

SAP SuccessFactors Learning Marketplace
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Learning Marketplace

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1 What's New for Learning Marketplace

Read what's new for the Learning Marketplace guide.

Q1 2017

Table 1: The following table summarizes changes to this guide for recent releases.

What's New	Description	More Info
Initial Publication in Q1 2017	The Learning Marketplace guide provides information regarding the implementation of the SAP SuccessFactors Learning Marketplace. This guide specifically covers integration aspects of the solution and not implementation of the core Learning or Commerce engines.	

2 Learning Marketplace

The SAP SuccessFactors Learning Marketplace is the next-generation Extended Enterprise Learning solution for training external audiences, such as customers, communities and partners.

Unmatched in the industry, the SAP SuccessFactors Learning Marketplace combines industry-leading learning capabilities and industry-leading commerce capabilities. This solution for training external audiences helps attract and retain customers, improve marketing brand awareness and offers new revenue channels.

The SAP SuccessFactors Learning Marketplace serves your global commerce needs, while providing a unique experience to each customer segment. Selling across multiple tax jurisdictions is enabled via multiple credit card processor support, extensions to support additional payment methods and integration into global tax engines which automatically calculate the tax with the option to leverage built-in tax table support for simple taxing schemes, such as VAT. The upsell and business rule definitions for audience segmentation aligns with a wide ranging number of pricing rules to attract users to offers that would have been otherwise missed. Promotional incentives can be used to fill classes to ensure maximum resource utilization. A built-in web content management engine inserts an in-place editing environment without coding that allows you to design your customer experience quickly and easily. The resulting branded storefront is personalized to each user and optimized to include responsive design for cross-platform deployments.

The SAP SuccessFactors Learning Marketplace surfaces leading learning management capabilities in a compelling storefront. Users can view the storefront catalog for courses offered near the user's location, shop by the types of courses available, delivery method and dates that are convenient to the user's schedule. These online and classroom based courses are managed in the learning engine. For instructor-led training, the learning engine provides completed schedule and resource management including course locations and instructor information. Business rule definition for audience segmentation allows you to use the same learning engine to manage courses for both internal and external audiences. Courses made available to your extended enterprise via the learning engine are fed to the customer experience engine for flexible catalog presentation including a course description, target audience goals, prerequisites, ratings and reviews.

Once users find courses that interest them, they can purchase using a quick and safe checkout process. Prior to processing the order, the commerce engine communicates with the learning engine real-time to ensure the courses are within delivery capacity and the user is qualified to take the course. Fraud detection systems for safeguarding customer data analyze information to ensure the transaction is managed as safely as possible. Upon validation, payment is processed using the configured payment processing engines and the learning engine is updated to reflect the seat reservation. The order data can be set up to flow to your financial system to ensure that revenue is recognized and receipts can be tracked.

After the order is paid for, users can immediately launch their online content and attend scheduled training. The learning engine tracks online consumption and course completions. The user can access current courses and view their completed course history in the storefront. In addition to providing you a view of your customers learning history, the SAP SuccessFactors Learning Marketplace also allows you to capture important visitor metrics providing you valuable customer traffic insights such as where you might be losing potential business, what promotions are working well and order trends.

The SAP SuccessFactors Learning Marketplace is a full featured commerce system leveraging the SAP Hybris Commerce platform, with our industry leading LMS working behind the scenes to manage your courseware.

2.1 Learning Marketplace Specific Capabilities

To use the SAP SuccessFactors Learning Marketplace, you will first need to understand specific information about what can be sold using the Learning Marketplace solution and how the user price is determined.

SAP SuccessFactors Learning Marketplace offers the ability to sell the following types of Items to an authenticated user (guest checkout is not supported) with the controls also noted below. Sales of products not maintained in the learning engine inventory is not permitted under the standard license.

- Online
- ILT
- Blended if online is only accessible with a registration.

Constraints on what can be sold:

- An online or blended course that is not available for launch cannot be sold.
- A course that has "show in catalog" set to false cannot be sold.
- A user cannot purchase a course if prerequisites have not been met.
- A user cannot purchase a seat in a scheduled offering if the start date of that offering is in the past.
- A user cannot waitlist for a scheduled offering or request an offering date through the application.

