



# **How to Go from Zero to Hero in Two Hours with SAP Analytics Cloud**

## **ANA264**

### **EXERCISE 1:**

How to configure SAP Analytics Cloud with SAP Web Dispatcher when you need to access live data stored in SAP HANA.

Las Vegas:  
Ian McAlpine / Matthias Badaire

Bangalore:  
Jayanth Sunder Kaskyap / Narashimman K S / Samarth Narayan

Barcelona:  
Stephane Perdigeon / Sven Frick

TABLE OF CONTENTS

INTRODUCTION .....3

IMPORT CERTIFICATE .....4

CONFIGURE MAPPING RULES TO SAP ANALYTICS CLOUD .....13

CONFIGURE MAPPING RULES TO SAP HANA .....17

Problems? .....19

CREATE A SAP HANA LIVE CONNECTION .....20

CREATE A MODEL FROM THE REMOTE SAP HANA SYSTEM .....22

CREATE A STORY .....24

## INTRODUCTION

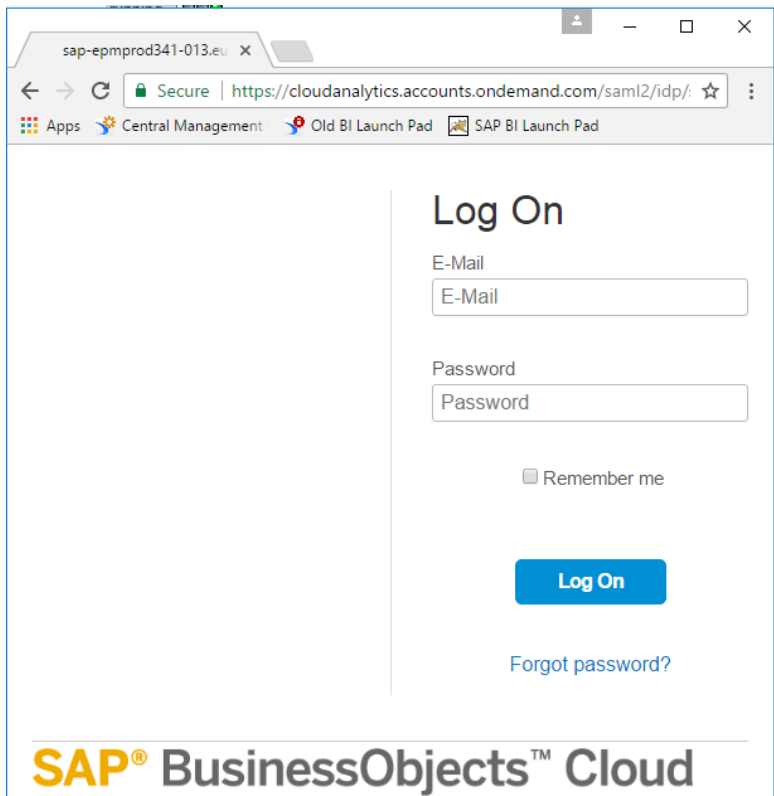
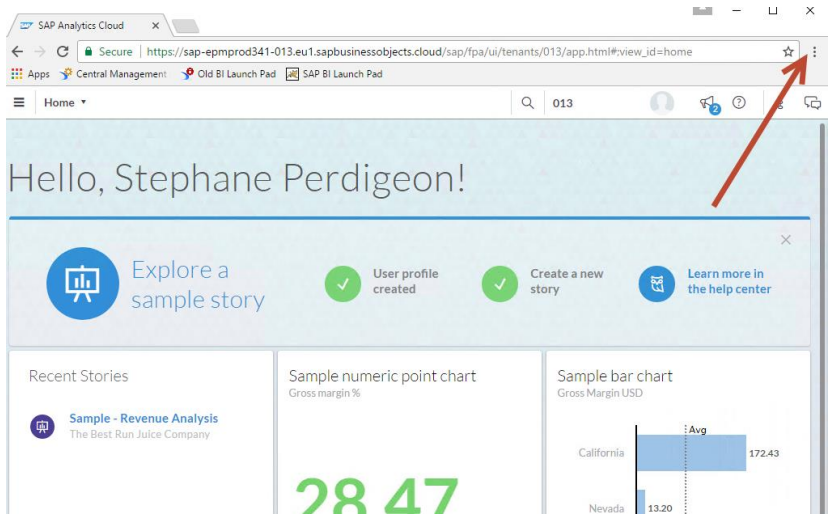
We have installed a SAP Web Dispatcher on this machine that will be used as a reverse proxy for this exercise. The reverse proxy allows us to access the SAP Analytics Cloud URL and the SAP HANA system URL both at the same... in order to perform a live connection to SAP HANA in SAP Analytics Cloud (SAC).

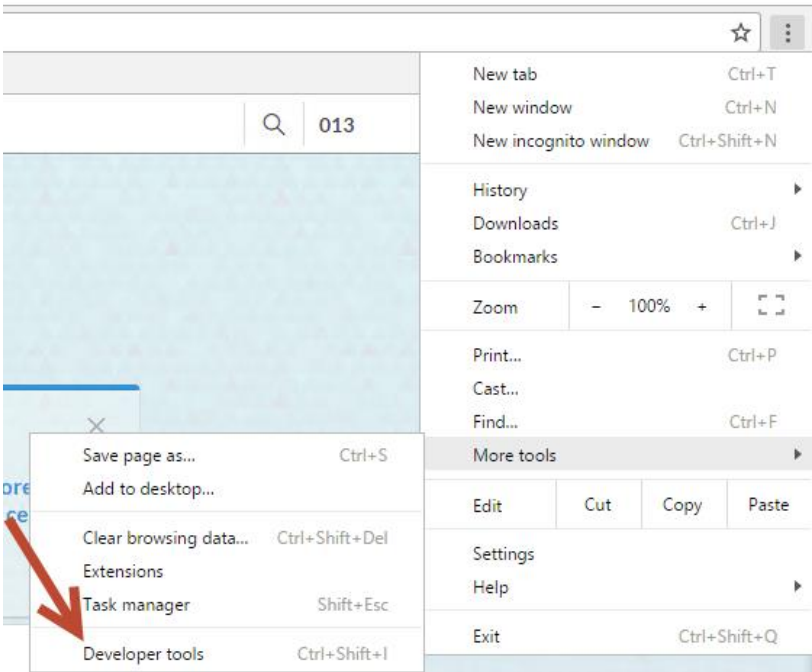
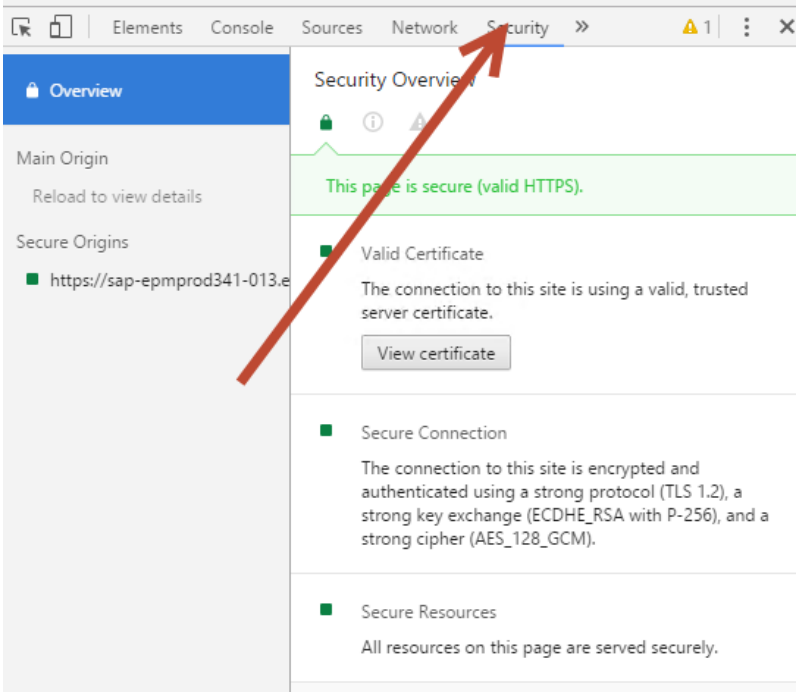
The main steps that will be performed are the following:

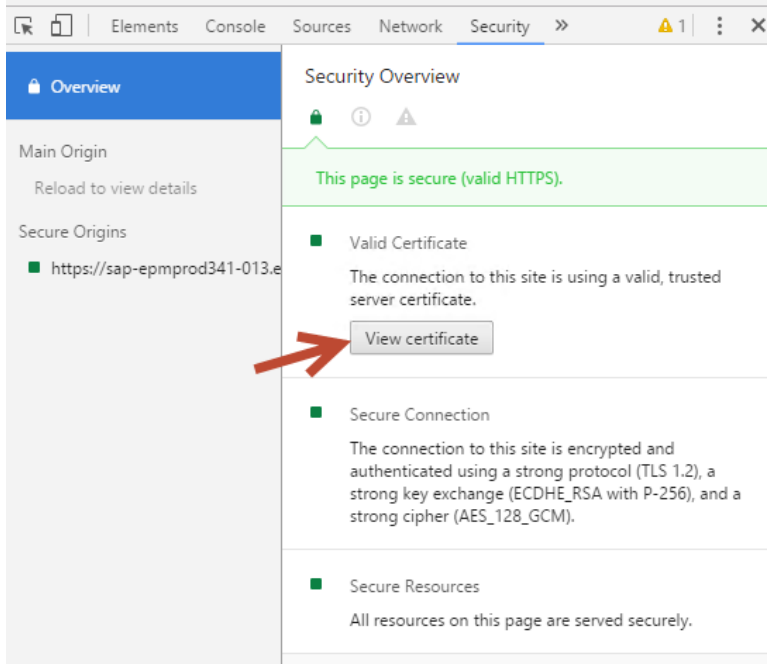
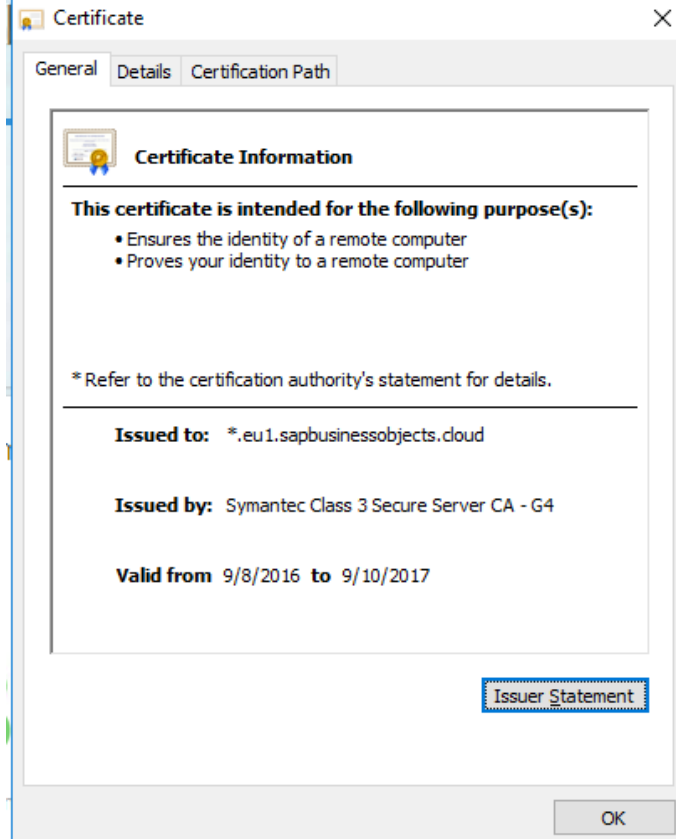
- Import certificate to trust communication between SAC and the reverse proxy
- Configure mapping rules to SAC, so that SAC calls using the reverse proxy URL are sent to the SAC system
- Configure mapping rules to HANA, so that HANA calls using the reverse proxy URL are sent to the HANA System
- Create a HANA LIVE Connection, to demonstrate the connection to HANA is working
- Quickly create a Model from the remote HANA System
- Quickly create a story to demonstrate the benefit of a LIVE connection

