

ORACLE ENTERPRISE MANAGER 10_g CONFIGURATION MANAGEMENT PACK

KEY FEATURES

- Discovery and assets tracking for a broad spectrum of IT components
- Out-of-box and customizable search and compare features
- Historical change tracking
- Policy frameworks and compliance assessment
- Critical patch advisory
- Oracle and third party IT component support

Configuration Change Console adds:

- Real-time change detection
- Out-of-box policies, compliance assessment and compliance dashboard
- Reconciliation with change management systems
- Helps ensure compliance with regulatory and industry standards such as Sarbanes-Oxley and PCI

Configuration management is a critical component in every enterprise's day to day IT operations. Oracle Configuration Management Pack forms the centerpiece of Oracle Enterprise Manager's ability to manage configurations and automate IT processes. A key component of this solution is Configuration Change Console, which reduces cost and mitigates risk by automatically detecting, validating and reporting on authorized and unauthorized configuration changes in real-time.

Key Benefits

• **Discovery and Asset Tracking For A Broad Spectrum of IT Components**

Get instantaneous views of IT assets, configuration items, topologies and their dependencies, including:

- Operating System Configuration
- Hardware Configurations
- Database Configurations
- Application Server Configurations
- Packaged Application Configurations

• **Analytics And Reporting**

Track, analyze, report and view details related to IT configurations using a single interface. Included is a rich set of out-of-the-box reports and capabilities for filtering information and flexible search capabilities across the enterprise.

• **Change Detection**

Manage configuration drift through ad hoc, one to one or one to many configuration compare. Schedule comparisons with "gold configurations" or saved baselines. Increase time to resolution and root cause analysis with change history for all targets and parameters.

• **Compliance Assessments**

Proactively track compliance and adherence to best practices with over 200 out of the box Policies. Utilize the Compliance Dashboard and Policy groups to receive an at-a-glance view of how specified systems are complying with best practices, security, storage or use defined policies.

- ***Real-Time Configuration Change Detection***

Detect changes to IT configurations in real-time to manage complex enterprise IT controls. Provides the ability to collect, detect and report change data from a broad range of systems, databases, applications and other IT infrastructure components.

- ***Facilitate Compliance With Security And Governance Policies***

Measure and track IT organization's ability to successfully meet its compliance goals. Enable IT departments to easily demonstrate compliance to government regulations and industry standards like SOX, PCI, ITIL and others.

- ***Powerful Support For Leading Change Management Systems***

Helps customers take advantage of existing investments, providing extensive insight across complex heterogeneous IT environments.

Discovery and Asset Tracking

Tracking assets and configuration items across the IT environment can be time consuming, cumbersome and prone to errors. Traditionally this is accomplished through knowledge of key individuals, ad hoc processes and spreadsheets.

Oracle Configuration Management Pack collects deep configuration information for hardware and software components across the Enterprise. These include:

- Hardware (CPU, memory, storage, network, etc)
- Operating System patches, kernel parameter settings and installed packages
- Oracle software (Databases, middleware and applications) details such as; patches, patch sets, init parameters and configuration settings
- Oracle Application Server details such as; patches, patch sets, components and configuration settings
- Oracle WebLogic Server configuration settings such as; ports in use, resource usage settings, deployed applications and JDBC resources

The configuration information is automatically collected at regular intervals and stored in the Oracle Enterprise Manager repository. This information is then available in Oracle Enterprise Manager from a central console providing a comprehensive view of all heterogeneous components in the data center.

Deployments Summary			
View Database Installations			
Software Targets Without Inventory: 4 of 14			
Database Installations [△]	Targets	Installations	Interim Patches Applied
Oracle Database 10g 10.1.0.4.0	1	1	Yes
Oracle Database 10g 10.1.0.5.0	1	1	Yes
Oracle Database 10g 10.2.0.1.0	3	1	No
Oracle Database 10g 10.2.0.2.0	3	2	No
Oracle Database 10g 10.2.0.3.0	0	2	Yes
Oracle Database 11g 11.1.0.6.0	2	6	Yes
Oracle9i 9.2.0.4.0	0	1	No

Summaries are also available for Oracle Application Server, Hardware and OS

Analytics and Reporting

Understanding configuration settings across the enterprise can be a difficult and sometimes impossible task. Specifically in the case where an outage or disruption of service is caused by a miss-configured setting, understanding the vulnerability to all your systems across the enterprise is critical.

Oracle Configuration Management Pack provides a centralized inventory of the configuration items and a rich set of standard and ad hoc search capabilities. This provides the ability to search for specific configuration values across all targets.

Some of the out-of-box searches capabilities are:

- Which servers have a particular version of a product installed
- Which Oracle products are missing a specific patch or patch set
- Which Oracle databases have a particular init.ora parameter set
- Which oracle Application Servers are using a particular port value
- Which Oracle products are using a particular feature, such as partitioning
- Which hosts have a specific kernel parameter value set
- Which hosts have a specific operating system patch installed

Change Detection

Keeping systems configured to a standard and identifying if a configuration change takes place, identifies and helps reduce “configuration drift”. This can also confirm if and when a planned change takes place. Oracle Configuration Management Pack provides a suite of comparison capabilities allowing the administrator to quickly and easily pinpoint any potential differences or changes in configurations.

The comparisons span the entire stack from the hardware to the application. Customers can create a baseline from an existing configuration; use a defined gold configuration or a current system to perform a one-to-one or one-to-many comparison.

