

# Guide to Microsoft System Center Management Pack for SQL Server 2017+ Replication

**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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# Contents

Changes History5
Get Started5
Supported Configurations
Management Pack Scope6
Prerequisites
Files in this Management Pack7
Mandatory Configuration
Management Pack Purpose
Monitoring Scenarios
Discovery of SQL Server Replication Objects9
Distributor Discovery and Monitoring9
Publisher Discovery and Monitoring10
Subscriber Discovery and Monitoring10
Publication Discovery and Monitoring10
Subscription Discovery and Monitoring10
Many Publication Snapshots on the Same Drive10
Maintenance Job Failure10
Job Failure11
Data Flow
Logical Structure
Publication Flow
Replication Database Health15
Configure the Management Pack19
Best Practice: Create a Management Pack for Customizations
How to Import a Management Pack

How to Enable Agent Proxy Option	20
Security Configuration	20
Run As Profiles	20
View Information in the Operations Manager Console	21
Version-Independent (Generic) Views and Dashboards	21
SQL Server Replication Views	21
Dashboards	22
Replication Components Datacenter Dashboard	23
SQL Server Replication Datacenter Dashboard	23
Links	23
Appendix: Terms and Definitions	24
Appendix: Management Pack Views and Dashboards	26
Appendix: Management Pack Objects and Workflows	27
Appendix: Known Issues and Troubleshooting	107

# Guide to Microsoft System Center Management Pack for SQL Server 2017+ Replication

This guide is based on version 7.0.0.0 RTM of the Management Pack for Microsoft SQL Server 2017+ Replication.

## **Changes History**

Release Date	Changes
November 2017 (version 7.0.0.0 RTM)	<ul> <li>Introduced a number of improvements and bug fixes.</li> </ul>
October 2017 (version 6.7.65.0 RC1)	<ul> <li>The management pack was reimplemented in order to enable monitoring SQL Server 2017 and all upcoming SQL Server versions</li> <li>Reduced the number of files in the management pack</li> <li>Introduced a number of fixes and improvements to functionality, performance, and display strings</li> </ul>
June 2017 (version 6.7.60.0 RC0)	<ul> <li>Added a number of monitors and performance rules to create the same Health model as presented in SQL Server 2008-2016 Replication management packs</li> <li>Improved and refactored the management pack modules</li> <li>Fixed a number of issues</li> </ul>
April 2017 (version 6.7.40.0 CTP1)	Original release of this management pack

### **Get Started**

In this section:

- <u>Supported Configurations</u>
- <u>Management Pack Scope</u>

- Prerequisites
- Files in this Management Pack
- Mandatory Configuration

#### **Supported Configurations**

This management pack is intended to monitor SQL Server Replication in SQL Server 2017 and all upcoming SQL Server versions. It is designed for the following versions of System Center Operations Manager:

- System Center Operations Manager 2012 R2
- System Center Operations Manager 2016

A dedicated Operations Manager management group is not required for this management pack.

The following table details the supported configurations for the Management Pack for Microsoft SQL Server Replication:

Configuration	Support
SQL Server	64-bit SQL Server Database Engine on 64-bit OS
Clustered servers	No
Agentless monitoring	Yes
Virtual environment	Yes

Note that all SQL Server Express editions support Replication as Subscriber only.

For more information, see features supported by SQL Server editions:

https://msdn.microsoft.com/library/cc645993(v=sql.130).aspx

#### **Management Pack Scope**

Management Pack for Microsoft SQL Server Replication enables the monitoring of following features:

• SQL Server Replication

#### 📝 Note

Please refer to "<u>Monitoring Scenarios</u>" section for a full list of monitoring scenarios supported by this management pack.

#### 📝 Note

For more information and detailed instructions on setup and configuration, see "<u>Configure</u> <u>the Management Pack</u>" section of this guide.

#### 📝 Note

This management pack depends on management pack for SQL Server, i.e. installation of a management pack for SQL Server is recommended.

#### **Prerequisites**

As a best practice, you should import the Windows Server Management Pack for the operating system you are using. The Windows Server Management Packs monitor aspects of the operating system that influence the performance of computers running SQL Server, such as disk capacity, disk performance, memory utilization, network adapter utilization, and processor performance.

#### **Files in this Management Pack**

The Management Pack for Microsoft SQL Server Replication includes the following files:

File	Description
Microsoft.SQLServer.Replication.Windo ws.Discovery.mpb	This management pack discovers Microsoft SQL Server Replication Instances.
Microsoft.SQLServer.Replication.Windo ws.Monitoring.mpb	This Management Pack enables the monitoring of Microsoft SQL Server Replication and depends on the Microsoft SQL Server Replication (Discovery) Management Pack.
Microsoft.SQLServer.Replication.Windo ws.Views.mp	This Management Pack contains views and folder structure for Microsoft SQL Server Replication management packs.

File	Description
Microsoft.SQLServer.Replication.Core.Lib rary.mpb	This Management Pack is the core library for all versions of SQL Server Replication. It defines all SQL Server Replication base classes and relationships
Microsoft.SQLServer.Replication.Core.Vi ews.mpb	This Management Pack is the core library views for all versions of SQL Replication.
Microsoft.SQLServer.Visualization.Librar y.mpb	This Management Pack contains basic visual components required for SQL Server dashboards.

#### 📝 Note

Along with the present guide, the Management Pack delivery also contains a guide to configuration and customization of the SQL Server dashboards.

#### **Mandatory Configuration**

To configure Management Pack for Microsoft SQL Server Replication, complete following steps:

- Review the "<u>Configure the Management Pack</u>" section of this guide.
- Grant required permissions as described in "<u>Security Configuration</u>" section of this guide.
- Enable the Agent Proxy option on all agents that are installed on servers, which host an Instance of SQL Server Replication. For more information about enabling Agent Proxy option, see "<u>How to Enable Agent Proxy Option</u>" section of this guide.
- Import the Management Pack.
- Associate SQL Server Replication Run As profiles with accounts that have appropriate permissions. For more information about configuring Run As profiles see "<u>How to</u> <u>Configure Run As Profiles</u>" section of this guide.

### **Management Pack Purpose**

In this section:

Monitoring Scenarios

• Data Flow

#### 📝 Note

For details on the discoveries, rules, monitors, views, and reports contained in this management pack, see following sections of this guide:

- <u>Appendix: Management Pack Objects and Workflows</u>
- Appendix: Management Pack Views and Dashboards

#### **Monitoring Scenarios**

#### **Discovery of SQL Server Replication Objects**

The Management Pack for SQL Server Replication enables the discovery and monitoring of all the SQL Server Replication related components. The management pack supports agent, agentless and mixed monitoring types; it automatically selects the monitoring type used by the management pack for SQL Server to monitor the appropriate SQL Server instance. Replication objects discovered and monitored by the management pack are as follows:

- Distributor
- Publisher
- Subscriber
- Publication
- Subscription

Each managed replication object is discovered and monitored using a number of rules and monitors. Please refer to the "<u>Appendix: Management Pack Objects and Workflows</u>" section for the full list of rules and monitors targeted to replication objects.

#### **Distributor Discovery and Monitoring**

For each managed database engine, the distributors on it are discovered and monitored using a number of rules and monitors. Please refer to the "<u>Appendix: Management Pack Objects and</u> <u>Workflows</u>" section for the full list of rules and monitors targeted to the distributor.

For more information, see <u>Distributor and Publisher Information Script</u> article in the MSDN Library.

#### **Publisher Discovery and Monitoring**

For each managed database engine, the publishers are discovered and monitored using a number of rules and monitors. Please refer to the "<u>Appendix: Management Pack Objects and</u> <u>Workflows</u>" section for the full list of rules and monitors targeted to the publisher.

For more information, see Distributor and Publisher Information Script in the MSDN Library.

#### Subscriber Discovery and Monitoring

For each managed database engine, the subscribers are discovered and monitored using a number of rules and monitors. Please refer to the "<u>Appendix: Management Pack Objects and</u> <u>Workflows</u>" section for the full list of rules and monitors targeted to the subscriber.

#### **Publication Discovery and Monitoring**

For each managed publisher instance, the publications are discovered and monitored using a number of rules and monitors. Please refer to the "<u>Appendix: Management Pack Objects and</u> <u>Workflows</u>" section for the full list of rules and monitors targeted to publication.

#### Subscription Discovery and Monitoring

For each managed subscriber instance, the subscriptions are discovered and monitored using a number of rules and monitors. Please refer to the "<u>Appendix: Management Pack Objects and</u> <u>Workflows</u>" section for the full list of rules and monitors targeted to subscription.

#### Many Publication Snapshots on the Same Drive

Space monitoring introduced by this management pack may be noisy in environments where many publications' snapshots share the same media. In such cases, an alert for a publication's snapshot is generated when the amount of free space on the hard drive reaches the threshold. To reduce the noise, turn off the space monitors for "Snapshot Available Space (%)" and use Operating System Management Pack to monitor space on the hard drive.

#### **Maintenance Job Failure**

Replication uses the maintenance jobs that are monitored by the "MSSQL Replication: The Maintenance Job(s) Failed on Distributor Alert Rule":

- Reinitialize subscriptions having data validation failures
- Agent history clean up: distribution
- Replication monitoring refresher for distribution.

- Replication agents checkup
- Distribution clean up: distribution
- Expired subscription clean up

For more information, see <u>Run Replication Maintenance Jobs (SQL Server Management Studio)</u> in the MSDN Library.

#### Job Failure

The management pack defines a monitor targeted at the Distributor and Subscriber. These monitors oversee the replication agents' jobs and change the monitor state when the job has the following states:

- Job Exist But Never Run and Has Not Scheduled
- Job Expired
- Job Failed
- Job is Disabled
- Job is Enabled but Schedule is Disabled
- Job Execution Failed and was Not in Accordance with the Schedule
- Job is Retry
- Job Never Run
- Job Never Run But Schedule Exist
- Job Successfully Done But Not in Accordance with the Schedule
- Job Execution was Stopped and was Not in Accordance with the Schedule
- Previous Job Execution Failed
- Previous Job Execution was Stopped
- Unknown State of the Job

Please refer to "<u>Appendix: Management Pack Objects and Workflows</u>" section for the full list of rules and monitors targeted to Replication Agents.

