The Savision Community

1. Introduction

The Database Query Result Monitoring Management Pack is a powerful add-on for SCOM that enables users to easily create monitors for SQL query results with SCOM authoring templates.

Here is a list of the key features:

- Easy Authoring template to create and delete queries.
- Support for SQL Authentication.
- Dedicated views in SCOM console.
- Historical data collection.
- Monitor using consecutive samples condition and schedule filter.
- Two and Three states monitor.
- Recalculate state is enabled.
- Organizing multiple queries into a group.

2. Requirements

- a) SCOM 2012 and above.
- b) The SQL management packs listed in the table below

MP name	Description	
Microsoft SQL Server Core Library	Microsoft SQL Server Core Library defines base classes and relationships required for SQL Server 2008, 2008 R2 and 2012 Management Packs.	
Microsoft SQL Server 2014 (Discovery)	The Microsoft SQL Server 2014 (Discovery) Management Pack discovers Microsoft SQL Server 2014 and related objects. The management pack only contains the discovery logic and requires the separate monitoring management pack to be imported to monitor the discovered objects.	
Microsoft SQL Server 2016 (Discovery)	The Microsoft SQL Server 2016 (Discovery) Management Pack discovers Microsoft SQL Server 2016 and related objects. The management pack only contains the discovery logic and requires the separate monitoring management pack to be imported to monitor the discovered objects.	
Microsoft SQL Server 2017 on Windows (Discovery)	Microsoft SQL Server 2017 on Windows (Discovery) Management Pack discovers Microsoft SQL Server 2017 and related objects on Windows. It requires Microsoft SQL Server 2017 Core Library Management Pack. The management pack only contains the discovery logic and requires the separate monitoring management pack to be imported to monitor the discovered objects.	

c) Non-Microsoft SQL require an ODBC driver (monitoring non-Microsoft SQL is a *beta feature*).

3. Installation and Import Files in this Management Pack

MP name	Description
	This management pack contain all the type
uery_Result_Library.mp	definitions, monitors and etc.
Savision_Community_Monitor_Q This management pack includes the templ	
uery_Result_Template.mpb	

The Management Pack includes the following files:

How to import a Management Pack

For more information about importing a management pack, see <u>How to Import an</u> <u>Operations Manager Management Pack</u>.

Installing the Management Pack

- 3.1. Open the SCOM Operations Console and connect to your Management Server.
- 3.2. Click Administration in the left pane of the console.
- 3.3. Right-click Management Packs and select Import Management Packs.
- 3.4. Click Add > Add from disk.
- 3.5. From the Select Management Packs to Import dialog, browse to the location of the Savision Community Database Query Result Monitoring Management Pack.
- 3.6. Click **Open**. The import list shows the selected management packs.
- 3.7. Click Install. The wizard starts the installation, showing the status of each import.
- 3.8. When the import completes, click **Close**.

4. Configuration

Two-state and Three-state Monitor Setup

4.1. Open the Authoring pane.

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Monthor DB Cavey Result Three State powered by Martello Vero Management Pack Objects. Vero Management Pack Objects. Vero Management Pack Objects.	Microsoft SQL Server 2017+				Properties
O Monitor DB Query Result Two State (powered by Martelio)	Monitor DB Query Result Three State (powered by Martello)				3 View Management Pack Objects >
X Delete	Monitor DB Query Result Two State (powered by Martelio)				× Delete
G OLE DB Data Source	OLE DB Data Source				
Lg Process Monitoring	Lo Process Monitoring				
G TCP Fort	Lo TCP Port				
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- Click on Add Monitoring Wizard. 4.2.
- Select the Monitor DB Query Result Two State (Powered by Martello). 4.3.

