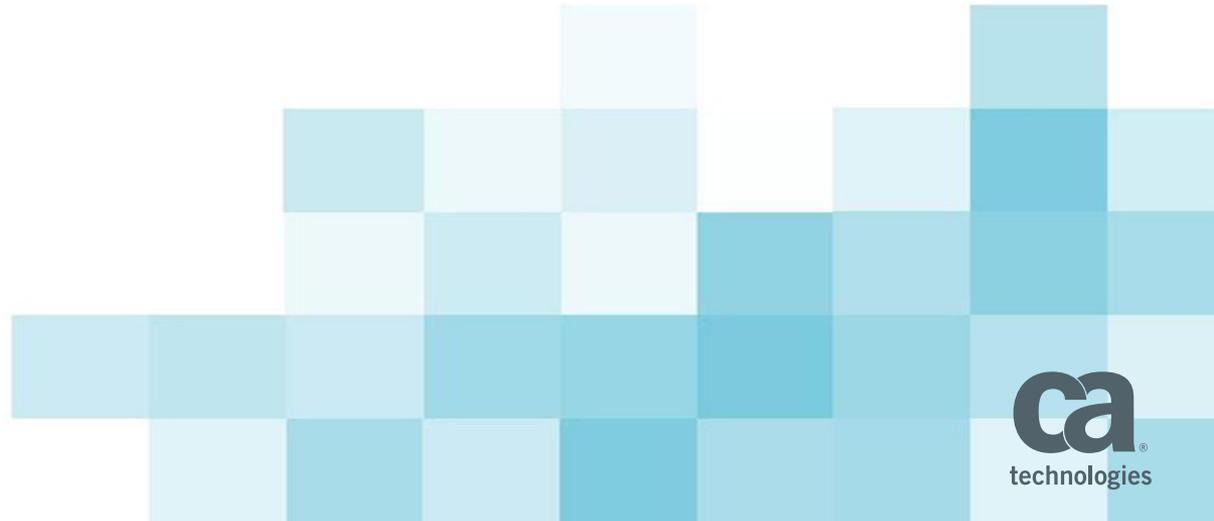


# Spectrum-UIM integration

Community Webcast

**Date: 9/8/16**



# Agenda

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**OVERVIEW**

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**FUTURE PLANS**

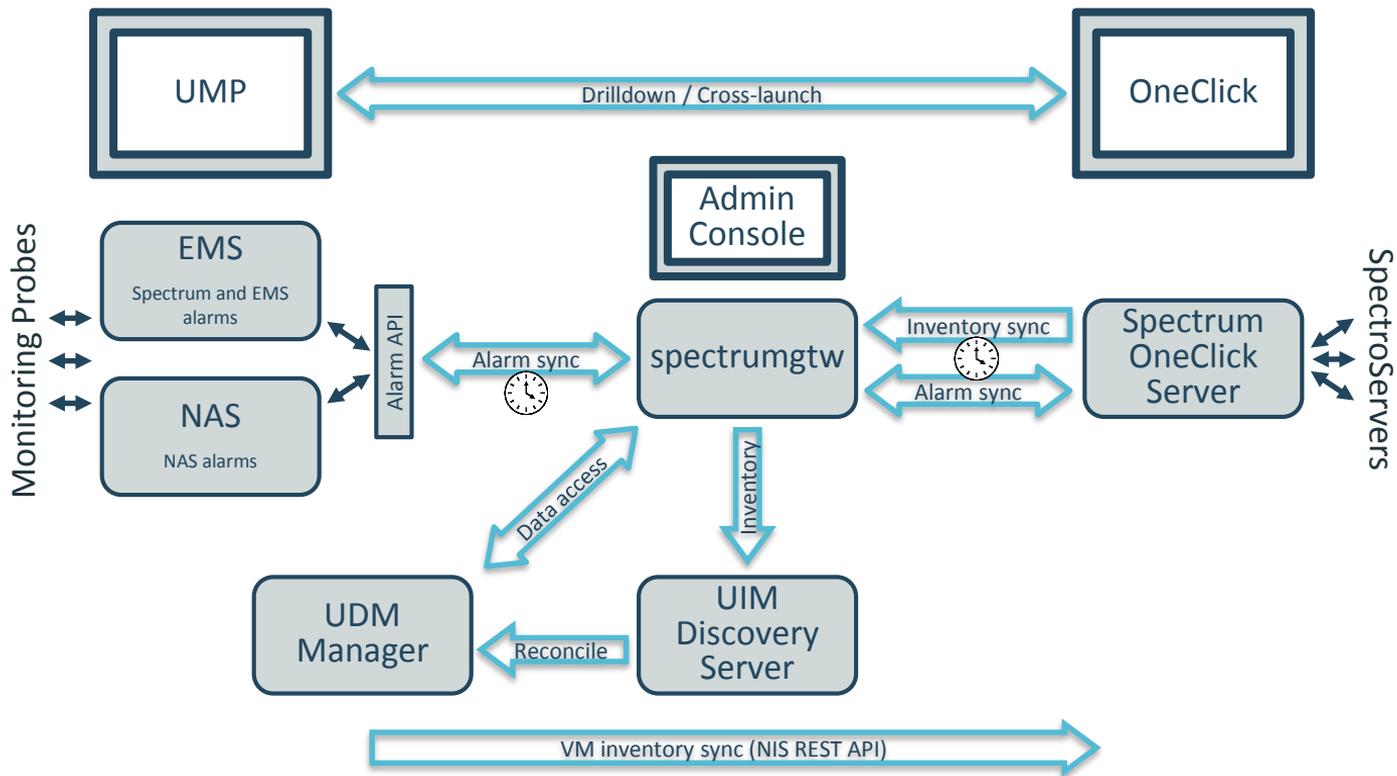
# What do you get?

