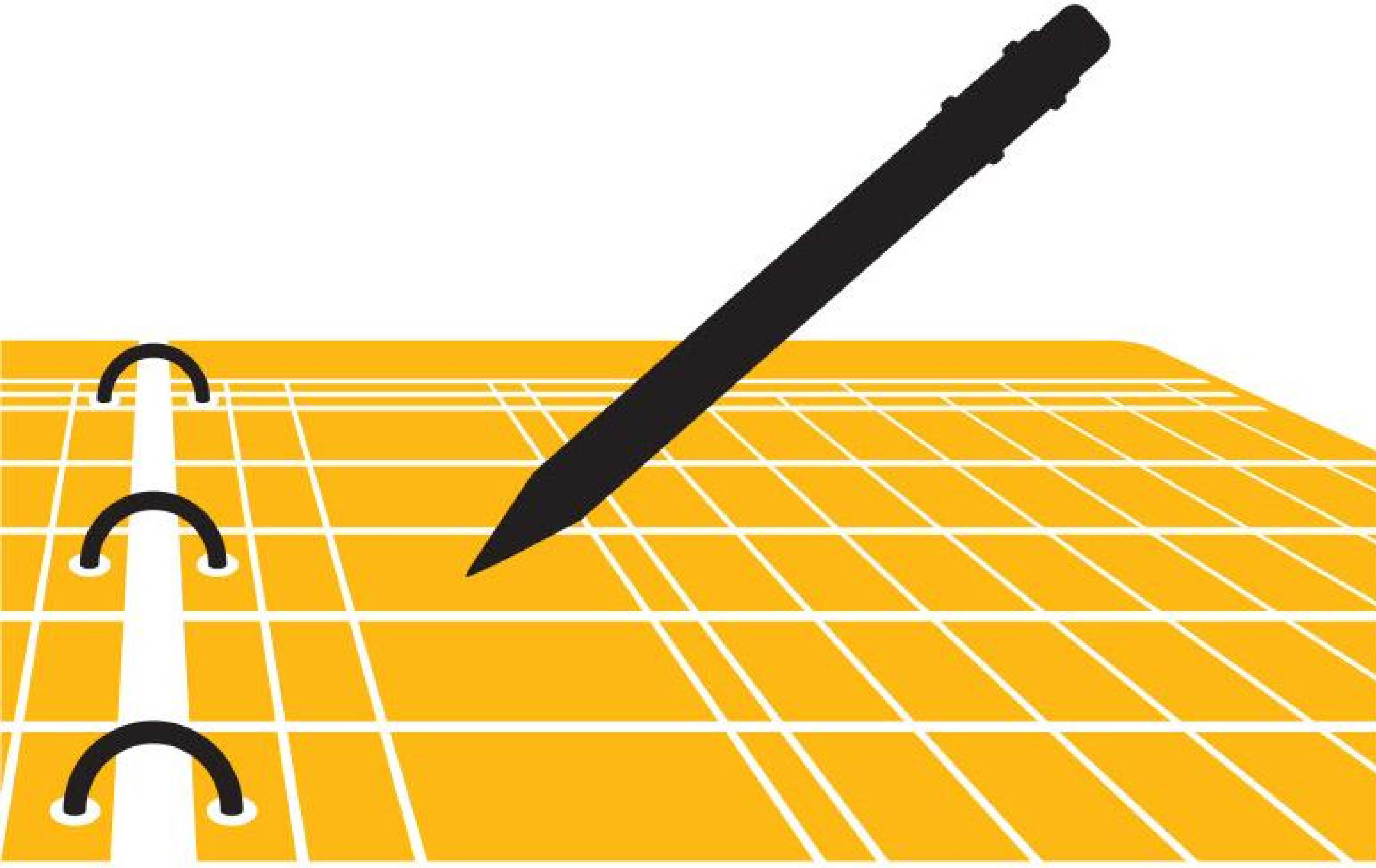
User Guide

CUSTOMER

Document Version: 1.1 – Final
Date: April 27, 2017

UI Custom Theme Designer

SAP Trade Management 3.0



Typographic Conventions

Type Style	Description
Example	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
`EXAMPLE`	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
`Example`	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
`Example`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE	Keys on the keyboard, for example, F2 or ENTER.

Document History

Version	Status	Date	Change
1.0	Final	April 27, 2017	Initial Version
1.1	Final	April 27, 2017	Updated for SAP Trade Management 3.0

Table of Contents

1 Prerequisites

Make sure that the following prerequisites are met before you customize the application:

- **SAPGUI**: For customizing the SAP system.
- **IDE**: Any IDE, such as Eclipse. We recommend that you use Eclipse with UI5 development tools and ABAP Repository team provider plugins. For information about installing and configuring Eclipse, see https://tools.hana.ondemand.com/#sapui5.

2 Assumptions

This user guide assumes that you have some level of familiarity with the UI5 application LESS/CSS and browser development tools. Basic familiarity with the Eclipse Editor is also expected.

The aim of this user guide is to provide you with the information you need to style the application.

3 Styling Approach

The application uses both standard SAPUI5 and custom controls. The SAP UI Theme Designer is used to configure standard controls while the application-specific theme designer tool is used to manage custom controls.

Custom controls inherit the standard UI5 controls and extend the existing functionality. They are also styled using custom CSS classes.

For more information about the standard theme designer, see standard theme designer.

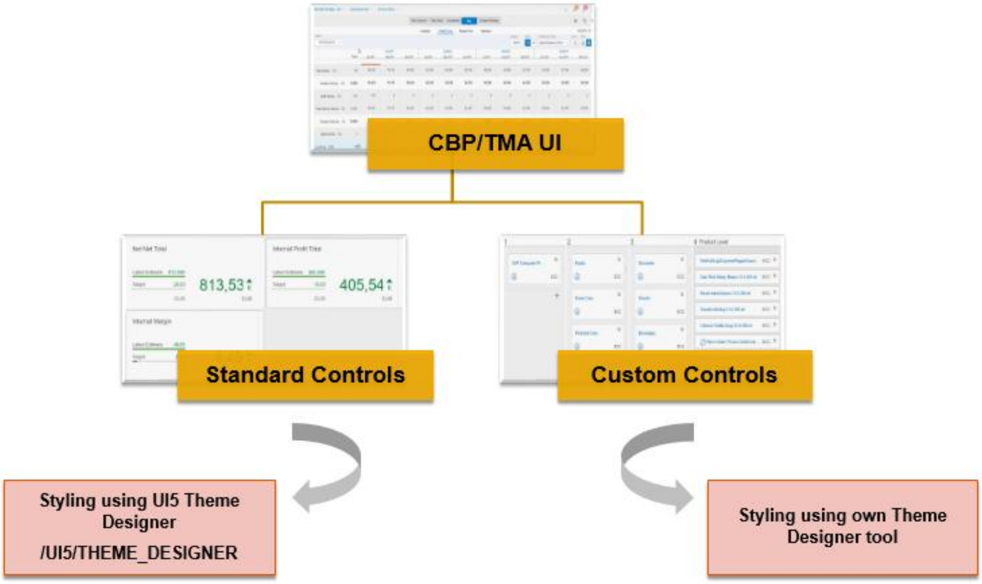

CBP/TMA UI
Standard Controls
Custom Controls
Styling using UI5 Theme Designer /UI5/THEME_DESIGNER
Styling using own Theme Designer tool
813,53
405,54

Figure 1: Standard and Custom Controls

The custom theme designer can be used to apply additional styling and can be accessed at: `https://<fully-qualified-host-name>:<port-number>/sap/bc/ui5_ui5/jbpc/ui5_thmdsg/index.html`

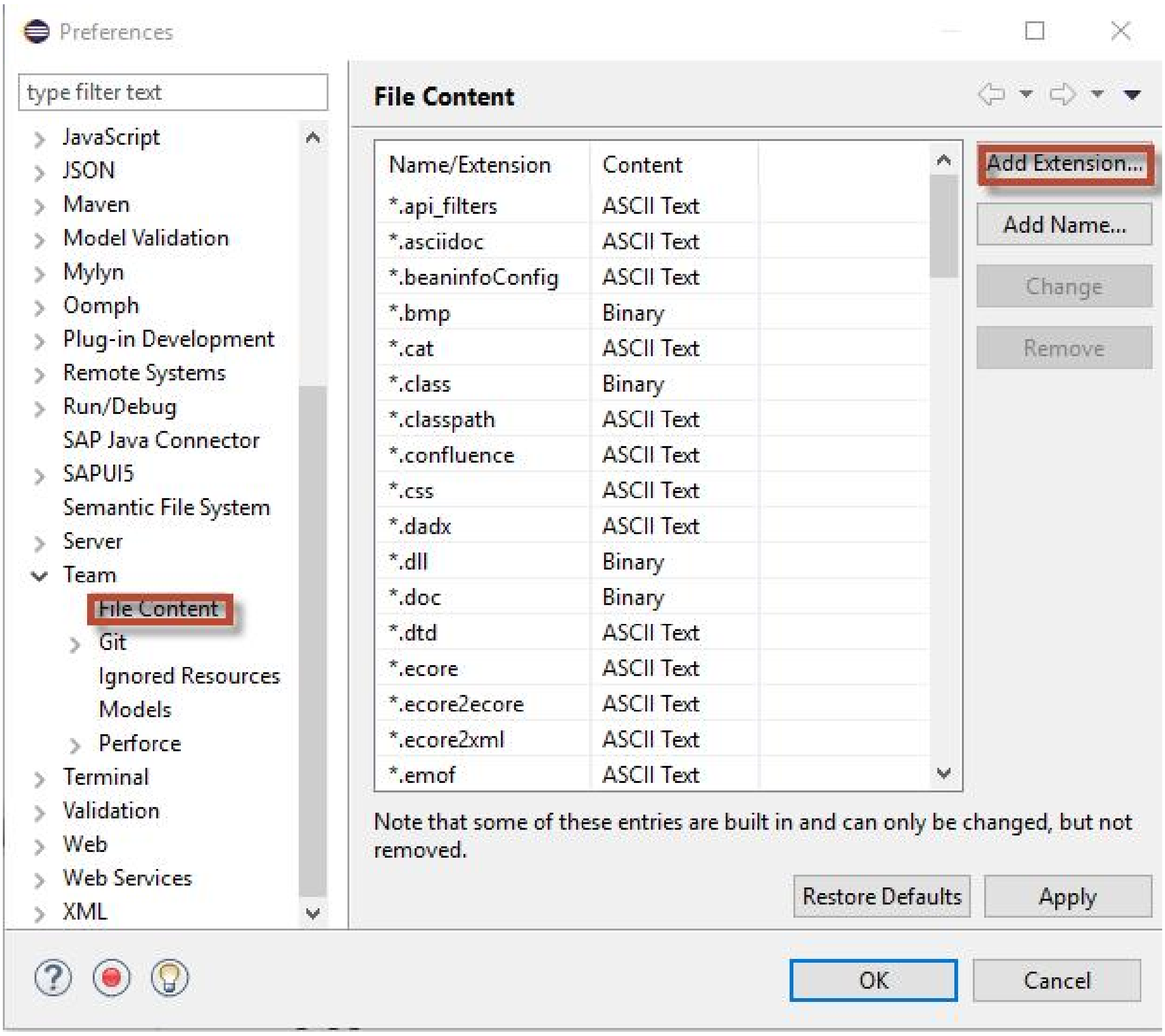
For more details, see section 6.1.2.1.

4 Configuration Settings

4.1 Eclipse: Maintain File Type

Maintain the file types **.ttf** and **.cur** in Eclipse to ensure that these file types can be transferred to the ABAP Repository.

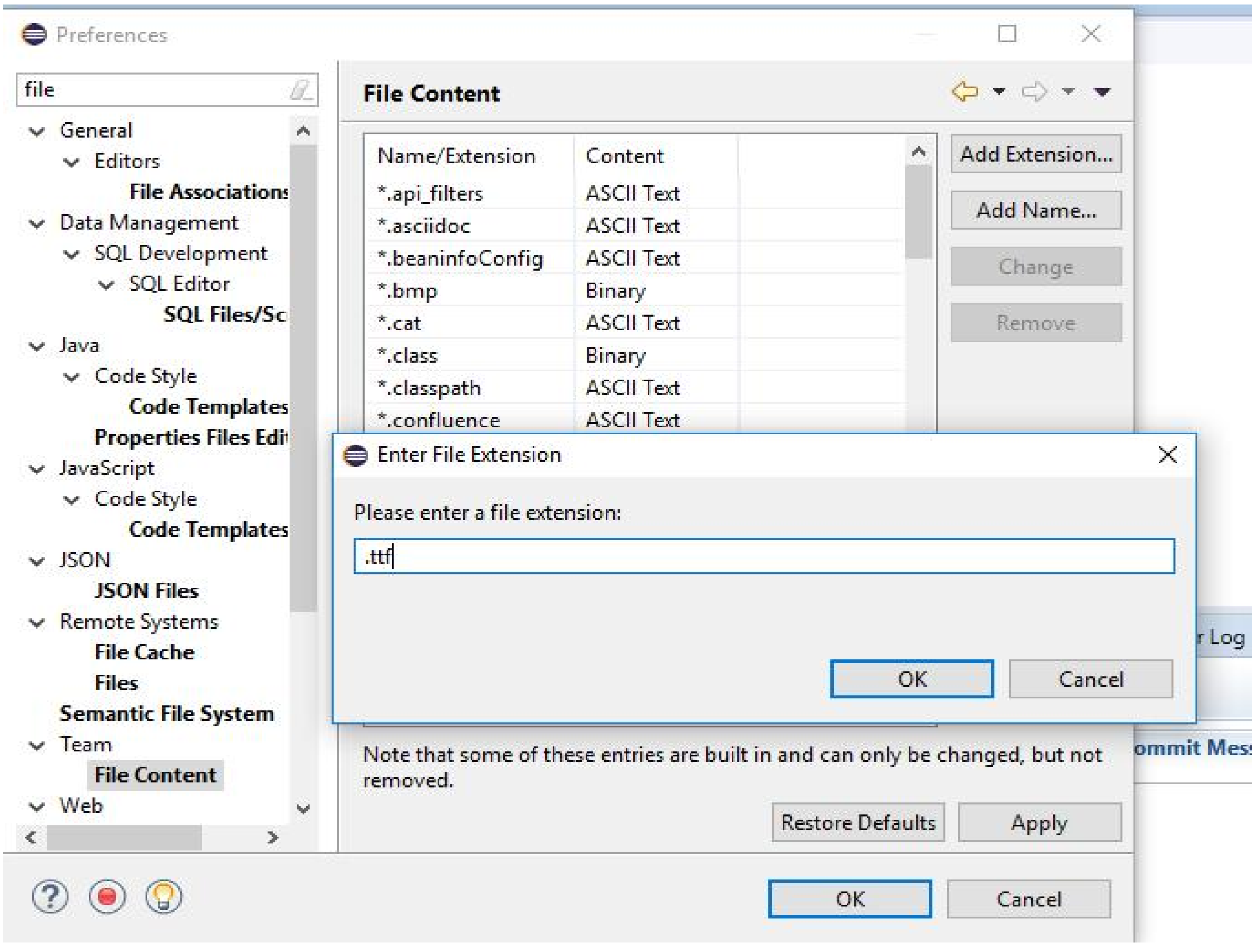
1. In Eclipse, click *Window à Preferences à Team à File Content*.
2. Click *Add Extension*.