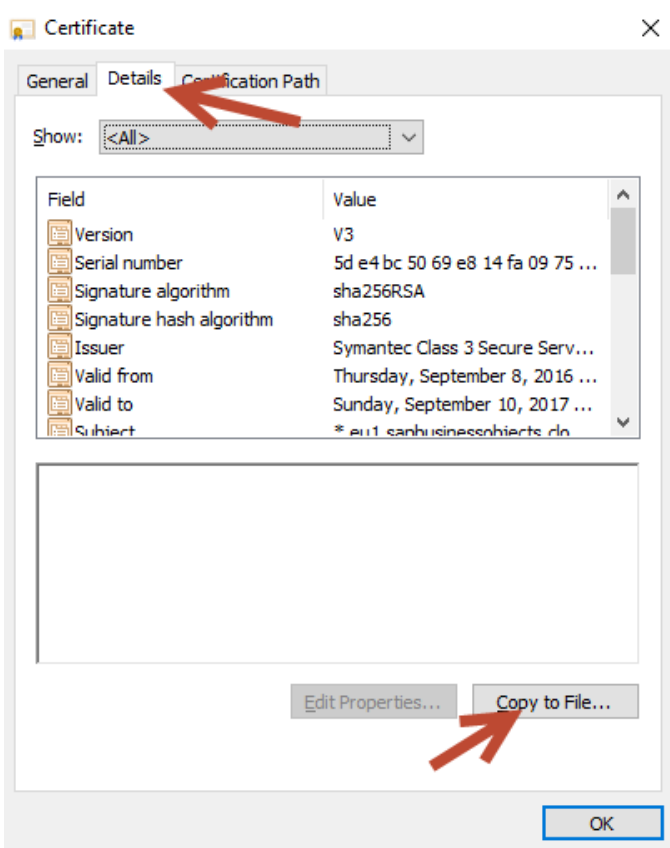
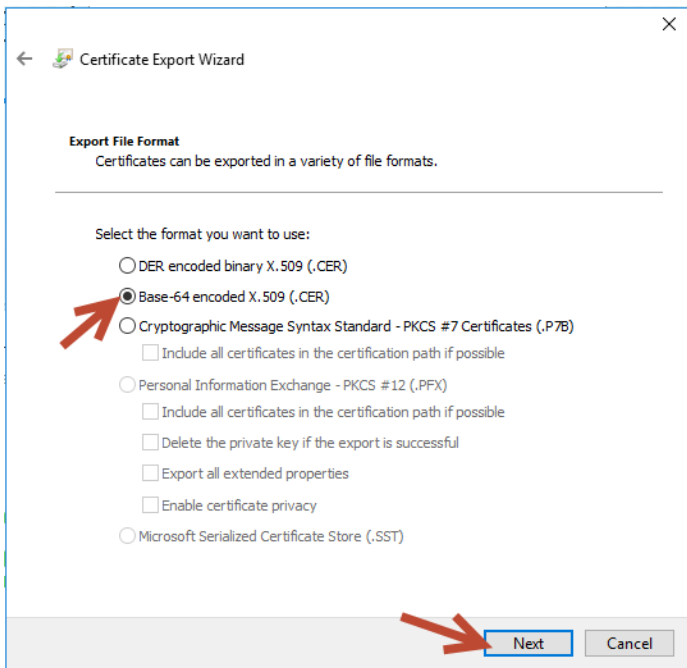
## IMPORT CERTIFICATE

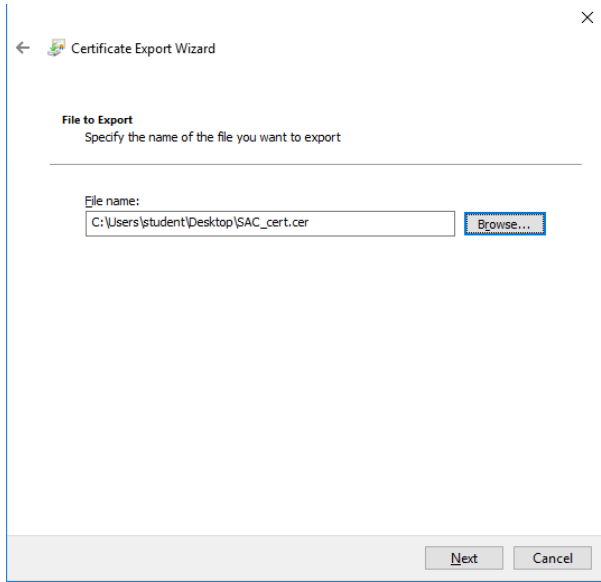

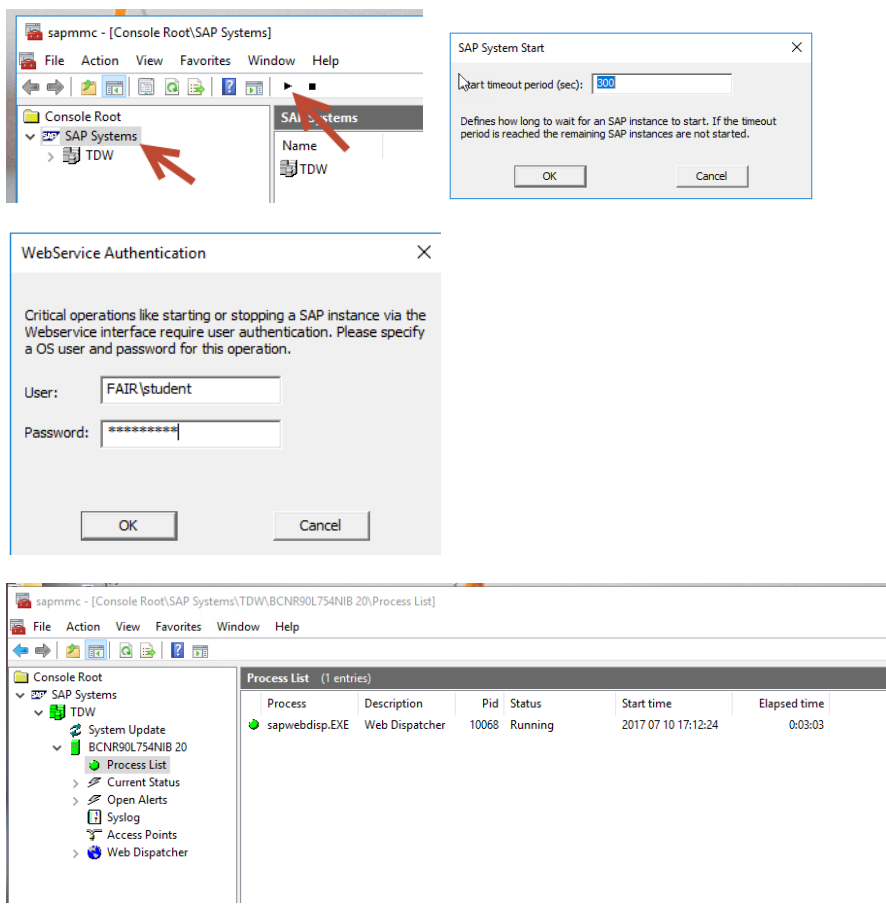
Import a certificate to trust communication between SAC and the reverse proxy.

Explanation	Screenshot
<p>Launch Chrome browser, and access the Cloud for Analytics system URL: <a href="https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud">https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud</a></p> <p>Log into the system using your credentials:  <b>teched17ANA264+XXX@gmail.com</b>  ...where XXX is the number assigned to you (for example if you have 089, the email address will be: teched17ANA264+089@gmail.com)</p> <p>Password: <b>Password1</b></p>	
<p>In the following steps, we are going to get the certificate information to trust the SAC web site.</p> <p>Once logged on, click on the Customize link (3 dots).</p>	

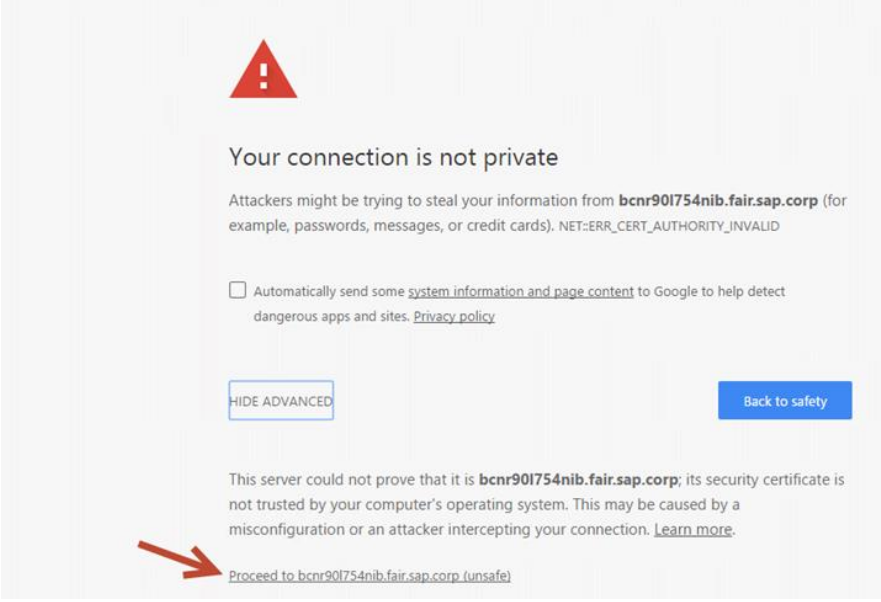
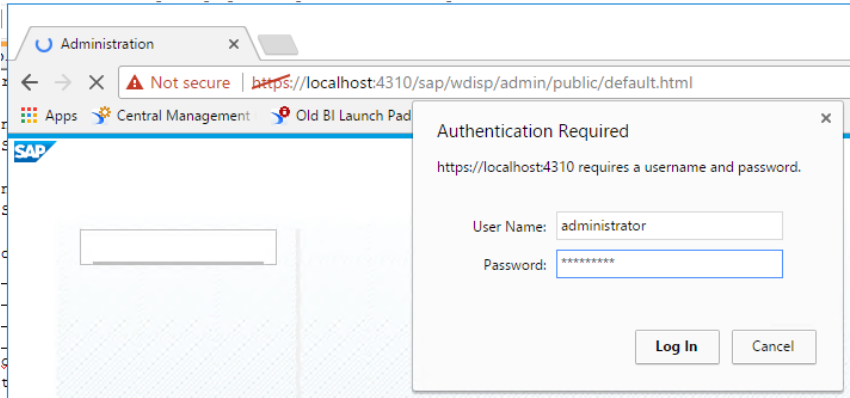
Explanation	Screenshot
Choose: More tools → Developer tools	 A screenshot of a web browser's main menu. The 'More tools' option is expanded, showing a list of utilities. A red arrow points to 'Developer tools' at the bottom of this list. Other visible options include 'Save page as...', 'Add to desktop...', 'Clear browsing data...', 'Extensions', 'Task manager', and 'Exit'.
Choose: Security	 A screenshot of the 'Security' tab within the browser's developer tools. The 'Security Overview' panel is active, displaying a green status bar that reads 'This page is secure (valid HTTPS)'. Below this, sections for 'Valid Certificate', 'Secure Connection', and 'Secure Resources' are visible, all indicating a secure connection. A red arrow points to the 'Security' tab in the top navigation bar of the developer tools.

