



OZSoft Consulting Corporation
<http://www.ozsoft-consulting.com>

ASE Management Pack for Microsoft System Center Operations Manager

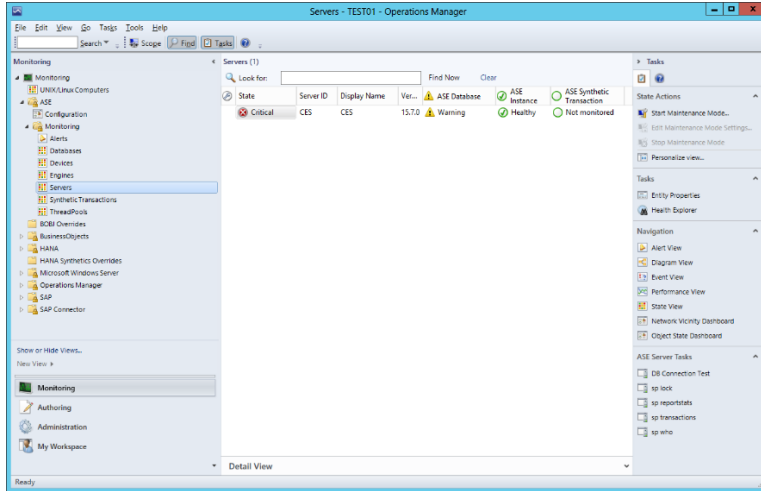
Release Notes

Version 1.1.0, December 15, 2015

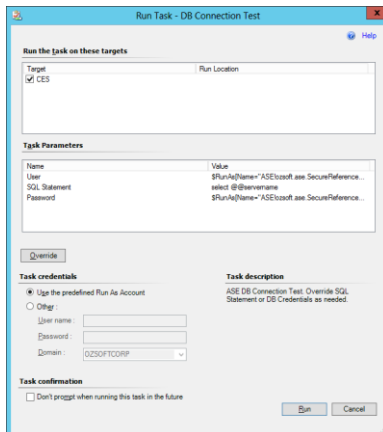
New in this release

Database Connection Test Task

In order to streamline ASE Management Pack configuration the new **DB Connection Test** task has been added. This task allows for interactive testing of Management Pack DB connection:

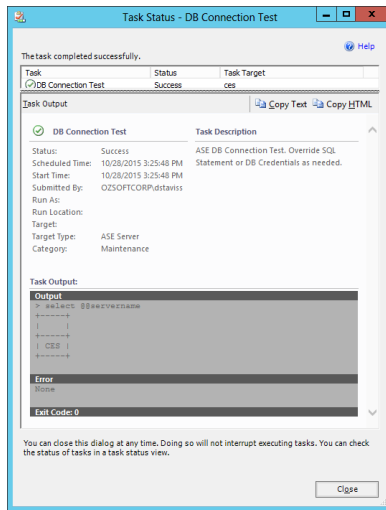


Navigate to **ASE Servers** view. Select an ASE Server(s) and click on **DB Connection Test** task in the tasks panel.



Override **Task Parameters** as needed. By default, the ASE Server's *Run As* account User and Password are used. Run the Task.

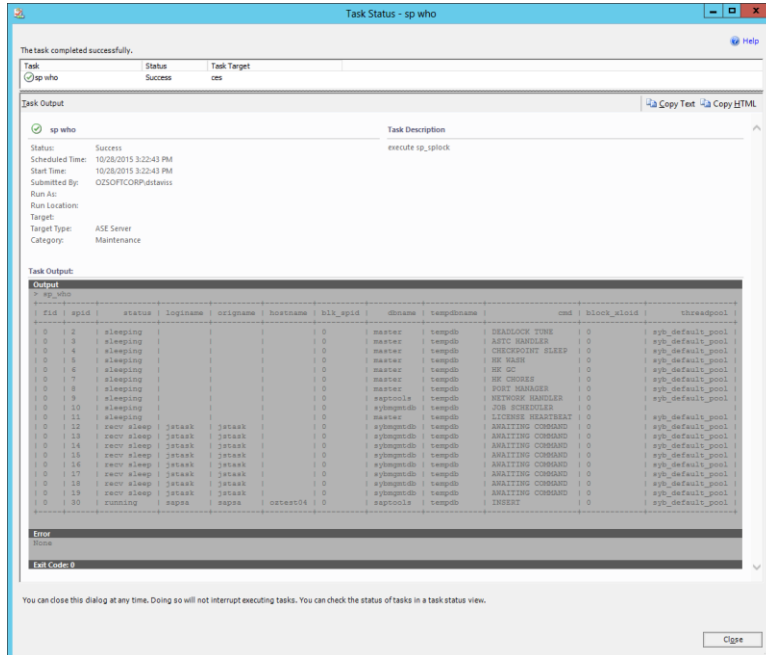
! Make sure you do no change the **Task Credentials** – *Run As* account for ASE is not compatible with Windows Accounts.



System Procedures Tasks

The Management Pack now includes tasks for interactive execution of popular ASE System Procedures such as *sp_who*, *sp_lock*, *sp_reportstats* and *sp_transactions*.

