

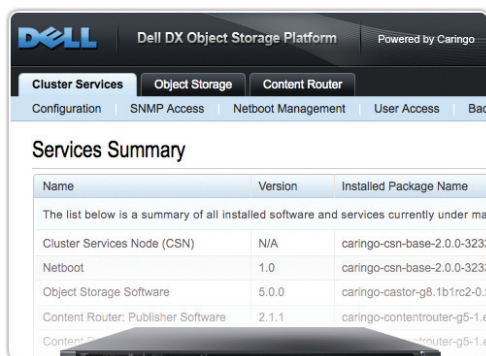
# CAStor® Cluster Services

## Complete Management of the Caringo® Object Storage Platform

Cluster Services Node (CSN) is a software application that streamlines installation, configuration and management of the Caringo® object storage platform including CAStor®, Content Router™ and the CAStor Proxy. For administrative ease, the CSN serves as a single integrated management platform addressing initial service deployment, upgrades and monitoring of the Caringo object storage environment.

### Featured Integrated Solution

Dell, a Caringo OEM partner, integrated their rack-based servers with Caringo CAStor and Cluster Services Node software to power the Dell DX Object Storage Platform, a powerful combination of best-in-class hardware and software optimized for enterprise storage.



### One Centralized Service Management Application

#### Key Benefits

**Simple, automated installation.** CSN minimizes administrative support for the installation and upgradeability of CAStor storage environments including Content Router and the CAStor Proxy.

**Ease of administration and management.** CSN centralizes the services and management information needed to install, upgrade and monitor the CAStor storage environment onto a single, accessible server with shared configuration.

**Centralized web-based access.** The CSN console provides a centralized, web-based interface to access configuration and status information from any web browser.

**Custom branding of the management console.** Caringo partners have the option of rolling out CAStor integrated solutions with their own branding of the graphical user interface.

#### Key Services

**Network management services.** The CSN provides the integration for all the network management services including DHCP, PXE, TFTP, syslog, NTP, SNMP, and DNS.

**Network boot control.** Integrated PXE network boot and configuration server enables booting of CAStor nodes on the CSN internal network for easy, push button provisioning of storage capacity.

**Unified management and access control.** The CSN console supports web-based configuration management for your clustered storage. Administrators access their storage cluster via the web console.

**Operational status monitoring.** CSN includes SNMP MIBs to provide operational status information for all nodes in the CAStor cluster and also monitor CAStor Content Router Publishers and Subscribers. The CSN aggregates this information and makes it accessible through Net-SNMP.

**External application accessibility.** The CSN provides load balancing for HTTP clients on the external network, including remote clusters using CAStor Content Router, to send and receive HTTP requests to and from CAStor storage on the CSN internal network.

**Multi-site storage replication.** Replicate content and roll up stored data from multiple sites using CAStor Content Router from the CSN console.

# CAStor® Cluster Services

## Recommended Hardware

**CPU:** 64-bit, Intel Xeon, AMD Opteron, or equivalent

**Hard Drive:** Content Router requires 200 GB of disk space for every 100 million unique objects in the associated CAStor cluster

**Memory:** Minimum: 6GB; Recommended: 12GB

**Network Interface:** Minimum: 2 Gigabit Ethernet interfaces; Recommended: 4 Gigabit Ethernet interfaces. Dedicated switch or VLAN for internal storage network. Managed switch recommended.

**OS:** Pre-installed 64-bit RHEL/CentOS 5.5 operating system

In addition to a CSN server, a minimum of three (3) CAStor nodes are required for the object storage cluster.

## About Caringo

To learn more about Caringo and our products visit our website or e-mail [info@caringo.com](mailto:info@caringo.com).

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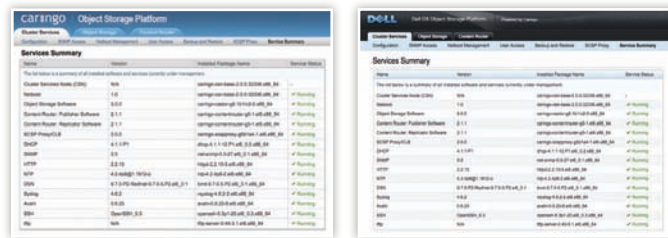
### Additional Features

**Configuration backup and rollback.** The CSN console provides automatic configuration backup and restore capabilities to previous CAStor cluster configuration versions.

**Storage software licensing management.** The CSN console provides a central place to manage published license files and scans for license updates after installation of the CAStor cluster.

**Automatic multi-process mode configuration.** CSN automatically configures all CAStor storage nodes in multi-process mode to take full advantage of your hardware's bandwidth.

**Backward compatibility.** CSN 2.0 supports upgrade from CSN versions 1.0 or 1.0.1.



Partners have the option of rolling out CAStor integrated solutions with their own branding of the management console.

## Configuration

**Operating system.** Red Hat Enterprise Linux 5.5

**External and dedicated internal network.** The CSN requires access to both the external network and a dedicated internal network. A private internal network ensures the CAStor cluster traffic is protected from unauthorized access and also that the external network is isolated from both the PXE network boot server, including DHCP, and the cluster multicast traffic. Allocation of the address space in the internal network is based on the network size selected during initial configuration.