Sales of courses in the storefront can only be sold to users with an LMS shopping account type of External and can only be consumed by the buyer. An agent can purchase on behalf of a user using the Assisted Service Module (ASM) which allows the agent to act as a proxy. Content launch is blocked from ASM.

List pricing can be maintained in the learning engine (master inventory or catalog price) and any adjustments to that are in the commerce engine, such as discounts, promotions, or an override. Alternatively, prices can be set and maintained in the commerce engine.

The Learning Marketplace extension includes an integration with CyberSource. For purposes of determining the service delivery location, the extension uses the billing address of the credit card provided by the user.

Sales and cancellations transaction data are contained in a transaction logs which include the financial amounts and profit center account code from the LMS.

Note

Only one profit center for a course will be included in the transaction log. If there is more than one profit center account code for a course in the LMS sold through the marketplace, customization is required to have all profit center codes available in the transaction report.

2.2 Learning Marketplace Prerequisites

To use SAP SuccessFactors Learning Marketplace, an identity provider providing authentication credentials is required. See "Integration with Identity Management System."

As the SAP SuccessFactors Learning Marketplace solution leverages the SAP SuccessFactors Learning LMS and the SAP Hybris Commerce platform with the B2C accelerator (commerce engine), implementation of both are required prerequisites for the solution. Specific prerequisites for the solution components include:

Learning Engine

- The LMS is integrated with the SAP SuccessFactors platform.
- External user in the platform is enabled.
- Courses to be sold in the storefront are created in the learning engine and can be distinguished from courses for an internal only audience through attributes such as catalog and/or domain. Course setup includes:
 - corresponding online learning content
 - scheduled offerings
 - pricing
 - prerequisites
 - course meta data such as facilities

Note

Facilities of certain countries must have a specific state/province format. See "Training Centers Facility Contact Address Format" for details.

- Post course actions – rating shouldn't be set on an LMS course as it will show on online course wrap up actions.

Note

Marketplace solution assumes that ratings and reviews in the user experience engine are used instead of the learning engine ratings. Thus rating shouldn't be enabled on a course in the learning engine. If enabled, ratings will show for online course wrap up actions. The learning engine ratings are not visible on the storefront. The experience engine does not require that the user complete the course in order to rate it. Customization would be required to require completion before rating.

- A client secret has been generated from ► [System Admin](#) ► [Configuration](#) ► [Oauth Token Server](#) ►.

Commerce Engine

- You will need to establish and configure the URL for your storefront.
- To collect payment, integration with a payment engine is required. For example, to collect credit card payments, you will need an account with a credit card processor such as CyberSource and provide the account information in the CyberSource extension configuration.

-
- To charge tax, set up the tax tables for the applicable jurisdiction or integrate with a tax engine.
 - Optionally, setup your website content such as footer, header and static content (FAQ, About us, T&C, Privacy policy, social media links, etc). You may wish to incorporate your cancellation policies with the terms & conditions. The user must accept the terms and conditions before placing an order.

Related Information

[Training Centers Facility Contact Address Format \[page 16\]](#)

[Integration with Identity Management System to Access Learning Marketplace \[page 15\]](#)

2.2.1 Learning Marketplace Course Setup Considerations

Please consider this information when setting up courses for Learning Marketplace.

- Only the thumbnail URL is exported so images need to be a URL in the LMS or entered directly in the content management engine.
- The SKU in Hybris Commerce must be unique across all products thus it is represented as the LMS SKU plus revision date. Changing the SKU in the LMS is not recommended as this would result in the creation of a new product in Hybris Commerce, in addition to the old SKU.
- A cancellation policy with an "amount" rule does not currently support multiple currencies.
- All prerequisite courses should also be available for storefront users. Otherwise, they will not be able to purchase the prerequisite.
- Courses only available to an external audience should be in a separate domain to allow certain functions to be locked down for the LMS admin. Functions that should be performed in the storefront or ASM, such as registering a user in an offering or withdrawing from an offering can be prohibited in the LMS using domain restriction capability on the corresponding workflows. LMS Order edits can also be prohibited with this approach.
- Products in a catalog are always displayed if the user has access to that catalog. If the title and description and other metadata aren't translated in the user's language, the product will still appear. We suggest that all items within a catalog be translated to the same set of languages with the intent that the courses are offered in those languages.

