# Learning System Properties
## Properties Set During Implementation

# Content

# 1 How to Edit System Properties Files

You edit SAP SuccessFactors Learning systems properties files through the SAP SuccessFactors Learning administration environment.

## Context

To edit system properties files, you must have workflow permission to access the file that you want to edit. If you cannot navigate to the area of SAP SuccessFactors Learning Administration that is described below, you do not have permission to edit the configuration.

## Procedure

1. In SAP SuccessFactors Learning Administration, go to ▶ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❮.
2. Identify the source that you want to change (based on its description) and click the *Edit*.
3. Click *Apply Changes*.

# 2    What's New in Recent Releases

Keep up with recent changes to system configuration.

Table 1: System Properties Changes in Q3 2015

| Change | Where to look for the change | More information |
|---|---|---|
| We added a way to time-out users' catalog searches and defaulted it to a recommended value (one minute). | Look in `LMS_ADMIN` and search for `catalogSearchTimeout`. | Catalog Search Properties in LMS_ADMIN [page 41] |
| We added a configuration to allow you to control whether or not users see an icon in the catalog when a learning item is mobile ready. | Look in `LMS_ADMIN` and search for `showMobileReadinessIndicators`. | Catalog Search Properties in LMS_ADMIN [page 41] |
| We added a limit to the amount of learning items that can appear on users' learning history. | Look in `LMS_ADMIN` and search for `MaximumLearningEventsDisplayed`. | User Learning History Settings in LMS_ADMIN [page 44] |
| We added a flag that allows users to submit incomplete user surveys when the surveys are optional. | Look in `LMS_ADMIN` and search for `UsersCanSubmitIncompleteOptionalSurveys`. | Miscellaneous User Interface Properties in LMS_ADMIN [page 44] |

Table 2: System Properties Changes in Q2 2015

| Change | Where to look for the change | More information |
|---|---|---|
| We added font icons to meet the user experience standards of other areas of suite. We recommend that you enable them, but you can disable them in `LMS_ADMIN`. | Look in `LMS_ADMIN` and search for `enableFontIcons`. | Miscellaneous User Interface Properties in LMS_ADMIN [page 44] |
| We added a property to handle different pricing models of Online Content Network (OCN) providers. See the Release Information for more details about the pricing model. | Look in `OPEN CONTENT NETWORK` and search for `pricingModel`. | OPEN CONTENT NETWORK [page 72] |
| We added OpenSesame as a content provider to OCN. | Look in `OPEN CONTENT NETWORK` and search for `OPENSESAME`. | OPEN CONTENT NETWORK [page 72] |
| To support the new tier option in Catalog Search Booster, we added tier as a filter option in users' catalogs. | Look in `LMS_ADMIN` and search for `catalogSearchSortByOptionsOrder` | Catalog Search Properties in LMS_ADMIN [page 41] |

| Change | Where to look for the change | More information |
|---|---|---|
| We now integrate with Google re-CAPTCHA. | Look in `WEB_SECURITY` and search for `enableCaptchaForSiteUsers` and `enableCaptchaForNativeUsers`. | WEB_SECURITY [page 86] |
| For customers using Online Report Designer (ORD), you can now limit the amount of time into the past that a report runs for records. | Look in `REPORT_SYSTEM` and search for `adhocReportDefaultPeriod` and `adhocReportPreviewModeDefaultPeriod`. | Online Report Designer Properties [page 81] |

# 3 System Configuration

This topic describes the purpose of the *System Configuration* section of the application.

In the *System Configuration* section, you can edit the configuration files. In general, you change system configuration files during deployment and leave them unchanged until the next time you review your deployment or deploy another part of the system. They are built to be edited by informed technicians.

We recommend that you read the comments to understand how changing the file affects the system. To avoid accidental modification of any one of the files, we recommend that you create backup files for each one. Some changes to the configuration files require restarting the server.

## Related Information

## 3.1  ADMIN QUICK LINKS

This topic describes the purpose of the ADMIN QUICK LINKS system property file.

The ADMIN QUICK LINKS configuration ID allows you to control the default configuration of the quick links configuration ▌▶ *System Admin* ❯ *Configuration* ❯ *Quick Links Configuration* ▌. The quick links configuration becomes the default view of the quick links area of each administrator's home page (▌▶ *Admin* ❯ *Home* ▌), which each administrator can customize with their own quick links. For example, you might want all administrators to have a quick link to Items and to Scheduled Offerings because they form the core of the Learning Management System (LMS). You can add those quick links to the list and all adminsitrators will see the links by default. For details about a property, please review the comments in the ADMIN QUICK LINKS configuration ID.

## 3.2  AICC

This topic describes the purpose of the AICC system configuration file.

The main purpose of the AICC system configuration file is to create a map between AICC completion status and SAP SuccessFactors Learning completion status. This file applies to you only if you are launching AICC content and tracking completion. If the file applies to you, then you need to edit it after you set up your SAP SuccessFactors Learning completion status list, which you usually set up in the initial configuration of the system and review periodically.

The mapping affects two SAP SuccessFactors Learning status values:

* Finished: The user has viewed but not necessarily mastered the material.
* Complete: The user has earned credit for mastery.

When you put **Finished** and **Complete** together with the five possible AICC status values, you can create a matrix like the following example.

Table 3: Sample AICC Status Mapping

| AICC Status | SAP SuccessFactors Learning "Finished" | SAP SuccessFactors Learning "Complete" |
|---|---|---|
| Pass | True | True |
| Complete | True | True |
| Failed | True | False |
| Incomplete | False | False |
| Not Attempted | False | False |

When you look at the example, you see that when AICC marks a user as Pass, the user is marked as both Finished and Complete in SAP SuccessFactors Learning. If AICC marks the user as Failed, then to SAP SuccessFactors Learning, the user has finished the content (gone to the end) but has not completed (mastered) the content. If the

user has not attempted the content, then the user has neither finished it (gone to the end) nor completed it (mastered it).

The relationship between AICC status and SAP SuccessFactors Learning Administration status requires that only an AICC status of **Pass** earns a SAP SuccessFactors Learning Administration status of **Complete**. When a user earns an AICC status of Pass, the user must earn a SAP SuccessFactors Learning status of Complete.

> ℹ **Note**
>
> The AICC status of Complete is Finished in SuccessFactors Learning Administration but not Complete. For the SuccessFactors Learning Administration status, the user must pass the content for it to be considered Complete.

Different vendors use different alphanumeric codes to represent the five AICC status values. SAP SuccessFactors Learning Administration needs to know the codes so that it can map the status correctly. It finds the codes based on metadata that the administrator provides when setting up the AICC content. A particular build company, tool, and source combination might send a value of 1 for Pass and 2 for Complete (for example). In the AICC file, you set up the mapping rules for the build and source combinations you expect and in the ▶ *Content* ❯ *Content Objects* ◀, the administrator identifies the unique build and source combination for that particular content object so that at run time, the system can execute the rules defined in AICC.

**Related Information**

## 3.2.1 How the System Knows the AICC Status Code

This topic describes how the system gets the status encoding for each content object at run time so that it can run the rules defined in the AICC file.

Different vendors use different alphanumeric codes to represent the five AICC status values. SAP SuccessFactors Learning Administration needs to know the codes so that it can map the status correctly. It finds the codes based on metadata that the administrator provides when setting up the AICC content. A particular build company, tool, and source combination might send a value of 1 for Pass and 2 for Complete (for example). In the AICC file, you set up the mapping rules for the build and source combinations you expect and in the ▶ *Content* ❯ *Content Objects* ◀, the administrator identifies the unique build and source combination for that particular content object so that at run time, the system can execute the rules defined in AICC.

When administrators create AICC objects, they assign metadata to the object. The system uses the metadata to map the AICC code to the code. It looks for matches in the order of the properties (top down). When it cannot find the first value, it looks for the second, and then the third:

1. Build Company: Assigned on the Summary tab of Content Object.
2. Build Tool (Developer Tool): Assigned on the Summary tab of Content Object.
3. Learning Item Source: Assigned in the *Source ID* list in ▶ *Learning* ❯ *Items* ❯ *Summary* ◀. Item source IDs is an enumerated list that you manage in ▶ *References* ❯ *Learning* ❯ *Item Sources* ◀.

For example, when creating a content object, the administrator adds the build company and build tool (in SAP SuccessFactors Learning Administration, it is called **developer tool**). If the system finds a build company, it will use the settings in lessonStatusMapping.ContentBuildCompany[*].* where the bracketed text identifies the build company. If no build company value exists, the system tries the build/developer tool in lessonStatusMapping.ContentBuildTool[*].* where the bracketed text identifies the tool. Finally, if it can find neither company nor tool, it falls back on the source in lessonStatusMapping.ComponentSource[*].*, where the bracketed text is the name of the source.

After the rules find a match for the metadata, the following suffix properties apply:

- ignoreCase: If set to true, then matching ignores case (Not case sensitive).
- vendorStatus: The bracketed text contains the completion code returned by the vendor and the value of the property contains the code as translated to Talent Management For example, the line:

```
lessonStatusMapping.ContentBuildTool[SKILLSOFT].vendorStatus[C]=P
```

Translates the SkillSoft vendor status "C" to "P" in Talent Management.

## 3.3 ATTACHMENT

This topic describes how the ATTACHMENT system property file affects your system.

The ATTACHMENT System Configuration controls some situations where the files that can be uploaded to Talent Management. You want to limit the attachment size and properties to keep your database size under control. If a file upload is not covered in a process named in the attachmentsEnabledForEntity properties, then it is covered by the fileUploadFilenameMaxSize, resourceUploadWarningSize, and resourceUploadMaxSize properties in LMS_ADMIN.

Table 4:

| Property | Description |
|---|---|
| attachmentsEnabledForEntity.* | The attachmentsEnabledForEntity properties have a suffix. Each suffix refers to a different part of the system where users can upload attachments. If you set any of the properties to true, then users can upload attachments in that part of the system. Set to false to remove users' ability to up-load attachments. <br><br> • REVIEW_DOCUMENTS - In Flex reviews, users and supervisors can add attachments when they are editing the reviews. This ID handles the behavior of their uploads. <br> • LEARNING_ITEM_HISTORY - Controls the upload process when users run the learning event recorder. <br> • EARNING_EXTERNAL_HISTORY - Controls the upload process when users run the learning event recorder and record an external learning event. |

| Property | Description |
|---|---|
| supportedAttachmentTypes[*] | Each supportedAttachmentTypes property contains a file extension in brackets. If their value is set to true, then they are the file extensions that users are allowed to upload when using the processes enabled by the attachmentsEnabledForEntity.* properties. If you set to false, then when users try to upload a file that has the extension, they see a warning and are prevented from continuing. |
| maximumSizePerAttachmentKB | The maximumSizePerAttachmentKB property value contains the maximum size that a single attachment can be, in KB. If a user exceeds the limit, they see an error and cannot continue. The default setting is 800 KB. |
| totalAttachmentSpaceAllocatedKB | The totalAttachmentSpaceAllocatedKB property value is the total amount of space (in KB) allowed in the database for attachments. Set it to a reasonable number to keep your database growth under control. The attachments quota watch notification (an Automatic Process: ▷ *System Admin* ❯ *Automatic Processes* ❯ *Attachments Quota Watch Notification* ◁) notifies an administrator when the size of the attachments in the database reaches a percentage of the total space allocated here. |

## 3.4   AUTHENTICATION

This topic describes the AUTHENTICATION system property file and how it affects your system.

The AUTHENTICATION file controls basic authentication and security issues for Talent Management.

## 3.4.1   Authentication Handlers

The authentication handlers are Java classes that manage the end-user and administrator authentication. If you are using single sign on or LDAP, you need to update the authentication handlers to custom classes.

SAP SuccessFactors Learning Administration (Pwa) and the end user interface (Pws) are separated because you often have just a few administrators but many end users. You might want to authenticate your users through a single sign on but use the default authentication handler for the small amount of administrators.

Table 5:

| Property | Description |
| --- | --- |
| handlerClassName.ADMIN | To change the authentication handler for SAP SuccessFactors Learning Administration, change the value of the handlerClassName.ADMIN property. |
| handlerClassName.USER | To change the authentication handler for users, change the value of the handlerClassName.USER property. |

## 3.4.2 External Authentication Providers

This topic describes the connection to LDAP and CAS authentication providers.

By default, the application connects to LDAP servers and CAS (Central Authentication Service) servers. You enable CAS or LDAP servers in LMS_ADMIN but configure them in either the cas.properties or LDAP.properties file.

Table 6:

| Property | Description |
| --- | --- |
| casEnabled | To enable the Central Authentication Service (CAS) server, set the CASenabled property to true. In most cases, you use a CAS server because you are using Talent Gateway. See the Talent Gateway installation documentation for more information. After you enable CAS, you configure it in the CAS System Configuration file. |
| authenticationProviders.ADMIN[*] | The authenticationProviders.ADMIN[*] property enables possible authentication providers for SAP SuccessFactors Learning administrators. DAO authentication is the out of the box authentication of SAP SuccessFactors Learning. You configure LDAP in the LDAP file. |
| authenticationProviders.USER[*] | The authenticationProviders.USER[*] property enables possible authentication providers for SAP SuccessFactors Learning users. DAO authentication is the out of the box authentication of SAP SuccessFactors Learning. You configure LDAP in the LDAP file. |

## Related Information

## 3.4.3 Login Policy

This topic describes the login policies of SAP SuccessFactors Learning default (DAO) authentication.

The login policy of users and administrators is handled both in LMS_ADMIN and in SAP SuccessFactors Learning Administration, in ▌▶ *System Admin* ❯ *Configuration* ❯ *Global Variables* ❚.

> **i Note**
>
> For LDAP and single sign on environments, we recommend that you set all values to false.

In LMS_ADMIN, you can set Administrator and User (Learner) login policies with the following properties, set to true or false. The login policies for administrators and users are in different paths.

For more information about other security settings, including password aging, user ability to unlock their own accounts, and specific administrator and end user account settings, look at the PASSWORD_POLICY system configuration file.

Table 7:

| Property | Description |
| --- | --- |
| `loginPolicy.*.caseSensitiveID` | In the `loginPolicy.*.caseSensitiveID` property, the * represents either ADMIN or USER. The ADMIN property controls the case sensitivity of the administrators' user ID. The USER property controls the case sensitivity of the users' user ID. When set to true, user IDs are case sensitive. If set to false, JOHN_DOE and john_doe are treated as equal. |
| `loginPolicy.*.lockout` | In the `loginPolicy.*.lockout` property, the * represents either ADMIN or USER. The ADMIN property controls the lockout of the administrators' user ID. The USER property controls the lockout of the users' user ID. If the lockout property is set to true, SuccessFactors Learning locks out the admin/user after n login failures The number of login failures can be set in ▌▶ *Admin* ❯ *System Admin* ❯ *Login Attempts* ❚. |
| `loginPolicy.*.forcePasswordExpiration` | In the `loginPolicy.*.forcePasswordExpiration` property , the * represents either ADMIN or USER. The ADMIN property controls the password expiration of the administrators. The USER property controls the password expiration of users. If the `forcePasswordExpiration` property is set to true, then users must immediately change their password after an administrator resets it. |

| Property | Description |
|---|---|
| loginPolicy.*.caseSensitivePassword | In the loginPolicy.*.caseSensitivePassword property , the * represents either ADMIN or USER. The ADMIN property controls the password case sensitivity of the administrators. The USER property controls the password case sensitivity of users. The property specifies whether the password match during user or administrator login should be a case sensitive match or not. |
| loginURI.* | In the loginURI.* property, the * represents ADMIN, USER, or SITE.<br><br>ADMIN controls the login URI of the Administrator interface<br><br>USER controls the login URI of the end user interface<br><br>SITE controls the login URI of portals or "sites" (sites externalize SuccessFactors Learning for external users) |
| crossAppEnabled | If the crossAppEnabled property is set to true, then administrators who are mapped to user IDs can click a link to automatically switch between end user environments and administrator environments. To load the map between administrator IDs and user IDs, you can use a tool in the full database install .zip archives, in the Oracle\Install\Upgrade\Custom folder. Read the readme file in that folder to use the tool. |
| ssoTokenLapseTimeInSeconds | The ssoTokenLapseTimeInSeconds property contains the SSO Authentication Token expiration time in seconds. It is used when generating the SSO authentication token and expiration date set on that token is (currentTimestamp during generation of the ticket + lapse time) |
| httpSessionTimeout | The httpSessionTimeout property contains the value of the HTTP session timeout set to HTTPSession.setMaxInactiveInterval() each time a session is created. As of Servlets 2.2-2.5, that implementation accepts values specified in seconds. For example: 1800 is 30 minutes. This overrides the value specified in web.xml for the session timeout (in the session-config/session-timeout element). |
| excludedFilterURIs.*[*] | The excludedFilterURIs.*[*] properties are exposed for SAP SuccessFactors technical services. Do not change their values. |

## 3.5    BizX

The BizX configuration ID allows you to modify the settings that control how SAP SuccessFactors Learning integrates with other SAP SuccessFactors applications. For details about a property, please review the comments in the BizX configuration ID ( ▐▶ *System Admin* ❭ *Configuration* ❭ *System Configuration* ❭ ).

