Using Desktop Monitor for Avaya Workforce Optimization Select

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Contents

Chapter 1: Introduction

Purpose

This document describes how to use Desktop Monitor in an Avaya Workforce Optimization Select environment.

Supervisors can use this document to create and assign projects to employees in a contact center environment. Employees can use the document to manage the projects assigned to them.

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Chapter 2: Desktop Monitor Overview

Desktop Monitor overview

Desktop Monitor is a client-server solution to capture and monitor employee desktops and identify the quality of employees' daily interactions. The solution provides access to customer information from native and web-based applications. No additional programming or customization is required.

Desktop Monitor operates in two modes:

- Monitoring mode: The mode running on desktops of employees who are attending to voice and non-voice interactions in the contact center. This is the default mode.

- Learning mode: The mode installed on the supervisor or manager's desktop for monitoring interactions of employees. When Learning Console is started, the monitoring mode automatically changes to the learning mode.

Benefits

- Enables PCI compliance and security during event monitoring.

- Monitors web and native applications for compliance and adherence.

- Improves business processes, workflow, and rules.

- Identifies and measures training requirement for employees.

- Enhances organizational productivity with constant monitoring and recommending related coaching requirements.

Features

- An easy-to-use, browser-based interface to configure the projects that require monitoring.

- Automatic detection of confidential data, such as credit card details, and masking of the information for optimal security.

- Real time availability of user actions, events, triggers, and navigations.

- Integration with third-party applications, such as a Workforce Management tool.

Components

Desktop Monitor consists of the following components:

- Learning Console

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- Native resource files
- Web resource files
- Script Generator
- AvayaDesktopAgent.msi
- Unified Messaging
- Recorder
- Database
- Apache 2.4.25

Chapter 3: Certificate configuration for Avaya Desktop Agent

Avaya Desktop Agent has a self-signed certificate. Ensure you replace this certificate with the third party certificates after installation.

Replace the `ScreenCapture.cer` file with the `Root` certificate of the Certificate Authority. Ensure you provide the **Subject Alternative Name** in the third party client certificate which is generated for the Windows client machine. The **Subject Alternative Name** must contain the actual host name of the machine and also `localhost`. If you do not mention `localhost`, then the registration request from Avaya IX™ Workspaces to Screen service fails due to Unsecured certificate error. Ensure that the browser using which the agent has logged into Avaya IX™ Workspaces also has a client certificate generated from same Certificate Authority.

Chapter 4: Navigation

Opening Learning Console

Before you begin

Install `AvayaDesktopAgent.msi` on each administrator and employee machine.

Procedure

1. Go to the location where `LearningConsole.exe` is located on your local machine. For example: `C:\DTA\ScreenCapture\DTA\LearningConsole`.

2. Double-click `LearningConsole.exe`.

   The system displays the AWFOS Desktop Monitor page with the option to create a new project or open recent projects.

Menu options

Name	Description
Project	To configure and manage projects, applications, documents, forms, and controls.
Actions	To create custom user actions. The options are: • **Edit**: Provides the option to edit a project. • **Delete**: Provides the option to delete a project. • **Hierarchy**: Displays the structure of events in a project. • **Recent Actions**: Displays the recent user actions done on a project.
Help	To view: • A product overview of Learning Console. • The help file to use Learning Console.

Settings

Name	Description
Preferences	To set the location and preferred language on your local machine. The options are: • **App. Data Path**: The location where Learning Console is located. The default location is `C:\DesktopMonitor\AppData\`. You can change the location anytime. • **Culture**: The option to set the language. The default option is en-us.

Chapter 5: Managing Learning Mode

Learning mode

When you install `AvayaDesktopAgent.msi`, the system runs the following `.exe` files in the background:

- `Screen.exe`: Desktop Agent Service
- `ScreenCapture.exe`: Desktop Agent Application

In the Learning mode, one instance of Desktop Agent Service runs on each supervisor machine, and one instance of Desktop Agent Application runs for every screen that each employee accesses.

For example, if more than one user logs on to the same machine, then multiple Desktop Agent Application instances are created.

The sequence of execution in the Learning mode is as follows:

1. The supervisor uses Learning Console to configure the events and controls that must be monitored and captured.

2. The Desktop Agent Service starts Desktop Agent Application on the supervisor desktop.

   The Desktop Agent Application injects the learning code into the application that must be configured for monitoring on the employee desktop.

