

Appendix to Microsoft System Center Management
Pack for Azure SQL DB Managed Instance Guide:
Azure SQL DB Managed Instance Objects and
Workflows

**Microsoft Corporation** 

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The Operations Manager team encourages you to provide any feedbacks on the management pack by sending them to <a href="mailto:sqlmpsfeedback@microsoft.com">sqlmpsfeedback@microsoft.com</a>.

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# **Azure SQL DB Managed Instance Objects and Workflows**

This document is based on version 1.0.1.0 of the Management Pack for Microsoft Azure SQL DB Managed Instance.

The Management Pack for Microsoft Azure SQL DB Managed Instance discovers the object types described in the following sections. Not all of the objects are automatically discovered. Use overrides to discover those objects that are not discovered automatically.

# Azure SQL DB Managed Instance: All SQL Server Objects Group

The Azure SQL DB Managed Instance All SQL Server objects Group contains SQL Server objects, which can raise alerts.

### Azure SQL DB Managed Instance: All SQL Server Objects Group - Discoveries

Azure SQL DB Managed Instance: All SQL Server Objects Group Discovery

Discovery of Azure SQL DB Managed Instance All SQL Server Objects Group.

# **Azure SQL DB Managed Instance Generic Objects Group**

The Azure SQL DB Managed Instance Generic Objects Group contains Azure SQL DB Managed Instance Generic objects

# **Azure SQL DB Managed Instance Generic Objects Group - Discoveries**

**Azure SQL DB Managed Instance Generic Objects Group Discovery** 

Discovery of Azure SQL DB Managed Instance Generic Objects Group

# **Azure SQL DB Managed Instance: Database**

Azure SQL DB Managed Instance Database.

# **Azure SQL DB Managed Instance: Database - Discoveries**

Azure SQL DB Managed Instance: Discover Azure SQL DB Managed Instance Databases for a Database Engine

This rule discovers all databases running for a given instance of Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	

Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: Database - Unit monitors**

# **DB Chaining Configuration**

Monitors the Cross-database Ownership Chaining Enabled setting for the database. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	No
Generate Alerts	Defines whether the workflow generates an Alert.	True
Expected Value	Expected value of database configuration setting. To view the set of applicable values please refer to "Configuration" section of the knowledge base article of this monitor.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	43200
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	15

#### **Database Status**

This monitor checks the status of the database as reported by Microsoft SQL Server.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Page Verify Configuration**

Monitors the Page Verify setting for the database. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	No
Generate Alerts	Defines whether the workflow generates an Alert.	True
Expected Value	Expected value of database configuration setting. To view the set of applicable values please refer to "Configuration" section of the knowledge base article of this monitor.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	43200
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	

Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Auto Close Configuration**

Monitors the Auto Close setting for the database. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	No
Generate Alerts	Defines whether the workflow generates an Alert.	True
Expected Value	Expected value of database configuration setting. To view the set of applicable values please refer to "Configuration" section of the knowledge base article of this monitor.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	43200
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	15

# **Trustworthy Configuration**

Monitors the Trustworthy setting for the database. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Enabled	Enables or disables the workflow.	No
Generate Alerts	Defines whether the workflow generates an Alert.	True
Expected Value	Expected value of database configuration setting. To view the set of applicable values please refer to "Configuration" section of the knowledge base article of this monitor.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	43200
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Auto Create Statistics Configuration**

Monitors the Auto Create Statistic setting for the database. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	No
Generate Alerts	Defines whether the workflow generates an Alert.	True
Expected Value	Expected value of database configuration setting. To view the set of applicable values please refer to "Configuration" section of the knowledge base article of this monitor.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	43200

Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Auto Shrink Configuration**

Monitors the Auto Shrink setting for the database. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	No
Generate Alerts	Defines whether the workflow generates an Alert.	True
Expected Value	Expected value of database configuration setting. To view the set of applicable values please refer to "Configuration" section of the knowledge base article of this monitor.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	43200
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	15

Monitors the Recovery model setting for the database. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	No
Generate Alerts	Defines whether the workflow generates an Alert.	True
Expected Value	Expected value of database configuration setting. To view the set of applicable values please refer to "Configuration" section of the knowledge base article of this monitor.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	43200
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

#### **Database Backup Status**

This monitor checks the status of the database backup as reported by Microsoft SQL Server. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Backup Period (days)	The target backup frequency in days. Should be set according to your Recovery Point Objective (RPO).	

Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Auto Update Statistics Async Configuration**

Monitors the Auto Update Statistics Asynchronously setting for the database. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	No
Generate Alerts	Defines whether the workflow generates an Alert.	True
Expected Value	Expected value of database configuration setting. To view the set of applicable values please refer to "Configuration" section of the knowledge base article of this monitor.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	43200
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	15

#### **Auto Update Statistics Configuration**

Monitors the Auto Update Statistics setting for the database. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	No
Generate Alerts	Defines whether the workflow generates an Alert.	True
Expected Value	Expected value of database configuration setting. To view the set of applicable values please refer to "Configuration" section of the knowledge base article of this monitor.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	43200
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: Database - Aggregate monitors**

### **External Access Configuration**

Monitors the aggregate external access configuration health for the database.

#### **Automatic Configuration**

This monitor aggregates the health of automatic configuration monitors.

#### **Recovery Configuration**

Monitors the aggregate recovery configuration health for the database.

# **Azure SQL DB Managed Instance: Database - Rules (non-alerting)**

# **Azure SQL DB Managed Instance: DB Active Requests Count**

Azure SQL DB Managed Instance DBs Active Requests performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# Azure SQL DB Managed Instance: DB Allocated Free Space (MB)

Azure SQL DB Managed Instance DB Allocated Free Space (MB) performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Azure Maximum File Size (MB)	The maximum size of data file stored in Azure BLOB Storage. The workflow will consider this value as a maximum storage capacity for each file.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	

Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: DB Active Transactions Count**

Azure SQL DB Managed Instance DBs Active Transactions performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: DB Allocated Space (MB)**

Collect database allocated size

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Azure Maximum File Size (MB)	The maximum size of data file stored in Azure BLOB Storage. The workflow will consider this value as a maximum storage capacity for each file.	

Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

### **Azure SQL DB Managed Instance: DB Transactions per Second Count**

Azure SQL DB Managed Instance DBs Transactions per second performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	900
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: DB Active Connections Count**

Azure SQL DB Managed Instance DBs Active Connections performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No

Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: DB Active Sessions Count**

Azure SQL DB Managed Instance DBs Active Sessions performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: DB Allocated Space Used (MB)**

Azure SQL DB Managed Instance DBs Allocated Space Used (MB) performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes

Generate Alerts	Defines whether the workflow generates an Alert.	No
Azure Maximum File Size (MB)	The maximum size of data file stored in Azure BLOB Storage. The workflow will consider this value as a maximum storage capacity for each file.	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	900
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: Database - Tasks**

### **Check Database (DBCC)**

Checks the allocation, structural, and logical integrity of all the objects in the specified database.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

### **Check Disk (DBCC)**

Checks the consistency of disk space allocation structures for a specified database.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes

Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	l
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Check Catalog (DBCC)**

Checks for catalog consistency within the specified database. The database must be online.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

### **Set Database Offline**

### Set Database Offline

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

### **Set Database Online**

### Set Database Online

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes

Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

#### **Set Database to Emergency State**

Set Database to Emergency State

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: DB Engine**

An installation of an Azure SQL DB Managed Instance Database Engine. The database engine hosts databases and other SQL Server components.