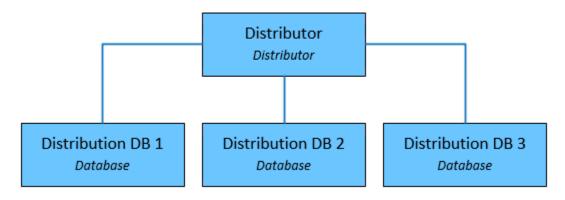
#### **Data Flow**

The following diagrams show the data flows in this management pack for:

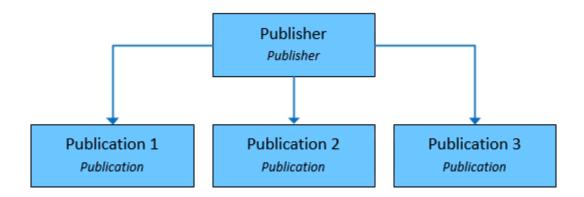
- Logical Structure
- Publication Flow
- <u>Replication Database Health</u>

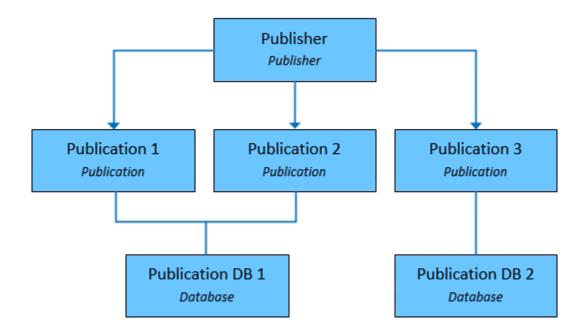
See <u>Terms and Definitions Appendix</u> for more details on the diagrams contents.

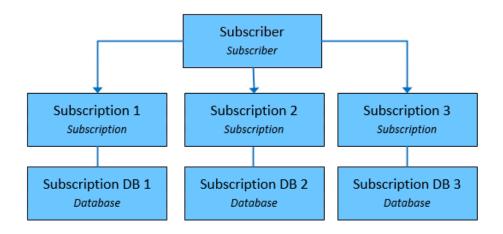
#### Logical Structure



**Publication Flow** 



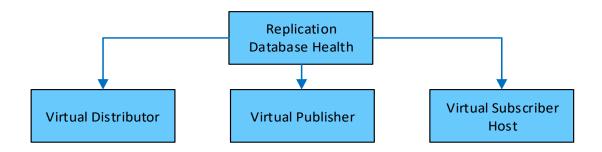




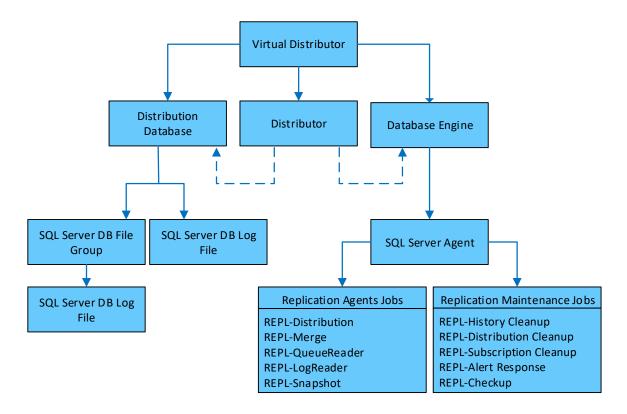
#### **Replication Database Health**

Replication Database Health is built for the Databases participating in replication process as published database.

#### **Top-Level Structure**



#### Virtual Distributor Level Structure



**Replication agent** files are located under <*drive*>:\Program Files\Microsoft SQL Server\100\COM. The following table lists the replication executable names and file names. Click the link for an agent to view its parameter reference.

Agent Executable	File Name
Replication Snapshot Agent	snapshot.exe
Replication Distribution Agent	distrib.exe
Replication Log Reader Agent	logread.exe
Replication Queue Reader Agent	qrdrsvc.exe
Replication Merge Agent	replmerg.exe

In addition to replication agents, a replication has a number of jobs that perform scheduled and on-demand maintenance.

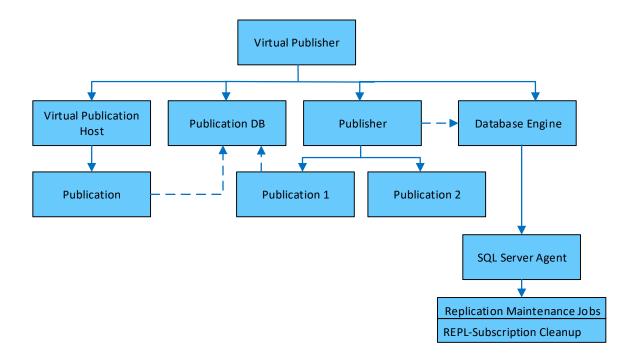
#### **Replication Maintenance Jobs**

Replication uses the following jobs to perform scheduled and on-demand maintenance.

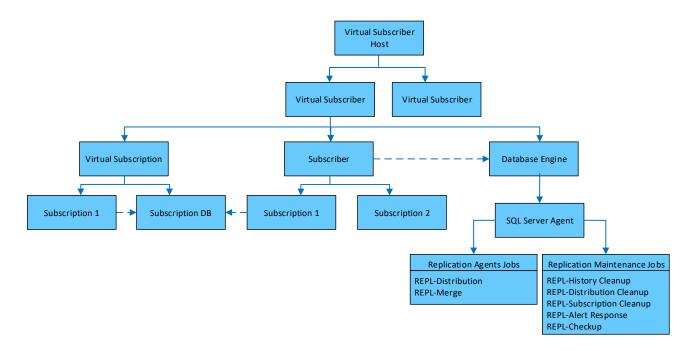
Clean up job	Description	Default schedule
Agent History Clean Up: Distribution	Removes replication agent history from the distribution database.	Runs every ten minutes
Distribution Clean Up: Distribution	Removes replicated transactions from the distribution database. Deactivates subscriptions that have not been synchronized within the maximum distribution retention period.	Runs every ten minutes

Expired Subscription Clean Up	Detects and removes expired subscriptions from publication databases.	Runs every day at 1:00 A.M.
Reinitialize Subscriptions Having Data Validation Failures	Detects all subscriptions that have data validation failures and marks them for re-initialization. The next time the Merge Agent or Distribution Agent runs, a new snapshot will be applied at the Subscribers.	No default schedule (not enabled by default).
Replication Agents Checkup	Detects replication agents that are not actively logging history. It writes to the Microsoft Windows event log if a job step fails.	Runs every ten minutes.
Replication monitoring refresher for distribution	Refreshes cached queries used by Replication Monitor.	Runs continuously.

#### Virtual Publisher Level Structure



**Virtual Subscriber Level Structure** 



### **Configure the Management Pack**

This section provides guidance on configuring and tuning this management pack.

In this section:

- Best Practice: Create a Management Pack for Customizations
- How to Import a Management Pack
- How to Enable Agent Proxy option
- How to Configure Run As profiles
- <u>Security Configuration</u>

#### **Best Practice: Create a Management Pack for Customizations**

The Management Pack for Microsoft SQL Server Replication is sealed so that you cannot change any of the original settings in the management pack file. However, you can create customizations, such as overrides or new monitoring objects, and save them to a different management pack. By default, the Operations Manager saves all customizations to the default management pack. As a best practice, you should create a separate management pack for each sealed management pack you want to customize.

Creating a new management pack for storing overrides has the following advantages:

- When you create a management pack for the purpose of storing customized settings for a sealed management pack, it is helpful to base the name of the new management pack on the name of the management pack that it is customizing, such as "Microsoft SQL Server Replication Overrides".
- Creating a new management pack for storing customizations of each sealed management pack makes it easier to export the customizations from a test environment to a production environment. It also makes it easier to delete a management pack, because you must delete any dependencies before you can delete a management pack. If customizations for all management packs are saved in the Default Management Pack and you need to delete a single management pack, you must first delete the Default Management Pack, which also deletes customizations to other management packs.

For more information about sealed and unsealed management packs, see <u>Management Pack</u> <u>Formats</u>. For more information about management pack customizations and the default management pack, see <u>About Management Packs</u>.

#### How to Create a New Management Pack for Customizations

- 1. Open the Operations console, and then click the **Administration** button.
- 2. Right-click Management Packs, and then click Create New Management Pack.
- 3. Enter a name (for example, MSSQL Replication MP Customizations), and then click **Next**.
- 4. Click Create.

#### How to Import a Management Pack

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

#### How to Enable Agent Proxy Option

To enable Agent Proxy option complete following steps:

- 1. Open the Operations Console and click the **Administration** button.
- 2. In the Administrator pane, click Agent Managed.
- 3. Double-click an agent in the list.
- 4. On the Security tab, select Allow this agent to act as a proxy and discover managed objects on other computers.

#### **Security Configuration**

This section provides guidance on configuring the security for this management pack.

#### **Run As Profiles**

This management pack uses the same Run As profiles as the Microsoft System Center Management Pack for SQL Server. Refer to the corresponding management pack guide for details about Run As profiles configurations. Note that configuration of low-privilege access is not supported by this management pack so far.

### **View Information in the Operations Manager Console**

#### Version-Independent (Generic) Views and Dashboards

This management pack uses common folder structure introduced with the first release of Management Pack for SQL Server. The following views and dashboards are version-independent and show information about all versions of SQL Server:

SQL Server Replication
 Active Alerts
 All Replication Related Objects
 SQL Server Replication Database Health
 Summary
 SQL Server Replication Views

"All Replication Related Objects" diagram view provides an information about all SQL Server Replication objects and their relations.

"SQL Server Replication Database Health" state view provides information about all databases participating in replication as published database. From this view, it is easy to open the diagram view specific to the published database.

#### **SQL Server Replication Views**

The Management Pack for Microsoft SQL Server Replication introduces the comprehensive set of state, performance and alert view, which can be found in the dedicated folder:

Monitoring

Microsoft SQL Server 2017+

SQL Server Replication

Generation Views

📝 Note

This management pack provides a separate folder for SQL Server Replication. Therefore, other Replication objects are not displayed in this folder.

#### 📝 Note

Please refer to "<u>Appendix: Management Pack Views and Dashboards</u>" section of this guide for the full list of views.

#### 📝 Note

Some views may contain a very long list of objects or metrics. To find a specific object or group of objects, you can use the **Scope**, **Search**, and **Find** buttons on the Operations Manager toolbar. For more information, see the "<u>Finding Data and Objects in the</u> <u>Operations Manager Consoles</u>" article in the Operations Manager Help.

#### Dashboards

This management pack includes a set of rich dashboards, which provide detailed information about SQL Server Replication. Each dashboard has a navigation widget (located in the leftmost part of the dashboard), which can be used to switch the current presentation context, i.e. the information displayed by other widgets depends on the object selected in the navigation widget.

