UIM 20.3 – Flash Removal and New Product Enhancements

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Execution Status

Scope (in UIM)

- Inventory management
- Alarms and metrics
- MCS platform updates
- MCS templates
- Dashboards and reports
- User account management
- Technical debt + NFRs

Stakeholder Plan

- End of Sprint demo with Broadcom field teams (May, 2020)
- Monthly validation testing with select customers (Jun,2020)

Key Points

- Operator Console to be one-stop portal for operator persona
- Retire UMP
- Removal of Liferay portal
- Admin Console and IM GUI to work as-is with UIM 20.3 (no-change)

UIM 20.3 Development Timeline

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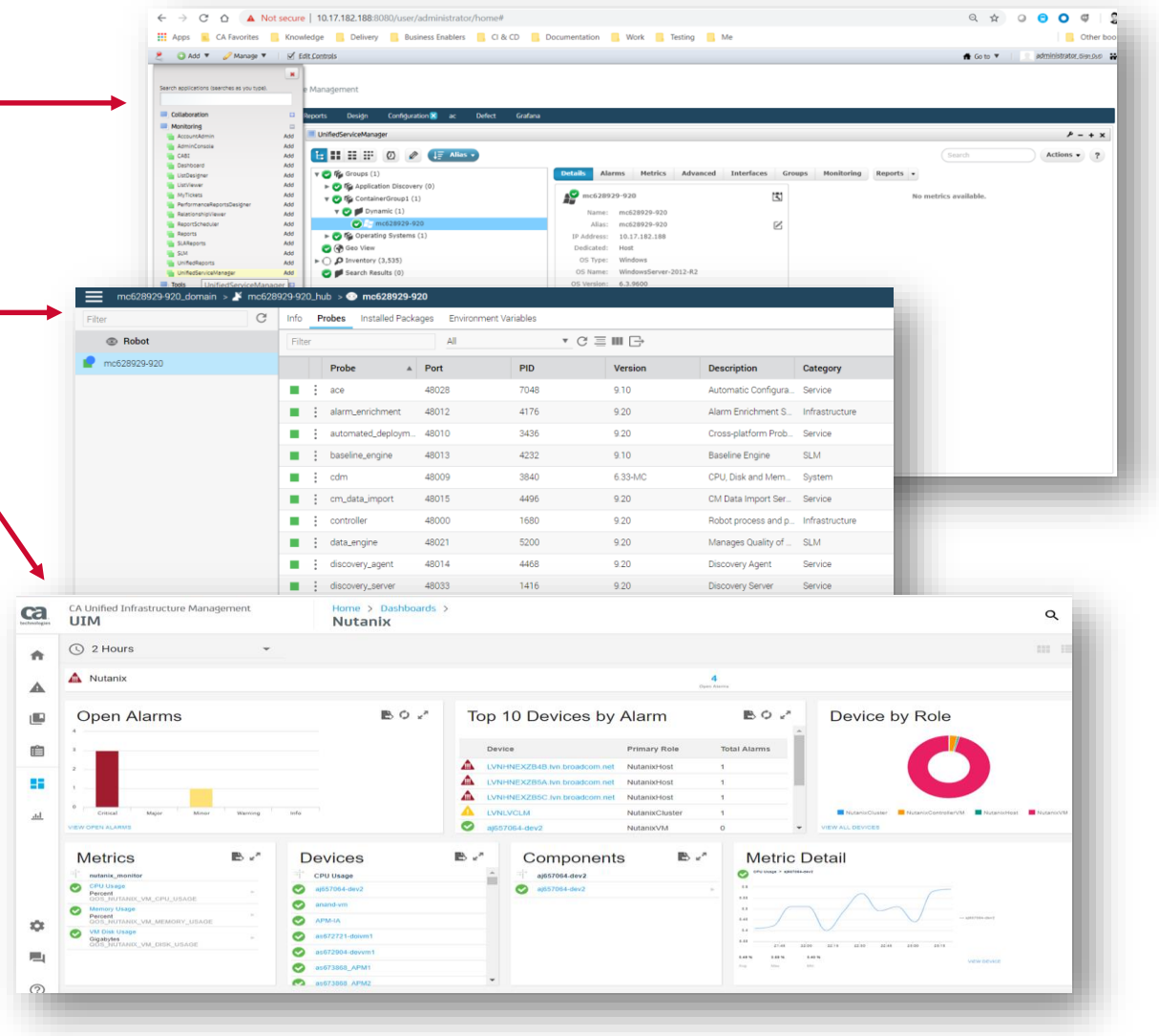
UIM Interfaces Today (i.e. 9.x and 20.1)

- UIM consists of the 3 primary user interfaces*:
  1. **Unified Management Portal (UMP):** Web-based interface providing a variety of portlets, reports, and dashboards for consuming data – *based on Flash* – to be retired
  2. **Admin Console**: A web-based interface to configure and distribute probes
  3. **Operator Console**: Available as part of the UMP, this UI provides users with an alternative way to manage devices, groups and device monitoring profiles and view dashboards and alarms; also provides views (Alarms View, Groups View, Inventory View, Dashboards View, etc.) to help monitor infrastructure



***Infrastructure Manager** remains as a traditional, Windows-based "thick client" interface for some functionality but is not considered a 'primary' interface

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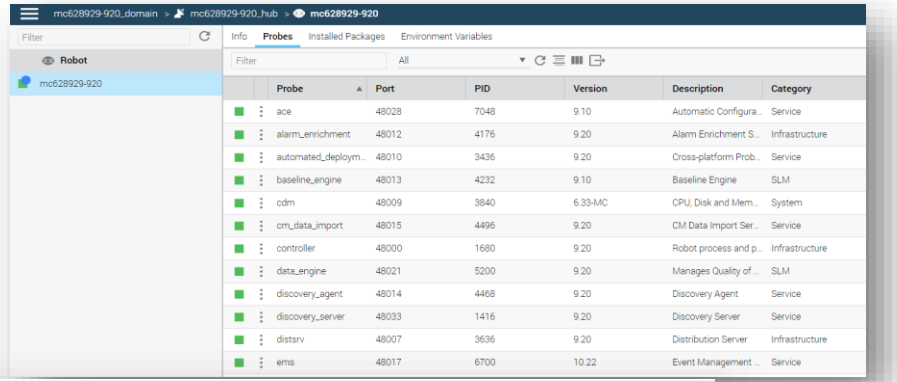
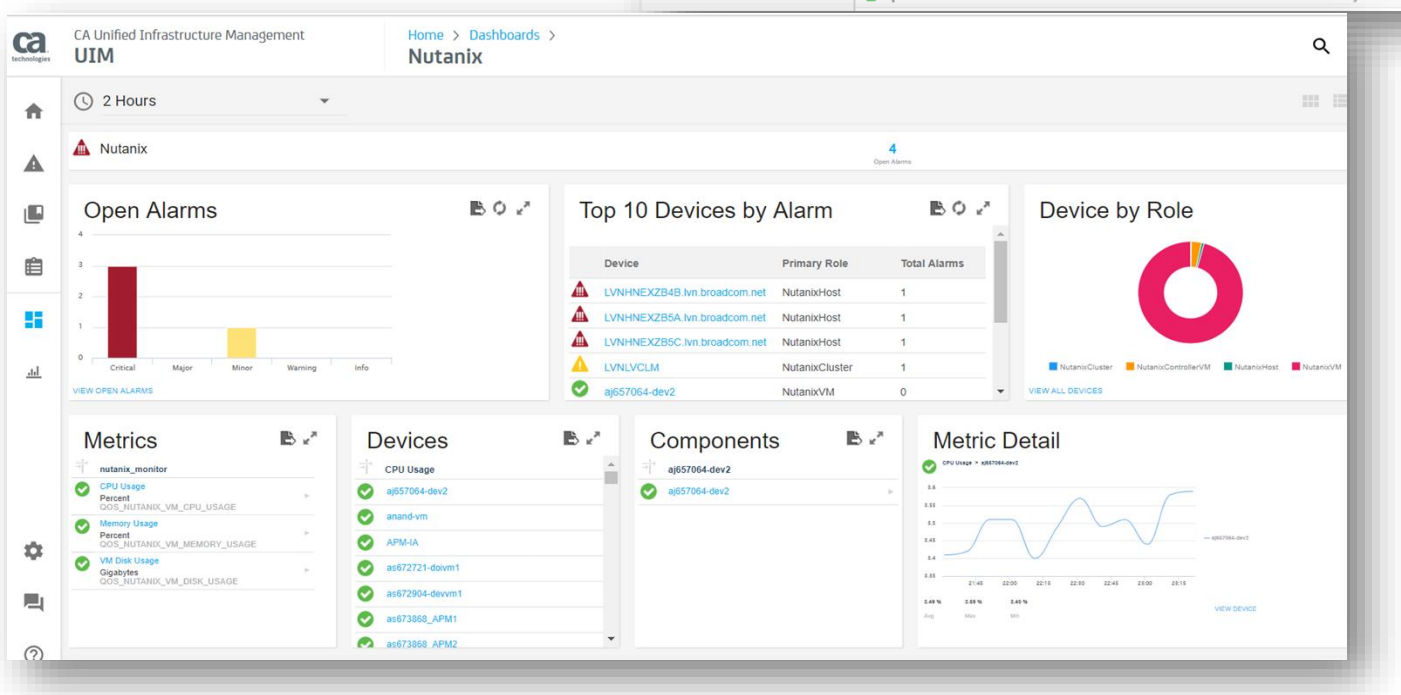
UIM 20.3 Interfaces (Zero Flash)

- UIM to have 2 primary interfaces*:
  1. **Admin Console**: Administration persona focused web-based interface to distribute and configure probes
  2. **Operator Console**: Main operator persona focused web-based interface (alternate to UMP) to provides users with an way to manage :
     - ✓ Discovery and monitoring configuration
     - ✓ Groups and inventory management
     - ✓ User and account management
     - ✓ Dashboard and reporting
     - ✓ Alarm management
     - ✓ SLA/SLM Management





***Infrastructure Manager** remains as a traditional, Windows-based "thick client" interface for some functionality but is not considered a 'primary' interface

