CA Enterprise Management:

CA Spectrum r9.2.3

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Kiran Diwakar,
Principal Product Manager,
Enterprise Management
Kiran.Diwakar @ca.com

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Agenda

- Spectrum r9.2.3 Overview

- Microsoft and IBM Clusters Support

- Cluster Support Capability Tour

- Demo

- Quality Initiative

- Roadmap

CA Spectrum – Project Saratoga(9.2.3)

- Objectives of this release are the following:
  - Strengthening of Spectrum's Systems Management Capabilities through Microsoft Clusters and IBM HACMP PowerHA support
  - Continued support for new and updated devices through certifications
  - Provide a vehicle for maintenance roll-up for enhanced stability
  - **Specific focus on install/upgrade experience & quality in response to comments from the community**

- Objectives of this release are the following:
  - GA Planned: 21th January 2013

CA Spectrum Quality Initiative

Quality Initiatives

- ## New with Saratoga:

  - Automated installation testing, covered all 17 OS versions that Spectrum supports (as indicated by PM)

  - Covered the 4 different paths of upgrades as identified by PM

- ## Bug Bash

  - (Additional) Ad-hoc/ Exploratory testing done without following any pre-defined test documentation, to simulate ad-hoc real world usage
  - Test POD & Specific Test Environment

- ## Performance Testing

  - Components planned to be tested for scalability and longevity:
    - Performance of SpectroSERVER, OneClick, Database, critical fix impact, Systems Management features

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Quality Initiatives

- "Ramp-load testing" for every iteration during development

  - Working with 100s of devices iteratively, for discovery/modeling and trying to "break" Spectro-Server

- Separate Release Scrum Team

  - Not tied to "a" specific component, but end to end testing, upgrades et al
  - Goals of the team:
    - Ensuring that **QUALITY** is baked into the product, not added at the end
    - Focus on the **OPERATION** of Spectrum. Make sure it functions as we say/expect it to, initial focus on Performance
    - **AUTOMATION** should be considered in everything that we do!
    - Step towards **PROACTIVELY** reducing the backlog and enhancing the **LONGEVITY** Spectrum

Release Team Impact

- Guiding the "other" teams on areas to focus – based on information:

Threading Model

	Sprint 1	Sprint 2	Sprint 3	Sprint 4	Sprint 5	Sprint 6	Sprint 7	Totals
# of Work Items	0	2	1	1	0	0	0	4
# of Change Sets	0	6	5	2	0	0	0	13
# of Regression Tests Exec	0	31	12	8	0	0	0	51
# of S1/S2 issues open	0	1	5	0	0	0	0	6
# of Work Items	0	2	3	4	4	4	4	
# of Change Sets	0	6	11	13	13	13	13	
# of Regression Tests Exec	0	31	43	51	51	51	51	
# of S1/S2 issues open	0	1	6	6	6	6	6	

Lower = Cumulative

SNMP Stack Changes

	Sprint 1	Sprint 2	Sprint 3	Sprint 4	Sprint 5	Sprint 6	Sprint 7	Totals
# of Work Items	0	2	0	0	0	0	0	2
# of Change Sets	0	3	0	0	0	0	0	3
# of Regression Tests Exec	0	8	6	0	0	0	0	14
# of S1/S2 issues open	0	6	7	0	0	0	0	13
# of Work Items	0	2	2	2	2	2	2	
# of Change Sets	0	3	3	3	3	3	3	
# of Regression Tests Exec	0	8	14	14	14	14	14	
# of S1/S2 issues open	0	6	13	13	13	13	13	

