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ONAP Portal and SDK

Guilin Demo

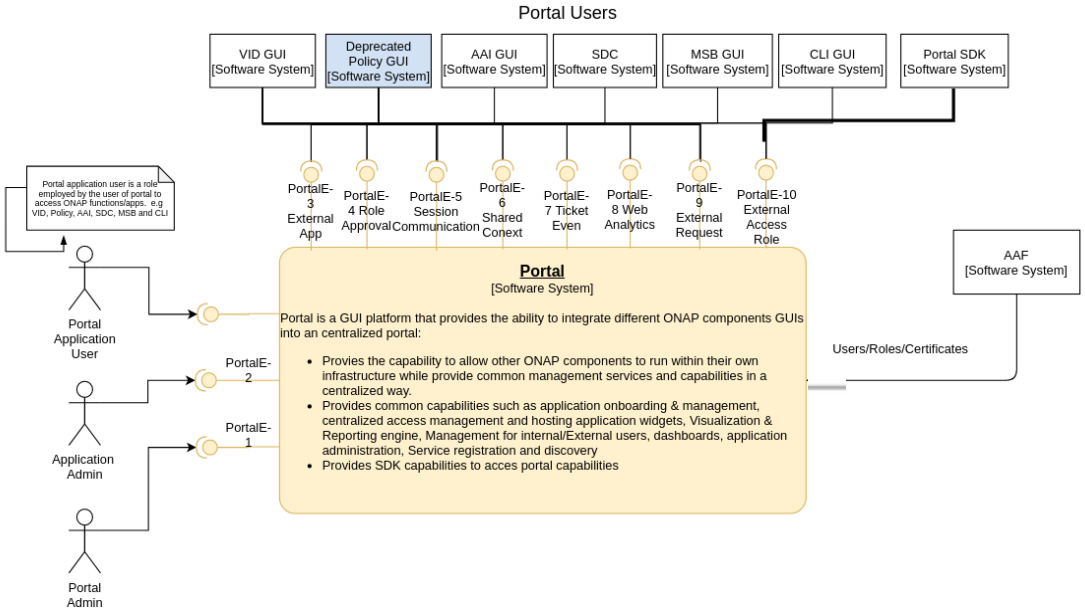
Presenters: Sunder Tattavarada / Sandeep Shah, Sudarshan Kumar, and Muni Mohan Kunchi

Agenda

- ONAP Portal Project and Architecture Overview
- ONAP Portal Deep Dive
  - Local Development Setup (Database, Angular CLI, Backend, Frontend / Angular 7)
- ONAP Portal SDK Deep Dive
- ONAP Portal Deployment Considerations
- Key Contacts and References
- Q&A

ONAP Portal Project and Architecture Overview

ONAP Wiki: https://wiki.onap.org/pages/viewpage.action?pageId=84642275



Portal is a GUI platform that provides the ability to integrate different ONAP platform GUIs into a centralized portal

- The capability to allow other ONAP components to run within their own infrastructure while providing common management services and capabilities in a centralized way

- Provides common capabilities such as:
  - Application on-boarding and management
  - Centralized access management
  - Hosting application widgets
  - Context-aware UI controls
  - Visualization & reporting engine

- Provides SDK capabilities to access portal capabilities
  - Software libraries and APIs
  - Seamless User interface experience

ONAP Portal Overview

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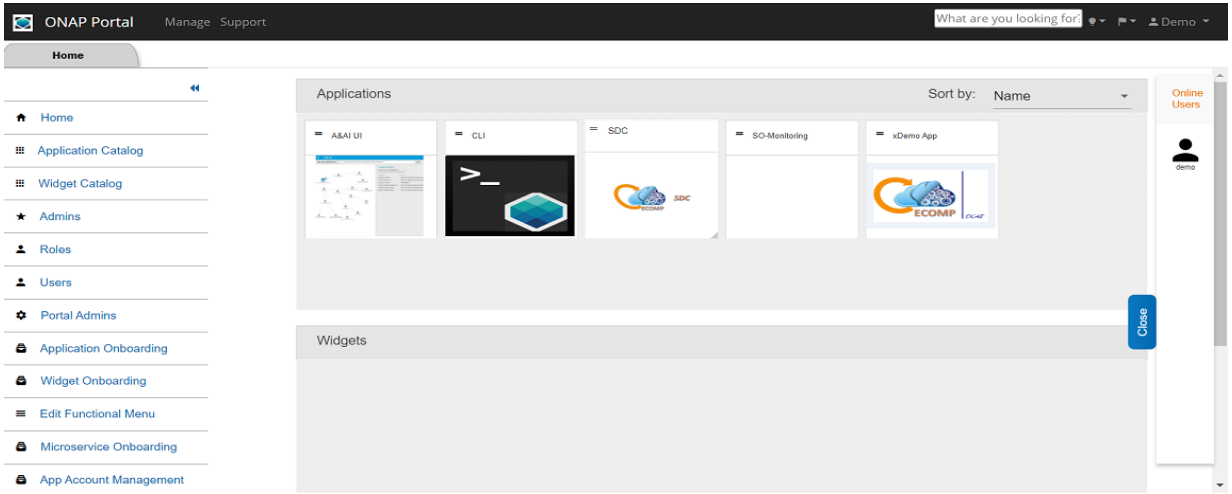
The ONAP portal is a web application that acts as the user interface and provides capabilities to design, test, certify, and deploy VNF/PNF and CNF based network services via onboarded partnering applications.



