NetApp E-Series data source

OnCommand Insight

NetApp
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NetApp E-Series data source

The NetApp E-Series data source collects inventory and performance information. There are two possible configurations (firmware 6.x and firmware 7.x+), and they both have the same values.

Terminology

OnCommand Insight acquires the following inventory information from the NetApp E-Series data source. For each asset type acquired by Insight, the most common terminology used for this asset is shown. When viewing or troubleshooting this data source, keep the following terminology in mind:

Vendor/Model Term	Insight Term
Drive	Disk
Volume Group	Disk Group
Storage Array	Storage
Controller	Storage Node
Volume Group	Storage Pool
Volume	Volume

These are common terminology mappings only and might not represent every case for this data source.

Requirements

- The IP address of each controller on the array
- Port requirement 2463

Configuration

Field	Description
Comma-separated list of Array SANtricity Controller IPs	IP addresses and/or fully-qualified domain names for the array controllers

Advanced configuration

Field	Description

Inventory Poll Interval (min)	Interval between inventory polls (default 30 minutes)
Performance Poll Interval (up to 3600 seconds)	Interval between performance polls (default 300 seconds)

E-Series Storage

Terms applying to objects or references that you might find on NetApp E-Series storage asset landing pages.

E-Series Storage Terminology

The following terms apply to objects or references that you might find on NetApp E-Series storage asset landing pages. Many of these terms apply to other data collectors as well.

- Model — model name of the device.
- Vendor — same Vendor name you would see if you were configuring a new data source.
- Serial number — The array serial number. On cluster architecture storage systems like NetApp Clustered Data Ontap, this serial number may be less useful than the individual “Storage Nodes” serial numbers.
- IP — generally will be the IP(s) or hostname(s) as configured in the data source.
- Microcode version — firmware.
- Raw Capacity — base 2 summation of all the physical disks in the system, regardless of their role.
- Latency — a representation of what the host facing workloads are experiencing, across both reads and writes. Insight calculates an IOPs-weighted average derived from the volumes in the storage.
- Throughput — the array’s total host facing throughput. Insight sums the volumes’ throughput to derive this value.
- Management — this may contain a hyperlink for the management interface of the device. Created programmatically by the Insight data source as part of inventory reporting.

E-Series Storage Pool

Terms applying to objects or references that you might find on NetApp E-Series storage pool asset landing pages.

E-Series Storage Pool Terminology

The following terms apply to objects or references that you might find on NetApp E-Series storage pool asset landing pages. Many of these terms apply to other data collectors as well.

- Storage — what storage array this pool lives on. Mandatory.
- Type — a descriptive value from a list of an enumerated list of possibilities. Most commonly will be “Thin Provisioning” or “RAID Group”.
- Node — if this storage array’s architecture is such that pools belong to a specific storage node, its name will be seen here as a hyperlink to its own landing page.
- Uses Flash Pool — Yes/No value.

- Redundancy — RAID level or protection scheme. E-Series reports “RAID 7” for DDP pools.
- Capacity — the values here are the logical used, usable capacity and the logical total capacity, and the percentage used across these. These value both include E-Series “preservation” capacity, resulting both in numbers and the percentage being higher than what the E-Series own user interface may show.
- Over-committed capacity — If by using efficiency technologies you have allocated a sum total of volume capacities larger than the logical capacity of the storage pool, the percentage value here will be greater than 0%.
- Snapshot — snapshot capacities used and total, if your storage pool architecture dedicates part of its capacity to segments areas exclusively for snapshots.
- Utilization — a percentage value showing the highest disk-busy percentage of any disk contributing capacity to this storage pool. Disk utilization does not necessarily have a strong correlation with array performance — utilization may be high due to disk rebuilds, deduplication activities, etc in the absence of host-driven workloads. Also, many arrays’ replication implementations may drive disk utilization while not showing as volume workload.
- IOPS — the sum IOPs of all the disks contributing capacity to this storage pool.
- Throughput — the sum throughput of all the disks contributing capacity to this storage pool.

E-Series Storage Node

Terms applying to objects or references that you might find on NetApp E-Series storage node asset landing pages.

E-Series Storage Node Terminology

The following terms apply to objects or references that you might find on NetApp E-Series storage pool asset landing pages. Many of these terms apply to other data collectors as well.

- Storage — what storage array this node is part of. Mandatory.
- HA Partner — on platforms where a node will fail over to one and only one other node, it will generally be seen here.
- State — health of the node. Only available when the array is healthy enough to be inventoried by a data source.
- Model — model name of the node.
- Version — version name of the device.
- Serial number — The node serial number.
- Memory — base 2 memory if available.
- Utilization — Utilization is not currently available for NetApp E-Series.
- IOPS — Calculated by summing all the IOPs for volumes that belong exclusively to this node.
- Latency — a number representing the typical host latency or response time on this controller. Insights calculates an IOPs weighted average from volumes that belong exclusively to this node.
- Throughput — a number representing the host driven throughput on this controller. Calculated by summing all the throughput for volumes that belong exclusively to this node.
- Processors — CPU count.

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