Lower = Cumulative

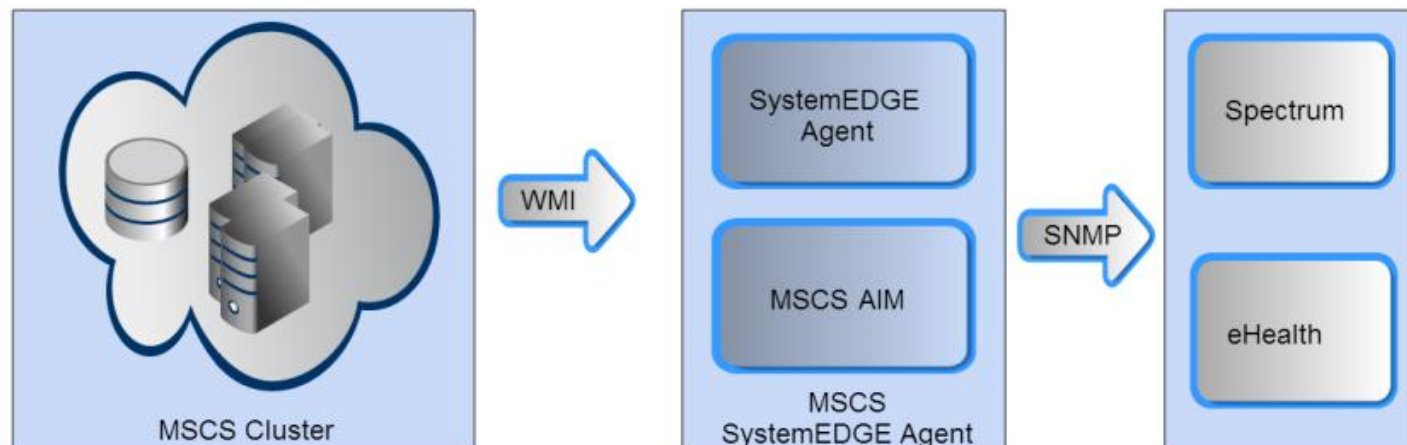# of Work Items — # of Change Sets — # of executed regression tests — # of S1/S2 resolved

8
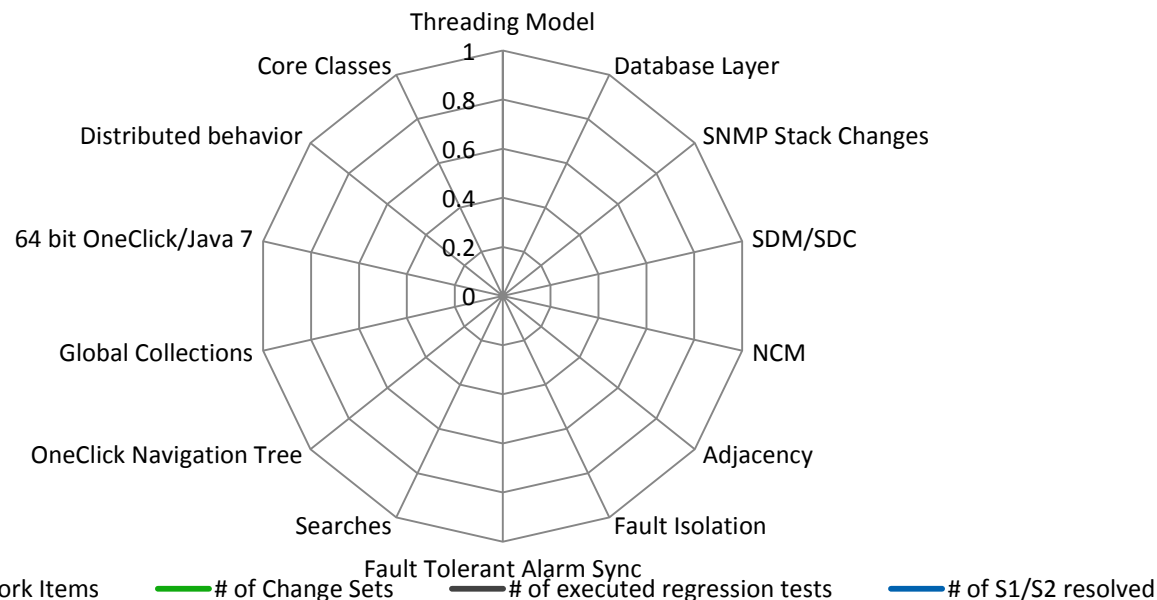
CA Spectrum Support for Microsoft Cluster and IBM PowerHA Monitoring