#### 📝 Note

The Replication dashboards have three personalization settings:

- "Refresh Rate" this setting defines how often dashboard refreshes data on a client. This
  setting does not change the actual collection frequency of metrics on a server.
- "Time Interval" this setting defines for which period to display data. The Performance widget on the "Instance" view depends on this setting.
- "Background Color" change the background color for all views.

#### 📝 Note

Use menu button 💻 of Datacenter Dashboard or a group In order to add a group or tile.

#### 📝 Note

To delete or edit a tile just right click on the tile and select required action.

#### 📝 Note

Background color, time interval, and refresh rate settings are applied to the Datacenter Dashboard and all Instance Dashboards and can be set from the Datacenter Dashboard menu.

For more information, see the guide to Microsoft SQL Server dashboards.

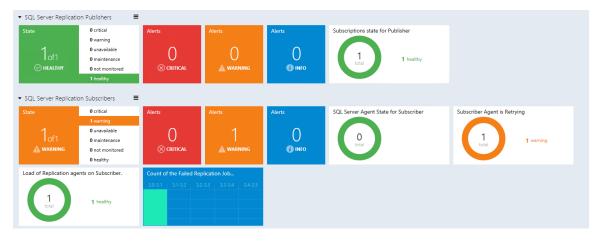
#### **Replication Components Datacenter Dashboard**

The Replication Components Datacenter Dashboard is a dashboard for SQL Server versionindependent Replication. This dashboard contains four groups by default: Replication Database Health Group, Distributors Group, Publishers Group and Subscribers Group.



#### **SQL Server Replication Datacenter Dashboard**

The SQL Server Replication Datacenter Dashboard is a specific dashboard for SQL Server Replication. This dashboard contains only SQL Server Replication group by default that contains all SQL Server Distributors, Publishers, and Subscribers.



### Links

The following links connect you to information about common tasks that are associated with System Center Management Packs:

- 1. Management Pack Life Cycle
- 2. How to Import an Operations Manager Management Pack

- 3. <u>Creating a Management Pack for Overrides</u>
- 4. Managing Run As Accounts and Profiles
- 5. How to Export an Operations Manager Management Pack
- 6. How to Remove an Operations Manager Management Pack

For free training on System Center Operations Manager, see the <u>System Center 2012 R2</u> <u>Operations Manager Management Pack</u> course at the Microsoft Virtual Academy (MVA).

For questions about the Operations Manager and management packs, see the <u>System Center</u> <u>Operations Manager community forum</u> (http://go.microsoft.com/fwlink/?LinkID=179635).

#### Important

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### **Appendix: Terms and Definitions**

Term	Definition
Distributor	Distributor is a database instance that acts as a store for
	replication specific data associated with one or more Publishers.
	Each Publisher is associated with a single database (known as a
	distribution database) at the Distributor. In many cases, a single
	database server instance acts as both Publisher and Distributor.
	This is known as a local Distributor. When Publisher and
	Distributor are configured on separate database server
	instances, the Distributor is known as a remote Distributor.
Distribution database	Distribution database stores replication status data, metadata about the publication, and, in some cases, acts as a queue for data moving from Publisher to Subscribers. In many cases, a single database server instance acts as both Publisher and
	Distributor. This is known as a local Distributor. When Publisher

Term	Definition
	and Distributor are configured on separate database server instances, the Distributor is known as a remote Distributor.
Publisher	Publisher is a database instance that makes data available to
	other locations through replication. A Publisher can have one or more publications, each defining a logically related set of objects and data to replicate.
Publication	Publication is a collection of one or more articles from one database. Such grouping of multiple articles into a publication makes it easier to specify a logically related set of data and database objects that are replicated as a unit. A publication can contain different types of articles, including tables, views, stored procedures, and other objects. When tables are published as articles, filters can be used to restrict the columns and rows of the data sent to Subscribers.
Article	Article identifies a database object that is included in a publication.
Subscriber	Subscriber is a database instance that receives replicated data. A Subscriber can receive data from multiple Publishers and publications. Depending on the selected replication type, a Subscriber can also pass data changes back to the Publisher, or republish the data to other Subscribers.
Subscription	Subscription is a request for a copy of a publication to be delivered to a Subscriber. A subscription defines what publication will be received, where and when. There are two types of subscriptions: push and pull.
Push subscription	Push subscription is represented by a subscription created and administered at the Publisher. The distribution agent or merge agent for this subscription runs at the Distributor. For more information about subscriptions, see <u>Subscribe to Publications</u> .
Pull Subscription	Pull subscription is represented by a subscription configured and maintained at each recipient. The subscribers administer the synchronization schedules and can pull changes whether they consider it necessary. For more information about subscriptions, see <u>Subscribe to Publications</u> .
Virtual Distributor	Virtual Distributor is a virtual entity, which serves to represent a real distributor on the diagram view for a Replication Database Health.
Virtual Publisher	Virtual Publisher is a virtual entity serves to represent a real publisher on the diagram view for a Replication Database Health.
Virtual Subscriber Host	Virtual Subscriber Host is a virtual entity that contains Virtual Subscribers.

Term	Definition
Virtual Subscriber	Virtual Subscriber is a virtual entity serves to represent a real Subscriber on the diagram view for a Replication Database Health.
Virtual Publication Host	Virtual Publication Host is a virtual entity that contains Publications.
Publication database	Publication database is the database on the Publisher that is the source of data and database objects to be replicated.
Virtual Subscription	Virtual Subscription is a virtual entity serves to represent a real <b>subscription</b> on the diagram view for a Replication Database Health. The purpose of this entity is to hide all subscriptions when the diagram is opened for the first time.

### **Appendix: Management Pack Views and Dashboards**

礂 Root

🚰 Microsoft SQL Server 2017+

SQL Server Replication [version independent folder]

Active Alerts – [target: Replication Alerts Scope Group, scope: SQL Server Replication Objects]

All Replication Related Objects – [target: Replication Flow Group, scope: All replication related objects]

**IIII** SQL Server Replication Database Health – [target: Distribution Databases,

scope: SQL Server Published Databases]

Summary

SQL Server Replication Views [version independent folder]

Distributors – [target: Generic Distributor, scope: SQL Server Replication Distributors]

Publications – [target: Generic Publication, scope: SQL Server Replication Publications]

Publishers – [target: Generic Publisher, scope: SQL Server Replication Publishers]

Subscribers – [target: Generic Subscriber, scope: SQL Server Replication Subscribers]

Subscriptions – [target: Generic Subscription, scope: SQL Server Replication Subscriptions]

SQL Server on Windows Replication [version dependent folder]

Active Alerts – [target: SQL Server Replication Alerts Scope] Group, scope: SQL Server Replication Objects] **Distributors** – [target: Distributor SQL, scope: SQL Server] Replication Distributors] Publications – [target: Publication SQL, scope: SQL Server] Replication Publications] Publishers – [target: Publisher SQL, scope: SQL Server Replication Publishers] Subscribers – [target: Subscriber SQL, scope: SQL Server] Replication Subscriber] Subscriptions – [target: Subscription SQL, scope: SQL Server Replication Subscription] Summarv Performance Distributor Performance Collections – [target: Distributor SQL, scope: Performance counter objects] Publisher Performance Collections – [target: Publisher SQL, scope: Performance counter objects] Subscriber Performance Collections – [target: Subscriber SQL, scope: Performance counter objects]

### **Appendix: Management Pack Objects and Workflows**

The Management Pack for Microsoft SQL Server Replication discovers the object types described in the following sections.

### **Distributor Group**

Distributor Group is a group containing the Distributors.

#### **Distributor Group - Discoveries**

**Distributor Group Memberships Discovery** The Discovery of Memberships in a Distributor Group

#### Distributor Group - Dependency (rollup) monitors

Generic Distributor Configuration Rollup for the Distributor Group

Generic Distributor Availability Rollup for the Distributor Group Generic Distributor Security Rollup for the Distributor Group

Generic Distributor Performance Rollup for the Distributor Group

### **Distributor Instances Group**

Distributor Instances Group is a group that contains all SQL Server instances with a Distributor.

#### **Distributor Instances Group - Dependency (rollup) monitors**

Instance Availability Rollup for the Distributor Instance Group Generic Distributor Security Rollup for the Distributor Instance Group Instance Configuration Rollup for the Distributor Instance Group Generic Distributor Performance Rollup for the Distributor Instance Group Generic Distributor Configuration Rollup for the Distributor Instance Group Instance Performance Rollup for the Distributor Instance Group Instance Security Rollup for the Distributor Instance Group Generic Distributor Availability Rollup for the Distributor Instance Group

### **Generic Publication**

#### **Generic Publication - Dependency (rollup) monitors**

Database Configuration Rollup Database Availability Rollup Database Performance Rollup Database Security Rollup

### **Generic Replication Alerts Scope Group**

The Generic Replication Alerts Scope Group contains SQL Server objects which can raise alerts.

#### **Generic Replication Alerts Scope Group - Discoveries**

Generic Replication Alerts Scope Group Discovery Discovery of Alerts Scope Group

### **Generic Subscription**

Basic collection of common properties.

#### Generic Subscription - Dependency (rollup) monitors

**Database Availability Rollup** 

**Database Configuration Rollup** 

**Database Security Rollup** 

**Database Performance Rollup** 

#### **MSSQL on Windows Replication: Alerts Scope Group**

SQL Server on Windows Replication Alerts Scope Group

#### **MSSQL on Windows Replication: Alerts Scope Group - Discoveries**

MSSQL on Windows Replication: Alerts Scope Group Discovery Discovery of Alerts Scope Group

#### **MSSQL on Windows Replication: Distributor**

SQL Server on Windows Distributor is a SQL Server instance that acts as a store for replication specific data associated with one or more Publishers

#### **MSSQL on Windows Replication: Distributor - Discoveries**

**MSSQL on Windows Replication: Distributor Discovery** 

The object discovery discovers all distributors of an instance of Microsoft SQL Server on Windows.

