ORACLE

Hybrid Portal - Modernize WebCenter Portal with Oracle Content Management

An Oracle White Paper

PURPOSE STATEMENT

Customers today expect Portals to have a more intuitive User Interface that provides richer experiences with ease of navigation. The need for better performance and faster application load times is important. But designing such a Portal has had many challenges in the past. It is not easy to achieve this without considering UI frameworks that allow ease of development and deployment.

The objective of this White Paper is to provide an overview of how WebCenter Portal (WCP) can be extended to provide a more modernized user experience to all your end users. This brings in a new paradigm shift for modernizing WebCenter as a "Hybrid Portal" with Oracle Content Management (OCM).
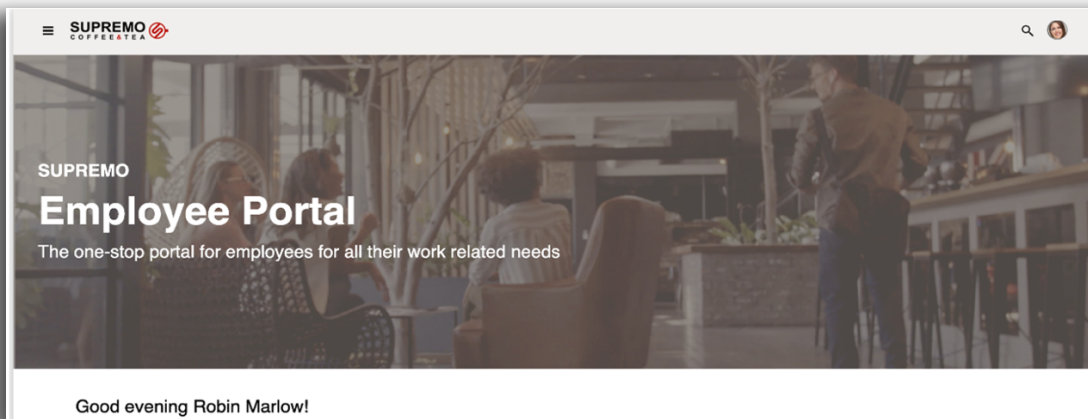
DISCLAIMER

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INTRODUCTION

The Hybrid OCM Portal is an extension to WebCenter Portal where customers can modernize their web applications allowing self-service and transactional capabilities for users to interact. A simple example is an "Employee Portal" where employees can login to view event calendars, submit leave requests, book travel, and submit expenses. Employees can get to know latest updates via companywide announcements. They can also read blogs on various topics such as taxation law changes.

Based on latest industry trends, it is obvious that any-time and any-device access to information is the most important need from end-consumers. All of this has a direct impact on the best-of-breed user experience needs for any business. The basic characteristics include easy to use, intuitive, visually appealing UI, highly performing application that delivers what it actually promises.

From the perspective of the Development experience, JavaScript frameworks are an essential part of modern front-end web development, providing developers with tried and tested tools for building scalable, interactive web applications. Many modern companies use frameworks as a standard part of their tooling, so many front-end development jobs now require framework experience. There's no question that user experience is impacted by perceived load times. With a client-side rendering solution, you redirect the request to a single HTML file and the server will deliver it without any content until you fetch all the JavaScript and let the browser compile everything before rendering the content.

Another key industry trend driving the change is adoption of Cloud Infrastructure for scalability and performance. All of this means that WebCenter Portal customers are also looking out for modernizing the experiences they deliver to their end users – Employees, Partners, Customers, Dealers and Suppliers.
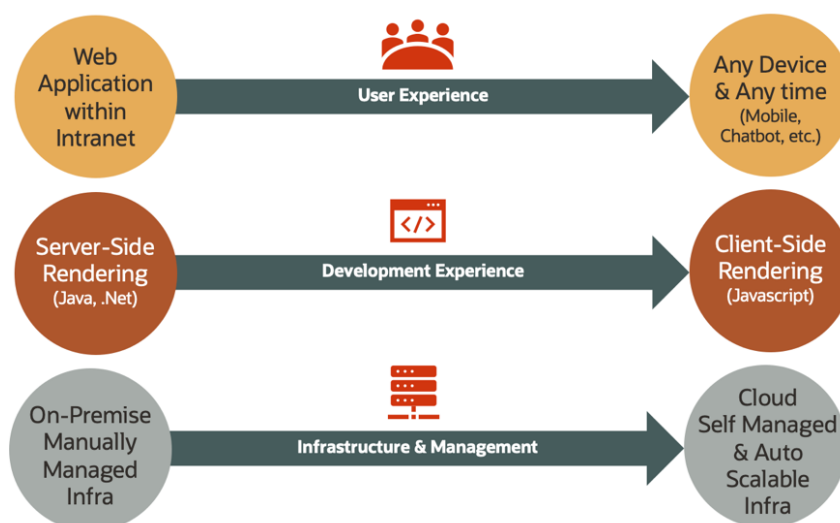
KEY VALUE PROPOSITION OF A HYBRID PORTAL