Name/Extension	Content
*.api_filters	ASCII Text
*.asciidoc	ASCII Text
*.beaninfoConfig	ASCII Text
*.bmp	Binary
*.cat	ASCII Text
*.class	Binary
*.classpath	ASCII Text
*.confluence	ASCII Text
*.css	ASCII Text
*.dadx	ASCII Text
*.dll	Binary
*.doc	Binary
*.dtd	ASCII Text
*.ecore	ASCII Text
*.ecore2ecore	ASCII Text
*.ecore2xml	ASCII Text
*.emof	ASCII Text

Note that some of these entries are built in and can only be changed, but not removed.

Figure 2: Eclipse IDE File Content



Name/Extension	Content
*.api_filters	ASCII Text
*.asciidoc	ASCII Text
*.beaninfoConfig	ASCII Text
*.bmp	Binary
*.cat	ASCII Text
*.class	Binary
*.classpath	ASCII Text
*.confluence	ASCII Text

Please enter a file extension:

.ttf

Note that some of these entries are built in and can only be changed, but not removed.

Figure 3: File Extensions

3. Similarly add the file type **.cur**.

5 Common Activities

5.1 Download Theme Files

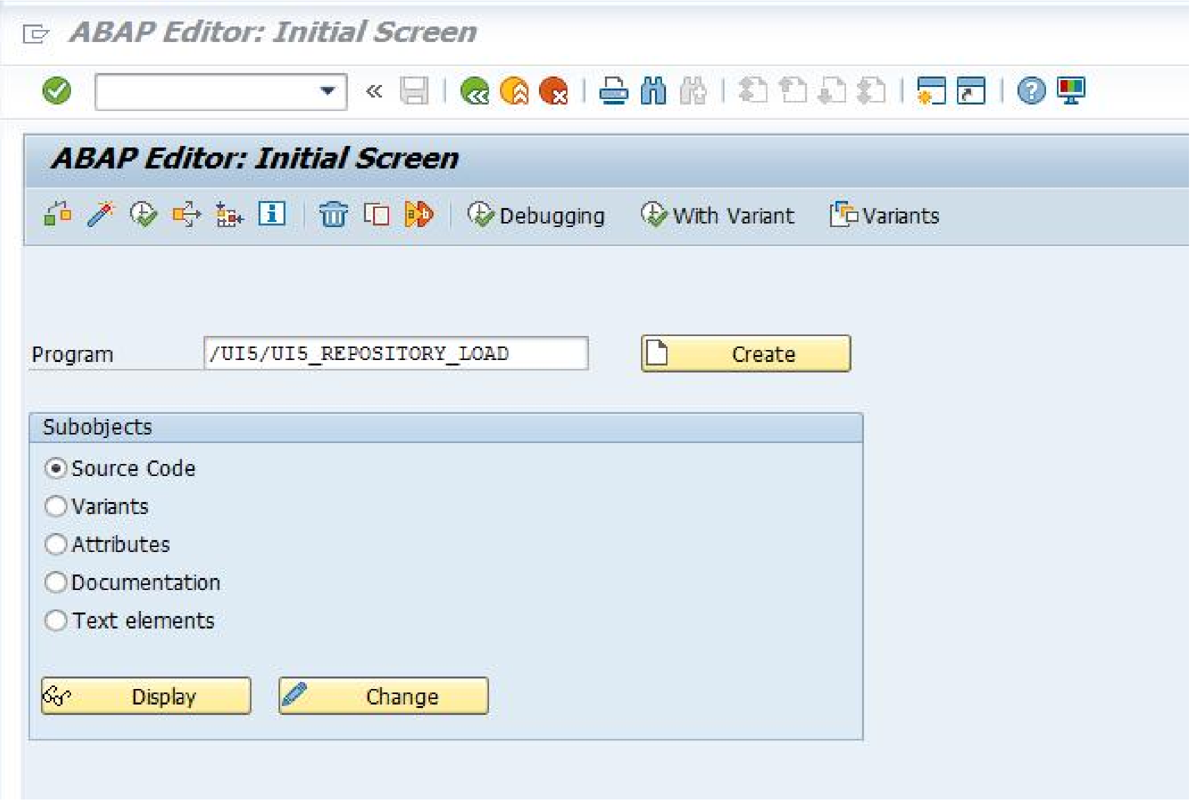
5.1.1 Run Report for Downloading Theme Files

In the SAP system, execute transaction `SE38` and run the report `/UI5/UI5_REPOSITORY_LOAD`.

This report is used to upload and download SAPUI5 applications.

5.1.2 Download Theme Files for SAP Blue Crystal

Enter the BSP application `/JBPC/UI5_LIB` and download the files to your local machine. This is the BSP application for SAP Trade Management.



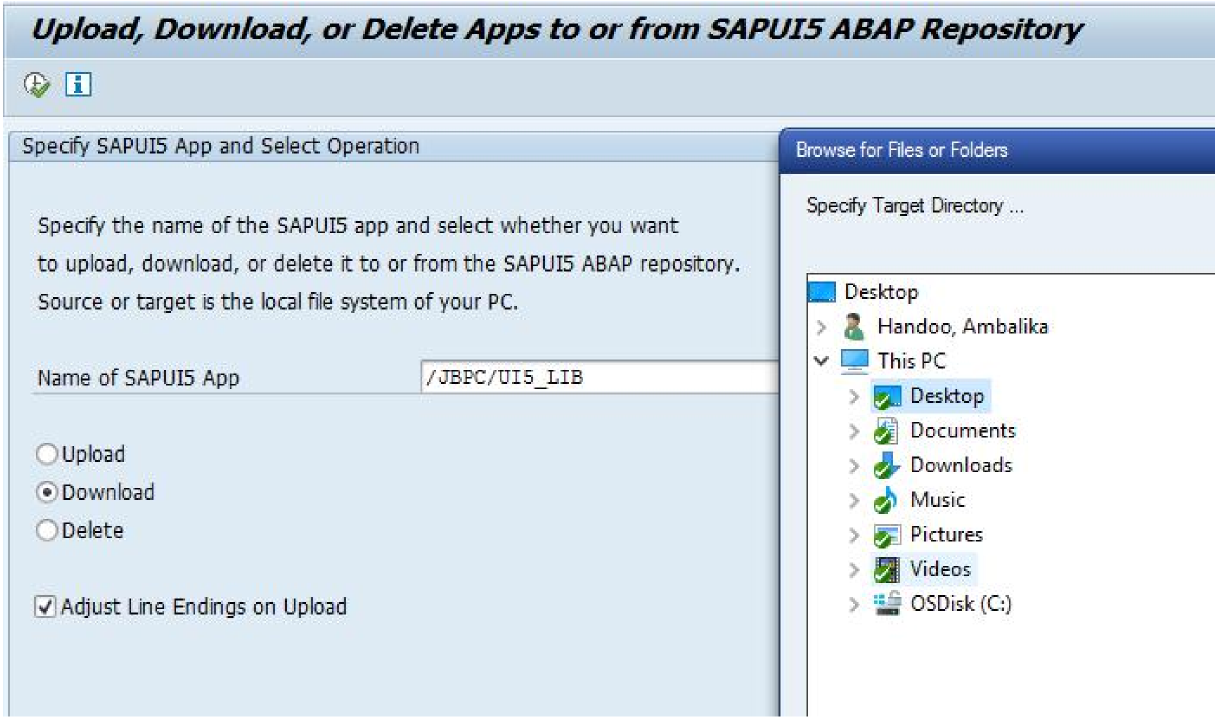
ABAP Editor: Initial Screen

Program /UI5/UI5_REPOSITORY_LOAD

Subobjects

● Source Code
○ Variants
○ Attributes
○ Documentation
○ Text elements

Figure 4: Report for Download



Upload, Download, or Delete Apps to or from SAPUI5 ABAP Repository

Specify SAPUI5 App and Select Operation

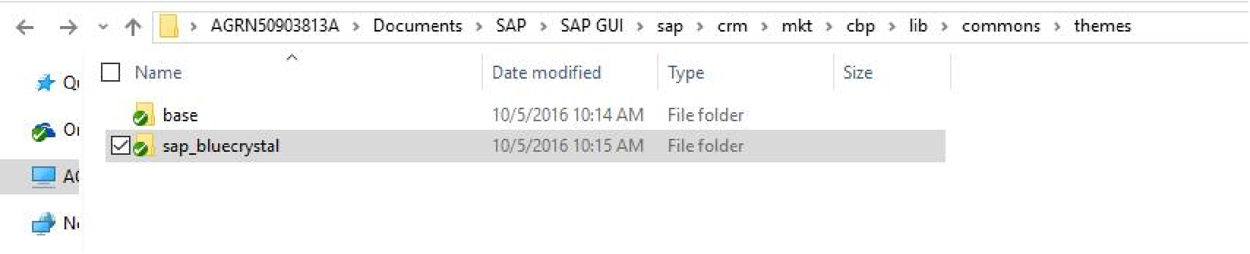
Specify the name of the SAPUI5 app and select whether you want to upload, download, or delete it to or from the SAPUI5 ABAP repository. Source or target is the local file system of your PC.

Name of SAPUI5 App: /JBPC/UI5_LIB

○ Upload
● Download
○ Delete

☑ Adjust Line Endings on Upload

Figure 5: Save to Local Machine



AGRN50903813A › Documents › SAP › SAP GUI › sap › crm › mkt › cbp › lib › commons › themes

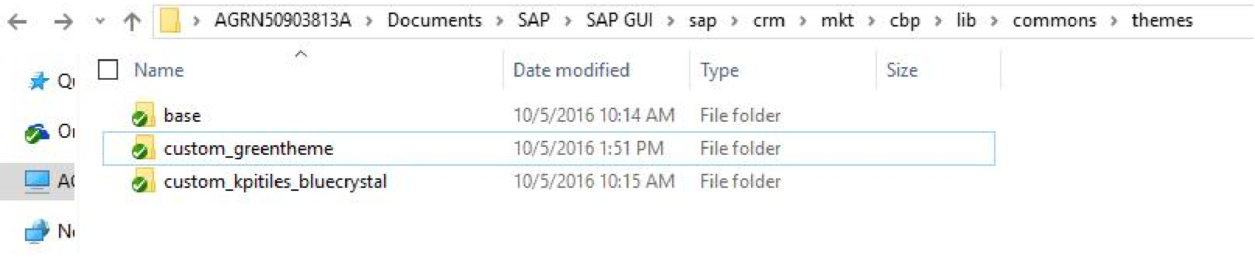
Name	Date modified	Type	Size
base	10/5/2016 10:14 AM	File folder	
sap_bluecrystal	10/5/2016 10:15 AM	File folder	

Figure 6: Standard SAP Blue Crystal Files

Navigate to the folder **sap\crm\mkt\cbp\lib\commons\themes**, which is the location of the standard SAP Blue Crystal theme that you will download and adapt to your requirements.

5.1.3 Rename the Downloaded SAP Blue Crystal Theme

Change the name **sap_bluecrystal** to the name you would like to use for your custom theme; for example, **custom_Kpitiles_bluecrystal**.



AGRN50903813A > Documents > SAP > SAP GUI > sap > crm > mkt > cbp > lib > commons > themes

Name	Date modified	Type	Size
base	10/5/2016 10:14 AM	File folder	
custom_greentheme	10/5/2016 1:51 PM	File folder	
custom_kpitiles_bluecrystal	10/5/2016 10:15 AM	File folder	

Figure 7: Rename Standard Theme

You can store multiple themes in the folder by copying the standard theme folder and renaming it.

5.2 Distinguishing Between Standard and Custom Controls

Before creating a custom theme, you need to determine whether the control is a standard UI5 control or a custom control. The procedure for doing so is illustrated below for the KPI tiles, responsibility area dropdown, and header navigation bar. Although Chrome is used for the walk-through, the steps to identify controls are similar for the Internet Explorer development tools.

5.2.1 Log in to the SAP Customer Business Planning Application

Log in to the SAP Customer Business Planning application and open the *Plan* screen.

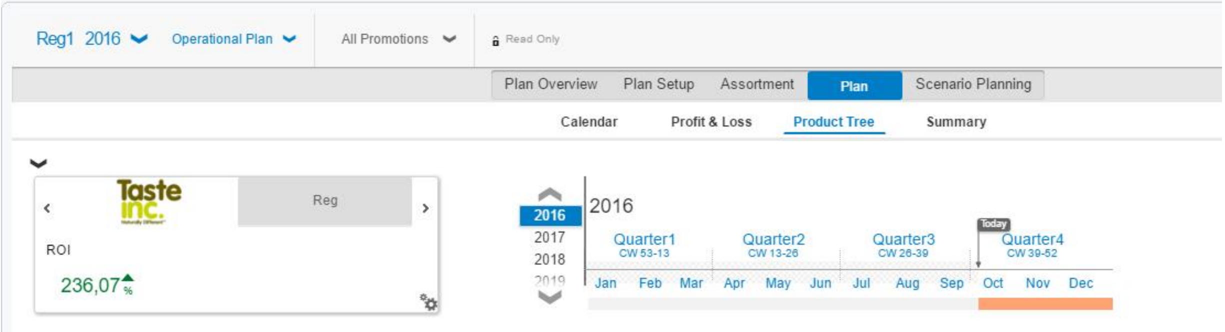


Figure 8: CBP Application Plan Screen

5.2.2 Use Chrome Developer Tools to Identify Style Classes and Properties of UI Elements to Be Styled

Hover over the dropdown control and right-click to inspect the element.

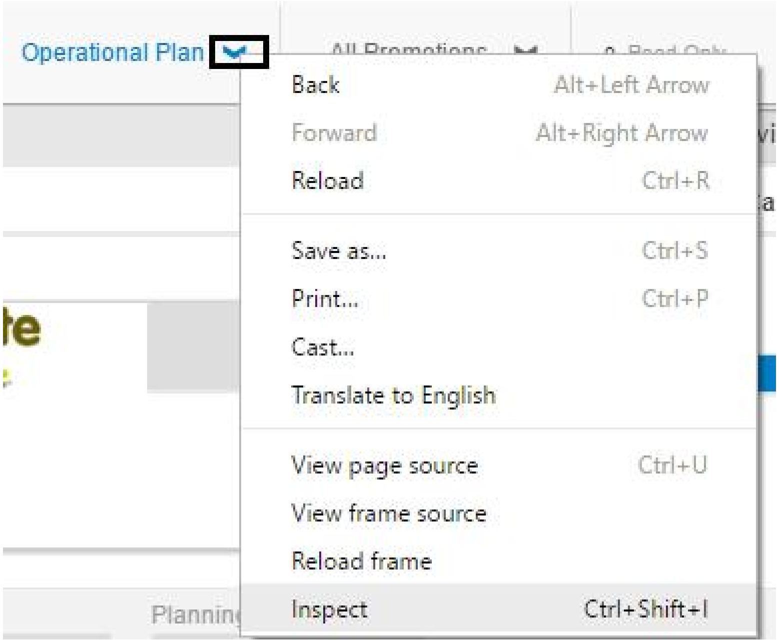
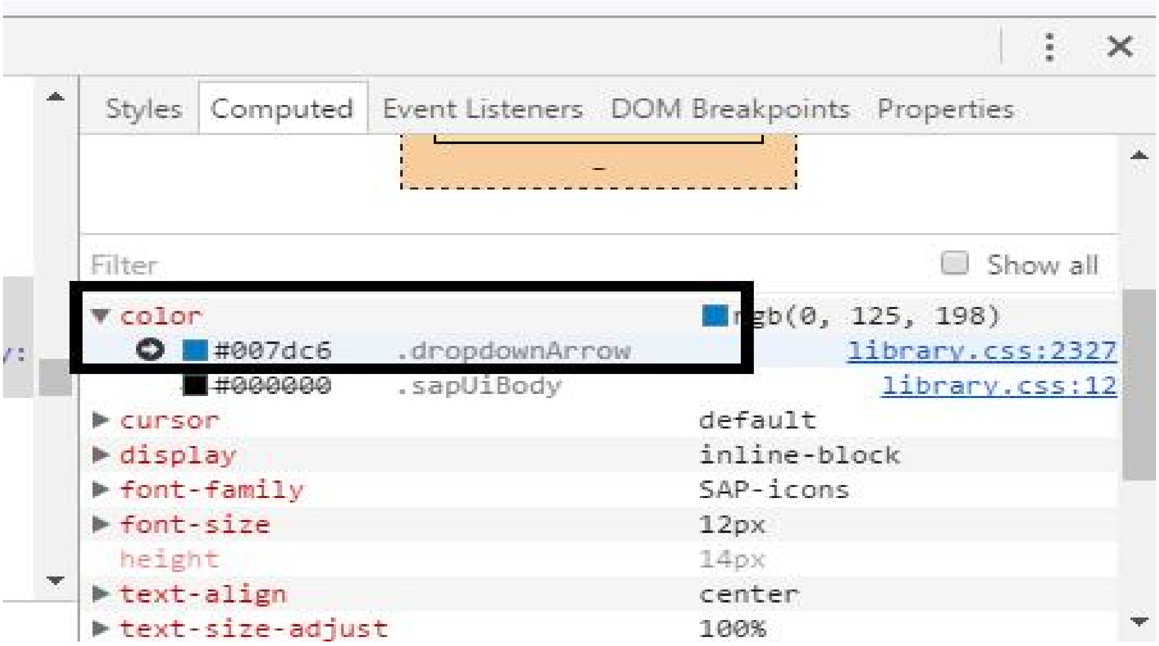


Figure 9: Inspect Element in Chrome Browser

The list of applied CSS style classes is displayed in the right-hand corner.