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.	14400
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

### MSSQL on Windows Replication: Distributor - Unit monitors

Distribution Agents state (aggregated for all Publications)

This monitor checks the state of the Distribution agents for all publications serviced by this Distributor.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Estimated Job Duration	Threshold which is being used to check the job schedule compliance	15
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Show Jobs with Unknown State	Include jobs with unknown state to the monitor output and alert context. Will affect health.	false

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.	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

**Replication Merge Agent State for the Distributor (aggregated for all Subscriptions)** This monitor checks the state of the Merge agents for all Subscriptions on the Distributor.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Estimated Job Duration	Threshold which is being used to check the job schedule compliance	15
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Show Jobs with Unknown State	Include jobs with unknown state to the monitor output and alert context. Will affect health.	false
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.	200

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

#### **Replication Snapshot Agent State for Distributor (aggregated for all Publications)**

This monitor checks the state of the Snapshot Agent services for all Publications on the Distributor.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Estimated Job Duration	Threshold which is being used to check the job schedule compliance	15
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Show Jobs with Unknown State	Include jobs with unknown state to the monitor output and alert context. Will affect health.	false
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.	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

**Replication Queue Reader Agent State for Distributor (aggregated for all Publications)** 

This monitor checks the status of the Queue Reader Agent services for all Publications on the Distributor. 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
Estimated Job Duration	Threshold which is being used to check the job schedule compliance	15
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Show Jobs with Unknown State	Include jobs with unknown state to the monitor output and alert context. Will affect health.	false
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.	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

#### Percent of Expired Subscriptions

Percent of Expired Subscriptions Monitor

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

Error Threshold	Error Threshold	10
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.	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
Warning Threshold	The monitor will change the state to Warning if the value drops below this threshold.	0

#### Unsynchronized Subscriptions on Distributor

This monitor detects unsynchronized subscriptions for specific Distributors. Note that this monitor is disabled for Merge Subscriptions.

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.	12
Per-Subscription threshold	Per-Subscription threshold	0

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.	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
Unhealthy subscriptions count threshold	Unhealthy subscriptions count threshold	0

#### **Replication Log Reader Agent State for the Distributor (aggregated for all Publications)**

This monitor checks the state of the Replication Log Reader for all Publications serviced by the Distributor.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Estimated Job Duration	Threshold which is being used to check the job schedule compliance	15
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Show Jobs with Unknown State	Include jobs with unknown state to the monitor output and alert context. Will affect health.	false
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	200

before being closed and marked as failed.	
The workflow will fail and register an event, if it cannot access the database during the specified period.	15

#### **Replication Agents failed on the Distributor**

This monitor checks if the following Replication agent jobs are in a healthy state: Distribution agent, Merge agent, and Snapshot agent. If any of the agents are in a failed state, the monitor will be triggered.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Failed jobs count threshold	Failed jobs count threshold	1
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Per-Job threshold	Per-Job threshold	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.	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

#### Publication Snapshot Available Space

The monitor reports a warning when the available disk space for the publication Snapshot drops below the Warning Threshold setting. This is indicated as a percentage of the snapshot files

folder size. The monitor reports a critical alert when the available space drops below the Critical Threshold.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Error Threshold	Error Threshold	10
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.	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
Warning Threshold	Warning Threshold	20

### **Percent of Deactivated Subscriptions**

Percent of Deactivated Subscriptions Monitor

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Error Threshold	Error Threshold	10
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.	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
Warning Threshold	The monitor will change the state to Warning if the value drops below this threshold.	0

### **Distributor Securables Configuration Status**

This monitor checks the status of Replication Distributor securables access configuration on Windows.

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.	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.	300

## Pending Commands on Distributor

There are pending commands on the Distributor waiting for delivery. Note that this monitor is disabled for Merge Subscriptions.

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	Threshold	5
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

## Availability of the Distribution database

This monitor checks the availability of the Distribution database from the Distributor.

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

### One or more of the Replication Agents are retrying on the Distributor

This monitor checks if any of the following Replication Agents are retrying an operation: Distribution Agent, Log Reader Agent, Merge Agent, Queue Reader Agent or Snapshot Agent.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Failed jobs count threshold	Failed jobs count threshold	1
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Per-Job threshold	Per-Job threshold	3
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.	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

## Total daily execution time of the replication agent

This monitors the total daily execution time of the replication agents, Distribution, Log Reader, Merge, Queue Reader and Snapshot on the Distributor.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Error Threshold	Error Threshold	4
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Measurement Period (hours)	Period of time used for measurement (hours)	24
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.	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
Warning Threshold	The monitor will change the state to Warning if the value drops below this threshold.	3

### Availability of the Distribution database from a Subscriber

This monitor checks availability of the Distribution database from the Subscriber.

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

CredSsp Enabled	Indicates that CredSsp is enabled prior to running this workflow. Will leave it enabled after the run	true
Database Names	List of names for databases that should be checked, delimited by ',' symbol	
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Port	Port of wsman service	5985
Prefix	Name of the wsman service	wsman
Subscriber Names	List of names of subscribers that should be used as a check source, delimited by ' ' symbol	
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.	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
Transport	Prefix of the protocol to access the wsman service	http

# SQL Server Agent State for Distributor

This monitor checks if the SQL Server Agent is running on Distributor.

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.	600
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

# MSSQL on Windows Replication: Distributor - Dependency (rollup) monitors

MSSQL on Windows Replication: Database Performance Rollup

This monitor rolls up the performance state from Database to Microsoft SQL Server on Windows Replication

# **MSSQL on Windows Replication: Distributor - Rules (alerting)**

MSSQL on Windows Replication: The Maintenance Job(s) Failed on Distributor Alert Rule The Maintenance Job(s) Failed on Distributor Alert Rule

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	Yes
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Priority	Defines Alert Priority.	2
Severity	Defines Alert Severity.	2
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.	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

# **MSSQL** on Windows Replication: Distributor - Rules (non-alerting)

**MSSQL on Windows Replication: Count of the Distribution Agent Instances for the Distributor** Count of the Distribution Agent Instances for the Distributor

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.	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

MSSQL on Windows Replication: Count of the Merge Agent Instances for the Distributor
Count of the Merge Agent Instances for the Distributor.

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.	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

### MSSQL on Windows Replication: Log Reader Agent: Delivered Transactions per Second The number of transactions per second delivered to the Distributor.

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.	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

## MSSQL on Windows Replication: Merge Agent: Download Changes per Second

The number of rows per second replicated from the Publisher to the Subscriber (aggregated for Distributor).

Name	Description	Default value
	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.	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

**MSSQL** on Windows Replication: Count of the Log Reader Agent Instances for the Distributor Count of the Log Reader Agent Instances for the Distributor.

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.	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

### MSSQL on Windows Replication: Log Reader Agent: Delivered Commands per Second The number of commands per second delivered to the Distributor.

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.	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

# MSSQL on Windows Replication: Count of Failed Replication Agents Jobs on the Distributor

This rule collects the following failed Replication agent jobs: Merge, Distribution and Snapshot agents.

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.	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.	200
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot	15

access the database during the	
specified period.	

## MSSQL on Windows Replication: Snapshot Agent: Delivered Transactions per Second The number of transactions per second delivered to the Distributor.

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.	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

# MSSQL on Windows Replication: Distribution Agent: Delivered Commands per Second

The number of commands per second delivered to the Subscriber.

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.	300

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

**MSSQL** on Windows Replication: Count of Pending Commands in the Distribution Database Count of commands in the Distribution database pending replication.

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.	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.	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

# MSSQL on Windows Replication: Replication Snapshot Available Space (%)

The amount of space left on media hosting a Replication Snapshot.

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.	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

MSSQL on Windows Replication: Count of the Snapshot Agents Instances for the Distributor	
Count of the Snapshot Agent Instances for the Distributor.	

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.	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

## MSSQL on Windows Replication: Log Reader Agent: Delivery Latency

The current amount of time (in milliseconds) elapsed from when transactions are applied at the Publisher to when they are delivered to the Distributor.

Name	Description	Default value
	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.	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

MSSQL on Windows Replication: Snapshot Agent: Delivered Commands per Second The number of commands per second delivered to the Distributor.

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.	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

### MSSQL on Windows Replication: Distribution Agent: Delivery Latency

The current amount of time (in milliseconds) elapsed from when transactions are delivered to the Distributor to when they are applied at the Subscriber.

Name Description Default value	
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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.	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

## MSSQL on Windows Replication: Merge Agent: Conflicts per Second

The number of conflicts per second occurring during the merge process.

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.	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

**MSSQL on Windows Replication: Merge Agent: Uploaded Changes per Second** The number of rows per second replicated from the Subscriber to the Publisher.

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.	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

# MSSQL on Windows Replication: Deactivated Subscriptions (%)

The percentage of Deactivated Subscriptions for the Distributor

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.	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.	200
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot	15

access the database during the specified period.	
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## MSSQL on Windows Replication: Expired Subscriptions (%)

The Percentage of Expired Subscriptions for the Distributor

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.	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.	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

# MSSQL on Windows Replication: Count of Publications for the Distributor

Count of Publications for the Distributor.

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.	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

## MSSQL on Windows Replication: Distribution Agent: Delivered Transactions per Second The number of transactions per second delivered to the Subscriber.

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.	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

### **MSSQL** on Windows Replication: Count of Subscriptions for the Distributor Count of Subscriptions for the Distributor.

Name	Description	Default value
	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.	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

### **MSSQL** on Windows Replication: Count of the Queue Reader Instances for the Distributor Count of the Queue Reader Instances for the Distributor.

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.	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

MSSQL on Windows Replication: Count of Unsynchronized Subscriptions for the Distributor

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.	300
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Threshold	Threshold	0
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

Count of unsynchronized subscriptions for the Distributor

# **MSSQL on Windows Replication: Group**

A group containing all SQL Server on Windows Replication components

# **MSSQL on Windows Replication: Group - Discoveries**

MSSQL on Windows Replication: Populate SQL Server on Windows Replication Group

This discovery rule populates the SQL Server on Windows Replication group with all SQL Server on Windows Replication components.

# MSSQL on Windows Replication: Monitoring Pool Alert Collection

MSSQL Replication Monitoring Pool Alert Collection on Windows. This object is used to collect Windows module errors and warnings from event log of nodes that are the members of the SQL Server Monitoring Pool.

# MSSQL on Windows Replication: Monitoring Pool Alert Collection -Discoveries

### **MSSQL** on Windows Replication: Discover Monitoring Pool Alert Collections

This rule discovers a Monitoring Pool Alert Collection for a MSSQL on Windows Replication. This object is used to collect module errors and warnings from event log of nodes that are the members of the SQL Server Monitoring Pool.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	

#### **MSSQL on Windows Replication: Discover Local Alert Collections**

This rule discovers a Local Alert Collection for a MSSQL on Windows Replication. This object is used to collect module errors and warnings from event log of SCOM agents that monitor Local SQL Server DB Engine instances.