# **Azure SQL DB Managed Instance: DB Engine - Discoveries**

**Azure SQL DB Managed Instance: Discover Azure SQL DB Managed Instance Database Engines** 

This rule discovers Azure SQL DB Managed Instance DB Engines.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	

Timeout for database connection	The workflow will fail and register	15
	an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: DB Engine - Unit monitors**

# **Average Wait Time**

Average Wait Time monitor for Azure SQL DB Managed Instance DBs

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Number of samples	Indicates how many times a measured value should breach a threshold before the state is changed.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Threshold	The collected value will be compared against this parameter.	250
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	200
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	15

### **Buffer Cache Hit Ratio**

Buffer Cache Hit Ratio for Azure SQL DB Managed Instance DB Engine

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes

Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Number of samples	Indicates how many times a measured value should breach a threshold before the state is changed.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Threshold	The collected value will be compared against this parameter.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Thread Count**

Thread Count for Azure SQL DB Managed Instance DB Engine

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Minimum Free Threads Threshold	The workflow determines the maximum number of threads and the number of active threads for each DB Engine process. An alert will be generated if the number of free threads is less or equal than this parameter.	

Number of samples	Indicates how many times a measured value should breach a threshold before the state is changed.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **CPU Utilization (%)**

CPU Utilization (%) for Azure SQL DB Managed Instance DB Engine

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Number of samples	Indicates how many times a measured value should breach a threshold before the state is changed.	6
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Threshold	The collected value will be compared against this parameter.	95
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	200
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the	15

database	during	the	specified
period.			

# **Stolen Server Memory**

Stolen Server Memory for Azure SQL DB Managed Instance DB Engine

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	1
Number of samples	Indicates how many times a measured value should breach a threshold before the state is changed.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Threshold	Alert will be generated if the Stolen Server Memory/SQL Server max memory ratio is greater than this threshold.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **DB Engine Health Status**

This monitor checks the health state of the SQL Server Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True

Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **SQL Re-Compilation**

SQL Re-Compilation for Azure SQL DB Managed Instance DB Engine. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Number of samples	Indicates how many times a measured value should breach a threshold before the state is changed.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Threshold	If the ratio between SQL Re- Compilation and SQL Compilation is greater than this threshold alert will be generated.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	

Timeout for database connection	The workflow will fail and register	15
Tr.	an event, if it cannot access the database during the specified period.	

# **DMV Configuration Status**

This monitor checks the status of DMV access configuration.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	

### **Blocking Sessions**

Monitors blocked sessions for a SQL instance. Note: This monitor is disabled by default. Please use overrides to enable it when necessary.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Number of blocked sessions	The maximum allowed number of blocked sessions.	1
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	

Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	
Wait Time (minutes)	The minimum process execution duration before considering it for Blocked SPIDs analysis.	

# **Page Life Expectancy**

Page Life Expectancy (s) for Azure SQL DB Managed Instance DB Engine

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Number of samples	Indicates how many times a measured value should breach a threshold before the state is changed.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Threshold	The collected value will be compared against this parameter.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

Azure SQL DB Managed Instance: DB Engine - Dependency (rollup) monitors

#### **Databases Availability**

Rolls up all Databases availability monitors to the DB Engine.

#### **Databases Configuration**

Rolls up all Databases configuration monitors to the DB Engine.

### **Azure SQL DB Managed Instance: DB Engine - Rules (non-alerting)**

#### Azure SQL DB Managed Instance: Number of Lock Requests per Second

Collects the Windows "Number of Lock Requests per Second" performance counter for each instance of Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	l I
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

#### **Azure SQL DB Managed Instance: SQL Compilations per Second**

Collects the Windows "SQL Compilations per Second" performance counter for each instance of Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	

Timeout for database connection	The workflow will fail and register	15
(seconds)	an event, if it cannot access the database during the specified period.	

### **Azure SQL DB Managed Instance: Number of Lock Waits per Second**

Collects the Windows "Number of Lock Waits per Second" performance counter for each instance of Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

### Azure SQL DB Managed Instance: Number of Deadlocks per Second

Collects the Windows "Number of Deadlocks per Second" performance counter for each instance of Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	900
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	l I
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the	l I

database	during	the	specified	
period.				

