



*Agile Operations Sales Acceleration Series*

# What's New with CA Spectrum 10.3

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# Agenda

AUTONOMOUS OPS AND NETWORK OPERATIONS ANALYTICS OVERVIEW

AIOPS FOR NETWORK OPERATIONS

CONTAINERIZATION FOR FASTER UPGRADES AND FRESH INSTALLS

REPORTING ENHANCEMENTS

VMWARE MONITORING ENHANCEMENTS

ENHANCEMENTS FOR MEGA-SCALE AND CSP NETWORKS

ADDITIONAL ENHANCEMENTS

# Autonomous Operations Vision and Strategy



## DIGITAL EXPERIENCE

Deliver unified, deep, end-to-end visibility for successful business outcomes



## AIOPS

Harness AI and ML for prescriptive, predictive Ops



## AUTOMATION

Increase speed & efficiency with intelligent automation, closed loop remediation

# Network Operations Analytics Architecture

## Operational Intelligence

*CA Digital Experience Insights or Third Party*

Topology

Logs

Metrics

## NETWORK OPERATIONS ANALYTICS

(NetOps Portal, Business Intelligence Reports, OpenAPI)

In Context Diagnostics / Relationships / Flexible Data Model

Topology  
Inventory  
Fault

SNMP

Flow

Packet

REST

Telemetry

Logs

Service Activation  
Provisioning

Service  
Remediation

Inventory

Topology

App SLA

Orchestration

Triage

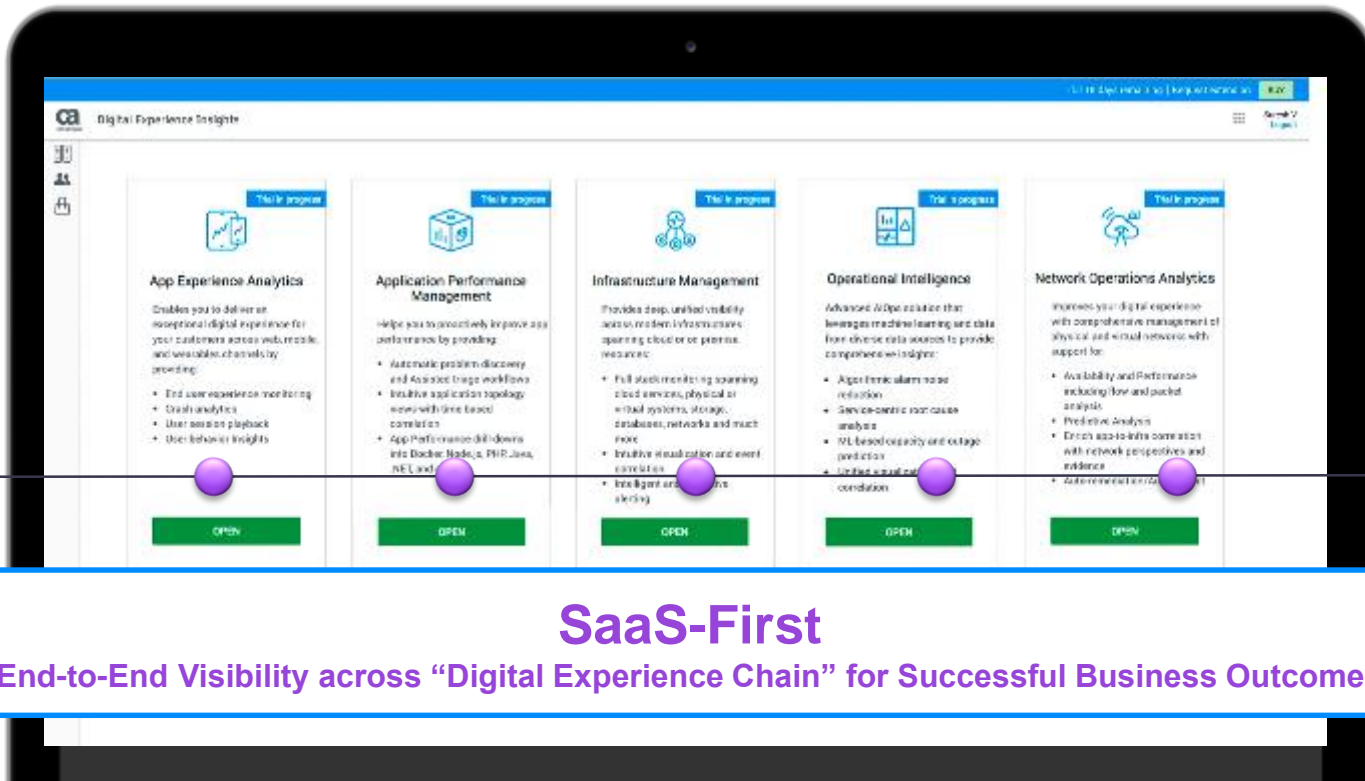
Repair

*Network Health  
& Availability*

*Network Performance*

*Network Automation*

# CA Digital Experience Insights



**SaaS-First**  
End-to-End Visibility across “Digital Experience Chain” for Successful Business Outcomes

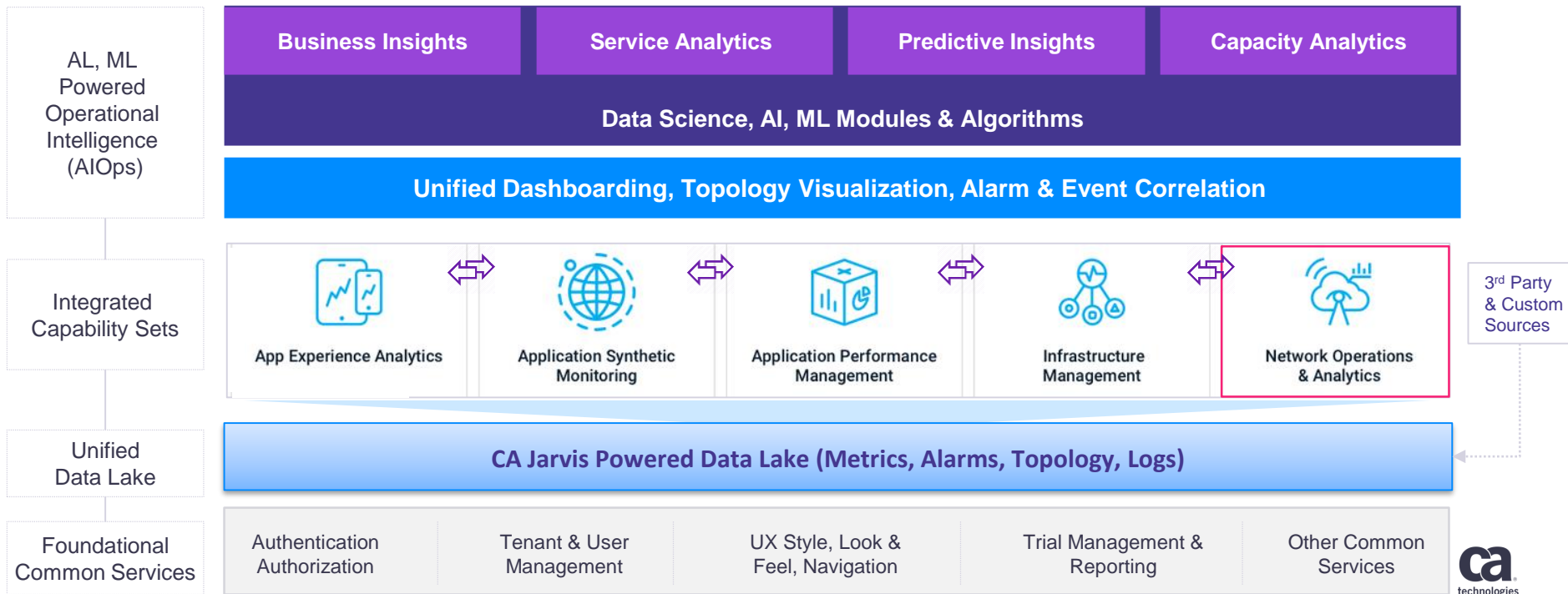


Customers,  
Partners



Business

# Unified. Complete. Intelligent. Business-Driven



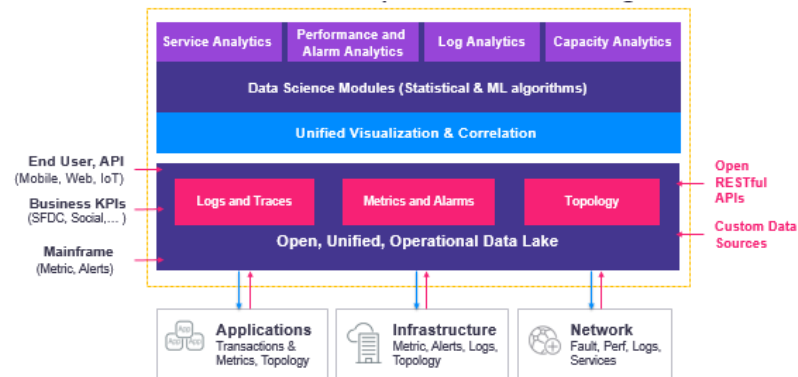
# AI Ops for Network Operations Analytics