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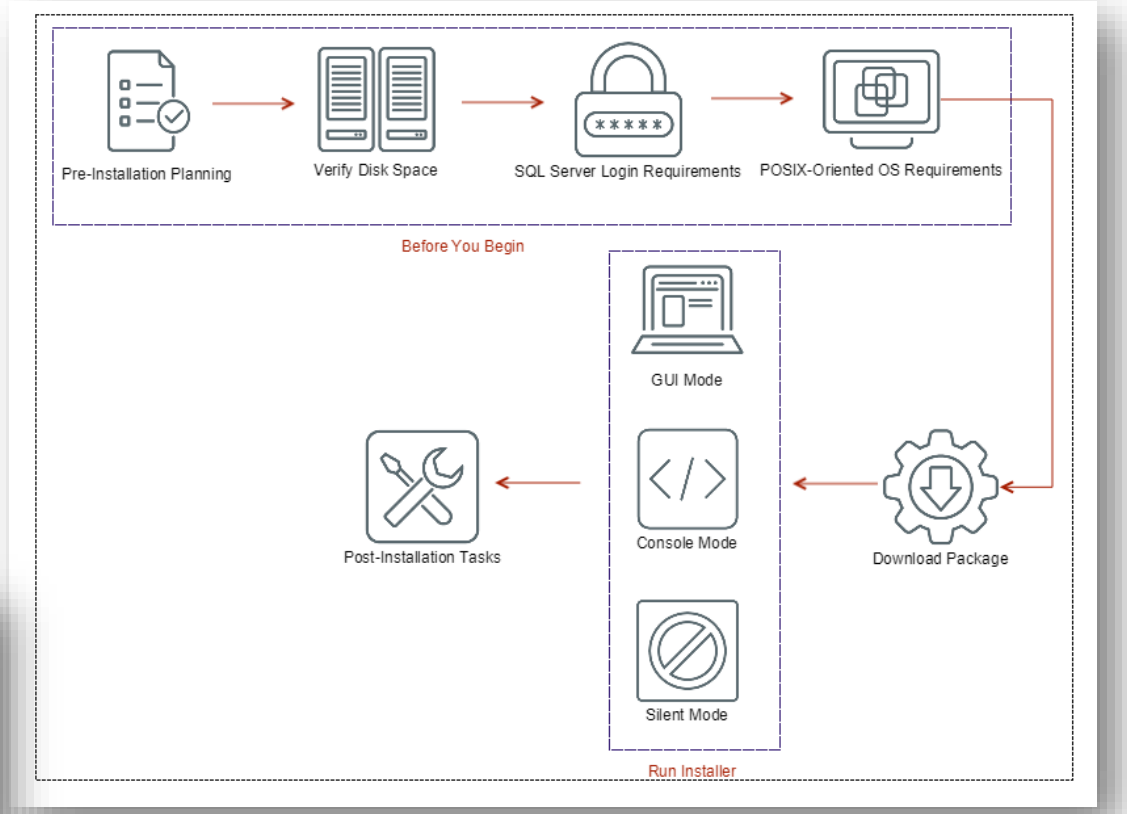
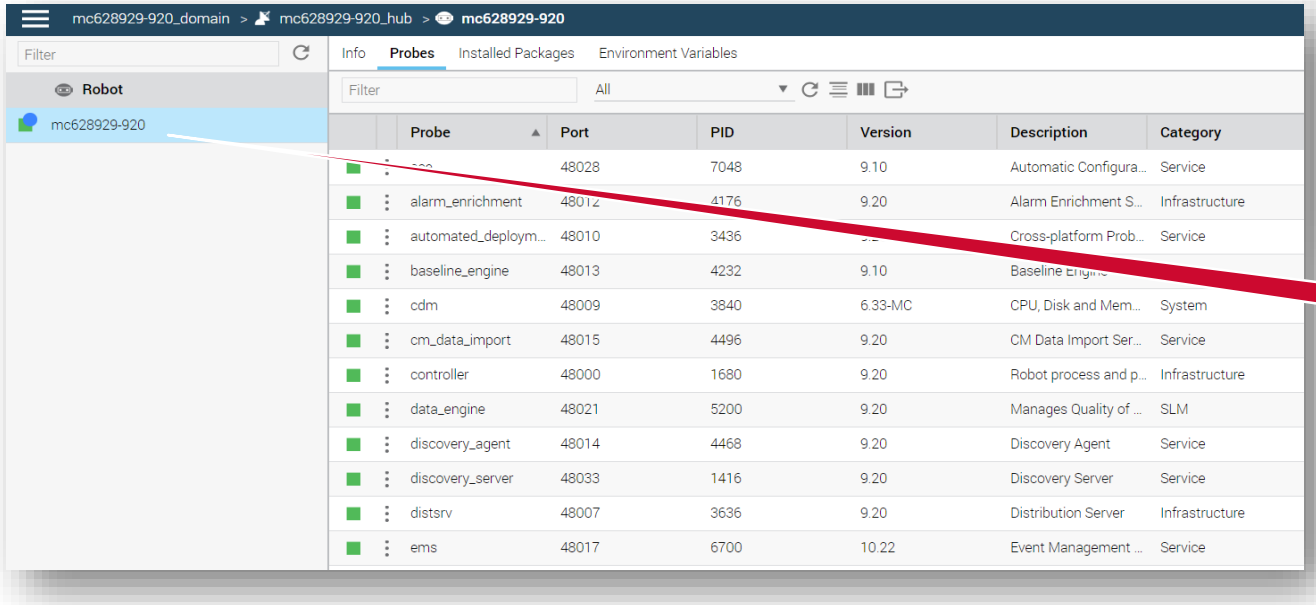
Installation of UIM Server and Hubs

- UIM Installer is **not impacted due to Flash** and will remain unchanged
  - Continue to support 3 installation options
    1. GUI Mode
    2. Console Mode
    3. Silent Mode





Hub and robot installation via Admin Console remains unchanged

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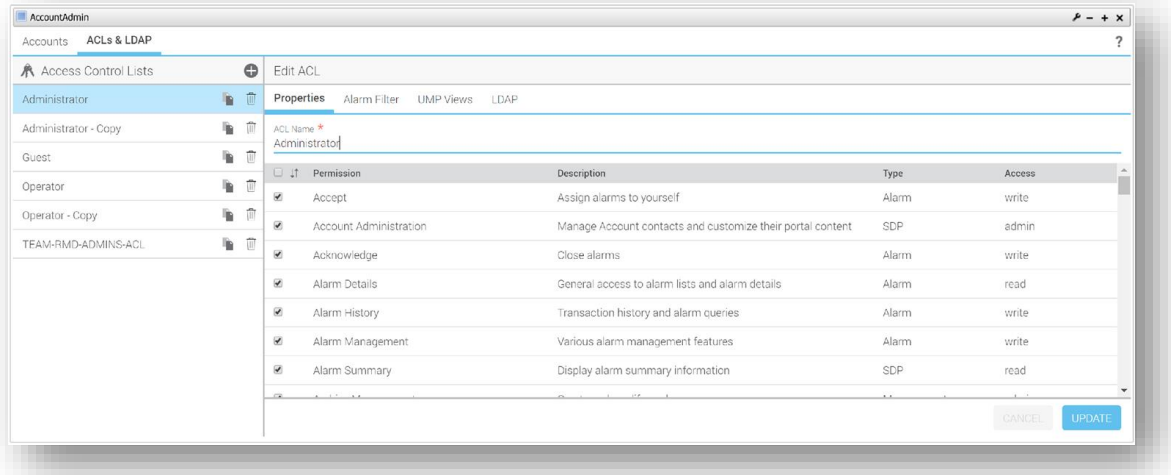
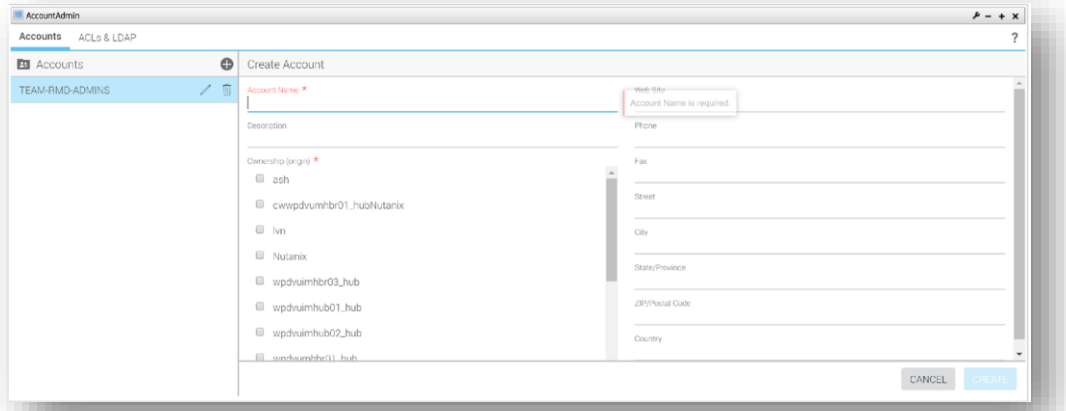
User Management

- Move access control list (ACL) management for features/portlets from UMP to Operator Console
  - UIM allows different role-based access for Administrator, Operations Manager, etc. to perform specific tasks
  - ACL manages permissions to access specific UIM features for these roles/groups
- Move Account Contact User management from UMP to Operator Console; Bus User management to continue as-is
  - **Account Contact Users** to be created using Operator Console instead of UMP
  - **Bus Users** continue to be created using IM and Admin Console
- Actions to be supported on Operator Console
  1. Create, Edit or Delete an Account
  2. Add, Edit or Delete a User
  3. Manage ACLs and LDAP in Account Admin
  4. Edit an ACL
  5. Additional Considerations for Users in Multiple Accounts





