Portal Platform and SDK Features for ONAP developers

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ONAP Beijing Release Developer Forum

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Today's focus

What is Portal Platform?

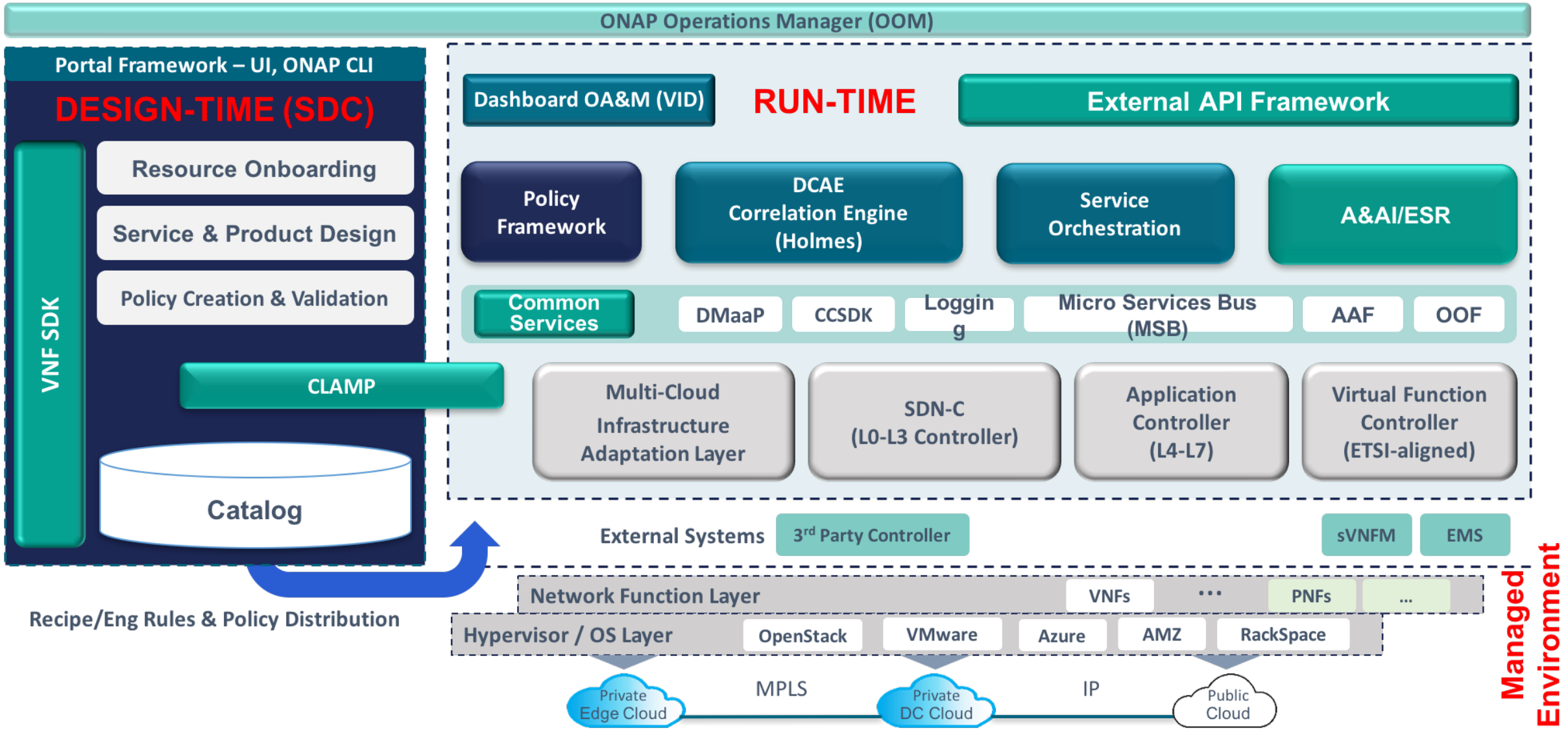
How does Portal work?

How to use Portal's SDK to build new application?

What's next for Beijing?

Questions and feedback

ONAP Overview



ONAP Portal - “The Control Panel for ONAP”

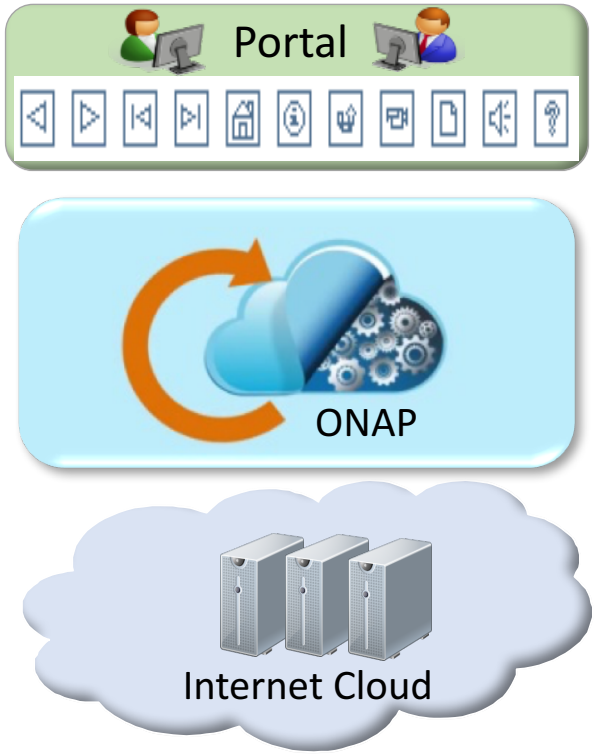
Provides single ***Access, Framework and SDK*** to develop new and integrate existing applications to support ONAP Platform and Service Management functions.

Applications Paradigm

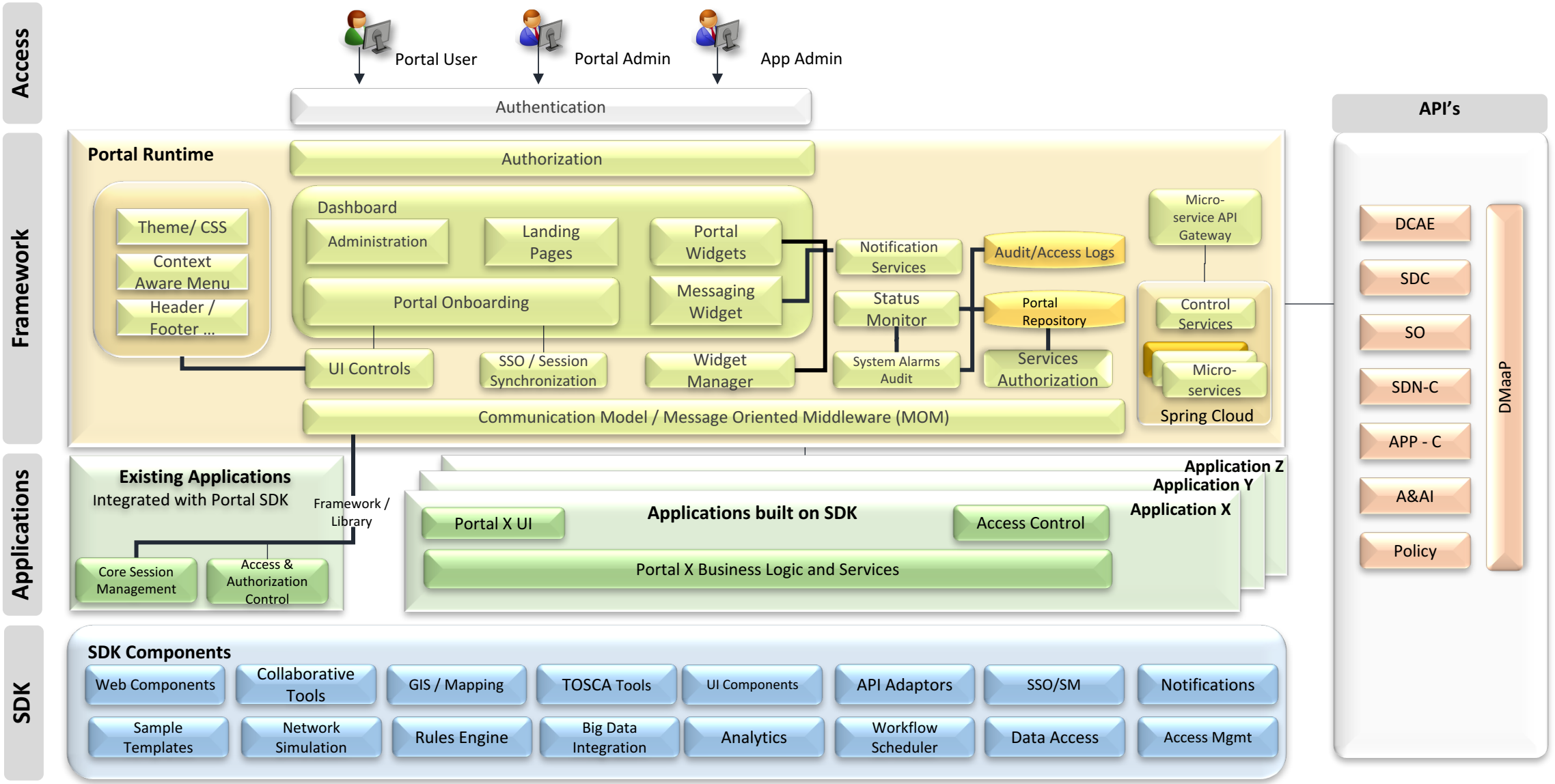
- ***Federated*** application development and onboarding model
- ***Distributed*** and decoupled applications on cloud infrastructure
- ***Integrated*** existing and 3rd party applications with minimal effort
- ***Managed*** applications hosting environment (upcoming)

