



SFA ZenPack

Installation Guide

Version 0.0.5 | 96-30076-004 | Rev. A0

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This document provides information about the DDN SFA ZenPack. Installation instructions are given at the end of the document.

1. Overview

This ZenPack is developed by DDN to provide modeling and monitoring functionality for DDN's SFA storage solution.

2. Releases

Version:	0.0.5
Summary of changes:	First release
Released on:	April 17, 2015
Compatible with:	Zenoss 4 and Zenoss 5

3. Prerequisites

No prerequisites are required.

4. Installed Items

Installing this ZenPack will add the following items to your Zenoss system.

4.1 Device Classes

The following device classes will be created once this ZenPack is installed:

- /Storage
- /Storage/DDN
- /Storage/DDN/SFA

4.2 Configuration Properties

The following configuration properties will be added which are required for this ZenPack:

- **zCommandUsername**
This is the name of the user through which Zenoss system communicates with the device (for example, root).
- **zCommandPassword**
The password of that particular user through which Zenoss system communicates with the device (for example, root).
- **zKeyPath**
If password-less SSH is configured, provide the full path for private key file (for example, ~/.ssh/id_rsa).
- **zSFASecondaryIp**
Secondary IP address of SFA to be monitored (for example, 192.168.111.8, 192.168.111.9).

5. Modeler Plug-ins

List of modeler plug-ins for SFA:

- `ddn.ModelSFAController`
- `ddn.ModelSFAHostChannel`
- `ddn.ModelSFAPhysicalDisk`
- `ddn.ModelSFAPool`
- `ddn.ModelSFVirtualDisk`

6. Monitoring Templates

This defines the metrics for physical disk, host channel, and virtual disk:

6.1 Component Level

1. Physical Disks
 - ❖ `AverageReadIOLatency`
 - ❖ `AverageWriteIOLatency`
 - ❖ `KBytesTransferred`
 - ❖ `ReadIOs`
 - ❖ `TotalIOs`
 - ❖ `WriteIOs`
2. Host Channels
 - ❖ `AverageReadIOLatency`
 - ❖ `AverageWriteIOLatency`
 - ❖ `KBytesTransferred`
 - ❖ `ReadIOs`
 - ❖ `TotalErrorCounters`
 - ❖ `TotalIOs`
 - ❖ `WriteIOs`
3. Virtual Disks
 - ❖ `AverageReadIOLatency`
 - ❖ `AverageWriteIOLatency`
 - ❖ `ForwardedIOs`
 - ❖ `KBytesForwarded`
 - ❖ `KBytesTransferred`
 - ❖ `ReadIOs`
 - ❖ `TotalIOs`
 - ❖ `WriteIOs`

6.2

Graphs

- Aggregate
- IOTransferred
- Latency

6.3

Events Classes

- /Perf

6.4

Thresholds

No Thresholds are defined.

7.