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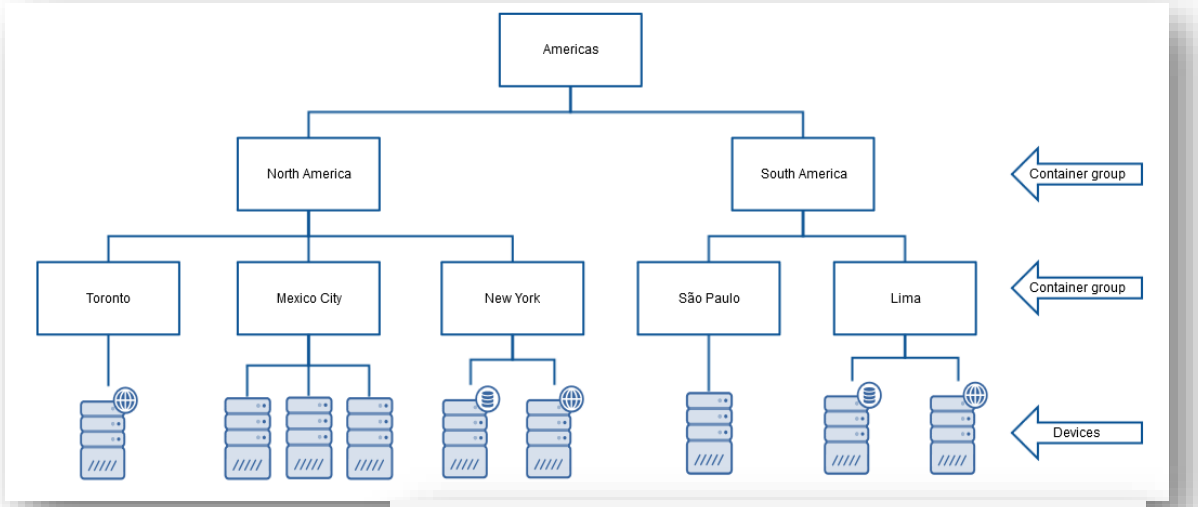
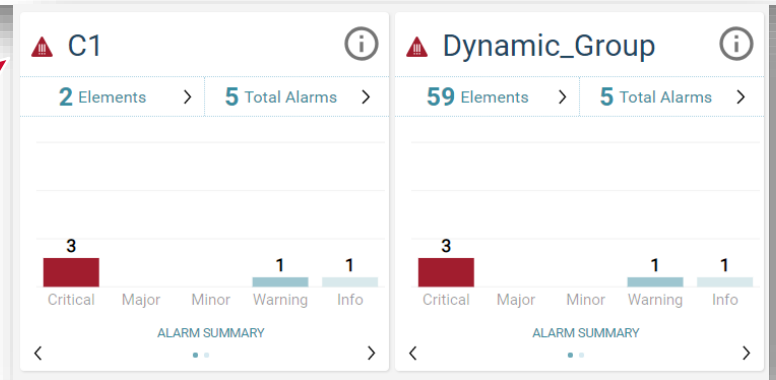
Group Management

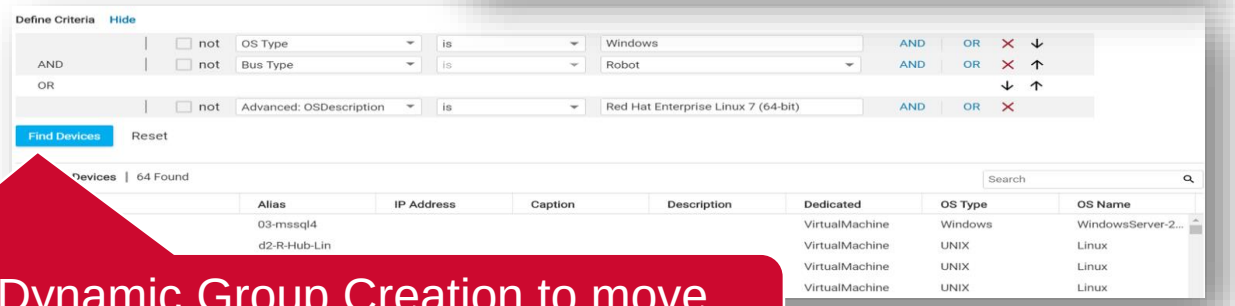
- UIM to continue supporting 4 groups types:
  - **Container:** A parent to other groups
  - **Dynamic:** Contains the computer systems or interfaces that meet a specified set of criteria
  - **Static:** Contains a specified list of computer systems or interfaces
  - **Interface:** Interface groups are unique groups for networking devices
- Actions to move from USM to Operator Console

1. Create a Group
2. Add a Filter
3. Add an Advanced Filter
4. User Tags
5. Create Groups Automatically
6. Configure the Update Interval for Automatic Groups
7. Configure Group Reports
8. View Group Assignments
9. Change a Group Parent
10. Delete a Group
11. Restore a Group
12. Enable and Configure a Health Index Score for a Group



Existing Operator Console (shown) to be enhanced for improved Group Management





Existing Dynamic Group Creation to move from USM (shown) to Operator Console

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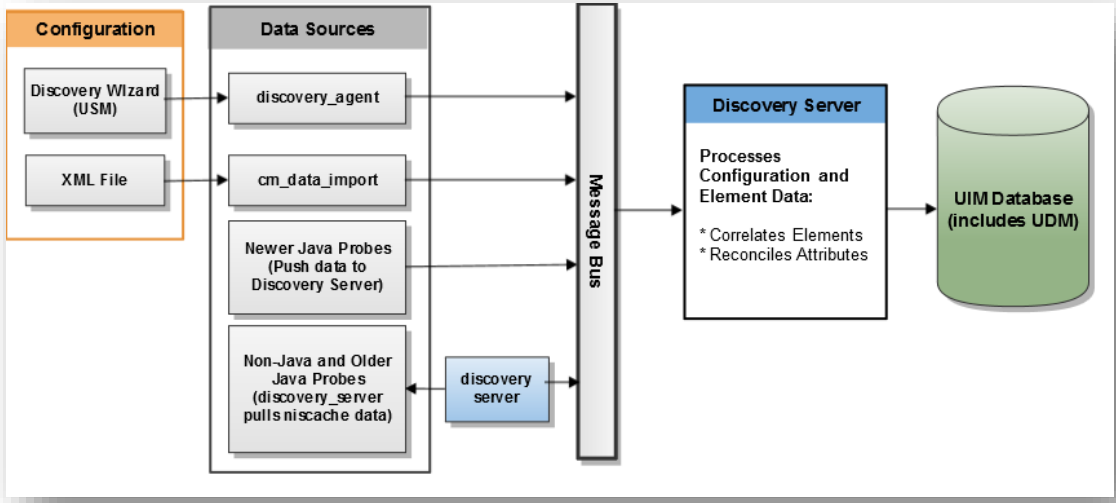
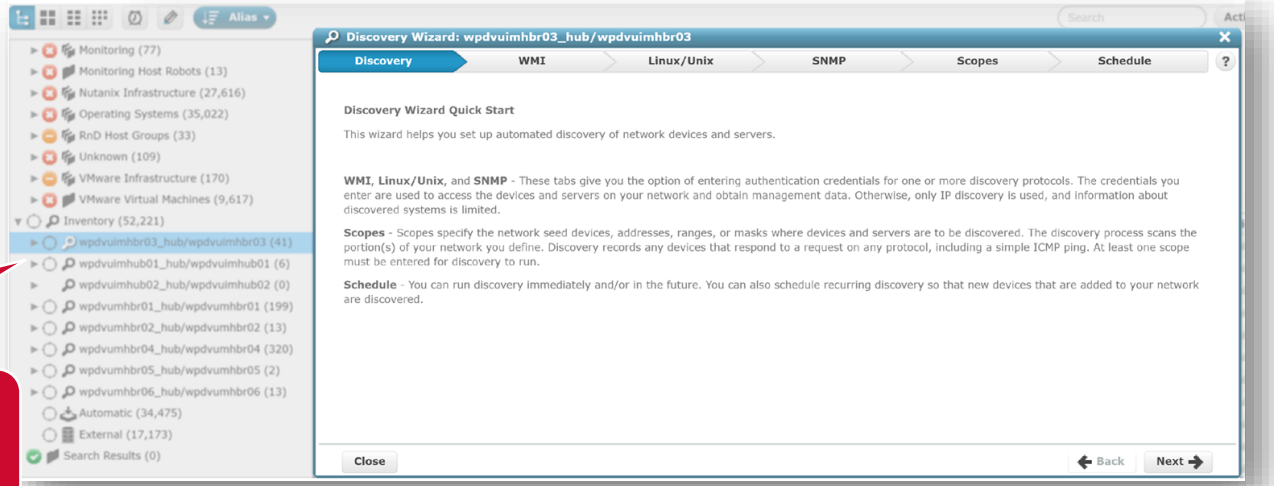
Discovery Wizard

- Discovery functionality to be similar as today
- Discovery Wizard to be moved from UMP and re-developed in Operator Console
  - The Discovery Wizard lets you easily configure discovery scans
  - Wizard will continue to let users specify authentication profiles and the range of addresses you want to search; Discovery then uses this information to scan the network and populate the device inventory
  - Two options to launch the Wizard:
    - **Settings page** on **Operator Console** to schedule discovery (similar to Actions menu on existing USM to be replaced)
    - Run the wizard from any discovery agent node in the **Discovery Tree** in **Inventory view** (new Operator Console functionality)





Existing Discovery Wizard functionality to move from USM (shown) to Operator Console

