



# **Viewing object configuration information**

OnCommand Unified Manager 9.5

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# Viewing object configuration information

The object Information pages—located on the landing page of each object—display the values for the non-performance configuration attributes of each storage object. Some of the attributes are physical configuration settings, while other attributes may affect the performance of the object.

For example, it is useful to know the amount of space that is available for an aggregate or for a node. Knowing the speed setting for a particular port can help when you are diagnosing a performance issue.

## Performance/Cluster Information page

Use the Performance/Cluster Information page to view a list of the physical and logical attributes of the cluster. This information might help in answering performance-related questions.

### Cluster attributes

- **Management LIF**

The name of the cluster management LIF, and whether the LIF is currently available (Up), or not (Down).

- **IP Address**

The IPv4 or IPv6 address of the cluster management LIF.

- **FQDN**

The fully qualified domain name (FQDN) of the cluster management LIF.

- **OS Version**

The version of ONTAP software installed on the cluster.



If different versions of ONTAP software are installed on the nodes in the cluster, the listed version is the lowest version number. Check the Performance/Node Information page to view the version of ONTAP software installed on each node.

- **Serial Number**

The unique identification number of the cluster.

- **Model / Family**

The platform model number and model family of all the nodes in the cluster.

- **Capacity (free/total)**

The total storage available to the cluster, in gigabytes, and the amount of storage currently available.

- **Allowed Protocols**

The list of all protocols that can be serviced by this cluster. The available protocols are FC/FCoE, iSCSI, HTTP, NVMe, NDMP, NFS, and CIFS.

- **Nodes**

The number of nodes in this cluster. You can click the number to display the nodes in the Performance/Node Inventory page.

- **Storage Virtual Machines**

The number of SVMs in this cluster. You can click the number to display the SVMs in the Performance/SVM Inventory page.

- **LIFs**

The number of LIFs in this cluster. You can click the number to display the LIFs in the Performance/LIF Inventory page.

- **Contact / Location**

If available, the name of the storage administrator to contact regarding this cluster, and the location of the cluster.

## Performance/Node Information page

Use the Performance/Node Information page to view a list of the physical and logical attributes of the node. This information might help in answering performance-related questions.

### Node attributes

- **IP Address**

The IPv4 or IPv6 address of the node management LIF.

- **FQDN**

The fully qualified domain name (FQDN) of the node management LIF.

- **OS Version**

The version of ONTAP software installed on the node.

- **Model / Family**

The platform model number of the node.

- **Capacity (free/total)**

The total storage available to the node, in gigabytes, and the amount of storage currently available.

- **Cluster**

The name of the cluster to which this node belongs. You can click the name to display cluster details the

Performance/Cluster Explorer page.

- **HA Partner**

The name of the HA partner node, if applicable. You can click the name to display partner node details in the Performance/Node Explorer page.

- **Aggregates**

The number of aggregates on this node. You can click the number to display the aggregates in the Performance/Aggregates Inventory page.



The number listed here may not match the number in the Performance/Aggregates Inventory page because the inventory page does not include root aggregates.

- **Ports**

The number of ports on this node. You can click the number to display the ports in the Performance/Ports Inventory page.



The number listed here may not match the number in the Performance/Ports Inventory page because the inventory page does not include node management ports.

- **Contact / Location**

If available, the name of the administrator to contact regarding this node, and the location of the node.

- **# of Cores / Speed**

If available, the number of CPU cores on the controller, and the speed of the CPU cores.

- **RAM**

If available, the total memory available on the controller.

## Flash Devices



Flash Cache data is displayed only for nodes, and only when a Flash Cache module is installed in the node.

- **Slot Number**

The slot number in which the Flash Cache module is installed.

- **Status**

The operational status of the module. Valid values:

- Online
- Offline\_failed
- Offline\_threshold

- **Model / Family**

The model number of the module.

- **Firmware Rev**

The version of firmware installed on the module.