Solution Overview

- Spectrum Cluster Manager solution architecture leverages the SystemEDGE AIM deployment Architecture
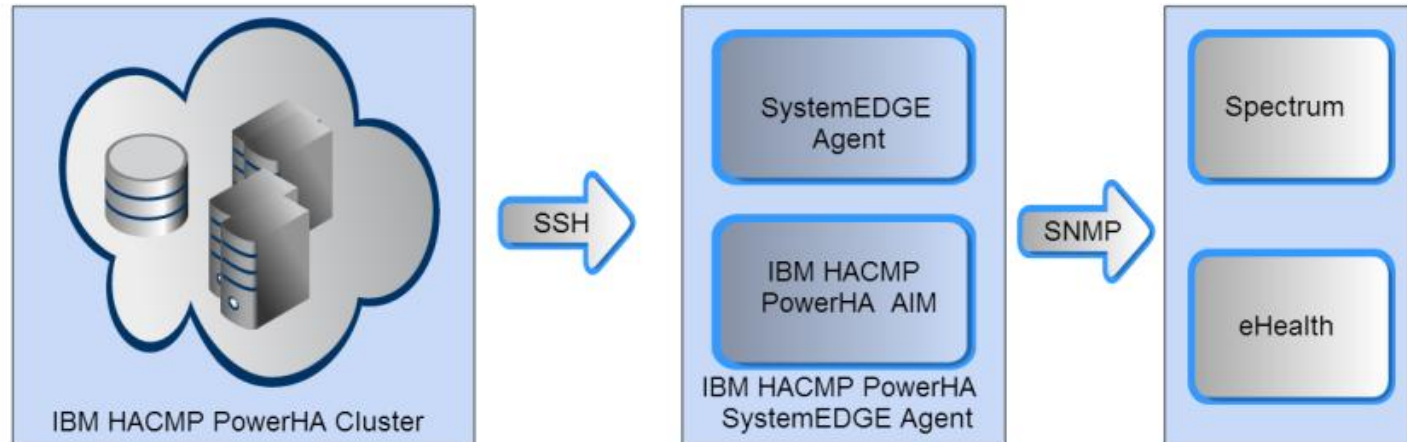
Typical IBM PowerHA AIM Deployment

Typical MSCS AIM Deployment

- The Cluster AIMs are specialized CA SystemEDGE Application Insight Modules

  - Extension of the CA SystemEDGE agent

  - Resides on its own host

  - Obtains data from Cluster Services that are specific to the clustering technologies

  - Writes data to a CA-developed MIBs (camscsaim & cahacmpaim)

  - Provides MIB data to clients via SNMP requests

- CA Spectrum's Cluster Manager can support multiple AIMs

  - Provisioned within a single SpectroSERVER

  - Distributed across multiple SpectroSERVERs

Cluster AIMs
Packaging & Requirements

- Will be available as part CA VAIM package

  - Support for use with both CA eHealth and CA Spectrum

- IBM HACMP PowerHA AIM supports monitoring

  - HACMP 6.1

- MSCS AIM supports monitoring

  - Windows 2003 sp2

  - Windows 2008 and R2

- Supported platforms for the HACMP and MSCS AIMs

  - Windows 2003, Windows 2008 Datacenter, Enterprise & Standard, Service Pack 2 and r2

Navigating the Modeled Environment
Navigation Panel Hierarchy

The Cluster Manager hierarchy provides a tree structure that helps you to visualize the logical organization of your managed cluster environments