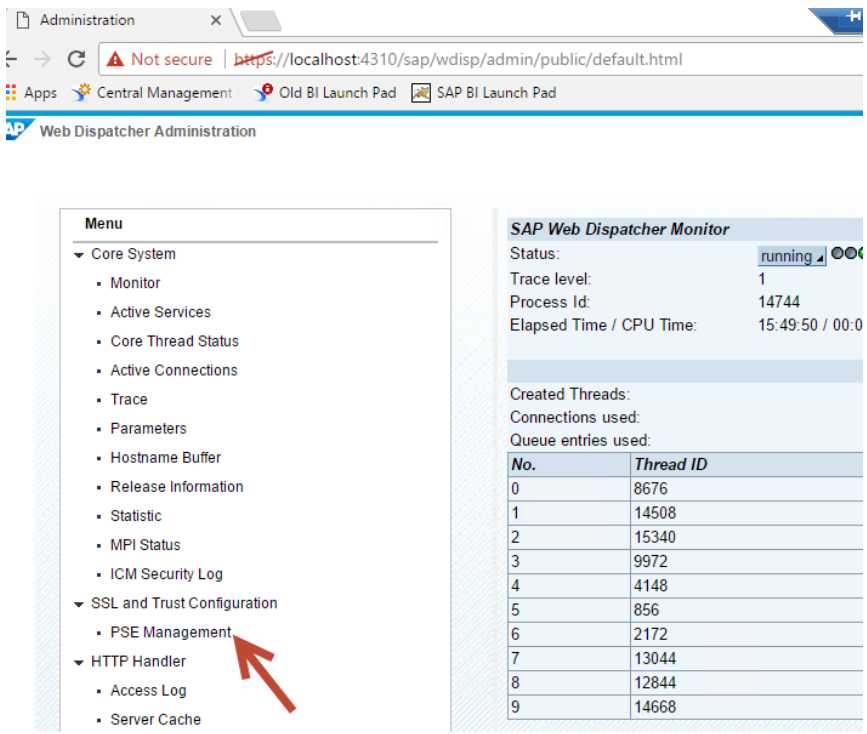
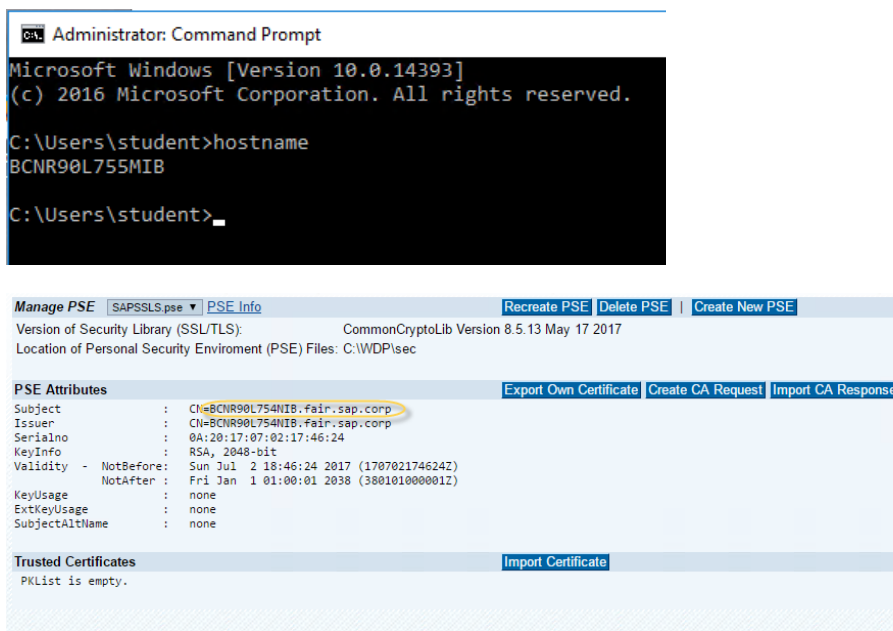
Explanation	Screenshot
<p>Choose: <i>View Certificate</i></p>	 <p>The screenshot shows the Chrome DevTools Security tab. The 'Overview' panel on the left lists 'Main Origin' and 'Secure Origins'. The 'Secure Origins' section shows a green checkmark next to the URL 'https://sap-epmprod341-013.e...'. The main panel displays the 'Security Overview' with a green banner stating 'This page is secure (valid HTTPS)'. Below this, the 'Valid Certificate' section indicates 'The connection to this site is using a valid, trusted server certificate.' and features a 'View certificate' button, which is highlighted by a red arrow. Other sections include 'Secure Connection' and 'Secure Resources'.</p>
<p>You will get the Certificate information.</p>	 <p>The screenshot shows the 'Certificate' dialog box with the 'General' tab selected. It displays 'Certificate Information' for a certificate intended for the following purposes: 'Ensures the identity of a remote computer' and 'Proves your identity to a remote computer'. A note states '*Refer to the certification authority's statement for details.' The certificate is 'Issued to: *.eu1.sapbusinessobjects.cloud', 'Issued by: Symantec Class 3 Secure Server CA - G4', and 'Valid from 9/8/2016 to 9/10/2017'. There is a button for 'Issuer Statement' and an 'OK' button at the bottom right.</p>

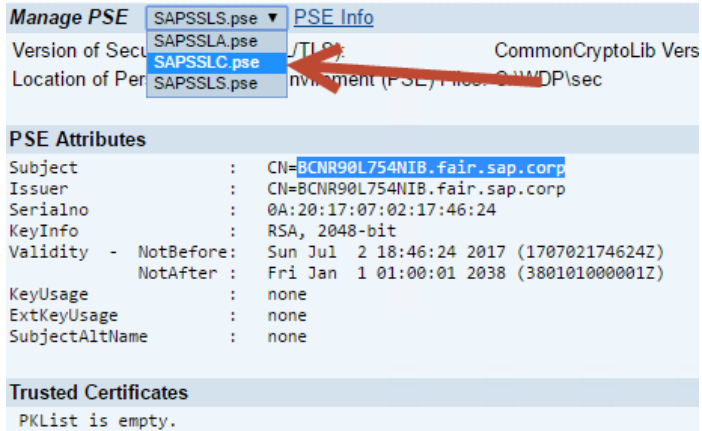
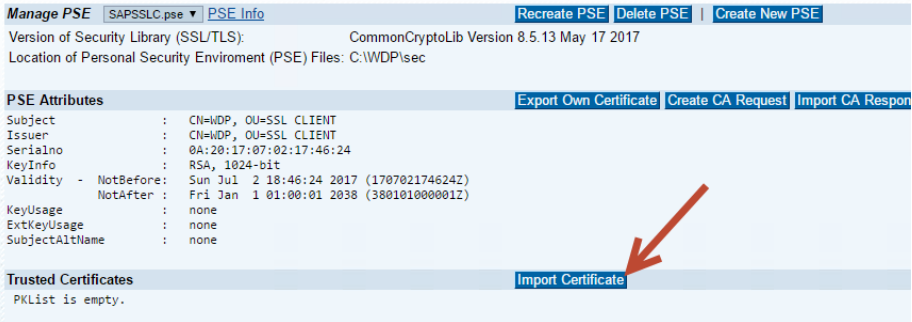
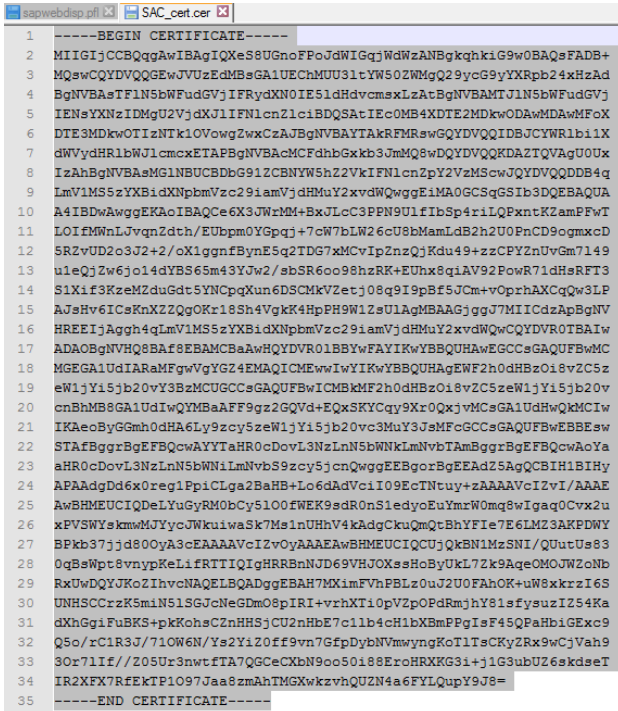
Explanation	Screenshot																		
<p>In the certificate viewer, export the certificate. Choose: <i>Details Tab → Copy to File...</i></p>	 <p>The screenshot shows the 'Certificate' dialog box with the 'Details' tab selected. The 'Show:' dropdown is set to '&lt;All&gt;'. The table below lists the certificate details:</p> <table><thead><tr><th>Field</th><th>Value</th></tr></thead><tbody><tr><td>Version</td><td>V3</td></tr><tr><td>Serial number</td><td>5d e4 bc 50 69 e8 14 fa 09 75 ...</td></tr><tr><td>Signature algorithm</td><td>sha256RSA</td></tr><tr><td>Signature hash algorithm</td><td>sha256</td></tr><tr><td>Issuer</td><td>Symantec Class 3 Secure Serv...</td></tr><tr><td>Valid from</td><td>Thursday, September 8, 2016 ...</td></tr><tr><td>Valid to</td><td>Sunday, September 10, 2017 ...</td></tr><tr><td>Subject</td><td>*.all.eanbusinesshierts.dn</td></tr></tbody></table> <p>The 'Copy to File...' button is highlighted with a red arrow.</p>	Field	Value	Version	V3	Serial number	5d e4 bc 50 69 e8 14 fa 09 75 ...	Signature algorithm	sha256RSA	Signature hash algorithm	sha256	Issuer	Symantec Class 3 Secure Serv...	Valid from	Thursday, September 8, 2016 ...	Valid to	Sunday, September 10, 2017 ...	Subject	*.all.eanbusinesshierts.dn
Field	Value																		
Version	V3																		
Serial number	5d e4 bc 50 69 e8 14 fa 09 75 ...																		
Signature algorithm	sha256RSA																		
Signature hash algorithm	sha256																		
Issuer	Symantec Class 3 Secure Serv...																		
Valid from	Thursday, September 8, 2016 ...																		
Valid to	Sunday, September 10, 2017 ...																		
Subject	*.all.eanbusinesshierts.dn																		
<p>Click <i>Next</i> in the certificate export wizard. Choose: <i>Base-64 encoded X.509 (.CER)</i> as the file format, and click <i>Next</i>.</p>	 <p>The screenshot shows the 'Certificate Export Wizard' dialog box. The 'Export File Format' section is visible, showing the following options:</p> <ul style="list-style-type: none"><li><input type="radio"/> DER encoded binary X.509 (.CER)</li><li><input checked="" type="radio"/> Base-64 encoded X.509 (.CER)</li><li><input type="radio"/> Cryptographic Message Syntax Standard - PKCS #7 Certificates (.P7B)<ul style="list-style-type: none"><li><input type="checkbox"/> Include all certificates in the certification path if possible</li></ul></li><li><input type="radio"/> Personal Information Exchange - PKCS #12 (.PFX)<ul style="list-style-type: none"><li><input type="checkbox"/> Include all certificates in the certification path if possible</li><li><input type="checkbox"/> Delete the private key if the export is successful</li><li><input type="checkbox"/> Export all extended properties</li><li><input type="checkbox"/> Enable certificate privacy</li></ul></li><li><input type="radio"/> Microsoft Serialized Certificate Store (.SST)</li></ul> <p>The 'Next' button is highlighted with a red arrow.</p>																		