Navigate to **ASE Servers** view. Select an ASE Server(s) and click on the desired “sp” in the tasks panel:

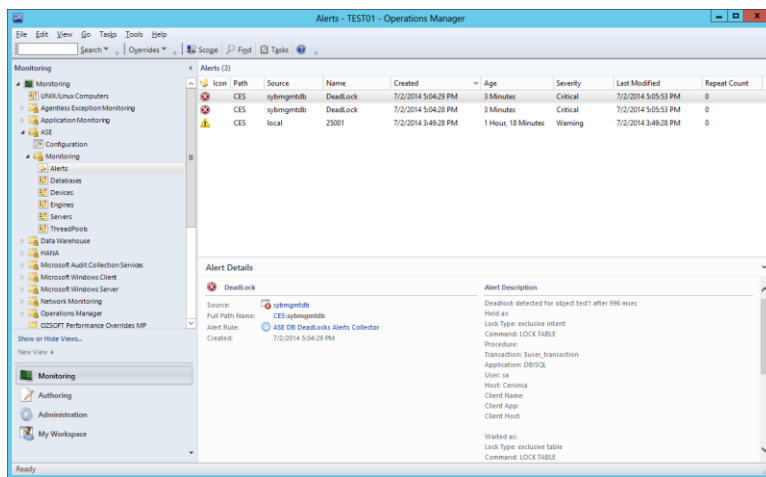


The system procedures are executed under the configured ASE Server credentials and cannot be overridden at the runtime.

Lock Timeout Notification

ASE Management Pack now allows for Lock Timeout notification.

As soon as the new Lock Timeout occurrence is detected the Management Pack will generate a SCOM Alert, with the Alert Name as “Lock Timeout” and the alert Description containing the details of the Timeout:



ASE Management Pack supplies two **Lock Timeout** alert-generating rules:

- **Lock Timeout Alert Collector** - generates an alert for every DB Lock Timeout event

- **Lock Timeout Alert Collector (Deduplicated)** - generates an alert for every DB Lock Timeout event, while suppressing the alerts based on Lock's associated *ObjectID*

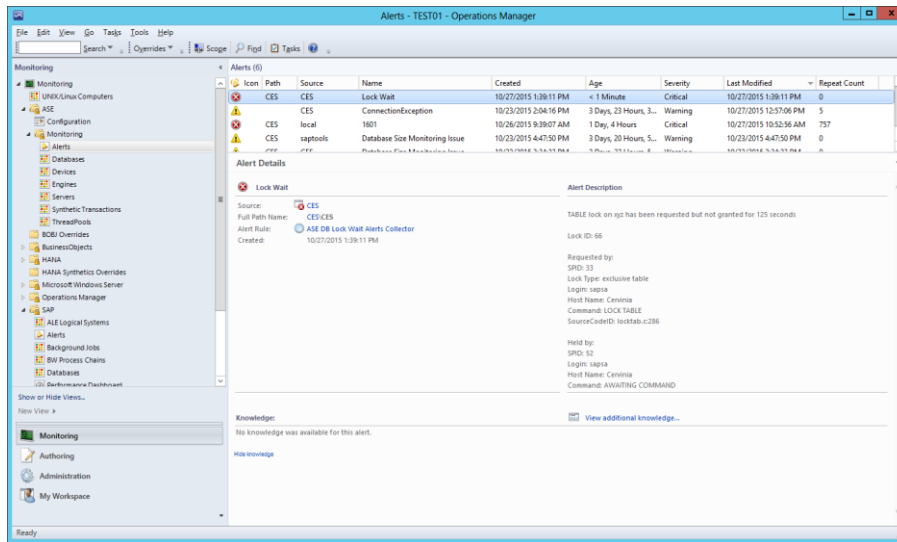
Depending on the requirements one of the rules can be disabled and the other enabled.

! Please make sure that only one rule is enabled

Lock Wait Monitoring

ASE Management Pack now allows for Excessive Lock Waits notification.

The Management Pack monitors pending Lock Requests and if the lock wait exceeds a specified threshold an alert is generated. The alert details include information on the lock requester process as well as the process currently holding the lock:

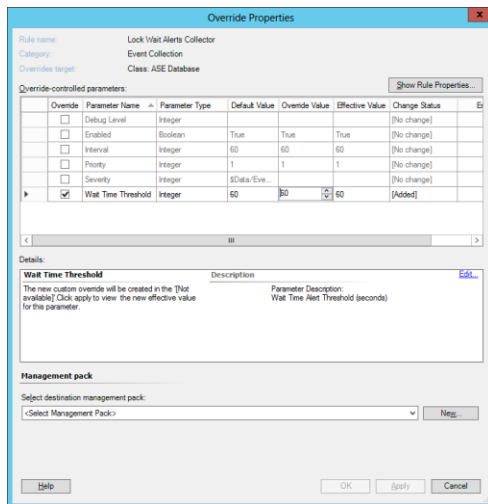
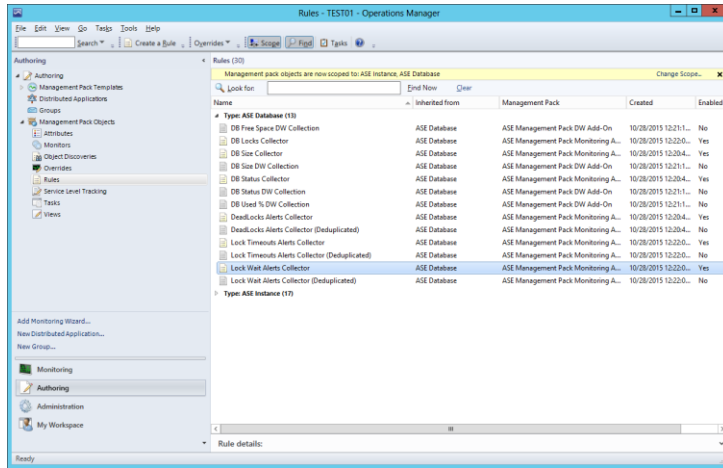