Key Features of ONAP Portal:

- Applications Onboarding
- Applications Catalog
- Microservices Onboarding
- Widgets Onboarding
- Widget Catalog
- Users Management
- Roles and Role Functions Management & Role Sync with AAF.
- Functional Menu Management

ONAP Portal Journey

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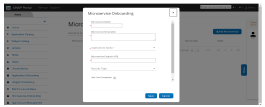
Applications Onboarding screen allow administrator to onboard different applications. This screen provides ability to search the onboarded applications and update the configuration details.



Microservices Onboarding screen allows administrator to onboard microservices. One can manage the microservices and test the services from this page.

User / Role Management: User provisioning can be managed from this screen in the portal. It allows an administrator to see the users of applications and manage their authorization (Roles).

Widget Onboarding: This screen allows developer to upload and manage widget details which appears on the widget catalog screen.

Widget Catalog: Ability to visualize all widgets by ONAP Portal users.

Setting up ONAP Portal for Local Development

ONAP Wiki: https://wiki.onap.org/display/DW/Setting+Up+Your+Development+Environment

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Back-End Application

Prerequisites:

- Java version 1.8
- Maven version 3
- Tomcat version 8.5
- MariaDB Server version 10.1.11-MariaDB

Back-End Application Setup

- Build the ecomp-portal-BE-os project ("mvn clean install")
- Deploy war file “portal-be-os.war” to tomcat

Front-End Application

Prerequisites:

- Node version-10.16.0
- Angular CLI version-7.0.4

Front-End Application Setup

- Build portal-FE-os project ("npm install")
- Run "npm start"

Database Setup

Run DDL and DML scripts from the location ecomp-sdk\epsdk-app-common\db-scripts folder

1. EcompSdkDDLMySql_3_3_Common.sql
2. EcompSdkDMLMySql_3_3_Common.sql

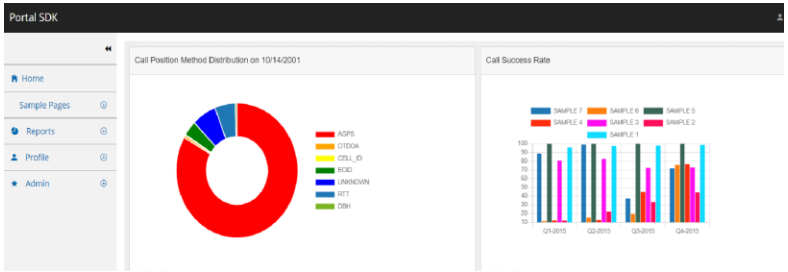
Run DDL and DML SQL scripts from ecomp-sdk\epsdk-app-os\db-scripts

1. EcompSdkDDLMySql_3_3_OS.sql
2. EcompSdkDMLMySql_3_3_OS.sql

Gerrit: https://gerrit.onap.org/r/admin/repos/portal

ONAP Portal SDK Overview

The ONAP Portal SDK used to create a sample web app that can be deployed onto a Tomcat instance. The SDK App can be used standalone (i.e., command line) or within the Eclipse IDE.



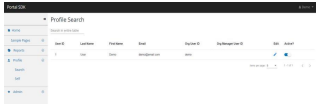
Key SDK features:

- RAPTOR – Reporting Capabilities
- Profile Search and Self Profile Management
- Roles and Role Functions Management
- Menu Management – Managing left Menu Items.
- Pre-defined templates

ONAP Portal SDK Journey

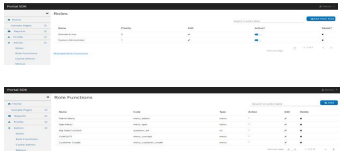
SDK RAPTOR provides a web based-engine to build various reports including Linear and Dashboard.

Sample Report



Profile Search: Search/manage user's profile. It gives us the capabilities to edit or activate/in-activate the profile.

Self-Profile Management: Manage self-profile. It allows editing of any information related to user's own profile.



Role and Roles Function Management: This is used to manage User's Roles and Role Functions for non-centralized applications.