3 Learning Marketplace Extension Installation

You are provided an instance with commerce installed but not the extensions required for the Learning Marketplace solution. The installation instructions are:

Procedure

1. Copy the five extensions to \$HYBRIS_HOME/bin/custom:
 - lmscore
 - lmsaddon
 - lmswsaddon
 - lmsassistedserveraddon
 - cybersourceaddon
2. Copy localextensions.xml to \$HYBRIS_HOME/config.
3. Build LMS-specific local.properties making sure that the LMS-specific values are set, while also maintaining the cloud services values.
 - acceleratorservices.batch.impex.basefolder=\${HYBRIS_DATA_DIR}/lms/import
 - lms.test.userType=user
 - lms.test.resourceType=learning_public_api
 - lms.odata.guest.user.type=guest
 - lms.odata.student.user.type=user
 - lms.scheme=https
 - lms.odata.url=\${scheme}://\${host}/\${path}
 - lms.odata.query.url=\${scheme}://\${host}/\${path}?\${query}
 - lms.host={host}
 - lms.token.path=learning/oauth-api/rest/v1/token
 - lms.test.companyId={LMS OAuth CompanyID}
 - lms.client.id={LMS OAuth ClientID}
 - lms.client.secret={LMS OAuth Client Secret}
 - lms.use.authorization=false

LMS OAuth can be found in ► [System Admin](#) ► [Configuration](#) ► [OAuth Token Server](#) ►.

4. Go to directory \$HYBRIS_HOME/bin/platform and build platform.
 - a. Execute `../setantenv.sh`
 - b. Execute `ant all`
 - c. Execute `ant -Dtenant=master initialize`
5. Install add-ons.

If building a demo:

- ant addoninstall -Daddonnames="lmsaddon" -
DaddonStorefront.yacceleratorstorefront="yacceleratorstorefront"
- ant addoninstall -Daddonnames="lmswsaddon" -
DaddonStorefront.ycommercewebservices="ycommercewebservices"
- ant addoninstall -Daddonnames="cybersourceaddon" -
DaddonStorefront.yacceleratorstorefront="yacceleratorstorefront"
- ant addoninstall -Daddonnames="lmsassistedserviceaddon" -
DaddonStorefront.yacceleratorstorefront="yacceleratorstorefront"

If building a customer implementation:

- ant addoninstall -Daddonnames="lmsaddon" -
DaddonStorefront.yacceleratorstorefront="<ACCELERATOR_NAME>"
- ant addoninstall -Daddonnames="lmswsaddon" -
DaddonStorefront.ycommercewebservices="<COMMERCE_WEBSERVICES_NAME>"
- ant addoninstall -Daddonnames="cybersourceaddon" -
DaddonStorefront.yacceleratorstorefront="<ACCELERATOR_NAME>"
- ant addoninstall -Daddonnames="lmsassistedserviceaddon" -
DaddonStorefront.yacceleratorstorefront="<ACCELERATOR_NAME>"

6. Startup the Hybris Commerce system with command:

```
$HYBRIS_HOME/bin/platform/hybrisserver.sh start
```

7. Set the hot folder location in local.properties:

```
accelatorservices.batch.impex.basefolder=${HYBRIS_DATA_DIR}/lms/import
```

The Hybris Commerce hot folder process will begin processing each file as it becomes available on the hot folder directory. Files from the LMS containing courseware data can be setup to automatically transfer to Hybris Commerce via SFTP or be manually dropped into the hot folder.

4 Setting Up the LMS for the Learning Marketplace

To use the SAP SuccessFactors Learning Marketplace, you will first need to set up the LMS.

