

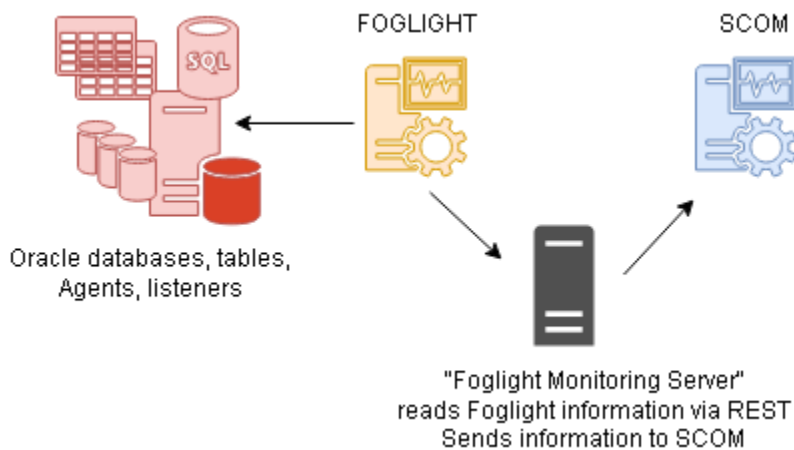
# Integrate Foglight's monitored Oracle Databases into SCOM

## Introduction

**Connect APM Foglight** is a Management Pack for SCOM which integrates health states of Oracle database components which are monitored via Foglight into SCOM.

## Design

The Management Pack will use any specified Windows Server which is monitored via Agent from SCOM as "Foglight Monitoring Server". Inventory and Health State is gathered via REST calls from the Foglight Management Server.



## Change History

Date	Build No.	Changes
2019-08-29	1.0.0.78	Initial Upload to GitHub

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## Management Pack Components

### Classes

#### Foglight Monitoring Server

Id	Base
<b>Connect.APM.Foglight.MonitoringServer</b>	Windows!Microsoft.Windows.ComputerRole

#### Foglight Database Objects

Id	Base
<b>Connect.APM.Foglight.DBO.Base</b>	System!System.LogicalEntity
<b>Connect.APM.Foglight.DBO.DatabaseSystem</b>	Connect.APM.Foglight.DBO.Base
<b>Connect.APM.Foglight.DBO.Database</b>	Connect.APM.Foglight.DBO.Base
<b>Connect.APM.Foglight.DBO.Server</b>	Connect.APM.Foglight.DBO.Base
<b>Connect.APM.Foglight.DBO.Listener</b>	Connect.APM.Foglight.DBO.Base
<b>Connect.APM.Foglight.DBO.Tablespace</b>	Connect.APM.Foglight.DBO.Base
<b>Connect.APM.Foglight.DBO.Agent</b>	Connect.APM.Foglight.DBO.Base

### Discoveries

Id	Base
<b>Discover.Connect.APM.MonitoringServer</b>	Windows!Microsoft.Windows.Computer
<b>Discover.Connect.APM.DBOObjects</b>	Connect.APM.Foglight.MonitoringServer
<b>Discover.Connect.APM.DBOObjectRelations</b>	SC!Microsoft.SystemCenter.RootManagementServer

## Monitors

### Unit

Id	Target
<b>Monitor.Connect.APM.Tablespace</b>	Connect.APM.Foglight.DBO.Tablespace
<b>Monitor.Connect.APM.Server</b>	Connect.APM.Foglight.DBO.Server
<b>Monitor.Connect.APM.Listener</b>	Connect.APM.Foglight.DBO.Listener
<b>Monitor.Connect.APM.Agent</b>	Connect.APM.Foglight.DBO.Agent
<b>Monitor.Connect.APM.Database</b>	Connect.APM.Foglight.DBO.Database