ONAP Portal SDK - RDP Data Table and Grid

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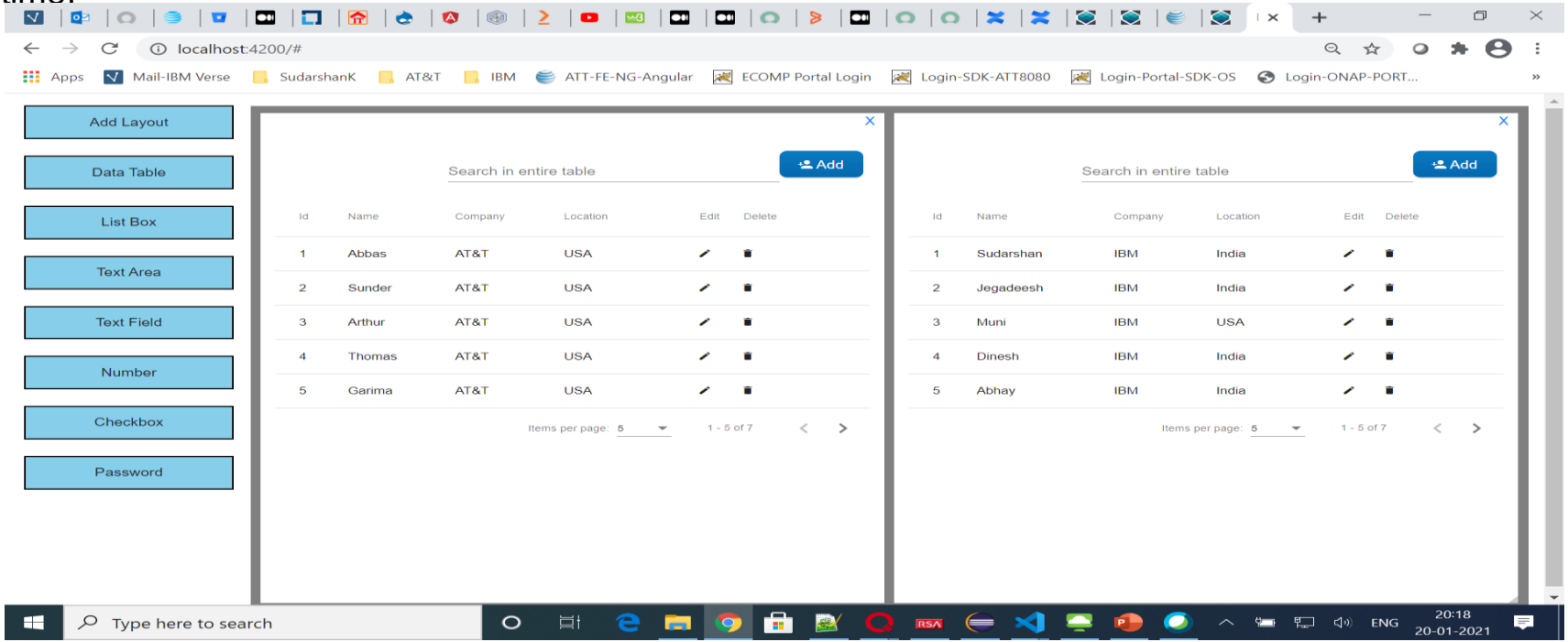
RDP (**R**apid application **D**evelopment **P**latform) is a custom Angular library developed to eliminate redundant code with respect to Data table, and it also provides options to configurations Data table at run time.



Setting up ONAP SDK into Local Environment

ONAP Wiki:

https://wiki.onap.org/display/DW/Developing+Portal+SDK+based+UI+App+and+the+initial+setup

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Back-End Application

Prerequisites:

- Java version 1.8
- Maven version 3
- Tomcat version 8.5
- MariaDB Server version 10.1.11-MariaDB

Back-End Application Setup

- Build epsdk-app-os project ("mvn clean install")
- Deploy war file "epsdk-app-os.war" to tomcat

Front-End Application

Prerequisites:

- Node version-10.16.0
- Angular CLI version-7.0.4

Front-End Application Setup

- Go to epsdk-app-os\ngapp
- "npm install"; "npm start"

Database Setup

Run DDL and DML scripts from the location ecomp-sdk\epsdk-app-common\db-scripts folder

1. EcompSdkDDLMySql_3_3_Common.sql
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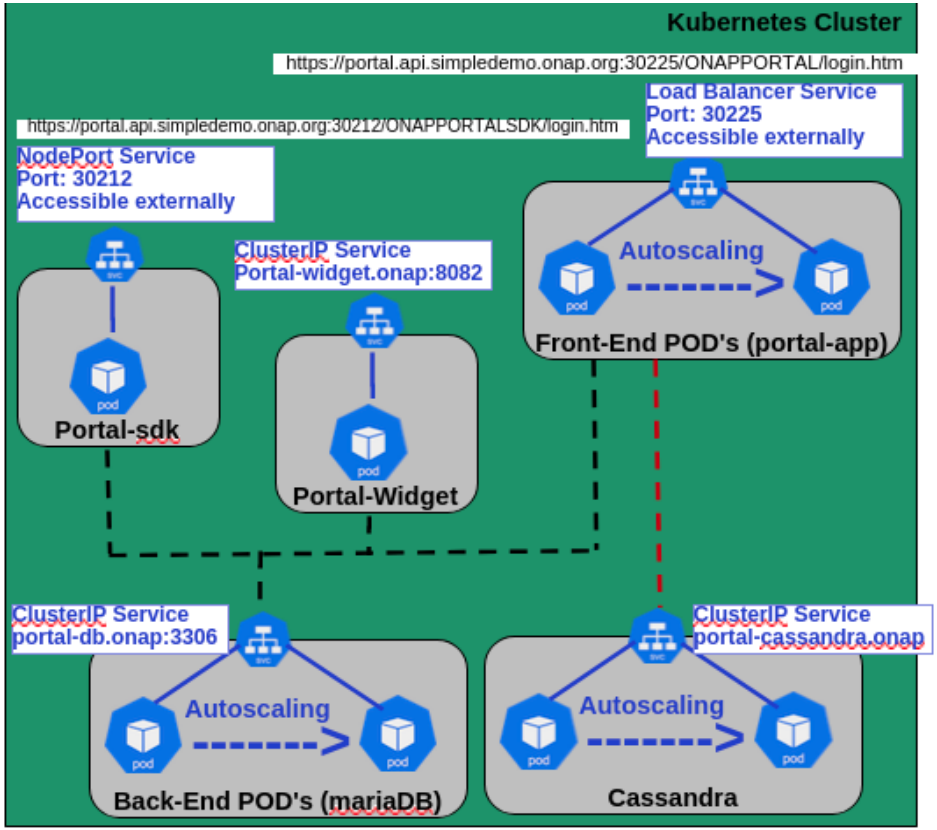
1. EcompSdkDDLMySql_3_3_OS.sql
2. EcompSdkDMLMySql_3_3_OS.sql

