CD360

Build Delightful User Interfaces in the Cloud with SAP UI 5 Framework

Sajjad Ahmed, Nati Ari, Barak Kinarti and Ben Aflalo
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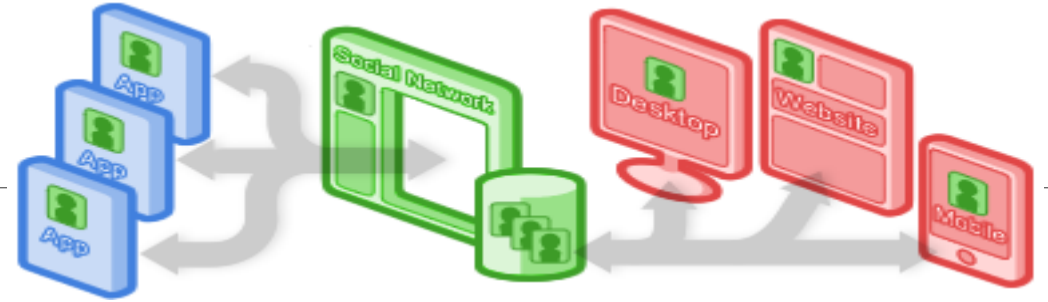
Workshop Agenda
Develop rich application UI using SAP NW Cloud Portal and SAPUI5 libraries

- Configure development environment

- Get to know the events web app code

- Develop widgets for events application

- Deploy the widgets

- Design the application layout

- Change theming and branding

- Publish and consume the application

Open Social Overview

Goal

OpenSocial's goal is to make more apps available to more users, by providing a common API that can be used in many different contexts. I.e. web sites/containers.

Build of Materials

Developers can create applications, using standard JavaScript and HTML, that run on websites where OpenSocial APIs are implemented. These websites are known as OpenSocial containers.

Key concepts

OpenSocial provides a standard way for websites to expose their social graph and other social information and has evolved to be widely used as a component model also in social free enterprise context.

Terminology

1. **Widgets:** mini-applications that can be published to different OpenSocial-compliant providers. Working with a common API and framework means a developer has less to learn in order to build multiple websites. Widgets are portable, allow for personalization and individual user preferences.

2. **Container**: Where the widgets are run, it is typically represented as a web page, but alternative forms are also capable of displaying a widget.

3. **View**: A presentation mode for a widget.

Terminology cont.

4. **User Preferences:** These represent configuration values for a User of the widget. These are key/value pairs that form the basis of widget configuration and persistence.

5. **Feature**: A library or behavior that is provided by the Container. widget features are the primary extensibility mechanism employed by widgets. They often direct a widget server to make new JavaScript APIs available to rendering code, but may also manipulate the widget's contents, for example to add extended syntax.

6. **Widget Specification XML**: this is the XML document that contains all the Metadata, Features, Message Bundles, User Preferences, and Content necessary to display a widget to an end user.

SpecXML example

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Module>
  <ModulePrefs
    title="Setprefs New">
    <Require feature="opensocial-0.9"/>
    <Require feature="setprefs" />
    </ModulePrefs>
  <UserPref
    name="counter"
    datatype="hidden"/>
  <Content type="html">
  <![CDATA[
        <div id="content_div" style="height: 100px;"></div>
        <script type="text/javascript">

        // Get user preferences
        var prefs = new gadgets.Prefs();
        var html = "";
        var div = document.getElementById('content_div');
        // Increment value of "counter" user preference
        function incrementCounter() {
          var count = prefs.getInt("counter");
          div.innerHTML = "The count is " + count + ".";
          // Increment "counter" userpref
          prefs.set("counter", count + 1);
        }

        // Reset value of "counter" userpref to 0
        function resetCounter(){
          prefs.set("counter", 0);
          div.innerHTML = "Count reset to " + prefs.getInt("counter") + ".";
        }

