applications that comply with TextXML.

Designed as an Eclipse plug-in, Orchestration Designer provides an integrated GUI for the design and implementation of:

- Speech applications that can operate with Interactive Response, Voice Portal, Media Processing Server, and Avaya Aura® Experience Portal systems.
- Message applications that can operate with Avaya Aura® Experience Portal system.
- Data only applications that can operate with Avaya Aura® Experience Portal system
- HTML5 applications that can operate with Avaya Aura® Experience Portal system.

Orchestration Designer is a suite of self-service products and Avaya Contact Center products, namely, Avaya Aura® Experience Portal, Avaya Interactive Response (IR), Media Processing Server (MPS), and Avaya Aura® Contact Center. As a single tool, you can use Orchestration Designer to design, simulate, and maintain the contact routing scripts with inbound and outbound self-service support. Orchestration Designer accelerates the service design and deployment, reduces the cost, and enhances the customer experience.

Orchestration Designer integrates seamlessly with Avaya Breeze™ and allows an Orchestration Designer application to interact with the Engagement Designer workflows and pass the collected data in several ways:

- Orchestration Designer can start a workflow and pass collected data to that workflow using Context Store. This integration enables the workflow to process the information and complete the transaction using the data that it receives from Orchestration Designer.
- Orchestration Designer supports integration of Orchestration Designer SMS and Email applications with Engagement Designer workflow. The integration enables the Orchestration Designer application to receive data from Engagement Designer workflow, interact using one more text messages and return the data to the Engagement Designer workflow.

Note:

Orchestration Designer 7.2 does not support the integration of Orchestration Designer SMS and Email applications with Engagement Designer. So, the dynamic tasks to launch the SMS and Email applications are disabled in the current release.

- A Engagement Designer workflow can initiate a new call to the customer and plug-in Orchestration Designer into the call to provide IVR services.
- A Engagement Designer workflow can plug-in Orchestration Designer into an existing call.

Orchestration Designer works with widely accepted Eclipse.org development framework.Orchestration Designer provides a drag-and-drop environment for development and maintenance of speech, touchtone, and message applications.

Multi-Channel Self Service (MCSS)

The Multi-Channel Self Service (MCSS) primarily allows users to extend the current Experience Portal or Orchestration Designer product capabilities to include channels other than inbound voice (telephony).

Key capabilities of MCSS include:

- Application processing of inbound SMS and Email.
- Sending a response to an inbound SMS and Email.
- Sending outbound SMS and Email from applications (cross channel). A speech application sending an SMS or Email confirmation, for example.
- New application type **Web** in Orchestration Designer.
- Application design palettes specific to a channel.
- Generic message flow with custom xml generation for social media and other channels.
- Transferring items to AACC agent for handling with reply via SMS and Email.
- Web channel to collect information via HTML5 pages

Inbound processing of SMS and Email adds text channels to the Experience Portal. You can build Orchestration Designer applications to process and respond to incoming SMS and Email. In addition the outbound SMS and Email allows an application on a given channel to provide additional feedback to a user via another channel. For example, a speech application might send a confirmation of a transaction to the user via email or SMS. Items that cannot be handled in Self Service can be transferred to an AACC agent via a connector.

Features and benefits

Orchestration Designer:

- Simplifies development, integration, and reusability of speech and touchtone applications.
- Significantly reduces time and cost of application prototyping and design.
- Provides unprecedented coverage of customer self-service, employee-facing productivity, and advanced call control application areas.

- Ensures consistent and more reliable deployment of voice supporting services and applications.
- Maximizes the use of tooling investments for more rapid deployment of Web-based voice applications through the open Eclipse-based framework.
- Integrates with Avaya Breeze™ and Avaya Context Store Snap-in providing a centralized location to store context information.
- Provides the capability to integrate Orchestration Designer voice, SMS, and Email applications with Engagement Designer and receive and send data to the Engagement Designer workflow.
- Provides support for mobile application with HTML5.
- Provides two-way integration with Avaya Breeze™ and Avaya Engagement Designer Snap-in.
- Provides multi-channel support.
- Starting with the JTAPI 3.1 driver, the OD CTI (AES) connector, can use the UCID (Universal Call ID) to keep track of call ID's. To use this feature, you must enable OD CTI (AES) connector on your switch.

  Note:

  It is not mandatory to enable OD CTI (AES) connector. However, it will guarantee no call ID's are recycled which have been problematic in the past with high call volumes.

System requirements

License requirements

You must have a valid license to run Orchestration Designer applications on Avaya Aura® Experience Portal, Avaya Voice Portal, Avaya Interactive Response (IR), Avaya Media Processing Server (MPS), and other supported VXML platforms. Orchestration Designer licenses are free. You can contact an Avaya sales representative or the channel manager to get the license file. Avaya partners can log on to Partner Portal to find information about ordering additional licenses. If yes, source it just like the other product names.

If you run the Orchestration Designer applications on Voice Portal, Avaya Aura® Experience Portal, IR, or other Avaya products that use the WebLM license server, then Orchestration Designer does not require a separate WebLM license server. You must install the Orchestration Designer license on the existing WebLM license server that is installed with Voice Portal, Avaya Aura® Experience Portal, IR, or other Avaya products that use the WebLM license server.

If you run the Orchestration Designer applications on MPS, then you must install the WebLM license server and configure the license information of Orchestration Designer. You must install a separate WebLM license server because the system does not install the WebLM license server during the MPS installation.

Orchestration Designer license has a grace period of 30 days. If the WebLM license server is unavailable after Orchestration Designer obtains the license from the WebLM license server, Orchestration Designer is available for use for 30 days.

You do not require a license to install or run the Eclipse-based Orchestration Designer development and the simulation environment.

Related links

About the WebLM license server installation and configuration on page 17

Hardware requirements

The system that hosts the Orchestration Designer development environment must meet the following hardware requirements:

Hardware	Minimum requirement	Preferred value
CPU speed	1 GHz	2 GHz
RAM	1 GB	2 GB
Hard disk drive	40 GB	—
Monitor resolution	1024 x 768 pixels	—

Software requirements

The system that hosts the Orchestration Designer development environment must have the following software packages installed. You must install these packages before installing and configuring Orchestration Designer. The software required to host the Orchestration Designer development environment is available on the Orchestration Designer 7.2 ISO image.

Important:

To upgrade Orchestration Designer, see the following requirements:

Software requirement	On ISO image	Notes and links
You must have any one of the following: • Microsoft Windows 7 (Professional and Enterprise versions) • Microsoft Windows 10	No	You can install Orchestration Designer on any of these operating systems if you meet all hardware requirements and install all the supporting software packages. **Note:** For the development environment, Orchestration Designer supports Windows 7, 32 bit and 64 bit. However, for 64 bit operating system, you must use 32 bit JRE and Eclipse version.

Table continues…

Software requirement	On ISO image	Notes and links
• Google Chrome 57 • Mozilla Firefox 43 • Microsoft Internet Explorer 11	No	You must install Google Chrome 57, Microsoft Internet Explorer 11, or Mozilla Firefox 43 for simulation of HTML5 application.
• J2SE Development Kit 7.0 (JDK 7.0) • J2SE Development Kit 8.0 (JDK 8.0)	No	The JDK includes the Java Run-Time Environment (JRE) and command-line tools, compilers, and debuggers used in developing applets and applications. Java 7 supports SHA2 certificates. **Note:** Orchestration Designer 7.2.0 requires Java version 7 or later. It is not backward compatible with earlier versions. Orchestration Designer supports JDK 7 and JDK 8 from Oracle and OpenJDK.
You must have any one of the following: • Eclipse-4.5-Prereq-AAOD.zip • Eclipse-4.6-Prereq-AAOD.zip	Yes	Eclipse is a Java-based open-source integrated development environment (IDE) for software development. Orchestration Designer runs as an Eclipse plug-in. Orchestration Designer uses the Eclipse Graphical Editing Framework plug-ins for Eclipse (GEF) for advanced graphical functions. Orchestration Designer also includes the support files for Call Control (CCXML) development.
Apache Tomcat 7.0 or Tomcat 8.0	Yes	Tomcat generates and serves VoiceXML pages to the Avaya Application Simulator. **Note:** • You must have administrative privileges when running Tomcat. • If you upgrade to Tomcat 8.0, you might need to make small adjustments the first time you run Tomcat. If your applications have manually configured build paths or have resources in common/lib or common/classes, then you must manually update the build path to point to `<tomcat_installpath>/lib`. You must put also put any resources, such as libraries, in that folder.
Avaya Breeze™ 3.2	No	Avaya Breeze™ provides a virtualized and secure application platform where Java programmers can develop and dynamically deploy advanced collaboration capabilities. For more information on installing Avaya Breeze™, see *Deploying Avaya Breeze™*.
Avaya Engagement Designer Snap-in 3.2	No	Avaya Engagement Designer Snap-in offers business analysts, non-technical resources, and developers the opportunity to write logical business process flows. These process flows can leverage any Avaya Breeze™ snap-in