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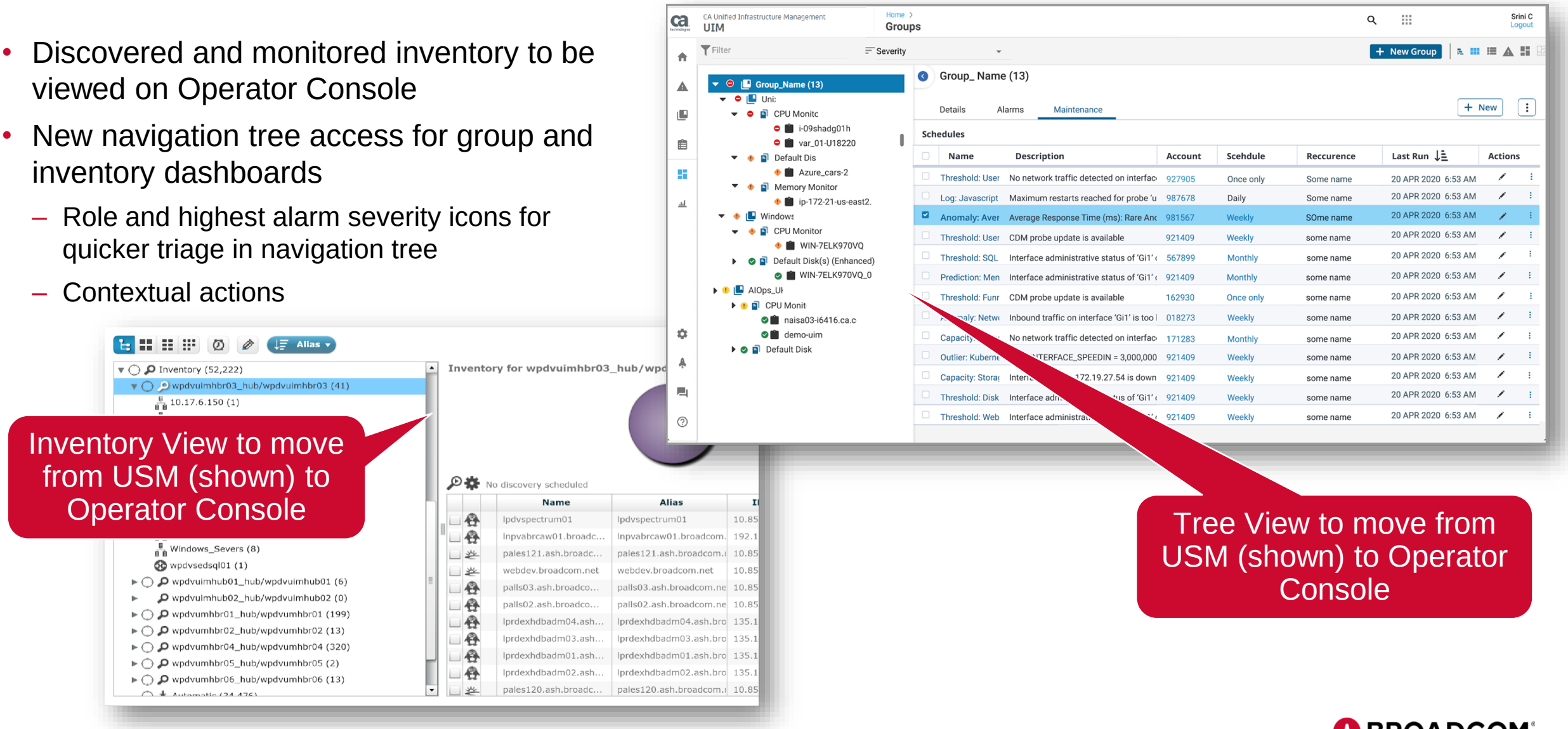
Inventory View and Navigation Tree

- Discovered and monitored inventory to be viewed on Operator Console
- New navigation tree access for group and inventory dashboards
  - Role and highest alarm severity icons for quicker triage in navigation tree
  - Contextual actions



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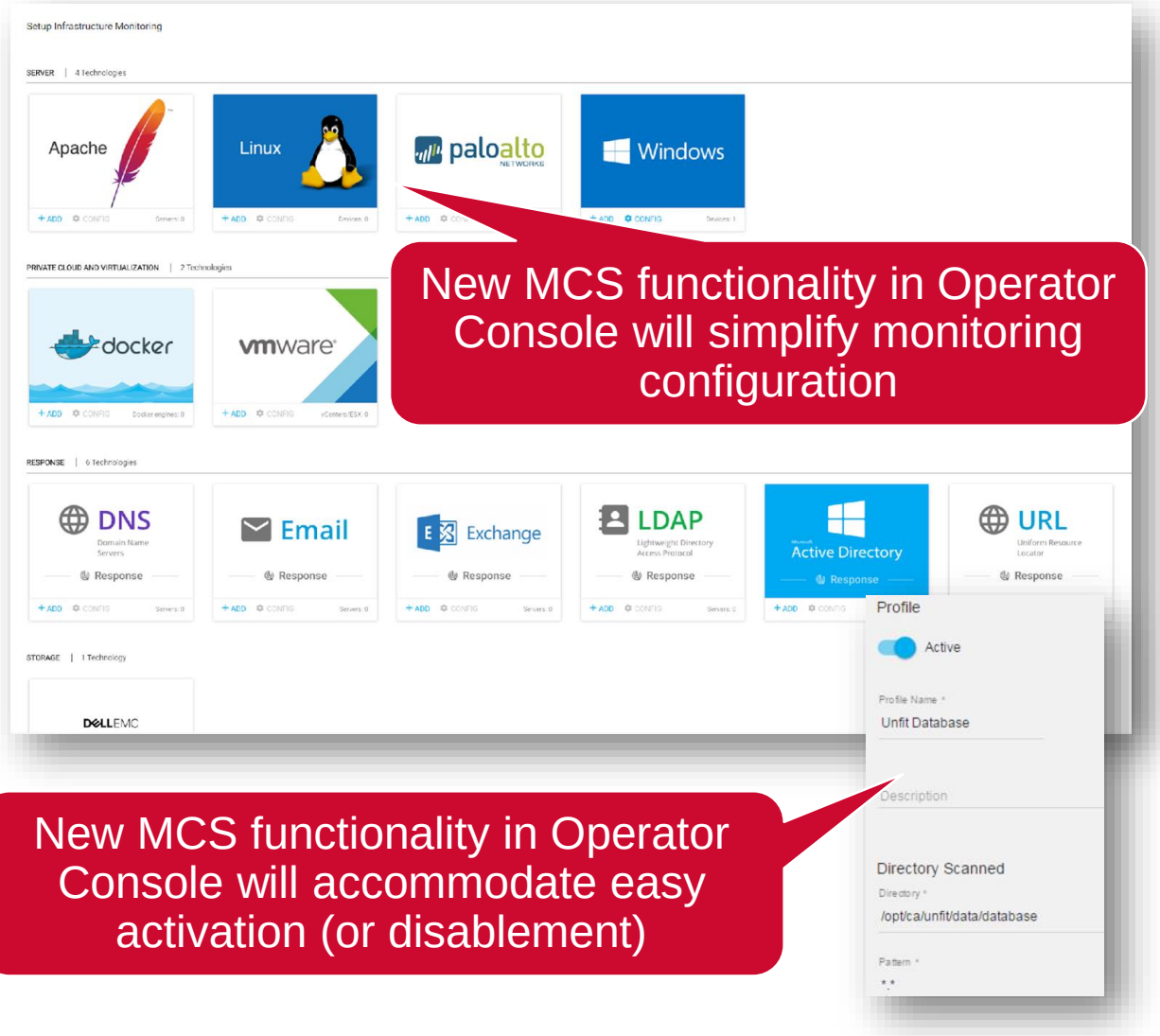
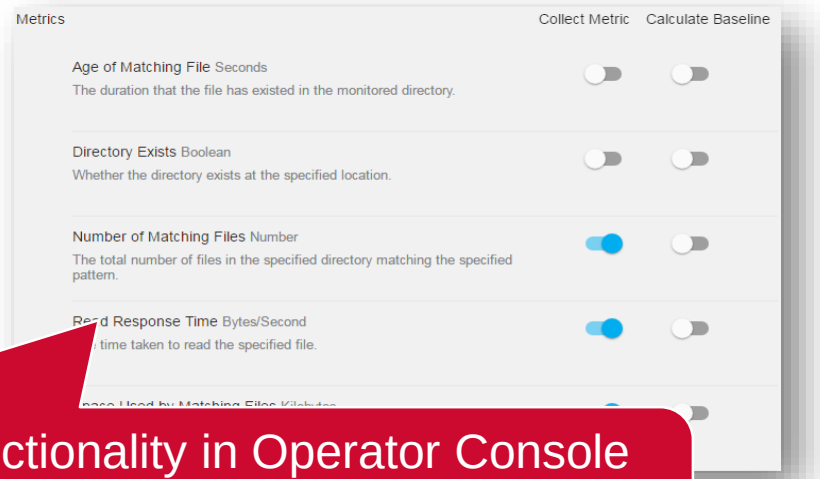
Monitoring Configuration thru Operator Console

- Existing MCS template to be recreated on Operator Console
  - Setup wizard based monitoring configuration
  - Support both enhanced and legacy MCS templates
- Enhanced MCS APIs for integration with orchestration tools
- Support for “For-each” profiles for child templates for bulk configuration





New MCS functionality in Operator Console will simplify monitoring configuration

New MCS functionality in Operator Console will accommodate easy activation (or disablement)

New MCS functionality in Operator Console will accommodate metric selection for collection and baselining

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Enhanced Monitoring Templates and Alarm Policy

- All MCS enabled probes to have enhanced Configuration Templates and default Alarm Policy support in Operator Console; also, increase coverage to additional probes (~40)

Existing Probes with Enhanced Templates for UIM 20.3

- ad_response (Active Directory Response)
- ad_server (Active Directory Server)
- adevl (Active Directory Events)
- apache (Apache HTTP Server)
- aws (Amazon Web Services)
- azure (Microsoft Azure)
- cdm (CPU, Disk, Memory Performance)
- email_response (Email Response)
- ews_response (Microsoft Exchange Server Response)
- dns_response (DNS Response)
- hyperv (Microsoft Hyper-V)
- iis (IIS Server)
- logmon (Log Monitoring)
- ldap_response (LDAP)
- mysql (MySQL Server)
- net_connect (Network Connectivity)
- nexec (Command Execution)
- ntevl (NT Event Log)
- ntservices (Microsoft Windows NT Services)
- oracle (Oracle Database)
- processes (Process)
- rsp (Remote System)
- sqlserver (SQL Server)
- sql_response (SQL Server Response)
- url_response (URL Endpoint Response)
- vmware (VMware)
- websphere_mq (WebSphere MQ)
- websphere (WebSphere)