The BizX configuration ID deprecates and inherits the settings from the SAML, SUCCESSFACTORS_INTEGRATION, and SUCCESSFACTORS_LEARNING configuration IDs.

## 3.6    BOOTSTRAP-PAYMENT-GATEWAY

This topic describes the BOOTSTRAP-PAYMENT-GATEWAY system properties file. Its properties are only viewable to on-premise customers.

The BOOTSTRAP-PAYMENT-GATEWAY file contains the network and logging settings of the PayPal Payflow Pro connection. It appears only to on-premise customers in the ▐▶ *System Admin* ❭ *Configuration* ❭ *System Configuration* ❭ *BOOTSTRAP-PAYMENT-GATEWAY* ❭. If you are an on-demand customer of SAP SuccessFactors Learning, contact a SAP SuccessFactors representative for help.

Table 8:

| Name | Description | Default Value | Notes |
|------|-------------|---------------|-------|
| hostAddress | The hostAddress property contains the URL of the host for the PayPal site hosting your Payflow Pro account. | pilot-payflowpro.paypal.com | By default, SuccessFactors Learning goes to the test, or "pilot" site. Read more about the pilot site and find your live transaction site in the PayPal Payflow Pro documentation. |
| hostPort | The hostPort property contains the port that SuccessFactors uses and that PayPal Payflow Pro requires. | 443 | The port is unlikely to change, but it can change. Check the PayPal Payflow Pro documentation. |
| timeout | This is the timeout for a payment request. If a request is not complete by the timeout, SuccessFactors Learning disconnects. | 60 | The unit is seconds. |
| logFilename | The logFilename property contains the name of the Payflow Pro log. | payflowpro.log | SuccessFactors Learning stores it in the temp directory as defined by the Java Virtual Machine (JVM). |
| logSeverity | The logSeverity property contains a one-digit code to define the sensitivity of the log. | 1 | You can set the log sensitivity to one of six levels, which includes OFF. |

| Name | Description | Default Value | Notes |
|------|-------------|---------------|-------|
| `maxLogFileSize` | The `maxLogFileSize` property contains the size that the log file will be allowed to grow to before it is truncated | 1000000 | The unit is bytes. |

## 3.7 COMP_DASHBOARD

The COMP_DASHBOARD file controls the legacy Plateau Compensation dashboard.

**Related Information**

Plateau Legacy Help

## 3.8 CONNECTORS

This topic describes how the CONNECTORS system properties file affects your connectors. If you do not use connectors, this file does not apply to you.

Connectors process flat data files that match a predefined format. You can, for example, use the User Connector to import a delimited file of user records. Any system that can export a delimited file can feed data to a connector as long as the source can match the file rules that you create in the CONNECTORS system property file.

We do **not** recommend that customers deploy connectors on their own. Instead, we recommend that you work with a certified SAP SuccessFactors Learning to understand your business case and then build and test a solution for your business case.

When setting up the CONNECTORS property file, please check the comments in the file for help with specific settings. However, the file matches a pattern. You need to define:

- The syntax of the connectors. For example, what character should delimit the fields? What should define the end of a line? What character escapes the special characters?
- The map between the header row of the file and the target column in the database? For example, the target database column might be STUD_ID for "student ID" but in the header, you might output as "USR_ID."
- The default values for fields that are passed null. For example, all users must have a domain. In the Administration environment, the default domain is usually PUBLIC. In the connector, you might want to assign the same default domain.
- The pick-up location for the input files and the drop location for output files. Usually, this is an FTP site, so the system needs to know the login information for the FTP site and the folder where it should expect the files.

**Related Information**

## 3.8.1 Setting the Syntax of the Connectors in CONNECTORS System Properties

This topic describes how you set up the syntax for connectors in ▌▶ *System Admin* ❭ *Configuration* ❭ *System Configuration* ❭ *CONNECTORS* ❭ .

You set up the syntax of the connectors in the CONNECTORS system properties (▌▶ *System Admin* ❭ *Configuration* ❭ *System Configuration* ❭). The following properties control the syntax.

Table 9:

| Property | Description |
| --- | --- |
| connector.input.file.processing.mode | For new customers, only the value "header" is supported. Existing customers who use "position" should re-engage services in the unlikely event that they need to revisit their syntax. |
| connector.input.file.columnDelimiter | The character that delimits values in both the header and body. By default it is a comma (,) so the connectors accept Comma Separated Value (CSV) files. |
| connector.input.file.escapeChar | The character that escapes the delimiter. By default it is a double-quote ("). For example, if you want to import an item title that is **Safety, Our top Priority**, then without the escape character, the system reads the comma after **Safety** as the delimiter. You can escape the comma as **Safety"," Our Top Priority**. |
| connector.input.file.eolSymbols | The set of characters that represent an end of a line in the file (a new line). By default, it is an exclamation point, two pound signs, and another exclamation point (!##!). We recommend multiple characters to lower the risk that they would actually appear anywhere in the records. |

**Related Information**

## 3.8.2 Mapping Headers to Database Columns in CONNECTORS System Properties

This topic describes how you set up the header-to-database mapping for connectors in ❯ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *CONNECTORS* ❯.

You set up the mapping between the header of your data file and the target in the database through a series of "field mapping data" properties. Each connector has all of its possible fields listed in a pattern:

```
<connector name>.field.mapping.data.<target DB column>=<file header column>
```

For example, the following property is for the organization connector, and it maps the target DB column "ORG_ID" to a header column called "ORGANIZATION_ID." The second row identifies "ORG_DESC" and shows what the default configuration looks like: the header name matches the target DB column. The first line changed the default "ORG_ID" to "ORGANIZATION_ID" to show the impact of the map.

```
organization.field.mapping.data.ORG_ID=ORGANIZATION_ID
organization.field.mapping.data.ORG_DESC=ORG_DESC
```

The header and the first body line of the organization connector in this configuration would look like the following:

```
ORGANIZATION_ID,ORG_DESC,<other CSV header columns>!##!
IT,Information Technology,<other CSV values>!##!
```

### Related Information

## 3.8.3 Creating Default Values in CONNECTORS System Properties

This topic describes how you set up default values for connectors in ❯ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *CONNECTORS* ❯.

When you run a connector, you can set up a default value for fields. For example, domainID is a required to have a value for all connectors that include it, so most implementations specify a default for the domain. That way, if a connector run is missing a domain value, the row is still added, and it is added with a default domain. You can change the value later.

Here is an example of a default value for domainID for the organization connector:

```
organization.connector.defaultValue.domainID=APAC
```

If a row in the organization connector file is missing a domainID, the row will still be added, but it will be added as APAC.

The syntax for the default value properties is:

```
<connector name>.connector.defaultValue.<field to default>=<default value>
```

**Related Information**

## 3.8.4 Setting the Connector File Locations and Encryption in CONNECTORS System Properties

This topic describes how you set up the pick-up location for connector files in ▶ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *CONNECTORS* ❯.

In CONNECTORS, you must specifiy where the system should look for the connector files. The system looks in this location every time a connector automatic process runs. You can manage the run times of the connectors and check the logs of past connector runs at ▶ *System Admin* ❯ *Connectors* ❯.

**Properties that Affect the Data Files for the Connector**

Data files are the delimited files that contain the data for the connector. Except for the tenant suffix (described in the table below), the names of the files are fixed and described in each connector definition. For example, the organization connector data file is organization_data_<tenant suffix>.txt. Check the connector definition documentation for the exact name for your connector.

Table 10:

| Property | Description |
|---|---|
| connector.input.file.location | The values can be either **FTP** or **local**, but we recommend FTP. In practice, the local setting only works in on premises installations. |

| Property | Description |
|---|---|
| connector.input.file.fetch.retry.enable | Set to **false** if you want to wait until the next connector run in the case of a file read error. Set to **true** to try and fetch two more times on file read error. In practice, many organizations set to **false** because they run a connector every day and they believe that the information can wait until the next connector run in the unlikely event of a file read error. Additionally, file read errors are often caused by issues like missing files or a bad FTP password: issues that won't be solved by trying the fetch again. Set to **true** if you believe the connector information has more time sensitivity than the next connector run.<br><br>The fetch attempts, and the duration of time between fetch attempts can only be controlled by SaaS operations to control the impact on servers. |
| connector.ftp.input.remoteDirectory<br><br>connector.local.input.localDirectory | Only one of these two properties applies, depending on the value of connector.input.file.location.<br><br>• The remoteDirectory property applies only if the connector.input.file.location property is set to FTP.<br>• The localDirectory property applies only if the connector.input.file.location property is set to local.<br><br>The value of either property must be an absolute URI. For example:<br><br>`/root/connectors/input`<br>`c:\\connectors\\input`<br><br>The FTP server settings are shared for input and output files. They are described in a different section in this topic. |

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| Property | Description |
|---|---|
| connector.input.file.name.tenant.suffix.enable connector.input.file.name.tenant.suffix.override | Together, these properties control how the system identifies a SaaS customer's connector data file, so they apply only to SaaS customer. <br><br> If you are a SaaS customer, set the enable property to **true**. <br><br> ```connector.input.file.name.tenant.suffix.enable=true connector.input.file.name.tenant.suffix.override=``` <br><br> You then end the connector file as _<your tenant ID>.txt. For example, if your tenant ID is **t1**, then you set your file name to something like organization_data_t1.txt: The text "organization_data" is specified as the name for the organization connector. You add "_t1" to the name because that is your tenant ID. Finally, the file type is text, so the name ends with ".txt" for all connector data files. <br><br> If you set a value for the override property, then you use that value instead of your tenant ID. For example, if you supply the value ABC: <br><br> ```connector.input.file.name.tenant.suffix.enable=true connector.input.file.name.tenant.suffix.override=ABC``` <br><br> In this scenario, you add _ABC.txt instead of your tenant ID. We recommend that you use a tenant ID to make troubleshooting easier through a more consistent cross-customer approach in the SaaS environment. |
| connector.pgp.enabled | If you encrypt the data file, set to **true** so that the system can decrypt the files. Encrypted files are common when they contain sensitive information, like user identification numbers. |
| connector.pgp.public.keyring <br><br> connector.pgp.secret.keyring <br><br> connector.pgp.passphrase <br><br> connector.pgp.file.extension | The connector.pgp.public.keyring property value is the public keyring used by the system to decrypt the encrypted files. The keyring must be provided to the party that is generating the PGP encrypted file so that the encryption and decryption match. The keyring value is a base64 encoding of the binary keyring file. Use the Linux base64 command or other tool for decoding the property value to obtain the public keyring file that needs to be provided to both ends of the transaction. <br><br> The secret keyring, passphrase, and extension are standard PGP encryption properties. The extension is usually **.pgp**. |

## FTP Properties that are Shared by Data and Log Files

These properties are shared by both the data and log files when interacting with an FTP server.

Table 11:

| Property | Description |
| --- | --- |
| connector.ftp.protocol | The protocol used by the FTP server. Valid values are **ftp**and **sftp**. |
| connector.ftp.server | The name of the FTP server. For example, ftp.acme.internal. |
| connector.ftp.port | The port that the FTP server listens to. For example, 22. |
| connector.ftp.userID | The user ID on the FTP server that owns this process. When specifying the user, make sure that the user has access to the directors where the system reads data files and writes log files. |
| connector.ftp.password | The password for the user. The password is clear text until you save the CONNECTOR file. On save, the system encrypts the value. |

## Properties that Affect the Log Files for the Connector

Log files are reports on connector runs. Although you can also check the logs in ▶ *System Admin* ❭ *Connectors* ❭, you can also configure the system to push logs to you.

Table 12:

| Property | Description |
| --- | --- |
| connector.ftp.output.report.enable | Set to **true** to drop the log file to an FTP directory. You then must also specify the other connector.ftp.output.* properties. |
| connector.ftp.output.report.remoteDirectory | The remote FTP directory to send the log report to. |
| connector.report.email.enable | Set to **true** to have the system email a copy of the report. |
| connector.report.email.toAddresses | The email address that receives the emailed report log if the emailed report is enabled. Some organizations set up a distribution list address and use it as a value. |
| connector.report.email.CCAddresses | Optional. If you also want to CC an address, provide it in this property. |
| connector.report.email.mailSubject | The value of this property is the subject line of the report email. We recommend a value like **$interfaceId$ - Connector Results**. At run time, the system substitutes the name of connector for **$interfaceId$**. |

| Property | Description |
|---|---|
| connector.report.email.enableDetailReportAttachments | If set to **true**, then a detailed log will be sent as an attachment to the email. Otherwise, the email contains the time of the run and success or failure.<br><br>A good strategy to reduce the size of the email messages: set this property to **false** and then tell the recipients to look at the detailed report in the ▶ *System Admin* ❯ *Connectors* ❯ section of the Administrator interface. To use this strategy, recipients must have access to the SAP SuccessFactors Learning Administration environment. |
| connector.report.detail.displayMessageTypes | This property specifies what level of log entries should be part of the detailed report. Possible values are: Exception, Warning, FATAL, and info. To include more than one, add as a comma separated list:<br><br>```connector.report.detail.displayMessageTypes=Exception,Warning,FATAL``` |
| connector.report.detail.numberOfExceptionsDisplayed | This property limits the amount of exceptions that the detailed report contains. Although the value can be any number greater than zero, we recommend a reasonable number to keep the report to a workable size. By default, we set it to 5000. |

**Related Information**

## 3.8.5 Inactivating Users by Using Connectors

When you update a user through a connector and make the user inactive, the system changes the user's attributes.

When you inactivate a user through the User, Federal User, or User - SF connectors, you can configure how the connector behaves when it inactivates the user. By setting `cleanDevPlan`, you can either remove all learning items from the users' learning plans or you can inactivate the user but still keep learning items on their learning plans (you can see the users learning plans on their user records: ▶ *Users* ❯ *Users* ❯ *Assigned Items* ❯).

The `cleanDevPlan` property is available for all user connectors.

Table 13: cleanDevPlan Property

| This cleanDevPlan property.... | ...Affects the behavior of this connector |
|---|---|
| `user.connector.inactiveRule.cleanDevPlan` | The standard user connector. |
| `federaluser.connector.inactiveRule.cleanDevPlan` | The Federal user connector. |
| `sfuser.connector.inactiveRule.cleanDevPlan` | The User SF connector (that brings user information from the tables of record to the LMS). |

For any of the `cleanDevPlan` properties:

- If you set to **Y**, then the connector removes all learning items from the users' learning plans when it inactivates the user. This setting makes the connector behave like the administrator interface. It is the default setting.
- If you set to **N**, then the connector maintains the users' learning plans even if the user is inactive.

### 3.8.6   Making Matrix Managers into Alternate Supervisors

When you run the User - SF connector, you can make Matrix Managers (in the SF tables of record) into Alternate Supervisors (in the LMS tables).

In the SF tables or record, users can have matrix managers: managers who in the LMS map to the concept of alternate supervisors. You might want matrix managers to become alternate supervisors (so that they can help manage users' learning) or you might want only the supervisor to manage users' learning. Furthermore, if you are using HRBP (Human Resource Business Partner) users, you might want the HRBP users to become alternate supervisors but not the matrix managers.

If you want matrix managers in the SF tables of record to become alternate supervisors in the LMS, then set `sfuser.field.mapping.data.TEMP_ALT_SUPER` to **MATRIX_MANAGER**. Existing alternate supervisors that are added through the administration environment are not overwritten by the connector.

## 3.9   CONTENT IMPORT

This topic describes how the CONTENT IMPORT system properties file affects the learning content import tool.

The CONTENT IMPORT system properties file controls some of the default configuration for the content importer ( ▷ *Content* ▷ *Tools* ▷ *Import Content* ▷ ). Deployment locations are controlled in ▷ *Content* ▷ *Deployment Locations* ▷ .

## 3.10 CSRF_GUARD

This topic describes the purpose of the CSRF_GUARD system properties file. Most customers do not change this file.

The CSRF_GUARD system properties file configures the SAP SuccessFactors Learning implementation of CSRFGuard. For information about the properties, read the CSRFGuard documentation (on the owasp.org site). You only need to change these settings if you want to change how the system guards against Cross-Site Request Forgery (CSRF) attacks. We recommend that you do not change these properties.

## 3.11 DIRECT_LINK

This topic describes how the DIRECT_LINK system properties file affects your administration environment. If you haven't added new .jsp files or struts actions, you do **not** need to change this file.

