



Why Upgrade to Unified Infrastructure Manager 20.1



Agenda

- Why Unified Infrastructure Management from Broadcom
- Why Upgrade to Unified Infrastructure Management 20.1 and How
- Unified Infrastructure Management 20.1 Marquee Features
- Monitoring Technologies Updates

Durable Problems for IT Operations

Data Explosion

40%

of I&O teams will use AI-augmented automation in large enterprises, resulting in higher IT productivity with greater agility and scalability ³



Drastic increase in operations data make it difficult for teams to analyze, react and predict on

Modern Complexity

75%

of successful digital strategies will be built by a transformed IT organization, with modern & rationalized infrastructure, apps & data architectures ²



Adoption of new technologies leads to monitoring complexity & skills gap

Tool Expansion

72%

of companies are currently using multiple tools to capture end-user metrics¹



Tool sprawl increases the time taken to identify and remediate issues ⁴

1: Dimensional Research: Improving User Experience and the Bottom-Line: A Global Survey of User Experience Professionals; December 2018; 2: IDC: "IDC FutureScape: Worldwide CIO Agenda 2019 Predictions", US44390218, Oct 31, 2018; Serge Finding; 3: Gartner: "Predicts 2019:Artificial Intelligence Core Technologies" ID G00375468, November 28, 2018; Chirag Dekate; 4: Gartner: Use AIOps for a Data-Driven Approach to Improve Insights From IT Operations Monitoring Tools; 2018

Value Proposition: Manage Today's Infrastructures

UNIFIED INFRASTRUCTURE MANAGEMENT

AIOps



Predictive Insights boost user experience



Zero-Touch Configurations save time and cost

Intelligence: Capacity | Anomalies | Root Cause

Predictive, Actionable Dashboards & Alerting

SLA | Performance | Log | Response



Most Comprehensive support for hyperconverged and legacy on-premises technologies



Open, Extensible Architecture for scale & rapid support of new apps or infrastructures

Why Upgrade and How



Why Upgrade to UIM 20.1



Enterprise Class

Enhancements include more zero-touch policy configuration and additional security for high-scale enterprises and MSPs



Modern Support

Enhancements include support for Windows 2019, Red Hat 8.x, SUSE 15.x and Oracle 19c



High Quality

Enhancements include 40+ customer enhancement requests, 15+ ideas from User Community, and customer-found defect fixes

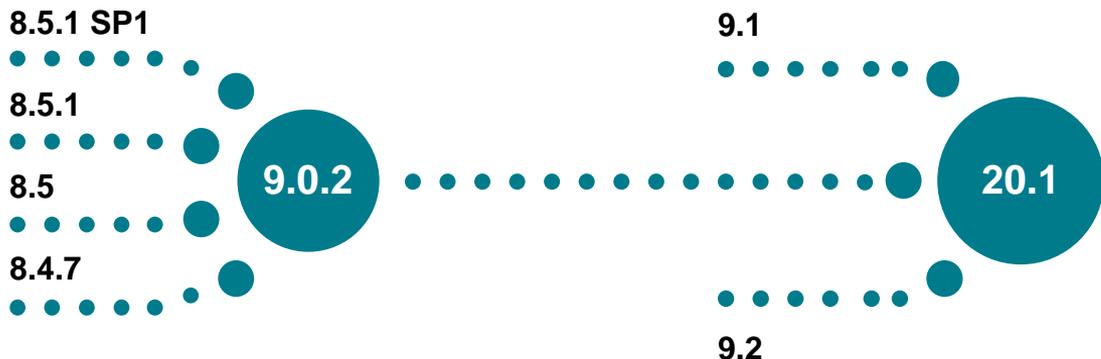


Path Ahead

Enhancements include tighter integration with AIOps from Broadcom analytics and automation platform

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

7.5 or higher

8.2

8.4.7

9.0.2

20.1

For customers with very old implementations

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

Unified Infrastructure Management 20.1: Marquee Features



Platform Support



Version Currency and Directory Server Authentication Updates

Key Highlights

Database support for Microsoft SQL Server 2017 and Oracle 19c

Platform support for Microsoft Windows 2019, Red Hat Enterprise Linux 8.x, SUSE Linux Enterprise 15.x

Java Runtime Environment updated to OpenJDK JRE 8u212

Client-server mutual authentication for LDAP directory server



19^c ORACLE[®]
Database



OpenJDK



UIM 20.1 Platforms Supported/Dropped

Platforms Supported	Vendor	Version	Component
	IBM iSeries (AS/400)	IBM i7.3	Robot
	Linux	SUSE 15.5	Hub + Robot
		Ubuntu 18.4 LTS	Robot
		RHEL 8.x	Hub + Robot
		Debian 9	Hub + Robot
	Microsoft	Win Server 2016	Hub + Robot
		Win Server 2019	Hub + Robot
	Microsoft	SQL Server 2017	Database
Oracle	Oracle 19c	Database	

