CloudPortal Business Manager 2.3 Customization Guide

Customization Overview

The Customisation pack allows customer or professional services team to extend or customize CloudPortal Business Manager.

Customization pack is delivered as an archive named cpbm-customization.tar.

Bundles in cpbm-customization.tar:

- citrix.cpbm.custom.model
  - This bundle consists of all the proxy model interfaces of the customisable entities.
  - These are Tenant, User, and Subscription proxy interfaces used for custom fields.
  - This bundle also consists a package called com.citrix.cpbm.custom.model which can contain any custom model required for customization.
- citrix.cpbm.custom.common
  - All custom liquibase goes under this.
  - Custom DAOs and Services are written here.
  - Custom job is configured here.
  - Custom workflow is configured here.
  - Custom report is configured here.
  - Custom email templates
  - Topic Subscribers
- citrix.cpbm.custom.portal
  - CPBM open sourced portal UI contents like controllers, view (JSPs, javascripts, css, and so on).
  - WebSecurity xml consisting of access based control for URL paths.

These above bundles are contained in cpbm-customization directory.

The customization bundle also contains reporting system that is contained inside birt directory.

The bin and pb directory contains the various scripts and ansible playbooks required to build and install the custom changes to cpbm server.

Customizing Resource Properties

Customers can add or update a resource property in the following places:

- Under citrix.cpbm.custom.common:
  - For English: /src/main/resources/OSGI-INF/l10n/resources/CustomApplicationResources.properties
  - For other languages: /src/main/resources/OSGI-INF/l10n/resources/CustomApplicationResources_<languageCode>.properties

Note: Also refer to the properties and their default values listed in /src/main/resources/OSGI-INF/l10n/resources/ApplicationResources.properties.

- Under citrix.cpbm.custom.portal:
  - For English: src/main/resources/OSGI-INF/l10n/resources/PortalCustomApplicationResources.properties
  - For other languages: /src/main/resources/OSGI-INF/l10n/resources/PortalCustomApplicationResources_<languageCode>.properties

The language code is a valid ISO Language Code. These codes are the lower-case, two-letter codes as defined by ISO-639. You can find a full list of these codes at a number of sites, such as: http://www.loc.gov/standards/iso639-2/englangn.html

Typically, you should add all UI related custom resource properties in citrix.cpbm.custom.portal bundle and the rest in citrix.cpbm.custom.common bundle. Properties defined in citrix.cpbm.custom.portal take precedence over other properties in the system.

After adding/updating resource properties, the property called Application-ResourceVersion in bundle's manifest needs to be bumped up to a higher version for the changes to take effect. For citrix.cpbm.custom.common bundle, this property can be found in /src/main/resources/META_INF/MANIFEST.MF and for citrix.cpbm.custom.portal bundle, this property can be found in /src/main/resources/PortalCustomApplicationResourceVersion.properties.

Note: Single quote handling in message strings:

For each key-value pair, any single quote in a "value" string must be written as 2 consecutive single quotes to prevent the single quote from acting as a string delimiter.

Steps to generate the customization bundle

Untar or expand the content of cpbm-customization.tar on the build machine. Currently the scripts are only supported on CentOS 6.7 64 bit server. In the bin directory you will find “make_archive.sh”. make_archive.sh creates cpbm-bundle that contains a installable bundle capable of installing the latest UI, localization and reports on cpbm server.

It requires java, maven, ansible and wget. These dependencies are checked and installed for Centos 6.7.

To run this script go to bin diretcory in current repositiory and run it from command line.

1. Change to bin directory:
   $ cd bin

2. Run script make_archive.sh
   $ ./make_archive.sh

After running this script you will have a self-contained cpbm-bundle directory created in the bin folder. The cpbm-bundle contains a install.sh script with various other archives and ansible playbooks. This self contained bundle can then be tarred or zipped to be delivered for installation on target cpbm server.

Steps to install the custom bundle on cpbm

The cpbm bundle contains customization to the cpbm UI, localization and reports. The prerequsite to install this bundle are jar tool and ansible. Both these requirements are installed automatically by the install script. This script is currently supported on Centos 6.7.

Installation: To install this bundle on CPBM server you need the following information:

1. CPBM Mysql Database ip/hostname
2. CPBM Mysql Database port
3. CPBM Mysql Database user, usually default is cpbm
4. CPBM Mysql Database password
5. CPBM server ip

The script will prompt you for the CPBM server password in order to install the package and make necessary configuration on the CPBM server.

To run the install.sh you need to provide these parameters on command line as shown below:

./install.sh -a 192.168.100.43 -p 3306 -u root -s password -i 192.168.100.46

where

"192.168.100.43" is mysql database ip as visible from cpbm server
"cpbm" is mysql database user
"password" is mysql database password
"192.168.100.46" is the cpbm server ip
"3306" is mysql database port

You need to make sure that the Mysql username has db privileges to query mysql db from the cpbm server.

The install.sh will install any changes to the UI, language files and report. The script will stop and then restart the cpbm server for the changes to take affect.