Additional Templates for UIM 20.3

- office365_mcs_template
- snmpget_mcs_templates
- ntperf
- emailgtw
- Sap_basis
- Ceph
- dell_emc
- jvm_monitor
- kvm
- redis
- websphere
- xtremio

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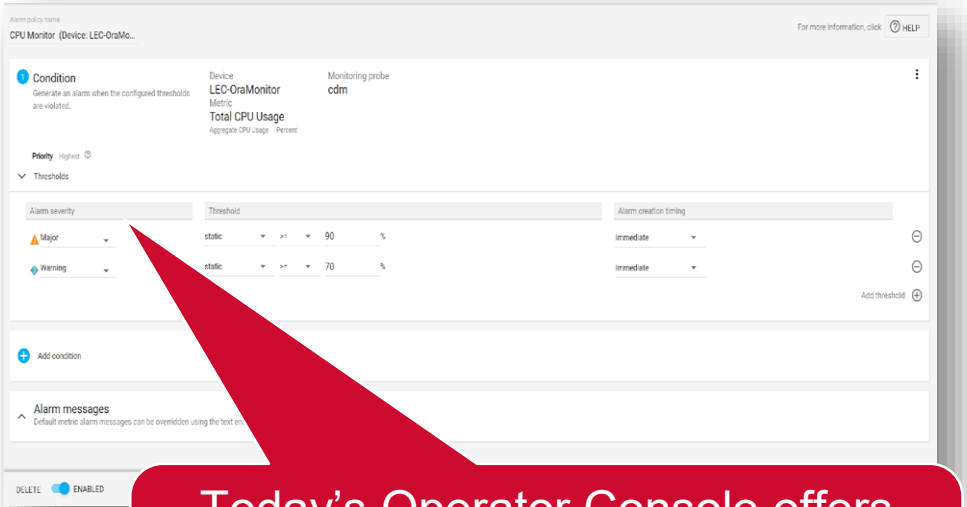
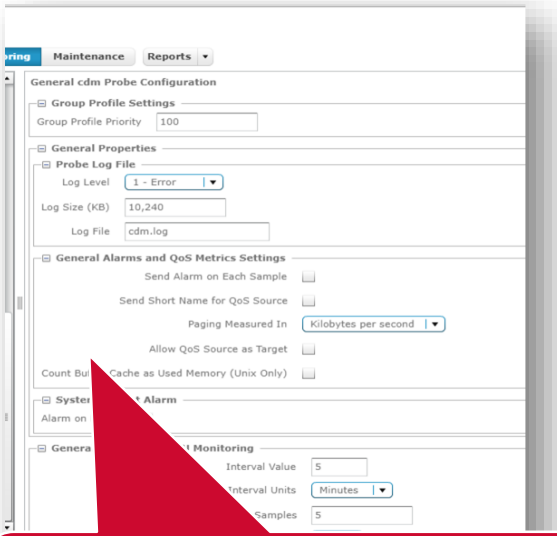
Operator Console for Alarm Policy

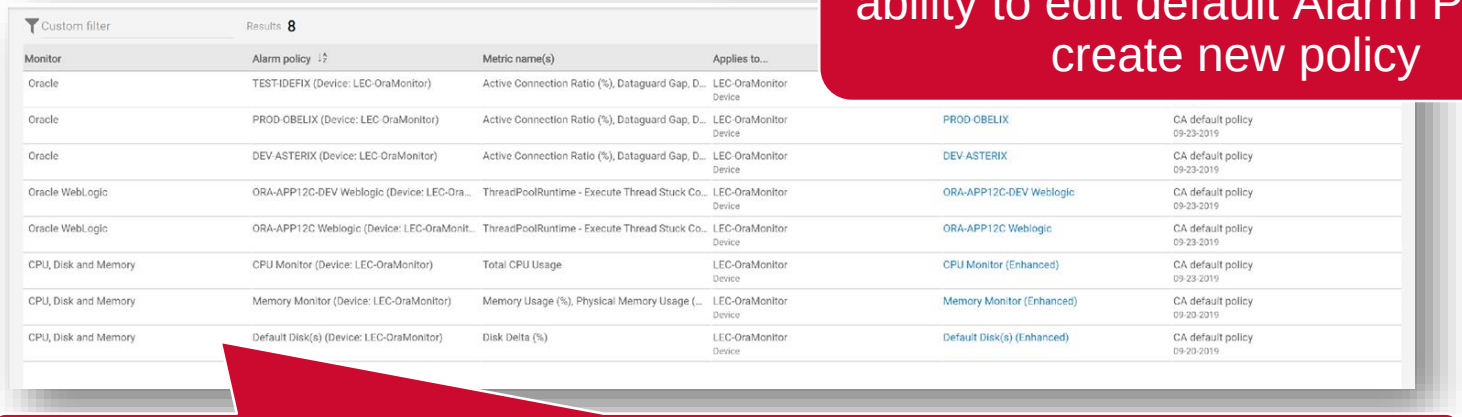
- Bulk thresholding with device, group or probe context
- Alarm policy for centralized thresholding configuration across probes
- Custom alarm description and ITSM integration
- API for export and import of alarm policies across domains



Today's Operator Console offers ability to edit default Alarm Policy or create new policy



Threshold Creation to move from USM (shown) to Operator Console



Today's Operator Console offers default Alarm Policy configuration

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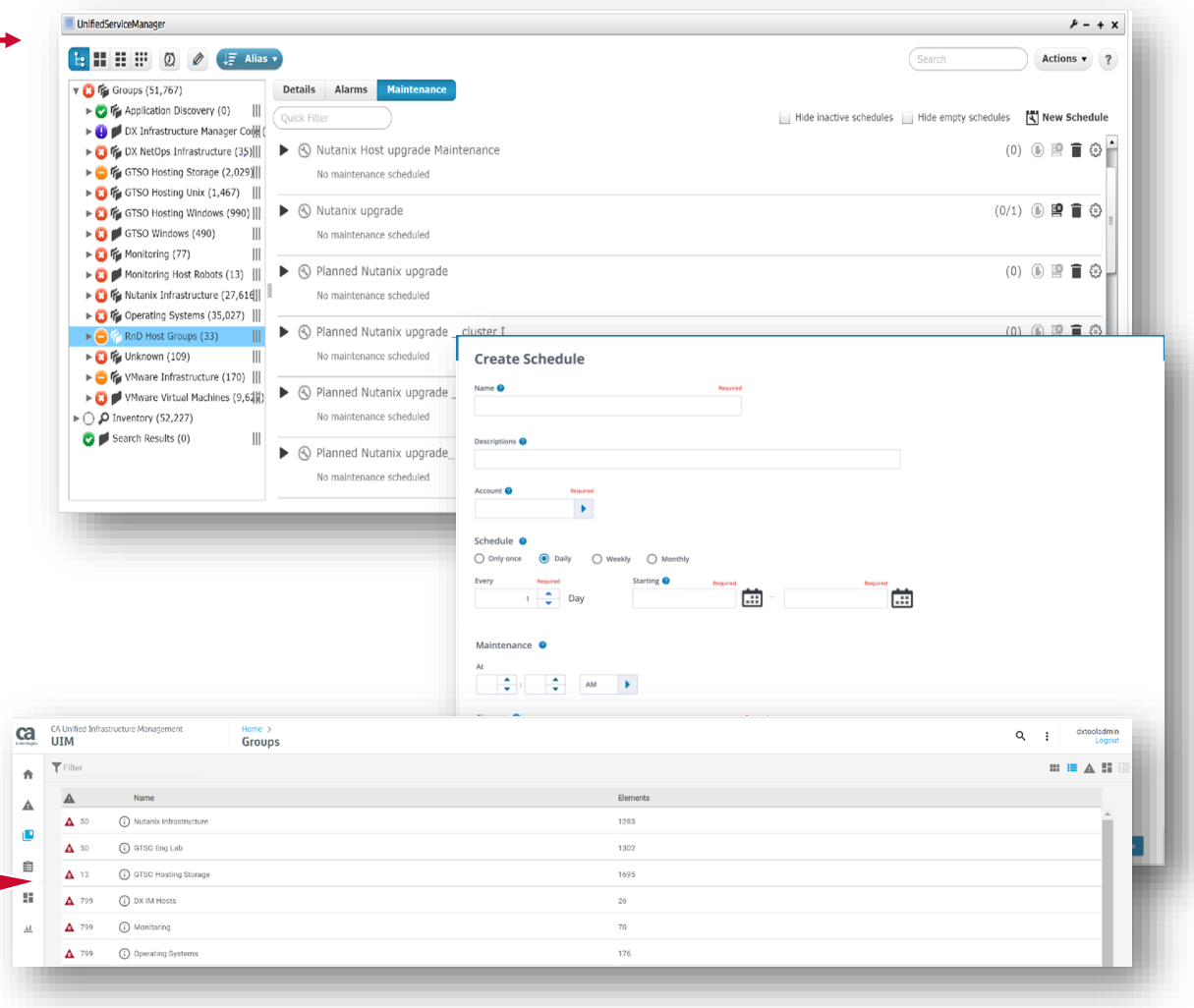
Maintenance Scheduling

- Maintenance mode portlet to move from UMP (shown) to Operator Console
- Key actions to be supported on Operator Console include:
  - Schedule recurring maintenance to perform routine system updates or user can place systems in a schedule that runs once only
  - Create an ad hoc maintenance schedule if an unplanned outage occurs so that user can quickly respond to the outage
  - Manage *Edit Maintenance Mode Schedules* based on permission set in ACL

Navigation on Operator Console to include Group View and accommodate contextual action from both tile view and tree view for selected group



