Maintaining WebEx Virtual Classrooms
Using Skype or Lync for Virtual Training

SAP

SAP SuccessFactors ♡

Content

What's New in the Connection to WebEx

Keep track of the quarterly changes to how you connect SAP SuccessFactors Learning to WebEx for virtual learning.

Q4 2016

Table 1: The following table summarizes changes to this guide for the Q4 2016 release

What's New	Description	More Info
Instructor VLS Passwords	Instructors can manage their VLS passwords for Adobe Connect or WebEx.	Enabling Instructors to Change their VLS Passwords [page 13]
Advice for Instructor Passwords	If the instructors' VLS accounts are strictly for instruction, you might want to manage them centrally. We added that distinction.	Configuring Instructors for VLS [page 11]

Q3 2016

Table 2: The following table summarizes changes to this guide for the Q3 2016 release

What's New	Description	More Info
Support Change	Although this does not affect your configuration or this guide, we updated the VLS connection to support WebEx WBS31 (T31).	N/A

Q2 2016

Table 3: The following table summarizes changes to this guide for the Q2 2016 release

What's New	Description	More Info
No Changes	We did not change this document for Q2 2016.	

Q1 2016

Table 4: The following table summarizes changes to this guide for the Q1 2016 release

What's New	Description	More Info
Removed `sync` option	The `sync` option applied to **on premises** installations, but it is not relevant to cloud products. We removed the setting from documentation because it is no longer used. If it is present in the configuration files, it is ignored.	WebEx Configuration Settings [page 7]

Q4 2015

Table 5: The following table summarizes changes to this guide for the Q4 2015 release

What's New	Description	More Info
No Changes	We did not change this guide for Q4 2015.	

1 SAP SuccessFactors Learning Virtual Learning Service (VLS)

The Virtual Learning Service (VLS) is the integration between virtual meeting rooms like WebEx or Adobe Connect and SAP SuccessFactors Learning.

If your company holds training in online meeting spaces like WebEx and Adobe Connect, you can use the Virtual Learning Service (VLS) to connect users directly to the meeting rooms where their training takes place. When the meeting spaces are connected through VLS, users can open a virtual meeting room by clicking a link in their assignments lists.

2 Configuring the Virtual Learning Service

Configure the Virtual Learning Service (VLS) so that your users can open virtual meeting rooms directly from their *My Assignments* tile.

Context

When you configure the Virtual Learning Service (VLS), you create an API connection to a virtual meeting room vendor. That connection manages the virtual training sessions: users can launch them from their assignments and learning administrators can schedule them from the administration environment.

Procedure

1. Request a VLS configuration file from Customer Success.

   By requesting a copy, you receive the latest XML version of the file. When you talk to Customer Success, tell them your meeting room vendor.

2. Configure the file for WebEx.

   WebEx Configuration Settings [page 7]

3. Open the SAP SuccessFactors Learning administration environment.

4. Go to ▌ *System Admin* ❯ *Configuration* ❯ *VLS Configuration* ▐ .

5. Click *Add New* and add the configuration file.

6. Go to ▌ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *LMS_ADMIN* ▐ .

7. Find `vleEnabled` and change its value to **true**.

Related Information

WebEx Configuration Settings [page 7]

2.1 Sample WebEx VLS Configuration File

To connect SAP SuccessFactors Learning with WebEx, you add the WebEx XML configuration file.