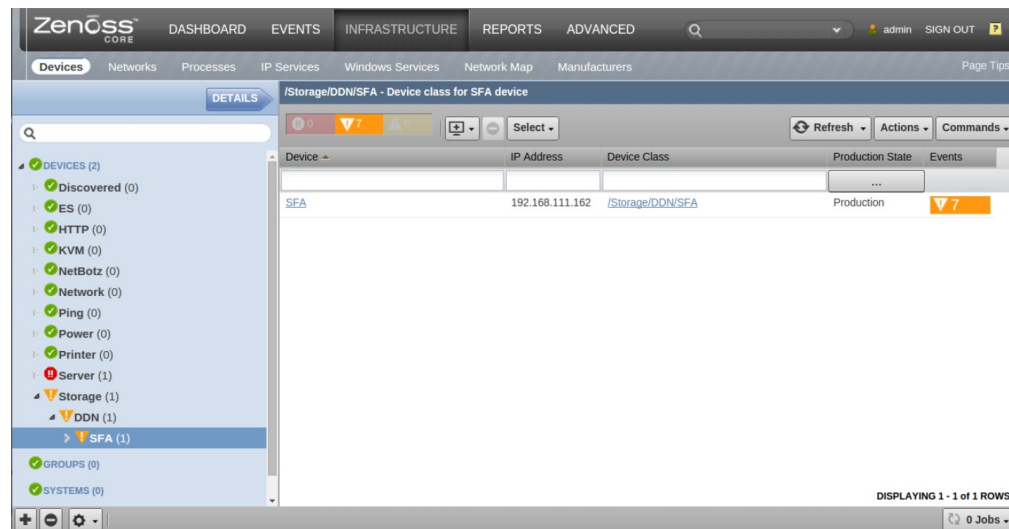
Detailed Overview

7.1

Device Classes

Figure 1 shows the list of device classes that are available in this ZenPack.

Figure 1. List of Available Device Class Screen

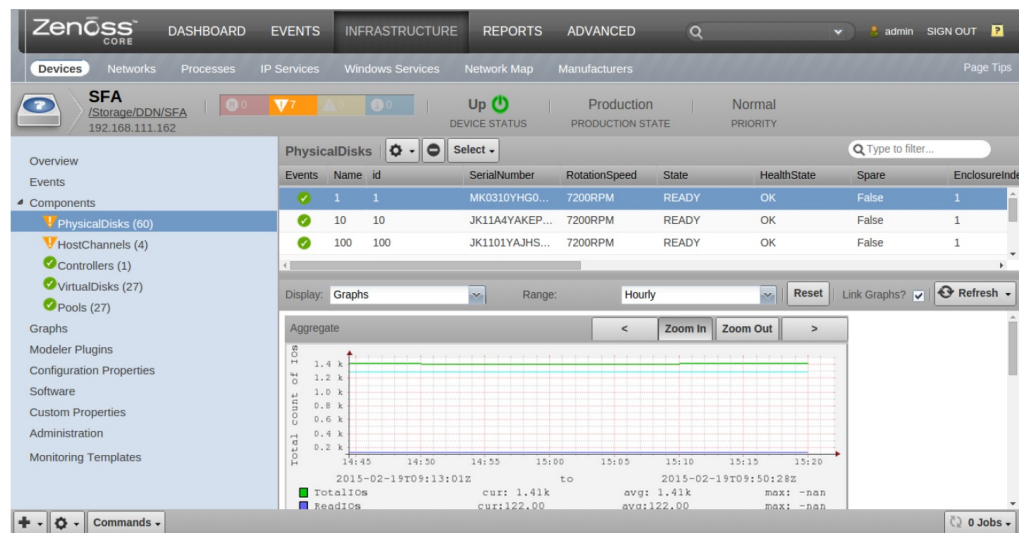


7.2 Device Components

7.2.1 PhysicalDisks

Figure 2 shows the list of SFA physical disks screen along with the graph available in this Zenpack.

