Oracle Enterprise Manager 13c
Microsoft SQL Server Plug-in version 13.1.1.0.0

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Heterogeneous Datacenter Management

Oracle’s Philosophy

• Productize our deep understanding of the Oracle stack to provide integrated management

• Provide generic Oracle solutions for managing non-Oracle technology
  – User Experience Management, Middleware Management, Business Transaction Management, Testing & Test Data Management, ...

• Incent and promote others to provide optimized management for non-Oracle technology

• Provide product extensibility wherever possible
  (today’s focus: Plug-In for SQL Server)
Enterprise Manager 13c Heterogeneous Management

Making The Complex Simple In Three Steps

1. Use or create **plug-ins** using Enterprise Ready Extensible Framework

2. Leverage common functions through plug-ins
   - Performance & Availability Monitoring
   - Configuration Management
   - Compliance Management
   - Job System
   - Alerting & Notifications
   - Custom UI
   - Reporting

3. Manage like any other target
Microsoft SQL Server Plug-in
Revamped for Better Analysis and Management

New! features

- Support for Microsoft SQL Server 2016
- New Business Intelligence Publisher Reports
- Query Performance Historical Playback
- Support for Microsoft SQL Server Full Recovery Model

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Benefits

Apply Enterprise Manager management and monitoring to your MS SQL Server workloads.

✓ **Comprehensive Monitoring**
  - Availability, Performance Metrics
  - Alerts, Blackouts
  - Templates
  - Groups/Systems

✓ **Configuration Analysis**
  - Detailed configuration collection
  - View/Save/Compare Configurations

✓ **Reporting**
Microsoft SQL Server Plug-in

Features

• MS SQL Server as EM Managed Target
• Comprehensive collection of monitoring Metrics (~ 400)
  – Buffer Statistics, Memory Statistics, Cache Statistics
  – Locks, Processes, Space Usage
  – Users and Roles
  – Cluster and AlwaysOn performance and status
• Out-of-box thresholds on key metrics
• 14 Out of the box Reports summarize key configuration and performance data

• Comprehensive configuration management
  – Server Configuration, Database Settings, Registry and Security Settings
  – Ability to View, Search and Compare configurations
• Ability to schedule Jobs
• Ability to Start/Stop/Pause/Resume SQL Server Instances
• Jobs to create, schedule, delete, and restore database backups
• Versions supported:
New Intuitive UI Dashboards

- Revamped for Better Analysis and Management
- Includes intuitive interface for creating and managing database backups
- Exposes even more key performance indicators, down to the individual database level
- Adds additional Indexes page with advanced investigative and management capabilities
SQL Server Focused Dashboard Views

• View Database server as well as individual database instance health and availability

• Individual database status and statistics with linking to additional details and management

• Key health, performance, and availability views

• Cluster and AlwaysOn availability and health
Instance-level Database Monitoring

Monitor MS SQL databases at the instance level

• Database status and storage measurements

• In-depth performance metrics
Drill into SQL Server Session and Query Statistics

- View session statistics by memory utilization and CPU time
- Break down query statistics by execution count, CPU time, & blocked time
Identify top MS SQL SQL activity

- Identify “Top” SQL queries
- View by CPU Time or Memory Utilization
- Limit to last Day, Week or Month
Managing MS-SQL Session

- Identify “Top” consumers by CPU or memory utilization
- Kill runaway session from within the UI
Manage Database Backups

- Name and create unique backups for any of your Microsoft SQL Server Databases
- Schedule jobs to create new backups
- Restore a selected backup
- Delete old or unwanted backups from the list
View Historical Key Performance Indicators

- Process and Connection KPIs
- Memory KPIs
- SQL Execution KPIs
- View the performance history by Day, Week, or Month
Inventory and Usage Details

- Drill down multiple levels of inventory details
- View different trends in inventory counts charted
Hundreds of performance and configuration metrics available for incident thresholds, reports, analysis and comparison.
Drill down into individual MS-SQL statistics

- Drill into hundreds of MS-SQL metrics
- Compare multiple MS-SQL server instances to one-another for a specific metric
- View associated alerts for particular metrics
- Choose to view the metric in real-time or customized historical views
Comprehensive MS-SQL Thresholds
Enterprise Manager helps you meet the challenges of managing the heterogeneous enterprise

- Comprehensive, top-down visibility into your infrastructure
- Rapid, accurate diagnosis & resolution of complex problems
Incident Manager for MS SQL Server
Metric Extensions

Missing a metric your team depends on?

Do you want to integrate custom scripts?

Use Oracle Enterprise Manager’s Metric Extension capabilities to easily expand and customize the MS SQL solution with a convenient UI-based development workflow.
Latest Configuration of SQL Server

- SQL Server version and patch level
- Platform and OS details
- Relevant Windows registry settings
- Individual database details
- Microsoft SQL AlwaysOn (HADR) Availability Group details
Compare SQL Server Configurations
Microsoft SQL Server Compliance Standard

- Compliance management standard that tracks and reports conformance of managed targets to industry, Oracle, or internal standards.
- Track and manage the adherence of managed targets.
Chargeback Functionality

- Monitor and control IT costs by gathering data on resource use, and allocating charges accordingly.
Reports
Comprehensive out-of-the-box reports

Includes 14 MS SQL Server reports including reports focused on:

- Performance Monitoring
- Configuration
- Storage
Reports

Performance

• In-depth performance reports

• View the SQL query statements consuming the most resources or taking the longest to execute
Reports

Configuration

- In-depth configuration reports
- Reports for database and system configuration
- At-a-glance comparison of key database configuration values
• Schedule a report to identify databases storage utilization
• Identify file growth and location
Plug-ins: Where do you get them?

**Self Update: Oracle Provided Content**

- Self Update
- Download MS SQL Server plug-in directly from Self Update
- Delivers new features and updates
- Single console to search, download and manage target plug-ins
- Proactive notification for Oracle supplied updates if running in connected mode
- Supports Online & Offline modes
- Allows import of non-Oracle entities
Plug-In Manager
Single window Solution for all (Un)Deployment

- Integrated with Self Update
- Plug-ins must be deployed to OMS before agents
- Download, Deploy and Upgrade Plug-Ins across OMS and agent
- Option to resume the plug-in deployment. It will start from failed step.
For More Information...

- The Microsoft SQL Server Plug-in is listed in the Oracle Technology Global Price List under: System Monitoring Plug-in for Non Oracle Databases

- The Oracle Global Price List can be found at: http://www.oracle.com/us/corporate/pricing/technology-price-list-070617.pdf

- Latest Microsoft SQL Server Plug-in documentation for installation, troubleshooting and monitoring metric reference: http://docs.oracle.com/cd/E24628_01/install.121/e35211/toc.htm