🍃 Sample Code

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<connector>
    <description>Webex Training Center 5.0</description>
    <!-- Do not change connector_class -->
    <connector_class>com.plateausystems.elms.framework.
vle.impl.WebExConnector</connector_class>
    <xml_api_address>[provided by WebEx]</xml_api_address>
    <url_api_address>[provided by WebEx]</url_api_address>
    <site_name>[provided by WebEx]</site_name>
    <username>[Must have Site Admin privilege.]</username>
    <password>[Your password]</password>
    <listing_type>[select from list below]</listing_type>
    <elms_url_prefix>/vle</elms_url_prefix>
    <inst_default_password>plateau</inst_default_password>
    <telephony_option>CALLBACK</telephony_option>
    <connector_type>MEETINGCENTER</connector_type>
    <timezones>
      <timezone name="Pacific/Apia" value="1"/>
      <!-- ==== Time zones removed for brevity ==== -->
    </timezones>
</connector>
```

2.2 WebEx Configuration Settings

Set the values of the WebEx configuration file to control how SAP SuccessFactors Learning communicates with WebEx.

Table 6:

Element	Description
connector_class	Do not modify the connector class unless you are instructed to do so by SAP SuccessFactors Learning engineering team.
xml_api_address	API address provided by WebEx.
url_api_address	API address provided by WebEx.
site_name	Name of site provided by WebEx.
username	Site-specific user name. This user must have admin rights to the server.
password	Site-specific password.

Element	Description
listing_type	Listing type controls how your meetings appear to WebEx users of the site. Although the instructor is always responsible for managing attendance, how you set the listing type influences who can find and attend the virtual learning sessions. The values can be the following: • **UNLISTED**: The meeting is not listed on the WebEx site, but invitees can join the meeting if they know the meeting number. • **PUBLIC**: Everyone can view or join the meeting. • **PRIVATE**: Only invitees can join the meeting.
elms_url_prefix	The Electronic Learning Management System (ELMS) URL is relative to the SAP SuccessFactors Learning server. For example, if the SAP SuccessFactors Learning server is http://tms.company.com/learning, then a value of /vle in elms_url_prefix points to http://tms.company.com/vle. In most cases, you can use the default.
inst_default_password	The default account password for instructors. Instructors do not have an interface to the LMS; therefore, when an account is created on the server, a default password must be supplied with the Instructor ID.
telephony_option	Telephony options control how the system makes users' voice connection to the meeting. Allowed values: • **NONE**: (default) sessions are created without a telephony option for attendees. If you set to NONE, you disable all telephony for the meeting, including third party telephony. Integrated WebEx VoIP, however, will be available. • **CALLIN**: Attendees given a number to call (and standard meeting numbers) and are asked to dial in to the meeting. • **CALLBACK**: Attendees can use the standard callback option of WebEx. To use either the native WebEx telephony system or third party telephony, configure the teleconference options on the WebEx side and set `telephony_option` to either **CALLIN** or **CALLBACK**, depending on your preference. The third-party telephony option is available to both WebEx Meeting Center and Training Center.
connector_type	Set to either **TRAININGCENTER** or **MEETINGCENTER** depending on the type of WebEx server where you have an account. The default value is **TRAININGCENTER**.

Element	Description
timeszones	Contains the time zone maps. In most cases, you can keep the default settings in time zone maps. In some rare cases, you might need to troubleshoot the time zone map.

Related Information

3   Opening Virtual Courses Early

Open virtual courses early to allow participants to gather in the virtual meeting room before the instructor officially opens it.

Prerequisites

Configure either WebEx Training Center or Adobe Connect as a Virtual Training Service (VLS). You cannot open WebEx Meeting Center meetings early.

Procedure

1. Go to ▶ *System Admin* ❯ *Configuration* ❯ *Global Settings* ❯.
2. In *Display Join option prior to session start* set the amount of time that participants can join before the instructor.

   You can think of this setting as the online version of opening a room before instruction actually begins. It's unlikely that your participants and your instructor would arrive at exactly the same time, so you want to let your participants in a bit early.

   In ▶ *System Admin* ❯ *Configuration* ❯ *Global Settings* ❯, the *Display join option prior to session start* setting does not apply to Meeting Center. The Meeting Center API does not support Early Attendance like Training Center does.

4   Configuring Instructors for VLS

Configure instructors for the Virtual Learning Service (VLS) so that they can start virtual training sessions in virtual meeting rooms like WebEx or Adobe Connect.

Prerequisites

Before you can work with Virtual Learning Service (VLS), you must configure it. Configuring the VLS is a one-time implementation task. Please read our implementation guide for your meeting room vendor. Each server that you configure is available when you configure other parts of the application for VLS, like segments and instructors.