Key Drivers

- ***Single*** access point, authentication, authorization with personalized content
- ***Reusable*** software libraries and API’s via Portal SDK and Framework
- ***One-Stop*** access for virtualized services design, test and distribution functions
- ***Secure*** role based access for ONAP platform administration
- ***Operations*** support for VNF lifecycle management and service assurance
- ***Consistency*** across broad set of tools and applications
- ***Seamless*** user interface and experience
- ***Self-Service*** internal and external access for customers and vendors



ONAP Portal Architecture



ONAP Portal User Functions

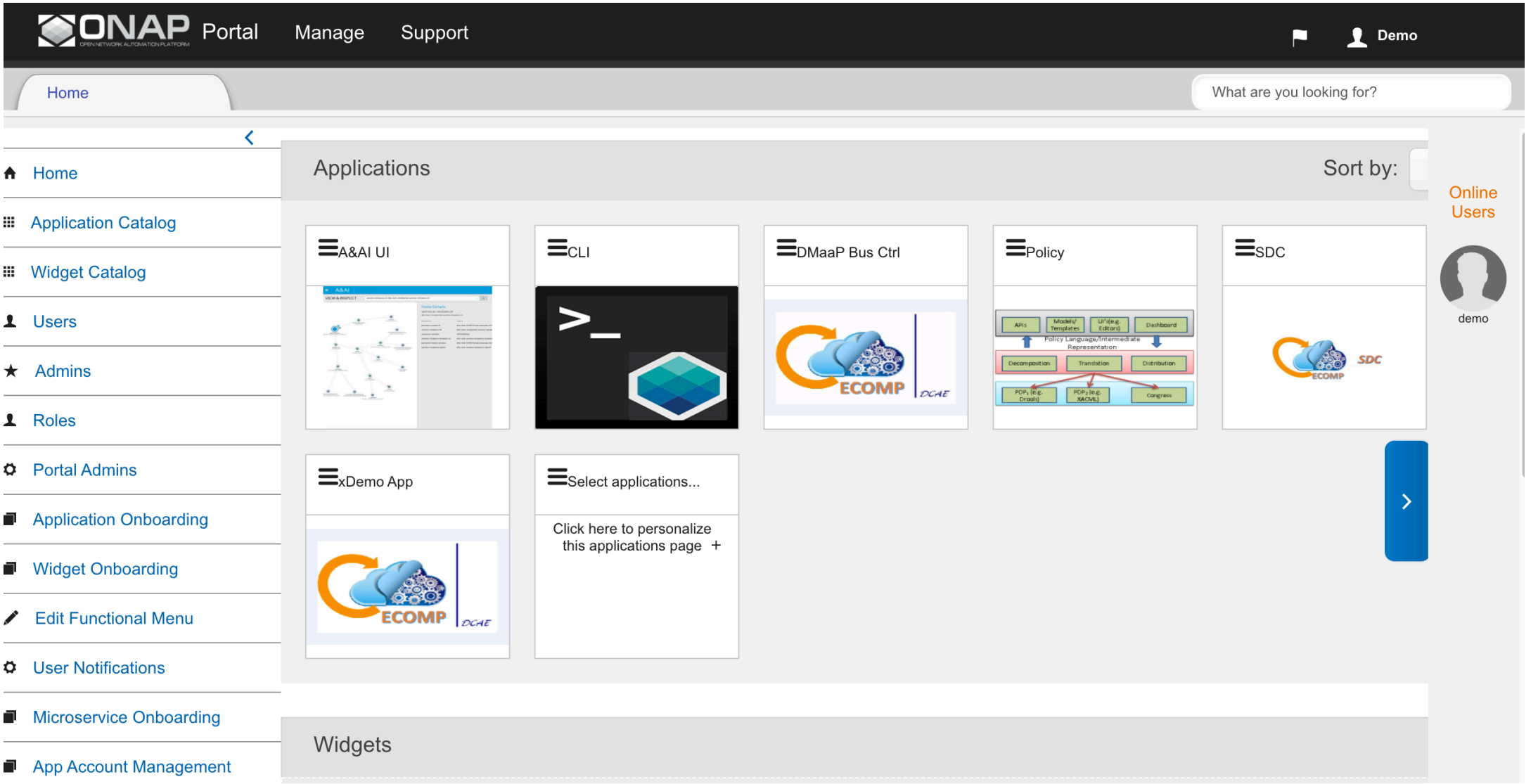
Design

- Product Design
  - Create Product
  - Create Vendor Software Product
- Design Administration
  - User/Category Management
- Testing
  - Test/Approve a Resource or Service
- Catalog Browser
  - Manage Resource/Service/Product
- Distribution
  - Distribute a Service
- Resource/Service Design and Onboarding
  - Approve Service for distribution
  - Create a license model
  - Create a Resource / Service
  - Create/Manage Policy

Operation

- Technology Management
  - Message Bus Management
  - Network Operations
    - VF Management
    - Router Management
  - Service Topology
    - Viewer
  - IP Address Management
  - Customer Configuration
  - Closed Loop Management
    - Control Loop Automation Management
  - Change Management
    - Change Scheduling, Orchestration & Validation
- Operations Planning
  - Project Management
    - Team Tools
  - Policy Engineering
- Capacity Planning
  - Applications
- Technology Insertion
  - Name & Address
  - Infrastructure Provisioning
    - Infrastructure VNF Provisioning
  - Configuration
    - VNF Compose
- Performance Management
  - Network Analytics
  - Service Analytics
- Platform Management
  - ONAP Comp. OA&M
    - Databus Provisioning

Portal Platform Home Page



Demo Topics

- Homepage
  - Applications
  - Layout
- Access Management
  - Portal Administration
  - Account admin
  - Standard User
- Onboarding – Applications/Widgets
- Functional menu
- Personalization
- Notifications/Role based
- Search
- Support
  - Contact us
  - Get Access
- SDK Sample app

Portal's SDK - Applications Integration Levels

	Feature	Description
Basic (Minimum alignment for initial support)	**Single Sign-On**	Align with Corporate Security Authentication tooling and guidelines	Employ Corporate Security CSP Cookie or Junction (preferred) technology
	Authorization	Adopt/Integrate common roles & role management	Role Administration/synchronization
	Style	Align to User Experience Guidelines	Utilize common Style Sheets (CSSs) and libraries
	Device Compliance	Enable UIs to be exposed on multiple device types	Align to common UI technologies /libraries
	Auditing, Logging	Status monitoring and system level logging / alarms / auditing	Utilize SDK tooling to implement required auditing capabilities
Target	**Component**	Factor functional capabilities into Component UIs to facilitate navigation at the functional level	Utilize ONAP SDK to build component based Uis that enable functional navigation/personalization
	Session Mgmt	Implement Session Management to drive a consistent behavior across partner applications	Employ Corporate Security Cookie or Junction (preferred) technology
	Context Sharing	Participate in Context Sharing capabilities drive an integrated experience relative to current context	Utilize ONAP SDK to enable Context Sharing capabilities and associated interactions/interfaces
Extended	**Usability Enhancements**	Search, Analytics, Visualization, Workflow, Rules, Animations	Utilize ONAP SDK to build usability enhancements to applications

Portal SDK Features part 1

Single sign-on from Portal via encrypted cookie

Centralized user and role management at Portal

- Application defines roles OR roles can be delegated to AAF
- Implemented via REST API
- SDK provides complete API implementation
- Functions associated to each role
- Page-level checking of function authorization

