SuccessFactors HCM Suite

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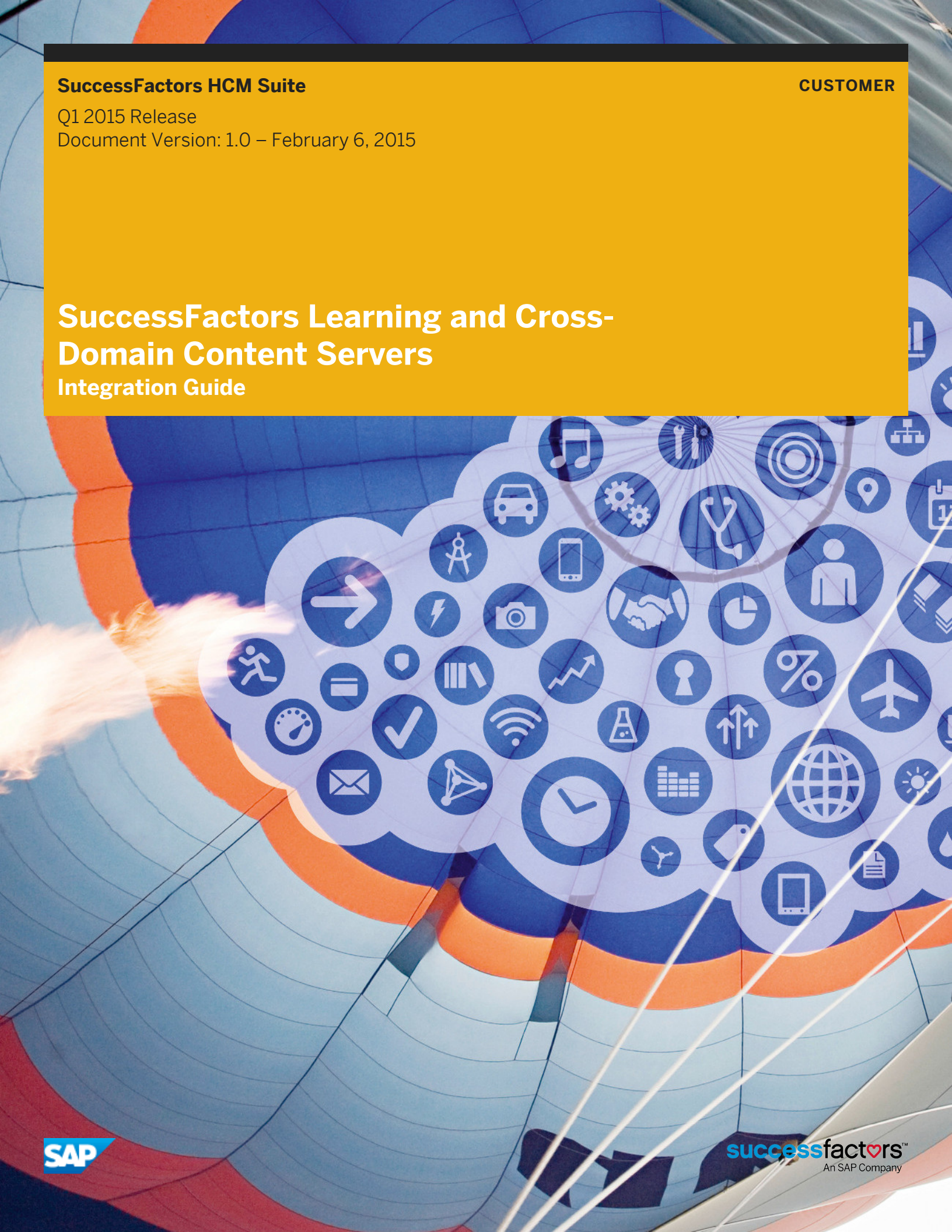
SuccessFactors Learning and Cross-Domain Content Servers

Integration Guide



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1 Proxlet Cross Domain Solution Overview

This topic describes how the Cross Domain Solution (CDS) proxlet helps the system track users' course completion when the content server is on a different domain from SuccessFactors Learning.