- **Accelerate Content Management with Cloud**

    Oracle Content Management (OCM) is a cloud-based content hub to drive omni-channel content management and accelerate experience delivery. It offers benefits like scalability, security, and governance, so you can eliminate the typical inefficiencies in content management. OCM helps you throughout the entire content lifecycle. Create, capture, organize, review, and protect all your content as it flows through your organization with integrated processes and data. You can easily manage Digital Assets and publish to multiple channels. This includes collaborating internally or externally on any device to approve content and create contextualized experiences. OCM offers built-in tools that are business-friendly for building new web experiences.

    This Sample Hybrid Portal leverages these rich capabilities of OCM and fuses the same with WebCenter Portal.

- **Leverage existing investments & be Future-Ready**

    While you may already be using Oracle WebCenter Portal, or planning to embark on this journey with Oracle, leveraging existing investments and extending the same will help the business achieve much more while spending minimal on new procurements. Building on the top of existing applications can be much faster so it allows you to be proactive in understanding your customer's needs and catering to the same. Hence, it provides cost benefits as well as enables agility. Also, extending WebCenter Portal with OCM means you are getting the added advantages of what OCM has to offer in terms of being a future-ready platform to build and run applications that are modern, more intuitive and user-friendly.

- **Development framework flexibility & lower maintenance cost**

    Teams need to keep innovating with better ideas and hence Developers are always looking to adopt newer development frameworks and technologies that support agile and DevOps. Web development frameworks provide a streamlined approach to App development and developers get responsive and intuitive interface for programming and deployments.

    WebCenter Portal also offers services via REST APIs, enabling the front-end JavaScript libraries such as React to easily interact with Portal and perform CRUD operations. Similarly, OCM offers headless Content Management capabilities that allow React applications to consume content via APIs. React is just an example of one of the most common JS libraries that can be used to provide development flexibility. Likewise, developers are free to opt for their choice of development and hosting platforms, OCM being another great tool. This Sample Hybrid Portal leverages OCM for hosting such applications and seamlessly integrating with WCP. One of the key benefits of this approach is lowering maintenance cost from development perspective. OCM offers Headless Samples for Vue, Angular, Visual Builder, JET and many more.

- **Opportunity to benefit from Oracle Cloud Infrastructure IAAS**

    Lifting-and-Shifting WebCenter Portal to run on OCI has several benefits. One of the key advantages is that there are many SAAS applications that are already provisioned on OCI to be used with WCP. Integrations are generally needed with different software applications such as Database, Business Process Management, Identity Management, Search etc. While being on-premises, customers must procure hardware, install, and manage these applications themselves or through Partners.

    With migration to OCI, WCP can start leveraging several of the Services that Oracle has already provisioned and certified to use. For instance, WCP can be configured to work with the OCI based Database Cloud Service, Identity Cloud Service, Integration Cloud Service, Visual Builder Cloud Service and OpenSearch Cloud Service. All of this means customers can focus on business innovation and growth rather than focusing on managing the infrastructure, uptime, and performance of the applications. The Sample Hybrid Portal follows the same approach for integrating with OCM.

SAMPLE HYBRID PORTAL SETUP

Café Supremo is a fictitious Coffee retailer chain that runs Coffee Shops across the world. They are looking to enrich the Employee Portal with intuitive user experience and features that are modern. While they are already using WebCenter Portal (WCP), the key ask is a modern facelift to the entire Employee Portal with new looking user interface which is more intuitive, fast loading and high performing. Hence, Oracle suggested a Hybrid approach along with OCM (Oracle Content Management). OCM helps businesses manage, create, and activate various types of content, including websites, documents, videos, and graphic assets, in one cloud native system. OCM enables creating content in a collaborative environment making it available for digital, employee and customer experiences.