DIRECT_LINK maps the settings and administrator sees on the ▶ *System Admin* ❭ *Tools* ❭ *Direct Links* ❭ page with the functions that provide direct links. You do not need to change this file unless you add new .jsp files or struts actions to the system and you want administrators to build direct links to them.

## 3.12 ENTITY_IMPORT

This topic describes how the ENTITY_IMPORT system properties file affects the entity import tool.

The ENTITY_IMPORT tool controls the rules of ▶ *System Admin* ❭ *Tools* ❭ *Import Data* ❭. In most cases, you do not need to change the values in this file. At most, you might change the maximum size per attachment.

Table 14:

| Property | Description |
| --- | --- |
| supportedAttachmentTypes[*] | You can use each supported file type that you can use to import data. Unless you customized the import data tool, we recommend that you do not change the default settings |
| maximumSizePerAttachmentKB | The maximumSizePerAttachmentKB property contains the maximum file size, in kilobytes, that you can use to import data. We recommend that you do not change the value unless you have customized the tool. If administrators exceed this limit, then they see an error and are prevented from continuing. |

| Property | Description |
|---|---|
| backgroundJobThreshold | The backgroundJobThreshold property contains the amount of rows that can be in an import file (spreadsheet) before the system requires users to schedule a background job. Currently, only a value of -1 is supported (forcing all jobs to run in the background). Do not change the default. |

## 3.13  FINANCIAL

The FINANCIAL system properties described here control parts of SAP SuccessFactors Learning commerce.

Parts of the FINANCIAL file work together with BOOTSTRAP-PAYMENT-GATEWAY to configure the payment connector. The rest of the file sets up commerce in the SAP SuccessFactors Learning product. We recommend that you review all your current settings when you make financial changes.

The FINANCIAL configuration file contains the PayPal Payflow Pro log in settings and the settings to control the behavior of SAP SuccessFactors Learning when a user provides payment information. The file appears to all customers in ▌▶ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *FINANCIAL* ▐.

Table 15:

| Name | Description | Default Value | Notes | Payflow Specific Setting? |
|---|---|---|---|---|
| autoOrderApproval | The autoOrderApproval property must be set to true. | true | The false setting is not supported. | No |
| autoCreateMasterInventory | If autoCreateMasterInventory is set to true, then all materials, components and schedules created will be automatically added to the master inventory. | true | We recommend setting to true because most organizations want their master inventory to include everything in inventory. | No |
| financialTxApprovalRequired | If financialTxApprovalRequired is set to true the financial transactions will have to be approved by an administrator before the transactions can be extracted. | true | | No |

| Name | Description | Default Value | Notes | Payflow Specific Setting? |
|---|---|---|---|---|
| skuPrefix | The alphanumeric characters in the skuPrefix property are added to the beginning of every SKU in commerce. | SKU- | | No |
| orderNoPrefix | The alphanumeric characters in the orderNoPrefix property are added to the beginning of every order number in commerce. | ORDNO- | | No |
| orderTicketNoPrefix | The alphanumeric characters in the orderTicketNoPrefix property are added to the beginning of every order ticket number in commerce. | ORDTKTNO- | | No |
| shoppingAccountPrefix | The alphanumeric characters in the shoppingAccountPrefix property are added to the beginning of every shopping account in commerce. | SHPNGACCTID- | | No |
| shoppingAccountTypeStudent | The shoppingAccountTypeStudent property defines the default shopping account type for newly added users. The shopping account type can be INTERNAL or EXTERNAL. | INTERNAL | The shopping account type matters because external users can be excluded from some transactions. | No |
| shoppingAccountTypeOrganization | The shoppingAccountTypeOrganization property defines the default shopping account type for newly added organizations. The shopping account type can be INTERNAL or EXTERNAL. | INTERNAL | The shopping account type matters because external users can be excluded from some transactions. | No |

| Name | Description | Default Value | Notes | Payflow Specific Setting? |
|---|---|---|---|---|
| externalStudentPaymentMethodChargebackEnabled | When checking out at the shopping cart, can the external user use chargeback payment method? | true | | No |
| externalStudentPaymentMethodCreditCardEnabled | When checking out at the shopping cart, the externalStudentPaymentMethodCreditCardEnabled controls whether an external user (or user in an external organization) can use a credit card as a payment method. | false | | Yes |
| creditCardAuthorizationEnabled | Set creditCardAuthorizationEnabled to true to enable transactions through PayPal Payflow Pro. | false | | Yes |
| creditCardSecurityCodeRequired | Set creditCardSecurityCodeRequired to true to require users to enter their credit card security code (for example, the three digits on the back of a Visa card). | true | Check PayPal Payflow Pro documentation and your Payflow configuration before setting this property. | Yes |
| creditCardSecurityCodeMasked | Set creditCardSecurityCodeMasked to true to mask the users' security code number in text boxes so that another person, looking over the users' shoulders, could not see the number. | true | | Yes |
| expYearOffset | The expYearOffset property defines the number of expiration years to show in the drop down, starting with the current year. | 10 | | Yes |

| Name | Description | Default Value | Notes | Payflow Specific Setting? |
|---|---|---|---|---|
| `validateCreditCardNumber` | Set `validateCreditCardNumber` to true to do basic validation on the credit card number, such as: does the credit card number have the correct amount of digits? | true | | Yes |
| `creditCardNumberMasked` | Set `creditCardNumberMasked` to true to mask the users' credit card number in text boxes so that another person, looking over the users' shoulders, could not see the number. | true | | Yes |
| `storeLast4Digits` | Set `storeLast4Digits` to true to encrypt and store the last four digits of the credit card number for auditing purposes. | true | | Yes |
| `paymentGateway` | Always set `paymentGateway` to "PayPal" for PayPal Payflow Pro transactions. | PayPal | | Yes |
| `paymentGatewayPartner` | The `paymentGatewayPartner` property contains the ID provided to you by the authorized PayPal reseller who registered you for the Payflow SDK. It is limited to twelve alphanumeric, case-sensitive characters. | (null) | If you purchased your account directly from PayPal, use PayPal. | Yes |

| Name | Description | Default Value | Notes | Payflow Specific Setting? |
|---|---|---|---|---|
| `paymentGatewayVendor` | The `paymentGatewayVendor` property contains merchant login ID that you created when you registered for the account. It is limited to sixty-four alphanumeric, case-sensitive characters. | (null) | | Yes |
| `paymentGatewayUser` | The `paymentGatewayUser` property contains the ID provided to you by PayPal or the authorized PayPal Reseller who registered you for the Payflow SDK. If you purchased your account directly from PayPal, use PayPal. It is limited to sixty-four alphanumeric, case-sensitive characters. | (null) | | Yes |
| `paymentGatewayPassword` | The `paymentGatewayPassword` contains the password to the Payflow Pro account. | (null) | The password is encrypted when you save the file. | Yes |
| `paymentGatewayCurrencies[USD]` | The `paymentGatewayCurrencies` sets the currencies accepted by Payflow Pro. By default, we set up US Dollars (USD). | true | For each currency you want to add, copy `paymentGatewayCurrencies[USD]` and change "USD" to your three letter currency code, then set the property to true. To disable the currency while leaving its entry in the file, set it to false. | Yes |
| `paymentGatewayProxyAddress` | Check with your network administrator or SAP SuccessFactors representative for the correct value. | (null) | | Yes |

| Name | Description | Default Value | Notes | Payflow Specific Setting? |
|------|-------------|---------------|-------|---------------------------|
| paymentGatewayProxyPort | Check with your network administrator or SAP SuccessFactors representative for the correct value. | (null) | | Yes |
| paymentGatewayProxyLogon | Check with your network administrator or SAP SuccessFactors representative for the correct value. | (null) | | Yes |
| paymentGatewayProxyPassword | Check with your network administrator or SAP SuccessFactors representative for the correct value. | (null) | | Yes |
| userPurchaseOrderBalanceDisplay | When userPurchaseOrderBalanceDisplay is set to true, users can see their purchase order balance in *My Orders*. | true | | No |
| displayPurchaseOrdersToUsers | When displayPurchaseOrdersToUsers is set to true, users can see their purchase orders in *My Orders* and the shopping cart checkout page. | true | | No |
| showPricingInternalUsers | If set to true, internal users see currency filters, and pricing in their catalog. If set to false, internal users do not see currency and pricing in their catalogs. Set to false if you do not use the commerce module and you want to hide price so that users are not confused by it. | true | This setting affects only the display of commerce to internal users, it does **not** turn off commerce. If you have commerce set up for internal users, we recommend you set this to true. | No |

| Name | Description | Default Value | Notes | Payflow Specific Setting? |
|------|-------------|---------------|-------|---------------------------|
| `showPricingExternalUsers` | If set to true, external users see currency filters, and pricing in their catalog. If set to false, external users do not see currency and pricing in their catalogs. Set to false if you do not use the commerce module and you want to hide price so that users are not confused by it. | false | This setting affects only the display of commerce to external users, it does **not** turn off commerce. If you have commerce set up for external users, we recommend you set this to true. | No |

## 3.14  Gamificiation Settings

Use the gamification settings to integrate with your gamification server so that the server can send back points and badges to turn learning into a game for users.

At this time, the gamification server BUNCHBALL is supported. Bunchball collects points and returns badges to the user. See the comments in the file for configuring the server. This feature is in preview release.

## 3.15  ICONTENT

This topic describes how the ICONTENT system properties file affects your interaction with iContent servers. If you do not use iContent servers, this file does not apply to you.

The ICONTENT System Configuration file applies to iContent customers only. If you are an iContent customer, contact your iContent representative for the proper usage of this file.

## 3.16  LDAP

This topic describes how the LDAP system properties file affects your interaction with LDAP authentication providers. In most cases, this file does not apply to you. It only applies if you have set an LDAP authentication provider in LMS_ADMIN.

The LDAP file contains the properties used to connect SuccessFactors Learning to an external authentication provider like Active Directory over LDAP. SuccessFactors Learning ignores this file unless you add an LDAP server

as an authentication provider in LMS_ADMIN. See Authentication Providers in the AUTHENTICATION file. After you enable LDAP in LMS_ADMIN, set the properties in LDAP as follows.

- ldap.provider: The provider URL, including port, with optional LDIF syntax appended. For example: `ldap://10.3.10.61:10389/dc=example,dc=com`

- ldap.userDn: The log in string to the LDAP server. Requires LDIF syntax. Note that the example includes the user ID and the organizational unit. Leave it blank for anonymous binding. For example: `ldap.userDn=uid=admin,ou=system`

- ldap.password: The password string to the LDAP server. Leave it blank for anonymous binding. For example: `ldap.password=secret`

- ldap.localUserAttributeKey: This LDAP entry attribute maps to the local DB user ID. If left blank, the user entered username will be used as the local DB user ID. For example: `ldap.localUserAttributeKey=cn`

- ldap.defaultBindAuthenticator.userDnPattern_[1-n]: Settings when using the defaultBindAuthenticator. These settings do not apply if the activeDirectoryBindAuthenticator is used. The user's Distinguished Name pattern used to directly bind to the user DN. You can modify the ElmsSecurityContext.xml to support more than 5 patterns. For example: `ldap.defaultBindAuthenticator.userDnPattern_n=uid={0},ou=Users,dc=example,dc=com`

- ldap.defaultBindAuthenticator.search.base and ldap.defaultBindAuthenticator.search.filter: The search base and filter are used if the above direct binding is not available or unsuccessful. A valid LDAP login may be required. For example: `ldap.defaultBindAuthenticator.search.base==ou=Users,dc=example,dc=com` and `ldap.defaultBindAuthenticator.search.filter=(uid={0})`

## Related Information

# 3.17 LEARNER_SECURITY

This topic describes how the LEARNER_SECURITY system properties file affects your users' workflow mapping. In most cases, this file does not apply to you. It applies only if you have remapped workflows for a customization.

The LEARNER_SECURITY includes workflow mapping. The first section is a map of a URL to the workflows associated with the URL and the access restrictions for the workflow. For example, workflowURLs.browseSubordinate.url=/user/employee/browseSubordinate is the "browse subordinate dashboard URL." It is associated with the workflows:

```
workflowURLs.browseSubordinateDashboard.workflows.AccessSubordinateDeadlineDashboard
workflowURLs.browseSubordinateDashboard.workflows.AccessSubordinateGoalStatusDashboa
rd
workflowURLs.browseSubordinateDashboard.workflows.AccessSubordinatePerformanceReview
StatusDashboard
```

Each is then mapped to an access string, for example:

```
...AccessSubordinateDeadlineDashboard=STUDENT Access Subordinate Deadline Dashboard
```

Each access string can then be used in the lower sections to affect the restricted user-side URLs when assuming the identity of another user:

```
userRestrictionWorkflows.AccessSubordinateDeadlineDashboard=STUDENT Access
Subordinate Deadline Dashboard
```

## 3.18  LMS_ADMIN

This topic introduces the LMS_ADMIN system properties file. Of the system properties files, customers change it the most because it is the central system properties file.

The LMS_ADMIN system properties file controls the application as a whole. Because its scope is so broad, settings are grouped here into general categories to help you find the setting that applies to your task.

### 3.18.1  Database Format Preferences in LMS_ADMIN

These properties in LMS_ADMIN specify date/time translation between the database and application server. They do not apply to SaaS customers.

The database format preferences apply only to on premises customers. When you change the settings, you **must** follow these rules or you can break the connection between the application server and database:

- The format described `DatePattern` and `TimePattern` must match the format described `DBDatePattern` and `DBTimePattern`. (The former uses Java SimpleDateFormat syntax and the latter uses Oracle datetime format syntax).
- These locale settings do **not** apply to users. You can change user locale settings in SuccessFactors Learning Administration.
- The default time zone for administrator and user records and the time zone for instances in notifications is the Application Server time zone.

### 3.18.1.1  Database Properties in LMS_ADMIN

This topic describes the properties in the in LMS_ADMIN system properties file that directly affect the database. These properties apply to on premises customers.

> ⚠ Caution
>
> Do not change these settings after you add data to the database.

Table 16:

| Property | Description |
|---|---|
| dbDatePattern<br><br>dbTimePattern | The dbDatePattern property contains the date pattern used by the database to store dates. Type the pattern in Oracle Datetime Format Syntax. The pattern must match the date pattern described in the dbPreferencesDatePattern.pattern property, which uses Java SimpleDateFormat (mm/dd/yyyy = MM/dd/yyyy).<br><br>The TimePattern property contains the time pattern used by the database to store dates. Type the pattern in Oracle Datetime Format Syntax. The pattern must match the time pattern described in the dbPreferencesTimePattern.pattern property, which uses Java SimpleDateFormat (hh:mi:ss AM = hh:mm:ss aaa). |
| dbPreferencesDatePattern.pattern<br><br>dbPreferencesTimePattern.pattern | The dbPreferencesDatePattern.pattern property contains date pattern used by the application server to store dates. Type the value in Java SimpleDateFormat. The pattern must match the date pattern described in the dbDatePattern property, which uses Oracle Datetime Format Syntax (MM/dd/yyyy = mm/dd/yyyy).<br><br>The dbPreferencesTimePattern.pattern property contains time pattern used by the application server to store times. Type the value in Java SimpleDateFormat. The pattern must match the time pattern described in the dbTimePattern property, which uses Oracle Datetime Format Syntax (hh:mm:ss aaa = hh:mi:ss AM). |
| dbPreferencesLanguageCode<br><br>dbPreferencesCountryCode | The dbPreferencesLanguageCode property contains language code for the database. Use ISO Standard.<br><br>The dbPreferencesCountryCode property contains the country code for the database. Use ISO Standard. |
| maxDbSupportedYear | The maxDBSupportedYear property contains the maximum year that the database and application will support. |

## 3.18.1.2 Other Properties that Affect the Database

These properties in LMS_ADMIN affect the connection to and the operation of the database.

- Job Scheduling: How you schedule jobs affects your database performance
- Data Limits: This parameter affects the size of data that you can manage on the server
- Batch Processing for threaded events: The application runs many jobs in batches. Many of the batch sizes are set in LMS_ADMIN. How you set your batches will affect your database.

- Assignment Profiles: Assignment Profile APM

**Related Information**

# 3.18.2 Data Limits

The LMS_ADMIN system properties file sets these limits for the application, such as number size and file size. Setting proper limits manages your data and your database effectively.