G Add Monitoring Wizard		×
Select Monitoring	Туре	
Monitoring Type		🕢 Help
General Properties	Select the monitoring type	
Connection And Query Settings		
Monitoring Settings	NET Application Performance Monitoring	
Alert Settings	Azure SQL Databases Monitoring	
Scheduler Settings	Montor DB Query Result Three State (powered by Mantello)	
Summary	Montor UB cluery Healt. Two State (powered by Matelo) Concerned by Matelo) Concerned by Matelo)	
	Process Monitoring	
	G UNXCLinux Log File Monitoring	
	La Veb Acolication Availability Montania	
	Web Application Transaction Monitoring	
	S Windows Hie Montoring (powered by Savision)	
	Description:	
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	< <u>Previous</u> <u>Next</u> > Create	Cancel

4.4. Follow the wizard.

add Monitoring Wizard				×
Name and Descript				
Monitoring Type				🕜 Help
General Properties	Enter a friendly name and description			
Connection And Query Settings				
Monitoring Settings	Name:			
Alert Settings	Space (Q. I wo State Monitor			
Scheduler Settings	Description:			
Summary				^
				~
	Management pack			
	Select destination management pack:			
	Space iQ DB monitor		~	New
		< Previous Nex	xt > Create	Cancel
				.1

4.5. Configure the SQL connection string and the query.

add Monitoring Wizard		×
Connection And Qu	ery Settings	
Monitoring Type		Welp
General Properties	Connection string and quary definition	. .
Connection And Query Settings		
Monitoring Settings	Microsoft SQL: select database engine	
Alert Settings	Browse	
Scheduler Settings	Select a database	
Summary	OperationsManager ~	
	Provider Authentication	
	Microsoft OLE DB Provider for SQL Server	
	Run As Account	
	✓ O SQL Authentication	
	Non-Microsoft SQL: select watcher	
	OBrowse	
	*Note: A proper odbc driver must be installed on the watcher server.	
	To rearring about the connection string and reaced drivers go to	
	Connection String	
	Provider=SQLOLEDB;Server>Httm://www.interforce.com/lists/;Initial Catalog=OperationsManager;Integrated Security=SSPI;	
	Query	
	SELECT COUNT(") FROM Alert	
	Where Resolutionstate <> 255	
	Note: Query result must be a single numeric value	
	Give a name to the result for purposes performance collection (Metric name)	
	Alerts	
	·	
		< Previous Next > Create Cancel

- Use the **Test** button to verify your result. The test is executed by the Health Service installed on the DB Engine (The test is enabled only for Windows Server SQL query).
- Make sure the query result is a numeric value.

4.6. Configure the **monitor**

🗔 Add Monitoring Wizard		×
Monitoring Setting		
	9°	
Monitoring Type		🧭 Help
General Properties	Monitoring settings	
Monitoring Settings	Define crtical state:	
Alert Settings		
Scheduler Settings	Direction: preater then	
Summary	Threshold: 4 00000	
	Specify number of samples	
	Specify the number of consective samples that should exceed a threshold before a state is change	
	2	
		< Previous Next > Create Cancel

4.7. Configure the **Alert**

Alert Settings	
Monitoring Type	
() F	reip
General Properties Alert info and monitor group define	
Connection And Query Settings	
Monitoring settings Add more information to the alert content.	
Alert semiges Alert impact content	
Summary There are too many open alert, please verify that is fine.	
○ Select exsiting group	
Application Layer Browse.	
< Previous Next > Create Cance	н 1.

• The groups feature allows you to aggregate monitors into one group.