Platforms Dropped	Vendor	Version	Component
	iBM iSeries (AS/400)	V5R3	Robot
		V5R4	Robot
	HP-UX	11.2 (IA-64)	Robot
		11.2 (PA-RISC)	Robot
	Linux	CentOS 5 (32/64)	Robot + Hub
		Debian 5 & 6	Robot + Hub
		PowerPC BE	Robot + Hub
		RHEL 5 (x86_32, x86_64)	Hub
		Ubuntu 12 x86_32	Robot
Microsoft		Win 2008 (32/64)	Hub + Robot
	Win 2008 R2 64	Hub + Robot	

Secure System Communications



Key Highlights

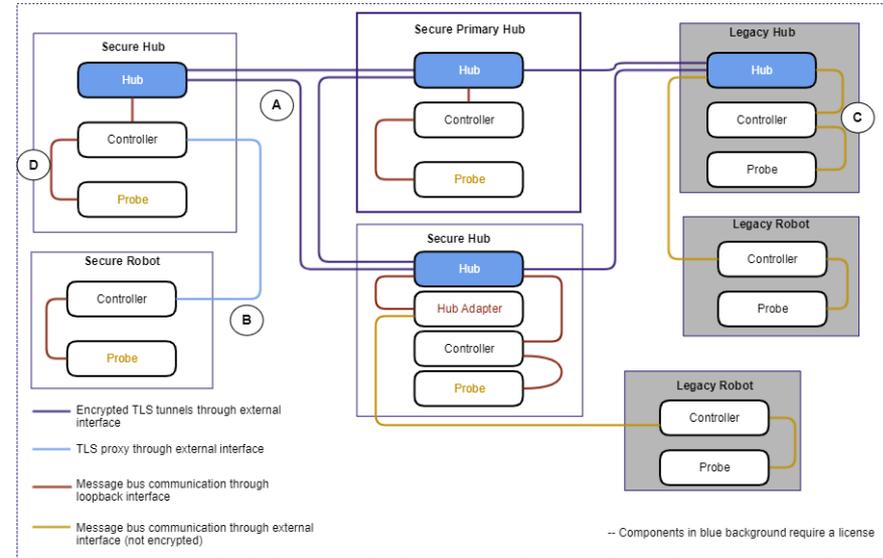
Secure hubs communicate only through tunnels

The controller handles communication between secure hubs and robots: the communication is encrypted

Non-secure hubs and robots continue to use non-encrypted transport

All internal communication between components installed on a secure server occur over the loopback

Aligns with TLS 1.2 industry standard



Group Availability Report

Availability/Reachability for Physical, Virtual and Cloud Compute Instances

Key Highlights

Get availability % at both group and device level

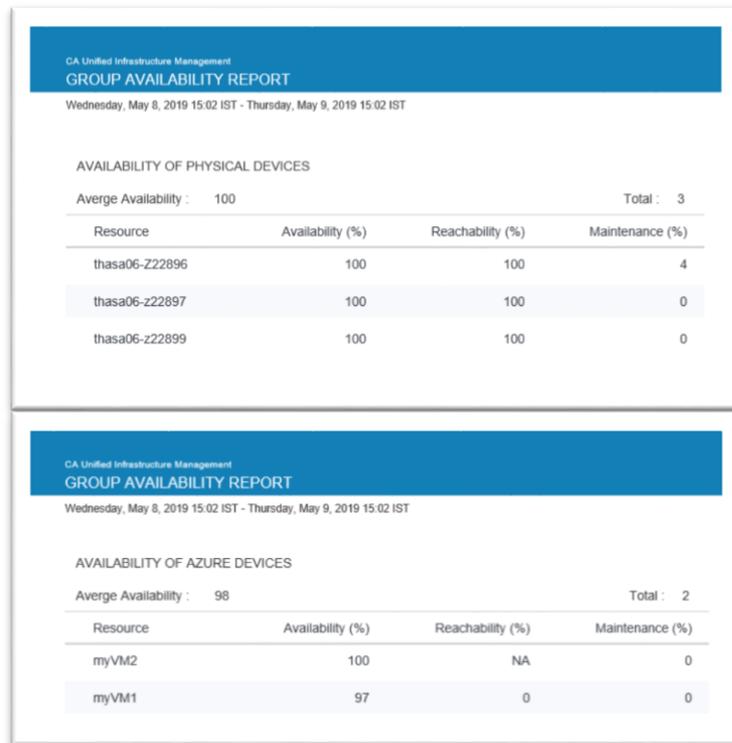
Report can be auto-scheduled and exported