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.	14400
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

# MSSQL on Windows Replication: Monitoring Pool Alert Collection - Rules (alerting)

**MSSQL on Windows Replication: Discovery warning** 

The rule traces discovery workflows warnings and generates error alerts.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	Yes
Priority	Defines Alert Priority.	1
Severity	Defines Alert Severity.	1

### MSSQL on Windows Replication: Discovery error

The rule traces discovery workflows errors and generates error alerts.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	Yes
Priority	Defines Alert Priority.	1
Severity	Defines Alert Severity.	2

## MSSQL on Windows Replication: Monitoring Warning

The rule traces monitoring workflows warnings and generates error alerts.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	Yes
Priority	Defines Alert Priority.	1
Severity	Defines Alert Severity.	1

## MSSQL on Windows Replication: Monitoring Error

The rule traces monitoring workflows errors and generates error alerts.

Name	Description	Default value
	Enables or disables the workflow.	Yes

Generate Alerts	Defines whether the workflow generates an Alert.	Yes
Priority	Defines Alert Priority.	1
Severity	Defines Alert Severity.	2

# **MSSQL** on Windows Replication: Publication

A publication is a collection of one or more articles from one database. The grouping of multiple articles into a publication makes it easier to specify a logically related set of database data and objects that are replicated as a unit.

# **MSSQL on Windows Replication: Publication - Discoveries**

**MSSQL** on Windows Replication: Publication Discovery

The object discovery discovers all publications of a Publisher of Microsoft SQL Server on Windows

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.	14400
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

# **MSSQL on Windows Replication: Publication - Unit monitors**

**Replication Snapshot Agent State** 

This monitor checks the status of the Replication Snapshot Agent service for Publications.

Name	Description	Default value
	-	

Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Estimated Job Duration	Threshold which is being used to check the job schedule compliance	15
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Show Jobs with Unknown State	Include jobs with unknown state to the monitor output and alert context. Will affect health.	false
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.	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

# Replication Log Reader Agent State for Publication

This monitor checks the status of the Replication Log Reader Agent service for Publications.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Estimated Job Duration	Threshold which is being used to check the job schedule compliance	15

Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Show Jobs with Unknown State	Include jobs with unknown state to the monitor output and alert context. Will affect health.	false
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.	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

# All Subscriptions are Synchronizing for Publication All Subscriptions are Synchronizing

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.	200

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

# **MSSQL on Windows Replication: Publisher**

SQL Server on Windows Publisher is a SQL on Windows instance that makes data available to other locations through replication.

## **MSSQL** on Windows Replication: Publisher - Discoveries

MSSQL on Windows Replication: Publisher Discovery

The object discovery discovers Publishers of an instance of Microsoft SQL Server on Windows.

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.	14400
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

# MSSQL on Windows Replication: Publisher - Unit monitors

### **SQL Server Agent State for Publisher**

This monitor checks if the SQL Server Agent is running on Publisher.

Name	Description	Default value
	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.	600
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

## Subscriptions state for Publisher

This monitor checks whether there are any inactive subscriptions for any publications.

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.	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.	300
Timeout for database connection (seconds)	The workflow will fail and register an event, if it cannot	15

access the database during the	
specified period.	

## **Publisher Securables Configuration Status**

This monitor checks the status of Replication Publisher securables access configuration on Windows.

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.	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.	300

# **MSSQL on Windows Replication: Publisher - Rules (non-alerting)**

**MSSQL on Windows Replication: Count of Publications for the Publisher** Count of Publications for the Publisher.

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.	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

# **MSSQL** on Windows Replication: Subscriber

SQL Server on Windows Subscriber is a SQL on Windows instance that receives replicated data. **MSSQL on Windows Replication: Subscriber - Discoveries** 

MSSQL on Windows Replication: Subscriber Discovery

The object discovery discovers Subscribers of an instance of Microsoft SQL Server on Windows.

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.	14400
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

# **MSSQL on Windows Replication: Subscriber - Unit monitors**

Load of Replication agents on Subscriber

Replication agents (Distribution and Merge) load on Subscriber. Note that SQL Server Agent is not available for SQL Server Express Editions; therefore, this monitor is disabled for instances of such editions.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Error Threshold	Error Threshold	4
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Measurement Period (hours)	Period of time used for measurement (hours)	24
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.	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
Warning Threshold	The monitor will change the state to Warning if the value drops below this threshold.	3

### Subscriber Agent is Retrying

The Subscriber Agent (Distribution, Log Reader, Merge, Queue Reader and Snapshot) is Retrying Monitor. Note that SQL Server Agent Windows Service is not supported by any edition of SQL Server Express. Therefore, this monitor is not applicable for SQL Server Express cases.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Failed jobs count threshold	Failed jobs count threshold	1

Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Per-Job threshold	Per-Job threshold	3
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.	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

## SQL Server Agent State for Subscriber

This monitor checks if the SQL Server Agent is running on Subscriber. Note that SQL Server Agent Windows Service is not supported by any edition of SQL Server Express. Therefore, this monitor is not applicable for SQL Server Express cases.

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.	600
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	15

access the database during the specified period.	
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## **Subscriber Securables Configuration Status**

This monitor checks the status of Replication Subscriber securables access configuration on Windows.

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.	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.	300

# MSSQL on Windows Replication: Subscriber - Rules (non-alerting)

**MSSQL** on Windows Replication: Count of the Failed Replication Jobs for the Subscriber Count of the Failed Replication Jobs for the Subscriber

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.	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.	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

## MSSQL on Windows Replication: Count of Subscriptions for the Subscriber

Count of Subscriptions for the Subscriber.

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.	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

# **MSSQL** on Windows Replication: Subscription

SQL Server on Windows Subscription is a request for a copy of a publication to be delivered to a Subscriber.

# **MSSQL** on Windows Replication: Subscription - Discoveries

MSSQL on Windows Replication: Subscription Discovery

The object discovery discovers all subscriptions of a Subscriber of Microsoft SQL Server on Windows.

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.	14400
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

# **MSSQL** on Windows Replication: Subscription - Unit monitors

### **Replication Merge Agent State for Subscription**

This monitor checks the status of the Replication Merge Agent service for Subscription. Note that SQL Server Agent Windows Service is not supported by any edition of SQL Server Express. Therefore, this monitor is not applicable for SQL Server Express cases.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Estimated Job Duration	Threshold which is being used to check the job schedule compliance	15
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300

Show Jobs with Unknown State	Include jobs with unknown state to the monitor output and alert context. Will affect health.	false
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.	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

## Subscription Pending Commands

There are pending commands on the Distributor for specific Subscription waiting delivery. Note that this monitor is disabled for Merge Subscriptions.

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	Threshold	20
Timeout (seconds)	Specifies the time the workflow is allowed to run	200

	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.	15

#### **Distribution Agent State for Subscription**

This monitor checks the status of the Replication Distribution Agent services for Subscription. Note that SQL Server Agent Windows Service is not supported by any edition of SQL Server Express. Therefore, this monitor is not applicable for SQL Server Express cases.

Name	Description	Default value
Enabled	Enables or disables the workflow.	Yes
Generate Alerts	Defines whether the workflow generates an Alert.	True
Estimated Job Duration	Threshold which is being used to check the job schedule compliance	15
Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	300
Show Jobs with Unknown State	Include jobs with unknown state to the monitor output and alert context. Will affect health.	false
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.	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

#### Subscription latency

This monitor checks the latency for commands in the Distribution database waiting to be delivered to the Subscribers. Note that this monitor is disabled for Merge Subscriptions.

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.	
Threshold	Threshold	60
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

## **MSSQL** on Windows Replication: Subscription - Rules (non-alerting)

**MSSQL on Windows Replication: Count of Pending Commands** 

Count of commands pending replication in distribution database for the Subscription. Note that this rule is disabled for Merge Subscriptions.

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.	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.	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

# **MSSQL: Generic Replication Alerts Scope Group**

SQL Server Replication Alerts Scope Group contains SQL Server objects which can throw alerts.

## **MSSQL: Generic Replication Alerts Scope Group - Discoveries**

MSSQL: Replication Alerts Scope Group Discovery Discovery of Alerts Scope Group

# **MSSQL: Generic Replication Alerts Scope Group**

The Generic Replication Alerts Scope Group contains SQL Server objects which can raise alerts.

## **MSSQL: Generic Replication Alerts Scope Group - Discoveries**

MSSQL: Replication Alerts Scope Group Discovery Discovery of Alerts Scope Group

# **MSSQL: Generic Replication Database Health**

This class is a dynamic application used to group Publishers, distributors and Subscribers which are linked with a single Publisher database.

## **MSSQL: Generic Replication Database Health - Discoveries**

**MSSQL: Generic Replication Database Health Discovery** 

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400

Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

# MSSQL: Generic Replication Database Health - Dependency (rollup) monitors

Virtual Distributor Configuration Rollup Virtual Distributor Configuration Rollup

Virtual Distributor Performance Rollup Virtual Distributor Performance Rollup

Virtual Publisher Availability Rollup Virtual Publisher Availability Rollup

Virtual Publisher Configuration Rollup Virtual Publisher Configuration Rollup

Virtual Distributor Availability Rollup Virtual Distributor Availability Rollup

Virtual Publisher Performance Rollup Virtual Publisher Performance Rollup

Virtual Subscriber Host Availability Rollup Virtual Subscriber Host Availability Rollup

Virtual Publisher Security Rollup Virtual Publisher Security Rollup

Virtual Subscriber Host Security Rollup Virtual Subscriber Host Security Rollup

Virtual Distributor Security Rollup Virtual Distributor Security Rollup Virtual Subscriber Host Performance Rollup Virtual Subscriber Host Performance Rollup

Virtual Subscriber Host Configuration Rollup Virtual Subscriber Host Configuration Rollup

# **MSSQL: Generic Replication Distributor Group**

A Distributor Group is a group of Distributors. **MSSQL: Generic Replication Distributor Group - Discoveries MSSQL: Generic Replication Distributor Group Memberships Discovery** The Discovery of Memberships in a Distributor Group

# MSSQL: Generic Replication Distributor Group - Dependency (rollup) monitors

Generic Distributor Performance Rollup for the Distributor Group Generic Distributor Performance Rollup for the Distributor Group

Generic Distributor Configuration Rollup for the Distributor Group Generic Distributor Configuration Rollup for the Distributor Group

Generic Distributor Availability Rollup for the Distributor Group Generic Distributor Availability Rollup for the Distributor Group

Generic Distributor Security Rollup for the Distributor Group Generic Distributor Security Rollup for the Distributor Group

# **MSSQL:** Generic Replication Distributor Instances Group

Distributor Instances Group is a group that contains all SQL Server instances with a Distributor. **MSSQL: Generic Replication Distributor Instances Group - Dependency** (rollup) monitors

**Instance Configuration Rollup for the Distributor Instance Group** Instance Configuration Rollup for the Distributor Instance Group

Instance Availability Rollup for the Distributor Instance Group Instance Availability Rollup for the Distributor Instance Group

Instance Security Rollup for the Distributor Instance Group Instance Security Rollup for the Distributor Instance Group Generic Distributor Configuration Rollup for the Distributor Instance Group Generic Distributor Configuration Rollup for the Distributor Instance Group

Instance Performance Rollup for the Distributor Instance Group Instance Performance Rollup for the Distributor Instance Group

Generic Distributor Performance Rollup for the Distributor Instance Group Generic Distributor Performance Rollup for the Distributor Instance Group

Generic Distributor Availability Rollup for the Distributor Instance Group Generic Distributor Availability Rollup for the Distributor Instance Group

Generic Distributor Security Rollup for the Distributor Instance Group Generic Distributor Security Rollup for the Distributor Instance Group

## **MSSQL: Generic Replication Flow Group**

This group is a collection of Publishers, distributors and Subscribers. It contains all objects related to the replication which can be found in the System Center Operations Manager database.