## Number Limits

Number limits control the size of the numbers that users can enter and that the application handles. If administrators or end users violate the limits, then the system displays an error message. They cannot continue until they address the problem. If an application violates the limits, the application throws an exception

Table 17:

| Property | Description |
| --- | --- |
| `min*Value`<br><br>`max*Value` | In the `min*Value` and `max*Value`, the * represents either "Long" or "Double." The `minLongValue` property for example, is the minimum value for a Long type. The max value is the largest value allowed for that type of number. The min value is the smallest number allowed for that type of number. |
| `talentPoolMaxGroupSize` | The `talentPoolMaxGroupSize` property controls the amount of users who appear in any given talent pool. If users create a talent pool that goes over the limit, they see a validation error telling them that the pool is too large and to redefine the query. Setting limits on talent pools helps both the author of the pool and the load on the system. It helps the author of the pool because a good limit size ensures that authors are creating workable pools rather than sprawling queries that pull in less qualified users. By default, it is set to 1000. There is no upper limit, but the higher you set the maximum group size, the more it affects performance. |

## File Upload Limits

File upload limits set boundaries for files uploaded to SAP SuccessFactors Learning Administration. You can set two limits on the files users upload to the system. If users violate the limits, they see an error that the upload limit has been violated. They cannot continue until they address the problem.

Table 18:

| Property | Description |
| --- | --- |
| `fileUploadMaxSize` | The `fileUploadMaxSize` property contains the limit, in bytes, of uploaded files not covered by the settings in the AT-TACHMENT system property file. The value can be between 0 (no uploads) to 21474836642 (2 GB). We recommend a value greater or equal to 65536 bytes or SAP SuccessFactors Learning might not function properly. |
| `fileUploadFilenameMaxSize` | The `fileUploadFilenameMaxSize` property contains the limit, in characters, of a file name for files to be uploaded to the server. |
| `resourceUploadMaxSize` `resourceUploadWarningSize` | The `resourceUploadMaxSize` property contains the maximum size, in bytes, of files that can be uploaded for Plateau Question Editor (PQE). The most commonly uploaded files are images. The `resourceUploadWarningSize` property contains the limit, in bytes, at which PQE users are warned that their image is too big. As long as users do not exceed the bytes in the `resourceUploadMaxSize` property, they can still upload after the warning. |

## Related Information

## 3.18.3 End User Interface Interaction Preferences in LMS_ADMIN

Interaction preferences affect the relationship between end users and the graphical user interface. Most properties that set these preferences affect deprecated user environments (Flash and HTML) and are therefore not relevant to most customers.

Most interaction settings appear in the LMS_ADMIN configuration file, but there are others in PERFORMANCE_CONFIG. End Users were called Students and Learners in previous versions of the application, so you see that terminology in the LMS_ADMIN file. In addition to strict interaction settings, end users are also affected by security configuration, data limits, and online content settings. For more information about other settings that affect them, see Security Configuration, Data Limits, and Online Learning.

You can set three different end-user interface experiences in ▌▶ *System Admin* ❯ *Configuration* ❯ *User Settings* ❯ *User Interface Display.* ▌. Depending on the user interface display you choose, some properties affect your choice and others do not. Therefore, we recommend that if you decided to change these property values, that you test your changes.

**Related Information**

Data Limits [page 36]
Defining Online Learning [page 53]

## 3.18.3.1  Deprecated Home Page Properties in LMS_ADMIN

These properties still appear in the LMS_ADIMIN system properties file but are deprecated.

The Home Page is the predecessor to the Easy Links and the work areas under them, next to the Learning To-Do list (which was removed for the current My Learning Assignments tile). Until we are sure that removing learning plan settings will not affect your installation and any customizations you might have, we have left the settings in place. As a rule, however, you should not use them:

- showHomeCatalogModule
- showHomeAlertsModule
- showHomeLearningPlanModule
- showHomeCareerPlanModule
- showHomeCurriculumModule
- showHomeNewItemModule
- showHomeFeaturedItemModule
- showHomeRevisedItemModule
- homeLearningPlanModuleRecordsToDisplay
- homeCareerPlanModuleRecordsToDisplay
- homeCurriculumModuleRecordsToDisplay
- homeFlaggedCatalogItemsToDisplay
- searchNewPostsToCommunitiesInTheLastDays

## 3.18.3.2  Learning Display Properties in LMS_ADMIN

These properties control the list of assignments that a user has.

In different iterations of SAP SuccessFactors Learning, the list of assignments has been called "learning plan," "to-do list" and "my assignments." You see some of that language in this section, which can cause some confusion. Generally speaking, these different phrases referred to the list of a user's learning assignments. Of the user interface properties, these are the most important to test because of the various deprecated user interfaces and

properties. How you set �▶ *System Admin* ▶ *Configuration* ▶ *User Settings* ▶ *User Interface Display* ▶ will affect how these properties behave.

Table 19:

| Property | Description |
|---|---|
| showDaysRemaining | Set to true to show the Days Remaining Column rather than the Required by column in the Learning Plan Page and the Curriculum Details page. Default: false |
| showAssignmentType | Set to true to show the Assignment Type Column in the Learning Plan Page, the Curriculum Details page, and in the Home page. Default: false. |
| learningPlanFieldsChooserItems.* | learningPlanFieldsChooserItems controls the columns that users can enable and disable on the learning plan and some properties of the column. The settings have attributes that identify the column, control the user interaction, call the column title, and control the width.<br><br>Each field has the following sub properties:<br><br>• .enabled: Set to true to allow a user to choose the field.<br>• .columnID: This contains the id of the column. Do not change.<br>• .titleLabelID: This is the label (from the I18N settings in the admin environment) that appears at the top of the column.<br>• .visibility: This is whether the column appears by default, whether it is mandatory, or whether it is optional. Possible values: default, mandatory, and optional.<br>• .width: This is the width of the column. |
| learningPlanSystemPreferences.groupPlanFilter | This property defines the system default user learning plan settings. User can override with their own preferences. This defaults the Group By drop-down. Possible values: None, ItemType, AssignmentType, DueWithin, StatusTowardCompletion. Default: None |
| learningPlanSystemPreferences.itemsFilter | This property sets the default of the *Filter By* list. Possible values: All, With Online Content, Registered, In progress. Default: All |
| learningPlanSystemPreferences.requiredByFilter | This property sets the default of the *Required By* list. Possible values: All, Next 30 Days, Next 60 Days, Next 90 Days. Default: All |

| Property | Description |
| --- | --- |
| enableOnlineContentEarlyLaunchWarning<br><br>onlineContentEarlyLaunchWarningThreshold | When enableOnlineContentEarlyLaunchWarning is set to true, users are warned if they launch online content that is due far in the future. For example, if a user launches on-line content that is due two months from now, the early launch warning tells them that their course isn't due soon. You control the threshold for the warning in onlineContentEarlyLaunchWarningThreshold, which sets a threshold some number of days in the future. If the due date of the online item is later than the threshold, the user sees the launch warning. |
| showItemThumbnailPhotosGlobally | When set to true, administrators can type a URL in the *Thumbnail URL* box to show an image or logo in the description of courses in users' catalogs. When set to false, the item thumbnail functionality is disabled globally. |
| showSystemDefaultThumbnail | When set to true, the default thumbnail image or icon appears to users. |
| enableHTMLDescriptions | When set to true, administrators can use inline HTML in learning item descriptions. Set to true only if you enable tiles interface display in ▶ *System Admin* ❭ *Configuration* ❭ *User Settings* ❭ *User Interface Display* ❭. |

## 3.18.3.3 Catalog Calendar Properties in LMS_ADMIN

This topic describes the catalog calendar properties in the LMS_ADMIN system configuration file.

The learning calendar is a place that the end user can view learning items as a calendar. You can set the default display settings. When the user changes the view and makes it different from the default, the user's preferences are saved.

Table 20:

| Property | Description |
| --- | --- |
| calendarPreferencesHandler<br><br>calendarLazyPersistence | If the calendarLazyPersistence property is set to true, the user's preferences are not immediately persisted. Setting to true increases transaction speed with a large user base. The class in the calendarPreferencesHandler property is the class that handles users' preferences. Do not change the value in the calendarPreferencesHandler property. |

| Property | Description |
|---|---|
| excludedWeekDays.* | The excludeWeekDays.* properties remove days from the calendar. For example, excludedWeekDays.Sunday=true removes Sundays from the calendar. |
| firstDayOfWeek | The firstDayOfWeek property contains first day of the week, the one that appears furthest left on the monthly and weekly calendar views. See comments in the file for allowed values. |
| calendarDailyTimeSlotStartTime calendarDailyTimeSlotEndTime calendarDailyTimeSlotSize | The calendarDailyTimeSlotStartTime and calendarDailyTimeSlotEndTime properties define the default time range that displays in the calendar. The calendarDailyTimeSlotSize property controls the increments that the calendar is grouped into. |
| rememberCalendarMode | If the rememberCalendarMode property is set to true, then the application persists the user's last view of the calendar (daily, weekly, or monthly). If set to false, it does not persist the last view. |
| monthlyLearningCalendarDailyEventDisplayLimit monthlyCatalogCalendarDailyEventDisplayLimit | The monthlyCatalogCalendarDailyEventDisplayLimit property contains the maximum number of events that can appear in the monthly catalog calendar view. Do not use the monthlyLearningCalendarDailyEventDisplayLimit property. |

## 3.18.3.4  Catalog Search Properties in LMS_ADMIN

This topic describes the catalog calendar properties in the LMS_ADMIN system configuration file.

You can configure the way that the catalog appears to users. Users browse and search their catalog to find learning items that they are interested in. Along with settings in ▶ *System Admin* ❯ *Configuration* ❯ *User Settings* ❭, these settings control how the user experiences the catalog. Therefore, we recommend you test these properties against your unique combination of user interface choices.

Table 21:

| Property | Description |
|---|---|
| showItemRatingInCatalog | On the *Items* page, administrators can assign a rating to the item (some number of stars out of a maximum number of stars). If the showItemRatingInCatalog property is set to true users see the rating in the catalog. The maximum rating is controlled in the maxItemRatingValue property. |

| Property | Description |
|---|---|
| displayMaxItemDescriptionLength | Items have a description, supplied by administrators. Sometimes the description is lengthy. The displayMaxItemDescriptionLength property limits the amount of characters that display in the catalog. |
| enableCatalogFilteredSearchAndIntegratedSocialContent | In the Q1 2015 release, we have removed this property because Catalog 1.0 is no longer supported. This was the setting that, when set to **false**, the system used Catalog 1.0. In effect, this is always set to **true**. |
| catalogSearchCategories[<category name>] | You can hide some search categories from the catalog. For example, if you are not using QuickGuides, then you can go to ▶ *System Admin* 〉 *Configuration* 〉 *System Configuration* 〉 *LMS_ADMIN* 〉 and set catalogSearchCategories[QuickGuide] to **false**. After you save the properties file, users no longer see the QuickGuide category in their catalogs **or their search**. <br><br> Because a **false** setting hides both the category and the search results, it is more powerful than hiding search filters. Customers who do not use learning programs and Quick-Guides can completely hide any content from their users, even if they are experimenting with the functionality in a production environment. For example, if you are not sure that you want to use learning programs, but you want to set up a few, you can set catalogSearchCategories[Programs] to **false** to ensure that they can never appear on a user catalog. |
| catalogSearchFilters[<filter name>] | You can hide some search filters from the catalog. For example, if you are not using subject areas, you go to ▶ *System Admin* 〉 *Configuration* 〉 *System Configuration* 〉 *LMS_ADMIN* 〉 and set catalogSearchFilters[SubjectArea] to **false**. After you save the properties file, users no longer see the subject area filter in their catalogs. <br><br> Unlike hiding a category, when you hide a filter, users still see the information in their search results. If you hide the subject area filter but a learning administrator adds subject areas to learning item, the user cannot filter by subject area but does see the subject area in the search results. |

| Property | Description |
|---|---|
| enableCatalogSearchTypeAhead | By default, this property is set to false. When set to true, the system assists users with their catalog searches with type-ahead technology: the system predicts the search that the user is entering and it completes the phrase.

One reason to set the enableCatalogSearchTypeAhead property to false is that the system does not restrict the type-ahead to a users' organization or catalog. The type-ahead technology makes predictions across the entire learning system. If you are concerned with a user seeing learning item phrases outside their organization or catalog, set to false. |
| catalogSearchSortByOptionsOrder | A comma-separated list of sorting options that you want to support for users in their catalogs. The first sort option in the list is the default sort option: the sort option that users see when they first open the catalog.

Valid values are:

- **Relevance**: the relevance of score from the system multiplied by the relevance score set on the learning item or curriculum in the catalog.
- **Title**: the title of the learning item.
- **Price**: the price of the learning item.
- **Tier**: the search tier that you have configured. |
| catalogSearchTimeout | This is the time that users' catalog searches can run before they time out. Very large organizations can have long catalog searches that users must refine. By timing out their searches, you prevent them from monopolizing resources.

Set the value in milliseconds. We recommend 60000. |
| showMobileReadinessIndicators | If set to **true**, then when users search for learning items that are flagged as mobile ready, they see an icon telling them that they can see the learning item on mobile devices (if they have the mobile app installed). Mobile ready learning items are designed for mobile devices. |

## 3.18.3.5  User Learning History Settings in LMS_ADMIN

You can change how users experience the history of their learning events.

Table 22: Learning History Properties

| Property | Description |
| --- | --- |
| MaximumLearningEventsDisplayed | Set to the amount of learning items that should appear in users' learning histories. Set to zero to allow unlimited history. |

## 3.18.3.6  Miscellaneous User Interface Properties in LMS_ADMIN

These properties are miscellaneous user interface properties in LMS_ADMIN system properties file.

Table 23:

| Property | Description |
| --- | --- |
| showCompetencyType | If the showCompetencyType property is set to true, users see their competencies' type when they are displayed. A competency type is a category of competency, such as skill or knowledge. When set to false, the competency type does not display to the end user. |
| studentUIPreferencesHandler | The studentUIPreferencesHandler property contains the class that persists end user preferences to the database. We recommend that you do not change the value. |
| displayNewsPageOnLogin | The displayNewsPageOnLogin property controls the behavior of the news page. The news page is the page of tips and new information that the user might be interested in it appears when users first log in, before they see the to-do list. By default, it is set to UserDiscretion. The following are possible values: <ul><li>**Never**: News page never displays</li><li>**Always**: News page always displays</li><li>**UserDiscretion**: The user can click a box that turns the news page off</li></ul> <br> ⓘ Note <br> The values are case-sensitive and as written above. For example, the correct value is **UserDiscretion** not **userdiscretion**. |

| Property | Description |
|---|---|
| enableItemRecommendations | When you set enableItemRecommendations to true, you enable a feature called "Item Recommendations." This feature allows you to recommend learning items to members of an assignment profile.<br><br>After you set this value to true, you can add one or more items to the *Recommended Items* tab of an assignment profile when you want to recommend those items to the users in the assignment profile. Users see the recommended learning items in their catalog or on their SuccessFactors Learning *Home* tab. An item appears in the user's catalog or on the user's home page if the item is:<br><br>• In a catalog that is assigned to the user.<br>• Not already on the user's To-do list.<br>• Not in the user's learning history (completed work).<br><br>If a user dismisses an administrator-recommended item, then that item does not appear on the user's home page as a recommended item, even if an administrator adds it as a recommended item to a different assignment profile that the user is included in.<br><br>Users see a *Recommended for you* section in the *Find Learning* tile and in the catalog search. |
| enableNativeMobileLearning | This property is used to enable/disable the Native Learning Mobile iPad app. If set false, users will have access only to the Learning Classic App, which provides online functionality for the Learning Plan. If set true, users will have access to the new Native Learning mobile app with additional offline functionality, and also the Learning Classic App. |
| enableNotificationHeaderFooter | This property is used to enable/disable the notification header and footer support. |
| allowUserToModifyCustomColumnsDataIfRegisteredBySuper<br><br>allowUserToModifyCustomColumnsDataIfRegisteredByAdmin | These properties, when set to true, allow users to modify custom column data entered by an administrator or a supervisor. |
| enableFontIcons | Set to **false** to use bitmap icons. We recommend that you set it to **true** to use font icons, which scale better for differently sized displays. |
| enableSmartLinks | Set to **false** to require users to log in when they receive a deep link. |

| Property | Description |
|---|---|
| `UsersCanSubmitIncompleteOptionalSurveys` | Set to **true** to allow users to submit incomplete surveys when the survey is optional. |

## 3.18.3.6.1 Organization Based Notification Header and Footer

You can create custom headers and footers for your each organizations' notifications. When you do, you should be aware of these rules.

You can create customer headers and footers for notifications that go to users and supervisors (other notifications are not affected). You create the header and footer in ▐▶ *Users* ❯ *Organizations* ❯ *Summary* ▌ inside the *Notification Header* and *Notification Footer* text areas. If the text areas are empty, the system ignores them.

Organizations are hierarchical, so the header and footer that users see could come from the users' parent organizations. When sending a notification, the system starts looking for headers and footers at the users' lowest organization and then works up the hierarchy until it finds a custom header and footer. When it finds **either** a header or footer, it stops looking and uses the header and footer at the current organization level, even if one is populated and the other is blank (for example if the header is populated with text and the footer is blank, the system stops going up the hierarchy, and sends the blank footer).

