Oracle Enterprise Manager 12c
Sybase ASE Database Plug-in

May 2015
Safe Harbor Statement

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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-Ins)
Enterprise Manager 12c 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
Sybase ASE Plug-In
Revamped for Better Performance Analysis and Monitoring

New features

- New Performance page
- Enabled more Metric Thresholds
- 3 Out-of-the-Box Monitoring templates
- Migrated Information Publisher Reports to Business Intelligence Publisher Reports and more!
Sybase ASE Plug-In 12.1.0.4.0

Benefits

Apply Enterprise Manager management and monitoring to your Sybase ASE workloads.

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

✓ Configuration Analysis
  • Detailed configuration collection
  • View/Save/Compare Configurations

✓ Reporting
Sybase ASE Plug-In

Features

- Sybase ASE as EM Managed Target
- Comprehensive collection of monitoring Metrics (~ 450)
  - Buffer Statistics, Memory Statistics, Cache Statistics
  - Locks, Processes, Space Usage
  - Users and Roles
- Out-of-box thresholds on key metrics
- 17 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 Sybase ASE Databases
- Versions supported:
  - Version 15.7 and 16.0 of Express (XE), Enterprise (EE), and Developer (DE) editions of Sybase Adaptive Server Enterprise
New Intuitive UI Dashboards

- Revamped for Better Performance Analysis and Monitoring
- Exposes even more key performance indicators
- Adds additional performance page with advanced investigative capabilities
New Sybase ASE Focused Dashboard Views

- View Database server as well as individual database instance health and availability
- Stop and Start jobs for the database
- Key health, performance, and availability views
Drill into Sybase ASE SQL and Wait Events Statistics

- View SQL statistics by CPU Time, Wait Time, and Memory
- Break down of Wait Events by Wait Time and Wait Count
Identify Top Sybase ASE SQL Activity

- Identify “Top” SQL queries
- View by CPU Time or Execution Count
- Limit to last Day, Week or Month
View Historical Key Performance Indicators

- Connection KPIs
- Memory KPIs
- Utilization 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
Metrics

Hundreds of performance and configuration metrics available for incident thresholds, reports, analysis and comparison.
Drill Down Into Individual Sybase ASE Statistics

- Drill into hundreds of Sybase ASE metrics
- View associated alerts for particular metrics
- Choose to view the metric in real-time or customized historical views
Comprehensive Sybase ASE Metric Thresholds

![Sybase ASE Metric Thresholds](image-url)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Comparison Operator</th>
<th>Warning Threshold</th>
<th>Critical Threshold</th>
<th>Corrective Actions</th>
<th>Collection Schedule</th>
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<tbody>
<tr>
<td>Adaptive Server Engine Statistics</td>
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<td></td>
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<tr>
<td>Engine CPU (for System DB Services)</td>
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<td>80</td>
<td>90</td>
<td>None</td>
<td>Every 30 Minutes</td>
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<tr>
<td>Engine CPU (for User Commands)</td>
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<tr>
<td>Adaptive Server Statistics</td>
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<td>Sybase ASE (Overall) CPU Utilization</td>
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<td>90</td>
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<td>Every 30 Minutes</td>
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<tr>
<td>Sybase ASE (Overall) ID Utilization</td>
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<td>Every 30 Minutes</td>
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<tr>
<td>Database Instances</td>
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<td>Data Space Utilization (%)</td>
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<td>90</td>
<td>None</td>
<td>Every 1 Hour</td>
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<tr>
<td>Log Space Utilization (%)</td>
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<tr>
<td>% test harness failed</td>
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</table>
Sybase ASE Monitoring Templates

- Apply a subset of collection settings to multiple targets
- Standardize monitoring across your enterprise
Heterogeneous System Topology

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 Sybase ASE Plug-In
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 Sybase ASE solution with a convenient UI-based development workflow.
Latest Configuration of Sybase ASE

- Sybase version and fix pack level
- Platform and OS details
- Relevant Sybase Charsets Information
- Disk I/O Configuration Parameters
- And Much More
Compare Sybase ASE Configurations
Reports
Comprehensive out-of-the-box reports

Includes 17 Sybase ASE 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
Reports

Storage

- 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 the Sybase ASE 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 Sybase ASE 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 Sybase ASE Plug-in documentation for installation, troubleshooting and monitoring metric reference: http://docs.oracle.com/cd/E24628_01/install.121/e25214/toc.htm