   Desktop Monitor supports monitoring of web-based and native applications.

   The injected code monitors the employees' activities, captures the data coming from add-ons or DLLs, and sends the data to Desktop Agent Application.

3. The Desktop Agent Application collects the incoming data and sends it to Learning Console.

4. The Learning Console processes the data, generates an XML file, and sends the file to Script Generator to generate project resource files.

5. The supervisor manually inserts the project resource files, js files and xml files, into the database and in DTA_USER_ACCESS table with the help of database queries.

Chapter 6: Managing Monitoring Mode

Monitoring mode

In Monitoring mode, you can use the following login types depending on your environment:

- Individual user login: One instance of Desktop Agent Service and one instance of Desktop Agent Application run on each employee machine to be monitored. Example, desktop environment.
- Single server multiple user login: One instance of Desktop Agent Service associated with multiple users' login and multiple instances of Desktop Agent Application run on employee machine to be monitored. Example, Cywayitrix environment.

In the Monitoring mode, Avaya Desktop Agent Service runs on each employee machine to be monitored.

The sequence of execution in the Monitoring mode is as follows:

1. When an employee logs on to the desktop, Desktop Agent Service sends a notification to Desktop Agent Server.
2. Desktop Agent Server copies all the project resource files and XML files to Desktop Agent Service and Desktop Agent Application on the local machine. The default location is `C:\ProgramData\Avaya\Data`.
3. Desktop Agent Application processes these files and injects the code into the running instances of Desktop Agent Server to capture the employee activities. The Desktop Agent Server sends back the captured data and triggers to Desktop Agent Application.
4. The Desktop Agent Application collects and processes the data and generates events such as Pause, Resume, Call Data, Start and Stop.
5. The event triggers are sent to the Desktop Agent Server through a Desktop Agent Service.
6. The Desktop Agent Server sends events to the Recorder, and then the Recorder updates the Call Data in the database.
7. The program resource files and XML files have the list of URLs. When an agent opens a document or application, the browser sends the URL information to the Desktop Agent Application. The Desktop Agent Application verifies the URL in the program resource files and XML files and injects the code into the browser.
8. Based on the triggers configured, you can capture:
   - Application start and stop events.
   - Contextual data such as application name, user ID, and machine name.
   - Events with data and time.

- Changes to fields or data within the application.
- Navigation information such as click, mouse over and mouse out.

✳ Note:

- If a voice or a non voice interaction configured for screen capture recording is paused, then during live monitoring or playback, Avaya Workforce Optimization Select displays the ⊘ image to indicate that no screens are captured during the paused state.

- If a voice or non voice interaction configured for screen capture recording is terminated when the recording is paused, then during playback, Avaya Workforce Optimization Select displays the ⊘ image during the paused state and at the end of the screen cast.

Limitation

In Internet Explorer, when you create and try to reload the project or refresh the project URL, the reload fails. This issue occurs because when you press the reload button or the refresh key (F5), the system still uses the cached data. However, a user can manually reload the page by clicking on the URL and then pressing the Enter key.

Chapter 7: Managing Learning Console

Learning Console configuration

To successfully implement Desktop Agent, you must identify the applications that you must monitor and track and then configure the Learning Console.

In the Learning mode, you can configure the Learning Console to capture:

- Web applications and native applications that a user visits.
- Screen images that a user browses or visits.
- Application-specific data such as specific button clicks or mouse out or mouse over or field changed events.
- Business data associated with interactions.

You can configure all user-level activity and export it to agent desktops that are to be monitored.

Use Projects as a placeholder to define the applications that you must monitor, track, and analyze. Each Project is an abstract entity that contains a collection of automation rules configured for the Desktop Agent. Depending on the business problem that you want to address or the business process that you want to improve, you can create more than one project.