ASE Management Pack supplies two **Lock Wait** alert-generating rules:

- **Lock Wait Alert Collector** - generates an alert for every DB Lock with the Wait Time above the configured threshold.
- **Lock Wait Alert Collector (Deduplicated)** - generates an alert for every DB Lock with the Wait Time above the configured threshold, while suppressing the alerts based on Lock's associated *ObjectID*

Configuring Lock Wait Alert rules

The Lock Wait threshold value is set by overriding rules' parameter:



New Monitors

A number of new Monitors have been added:

Enabled	Target	Display Name	Description
false	ASE Database	Locks Granted	ASE Database Granted Lock Count Monitor
false	ASE Database	Locks Requested	ASE Database Requested Lock Count Monitor
true	ASE Instance	Error Log Pipe Active	ASE Instance Error Log Pipe Activation Monitor
true	ASE Instance	Error Log Pipe Max Messages	ASE Instance Error Log Pipe Max Messages Configuration Monitor
false	ASE Instance	Lock Timeout Pipe Active	ASE Instance Lock Timeout Pipe Activation Monitor
false	ASE Instance	Lock Timeout Pipe Max Messages	ASE Instance Lock Timeout Pipe Max Messages Configuration Monitor
true	ASE Instance	Monitoring Enabled	ASE Instance Monitoring Enabled Monitor
true	ASE Instance	Procedure Cache Size %	Procedure Cache Size as % of configured maximum

false	ASE Instance	Unilib Cache Size %	Unilib Cache Size as % of configured maximum
false	ASE Instance	Max Online Engines Usage %	Max Online Engines as % of configured maximum
false	ASE Instance	Global Fixed Heap Size %	Global Fixed Heap Size as % of configured maximum
false	ASE Instance	Process Object Heap Size %	Process Object Heap Size as % of configured maximum
false	ASE Instance	Shared Class Heap Size %	Shared Class Heap Size as % of configured maximum
true	ASE Instance	Locks Usage %	Number of Locks as % of configured maximum
false	ASE Instance	Kernel Resource Memory %	Kernel Resource Memory as % of configured maximum
true	ASE Instance	Additional Network Memory %	Additional Network Memory as % of configured maximum
true	ASE Instance	User Connections Usage %	ASE User Connections count
true	ASE Instance	Worker Processes Usage %	ASE Worker Processes Active percentage of maximum configured
true	ASE Instance	Worker Processes Memory %	ASE Worker Processes Memory (per process) usage percentage of maximum configured
true	ASE Server	Managed Module Version	ASE Management Pack Managed Module Version

Changed in this release

There are no changes to the existing functionality in this release.

Corrected Problems

The issues listed below were reported in earlier releases of SAP Management Pack and have been corrected in this release.

Tracking Number	Description
BMPASE000011	The Monitor “ Device Free Space % ” state keeps changing from OK to Critical

Open issues and resolutions

This section describes issues that remain open in this release.

Tracking Number	Description
BMPASE000007	On SCOM Agents running on Windows 2008 R2 and earlier Windows OS selected as a Watcher Node the ASE MP will not work due to the MP minimum supported.NET version 4.0 requirement.
BMPASE000010	<p>Problem: On a Watcher node, the following Event is generated in Windows Operations Manager event log: <i>System.TypeInitializationException: The type initializer for 'Sybase.Data.AseClient1.AseConnection' threw an exception. ---> Sybase.Data.AseClient.AseException: Could not load C:\Windows\TEMP\Sybase.AdoNet4.AseClient.64bits.16.0.0.2</i></p> <p>Cause: The error is due to Windows Monitoring Agent service Log On As account is set to other than System. Sybase ADO.NET assembly creates temporary <i>C:\Windows\TEMP</i> folder and it is assigned restrictive access preventing the Management Pack writing into it.</p> <p>Solution: Grant Full Control access to <i>C:\Windows\TEMP</i> for Windows Monitoring Agent service Log On As account.</p>

Installation Instructions

Import the new versions of **ozsoft.ase.mpb**, **ozsoft.ase.monitoring.mp** and **ozsoft.ase.dw.rules.mp**

- ! Due to changes in the Management Pack’s Managed Module after importing the new **ozsoft.ase.mpb** please restart “**Microsoft Monitoring Agent**” windows service on all **Watcher Nodes** selected in ASE Configuration (or all Management Servers in the Resource Pool if the resource pool is chosen as the Watcher)