Table continues…

Software requirement	On ISO image	Notes and links
		that have an associated palette of tasks. For more information on Avaya Engagement Designer Snap-in, see *Avaya Engagement Designer Reference*.
Experience Portal Snap-in tasks: • Launch SMS Service • Launch Email Service	No	Experience Portal Snap-in tasks to start Orchestration Designer SMS and Email application. For more information on Experience Portal Snap-in tasks, see *Experience Portal Tasks*. **Note:** Orchestration Designer 7.2 does not support the integration of Orchestration Designer SMS and Email applications with Engagement Designer. So, the dynamic tasks to launch the SMS and Email applications are disabled in the current release.
Avaya Context Store Snap-in 3.2	No	Avaya Context Store provides a flexible and easy integration among different applications, providing a centralized solution to store context information. For more information on installing Avaya Context Store, see *Avaya Context Store Snap-in Reference.*
Microsoft SAPI Speech 6.0	Yes	Orchestration Designer uses Microsoft SAPI Speech during application testing to perform automated speech recognition (ASR) and text-to-speech (TTS) functions. **Note:** Microsoft Windows 7 already have Microsoft Speech components installed. If Microsoft SAPI Speech is installed on Windows 7, verify if the **Speech Recognition** and **Text-to-Speech** tabs are available in **Control Panel** > **Speech Recognition** > **Text-to-Speech**.
Storm Codec 7.01.19	Yes	You must install Storm Codec 7.01.19 only if you intend to use 3GP video files for media. To open the Storm Codec installer, see the installation notes available on the ISO image.
Ambulant player 2.1	No	Orchestration Designeruses Ambulant player 2.1 for playing and previewing media files. Do not use all menu, toolbar, and controls in the Ambulant player 2.1.
Nuance Recognizer 9/10 (MRCPv1)	No	You must acquire Nuance Recognizer directly from the vendor.
Loquendo Speech Server 7/ MRCPv1 Server 7.2 or higher	No	You must acquire Loquendo Speech Server directly from the vendor.

Table continues…

Software requirement	On ISO image	Notes and links
Users launch the ISO image, and use the displayed HTML index page to navigate to the required resources as specific locations on the ISO image are described here. By following these instructions, installation is smoother because the online navigation documentation leads you along the correct installation path. Following these instructions is the preferred method for using the ISO image and installing efficiently.		

General Upgrades	Notes
3.2.1	Before upgrading your application server, make copies of `tsapi.pro, ddconfig.xml, trusted_weblm_certs.jksfiles` files, so that you can restore the files, if they are overwritten by the upgrade.
3.2.2	The Orchestration Designer upgrade process does not change any custom code. The application developer must manually resolve the errors or warnings resulting from OD version upgrades (such as variable name changes) that affect the custom code.
3.2.3	If you have an existing installation in which you have updated the certificate file (`trusted_weblm_certs.jks`), then you must save a copy of the certificates file when reinstalling the runtime support files.
3.2.4	When upgrading applications from Windows XP to Windows 7, the call flow visual representation might experience some issues because of the difference in the graphics layer between the 2 Windows releases. Some corrections are required.
3.2.5	Framework updates are there that might result in Java compilation errors after upgrading. To correct this, regenerate projects reporting errors.

3.2.6	Remove Older Jar files after upgrade. After upgrading, ensure that you do not have old versions of jar files on the application server: Some examples are:
	`commons-httpclient-3.1.jar`
	`commons-logging-1.1.1.jar`
	`log4j-1.2.15.jar`
	`wss4j-1.5.8.jar`
	`scertcommon-07.01.08.04.jar`
	`scertcommon-07.01.07.01.jar`

About the WebLM license server installation and configuration

If you run the Orchestration Designer applications on MPS, then you must install the WebLM license server and configure the license information of Orchestration Designer. You must install a separate WebLM license server because the system does not install the WebLM license server during the MPS installation.

Use the `WebLM.war` file that is available on the Orchestration Designer 7.2.0 installation ISO image to install the WebLM license server software.

For versions WebLM 6.3.11 and above, the WebLM server accepts requests only over TLS 1.0 and above. If the product application is configured to send requests on SSLv2 or SSLv3, then the communication between the product application fails. So, if the product application is upgrading WebLM to 6.3.11 and above, then ensure that the product application is configured to send requests only over TLS 1.0 and above.

For information about installing and configuring the WebLM license server software, see the *Licensing Installation Instructions for WebLM* guide and *Licensing Release Notes for WebLM*.

The `WebLM.war` file, *Licensing Installation Instructions for WebLM* guide, and *Licensing Release Notes for WebLM* are available on the Orchestration Designer 7.2.0 installation ISO image at:

`<absolute path of ISO image>:\Software\WebLM\`

Related links

License requirements on page 12

Installing Orchestration Designer manually

Before you begin

Before installing the Orchestration Designer software, temporarily disable the antivirus software and close any open or running applications. Orchestration Designer installation includes extracting Java-related files from a compressed archive and the antivirus software can slow down the installation process.

About this task

The Orchestration Designer installation ISO image contains the Orchestration Designer distribution executable. Before running the executable, ensure that you meet all system requirements, as mentioned in System requirements on page 12.

Important:

The procedure described in this section is for new installations of the Orchestration Designer software. To upgrade Orchestration Designer, see About Orchestration Designer Upgrade on page 30.

Procedure

1. Copy the Orchestration Designer installation ISO image to the local drive.
2. Download and install the JDK installer (Open or Oracle).

   For Oracle JDK 7, see http://www.oracle.com/technetwork/java/javase/downloads/java-archive-downloads-javase7-521261.html.

   For Oracle JDK 8, see http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html.
3. Install Eclipse and all other Eclipse prerequisite features:
   a. Locate the package file on the Orchestration Designer 7.2.0 ISO image. This file is located in the following directory: `<absolute path of ISO image>:\Software\Eclipse\`.
   b. Extract the `.zip` file into an installation folder.
   c. **(Optional)** Create a shortcut for the Eclipse executable. Eclipse launches Orchestration Designer.
4. Install Orchestration Designer software:
   a. Locate the `AAOD_7.2.0.XXX.jar` installation archive on the Orchestration Designer 7.2.0 ISO image and copy it to a temporary location.

      The installation archive is located in the `<absolute path of ISO image>:\UpdateSites\` directory.
   b. On the eclipse interface, click **Help** > **Install New Software**.
   c. On the Available software page, click **Add**.
   d. On the Add Repository page, enter a name and click **Archive** to specify the location of the `AAOD_7.2.0.XXX.jar` file.
   e. Click **OK**.
   f. Click **Select All**.
   g. On the Available software page, clear the **Contact all update site sites during install to find the required software** check box and then click **Next**.
   h. On the Install Details page, click **Next**.

      The system displays Avaya Software License Agreement.
   i. Review the license agreement and then click **I accept the term of the license agreement**.
   j. Click **Finish**.
   k. When prompted to trust the certificates, click **Select All**, and click **OK**.
   l. Click **Restart Now** to restart eclipse.

5. Install Tomcat:
   a. Locate the Tomcat distribution package on the Orchestration Designer 7.2.0 ISO image.

      The Tomcat distribution package is located in the `<absolute path of ISO image>:\Software\Tomcat\` directory.
   b. Extract the `.zip` file in a temporary folder.
   c. Review the `RUNNING.txt` file for more installation instructions.