Procedure

1. Verify your environment has SAP SuccessFactors Learning Marketplace installed by going to ► [System Admin](#) ► [Environment](#) ► [Licensed Modules](#) ►. The license ID is "Marketplace". If it is not installed, please contact Customer Service or your services professional.
2. Configure the commerce server information in ► [Admin](#) ► [System Admin](#) ► [Configuration](#) ► [System Configuration](#) ► [MARKETPLACE](#) ► [Edit the System Configuration](#) ►. This is the information that allows the LMS to call the commerce engine when an offering is cancelled that has users that registered via the Marketplace storefront.

4.1 Loading Marketplace Reports and Schedule

Obtain the following course reports from Customer Service or your services professional. Load course reports and schedule to run and transfer to Hybris Commerce.

The reports should be scheduled to run in this order with the specified output name:

Table 2:

Report Name	Report Output Name
Catalog_Export-01	Catalog_Export-01
Item_Catalog_Export-02	Item_Catalog_Export-02
Item_Price_Export-03	Item_Price_Export-03
Item_Export-04 This report needs to be created for each language supported for the items and the output file name includes the language ISO 2 character code.	Item_Export_en-04 Item_Export_es-04
Facility_Export-05	Facility_Export-05
Facility_Address_Export-06	Facility_Address_Export-06

Report Name	Report Output Name
Offering_Segments_Export-07	Offering_Segments_Export-07
Offering_Export-08	Offering_Export-08
Offering_Catalog_Export-09	Offering_Catalog_Export-09
Offering_Price_Export-10	Offering_Price_Export-10

4.2 Creating a Learning Marketplace Report Group

To collect Marketplace reports, you need to create a Report Group.

Context

A Report Group collects all of the Marketplace reports.

Procedure

1. Log in to SAP SuccessFactors Learning Administration.
2. Go to ► [References](#) ► [System Admin](#) ► [Report Groups](#) ►.
3. Click [Add New](#) to add the Marketplace Report Group.

4.3 Importing and Scheduling Reports

If you want to know how to import, export and schedule reports, perform these steps.

Context

If you are a member of a role that has the Import/Export Reports workflow, then you can import and export custom reports. If you go to Reports and you see the Import link, then you can import and export reports. The following procedure should be repeated for each report, including each language for the Item_Export report.

Procedure

1. Log in to SuccessFactors Learning Administration, go to [Reports](#), click the [Reports tab](#), and click the [Import](#) link.
2. In the [File](#) box, type the full path to the report .zip file. You can click the [Browse](#) button to find the report .zip file.
3. Click [Submit](#).
4. In the Report Import page, select Administrators for the [Target User](#).
5. For the Item_Export report, you will need to rename the report with the applicable language. Select the [Rename](#) link under the title of the uploaded file and rename the report per the report output name in the section, "Loading Marketplace Reports and Schedule."

Security: The permission to run the custom report is controlled by security settings (the Run Report workflow, domains, and roles). Roles have types and you need to select the role type here. For the Marketplace Reports, select [Admin](#). Add the workflow to your Marketplace admin role.

6. Click [Import](#).

Next Steps:

- Run the unpublished report to test it. To run unpublished reports, your role must have access to the Run Unpublished Reports workflow.
- Publish the report by checking the [Publish](#) checkbox within the report metadata (i.e. the pencil icon next to the report name). After you publish it, any Admin that has an Admin role with the Run Report workflow will be able to schedule and run the report. You can add the Run report workflow to an Admin Role under [System Admin](#) > [Security](#) > [Role Management](#) .
- Schedule the report by clicking in the imported report and clicking [Schedule Job](#). The reports need to be scheduled in the order in the section, Loading Marketplace Reports and Schedule.

Optionally, configure the hot folder location to which the reports are sent via sftp in [System Admin](#) > [Configuration](#) > [System Configuration](#) > [REPORT_SYSTEM](#) . Alternatively, the report output files can be manually placed in the hot folder.