- Finally, the bi-directional integration will be GA!
- Manage the entire IT environment – systems as well as networks, from the same tool
- Drive operational workflows from the same, single console
- UIM will leverage root cause analysis and fault isolation
- Reduce redundant effort required in updating same information in both the tools
- Granularity to determine the direction of synchronization, for better control

# Beta validation program update

- Participating customers: 16
- Successfully tested all use cases: 5
- Feedback:
  - Map additional events from UIM to Spectrum
  - Ability to perform selective sync of inventory
  - Ability to perform selective sync of alarms
  - Additional metrics
  - Root cause analysis for UIM alarms

# UIM-Spectrum Integration Architecture



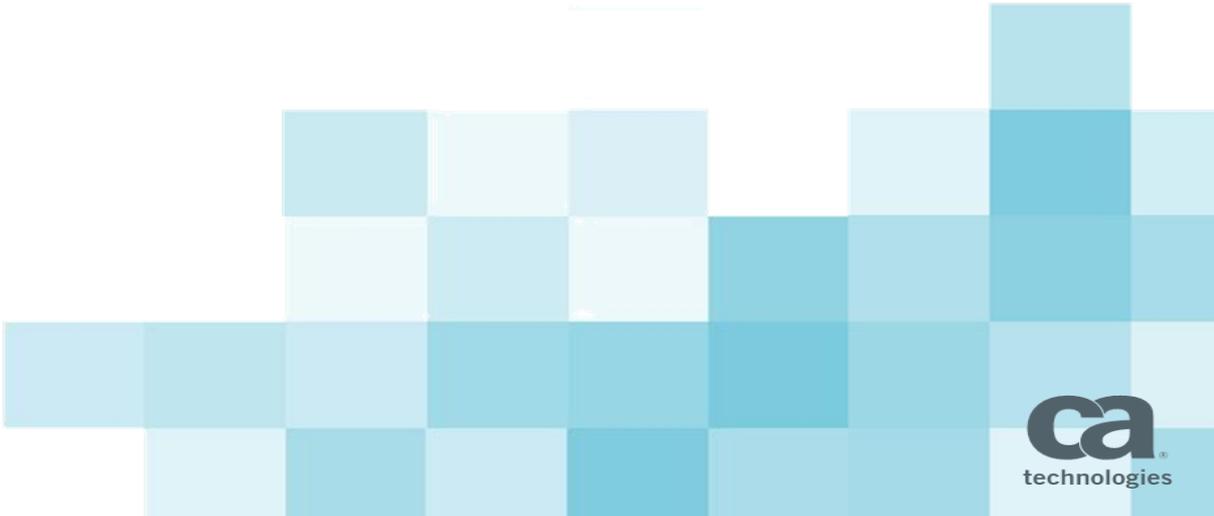
# Prerequisites for integration

- Spectrum Servers should be at version 10.1 or 10.1.1
- CA Unified Infrastructure Management Server should be at version 8.4.2 or higher
- EMS, NAS and Trellis probes should be deployed and running
- NIS API should be at version 8.4.2 or higher