Utilization of the configuration comparisons capabilities reduces “configuration drift” and simplifies investigations into why systems that are presumed to be identical may behave differently, for example the nodes in a RAC cluster. Configuration comparison is a key function in change management. By comparing baselines, before, after a change, or when a

patch is applied, you can verify that all configuration changes introduced were planned and expected.

In addition to configuration compare, Oracle Configuration Management Pack also provides the ability to track change history. The change history is maintained for the stack, hardware to application, and allows the administrator to simply track all changes for a specific configuration between two points in time. This allows the administrator to quickly see what has changed for a system that once worked and is suddenly not performing at an acceptable level.

Compliance Assessments

Proactive assessment of key compliance areas such as, security, configuration and storage help identify areas of vulnerabilities and areas where best practices are not being followed. Oracle Configuration Management Pack ships with over 200 policies along and the capability for users to defined their own specific policies.

Oracle Enterprise Manager tracks violations of these policies in a similar manor as performance metrics. Notification rules can be applied and corrective actions can be assigned to violations. For example, if a well-known username/password is present in a database, or if an open port is detected in the Application Server, a corrective action could be defined to automatically disable the account and close that port.

Such proactive enforcement is supplemented with compliance reports. These reports denote the compliance score for targets. It is possible to view the compliance score over time, along with drilling down into the violations and impact for each target. Integration with problem ticketing solutions allow for policy violation information to be automatically sent to a ticketing system and incident tickets created without the need for manual intervention.

Policies can also be applied in Policy Groups. Policy Groups contain a predefined set of Policies and proved an overall score based on a weighted average. The Policy Group score can be viewed from the Compliance Dashboard enabling administrators to have an at-a-glance view of how their systems comply with best practices, such as Security. The dashboard presents a summary of the current scores with the ability to drill down into the details. There is also a historical trend for each Policy Group providing the ability to track progress towards compliance over time.

Critical Patch Advisories issued by Oracle are also tracked. The Critical Patch Advisory will automatically assess all targets for violations, report deviations and offer multiple remediation paths for fixing a particular vulnerability. The administrator can optionally invoke the patch wizard and deploy the patch.

Real-Time Configuration Change Detection

Enterprises today are implementing compliance frameworks such as SOX , ITIL and PCI. A crucial consideration for these compliance frameworks is real-time configuration change detection and reporting. Configuration Change Console provides this real-time configuration change detection and reporting in the form of out-of-the-box policies and controls.



Configuration Change Console's dashboard provides near real-time configuration change detection along with meaningful visibility to a complete history of configuration change actions performed by users and applications to the logical infrastructure.

Configuration Change Console complements many existing IT infrastructure and service management systems through the following integration approaches:

- **SNMP traps:** Configuration Change Console can send an alert whenever a specific change is detected to any third party system.
- **Standards-based APIs:** Configuration Change Console is based upon industry standards such as J2EE and XML and can integrate with similar standards-based interfaces.
- **Change Management integration:** Configuration Change Console integrates with popular change management systems to create a closed-loop change management solution.

Facilitate Compliance With Security And Government Policies

Configuration Change Console is a policy-based system designed to help organizations and administrators support their IT compliance goals and help deliver the Level Of Service expected by their users. Out-of-the-box, Configuration Change Console comes with a set of predefined frameworks created by industry experts to meet common compliance requirements.

The frameworks provide predefined controls that are mapped to application, device and user event detection rules. These mappings put the enterprise in an ideal position to monitor adherence to best practices from the dashboard and to provide hard evidence in the form of reports for internal and external audits, reducing risk and the cost of compliance. Configuration Change Console also provides an easy to use interface allowing the customer to define their specific frameworks, policies, controls and map these to the devices they chose to monitor.

One of the main issues in managing compliance is automated data collation. Configuration Change Console automates this process by detecting and capturing any actions by users or applications that result in changes to the infrastructure. No user input is requested or required to capture and document changes.

Some examples of Components monitored for change are:

- Files and Directories
- Processes
- User Accounts
- Server resources
- Database
- Network

Powerful Support For Leading Change Management Systems

Configuration Change Console integrates with popular change management systems such as Remedy. Integration is achieved through an adapter that enables communications between the change management system and Configuration Change Console. This integration enables the Configuration Change Console to determine if a change was unauthorized or authorized via an open Request For Change in the change management system.

Complete Application Management Solution

Oracle Configuration Management Pack is a key component of Oracle Enterprise Manager, Oracle's complete management solution for the enterprise application stack. By integrating a complete configuration management solution in its application management solution, Oracle helps customers to maximize the value of their IT assets, increase the quality of IT services, reduce the cost of managing IT, and meet IT compliance requirements. Oracle Configuration Management Pack is available for Oracle Database, Oracle Middleware and Non-Oracle Systems. Configuration Change Console is an integral component of all flavors of Oracle Configuration Management Pack.

Conclusion

Configuration Management Pack provides the customer features allowing them to simplify their day to day activities, ensure their systems are compliant and reduce their overall costs. Following are the features of this pack:

- Discovery and Asset Tracking
- Configuration Analytics and Reporting
- Change Detection
- Compliance Assessments
- Real-time Configuration Change Detection
- Facilities Compliance With Security and Governance Policies



Oracle Corporation
World Headquarters
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

Worldwide Inquiries:
Phone: +1.650.506.7000
Fax: +1.650.506.7200
oracle.com

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