The following diagram depicts the steps to create a project and assign it to a user:

```
┌─────────────────────────────────────┐
│         Creating a project          │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│    Adding applications to a project │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│   Adding documents to an application│
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│      Adding forms to a document     │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│       Adding controls to a form     │
└─────────────────────────────────────┘
```
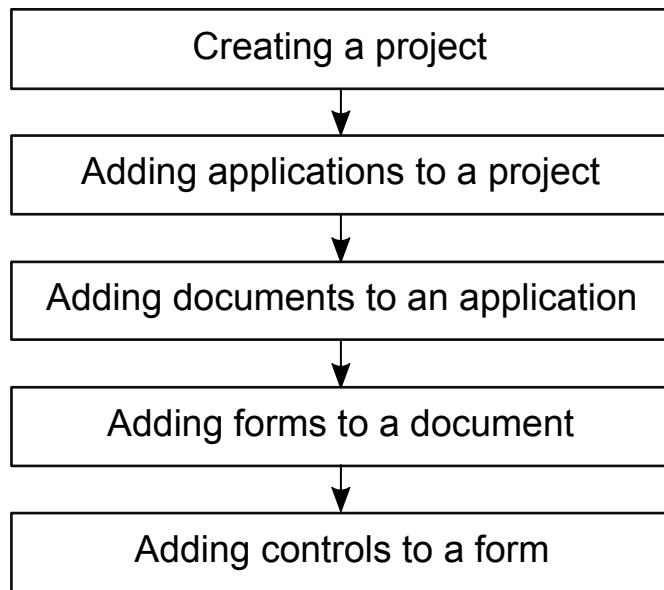
Limitations:

- Learning is not supported for cross domain URLs, iframes, plug-ins, and advertisements in web URLs.
- Monitoring pop up windows, files, and buttons using the payload feature is not supported for native apps.
- Learning and monitoring of Avaya native apps made with .net, java apps are not supported for native apps.
- Learning in high level apps or secure native apps is not available without administrative permissions.
- Learning is not available for File Explorers and windows pop-ups.
- Monitoring is not available for multiple applications within the same native app.
- Learning is not supported in Citrix Zen Desktop.
- Call Data is not captured if the variable name is in upper case.
- Learning and monitoring are not supported in websites that contain document mode 7, 8, 9, and 10. Only document mode 11 is supported.

Learning Console configuration checklist

This checklist provides the steps for configuring the Learning Console in Learning mode.

No.	Task	Description	Notes	✔
1	Enable the Desktop Monitor add-ons in the following browsers: • Internet Explorer • Google Chrome • Mozilla Firefox	See • [Enabling Desktop Monitor add-ons in Internet Explorer](#) on page 19. • [Enabling Desktop Monitoradd-ons in Google Chrome](#) on page 19.		
2	Create a Project to monitor applications on employee desktop.	See [Creating a project](#) on page 20.		
2	Add applications.	See [Adding an application to a project](#) on page 21.		
3	Add a document to monitor.	See [Adding a document to an application](#) on page 23.		
4	Add a form from which you want to capture data.	See • [Adding a default form](#) on page 25. • [Adding a custom form](#) on page 25.		
5	Add controls to track and analyze employee actions.	See [Adding controls](#) on page 26.		
6	Add actions on which you want to capture employee actions.	See [Adding actions to user actions](#) on page 28.		
7	Add payloads to capture data from employees' desktop.	See [Adding a Payload](#) on page 30.		
8	Save the project.	See [Saving a project](#) on page 32.		
9	Execute Database scripts, and push projects to agent desktops to monitor.	For more information, see *Deploying Avaya Workforce Optimization Select with Avaya Aura® Communication Manager and Avaya Aura® Contact Center* .		

Enabling the Desktop Monitor add-ons in different browsers

Enabling Desktop Monitor add-ons in Internet Explorer

About this task

Use this procedure to enable the Desktop Monitor add-on, HarmonyBHO.dll for 32–bit machine or HarmonyBHO64.dll for 64–bit machine, in Internet Explorer. By default, the browser add-ons for Desktop Monitor are installed in the user's local machine while installing Screen Capture.

Procedure

1. Click **Start** > **Internet Explorer**.

2. On Internet Explorer, click **Tools** > **Manage add-ons**.

3. On the Manage Add-ons page, click one of the following:

   - `HarmonyBHO.dll` :Browser add-on for IE 32–bit machine.

   - `HarmonyBHO64.dll` :Browser add-ons for IE 64–bit machine.

4. Click **Enable** > **Close**.

Next steps

Close the IE browser and open again.

Enabling Desktop Monitoradd-ons in Google Chrome

About this task

Use this procedure to enable the Desktop Monitor add-on, `AvayaDesktopAgent` in Google Chrome. By default, the browser add-ons for Desktop Monitor are installed in the user's local machine while installing Screen Capture.

Procedure

1. Click **Start** > **Google Chrome**.

2. On Google Chrome, click **Settings** > **Extensions**.

3. On the Extensions page, select the **Enable** checkbox next to `AvayaDesktopAgent` and close the window.

Next steps

Close the Chrome browser and open again.