      Important:

      Do not install Tomcat as an NT service. Orchestration Designer does not support this configuration because Tomcat does not start and stop appropriately when developing applications.
6. **(Optional)** Install Microsoft Speech API 6.0:
   a. Copy the Orchestration Designer 7.2.0 installation ISO image to the local drive.
   b. Go to ***<absolute path of ISO image>*** > **Software** > **MSSpeech**
   c. Double-click the `Setup.exe` file.

      The system displays the Microsoft SAPI Speech wizard.
   d. In the Welcome dialog box, click **Next**.
   e. Accept the license terms and then click **Next**.
   f. Enter a user name and the organization in the Customer Information dialog box, then click **Next**.
   g. Accept the default installation folder, when prompted, or navigate to another, if applicable. Then, click **Next**.
   h. Click **Install** to begin the Microsoft SAPI Speech installation.
   i. Click **Finish** when the installation is complete.
7. **(Optional)** Optionally, install the Storm Codec 7.01.19. To start the Storm Codec 7.01.19, refer the *Installation Notes* on the ISO image.

   Note:

   - After you complete the installation procedure, read the Eclipse “readme” file located in the /readme subdirectory where Eclipse is installed. The Eclipse readme file includes valuable information and tips for configuring Eclipse.
   - Before you use Orchestration Designer, you must configure the basic settings. For information about configuring your development environment settings, see Basic configuration on page 21.

Installing Orchestration Designer using pre-packaged installation

Before you begin

Before you use the prepackaged Orchestration Designer installation, ensure you have installed the Java Development Kit.

About this task

The Orchestration Designer ISO image contains a prepackaged Orchestration Designer installation that contains both the Self Service and Contact Center features and also a Tomcat installation.

Procedure

1. Copy the Orchestration Designer installation ISO image to the local drive and navigate to the root folder of the ISO image.
2. Copy the `AAOD7.2.0` folder to `C:\` directory on your computer.
3. Double-click `eclipse.exe` file in the `AAOD7.2.0\eclipse` folder to install and open Orchestration Designer.

   Tip:

   To access the Orchestration Designer, you can create a shortcut to `eclipse.exe` and make the shortcut in a convenient location.
4. Open Orchestration Designer and perform the following step to configure the preferences for the location of the Tomcat installation:

   Click **Window** > **Preferences** > **Tomcat** and set the **Tomcat home** value.

   For example, if you copied the `AAOD7.2.0` folder to your `C:\` drive, then the **Tomcat home** value is `C:\AAOD7.2.0\apache-tomcat-7.0.55`.

Viewing the version number of an installed Orchestration Designer software

Procedure

1. On the **Help** menu, click **About Eclipse SDK**.
2. In the About Eclipse SDK dialog box, click **Installation Details**.

   The system displays the Eclipse SDK Installation Details dialog box, which contains the installation and configuration details.

Basic configuration

Before you start creating Orchestration Designer projects, you must perform some basic configurations to ensure that the environment is configured and ready to use.

Creating an Eclipse shortcut

About this task

After you complete installing all installation components, you can start Eclipse to access the Orchestration Designer. For easy access to Eclipse, you can create a Windows desktop shortcut icon to the **eclipse.exe** Eclipse executable file, which is located where Eclipse is installed.

Procedure

1. To create an Eclipse shortcut, right-click the **eclipse.exe** Eclipse executable file which is located where Eclipse is installed, and then click **Send To** > **Desktop (create shortcut)**.
2. Double-click the shortcut file to startOrchestration Designer.

   The system displays the Workspace Launcher dialog box.

Setting up the workspace

About this task

After you start Orchestration Designer, through Eclipse, for the first time, the Eclipse **Workspace Launcher** dialog box prompts you to specify a workspace location. Specify a directory to save all Orchestration Designer project files.

Important:

If you are configuring a new version of Orchestration Designer, back up all files in the original installation directory before configuring a new directory.

Procedure

1. Double-click **eclipse.exe**.

   For more information, see Creating an Eclipse shortcut on page 21.
2. In the Workspace Launcher dialog box, click **Browse** to navigate to the location to set as the workspace location.

   The default directory is relative to the installation path of Eclipse. For example, `C:\Eclipse\workspace`.
3. Click **OK**.

Note:

To stop the Workspace Launcher dialog box from prompting for this directory with every start of Eclipse, select the **Use this as the default and do not ask again** check box, and then click **OK**.

Settings configuration

Configuring the default perspective

About this task

You must configure the preferences for the first time you use Orchestration Designer. Orchestration Designer uses these configured preferences on subsequent launches.

Procedure

1. On the **Window** menu, click **Preferences**.
2. In the Preferences dialog box, in the left navigation pane, double-click **General**.
3. Click **Perspectives**.
4. In the **Open a new perspective** area, click **In the same window**.
5. In the **Fast Views** area, click **Within the perspective**.
6. In the **Open the associated perspective when creating a new project** area, click **Prompt**.
7. In the **Available perspectives** pane, perform one of the following actions:
   - Click **Speech** to set the Speech perspective as the default perspective.
   - Click **Call Control** to set the Call Control perspective as the default perspective.
   - Click **Message** to set the Message perspective as the default perspective.
   - Click **Web** to set the Web perspective as the default perspective.
8. Click **Make default**.
9. Click **Apply**, and then click **OK**.

Configuring Tomcat preferences

About this task

Tomcat preferences provides settings that determine how Orchestration Designer works with the Apache Tomcat servlet engine during simulations.

If you install Tomcat with the default settings, Tomcat preferences are already configured and you do not have to configure Tomcat preferences again.

Verify that the appropriate Tomcat version, home directory, and Contexts directory are populated.

Note:

If you are running only Orchestration Designer in your development environment, that is, if you are not running deployed applications, you do not have to install the runtimeconfig to your local Tomcat. This file is installed automatically. You only have to set up your production system when you are deploying and running live applications.

Important:

Do not run the runtimeconfig on your ADE. If you do, connection timeout exceptions occur. To recover, stop Tomcat, stop Orchestration Designer, restart Orchestration Designer, and change your configuration in preferences.

Procedure

1. On the **Window** menu, click **Preferences**.

   The system displays the Preferences dialog box.
2. In the left navigation pane, click **Tomcat**.
3. In the Tomcat version area, click the Tomcat version that is installed on your computer.
4. In the **Tomcat home** field, click **Browse** to navigate to and select the directory where Tomcat is installed.
5. In the Context declaration mode area, click **Context files**.
6. In the **Context directory** field, click **Browse** to navigate to and select the context directory.
7. Click **Apply**, and then click **OK**.

Orchestration Designer preferences management

Considerations for enabling an HTTP or HTTPS proxy connection

The Orchestration Designer Preferences panel includes a setting to enable an HTTP or HTTPS proxy connection.

Proxy settings are required when all of the following conditions are true:

- The system where Orchestration Designer is installed is behind a firewall.
- Access is required to resources that reside outside the firewall for your Orchestration Designer speech projects. These resources can include Web services, databases, or other outside resources.
- Access to these resources requires the use of either an HTTP or HTTPS proxy server.

When these conditions are true, proxy settings for Orchestration Designer must be configured, even if proxy settings are already configured for your Internet browser or e-mail client. If you have a proxy

server configured for your Internet browser, use the same proxy settings for Orchestration Designer. For more information, see *Admin (ddadmin) Web application configuration* in the *Avaya Aura® Orchestration Designer Developer's Guide*.

Related links

Enabling an HTTP or HTTPS proxy connection on page 24

Enabling an HTTP or HTTPS proxy connection

Procedure

1. On the **Window** menu, click **Preferences**.
2. In the Preferences dialog box, in the left navigation pane, double-click **Avaya Aura**.
3. Click **Orchestration Designer**.
4. In the Orchestration Designer pane, perform one of the following actions:
   - In the **Proxy Settings** area, configure the HTTP proxy settings.
   - In the **HTTPS Proxy Settings** area, configure the HTTPS proxy settings.
5. Click **Apply**, and then click **OK**.