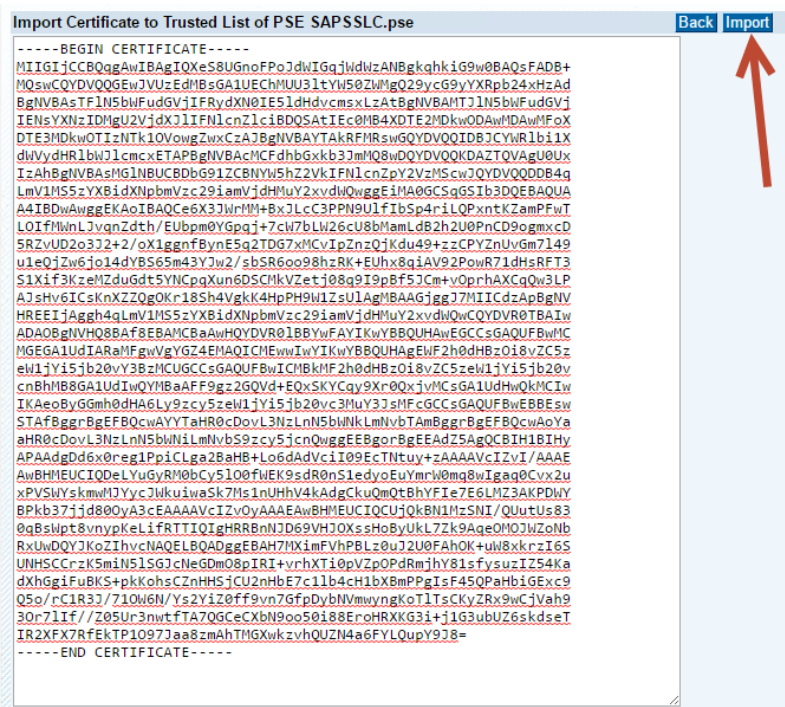
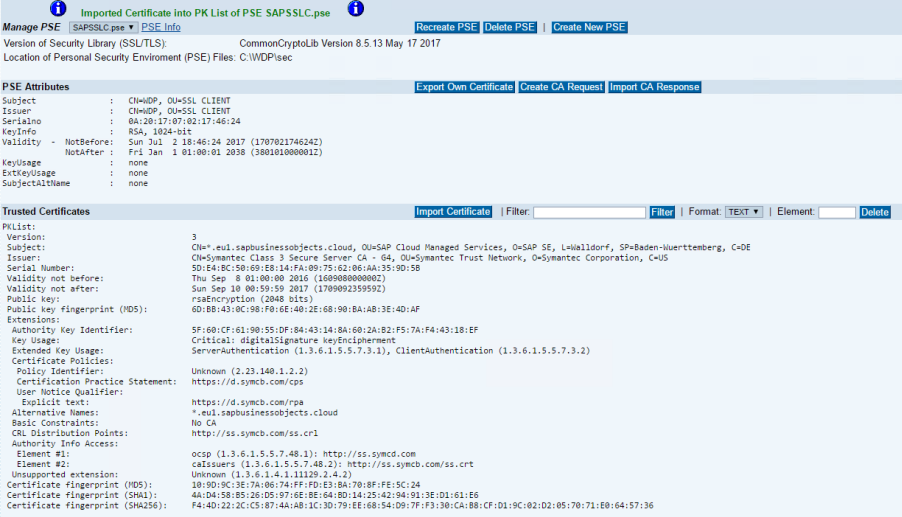
Explanation	Screenshot
<p>Save the file as <i>SAC_cert.cer</i> onto the Desktop.</p> <p>Click <i>Next</i>, then <i>Finish</i>.</p> <p>You can close the Certificate window.</p>	
<p>Let's start Web Dispatcher.</p> <p>Launch the <i>SAP Management Console</i> available on your desktop.</p>  <p>Click on <i>SAP Systems</i> and then click the <i>Start</i> button.</p> <p>Click <i>OK</i> for the "Timeout period" question.</p> <p>If prompted for user / password enter the windows authentication information, then click <i>OK</i>.</p> <p>User: <b>FAIR\student</b> Password: <b>Welcome17</b></p> <p>Click the <i>Refresh</i> button to ensure this is started properly.</p>	



Explanation	Screenshot
<p>The next step is to import the certificate to the Web Dispatcher's trusted certificate list.</p> <p>Launch the Web Dispatcher's Administration UI at <a href="https://localhost:44320/sap/wdisp/admin/">https://localhost:44320/sap/wdisp/admin/</a></p> <p>If you are prompted that your connection is not private, click <i>Advanced</i> and then <i>Proceed</i>.</p>	
<p>Enter the following credentials to login to the Administration UI:</p> <p>User: <b>webadm</b> Password: <b>Abcd1234</b></p>	

Explanation	Screenshot
<p>In the left menu, expand <i>SSL and Trust Configuration</i>.</p> <p>Click <i>PSE Management</i>.</p> <p>The PSE Management user interface appears on the right.</p>	
<p>Before doing anything else, we will retrieve the hostname on the local machine. This will be used in several configuration steps.</p> <p>Open a Windows Command Prompt (enter <b>cmd</b> into the Windows Search bar). In the Command Prompt, enter <b>hostname</b></p> <p>Use Notepad to note the hostname and suffix it with <b>.fair.sap.corp</b> to get the Fully Qualified Domain Name (FQDN).</p> <p>The FQDN hostname will look like: <b>BCNYYYYYYYYYYY.fair.sap.corp</b></p> <p>Save this as a text file on your Desktop and call it <i>hostname.txt</i>.</p>	


Explanation	Screenshot
<p>The Web Dispatcher acts as an SSL client to SAP Analytics Cloud, so we should maintain the trust in the <code>SAPSSLC.pse</code> file.</p> <p>Select <code>SAPSSLC.pse</code> in the drop-down list.</p>	
<p>Click <i>Import Certificate</i> in the “Trusted Certificates” section.</p>	
<p>Now open the previously saved <code>SAC_cert.cer</code> certificate with a text editor and copy the entire contents.</p>	

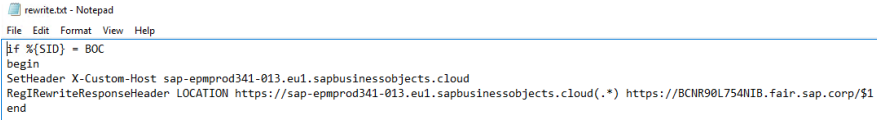
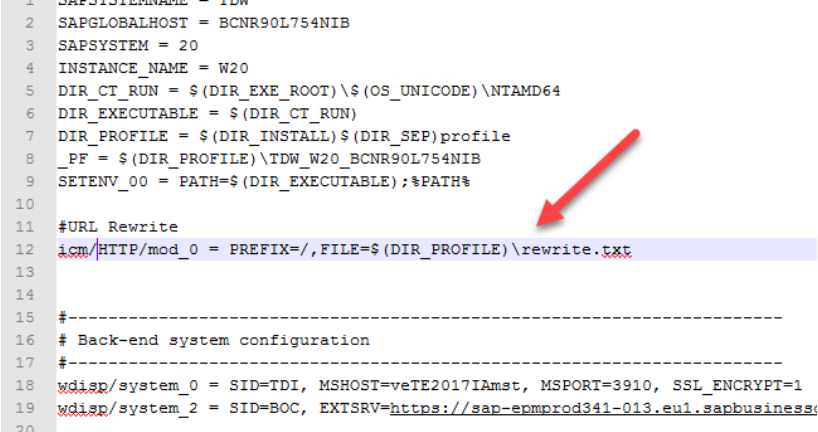
Explanation	Screenshot
<p>Paste this into the Import Certificate wizard.</p> <p>Click <i>Import</i>.</p>	
<p>The certificate is now part of the Trusted Certificates list.</p>	