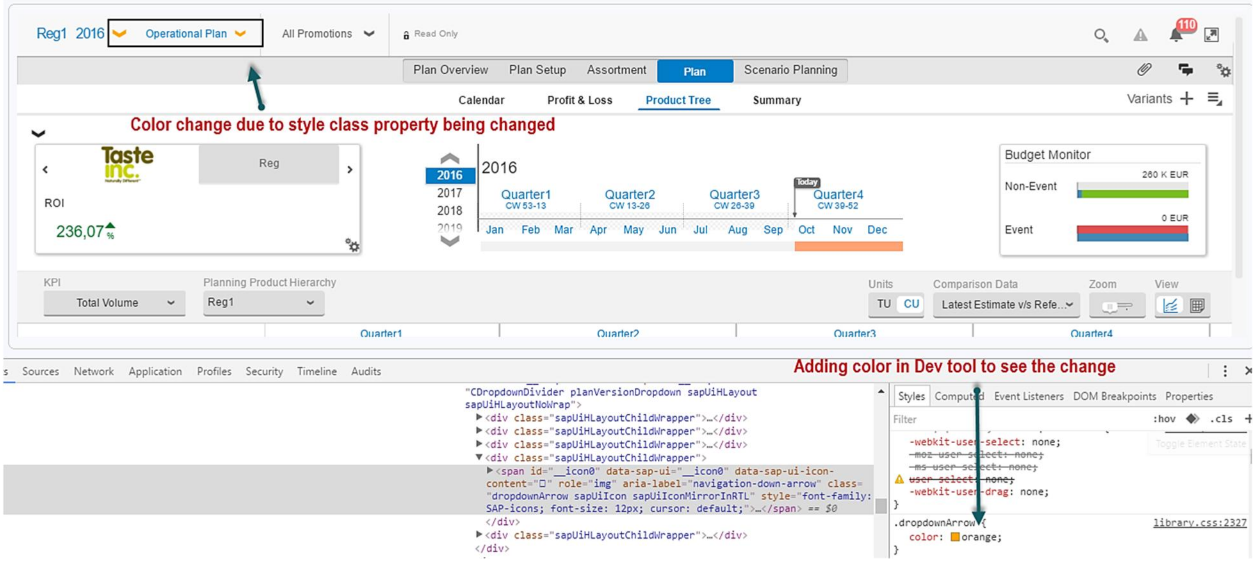
Go to the *Computed* tab and find the property that needs to be changed.

In this example, we are looking for the `color` property. We locate the property and find the style class responsible for it. Click on it to see it in the *Styles* tab.



```
▼ color                                  rgb(0, 125, 198)
    ➡ #007dc6    .dropdownArrow          library.css:2327
      #000000    .sapUiBody              library.css:12
▶ cursor                                 default
▶ display                                inline-block
▶ font-family                            SAP-icons
▶ font-size                              12px
  height                                 14px
▶ text-align                             center
▶ text-size-adjust                       100%
```

Figure 10: Computed Tab with CSS Properties


Color change due to style class property being changed

Adding color in Dev tool to see the change

```
"CDropdownDivider planVersionDropdown sapUiHLayout
sapUiHLayoutNoWrap">
  ▶<div class="sapUiHLayoutChildWrapper">…</div>
  ▶<div class="sapUiHLayoutChildWrapper">…</div>
  ▶<div class="sapUiHLayoutChildWrapper">…</div>
  ▼<div class="sapUiHLayoutChildWrapper">
    ▶<span id="__icon0" data-sap-ui="__icon0" data-sap-ui-icon-
    content="□" role="img" aria-label="navigation-down-arrow" class=
    "dropdownArrow sapUiIcon sapUiIconMirrorInRTL" style="font-family:
    SAP-icons; font-size: 12px; cursor: default;">…</span> == $0
    </div>
  ▶<div class="sapUiHLayoutChildWrapper">…</div>
  </div>
```

```
  -webkit-user-select: none;
  ~~-moz-user-select: none;~~
  ~~-ms-user-select: none;~~
⚠ ~~user-select: none;~~
  -webkit-user-drag: none;
}
.dropdownArrow {                          library.css:2327
  color: ■orange;
}
```

Figure 11: Identification of CSS Style Class

You can change the property in the development tools to verify that you identified the correct style class.

Make a note of the style class/styling rules for identification.

Similarly, identify the style classes for the navigation bar and KPI tiles. Since we are only changing the color here, we need to find the style class responsible for it.

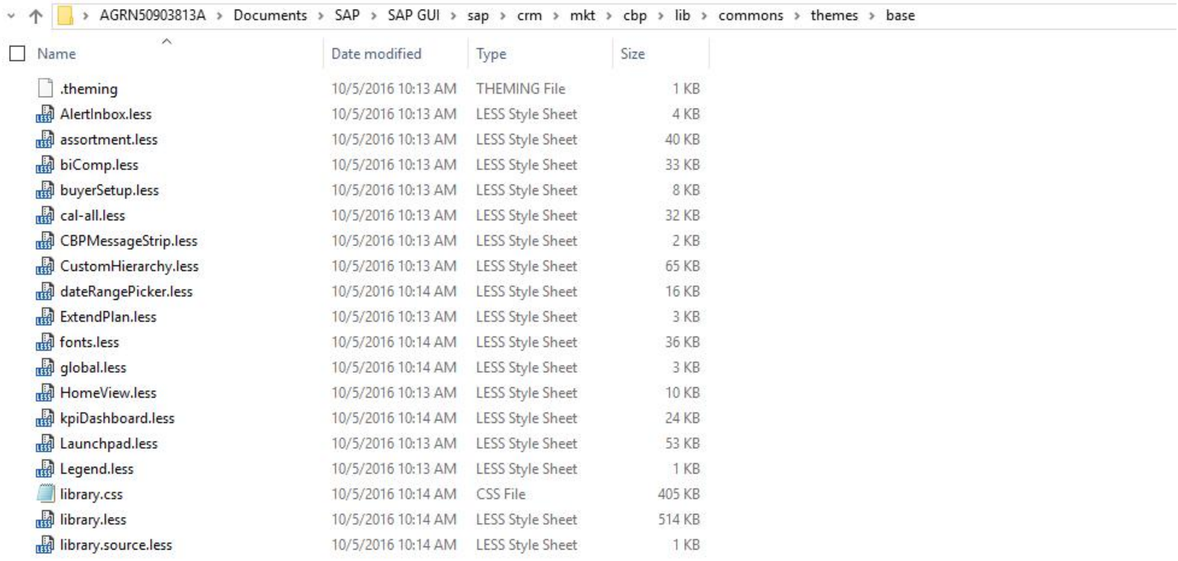
In the walk-through below, the following style classes are responsible for color:

- Header dropdown arrow: **`dropdownArrow`**
- Header navigation bar color: **`customSegmentedButton.sapUiSegmentedButton`**

- KPI tile color green: `.sapSuiteUiCommonsNCValue.Good`, `.sapSuiteUiCommonsNCIndicator.Good`

5.2.3 Identify Control Type

Look for style class/styling rule in the custom LESS files download in the base folder downloaded in step 5.1.2.



› AGRN50903813A › Documents › SAP › SAP GUI › sap › crm › mkt › cbp › lib › commons › themes › base

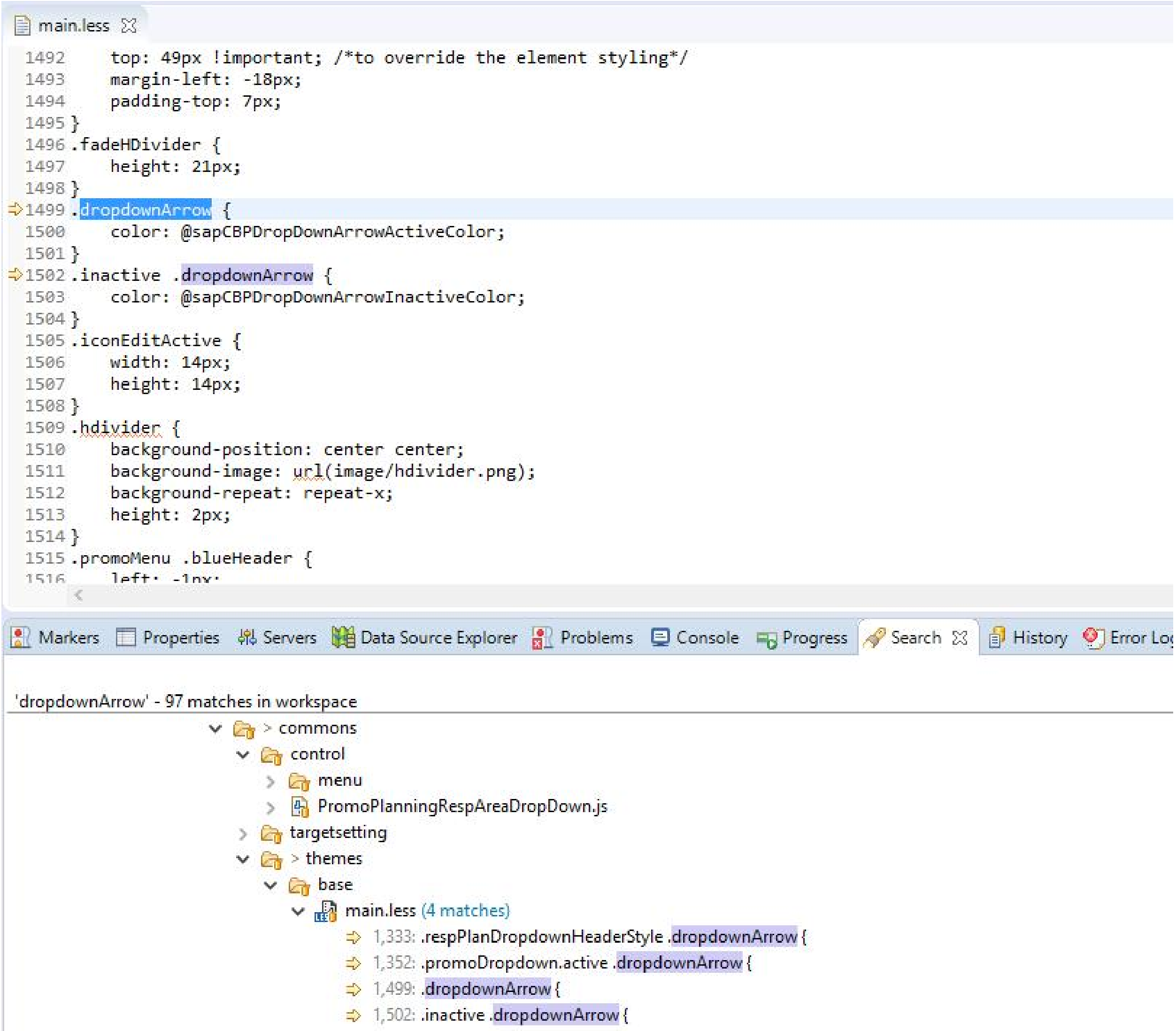
Name	Date modified	Type	Size
.theming	10/5/2016 10:13 AM	THEMING File	1 KB
AlertInbox.less	10/5/2016 10:13 AM	LESS Style Sheet	4 KB
assortment.less	10/5/2016 10:13 AM	LESS Style Sheet	40 KB
biComp.less	10/5/2016 10:13 AM	LESS Style Sheet	33 KB
buyerSetup.less	10/5/2016 10:13 AM	LESS Style Sheet	8 KB
cal-all.less	10/5/2016 10:13 AM	LESS Style Sheet	32 KB
CBPMessageStrip.less	10/5/2016 10:13 AM	LESS Style Sheet	2 KB
CustomHierarchy.less	10/5/2016 10:13 AM	LESS Style Sheet	65 KB
dateRangePicker.less	10/5/2016 10:14 AM	LESS Style Sheet	16 KB
ExtendPlan.less	10/5/2016 10:13 AM	LESS Style Sheet	3 KB
fonts.less	10/5/2016 10:14 AM	LESS Style Sheet	36 KB
global.less	10/5/2016 10:14 AM	LESS Style Sheet	3 KB
HomeView.less	10/5/2016 10:13 AM	LESS Style Sheet	10 KB
kpiDashboard.less	10/5/2016 10:14 AM	LESS Style Sheet	24 KB
Launchpad.less	10/5/2016 10:13 AM	LESS Style Sheet	53 KB
Legend.less	10/5/2016 10:13 AM	LESS Style Sheet	1 KB
library.css	10/5/2016 10:14 AM	CSS File	405 KB
library.less	10/5/2016 10:14 AM	LESS Style Sheet	514 KB
library.source.less	10/5/2016 10:14 AM	LESS Style Sheet	1 KB

Figure 12: CBP Application LESS Files

Recommendations

Use a text editor for extensive searches or open individual LESS files to check the styling rule. The Eclipse Editor is used for this walk-through.