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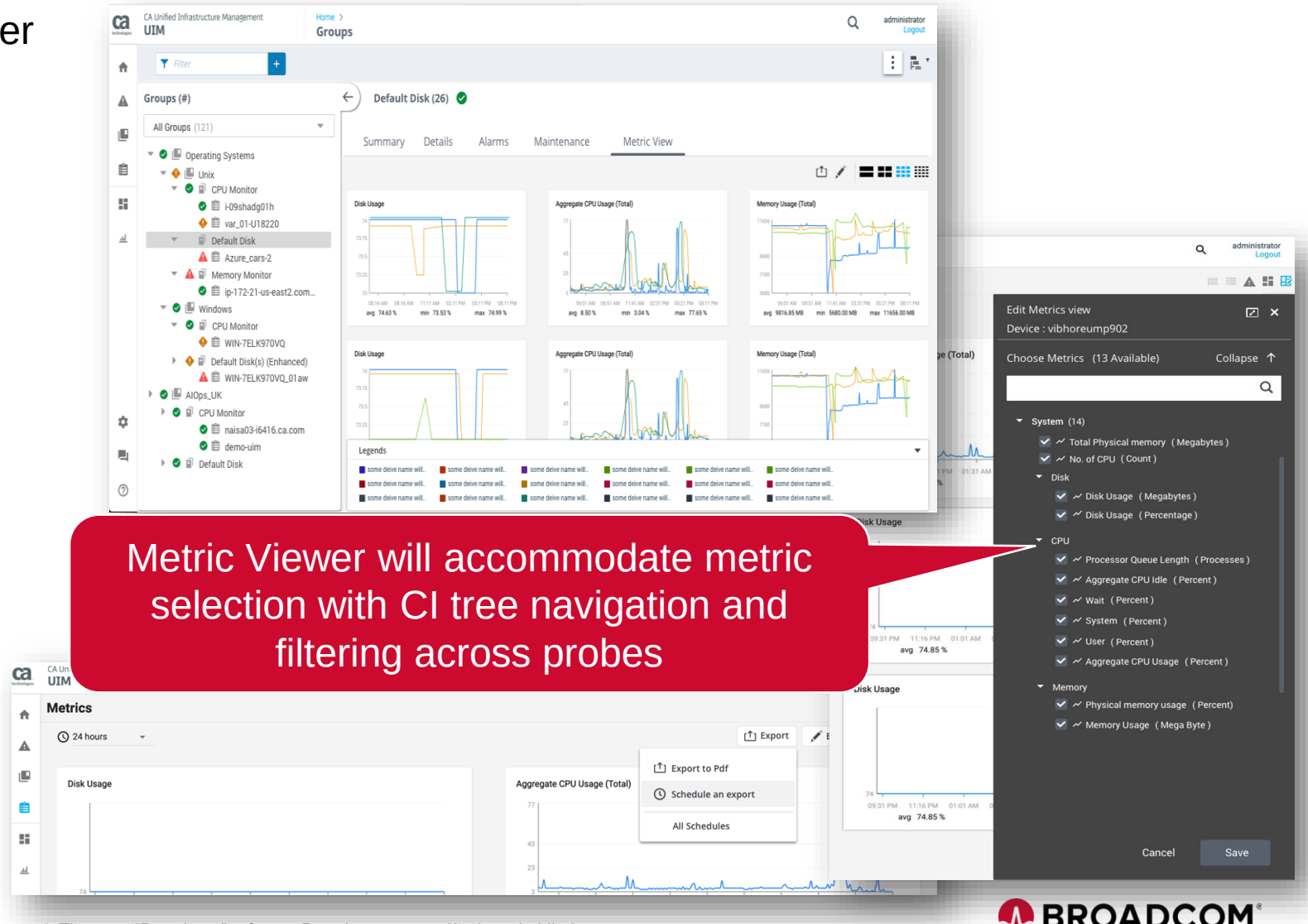
New Metric Viewer in Operator Console

- Modern inventory in-context metric viewer
  - View multiple metrics for a device (s)
  - Compare multiple metrics for multiple devices belonging to an group
- Configuration Item (CI) tree-based navigation
- View preferences
  - Time period for trend
  - Metric view layout
  - Metrics across probes
- Default metric selection
- Schedule reports for export, similar to capabilities with Performance Report Designer (PRD).
- Metric viewer to replace Performance Report Designer (PRD)



Metric Viewer will accommodate metric selection with CI tree navigation and filtering across probes

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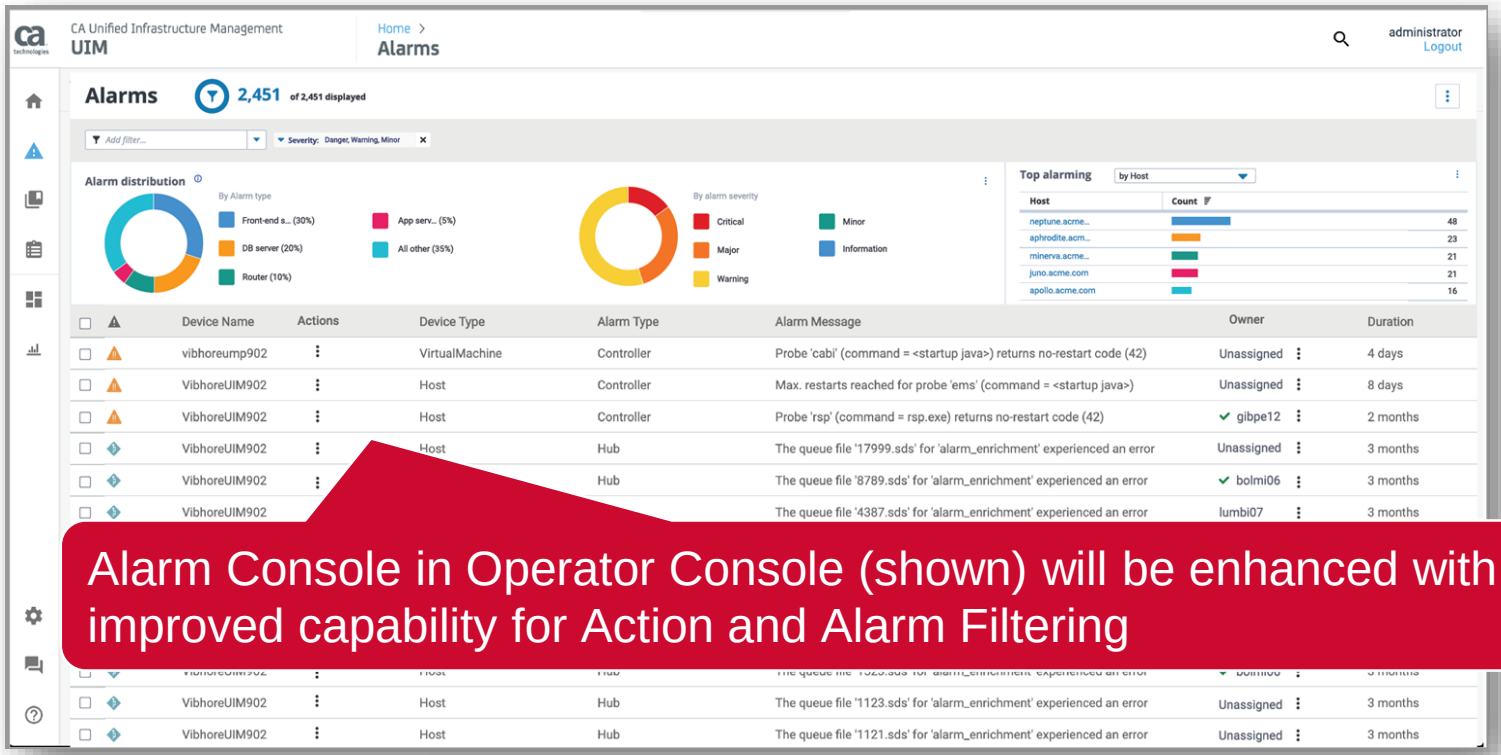
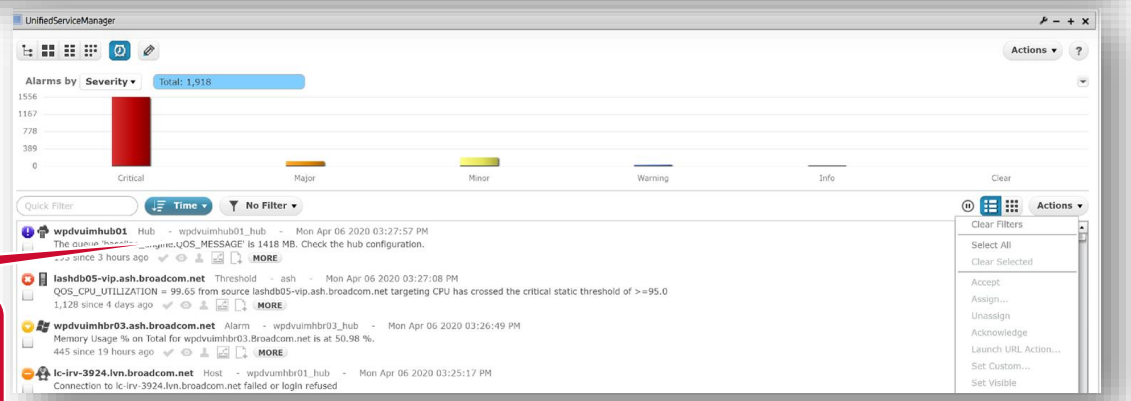
Alarm Management

- All USM alarm console features will be made available on Operator Console
- In addition to View Alarms, new Operator Console to provide the following:
  - Filter Alarms
  - Create a Custom Alarm Filter
  - Set Custom Alarm Fields
  - Sort Alarms
  - Change Alarm States
  - Configure Invisible Alarms
  - View and Export Historical Alarms to CSV (one of most popular customer requests to be delivered in 20.3)