        </script>
        <input type=button value="Count" name="count" onClick="incrementCounter()">
        <input type=button value="Reset" name="reset" onClick="resetCounter()">
  ]]>
  </Content>
</Module>
```
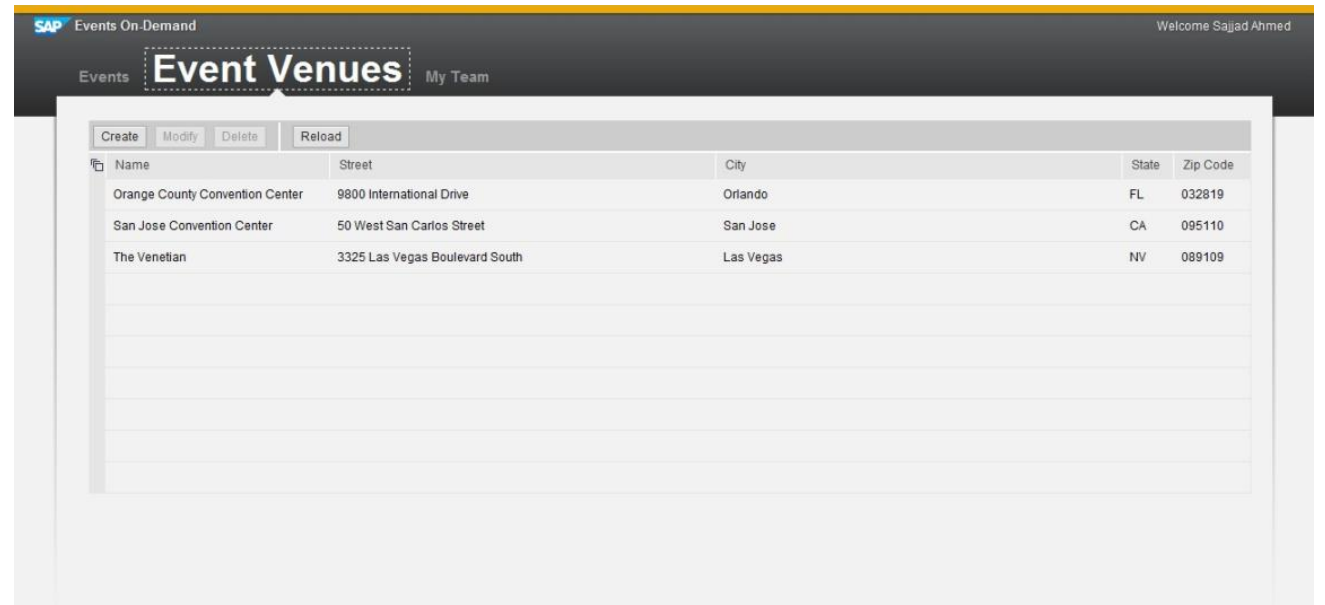
Events Application
Functionality Overview

- Schedule an event with dates

- Select a specific venue for the event

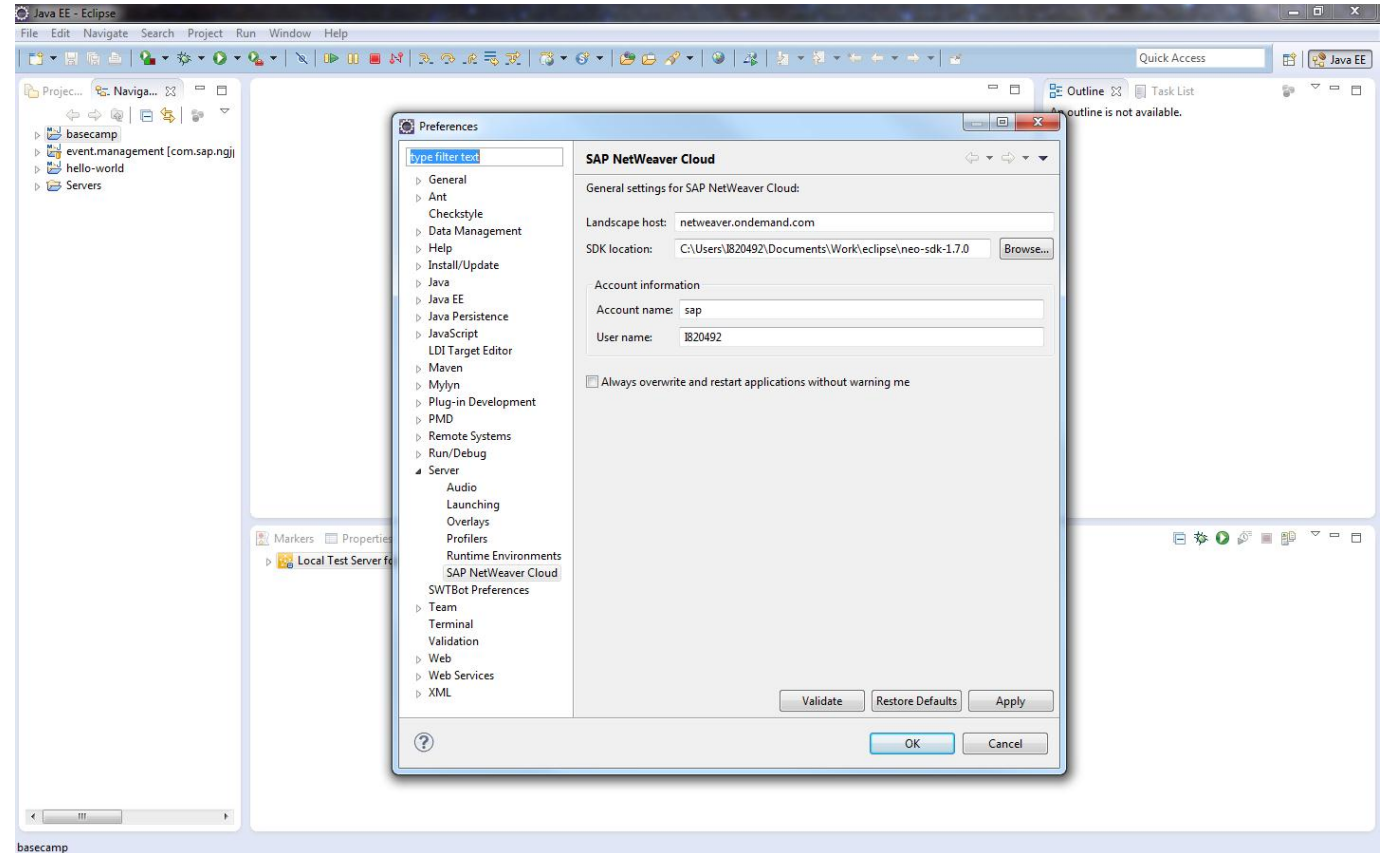- Assign participants to the event

Exercise 1 - Configure Development Environment
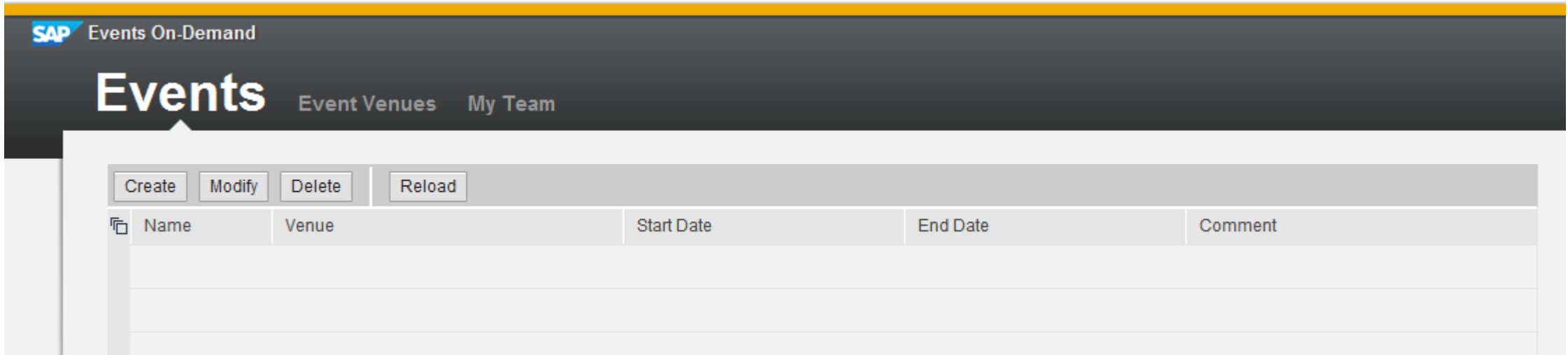