https://gerrit.onap.org/r/admin/repos/portal/sdk

Portal Deployment – Kubernetes Cluster/HELM Charts



Windriver: SB-00

```
ubuntu@sb-00-rke-node:~$ kubectl get pods -n onap -o wide | grep portal
dev-portal-app-5f8fd7df5c-4lhdm                                   2/2     Running     0          61d
    10.42.11.20    sb-00-worker-9    <none>           <none>
dev-portal-cassandra-7778f5f7d4-v6b6s                             1/1     Running     0          61d
    10.42.10.17    sb-00-worker-5    <none>           <none>
dev-portal-db-86599754bc-q9pmk                                    1/1     Running     0          61d
    10.42.11.19    sb-00-worker-9    <none>           <none>
dev-portal-db-config-m2sjd                                        0/2     Completed   0          61d
    10.42.8.24     sb-00-worker-1    <none>           <none>
dev-portal-db-config-xts8p                                        0/2     Init:Error  0          61d
    10.42.8.20     sb-00-worker-1    <none>           <none>
dev-portal-sdk-65d68596b9-n22jp                                   2/2     Running     0          61d
    10.42.9.16     sb-00-worker-7    <none>           <none>
dev-portal-widget-76c8957fdd-6dx8m                                1/1     Running     0          61d
    10.42.9.15     sb-00-worker-7    <none>           <none>
```

POD's for Portal Component

```
ubuntu@sb-00-rke-node:~$ kubectl get svc -n onap  | grep portal
portal-app                        LoadBalancer   10.43.129.189   <pending>
                     8443:30225/TCP                                  61d
portal-cassandra                  ClusterIP      10.43.137.80    <none>
                     9160/TCP,7000/TCP,7001/TCP,7199/TCP,9042/TCP    61d
portal-db                         ClusterIP      10.43.89.104    <none>
                     3306/TCP                                        61d
portal-sdk                        NodePort       10.43.174.146   <none>
                     8443:30212/TCP                                  61d
portal-widget                     ClusterIP      10.43.228.130   <none>
                     8082/TCP                                        61d
ubuntu@sb-00-rke-node:~$
```

Services for Portal Component

References

- **ONAP Wiki Portal**
  - **Portal Platform Project (**https://wiki.onap.org/display/DW/Portal+Platform+Project)
  - **Portal Development Environment (**https://wiki.onap.org/display/DW/Setting+Up+Your+Development+Environment)
  - **Guilin ARC Portal Component Description (**https://wiki.onap.org/pages/viewpage.action?pageId=84642275)

- **Key Points of Contact**
  - **PTL: Sunder Tattavarada (statta@att.com)**
  - **Sandeep Shah (sandeep.shah@att.com)**

Q&A

Thank you!

Backup
- Application screenshots

ONAP Portal – Application Onboarding

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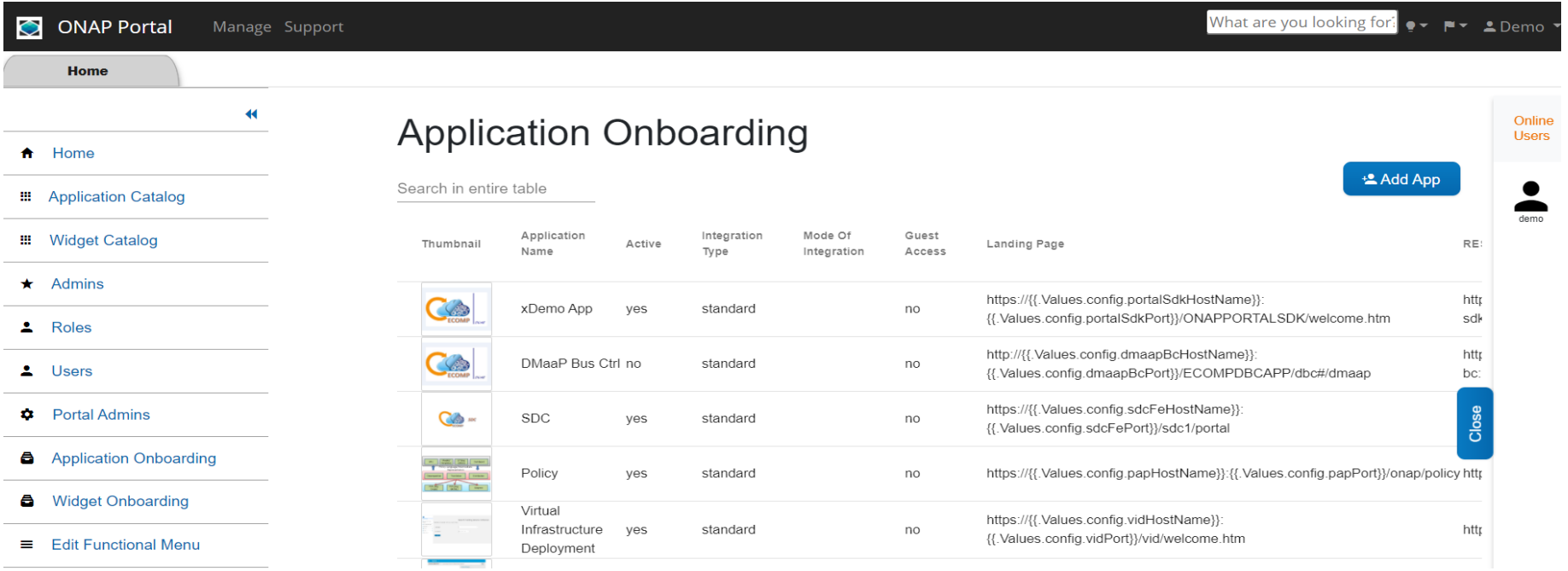
Applications Onboarding screen allow administrator to onboard different applications. This screen provides ability to search the onboarded applications and update the configuration details.