Device availability composed of

- Availability: device power ON/OFF
- Virtual/cloud device: power state metric
- Physical device: robot/device power up, hub-robot connectivity status having local robot in-place (Hub 7.96+)

Reachability: device is available if it's reachable through ICMP ping

Maintenance mode: removing maintenance scheduled for accurate availability calculation



CA Unified Infrastructure Management
GROUP AVAILABILITY REPORT

Wednesday, May 8, 2019 15:02 IST - Thursday, May 9, 2019 15:02 IST

AVAILABILITY OF PHYSICAL DEVICES

Average Availability : 100 Total : 3

Resource	Availability (%)	Reachability (%)	Maintenance (%)
thasa06-z22896	100	100	4
thasa06-z22897	100	100	0
thasa06-z22899	100	100	0

CA Unified Infrastructure Management
GROUP AVAILABILITY REPORT

Wednesday, May 8, 2019 15:02 IST - Thursday, May 9, 2019 15:02 IST

AVAILABILITY OF AZURE DEVICES

Average Availability : 98 Total : 2

Resource	Availability (%)	Reachability (%)	Maintenance (%)
myVM2	100	NA	0
myVM1	97	0	0

Dynamic, Policy Based Configuration



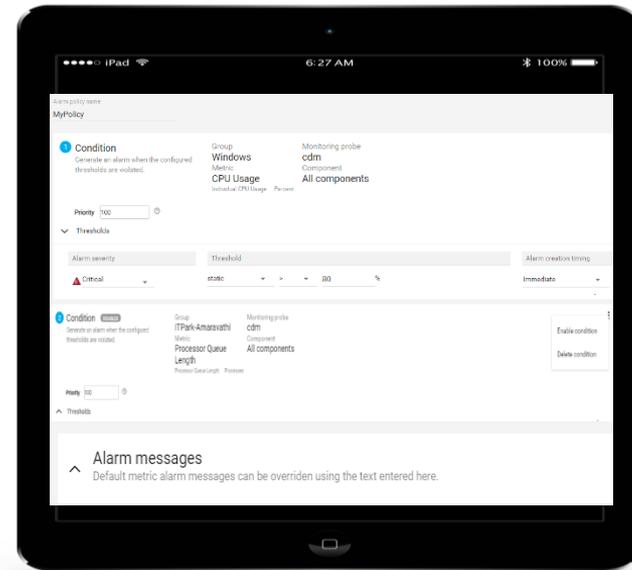
Speed Monitoring Deployment and Reduce Complexity