Start Eclipse and verify settings

- Proxy
- Target Runtime
- NW Cloud Server

Load the Events Management Project

- From \\fairfile.fair.sap.corp\session\CD360

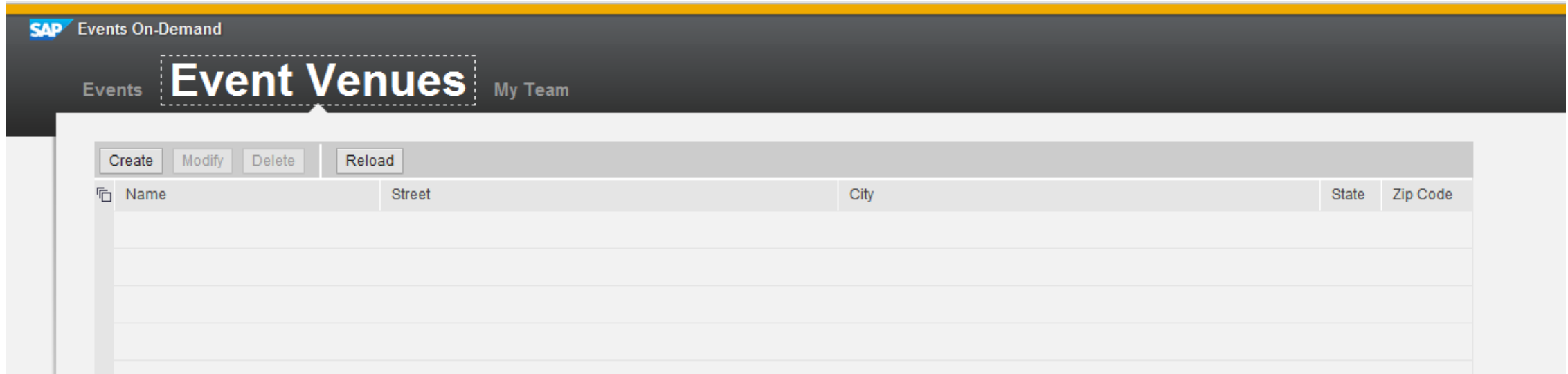# Exercise 2 – Widgetize the Events Section with UI5 controls

SAP Events On-Demand

Events   Event Venues   My Team

| Create | Modify | Delete | | Reload |

Name	Venue	Start Date	End Date	Comment

Events Table Widget	*Participants Widget*	*Events Location Map Widget*

Exercise 3 – Widgetize the Event Venues Section with UI5 controls
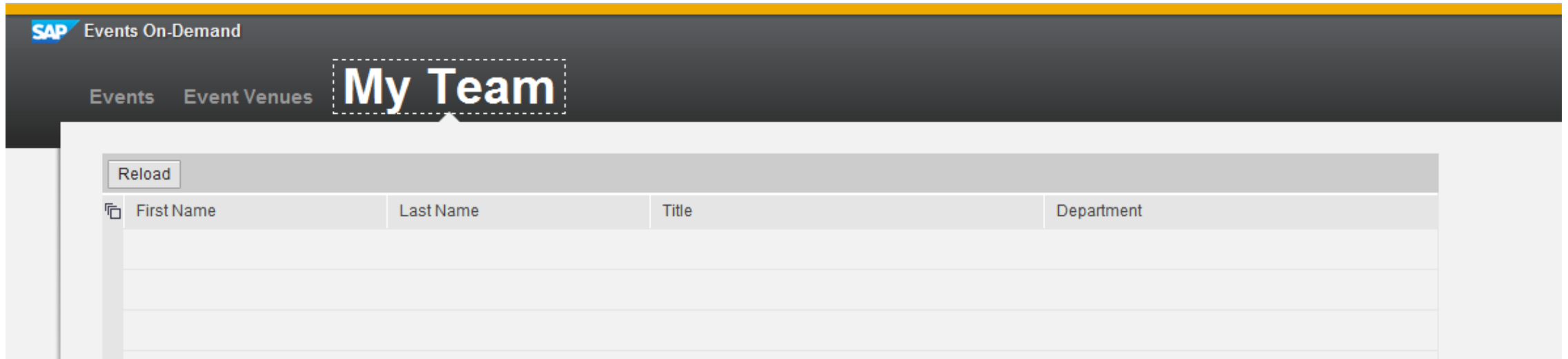