Version 1.0.2, May 1, 2015

New in this release

Synthetic Performance Monitoring

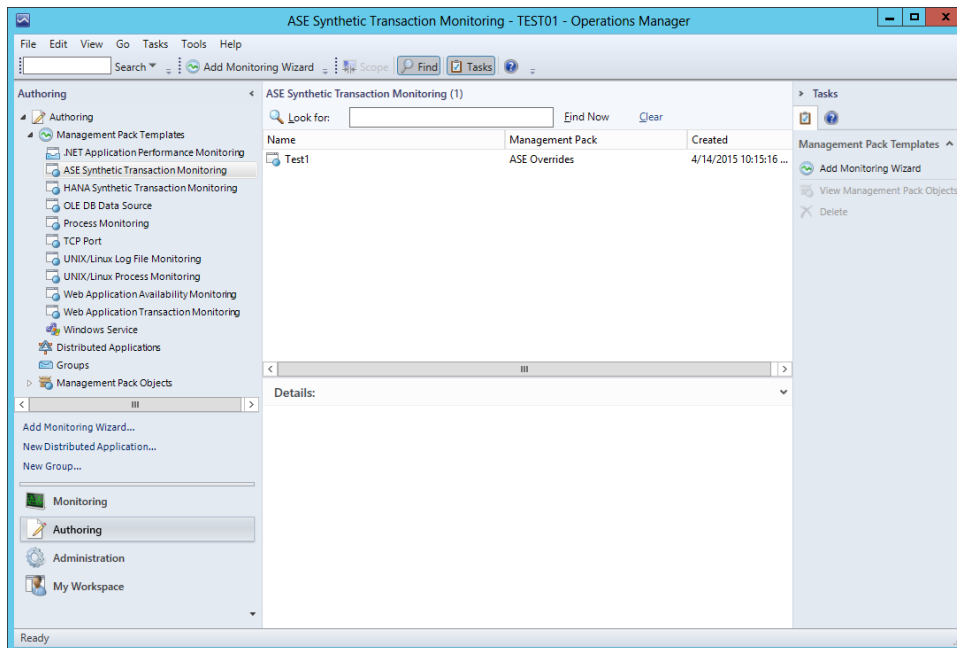
In this release of the Management Pack OZSoft is introducing ASE Synthetic monitoring. The supplied Monitoring Template allows the creation of a Synthetic SQL statement which to be executed periodically on a specific ASE Server.

Installation Instructions

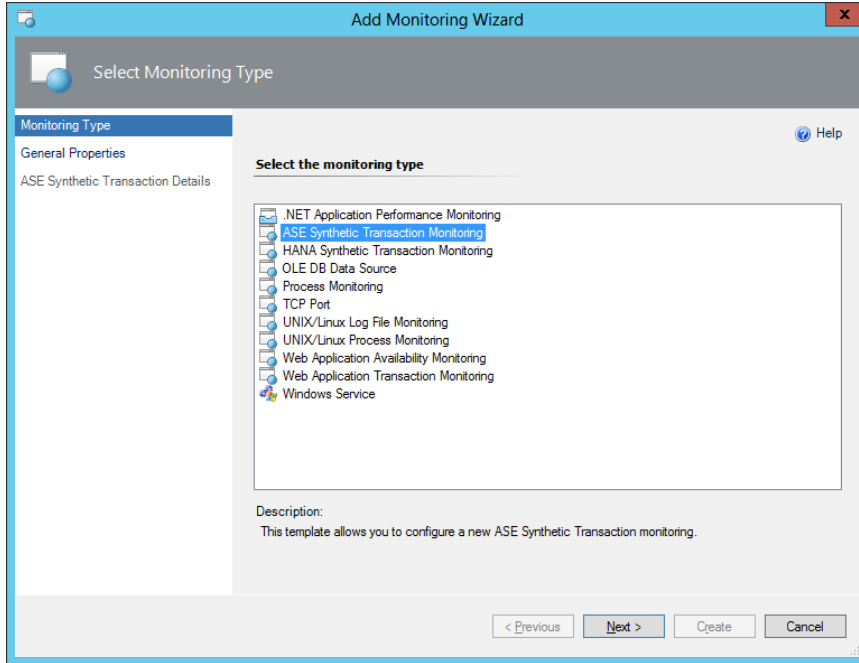
Import the Management Pack file **ozsoft.ase.synthetic.mp**.

Defining Synthetic Transactions

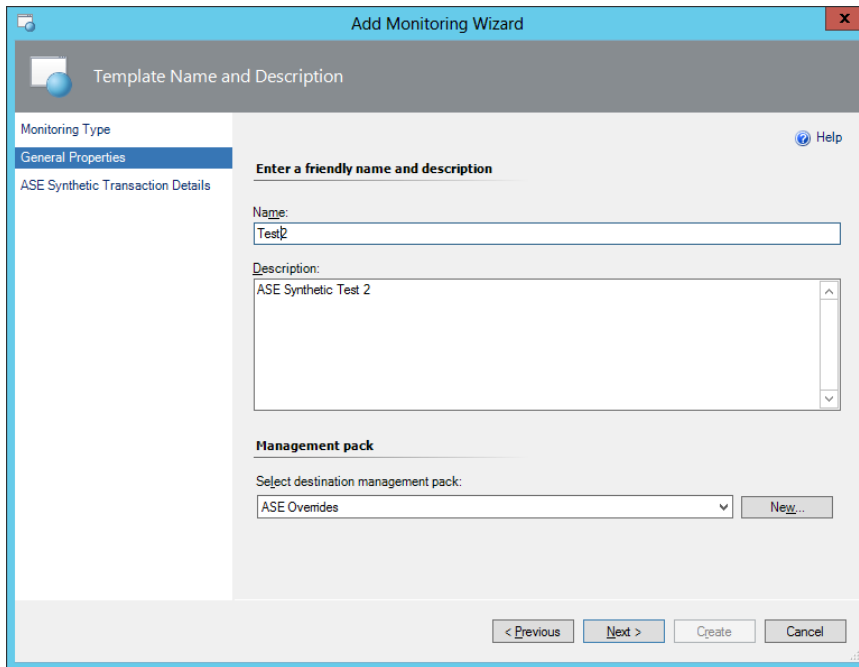
Switch to **Authoring** perspective and navigate to **Management Pack Templates**:



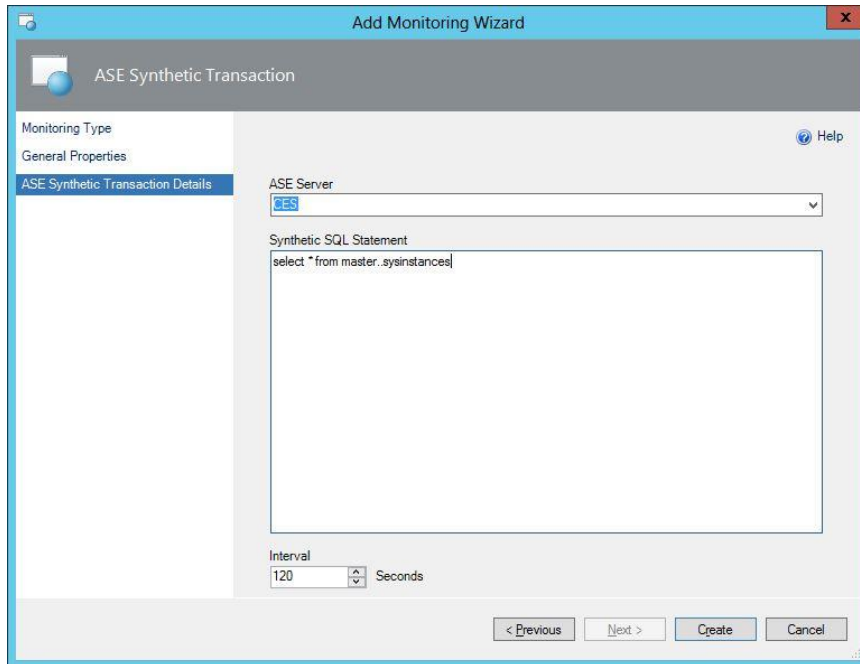
Click on **Add Monitoring Template** task



Select **ASE Synthetic Transaction Monitoring** template and click **Next**



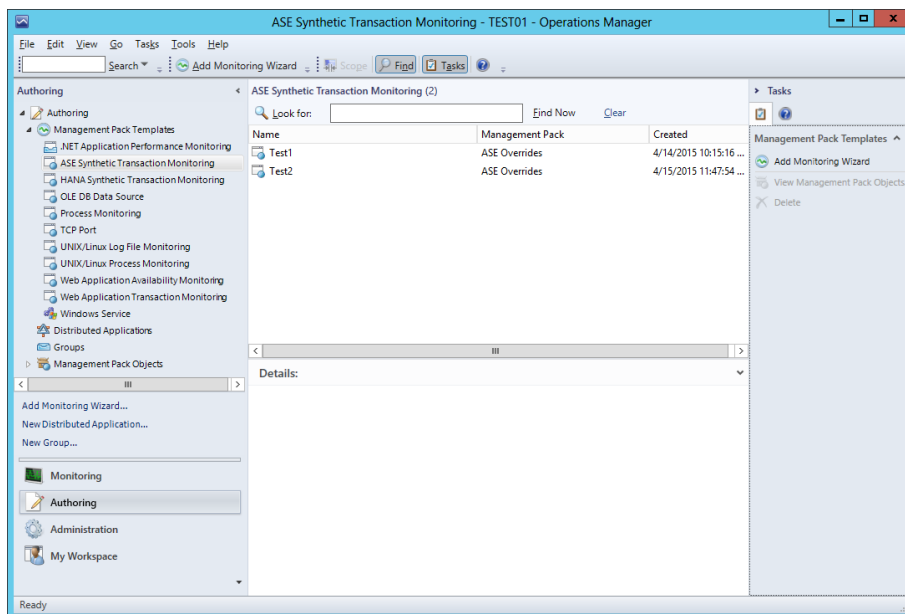
Fill in the fields, use an existing or create a new overrides management pack (we recommend creating a dedicated MP for synthetic transactions). The **Name** is used as the **Transaction ID** and has to be unique.



Select a target ASE Server, fill-in the SQL statement and choose the repeat interval. Click **Create**.

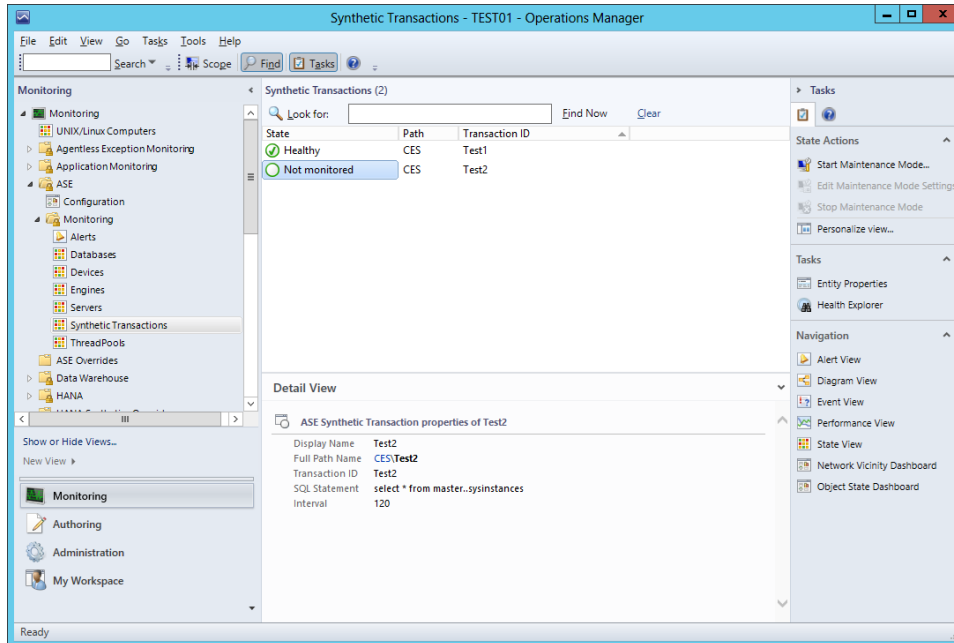
! The Synthetic SQL statement is executed under ASE DB Account as assigned in **ASE DB Monitoring Account** Run As profile.