Sample Code

```
#This section is used for configuring an FTP server to receive report output
#In environments where access to root level directory is denied, path can be
configured as relative path.
#Relative path should be in the format - <directory in user home directory>/
<sub directory>/<sub directory> where <sub directory> are optional.
# The timeout is in milliseconds. Default is 1 minute. Setting it to low value
will cause issues during establishing connection.
# To enable local passive mode . Please set enablePassiveMode = true
remoteFtpEnabled=true
defaultReportFtpConfig.protocol=sftp
defaultReportFtpConfig.server=ftpupload.plateau.com
defaultReportFtpConfig.port=22
defaultReportFtpConfig.path=/marketplace/hotfolder
defaultReportFtpConfig.userID=marketplace
defaultReportFtpConfig.password=password123
defaultReportFtpConfig.timeout=60000
defaultReportFtpConfig.enablePassiveMode=false
```

Related Information

[Loading Marketplace Reports and Schedule \[page 10\]](#)

4.4 User Management Setup for the Learning Marketplace

To use the SAP SuccessFactors Learning Marketplace, setting up user management is necessary.

Procedure

1. Create a role for external user that has "Marketplace User" workflow.

The external user role should not have P2P recommend workflow as the storefront does not support LMS recommendations. Better yet, users can share a course with others using the social media integration options on the product detail page in the storefront.

2. Create organization(s) and domains to which external users will be associated.
3. Create, propagate and synchronize assignment profile so users are assigned catalog(s) intended for external user.

5 Setting Up Hybris Commerce for the Learning Marketplace

In order to run SAP SuccessFactors Learning Marketplace, you will need to set up Hybris Commerce.

Procedure

1. To setup guest catalog access:
 - a. Identify the LMS catalog ID to be available for guest users in the LMS.anonymous.catalog property.
 - b. Associate Guest user visibility group to the category(ies) in Hybris Commerce.
2. Optional customizations:
 - a. Setup navigation to allow direct access to a catalog from the storefront home page.
 - b. Establish product references as upsell relationships which will appear on the course detail page.

6 Integration with Identity Management System to Access Learning Marketplace

To allow users in your Identity Management System to access Learning Marketplace, they must be created in the platform, LMS, and Hybris Commerce.

The platform and Hybris Commerce need to be setup for SSO from your Identity Management system. Consult with your security expert and professional services partner to design and implement your integration.

Establishing Users in Learning Marketplace via APIs

These APIs are needed to create the user:

- To create an external user in the platform, use the API = `odata/v2/ExternalUser`. Synch of external user information from the platform to learning is not yet available.
- To create an external user in LMS, use the API = `POST /learning/odatav4/user/v1/Users`. The user must be created with the LMS ID equal to the Person GUID returned from creating an external user in the platform.

i Note

See “Adding and Updating SAP SuccessFactors Learning LMS Users through Web Services” for more information.

- Consult with your Hybris Commerce professional services partner to create an external user in Hybris Commerce.

i Note

External users in the LMS should be in separate domain and admins should not be allowed to modify users in this domain. Domain restrictions can be used to establish this control.

Related Information

[Adding and Updating SAP SuccessFactors Learning LMS Users through Web Services](#) 

7 Training Centers Facility Contact Address Format

To utilize "Training Centers Near Me", the learning facility contact address (state and country) must match the ISO Code format for these countries. The name is provided for easy table lookup.

Table 3: United States of America

Country (ISO Code)	State/Province (ISO Code)	Name
US	AL	Alabama
US	AK	Alaska
US	AZ	Arizona
US	AR	Arkansas
US	CA	California
US	CO	Colorado
US	CT	Connecticut
US	DE	Delaware
US	FL	Florida
US	GA	Georgia
US	HI	Hawaii
US	ID	Idaho
US	IL	Illinois
US	IN	Indiana
US	IA	Iowa
US	KS	Kansas
US	KY	Kentucky
US	LA	Louisiana
US	ME	Maine
US	MD	Maryland