– Cluster Manager

– Cluster technology

– Cluster

– Cluster node

– Resource group

– Resource
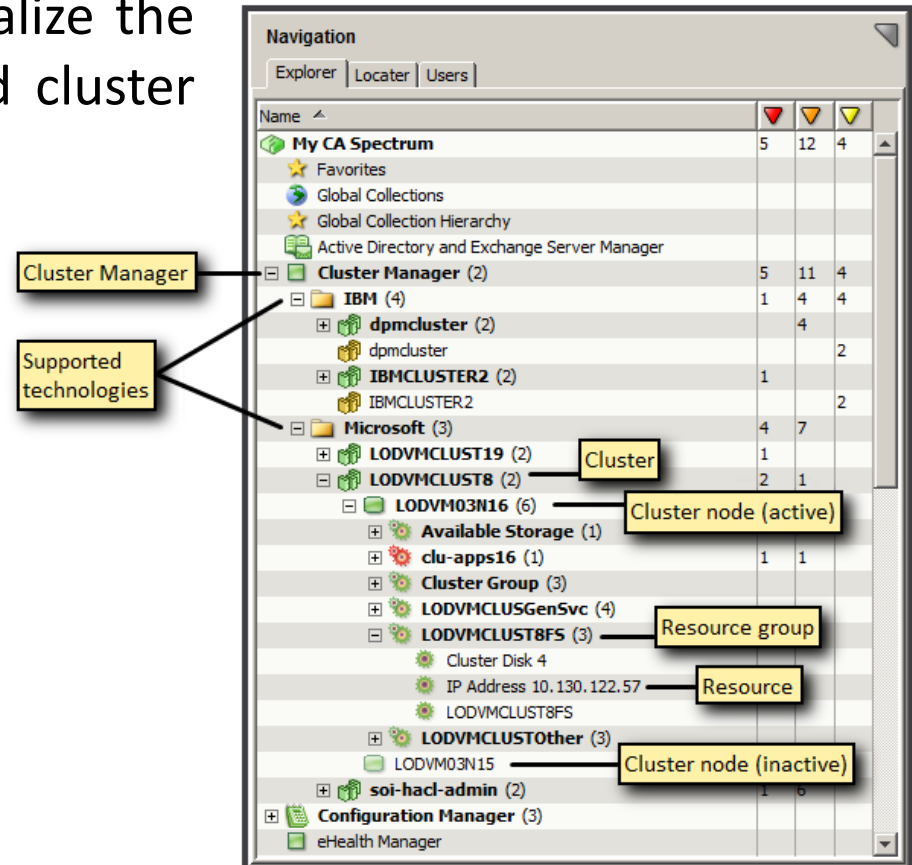
Capabilities of the Solution

- **Enhanced fault management capabilities**
  - State-based alarming
  - Enhanced support for SystemEDGE self monitoring traps
  - Recognition and correlation of symptomatic alarms

- **One Click Sub-Views**

- **Locator searches**

- **Cluster Reports (to come in H11)**

- **Automatic discovery, modeling**
  - Identification & organization of cluster entities in the topology
  - Clusters, nodes and resource groups, active and inactive node identification

- **Hierarchical representation of the logical cluster environment**
  - Navigation pane
  - Cluster, cluster nodes, resource groups and resources
  - Collation into singular, distributed (multi-landscape) tree

Capability Tour

Wendy Payne,
*Director, Software Engineering*

Topology

- This graphical representation helps you to visualize the structure of your managed environment, including connections between cluster nodes and other elements of your network.

- Top tier
  - Displays any off-page references to connecting devices modeled in other views, such as upstream routers, repeaters, and switches. These elements connect your cluster nodes to your network.

- Middle tier
  - Displays the cluster nodes that participate in the cluster.