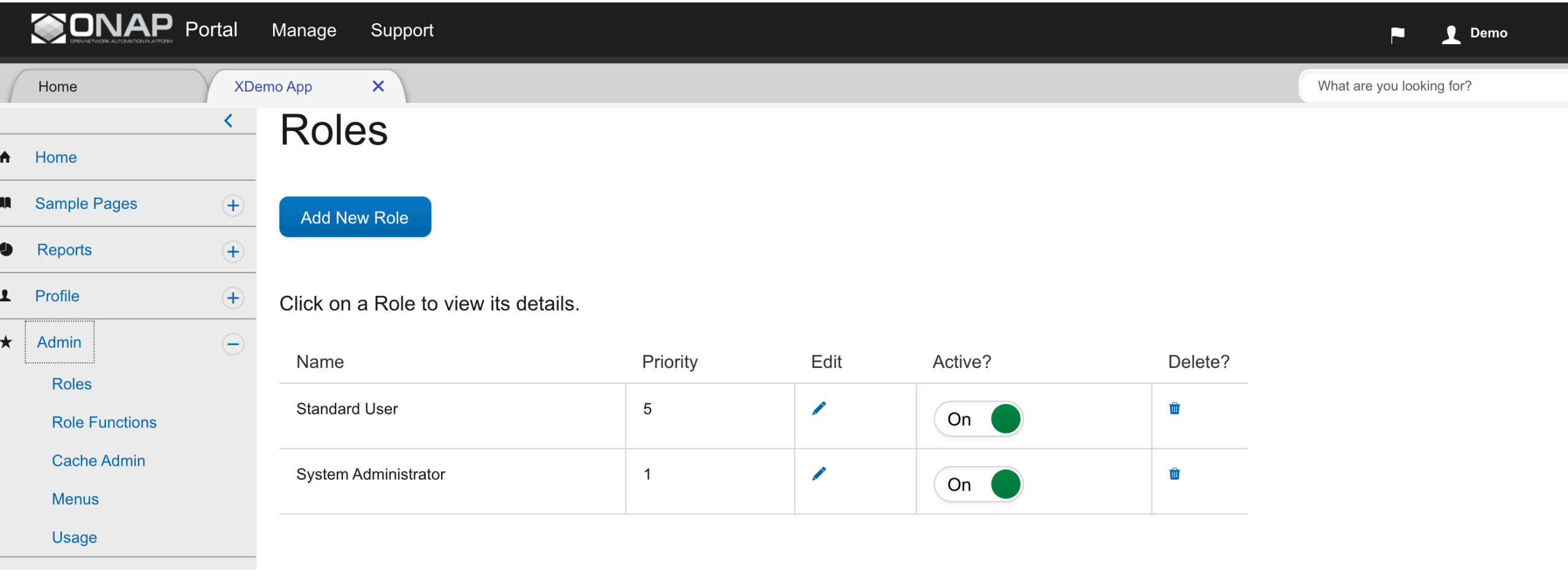
Application session management across ONAP applications

- Active in any application keeps all sessions alive

Seamless user experience across the Platform

- Look and feel compliance

SDK App Role Management



Portal SDK Features part 2

Full implementation of ONAP-compliant auditing and logging

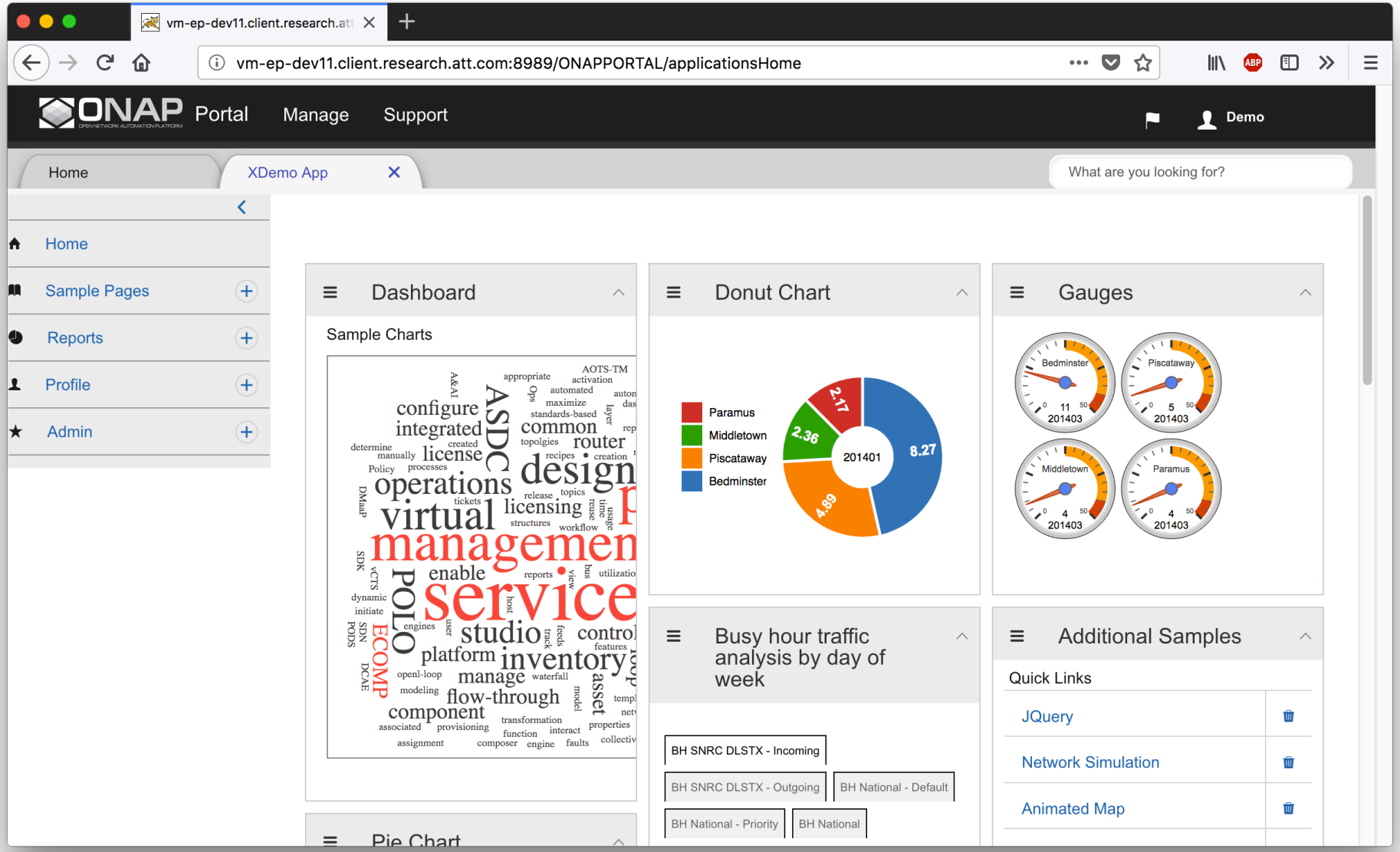
- Based on EELF contributed to ONAP
- In Beijing, support ELK log analysis

Basic caching (context sharing) via Portal

- Applications can share data with each other via REST APIs

Demonstration code for DROOLS rule-engine integration

SDK App Landing



Portal SDK Reusable Pieces

Portal/SDK Libraries

- epsdk-fw
- epsdk-core
- epsdk-analytics
- epsdk-workflow
- Distributed via ONAP Maven repository

Portal/SDK application

- Web app based on Angular, Hibernate, Spring MVC
- Starting with a fully functional app accelerates development
- Demonstrates features of EPSDK libraries
- Requires database - MySql or Postgres
- Distributed via ONAP wiki as zip archive

What's next in Beijing?

Planned Contributions

- Scheduler Widget (dependent on policy, vid and scheduler teams)
- Role Centralization capability for framework based partners
- Bootstrapping of VID roles and tighter integration with AAF
- JUNIT – 50% code coverage
- Enhancements - Improved logging, Security Hardening, and SDK Simplification

Integration with Projects

- OOM – for support high availability
- AAF – for role authorization
- UsecaseUI
- CLI support

Questions

Thank You!