The SuccessFactors Learning Cross Domain Solution (CDS) provides trusted server-to-server communication between an outside content server and SuccessFactors Learning. The trusted communication is necessary when the course content server is in a different Domain Name Space (DNS) than the SuccessFactors Learning DNS. This is common.

In a cross domain scenario, SuccessFactors recommends the Proxlet WAR CDS. The Proxlet WAR (Java Web ARchive) communicates basic course tracking information back to SuccessFactors Learning, such as exam scores and progress through content. When the Proxlet WAR CDS is NOT working properly, the user can launch content, but their completion status is not recorded back to SuccessFactors Learning.

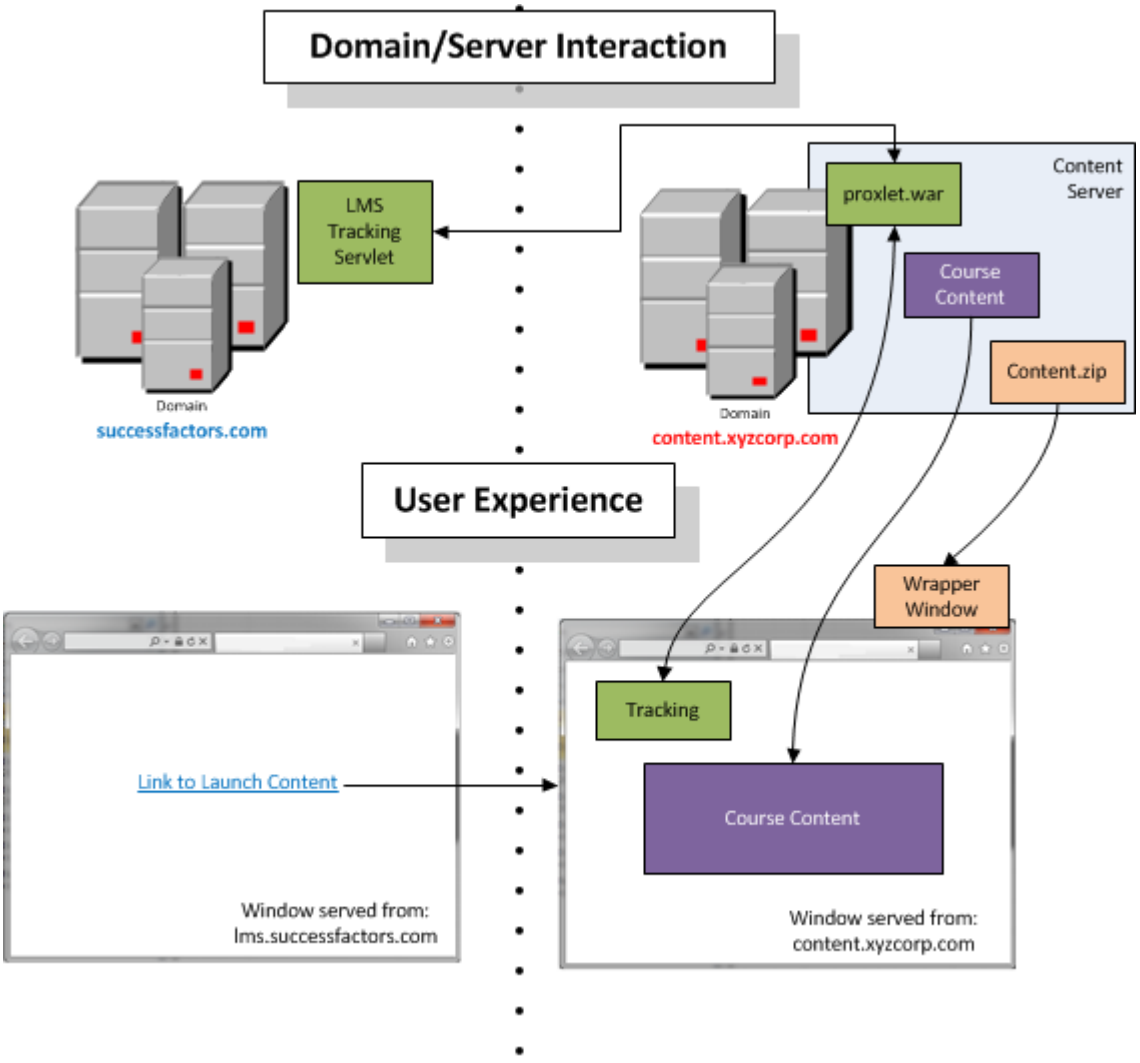

Figure 1: Proxlet Cross Domain Solution

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> **Note**
>
> SuccessFactors Learning has a second CDS called a **Cookie CDS**. The cookie CDS is less common, so this document refers to the Proxlet WAR CDS as “the CDS.”

Related Information

Cross Domain Solution Files [page 4]
Cross Domain Solution at Run Time [page 4]
JSlet Tracking vs. Applet Tracking [page 5]
Cross Domain Solution Configuration Overview [page 6]

1.1 Cross Domain Solution Files

The Cross Domain Solution (CDS) files are delivered to on-premise customers and are available on request for on-demand customers. You need the files to install the CDS on your content server.

On-premise customers can find the CDS files in foundation.zip: \plateau-talent-management-[version]\plateau \support\crossdomain.zip. On-demand customers can contact Customer Success for the files.

- The content.zip file contains static files that you copy to the content server. They load the progress tracking code wrap your content.
- The proxlet.war is a small Web ARchive (WAR) application that you deploy on your content server, typically in Tomcat. It is a communication relay between the tracking code and SuccessFactors Learning.

1.2 Cross Domain Solution at Run Time

Users are **not** aware of the Cross Domain Solution (CDS) when they interact with it at run time, but they are working with it to earn credit for their progress. This topic describes how they are interacting with the CDS.

When users click a link in their learning assignments to launch content, they open a new window that is served from the content server. The users see their content in a separate window and do not know about the wrapper.

- Inside the wrapper window, users navigate the course, exam, or other content. This content is served from the content server.