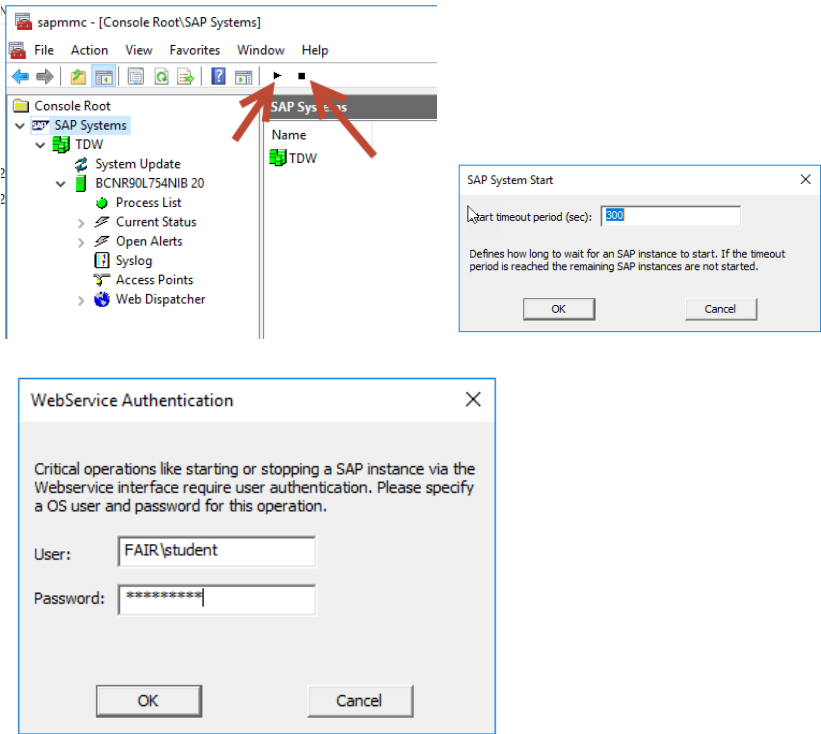
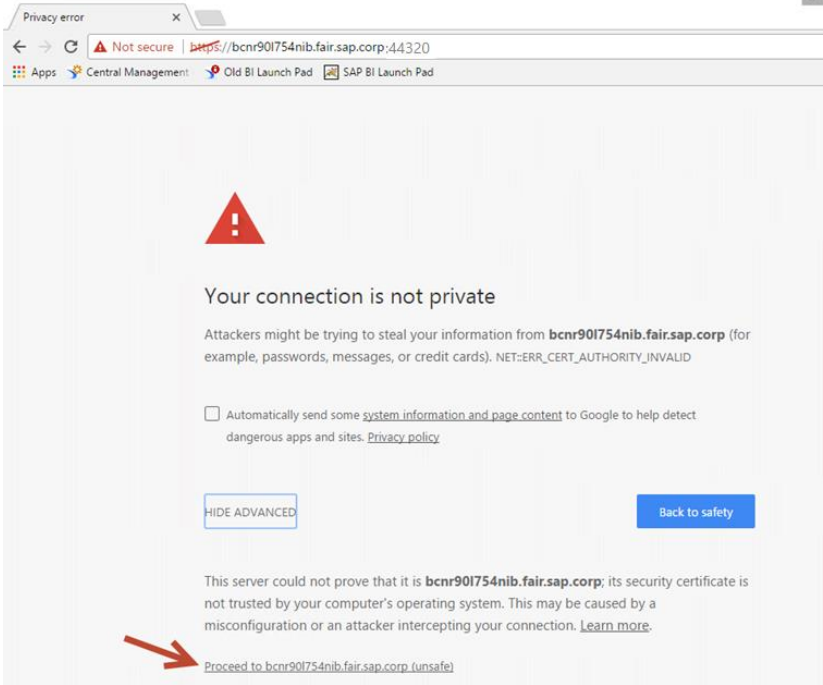
## CONFIGURE MAPPING RULES TO SAP ANALYTICS CLOUD

In the next few steps we will configure the Web Dispatcher's profile and URL "rewrite" rules to enable the Web Dispatcher to act as a reverse proxy for SAP Analytics Cloud.

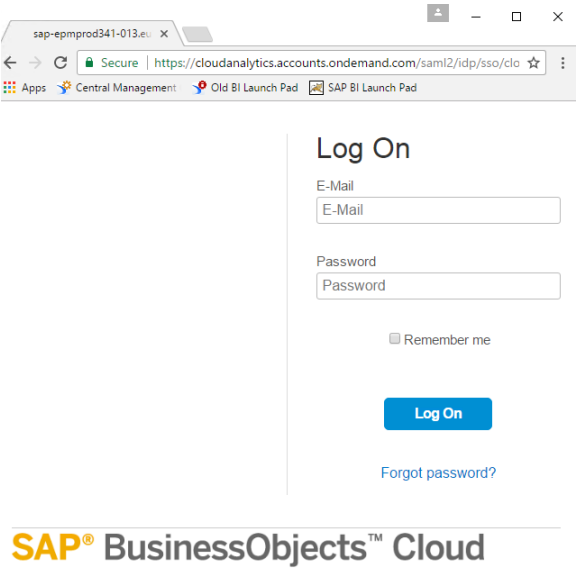
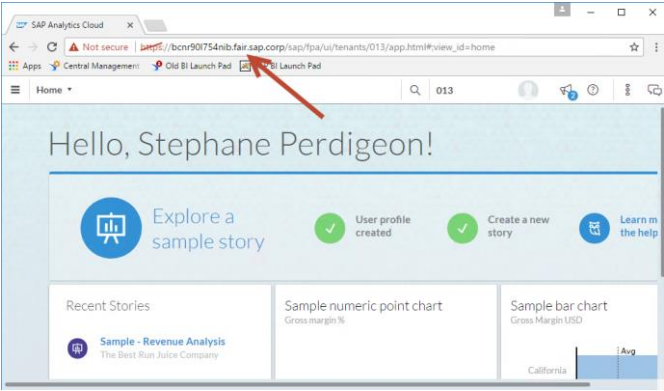
For this part of this exercise you will need to access files that are located in the folder `D:\usr\sap\TDW\SYS\profile`. This is the folder where the SAP Web Dispatcher has been installed for you.

Explanation	Screenshot
<p>From <code>D:\usr\sap\TDW\SYS\profile</code>, use a text editor to open <code>TDW_W20_***</code> (***) being the hostname) and add the following line:</p> <p><b>wdisp/system_2 = SID=BOC, EXTSRV=https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud, SRCSRV=*:44320, SRCURL=/, PROXY=proxy:8080, STANDARD_COOKIE_FILTER=OFF</b></p> <p>Optionally, the workshops hosts will tell you where to copy/paste this information.</p> <p>This rule defines the System ID for the SAP Analytics Cloud system, its protocol, its server name and its port.</p> <p>Any HTTPS request on port 44320 with a URL beginning with <code>https://&lt;WebDispatcherFQDN&gt;</code> will be forwarded to the SAP Analytics Cloud system at <code>https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud</code>.</p> <p>As SAP Analytics Cloud resides on the Internet, we need to add a proxy setting in the rule to allow the Web Dispatcher to access the system via SAP's corporate network proxy server.</p>	 <pre> 1  SAPSYSTEMNAME = TDW 2  SAPGLOBALHOST = BCNR90L754NIB 3  SAPSYSTEM = 20 4  INSTANCE_NAME = W20 5  DIR_CT_RUN = \$(DIR_EXE_ROOT)\\$(OS_UNICODE)\NTAMD64 6  DIR_EXECUTABLE = \$(DIR_CT_RUN) 7  DIR_PROFILE = \$(DIR_INSTALL)\\$(DIR_SEP)profile 8  _PF = \$(DIR_PROFILE)\TDW_W20_BCNR90L754NIB 9  SETENV_00 = PATH=\$(DIR_EXECUTABLE);%PATH% 10 11 12  #----- 13  # Back-end system configuration 14  #----- 15  wdisp/system_0 = SID=TDI, MSHOST=veTE2A\PIAmst, MSPOrt=3910, SSL_ENCRYPT=1 16  wdisp/system_2 = SID=BOC, EXTSRV=https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud, SRC: 17 18  #----- 19  # Configuration of maximum number of concurrent connections 20  #----- 21  icm/max_conn = 500 </pre>

Explanation	Screenshot
<p>Open the file <i>rewrite.txt</i>, which is in the same folder as the <i>TDW_W20_***</i> file.</p> <p>Add the following rewrite rule to the file and save it:</p> <pre> if %{SID} = BOC begin SetHeader X-Custom-Host sap-epmprod341-013.eu1.sapbusinessobjects.cloud RegRewriteResponseHeader LOCATION https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud(.*) https://&lt;WebDispatcherFQDN&gt;/\$1 end </pre> <p>Replace &lt;WebDispatcherFQDN&gt; with the Web Dispatcher system fully qualified domain name, which you previously saved in the <i>hostfile.txt</i> file. For TechEd the format is <i>yyyyyy.fair.sap.corp</i>.</p> <p>This rule is an HTTP rewrite rule. Any HTTP redirection by SAP Analytics Cloud using the Location command with the original SAC system host name will be rewritten to use the Web Dispatcher's fully qualified domain name, so that the SAC URL is transparent to the end user.</p> <p>Note that this rule only applies if %{SID} is equal to BOC, the system ID previously defined for the SAP Analytics Cloud system.</p>	 <pre> rewrite.txt - Notepad File Edit Format View Help if %{SID} = BOC begin SetHeader X-Custom-Host sap-epmprod341-013.eu1.sapbusinessobjects.cloud RegRewriteResponseHeader LOCATION https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud(.*) https://BCNR90L754NIB.fair.sap.corp/\$1 end </pre>
<p>In the <i>TDW_W20_***</i> file, add the following lines to refer to the newly-created <i>rewrite.txt</i>:</p> <pre> #URL Rewrite icm/HTTP/mod_0 = PREFIX=/,FILE=\$(DIR_PROFILE)\rewrite.txt </pre> <p>Save the file.</p>	 <pre> 1  PREFIX=PREFIX= / 2  SAPGLOBALHOST = BCNR90L754NIB 3  SAPSYSTEM = 20 4  INSTANCE_NAME = W20 5  DIR_CT_RUN = \$(DIR_EXE_ROOT)\\$(OS_UNICODE)\NTAMD64 6  DIR_EXECUTABLE = \$(DIR_CT_RUN) 7  DIR_PROFILE = \$(DIR_INSTALL)\\$(DIR_SEP)profile 8  _PF = \$(DIR_PROFILE)\TDW_W20_BCNR90L754NIB 9  SETENV_00 = PATH=\$(DIR_EXECUTABLE);%PATH% 10 11 #URL Rewrite 12 icm/HTTP/mod_0 = PREFIX=/,FILE=\$(DIR_PROFILE)\rewrite.txt 13 14 15 #----- 16 # Back-end system configuration 17 #----- 18 wdisp/system_0 = SID=IDI, MSHOST=veTE2017IAMst, MSPORT=3910, SSL_ENCRYPT=1 19 wdisp/system_2 = SID=BOC, EXTSRV=https://sap-epmprod341-013.eu1.sapbusiness 20 </pre>