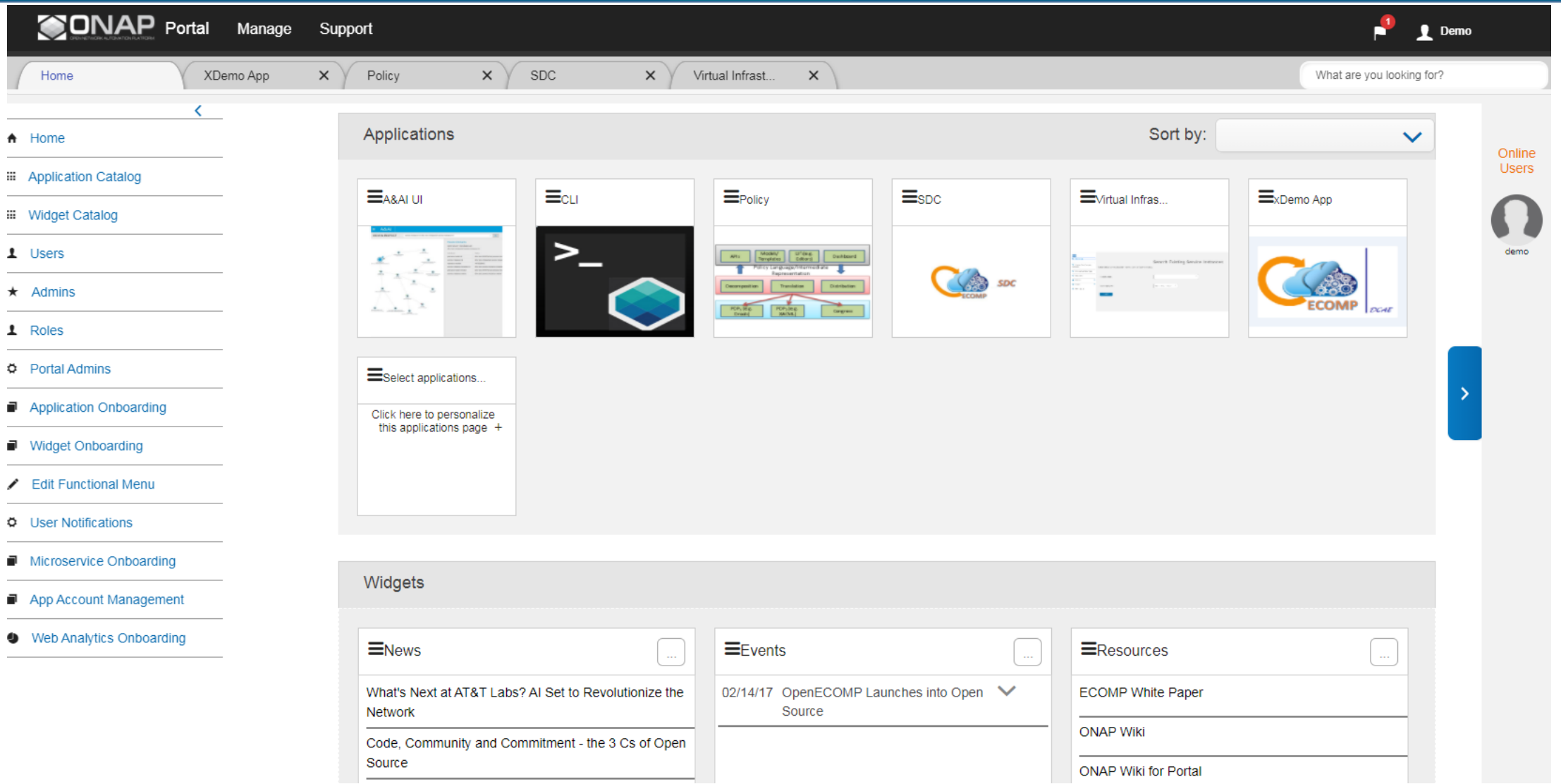
https://wiki.onap.org/display/DW/Portal

Getting started with Portal SDK Application

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

- Browsing the SDK
- Downloading the SDK
- Prerequisites
- Eclipse Project setup
- Database setup
- Eclipse Project/Tomcat configuration/startup
- Project Customization