- **Capacity**

The size of the installed Flash Cache module.

## Performance/Aggregate Information page

Use the Performance/Aggregate Information page to view a list of the physical and logical attributes of the aggregate. This information might help in answering performance-related questions.

### Aggregate attributes

- **Aggregate Type**

The type of aggregate:

- HDD

- Hybrid

Combines HDDs and SSDs, but Flash Pool has not been enabled.

- Hybrid (Flash Pool)

Combines HDDs and SSDs, and Flash Pool has been enabled.

- SSD

- SSD (FabricPool)

Combines SSDs and a cloud tier

- VMDisk (SDS)

Virtual disks within a virtual machine

- VMDisk (FabricPool)

Combines virtual disks and a cloud tier

- LUN (FlexArray)

- **Cluster**

The name of the cluster to which the aggregate belongs. You can click the name to display cluster details in the Performance/Cluster Explorer page.

- **Node**

The name of the node to which the disks of the aggregate belong. You can click the name to display node details in the Performance/Node Explorer page.

- **Flash Pool**

Whether this is a Flash Pool aggregate: Yes or No.

A Flash Pool aggregate is a hybrid aggregate that consists of both SSDs and HDDs.

- **FabricPool**

Whether this is a FabricPool aggregate: Yes or No.

A FabricPool aggregate is an aggregate that consists of both SSDs and a cloud tier.

- **Inactive Data Reporting**

Whether the inactive data reporting capability is enabled or disabled on this aggregate. When enabled, volumes on this aggregate display the amount of cold data in the Performance/Volumes inventory page.

The value in this field is “N/A” when the version of ONTAP does not support inactive data reporting.

## Performance/Volume or Performance/FlexGroup Information page

Use this page to view a list of the physical and logical attributes of the volume. This information might help in answering performance-related questions. The title of this page depends on whether you are viewing a FlexVol volume or a FlexGroup volume.

### Volume attributes

- **Type**

The volume’s type; either read-write (RW) or data-protection (DP).

- **Style**

The style of volume; either FlexVol or FlexGroup.



The performance pages of Unified Manager do not support Infinite Volumes.

- **Cluster**

The name of the cluster to which this FlexVol volume or FlexGroup volume belongs. You can click the name to display cluster details in the Performance/Cluster Explorer page.

- **Aggregates**

The name of the aggregate on which this FlexVol volume resides, or the number of aggregates on which this FlexGroup volume resides.

For FlexVol volumes, you can click the name to display aggregate details in the Performance/Aggregate Explorer page. For FlexGroup volumes, you can click the number to display the aggregates that are used

in this FlexGroup volume in the Performance/Aggregate Inventory page.

- **Storage Virtual Machine**

The name of the SVM to which this FlexVol volume or FlexGroup volume belongs. You can click the name to display SVM details in the Performance/SVM Explorer page.

- **Tiering Policy**

The tiering policy set on the volume. The policy takes affect only when the volume is deployed on a FabricPool aggregate. The available policies are:

- None. The data for this volume always remains on the performance tier.
- Snapshot Only. Only Snapshot data is moved automatically to the cloud tier. All other data remains on the performance tier.
- Backup. On data protection volumes, all transferred user data starts in the cloud tier, but later client reads can cause hot data to move to the performance tier.
- Auto. Data on this volume is moved between the performance tier and the cloud tier automatically when ONTAP determines that the data is “hot” or “cold”.

- **RAID Type**

The redundancy type that is being used on the performance tier of the aggregate where this volume resides. Possible types:

- RAID0
- RAID4
- RAID-DP
- RAID-TEC



The value “Not Applicable” is displayed for FlexGroup volumes because the constituent volumes can be on aggregates of different RAID types.

- **Capacity (free/total)**

The total storage available on the volume, in gigabytes, and the amount of storage currently available.

## Performance/Constituent Volume Information page

Use the Performance/Constituent Volume Information page to view a list of the physical and logical attributes of the FlexGroup constituent volume. This information might help in answering performance-related questions.