Enabling Desktop Monitor add-ons in Mozilla Firefox

About this task

Use this procedure to enable the Desktop Monitor add-on, `AvayaDESKTOPAGENT`, in Mozilla Firefox. By default, the browser add-ons for Desktop Monitor are installed in the user's local machine while installing Screen Capture.

Procedure

1. Click **Start** > **Mozilla Firefox**.

2. On Mozilla Firefox, click the **Manage your add-ons** > **Extensions** icons.

3. Click the **Enable** tab next to `AvayaDESKTOPAGENT`.

Next steps

Close the Mozilla Firefox browser and open the browser again.

Creating a project

About this task

Use this procedure to configure projects that define what applications you want to monitor on an agent desktop.

Procedure

1. Start the Learning Console, and select one of the following:

   • **New Project**

   • **Recent Projects**

2. For a new project, enter a name and description.

3. Click **OK**.

Example

For example, if you want to create a project that captures back office desktop processes for banking transactions, create a project named Back Office.

Editing a project

Before you begin

Create a project.

Procedure

1. On Learning Console, click **Project** > **Recent** > *x*.

   Here, *x* is the name of the project that you want to edit.

2. Right-click on *x* and click **Edit Project**.

   The system displays the Edit Project page.

3. Change the name and the description of the project.

4. Click **OK**.

Adding an application to a project

About this task

Use this procedure to add applications that you want the Desktop Monitor to monitor and capture. You can add more than one application to a project.

Before you begin

Create a project.

Procedure

1. Right-click the project, and select **Add Application**.

2. Enter the required details in the following fields:

   • **Alias**

   • **Name**

3. In **Category**, click one of the following:

   • **Web Applications**: In **Domain**, type the domain of the web.

   • **Native Applications**: The **Domain** name changes to **Executable** and the **Type** field changes to MFC. Click **Browse** to select the required `.exe` file.

4. Click one of the following:

   • **OK**: To save the application details.

   • **OK & Add Another**: To add another application.

   • **OK & Add Document**: To add a document.

   • **Cancel**: To cancel the process.

Next steps

Add a document.

Related links

[Configure Application field descriptions](#) on page 22

Configure Application field descriptions

Name	Description
Alias	The alias name of the application.
Name	The name of the application.
Category	The category of the application. The options are: • **Web Applications**: Applications that run within a browser. • **Native Applications**: Applications that are native, such as Notepad.
Type	The type of application within a specific category. The options are: • **Simple Web App (HTML/JS)**: Applicable for web applications. • **MFC**: Applicable for native applications. • **C/C++**: Applicable for native applications.
Domain	The domain name of the web application. Learning Console displays this field only when you select **Web Applications** in the **Category** field.
Executable	The executable file of the native application. Learning Console displays this field only when you select **Native Applications** in the **Category** field. You must use **Browse** to browse and select the executable file.
Actions	The user actions within the application. The options are: • **Open** • **Close** You can map custom events with each user action.
Instance Specific Expr Evaluation	The mechanism for evaluating the user actions coming from different instances of an application. The options are: • **Automatic**: Avaya Desktop Agent evaluates the user actions automatically. • **Enable**: Avaya Desktop Agent evaluates the user actions independently grouped by the instance. • **Disable**: Avaya Desktop Agent evaluates the user actions as if they are coming from a single instance of the application.

Related links

Adding a document to an application

About this task

Use this procedure to create a document and capture the URL of the application for capturing agent activities. You can add multiple documents to capture different pages within a single application. You can add a document only in web applications, and not in native applications.

Note that if you refresh the page on Internet Explorer using the refresh key (F5), the Learning Console does not reload the URL because the system uses cached data. However, a user can manually reload the page by clicking on the URL and pressing the **Enter** key.

Before you begin

Add an application to a project.

Procedure

1. Open the web application that you want to monitor on the employee machine.

2. In Learning Console, right-click on the application, and click **Add Document**.

3. Reload the web application.

   Learning Console displays a set of blank fields.

4. Enter the required information in the fields.

5. Click one of the following:

   • **OK**: To save the document details.

   • **OK & Add Another**:To add another document.

   • **OK & Add Form**: To add a form to the document.

   • **Cancel**: To cancel the process.

Next steps

Add a form.