- Bottom tier
 - Displays the resource groups that participate in the cluster.
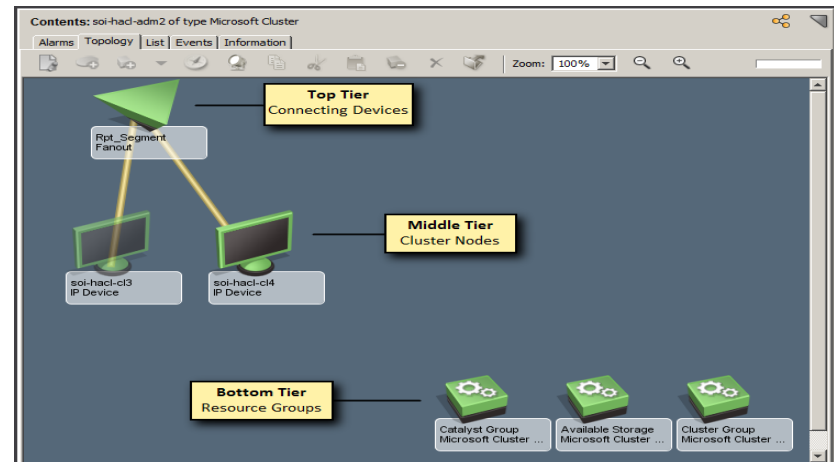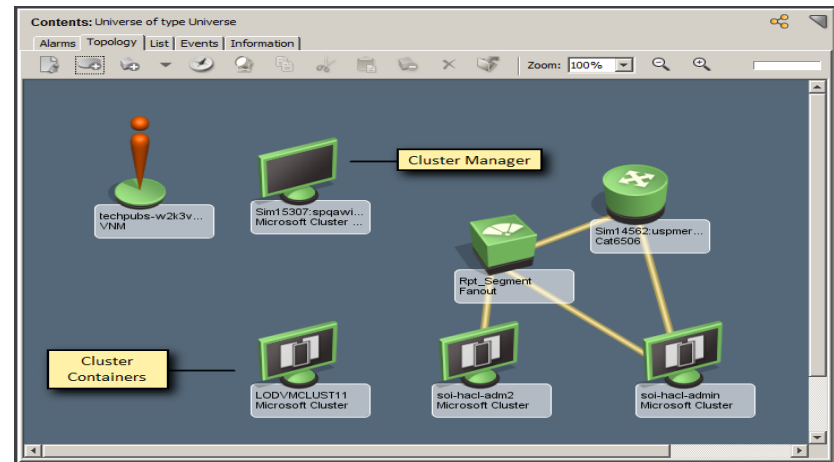
- Cluster Manager provides the links between your cluster nodes and any connecting devices that have been modeled in your network.

- By selecting a connection one can examine the link more closely, and the connections to the specific nodes are displayed.

- Discover Connections runs automatically when:
  - A cluster node is initially discovered and modeled.
  - The IP address or MAC address of the cluster node has changed.