Functional Architecture: Café Supremo Employee Portal

To gain the real benefit of a "Hybrid" model, we recommend setting up WebCenter Portal to run on Oracle Cloud Infrastructure (OCI). This whitepaper will walk you through the high-level steps necessary to setup WCP instance running in OCI along with an OCM Site. The end goal is to deploy a sample Hybrid Portal using OCM that surfaces apps from a WCP instance running on a VM in the same Cloud tenancy as OCM. An OCM Website exposes Sites Custom Components that integrates with WCP data. In addition, this integration can have SSO configured between these systems for seamless security. The Café Supremo Hybrid Portal Sample leverages the power of OCM along with WCP to produce modern user experiences. While OCM is a cloud native application, we recommend that WCP is hosted on Oracle Cloud Infrastructure (OCI) for optimum performance and scalability. Hence, this whitepaper guides you with the recommendation of setting up a Sample Hybrid Portal on OCI.
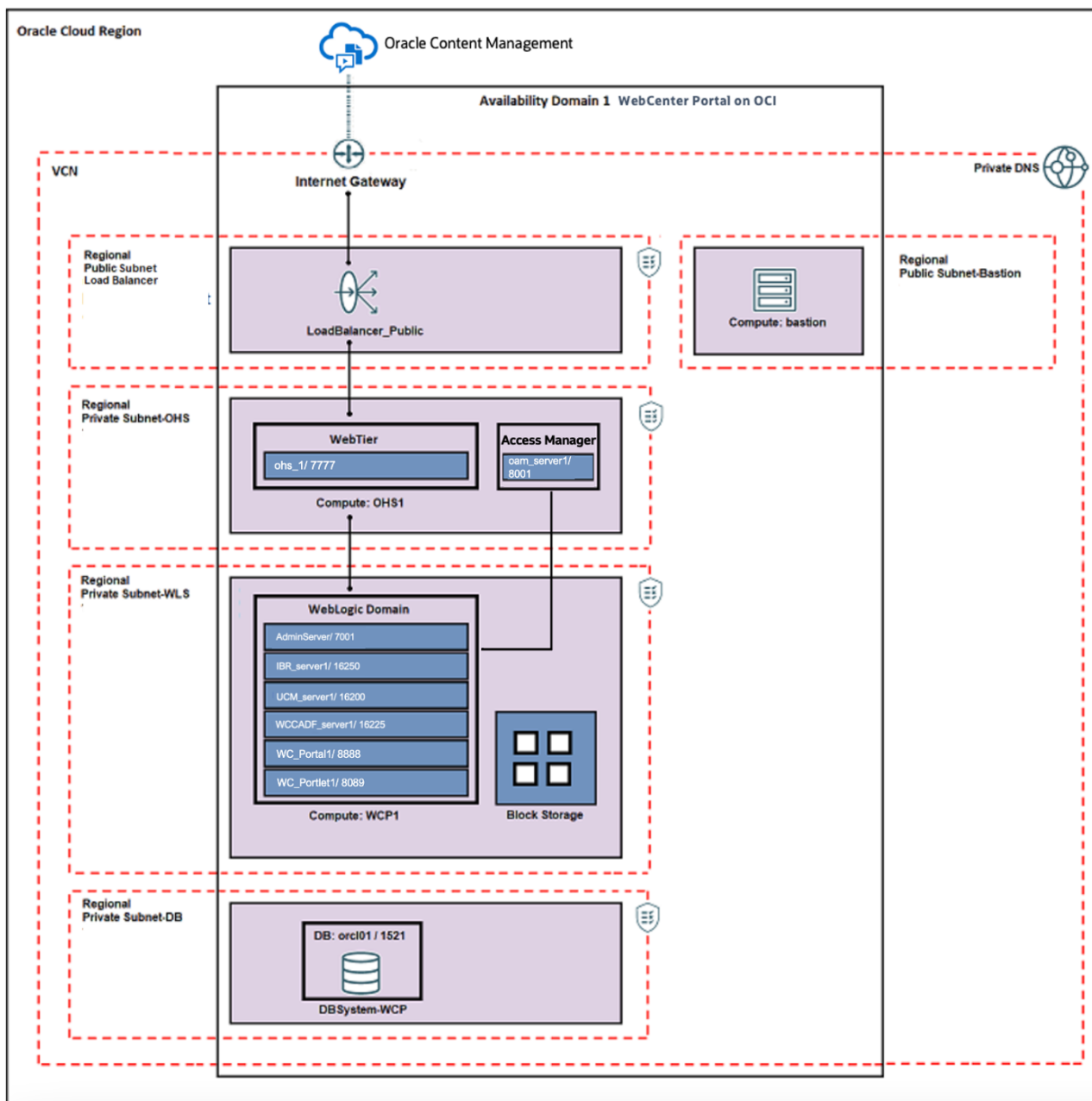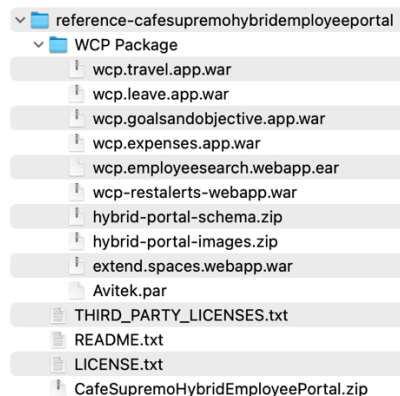
Pre-requisites for the Setup