Related links

Document field descriptions

Name	Description
Alias	The alias name for the document.
Name	The name of the application.
Document	The name of the document that contains the URL of the application.
URL Match	The options used to search and match the URL of the application that is monitored. The options are: • **Exact** The Learning Console searches for the exact match of the URL as specified in the **Document** field. For example, if you set the **Document** is `http://google.com` and select this option, the Learning Console captures only the controls and triggers defined for this page. • **Partial Match** The Learning Console searches for keywords or strings to match in the URL as specified in the **Document** field. • **RegEx** The Learning Console searches for a special text string used to describe a search pattern in different applications.
Match Value	The value to match when searching for **Document**. The default is the value captured by the Spy tool. You can change the value from the default value to another value.
User Actions	The user actions for the document. The options are: • **Open** • **Load** • **Unload** For each of the above user actions, you can map actions such as **PAUSE**, **RESUME**, **START**, **STOP**, and **CALL_DATA**. For example, you can configure the application to pause when the page loads, and resume when the page unloads.

Related links

Adding a default form

Before you begin

Add a document.

About this task

A form defines what you want to monitor or capture within a document. Add controls to define the user activity that needs to be captured within a document. You can add multiple controls within a form.

> **Note:**

Native applications do not support forms.

Procedure

1. Right-click on the document and select **Add Form**.

2. Enter the name and alias name for the form.

3. To save the form, click **OK**.

4. To add another form, click **OK & Add Another**.

5. To add controls to the document, click **OK & Add Controls**.

Next steps

Add controls.

Adding a custom form

Before you begin

Add a document.

About this task

You can add forms under the default or custom categories.

A web page which has different sections within the page is captured as a custom form.

> **Note:**

Learning is not supported for cross domain URLs, iframes, plug-ins, and advertisements in web URLs.

Procedure

1. Drag and drop the spy (⊕) icon to add a control to a form.

   The system displays a message to confirm whether you want to add a custom form.

2. Type the required details.

3. To save the form, click **OK**.

4. To add another form, click **OK & Add Another**.

5. To add controls to the document, click **OK & Add Controls**.

Next steps

Add controls.

Related links

[Custom form field descriptions](#) on page 26

Custom form field descriptions

Name	Description
Alias	The alias name for the form.
Name	The name of the form.
Form ID	The class ID of the form. This field is automatically populated when you capture the page using the spy tool.
Form Class	The name of the class. This field is automatically populated when you capture the page using the spy tool.
User Actions	The user actions to be captured for the form. The options are: • **Load** • **Unload** For each of the above user actions, you can map actions such as **PAUSE**, **START**, **RESUME**, **STOP**, and **CALL_DATA**.

Related links

[Adding a custom form](#) on page 25

Adding controls

Before you begin

Add form to a document.

About this task

Add controls within a form to capture a particular action such as a click or a text input in the application or page. Controls can be input text boxes, radio buttons, and checkboxes. You can also add multiple controls to a form.

> ✳ **Note:**

You cannot add drop down list as a control within a form.

Procedure

1. Right-click on the document, and select **Add Form**.

2. To add a control, drag the spy (⊕) icon to the section in the page you want to capture.

   The Learning Console automatically identifies the control properties.

3. On the web application page, drag and drop the spy tool on the control you want to monitor.

   The Learning Console automatically identifies the properties of the control.

4. If you want to enable monitoring of sibling control types, select **Enable Sibling**.

5. Select the appropriate user action that you want to monitor, and click **OK**.

Related links

Controls field descriptions

Name	Description
Alias	The alias name for the control.
Name	The name of the control.
Type	The type of the control. This field is automatically populated when you drag and drop the spy tool. If you drop the spy tool on a button, the field is populated as Button.
ID	The identifier that is unique to the type of the control. This field is automatically populated.
Value	The value, position, width, height of the control. This field is automatically populated.
Class Name	The class name of the control. This field is automatically populated.
Enable Sibling	The option to enable monitoring of sibling control types. For example, select the check box if you want to monitor when the agent clicks on any or all of the buttons in a document.

Table continues…

Name	Description
User Actions	The user actions for the control. The options are: • **Click** • **Mouseover** • **Mouseout** For each of the above user actions, you can map actions such as **PAUSE**, **RESUME**, and **CALL_DATA**. **Note:** Native applications do not support mouseover and mouseout controls.

Related links

[Adding controls](#) on page 26

Adding actions to user actions

About this task

You can manually map one or more actions to every user action.