Events Venues Data Widget Table + Map View

Events Map Widget

Toggle Map Display

Exercise 4 – Widgetize the My Team Section with UI5 controls

Team Table Widget

Person Details Widget

Exercise 5 – Add Cloud Portal Open Social Features

Context
- Events Section
- Event Venues Section
- My Team Section

Widget Menu
- Event Venues Widget

Personalization

Exercise 6 – Deploy the Widgets to NW Cloud and expose in NW Cloud Portal

Exercise 7 – Authoring the Application Site
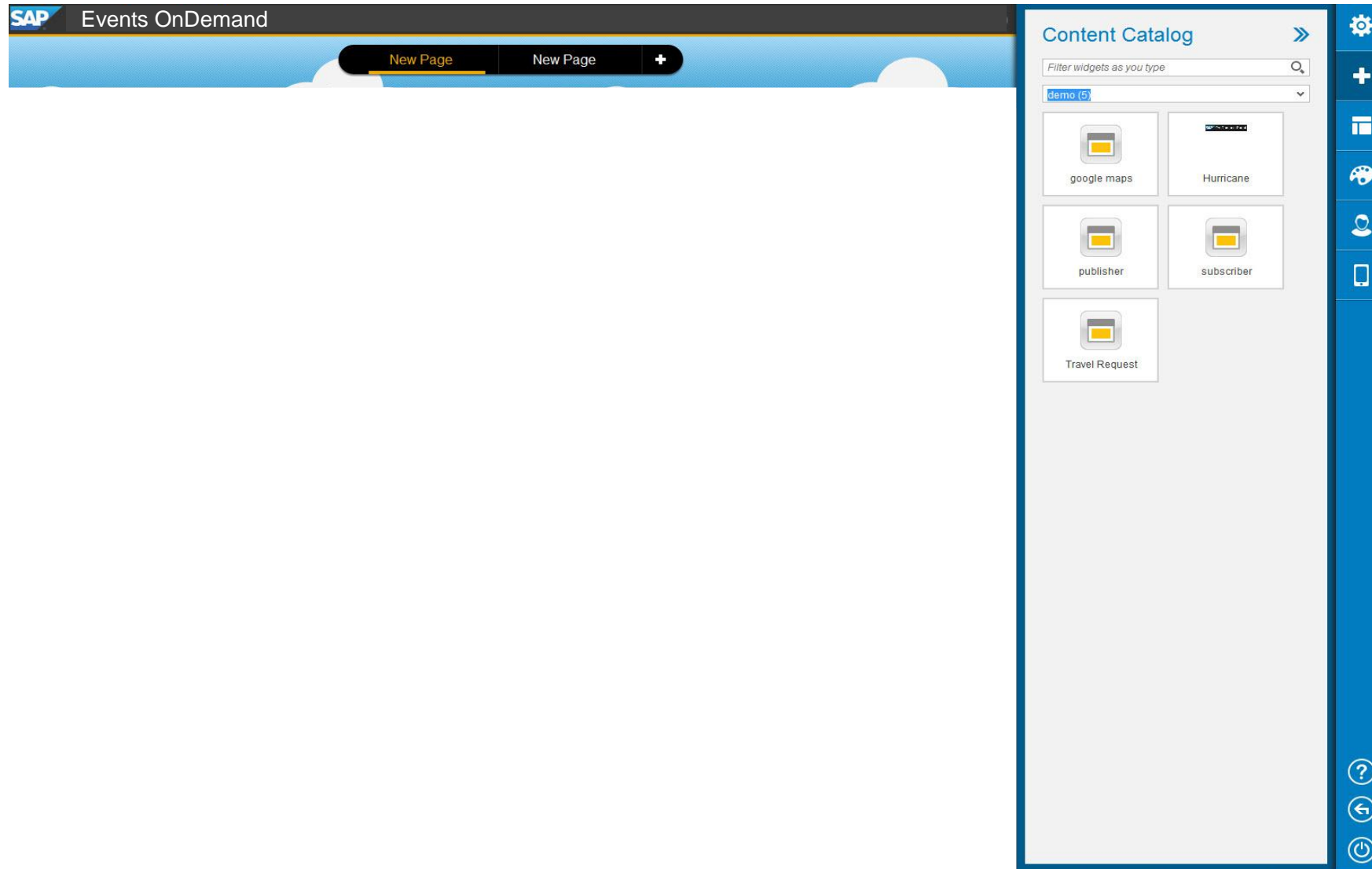