To get started, you'll need Admin access to an OCI tenancy. You will also need a running instance of OCM. Download the zip file containing the template and sample code for the Café Supremo Hybrid Employee portal. Once you obtain a copy of the template, upload it to Oracle Content Management, where you'll use it to create the portal. The sample template and related code for the Café Supremo Hybrid Portal is hosted on the Oracle Support Portal. Please refer to the following Support Note for further details on downloading the same:

Extend WebCenter Portal with Oracle Content Management Capabilities to Setup a "Sample" Hybrid Portal - Doc ID 2917526.1

Once downloaded, extract the contents of the **reference-cafesupremohybridemployeeportal.zip** file to a folder on your local machine as we need the same in the subsequent steps. You will see a similar folder and file structure as below:

```
∨ 📁 reference-cafesupremohybridemployeeportal
   ∨ 📁 WCP Package
        📄 wcp.travel.app.war
        📄 wcp.leave.app.war
        📄 wcp.goalsandobjective.app.war
        📄 wcp.expenses.app.war
        📄 wcp.employeesearch.webapp.ear
        📄 wcp-restalerts-webapp.war
        📄 hybrid-portal-schema.zip
        📄 hybrid-portal-images.zip
        📄 extend.spaces.webapp.war
        📄 Avitek.par
     📄 THIRD_PARTY_LICENSES.txt
     📄 README.txt
     📄 LICENSE.txt
     📄 CafeSupremoHybridEmployeePortal.zip
```

Steps required to setup WebCenter Portal on OCI

As already mentioned, we recommend setting up WebCenter Portal to run on Oracle Cloud Infrastructure (OCI). In case you are new to OCI, please read more about the benefits here: https://www.oracle.com/in/cloud/why-oci/

Furthermore, to enable your teams in setting up and running WebCenter Portal on OCI, please refer to the following step-by-step Tutorial on Oracle Customer Support Portal:

Tutorial: Running Oracle WebCenter Portal with Content on Oracle Cloud Infrastructure - Doc ID 2856874.1

In summary, you will be creating a Compartment for Organizing the Resources for your Configuration Project. A compartment allows you to organize and control your cloud resources. This is a collection of all your related resources such as instances, virtual cloud networks, block volumes, etc. Compartments can be accessed only by certain groups with the proper permissions granted by your administrator. The tutorial will help you enable a Virtual Cloud Network (VCN) with the following resources:

- Internet Gateway: This enables direct connectivity to the internet. Resources that need to use the gateway for internet access must be in a public subnet and have public IP addresses.
- NAT Gateway: This gives instances in a private subnet access to the internet. Instances in a private subnet don't have public IP addresses. With the NAT gateway, they can initiate connections to the internet and receive responses, but not receive inbound connections initiated from the internet.
- Service Gateway with access to the Oracle Services Network: This enables cloud resources without public IP addresses to privately access Oracle services. These services have public IP addresses that you typically reach over the internet.
  However, you can access the Oracle Services Network without the traffic going over the internet.
- Regional Public Subnet with access to the Internet Gateway: This subnet uses the VCN's default security list and default route table. Instances in this subnet may optionally have public IP addresses.
- Regional Private Subnet with access to the NAT Gateway and Service Gateway: This subnet uses a custom security list and custom route table. Instances in this subnet cannot have public IP addresses.
- Oracle Database on OCI to be used as WebCenter Portal DB. The recommendation is to leverage Oracle Database-as-a-service on OCI, although you may go with installing the Database on another compute VM on OCI.