The newly created template will appear in the view:



! At this time the transaction definitions are not modifiable via the UI – re-create a template if the changes are required. Alternatively, export the custom management pack chosen during the template creation to XML file, modify the values and reimport the management pack file.

The newly created Template will trigger the Discovery. It may take several minutes for a **Synthetic Transaction** object to be created. The Transaction objects are listed in the new **Synthetic Transactions** view under **ASE** folder:



Monitoring Synthetic Transactions

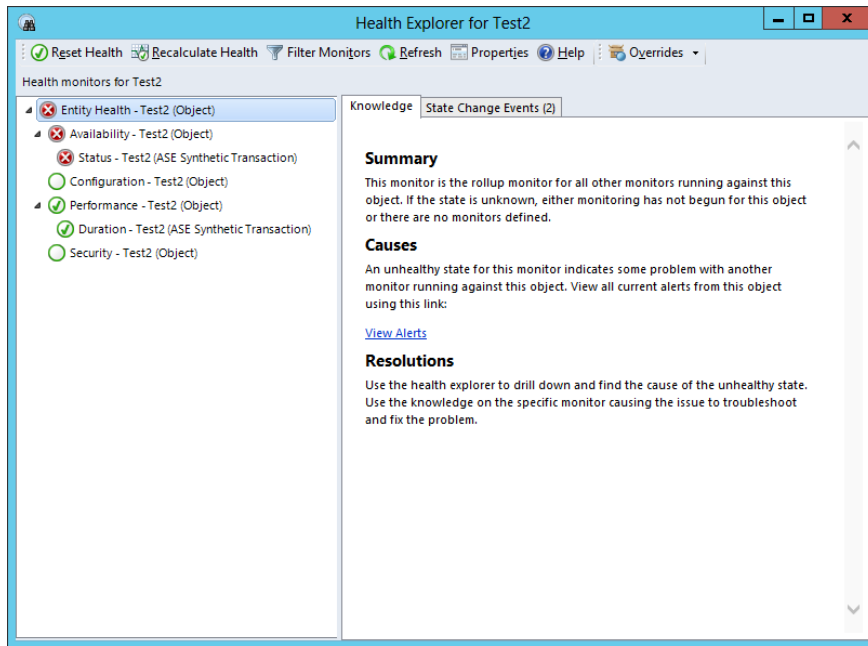
There are two performance counters collected for every Synthetic Transaction execution:

- **Status** – SQL Statement Severity:

0-9	Success
10 and above	Error

- **Duration** – SQL Statement execution time (milliseconds).

Two monitors are supplied for the above performance counters:



For the **Duration** Monitor the default Thresholds are defined as Warning for > 500ms, and Error for > 2000ms. Please override as required.

Additional ASE Connection Properties

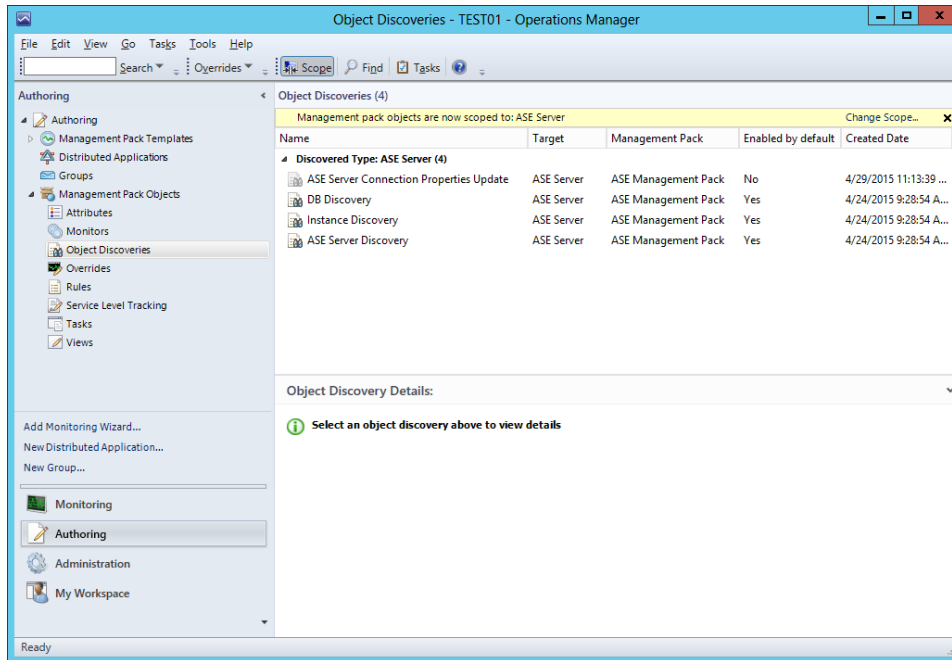
ASE Management Pack now allows to specify the additional ASE connection properties. In some ASE installation the default connection properties used by Sybase ADO.NET assembly might not be sufficient to successfully connect to the server.

