

# SYSTEM MONITORING PLUG-IN FOR EMC CELERRA SERVER



## SYSTEM MONITORING PLUG-IN FOR EMC CELERRA SERVER DELIVERS:

- Pinpoint storage related performance problems rapidly
- Navigate from data file to host volume to storage device
- Proactively respond to problems by using the metric thresholds
- Optimize storage allocation by tracking storage usage by databases

## BENEFITS:

- Consolidate all of the information about your Oracle and EMC storage environment in the Grid Control Console
- Correlate availability and performance problems across entire set of IT components
- Enhance service modeling and perform comprehensive root cause analysis
- Increase operational efficiencies

*The Oracle Enterprise Manager Grid Control System Monitoring Plug-in for EMC Celerra Server delivers comprehensive availability, performance and configuration information for EMC Celerra Servers. By combining EMC Celerra Server monitoring with the richest and most comprehensive management of Oracle systems, Grid Control significantly reduces the cost and complexity of managing applications that rely on EMC Celerra Server and Oracle technologies. Application administrators can now consolidate all of the monitoring information in the Grid Control Console, model and view the complete topology of their applications, and perform comprehensive root cause analysis. Storage administrators can perform proactive monitoring and detailed configuration analysis for EMC Celerra Servers, assess the impact of storage performance problems on end-user services, and better align their efforts with business needs.*

## Realize Immediate Value through Out-of-Box Availability and Performance Monitoring

The System Monitoring Plug-in for EMC Celerra Server automatically collects a comprehensive set of availability and performance metrics with pre-defined thresholds, immediately alerting administrators of any issues. This allows administrators to derive instant value, while giving them the flexibility to fine-tune thresholds according to their specific operational requirements. Out of the seventy seven metrics collected, some of the key performance indicators monitored include: EMC Celerra status, Data Mover Statistics, NFS Statistics, Size and Usage for File Systems, Volumes, and Pools.

In addition to real-time monitoring of performance metrics for EMC Celerra Server, Grid Control also stores the monitoring information in the management repository, thereby enabling administrators to analyze performance through various historical views (Last 24 Hours/ Last 7 Days/ Last 31 Days) and facilitating strategic tasks such as trend analysis and reporting.

To further aid administrators with critical tasks such as problem diagnosis, trend analysis and capacity planning, the System Monitoring Plug-in for EMC Celerra Server includes ten out-of-box reports, summarizing key information about EMC Celerra Server availability, performance, traffic and configuration. These reports are easily accessible from the EMC Celerra Server homepage in the Grid Control Console and from the Information Publisher (Enterprise Manager's powerful reporting framework), enabling administrators to schedule, share, and customize reports to fit their operations needs.

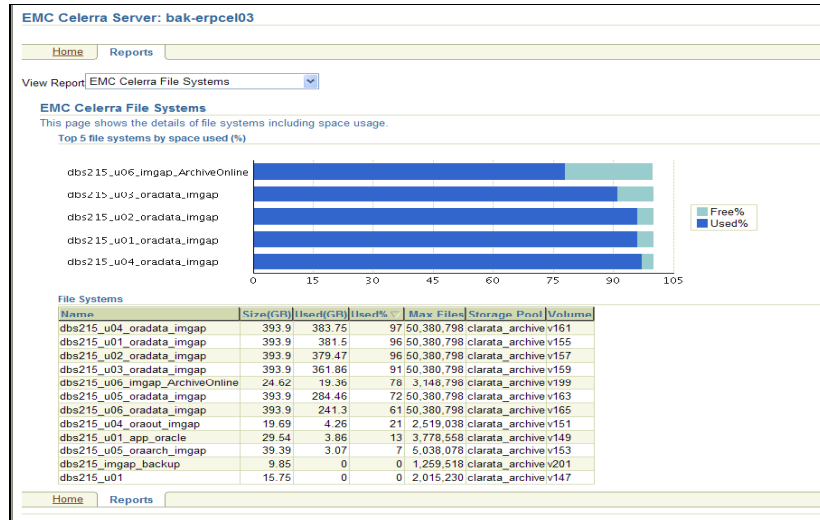


Figure 1. EMC Celerra File Systems Report.

### Apply Grid Control's Powerful Monitoring and Event Management Features to EMC Celerra Server

The System Monitoring Plug-in for EMC Celerra Server leverages Grid Control's powerful monitoring and event management features, thereby delivering a robust monitoring solution through automation, standardization and "manage many-as-one" approach. Key features include:

- **Blackout Periods:** prevent unnecessary alerts from being raised during scheduled maintenance operations, such as hardware upgrade.
- **Monitoring Templates:** simplify the task of standardizing monitoring settings across the entire EMC Celerra Server environment, by allowing administrators to specify the monitoring settings (metrics, thresholds, metric collection schedules and corrective actions) once and applying them to any number of EMC Celerra Server instances.
- **User-defined Metrics:** allow administrators to collect and monitor parameters specific to their applications.
- **Corrective Actions:** ensure that routine responses to alerts are automatically executed, thereby saving administrators time and ensuring problems are dealt with before they noticeably impact users.
- **Notification Rules, Methods and Schedules:** define when and how administrators should be notified about critical problems with their applications, ensuring quicker problem resolution.
- **Groups / Systems:** significantly simplify management of large numbers of components, allowing administrators to "manage many-as-one". By combining EMC Celerra Server instances in groups, or including them in heterogeneous groups or systems, administrators can benefit from a wealth of group management features, such as ability to proactively monitor availability and alerts of all group members via the System Monitoring Dashboard.