# Overview

- Export and correlate UIM inventory (servers and VMs) to Spectrum
- Bi-Directional capabilities to sync and drive alarm workflows from Spectrum to UIM and vice versa
- NIS API update to support the latest version i.e. NISAPI 8.4.2 or higher
- Export and correlate Spectrum Inventory from a Global Collection to UIM

# Detailed use cases



# Export and correlate UIM Inventory to Spectrum

- Import inventory from UIM to Spectrum
- Servers and VM inventory is synced from UIM to Spectrum
- Out of box solution for managing VM as a server

# Bi-directional View of Alarms

- Alarms raised in UIM, will be visible in Spectrum in context of a device
- Alarms raised in Spectrum, will be visible in UIM in context of a device
- The direction is configurable with following options:
  - Spectrum to UIM
  - UIM to Spectrum
  - Both: Default option

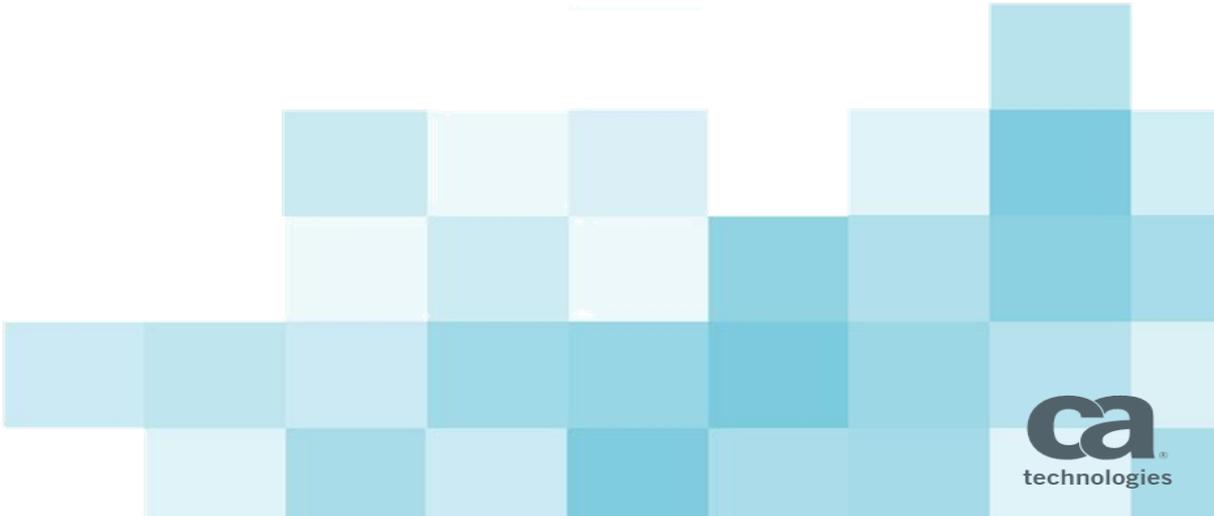
# Bi-Directional Clear / Update of Alarms

- For both UIM and Spectrum alarms:
  - Updated troubleshooter in UIM will be updated in Spectrum and vice versa
  - Acknowledged in UIM will be cleared in Spectrum
  - Cleared in Spectrum will be acknowledged in UIM
  - Ticket ID created in either of the applications get synced at both the places