Procedure

1. In **User Action**, click the **Manage User Action** (🖼) icon for the action that you want to map to a user action.

2. On the Select Actions screen, select the checkbox from the Available Actions column, click the ▶ icon, and click **OK**.

   You can add one or more actions from the Available Actions column to the same user action.

   The Selected Actions column displays the actions that you have selected for an user action.

3. **(Optional)** To remove one or more selected actions, select the checkbox from the Selected Actions column, click the ◀ icon and click **OK**.

Related links

[Actions field descriptions](#) on page 29

Actions field descriptions

Name	Description
TIMERS	
PAUSE	To capture critical information entered in the control that is mapped within an application.
	For example, to pause or mute voice recordings especially when the customer is providing critical information like credit card details over the phone.
RESUME	To resume the capture of events within an application.
	For example, you can use the action specifically after using the **PAUSE** action.
CALL_DATA	To capture the text entered by a user in the application that is configured for monitoring.
STARTSCREEN	To start screen capture on the user desktop.
STOPSCREEN	To stop screen capture on the user desktop.

Related links

Payload

Payload is the data that a user enters, which is captured in Learning Console. Payload can be divided on the following two types depending on the value it is assigned.

- Static Payload: A fixed value given to a control. You can specify a static payload for values which never change.

- Dynamic Payload: Any value given at run time to a control that is whatever value the user enters, the data is captured.

The data is captured in three different scenarios:

- Control and Payload are same

- Control and Payload are from same row

- Control and Payload are from different rows

Adding a Payload

Before you begin

Add Actions

About this task

When you map a user action with **Actions** such as **CALL_DATA**, you can add **Payload** to define whether the content that is captured must be static or dynamic.

✳ Note:

For native applications, you cannot monitor pop-up windows, and files using the Payload feature.

Procedure

1. In **Actions**, select a user action on which you want to map a **Payload**.

2. Click the ✚ icon on **User Action**.

3. On the Actions screen, select the **Payload**.

   You can add one or more than one **Payload** for the same user action.

4. Select event call data.

5. Click **Add Payload**.

6. Click **Dynamic Payload**.

7. Drag the **Spy** icon on control.

8. In the **Payload Name** field, type `Var1`.

9. Click **Add** and save the project.

Related links

[Add Payload field descriptions](#) on page 30

Add Payload field descriptions

Static Payload

Name	Description
Name	The name of the payload.
Value	The value of the payload.

Dynamic Payload

Name	Description
Payload Name	The name of the payload.

Table continues…

Name	Description
Control ID	The identifier of the control.
Control Name	The name of the control.
Control Class	The class of the control.
Control Type	The type of control.
Control Value	The value of the control.
Value Filter RegEx	The value based on which Avaya Desktop Agent searches for a special text string.
Process Siblings	The check box to process the sibling control types. If you select this check box, you must select the sibling of the control. You can add Sibling payloads in three ways: • Control and payload are same • Control and payload are from the same row • Control and payload are from the different rows

Related links

Siblings

Siblings are group of controls that consists of same properties in a particular form. Siblings can also be same controls from same HTML parent.

Siblings are used when a user needs to add more than one control to an action. Siblings are applicable to controls which consists of some common properties and for tabular data, such as, rows and columns.

Refer to the following example table to understand the concept of Siblings in Learning Console:

Rank	Team	Matches	Points	Rating
1	A	24	3008	125
2	B	32	3376	106
3	C	36	3686	102

In this sample table, each column or row can be siblings of each other. For example, if you add 1 as a control in the Rank column, you can choose 2 as its sibling. When you enable sibling for 1 and add a user action for control, the user action is also valid for its siblings. For example, if you added user action for control 1 to generate pause event, and click either of the siblings 2 or 3, the pause event is generated.

The siblings payload can be added in the following three scenarios:

- Control and Payload are same
- Control and Payload are from the same row
- Control and Payload are from different rows

Adding siblings

About this task

Use this procedure to add siblings after you enable sibling in controls.

Before you begin

Add controls.

Procedure

1. While adding controls, select the **Enable Siblings** checkbox.

   The system displays a pop-up window.

2. Drag and drop the **Spy** icon to the control you want to add as a sibling.

3. Click **OK**.

4. Select the **Enable Sibling Processing** checkbox.

5. On the **Payload Name** field, type `var1`.

6. Drag and drop the **Spy** icon on payload1 (control1).

7. Select the **Process Sibling** checkbox.

8. Drag and drop the **Spy** icon on another control, control2.

9. Click **OK** and save the project.

Saving a project

About this task

Use this procedure to save a project after you added all the hierarchal elements to the project.