- While navigating the content, the user's progress is tracked with JSlet (JavaScript "applet") or a Java Applet tracking code.
- The proxlet.war application relays the user's progress to the LMS.

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1.3 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.

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2 Cross Domain Solution Configuration Overview

Before you begin configuring the parts of the Cross Domain Solution (CDS), this topic gives you an overview of the steps.

The proxlet.war implementation of the Cross Domain Solution (CDS) is configured in three parts:

- On content server, you extract and deploy the files from crossdomain.zip.
- On SuccessFactors, you point the Learning Management System (LMS) to the content server.
- On each content object you want to use, you enable the CDS.

Related Information

Setting up the Cross Domain Solution on the Content Server [page 6]
Configuring LMS_ADMIN for the Cross Domain Solution [page 7]
Enabling the Cross Domain Solution on Content Objects [page 9]
Cross Domain Solution Troubleshooting [page 10]

2.1 Setting up the Cross Domain Solution on the Content Server

You set up the Cross Domain Solution (CDS) on the content server so that users can earn credit for their progression through the learning content served from the content server.

Prerequisites

- Identify or create a web accessible directory in your content server to contain the wrapper files. We recommend `/content`.
- Obtain the crossdomain.zip file, which is explained in Cross Domain Solution Files [page 4]

Procedure

1. Extract content.zip from the crossdomain.zip file to a temporary folder.
   You see two files in the temporary folder: content.zip and proxlet.war.

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2. Extract content.zip to the web accessible directory.

   For the web accessible directory, we recommend `/content`.
3. Deploy proxlet.war on the content server according to the instructions for your application server or servlet container.

Related Information

Cross Domain Solution Configuration Overview [page 6]
Configuring LMS_ADMIN for the Cross Domain Solution [page 7]
Enabling the Cross Domain Solution on Content Objects [page 9]
Cross Domain Solution Troubleshooting [page 10]

2.2 Configuring LMS_ADMIN for the Cross Domain Solution

You configure the LMS_ADMIN file to point the Learning Management System (LMS) to the content server where you deployed the Cross Domain Solution (CDS).