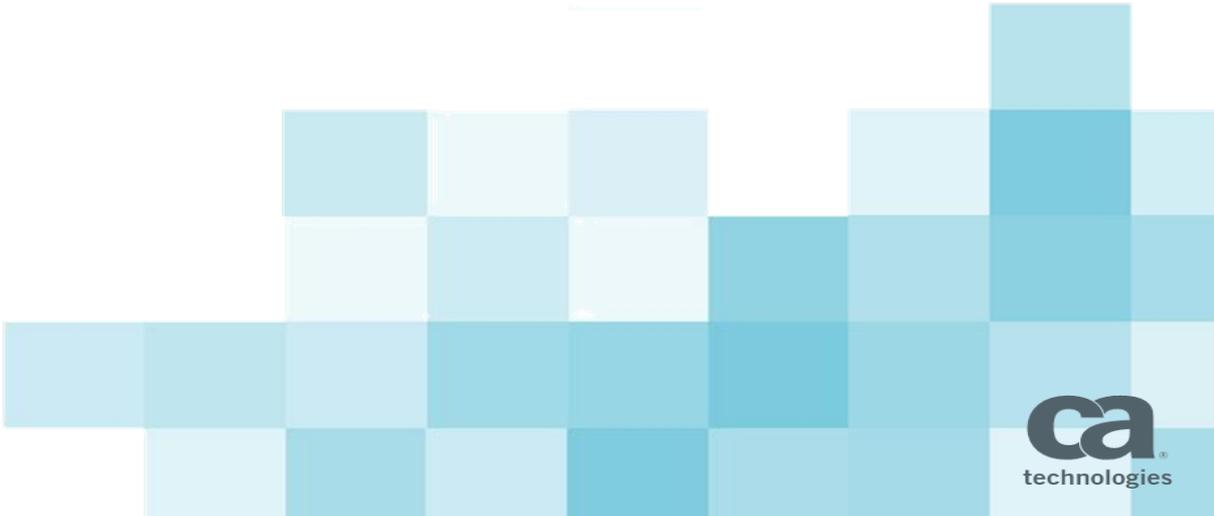
# Export and correlate Spectrum Inventory from a Global Collection to UIM

- Import inventory from Spectrum Global Collection in UIM
- Metrics available in UIM
- Physical interfaces of the devices in the configured GC will be synced to UIM

# Demo



# Future Plans



# Stay tuned for these enhancements

- Mapping more events from UIM into Spectrum to provide more flexibility and customization capability for the admin
- Sync cloud inventory and alarms from UIM to Spectrum for monitoring
- Provide selective sync for inventory based on certain parameters e.g. device type to reduce clutter and unwanted sync
- Provide selective sync for alarms based on certain parameters e.g. device type to reduce clutter and unwanted sync
- Maintenance schedules sync between UIM and Spectrum to eliminate redundant efforts required for an admin to configure maintenance schedules on both the tools