Related links

Considerations for enabling an HTTP or HTTPS proxy connection on page 23
Orchestration Designer preferences field descriptions on page 26

Configuring the run-time license server

About this task

Note:

Specify a run-time license server only if you have Avaya Aura® Experience Portal, IR, or MPS accessing your application from the development environment.

Run-time license to run applications using the Application Simulator is not needed.

Procedure

1. On the **Window** menu, click **Preferences**.
2. In the Preferences dialog box, in the left navigation pane, double-click **Avaya Aura**.
3. Click **Orchestration Designer**.
4. In the Orchestration Designer pane, in the **Runtime License Server** area, in the **Server URI** field, type the URI of the run-time license server if you have Avaya Aura® Experience Portal, IR, or MPS accessing your application from the development environment.

The format for this URI is `http://webServerName:port`, where:

- **webServerName** is the fully qualified host name or IP address of your WebLM license server.
- **port** is the number of the HTTP/HTTPS port the system uses to access the license server.

For example, `http://licenseServer.myCompany.com:8080`

5. In the **License Check Timeout** field, type the time in seconds that the system must wait for a response from the WebLM license server while attempting to connect to the WebLM license server.

   The default value is zero seconds. Zero indicates that there is no timeout.

6. Click **Apply**, and then click **OK**.

Related links

Orchestration Designer preferences field descriptions on page 26

Removing the context files on closing a project

About this task

Tomcat opens the context files of all projects each time you simulate a project. Therefore, Orchestration Designer performance can degrade if you have several workspaces with a huge number of projects.

If you select the **Remove context files on project close** check box, Orchestration Designer automatically deletes the corresponding context files when you close the Orchestration Designer projects.

Orchestration Designer recreates the context file when a project is reopened. This improves the performance by controlling the size of the workspaces.

Note:

This option does not affect the projects which are not opened in the current session. This applies only to Orchestration Designer projects which you open and close subsequently.

Procedure

1. On the **Window** menu, click **Preferences**.
2. In the Preferences dialog box, in the left navigation pane, double-click **Avaya Aura**.
3. Click **Orchestration Designer**.
4. In the Orchestration Designer pane, in the **Context Files** area, select the **Remove context files on project close** check box.
5. Click **Apply**, and then click **OK**.

Related links

Orchestration Designer preferences field descriptions on page 26

Configuring the fetch secure port

About this task

To use HTTPS to get and post data from form nodes, such as prompt and collect, announce, menu, record, and transfer, you can specify the port number used by the application server. If you are using Tomcat, the default port is 8443.

Procedure

1. On the **Window** menu, click **Preferences**.
2. In the Preferences dialog box, in the left navigation pane, double-click **Avaya Aura**.
3. Click **Orchestration Designer**.
4. In the Orchestration Designer pane, in the **Secure Fetch** area, in the **Secure Fetch Port** field, specify the port number used by the application server.
5. Click **Apply**, and then click **OK**.

Related links

Orchestration Designer preferences field descriptions on page 26

Orchestration Designer preferences field descriptions

Name	Description
Proxy Settings	
Enable HTTP proxy connection	Check box to enable HTTP proxy connection if you need a proxy server for Internet access.
Ignore hosts with addresses	The IP addresses. Orchestration Designer ignores HTTP hosts with these addresses. For multiple addresses, use either a comma or semicolon as a separator character.
HTTP proxy host address	The full HTTP path or the URL of the proxy server.
HTTP proxy host port	The port that Orchestration Designer can use to access the proxy server.
Copy HTTP settings to HTTPS	To copy the configured HTTP settings to HTTPS settings automatically.
HTTPS Proxy Settings	
Enable HTTPS proxy connection	Check box to enable HTTPS proxy connection if you need a proxy server for Internet access. If you do not need a proxy server for Internet access, clear this check box. If cleared, Orchestration Designer disables the other options in this area.

Table continues…

Name	Description
Ignore HTTPS hosts with addresses	The IP addresses. Orchestration Designer ignores HTTPS hosts with these addresses. For multiple addresses, use either a comma or a semicolon as a separator character.
HTTPS proxy host address	The full HTTPS path or the URL of the proxy server. If you do not know this address, see the proxy server settings for your Internet browser software.
HTTPS proxy host port	The port that Orchestration Designer can use to access the HTTPS proxy server If you do not know the URI, contact the Avaya technical service representative. **Note:** These settings are required even if proxy options are set in Microsoft Internet Explorer or any other Web browser.
Runtime License Server	
Server URI	The URI of the run-time license server if you have Avaya Aura® Experience Portal, IR, or MPS accessing your application from the development environment. **Note:** You must specify a run-time license server only if you have Avaya Aura® Experience Portal, IR, or MPS accessing your application from the development environment. You do not need a run-time license to run applications using the Application Simulator. The format for this URI is *http://webServerName:port* where: • **webServerName** is the fully qualified host name or IP address of your WebLM license server. • **port** is the number of the HTTP/HTTPS port the system uses to access the license server. For example, `http://licenseServer.myCompany.com:8080`.
License Check Timeout	The time in seconds that the system must wait for a response from the WebLM license server while attempting to connect to the WebLM license server. The default value is zero seconds. Zero indicates that no timeout is there.

Table continues…

Name	Description
Context Files	
Remove context files on project close	Check box to automatically delete corresponding context files when you close Orchestration Designer projects. Orchestration Designer recreates the context file when a project is reopened. This improves the performance by controlling the size of the workspaces. If you clear the **Remove context files on project close** check box, Tomcat opens the context files of all projects each time you simulate a project. Therefore, Orchestration Designer performance can degrade if you have several workspaces with a huge number of projects. **Note:** This option does not affect the projects which are not opened in the current session. This applies only to Orchestration Designer projects which you open and close subsequently.
Secure Fetch	
Secure Fetch Port	The port number used by the application server if you want to use HTTPS to get and post data from form nodes, such as prompt and collect, announce, menu, record, and transfer. If you are using Tomcat, the default port is 8443.

Related links

Enabling an HTTP or HTTPS proxy connection on page 24
Configuring the run-time license server on page 24
Removing the context files on closing a project on page 25
Configuring the fetch secure port on page 26

Verifying the Java JRE

Procedure

1. On the **Window** menu, click **Preferences**.
2. In the Preferences dialog box, in the left navigation pane, double-click **Java**.
3. Click **Installed JREs**.

4. Verify that **jre7** or **jre8** is selected. If **jre7** or **jre8** does not appear in the list, perform the following action:
   - Click **Add** to add the JRE. For more information, see the *Java Development User Guide*.
5. Click **OK**.

Setting the Java JDK compiler compliance level

Procedure

1. On the **Window** menu, click **Preferences**.
2. In the Preferences dialog box, in the left navigation pane, double-click **Java**.
3. Click **Compiler**.
4. In the **JDK Compliance** area, select the **Compiler compliance level**.
5. Click **Apply**, and then click **OK**.

Configuring Microsoft SAPI Speech for microphone input

About this task

Orchestration Designer uses the Microsoft Speech API 6.0 to handle ASR input from a microphone during application simulation. To use the Microsoft SAPI Speech for ASR input, you must configure the Microsoft SAPI Speech to use a microphone.

Procedure

1. On the system where Orchestration Designer is installed, open Control Panel.
2. Go to the speech recognition configuration.
3. With a microphone plugged in and turned on, speak into the microphone. The **Level** indicator in the Microphone area must show that the system is receiving microphone input. If **Level** indicator does not show, rectify the audio input source settings.
4. Follow the wizard steps to further tune the microphone settings.
5. Click **OK**.

Installing sample applications

About this task

Orchestration Designer includes numerous sample applications. You can use these sample applications to understand how finished applications work and operate, and how the features of Orchestration Designer work.

Procedure

1. Navigate to the `/Sample Applications` directory on the Orchestration Designer installation ISO image.
2. Locate and double-click the **Avaya Aura® Orchestration Designer [*version*] Sample Applications.doc** file.
3. Follow the instructions in this file to install and configure Orchestration Designer sample applications.

   This file also contains detailed information about each sample application.

   Important:

   You can use included sample applications as technical samples for reference only, and not production-ready applications.