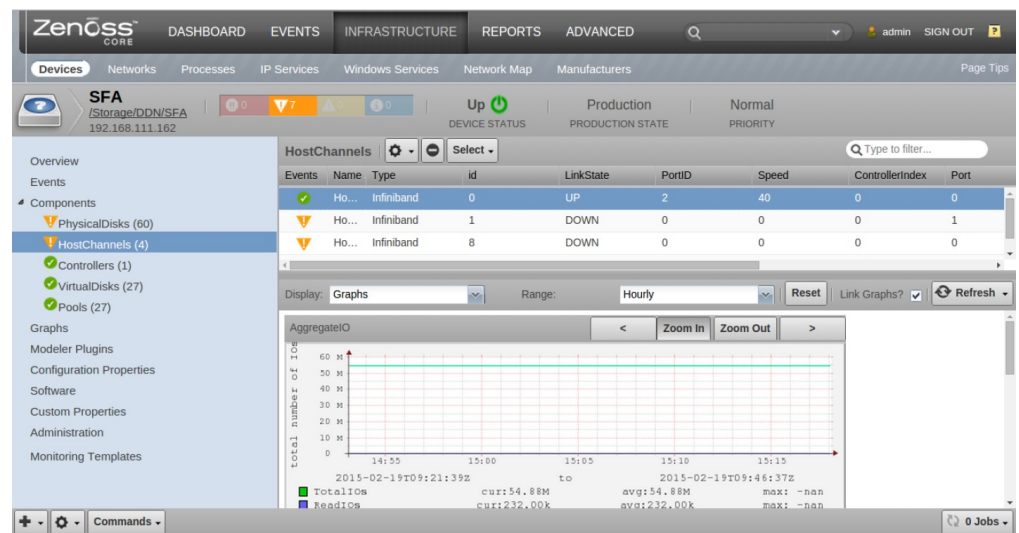
Figure 2. List of Physical Disks Screen



7.2.2 HostChannels

Figure 3 shows the list of SFA host channels screen along with the graph available in this ZenPack.

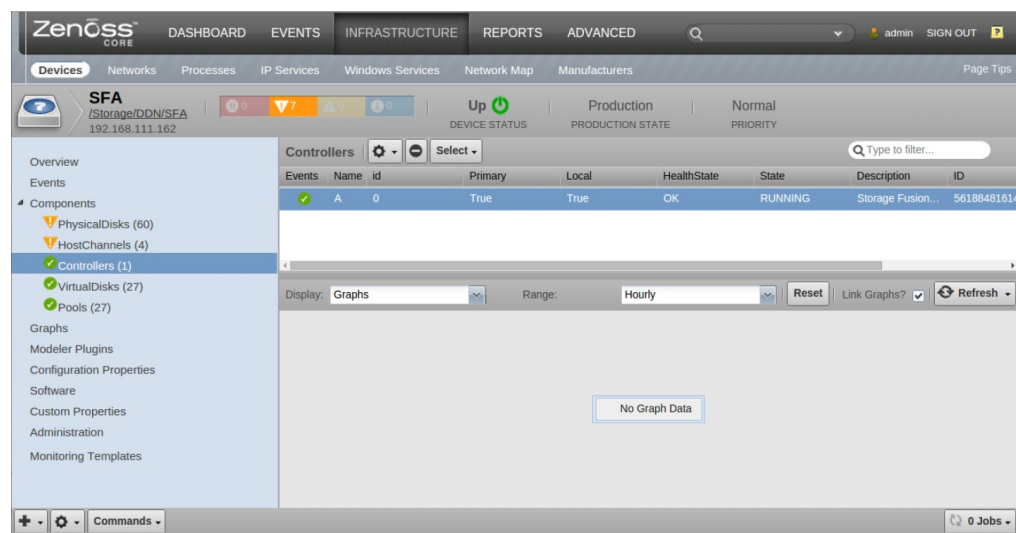
Figure 3. List of Host Channels Screen



7.2.3 Controllers

Figure 4 shows the list of SFA controllers screen.

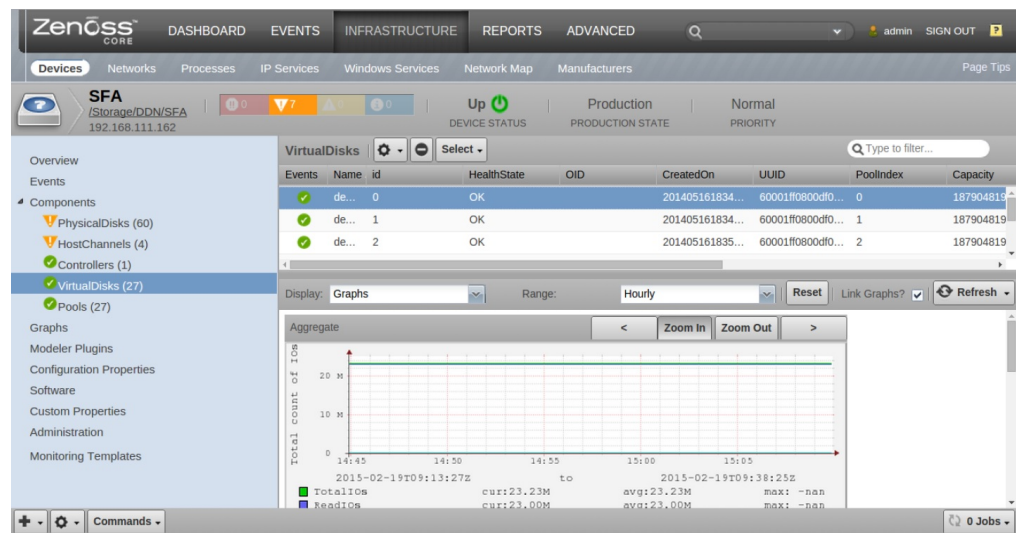
Figure 4. List of SFA Controllers Screen