# CA Digital Operational Intelligence Support

## Enhancements to Data Ingestion for Analytics Platform

R10.3



### SITUATION

- CA Digital Operational Intelligence is an analytics platform that provides rich analysis and machine-learning to empower artificial intelligence-based IT operations
- CA Spectrum previously shared monitored inventory and alarms

### KEY FEATURES

- CA Spectrum now shares a more robust set of data points
- Global Collections feed into the platform's "Groups" structure
- Device count and availability is now shared with the platform
- Services defined with CA Spectrum Service Manager now feed into the platform's "Services" structure and service analytics

### BENEFITS

- CA Digital Operational Intelligence helps IT operations teams deliver a phenomenal user experience, improve service quality and drive operational efficiencies
- In-context launch from alarms in analytics platform to alarm details in CA Spectrum provides more insight to issues





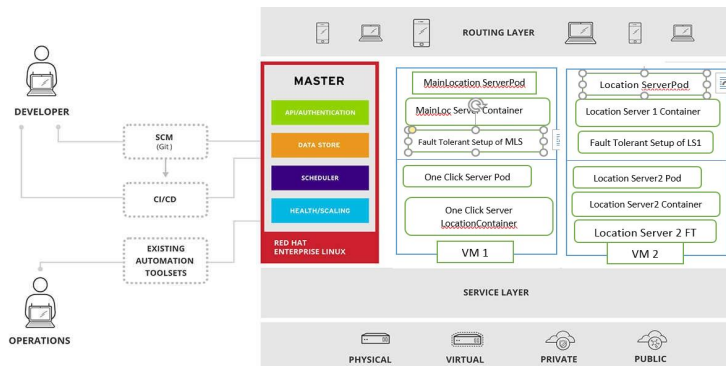
## CA Spectrum 10.3

# Containerization of CA Spectrum and Its Components

# Support for Red Hat® Open Shift® Containers

R10.3

## New Option for Rapidly Deploying CA Spectrum



### SITUATION

- IT needs more flexibility for deploying new instances and upgrades of CA Spectrum and its components
- MSPs desire faster time-to-monitor for new tenants and customers
- Continuous integration and deployment require containerization