Add your instructors to SAP SuccessFactors Learning. Your instructors must be tracked in the system for VLS to work properly.

Context

For live training events, your instructors and students are often in different locations. Although you can fly your instructors and your participants to a central location, you can save money by configuring Virtual Learning Service (VLS). VLS integrates SAP SuccessFactors Learning and a virtual meeting room vendor so that the training and employees can meet online in a virtual meeting room.

Procedure

1. Go to ▶ *Learning* ❯ *Instructors* ❯ and search for the instructor who should have access to VLS.
2. Go the *Summary* to verify that the instructor record has a first name, last name, and email address.

   These fields are required to maintain VLS accounts in SAP SuccessFactors Learning.
3. Go to *VLS Settings*.

   VLS Settings contains the VLS servers that you created when you configured your instance of VLS.
4. In *Account ID*, type the instructor's virtual meeting room ID. If the instructor does not yet have an account, type the account ID that you want the instructor to have.
5. In *Account Password*, type the instructor's virtual meeting room password. If the instructor does not have an account, type the password that you want the instructor to have.

   This step applies if you have **not** allowed instructors to manage their own passwords. To save this step and to protect the privacy of your instructors, we recommend that you enable them to manage their own passwords.

   The password must conform to password rules set by the meeting room vendor.

6. In *Action*, select what should happen when you apply the changes.

Option	Description
Create New Account	Attempts to create a new account for the instructor. Select this option if the instructor does not yet have an account.
Use Existing Account	Tests the credentials of the instructor. If you type an incorrect *Account ID* or *Account Password* the system warns you.

7. Click *Apply Changes*.

Next Steps

You can now set up virtual segments and assign the instructor as the primary instructor for the segment.

Related Information

Adding a Virtual Segment [page 14]
Enabling Instructors to Change their VLS Passwords [page 13]

5 Enabling Instructors to Change their VLS Passwords

Enable instructors to change their Virtual Learning Service (VLS) passwords if their meeting room accounts are personal accounts that they want to keep private.

Context

If you integrate SAP SuccessFactors Learning with a Virtual Learning Service (VLS), you can either require learning administrators to manage instructor passwords, or you can allow instructors to manage their own passwords. If the instructors' accounts are for the express purpose of conducting training and **not** the instructors' personal meeting room account, then you might want a learning administrator to manage the account passwords. But if the meeting room accounts are instructors' accounts, you should enable them to manage the password. You might also enable instructors to manage their own passwords to remove a bottleneck in your process.

> ℹ **Note**
>
> Even if the accounts are for the express purpose of training and they are **not** the instructors' personal accounts, consider giving your instructors management responsibility to reduce workload on your administrators.

Procedure

1. Go to SAP SuccessFactors Learning administration and then go to ▶ *System Admin* ❯ *Security* ❯ *Role Management* ❯.
2. Find and open the role you are using for your instructors.
3. Open *Workflows*.
4. Add the Edit Virtual Learning Account workflow.

6   Adding a Virtual Segment

Add a segment as a virtual segment when you want users to meet in a virtual meeting room like WebEx or Adobe Connect.

Prerequisites

Before you can work with Virtual Learning Service (VLS), you must configure it. Configuring the VLS is a one-time implementation task. Please read our implementation guide for your meeting room vendor. Each server that you configure is available when you configure other parts of the application for VLS, like segments and instructors.

A virtual segment must be started by an instructor, so you must create at least one instructor with VLS privileges, authorize the instructor to teach the course, and add the instructor as a resource to the virtual segment.

Context

When yo set up virtual segments, users can gather for training virtually. They click a link in their *My Assignments* tile and launch a virtual meeting room session where they can meet with the training. By using virtual segments, you can save on travel for training and still track training, including participation for completion, scheduling, attendance, and so on.

Procedure

1. Go to ▌ *Learning* ❯ *Scheduled Offerings* ❯ *Segments* ▐ and then click *Add Segments* (⊕).
2. Schedule the segment.
3. Click *Add Resources* (⊕) and then click *Instructor* to add an instructor who can launch the virtual segment.