#### **MSSQL: Generic Replication Flow Group - Discoveries**

MSSQL: Generic Replication Flow Group Discovery Discovery of Memberships in a Replication Flow Group

#### MSSQL: Generic Replication Flow Group - Dependency (rollup) monitors

**Distributor Group Availability Rollup for the Replication Flow Group** Distributor Group Availability Rollup for the Replication Flow Group

Subscriber Group Availability Rollup for the Replication Flow Group Subscriber Group Availability Rollup for the Replication Flow Group

Publisher Group Configuration Rollup for the Replication Flow Group Publisher Group Configuration Rollup for the Replication Flow Group

Publisher Group Availability Rollup for the Replication Flow Group Publisher Group Availability Rollup for the Replication Flow Group

Publisher Instance Group Availability Rollup for the Replication Flow Group Publisher Instance Group Availability Rollup for the Replication Flow Group

Subscriber Group Configuration Rollup for the Replication Flow Group Subscriber Group Configuration Rollup for the Replication Flow Group **Distributor Instance Group Availability Rollup for the Replication Flow Group** Distributor Instance Group Availability Rollup for the Replication Flow Group

**Distributor Instance Group Security Rollup for the Replication Flow Group** Distributor Instance Group Security Rollup for the Replication Flow Group

Subscriber Instance Group Configuration Rollup for the Replication Flow Group Subscriber Instance Group Configuration Rollup for the Replication Flow Group

**Distributor Group Performance Rollup for the Replication Flow Group** Distributor Group Performance Rollup for the Replication Flow Group

Subscriber Instance Group Availability Rollup for the Replication Flow Group Subscriber Instance Group Availability Rollup for the Replication Flow Group

Subscriber Group Security Rollup for the Replication Flow Group Subscriber Group Security Rollup for the Replication Flow Group

**Distributor Instance Group Configuration Rollup for the Replication Flow Group** Distributor Instance Group Configuration Rollup for the Replication Flow Group

Subscriber Instance Group Security Rollup for the Replication Flow Group Subscriber Instance Group Security Rollup for the Replication Flow Group

Publisher Instance Group Security Rollup for the Replication Flow Group Publisher Instance Group Security Rollup for the Replication Flow Group

**Distributor Group Configuration Rollup for the Replication Flow Group** Distributor Group Configuration Rollup for the Replication Flow Group

Subscriber Instance Group Performance Rollup for the Replication Flow Group Subscriber Instance Group Performance Rollup for the Replication Flow Group

Subscriber Group Performance Rollup for the Replication Flow Group Subscriber Group Performance Rollup for the Replication Flow Group

Publisher Instance Group Configuration Rollup for the Replication Flow Group Publisher Instance Group Configuration Rollup for the Replication Flow Group

**Distributor Instance Group Performance Rollup for the Replication Flow Group** Distributor Instance Group Performance Rollup for the Replication Flow Group Publisher Group Security Rollup for the Replication Flow Group Publisher Group Security Rollup for the Replication Flow Group

Publisher Instance Group Performance Rollup for the Replication Flow Group Publisher Instance Group Performance Rollup for the Replication Flow Group

**Distributor Group Security Rollup for the Replication Flow Group** Distributor Group Security Rollup for the Replication Flow Group

Publisher Group Performance Rollup for the Replication Flow Group Publisher Group Performance Rollup for the Replication Flow Group

# **MSSQL: Generic Replication Publication**

Generic Publication. **MSSQL: Generic Replication Publication - Dependency (rollup) monitors Database Availability Rollup** Database Availability Rollup

Database Performance Rollup Database Performance Rollup

Database Configuration Rollup Database Configuration Rollup

Database Security Rollup Database Security Rollup

## **MSSQL:** Generic Replication Publisher Group

A Publisher Group is a group of Publishers. **MSSQL: Generic Replication Publisher Group - Discoveries MSSQL: Generic Replication Publisher Group Memberships Discovery** The Discovery of Memberships in a Publisher Groups

# MSSQL: Generic Replication Publisher Group - Dependency (rollup) monitors

Generic Publisher Availability Rollup for the Publisher Group Generic Publisher Availability Rollup for the Publisher Group

**Generic Publisher Security Rollup for the Publisher Group** 

Generic Publisher Security Rollup for the Publisher Group

Generic Publisher Performance Rollup for the Publisher Group Generic Publisher Performance Rollup for the Publisher Group

Generic Publisher Configuration Rollup for the Publisher Group Generic Publisher Configuration Rollup for the Publisher Group

## **MSSQL:** Generic Replication Publisher Instances Group

A Publisher Instances Group is a group that contains all SQL Server Instances with Publishers. MSSQL: Generic Replication Publisher Instances Group - Dependency (rollup) monitors

Instance Configuration Rollup for the Publisher Instance Group Instance Configuration Rollup for the Publisher Instance Group

**Instance Performance Rollup for the Publisher Instance Group** Instance Performance Rollup for the Publisher Instance Group

Instance Security Rollup for the Publisher Instance Group Instance Security Rollup for the Publisher Instance Group

Instance Availability Rollup for the Publisher Instance Group Instance Availability Rollup for the Publisher Instance Group

Generic Publisher Performance Rollup for the Publisher Instance Group Generic Publisher Performance Rollup for the Publisher Instance Group

Generic Publisher Availability Rollup for the Publisher Instance Group Generic Publisher Availability Rollup for the Publisher Instance Group

Generic Publisher Configuration Rollup for the Publisher Instance Group Generic Publisher Configuration Rollup for the Publisher Instance Group

Generic Publisher Security Rollup for the Publisher Instance Group Generic Publisher Security Rollup for the Publisher Instance Group

# **MSSQL: Generic Replication Seed**

An installation of Microsoft SQL Server Replication Seed. MSSQL: Generic Replication Seed - Discoveries MSSQL on Windows Replication: Discover SQL Server on Windows Replication (seed) This discovery rule discovers a seed for a Microsoft SQL Server on Windows Replication Database Health. This object indicates that the particular server computer contains an installation of Microsoft SQL Server on Windows with Replication Distributor configured.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	

## **MSSQL: Generic Replication Subscriber Group**

Subscriber Group is a group that contain all Subscribers. **MSSQL: Generic Replication Subscriber Group - Discoveries MSSQL: Generic Replication Subscriber Group Memberships Discovery** Discovery of Memberships in a Subscriber Group

# MSSQL: Generic Replication Subscriber Group - Dependency (rollup) monitors

Generic Subscriber Security Rollup for the Subscriber Group Generic Subscriber Security Rollup for the Subscriber Group

Generic Subscriber Availability Rollup for the Subscriber Group Generic Subscriber Availability Rollup for the Subscriber Group

Generic Subscriber Performance Rollup for the Subscriber Group Generic Subscriber Performance Rollup for the Subscriber Group

Generic Subscriber Configuration Rollup for the Subscriber Group Generic Subscriber Configuration Rollup for the Subscriber Group

# **MSSQL: Generic Replication Subscriber Instances Group**

Subscriber Instances Group is a group that contains all SQL Server Instances with Subscribers. MSSQL: Generic Replication Subscriber Instances Group - Dependency (rollup) monitors

Instance Availability Rollup for the Subscriber Instance Group

Instance Availability Rollup for the Subscriber Instance Group

Generic Subscriber Availability Rollup for the Subscriber Instance Group Generic Subscriber Availability Rollup for the Subscriber Instance Group

**Instance Configuration Rollup for the Subscriber Instance Group** Instance Configuration Rollup for the Subscriber Instance Group

Generic Subscriber Performance Rollup for the Subscriber Instance Group Generic Subscriber Performance Rollup for the Subscriber Instance Group

Instance Performance Rollup for the Subscriber Instance Group Instance Performance Rollup for the Subscriber Instance Group

Generic Subscriber Security Rollup for the Subscriber Instance Group Generic Subscriber Security Rollup for the Subscriber Instance Group

Generic Subscriber Configuration Rollup for the Subscriber Instance Group Generic Subscriber Configuration Rollup for the Subscriber Instance Group

Instance Security Rollup for the Subscriber Instance Group Instance Security Rollup for the Subscriber Instance Group

## **MSSQL:** Generic Replication Subscription

Generic Subscription. **MSSQL: Generic Replication Subscription - Dependency (rollup) monitors Database Security Rollup** Database Security Rollup

Database Configuration Rollup Database Configuration Rollup

Database Performance Rollup Database Performance Rollup

Database Availability Rollup Database Availability Rollup

# **MSSQL:** Generic Replication Virtual Alerts Scope Group

The Virtual Replication Alerts Scope Group contains Virtual Replication objects which can raise alerts.

# **MSSQL: Generic Replication Virtual Alerts Scope Group - Discoveries**

MSSQL: Replication Replication Virtual Alerts Scope Group Discovery Discovery of Virtual Alerts Scope Group

# **MSSQL:** Generic Replication Virtual Distributor

Virtual Distributor.

#### **MSSQL: Generic Replication Virtual Distributor - Discoveries**

MSSQL: Generic Replication Database Health Discovery

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

## **MSSQL: Generic Replication Virtual Distributor - Unit monitors**

All Publishers Discovered for Distributor

This monitor checks that all Publishers are discovered for the Distributor.