About Orchestration Designer Upgrade

You can upgrade to Orchestration Designer 7.2 from following versions:

- Orchestration Designer 7.0
- Orchestration Designer 7.0.1
- Orchestration Designer 7.1

You can upgrade to Orchestration Designer 7.2 either by maintaining the previous environment or without retaining the previous environment.

Note:

Upgrades to Orchestration Designer might require updates to connectors or other dependant libraries on the application server. Avaya recommends that you update the connector applications`icconnector.war` and `aesconnector.war` and run-time support files (runtimeSupport `platform.zip`) after upgrading Orchestration Designer.

For more information about installing the run-time support files and connectors, see Prerequisite files on the application server in *Avaya Aura® Orchestration Designer Developer's Guide*.

Related links

Maintaining the 7.0 environment while installing 7.2.0 on page 31
Maintaining the 7.0.1 environment while installing 7.2.0 on page 32
Maintaining the 7.1 environment while installing 7.2.0 on page 33

Recommended installation paths for multiple Orchestration Designer and Eclipse versions on page 34
Installing 7.2.0 without retaining the 7.0 environment on page 34
Installing 7.2.0 without retaining the 7.0.1 environment on page 35
Installing 7.2.0 without retaining the 7.1 environment on page 36
Software requirements on page 13
Software requirements on page 13

Maintaining the 7.0 environment while installing 7.2.0

About this task

To retain the Orchestration Designer 7.0 environment, you can install Orchestration Designer 7.2.0 into a separate directory. You can retain the Orchestration Designer 7.0 environment for reasons such as maintenance of 7.0 based applications.

For information about the recommended installation paths, see Recommended installation paths for multiple Orchestration Designer and Eclipse versions on page 34.

Procedure

1. Save the Orchestration Designer 7.0 and Eclipse 3.6 installation and workspace. Orchestration Designer 7.0 continues to use the previous Tomcat installation.
2. Install Orchestration Designer 7.2.0, and Tomcat 7.0 or 8.0. (Tomcat upgrade is optional) to a separate location. For example, `C:\OD7.2.0\`.

   Note:

   You must install Tomcat under the Orchestration Designer 7.2.0 installation location to keep it separate.
3. Upgrade Orchestration Designer 7.0 projects to Orchestration Designer 7.2.0 projects. Perform the following actions:
   a. Copy the projects from the Orchestration Designer 7.0 workspace to the Orchestration Designer 7.2.0 workspace. Keep a copy of the projects in the 7.0 workspace to ensure that you have a backup if upgrading problems.
   b. Import the copied projects into Orchestration Designer 7.2.0.

      The system converts the projects for Orchestration Designer 7.2.0. You cannot open these projects in Orchestration Designer 7.0.
4. If you use a source control system, store the 7.0 application in a different location or a different branch, so that you can maintain the old 7.0 application in the future.

   Note:

   After creating a new workspace during an upgrade, click **Window** > **Preferences** to configure your preferences before importing old projects.

Related links

About Orchestration Designer Upgrade on page 30

Maintaining the 7.0.1 environment while installing 7.2.0

About this task

To retain the Orchestration Designer 7.0.1 environment, you can install Orchestration Designer 7.2.0 into a separate directory. You can retain the Orchestration Designer 7.0.1 environment for reasons such as maintenance of 7.0.1-based applications.

For information about the recommended installation paths, see Recommended installation paths for multiple Orchestration Designer and Eclipse versions on page 34.

Procedure

1. Save the Orchestration Designer 7.0.1 and Eclipse 3.6 installation and workspace. Orchestration Designer 7.0.1 continues to use the previous Tomcat installation.
2. Install Orchestration Designer 7.2.0, and Tomcat 7.0, or 8.0. (Tomcat upgrade is optional) to a separate location. For example, `C:\OD7.2.0\`.

   Note:

   You must install Tomcat under the Orchestration Designer 7.2.0 installation location to keep it separate.
3. Upgrade Orchestration Designer 7.0.1 projects to Orchestration Designer 7.2.0 projects. Perform the following actions:
   a. Copy the projects from the Orchestration Designer 7.0.1 workspace to the Orchestration Designer 7.2.0 workspace. Keep a copy of the projects in the 7.0.1 workspace to ensure that you have a backup if upgrading problems.
   b. Import the copied projects into Orchestration Designer 7.2.0.

      The system converts the projects for Orchestration Designer 7.2.0. You cannot open these projects in Orchestration Designer 7.0.1.
4. If you use a source control system, store the 7.0 1 application in a different location or a different branch, so that you can maintain the old 7.0 1 application in the future.

   Note:

   After creating a new workspace during an upgrade, click **Window** > **Preferences** to configure your preferences before importing old projects.

Related links

About Orchestration Designer Upgrade on page 30

Maintaining the 7.1 environment while installing 7.2.0

About this task

To retain the Orchestration Designer 7.1 environment, you can install Orchestration Designer 7.2.0 into a separate directory. You can retain the Orchestration Designer 7.1 environment for reasons such as maintenance of 7.1 based applications.

For information about the recommended installation paths, see Recommended installation paths for multiple Orchestration Designer and Eclipse versions on page 34.

Procedure

1. Save the Orchestration Designer 7.1 and Eclipse installation and workspace. Orchestration Designer 7.0 continues to use the previous Tomcat installation.
2. Install Orchestration Designer 7.2.0, and Tomcat 7.0 or 8.0. (Tomcat upgrade is optional) to a separate location. For example, `C:\OD7.2.0\`.

   Note:

   You must install Tomcat under the Orchestration Designer 7.2.0 installation location to keep it separate.
3. Upgrade Orchestration Designer 7.1 projects to Orchestration Designer 7.2.0 projects. Perform the following actions:
   a. Copy the projects from the Orchestration Designer 7.1 workspace to the Orchestration Designer 7.2.0 workspace. Keep a copy of the projects in the 7.1 workspace to ensure that you have a backup if upgrading problems.
   b. Import the copied projects into Orchestration Designer 7.2.0.

      The system converts the projects for Orchestration Designer 7.2.0. You cannot open these projects in Orchestration Designer 7.1.
4. If you use a source control system, store the 7.1 application in a different location or a different branch, so that you can maintain the old 7.1 application in the future.

   Note:

   After creating a new workspace during an upgrade, click **Window** > **Preferences** to configure your preferences before importing old projects.

Related links

About Orchestration Designer Upgrade on page 30

Recommended installation paths for multiple Orchestration Designer and Eclipse versions

The following example installation paths are recommended for multiple Orchestration Designer and Eclipse versions. In these paths, (base) means any parent directory.

`c:\(base)\OD7.0\`

`eclipse\` (Eclipse 4.2 install, with GEF 3.9 SDK, WTP SDK 3.4, emf-xsd 2.8, DTP 1.10 Orchestration Designer 7.0 features)

`tomcat\` (Tomcat 6.0, or 7.0 for running Orchestration Designer 7.0 applications)

`workspace\` (Orchestration Designer 7.0 projects)

These paths are convenient installation structure that retains the Orchestration Designer 7.0 and Orchestration Designer 7.0.1 environments and the prerequisite software separate.

`c:\(base)\OD7.0.1\`

`eclipse\` (Eclipse 4.2 install, with GEF 3.9 SDK, WTP SDK 3.4, emf-xsd 2.8, DTP 1.10 Orchestration Designer 7.0.1 features)

`tomcat\` (Tomcat 7.0, or 8.0 for running Orchestration Designer 7.0.1 applications)

`workspace\` (Orchestration Designer 7.0.1 projects)

These paths are convenient installation structure that retains the Orchestration Designer 7.0.1 and Orchestration Designer 7.1.0 environments and the prerequisite software separate.

`c:\(base)\OD7.1\`

`eclipse\` (Eclipse 4.2 install, with GEF 3.9 SDK, WTP SDK 3.4, emf-xsd 2.8, DTP 1.10 Orchestration Designer 7.1 features)

`tomcat\` (Tomcat 7.0, or 8.0 for running Orchestration Designer 7.1 applications)

`workspace\` (Orchestration Designer 7.1 projects)

These paths are convenient installation structure that retains the Orchestration Designer 7.1 and Orchestration Designer 7.2.0 environments and the prerequisite software separate.