While there is existing documentation already available for migrating WebCenter Portal to a different infrastructure, the following step-by-step Tutorial details how to lift-and-shift from on-premises to Oracle Cloud Infrastructure.

Tutorial: Migrating Oracle WebCenter Portal with Content from On-Premises Install to Oracle Cloud Infrastructure (Lift and Shift to OCI) – Doc ID 2907549.1

Enable SSO between WCP and OCM

As the end users will seamlessly move between WCP and OCM pages, SSO setup is required with Oracle Access Manager (OAM) used by WCP, and Identity Cloud Service (IDCS) used by OCM. The following Support Note guides you through a step-by-step tutorial on how to configure OAM with WCP (running in Oracle Cloud Infrastructure):

Tutorial: Configuring WebCenter Portal and WebCenter Content on Oracle Cloud Infrastructure with Oracle Access Manager - Doc ID 2916045.1

Next, it is recommended to configure OAM as an Identity Provider (IdP) in Oracle Identity Cloud Service to provide seamless SSO with WCP for OCM users. You can configure Oracle HTTP Server WebGate that acts as a web server plug-in to intercept and forward HTTP requests to an existing Oracle Access Manager instance. The following Support Note provides detailed steps on how to enable SSO between WCP and OCM:

Tutorial: Configuring WebCenter Portal and WebCenter Content on Oracle Cloud Infrastructure with Oracle Access Manager and Oracle Identity Cloud Service - Doc ID 2918559.1

The steps to validate SSO is discussed post configuring the Hybrid Portal sample applications in OCM and WCP. The following sections will describe how to setup the Hybrid Portal application both in OCM and WCP.

Setting up Café Supremo (Hybrid Portal) Website in OCM

The sample code for the website template is already provided as part of the package zip mentioned under the section "Pre-requisites for the Setup". You need to obtain a copy of the template and upload it to OCM following the steps below:

1. Sign-in to Oracle Content Management as an administrator. If you don't see an ADMINISTRATION section in the left navigation menu in the Oracle Content Management web interface, you don't have administrator privileges. In that case, contact your service administrator.
2. In the left navigation menu, click **Developer**, and then **View All Templates**.
3. On the Templates page, click **Create**, and choose **Import a template package**.
4. In the Pick a File dialog, navigate to the folder where you want to upload the file or create a new folder, and click **Upload**.
   a. Locate and select the **CafeSupremoHybridEmployeePortal.zip** template package within your local computer's folder you created earlier (refer the section "Pre-requisites for the Setup").
   b. Click **Open**. Wait for the file to be uploaded. Once the file is uploaded, it will be available for selection.
   c. Select the **CafeSupremoHybridEmployeePortal.zip** check box and click **OK**.
   d. In the list of templates, you'll now see the **CafeSupremoHybridEmployeePortal** template.
5. Click **Content** under **ADMINISTRATION** in the left navigation menu.
6. A repository is a storage location to manage all the assets you use in your portal in one place. Therefore, create a repository.
   a. Choose **Repositories** from the drop-down list, click **Create** in the upper right corner and then choose **Asset Repository**.
      - In the **Name** field, enter a meaningful repository name (for example, **CafeSupremoHybridEmployeePortal**).
      - In the **Default Language** field, ensure that **English (United States) (en-US)** is selected.
   b. Click **Save**.
   c. The newly created repository is now included in the list of repositories on the Content page.
7. Select **Sites** in the left navigation menu. On the Sites page, click **Create** in the upper right corner.
8. On the Choose Template page, choose the **CafeSupremoHybridEmployeePortal** template.
9. On the Configure Site page, complete the following fields.
   - Asset Repository — Select the asset repository you created earlier (for example, **CafeSupremoHybridEmployeePortal**).
   - Localization Policy — The localization policy is automatically selected because it is available as part of the sample code and template.
   - Default Language — This field is set to **English (United States) (en-US)** by default.
10. Click **Next**.
11. On the Add Details page, complete the following fields:
    - Name — Enter a name for your website (for example, **CafeSupremoHybridEmployeePortal**).
    - Prefix for Friendly URL Values — You can edit the default value if needed.
12. Click **Finish**. It is created and listed on the Sites page.

Add Demo Users for Sample Hybrid Portal

Although you can very well create new users, the Sample comes with a few seeded users. Refer to the below table that mentions the username, role in WCP, and persona applicable to each user.