7.2.4 VirtualDisks

Figure 5 shows the list of SFA virtual disks screen along with the graph available in this ZenPack.

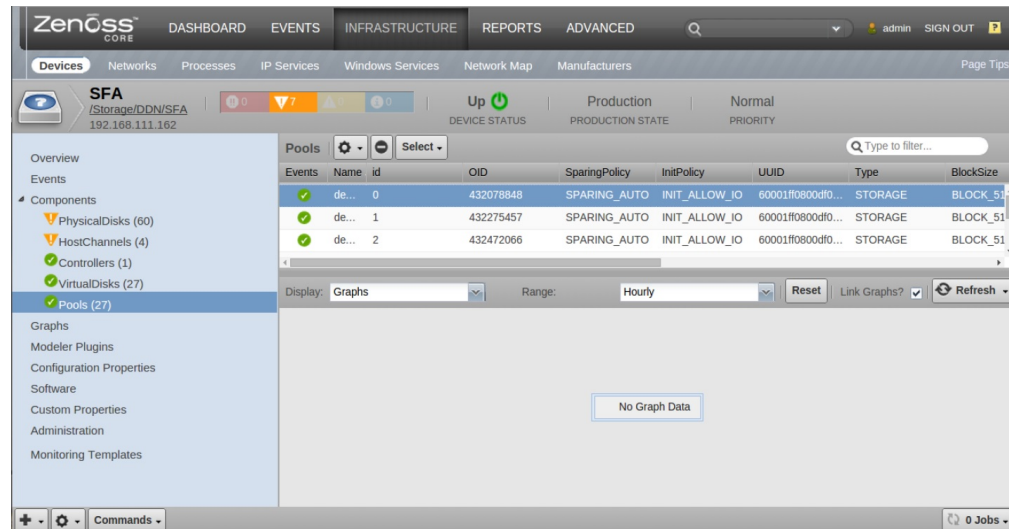
Figure 5. List of SFA VirtualDisks Screen



7.2.5 Pools

Figure 6 shows the list of SFA pools screen.

Figure 6. List of SFA Pools Screen



8. ZenPack Installation

Follow these steps to install DDN SFA ZenPack:

1. Download the appropriate .egg file for the version of the Zenoss you are running.
2. Ensure that you are logged in as Zenoss user.
su - zenoss
3. Install ZenPack:
 - ❖ Zenoss 4
zenpack --install ZenPacks.DDN.SFA2-*--py2.7.egg
 - ❖ Zenoss 5
sudo serviced service run zenpack install ZenPacks.DDN.SFA2-*--py2.7.egg
4. Restart Zenoss:
 - ❖ Zenoss 4
zenoss restart
 - ❖ Zenoss 5
sudo serviced service stop service-name
(Get the service name by running command “**sudo serviced service status**”)
sudo serviced service start service-name

8.1 Listing All Installed ZenPacks

Use the following commands to list all installed ZenPacks:

- Zenoss 4
`zenpack -- list`
- Zenoss 5
`sudo serviced service run zope zenpack list`

8.2 Steps to Uninstall ZenPacks

Use the following commands if you need to uninstall ZenPacks:

- Zenoss 4
`zenpack -- remove zenpack-name`
- Zenoss 5
`sudo serviced service run zope zenpack uninstall zenpack-name`