**Lower Costs through Knowledge: Know What You Have and What Changed**

Tracking configurations is one of the most time-consuming and difficult tasks administrators face on a daily basis. Being able to quickly view a detailed configuration snapshot, analyze historical changes and enforce standardization between systems is key to diagnostics, auditing, compliance, and making solid business decisions.

System Monitoring Plug-in for EMC Celerra Server simplifies these tasks by automatically collecting detailed configuration information about EMC Celerra Server, including: control station details, data mover, disk groups and disk devices configuration. This information is collected daily and stored in the management repository. In addition, Grid Control automatically tracks all changes to the EMC Celerra Server configuration, helping administrators answer key questions about what changed, who is responsible for the change, and when the change was made. System Monitoring Plug-in for EMC Celerra Server also enables enterprise-wide configuration comparisons of EMC Celerra Server instances, allowing administrators to quickly and easily pinpoint potential differences. This helps to keep systems synchronized and to reduce “configuration drift”. In addition, it simplifies investigations into why systems that are presumed to be identical, are behaving differently.

### Leverage the Enterprise Manager Grid Control management framework

Oracle Enterprise Manager Grid Control provides administrators with a consolidated view of the enterprise systems, including databases, hosts and storage systems. The System Monitoring Plug-in for EMC Celerra System leverage Enterprise Manager Grid Control’s powerful management capabilities to provide robust monitoring, rapid fault diagnostic and manage-many-as-one automation capabilities. Key features include:

- **Topology view:** By mapping relationships between databases, hosts or clusters and storage systems, administrators can get a whole system view of the entire application infrastructure and can zoom in on problem components.

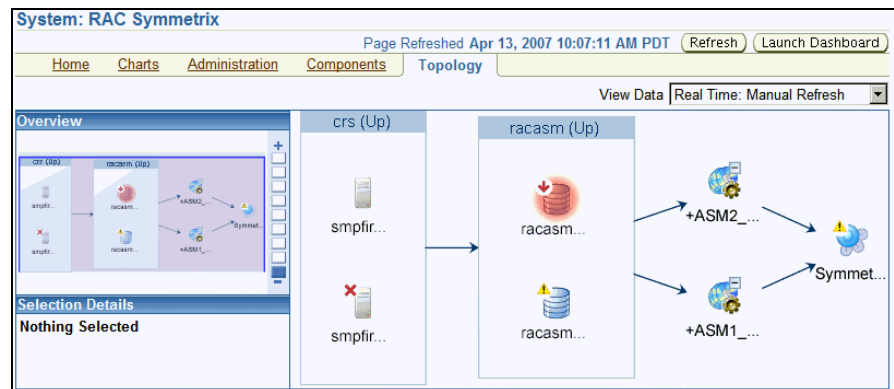


Figure 2: Topology view of RAC database, cluster and storage systems

- **Blackout periods:** Eliminates unnecessary alerts from being raised during scheduled maintenance period, e.g. patching the microcode.
- **Monitoring templates:** Simplifies and standardizes the monitoring settings for EMC Celerra Systems by allowing the administrators to set the monitoring settings once and applying them across the enterprise.
- **User defined metrics:** Allow administrators to collect and monitor parameters specific to their data center environment.

**SYSTEM MONITORING  
PLUG-IN FOR EMC  
CELERRA SYSTEM**

Related Products:

- Management Plug-ins
  - System Monitoring Plug-in for Hosts
  - System Monitoring Plug-in for Non-Oracle Databases
  - System Monitoring Plug-in for Non-Oracle Middleware
  - System Monitoring Plug-in for Network Devices
  - System Monitoring Plug-in for Storage
- Management Connectors

Detailed information on these products can be located at <http://www.oracle.com/enterprise-manager>.

- **Roles, Notification Rules, Methods and Schedules:** defines which, when and how administrators should be notified about critical problems with their systems ensure quicker problem resolution by the appropriate administrators.
- **Corrective actions:** Ensures that routine responses to alerts are automatically executed, thereby saving administrators time and enabling problems to be dealt with proactively before they impact users.
- **Groups and Systems:** Significantly reduce the burden of managing large number of components, whether they are storage systems, databases or application servers, using groups and systems. By combining EMC Celerra Storage Systems in groups or associating them with other data center components, such as hosts, databases, etc., administrators can proactively monitor availability and alerts using the dashboard.

### Complete monitoring of enterprise components using Enterprise Manager

Oracle Enterprise Manager Grid Control is very simply the most complete management solution for Oracle and non-Oracle components in enterprise data centers. The System Monitoring Plug-in for EMC Celerra is an integral piece of the monitoring capabilities of Enterprise Manager Grid Control. By leveraging the management capabilities of Enterprise Manager, administrators can simplify the tasks of managing storage systems that support enterprise database applications, optimize the storage usage and deliver higher uptime and performance for end users.

### Learn More

For more information about this and other Oracle Management Connectors, visit <http://www.oracle.com/technology/products/oem/extensions/index.html>

*To learn more about Oracle Enterprise Manager 11<sup>g</sup>, visit [www.oracle.com/enterprise\\_manager](http://www.oracle.com/enterprise_manager)*

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