Country (ISO Code)	State/Province (ISO Code)	Name
US	MA	Massachusetts
US	MI	Michigan
US	MN	Minnesota
US	MS	Mississippi
US	MO	Missouri
US	MT	Montana
US	NE	Nebraska
US	NV	Nevada
US	NH	New Hampshire
US	NJ	New Jersey
US	NM	New Mexico
US	NY	New York
US	NC	North Carolina
US	ND	North Dakota
US	OH	Ohio
US	OK	Oklahoma
US	OR	Oregon
US	PA	Pennsylvania
US	RI	Rhode Island
US	SC	South Carolina
US	SD	South Dakota
US	TN	Tennessee
US	TX	Texas
US	UT	Utah
US	VT	Vermont
US	VA	Virginia

Country (ISO Code)	State/Province (ISO Code)	Name
US	WA	Washington
US	WV	West Virginia
US	WI	Wisconsin
US	WY	Wyoming
US	DC	District of Columbia
US	AS	American Samoa
US	GU	Guam
US	MP	Northern Mariana Islands
US	PR	Puerto Rico
US	UM	United States Minor Outlying Islands
US	VI	Virgin Islands

Table 4: Canada

Country (ISO Code)	State/Province (ISO Code)	Name
CA	AB	Alberta
CA	BC	British Columbia
CA	MB	Manitoba
CA	NB	New Brunswick
CA	NL	New Foundland and Labrador
CA	NS	Nova Scotia
CA	ON	Ontario
CA	PE	Prince Edward Island
CA	QC	Quebec
CA	SK	Saskatchewan
CA	NT	Northern Territories
CA	NU	Nunavut
CA	YT	Yukon Territory

Table 5: China

Country (ISO Code)	State/Province (ISO Code)	Name
CN	11	Beijing
CN	50	Chongqing
CN	31	Shanghai
CN	12	Tianjin
CN	34	Anhui
CN	35	Fujian
CN	62	Gansu
CN	44	Guangdong
CN	52	Guizhou
CN	46	Hainan
CN	13	Hebei
CN	23	Heilongjiang
CN	41	Henan
CN	42	Hubei
CN	43	Hunan
CN	32	Jiangsu
CN	36	Jiangxi
CN	22	Jilin
CN	21	Liaoning
CN	63	Qinghai
CN	61	Shaanxi
CN	37	Shandong
CN	14	Shanxi
CN	51	Sichuan
CN	71	Taiwan
CN	53	Yunnan

Country (ISO Code)	State/Province (ISO Code)	Name
CN	33	Zhejiang
CN	45	Guangxi
CN	15	Nei Mongol
CN	64	Ningxia
CN	65	Xinjiang
CN	54	Xizang
CN	91	Xianggang
CN	92	Aoemen

Table 6: Japan

Country (ISO Code)	State/Province (ISO Code)	Name
JP	23	Aiti
JP	05	Akita
JP	02	Aomori
JP	38	Ehime
JP	21	Gihu
JP	10	Gunma
JP	34	Hiroshima
JP	01	Hokkaido
JP	18	Hukui
JP	40	Hukuoka
JP	07	Hukushima
JP	28	Hyogo
JP	08	Ibaraki
JP	17	Isikawa
JP	03	Iwate
JP	37	Kagawa

Country (ISO Code)	State/Province (ISO Code)	Name
JP	46	Kagoshima
JP	14	Kanagawa
JP	39	Kochi
JP	43	Kumamoto
JP	26	Kyoto
JP	24	Mie
JP	04	Miyagi
JP	45	Miyazaki
JP	20	Nagano
JP	42	Nagasaki
JP	29	Nara
JP	15	Niigata
JP	44	Oita
JP	33	Okayama
JP	47	Okinawa
JP	27	Osaka
JP	41	Saga
JP	11	Saitama
JP	25	Shiga
JP	32	Shimane
JP	22	Shizuoka
JP	12	Chiba
JP	09	Tochigi
JP	36	Tokushima
JP	13	Tokyo
JP	31	Tottori

Country (ISO Code)	State/Province (ISO Code)	Name
JP	16	Toyama
JP	30	Wakayama
JP	06	Yamagata
JP	35	Yamaguchi
JP	19	Yamanashi

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**go.sap.com/registration/
contact.html**

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