### **Azure SQL DB Managed Instance: Lock Timeouts per Second**

Collects the Windows "Lock Timeouts per Second" performance counter for each instance of Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: DB Engine CPU Utilization (%)**

Azure SQL DB Managed Instance DB Engine CPU Utilization (%) performance collection rule.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	900
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	

Timeout for database connection	The workflow will fail and register 15
1,	an event, if it cannot access the
	database during the specified period.

# **Azure SQL DB Managed Instance: Buffer Cache Hit Ratio**

Collects the Windows "Buffer Cache Hit Ratio" performance counter for each instance of Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

### **Azure SQL DB Managed Instance: SQL User Connections**

Counts the number of users currently connected to SQL Server.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the	

	database	during	the	specified
l	period.			

# **Azure SQL DB Managed Instance: DB Engine Thread Count**

Azure SQL DB Managed Instance DB Engine Thread Count performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	l .
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# Azure SQL DB Managed Instance: SQL Re-Compilations per Second

Collects the Windows "SQL Recompiles per Second" performance counter for each instance of Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	

Timeout for database connection	The workflow will fail and register	15
,	an event, if it cannot access the	
	database during the specified	
	period.	

# **Azure SQL DB Managed Instance: Logins per Second**

Total number of logins started per second. This does not include pooled connections.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: Total Transactions per Second**

Collects the Windows "Transaction per Second" performance counter for the \_Total instance of the databases performance object for each instance of Azure SQL DB Managed Instance DB Engine.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the	

	database	during	the	specified
	period.			

### **Azure SQL DB Managed Instance: DB Engine Page Life Expectancy (s)**

Azure SQL DB Managed Instance DB Engine Page Life Expectancy (s) performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

### **Azure SQL DB Managed Instance: DB Engine Stolen Server Memory (MB)**

Azure SQL DB Managed Instance DB Engine Stolen Server Memory (MB) performance collection rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	900
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the	15

	database	during	the	specified
	period.			

### **Azure SQL DB Managed Instance: DB Engine Average Wait Time (Milliseconds)**

Azure SQL DB Managed Instance DB Engine Average Wait Time performance collection rule

Name	Description	Default value
Enabled Enables or disables the workflow		Yes
Generate Alerts	Defines whether the workflow generates an Alert.	No
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	900
Timeout (seconds)  Specifies the time the work allowed to run before closed and marked as failed		
Timeout for database connection (seconds)	The workflow will fail and registe an event, if it cannot access the database during the specified period.	

# **Azure SQL DB Managed Instance: DB Engine - Tasks**

### **Global Configuration Settings**

Global Configuration Settings.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	

# Microsoft Azure SQL DB Managed Instance Alerts Scope Group

Microsoft Azure SQL DB Managed Instance Alerts Scope Group contains objects, which can throw alerts.

### Microsoft Azure SQL DB Managed Instance Alerts Scope Group - Discoveries

Microsoft Azure SQL DB Managed Instance Alerts Scope Group Discovery

Discovery of Microsoft Azure SQL DB Managed Instance Alerts Scope Group

# **Microsoft Azure SQL DB Managed Instance Computers**

This group contains all Windows computers that are running a component of Microsoft Azure SQL DB Managed Instance

### Microsoft Azure SQL DB Managed Instance Computers - Discoveries

Microsoft Azure SQL DB Managed Instance: Discover SQL Server Computer Group Membership

Populates the computer group to contain all computers running Azure SQL DB Managed Instance DB Engines.

#### **Resource Pool Watcher**

Monitors the health of a resource pool from the perspective of the management servers.

#### **Resource Pool Watcher - Discoveries**

**Azure SQL DB Managed Instance: Monitoring Pool Watcher Discovery** 

The discovery is designed to discover all the watcher nodes contained in the pool. If the pool is empty, it will mirror the contents of All Management Servers pool.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
1	The recurring interval of time in seconds in which to run the workflow.	l