The Management Pack sets the following connection properties based on Server and **RunAs** account configurations: **Server**, **Port**, **UID**, **PWD**, and **ApplicationName**. These properties can't be overridden.

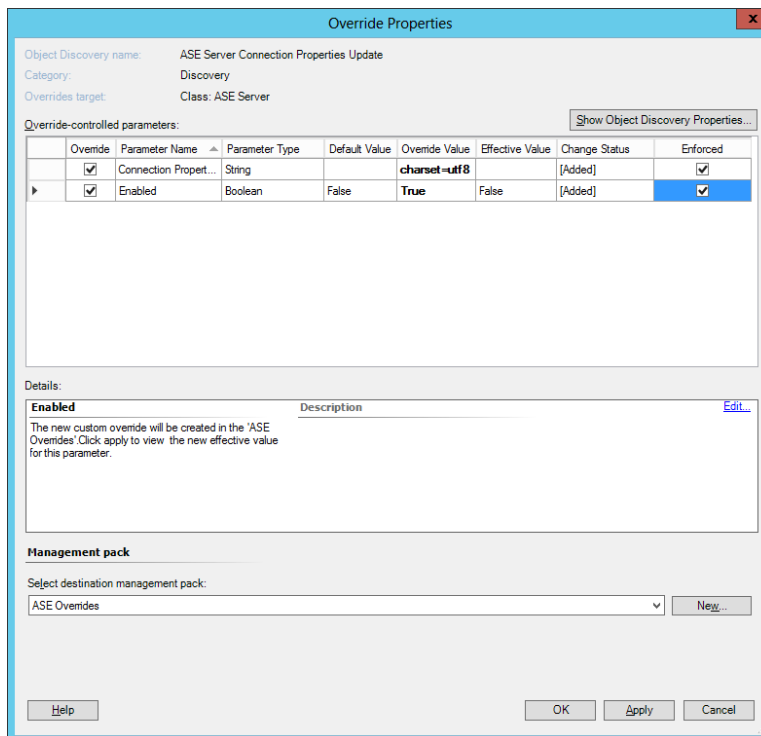
Additional properties like **Charset**, **AlternateServers**, etc. can be specified by overriding a supplied **Connection Property Discovery**:

- In the Operations Console switch to Authoring perspective
- Navigate to Management Pack Objects/Object Discoveries
- Change Scope to ASE Server

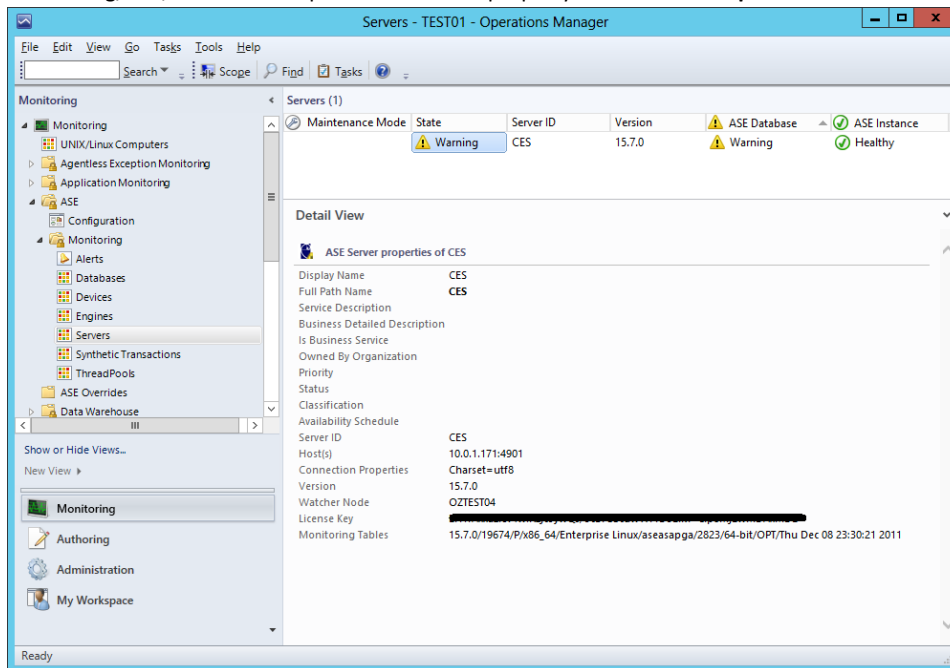
- Locate and Override **ASE Server Connection Properties Update**. You can apply the override to a specific ASE Server, a group, or all ASE Servers objects:



- Enable the discovery, Specify **Connection Properties** value as `<property name>=<value>[;<property name n>=<value n>]`. Refer to <https://www.connectionstrings.com/ase-ado-net-data-provider> for the complete list of options. Check Enforced



- After the Discovery is overridden it can take up to 15 minutes for the value to be “Discovered”. See Monitoring/ASE/Servers view specific ASE Server property: **Connection Properties**:



Managed Module version Monitoring

ASE Management Pack is based on Managed Module Assembly that is loaded by the watcher node's HealthService (**Microsoft Monitoring Agent** service). When the new version of the Management Pack is imported the new version of the Managed Module Assembly is not loaded until the HealthService is restarted.

The Management Pack now has a new Monitor “**Managed Module Version**”. This Monitor checks that the latest version of the Managed Module is loaded. If the Monitor is in Critical state a restart of the Watcher Node’s Health Service is needed.

Changed in this release

Cookdown for Performance Monitors and Rules

The so-called **Cook-down** has been implemented for all Performance Monitors and related Rules. This significantly lowers the performance overhead of ASE monitoring both in SCOM and on monitored ASE servers.