To enable custom headers and footers, go to ▐▶ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *LMS_ADMIN* ▌ and set enableNotificationHeaderFooter to true. When setting up customer headers and footers for organizations, remember:

- As with any notification system that sends bulk email, test your notifications before sending email to your users.
- If you do not see the header and footer you expect, you likely have a header or footer configured on a child organization.
- The header and footer accept HTML. Be strict with your HTML usage: wrap your paragraphs in paragraph (<p> </p>) tags. If you do not include a tag to separate your header and footer from the body of the message, it will not separate from the body of the message.
- The system is designed for organizations to have a custom header **and** a custom footer on the same organization level.

### Related Information

Miscellaneous User Interface Properties in LMS_ADMIN [page 44]

## 3.18.4 Supervisor Display Properties in LMS_ADMIN

This topic describes the connection among supervisor display properties in the LMS_ADMIN system properties file.

Supervisors are a special type of end user: one who manages a set of employees. Supervisors are assigned to supervisors in SAP SuccessFactors Learning administration. To become a supervisor, a user must have at least one employee with the supervisor set in the user's *Supervisor* box.

> **i Note**
>
> Supervisors, like all users, are affected by security configuration, data limits, and online content settings.

Supervisors have access to some pages and functions that are **not** available to an end user. Supervisors can view the My Employees tab, for example. In that page, they can assume the identity of an employee on their team. To control their ability to assume the identity (proxy) a user, change the properties in LEARNER_SECURITY.

### Display of My Employees' Profiles

The employee profile display affects pages in the application where a supervisor or an organization owner is viewing employees. An organization owner is set on the organization.

Table 24:

| Property | Description |
|---|---|
| `studentSubordinatesLazyPersistence`<br><br>`studentSubordinatesPreferencesHandler` | When the `studentSubordinatesLazyPersistence` property is set to true, the persistence of supervisors' subordinate display preferences is lazy, meaning it does not need to happen immediately. The `studentSubordinatesPreferencesHandler` property contains Java class that controls the UI preference. Do not change the value. |
| `studentSubordinatesShowPictures`<br><br>`studentSubordinatesShowStatus`<br><br>`studentSubordinatesShowSuccessors` | When the `studentSubordinatesShowPictures` property is set to true, *Show Pictures* on supervisors' interface is selected. This setting interacts with the `hideUserPhotosGlobally` property. If the `hideUserPhotosGlobally` property is set to true, then the default preference is irrelevant—pictures never show.<br><br>When the `studentSubordinatesShowStatus` property set to true, *Show Status* in subordinate profiles is selected by default.<br><br>When the `studentSubordinatesShowSuccessors` property is set to true, *Show Successors* is selected by default for the Supervisor in the Subordinate Profiles area (*Show Successors* only appears in the Succession Planner). |

## Dashboard Instructional Text

In the dashboard, supervisors view their team's deadlines and statuses with simple reports. You can change the label used in the instruction by changing the value of the property.

Table 25:

| Property | Description |
| --- | --- |
| managerDashboardInstructionalText | The managerDashboardInstructionalText property contains the instructional text that appears on the Supervisor's Dashboard page you can use a label defined in the labels section of SuccessFactors Learning. |

## Supervisor Registration of Employees

These properties affect how a supervisor registers employees for learning.

Table 26:

| Property | Description |
| --- | --- |
| allowSupervisorToEnterRegistrationFormCustomColumnsData | When set to true, supervisors can modify custom column entries when registering users for scheduled offerings. An additional setting allows users to overwrite the values that a supervisor enters. |
| updatedSupervisorFlow | When set to true, supervisors use the current Supervisor Registration Assistant. As of the February 2014 release and the support of commerce in the updated Registration Assistant, we recommend that you set this property to true. |

## Supervisor User Tree

Table 27:

| Property | Description |
| --- | --- |
| maxNumberOfSubordinatesDisplayedInTree | If your supervisors manage very large teams, you can restrict the number of employees to appear under any node before paging. By default, the setting is 300, which is a manageable size in most environments. Most customers do not need to change this property and most customers do not hit the default of 300 users per supervisor. But for those customers who do have 300 or more users per supervisor or for those customers who experience a slow *My Employees* tab, you might want to change the value of this property. |

**Related Information**

## 3.18.5 Administrator Display Properties in LMS_ADMIN

This topic groups topics that describe the ways you can use LMS_ADMIN system properties to change the way administrators experience the SAP SuccessFactors Learning Administration environment.

Administrators log in to SAP SuccessFactors Learning Administration to manage end users, learning items, and performance. They are a completely different user group than end users, even though they might have a related user ID and also log in to the user environment.

### Tab Display

In SuccessFactors Learning Administration, the administrator works in pages that contain multiple tabs. Some of the pages contain so many tabs that the administrator can show either the complete list of tabs or only the most frequently used tabs (in a page). The administrator's preferences are persisted in the database, but you can control the default display method.

> **i Note**
>
> The VLS Settings tab appears when the Virtual Learning System is enabled.

Table 28:

| Property | Description |
|---|---|
| `userUIDefaultTabDisplayMode` | The `userUIDefaultTabDisplayMode` property contains the default display mode of the pages with many tabs. Allowed values are simple and advanced. The value simple shows fewer tabs than advanced. |
| `userUILazyPersistence` `userUIPreferencesHandler` | If the `userUILazyPersistence` property is set to true, the administrator's preferences for tab display are not immediately persisted into the database. The `userUIPreferencesHandler` property contains the Java class that handles the tab display preferences. Do not change the value of the `userUIPreferencesHandler` property. |
| `displayModuleTabsInAlphabeticalOrder` | The `displayModuleTabsInAlphabeticalOrder` property, when set to true, shows administrator tabs in alphabetical order, but with the Summary tab always first. When set to false, the tabs display in their 6.2 and previous order. |

## User Registration/Learning Plan Display

Administrators can view user learning plans. You can set the time display for the administrator. The administrator can see the learning plan times (and dates) in their own time zone or the time zone of the end user (the "learner").

Table 29:

| Property | Description |
| --- | --- |
| learningPlanDisplayInLearnerTimezone | Set the learningPlanDisplayInLearnerTimezone property to true to show the administrator the learning plan times in the end user's time zone. Set to false to show the administrator the learning plan times in the administrator's time zone. |
| allowAdminToModifyRegistrationFormCustomColumns | When set to true, administrators can modify custom column entries when registering users for scheduled offerings. An additional setting allows users to overwrite the values that an administrator enters. |

## Administrator Limits

Administrators use the Copy Scheduled Offering wizard to create multiple, recurring copies of scheduled offerings. For example, if an administrator wants to create a scheduled offering (a class) that meets every Monday for the first 10 weeks of the year, he or she could create a scheduled offering for the first Monday of the year and copy the scheduled offering to the other 9 weeks.

Administrators can inadvertently create hundreds of scheduled offerings using the Copy Scheduled Offering Wizard. Therefore, you can limit the number of copies an administrator can create when running the wizard. For example, if you set the limit to 5, then the administrator who wants to make10 copies would have to run the wizard twice. If administrators run the wizard to make copies in excess of the limit you set, they see an error: The parameters you are specifying will create 10 copies of this schedule instance. The system has been configured to limit administrators to 5 copies.

Likewise, an administrator can create training request seats. You also want to set a reasonable limit to prevent the administrator from overwhelming the database.

Table 30:

| Property | Description |
| --- | --- |
| scheduleCopiesLimit | The scheduleCopiesLimit property defines the number of copies administrators can make of a scheduled offering any one time they run the Copy Scheduled Offering wizard. |
| maxNumberOfTrainingRequestSeats | This property limits the amount of training request seats an administrator can create. By setting a reasonable limit, you prevent administrators from overwhelming database. The default Value is 500, the minimum value is 1 and the maximum value is 10000. |

| Property | Description |
|---|---|
| `exportExpiration` | This property sets the maximum number of days that an administrator has to download their export results from the export tool. After the number of days set in this property, the administrator is no longer able to access the result. The default and recommended setting is 3. The value can be between 1 and 30. |

## 3.18.6 Administrator and User Shared Properties in LMS_ADMIN

This topic groups topics that describe the ways you can use LMS_ADMIN system properties to change the way both administrators and users experience SAP SuccessFactors Learning.

Some settings for interface display apply to the administrator and the end user.

### Privacy Settings: Masking User Information in Reports

For privacy reasons, the system can mask user ID or instructor ID in notifications or printed reports.

Table 31:

| Property | Description |
|---|---|
| `privacyActDefaultMask` | The `privacyActDefaultMask` property is a string of characters that the system uses to replace the user or instructor IDs. For example, if the value is "*********" then the for the user ID and instructor ID, readers see "*********" instead of the actual IDs. |
| `privacyActMaskEnabled.*.*` | The `privacyActMaskEnabled.*.*` property enables the mask defined in the `privacyActDefaultMask` property. For example, if the `privacyActMaskEnabled.Notification.Student ID` property is set to true, then for all notifications sent out, the user ID values appear as the set of characters defined in the `privacyActDefaultMask` property. |

### General Settings that Apply to both Administrator and User

The following are general settings that apply to the behavior of both administrators and users.

Table 32:

| Property | Description |
|---|---|
| emailValidationEnabled<br><br>emailValidationClassName | If the emailValidationEnabled property is set to true, SuccessFactors Learning validates the syntax of addresses entered in fields where administrators or users can enter e-mail addresses (checks to find an @ character, for example). The emailValidationClassName property contains the class that handles the validation. Do not change the emailValidationClassName property. |
| maxItemRatingValue | The maxItemRatingValue property defines the maximum rating allowed for a learning item. If the user's catalog is set to display the learning item rating (to see how to set the display of the learning item rating, see "Catalog (Browse and Search)") then the value of maxItemRatingValue property is the maximum number of stars an item can be given by an administrator and seen by a user. |
| hideUserPhotosGlobally | If the hideUserPhotosGlobally property is set to true, no user photos are displayed anywhere in SuccessFactors Learning. |
| proxyCaching<br><br>nsBrowserCaching | The proxyCaching property controls caching for Microsoft Internet Explorer, and the nsBrowserCaching controls the caching for Mozilla browsers. In a development environment, when you are updating pages often, set to false to load the pages fresh each time. In a production environment, set to true for better performance. |
| cacheChartFormats | If the cacheChartFormats property is set to true, SuccessFactors Learning caches the XML that generates report charts (graphs). Set to true in production environments to speed delivery of charts and false in development environments when you are testing different charts. |
| adHocEmailTemplateUsageEnabled | If you are not using an OnDemand license, the adHocEmailTemplateUsageEnabled property has no effect. But if you are using an OnDemand license, then the property affects your ad hoc notifications. If it is set to true, then administrators can select a notification template (but not edit it) to send to users. If it is set to false, then administrators cannot select a template but can type free text into the Body box of the Ad Hoc Notifications Message page. |
| showPreferenceSelectorInDefaultHeader | If this is set to true, then users and administrators see a locale drop-down on the log in page. They can select their locale to read the login page in their language. If it is set to false, then the login page appears in the default locale language. |

### 3.18.7 Help Configuration

This topic describes how you can change the interaction between help and the application with settings in the LMS_ADMIN system properties file.

This help configuration affects two types of customers:

- It affects customers who use the Flash based interface (set in ▎ *System Admin* ❭ *Configuration* ❭ *User Settings* ❭).
- It affects customers who use the Tiles interface but who have users in non-US English locales. If the help in the locale has **not** been translated since the Tiles interface has been released (the help still describes the Flash based interface), then these settings do apply.

Table 33:

| Property | Description |
| --- | --- |
| `baseHelpRedirectURL` | The application reads the prefix for the help from the `baseHelpRedirectURL` property. For on premises customers, if you deploy the help in a place other than the default location, change the `baseHelpRedirectURL` property. It can be relative to the application server URL. It is configured as a relative path by default.<br><br>The `baseHelpRedirectURL` property can also be set to a full path. For example, you can set it to http://help.learning.com/help, where you are serving the help. |
| `helpRedirectorURI` | In most cases, you do not edit the `helpRedirectorURI` property. It is the struts action that calls the help. It is exposed in the configuration file for easy customization by SAP SuccessFactors Technical Services. We do not recommend that customers change the setting without help from SAP SuccessFactors. |

### 3.18.8 Defining Online Learning

This topic contains important concepts about online learning in SAP SuccessFactors Learning. You should understand these concepts before configuring online learning.

Online content is any learning item offered on the computer—whether it is over the Internet or launched locally from a workstation. Often, online content is served from a content server and tracked in SAP SuccessFactors Learning Administration. Three standards affect the structure and recording of user status.

- AICC (Aviation Industry CBT Committee). The AICC configuration has its own properties file: AICC
- SCORM (Sharable Content Object Reference Model)
- SAP SuccessFactors Structure (You can add content objects on their own, without adhering to one of the above structures, and SAP SuccessFactors Learning Administration will still track the content modules).

To set up an online environment, we recommend that you understand the following concepts:

- Cross-Domain Support (CDS): Allows SAP SuccessFactors Learning Administration to communicate with a content server that is set up on a different domain. There are two types of cross-domain support:
    - Cookie Cross-Domain Support: Uses cookies to manage the cross-domain communication, but requires the content server and SAP SuccessFactors Learning Administration to share a higher-level domain. Also requires JavaScript to truncate the domain name.
    - Communication Cross-Domain Support: Uses an API wrapper to make the cross-domain communication. Requires different pages for different types of content (SCORM, Content, Exams). Does not work with NETg, but is otherwise the recommended approach to CDS. If you are interested in the recommended CDS deployment, there is a separate guide for setting up your CDS.
- Plateau Offline: Takes learning content offline so that users can view the content while disconnected from the Internet. There are other uses for Plateau Offline, but the ability to play content is how it is used in a learning scenario. Plateau Offline is a client application.
- Mobile Offline: Takes learning content offline and onto mobile devices.
- VLS: Manages the communication between different brands of content servers and the application. VLS tabs appear in SAP SuccessFactors Learning Administration so that administrators can tune learning items and scheduled offerings to communicate with the content servers. To use VLS, you must also install connectors. VLS is called VLE in the configuration settings. To learn more about VLS, see the VLS Configuration Guide.
- Tracking: Tracks a user's progress through online content through an applet and a servlet. For different kinds of content, the servlet can run in different places. You can define the location of the servlet that handles, for example, SCORM content.
- Sites/Portals: Sites (called portals in the configuration) are Web sites where external users can access learning content.

## 3.18.8.1 General Online Learning Properties in LMS_ADMIN

This topic describes general online learning properties that you can set in LMS_ADMIN. General online learning properties enable online learning functions that apply broadly across online learning.