Appendix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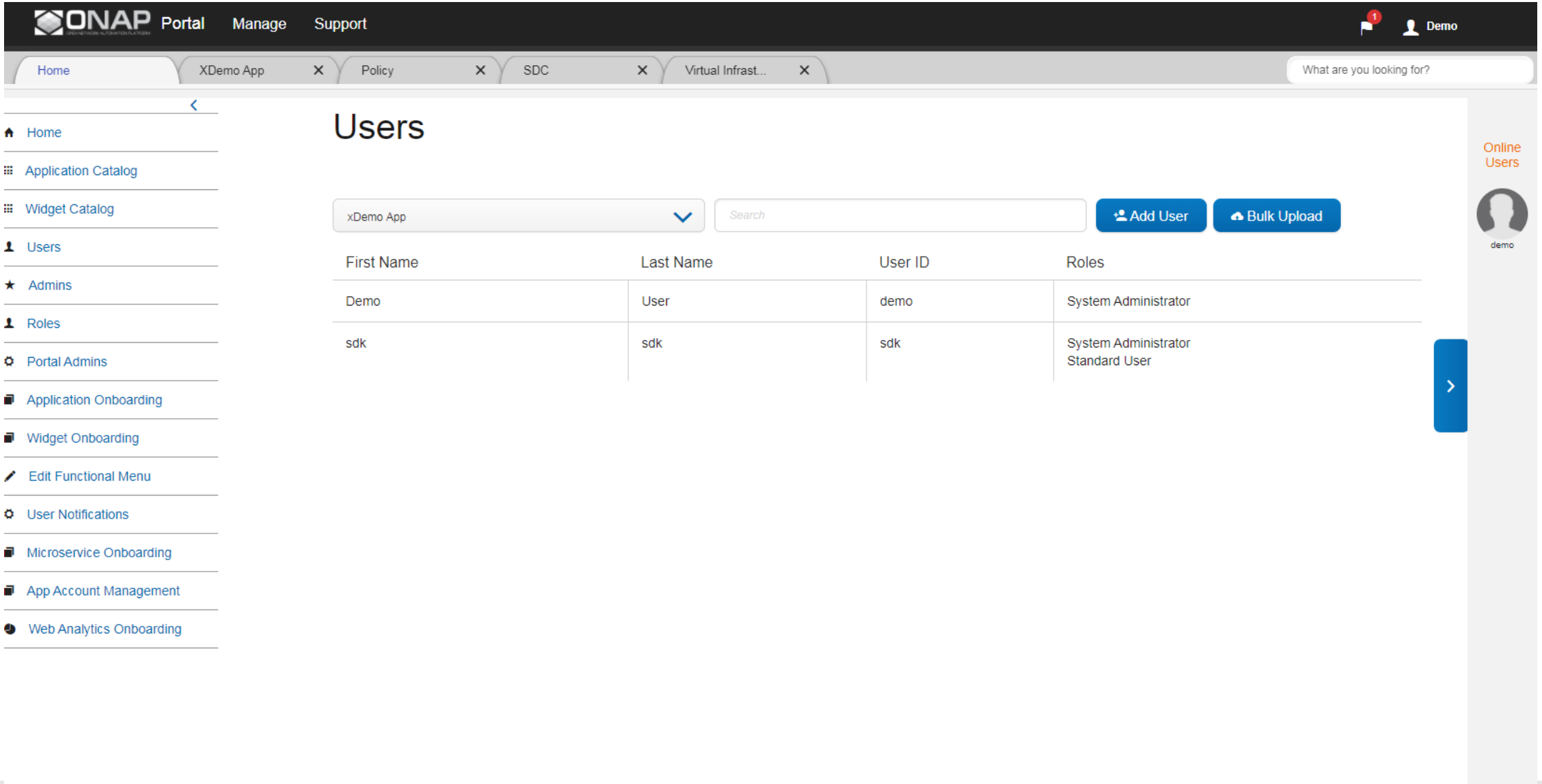
ECOMP White Paper
ONAP Wiki
ONAP Wiki for Portal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Standard User
Online Users
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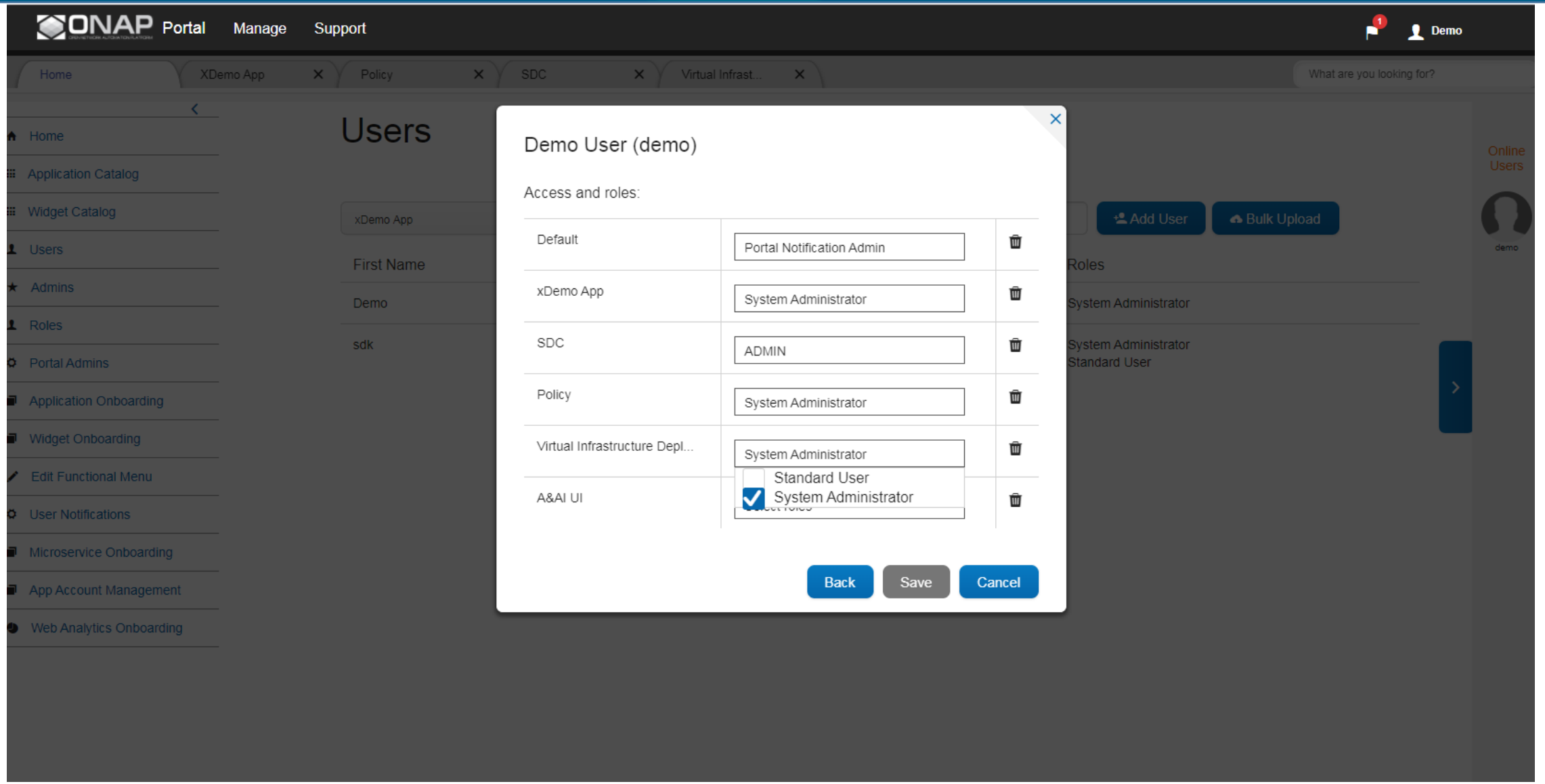
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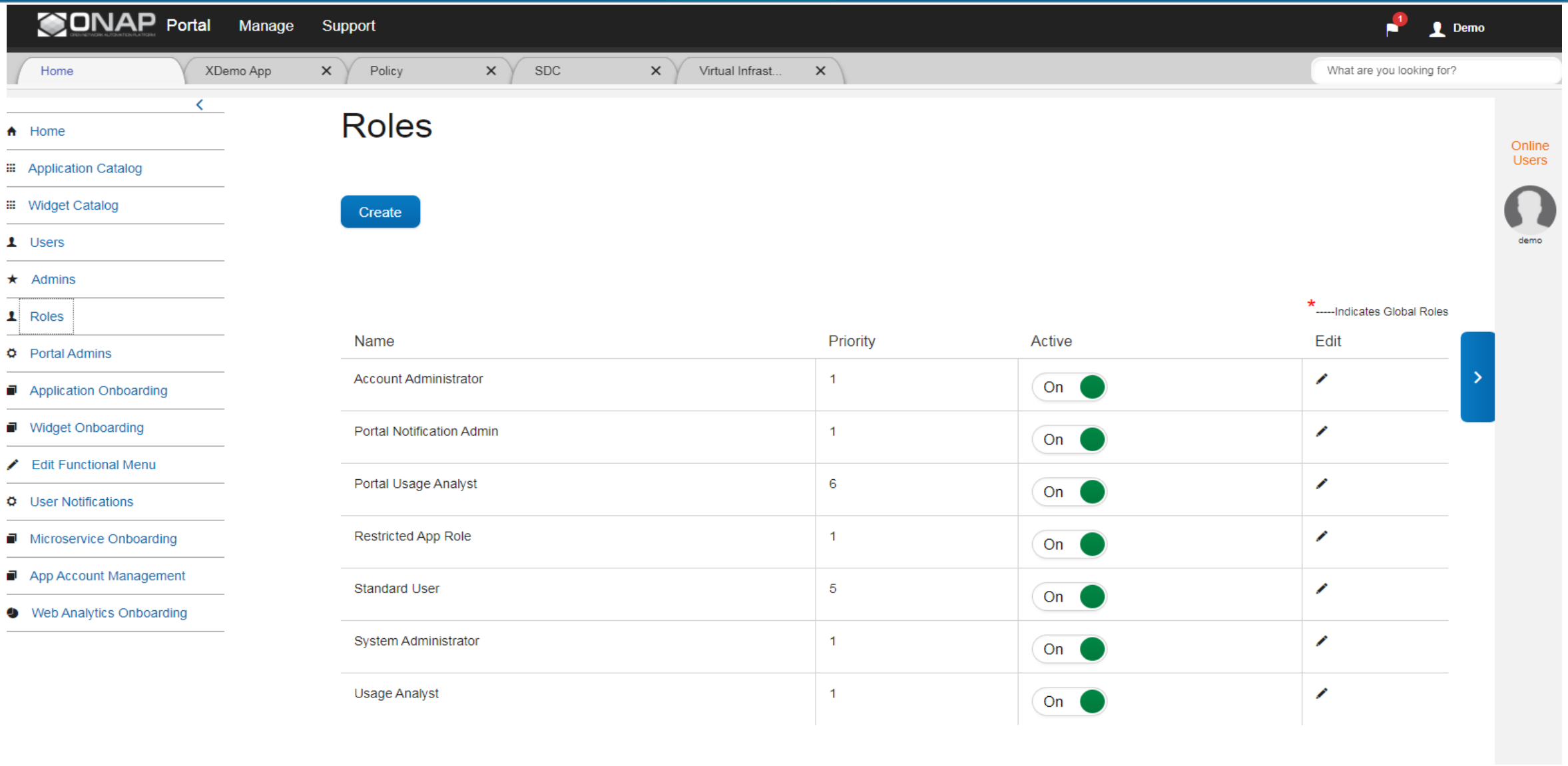
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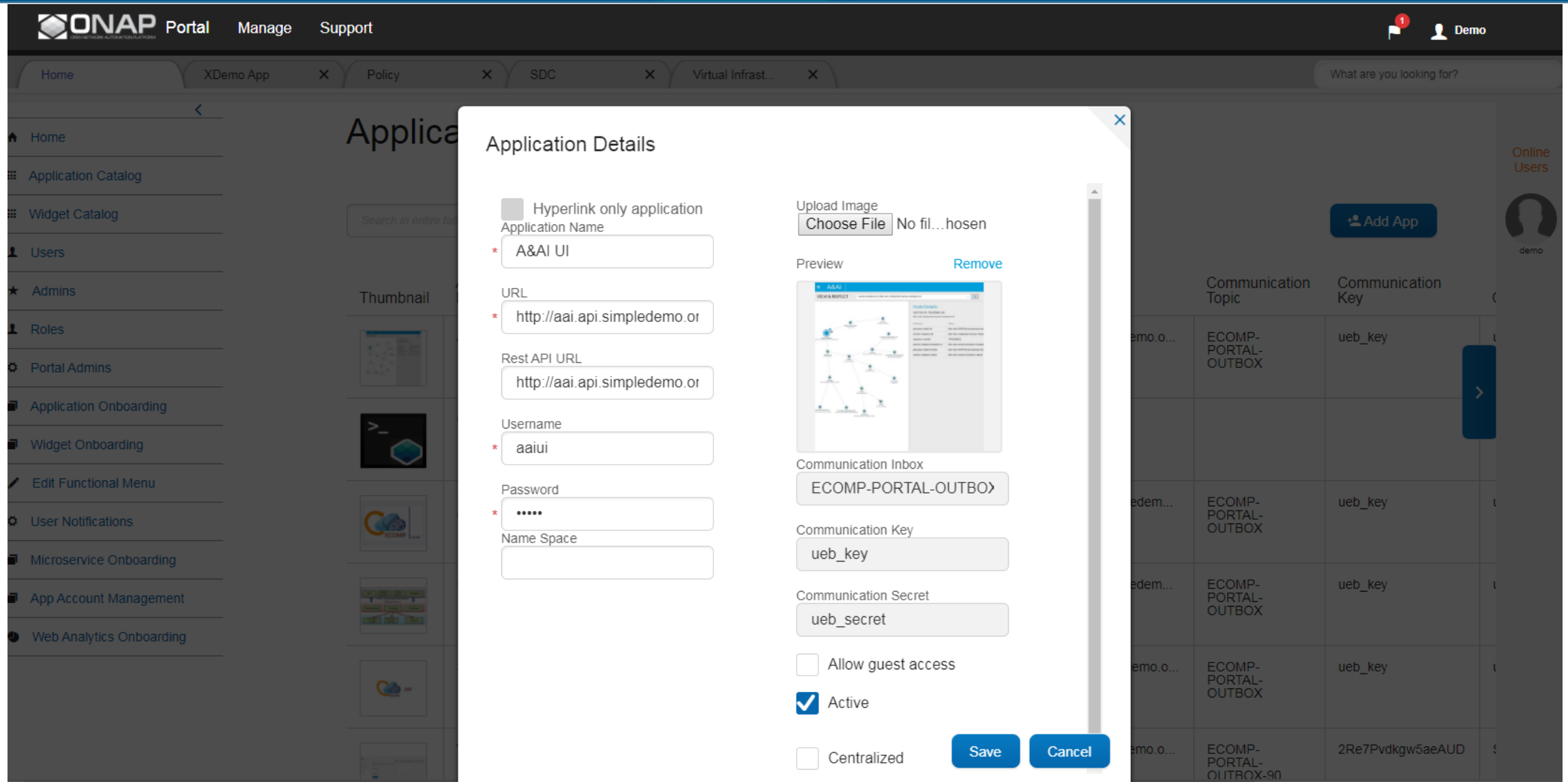
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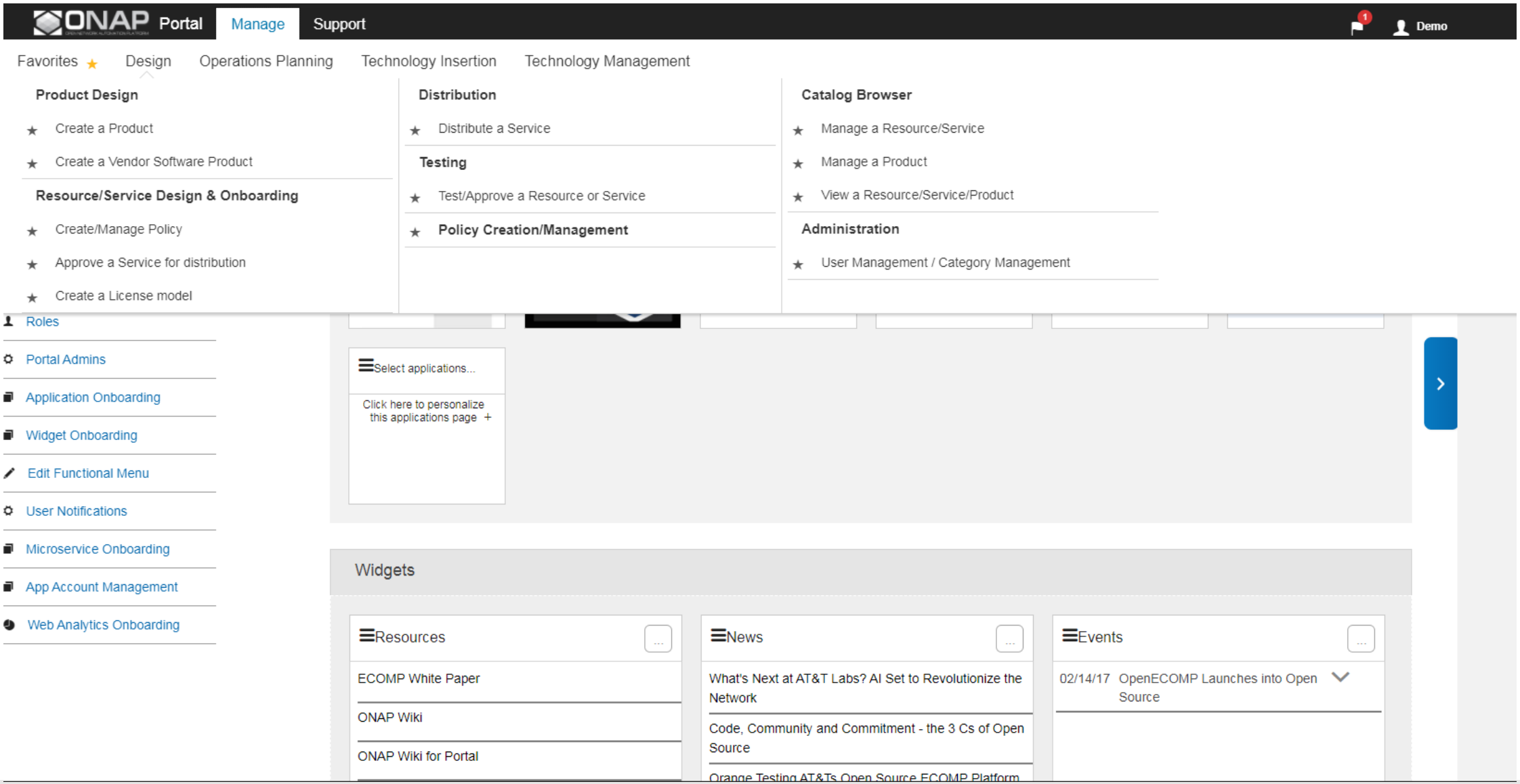