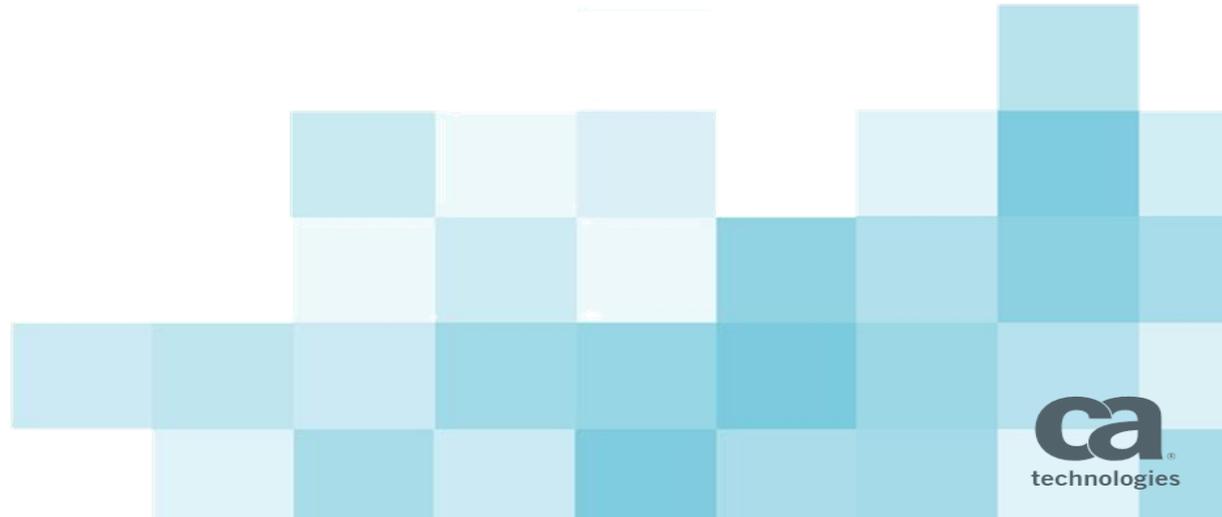
# Questions



# Appendix



# High level architecture



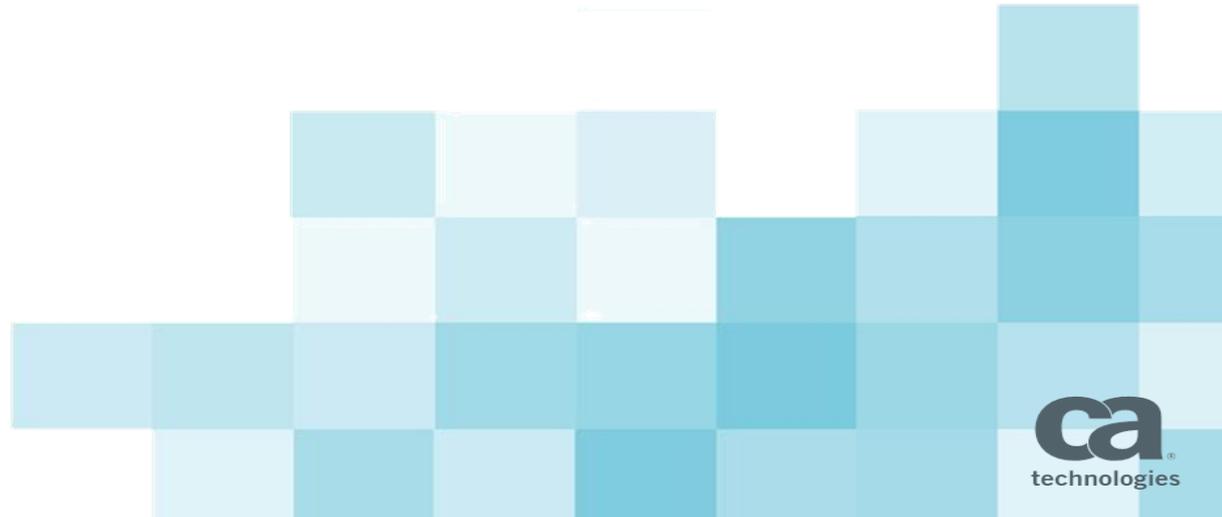
# UIM-Spectrum Integration Alarms sync

- Two-way integration between UIM and Spectrum is enabled by the new **spectrum gateway** probe.
  - UIM probe deployed adjacent to a Spectrum OneClick server
  - Syncs inventory one-way from a Spectrum Global Collection (GC) to UIM
    - Incremental and full inventory sync (30 minutes and daily, respectively; configurable)
    - Uses UIM Discovery Server to reconcile UIM and Spectrum inventory perspectives
  - Syncs alarms both ways between UIM and Spectrum
    - Incremental and full alarm sync (30 seconds and hourly, respectively; configurable)

# UIM-Spectrum Integration Inventory sync

- The existing integration continues to use the NIS REST API to sync VM / host servers inventory one-way to Spectrum.
  - VM / Host servers inventory is synced to Spectrum.

# Deployment pre-requisites



# Prerequisites for integration

- Spectrum Servers should be at version 10.1
  - Spectrum 10.1 should be installed before installing 10.1.2 patch to enable UIM Bi-directional support
  - 10.1.2 patch can also be installed on top of 10.1.1
- Existing CA Spectrum – CA UIM integration for alarms through southboundgateway and CA UIM's snmpgtw probe should be stopped by deleting the Spectrum profile from CA UIM's snmpgtw probe
- "CA Spectrum-UIM Bidirectional Management" option should be checked on OneClick Administration page, for alarms to sync from CA UIM to CA Spectrum
- Spectrum should have a Global Collection containing only 'physical' (non-virtual) devices

# Prerequisites - UIM and Gateway Probe

- CA Unified Infrastructure Management Server should be at version 8.4.2 or higher.
- EMS, NAS and Trellis probes should be deployed and running.
- NIS API should be at version 8.4.2 or higher.
- *spectrum-uim-service-impl* has to be deployed on the primary robot where Trellis is installed and Trellis has to be restarted.

# Recommended deployment practices

- Spectrum
  - Enable integration on a OneClick Server that is connected to the MLS and not integrated with SRM
- Gateway Probe
  - Ensure Gateway probe is deployed in the same network where Spectrum OneClick server is installed



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