- Discover Connections runs when necessary on the poll cycle. If the Discover Connections process does not complete within a single polling interval, the next poll cycle is postponed.
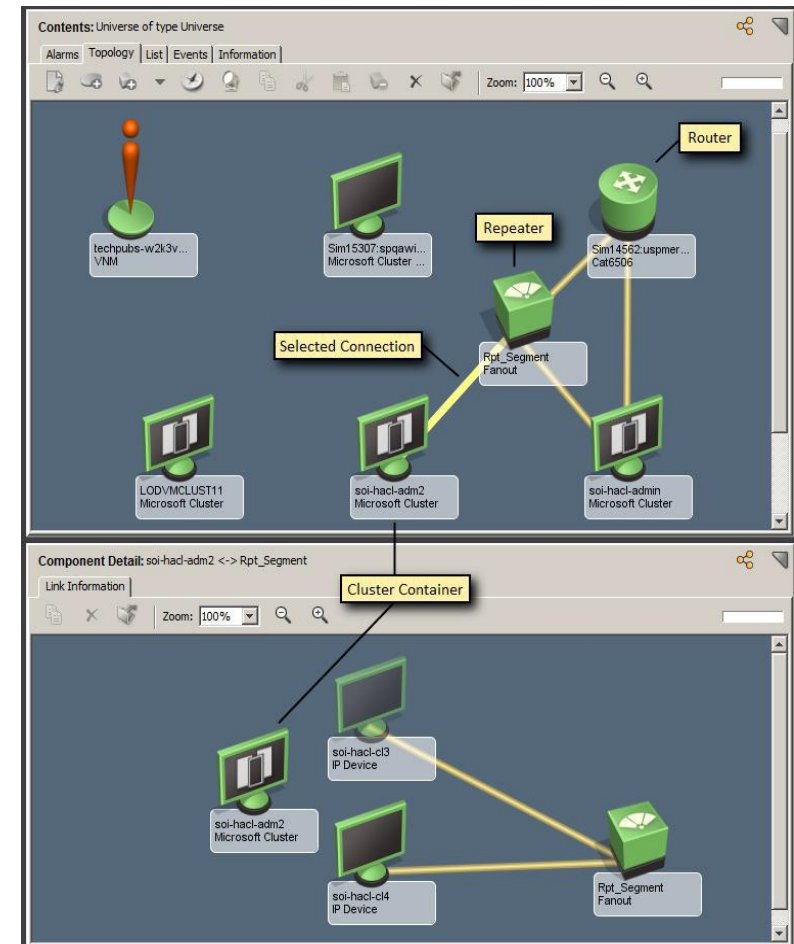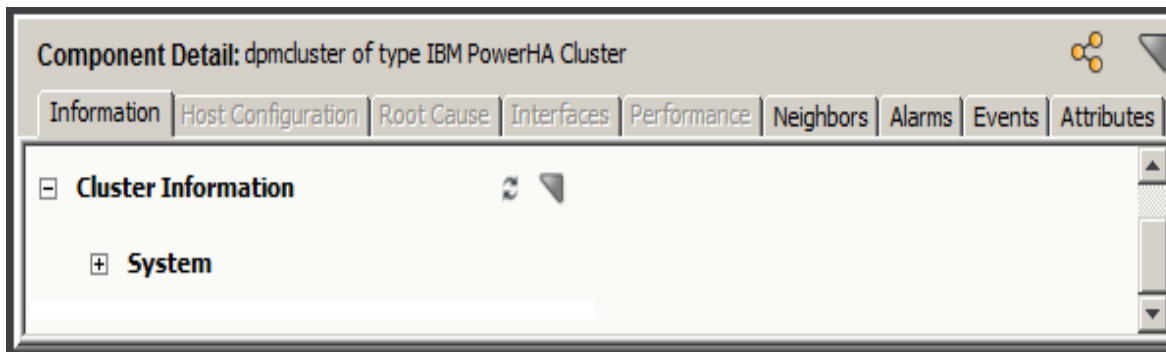
OneClick Views
IBM PowerHA OneClick Views