Corrected Problems

The issues listed below were reported in earlier releases of SAP Management Pack and have been corrected in this release.

Tracking Number	Description
BMPASE000008	The Monitor " Monitoring Tables Installed " always stays in un-initialized state due to incorrect Counter Name
BMPASE000009	The Reported Database Size Performance Counter values (SIZE, FREE, and USED_PERCENT) are inaccurate

Open issues and resolutions

This section describes issues that remain open in this release.

Tracking Number	Description
BMPASE000007	On SCOM Agents running on Windows 2008 R2 and earlier Windows OS selected as a Watcher Node the ASE MP will not work due to the MP minimum supported.NET version 4.0 requirement.

BMPASE0000010

Problem:

On a Watcher node, the following Event is generated in Windows **Operations Manager** event log:
System.TypeInitializationException: The type initializer for 'Sybase.Data.AseClient1.AseConnection' threw an exception. --> Sybase.Data.AseClient.AseException: Could not load C:\Windows\TEMP\Sybase.AdoNet4.AseClient.64bits.16.0.0.2

Cause:

The error is due to **Windows Monitoring Agent** service **Log On As** account is set to other than **System**. Sybase ADO.NET assembly creates temporary *C:\Windows\TEMP* folder and it is assigned restrictive access preventing the Management Pack writing into it.

Solution:

Grant **Full Control** access to *C:\Windows\TEMP* for **Windows Monitoring Agent** service **Log On As** account.

Installation Instructions

Import the new versions of **ozsoft.ase.mpb**, **ozsoft.ase.monitoring.mp**, **ozsoft.ase.dw.rules.mp** and if needed **ozsoft.ase.synthetic.mp**

- ! Due to changes in the Management Pack's Managed Module after importing the new **ozsoft.ase.mpb** please restart "**Microsoft Monitoring Agent**" windows service on all **Watcher Nodes** selected in ASE Configuration (or all Management Servers in the Resource Pool if the resource pool is chosen as the Watcher)

Version 1.0.1, March 6, 2015

New in this release

ASE Server new "Monitoring Tables" property

ASE Server objects have a new property "Monitoring Tables". The property value is populated by the discovery and contains the version of 'montables' script as it is reported by *sp_version* system procedure

Changed in this release

Watcher Nodes' host OS Requirement

SCOM 2012 (R2) Management servers and Agents can be selected as watcher nodes. However, only SCOM Agents, running on Windows Server 2012 (or later), are supported. SCOM Agents running on Windows Server 2008 R2 and earlier run as CRL .NET 2.0 and unable to load ASE Management Pack's Managed Module which requires .NET 4.0 or later. This does not apply to SCOM Management Servers as they are always running as .NET 4.0.

Monitor "Server MDA Configuration Status" is renamed

The Monitor "Server MDA Configuration Status" is now named "Monitoring Tables Installed". The monitor now checks the status of 'montables' script in *sp_version* system procedure

Corrected Problems

The issues listed below were reported in earlier releases of SAP Management Pack and have been corrected in this release.

Tracking Number	Description
BMPASE000006	The Monitor "Server MDA Configuration Status" always stays in critical status

Open issues and resolutions

This section describes issues that remain open in this release.

Tracking Number	Description
BMPASE000007	If a SCOM Agent running on Windows 2008 R2 and earlier Windows OS is selected as a Watcher Node the ASE MP will not work due to the MP minimum supported.NET version 4.0 requirement.

Installation Instructions

Import the new versions of *ozsoft.ase.mpb*, *ozsoft.ase.monitoring.mp* and *ozsoft.ase.dw.rules.mp*

- ! Due to changes in the Management Pack's Managed Module after importing the new *ozsoft.ase.mpb* please restart "Microsoft Monitoring Agent" windows service on all **Watcher Nodes** selected in ASE Configuration (or all Management Servers in the Resource Pool if the resource pool is chosen as the Watcher)

Version 1.0.0, December 15, 2014

New in this release

There are no new features in this release

Changed in this release

There are no changes to the existing functionality in this release

Corrected Problems

The issues listed below were reported in earlier releases of SAP Management Pack and have been corrected in this release.

Tracking Number	Description

Open issues and resolutions

This section describes issues that remain open in this release.

Tracking Number	Description

Version 0.1.2, October 13, 2014

New in this release

There are no new features in this release

Changed in this release

MP License is ignored in Beta version

To simplify the beta testing the license key validation is disabled. There is no need to install the license key during the ASE server configuration.

Corrected Problems

The issues listed below were reported in earlier releases of SAP Management Pack and have been corrected in this release.

Tracking Number	Description
BMPASE000003	Management Pack License Key is removed when updating System Configuration while leaving the License Key field empty

Open issues and resolutions

This section describes issues that remain open in this release.

Tracking Number	Description
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Installation Instructions

Import the new version of ***ozsoft.ase.mpb***, ***ozsoft.ase.monitoring.mp*** and ***ozsoft.ase.dw.rules.mp***

- ! Due to changes in the MP Managed Module please restart "Health Service" windows service on all "Watcher Nodes" selected in ASE Configurations (or all Management Servers in the Resource Pool if the resource pool is chosen as the Watcher)

Version 1.0.0, July 15, 2014

New in this release

New Release

Changed in this release

N/A

Installation Instructions

Import the Management Pack Bundle ***ozsoft.ase.mpb*** and management pack files ***ozsoft.ase.monitoring.mp*** and ***ozsoft.ase.dw.rules.mp***