   Virtual segments require a primary instructor who has a VLS account and who is authorized to teach the course. Without an instructor with a VLS account, there is no one to start the virtual training session. Additional metrics like total time in the VLS rely on the time that the instructor opens the virtual segment.
4. Select *Segment is Virtual*.

   The system shows *Segment is Virtual* only if `vleEnabled` is set to **true** in ▌ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *LMS_ADMIN* ▐. This step is part of setting up the VLS.
5. To allow external users (users **not** listed in ▌ *Users* ❯ *Users* ▐) to log in to the virtual meeting room, type a password in *VLS Password*.

When internal users enter the meeting room through a link in an email message from the Learning Management System (LMS) or through their *My Assignments* tile, they are authenticated through the LMS. External users cannot be authenticated through the LMS and therefore need a password.

For Meeting Center virtual meeting rooms, the VLS does not have an option to set password for event registration.

> ℹ **Note**
>
> External users' attendance is **not** tracked in the LMS.

6. Select a session type in *Session Type*.

   A session type defines the features and options that are available for your virtual training. Session types are unique to WebEx VLS systems. You create session types in your WebEx administration environment.

7. Choose how you want attendees to connect their voice to the virtual meeting room in the *Teleconferencing* list.

Option	Description
No Teleconferencing	Integrated WebEx Voice over IP (VoIP) is available but users cannot dial in or out with a telephone.
Call In	Attendees given a number to call (and standard meeting numbers) and are asked to dial in to the meeting.
Call Back	Attendees can use the standard callback option of WebEx.

   The options in the *Teleconferencing* list are unique to WebEx. They are controlled by the WebEx VLS configuration file, in the `telephony_option` setting.

8. In session details, type text that you want to send to users in their email invitations to this virtual learning. For example, you can type dial in numbers or you can ask that users please mute their phones.

9. Click *Save*.

Related Information

[Configuring Instructors for VLS \[page 11\]](#)

7 Configuring VLS Segments to Record Learning Events

Configure VLS segments to record learning events so that internal users receive credit for attendance.

Prerequisites

Before you can work with Virtual Learning Service (VLS), you must configure it. Configuring the VLS is a one-time implementation task. Please read our implementation guide for your meeting room vendor. Each server that you configure is available when you configure other parts of the application for VLS, like segments and instructors.

Create at least one virtual segment on the scheduled offering. Without a virtual segment, you cannot record learning for the virtual segment.

Configure the VLS attendance processing Automatic Process Manager (APM): ▶ *System Admin* ❭ *Automatic Processes* ❭ *VLS Attendance Processing* ❭

Context

By configuring VLS Segments to record learning events, you can assure that participants in virtual segments have been in the virtual room for a set period of time before they are marked complete.

Procedure

1. Go to ▶ *Learning* ❭ *Scheduled Offerings* ❭ and click *View All* to see *Additional Settings* for the scheduled offering.
2. Set *Automatically record learning events after scheduled offering has completed*.

Option	Description
Yes	We recommend setting to `Yes` so that the VLS Attendance Processing can automatically record learning events for virtual learning.
No	If you set to no, then you must use some other mechanism, like the learning event recorder to record the learning event. Instead of automatically reading the attendance from the meeting room vendor, you need to run a report from the vendor and select users who attended.

3. Set *Minimum Attendance Percentage for Credit*.

   Although you are not required to set *Minimum Attendance Percentage for Credit*, you gain some advantages with virtual learning. The system calculates attendees' participation time by dividing the total time of the

session (as determined by when the instructor launched and ended it) into the time that a user spent in the session.

4. Set *For Credit Completion Status* and *Non-Credit Completion Status*.

   You set these two fields so that the VLS attendance processing APM can determine what status to assign to attendees.

5. Click *Save*.

8 Troubleshooting

8.1 User Attendance Not Tracked in VLS

If your users' attendance is not tracked in the VLS, chances are that they did not log in through SAP SuccessFactors Learning.

SAP SuccessFactors Learning Virtual Learning Service (VLS) works correctly users connect directly from SAP SuccessFactors Learning to the listed virtual classrooms. If users connect to their courses through the service directly, features like completion status do not work.

If this is the case, ask your trianing organization to redirect employees to their *Learning Assignments* tile, which not only links the participants to the virtual traning room but also keeps track of their training events, and a history of their participation. SAP SuccessFactors Learning automatically sends an .ics calendar file to users enrolled in training.

8.2 VLS Sessions Created Incorrectly