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.	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

# MSSQL: Generic Replication Virtual Distributor - Dependency (rollup) monitors

Generic Distributor Configuration Rollup Generic Distributor Configuration Rollup

Generic Distributor Security Rollup Generic Distributor Security Rollup

Generic Distributor Availability Rollup Generic Distributor Availability Rollup

Database Configuration Rollup Database Configuration Rollup

Database Security Rollup Database Security Rollup

Database Availability Rollup Database Availability Rollup

System Entity Security Rollup System Entity Security Rollup

System Entity Performance Rollup System Entity Performance Rollup

System Entity Availability Rollup System Entity Availability Rollup

#### Database Performance Rollup Database Performance Rollup

Generic Distributor Performance Rollup Generic Distributor Performance Rollup

System Entity Configuration Rollup System Entity Configuration Rollup

# **MSSQL: Generic Replication Virtual Publication Host**

Virtual Publication host.

## **MSSQL: Generic Replication Virtual Publication Host - Discoveries**

**MSSQL:** Generic Replication Database Health Discovery

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

# MSSQL: Generic Replication Virtual Publication Host - Dependency (rollup) monitors

Generic Publication Performance Rollup Generic Publication Performance Rollup

Generic Publication Configuration Rollup Generic Publication Configuration Rollup

#### Generic Publication Security Rollup Generic Publication Security Rollup

**Generic Publication Availability Rollup** Generic Publication Availability Rollup

# **MSSQL:** Generic Replication Virtual Publisher

Virtual Publisher.

## **MSSQL: Generic Replication Virtual Publisher - Discoveries**

**MSSQL: Generic Replication Database Health Discovery** 

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

# MSSQL: Generic Replication Virtual Publisher - Dependency (rollup) monitors

Generic Publication Configuration Rollup Generic Publication Configuration Rollup

Database Performance Rollup Database Performance Rollup

Generic Publication Performance Rollup Generic Publication Performance Rollup Virtual Publication Host Performance Rollup Virtual Publication Host Performance Rollup

Virtual Publication Host Configuration Rollup Virtual Publication Host Configuration Rollup

Virtual Publication Host Security Rollup Virtual Publication Host Security Rollup

Generic Publisher Availability Rollup Generic Publisher Availability Rollup

System Entity Security Rollup System Entity Security Rollup

Database Security Rollup Database Security Rollup

Database Availability Rollup Database Availability Rollup

System Entity Availability Rollup System Entity Availability Rollup

Generic Publication Security Rollup Generic Publication Security Rollup

Database Configuration Rollup Database Configuration Rollup

Generic Publisher Configuration Rollup Generic Publisher Configuration Rollup

System Entity Configuration Rollup System Entity Configuration Rollup

System Entity Performance Rollup System Entity Performance Rollup

Generic Publisher Security Rollup Generic Publisher Security Rollup Virtual Publication Host Availability Rollup Virtual Publication Host Availability Rollup

Generic Publisher Performance Rollup Generic Publisher Performance Rollup

Generic Publication Availability Rollup Generic Publication Availability Rollup

# **MSSQL:** Generic Replication Virtual Subscriber

Virtual Subscriber.

#### **MSSQL: Generic Replication Virtual Subscriber - Discoveries**

**MSSQL: Generic Replication Database Health Discovery** 

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

# MSSQL: Generic Replication Virtual Subscriber - Dependency (rollup) monitors

System Entity Security Rollup System Entity Security Rollup

System Entity Configuration Rollup System Entity Configuration Rollup System Entity Availability Rollup System Entity Availability Rollup

Generic Subscriber Security Rollup Generic Subscriber Security Rollup

Virtual Subscription Security Rollup Virtual Subscription Security Rollup

System Entity Performance Rollup System Entity Performance Rollup

Generic Subscriber Performance Rollup Generic Subscriber Performance Rollup

Generic Subscriber Configuration Rollup Generic Subscriber Configuration Rollup

Generic Subscriber Availability Rollup Generic Subscriber Availability Rollup

Virtual Subscription Availability Rollup Virtual Subscription Availability Rollup

Virtual Subscription Configuration Rollup Virtual Subscription Configuration Rollup

Virtual Subscription Performance Rollup Virtual Subscription Performance Rollup

# **MSSQL: Generic Replication Virtual Subscriber Host**

Virtual Subscriber host.

#### **MSSQL:** Generic Replication Virtual Subscriber Host - Discoveries

**MSSQL: Generic Replication Database Health Discovery** 

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

Name	Description	Default value
	Enables or disables the workflow.	Yes

Interval (seconds)	The recurring interval of time in seconds in which to run the workflow.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

# MSSQL: Generic Replication Virtual Subscriber Host - Dependency (rollup) monitors

Virtual Subscriber Availability Rollup Virtual Subscriber Availability Rollup

Virtual Subscriber Configuration Rollup Virtual Subscriber Configuration Rollup

Virtual Subscriber Performance Rollup Virtual Subscriber Performance Rollup

Virtual Subscriber Security Rollup

Virtual Subscriber Security Rollup

# **MSSQL:** Generic Replication Virtual Subscription

Virtual Subscription.

# **MSSQL:** Generic Replication Virtual Subscription - Discoveries

**MSSQL:** Generic Replication Database Health Discovery

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400

Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

# MSSQL: Generic Replication Virtual Subscription - Dependency (rollup) monitors

Generic Subscription Security Rollup Generic Subscription Security Rollup

Generic Subscription Configuration Rollup Generic Subscription Configuration Rollup

Generic Subscription Performance Rollup Generic Subscription Performance Rollup

Generic Subscription Availability Rollup Generic Subscription Availability Rollup

# **Publisher Group**

A Publisher Group is a group of Publishers

#### **Publisher Group - Discoveries**

Publisher Group Memberships Discovery The Discovery of Memberships in a Publisher Groups

## Publisher Group - Dependency (rollup) monitors

Generic Publisher Security Rollup for the Publisher Group Generic Publisher Security Rollup for the Publisher Group

Generic Publisher Availability Rollup for the Publisher Group Generic Publisher Availability Rollup for the Publisher Group

Generic Publisher Performance Rollup for the Publisher Group Generic Publisher Performance Rollup for the Publisher Group Generic Publisher Configuration Rollup for the Publisher Group Generic Publisher Configuration Rollup for the Publisher Group

# **Publisher Instances Group**

A Publisher Instances Group is a group that contains all SQL Server Instances with Publishers **Publisher Instances Group - Dependency (rollup) monitors** Generic Publisher Configuration Rollup for the Publisher Instance Group Generic Publisher Configuration Rollup for the Publisher Instance Group

Instance Performance Rollup for the Publisher Instance Group Instance Performance Rollup for the Publisher Instance Group

Instance Security Rollup for the Publisher Instance Group Instance Security Rollup for the Publisher Instance Group

Generic Publisher Performance Rollup for the Publisher Instance Group Generic Publisher Performance Rollup for the Publisher Instance Group

Instance Availability Rollup for the Publisher Instance Group Instance Availability Rollup for the Publisher Instance Group

Generic Publisher Security Rollup for the Publisher Instance Group Generic Publisher Security Rollup for the Publisher Instance Group

Generic Publisher Availability Rollup for the Publisher Instance Group Generic Publisher Availability Rollup for the Publisher Instance Group

**Instance Configuration Rollup for the Publisher Instance Group** Instance Configuration Rollup for the Publisher Instance Group

# **Replication Database Health**

This class is a dynamic application used to group Publishers, Distributors and Subscribers, which are linked with a single Publisher database.

#### **Replication Database Health - Discoveries**

**Replication Database Health Discovery** 

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

## **Replication Database Health - Dependency (rollup) monitors**

Virtual Subscriber Host Availability Rollup Virtual Subscriber Host Availability Rollup

Virtual Publisher Configuration Rollup Virtual Publisher Configuration Rollup

Virtual Publisher Availability Rollup Virtual Publisher Availability Rollup

Virtual Distributor Availability Rollup Virtual Distributor Availability Rollup

Virtual Publisher Performance Rollup Virtual Publisher Performance Rollup

Virtual Publisher Security Rollup Virtual Publisher Security Rollup

Virtual Subscriber Host Configuration Rollup Virtual Subscriber Host Configuration Rollup

Virtual Distributor Security Rollup Virtual Distributor Security Rollup

Virtual Subscriber Host Performance Rollup Virtual Subscriber Host Performance Rollup Virtual Distributor Performance Rollup Virtual Distributor Performance Rollup

Virtual Distributor Configuration Rollup Virtual Distributor Configuration Rollup

Virtual Subscriber Host Security Rollup Virtual Subscriber Host Security Rollup

## **Replication Database Health Group**

Replication Database Health Group is group of Replication Database Health objects

**Replication Database Health Group - Discoveries** 

**Replication Library Database Health Group Memberships Discovery** Discovery of Memberships of Replication Library Database Health Group

# **Replication Flow Group**

This group is a collection of Publishers, Distributors and Subscribers. It contains all objects related to the replication which can be found in the System Center Operations Manager database.

#### **Replication Flow Group - Discoveries**

**Replication Flow Group Discovery** Discovery of Memberships in a Replication Flow Group

#### **Replication Flow Group - Dependency (rollup) monitors**

Subscriber Instance Group Availability Rollup for the Replication Flow Group Subscriber Instance Group Availability Rollup for the Replication Flow Group

Subscriber Group Availability Rollup for the Replication Flow Group Subscriber Group Availability Rollup for the Replication Flow Group

**Distributor Group Availability Rollup for the Replication Flow Group** Distributor Group Availability Rollup for the Replication Flow Group

Publisher Group Performance Rollup for the Replication Flow Group Publisher Group Performance Rollup for the Replication Flow Group

**Distributor Group Configuration Rollup for the Replication Flow Group** Distributor Group Configuration Rollup for the Replication Flow Group

Distributor Instance Group Security Rollup for the Replication Flow Group

Distributor Instance Group Security Rollup for the Replication Flow Group

**Distributor Instance Group Availability Rollup for the Replication Flow Group** Distributor Instance Group Availability Rollup for the Replication Flow Group

Publisher Instance Group Performance Rollup for the Replication Flow Group Publisher Instance Group Performance Rollup for the Replication Flow Group

Subscriber Group Performance Rollup for the Replication Flow Group Subscriber Group Performance Rollup for the Replication Flow Group

Publisher Instance Group Availability Rollup for the Replication Flow Group Publisher Instance Group Availability Rollup for the Replication Flow Group

Subscriber Group Security Rollup for the Replication Flow Group Subscriber Group Security Rollup for the Replication Flow Group

Subscriber Instance Group Configuration Rollup for the Replication Flow Group Subscriber Instance Group Configuration Rollup for the Replication Flow Group

Publisher Group Availability Rollup for the Replication Flow Group Publisher Group Availability Rollup for the Replication Flow Group