User	WebCenter Portal Role	Persona
robin.marlow	• Portal Manager • Portal Server Administrator	Administrator
joshua.baker	Participant	Employee Manager
anna.smith	Participant	Employee
morgan.zhu	Participant	Employee

You will need to create these users in WebCenter Portal, OAM and IDCS. You would have already created those in OAM while following the Tutorial Doc ID 2918559.1 referenced in the earlier section. Please ensure that the usernames are the same across the three user stores. This Whitepaper assumes customers can easily refer the online Oracle Documentation and follow the steps to create the required users.

The above users will be used as demo users once you get the Sample Hybrid Portal up and running. Refer to the "Persona" column in the table above which mentions the corresponding role provided to the demo users. The sample database HR schema that you would install as part of the next section configures the same demo users.

Install and Configure Applications in WCP

1. Pre-requisites for installing the Apps

To get started, you'll need to have access to the extracted zip file containing the template and sample code for the Café Supremo Hybrid Employee portal downloaded earlier. Once you browse the uncompressed folder structure, you will be able to locate the folder "/WCP_Package". In the further sections, there are references to the same folder that has required Schema files.

Also, this Whitepaper assumes you have SQL Developer installed on your machine. If not, please download and follow the instructions online to install: https://www.oracle.com/tools/downloads/sqldev-downloads.html.

2. Install Sample HR Schema

The sample database schemas provided by Oracle includes an HR Schema which is being used in this setup. Download the HR Schema scripts zip file from the following path:
https://github.com/oracle/db-sample-schemas/releases/tag/v21.1
All scripts necessary to create HR (Human Resource) schema are in: $ORACLE_HOME/demo/schema/human_resources
You need to call only one script, hr_main.sql, to create all the objects and load the data. More information and detailed documentation with steps for installing the sample schema hr_main.sql as follows:
https://docs.oracle.com/en/database/oracle/oracle-database/12.2/comsc/installing-sample-schemas.html#GUID-1E645D09-F91F-4BA6-A286-57C5EC66321D

3. Install Schemas required for Hybrid Portal

Under the folder "/WCP_Package" that is part of the downloaded zip file, you will be able to locate the schema file hybrid-portal-schema.zip. Unzip the hybrid portal schema file that has the scripts needed to create new tables for Leave, Expenses and Travel applications. All scripts necessary to create required schemas for hybrid portal reside in the human_resources_hybrid folder. You need to call only one script, hr_update.sql using the HR user to create all the objects and load the data.

The following steps can be referenced as example commands. Please follow the Oracle public documentation for detailed steps on how to install Database Schemas.

1. Get the present working directory:
   ```
   pwd
   ```

2. Copy the present working directory and replace __SUB__CWD__ with this value in the hr_update.sql file:
   ```
   vi human_resources_hybrid/hr_update.sql
   ```

   ```
   :%s:__SUB__CWD__:<present working directory>:g
   ```

3. Run the following command:
   ```
   @/u01/oracle/downloads/reference-cafesupremohybridemployeeportal/WCP
   Package/human_resources_hybrid/hr_update.sql
   ```

4. Enter details for the prompts listed in Script Output at the bottom of the page:
   - password for HR user: <Password>
   - connect string: <Your DB Connection String>

5. Verify the scripts ran successfully.

4. Deploy Shared Libraries and Applications

Under the same "/WCP_Package" folder, there are multiple packages/applications that you will need to setup.

Follow the below steps

1. Deploy the following .war files as Library on WebCenter Portal Managed Server:
   - extend.spaces.webapp.war
   - wcp.expenses.app.war
   - wcp.travel.app.war
   - wcp.leave.app.war
   - wcp.goalsandobjective.app.war
2. Deploy the following files as Application on WebCenter Portal Managed Server:
   - wcp.employeesearch.webapp.ear
   - wcp-restalerts-webapp.war
3. Activate all the above deployed applications.
4. Import the Avitek Portal along with the shared libraries:
   - Avitek.par

5. Create HR Datasource

As the next step, you need to create a Generic Data Source to be used as the HR data source. For the same, ensure you specify the following name and jndi while creating the Data Source in WebLogic.