Before you begin

Add all the required elements to the project.

Procedure

Click **Project** > **Save**.

Exporting a project

About this task

You can export a project for sharing the project with other users.

The supervisors with whom you share the project can the monitor configured agents.

Procedure

1. Click **Project** > **Export**

   The system displays the Export Projects window.

2. Click the checkbox corresponding to the project you want to export and click **OK**.

   To export all the projects, select the **Select All** checkbox.

   The system saves the project with an `.admb` extension in your specified location on your local machine, where admb stands for AWFOS Desktop Monitor Backup Files.

Importing a project

About this task

Use this procedure to import a project from your local machine. You can save a copy of the project to create a backup, and then import the project later from your local machine to Learning Console make changes in it.

Procedure

1. Click **Project** > **Import**.

2. Go to the location where you had saved your project with an `.admb` extension.

3. Click on the file you want to import and click **Open**.

   The system displays the message: `Project(s) imported successfully. Use the project open dialog to open.`

Deleting a project

Procedure

1. Click **Project** > **Recent** > *x*.

   Here, *x* is the project that you want to delete.

2. Right- click on *x* > **Delete Project**.

The system displays the message: `Deleting the project will cause all the saved in this project to be permanently lost. Are you sure, you want to delete this project?`

3. Click **Yes**.

Chapter 8: Monitor employee desktop

After you configure Learning Console and complete creating appropriate projects, you must push the project XML files onto all the employee machines. For more information see, *Deploying Avaya Workforce Optimization Select with Avaya Aura® Communication Manager and Avaya Aura® Contact Center* .

The desktop application stops monitoring if an employee refreshes the page that needs to be monitored using the refresh key (F5) in Internet Explorer. However, an employee can manually reload the page by clicking on the URL and then pressing the Enter key.

Chapter 9: Troubleshooting

Learning console not working

Condition

When a user tries to create or edit a project in Learning Console, the Learning Console functionalities fail to work as desired.

Cause

The Desktop Monitor add-ons got deleted unintentionally from Internet Explorer, Mozilla Firefox, and Google Chrome browsers.

Solution 1: To recover add-ons in Internet Explorer

Ensure that you have the following Broswer Helper Object (BHO) files in your screen folder:

- `HarmonyBHO.dll`: Browser add-ons for IE 32–bit

- `HarmonyBHO64.dll`: Browser add-ons for IE 64–bit

1. Click **Start** > **Internet Explorer**.

2. On the Internet Explorer Home page, click **Tools** > **Manage add-ons**

3. On the Manage Add-ons page, click the BHO files you added in Step 1.

4. Click **Enable** and close the page.

5. Restart the machine and check enable the add-ons after the restart.

6. **(Optional)** If the problem still persists, contact the system administrator.

Solution 2: To recover add-ons in Google Chrome

Ensure that you have the following files in your screen folder:

- `harmonydta.crx`

- `ChromeNMH.exe`

- `harmonydta.xml`

- `manifest.json`

⚠️ **Warning:**

Before making changes in the registry, make sure you have a full backup of your system. If anything goes wrong, you might end up losing all your data and reinstalling Windows.

1. To go to the registry, click **Run** on the Start menu, type `regedit`.

The system displays the Registry Editor page.

2. On the Registry Editor page, go to `HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Google\Chrome\NativeMessagingHosts`.

3. Right-click on the `NativeMessagingHosts` folder, click **New > Key**.

4. Rename the new key to `chrome.dm.nativemessaging.host.win`

5. Right-click on the `NativeMessaging` folder, click **New > String Value**.

6. Click on the **New Value#1** row.

7. On the Edit String window, type the required information in the following fields:

   • Value name: `Default`.

   • Value data: `C:\Program Files (x86)\Avaya\Screen\manifest.json`

8. Click **OK**.

9. Check if the `C:\\Program Files (x86)\\Avaya\\Screen\\ChromeNMH.exe` file is present in the `manifest.json` file.

10. On the Registry Editor page, go to `HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Policies\Google\Chrome\Extensions`.

11. Right-click on the `Extensions` folder, click **New > Key**

12. Rename the new key to `ExtensionInstallForcelist`

13. Right-click on the `Extensions` folder, click **New > String Value**.

14. Click on the **ExtensionInstallForcelist** row.

15. On the Edit String window, type the required information in the following fields:

   • Value name: `1`.