Related links

About Orchestration Designer Upgrade on page 30

Installing 7.2.0 without retaining the 7.0 environment

Procedure

1. Before uninstalling Orchestration Designer 7.0, create a backup copy of the projects in your workspace.

2. To uninstall Orchestration Designer, perform the following steps:
   a. Go to **Windows** > **Preferences** > **Install/Update**.
   b. In **Install/Update** wizard, click on **Uninstall or update** link.
   c. In **Installed Software** tab, select **Avaya Aura Orchestration Designer Developer Guide**.
   d. Click **Uninstall**.

   Depending on the location of your workspace, you can remove your projects by the uninstall process.
3. Install Orchestration Designer 7.2.0 and the supporting software.
4. Copy the Orchestration Designer 7.0 projects from the backup into the Orchestration Designer 7.2.0 workspace.

   Keep copies of your old backups in the event stating the errors while upgrading.
5. Import each project into Orchestration Designer 7.2.0.

   The system converts the projects for Orchestration Designer 7.2.0.
6. If you use a source control system, create a branch or store the 7.2.0 application in a different location so that you can maintain the old 7.0 application in the future.

   Note:

   After creating a new workspace during an upgrade, click **Window** > **Preferences** to configure your preferences before importing the old projects.

Related links

About Orchestration Designer Upgrade on page 30
Installing Orchestration Designer manually on page 17
Software requirements on page 13

Installing 7.2.0 without retaining the 7.0.1 environment

Procedure

1. Before uninstalling Orchestration Designer 7.0.1, create a backup copy of the projects in your workspace.
2. To uninstall Orchestration Designer, perform the following steps:
   a. Go to **Windows** > **Preferences** > **Install/Update**.
   b. In **Install/Update** wizard, click on **Uninstall or update** link.
   c. In **Installed Software** tab, select **Avaya Aura Orchestration Designer Developer Guide**.
   d. Click **Uninstall**.

Depending on the location of your workspace, you can remove your projects by the uninstall process.

3. Install Orchestration Designer 7.2.0 and the supporting software.
4. Copy the Orchestration Designer 7.0.1 projects from the backup into the Orchestration Designer 7.2.0 workspace.

   Keep copies of your old backups in the event stating the errors while upgrading.
5. Import each project into Orchestration Designer 7.2.0.

   The system converts the projects for Orchestration Designer 7.2.0.
6. If you use a source control system, create a branch or store the 7.2.0 application in a different location so that you can maintain the old 7.0.1 application in the future.

   Note:

   After creating a new workspace during an upgrade, click **Window** > **Preferences** to configure your preferences before importing the old projects.

Related links

About Orchestration Designer Upgrade on page 30
Installing Orchestration Designer manually on page 17
Software requirements on page 13

Installing 7.2.0 without retaining the 7.1 environment

Procedure

1. Before uninstalling Orchestration Designer 7.1, create a backup copy of the projects in your workspace.
2. To uninstall Orchestration Designer, perform the following steps:
   a. Go to **Windows** > **Preferences** > **Install/Update**.
   b. In **Install/Update** wizard, click on **Uninstall or update** link.
   c. In **Installed Software** tab, select **Avaya Aura Orchestration Designer Developer Guide**.
   d. Click **Uninstall**.

   Depending on the location of your workspace, you can remove your projects by the uninstall process.
3. Install Orchestration Designer 7.2.0 and the supporting software.
4. Copy the Orchestration Designer 7.1 projects from the backup into the Orchestration Designer 7.2.0 workspace.

   Keep copies of your old backups in the event stating the errors while upgrading.
5. Import each project into Orchestration Designer 7.2.0.

The system converts the projects for Orchestration Designer 7.2.0.

6. If you use a source control system, create a branch or store the 7.2.0 application in a different location so that you can maintain the old 7.1 application in the future.

   Note:

   After creating a new workspace during an upgrade, click **Window** > **Preferences** to configure your preferences before importing the old projects.

Related links

About Orchestration Designer Upgrade on page 30
Installing Orchestration Designer manually on page 17
Software requirements on page 13

About Orchestration Designer patch updates

At this time, Avaya does not automatically alert you about the availability of new patches for Orchestration Designer. Therefore, periodically check the Avaya support website for the availability of patches. Or, as an alternative, use the Eclipse update mechanism to check for available updates.

The following sections describe the steps for installing Orchestration Designer patches:

- Before installing an Orchestration Designer patch update on page 37
- Installing an Orchestration Designer patch update on page 38

Note:

The procedure described in the Installing an Orchestration Designer patch update on page 38 section is for installing patches or updates to a released software, and not for upgrading software versions completely. For upgrading the software, see About Orchestration Designer Upgrade on page 30.

Before installing an Orchestration Designer patch update

Before installing a patch update, back up all files in the default **/eclipse** installation directory, and in the designated **/workspace** directory (if not a subdirectory of **/eclipse**). Backing up your files helps you to revert an update.

To continue using the older version for existing applications, perform a “clean installation” of the new version in a new directory.

Caution:

When opening an application created with an earlier release of Orchestration Designer, Orchestration Designer prompts you to update the project to the new version. For project conversion considerations, see the Release Notes.

Installing an Orchestration Designer patch update

About this task

Avaya Support website releases Orchestration Designer patch updates. You can gain access to these updates from within the Eclipse user interface (UI).

Note:

The procedure described in this section is for installing patches or updates to a released software, and not for upgrading software versions completely. For upgrading the software, see About Orchestration Designer Upgrade on page 30.

Procedure

1. On the **Help** menu, click **Install New Software**.
2. In the **Install** dialog box, clear the **Contact all update sites during install to find required software** check box.
3. In the **Work with** field, click the Orchestration Designer patch update website name that you specified.

   Note:

   Ensure that the Orchestration Designer patch update website is added to Eclipse. For more information, see Adding the website for Orchestration Designer patch updates on page 39.

   Note:

   If you cannot connect to the update website, ensure that you have correctly configured the proxy settings. The system automatically checks for the Orchestration Designer patch updates. If patches or updates are found, the search mechanism returns the results.

4. In the middle pane, select the Orchestration Designer patch updates that you want to install, click **Next**, and then follow the prompts.

   Caution:

   You can use the Eclipse Install New Software mechanism for features besides Orchestration Designer. To ensure that you install compatible features, Avaya recommends that you update only the Orchestration Designer features.

   If you are unsure which updates to install or if you have questions about the installation procedure, contact Avaya Support at http://support.avaya.com.

Adding the website for Orchestration Designer patch updates

About this task

To get Orchestration Designer patch updates, you must add the Orchestration Designer patch update website to Eclipse.

Procedure

1. Perform one of the following actions:
   - On the **Help** menu, click **Install New Software**, and then click the **Available Software Sites** link.
   - On the **Window** menu, click **Preferences**.
2. In the Preferences dialog box, double-click **Install/Update**.
3. Click **Available Software Sites**.
4. In the Available Software Sites pane, click **Add**.
5. In the Add Site dialog box, in the **Name** field, type a name for the Orchestration Designer patch update website. For example, `AAOD`.
6. In the **Location** field, type `http://support.avaya.com/OrchestrationDesigner/SS/Updates/`.
7. Click **OK**.

Chapter 3: Resources

Related resources

Documentation

The following table lists the documents related to this product. Download the documents from the Avaya Support website at http://support.avaya.com

Title	Description	Audience
Getting Started with Avaya Aura® Orchestration Designer	This PDF document contains the information needed to install and configure Orchestration Designer for initial use, and to understand the basics of Orchestration Designer graphical user interface (GUI).	• Application Developers • Implementation Engineers
Avaya Aura® Orchestration Designer Developer's Guide	This PDF document contains the same information as available in the online Help, but you can view or print the document using Adobe Acrobat Reader.	Application Developers
Avaya Aura® Orchestration Designer online Help	The online Help provides detailed information and procedures for using Orchestration Designer features and options to create speech, message, and call control applications. When installing Orchestration Designer, the system installs the online Help as an additional Eclipse plug-in.	• Application Developers • Implementation Engineers
Programmer Reference Guide	This online documentation is designed for the programmers of Orchestration Designer. This documentation includes: • A Constants (Quick reference) guide. • A Class Hierarchy reference guide. • An API Reference guide.	Application Developers

Table continues…

Title	Description	Audience
Deploying Avaya Breeze™	This document provides information and procedures on deploying the Avaya Breeze™ services.	• System administrators • Services and Support personnel • Avaya Professional Services • Implementation engineers
Avaya Context Store Snap-in Reference	This document is intended for anyone who wants to install, configure, and administer Context Store.	• Application Developers • Implementation Engineers
Deploying Avaya Oceanalytics™ Insights	This document is intended for anyone who wants to deploy Avaya Oceanalytics™ Insights.	• Application Developers • Implementation Engineers

For information about viewing the Orchestration Designer documentation, see Viewing the Orchestration Designer documentation on page 8.