### Constituent Volume attributes

- **Type**

The constituent’s type; either read-write (RW) or data-protection (DP).

- **Style**



The style of volume; this is a constituent volume of a FlexGroup volume.

- **Cluster**

The name of the cluster to which this FlexGroup constituent volume belongs. You can click the name to display cluster details in the Performance/Cluster Explorer page.

- **Aggregate**

The name of the aggregate on which this FlexGroup constituent volume resides. You can click the name to display aggregate details in the Performance/Aggregate Explorer page.

- **FlexGroup**

The name of the FlexGroup volume to which this constituent belongs. You can click the name to display FlexGroup volume details in the Performance/FlexGroup Explorer page.

- **Storage Virtual Machine**

The name of the SVM to which this FlexGroup constituent volume belongs. You can click the name to display SVM details in the Performance/SVM Explorer page.

- **Tiering Policy**

The tiering policy set on the volume. The policy takes affect only when the volume is deployed on a FabricPool aggregate. The available policies are:

- None. The data for this volume always remains on the performance tier.
- Snapshot Only. Only Snapshot data is moved automatically to the cloud tier. All other data remains on the performance tier.
- Backup. On data protection volumes, all transferred user data starts in the cloud tier, but later client reads can cause hot data to move to the performance tier.
- Auto. Data on this volume is moved between the performance tier and the cloud tier automatically when ONTAP determines that the data is “hot” or “cold”.

- **RAID Type**

The redundancy type that is being used on the aggregate where this constituent resides. Possible types:

- RAID0
- RAID4
- RAID-DP
- RAID-TEC

- **Capacity (free/total)**

The total storage available on the constituent, in gigabytes, and the amount of storage currently available.

## Performance/Port Information page

Use the Performance/Port Information page to view a list of the physical and logical attributes of the port. This information might help in answering performance-related

questions.

## Port attributes

- **WWN**

The WWN (World Wide Name) of the port.

- **Node**

The name of the node on which the physical port resides. You can click the name to display node details in the Performance/Node Explorer page.

- **Cluster**

The name of the cluster to which the port belongs. You can click the name to display cluster details the Performance/Cluster Explorer page.

- **Operational Speed**

The actual speed at which the port is configured to run.

FCP ports are auto-sensing and display as “Auto”.

- **Role**

The network port function: either Data or Cluster.

FCP ports cannot have a role, and this field is not displayed.

- **Type**

The port type: either Network or FCP (Fibre Channel Protocol).

- **State**

The link status of the port.

- For network ports, an active port is listed as “Up” and an inactive port is listed as “Down”.
- For FCP ports, an active port is listed as “Online” and an inactive port is listed as “Link not connected”.

## Performance/SVM Information page

Use the Performance/SVM Information page to view a list of the configured attributes of the SVM. This information might help in answering performance-related questions.

### SVM attributes

- **IP Address**

If defined, this is the IPv4 or IPv6 address of the SVM management LIF.

- **IPspace**

The IPspace in which this SVM resides.

- **Domain Name**

The fully qualified domain name (FQDN) of the SVM management LIF.

- **Service Type**

The type of SVM.

Possible values include: “Admin” for the cluster-wide management SVM, “System” for cluster-level communications in an IPspace, “Data” for data serving SVM, and “Node” for node management SVM.

- **Capacity (free/total)**

The total storage available to the SVM, in gigabytes, and the amount of storage currently available.

- **Cluster**

The name of the cluster to which the SVM belongs. You can click the name to display cluster details in the Performance/Cluster Explorer page.

- **Volumes**

The number of volumes in the SVM. You can click the number to display the volumes in the Performance/Volume Inventory page.

- **LIFs**

The number of LIFs available to the SVM. You can click the number to display the LIFs in the Performance/LIFs Inventory page.

- **Data LIFs**

The number and type of Data LIFs available to the SVM.