ONAP Portal – Microservices Onboarding

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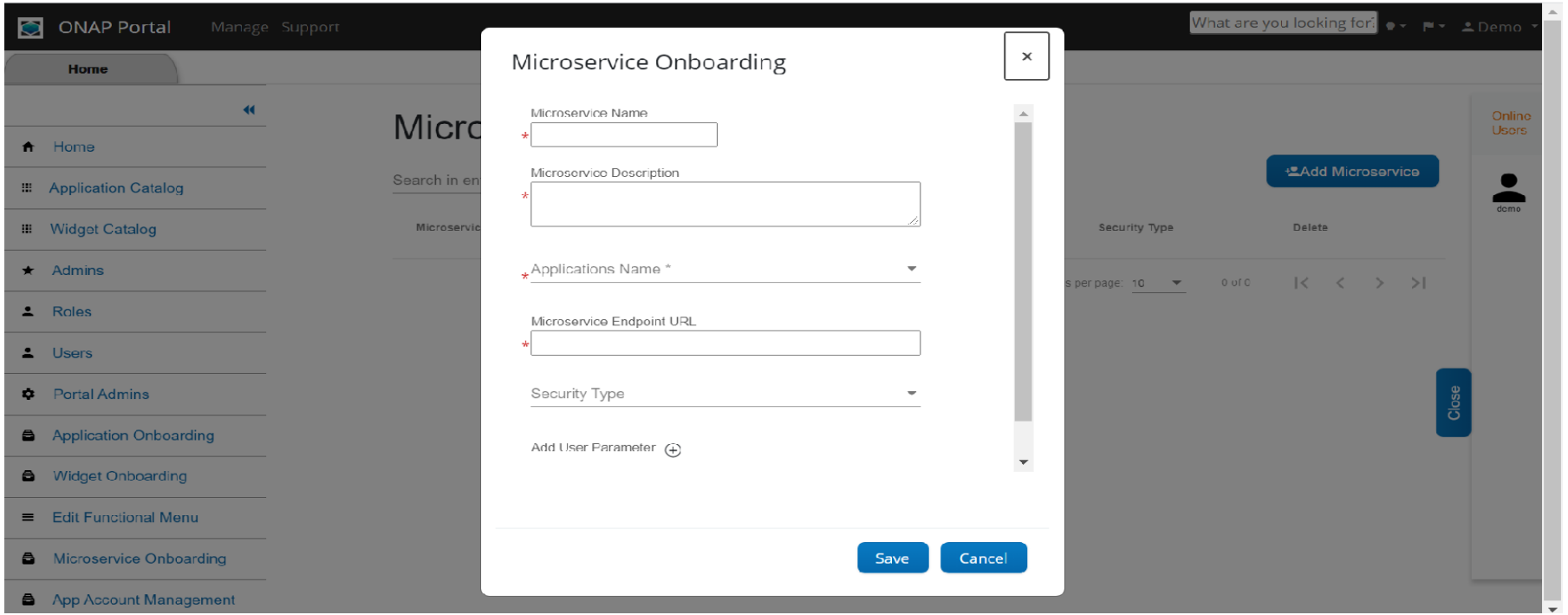
Microservices Onboarding UI allows an administrator to onboard/manage and test microservices.