- Name: HR-Connection
- JNDI: jdbc/HR-ConnDS
- Target: WebCenter Portal Managed Server

6. Create Connections & Upload Artifacts

Please ensure you update the Paths, Server Names and Ports before running these commands.
Create ADF Connection to Portal REST API
Run the following wlst command to create a connection pointing to WebCenter Portal REST API:
```
adf_createHttpURLConnection(appName='webcenter', name='RESTConnection', url='http://<WCP-IP>:8888',
realm='myrealm', authenticationType='basic', user='weblogic', password='welcome1')
```

Create ADF Connection to OCM Instance
Run the following wlst command to create a connection pointing to the OCM Instance:
```
adf_createHttpURLConnection(appName='webcenter', name='OCMConnection', url='https://<OCM Server URL>',
realm='myrealm',authenticationType='basic', user='<ocm-admin-user>', password='<ocm-user-password>')
```

Importing Images to MDS
First export the MDS Documents: (Create the directory /u01/oracle/MDS if it does not already exist)
```
exportMetadata(application='webcenter', server='WC_Portal', toLocation='/u01/oracle/MDS', docs='/**',
restrictCustTo='%')
```

In a new terminal window unzip the "/WCP_Package/hybrid-portal-images.zip" to the directory specified using the following command:

```
unzip hybrid-portal-images.zip -d /u01/oracle/MDS/oracle/webcenter/siteresources/scopedMD/shared/images/
```

Import the images to MDS:

```
importMetadata(application='webcenter', server='WC_Portal',
fromLocation='/u01/oracle/MDS',docs='/oracle/webcenter/siteresources/scopedMD/shared/images/hybridportal/*
.*')
```

Import the valid-link-url.xml file:

```
importMetadata(application='webcenter', server='WC_Portal',
fromLocation='/u01/oracle/MDS/',docs='/oracle/webcenter/webcenterapp/metadata/valid-link-url.xml')
```

Note: Restart all the Managed Servers to uptake the above changes.

7. Set the OCM URL

1. Click on the Settings action button on the left of the screen (looks like a gear icon).
2. In the attributes section, navigate to an attribute defined as siteURL.
3. Enter the URL of your OCM Hybrid Portal site
   Eg: https://<OCMhostname>/site/authsite/CafeSupremoHybridEmployeePortal/

8. Set the Logout Redirect URL

1. Go to the WCP home by click on the back icon at the top left of the page.
2. Navigate to Administration screen by clicking on Administration.
3. In the Options section, there is an attribute Redirect on Logout. Enter the URL of your OCM Hybrid Portal site here.
   Eg: https://<OCMhostname>/site/authsite/CafeSupremoHybridEmployeePortal/

9. Configure Required Applications

1. Log in to the WebCenter Portal as Avitek Portal manager.
2. Navigate to Administration screen by clicking on Administration and click on Portals tab.
3. Click on the Edit link for the Avitek Portal.
4. Click on the Pages action button on the left-hand side.
5. Click on Goals and Objectives page
6. Click on the Edit Page link at the top right of the page.
7. If you do not already see a Goals and Objective Taskflow then perform these steps:
   a. Click on Add Content to open the Resource Catalog.
   b. Click on HybridPortal folder in the list.
   c. Click on Goals and Objectives to add the Taskflow to the page.
8. Click on the Goals and Objectives Taskflow.
9. Click on the dropdown and select the Parameters option.
10. Now enter the parameters:
    - Asset Repository Name: Name of the OCM Asset Repository associated with the Cafe Supremo Hybrid Portal Site.
    - Asset Type: HP-Goals_And_Objectives
    - Site Name: Name of the OCM Hybrid Portal Site.
11. Click Apply and OK.
12. Click on the Goals and Objectives Taskflow dropdown again and select the Display options.
13. Uncheck Display Header and click Apply and OK.
14. Click the Save button at the top right.
15. Click on Drafts action button on the left side of the page (looks like a multi-page document).
16. Check the draft you just created for Employee Tools / Goals and Objectives.
17. Click Publish button.

Configure WCP Integration in OCM

1. Setup Proxy Services in OCM

Setup the Proxy Services in OCM to enable the integration with WebCenter Portal REST endpoints.

1. Login to OCM as an Administrator.
2. Click Integrations > Proxy Service under Administration in the left navigation menu.
3. Click on Create new Credential.
4. Enter a name to the credential as "WCPCredential". Enter credentials for the WebCenter Portal (WCP) Integration User. This will be the user that OCM will communicate through the WCP APIs.
5. Click the Save button.

Create endpoints with details as mentioned below. Make sure to enable the endpoints and use "WCPCredential" for credentials.