Subscriber Instance Group Security Rollup for the Replication Flow Group Subscriber Instance Group Security Rollup for the Replication Flow Group

Subscriber Instance Group Performance Rollup for the Replication Flow Group Subscriber Instance Group Performance Rollup for the Replication Flow Group

Publisher Group Configuration Rollup for the Replication Flow Group Publisher Group Configuration Rollup for the Replication Flow Group

Publisher Instance Group Configuration Rollup for the Replication Flow Group Publisher Instance Group Configuration Rollup for the Replication Flow Group

**Distributor Group Security Rollup for the Replication Flow Group** Distributor Group Security Rollup for the Replication Flow Group

Subscriber Group Configuration Rollup for the Replication Flow Group Subscriber Group Configuration Rollup for the Replication Flow Group

**Distributor Instance Group Performance Rollup for the Replication Flow Group** 

Distributor Instance Group Performance Rollup for the Replication Flow Group

Publisher Instance Group Security Rollup for the Replication Flow Group Publisher Instance Group Security Rollup for the Replication Flow Group

Publisher Group Security Rollup for the Replication Flow Group Publisher Group Security Rollup for the Replication Flow Group

**Distributor Instance Group Configuration Rollup for the Replication Flow Group** Distributor Instance Group Configuration Rollup for the Replication Flow Group

**Distributor Group Performance Rollup for the Replication Flow Group** Distributor Group Performance Rollup for the Replication Flow Group

## SQL Server Alerts Scope Group

SQL Server Alerts Scope Group contains SQL Server objects which can throw alerts. **SQL Server Alerts Scope Group - Discoveries** <u>MSSQL: Replication Alerts Scope Group Discovery</u> Discovery of Alerts Scope Group

# **SQL Server Alerts Scope Group**

SQL Server Alerts Scope Group contains SQL Server objects which can throw alerts.

#### SQL Server Alerts Scope Group - Discoveries

**Replication Alerts Scope Group Discovery** Discovery of Alerts Scope Group

## SQL Server Replication Alerts Scope Group

SQL Server Replication Alerts Scope Group contains SQL Server objects which can throw alerts.

# SQL Server Replication Alerts Scope Group - Discoveries

Replication Alerts Scope Group Discovery Discovery of Alerts Scope Group

# **Subscriber Group**

Subscriber Group is a group that contain all Subscribers **Subscriber Group - Discoveries Subscriber Group Memberships Discovery** Discovery of Memberships in a Subscriber Group

### Subscriber Group - Dependency (rollup) monitors

Generic Subscriber Configuration Rollup for the Subscriber Group Generic Subscriber Configuration Rollup for the Subscriber Group

Generic Subscriber Security Rollup for the Subscriber Group Generic Subscriber Security Rollup for the Subscriber Group

Generic Subscriber Availability Rollup for the Subscriber Group Generic Subscriber Availability Rollup for the Subscriber Group

Generic Subscriber Performance Rollup for the Subscriber Group Generic Subscriber Performance Rollup for the Subscriber Group

### **Subscriber Instances Group**

Subscriber Instances Group is a group that contains all SQL Server Instances with Subscribers **Subscriber Instances Group - Dependency (rollup) monitors** <u>Generic Subscriber Performance Rollup for the Subscriber Instance Group</u> Generic Subscriber Performance Rollup for the Subscriber Instance Group

Generic Subscriber Configuration Rollup for the Subscriber Instance Group Generic Subscriber Configuration Rollup for the Subscriber Instance Group

Instance Performance Rollup for the Subscriber Instance Group Instance Performance Rollup for the Subscriber Instance Group

Generic Subscriber Availability Rollup for the Subscriber Instance Group Generic Subscriber Availability Rollup for the Subscriber Instance Group

**Instance Configuration Rollup for the Subscriber Instance Group** Instance Configuration Rollup for the Subscriber Instance Group

Instance Availability Rollup for the Subscriber Instance Group Instance Availability Rollup for the Subscriber Instance Group

Instance Security Rollup for the Subscriber Instance Group Instance Security Rollup for the Subscriber Instance Group

Generic Subscriber Security Rollup for the Subscriber Instance Group Generic Subscriber Security Rollup for the Subscriber Instance Group

# Virtual Distributor

A virtual distributor.

# **Virtual Distributor - Discoveries**

**Replication Database Health Discovery** 

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

# Virtual Distributor - Unit monitors

#### All Publishers Discovered for Distributor

This monitor checks that all Publishers are discovered for the Distributor.

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	300

	before being closed and marked as failed.	
connection (seconds)	The workflow will fail and register an event, if it cannot access the database during the specified period.	15

## Virtual Distributor - Dependency (rollup) monitors

Generic Distributor Configuration Rollup Generic Distributor Configuration Rollup

Computer Role Security Rollup Computer Role Security Rollup

Computer Role Configuration Rollup Computer Role Configuration Rollup

Generic Distributor Availability Rollup Generic Distributor Availability Rollup

Generic Distributor Security Rollup Generic Distributor Security Rollup

Computer Role Availability Rollup Computer Role Availability Rollup

Database Availability Rollup Database Availability Rollup

Generic Distributor Performance Rollup Generic Distributor Performance Rollup

Database Performance Rollup Database Performance Rollup

Database Security Rollup Database Security Rollup

Database Configuration Rollup Database Configuration Rollup

#### **Computer Role Performance Rollup**

Computer Role Performance Rollup

# **Virtual Publication Host**

A virtual publication host.

#### **Virtual Publication Host - Discoveries**

#### **Replication Database Health Discovery**

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

## Virtual Publication Host - Dependency (rollup) monitors

**Generic Publication Performance Rollup** Generic Publication Performance Rollup

Generic Publication Configuration Rollup Generic Publication Configuration Rollup

Generic Publication Security Rollup Generic Publication Security Rollup

Generic Publication Availability Rollup Generic Publication Availability Rollup

# **Virtual Publisher**

A virtual publisher.

#### **Virtual Publisher - Discoveries**

**Replication Database Health Discovery** 

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

### Virtual Publisher - Dependency (rollup) monitors

Computer Role Security Rollup Computer Role Security Rollup

**Generic Publication Performance Rollup** Generic Publication Performance Rollup

Generic Publisher Security Rollup Generic Publisher Security Rollup

Generic Publisher Performance Rollup Generic Publisher Performance Rollup

Virtual Publication Host Availability Rollup Virtual Publication Host Availability Rollup

Virtual Publication Host Performance Rollup Virtual Publication Host Performance Rollup

#### Database Performance Rollup

Database Performance Rollup

Generic Publication Configuration Rollup Generic Publication Configuration Rollup

Generic Publisher Availability Rollup Generic Publisher Availability Rollup

Computer Role Configuration Rollup Computer Role Configuration Rollup

Generic Publication Security Rollup Generic Publication Security Rollup

Database Configuration Rollup Database Configuration Rollup

Virtual Publication Host Security Rollup Virtual Publication Host Security Rollup

Database Security Rollup Database Security Rollup

Generic Publisher Configuration Rollup Generic Publisher Configuration Rollup

Virtual Publication Host Configuration Rollup Virtual Publication Host Configuration Rollup

Generic Publication Availability Rollup Generic Publication Availability Rollup

Computer Role Performance Rollup Computer Role Performance Rollup

Computer Role Availability Rollup Computer Role Availability Rollup

Database Availability Rollup Database Availability Rollup

# **Virtual Replication Alerts Scope Group**

The Virtual Replication Alerts Scope Group contains Virtual Replication objects which can raise alerts.

## **Virtual Replication Alerts Scope Group - Discoveries**

Virtual Replication Alerts Scope Group Discovery Discovery of Virtual Alerts Scope Group

# **Virtual Subscriber**

A virtual subscriber.

### **Virtual Subscriber - Discoveries**

**Replication Database Health Discovery** 

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

# Virtual Subscriber - Dependency (rollup) monitors

Generic Subscriber Performance Rollup Generic Subscriber Performance Rollup

Virtual Subscription Configuration Rollup Virtual Subscription Configuration Rollup

Virtual Subscription Security Rollup Virtual Subscription Security Rollup

#### Computer Role Availability Rollup Computer Role Availability Rollup

Generic Subscriber Availability Rollup Generic Subscriber Availability Rollup

Computer Role Security Rollup Computer Role Security Rollup

Computer Role Configuration Rollup Computer Role Configuration Rollup

Generic Subscriber Security Rollup Generic Subscriber Security Rollup

Generic Subscriber Configuration Rollup Generic Subscriber Configuration Rollup

Virtual Subscription Availability Rollup Virtual Subscription Availability Rollup

Computer Role Performance Rollup Computer Role Performance Rollup

Virtual Subscription Performance Rollup Virtual Subscription Performance Rollup

# Virtual Subscriber Host

A virtual subscriber host.

#### **Virtual Subscriber Host - Discoveries**

**Replication Database Health Discovery** 

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400

Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15
Timeout (seconds)	Specifies the time the workflow is allowed to run before being closed and marked as failed.	300

### Virtual Subscriber Host - Dependency (rollup) monitors

Virtual Subscriber Configuration Rollup Virtual Subscriber Configuration Rollup

Virtual Subscriber Availability Rollup Virtual Subscriber Availability Rollup

Virtual Subscriber Performance Rollup Virtual Subscriber Performance Rollup

Virtual Subscriber Security Rollup Virtual Subscriber Security Rollup

# **Virtual Subscription**

A virtual subscription.

#### **Virtual Subscription - Discoveries**

#### **Replication Database Health Discovery**

The object discovery discovers the aggregate health containers and relationships for objects related to a published database.

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.	14400
Synchronization Time	The synchronization time specified by using a 24-hour format. May be omitted.	
Timeout (seconds)	Timeout (seconds)	15

Timeout (seconds)	Specifies the time the	300
	workflow is allowed to run	
	before being closed and	
	marked as failed.	

#### Virtual Subscription - Dependency (rollup) monitors

Generic Subscription Availability Rollup Generic Subscription Availability Rollup

Generic Subscription Security Rollup Generic Subscription Security Rollup

Generic Subscription Performance Rollup Generic Subscription Performance Rollup

Generic Subscription Configuration Rollup Generic Subscription Configuration Rollup

# **Appendix: Known Issues and Troubleshooting**

### "SQL Server Replication Database Health" virtual group may be empty in "Summary" dashboards view

**Issue:** "SQL Server Replication Database Health" virtual group may be empty in "Summary" dashboards view even if there are configured SQL replications discovered.

**Resolution:** Create a regular group containing "MSSQL: Generic Replication Database Health" class objects and restart the Operations Manager console.