ONAP Portal – Widget Onboarding

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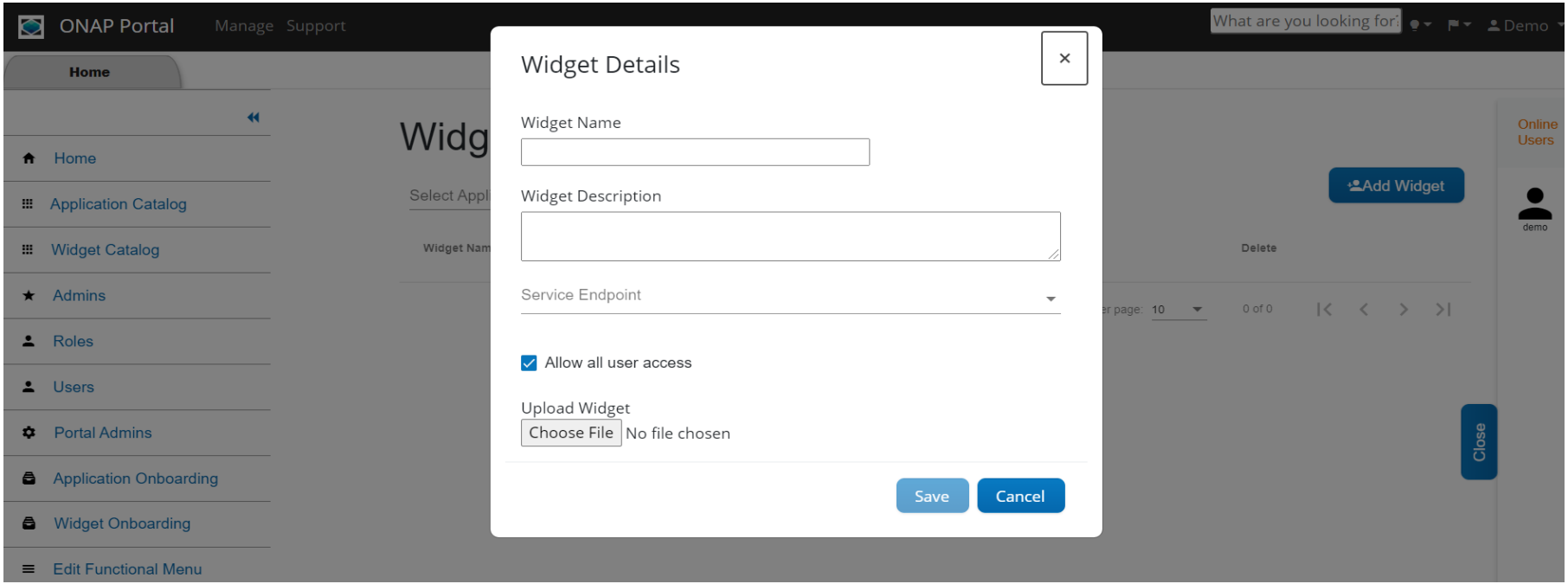
Widget Onboarding: This screen allows developer to upload and manage widget details which appears on the widget catalog screen.



ONAP Portal – Widget Catalog

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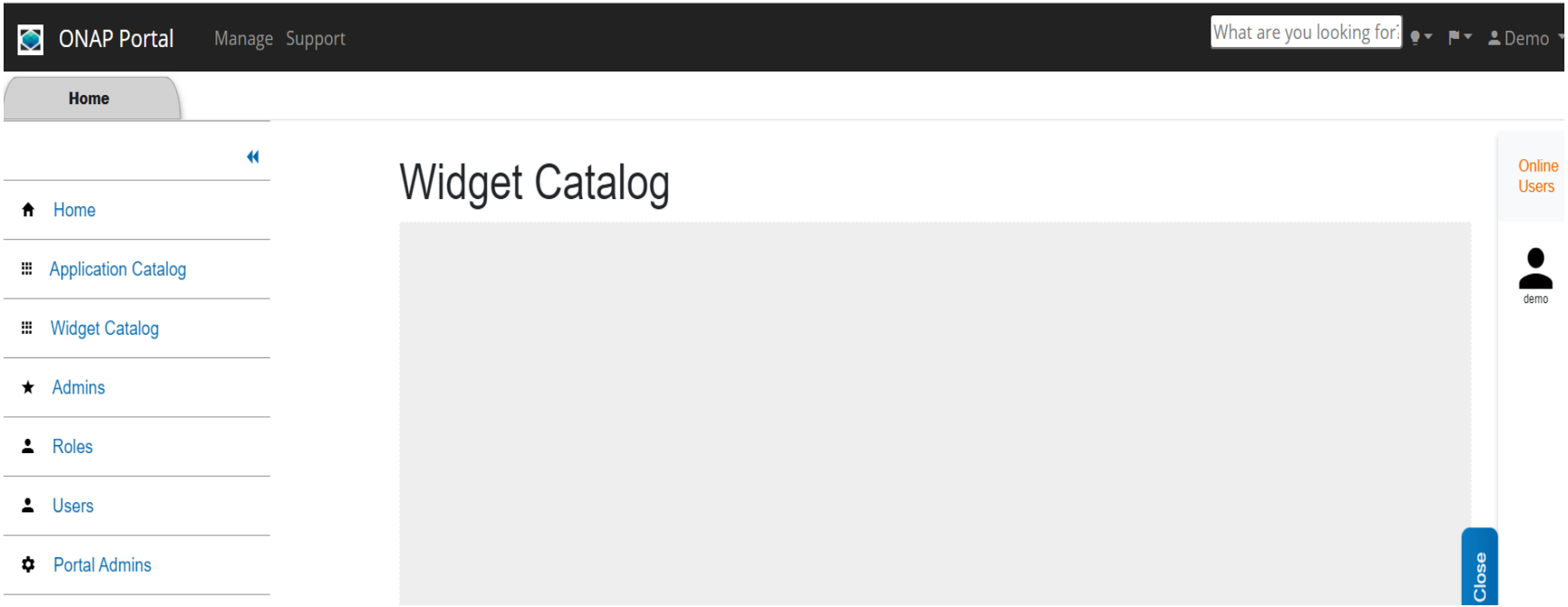
Widget Catalog: Ability to visualize all widgets by ONAP Portal users.