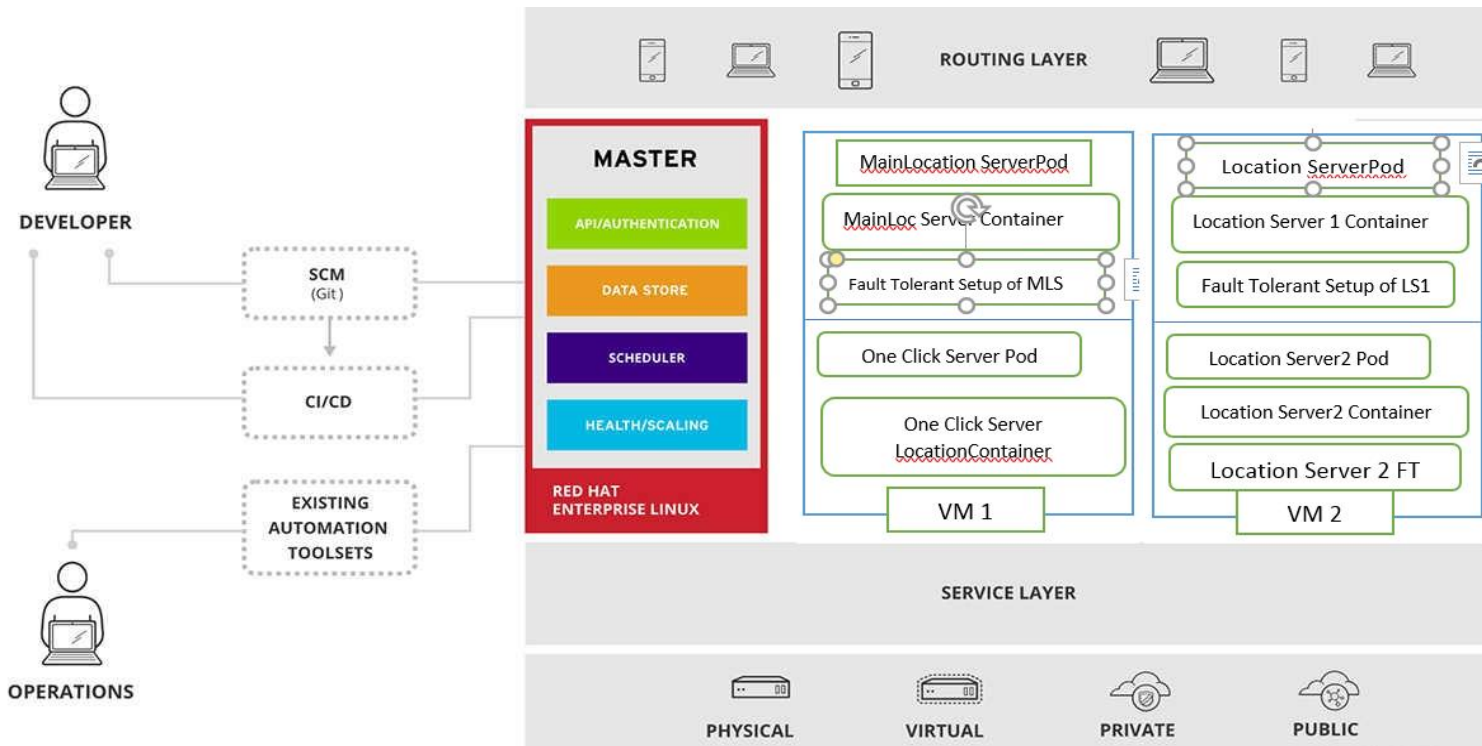
### KEY FEATURES

- Docker support for SpectroServer, OneClick Server and Secure Domain Connector
- Auto-scale CA Spectrum instances (both build and retire)
- Accommodates self-healing on system failure
- Load-balance OneClick servers as user population increases or declines

### BENEFITS

- Less time spent in deployment from pre-production or fresh install to production; as little as 5 to 7 minutes per image
- Onboard new locations, tenants or clients for faster book-to-bill

# CA Spectrum Dockerization Architecture

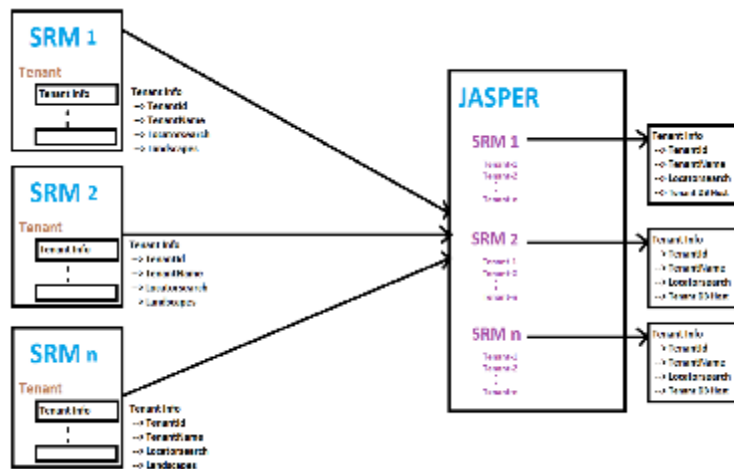


# Enhancements for New Reporting Requirements

# Report Consolidation for Large Data Sets

## Consolidate Tenant Data from Multiple CA Spectrum Report Managers

R10.3



### SITUATION

- Some organizations utilize multiple CA Spectrum Report Managers (SRMs) based on size of deployment, organizational structure or business model (i.e. MSP)
- Business requirement includes consolidated report across all SRMs

### KEY FEATURES

- CA Spectrum 10.3 integrates with new, updated version of CA Business Intelligence
- CA Business Intelligence now based on TIBCO JasperSoft® 6.4.2, which provide virtual data source using MySQL federated tables
- Reports and content accessible across the organization from common system folder

### BENEFITS

- Resolves prior challenges with both former SAP Business Objects and earlier versions of CA Business Intelligence
- Eliminates manual intervention to create multiple tenant reports and tenant-specific reports