5.2.4 Analyze Rule



```
    top: 49px !important; /*to override the element styling*/
    margin-left: -18px;
    padding-top: 7px;
}
.fadeHDivider {
    height: 21px;
}
.dropdownArrow {
    color: @sapCBPDropDownArrowActiveColor;
}
.inactive .dropdownArrow {
    color: @sapCBPDropDownArrowInactiveColor;
}
.iconEditActive {
    width: 14px;
    height: 14px;
}
.hdivider {
    background-position: center center;
    background-image: url(image/hdivider.png);
    background-repeat: repeat-x;
    height: 2px;
}
.promoMenu .blueHeader {
    left: -1px;
```

```
'dropdownArrow' - 97 matches in workspace
  > commons
    control
      menu
      PromoPlanningRespAreaDropDown.js
    targetsetting
    > themes
      base
        main.less (4 matches)
          1,333: .respPlanDropdownHeaderStyle .dropdownArrow {
          1,352: .promoDropdown.active .dropdownArrow {
          1,499: .dropdownArrow {
          1,502: .inactive .dropdownArrow {
```

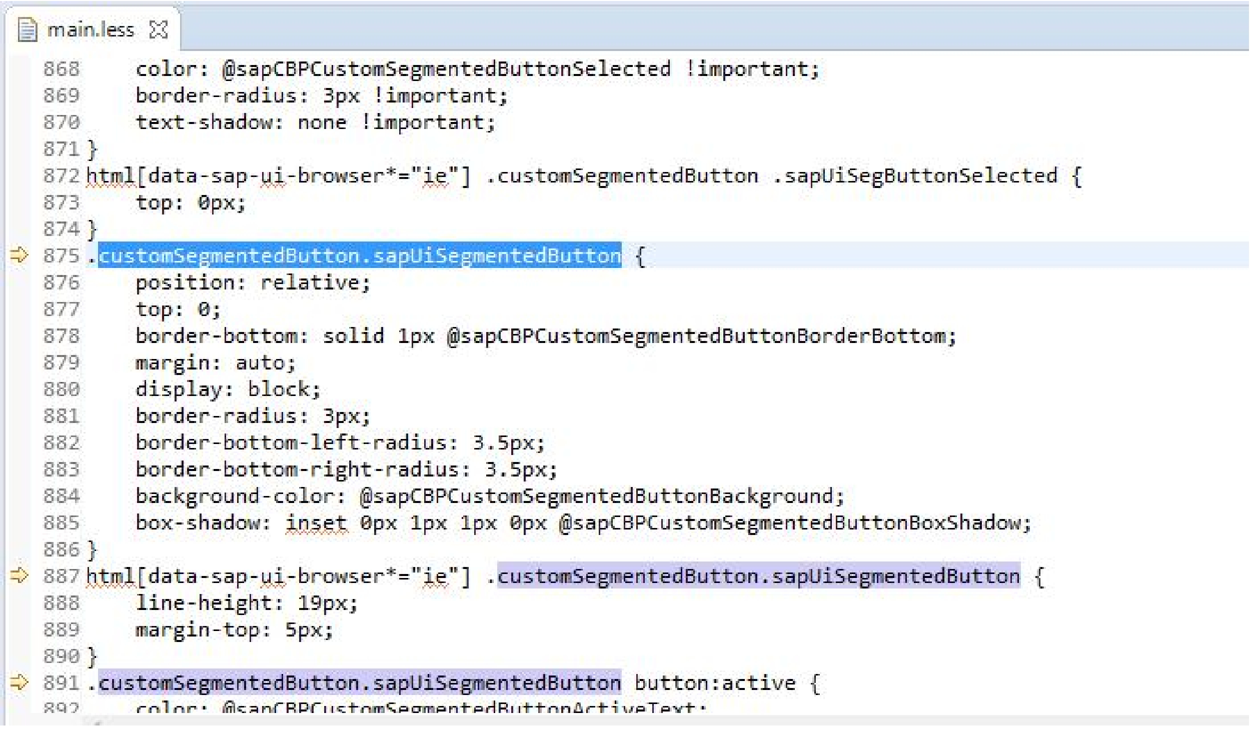
Figure 13: Search for CSS Class in Eclipse

You can find the styling class **`dropdownArrow`**, which has been used in the rules in the **`Main.less`** LESS file.

Here a custom LESS variable has been created for the color and must be overridden by the custom theme designer.

A combination of style classes has been used for the navigation bar. This combination can be found in Main.Less; here, the background-color needs to be changed.

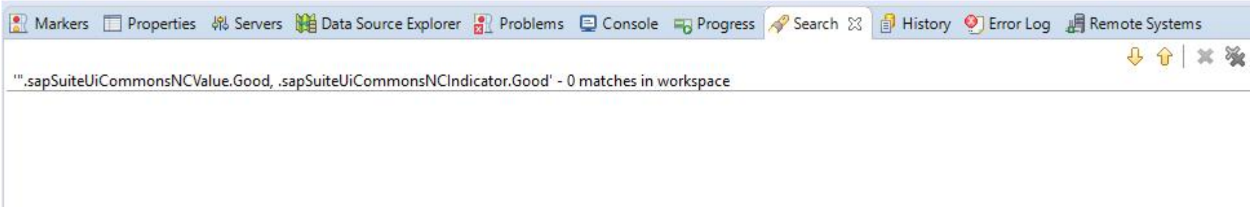
The LESS variable **`@sapCBPCustomSegmentedButtonBackground`** is responsible for the property. This must also be changed by the custom theme designer.



```
    color: @sapCBPCustomSegmentedButtonSelected !important;
    border-radius: 3px !important;
    text-shadow: none !important;
}
html[data-sap-ui-browser*="ie"] .customSegmentedButton .sapUiSegButtonSelected {
    top: 0px;
}
.customSegmentedButton.sapUiSegmentedButton {
    position: relative;
    top: 0;
    border-bottom: solid 1px @sapCBPCustomSegmentedButtonBorderBottom;
    margin: auto;
    display: block;
    border-radius: 3px;
    border-bottom-left-radius: 3.5px;
    border-bottom-right-radius: 3.5px;
    background-color: @sapCBPCustomSegmentedButtonBackground;
    box-shadow: inset 0px 1px 1px 0px @sapCBPCustomSegmentedButtonBoxShadow;
}
html[data-sap-ui-browser*="ie"] .customSegmentedButton.sapUiSegmentedButton {
    line-height: 19px;
    margin-top: 5px;
}
.customSegmentedButton.sapUiSegmentedButton button:active {
    color: @sapCBPCustomSegmentedButtonActiveText;
```

Figure 14: Combination of Style Classes in Rules

The style classes **.sapSuiteUiCommonsNCValue.Good** and **.sapSuiteUiCommonsNCIndicator.Good** cannot be found in the custom LESS files. This means the styling (style classes) is provided by standard SAPUI5 and must be changed by standard theming tool.



'".sapSuiteUiCommonsNCValue.Good, .sapSuiteUiCommonsNCIndicator.Good' - 0 matches in workspace

Figure 15: SAP UI5 Style Classes

5.2.5 Caution Points

If changes are made to standard controls using theme parameters, these might also be visible in other controls because style classes can be reused. For this reason, caution should be exercised when changing styles.

If custom styles are used that require standard CSS classes to be overridden, new styling rules might be required when the SAPUI5 version is upgraded.

Example

The CSS style classes for standard KPI tile colors in SAPUI5 version 1.28.26 are different to those used in version 1.38.1. If custom styling rules are written using the standard style classes, the style classes must also be present in the UI5 version you are using.

The LESS variables created by properties can be used at multiple locations and inherited. Caution should be exercised, therefore, to ensure that changes are not introduced inadvertently.

6 Walk-Through: Creating a Custom Theme

Let us assume you want to change the color of the numbers on the KPI tiles as well as the color of the selected navigation bar and dropdown arrows, which are a custom control.

In the application, negative values on the KPI tiles are shown in red and positive values in green. The navigation bar is displayed in gray and the dropdown arrows are blue. This is illustrated in the following figure:

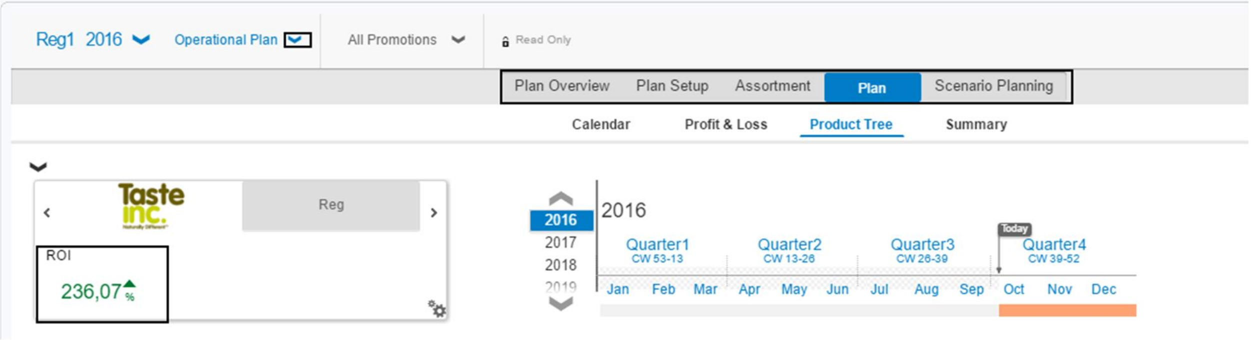


Figure 16: Plan Screen

In the walk-through, these colors will be adapted as follows:

- The navigation bar tab will be change to green using the custom theme designer.
- Negative values on the KPI tiles will be changed to blue using the standard theme designer.
- Positive values on the KPI tiles will be changed to purple using the standard theme designer.
- Dropdown arrows will be changed to pink using the custom theme designer.

The result of these changes is shown in the following figure:

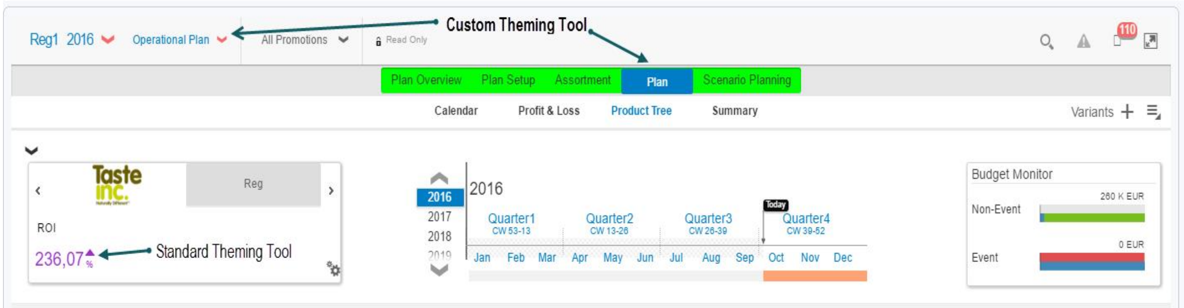


Figure 17: Plan Screen After Applying Custom Theme

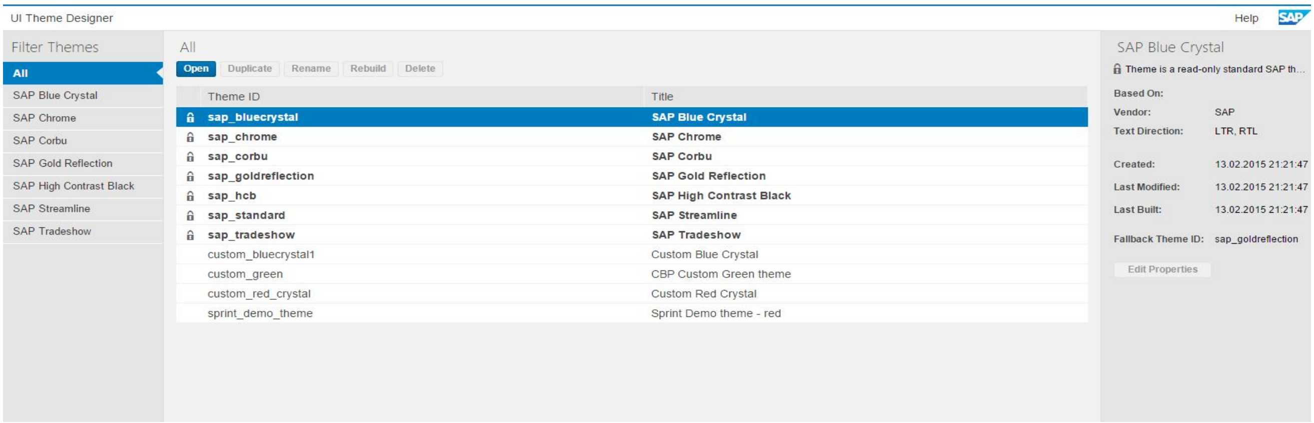
6.1 Steps for Creating Custom Theme

6.1.1 Steps for Standard Theme Designer

Since the KPI tiles are standard UI5 controls, the standard theme designer is used.

6.1.1.1 Launch Theme Designer

To launch the UI Theme Designer, run transaction `/UI5/THEME_DESIGNER` in your SAP system. Alternatively, open the following link in your browser:
`https://<server>:< port>/sap/bc/theming/theme-designer?sap-client=<client>`



Theme ID	Title
sap_bluecrystal	SAP Blue Crystal
sap_chrome	SAP Chrome
sap_corbu	SAP Corbu
sap_goldreflection	SAP Gold Reflection
sap_hcb	SAP High Contrast Black
sap_standard	SAP Streamline
sap_tradeshow	SAP Tradeshow
custom_bluecrystal1	Custom Blue Crystal
custom_green	CBP Custom Green theme
custom_red_crystal	Custom Red Crystal
sprint_demo_theme	Sprint Demo theme - red

SAP Blue Crystal

Theme is a read-only standard SAP th...

Based On:	
Vendor:	SAP
Text Direction:	LTR, RTL
Created:	13.02.2015 21:21:47
Last Modified:	13.02.2015 21:21:47
Last Built:	13.02.2015 21:21:47
Fallback Theme ID:	sap_goldreflection

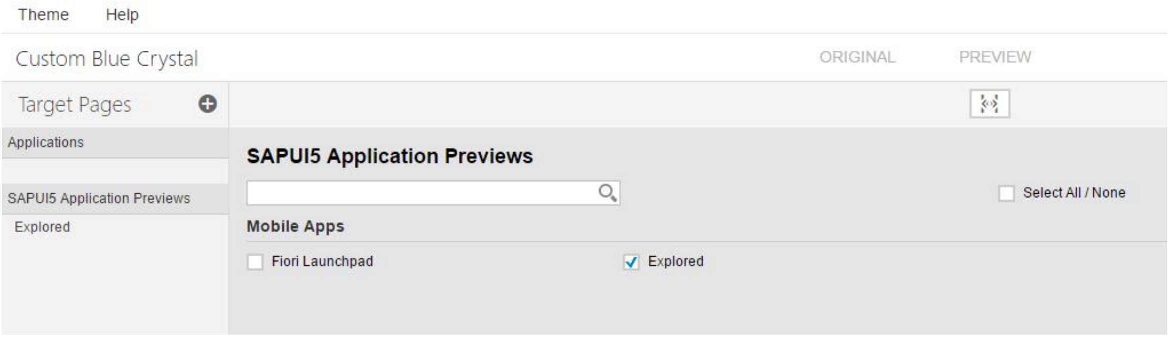
Figure 18: Standard Theme Designer Interface

You can see all the standard and custom themes in the browser-based tool.

6.1.1.2 Create New Theme

Select *sap_bluecrystal* and click *Open*.

Adding the URL is not applicable for the current application. The standard theme designer cannot process the controls in SAP Trade Management because they are embedded in iFrames within the BSP application. Click *SAPUI5 Application Previews* and click *Explored*.



