



## Product Bulletin

# Operations Manager, Protection Manager, and Provisioning Manager 4.0

## Revision History

22 February 2010 - Initial version

Proprietary and confidential. Restricted to NetApp employees and channel partners, each of whom is under NDA obligations. This document may not be shared with customers without prior written permission from NetApp. © Copyright 2010 NetApp, Inc. All rights reserved.

This product bulletin informs NetApp sales and NetApp partners about new or changed NetApp® products or services.

1. Summary
2. What's New?
3. Sales Tools
4. Customer-Ready Tools
5. System Requirements
6. Product Information
7. Regulatory Compliance
8. Warranty and Service
9. Additional Information

---

## 1. Summary

This product bulletin announces the First Customer Shipment (FCS) of Operations Manager, Protection Manager, and Provisioning Manager 4.0, key components of the NetApp Manageability Family.

Operations Manager is NetApp's solution for managing multiple NetApp storage systems. From a central console, Operations Manager delivers comprehensive monitoring and management of NetApp storage systems with alerts, reports, performance tools, and configuration tools to keep your customer's storage infrastructure in line with business requirements for maximum availability and efficiency.

Protection Manager is an intuitive and innovative backup and replication management software for NetApp disk-based data protection environments. Currently it supports and provides a management interface for the SnapVault®, Open System SnapVault, and SnapMirror® products. It also integrates with NetApp's SnapManager® products. Protection Manager delivers greater assurance of data protection and higher productivity by providing policy-based management, including automated data protection setup.

Provisioning Manager is a centralized provisioning tool for NetApp FAS storage systems. Storage administrators can provision storage across their environment using a wizard-driven GUI with just a few clicks. Storage provisioning is automated through use of user-defined provisioning policies, which include thin provisioning and deduplication settings. Storage administrators can quickly react to out-of-space conditions and perform various space management actions, including data migration.

## 2. What's New?

### What's New in Operations Manager 4.0?

- Discovery, Monitoring, Reporting and Alerting support for Data ONTAP® 8.0 (both 7-mode and Cluster mode) systems:
  - Discovers cluster components:
    - Clusters, nodes, aggregates, striped aggregates
    - Volumes, striped volumes, Snapshot™ copies
    - Ports, port aggregates, LIFs, LIF failover rule
    - Vservers, namespace, junctions
  - Monitors the health and general status of cluster components and generate appropriate events:
    - Provides physical view and logical view of the Data ONTAP 8.0 clusters and their components
    - Provides physical and logical resources' utilization details
    - Generates events for any failures of the physical components of the Data ONTAP 8.0 cluster
  - Reporting for Data ONTAP 8.0 clusters:
    - Provides most of the reports currently available for Data ONTAP 7G systems as applicable
    - Provides new reports on Data ONTAP 8.0 cluster components, chargeback reports for Data ONTAP 8.0 components
- Advise on diagnosing performance issues:
  - Provides details of the clients' usage statistics to identify the NFS/CIFS clients that are putting max load on the storage system, causing performance issues
  - Provides correlation between different events that would help the user to troubleshoot any performance issues
  - Provides extensible list of health-check rules to identify problem areas and suggests possible corrective actions to solve a performance issue
- Performance Baselineing:
  - Provides advanced statistics such as min, max, average, percentile for the performance metrics
  - Provides filters to select appropriate periods for metrics calculation, which helps in accurately baselining the workloads in customer environment
  - Suggests right thresholds and allows threshold setting based on advanced metrics such as min, max, average, percentile
- Performance Advisor Data collection enhancements:
  - Allows selectively enabling or disabling collection of specific performance counters for a particular host
  - Ability to customize performance data collection frequency and data retention period for specific counters for a particular host
- Performance Advisor custom view enhancements:
  - Ability to view the historic data for a newly created custom view
  - Custom view templates that can be applied for any instance of particular object type
- Performance Advisor Data Export:
  - Allows to export Performance Advisor data in CMA format, which can be used by support for offline analysis
  - This feature should be used only when requested by NetApp support
- V-Series enhancements:
  - Monitors storage arrays and array ports known to a V-Series system and generates events on errors
  - Provides reports to show:
    - How the storage array has been configured
    - Switch zoning and pathing information of an array LUN
    - Storage load on an array LUN and on an aggregate
- MyAutoSupport integration:
  - Ability to launch MyAutosupport portal for any particular storage system discovered by Operations Manager:
    - MyAutosupport provides features such as Upgrade Advisor and Visualization charts of the storage back end
- Storage Efficiency Dashboard plug-in:
  - The NetApp Operations Manager Efficiency Dashboard is a new plug-in tool built on top of Operations Manager (OM) database to allow customers to determine how well they are using both NetApp storage and NetApp storage efficiency technologies.