### Dependency

Id	Target
<b>Monitor.Dep.DatabaseSystemOnAgent</b>	Connect.APM.Foglight.DBO.DatabaseSystem
<b>Monitor.Dep.DatabaseSystemOnDatabase</b>	Connect.APM.Foglight.DBO.DatabaseSystem
<b>Monitor.Dep.DatabaseSystemOnListener</b>	Connect.APM.Foglight.DBO.DatabaseSystem
<b>Monitor.Dep.DatabaseSystemOnServer</b>	Connect.APM.Foglight.DBO.DatabaseSystem

### Aggregate

Id	Target
<b>Monitor.Ag.Connect.APM.DatabaseSystem</b>	Connect.APM.Foglight.DBO.DatabaseSystem

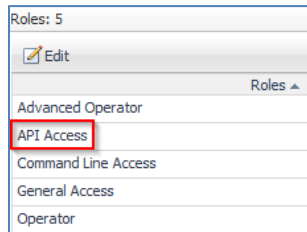
## Views

Id	Target
<b>view.State.Connect.APM.Foglight.Agent</b>	Connect.APM.Foglight.DBO.Agent
<b>view.State.Connect.APM.Foglight.Database</b>	Connect.APM.Foglight.DBO.Database
<b>view.State.Connect.APM.Foglight.DatabaseSystem</b>	Connect.APM.Foglight.DBO.DatabaseSystem
<b>view.State.Connect.APM.Foglight.Listener</b>	Connect.APM.Foglight.DBO.Listener
<b>view.State.Connect.APM.Foglight.Server</b>	Connect.APM.Foglight.DBO.Server
<b>view.State.Connect.APM.Foglight.Tablespace</b>	Connect.APM.Foglight.DBO.Tablespace

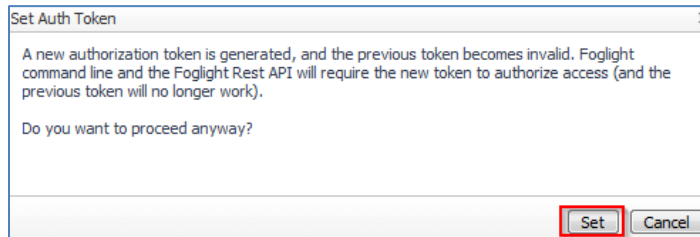
## Configuration

### Foglight Application Monitor

- Create a user in Active Directory and assign the following roles to that user (incl. the selected one)



- Set the token for the users:



### Foglight Monitoring Server

The computer which should be used to query the Foglight Monitoring Server must be monitored by SCOM via Agent.

Paste the following text into a plain text file, rename it as \*.reg and import it with double click on the monitoring computer:

```
Windows Registry Editor Version 5.00

[HKEY_LOCAL_MACHINE\SOFTWARE\ABCIT\APMFoglight]
"APMServerURL"="https://YOUR-FOGLIGHT-APM-URL:PORT"
"APMServerAuthToken"="YOUR-QUERY-USER-TOKEN"
```

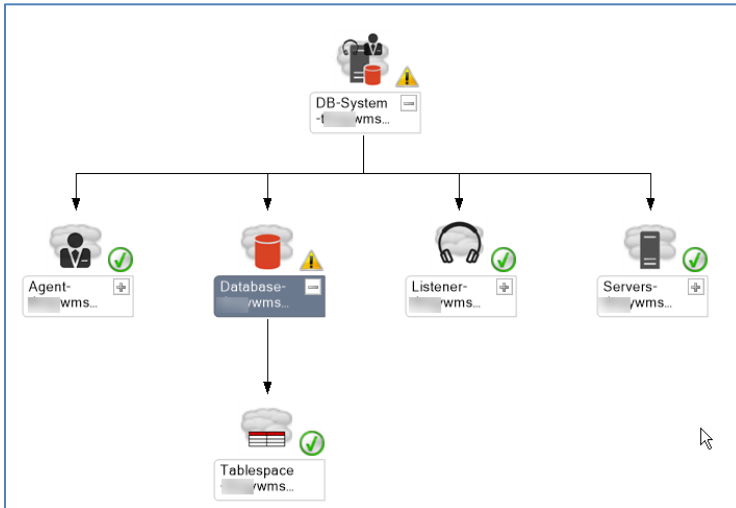
## Usage

After a while discovered objects appear in the SCOM console.