Explanation	Screenshot
<p>To restart the Server in the SAP Management Console, click <i>Stop</i> and choose <i>Hard (SIGINT)</i>.</p> <p>Once the server has stopped, click <i>Start</i>.</p> <p>Click <i>OK</i> for the “Timeout period” question.</p> <p>If prompted for user / password enter the windows authentication information, then click <i>OK</i>.</p> <p>User: <b>FAIR\student</b> Password: <b>Welcome17</b></p>	 <p>The screenshot shows the SAP Management Console (sapmmc) interface. The left pane shows the 'Console Root' tree with 'SAP Systems' expanded, showing 'TDW' and 'BCNR90L754NIB 20'. The right pane shows the 'SAP Systems' list with 'TDW' selected. Two dialog boxes are overlaid: 'SAP System Start' with a 'Start timeout period (sec):' field set to 800, and 'WebService Authentication' with 'User:' set to 'FAIR\student' and 'Password:' masked with asterisks. Both dialog boxes have 'OK' and 'Cancel' buttons.</p>
<p>Launch the Chrome browser and enter the following URL: <i>https://&lt;WebDispatcherFQDN&gt;:44320</i></p> <p>Replace &lt;WebDispatcherFQDN&gt; with the Web Dispatcher system fully qualified domain name, which you previously saved in the <i>hostfile.txt</i> file. For TechEd the format is <i>yyyyyy.fair.sap.corp</i>.</p> <p>Ignore the security warning as we are using a self-signed certificate for the Web Dispatcher. Proceed to the web site.</p> <p>The SAP Analytics Cloud system is now being accessed via the Web Dispatcher.</p>	 <p>The screenshot shows a Chrome browser window with a 'Privacy error' warning. The address bar shows 'https://bcnr90l754nib.fair.sap.corp:44320'. The warning message states: 'Your connection is not private. Attackers might be trying to steal your information from bcnr90l754nib.fair.sap.corp (for example, passwords, messages, or credit cards). NET:ERR_CERT_AUTHORITY_INVALID'. There is a checkbox for 'Automatically send some system information and page content to Google to help detect dangerous apps and sites.' and a 'Back to safety' button. At the bottom, there is a link 'Proceed to bcnr90l754nib.fair.sap.corp (unsafe)' which is highlighted with a red arrow.</p>



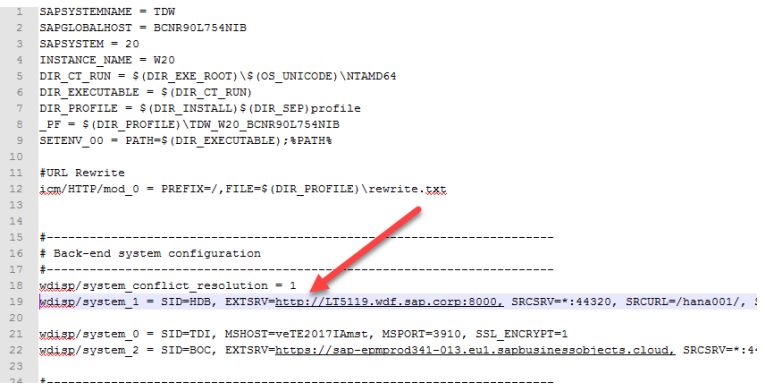
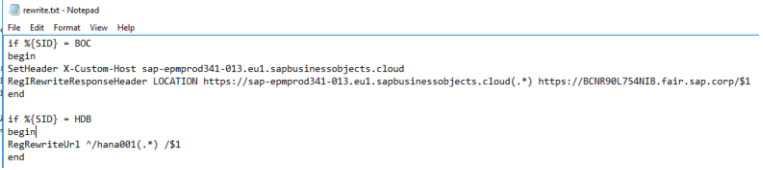
Explanation	Screenshot
<p>You can now log on to the system.</p> <p>Log into the system using your credentials: <b>teched17ANA264+XXX@gmail.com</b> ...where XXX is the number assigned to you (for example if you have 089, the email address will be: teched17ANA264+089@gmail. com).</p> <p>Password: <b>Password1</b></p>	
<p>You are now accessing SAP Analytics Cloud using the reverse proxy URL.</p>	

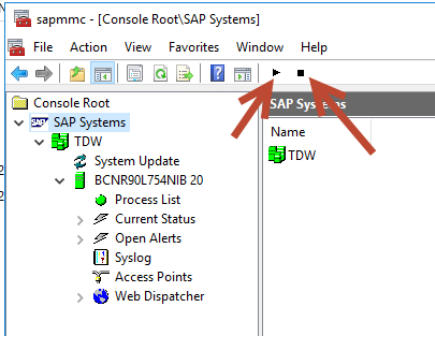
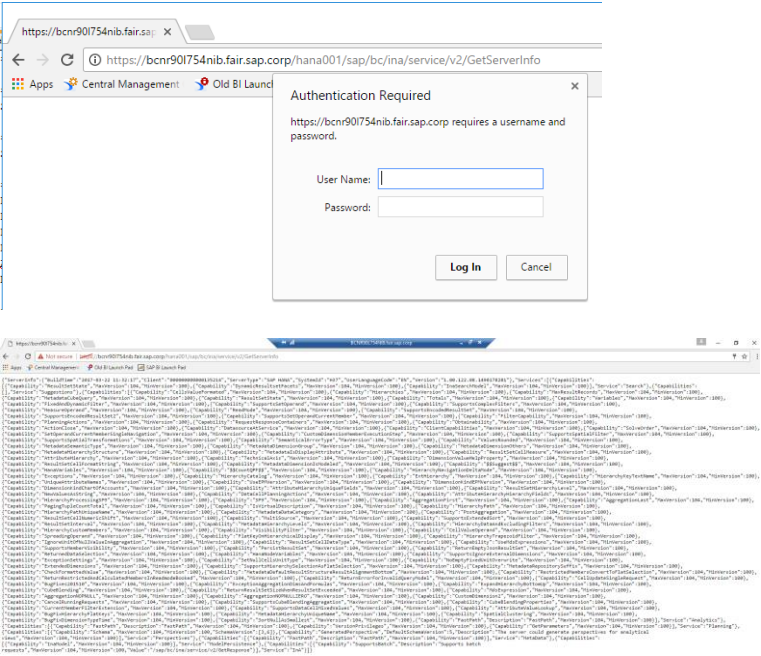


## CONFIGURE MAPPING RULES TO SAP HANA

In this section, we will setup the SAP Web Dispatcher as a reverse proxy for the on-premise / remote SAP HANA system. For simplicity, the SAP HANA system is being accessed via HTTP. In a production system you would use HTTPS between the Web Dispatcher and the SAP HANA system.

We will configure the Web Dispatcher profile and rewrite rules to turn it to a reverse proxy for HANA.

Explanation	Screenshot
<p>Add the mapping rule to the file <code>TDW_W20_***</code> with the following lines:</p> <pre>wdisp/system_conflict_resolution = 1  wdisp/system_1 = SID=HDB, EXTSRV=http://LT5119.wdf.sap.corp:8000, SRC_SRV=*:44320, SRCURL=/hana001/, STANDARD_COOKIE_FILTER=OFF</pre> <p>This rule defines the HANA system's ID (SID), protocol, server name and port of the HANA XS engine. Any HTTPS request arriving at Web Dispatcher on port 44320, with its URL beginning with <code>https://&lt;WebDispatcherFQDN&gt;/hana001</code>, will be forwarded to the HANA system at <code>http://LT5119.wdf.sap.corp:8000/</code>.</p> <p>Note that a proxy server is not configured in this rule as the HANA system resides on premise.</p> <p>Save the <code>TDW_W20_***</code> file.</p> <p><b>Important Note:</b> The order of the systems matters. The SAC system should be labeled with the latest ID; here it is <code>/system_2</code>.</p>	 <pre> 1  SAPSYSTEMNAME = TDW 2  SAPGLOBALHOST = BCNR90L754NIB 3  SAPSYSTEM = 20 4  INSTANCE_NAME = W20 5  DIR_CT_RUN = \$(DIR_EXE_ROOT)\\$(OS_UNICODE)\NTAMD64 6  DIR_EXECUTABLE = \$(DIR_CT_RUN) 7  DIR_PROFILE = \$(DIR_INSTALL)\\$(DIR_SEP)profile 8  _PF = \$(DIR_PROFILE)\TDW_W20_BCNR90L754NIB 9  SETENV_00 = PATH=\$(DIR_EXECUTABLE);%PATH% 10 11 #URL Rewrite 12 .com/HTTP/mod_0 = PREFIX=/,FILE=\$(DIR_PROFILE)\rewrite.txt 13 14 15 #----- 16 # Back-end system configuration 17 #----- 18 wdisp/system_conflict_resolution = 1 19 wdisp/system_1 = SID=HDB, EXTSRV=http://LT5119.wdf.sap.corp:8000, SRC_SRV=*:44320, SRCURL=/hana001/, 20 21 wdisp/system_0 = SID=TDI, MSHOST=veTE2017IAmet, MSPORT=3910, SSL_ENCRYPT=1 22 wdisp/system_2 = SID=BOC, EXTSRV=https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud, SRC_SRV=*:4 23 24 #----- </pre>
<p>Edit the <code>rewrite.txt</code> file and add the following rewrite rule:</p> <pre>if %{SID} = HDB begin RegRewriteUrl ^/hana001(.*) /\$1 end</pre> <p>This is an HTTP Request rewrite rule, which removes the <code>/hana001</code> part from the URL when forwarding to the backend HANA system, as <code>/hana001</code> is used by the Web</p>	 <pre> rewrite.txt - Notepad File Edit Format View Help if %{SID} = BOC begin SetHeader X-Custom-Host sap-epmprod341-013.eu1.sapbusinessobjects.cloud RegRewriteResponseHeader LOCATION https://sap-epmprod341-013.eu1.sapbusinessobjects.cloud(.*) https://BCNR90L754NIB.fair.sap.corp/\$1 end if %{SID} = HDB begin RegRewriteUrl ^/hana001(.*) /\$1 end </pre>

Explanation	Screenshot
<p>Dispatcher for server mapping purposes only and HANA does not recognize it.</p> <p>We did not need a similar HTTP Request rewrite rule for the SAC system, as the URL to the SAC system <u>does</u> contain <code>/sap</code> at the beginning of its URL path.</p> <p>The <i>if</i> condition in this rule makes sure that it is only applied to the backend HANA system.</p> <p>Save the <i>rewrite.txt</i> file.</p>	
<p>As before, restart the Server in the SAP Management Console. Click <i>Stop</i> and choose <i>Hard (SIGINT)</i>.</p> <p>Once the server has stopped, click <i>Start</i>.</p>	
<p>Launch a Chrome window, and put the following URL into the address bar to test the reverse proxy:</p> <p><code>https://&lt;WebDispatcherFQDN&gt;:44320/hana001/sap/bc/ina/service/v2/GetServerInfo</code></p> <p>Replace <code>&lt;WebDispatcherFQDN&gt;</code> with the Web Dispatcher system fully qualified domain name, which you previously saved in the <i>hostfile.txt</i> file. For TechEd the format is <code>yyyyyy.fair.sap.corp</code>.</p> <p>When prompted, enter the HANA system's user credential provided by the instructor:</p> <p>User: <b>System</b> Password: <b>WelcomeSAP17</b></p>	

**Problems?**

If your edited mapping or rewrite rules do not work, you can use the following two files in *D:\usr\sap\TDW\SYS\profile* instead:

- *rewrite – SOLUTION.txt*
- *TDW\_W20\_<hostname> SOLUTION*

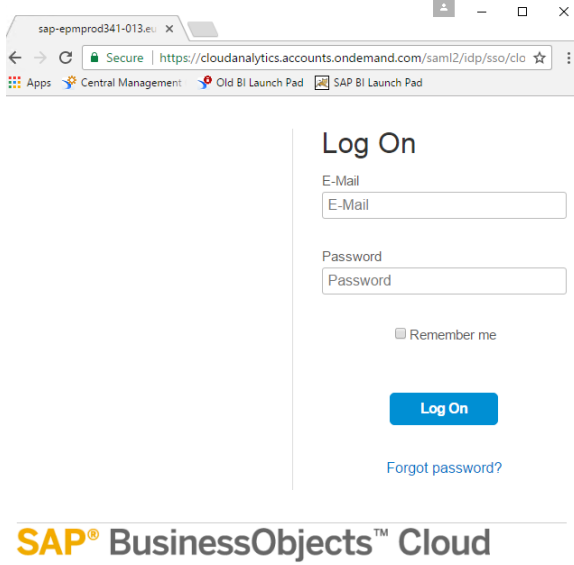
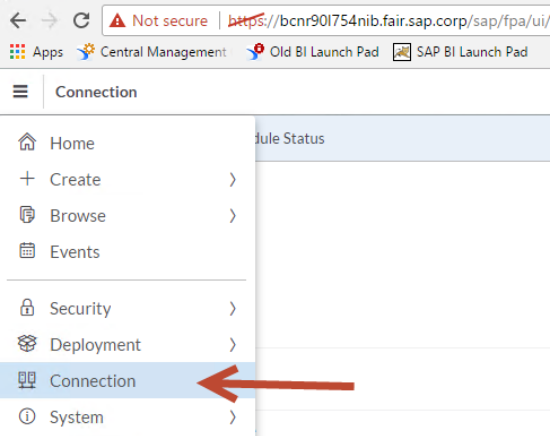
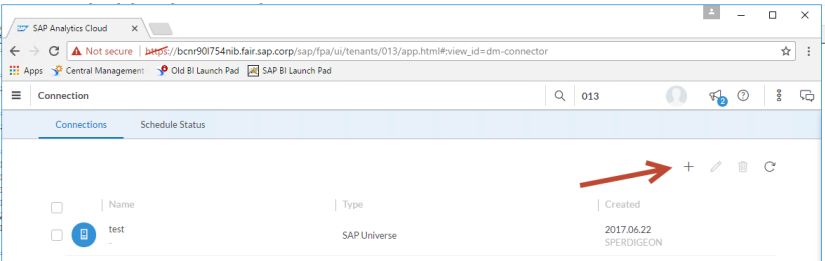
**Copy these two files** then rename the copies as:


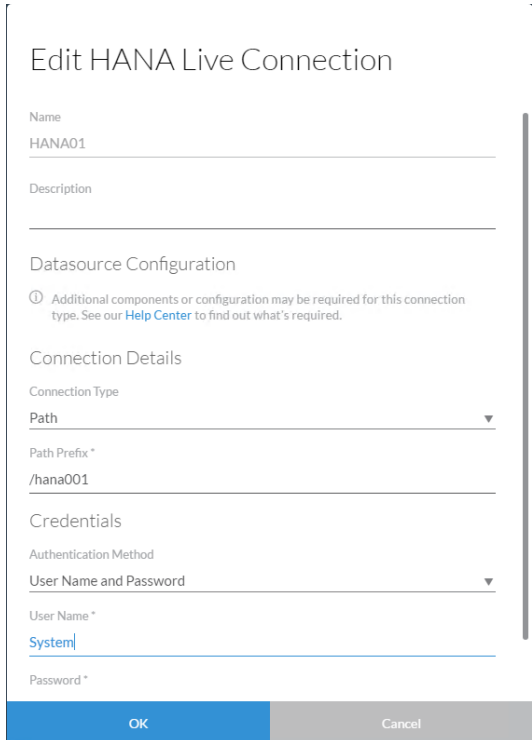
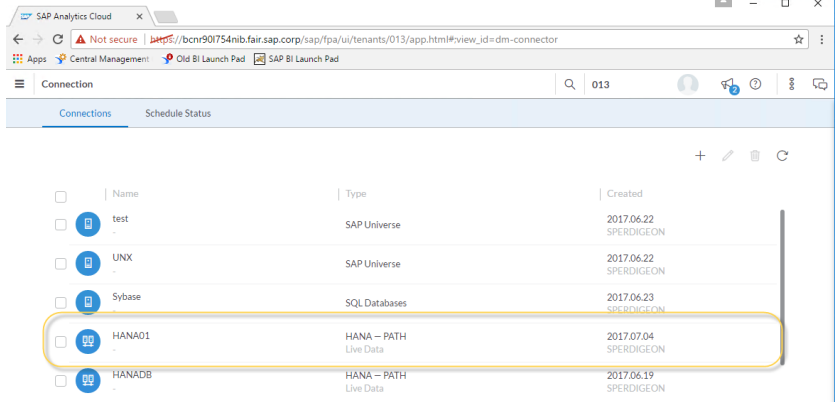
- *rewrite.txt*
- *TDW\_W20\_<hostname>*

...where <hostname> is the machine name (e.g. BCNR90L754NIB).

## CREATE A SAP HANA LIVE CONNECTION

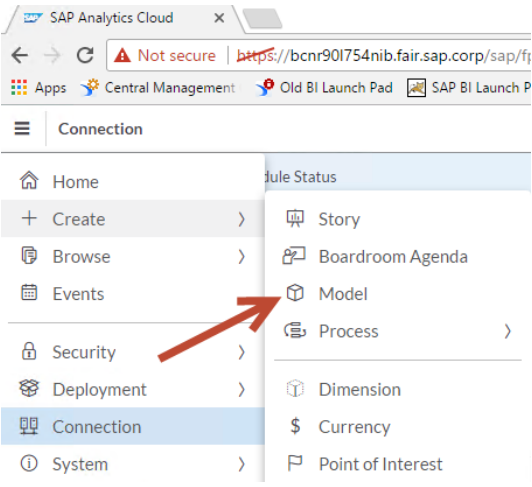
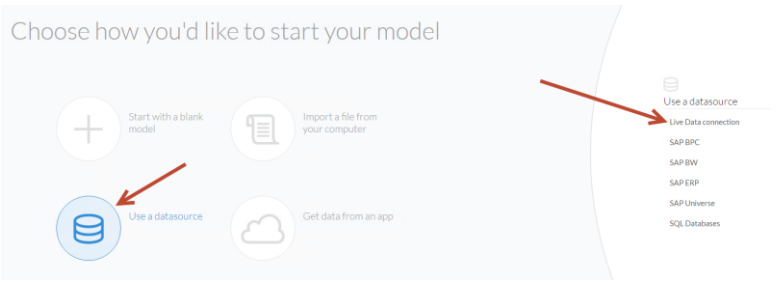
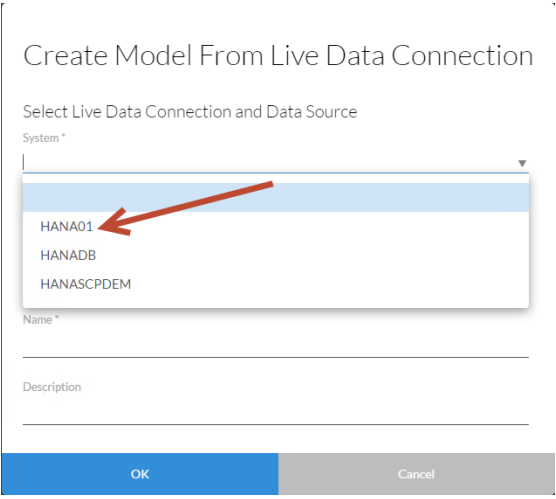
We will now connect to SAP Analytics Cloud via the reverse proxy and create a live connection to SAP HANA.

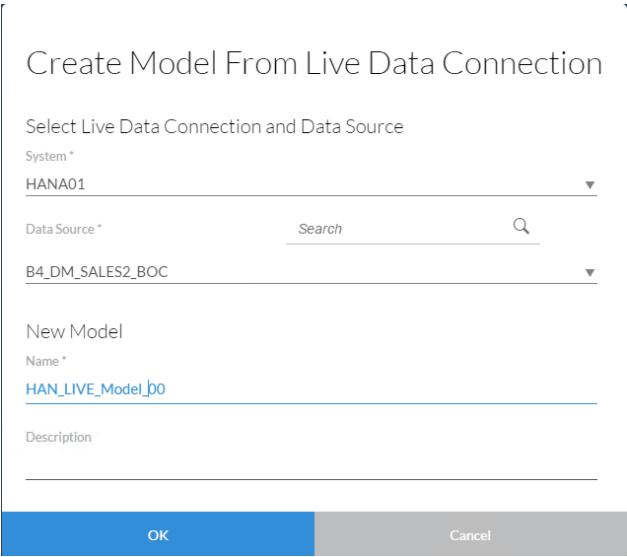
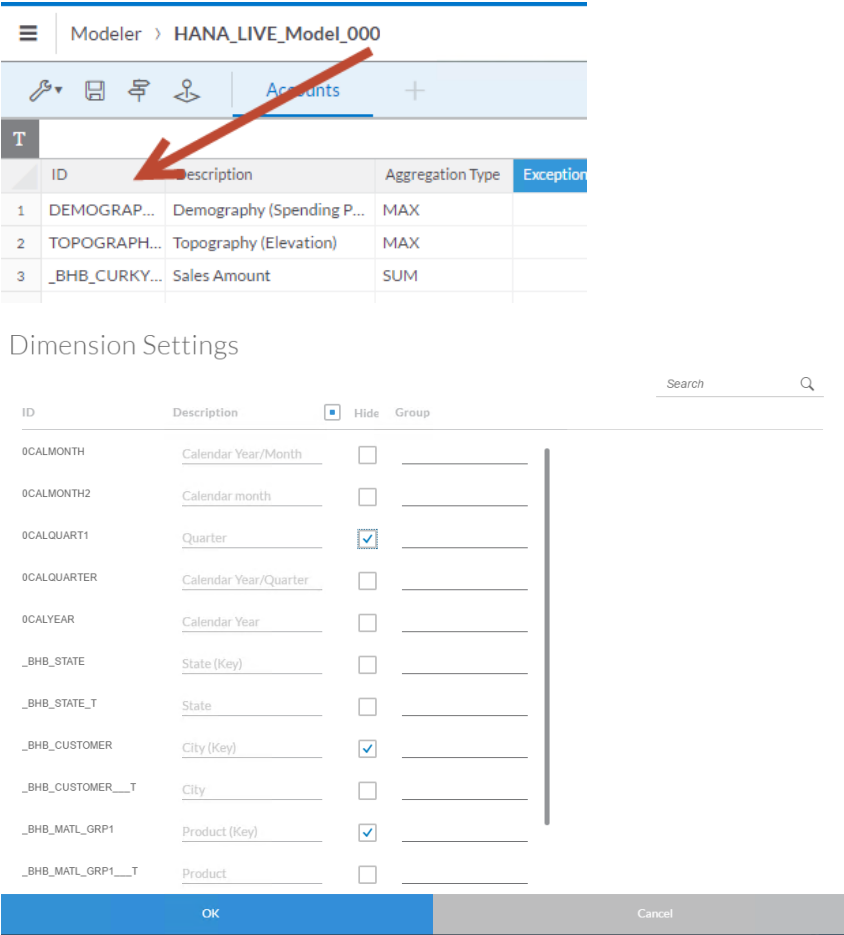
Explanation	Screenshot
<p>Launch the Chrome browser and enter the following URL:  <a href="https://&lt;WebDispatcherFQDN&gt;:44320">https://&lt;WebDispatcherFQDN&gt;:44320</a></p> <p>Replace &lt;WebDispatcherFQDN&gt; with the Web Dispatcher system fully qualified domain name, which you previously saved in the <i>hostfile.txt</i> file. For TechEd the format is <code>yyyyyy.fair.sap.corp</code>.</p> <p>Log into the system using your credentials:  <b>teched17ANA264+XXX@gmail.com</b>  ...where XXX is the number assigned to you (for example if you have 089, the email address will be: <code>teched17ANA264+089@gmail.com</code>).</p> <p>Password: <b>Password1</b></p>	
<p>Click on <i>Hamburger</i> → <i>Connection</i>.</p>	
<p>Create a new connection by clicking the + button.</p>	