- The plug-in tool is available in the ToolChest section of the NOW site:  
[http://now.netapp.com/NOW/download/tools/omsed\\_plugin](http://now.netapp.com/NOW/download/tools/omsed_plugin).
  - Note: The plug-in also works with OM v3.8.1.
- VSphere VMotion® and HA support:
  - Operations Manager server now supports high-availability solution provided by VSphere VMotion and HA features.

### What's New in Protection Manager 4.0?

- Advanced secondary space management:
  - Space management supports monitoring, alerting, advising, and automating data movement. Customers are able to make informed decisions using policy-based automation capabilities.
  - Space management and data migration are integrated features of Provisioning Manager and Protection Manager. In this release, Protection Manager license autoenables provisioning functionality.
  - Storage administrators are able to respond to out of space conditions through various space management options, including volume resizing, deduplication, Snapshot deletion, and data migration.
  - Monitors volume usage and threshold alerts by growth rate or volume size for load balancing.
- Large aggregate support:
  - Protection Manager supports 64-bit aggregates as the source or the destination for backup and DR
  - Improves customer's storage scalability, efficiency, and performance
- SnapVault Primary and SnapVault Secondary licenses are supported on the same controller:
  - Protection Manager supports single systems having both the primary and secondary Data ONTAP SnapVault licenses
  - Storage administrators are able to fully utilize available space on customer's backup storage system:
    - SnapVault primary and SnapVault secondary on same storage system require different aggregates for primary and secondary.
    - SnapVault primary and SnapVault secondary on different storage systems supports a cross-backup configuration.
- Improved error message and reporting:
  - Provides detailed information to help storage administrators resolve data set protection status and job failure issues.
  - Provides ability to drill down into error status for specific details why data set status is not in a protected state.
  - For job failures, a list of jobs are provided much like the jobs window in NMC when a given protection problem is selected.
- Simplified protection status dashboard and definitions:
  - Updated protection status definition to reflect environment
  - Demonstrate the value of Protection Manager without taking over the environment or requiring any additional configuration
  - Immediately identify top external relationship lags on dashboard

### What's New in Provisioning Manager 4.0?

- Online migration of data sets and vFiler™ units:
  - NetApp Data Motion™ is a cross-product solution for nondisruptive migration of NFS and iSCSI accessed data. Provisioning Manager is the front-end application that should be used in order to perform the online (nondisruptive) migration. Provisioning Manager has the necessary GUI workflows and automates all necessary checks to make sure that the cutover from source to destination happens without causing disruption to applications.
- Storage services:
  - With storage services it is possible for storage administrators and cloud service providers to expose the available storage infrastructure as a set of services to storage consumers.
  - A storage service is a set of policies, resource pools, and vFiler templates that define a storage service level, usually corresponding to a service-level objective. One or more data sets may then be provisioned by specifying a desired storage service. The resource pool used to provision the storage, and the policies governing the data set are determined by the storage service specified.
- Full 7-mode support on Data ONTAP 8.0:
  - Data ONTAP 8.0 comes with support for 64-bit (large) aggregates in 7-mode. Provisioning Manager

supports the ability to provision storage from these large aggregates. In addition it is possible to provision volumes larger than 16TB in size on the 64-bit (large) aggregates.

- Space management (covered under Protection Manager):
  - The secondary space management features including secondary volume migration are enabled with the Provisioning Manager license. See the Protection Manager section for more details.

### 3. Sales Tools (Sales Guides, Training Presentations, SE Presentations)

Sales and SE information for Operations Manager, Protection Manager, Protection Manager DR, and Provisioning Manager can be found on Field Portal under Index -> 03-Storage Management Software -> Storage Suite Management Software.

For individual product sales and SE training material look for content at the following locations:

- [Operations Manager](#)
- [Protection Manager and Protection Manager DR](#)
- [Provisioning Manager](#)
- For quoting instructions please refer to the [Quote Tool Bulletin \(QTB\) for DFM](#).