ONAP Portal – User/Role Management

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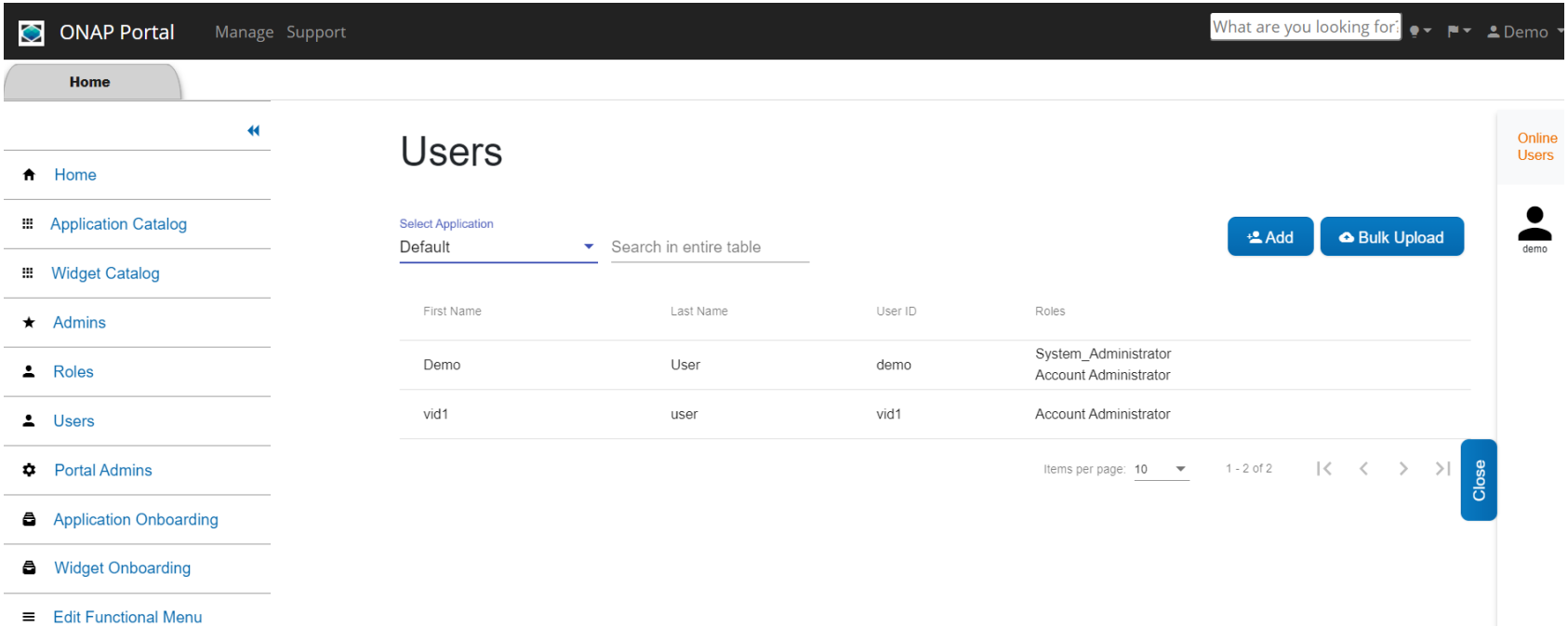
User/Role Management: User / Role Management: User provisioning can be managed from this screen in the portal. It allows an administrator to see the users of applications and manage their authorization (Roles).



ONAP Portal SDK RAPTOR

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SDK RAPTOR provides a web based-engine to build various reports including Linear and Dashboard.

Report Id	Report Name	Description	Report Owner	Create Date	Copy	Edit	Delete	Schedule	Run
11	cvxcvcx	xvcxvxc	Demo User	09/11/2020					
1	Demo Report - chart	this report show chart config	Demo User	09/25/2019					
4	Demo Report - Dashboard type	Compose several sub-reports into one view. Drag report from Data section and Chart section.	Demo User	05/06/2020					
2	Demo Report - drilldown with formfield	Demo Report - drilldown with formfield	Demo User	09/25/2019					
3	Demo Report - parent	this report show how many users for each ROLE. click Counts number to see USER details.	Demo User	12/06/2019					
9	fsdfds	dsfdsfds	Demo User	09/11/2020					
12	sdfdsf	dsfdsf	Demo User	09/11/2020					
7	TEST	TEST	Demo User	08/13/2020					