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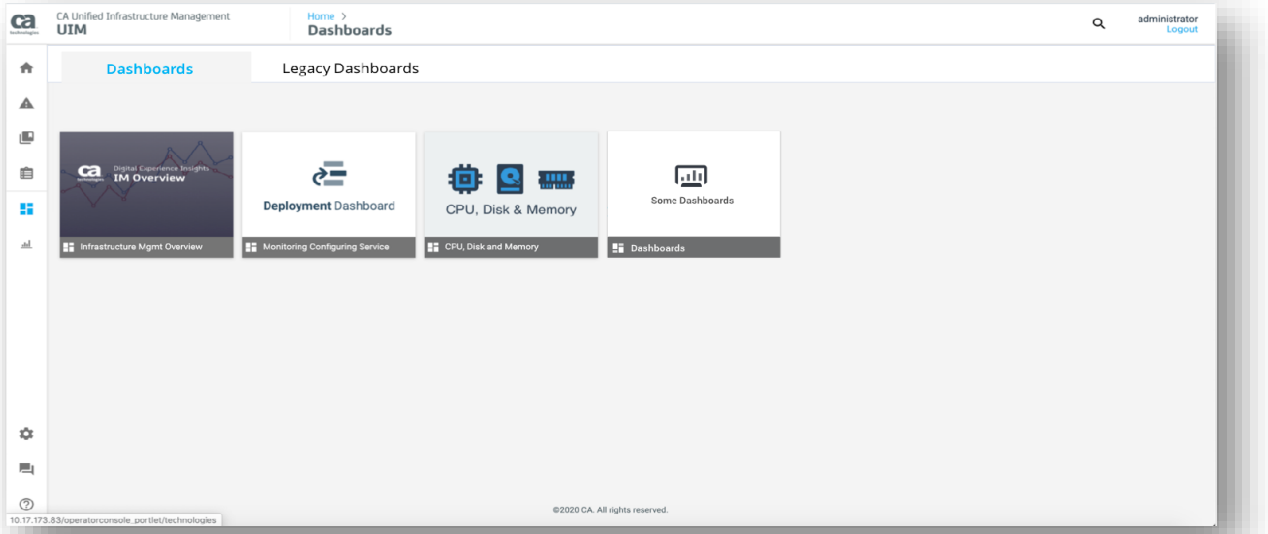
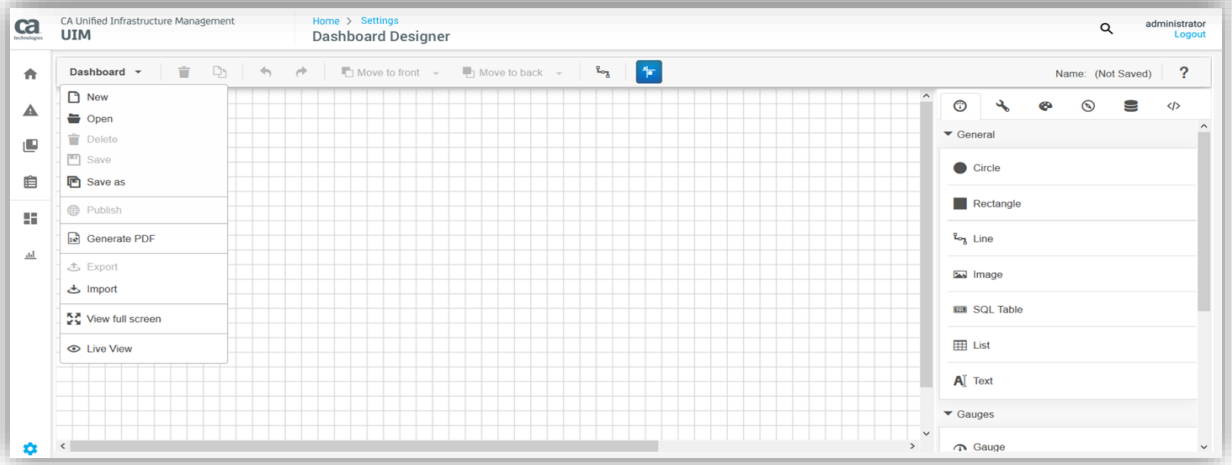
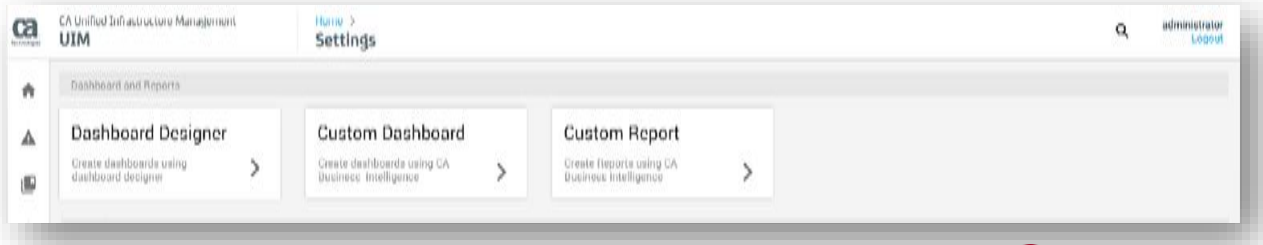
Dashboards and Reporting

- CA Business Intelligence (based on JasperSoft) to continue as default dashboard and reporting tool for UIM (as introduced with 8.5.1)
  - Out-of-the-box dashboards
  - Out-of-the-box reports
- Dashboard Portlet: HTML5 dashboard designer to be moved from UMP to Operator Console
- List Reports will be deprecated
  - EOL of Flash-based List Designer, List Viewer
- Custom dashboards and reports willl continue to be supported thru CABI
  - Bundled CABI will continue to be supported







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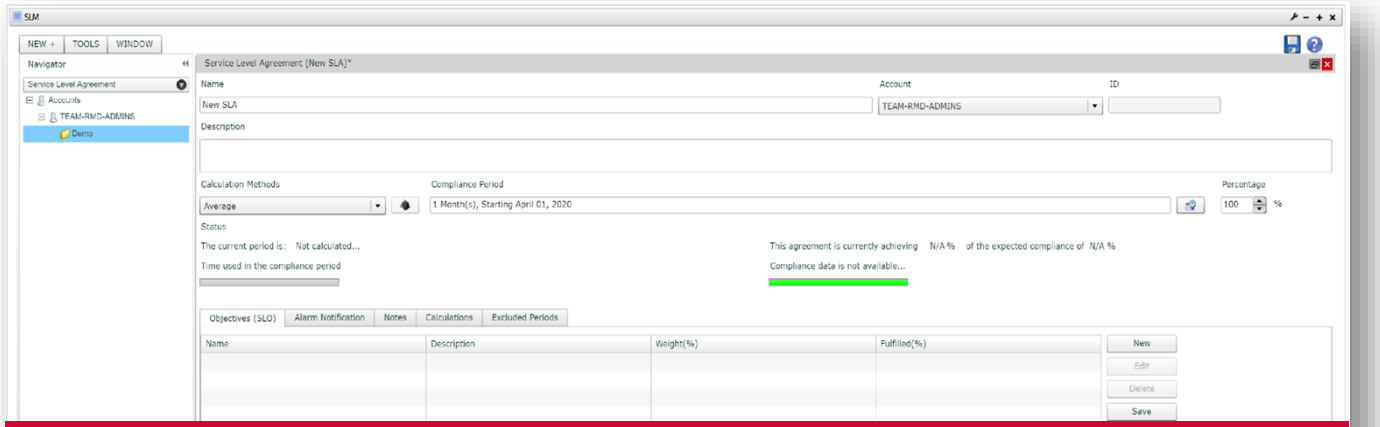
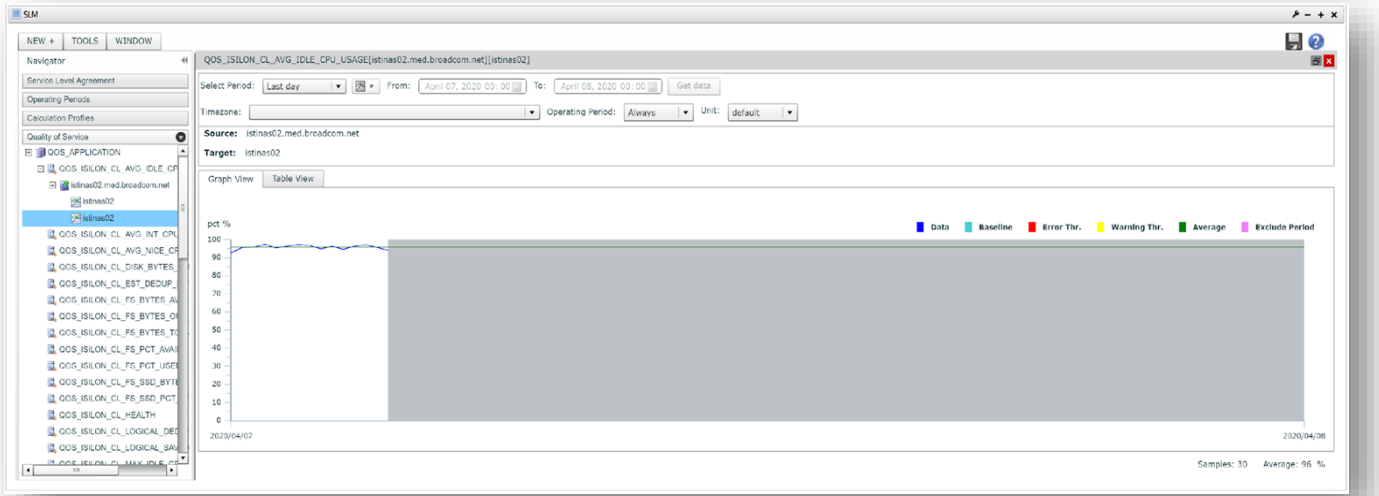
SLA and SLM Management

- SLM functionality to be moved from UMP (shown) to Operator Console
  - SLA reports portlet application displays performance information for service level agreements (SLAs) defined in the SLM portlet application; it will be redeveloped as part of Operator Console
    - Create SLO/SLAs
    - Calculation profiles
    - Database status and management
    - SQL Query
    - Export QoS data
    - SLA Wizard
  - SLA Reports shall continue to display performance information for all three levels:
    - View SLA Reports
    - View SLA History
    - Generate a Report as a PDF
  - Seamless migration of exists SLA reports