### 4. Customer-Ready Tools (Customer Presentations, Datasheets)

Look for customer presentations and other customer-ready content at the following locations:

- [Operations Manager](#)
- [Protection Manager and Protection Manager DR](#)
- [Provisioning Manager](#)

### 5. System Requirements

Refer to the IMT (Interoperability Matrix Tool) for [supported platforms and compatibility matrix](#).

### 6. Product Information

- Operations Manager is licensed for each NetApp storage system being managed. Operations Manager is the base license for all other feature licenses.
- Provisioning Manager is licensed for each NetApp storage system that is being managed. Even if only parts of the storage in a system are managed by Provisioning Manager, the full license needs to be purchased.
- Protection Manager should be licensed for every storage system that is participating in the data protection process. This includes any system that is running SnapVault primary, SnapVault secondary, and/or SnapMirror licenses. If any part of a system is being protected or is providing a resource for backup or mirroring, such as a single volume or aggregate, the entire system is considered as managed.
- Protection Manager DR is licensed based on the number of storage systems that will be managed in a disaster recovery environment for failover/failback. Protection Manager DR requires Protection Manager license as a prerequisite.
- The DataFabric® Manager server is the core management server than is required to run Operations Manager, Provisioning Manager, or Protection Manager. It is licensed per instance. The license is

required to enable the use of the embedded database.

- If needed, please consult the [“Licensing in a Nutshell” guide](#) for more information.

| Part Number               | Description                                            | Discount Category Code |
|---------------------------|--------------------------------------------------------|------------------------|
| SW-DFM-MGMTSVR            | Software, DFM Management Server                        | J                      |
| SW-DFM-T(x)-OPSMGR-AD     | Software, Operations Manager, Additive, Tier x (1-7)   | J                      |
| SW-DFM-T(x)-PROVMGR-AD    | Software, Provisioning Manager, Additive, Tier x (1-7) | J                      |
| SW-DFM-T(x)-PROTMGR-AD    | Software, Protection Manager, Additive, Tier x (1-7)   | J                      |
| SW-DFM-T(x)-PROTMGR-DR-AD | Software, Prot Mgr DR, Additive, Tier x (1c-7c)        | J                      |

### Software Subscription Plans

The following table lists the SSP part numbers as of the date of this product bulletin. Partners should contact their channel representative for pricing information.

| Part Number            | Description                                            | Discount Category Code |
|------------------------|--------------------------------------------------------|------------------------|
| SW-SSP-DFM-MGMTSVR     | SW Subs, DFM Management Server                         | S                      |
| SW-SSP-T(x)-OPSMGR-AD  | Software, Operations Manager, Additive, Tier x (1-7)   | S                      |
| SW-SSP-T(x)-PROVMGR-AD | Software, Provisioning Manager, Additive, Tier x (1-7) | S                      |
| SW-SSP-T(x)-PROTMGR-AD | Software, Protection Manager, Additive, Tier x (1-7)   | S                      |

Protection Manager DR does not have a separate SSP license and is included in the Protection Manager SSP.

All products can also be ordered through the FAS2xxx software packs:

- Operations Manager is part of the Base Pack.
- Provisioning Manager is part of the Foundation Pack.
- Protection Manager is part of the Protection Pack.

Refer to the [Software Packs and Bundles](#) guide for details.

### Quoting

For quoting instructions please refer to the [Quote Tool Bulletin \(QTB\) for DFM](#).

### Downloading

To download software, go to the [NOW Download Software](#) page.

### Product Availability

DataFabric Manager server 4.0 with Operations Manager, Protection Manager, Protection Manager DR, and Provisioning Manager is available now.

## 7. Regulatory Compliance

Products need to be validated against the NetApp Safety/EMI Regulatory Compliance List prior to order submission. The list is available at PartnerCenter Compliance Information. This is required to make insure that products are being sold only in the countries in which NetApp has received regulatory compliance certification.

## 8. Warranty and Service

Standard software warranty and services apply.

## 9. Additional Information

**Contact information:** Please contact your NetApp sales or channel partner representative with questions concerning this bulletin.

Go further, faster™

© 2010 NetApp | Subscriptions | Service and Support  
495 E. Java Drive, Sunnyvale, CA 94089 USA