Table 34:

| Property | Description |
| --- | --- |
| aiccSecurityEnabled | To enable security in AICC learning transactions, set the aiccSecurityEnabled property to true. AICC security prevents, for example, users from stealing a session by copying a URL. |
| contentTestPagesEnabled | Set the contentTestPagesEnabled property to true to allow some online learning test pages to run without going through the normal check-login routine. Enable test pages in only test environments because when you set to true, the system circumvents its login checks. This setting is exposed for SuccessFactors Technical Services. We recommend engaging them for help with online learning. |

| Property | Description |
|---|---|
| `userIdentityInformationCookieEnabled` | Some third party learning content, when served online, requires the user's ID in a cookie. If your content requires the user ID to be stored in a cookie, then set the `userIdentityInformationCookieEnabled` property to true. |
| `vleEnabled` | If the `vleEnabled` property is set to true, then the application can connect to virtual learning servers such as WebEx. If set to false, then there is no connection, and virtual learning settings throughout the application are disabled in SAP SuccessFactors Learning Administration. Also, if set to false, users cannot connect to virtual learning servers from their Content Structure page. SAP SuccessFactors produces a specific integration guide to walk you through integrating SAP SuccessFactors with virtual meeting rooms. |

## 3.18.8.2 Cross Domain Support (CDS) Properties in LMS_ADMIN

Table 35:

| Property | Description |
|---|---|
| `cookieCrossDomainSupportEnabled` | Set `cookieCrossDomainSupportEnabled` to true to enable cookie cross domain support. Cookie cross domain support is used to support launching and tracking courseware from a different domain than the application domain. The application and the content server must share the top-level domain for cross domain tracking to be successful. An application server with domain tms.learning.com and a content server with domain cms.learning.com share the top level domain: "learning.com." If you set to true, you must also set a value for the `cookieCrossDomainSupportDomainName` property. |

| Property | Description |
|---|---|
| cookieCrossDomainSupportDomainName | The cookieCrossDomainSupportDomainName contains the top-level domain when you are using cookie cross domain support (when cookieCrossDomainSupportEnabled is set to true). For example, if application has the domain tms.learning.com and your content management server has the domain cms.learning.com, then the value of the cookieCrossDomainSupportEnabled property is learning.com. |
| communicationCrossDomainSupportEnabled | When set to true, the communicationCrossDomainSupportEnabled property enables communication cross domain support, which uses an API wrapper to make possible cross-domain communication between SAP SuccessFactors Learning and a content management server. |
| defaultContentServerPath | The defaultContentServerPath property contains the default value for the URI where you store your online content. Administrators can change this. For example, you can type the root and allow administrators to type in their subfolders for different learning items. |
| contentWrapperPageName | The name of the wrapper frameset that loads SAP SuccessFactors Learning courseware APIs and training content. |
| lmsSessionId | The LmsSessionId property is used when proxlet.war is deployed to support cross domain SCORM content. It allows SAP SuccessFactors Learning to authenticate the request from the proxlet. The default setting is jsessionid, and you should not change it without assistance from SAP SuccessFactors Technical Services. |
| scorm2004ContentWrapperPageName | The scorm2004ContentWrapperPageName property contains name of the wrapper frameset that loads SCORM 2004 courseware APIs and training content. |
| externalURLQuestionWrapperPageName | The externalURLQuestionWrapperPageName property contains the name of the wrapper frameset that loads exam question APIs and exam content. The exams must be configured to work with SAP SuccessFactors Learning Administration. |
| contentOpenerPageName | The contentOpenerPageName property contains the name of the page that loads the courseware APIs. Unlike the wrapper page, the opener page opens the actual training content in a new window. |

| Property | Description |
|---|---|
| defaultProxletPath | The `defaultProxletPath` property contains the default value for the communication proxy loaded on the content server. Administrators can override this value in the Cross-Domain tab of the content object or question record. |
| useJsletInsteadApplet | This property applies to on-premise customers only. When set to true, the Cross Domain Solution (CDS) system uses Java-Script-based implementation (JSlet) which does not need a client JRE. The default, recommended setting is true to avoid problems with JRE security updates from Oracle causing lost tracking of content. Remember: the JRE is on the client machine (the learner's machine), so you do not control when it updates. Set to false to use the applet-based implementation of the CDS. |

**Related Information**

## 3.18.8.2.1    JSlet Tracking vs. Applet Tracking

Where possible, we recommend JSlet tracking over applet tracking. This topic describes why and how you can override that recommendation.

If you use an applet, then from time to time, you must patch your server when users update their Java Runtime Environment (JRE). You cannot control when users patch their JRE. When you use the JSlet, you are not affected by JRE updates.

- On-demand customers whose users launch tracked content under the proxlet.war Cross Domain Solution (CDS) must use JSlet.
- On-premise customers whose users launch tracked content under the proxlet.war Cross Domain Solution (CDS) use JSlet by default. We recommend JSset to avoid JRE update issues.
- On-premise customers whose users launch tracked content under the proxlet.war Cross Domain Solution (CDS) can switch to using Java applets. Go to ▶ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *LMS_ADMIN* ❯ and change the `useJsletInsteadApplet` setting to false. This setting has no effect on-demand customers.

## 3.18.8.3 Online Learning URL Properties in LMS_ADMIN

This topic describes how you can control how the browser and user interact with online learning. These properties are in the LMS_ADMIN system properties file.

Table 36:

| Property | Description |
| --- | --- |
| `aiccReturnURL` | The `aiccReturnURL` property is mapping to the `PwsAiccServlet`, which tracks the completion of external AICC content through HTTP messages. |
| `contentTrackingFunctionReturnURL` | The `contentTrackingFunctionReturnURL` property contains the mapping to the `PwsTrackingFunctionsServletServlet`, which tracks the completion of structured content through HTTP messages. |
| `scorm2004ReturnURL` | The `scorm2004ReturnURL` property contains the mapping to the SCORM 2004 RTE servlet, which tracks the completion of structured content through HTTP messages. |
| `examQuestionReturnURL` | The `examQuestionReturnURL` property contians the mapping to the PwsStudentExamAPI. The exam questions sends HTTP messages to this URL. |
| `examResourceCacheMaxCount` | The `examResourceCacheMaxCount` property contains the number of resources to be cached by the `PexamResourceServlet`. |
| `restrictAccessToOtherComponentObjectsDuringExam` | The `restrictAccessToOtherComponentObjectsDuringExam` controls whether users can access other objects (like learning items) during an exam. |

## 3.18.8.4 Training Planner Automatic Assignment Properties

System administrators can set automatic assignment of training requests from the training planner.

Table 37:

| Property | Description |
|---|---|
| `autoAssignReviewedTrainingRequests` | When set to **true**, this configuration enables automatic assignment of training requests if the organization has been reviewed and either the seats requested equals seats granted or the preselected user count is equal or less than the seats granted. |
| `defaultAssignmentTypeForAutoAssignTrainingRequests` | When `autoAssignReviewedTrainingRequests` is set to **true** and when the learning item does **not** have a default assignment type, the system uses this assignment type when assigning users. |

## 3.18.9 Logging Properties in LMS_ADMIN

This topic describes how you can control the logging of the application in the LMS_ADMIN system properties file.

Logging in the application is controlled by Log4J, not in the application configuration. You can, however, indirectly affect the logging in the configuration.

Table 38:

| Property | Description |
|---|---|
| `isI18nLabelExceptionLoggingEnabled` | When the `isI18nLabelExceptionLoggingEnabled` property is set to true, if a SuccessFactors Learning requests a label but cannot find it in the locale label cache, the missing label is logged to missinglabels.log. Set to false to turn off logging. |
| `stackTraceDepthForMissingLabelLogging` | The `stackTraceDepthForMissingLabelLogging` property defines the depth of the stack trace that will be logged to the missing labels log file. If set to 0 (zero), then no stack trace information is logged. It only applies if the `isI18nLabelExceptionLoggingEnabled` property is set to true. |

## 3.18.10 Automatic Process and Job Management

This topic describes automatic processes and job management in the context of the properties in LMS_ADMIN.

Automatic Processes Managers (APMs) are job schedulers. Administrators set up APMs to run asynchronous jobs periodically. Those jobs are various, but they all administer to the system. Background jobs are initiated

manually by the administrator, who schedules them to run once. APMs, however, automate processes so that they run periodically.

# 3.18.10.1 Assignment Profile APM Settings in LMS_ADMIN

An assignment profile is a user group that users are assigned based on their attributes. Administrators set up assignment profiles in SuccessFactors Learning Administration, and the Assignment Profile APM periodically synchronizes the assignment profiles by running through new and changed user attributes to sort users according to their profile. This topic describes the properties in LMS_ADMIN that affect the assignment profile APM.

Assignment profiles create groups of users. For example, administrators can make an assignment profile that includes all users in a particular city. The system looks for the CITY attribute of the USER object and assigns all matching USERs to the new assignment profile (a group of users in the same city). When administrators add or change an assignment profile, they must propagate it, meaning that the system runs through all user records to find users in a matching city to put in the new assignment profile.

Propagation and synchronization are two different processes. Any time an assignment profile is created or changed, it must be propagated through a background job before it can be synchronized through the automatic process. Assignment profiles that are not propagated are skipped during the assignment profile synchronization process.

Table 39:

| Property | Description |
| --- | --- |
| assignmentProfileBatchSize | The *assignmentProfileBatchSize* property contains the number of database records processed at once when assignment profiles are synchronized. |
| assignmentProfileMetaDataCache | The *assignmentProfileMetaDataCache* property determines if the operator data for the Assignment Profile APM (such as city = Washington AND job position = Engineer II) is cached in the memory or read from the database every time. We recommend you set to true for production environments and false for development environments. |
| assignmentProfileQueryHelper | The *assignmentProfileQueryHelper* property contains the Java class that handles the Assignment Profile APM queries. |
| assignmentProfileTxnCommitBatchSize | The *assignmentProfileTxnCommitBatchSize* property contains the number of records to be committed to the database at once within any one batch for the Assignment Profile APM. This number must be smaller than the DatabaseBatchSize. |

## 3.18.10.2 Generic APM Settings in LMS_ADMIN

This topic describes the properties in LMS_ADMIN that apply to Automatic Process Management (APM) that do not apply to assignment profiles.

Table 40:

| Property | Description |
|---|---|
| `apmJobSettings.*.sleepMilliSecondsBetweenBatches` | In the `apmJobSettings.*.sleepMilliSecondsBetweenBatches` property, the * represents one APM. For example, `apmJobSettings.TRNGEXPIRE.sleepMilliSecondsBetweenBatches` controls the training expiration APM. Set to the number of milliseconds that the job pauses between batches. Increase this number to pause big jobs momentarily so that other processes can use CPU time during the pause. |
| `apmJobSettings.*.enabled` | In the `apmJobSettings.*.enabled` property, the * represents one APM. For example, apmJobSettings.TRNGEXPIRE.enabled controls the training expiration APM. Set to true to enable the other settings for that APM. |
| `apmJobSettings.*.transactionCommitSize` | In the `apmJobSettings.*.transactionCommitSize` property, the * represents one APM. For example, apmJobSettings.TRNGEXPIRE.transactionCommitSize controls the training expiration APM. The property contains the size of the batches that are committed at once to the database when the job runs. |
| `emailBatchCount` | The `emailBatchCount` property contains the amount of e-mail messages sent in a batch for a background job. |
| `emailArchivePurgeBatchCount` | The amount of email messages to be purged at any one time. Default: 1000. Not used unless the purge settings are correct in Global Variables. |
| `numberOfRecordsToBeProcessedInABatch` | The `numberOfRecordsToBeProcessedInABatch` property contains the batch size (in records) that are changed when a batch process runs. Set to zero to stop batching for background jobs. You might set to zero in a development environment. |
| `lateTimeWindow` | The `lateTimeWindow` property defines an expiration time, in minutes, for late jobs. By default, it is set to 30, meaning that if a job is more than 30 minutes late in running, it expires and is skipped. |

| Property | Description |
|---|---|
| `enableMakeupFiring` | The `enableMakeupFiring` property allows the most recently scheduled job to occur in a case where the scheduling engine has been down and, as a result, a reoccurring job was skipped. For example, if a job runs daily at 5 P.M., the `lateTimeWindow` property is set to 30 minutes, then the engine has been down for a month, and you bring it back up on June 1 at 1 A.M.

If the `enableMakeupFiring` property is false, then the daily job does *not* run because you started the engine after the 30 minutes set in the `lateTimeWindow` property.

If the `enableMakeupFiring` property is set to true, then the most recent daily job *does* run at 1 A.M. when you start the engine. |
| `LearningEventResynchronizationStudentCommitCount` | The `learningEventResynchronizationStudentCommitCount` property contains the number of users who are committed to the database in any one batch for the Learning Event Resynchronization job. If it is set to zero, then no commits occur until the entire job has completed. The Learning Event Resynchronization assigns users to learning events and can be run through a wizard in the Administration environment. |
| `OnlineOperationMaxRecordsCount` | The Max Records Threshold is stored in LMS_ADMIN in the `onlineOperationMaxRecordsCount` property. The value of the `onlineOperationMaxRecordsCount` property is the trigger that forces administrators to run the job asynchronously (See image below). If the number of records affected is less than or equal to the count, administrators can run the job synchronously (They can select `Run this job immediately, if allowable`). If it is above the count, they must run it as a background job. |

| Property | Description |
|---|---|
| allowableBackgroundJobTimeframes* | The `allowableBackgroundJobTimeframes*` properties are the times that administrators can schedule a job to execute. Make them times when your environment is under light loads and can therefore run the larger batch jobs.<br><br>Background jobs can be scheduled only during allowable time frames, described below with the allowableBackgroundJobTimeframes settings. Each allowableBackgroundJobTimeframes property defines a window: a date and time during which administrators can run a background job. Make them times that the system is under light loads.<br><br>By default, each day is contained in brackets. '...[Monday].enabled' means that background jobs will run on Mondays. However, the bracketed text is just a string to denote one window. You could also, for example create a [Weekdays] and [Weekends] window. The default below one example of a non-day bracketed value, [Christmas]. For each bracketed day, you can define start and end minutes, hours, dates, months, etc. A * means any of the unit. so if you have a * in minutes and start/end hours between 0 and 5, then jobs can start on any minute between the hours of Midnight and 5 AM.<br><br>Hours are in 24-hour format so that 0 is Midnight and 13 is 1 PM.<br><br>● An asterisk (*) indicates **all**. For example, an asterisk in the minutes property means jobs can be run all minutes in the hour specified in the hour property.<br>● All values in the end time properties must be greater than the corresponding attributes in the corresponding start time properties.<br>● End hours include the specified hour. For example hour 0 through hour 5 is equivalent to midnight through 05:59:59.<br>● Hours are in the 24-hour format. 1 P.M. is hour 13.<br><br>Time frames are relative to the DBMS time and time zone. The Administration environment does **not** display the available time slots in the administrator's time zone. If your database is in GMT, all available time slots (time frames) appear in GMT. |

# 3.18.11 Application Properties in LMS_ADMIN

This topic contains properties that affect the SAP SuccessFactors Learning application.

Table 41:

| Property | Description |
| --- | --- |
| restrictUserSelfModification | Administrators who have workflows to edit administrator accounts are not allowed, by default, to modify their own account. For security reasons, they must request that another administrator make the change. The administrator is not allowed to self-modify because the restrictUserSelfModification property is set to true. <br><br> In some cases, you might want to allow administrators to edit their own accounts. For example, in a training environment or in a development environment, you might allow it. To allow self-modification, set restrictUserSelfModification to true. |
| webServicesEnabled | To enable Web services, log in to the administration environment (http[s]://[your server]/learning/admin/) as a user with privileges and then go to *System Admin* ▶ *Configuration* ▶ *System Configuration* ▶ *LMS_ADMIN* . Find the webServicesEnabled property and change its value to true. See the Web services guide for more information about using Web services. <br><br> The default user with all privileges is PLATEAU/PLATEAU. |
| cacheChartFormats | When the cacheChartFormats property is set to true, the system caches the chart format XML after the first time it loads from the database. We recommend that you set to true (the default). However, if you are developing or changing chart formats, you might set to false to always load the cart format from the database so that you can see your changes. |
| jamIntegrationEnabled | This property affects customers who use SAP SuccessFactors Learning in an integrated environment. If set to true, SAP SuccessFactors Learning can make use of the integrated SAP Jam environment. For example, you can assign SAP Jam groups to learning items so that the participants have an SAP Jam group for their course. |

| Property | Description |
|---|---|
| `allowFutureHireDates` | When set to true, a user's hire date can be in the future. A common reason to set this property to true is if you use User Connector - SF to load users from the SF tables to the SAP SuccessFactors Learning. Users in the SF tables can have future hire dates: they are set up in the system so that they are ready for the employees' first day. The default setting is false. If you set this property to true and then you set it back to false, the system does **not** remove users with future hire dates or perform any other clean up: your current user records are left as-is and new users created after you set it back to false are prevented from having future hire dates. |
| `enableCappingFactor` | By default, this property is set to false. Set it to true for French government reporting. When this property is set to true:<br><br>• The learning event recorder to display system default currency instead of the drop-down.<br>• Administrators are also prevented from changing the currency for addition costs in Learning Event Editor.<br>• The system hides *Training days* while recording learning. |

## 3.18.12 Encryption and Security Properties in LMS_ADMIN

This topic describes the encryption and security properties in the LMS_ADMIN system properties file.

The application includes three encryption handlers and the configuration to point to them. Two are commented out, and the recommended Sun JCE handler is uncommented (see below for a description of the handlers). The two encryption classes differ as follows:

• `ElmsJceEncryption` (algorithm DESede or DES): UTF-8 compliant but not compatible with legacy users.
• `ElmsEncryption`: Not UTF-8 compliant but compatible with legacy users. This encryption scheme is deprecated.

> **i Note**
>
> We strongly recommend you contact a SAP SuccessFactors representative before changing your encryption scheme.

To upgrade from `ElmsEncryption` to `ElmsJceEncryption` you must ensure that the application is up and running and that no users are logged on. De-encrypting and re-encrypting passwords is a resource intensive process. If you are running a clustered environment, you must restart all nodes in the cluster after the upgrade process is complete.