SAPUI5 Application Previews

□ Select All / None

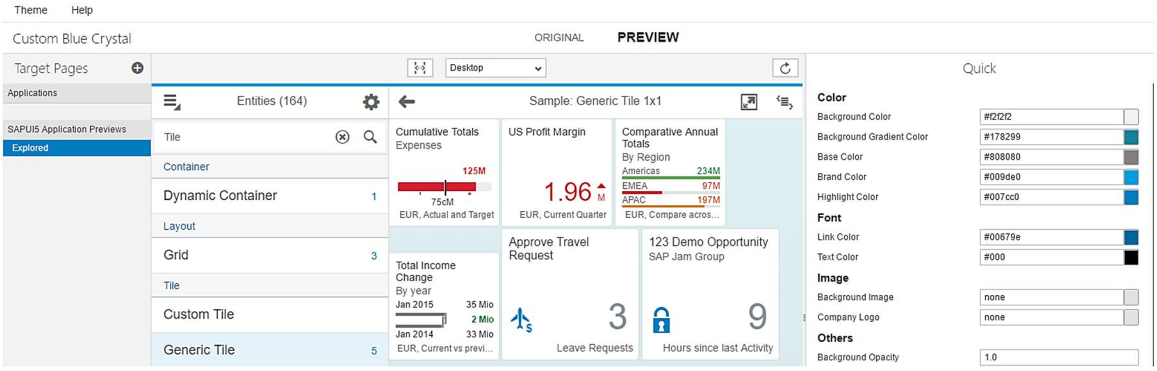
Mobile Apps

□ Fiori Launchpad ☑ Explored

Figure 19: Standard Theme Designer Application Preview

6.1.1.3 Select UI5 Controls

Select the UI5 controls that require Customizing. In the case of KPI tiles, select the *Generic Tile* control.

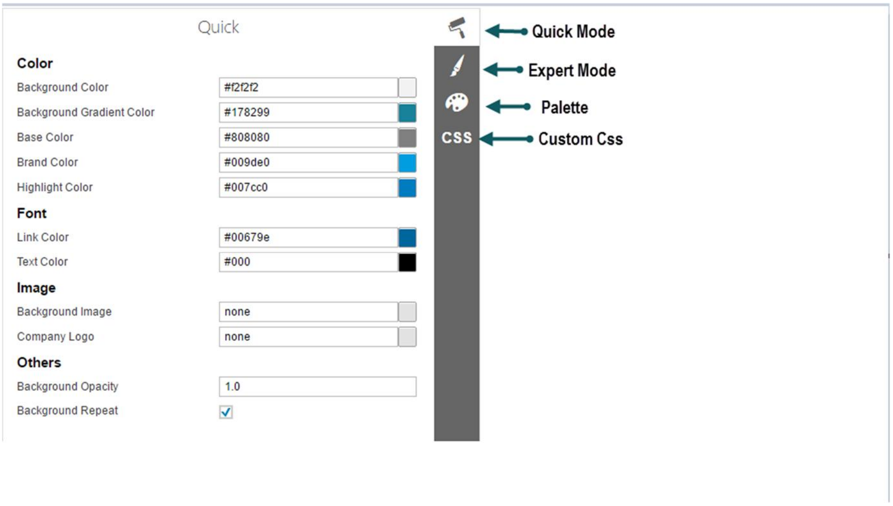


Color

Background Color	#f2f2f2
Background Gradient Color	#178299
Base Color	#808080
Brand Color	#009de0
Highlight Color	#007cc0
Font	
Link Color	#00679e
Text Color	#000
Image	
Background Image	none
Company Logo	none
Others	
Background Opacity	1.0

Figure 20: Add SAP UI5 Control for Theming

There are different modes in the Theme Designer. You can customize the background color of a specific control and change the standard SAP LESS variables values.



Quick

Color

Background Color	#f2f2f2
Background Gradient Color	#178299
Base Color	#808080
Brand Color	#009de0
Highlight Color	#007cc0

Font

Link Color	#00679e
Text Color	#000

Image

Background Image	none
Company Logo	none

Others

Background Opacity	1.0
Background Repeat	☑

Quick Mode

Expert Mode

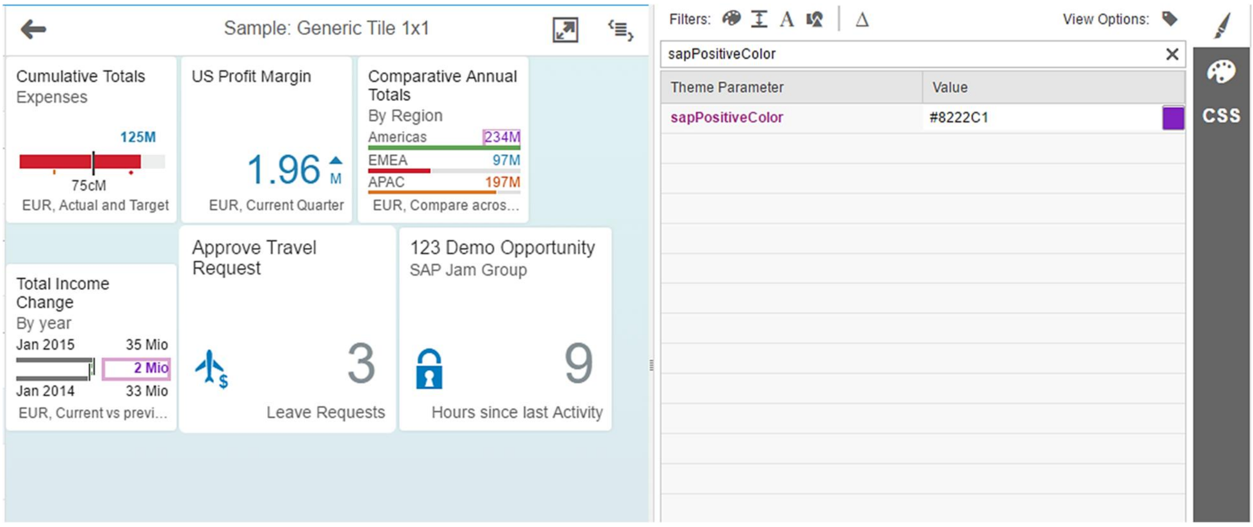
Palette

Custom Css

Figure 21: Different Modes in Theme Designer

6.1.1.4 Change Theme Parameters in Expert Mode

Click *Expert Mode* and change the values of `sapNegativeColor` and `sapPositiveColor` variables.



sapPositiveColor

Theme Parameter	Value
sapPositiveColor	#8222C1

Figure 22: Change Theme Parameters

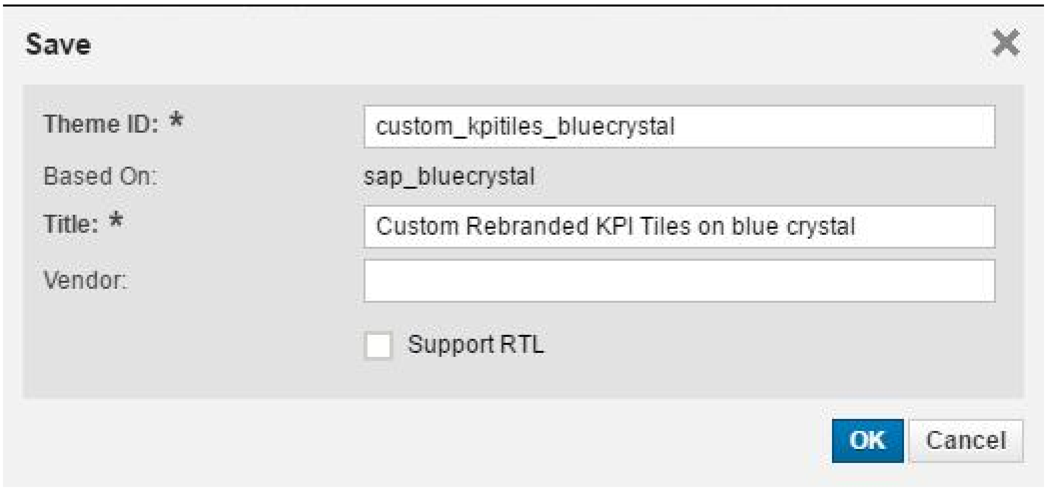
Note

If do not want to make changes to the variables of the `sap_bluecrystal` theme, open the theme and save it under a different name.

6.1.1.5 Save and Build Custom Theme

In the menu bar, click *Theme à Save & Build* and enter a custom theme ID for your new theme. Use the same theme name as in step 5.1.3.

If translation is required, select the *Support RTL* check box.



Save

Theme ID: * custom_kpitiles_bluecrystal

Based On: sap_bluecrystal

Title: * Custom Rebranded KPI Tiles on blue crystal

Vendor:

□ Support RTL

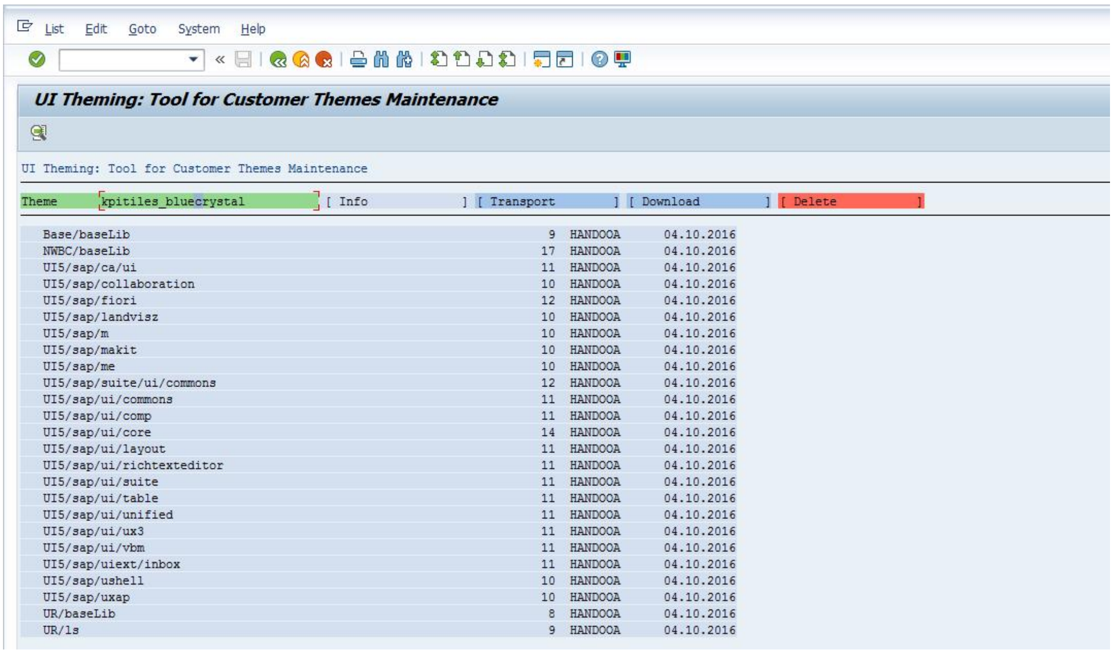
Figure 23: Save Theme Pop-Up

Note

This step is required even if you do not want to make changes to variables of the **`sap_bluecrystal`** theme.

6.1.1.6 Check New Theme

Run transaction `/UI5/THEME_TOOL` and find your new theme. Click the *Info* button.



UI Theming: Tool for Customer Themes Maintenance

UI Theming: Tool for Customer Themes Maintenance

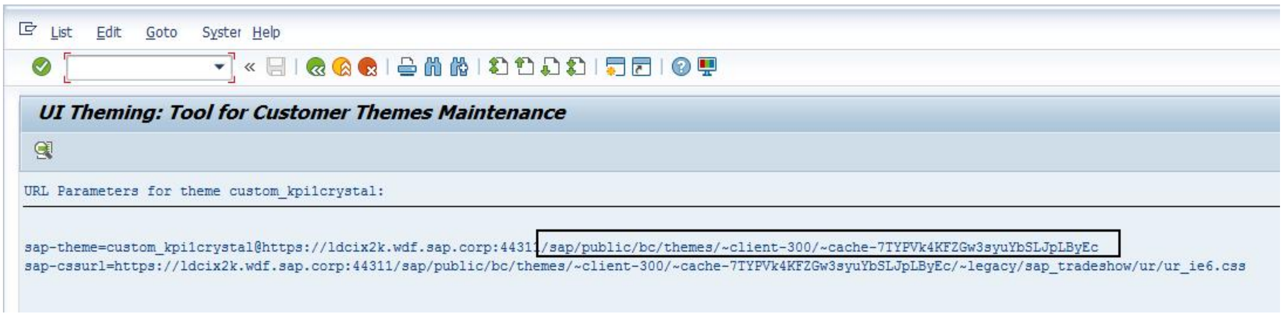
Theme kpitiles_bluecrystal [Info] [Transport] [Download] [Delete]

```
Base/baseLib                        9  HANDOOA    04.10.2016
NWBC/baseLib                       17  HANDOOA    04.10.2016
UI5/sap/ca/ui                      11  HANDOOA    04.10.2016
UI5/sap/collaboration              10  HANDOOA    04.10.2016
UI5/sap/fiori                      12  HANDOOA    04.10.2016
UI5/sap/landvisz                   10  HANDOOA    04.10.2016
UI5/sap/m                          10  HANDOOA    04.10.2016
UI5/sap/makit                      10  HANDOOA    04.10.2016
UI5/sap/me                         10  HANDOOA    04.10.2016
UI5/sap/suite/ui/commons           12  HANDOOA    04.10.2016
UI5/sap/ui/commons                 11  HANDOOA    04.10.2016
UI5/sap/ui/comp                    11  HANDOOA    04.10.2016
UI5/sap/ui/core                    14  HANDOOA    04.10.2016
UI5/sap/ui/layout                  11  HANDOOA    04.10.2016
UI5/sap/ui/richtexteditor          11  HANDOOA    04.10.2016
UI5/sap/ui/suite                   11  HANDOOA    04.10.2016
UI5/sap/ui/table                   11  HANDOOA    04.10.2016
UI5/sap/ui/unified                 11  HANDOOA    04.10.2016
UI5/sap/ui/ux3                     11  HANDOOA    04.10.2016
UI5/sap/ui/vbm                     11  HANDOOA    04.10.2016
UI5/sap/uiext/inbox                11  HANDOOA    04.10.2016
UI5/sap/ushell                     10  HANDOOA    04.10.2016
UI5/sap/uxap                       10  HANDOOA    04.10.2016
UR/baseLib                          8  HANDOOA    04.10.2016
UR/ls                               9  HANDOOA    04.10.2016
```

Figure 24: Standard Theme Tool

6.1.1.7 Copy Created URL

Copy the path in the **sap-theme** parameter for testing in step 8.



UI Theming: Tool for Customer Themes Maintenance

URL Parameters for theme custom_kpi1crystal:

```
sap-theme=custom_kpi1crystal@https://ldcix2k.wdf.sap.corp:44311/sap/public/bc/themes/~client-300/~cache-7TYPVk4KFZGw3syuYbSLJpLByEc
sap-cssurl=https://ldcix2k.wdf.sap.corp:44311/sap/public/bc/themes/~client-300/~cache-7TYPVk4KFZGw3syuYbSLJpLByEc/~legacy/sap_tradeshow/ur/ur_ie6.css
```

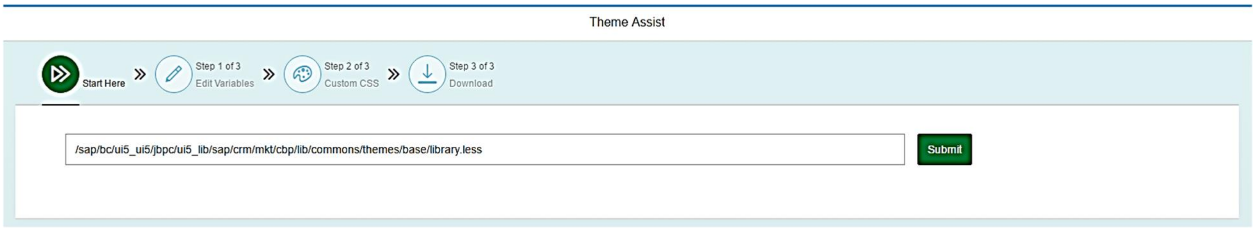
Figure 25: Custom Theme Path

6.1.2 Steps for Custom Theme Designer

6.1.2.1 Launch Custom Theme Designer

Launch the custom theme designer using the URL:
`https://<fully-qualified-host-name>:<portnumber>/sap/bc/ui5_ui5/jbpc/ui5_thmdsg/index.html`

Click *Submit*. By default, the custom theme designer picks the theme file from the SAP Trade Management application BSP on the current CRM back-end system.