Related links

Finding documents on the Avaya Support website on page 41

Finding documents on the Avaya Support website

About this task

Use this procedure to find product documentation on the Avaya Support website.

Procedure

1. Use a browser to navigate to the Avaya Support website at http://support.avaya.com/.
2. At the top of the screen, enter your username and password and click **Login**.
3. Put your cursor over **Support by Product**.
4. Click **Documents**.
5. In the **Enter your Product Here** search box, type the product name and then select the product from the drop-down list.
6. If there is more than one release, select the appropriate release number from the **Choose Release** drop-down list.
7. Use the **Content Type** filter on the left to select the type of document you are looking for, or click **Select All** to see a list of all available documents.

   For example, if you are looking for user guides, select **User Guides** in the **Content Type** filter. Only documents in the selected category will appear in the list of documents.

8. Click **Enter**.

Related links

Documentation on page 40

Training

The following courses are available on the Avaya Learning website at www.avaya-learning.com. After logging into the website, enter the course code or the course title in the **Search** field and click **Go** to search for the course.

Course Code	Course Title
4C00095W	Avaya Aura Orchestration Designer for Developers
5C00092V	Avaya Aura Experience Portal, Avaya Aura Orchestration Designer, and Avaya Proactive Outreach Manager Installation, Maintenance and Troubleshooting Essentials
3610C	Avaya Aura Contact Center - Orchestration Designer Scripting
2C00081O	Selling Avaya Aura Orchestration Designer
5C00080E	Knowledge Access: Avaya Aura Contact Center Orchestration Designer Scripting Administration
W: Web (online) course V: Virtual E: Self-paced in virtual campus O: On Demand	

Viewing Avaya Mentor videos

Avaya Mentor videos provide technical content on how to install, configure, and troubleshoot Avaya products.

About this task

Videos are available on the Avaya Support website, listed under the video document type, and on the Avaya-run channel on YouTube.

Procedure

- To find videos on the Avaya Support website, go to http://support.avaya.com and perform one of the following actions:
  - In **Search**, type `Avaya Mentor Videos` to see a list of the available videos.
  - In **Search**, type the product name. On the Search Results page, select **Video** in the **Content Type** column on the left.

- To find the Avaya Mentor videos on YouTube, go to www.youtube.com/AvayaMentor and perform one of the following actions:
  - Enter a key word or key words in the Search Channel to search for a specific product or topic.
  - Scroll down Playlists, and click the name of a topic to see the available list of videos posted on the website.

Note:

Videos are not available for all products.

Support

Go to the Avaya Support website at http://support.avaya.com for the most up-to-date documentation, product notices, and knowledge articles. You can also search for release notes, downloads, and resolutions to issues. Use the online service request system to create a service request. Chat with live agents to get answers to questions, or request an agent to connect you to a support team if an issue requires additional expertise.

Glossary

AACC	Avaya Aura® Contact Center.
AAEP	Avaya Aura® Experience Portal
AAS	Avaya Application Simulator.
ADR	See application detail record (ADR) on page 44.
AMS	Avaya Aura® Media Server.
ANI	See automatic number identification (ANI) on page 44.
API	See application program interface (API) on page 44.
application detail record (ADR)	Data records which contain historical information about an application used as part of a session. These records include information such as the session ID number, a timestamp, and a “friendly name” string determined by the developer who created the application.
application program interface (API)	A set of routines, protocols, and tools for building software applications. A good API makes it easier to develop a program by providing all the building blocks.
application server	A computer on which the Orchestration Designer speech application resides and runs. This computer is also where the Orchestration Designer run-time libraries are installed, thus making it possible to run Orchestration Designer applications on that server. The IVR system must be configured to start the speech application from this location.
ASR	See automated speech recognition (ASR) on page 44.
automated speech recognition (ASR)	Technology that employs a computer to recognize spoken words and respond appropriately.
automatic number identification (ANI)	A service that provides the originating telephone number of a call coming in to the system.
call flow	As implemented in speech applications, the call flow determines how a call is handled when it enters an interactive voice response system, based on options offered to callers and their responses to those options.

CCXML

Call Control eXtensible Markup Language.

An emerging XML specification, being developed to work in conjunction with VoiceXML and which addresses some of the technical limitations of VoiceXML. It enables the processing of asynchronous events, filtering and routing of incoming calls, and placement of outbound calls. Note that it is not intended to replace VoiceXML but rather to supplement it. See Ian Moraes's excellent article, "VoiceXML, CCXML, SALT: Architectural Tools for Enabling Speech Applications," on the Internet.

Computer Telephony Integration (CTI)

Software technology that integrates the use of telephones and computers without the need for special telephones, connectors, computer circuit packs, or other specialized hardware.

CTI

See Computer Telephony Integration (CTI) on page 45.

dialed number identification service (DNIS)

A service that identifies for the receiving system what telephone number was dialed by the caller. In theAvaya Aura® Experience Portal system this is often used to direct the call to a particular speech application, which is identified with that dialed number.

DNIS

See dialed number identification service (DNIS) on page 45.

DTMF

See dual tone multi-frequency (DTMF) on page 45.

dual tone multi-frequency (DTMF)

The system used by touchtone telephones, DTMF assigns a specific frequency (consisting of two separate tones) to each telephone key on the keypad, so that it can easily be identified by a microprocessor.

Eclipse

A Java-based open-source extensible IDE (integrated development environment) that provides application developers a feature-rich interface to develop their applications. Orchestration Designer is designed as a set of Eclipse plug-in modules that make it possible for application developers to design and build speech applications without having to write the code manually.

gateway

A network point that acts as an entry point to another network. In the context of Orchestration Designer and VoIP applications, a gateway is the entry point, often associated with one or more switches, to the interactive voice response (IVR) system application environment. See interactive voice response (IVR) system on page 46.

grammar

Elements that recognize the input received through inbound voice calls and messages.

In the context of IVR or speech applications, a grammar is a predefined set of words or DTMF tones that a speech application uses in conjunction with automated speech recognition (ASR) technology to interpret and respond to caller inputs. That is, grammars are lists of possible responses that callers make when responding to prompts by using spoken replies. Grammars

define which words or phrases the ASR engine can recognize and respond to.

In the context of text-based applications, a grammar is a predefined set of words in a message application that a text-processing system can use to interpret and respond to an inbound SMS or email message. The text-processing system collects and recognizes the input from inbound SMS and email messages and uses this input to direct the flow of a message application.

H.323

A hierarchical, IP-based telephony standard for connecting IP telephones and speech applications to switches.

IC

See Interaction Center (IC) on page 46.

IDE

See integrated development environment (IDE) on page 46.

integrated development environment (IDE)

A software application that usually provides a GUI environment, a text and/or code editor, a compiler and/or interpreter, and a debugger. This environment means that application or web developers can develop, test, and build their applications or Web sites within a single integrated space.

Interaction Center (IC)

A multichannel contact management platform that enables businesses to align real-time contact center operations with business objectives.

interactive voice response (IVR) system

A system, such as Avaya Aura® Experience Portal or Avaya IR, in which callers interact with a self-service application to get information, conduct transactions, or help with problems.

IVR system

See interactive voice response (IVR) system on page 46.

JDBC

An application program interface (API) on page 44 specification in which programs written in Java connect with and access data contained in database programs using Structured Query Language (SQL) on page 48.

localization

The process of modifying an application to operate and be understood in a different language, or locale. This usually involves modifying any phrases, prompts, and grammars associated with an application.

MPS

Media Processing Server.

MRCP

Media Resource Control Protocol.