Key Highlights

Minimum touch, turnkey on-boarding reduces time to value and insight

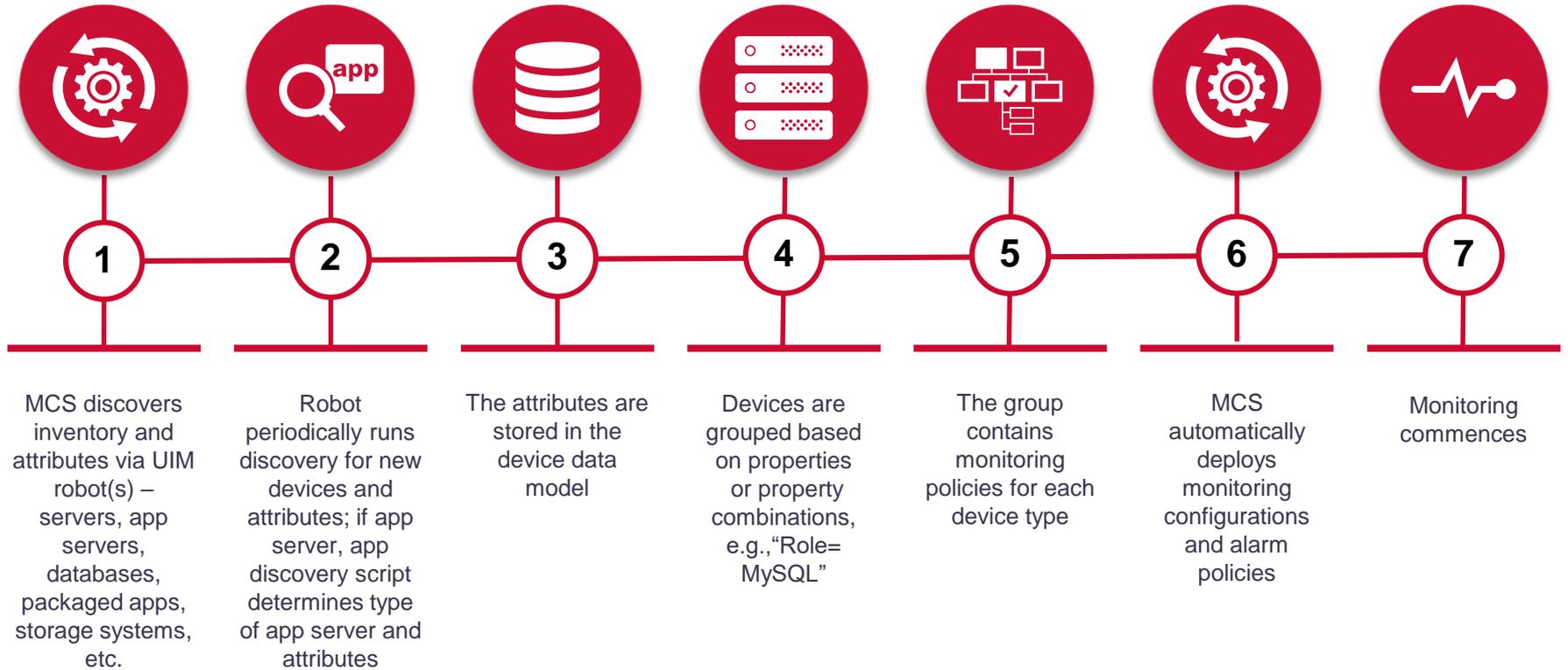
By leveraging policy based approach you can centralize configurations of thresholds, messages and actions plus ensure consistency

Dynamic automated discovery and configuration across hybrid environments reduces complexity and boosts productivity



Zero Touch Configuration

How It All Fits Together



Monitoring Configuration Service (MCS)



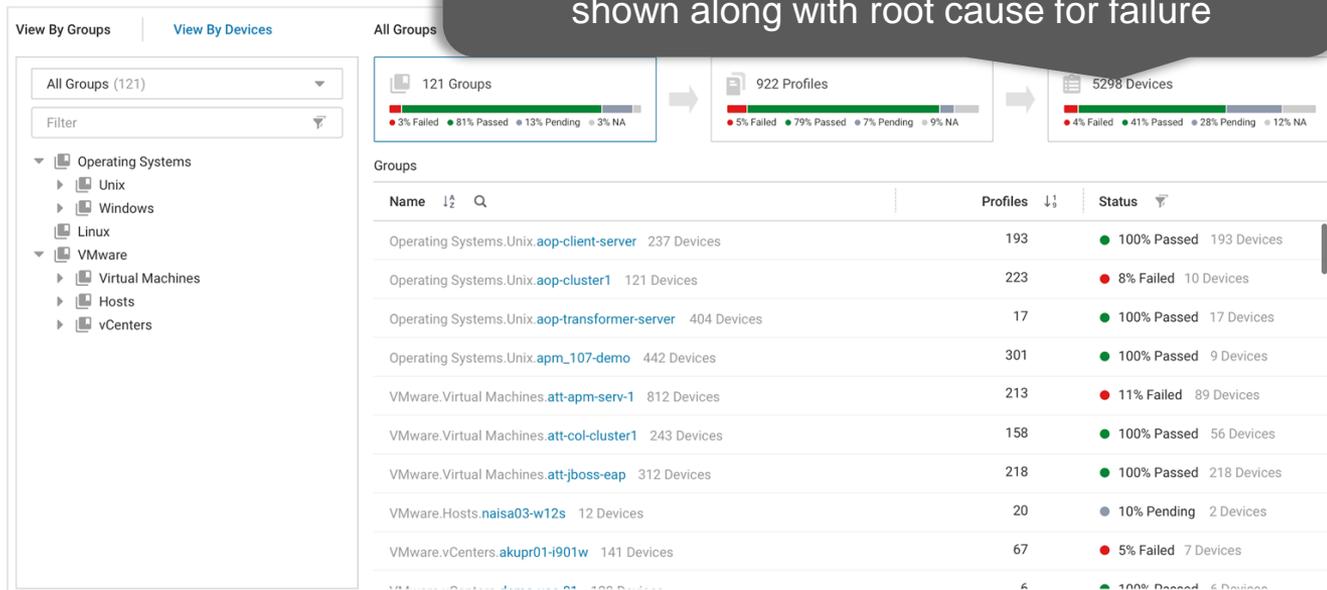
Enterprise Dashboard to Initiate Zero-Touch Configuration