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Manage a Resource/Service
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Click here to personalize this applications page +
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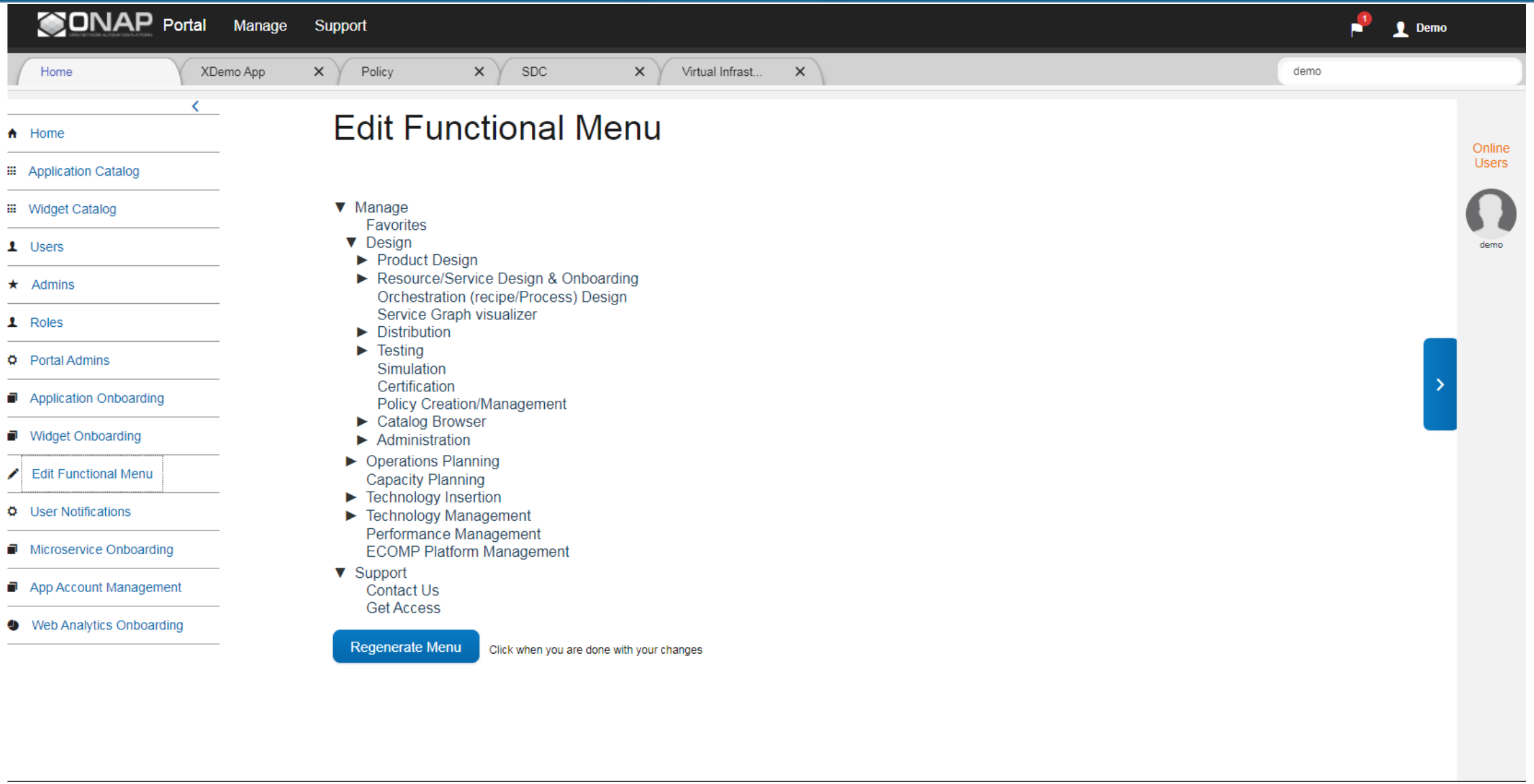
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App Account Management
Web Analytics Onboarding
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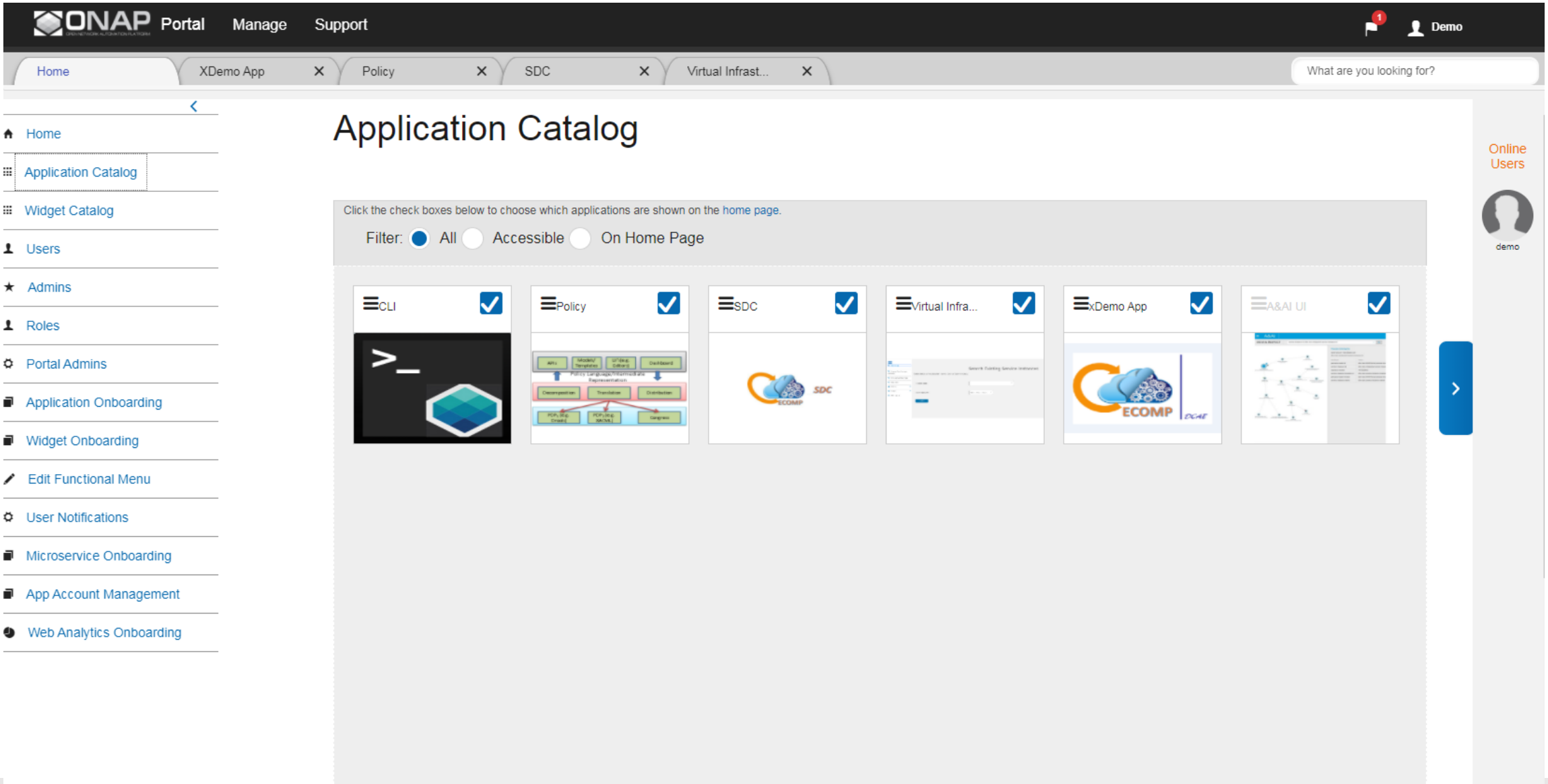
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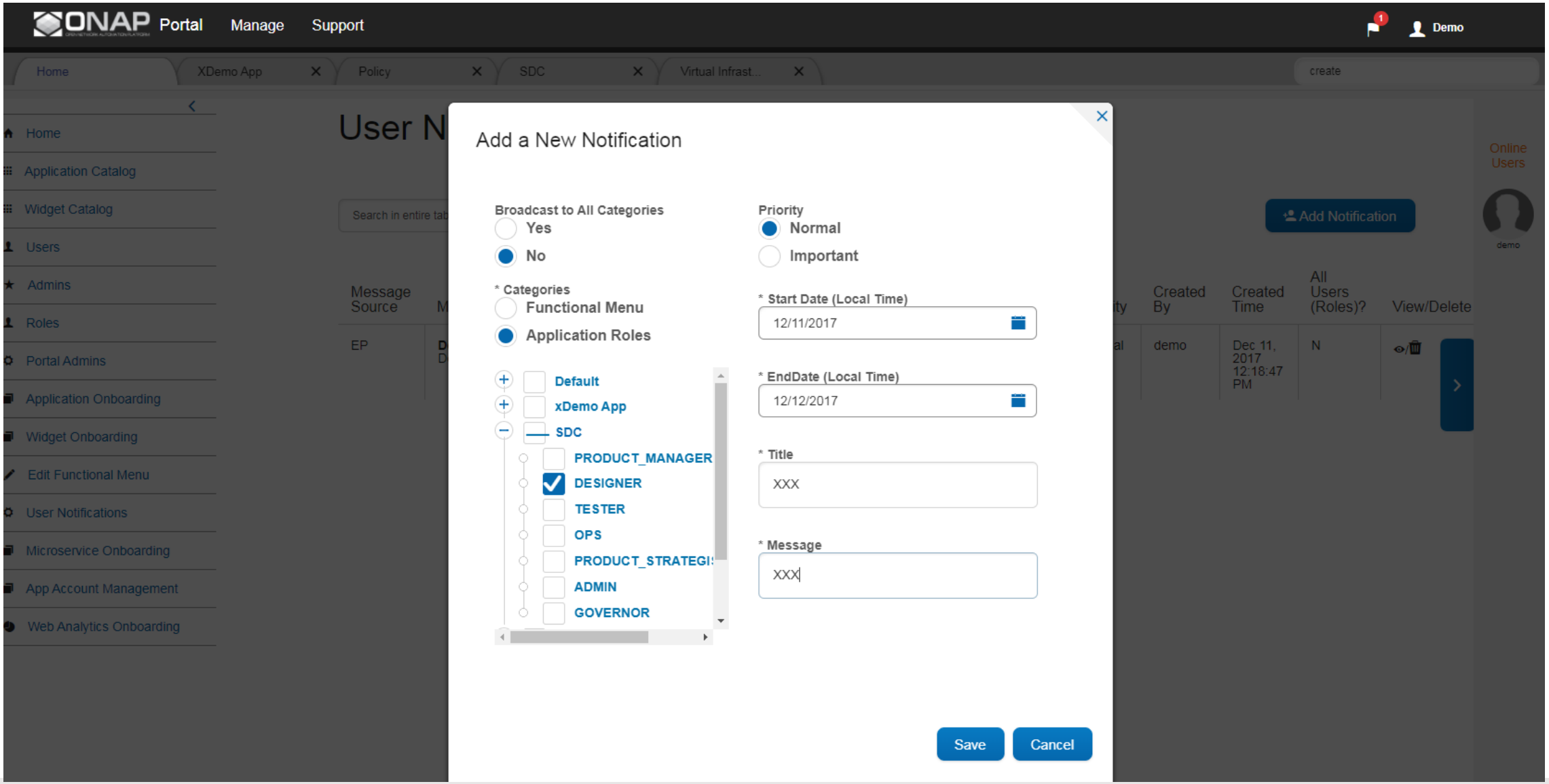
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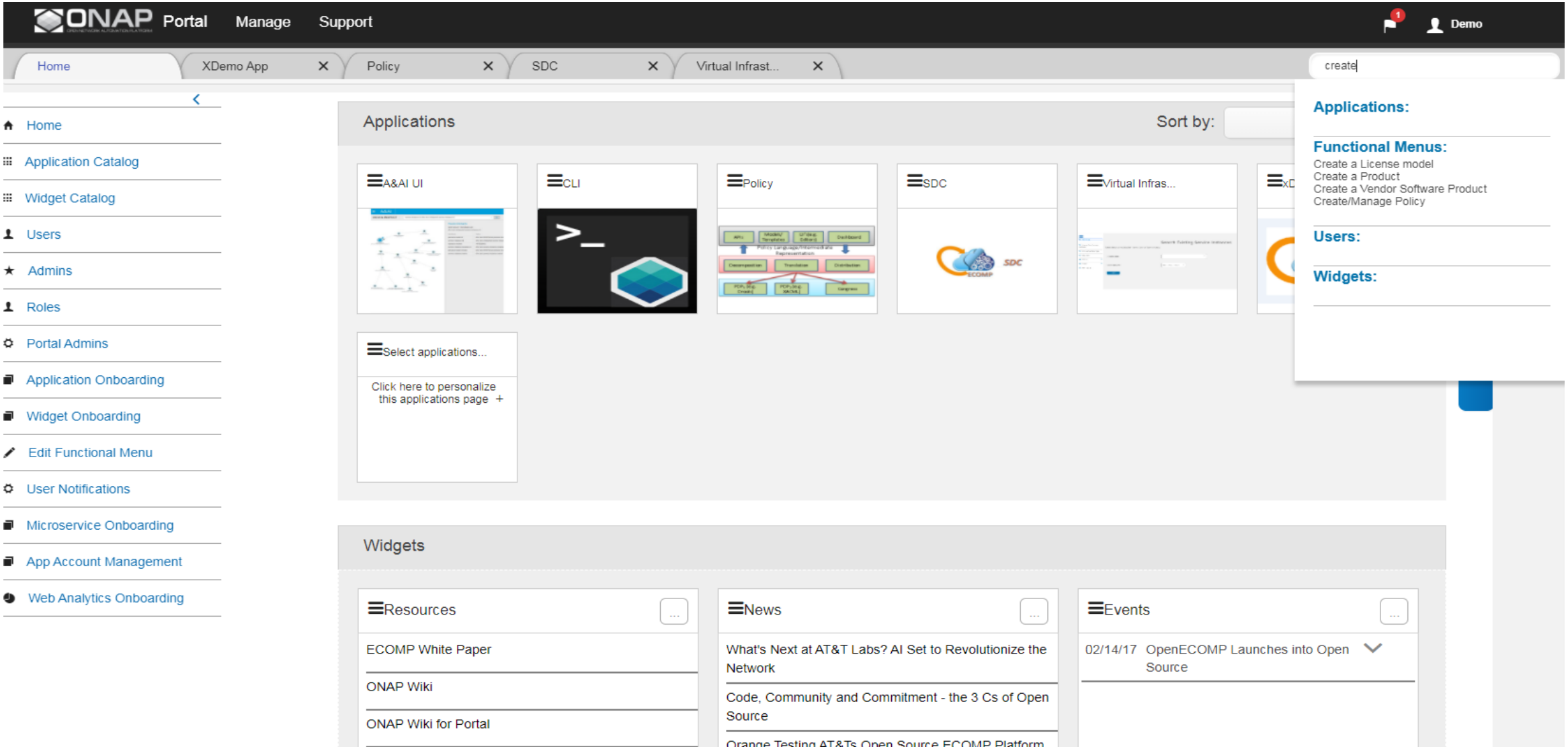