Prerequisites

You have set up the CDS on the content server. See Setting up the Cross Domain Solution on the Content Server [page 6]

Procedure

1. Log in to Learning Administration as a system administrator.
2. Go to *System Admin* > *Configuration* > *System Configuration* > *LMS_ADMIN*.
3. Edit the communication CDS settings. See Communication Cross Domain Support Settings [page 8].

Related Information

Communication Cross Domain Support Settings [page 8]
Cross Domain Solution Troubleshooting [page 10]

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2.2.1 Communication Cross Domain Support Settings

Use these settings in LMS_ADMIN to configure Cross Domain Support (CDS) to the proxlet.war.

Properties

> **Note**
>
> Make sure that you do not accidentally enable cookie CDS. The cookie cross domain solution is not as common.

Table 1:

Property	Recommended Value	Description
communicationCrossDomainSupport-tEnabled	true	Set to true to turn on the CDS: it enables communication with the proxlet.
defaultContentServerPath	<content server URL root>/content	This is the directory on your content server where you extracted the wrapper files. It must be an absolute URL.
contentWrapperPageName	main_content_wrapper.html	This is the main content wrapper page that you extracted. Do not change.
scorm2004ContentWrapperPageName	scorm_2004_content_wrapper.html	This is the main content wrapper page that you extracted for SCORM. Do not change.
externalURLQuestionWrapperPage-Name	main_question_wrapper.html	This is the main content wrapper page that you extracted for questions. Do not change.
contentOpenerPageName	main_content_opener.html	This is the main content opener page that you extracted. Do not change.
defaultProxletPath	<app server root URL>/proxlet	This is the path to the proxlet WAR that you deployed. Must be an absolute URL.
lmsSessionId	JSESSIONID	Do not change.

Configuration Example

```
communicationCrossDomainSupportEnabled=true
defaultContentServerPath=http://content.xyzcorp.com/content
contentWrapperPageName=main_content_wrapper.html
```