Table 42:

| Property | Description |
| --- | --- |
| encryptionClassName | The name of the class that handles encryption for SAP SuccessFactors Learning. |
| encryptionProvider | The encryption provider for the encryption scheme of SAP SuccessFactors Learning, such as SunJCE. |
| encryptionAlgorithm | The encryptionAlgorithm property contains the encryption algorithm called on the encryption class for transformation. |
| encryptionMode | The encryptionMode property contains the mode called on the encryption class for transformation. If null, no mode is specified. |
| encryptionPadding | The encryptionPadding property contains the padding called on the encryption class for transformation. If null, no padding is specified. |
| encryptionKey | The encryption key contains the key used by SAP SuccessFactors Learning for encrypted data. See comments in the LMS_ADMIN file for more information. |
| xssFilterExcludedURLs* | The xssFilterExcludedURLs* properties are exposed for SuccessFactors technical services. |

| Property | Description |
|---|---|
| `enableRandomPasswordGenerationForNewUsers` | This configuration sets whether the system uses default password functionality or initial random password generation. When set to true, the system uses random password generation for all the users created in our system. When set to false, the system uses default password functionality. |
| | After you set this property to true and when an administrator creates a new user record, the system emails a new password, using the PasswordNotification template ID, to each newly created user who has a valid email address. The initial password is 9 characters and can contain any combination of upper- and lowercase letters, numbers, or special characters. |
| | If your company adds new user records through an HR connector or the Import Data tool and those records do **not** have a valid email address, then the system creates the user record, does not send the email notification, and includes the inability to send an email to the user in the HR Connector or Import Data tool report, respectively. As a result, you might have users who have a unique, randomly generated password that they cannot access. In these cases, you must reset the passwords for those user records from the Summary tab of each user record. |
| | At the first login for each user, the system prompts the user to change the password and enter a security question and answer. |
| `enableMultipleSecurityQuestionsForUser` | This property is part of the password recovery process in SAP SuccessFactors Learning. |
| | • When this property is set to true, the system forces the end user to type their own security question, provide the answer to that question, and confirm the answer. |
| | • When this property is set to false, the system allows the end user to set answers to two out of a possible ten security questions, questions that an administrator creates by changing the appropriate label values. You can find the label IDs and values by clicking the *View Available Security Questions* link. |
| `offlinePlayerLoginRequired` | When this property is set to true, users of offline player must log in to offline player. By default it is set to true. |

# 3.18.12.1 Using the Encryption Tool

This topic describes how you use the encryption tool set the encryption key. SaaS customers can ignore this topic.

## Context

To set the `encryption.key` property in LMS_ADMIN, you must run an encryption tool to set the key. Your encryption key is stored in the LMS_ADMIN system properties file. You can use the encryption tool to generate a new encryption key or convert an existing key at any time.

If your encryption key ends in a double equals sign (==), we recommend that you generate a new one.

## Procedure

1. Open a command window and change directories to your SAP SuccessFactors Learning install folder.
2. Type the following command, replacing "x.x" with your version of the plateaucommon-core JAR:
   ```
   java -cp webapps/learning/WEB-INF/lib/plateaucommon-core-x.x.jar
   com.plateau.common.core.api.util.encryption.JceEncryption -help
   ```
3. Read the help that the command returns to understand the flags you can use in the encryption tool.

> 🔹 Example
>
> > ℹ Note
> >
> > The examples are on one line, the line breaks are added to fit the examples on a printable page.
>
> To convert an old encryption key (using double-equals sign) to the new, more secure format (assuming the JAR version is 2.1.3):
>
> ```
> java -cp webapps/learning/WEB-INF/lib/plateaucommon-core-2.1.3.jar
> com.plateau.common.core.api.util.encryption.JceEncryption -c [your key ending in
> ==]
> ```
>
> To generate a new encryption key using DESede:
>
> ```
> java -cp webapps/learning/WEB-INF/lib/plateaucommon-core-2.1.3.jar
> com.plateau.common.core.api.util.encryption.JceEncryption -g -a DESede
> ```
>
> To encrypt a plain text password:
>
> ```
> java -cp webapps/learning/WEB-INF/lib/plateaucommon-core-2.1.3.jar
> com.plateau.common.core.api.util.encryption.JceEncryption -e [your password]
> ```

## 3.18.12.2 Configuring 256 Bit AES Encryption

This topic describes how you can configure SuccessFactors Learning to use 256 Bit AES encryption. SaaS customers can ignore this topic.

By default, the Java environment that is required by SuccessFactors Learning uses 128 bit AES encryption, meaning that SuccessFactors Learning uses 128 bit encryption. For most organizations, 128 bit encryption is strong enough. If your organization requires a stronger encryption scheme, however, you can configure your Java environment to use 256 bit AES encryption. Download the security policy from the Oracle download site, and then follow the directions contained in the downloaded .zip file README.txt file.

## 3.18.12.3 Users' Password Setting and Recovery Process

Users can recover their passwords in SAP SuccessFactors Learning with security questions. This topic describes how you can configure the security questions.

### Setting Users' Initial Password

We recommend that you use the random password generation feature. To use this feature, set `enableRandomPasswordGenerationForNewUsers` to true in the LMS_ADMIN system properties file.

After you set this property to true and when an administrator creates a new user record, the system emails a new password, using the PasswordNotification template ID, to each newly created user who has a valid email address. The initial password is 9 characters and can contain any combination of upper- and lowercase letters, numbers, or special characters.

If your company adds new user records through an HR connector or the Import Data tool and those records do **not** have a valid email address, then the system creates the user record, does not send the email notification, and includes the inability to send an email to the user in the HR Connector or Import Data tool report, respectively. As a result, you might have users who have a unique, randomly generated password that they cannot access. In these cases, you must reset the passwords for those user records from the Summary tab of each user record.

At the first login for each user, the system prompts the user to change the password and enter a security question and answer.

Alternatively, you can set users' passwords directly. All new users then have the same temporary password that you set in ▶ *System Admin* ❯ *Configuration* ❯ *User Passwords* ◀ and the *User Password* box. For example, if you type "Welcome123" in the *User Password* box, all new users have an initial password of "Welcome123."

On some occasions, you must reset a single user's password, which you can do on the User record: ▶ *Users* ❯ *Users* ❯ *Summary Area* ◀. To allow administrators to change user passwords, go to ▶ *System Admin* ❯ *Configuration* ❯ *Global Variables* ❯ *Password Settings* ◀ and select *Allow user passwords to be changed*.

# Password Recovery

If users forget their passwords, SAP SuccessFactors Learning can prompt them with security questions to help them recover their access. You can choose either to control the security questions for password recovery or allow users to create their own passwords. In general, when you prompt users with security questions, you can ensure that users are asking questions that only they would know the answer to. But maintaining that list of questions is more time consuming. Not only do you need to set the list, but if your user base speaks more than one language, you must translate the questions. It is our recommendation that you suggest questions to users.

> ℹ **Note**
>
> The password recovery system applies only when users are logging in directly to SAP SuccessFactors Learning, not the integrated environment.

To enable password recovery, go to ‖▶ *System Admin* ❯ *Configuration* ❯ *Global Variables* ❯ *Password Settings* ❯. Select *Allow users to request their ID and password*. Then go to ‖▶ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *LMS_ADMIN* ❯ and set `enableMultipleSecurityQuestionsForUser` to either true or false depending on the password recovery strategy you choose.

The first time users log in, their experience changes with the setting of `enableMultipleSecurityQuestionsForUser`:

- When this property is set to true, the system forces the end user to type their own security question, provide the answer to that question, and confirm the answer.
- When this property is set to false, the system allows the end user to set answers to two out of a possible ten security questions, questions that an administrator creates by changing the appropriate label values. You can find the label IDs and values by clicking the *View Available Security Questions* link.

If users then forget their passwords, their experience changes with the setting of `enableMultipleSecurityQuestionsForUser`:

Table 43:

| If you set the enableMultipleSecurity-QuestionsForUser property to | and, if the end user clicks the... | then the system... |
|---|---|---|
| false | *Forgot Password?* link | prompts the user to provide value in the *User ID* box and click *Submit*. The system then shows the security question that the user created upon initial log in and requires the user to provide the correct value in the *Security Answer* box. After the user provides the correct security answer, the system send an email message to user with a temporary, random password. |

| If you set the enableMultipleSecurity-QuestionsForUser property to | and, if the end user clicks the... | then the system... |
|---|---|---|
| false | *Forgot ID?* link | prompts the user to provide value in the Email Address box and click Submit. After the user provides an email address that is associated with a user record, the system sends an email to that address with the user ID that is associated with that email address. |
| true | *Forgot Password?* link | prompts the user to provide value in the *User ID* box and click *Submit*. The system then shows the security questions that the user selected upon initial log in and requires the user to provide the correct values in the *Security Answer* boxes. After the user provides the correct security answers, the system send an email message to user with a temporary, random password. |
| true | *Forgot ID?* link | prompts the user to provide value in the Email Address box and click Submit. After the user provides an email address that is associated with a user record, the system sends an email to that address with the user ID that is associated with that email address. |

## 3.19  MODULE_TABS_SYSTEM

This topic describes purpose of the MODULE_TABS_SYSTEM system properties file.

MODULE_TAB_SYSTEM is used in conjunction with the configuration at ▶ *System Admin* ❯ *Configuration* ❯ *Module Tabs* ❯. The properties point to classes that control the HTML generation for the tab layout and some rules about a few of the tabs (Such as VLS tabs).

To change the tabs that appear in each of the sections, go to ▶ *System Admin* ❯ *Configuration* ❯ *Module Tabs* ❯, search for the module that you want to affect, and then edit its tab configuration.

## 3.20  ORG_DASHBOARD

The ORG_DASHBOARD contains the settings for configuring organization dashboard reports. The settings are exposed so that SuccessFactors representatives can troubleshoot and customize the dashboard pods.

Except in one circumstance, we do **not** recommend that customers change the settings. The one circumstance is licensing. If you want to change the license associations with a pod, you can do so by changing the value of the *.license properties (for example: dashboard.view0.PerformanceToCompensationPod.license). If you do not want the pod to appear to end users, change the value to one that does not match any license. For example, change it to NO LICENSE.

## 3.21  OPEN CONTENT NETWORK

After you sign agreements with content providers, you configure the Open Content Network to connect to the provider.

You configure the open content network so that SAP SuccessFactors Learning can connect and import the content catalog. Each Massive Online Open Courses (MOOC) provider has its own configuration. Talk with your provider for the correct values, but bear in mind the following important properties.

### Enabling the System and the Providers

Table 44:

| This property... | ...Is Used As Follows |
| --- | --- |
| enableWebCoursesTabInCatalogSearch | Set to **true** to enable the Web Courses tab in the end users' learning catalog pages. All MOOC courses appear on this tab. Set to **false** to disable the tab. When you disable the tab, you disable all user access to the MOOC courses: if they cannot see the tab, they cannot see the courses. |
| providers[<specific provider name>].* | Do not change any value for a property that starts with providers unless you are directed to so so by a SAP SuccessFactors Learning representative. There are two exceptions to this rule, and they are described in the rows below. |
| providers[<specific provider name>].enabled | By default, all providers are disabled (this property is set to **false**. Set to **true** to enable the provider after you sign an agreement. |

| This property... | ...Is Used As Follows |
|---|---|
| `providers[LYNDA].orgID` | The provider Lynda.com provides its customers with an organization ID, as a way to organize its customers. You find the organization ID in your agreement. Paste the organization ID as the value of `providers[LYNDA].orgID`. |
| `providers[<specific provider name>].fetchDeltaOnly` | When set to **true**, the system fetches changes to the provider's catalog instead of the entire catalog. Administrators see the catalog in ▶ *Learning* ❭ *Content Network* ❭.<br><br>You can set this property to **false** to do a first import. After the Automatic Process Manager (APM) ▶ *System Admin* ❭ *Automatic Processes* ❭ *Open Content Network Content Synchronization* ❭ runs the first time, you can set it to **true** to import only the changes. Remember that this property is per provider, so run a full fetch (set it to **false** for the first run of the APM) each time you add a provider. |
| `providers[<specific provider name>].pricingModel` | `providers[<specific provider name>].pricingModel` determines the pricing model of the provider. Valid values are:<br><br>• A value of **null** means that the provider falls back on whatever pricing you have configured in Commerce or falls back on free courses. If you want to use OCN with SAP SuccessFactors Learning commerce, then type **null**. If you plan to offer all courses for free, type **null**.<br>• If you want to publish the price of an OCN course on users' catalogs and allow them to pay for it a la carte from the OCN provider, type **RETAIL**. The provider must have an a la carte option. Companies can use this, for example, if they tell users to charge the course to a credit card and submit it in an expense report. The transaction takes place outside SAP SuccessFactors Learning, but we do show the pricing information so that users can make informed decisions. You cannot use Commerce if you select a retail model.<br>• If you signed up under a provider's subscription model, type **SUBSCRIPTION**. Subscription models vary, but users under a valid subscription are allowed to take the course. Billing takes place under your provider's subscription agreement. You cannot use Commerce if you choose a subscription model. |
| `providers[OPENSESAME].config.appKey` | OpenSesame requires a tenant ID, an app key, and a secret key. With an OpenSesame account, you can retrieve the information at https://www.opensesame.com/OCN ↪ |

| This property... | ...Is Used As Follows |
|---|---|
| `providers[OPENSESAME].config.secretKey` | OpenSesame requires a tenant ID, an app key, and a secret key. With an OpenSesame account, you can retrieve the information at https://www.opensesame.com/OCN ↗ |
| `providers[OPENSESAME].config.tenantID` | OpenSesame requires a tenant ID, an app key, and a secret key. With an OpenSesame account, you can retrieve the information at https://www.opensesame.com/OCN ↗ |

## Setting Default Import Values

When you import content from a provider to SAP SuccessFactors Learning, each course becomes a learning item in your system. The following properties define the default values when the system creates the learning item. The default values are the recommended values for most customers (the most common configuration case). The settings apply to all providers.

Table 45:

| This Property... | ...Is Used as Follows |
|---|---|
| `domainID` | This value is the default security domain of learning items created from importing MOOC content. |
| `crossDomainEnabled` | This value determines whether cross domain support (CDS) is enabled on the content. CDS is supported for Lynda only, and to use it, you must set up CDS. To set up CDS, read the *Integration - Learning and Cross-Domain Content Servers* document for your release. |
| `enableMobileAccess` | This value is the default value for the flag that enables mobile learning access for the learning items. If you want users to access the MOOC content only through a browser on laptops, set to **false**. |
| `isOnline` | This is the default setting for the flag that allows users to access the learning item. If you want to import MOOC content but you want to hide it until you have a chance to review each learning item, set the value to **false**. To reduce your review workload, set to **true**. |
| `isApprovalRequired` | This is the default setting for the flag that either requires or does not require approval to take a course. The idea of MOOC courses is that are highly available to your users, so in most cases, you should set to **false**. You can always set individual learning items to require approval later. Set to **true** to require, by default, approval to launch MOOC courses. |

| This Property... | ...Is Used as Follows |
|---|---|
| `processDefinitionID` | If you require an approval process by default in `isApprovalRequired`, then you create a default approval process and paste the ID as the value of this property. |
| `isSupervisorCanRecordLearningEvents` | This is the default setting for the flag that allows supervisors to record learning events on the learning item. The idea of MOOC courses is that they are highly available to your users, so we recommend setting this to **true**. You can always override the default value for individual learning items. |
| `isUserCanRecordLearningEvents` | This is the default setting for the flag that allows end users to record learning events on the learning item. The idea of MOOC courses is that they are highly available to your users, so we recommend setting this to **true**. You can always override the default value for individual learning items. |
| `currencyCode` | If you set up commerce for MOOC content and if you do not want to use the default currency code, then provide an alternative currency code here. The currency code is the ID from  ▶ *References* ❭ *Commerce* ❭ *Currencies* ❬ . |
| `itemType` | This is the default learning item type value for learning items created from importing MOOC content. Item type is sometimes confused with item classification. Item types are enumerated in ▶ *References* ❭ *Learning* ❭ *Item Types* ❬ . The classification for learning items created by MOOC content will always be `EXTERNAL-COURSE`. |
| `itemCompletionStatus` | This is the default value for completion status of the learning items created from importing MOOC content. This value is useful in two circumstances: when the value of `markCompleteOnLaunch` is set to **true** or when `crossDomainEnabled` is set to **true**. If content is complete when it launches, the users receive this status (by default). If cross domain is enabled, then the server communicates back the item completion status. |
| `itemFailureStatus` | This is the default value for failure status of learning items created from importing MOOC content. |
| `reviewable` | This is the default value for the flag that enables a learning item to be reviewable. |
| `markCompleteOnLaunch` | This is the default value for the mark complete on launch flag for learning items created form MOOC content. If you are tracking completion status, we recommend you set to **true** in this release. |

## 3.22 PASSWORD_POLICY

This topic describes the PASSWORD_POLICY system properties file.

PASSWORD_POLICY contains security information about passwords in the application. It is well commented, and a person who is knowledgeable in both Java and security policy would be able to understand the settings and adjust them accordingly. It is unlikely that you would change the password policy once you have set it up the first time.

## 3.23 PERFORMANCE_CONFIG

This topic links to the legacy help.

The PERFORMANCE_CONFIG system properties file is part of the legacy Plateau Performance product and therefore documented in the legacy help.