NDM

See Nuance Dialog Module (NDM) on page 47.

notebook

(Also known as a tabbed or stacked notebook) In the Eclipse context, a notebook is a set of views “stacked” on top of one another as a space saving measure. The views in the notebook are accessible by clicking tabs arranged along the top of the notebook. See the Eclipse documentation.

Nuance Dialog Module (NDM)

Speech application modules produced by Nuance software products, similar to speech application modules created by using Orchestration Designer. You can use NDMs in the Orchestration Designer speech applications. Orchestration Designer supports NDM version 5.0 and later.

Before version 5.0, Nuance Dialog Module (NDM) was known as Open Speech Dialog Module (ODSM).

See Open Speech Dialog Module (OSDM) on page 47.

Open Speech Dialog Module (OSDM)

Speech application modules produced by Nuance software products, similar to application modules created with Orchestration Designer. OSDMs can be used in Orchestration Designer applications. (Orchestration Designer supports the following OSDM versions: Address OSDM 2.0.3, Core OSDM 2.0.4, and Name OSDM 2.0.1.)

OSDM is renamed to Nuance Dialog Module (NDM) from version 5.0 and later.

OSDM

See Open Speech Dialog Module (OSDM) on page 47.

palette

In the Orchestration Designer Editor views, this is the pane to the left of the view, in which editor options are displayed and selected.

Real-time Transfer Protocol (RTP)

A protocol for transmitting “real-time” data, such as audio or video data, across the Internet. This protocol does not guarantee “real-time” delivery of such data, but it does provide mechanisms to support data “streaming.”

RTP

See Real-time Transfer Protocol (RTP) on page 47.

RTSP

The Real Time Streaming Protocol, serves as a control protocol, and as a jumping off point for negotiating transports, such as RTP, multicast and unicast, and negotiating codecs off of servers in a file format independent way.

SCE

See service creation environment (SCE) on page 47.

service creation environment (SCE)

A set of software tools used to develop, test, and debug speech applications. Orchestration Designer is an SCE.

servlet

A small program that runs on a server, often Java-based.

servlet engine

A program that coordinates the overall operation and integration of a number of servlets. In the context of Orchestration Designer, the supported servlet engines are Apache Jakarta Tomcat, IBM WebSphere/WebSphere Express, Oracle WebLogic, and JBoss AS7.

Session Initiation Protocol (SIP)

A signaling protocol for the Internet that makes it possible to set up conferencing, telephony, events notification, and instant messaging. Within

	a VoIP framework, it initiates call setup, routing, authentication, to endpoints within an IP domain.
SIP	See Session Initiation Protocol (SIP) on page 47.
speech recognition	See automated speech recognition (ASR) on page 44.
speech synthesis	See text-to-speech (TTS) on page 49.
speech user interface (SUI)	Any software interface in which the user interacts with the system using speech commands and audio prompts.
SQL	See Structured Query Language (SQL) on page 48.
SSL	Secure Sockets Layer. A protocol for transmitting private data securely over the Internet. By convention, URLs that use SSL require a connection using the HTTPS protocol, rather than just HTTP.
SSML	Speech Synthesis Markup Language. A W3C standard designed to provide an XML-based markup language for assisting with the generation of synthetic speech in Web and other applications. The essential role of the markup language is to provide authors of synthesizable content a standard way to control aspects of speech such as pronunciation, volume, pitch, rate, and so forth, across different synthesis-capable platforms.
stacked notebook	See notebook on page 46.
Structured Query Language (SQL)	A standard interactive and programming language for getting data to and from a database.
SUI	See speech user interface (SUI) on page 48.
tabbed notebook	See notebook on page 46.
TDD	See Telecommunications Display Device (TDD) on page 48.
Telecommunications Display Device (TDD)	Sometimes designated as a teletypewriter (TTY) device, a telephone equipped with a keyboard and display, used by hearing- or speech-impaired callers to send and receive typed messages.
telephone user interface (TUI)	Any software interface in which the user interacts with the system using a telephone or similar device.
teletypewriter (TTY) device	See Telecommunications Display Device (TDD) on page 48.

text-to-speech (TTS) Technology by which information in text format is rendered as audio output using a speech synthesis engine to simulate human speech.

TTS See text-to-speech (TTS) on page 49.

TTY See Telecommunications Display Device (TDD) on page 48.

TUI See telephone user interface (TUI) on page 48.

vector A user-defined sequence of functions that may be performed, such as routing the call to a destination, giving a busy signal, or playing a recorded message.

VoiceXML (Sometimes presented as VXML) Voice eXtensible Markup Language.

A specification which provides for a user to interact with Internet-based resources using voice recognition technology. Instead of a typical Web browser that requires a combination of HTML, keyboard, and mouse device, VoiceXML relies on an Internet voice browser and/or telephone. Using VoiceXML, the user interacts with the Web “page” by listening to audio outputs (either pre-recorded or using a technology such as TTS) and by submitting input in the form of the user’s natural speaking voice and/or manual responses, such as telephone key presses.

Web service A standardized way of offering Web-based applications or services. Because Web services are Web-based and standards-based applications, delivered over the Internet, Web services make it possible for organizations to communicate and share data that use different file formats and programming languages.

workspace In Orchestration Designer, the area within the Editor view used to build the functionality for the selected editor. For example, in the Call Flow Editor, this is the space to the right of the palette, in which you drag the nodes that represent application functions.

See palette on page 47.

WSDL Web services Description Language.

An XML-formatted language used to describe a Web service’s capabilities.

XML eXtensible Markup Language.

A specification for the presentation of Internet documents, one which expands on the capabilities of HTML. A pared-down version of SGML (Standard Generalized Markup Language), XML makes it possible for designers to create their own customized tags, which in turn makes it possible to do things over the Internet that cannot be done using simple HTML.

Index

Special Characters

_OD 7.2
    New Features 7

A

about
    WebLM license server installation 17
access options
    creating 21

C

Compact installation 17
configuring
    default perspective 22
    fetch secure port 26
    Microsoft SAPI Speech 29
    run-time license server 24
    workspace 21
courses 42
creating
    Eclipse shortcut 21
Custom installation 17

D

database operations
    documentation support 8
default perspective
    configuring 22
documentation
    Dialog Designer outputs 8
    Getting Started with Dialog Designer PDF guide 8
    other resources 8

E

Eclipse
    documentation 8
    version required 13
Eclipse shortcut
    creating 21
enable proxy settings 23
enabling
    HTTP proxy connection 24
    HTTPS proxy connection 24

G

GEF (Graphical Editing Framework), version required 13
Getting Started with Dialog Designer PDF guide 8

H

hardware required for installation of Dialog Designer 13
http 23
https 23

I

IBM WebSphere, documentation support 8
install 7.2.0 34–36
installation
    manual 17
    pre-packaged installation 20
installation and configuration
    initial configuration 21
    Microsoft SAPI Speech
        configuring microphone input 29
    options for installation
        Custom 17
    required hardware 13
    required software 13
    sample applications 30
    setting up the workspace 21
installing
    Orchestration Designer patches 37
    Orchestration Designer upgrades 37
    patch update 38
    sample applications 30

J

Jakarta Tomcat 13
    see also Tomcat 8
Java
    2 SDK 13
    SDK, documentation support 8
JDBC
    documentation support 8

M

Microsoft SAPI Speech
    configuring microphone input 29
    documentation support 8
Microsoft Speech API (SAPI) 13

O

OD upgrade 30
operating systems supported for Orchestration Designer ... 13

orchestration designer 7
purpose 7
Orchestration Designer installation path 34

P

patches, installing 37
PDF guides
Getting Started with Dialog Designer 8
proxy connection 23

R

related documentation 40
requirements
hardware, for installation 13
software, for installation 13

S

sample applications, installing and running 30
setting up workspace 21
software required for installation of Orchestration Designer 13
Speech API (SAPI), Microsoft 13
support 43

T

Tomcat
documentation support 8
version required 13
training 42
Typical installation 17

U

upgrade 30
upgrades, installing 37

V

verifying
Java JRE 28
videos 42

W

warranty 7
Web service operations
documentation support 8
workspace, setting up 21
Workspace Launcher, setting up 21