   • Value data: `lbgpiikogfeokonlkmejcfpffgnonbcc;file:///C:/Program Files (x86)/Avaya/Screen/harmonydta.xml`

16. Click **OK**.

17. Go to the `harmonydta.xml` folder and edit add path to `file:///C:/Program Files (x86)/Avaya/Screen/HarmonyDTA.crx`.

18. Restart the machine and enable the add-ons after the restart.

19. **(Optional)** If the problem still persists, contact the system administrator.

Solution 3a: To recover add-ons in Mozilla Firefox

You can use either Solution 3a or Solution 3b to recover the add-ons in Mozilla Firefox for 64–bit machine. For 32–bit machine, use only Solution 3a.

Ensure that the following file is available in the screen folder: `AvayaDESKTOPAGENT.xpi`

⚠ **Warning:**

Before making changes in the registry, make sure you have a full backup of your system. If anything goes wrong, you might end up losing all your data and reinstalling Windows.

1. Click **Start > Mozilla Firefox** .

2. Drag the `AvayaDESKTOPAGENT.xpi` file from the screen folder to the Firefox dashboard.

   The system displays the message: `This site would lie to install an add-on in Firefox:`

3. Click **Install** > **OK**.

4. Restart the machine and check enable the add-ons after the restart.

5. **(Optional)** If the problem still persists, contact the system administrator.

Solution 3b: To recover add-ons in Mozilla Firefox

You can use either Solution 3a or Solution 3b to recover the add-ons in Mozilla Firefox for 64–bit machine.

Ensure that the following file is available in the screen folder: `AvayaDESKTOPAGENT.xpi`

⚠️ **Warning:**

Before making changes in the registry, make sure you have a full backup of your system. If anything goes wrong, you might end up losing all your data and reinstalling Windows.

1. To go to the registry, click **Run** on the Start menu, type `regedit`.

   The system displays the Registry Editor page.

2. On the Registry Editor page, go to `HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Mozilla\Chrome\Firefox\Extensions`.

3. Right-click on the `Extensions` folder, click **New** > **Key**.

4. Rename the new key to `Extensions`

5. Right-click on the `Extensions` folder, click **New** > **String Value**.

6. Click on the **New Value#1** row.

7. On the Edit String window, type the required information in the following fields:

   - Value name: `harmonydta@avaya.com`.

   - Value data: `C:\Program Files (x86)\Avaya\Screen\AVAYADESKTOPAGENT.xpi`

8. Click **OK**.

9. Restart the machine and check enable the add-ons after the restart.

10. **(Optional)** If the problem still persists, contact the system administrator.

Error messages while installing and configuring Screen Capture

Timer Expired error

Condition

Connection to proxy server failed and the reason code is 0. The system displays the error message: `Timer Expired`.

Cause

The IP address of the proxy server in the screen registry is incorrect.

Solution

1. Right-click on the **Start** button and select **Run**.

   The system displays the Run window.

2. In the **Open** field, type `regedit` and click **OK**.

3. On the Registry Editor window, go to `HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\AVAYA\Screen`.

4. Click the `Screen` folder.

5. In **ConnectURL**, enter the required IP address and restart **ScreenCapture Service**.

6. **(Optional)** If the IP address is correct, then check **Tenant** is set to Default and restart **ScreenCapture Service**.

Invalid HTTP status error

Condition

Connection to proxy server failed and the reason code is 503. The description is Invalid HTTP status.

Cause

The Unified Messaging service is down.

Solution

1. To open your Windows Services manager, do the following:

   a. Right-click on the **Start** button and select **Run**.

      The system displays the Run window.

   b. In the **Open** field, type `services.msc` and click **OK**.

      The system displays the Services window.

2. On the Services page, click on the **AWFOSMessaging service** row.

3. To start the UM service, click on the **Start** link.

Underlying Transport error

Condition

DTA Resource Client connection to proxy failed and the reason code is 0. The description is Underlying Transport Error.

Cause

The agent network id is not configured properly or the employee user name is missing in the Avaya Workforce Optimization Select web.

Solution

1. Open the Avaya Workforce Optimization Select web url.

2. Navigate to the employee details and provide the correct user name.

3. In the harmony employee table on database, check if the user name is same as the network ID.

   Make the changes if the user name and the network ID are different.

4. Start the Unified Messaging services or the Screen services to view the changes.

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