Exercise 8 – Theming and Branding the Site

Exercise 9 – Publishing the Site

Related TechEd Sessions

Workshops

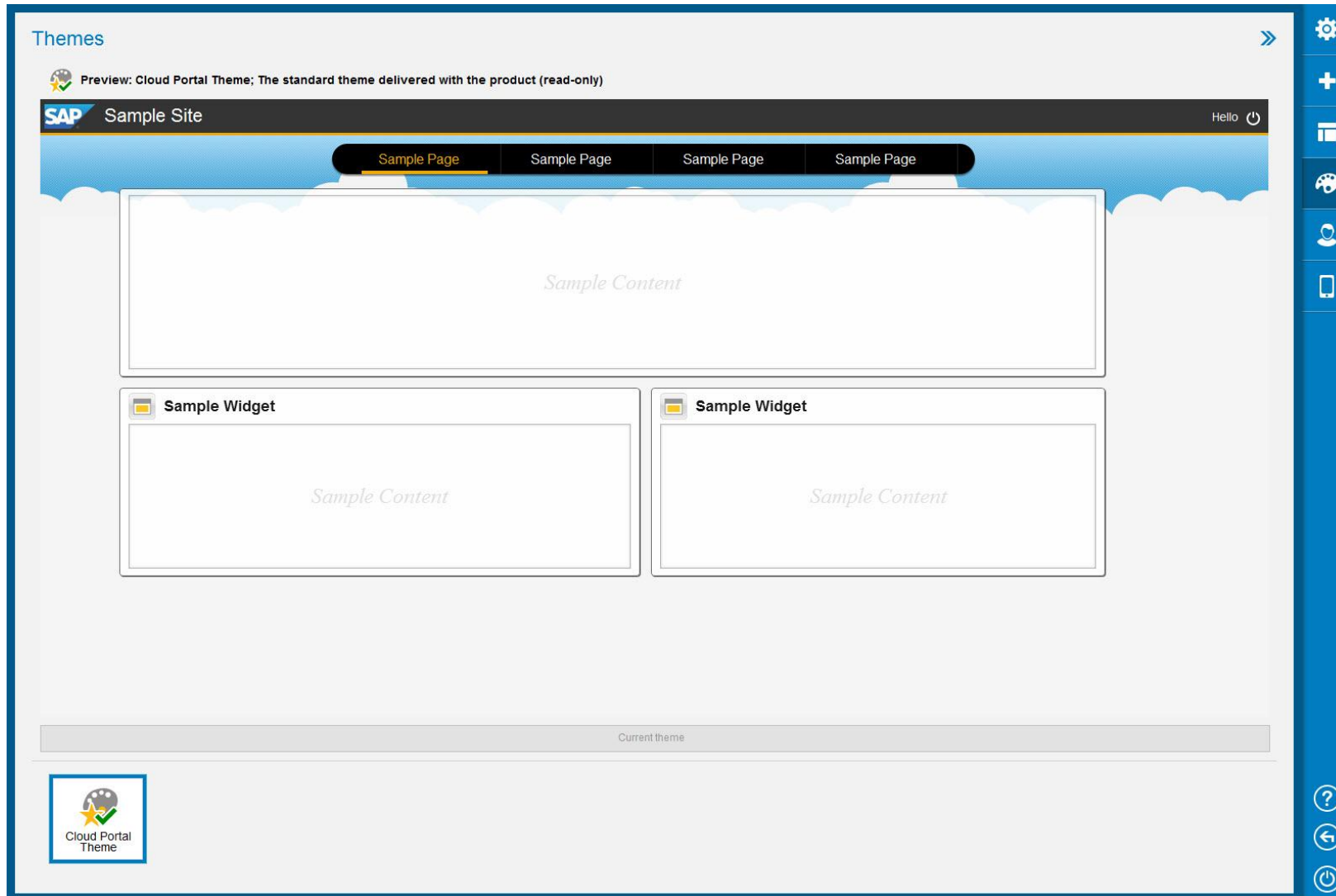- CD261 - NW Cloud Hands On Session

- CD264 - Enriching your SAP Portal with custom widgets and extensions

- PMC266 - Experience the new SAP NetWeaver Cloud Portal in Action

Q&A and Networking

- CD812 - Integrate On-Premise Systems with NW Cloud

- CD813 - Discover NW Cloud Labs

- Customer Success Stories with NW Cloud

Lectures

- PMC108 - SAP NetWeaver Portal Portfolio - Roadmap on Premise, on Demand, on Device

- TEC115 - NW Cloud Platform for Customer Enterprise Applications

- PMC110 - SAP NetWeaver Cloud Portal - Overview, Benefits and Scenarios

- SIS104 - SAP ID Service – Identity Provider for the Cloud

Further Information

SAP Public Web

SAP NetWeaver Cloud Portal Community
http://scn.sap.com/community/netweaver-portal/cloud

SAP NetWeaver Cloud Portal Experience Site
http://tiny.cc/ODPortal

SAP NetWeaver Cloud Portal Development Community
http://scn.sap.com/docs/DOC-30601

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