Key Highlights

Real time interactive visualization of

- Group profiles deployment
- Device profiles deployment
- Drill down via groups profile until you get to devices
- Status update with error message in case of deployment failure

Summarized profile deployment status for groups and devices; red means failed profile deployment shown along with root cause for failure



Modern, Intuitive User Interface



New Operator Console Boosts Visibility and Productivity

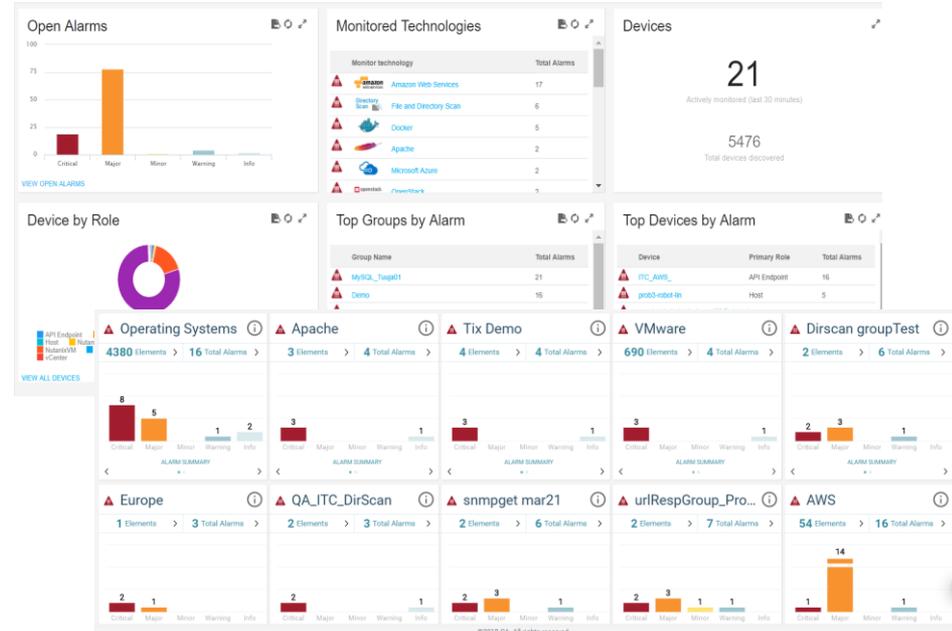
Key Highlights

HTML5 based intuitive interfaces allow you to easily perform administrative tasks

Unified view into all your technologies, inventory and alarms provides better visibility

Contextual drill down and analysis enable rapid triage

Customizable table columns



Monitoring Technology Updates



UIM Monitoring Technology Updates

Virtualization & HCI 	
VMware	7.14 (3/19)
Cisco UCS	2.43 (6/19)
Solaris Zones	2.0 (10/19)
Nutanix	1.56 (5/19)
OpenStack	1.38 (5/19)

Storage 	
Dell VMAX	1.44 (9/19)
IBM SVC	1.11 (4/19)
HPE 3PAR	1.24 (5/19)
Hitachi VSP 5000	2.14 (3/20)

Database 	
IBM Db2 pureScale	4.2 (5/19)
Hadoop	1.11 (9/19)
Mongo	2.0 (6/19)

Applications 	
SAP BASIS	2.06 (12/19)
Cisco Meraki	1.0 (7/19)
RESTMon	1.37 (3/19)
IBM WebSphere	1.82 (10/19)
IBM WebSphere MQ	2.22 (4/19)
Microsoft AD Events	2.03 (7/19)
Apache Soir	1.0 (2/20)
Apache Oozie	1.0 (2/20)
Apache Flume	1.0 (2/20)
DNS Response	1.69 (7/19)
DHCP Response	3.25 (7/19)
Oracle WebLogic	1.61 (5/19)
SQL Response	1.80 (5/19)

Network 	
SNMP Collector	4.0.3 (8/19)

Gateways 	
Operational Intelligence	1.21 (11/19)
APM Bridge	1.02 (11/19)
APM	3.23 (6/19)
Service Desk	2.20 (7/19)
Message Gateway	1.3 (10/19)

System 	
CDM	6.42 (4/19)
RSP	5.35 (4/19)
Processes	4.7 (3/20)
Logmon	4.11 (7/19)
Usage Metering	9.25 (8/19)
Net Connect	3.37 (4/19)
NT Services	3.5 (3/20)
Cluster	3.7 (3/20)
E2E App Response	2.52 (12/19)
URL Response	4.46 (7/19)



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