The screenshot shows the SCOM console interface. On the left, a tree view shows the hierarchy: Monitoring > Connect APM Foglight > DatabaseSystem. The main pane displays a table of DatabaseSystem objects (103 total). The table has columns for State, longName, and dbName. Several objects are in a 'Warning' state, while others are 'Healthy'.

State	longName	dbName
Warning	Database ( ... -WMSPT,DBO_Database)_Long	wmsptdb
Warning	Database ( ... -WMSPW,DBO_Database)_Long	wmspwdb
Warning	Database ( ... -CIMPL,DBO_Database)_Long	cimpldb
Warning	Database ( ... -WMSPA,DBO_Database)_Long	wmspadb
Healthy	Database ( ... -SHOP,DBO_Database)_Long	shoppdb

Health State bubbles up through dependency monitors.



Alerting is disabled by default. Can be enabled via override. – Create a dedicated Management Pack for overrides if required!

The screenshot shows the SCOM console interface for monitoring a database system. The top bar includes buttons for 'Reset Health', 'Recalculate Health', 'Filter Monitors', 'Refresh', 'Properties', 'Help', and 'Overrides'. The main pane is divided into two sections: 'Health monitors for DB-System-...wmsptdb-(Foglight)' and 'State Change Events (3)'. The health monitors section shows a list of monitors with warning icons, including 'Entity Health', 'Availability', 'Monigor Aggregate Database System', 'Monitor DatabaseSystem depends On Database', and 'Availability - Database'. The state change events section shows a table of events with columns for Time, From, To, and Operational State.

Time	From	To	Operational State
8/19/2019 1:19 PM	Green checkmark	Yellow warning triangle	OverWarningThreshold
8/19/2019 1:18 PM	Green checkmark	Green checkmark	UnderThreshold
8/19/2019 1:07 PM	Green checkmark	Green checkmark	UnderThreshold

The 'Details' section shows the following information:

- Context:**
  - Date and Time: 8/19/2019 1:19:37 PM
  - Property Name: Database ( ... -wmsptdb-WMSPT,DBO\_Database)
  - Name: 9aca4fb34f7f42c186abbfbb4b9b705a
  - uniqueId: Yellow
  - State: Invalid Package Bodies. Schema DZL contains invalid package bodies.
  - AlarmText: Tested on: 2019-08-19 13:19:33Z / (UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
  - TestedAt: (empty)

Monitor Connect APM Databases Properties

General Health Alerting Diagnostic and Recovery Configuration Product Knowledge Company Knowledge Overrides

Overrides are used to change the monitor, diagnostic and recovery configuration. You can also view all overrides applied to each by opening the summary dialog.

Choose the monitor, diagnostic or recovery configuration to override.

Monitor (Monitor Connect APM Databases)

**Override Properties**

Monitor name: Monitor Connect APM Databases  
Category: Availability Health  
Overrides target: Object: Database- vmsptdb-(Foglight)

Override-controlled parameters:

	Override	Parameter Name	Parameter Type	Default Value	Override Value	Effective Value	Change Status	Er
	<input type="checkbox"/>	Alert On State	Enumeration	The monitor...	The monitor i...	The monitor is...	[No change]	
	<input type="checkbox"/>	Alert Priority	Enumeration	Low	Low	Low	[No change]	
	<input type="checkbox"/>	Alert severity	Enumeration	Critical	Critical	Critical	[No change]	
	<input type="checkbox"/>	Auto-Resolve Alert	Boolean	False	False	False	[No change]	
	<input type="checkbox"/>	Enabled	Boolean	True	True	True	[No change]	
▶	<input checked="" type="checkbox"/>	Generates Alert	Boolean	False	False	False	[Added]	
	<input type="checkbox"/>	IntervalSeconds	Integer	300	300	300	[No change]	
	<input type="checkbox"/>	SyncTime	String				[No change]	

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**Examples:**  
Disable a monitor: I want to disable mon...  
Override a diagnostic: I need to override...

## License Terms

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