**Related Information**

Plateau Legacy Help

## 3.24 REPORT

This topic describes the REPORT system properties file.

REPORT is used in the report framework. It controls the classes that are called for different reports, their input parameters and the returns. To edit REPORT, you must understand the Report Framework in general and have a clear understanding of report writing and Java.

## 3.25 REPORT_SYSTEM

This topic describes the purpose of the REPORT_SYSTEM system properties file.

The REPORT_SYSTEM file contains basic information about the running of reports. To make bigger configuration changes to your reports, you must work within the Report Framework.

# 3.25.1  Asynchronous Reports

This topic describes how you can control asynchronous report behavior in REPORT_SYSTEM.

With SAP SuccessFactors Learning 6.4 and later, all reports are asynchronous; therefore, any changes you make to these settings affect all reports. When administrators run a report as a background job, the system generates the report at the scheduled time and stores it in the database.

Even though all reports are asynchronous, administrators still click Run Report, which gives the impression that it's a synchronous report. When administrators try to run a report immediately in this way, the system schedules it for immediate background execution, but with the timeout specified by the `onlineTimeoutPeriod` property. If they schedule the report, then the system uses the timeout specified by the `backgroundTimeoutPeriod` property.

Table 46:

| Property | Description |
| --- | --- |
| `asyncStorageMaxSize` | The `asyncStorageMaxSize` property contains the maximum size (in bytes), after which the system aborts attempts to store the report in the database. |
| `asyncStorageTTLDays` | The `asyncStorageTTLDays` property contains the number of days after which the system removes a report that is stored in the database. |
| `asyncEmailedReportFileName` | The `asyncEmailedReportFileName` property contains the default file name when the report is sent as an e-mail attachment. The format of the report is appended (.xml, .html, .pdf, or other extensions). |
| `scheduleOnlyReports.*` | The `scheduleOnlyReports` properties contain reports that can only be run as scheduled reports. The reports still appear in the Reports section, but users cannot execute them concurrently; they must schedule them. If you know that some reports always take a long time to run, you can force users to schedule them. Each report that you want to force as schedule only is a suffix to the `scheduleOnlyReports` property. For example, `scheduleOnlyReports.UserCurriculumStatus` makes the curriculum status report schedule only. The report name is stored in the database, within the PA_REPORT table, in the REPORT_NAME column. |

| Property | Description |
| --- | --- |
| onlineTimeoutPeriod | The `onlineTimeoutPeriod` property contains the time limit on all reports run online (by users clicking the report in SAP SuccessFactors Learning). If the report takes longer than the timeout, execution stops, an error is logged if logging is set to DEBUG, and users see an alert that tells them the report has taken too long to generate. Additionally, the next time users try to run a report that has timed out, they see a message telling them that previous attempts at the report did not run due to timeout settings._x000D_<br><br>When a PDF format report times out, the user can see a "poorly formed PDF document" error. |
| backgroundTimeoutPeriod | The `backgroundTimeoutPeriod` property contains the time limit for all background reports. If a report exceeds the timeout, SAP SuccessFactors Learning stops the report and logs a message about the failure. SAP SuccessFactors Learning logs the message if the logging level is set to DEBUG. |

## 3.25.2  Content Types

This topic describes the output format content types in REPORT_SYSTEM.

The content types that are streamed to the browser and some information about the stream are identified in the `outputFormatContentTypes.*` properties in REPORT_SYSTEM. Do **not** edit these values without contacting a SAP SuccessFactors Learning representative.

## 3.25.3  Font Format Properties in REPORT_SYSTEM

This topic describes how you can control the font display for different classes of text in reports. You control the font display with properties in the REPORT_SYSTEM system properties file.

Table 47:

| Property | Description |
| --- | --- |
| baseFontFile | The `baseFontFile` property contains location of the base font. Report text is rendered using this font style. Specify a Unicode font for UTF-8 compatibility. |

| Property | Description |
|---|---|
| `baseFontEncoding` | The `baseFontEncoding` property specifies the association between a code and a character. This is not typically changed. Example values are:<br><br>• Identity-H: horizontal<br>• Identity-V: vertical<br>• Cp1250: Central Europe<br>• Cp1252: Western Europe<br>• Cp1257: Baltic |
| `reportFontVOXMap.*` | The `reportFontVOXMap.*` properties control the formatting of text in PDF reports. The `reportFontVOXMap.*` property contains at least one suffix, name, that matches the middle of the property. For example, `reportFontVOXMap.title.name=title` identifies the attributes of the title font. For example, the `reportFontVOXMap.title.size=16.0` sets the size of the title font to 16. |

## 3.25.4  Page Format Properties in REPORT_SYSTEM

This topic describes the properties in REPORT_SYSTEM that control page formatting.

Table 48:

| Property | Description |
|---|---|
| `queryIndentWidthPercentage` | The *queryIndentWidthPercentage* property value is the percentage of the page that the report data is indented. |
| `queryResumptionIndicatorColor*Val` | The *queryResumptionIndicatorColor*Val* property contains the RGB values of the color of the line that prints after the query prints detail. The * in the property is red, green, or blue. |
| `tabularRowAlternatingBackgroundColor*Val` | The *tabularRowAlternatingBackgroundColor*Val* property contains the RGB values of the color of alternating rows (the color alternates with the page color). The * in the property is red, green, or blue. |
| `summaryRowBorderColor*Val` | The *summaryRowBorderColor*Val* properties contains the RGB values for the border of boxes around summary rows. The * in the property is red, green, or blue. |

## 3.25.5 Adobe Download Link Properties in REPORT_SYSTEM

When administrators run reports, they can run them as PDF, which includes information about downloading Adobe Acrobat Reader™. This topic describes the properties in REPORT_SYSTEM that control the download information.

Table 49:

| Property | Description |
| --- | --- |
| hrefAdobe | The hrefAdobe property contains the URL that administrators open to download Adobe Acrobat Reader. |
| imageVO.* | The imageVO.* properties contain the display properties of the Adobe Acrobat logo. The image is hyperlinked to the URL in the hrefAdobe property. The image source is relative to the Foundation WAR file. |

## 3.25.6 Administrator Report Preference Properties in REPORT_SYSTEM

This topic describes the properties in REPORT_SYSTEM that control the search and browse functionality of administrators' report search system.

Table 50:

| Property | Description |
| --- | --- |
| reportLazyPersistence | The reportLazyPersistence property controls whether Administrators' search preferences are "sticky" in SAP SuccessFactors Learning Administration. If sticky, the application remembers what the administrators last searched on and persists it into the database. The next time the administrators open the Reports pages, their search settings are defaulted to their last search.<br><br>Set to false to make the search preferences sticky. |
| reportPerferencesHandler | The reportPerferencesHandler property contains the class that handles "sticky" report preferences. Do not change unless you have written a new class to handle preferences. Check with a SuccessFactors representative for more information. |

### 3.25.7  Online Report Designer Properties

SAP SuccessFactors Learning integrates with SAP SuccessFactors Online Report Designer according to the following properties.

Table 51: Learning to ORD Properties

| This property... | ...Is used as follows |
| --- | --- |
| adhocReportDefaultPeriod | The amount of time, in months, that a report will look back in the past for records. If your reports are timing out often, you can decrease the amount of time. |
| adhocReportPreviewModeDefaultPeriod | The amount of time, in months, that a report will look back in the past for records while the user is designing a report. If your report designers complain that their design sessions are timing out, consider decreasing the amount of time. |

## 3.26  SEARCH

This topic describes the purpose of the SEARCH system properties file.

SEARCH contains global settings for the search framework. The search framework is the system that Administrators use to search for objects in the system (users, learning items, scheduled offerings, etc). Each field that the administrator can use to search is called a selector. Individual selectors can be configured in SAP SuccessFactors Learning Administration in the module ▐▶ *System Admin* ❯ *Configuration* ❯ *System Configuration* ❯ *Search Selectors* ▌.

Table 52:

| Property | Description |
| --- | --- |
| resultMaxRowAllowed | The resultMaxRowAllowed property is for internal debugging use. Do not use. |
| resultRowsPerPage | The resultRowsPerPage property contains the default number of rows per page of the search results. |

| Property | Description |
|---|---|
| `rowsPerPageOptions[*]` <br><br> `studentShowAllOption` <br><br> `studentShowAllLabel` | The `rowsPerPageOptions[*]`, `studentShowAllOption`, and `studentShowAllLabel` properties include settings for the end user interface search. Users can select how many rows appear on each page. In the `rowsPerPageOptions[*]` properties, each bracketed value is a number that the user can choose from a list. That number of rows appears in the page. <br><br> The `studentShowAllOption` property can be set to true or false (set to true to show and false to hide). We recommend that you set to false for performance reasons. Allowing users to return all records can lead to long transaction times and bog down your system. If you want users to be able to return many records, but not all records, you can set `rowsPerPageOptions[*]` to a high value, such as 500. <br><br> The `studentShowAllLabel` property contains the label that appears next to the rows per page list. |
| `adminRowsPerPageOptions[*]`, `adminShowAllOption, and adminShowAllLabel` | The `adminRowsPerPageOptions[*]`, `adminShowAllOption`, and `adminShowAllLabel` properties include settings for the administrator interface search. Administrators can select how many rows appear on each page. In the `adminRowsPerPageOptions[*]` properties, each bracketed value is a number that the administrators can choose from a list. That number of rows appears in the page. <br><br> The `adminShowAllOption` property can be set to true or false (set to true to show and false to hide). We recommend that you set to false for performance reasons. Allowing administrators to return all records can lead to long transaction times and bog down your system. If you want users to be able to return many records, but not all records, you can set `adminRowsPerPageOptions[*]` to a high value, such as 500. <br><br> The `adminShowAllLabel` property contains the label that appears next to the rows per page list |

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| Property | Description |
|---|---|
| globalSearchContextProperties[*] | The globalSearchContextProperties[*] properties can contain either EntitySearchDefaultToResultPage or PickerSearchDefaultToResultpage in brackets. Entity Search appears when an administrator clicks a menu (like User Management > Users) appears when an administrator clicks the Picker button. If you set either entity search or picker search property to true, then, by default, all searches of that type open a results page when the administrator first opens the page. |
| showSQL | When the showSQL property is set to true, the system outputs search SQL statement for debugging purposes. By default, set to false. |
| catalogSearchResultsDisplayPriceType | The catalogSearchResultsDisplayPriceType property contains the ways that catalog prices can be displayed. Possible values are listed in the comments. |
| catalogSearchResultsOrderBy<br><br>catalogSearchResultsOrderByColumns | The catalogSearchResultsOrderBy property, when set to true, allows the catalog search results to be ordered. You then set the order by columns in the catalogSearchResultsOrderByColumns property. Possible values for the catalogSearchResultsOrderByColumns property are listed in the comments. |
| maxInListItems | The maxInListItems property contains the maximum number of list items in a search SQL statement. Cannot exceed 1000. |
| useGlobalCaseSensitivitySetting<br><br>globalCaseSensitive | If you set the useGlobalCaseSensitivity property is set to true, then the system ignores the case sensitivity settings on search selectors. Set to false to control case sensitivity on the search selector level. The globalCaseSensitive property is active if the useGlobalCaseSensitivity is set to true. Set globalCaseSensitivity to true to make the search case sensitive by default. Set to false to make it not case sensitive by default. |

| Property | Description |
|---|---|
| matchOptionDefaults[*] | The matchOptionDefaults[*] property controls the default search criteria options. The brackets can contain these values: OP_EXACTMATCH = "="; OP_EQUAL = "="; OP_STARTWITH = "like1";//cannot be the same as OP_CONTAINS OP_CONTAINS = "like2"; OP_ANYMATCH = "in"; OP_ANYMATCH_NOT = "not in"; OP_GREATER = "&gt;"; OP_LESS = "&lt;"; OP_GREATER_EQUAL = "&gt;="; OP_LESS_EQUAL = "&lt;="; OP_NULL = "is null"; OP_NOTNULL = "is not null"; |
| maxResultsAllowedForAdminPowerSearch powerSearchWhitespaceCharacters | The maxResultsAllowedForAdminPowerSearch property controls the amount of records that the power search can return. The powerSearchWhitespaceCharacters property sets the characters that the power search treats as white space. The power search is part of the administration environment. It searches multiple object types at one time. |
| restrictUserPeerSearchByOrg | Set to true to restrict users' search to users within their own organization structure. Set to false to allow users to search any active user. |

| Property | Description |
|---|---|
| orgLevelsAboveUser | This property sets the number of organization levels above the user's organization the user can search when restrictUserPeerSearchbyOrg is enabled. Min Value: 0 Max Value: 30 Default value: 0 When set to zero (0), the search results returns only users associated to the user's organization or its sub-organizations When set to greater than zero (0), the search results returns users associated to user's parent organization <x levels above user's org and its sub-organizations |
| expandCatalogSearchBarFilters | This property determines whether the language and currency options are expanded by default in the users' catalog search or collapsed by default. One reason to expand the search bar filters is if you allow catalog searches on more than one language, a feature introduced in 1408. If you do, we recommend you set expandCatalogSearchBarFilters to true so that users are clearly presented an option to pick a secondary language for their searches. |

## 3.27  USER GENERATED CONTENT

This topic describes how the USER GENERATED CONTENT system properties file control content that can be added as quick guides.

Table 53:

| Property | Description |
|---|---|
| supportedFileExtensions | The supportedFileExtensions property contains the list of file extensions supported by quick guides. Quick guides are wizards that users can upload to teach each other how to do tasks. They often include images. |
| maximumPixelResolution | The maximumPixelResolution property contains the resolution, in pixels of images that can be uploaded to the system with quick guides. |

# 3.28 USER LEARNING PLAN

This topic describes how you can use the properties in the USER LEARNING PLAN system properties file.

Table 54:

| Property | Description |
| --- | --- |
| `timeline.buckets.*.id` | The `id` property identifies one value in the to-do list filter. End users pick a value to filter their list by due date of the object in the list. The ID must be unique. |
| `timeline.buckets.*.label` | The `label` property must point to an existing label. The label appears to the user on the filter list. You can add a label using the Label Import/Export Wizard. |
| `timeline.buckets.*.days` | The `days` property contains the due within days. List items due within the amount of days specified appear when the user filters by the bucket. For example, if the value is 30, then when the user selects the bucket, then items due within 30 days appear on the to-do list. To specify overdue items, set the days property to 0 (zero). |

# 3.29 WEB_SECURITY

WEB_SECURITY controls user to application security for SAP SuccessFactors Learning.

## Important Properties

WEB_SECURITY configures your system against common web security threats like cross-site scripting and clickjacking. We recommend that you keep the default settings. If you change the WEB_SECURITY file, you could disable important security features.

Table 55: WEB_SECURITY PROPERTIES

| This property... | ...Is Used as Follows |
| --- | --- |
| `enableXSSFilters` | When set to **true**, you enable cross-site security filters. The filters themselves are defined throughout the rest of the file and are described in comments. We recommend that you enable the filter and use the default patterns. |

| This property... | ...Is Used as Follows |
|---|---|
| `clickjackingProtection.enabled` | When set to **true**, you enable security against clickjacking. The configuration against clickjacking (allowed URIs) is defined throughout the rest of the file and is described in comments. We recommend that you enable the protection and use the default URI configuration. |
| `enableCaptchaForSiteUsers` | Set to **true** to enable reCAPTCHA for external Sites. |
| `enableCaptchaForNativeUsers` | Set to **true** to enable reCAPTCHA for native users. |
| `captchaServiceSiteKey` | The service site key that Google provides you with when you create an account. We need this to integrate with Google reCAPTCHA. |
| `captchaServiceSecretKey` | This is the secret key that Google provides you with when you create an account. We need this to integrate with Google reCAPTCHA. When you save the file, the secret key is encrypted. |

## Scripting Patterns

`WEB_SECURITY` sets patterns that users cannot type into SAP SuccessFactors Learning text boxes. By rejecting these patterns, SAP SuccessFactors Learning defends against XSS (Cross Site Scripting) attacks. If a user tries to enter text that matches the patterns, he or she receives an error and cannot continue. See comments in the file for help with the regular expression. For each regular expression, the user sees the value of the matching *errorLabel* property. The value of the action property must be valid.

# 4 Change History

We periodically update documentation during a quarterly release. When we do, we record the change history here.

Table 56: Content Changes

| Date | Change |
|---|---|
| August 7, 2015 | Initial Publication |

# Important Disclaimers and Legal Information

## Coding Samples

Any software coding and/or code lines / strings ("Code") included in this documentation are only examples and are not intended to be used in a productive system environment. The Code is only intended to better explain and visualize the syntax and phrasing rules of certain coding. SAP does not warrant the correctness and completeness of the Code given herein, and SAP shall not be liable for errors or damages caused by the usage of the Code, unless damages were caused by SAP intentionally or by SAP's gross negligence.

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