### **[OpenStack Integration](http://www.prophetstor.com/openstack/" \l "openstack-integration)**

OpenStack Integration

Federator® is a general-purpose storage orchestrator/optimizer, and it can be deployed in any cloud environment. Here we showcase how ProphetStor Federator SDS integrates seamlessly with OpenStack, an open source cloud operating system that is gaining tremendous amount of popularity and support from major corporations such as HP, Dell, and Red Hat.

* [**Text Hover**](http://www.prophetstor.com/openstack/)

Out-of-band and entirely REST API driven, Federator can be introduced into any storage environment with minimum disruption and development work. For OpenStack, Federator provides a Federator Volume Driver for Cinder that allows both enterprise and commodity storage devices to be plugged into the OpenStack cloud platform for storage federation. In addition to the Cinder features, Federator offers an extended collection of API’s to enable a rich set of data services, if the underlying storage supports them.

### [**Automated Deployment**](http://www.prophetstor.com/openstack/#automated-deployment)

Automated Deployment

ProphetStor Federator SDS can be deployed in OpenStack using a modified version of the open-source deployment tool FUEL offered by **[Mirantis](http://software.mirantis.com/" \t "_blank)**, the leading company that focuses on OpenStack deployment and distributions. Both Federator and Flexvisor nodes can be deployed automatically on bare metal servers using the PXE boot technology.

* [**Text Hover**](http://www.prophetstor.com/openstack/)

Users can continue to deploy OpenStack (Controller, Compute, Networking, etc.) using the same FUEL package if an existing OpenStack environment does not already exist.

### [**OpenStack Management Dashboard (Horizon)**](http://www.prophetstor.com/openstack/#openstack-management-dashboard-horizon)

OpenStack Management Dashboard (Horizon)

Federator® extension for Horizon exposes administrator-defined offerings in the dashboard such that OpenStack users can request storage services without ever having to leave the familiar Horizon environment. Offering details such as thin provisioning capability, IOPS performance, and RAID level, etc., are presented for the users to choose to match their application needs.

* [**Text Hover**](http://www.prophetstor.com/openstack/)

Federator® storage service offerings are exposed as Volume Types in OpenStack Cinder Block Storage. When a user creates a Block Volume on OpenStack, they can select the appropriate Volume Type for the Volume. Federator matches the Volume Type to the appropriate storage service offering, creates the Volume based on the requirements of the offering, and delivers the Volume to Cinder. The user can then attach the Volume through OpenStack Horizon Dashboard or Nova CLI to a Nova VM.