Endpoint Name	Pathname	Target URI	HTTP methods
WCP REST	wcprestapi	https://<Host:Port>/rest/api	Get, Options
WCP Spaces	wcprestspaces	https:// <Host:Port>/rest/api/spaces	Delete, Post, Get, Options, Put
WCP Alerts	alertrestservice	https:// <Host:Port>/alertRestService	Get, Options

2. Provide WCP Domain Information in OCM

The last step is to update the OCM Site settings and provide the Domain properties. For the same, login to OCM and edit the site CafeSupremoHybridEmployeePortal and update the following properties:

1. WCPHost: Enter the domain of WebCenter Portal as https://<wcpHost>:<wcpPort>.
2. uToken: Enter the User Token of WebCenter Portal.
   (This can be found by accessing https://<wcpHost>:<wcpPort>/rest/api/resourceIndex)
3. PortalGUID: Enter the WebCenter Portal GUID.
   (This can be found by accessing https://<wcpHost>:<wcpPort>/rest/api/spaces?utoken=<utoken>)

3. Publish the OCM Website

Login to OCM as the Admin and navigate to the Sites section. Select the site CafeSupremoHybridEmployeePortal and click on "Publish" in the top bar. Once published, bring the site Online by clicking on the ⎈ icon (change the site to online status). By now, you have completed the steps required to setup the Hybrid Portal and you should be able to access the running instance via the URL:

https://<OCMhostname>/site/authsite/CafeSupremoHybridEmployeePortal/

Please refer the following Tutorial for steps to verify the Single-Sign-On between WCP and OCM:

Tutorial: Single Sign On Configuration for Hybrid Portal – Doc ID 2918572.1

AUGMENT EXISTING WEBCENTER PORTAL INVESTMENTS

The key value driver for adopting a Hybrid Portal is that you can boost your existing investments in WebCenter Portal and take it to the next level. For instance, while the end users seamlessly move between the different applications / pages that are part of the Sample Hybrid Portal, it is important to note that there are few pages served by WCP and the rest are hosted on OCM.

Following are the ways in which WCP REST APIs and ADF Task Flows are interacting with OCM:

1. Pages such as Goals & Objectives, Expenses, Leave and Travel are all hosted and served by WCP.

    a. "Goals" and "Objectives" are separate ADF Task Flows. Both invoke OCM REST APIs to store, retrieve and manage goals and objectives.

    b. Expenses component is an ADF Task Flow that interacts with WCP DB to store expenses.

2. Home page, Employee Tools, Team Calendar / Events page, and Search are hosted and served by OCM.

    a. Alerts section on the home page is an OCM component that pulls the Leave and Expenses information from WCP using REST APIs.

    b. Events displayed on the Team Calendar page is a React component that invokes WCP REST APIs to create and update events.

    c. Employee Search tab on the Search page displays an ADF Task Flow that has been added to the OCM hosted page. It pulls the search results querying the WCP DB.

RESOURCES ON GETTING STARTED

- Learn Oracle Content Management
  https://docs.oracle.com/en/cloud/paas/content-cloud/

- Build a minimal Site in React with Headless Oracle Content Management
  https://docs.oracle.com/en/cloud/paas/content-cloud/oce-react-minimal-sample/index.html

- Managing Assets with Oracle Content Management
  https://docs.oracle.com/en/cloud/paas/content-cloud/managing-assets/overview-oracle-content-management.html

- Tutorials & Headless Samples
  https://developer.oracle.com/learn/headless-cms-tutorials.html

- Setup a tenancy and create a compartment:
  https://docs.oracle.com/en-us/iaas/Content/GSG/Concepts/settinguptenancy.htm
  https://docs.oracle.com/en us/iaas/Content/Identity/Tasks/managingcompartments.htm

- More information on virtual networks and how to create:
  https://docs.oracle.com/en-us/iaas/Content/Network/Tasks/quickstartnetworking.htm
  https://docs.oracle.com/en-us/iaas/Content/GSG/Tasks/creatingnetwork.htm

CONCLUSION

This Whitepaper is just a starting point for you to get an understanding and guidance around how to leverage the existing investments in WebCenter Portal, and still be able to elevate the overall experiences by integrating with OCM. It brings the best of both worlds together – OCM's best in class web Content Management and WCP's enterprise Portals. In addition, the benefits of lifting-and-shifting WCP to OCI are multi-fold. While the functional architecture provides a recommendation, it may be completely different based on your existing applications, architecture, and topology.

In case you are interested to learn more and see a working demo, please reach out to your Sales Teams or Oracle Content Management / WebCenter PM Teams.