- – Customized views in the Component Detail panel provide detailed information about the components in your cluster environment.
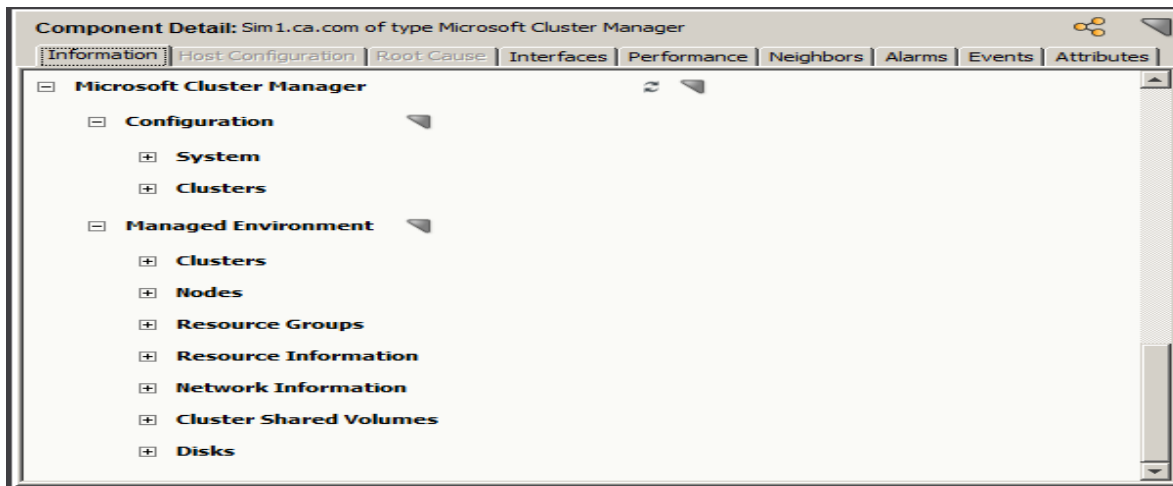
- – IBM PowerHA Cluster Manager
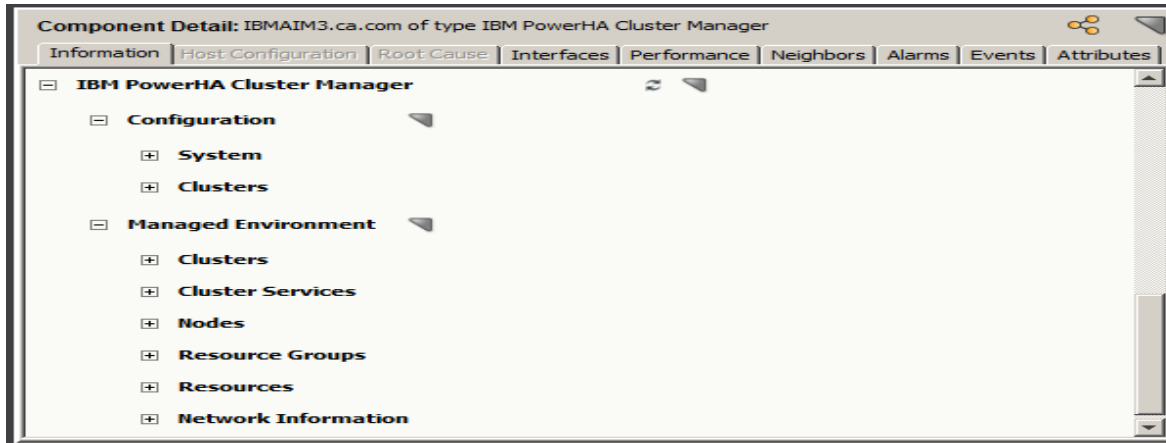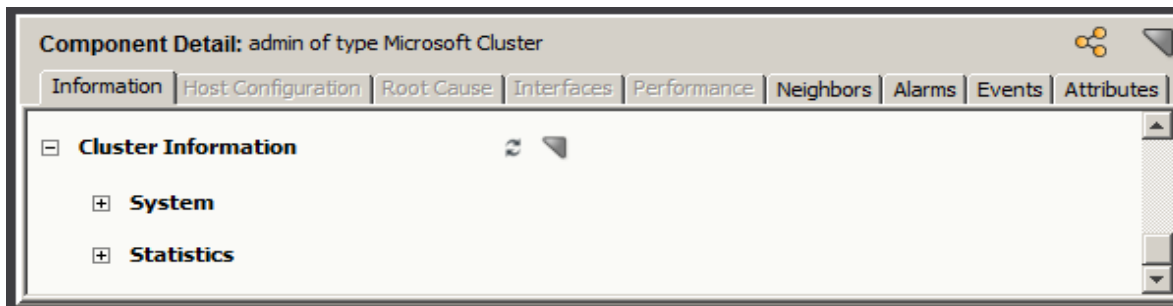

- – IBM PowerHA Cluster

OneClick Views
MSCS OneClick Views

– Customized views in the Component Detail panel provide detailed information about the components in your cluster environment.