If your sessions are not created correctly in the VLS, chances are that they were not created through SAP SuccessFactors Learning.

The SAP SuccessFactors Learning VLS supports the features it needs to connect users and instructors to the virtual meeting rooms where training will take place. If the error in your session is related to one of the actions below, then check your configuration. If not, it could be that you edited the session outside of SAP SuccessFactors Learning.

- Create and update users: Meeting room accounts need to be created and updated for instructors, if you manage your instructors in SAP SuccessFactors Learning.
- Create, update, or delete events: When you create a virtual meeting room segment of a scheduled offering, update it, or delete it, the system creates, updates, or deletes the event on the virtual meeting service.
- Enroll and withdraw users from a meeting: When you add users to a learning item or remove them, the system adds and removes them from the meeting room.
- Get meeting and user information: The system communicates meeting information between SAP SuccessFactors Learning and the meeting room service.
- Get EventHost URL and Get EventJoin URL: The system needs the URL for the instructor (host) to start the event and for users to join the event from their learning assignments.
- Get Host Attendance: The system gets the host attendance for the total duration of the session.
- Get Student Attendance: The system gets the student attendance for the duration of attendance for each student. Learning administrators can then report on users' participation.

8.3　Users Cannot Connect to Virtual Training

Before you implement Virtual Learning Services (VLS), you should make sure that your network allows your users to launch your virtual meeting room.

By configuring your network and testing it to make sure that your users can launch your virtual meeting room, you can test the SAP SuccessFactors Learning configuration end to end. You can set up a VLS session, assign it to a test user, and make sure that the user can launch the virtual meeting room.

A closed firewall port is the most common issue when connecting to virtual meeting rooms. We recommend that you open the firewall before you begin configuring the VLS to connect to your chosen vendor. Check with your vendor about the ports they use.

8.4　Users Cannot Join Before Meeting Starts

If your users cannot join before the instructor starts the meeting, check your configuration and your meeting room vendor.

If you set ▶ *System Admin* 〉 *Configuration* 〉 *Global Settings* 〉 *Display join option prior to session start* ▮, your users can join before the meeting starts. They remain on hold until the leader (the instructor) joins.

In ▶ *System Admin* 〉 *Configuration* 〉 *Global Settings* ▮, the *Display join option prior to session start* setting does not apply to Meeting Center. The Meeting Center API does not support Early Attendance like Training Center does.

8.5　Cannot set Password for Meeting Registration

If you cannot set a password for meeting registration, check your virtual meeting room vendor.

For Meeting Center virtual meeting rooms, the VLS does not have an option to set password for event registration.

8.6　My Meeting Name is not as Expected

If you do not see the meeting name you expect, check the vendor you are using for virtual meetings.

In Training Center, the title of the scheduled offering is a saved as both the `confName` and `Description` of the training session. Meeting Center has only `confName`, so the name will be only `confName`.

8.7 Virtual Learning Service Time Zone Troubleshooting

When setting up Virtual Learning Service (VLS) configuration files, you should be able to use the default time zone mappings, but time zones are a likely source of trouble. Use this information to troubleshoot time zone problems.

Time Zone Mapping Issues

The SAP SuccessFactors Learning time zones are standard Java time zones. The timezone maps in the VLS configuration files link the SuccessFactors time zone to the VLS server time zone. WebEx, for example, uses numbers for its time zones, so the system must map the Java syntax (for example, America\New_York) to the WebEx syntax (for example, the number 11).

Time zone mappings are contained in the VLS configuration files, in the timezones element. Each timezone child of timezones is a link. For example, the following links "America/New_York" from SuccessFactors syntax to 11 from the WebEx syntax. The name attribute contains the SuccessFactors syntax and the value attribute contains the VLS syntax.

```
<timezone name="America/New_York" value="11" />
```

In almost every case, you can use the default time zone mappings. However, if participants in your meetings describe time zone issues, you can check the map for their time zone to make sure that it is right.

Linux/Unix Time Zone Issues for On-Premise Customers

If you are an on-premise customer who serves SAP SuccessFactors Learning from an application server running on Unix or Linux, you must set the TZ variable, and you must set it to a value that appears in a name attribute of all maps for your VLS configuration.

Related Information

WebEx Configuration Settings [page 7]

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