- **Allowed Volume Type**

The type of volume that can be created on the SVM.

SVMs can contain one or more FlexVol volumes or FlexGroup volumes. The FlexGroup type is allowed when using ONTAP 9.1 or later.



The performance pages of Unified Manager do not support Infinite Volumes.

- **Allowed Protocols**

The list of all protocols that can be serviced by this SVM. The available protocols are FC/FCoE, iSCSI, HTTP, NDMP, NVMe, NFS, and CIFS.

- **Port Set**

If defined for FCP or iSCSI protocols, the port set that is assigned to this SVM.

# Performance/LUN Information page

Use the Performance/LUN Information page to view a list of the physical and logical attributes of the LUN. This information might help in answering performance-related questions.

## LUN attributes

- **WWN**

The WWN (World Wide Name) of the LUN.

- **Path**

The full path of the LUN, for example, `/vol/vol1/lun1`.

- **Alignment**

Indicates the alignment state of the LUN. Possible values:

- Not mapped
- Aligned
- Misaligned
- Possibly misaligned
- Indeterminate

- **Capacity (free/total)**

The total storage available on the LUN, in gigabytes, and the amount of storage currently available.

- **Volume**

The name of the volume to which the LUN belongs. You can click the name to display volume details in the Performance/Volume Explorer page.

- **Storage Virtual Machine**

The name of the SVM to which the LUN belongs. You can click the name to display SVM details in the Performance/SVM Explorer page.

- **Node**

The name of the node on which the LUN resides. You can click the name to display node details in the Performance/Node Explorer page.

- **Cluster**

The name of the cluster to which the LUN belongs. You can click the name to display cluster details in the Performance/Cluster Explorer page.

- **State**

The state of the LUN. Valid states can be online, offline, nvfail, space-error, and foreign-lun-error.

- **Mapped**

Whether the LUN is mapped to an initiator group (true), or not (false).

## Namespace Information page

Use the Namespace Information page to view a list of the physical and logical attributes of the Namespace. This information might help in answering performance-related questions.

### Namespace attributes

- **Cluster**

The name of the cluster to which the Namespace belongs. You can click the name to display cluster details in the Performance/Cluster Explorer page.

- **Capacity (free/total)**

The total storage capacity of the Namespace and the amount of storage currently available.

- **Node**

The name of the node on which the Namespace resides. You can click the name to display node details in the Performance/Node Explorer page.

- **Path**

The full path of the Namespace, for example, `/vol/vol1/namespace1`.

- **State**

The state of the Namespace. Valid states can be online, offline, nvfail, and space-error.

- **Subsystem**

The subsystem of the Namespace.

- **Storage Virtual Machine**

The name of the SVM to which the Namespace belongs. You can click the name to display SVM details in the Performance/SVM Explorer page.

- **Volume**

The name of the volume to which the Namespace belongs. You can click the name to display volume details in the Performance/Volume Explorer page.

## Performance/LIF Information page

Use the Performance/LIF Information page to view a list of the configured attributes of the LIF. This information might help in answering performance-related questions.

## LIF attributes

- **IP Address**

The IPv4 or IPv6 address assigned to the LIF. There can be multiple IP addresses assigned to a LIF.

- **Role**

The role determines the kind of traffic that is supported over the LIF.

LIFs can have one of the following roles:

- Data
- Cluster
- Node Management
- Intercluster

- **Failover Group**

The name of the failover group that is assigned to the LIF.

This field applies only to network LIFs, not to SAN (FC/ISCSI) and NVMe LIFs.

- **Failover Policy**

The name of the failover policy that is assigned to the LIF.

This field applies only to network LIFs, not to SAN (FC/ISCSI) and NVMe LIFs.

- **Home Port**

The name of the node and port that has been defined as the home port for this interface. You can click the name to display port details in the Performance/Port Explorer page.

- **Current Port**

The name of the node and port on which the interface is currently hosted. You can click the name to display port details in the Performance/Port Explorer page.

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