## VMware Monitoring Enhancements



# Reconciliation of VMware Entities

## Synchronize VMware Hosts and Virtual Machines Across Tool Chain

### SITUATION

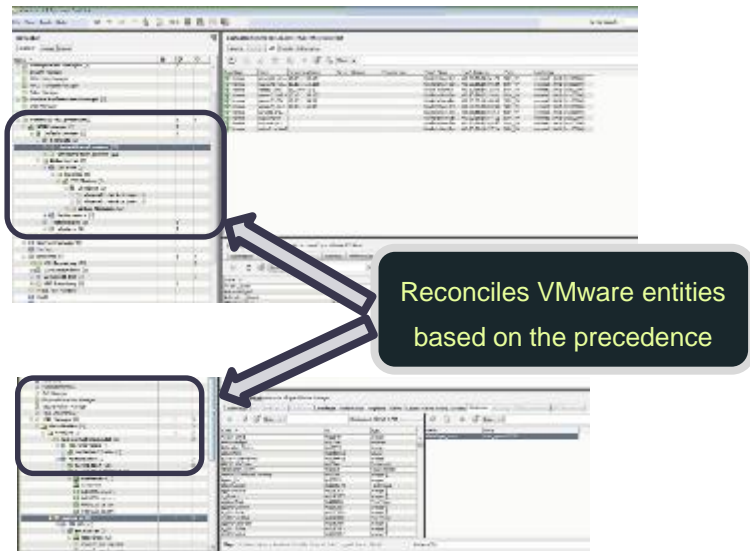
- VMware is ubiquitous hypervisor across traditional and modern infrastructure and network architectures
- Multiple tools may be monitoring these entities, requiring regular and accurate synchronization to avoid redundancy

### KEY FEATURES

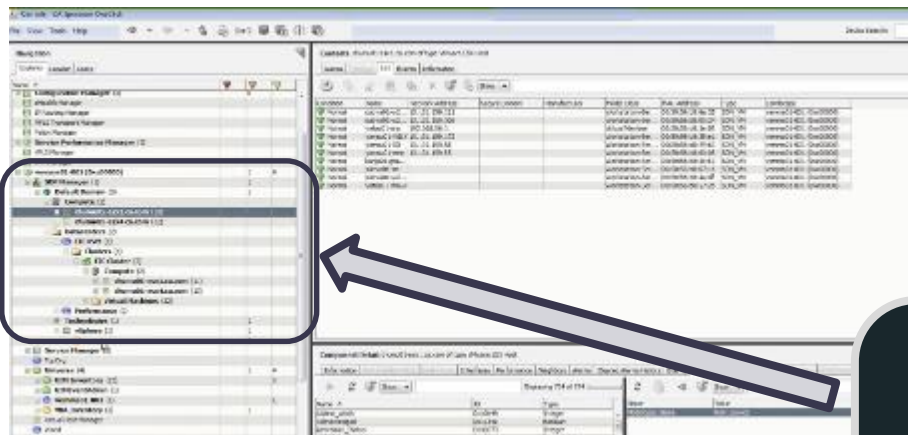
- CA Spectrum reconciles VMware entities that are common to it and CA Unified Infrastructure Management (CA UIM) and/or CA Virtual Network Assurance
- CA Spectrum correlates alarms associated with events from all three solutions
- New OneClick views for reconciled events and associate alarms
- CA Spectrum also captures OS details from CA UIM and synchronization failures from webserver logs

### BENEFITS

- Comprehensive topology view of VMware environment
- Patented event correlation, alarm suppression and root cause analysis for faster mean-time-to-repair



# Reconciliation of VMware Entities – Precedence



CA Spectrum reconciles VMware entities based on the precedence established with CA Virtual Network Assurance as the primary source of truth given its granular, consistent and robust data capture



A woman with blonde hair, wearing a dark jacket and sunglasses on her head, is sitting at a desk in a modern office. She is looking at a laptop screen and holding a small object in her hand. The office has large windows in the background, showing a city view. The lighting is warm and focused on the woman.