ONAP Portal SDK – Report

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Sample Report

ONAP Portal SDK – Profile Search

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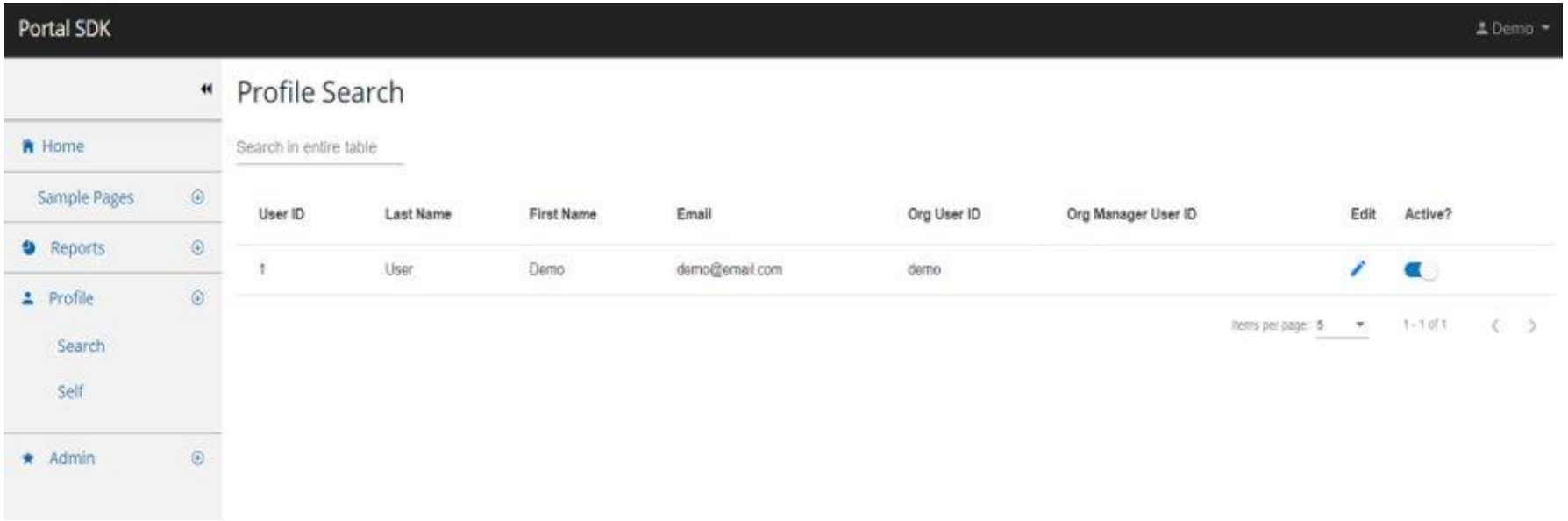
Profile Search: Search/manage user's profile. It gives us the capabilities to edit or activate/in-activate the profile.



ONAP Portal SDK – Self Profile Management

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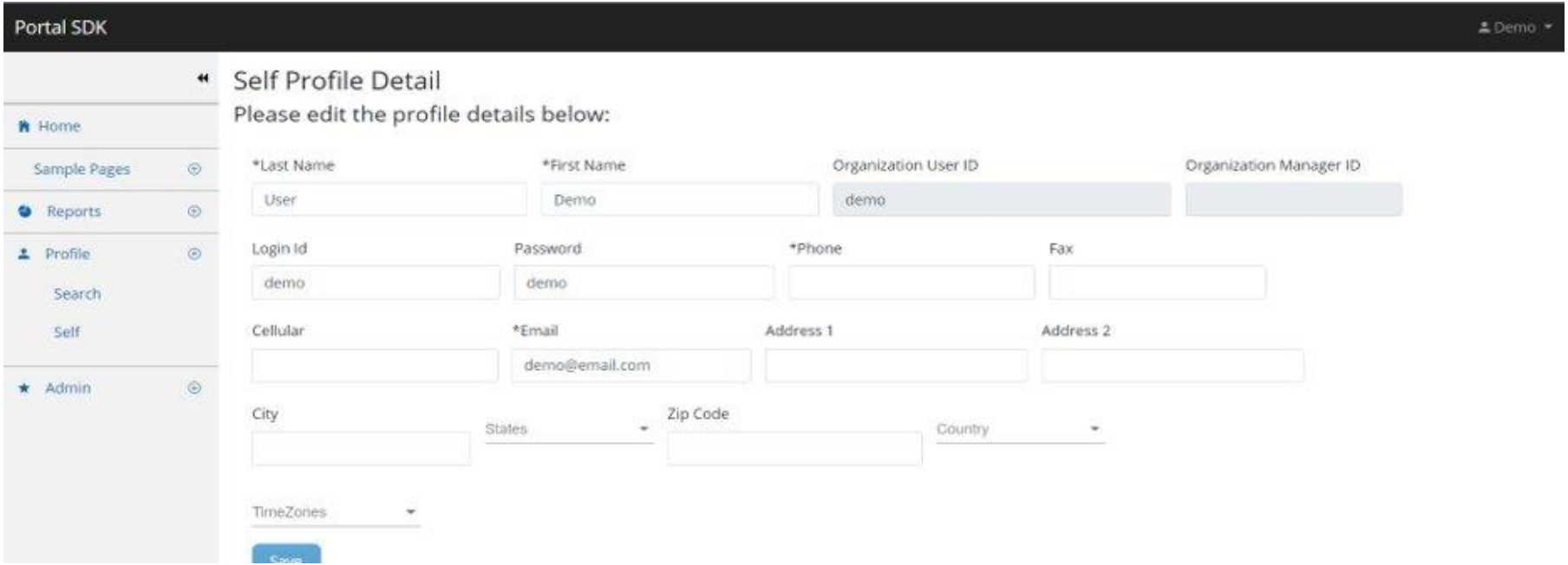
Self-Profile Management: Manage self-profile. It allows editing of any information related to user's own profile.



ONAP Portal SDK – Role and Roles Function Management

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Role and Roles Function Management: This is used to manage User's Roles and Role Functions for non-centralized applications.

Thank you!