– Microsoft Cluster Manager

– Microsoft Cluster

Locater Searches

- CA Spectrum provides a collection of preconfigured searches on the Locater tab that are designed specifically for your cluster environment.

- The searches are grouped under the Cluster Manager folder in the Locater tab of the Navigation panel.

- Only users with the appropriate privileges can access Cluster Manager searches.
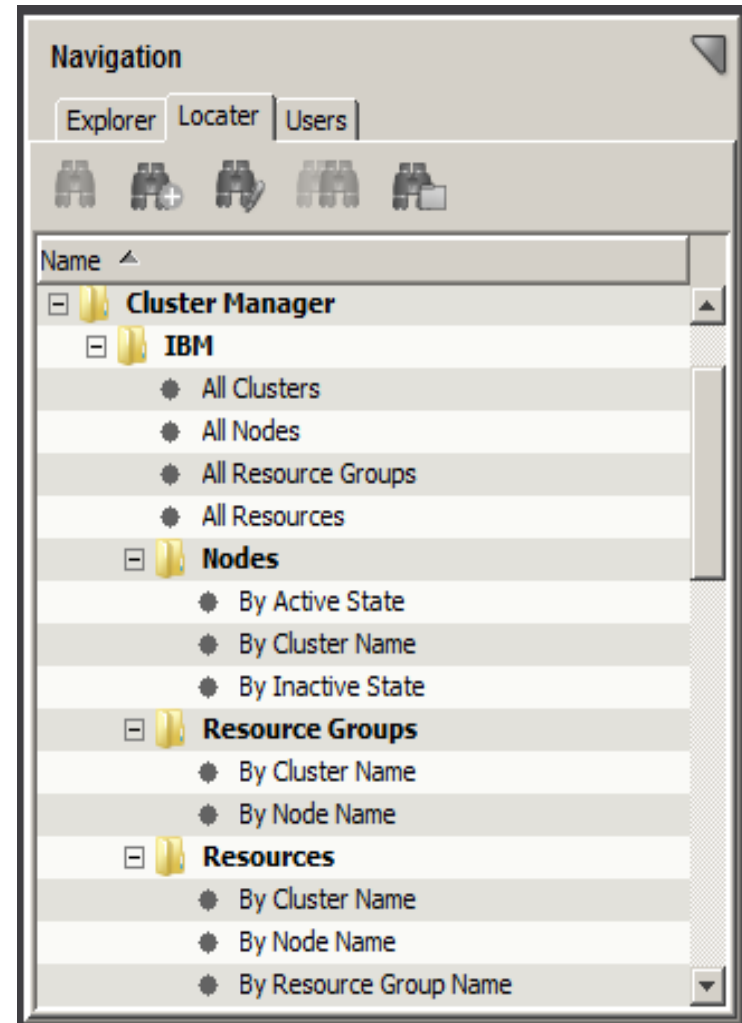
Demo

Certifications & Other Updates

Key Certification Updates

- Dynamic Alarm Titles for SysEdge Alarms

  - Alarm titles in Spectrum derived from the trap varbinds

- New Cisco ACE (Application Control Engine) Support

  - New Model type CiscoACE   to support 4 Cisco ACE devices (Cisco ACE 10K9, Cisco ACE 20K9, Cisco ACE 30K9, Cisco ACE 4710K9)
  - New icons to represent Cisco ACE container and all the contexts belonging to the device

- New Cisco, Dell, Radware and other Devices Certified/Updated

  - Enhanced Cisco Nexus certifications to support 9 additional device
  - Cisco Nexus Firmware version 6.1(1) support

- Spectrum is certified with SCOM 2012

* Enhanced features of SCOM 2012 over SCOM 2007 are not supported

Thank You!