Monitoring cluster performance from the Performance Dashboard

OnCommand Unified Manager 9.5

NetApp
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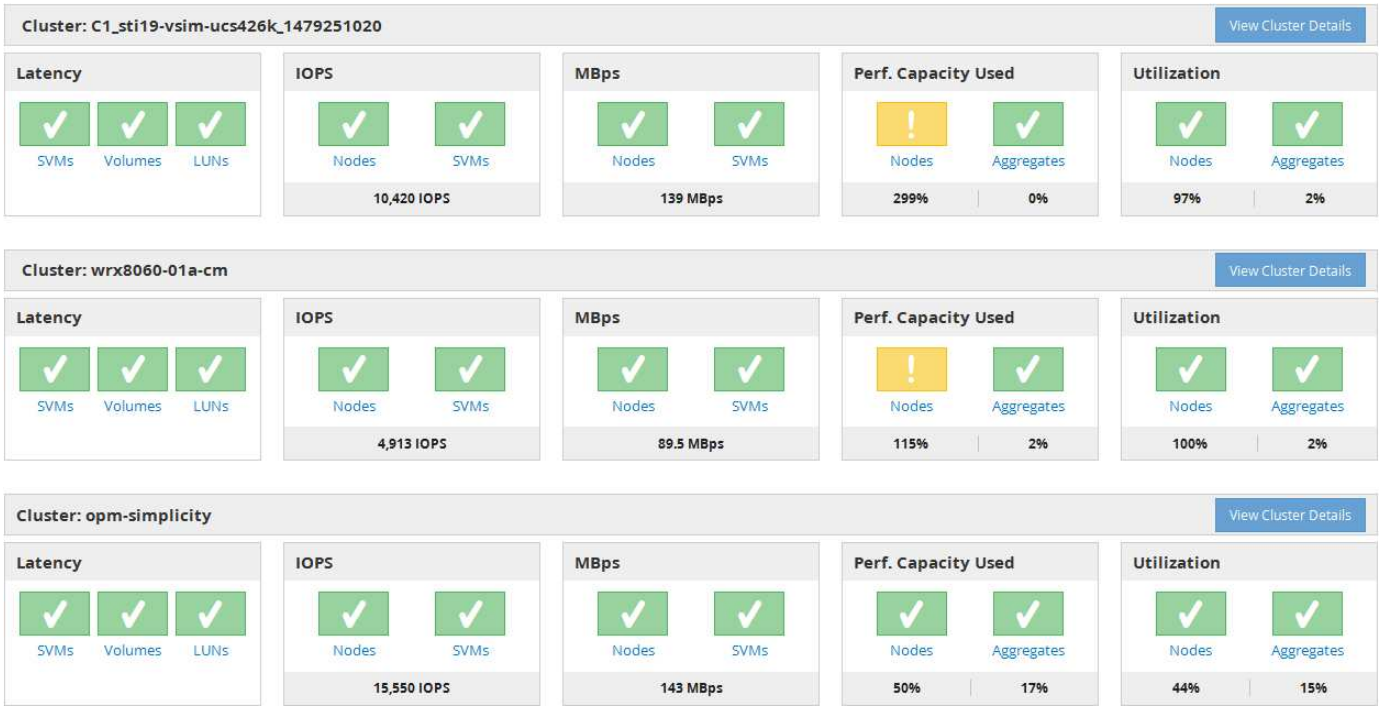
Monitoring cluster performance from the Performance Dashboard

The OnCommand System Manager Performance Dashboard displays the high-level performance status of all clusters being monitored by this instance of Unified Manager. It enables you to assess the overall performance of the managed clusters, and to quickly note, locate, or assign for resolution any specific events identified.

Understanding the Performance dashboard

The Unified Manager Performance dashboard provides a high-level overview of the performance status for all the clusters that are being monitored in your environment. Clusters that have performance issues are ordered at the top of the page by severity. The information on the dashboard is updated automatically at each five-minute performance collection period.