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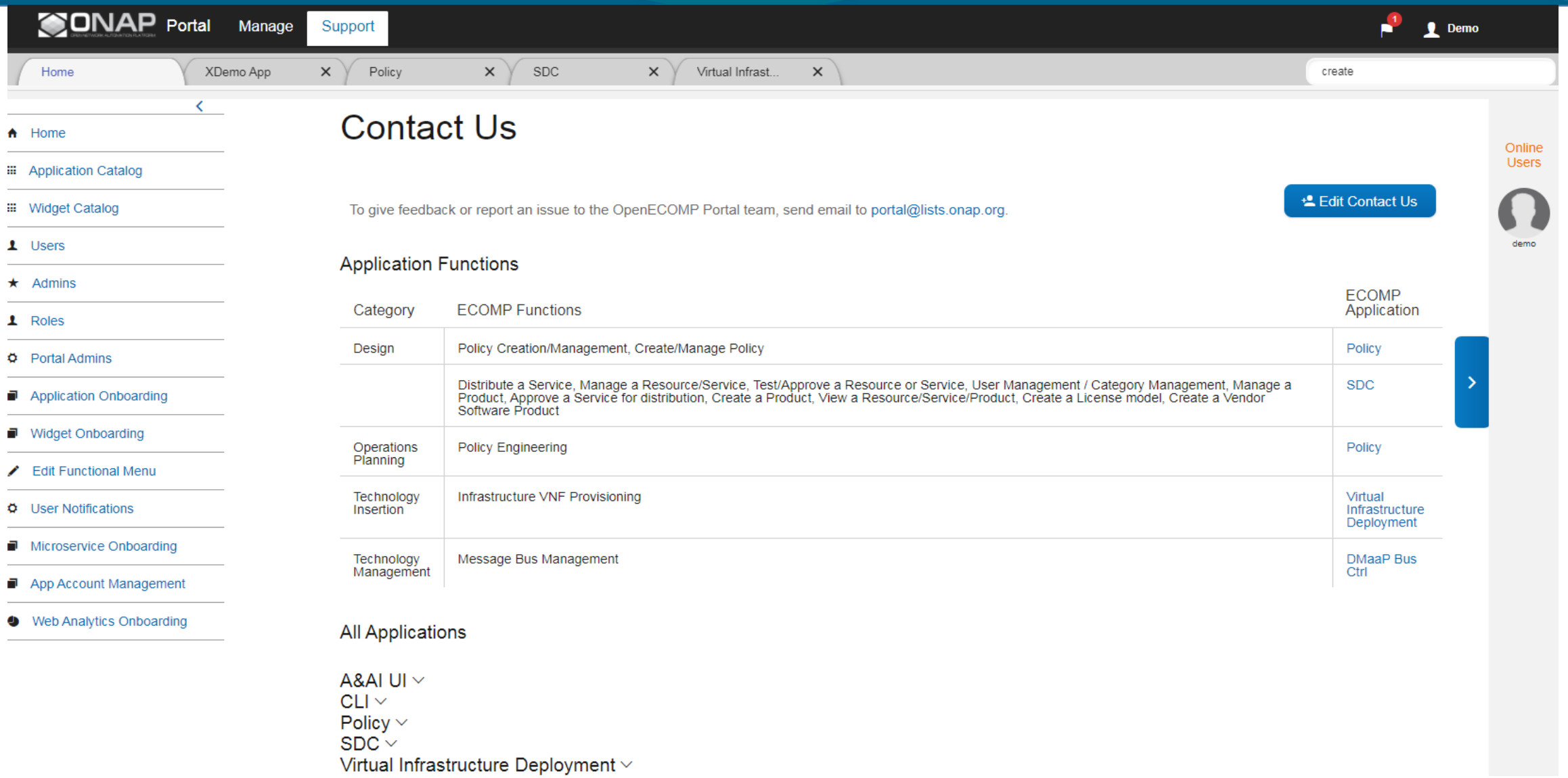
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Contact Us
To give feedback or report an issue to the OpenECOMP Portal team, send email to portal@lists.onap.org.
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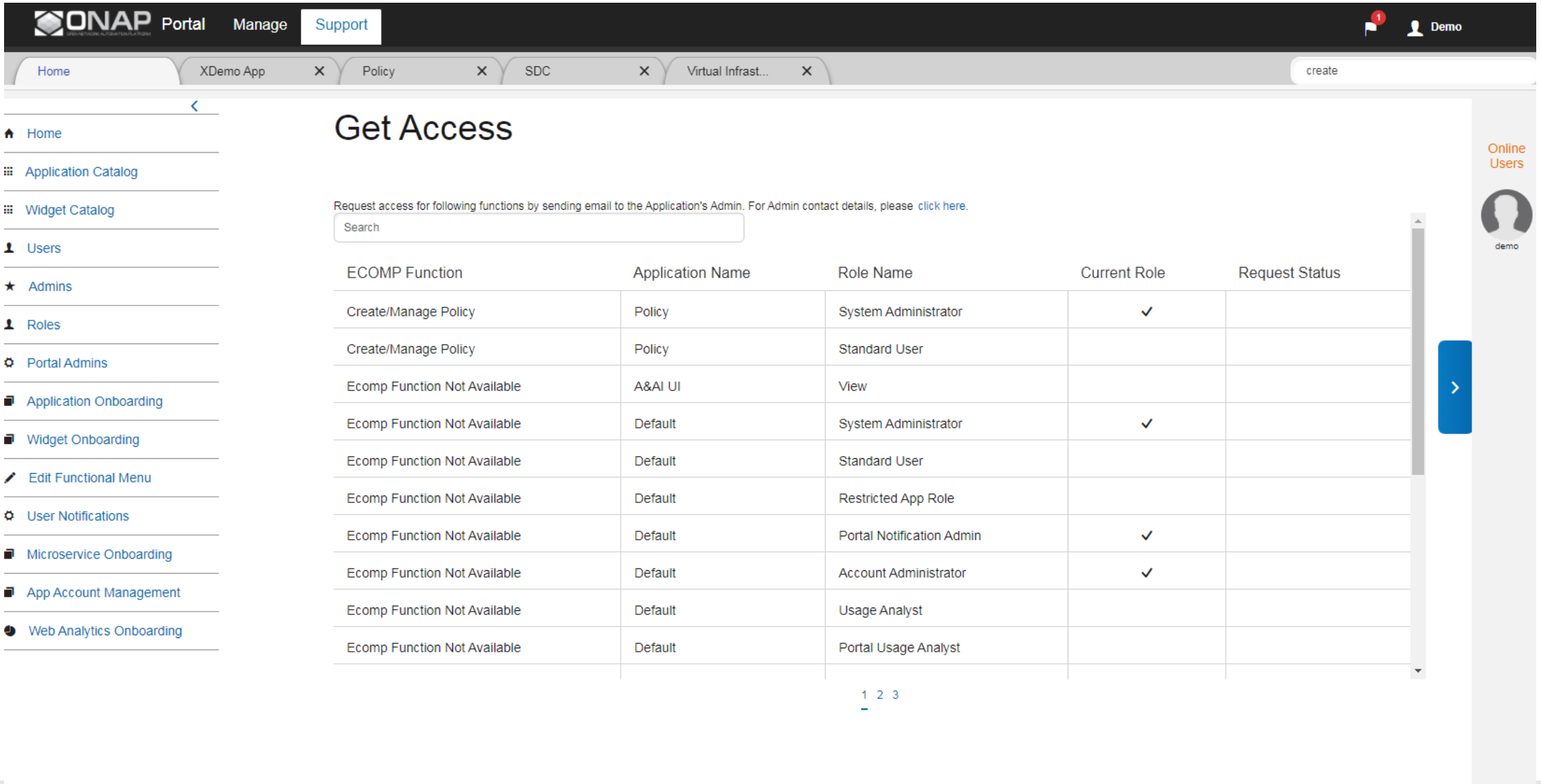
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User Notifications
Microservice Onboarding
App Account Management
Web Analytics Onboarding
Get Access
Request access for following functions by sending email to the Application's Admin. For Admin contact details, please click here.
Search
ECOMP Function
Application Name
Role Name
Current Role
Request Status
Create/Manage Policy
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System Administrator
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Policy
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Ecomp Function Not Available
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Restricted App Role
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Account Administrator
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Usage Analyst
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demo