Explanation	Screenshot
<p>Choose <i>Live Data Connection</i> → <i>SAP HANA</i>.</p>	
<p>In the pop-up window, fill in the following details:</p> <p>Name: <b>HANA001</b> (...where XXX is the number assigned to you).          Connection Type: <b>Path</b>          Path Prefix: <b>/hana001</b>          Credentials are required: <b>Checked</b>          Authentication Method: <b>User Name and Password</b>          User Name: <b>System</b>          Password: <b>WelcomeSAP17</b></p> <p>Notice that the path prefix matches the previous HANA path definition in the Web Dispatcher mapping rules.</p>	
<p>The newly-created remote HANA system definition is now part of the list of connections in SAP Analytics Cloud.</p>	

## CREATE A MODEL FROM THE REMOTE SAP HANA SYSTEM

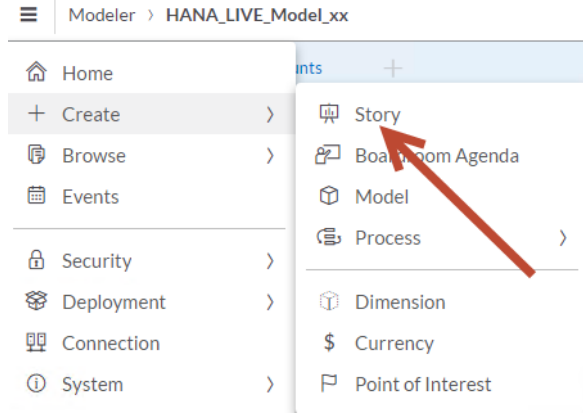
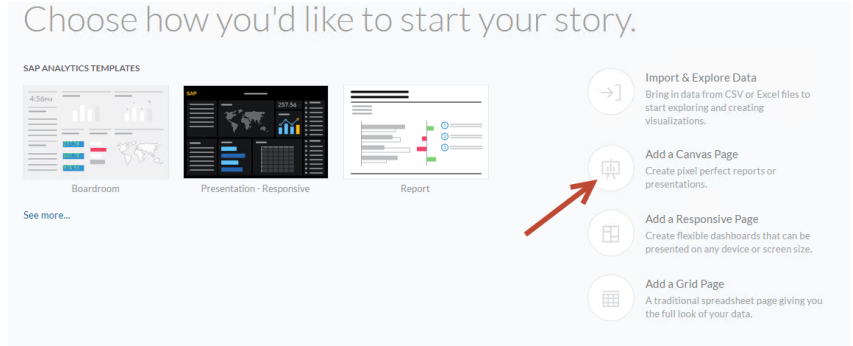
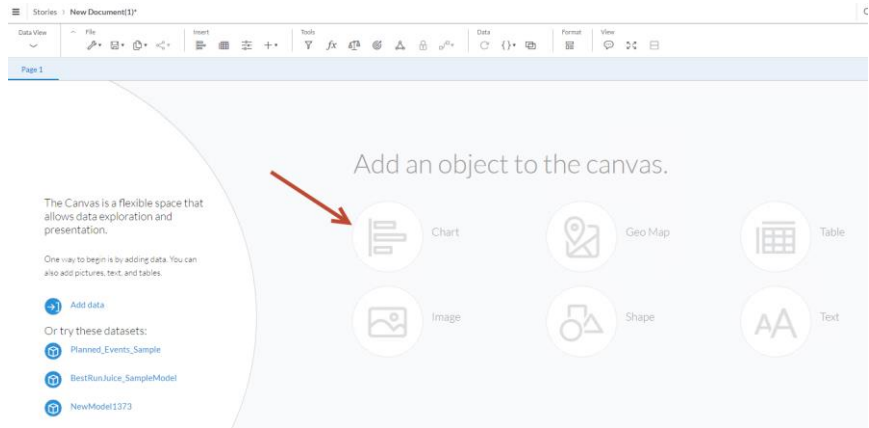
Now that the remote HANA system is ready to use, we will test it by creating a model from the remote HANA system.

Explanation	Screenshot
<p>The next step is to create a model from the remote HANA system we defined earlier.</p> <p>Click <i>Hamburger</i> → <i>Create</i> → <i>Model</i>.</p>	 <p>The screenshot shows the SAP Analytics Cloud web interface. The 'Create' menu is open, and the 'Model' option is highlighted with a red arrow. The browser address bar shows a URL starting with 'https://bcnr901754nib.fair.sap.corp/sap/ft'.</p>
<p>Choose <i>Use a datasource</i> and click on <i>Live Data Connection</i>.</p>	 <p>The screenshot shows a dialog titled 'Choose how you'd like to start your model'. There are four options: 'Start with a blank model', 'Import a file from your computer', 'Use a datasource' (selected with a red arrow), and 'Get data from an app'. On the right side, under 'Use a datasource', there is a list of options: 'Live Data connection', 'SAP BPC', 'SAP BW', 'SAP ERP', 'SAP Universe', and 'SQL Databases'. A red arrow points to 'Live Data connection'.</p>
<p>From the list of Systems, choose the name of the connection you just created <i>HANA001</i>, where XXX is the number assigned to you.</p>	 <p>The screenshot shows a dialog titled 'Create Model From Live Data Connection'. It has a section 'Select Live Data Connection and Data Source' with a 'System' dropdown menu. The dropdown is open, showing a list of systems: 'HANA01', 'HANADB', and 'HANASCPDEM'. A red arrow points to 'HANA01'. Below the dropdown are fields for 'Name' and 'Description'. At the bottom are 'OK' and 'Cancel' buttons.</p>

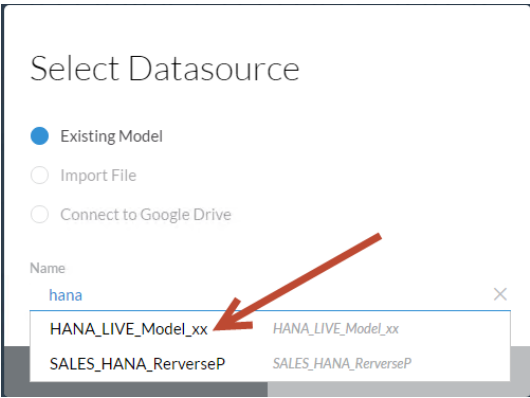
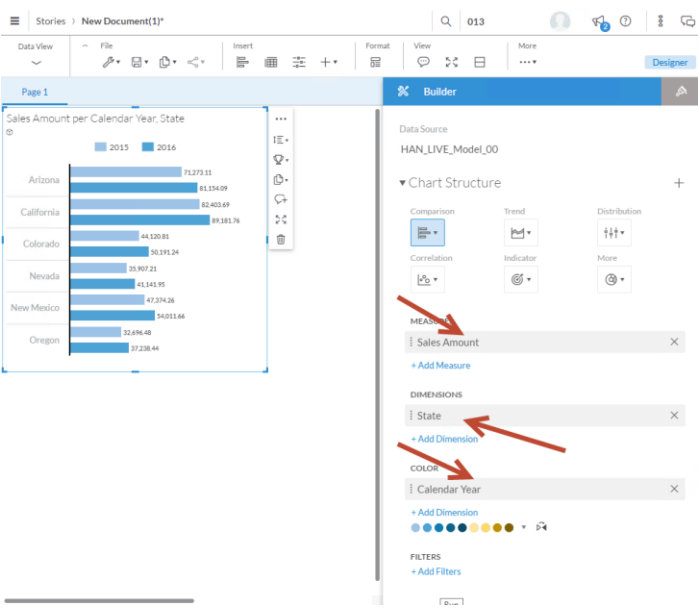
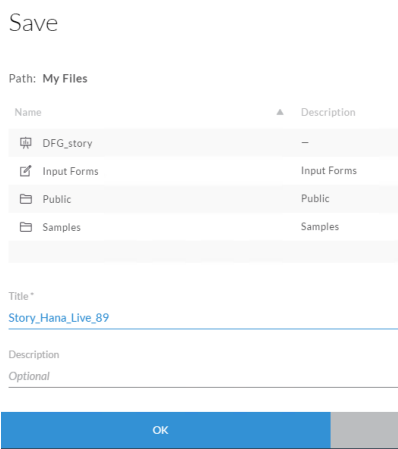
Explanation	Screenshot
<p>Enter user name and password for the HANA system, if prompted.</p> <p>User Name: <b>System</b> Password: <b>WelcomeSAP17</b></p> <p>Chose the Data Source available at the HANA level. We will choose <b>B4_DM_SALES2_BOC</b>.</p> <p>Give it a name such as <b>HANA_LIVE_Model_XXX</b>, where XXX is the number assigned to you.</p> <p>Click <b>OK</b>.</p>	
<p>You can optionally explore making some changes to your model.</p> <p>For example click on the <i>Dimension settings</i> icon and hide some dimensions.</p> <p>Click the <b>Save</b> icon to save your model.</p>	

## CREATE A STORY

We will now validate the model by creating a simple SAP Analytics Cloud story.

Explanation	Screenshot
Create a Story by clicking <i>Hamburger</i> → <i>Create</i> → <i>Story</i> .	
Click on <i>Add a Canvas Page</i> .	
Click on <i>Chart</i> to add a chart object to the canvas page.	



Explanation	Screenshot
<p>Choose the model we just created as a the Datasource, e.g. <i>HANA_LIVE_Model_XXX</i>, where XXX is the number assigned to you.</p>	
<p>We now add data to the chart.</p> <p>In the <i>Builder</i> panel on the right-hand side, add:</p> <p>Measures: <b>Sales Amount</b>  Dimensions: <b>State</b>  Color: <b>Calendar Year</b></p>	
<p>Click the <i>Save</i> icon and save your story as <i>Story_HANA_Live_XXX</i>, where XXX is the number assigned to you.</p>	

[www.sap.com/contactsap](http://www.sap.com/contactsap)

© 2017 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies. See <http://www.sap.com/corporate-en/legal/copyright/index.epx> for additional trademark information and notices.