The following image shows an example of a Unified Manager Performance dashboard that is monitoring two clusters:



The status icons that represent the storage objects can be in the following states, sorted from highest severity to lowest severity:

- Critical ( ): One or more new critical performance events have been reported for the object.
- Warning ( ): One or more new warning performance events have been reported for the object.
- Normal ( ): No new performance events have been reported for the object.

The color indicates whether new events exist for the object. Events that are no longer active, called obsolete events, do not affect the color of the icon.

Cluster performance counters

The following performance categories are displayed for each cluster:

- Latency

  Shows how quickly the cluster is responding to client application requests, in milliseconds per operation.

- IOPS

  Shows the operating speed of the cluster, in number of input/output operations per second.

- MBps

  Shows how much data is being transferred to and from the cluster, in megabytes per second.

- Performance Capacity Used

  Shows whether any nodes or aggregates are overusing their available performance capacity.

- Utilization

  Shows whether the resources on any nodes or aggregates are being overused.

To analyze the performance of your cluster and storage objects, you can perform one of the following actions:

- You can click **View Cluster Details** to display the Cluster Landing page, where you can view detailed performance and event information for the selected cluster and storage objects.
- You can click one of the red or yellow status icons of an object to display the Inventory page for that object, where you can view details about the storage object.

  For example, clicking a volume icon displays the Performance/Volume inventory page with a list of all the volumes in the selected cluster, sorted from worst performance to best performance.

Performance Dashboard cluster banner messages and descriptions

Unified Manager may display cluster banner messages on the Performance Dashboard to alert you to status issues for a particular cluster.

Banner message	Description	Resolution
`No performance data is being collected from cluster cluster_name. Restart Unified Manager to correct this issue.`	The Unified Manager collection service has stopped and no performance data is being collected from any clusters.	Restart Unified Manager to correct this issue. If this does not correct the issue, contact technical support.

Banner message	Description	Resolution
`More than x hour(s) of historical data is being collected from cluster cluster_name. Current data collections will start after all historical data is collected.`	A data continuity collection cycle is currently running to retrieve performance data outside of the real-time cluster performance collection cycle.	No action is required. Current performance data will be collected after the data continuity collection cycle is completed. A data continuity collection cycle runs when a new cluster is added or when Unified Manager has been unable to collect current performance data for some reason.

Changing the performance statistics collection interval

The default collection interval for performance statistics is 5 minutes. You can change this interval to 10 or 15 minutes if you find that collections from large clusters are not finishing within the default time. This setting affects the collection of statistics from all clusters that this instance of Unified Manager is monitoring.

Before you begin

You must have a user ID and password authorized to log in to the maintenance console of the Unified Manager server.

About this task

The issue of performance statistics collections not finishing on time is indicated by the banner messages `Unable to consistently collect from cluster <cluster_name>` or `Data collection is taking too long on cluster <cluster_name>`.

You should change the collection interval only when required because of a statistics collections issue. Do not change this setting for any other reason.

Changing this value from the default setting of 5 minutes can affect the number and frequency of performance events that Unified Manager reports. For example, system-defined performance thresholds trigger events when the policy is exceeded for 30 minutes. When using 5-minute collections, the policy must be exceeded for six consecutive collections. For 15-minute collections the policy must be exceeded for only two collection periods.

A message at the bottom of the Cluster Data Sources page indicates the current statistical data collection interval.

Steps

1. Log in using SSH as the maintenance user to the Unified Manager host.

   The Unified Managermaintenance console prompts are displayed.

2. Type the number of the menu option labeled **Performance Polling Interval Configuration**, and then press Enter.

3. If prompted, enter the maintenance user password again.
4. Type the number for the new polling interval that you want to set, and then press Enter.

After you finish

If you changed the Unified Manager collection interval to 10 or 15 minutes, and you have a current connection to an external data provider (such as Graphite), you must change the data provider transmit interval so that it is equal to, or greater, than the Unified Manager collection interval.

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