Existing SLA Management portlet in UMP to move to Operator Console



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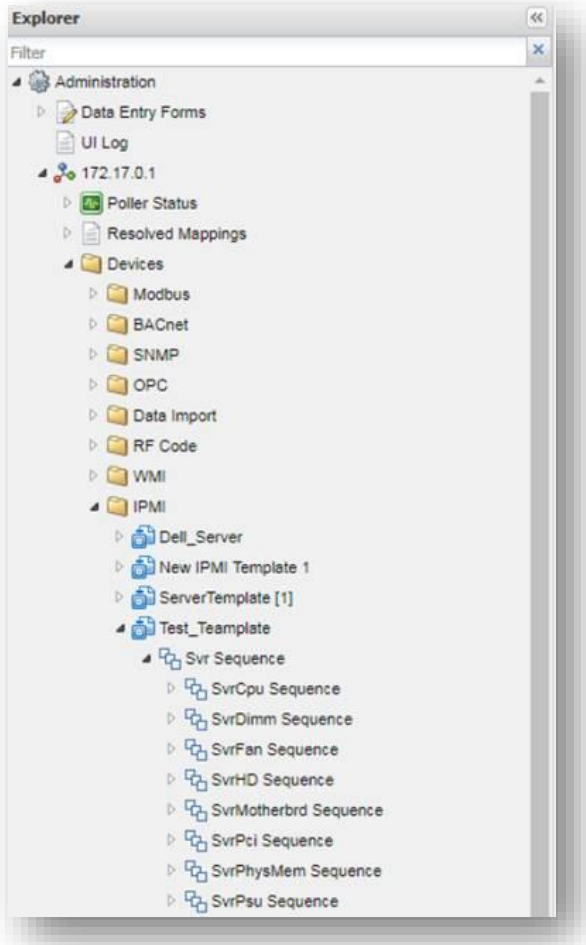
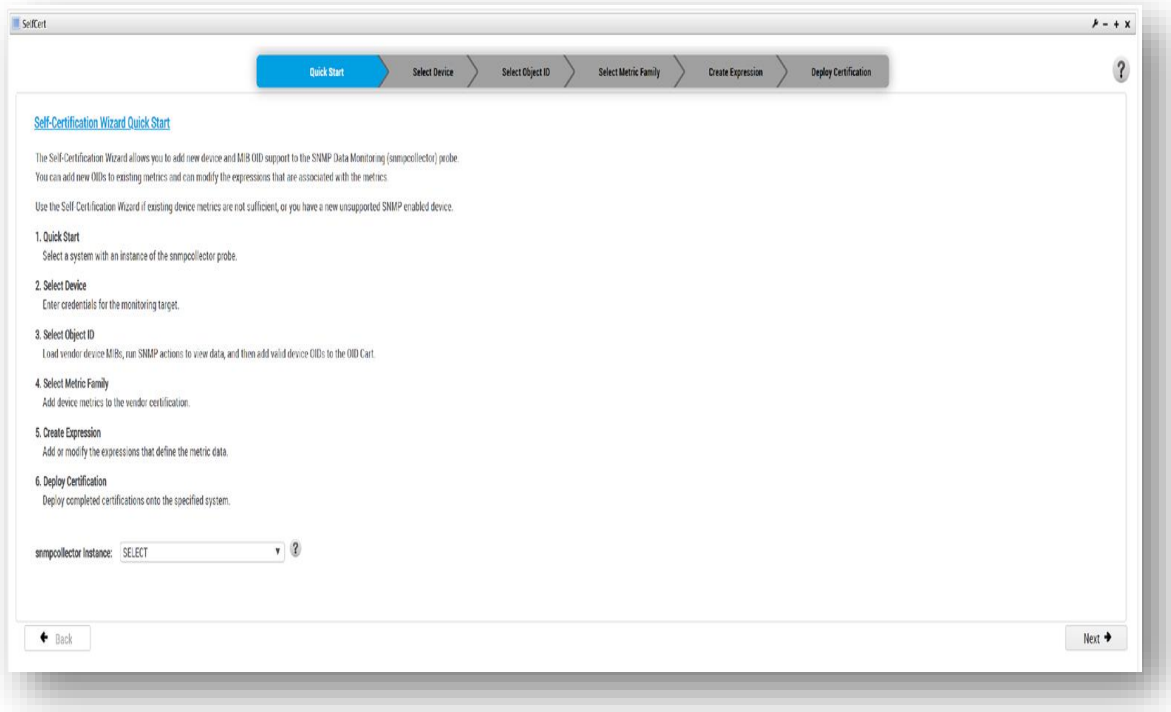
Other UMP Portlets to Be Moved

- **ecoMeter Administration** portlet for data center monitoring
  - Polling and discovery
  - Protocol-based modeling
  - Device-based templates
  - Metric viewer and charts



- **Self certification portlet** for SNMP Collector to move to Operator Console



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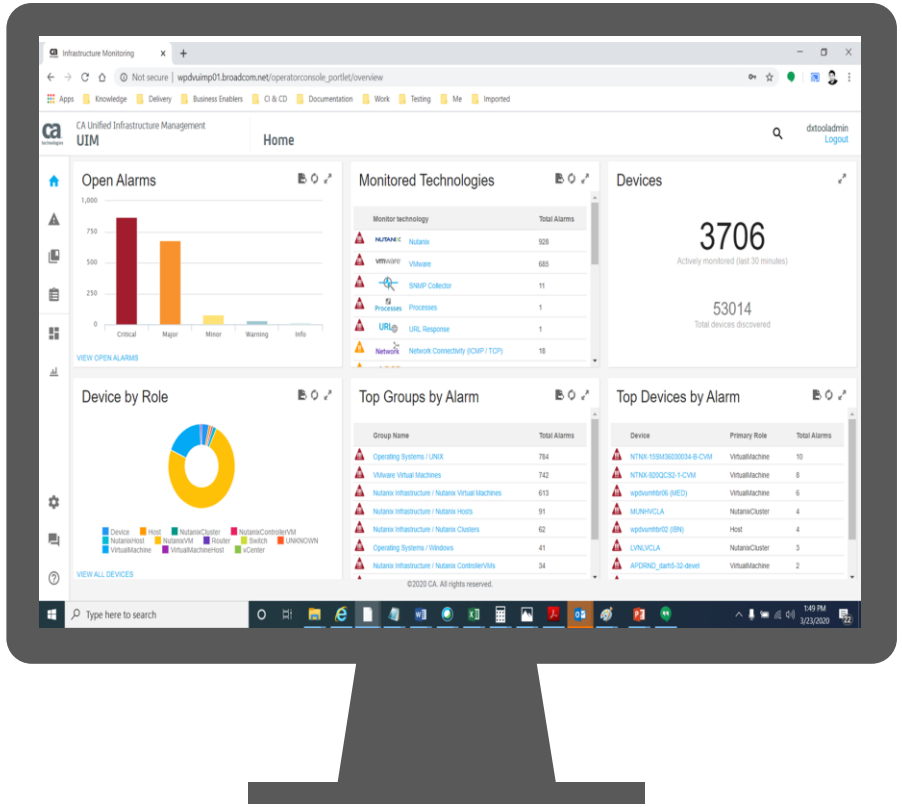
Enhanced Operator Console Non Functional Requirements

- Enable multi-instance for **load balancing**
- Configure **high availability**
- Define, address and baseline **concurrency** with regards to agreed set of **concurrent users**
- **Data protection** based on UIM Origins for tenant management
- **Address vulnerabilities** on third party libraries
- **Upgrade EOL libraries**
- Define, address and baseline **scalability** with regard to inventory, QoS and alarms
- Support **white labeling** of Operator Console
  - Custom login page
  - Custom header and footer (including product logo)
- Identify and address non-functional requirements in some of the core components specifically on **alarm and event management**



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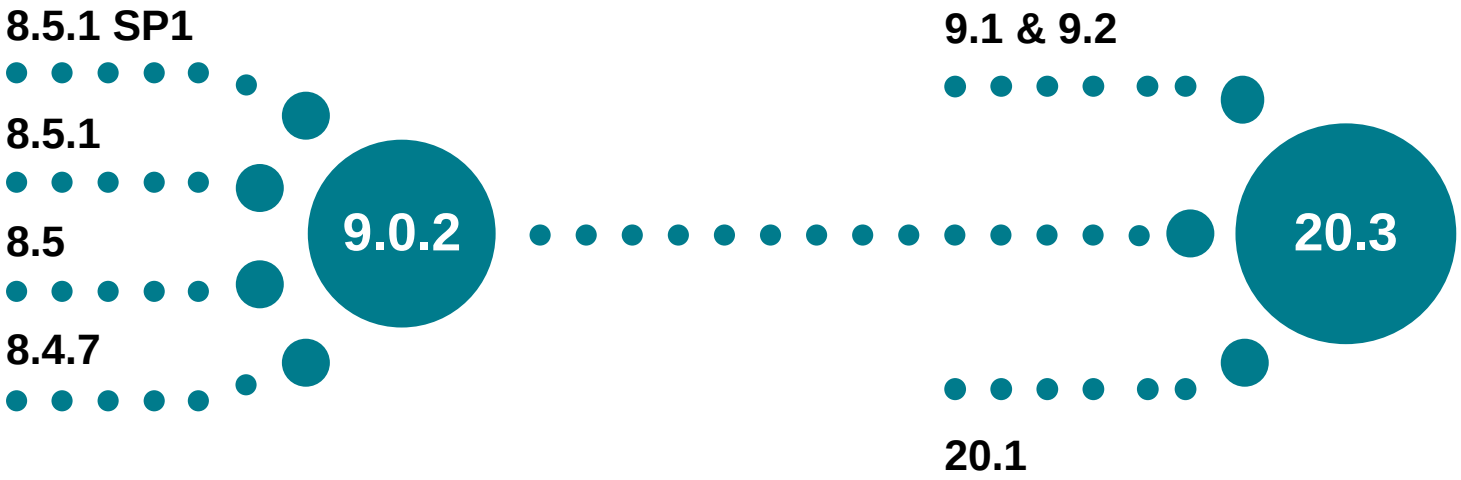
Upgrade Supported Versions and Paths

Upgrade Paths From 8.4.7 & Higher



For customers with old implementations:

- If based on 8.4.7 or 8.5.x, the upgrade path requires an install of 9.0.2 to get these binaries that include a new database schema, new config files for robots and probes, and new Monitoring Configuration Service templates
- There is a “fresh install” for new implementations

Upgrade Path From 7.5.x to 8.2

For customers with very old implementations

- Upgrade path is a little more complex but worth the effort

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UIM 20.3 Development Timeline

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What Questions Do You Have?


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