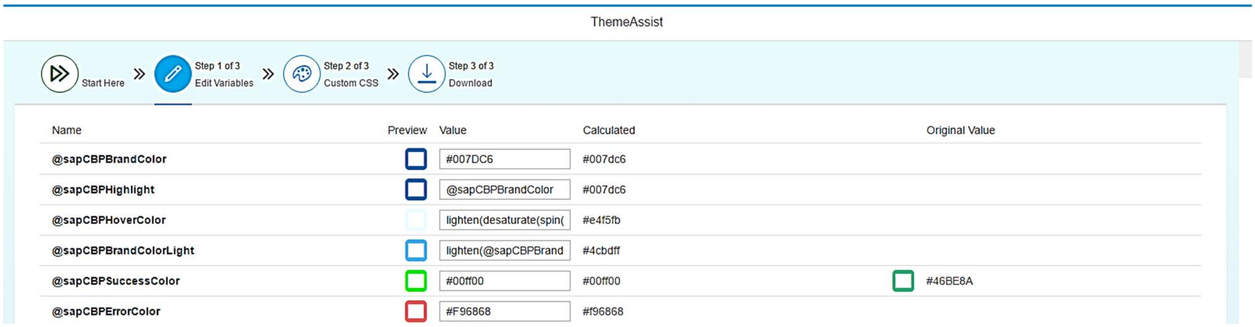


/sap/bc/ui5_ui5/jbpc/ui5_lib/sap/crm/mkt/cbp/lib/commons/themes/base/library.less

Figure 26: Custom Theme Designer

6.1.2.2 Change Theme Parameters

Edit the theme variables provided as part of the default theme. Enter the information (in the form of a HEX code/color name/RGB values/LESS variables) for the colors you would like to see.



Name	Preview	Value	Calculated	Original Value
@sapCBPBrandColor	🟦	#007DC6	#007dc6	
@sapCBPHighlight	🟦	@sapCBPBrandColor	#007dc6	
@sapCBPHoverColor	□	lighten(desaturate(spin(	#e4f5fb	
@sapCBPBrandColorLight	🟦	lighten(@sapCBPBrand	#4cbdff	
@sapCBPSuccessColor	🟩	#00ff00	#00ff00	🟩 #46BE8A
@sapCBPErrorColor	🟥	#F96868	#f96868	

Figure 27: Change Theme Parameters in Custom Theme Designer

Replace the existing HEX code and press `Enter`. This replaces all the derived variables as well with the new color.

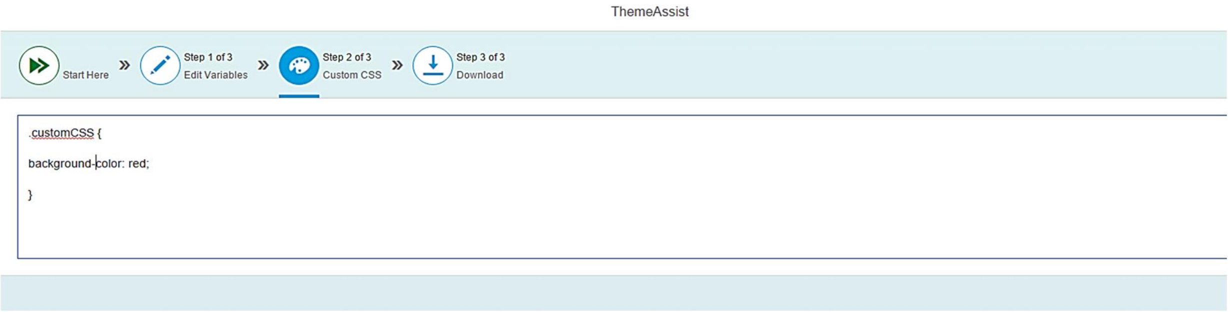
For the current scope, change the following theme parameters:

`@sapCBPCustomSegmentedButtonBackground` to **`#00ff00`**

`@sapCBPDropDownArrowActiveColor` to **`#f96868`**

6.1.2.3 Add Custom CSS Styling Rules

This step is required if you want to override SAP Trade Management style classes and is not required for the current walk-through scope.

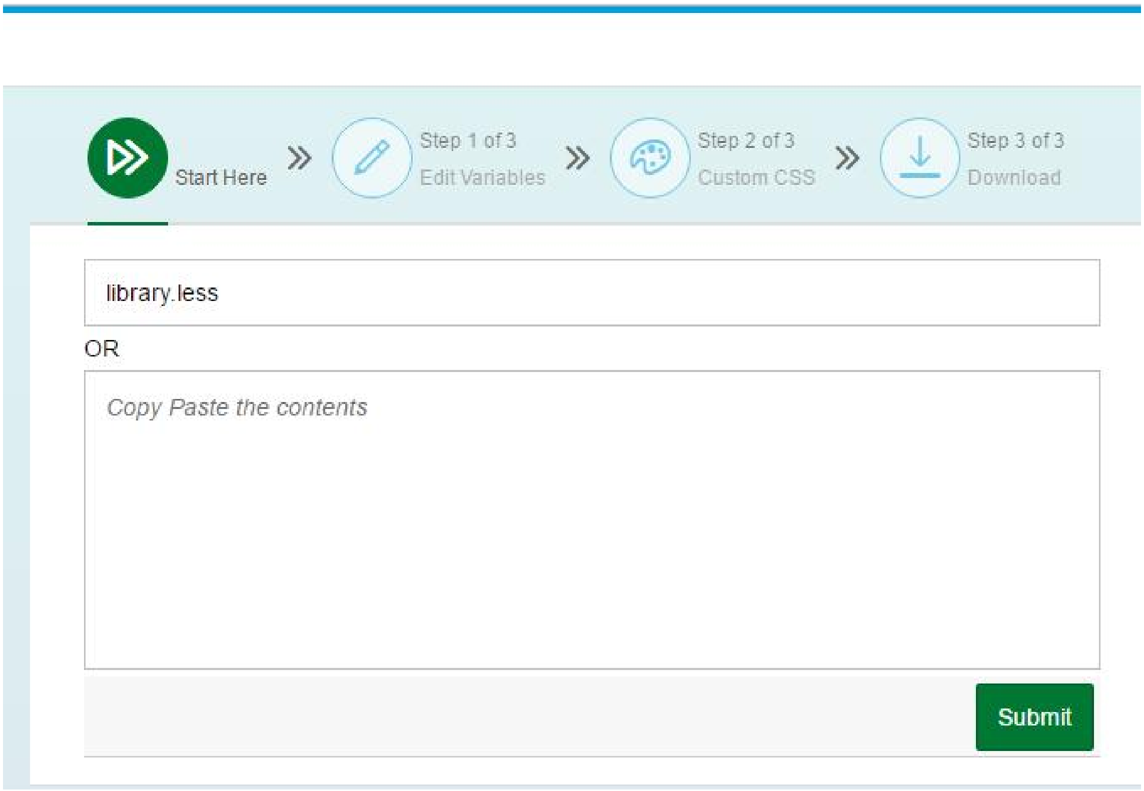


```
.customCSS {
background-color: red;
}
```

Figure 28: Add Custom CSS Rules

6.1.2.4 Download New Theme Files

Download the newly created theme files. These files will overwrite the files for the standard SAP Blue Crystal theme downloaded in step 5.1.2. The files will be placed in the renamed theme folder as shown in next step.

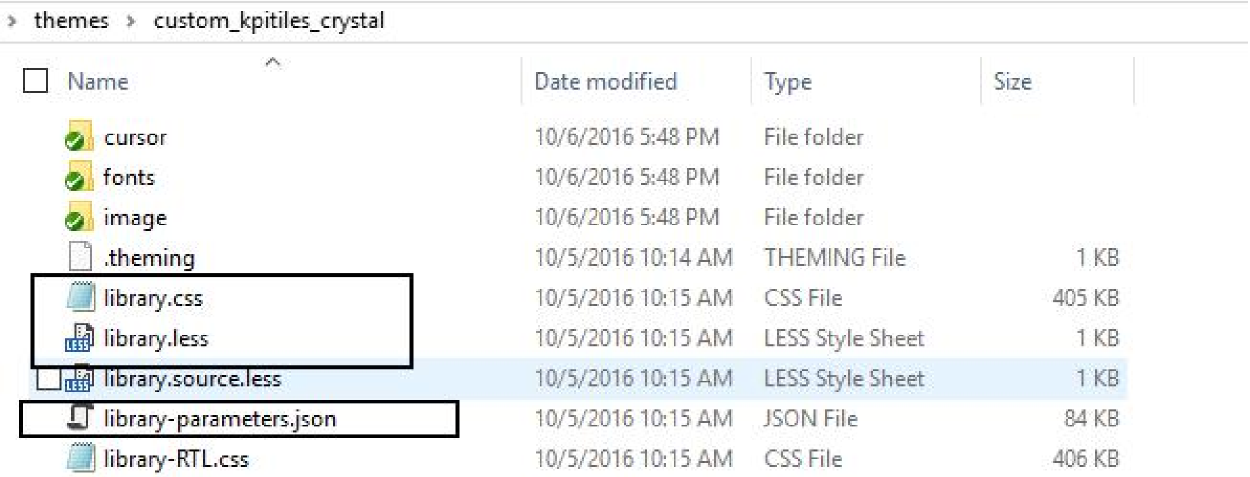


library.less

Figure 29: Add Theme Files

The overwritten files contain the standard theming parameters plus the changes we added for our styling.

6.1.2.5 Override Contents of Standard Theme



› themes › custom_kpitiles_crystal

□ Name	Date modified	Type	Size
cursor	10/6/2016 5:48 PM	File folder	
fonts	10/6/2016 5:48 PM	File folder	
image	10/6/2016 5:48 PM	File folder	
.theming	10/5/2016 10:14 AM	THEMING File	1 KB
library.css	10/5/2016 10:15 AM	CSS File	405 KB
library.less	10/5/2016 10:15 AM	LESS Style Sheet	1 KB
library.source.less	10/5/2016 10:15 AM	LESS Style Sheet	1 KB
library-parameters.json	10/5/2016 10:15 AM	JSON File	84 KB
library-RTL.css	10/5/2016 10:15 AM	CSS File	406 KB

Figure 30: Overwrite Theme Files

Replace the *library.css*, *library.less*, and *libraryParameters.json* files in the themes folder.

Note

You can skip this step if you have not customized any custom controls.

6.1.3 Create BSP Application for SAPUI5 Project

The SAPUI5 application with theme changes must be shared with the ABAP Repository as a BSP application.

This can be done using the Eclipse IDE.

6.1.3.1 Deploying the Application as a BSP Application Using Eclipse

Once all of the theming-related files have been created, you can deploy the application in the ABAP Repository as follows:

1. Go to the *Project Explorer* view in Eclipse.
2. Create a new general project.

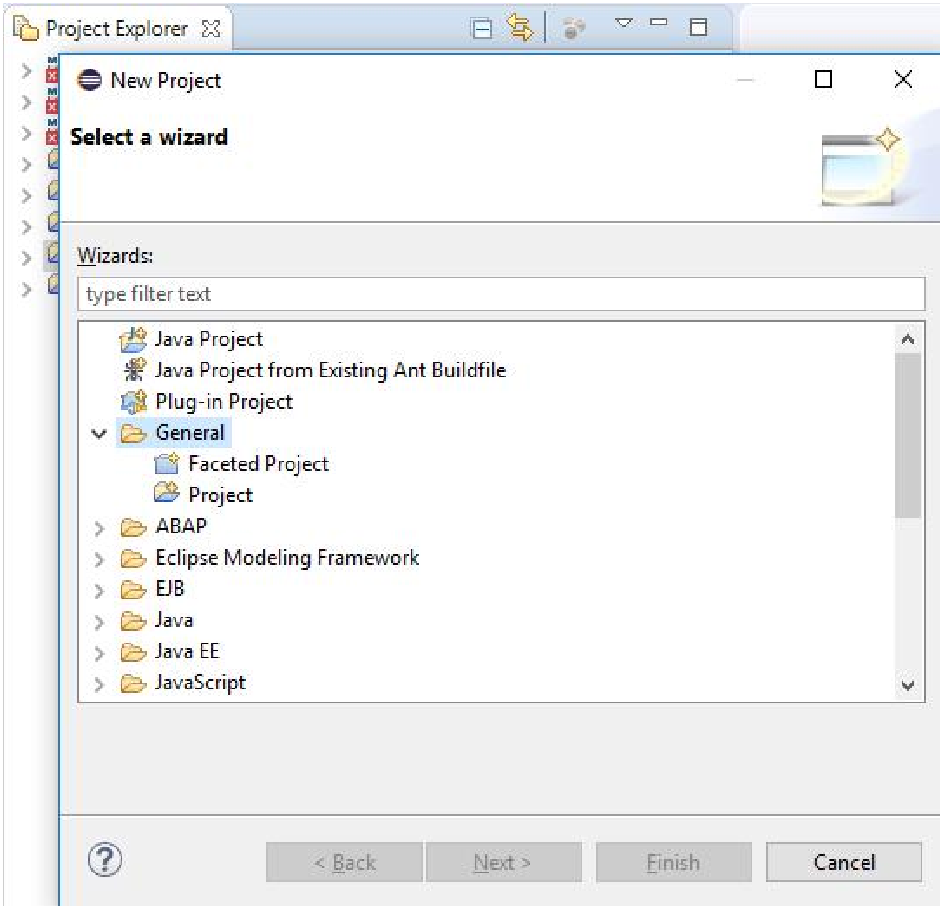
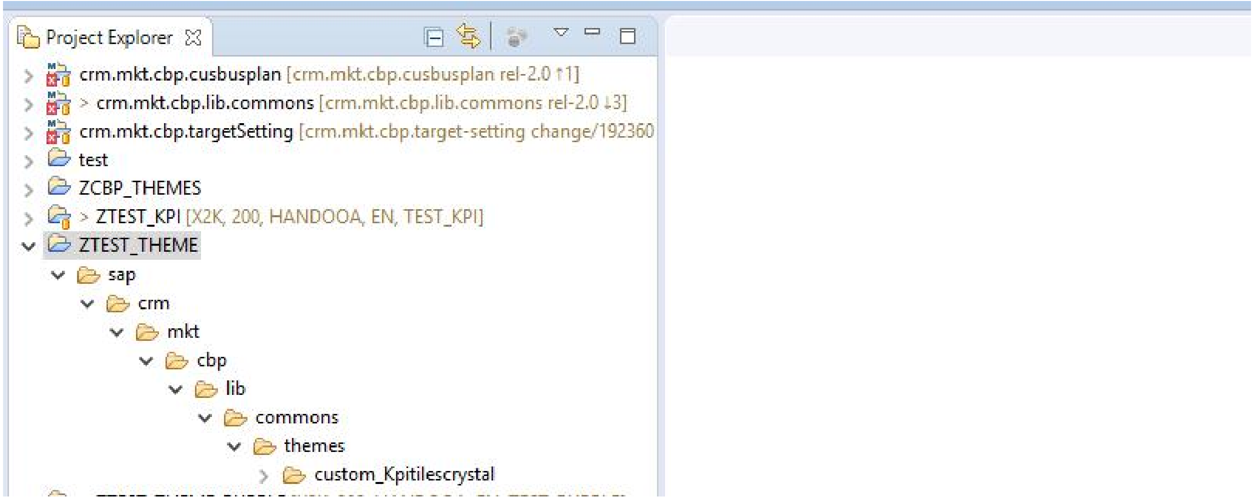


Figure 31: Create General Project

3. Copy and paste the downloaded theme-related files to the project. Maintain the folder structure as shown in the following figure.