4.8. Schedule Configuration

🖏 Add Monitoring Wizard		×
Scheduler Settings	S	
Monitoring Type		🔞 Help
Monitoring Type General Properties Connection And Query Settings Monitoring Settings Alert Settings Summary	Specify schedule settings Start Time End Time 00:00 23:59 Sample Interval Sample Interval Synchronize at 00:01 Specify days of week Sectify days of week Sectify days of week Sample Interval Sample Interval Surveday Verdreday Satt Tinkay Satt Tinkay Satt Tinkay Satt Tinkay	
	< Previous Next > C	reate Cancel

4.9. Save the monitor by clicking on **Create**.

add Monitoring Wizard		×
Summary		
Monitoring Type		Help
General Properties	Confirm the settings	
Connection And Query Settings	News Cross (O Two Orthe Mariles	
Monitoring Settings	Management Pack Space Q DB monitor	
Alert Settings	Instance KLAASR2-OM.KLAASR2.LOCAL Database OperationsMananer	
Scheduler Settings	Query SELECT COUNT(*) FROM Alert Where ResolutionState ⇔ 255	
Summary		
		< Previous Next > Create Cancel

Three-state Monitor - Critical and Warning Threshold

G Add Monitoring Wizard		×
Monitoring Settings		
Monitoring Type		🕢 Help
General Properties	Monitoring settings	-
Connection And Query Settings		
Monitoring Settings	Define warning and crtical states:	
Alert Settings	Warning state	
Scheduler Settings	Direction: greater then V Threshold: 3.00000	
Summary		
	- Critical state	
	Direction: greater then	
	Specify number of samples	
	2	
	< Previous Next > Create	Cancel

5. SCOM Views

Views related to the Management Pack.

5.1. Open the Savision Community Query Result folde.

a 🖓 Savision Community Query Result
Alert
Group State
Derformance
State
E Savision Community Windows Files Monitor

a. Alerts.

🔞 Kunta aktin a.	Space iQ Two S	Attention! The query Space iQ Two State M	New 2/	18/2019 3:16:00 PM	2 Minutes
Alert Details					
Attention! The	nuery Space iO Two St	ate Monitor - returned a suspicious result		Alert Description	
Courses Co	Searce IO Two State Me	voltor		Attention!	
Full Path Name:		Space iQ Two State Monitor		Description: There are	too many open alert, please verify that is fine
Alert Monitor:	DB query result monito	or (two states)		The return value 9 Aler	rts is greater then 4 Alerts.
Created:	2/18/2019 3:16:00 PM				
Knowledge:				View additional	knowledge
No knowledge was av	allable for this alert.				
Hide knowledge					
					Activate

b. Groups state.

Group State (3)										
O i i i i	_									
Look for:				Find Now Clear						
State 🦽	1	Name	Path	😵 Savision Community Monitor Query Result Instance						
Healthy		Weather		Ø Healthy						
🔞 Critical		Application Lay		🔞 Critical						
🔞 Critical		sfd		😢 Critical						
Detail View	Datail View									
Detail field										
B Savision Community Monitor Query Result Group properties of Application Layer										
Display Nar	ne		Application	i Layer						
Full Path Na	ame		Application	n Layer						
Group Nam	ie –		Application	n Layer						

c. Query monitor State.

State (4)											
🔍 Look for:			Find Now	Clear							
Ø Maintenan	State	Name									
	🔞 Critical	Space iQ Two State Monitor									
	🔞 Critical	asd		1							
	✓ Healthy	three state ex		1							
	🛕 Warning	warning test		I							

d. Performance (historical result data).





6. About Savision

Savision is a Microsoft Gold Partner founded in 2006 that provides enterprise software for the visualization of IT systems management data such as performance metrics, outage information and incidents. Deployed in over 50 countries around the world with more than 900 customers, Savision's software is an ITOps solution that integrates and controls monitoring, cloud, and service management tools data in a single pane of glass. Savision's products help IT teams reduce alert noise and control their IT environment.

For more information, visit: http://www.savision.com

7. About Martello

Martello's solutions manage and optimize the performance of real-time services on cloud and enterprise networks. Our solutions, which include network performance management software and SD-WAN technology, allow over the top (OTT) service providers and enterprises around the world to deliver better service quality and a reliable user experience. Designed for real-time communications such as voice and video, Martello's solutions detect, identify and address network performance problems BEFORE service quality is impacted.

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