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```
scorm2004ContentWrapperPageName=scorm_2004_content_wrapper.html
externalURLQuestionWrapperPageName=main_question_wrapper.html
contentOpenerPageName=main_content_opener.html
defaultProxletPath=http://content.xyzcorp.com:8080/proxlet
lmsSessionId=JSESSIONID
```

Related Information

Configuring LMS_ADMIN for the Cross Domain Solution [page 7]
Enabling the Cross Domain Solution on Content Objects [page 9]
Cross Domain Solution Troubleshooting [page 10]

2.3 Enabling the Cross Domain Solution on Content Objects

You enable individual content objects for the Cross Domain Solution (CDS) so that the content object can work properly in the CDS context.

Prerequisites

- You configured LMS_ADMIN and know the values you set for the properties. See Configuring LMS_ADMIN for the Cross Domain Solution [page 7]
- You have imported or created the content objects you want to configure.

Procedure

1. Go to *Learning Admin* > *Content* > *Content Objects*, find your content object, and then open the *Cross Domain* tab.
2. Select *Use Frameset* to open the content in a wrapper frameset or clear it to open the content in its own window.

   We recommend you select *Use Frameset* unless the content does not run well when launched under a frameset.

Related Information

Configuring LMS_ADMIN for the Cross Domain Solution [page 7]
Cross Domain Solution Troubleshooting [page 10]

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3 Cross Domain Solution Troubleshooting

This topic describes how you can troubleshoot issues with your Cross Domain Solution (CDS) configuration.

Turning on Debugging for All User Sessions

The easiest but broadest way to debug the CDS is to turn debugging on in LMS_ADMIN. When you turn debugging on in this way, all user sessions are put into debugging mode. We recommend this approach if you are debugging a staging server. Go to *System Admin* > *Configuration* > *System Configuration* > *LMS_ADMIN*. Find the contentTestPagesEnabled setting and change its value to true.

Turning on Debugging for a Specific User Session

A more precise way to debug the system is to use the tools.war application. If you have tools.war deployed, then you can log in to the user side of the application and go to this JSP page:

http://<HOST_NAME>/tools/client-logging-config.jsp

When you open the JSP page, debugging is turned on for your current user session **only**. We recommend this approach if you need to debug a production server.

Related Information

Cross Domain Solution Configuration Overview [page 6]

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4 Change History

If this document changes after initial release, you can find a description of the change in this change history table.

Date	Version	Description
February 6, 2015	1.0	Initial release

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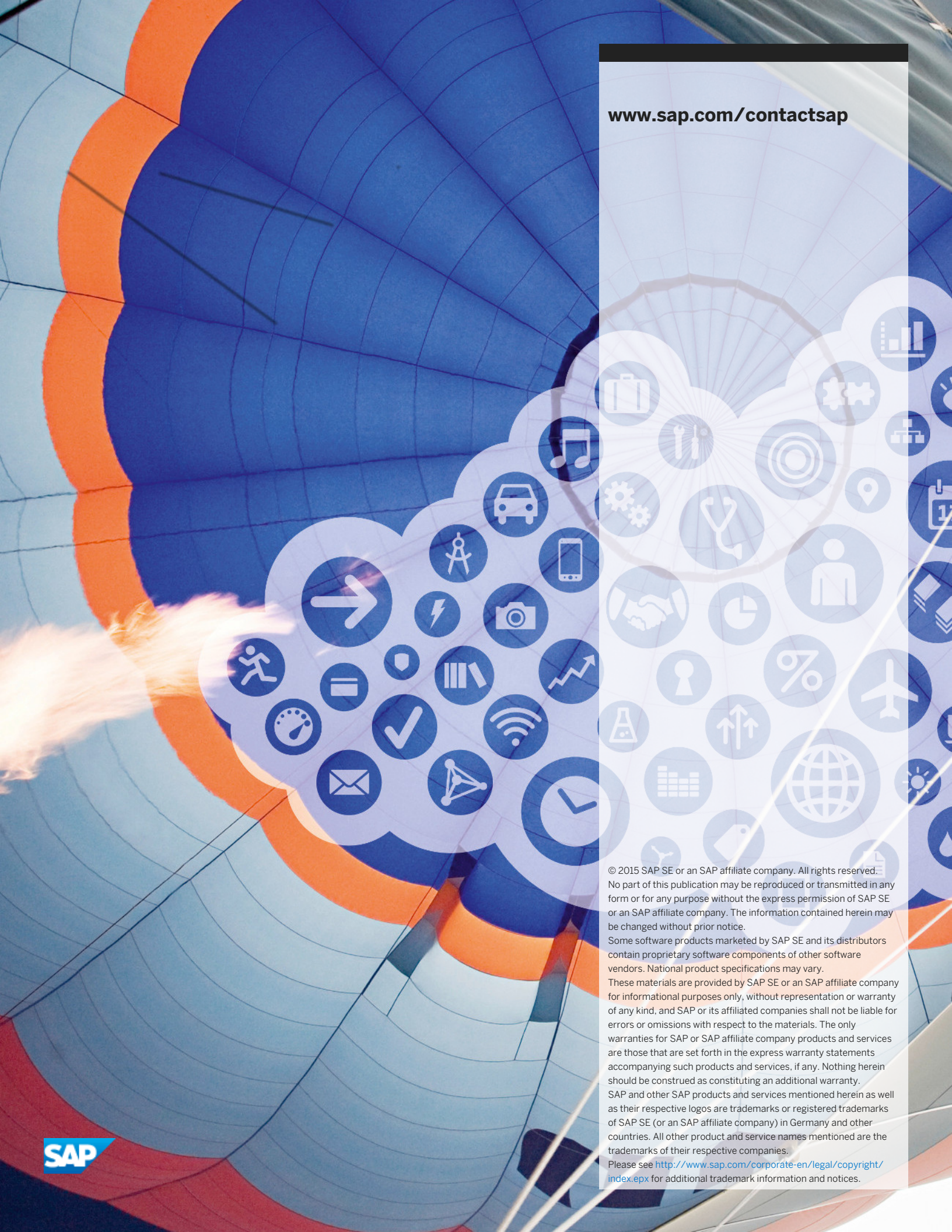

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