Project Explorer
crm.mkt.cbp.cusbusplan [crm.mkt.cbp.cusbusplan rel-2.0 ↑1]
> crm.mkt.cbp.lib.commons [crm.mkt.cbp.lib.commons rel-2.0 ↓3]
crm.mkt.cbp.targetSetting [crm.mkt.cbp.target-setting change/192360
test
ZCBP_THEMES
> ZTEST_KPI [X2K, 200, HANDOOA, EN, TEST_KPI]
ZTEST_THEME
sap
crm
mkt
cbp
lib
commons
themes
custom_Kpitilescrystal

Figure 32: Copy Theme Files into Project

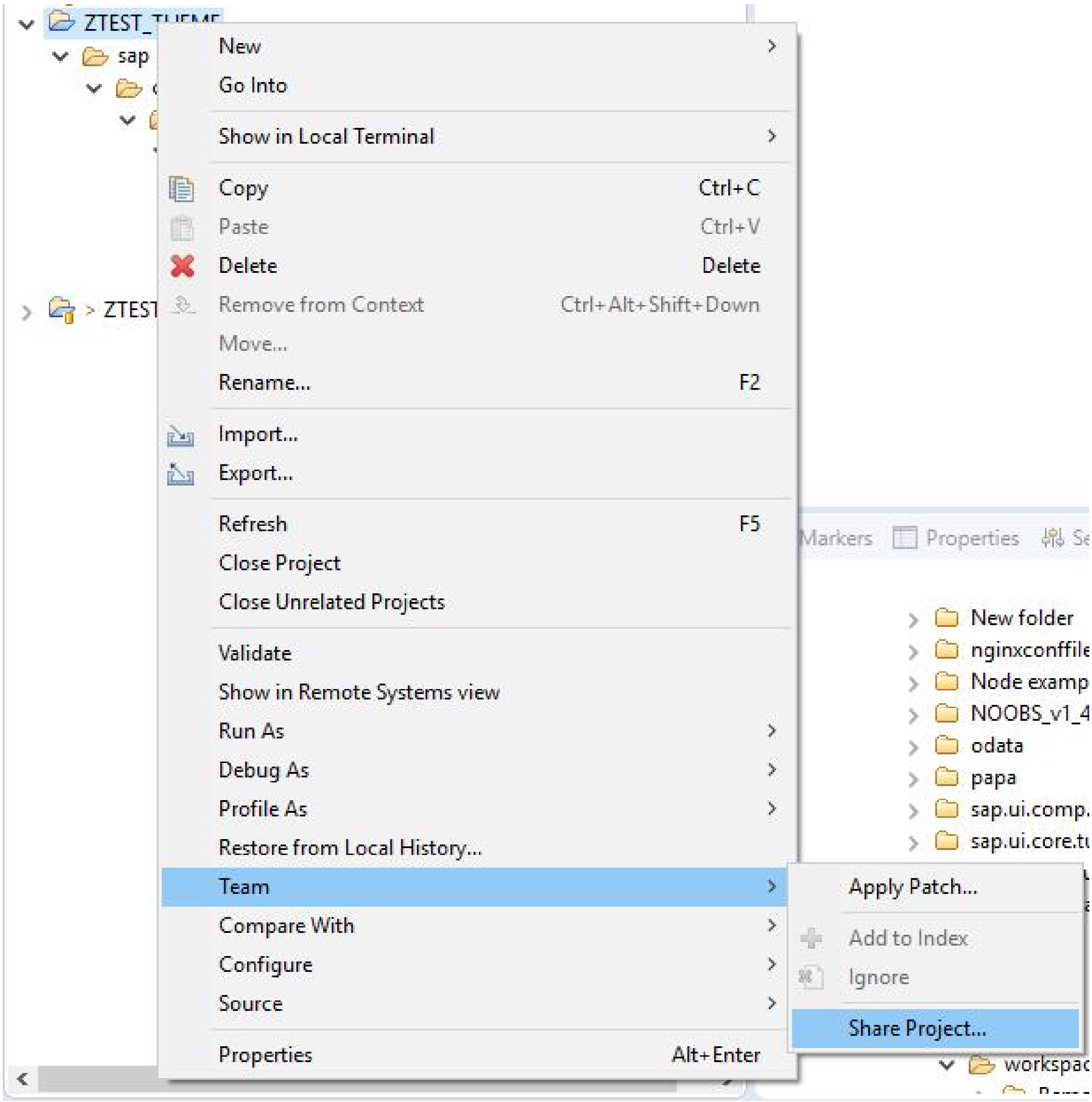
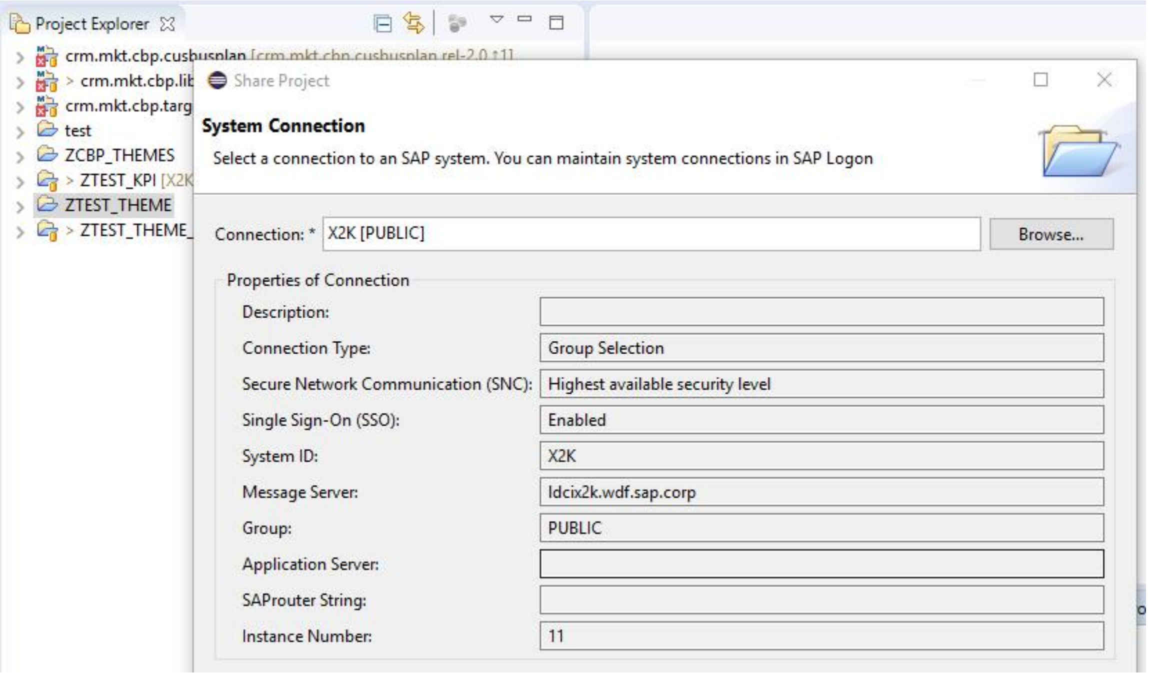


Figure 33: Share Project

4. Right-click the project and choose *Team* and then *Share Project*:
5. Select *SAPUI5 ABAP Repository* and choose *Next*.
6. Browse and select the SAP system where the application is to be deployed and choose *Next*.

   Note

   It is assumed that you have the permissions required to deploy the application in the relevant SAP system.
7. Provide the appropriate client number and credentials, and then choose *Next*.



System Connection

Select a connection to an SAP system. You can maintain system connections in SAP Logon

Connection: * X2K [PUBLIC]

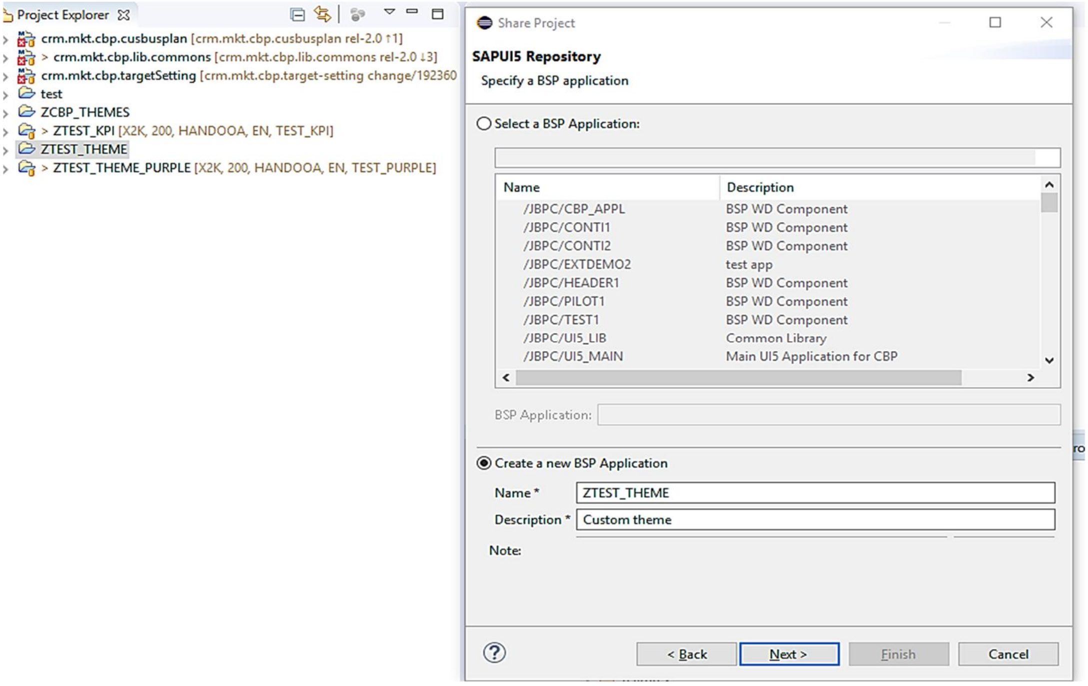
Properties of Connection

Description:	
Connection Type:	Group Selection
Secure Network Communication (SNC):	Highest available security level
Single Sign-On (SSO):	Enabled
System ID:	X2K
Message Server:	ldcix2k.wdf.sap.corp
Group:	PUBLIC
Application Server:	
SAProuter String:	
Instance Number:	11

Figure 34: Select System

8. Enter the required details, such as the application name, description, and choose *Next*.

   If you have already created a BSP application in the ABAP Repository, you can select it rather than creating a new one.


Project Explorer
crm.mkt.cbp.cusbusplan [crm.mkt.cbp.cusbusplan rel-2.0 ↑1]
> crm.mkt.cbp.lib.commons [crm.mkt.cbp.lib.commons rel-2.0 ↓3]
crm.mkt.cbp.targetSetting [crm.mkt.cbp.target-setting change/192360
test
ZCBP_THEMES
> ZTEST_KPI [X2K, 200, HANDOOA, EN, TEST_KPI]
ZTEST_THEME
> ZTEST_THEME_PURPLE [X2K, 200, HANDOOA, EN, TEST_PURPLE]
Share Project
< Back
Next >
Finish
Cancel

SAPUI5 Repository

Specify a BSP application

○ Select a BSP Application:

Name	Description
/JBPC/CBP_APPL	BSP WD Component
/JBPC/CONTI1	BSP WD Component
/JBPC/CONTI2	BSP WD Component
/JBPC/EXTDEMO2	test app
/JBPC/HEADER1	BSP WD Component
/JBPC/PILOT1	BSP WD Component
/JBPC/TEST1	BSP WD Component
/JBPC/UI5_LIB	Common Library
/JBPC/UI5_MAIN	Main UI5 Application for CBP

BSP Application:

● Create a new BSP Application

Name * ZTEST_THEME

Description * Custom theme

Note:

Figure 35: Create or Select BSP Application

9. Choose *Finish* to create an empty container for the application in the ABAP Repository with the specified details.

   Although the BSP application is now present in the specified package within the ABAP Repository, it does not have any theme-related files.

