Providing Enterprisewide Oracle ZFS Storage Appliance Visibility to Oracle Enterprise Manager

Enterprisewide storage management is a key to success with distributed data-intensive application environments. By itself, Oracle ZFS Storage Appliance simplifies storage management with an easy-to-use interface and comprehensive analytics for granular storage performance analysis. With Oracle Enterprise Manager Plug-in for Oracle ZFS Storage Appliance, you now can monitor, manage, and provision distributed storage systems from a single console. By combining these tools, database and storage administrators can collaborate to quickly identify and resolve issues, as well as provision LUNs and shares, improving productivity and operational effectiveness.

Simplicity in an Increasingly Complex Storage Infrastructure

Data proliferation combined with distributed storage architectures introduces complexity within the infrastructure, management, and support environments. Thus, simplifying the day-to-day activities related to monitoring and managing storage is critical. Oracle Enterprise Manager enables the management and monitoring of distributed instances of Oracle Database and storage platforms from a single console. With Oracle Enterprise Manager Plug-in for Oracle ZFS Storage Appliance, database administrators (DBAs) and storage administrators now have an at-a-glance view into the database and storage availability, capacity utilization, and performance of Oracle ZFS Storage Appliance systems distributed across the enterprise.

In addition, storage provisioning, prebuilt jobs and compliance checks enable DBAs and storage administrators to manage their storage infrastructure through the Oracle Enterprise Manager interface.

Empowering Storage and Database Administrators

Using Oracle Enterprise Manager Plug-in for Oracle ZFS Storage Appliance, DBAs and storage administrators have access to an easy-to-read graphical dashboard in the Oracle Enterprise Manager console that displays key metrics and analytics, providing
**KEY BUSINESS BENEFITS**

- Improves DBAs’ productivity with a visual interface showing capacity and performance of Oracle ZFS Storage Appliance
- Enables DBAs and storage administrators to provision LUNs and shares in Oracle ZFS Storage Appliance
- Simplifies management of multiple Oracle ZFS Storage systems with built-in storage management jobs
- Identifies drift in system configuration with compliance checks
- Enables identification of database-related storage issues with 67 percent fewer steps

Deep insights into performance, capacity utilization, and availability of Oracle Database on Oracle ZFS Storage Appliance. With critical system alerts being visible from within Oracle Enterprise Manager, administrators gain visibility into storage hardware issues. Plus, using group functionality, administrators have the ability to easily monitor and manage multiple Oracle ZFS Storage Appliance systems from a customizable dashboard.

The plug-in achieves granular monitoring by leveraging the powerful DTrace Analytics software feature of Oracle ZFS Storage Appliance. From storage performance to system health check results, the plug-in provides unmatched, instant visibility and ease of use to monitor distributed Oracle ZFS Storage Appliance systems from a single console. Plus, with support for management by exception, DBAs and storage administrators can set thresholds and alerts for key storage metrics and manage the storage infrastructure more efficiently.

In Oracle Database 12c environments, DBAs and other key IT personnel can obtain per-database-level drill downs and breakdowns by database file type and database function on storage analytics. This capability is extremely significant in multitenant Oracle Database 12c environments, enabling DBAs to obtain an unprecedented level of visibility into storage traffic, identify performance issues, and tune storage resources for optimal performance.

**Managing Oracle ZFS Storage Appliance with Oracle Enterprise Manager**

Management of an Oracle ZFS Storage Appliance system through Oracle Enterprise Manager brings storage administration functions closer to the single-pane-of-glass interface. The expectation of "set and forget" is not realistic for any resources in the data center. Compute resources require active monitoring and managing, and the storage resources in the infrastructure need the same level of attention. When Oracle Enterprise Manager is used to monitor storage resources, DBAs or storage administrators can
actively make changes to Oracle ZFS Storage Appliance systems. They can add new LUNs or file systems needed to support application requirements. Once storage is allocated, it is possible to further tune the storage to deliver optimal results to best support the application that is relying on the storage. Most tunable settings for file systems and LUNs from Oracle ZFS Storage Appliance are available through the Oracle Enterprise Manager interface.

Additionally, prebuilt storage management jobs, available within Oracle Enterprise Manager job library, enable n-way management of Oracle ZFS Storage Appliance systems. From managing dataset size and retention policy to creating users, the jobs enable administrators to perform storage-related activities on multiple storage systems, without exiting the Oracle Enterprise Manager console.

Furthermore, administrators can extend Oracle Enterprise Manager’s compliance and configuration drift management frameworks to Oracle ZFS Storage Appliance systems. This capability is highly significant in verifying compliance of Oracle ZFS Storage Appliance targets to compliance rules and also identifying configuration drift among storage targets.

**Enterprisewide Visibility and Optimization**

The inability to optimize performance and maximize data availability from application to storage can have a direct impact on business through lower productivity and lost sales opportunities. Oracle Enterprise Manager Plug-in for Oracle ZFS Storage Appliance provides enterprisewide visibility with deep insight into storage infrastructure components so that IT staff can easily optimize application-to-storage performance. In
addition, provisioning LUNs and shares through the Oracle Enterprise Manager framework increases your staff's ability to respond rapidly and resolve storage bottlenecks and other issues that can affect data center operations.

By encouraging collaboration among your DBAs, system administrators, and storage administrators, database and storage issues can be addressed faster, giving your IT staff time to focus on revenue-generating, strategic applications instead of infrastructure support. Now you can stop making piecemeal optimizations and start transformative improvements by using Oracle Enterprise Manager Plug-in for Oracle ZFS Storage Appliance to monitor your enterprisewide Oracle ZFS Storage Appliance deployments.

CONTACT US
For more information about Oracle Enterprise Manager Plug-in for Oracle ZFS Storage Appliance, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

Integrated Cloud Applications & Platform Services

Copyright © 2017, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0517