CA Spectrum 10.3

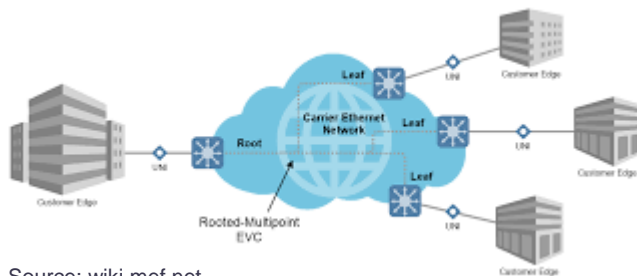
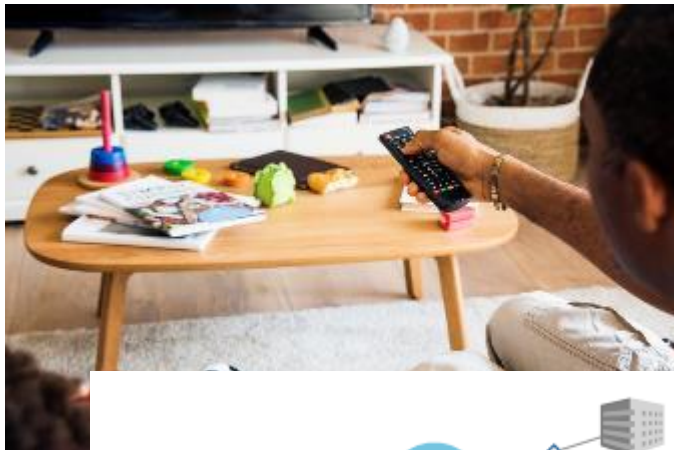
Support for  
Mega-Scale &  
Communication  
Service Provider  
Networks

# Support for Dynamic IP Addressing Schemes

R10.3

## New Capability to Resolve Device IP Addresses that Change

Source: unsplash.com/rawpixel



Source: wiki.mef.net

### SITUATION

- Some organizations use DHCP to assign IP addresses, particularly where a large number of devices are deployed, i.e. cable modems, and for Metro Ethernet services
- As DHCP leases expire and new IP addresses are issued, monitoring can get lost in the shuffle
- Similar situation can occur when contact to device is lost

### KEY FEATURES

- CA Spectrum now supports DHCP-based environments
- CA Spectrum runs DNS lookup to resolve original IP address with new IP address
- Situations where can occur include device IP swap, device contact lost and management agent lost,

### BENEFITS

- Allows IT organizations to utilize common network management procedure for IP addressing
- Ensures device monitoring carries forward after IP address lease expiration and renewal

# New Filtering for Very Large Devices

Ensure System Resilience When Discovering Devices with High Port Counts

R10.3

Option to MType of the  
device model which you want  
to filter

## MTYPE Based Iftype Filtering

MTYPE Iftype Map

0x21000c -> 6

[Add](#) [Edit](#) [Remove](#)

## SITUATION

- Some organizations rely on carrier-grade routers that provide ultra-high-density
- Business requirement can include a limit on the number of interfaces to be monitored following discovery
- Unchecked, discovery of high port-count devices can stress system resiliency

## KEY FEATURES

- CA Spectrum 10.3 provides new functionality to filter out device component that should not be discovery and monitored

## BENEFITS

- Interface filtering is requirement for many communication service providers, cloud providers and large, highly distributed enterprises
- Filtering removes potential for system failure

## Additional Enhancements

# Additional Enhancements, 1 of 3

- Enhanced integration with CA Unified Infrastructure Management
  - OS details now passed to CA Spectrum for improved filtering; new debugging for synchronization failures
- Syslog monitoring
  - CA Spectrum uses DNS lookup to match host name and IP address if enabled; if not, new PreventDNSlookup provides functionality to search for model name
- Monitoring profile reporting
  - Report on MIBs, trap details and pollable attributes for greater visibility into what's being monitored
- API performance
  - Improves uptime, availability, reliability, functional correctness and responsiveness
- Database performance
  - InnoDB engine supports partitioning of events table for efficient event retrieval

# Additional Enhancements, 2 of 3

- CDP and LLDPv2 MIB discovery and topology mapping
  - Discovers connections between Cisco and Juniper devices
- Device certifications
  - Cisco IOS 15.x, HP Intelligent Resilient Framework
- Communication link down alarms
  - OneClick view for affected interfaces; also, capability to remove unwanted interfaces
- Network Configuration Manager enhancement
  - New option for AutoRepair while creating configuration policy
- Modeling Gateway update
  - New functionality for export and import of World and Top Org views



# Additional Enhancements, 3 of 3

- MPLS monitoring enhancement
  - Supports extended for MPLS Tunnel Discovery Based on RFC 3812 MIB and Traps configurations
- Event generation for SNMP v3
- Performance enhancement for model deletions, SBG trap processing, SS startup
- Localization for EventFormat, Pcause and other properties
- OneClick launch now contains action for multiple selected items
- Microsoft support
  - Support for Microsoft Windows 2016 and Microsoft System Center Operations Manager 2016
- Platform support
  - MySQL 5.7.22, Tomcat 9.0.8, JDK\JRE 1.8.0\_172, CXF 3.2.4, Cygwin 2.10



***What Questions Do You Have?***





**THANK YOU!**