10. You can now make the required changes and then submit them as shown in the following figure.

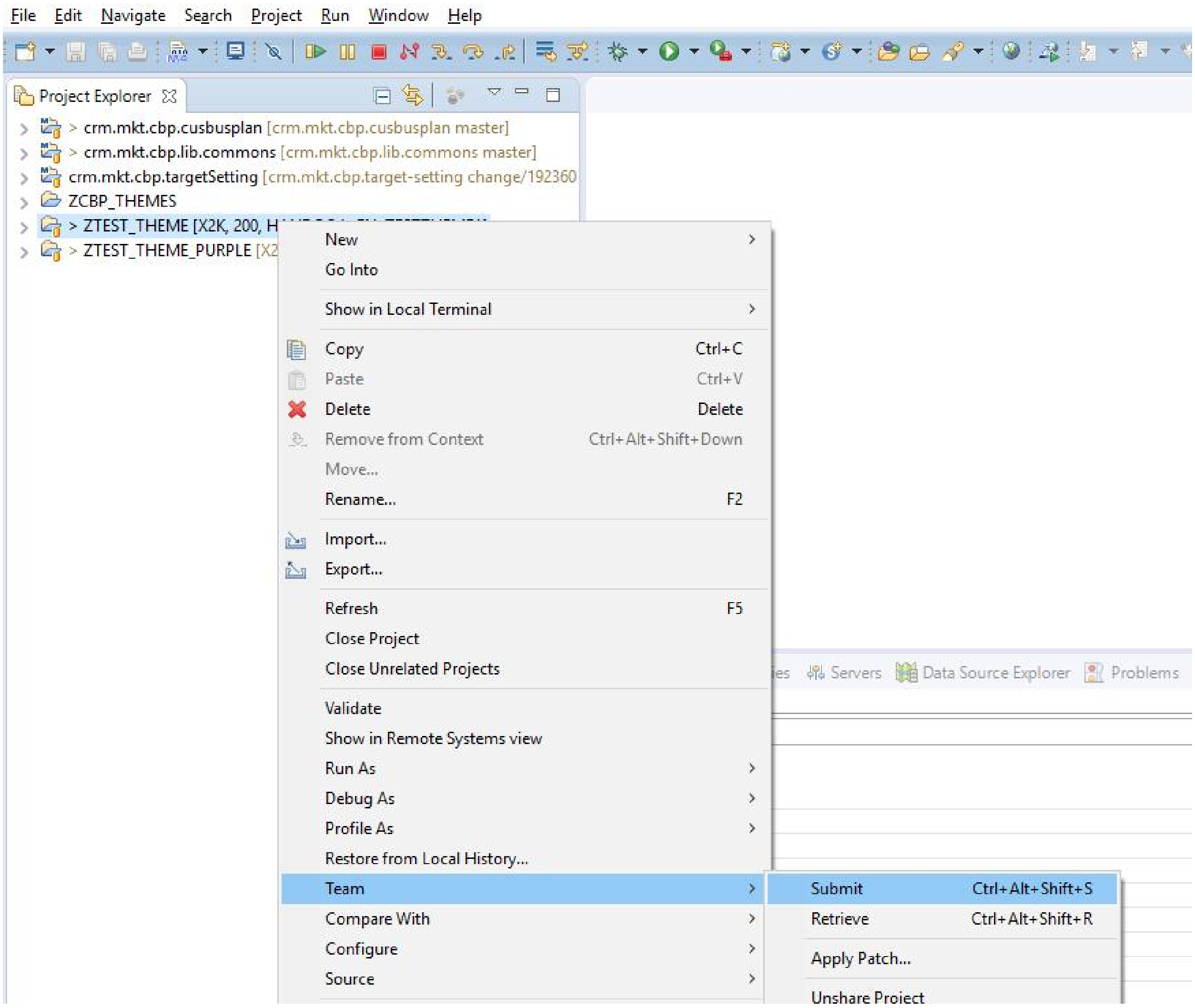
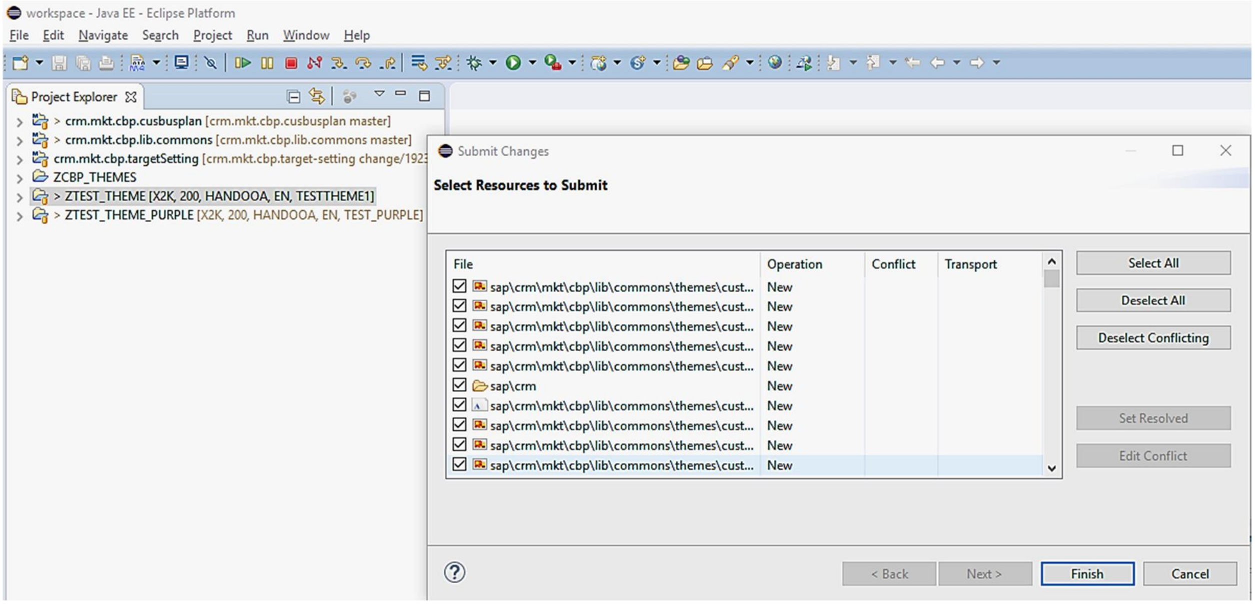

File Edit Navigate Search Project Run Window Help
Project Explorer
> crm.mkt.cbp.cusbusplan [crm.mkt.cbp.cusbusplan master]
> crm.mkt.cbp.lib.commons [crm.mkt.cbp.lib.commons master]
crm.mkt.cbp.targetSetting [crm.mkt.cbp.target-setting change/192360
ZCBP_THEMES
> ZTEST_THEME [X2K, 200, H
> ZTEST_THEME_PURPLE [X2
New
Go Into
Show in Local Terminal
Copy Ctrl+C
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Move...
Rename... F2
Import...
Export...
Refresh F5
Close Project
Close Unrelated Projects
Validate
Show in Remote Systems view
Run As
Debug As
Profile As
Restore from Local History...
Team
Compare With
Configure
Source
Submit Ctrl+Alt+Shift+S
Retrieve Ctrl+Alt+Shift+R
Apply Patch...
Unshare Project
Servers
Data Source Explorer
Problems

Figure 36: Submit Theme Files

11. Select all the files that are ready to be published, and choose *Finish* to upload them.



- > crm.mkt.cbp.cusbusplan [crm.mkt.cbp.cusbusplan master]
- > crm.mkt.cbp.lib.commons [crm.mkt.cbp.lib.commons master]
- crm.mkt.cbp.targetSetting [crm.mkt.cbp.target-setting change/1923
- ZCBP_THEMES
- > ZTEST_THEME [X2K, 200, HANDOOA, EN, TESTTHEME1]
- > ZTEST_THEME_PURPLE [X2K, 200, HANDOOA, EN, TEST_PURPLE]

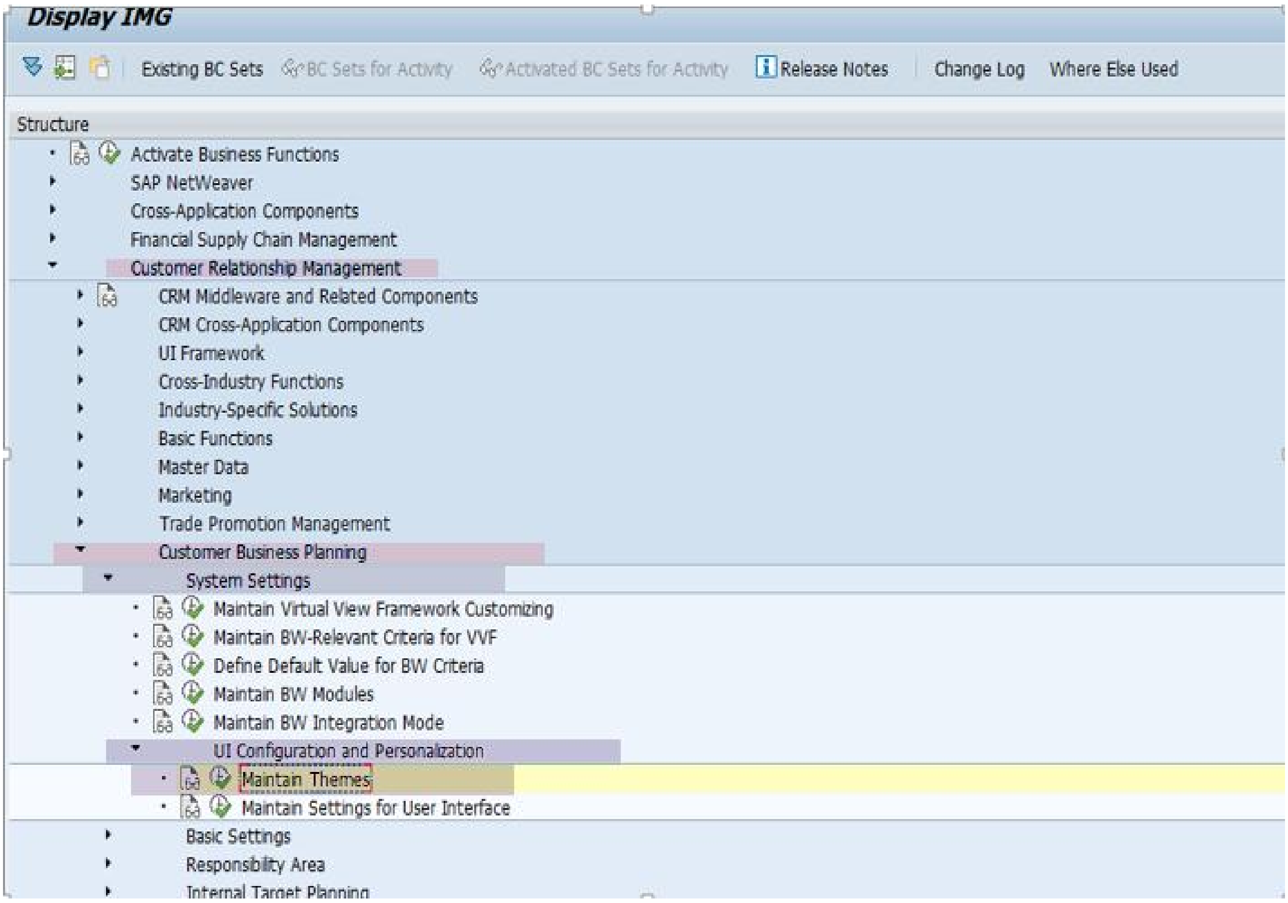
Select Resources to Submit

File	Operation	Conflict	Transport
☑ sap\crm\mkt\cbp\lib\commons\themes\cust...	New		
☑ sap\crm\mkt\cbp\lib\commons\themes\cust...	New		
☑ sap\crm\mkt\cbp\lib\commons\themes\cust...	New		
☑ sap\crm\mkt\cbp\lib\commons\themes\cust...	New		
☑ sap\crm\mkt\cbp\lib\commons\themes\cust...	New		
☑ sap\crm	New		
☑ sap\crm\mkt\cbp\lib\commons\themes\cust...	New		
☑ sap\crm\mkt\cbp\lib\commons\themes\cust...	New		
☑ sap\crm\mkt\cbp\lib\commons\themes\cust...	New		
☑ sap\crm\mkt\cbp\lib\commons\themes\cust...	New		

Figure 37: File Submit Pop-Up

7 Customizing

As a last step, you need to register your newly created theme in the Customizing activity as shown in the following figure:



Display IMG

Existing BC Sets | BC Sets for Activity | Activated BC Sets for Activity | Release Notes | Change Log | Where Else Used

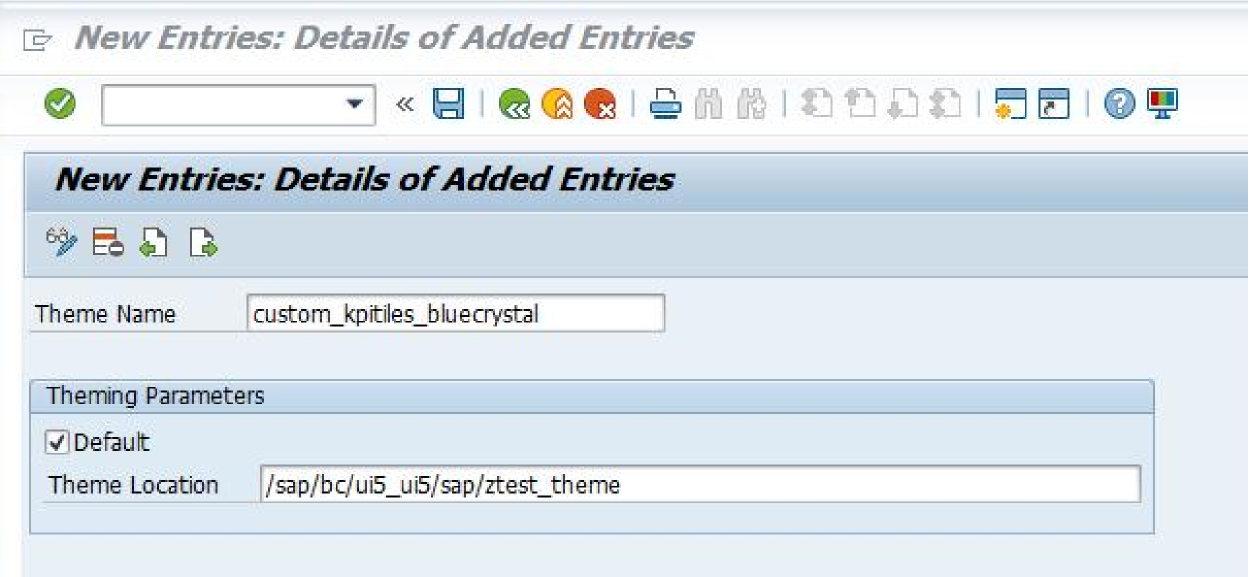
Structure

- Activate Business Functions
- SAP NetWeaver
- Cross-Application Components
- Financial Supply Chain Management
- Customer Relationship Management
  - CRM Middleware and Related Components
  - CRM Cross-Application Components
  - UI Framework
  - Cross-Industry Functions
  - Industry-Specific Solutions
  - Basic Functions
  - Master Data
  - Marketing
  - Trade Promotion Management
  - Customer Business Planning
    - System Settings
      - Maintain Virtual View Framework Customizing
      - Maintain BW-Relevant Criteria for VVF
      - Define Default Value for BW Criteria
      - Maintain BW Modules
      - Maintain BW Integration Mode
      - UI Configuration and Personalization
        - Maintain Themes
        - Maintain Settings for User Interface
    - Basic Settings
    - Responsibility Area
    - Internal Target Planning

Figure 38: SPRO Customizing

7.1 Add New Entry for New Theme

Enter the ID of the custom theme you created in Step 6.1.1.5 and provide the path of the BSP application created in the Eclipse IDE. Set the theme as the default theme and save your changes.



New Entries: Details of Added Entries

Theme Name custom_kpitiles_bluecrystal

Theming Parameters

☑ Default

Theme Location /sap/bc/ui5_ui5/sap/ztest_theme

Figure 39: Set Theme as Default

8 Test Your Changes

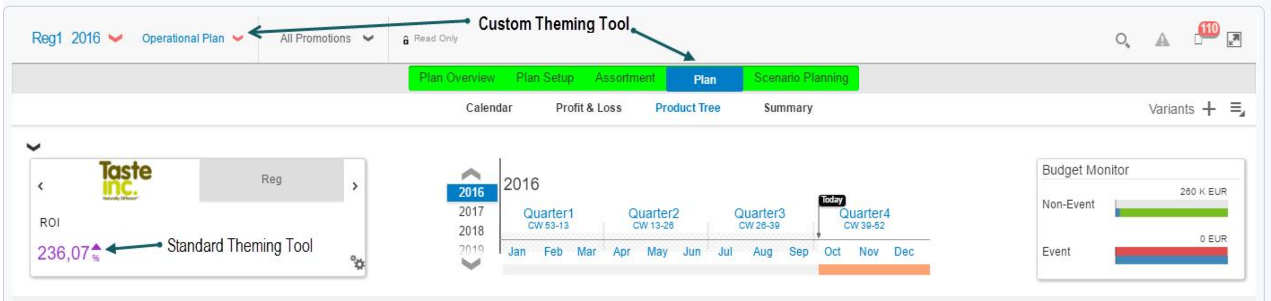
Log into the *Plan* screen and check the changes you applied to your custom theme.

You can also check the custom theme without making it the default theme by specifying three parameters in the URL:

- Theme name: **`my_theme`**
- CBP theme location: **`/SAP/BC/UI5_UI5/SAP/ZTEST_THEME`**
- Standard theme location: path copied in step 6.1.1.7

Example

https://ldcix2k.wdf.sap.corp:44311/bc/bsp/sap/crm_ui_start/default.htm?sap-client=300&sap-language=EN&dbg-theme-name=my_theme&dbg-cbp-ui5-theme-location=/SAP/BC/UI5_UI5/SAP/ZTEST_THEMES&dbg-standard-ui5-theme-location=/sap/public/bc/themes/<>



Custom Theming Tool

Standard Theming Tool

Figure 40: Plan Screen with Applied Custom Theme

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