

Metalogix® Replicator 7.4

Enterprise API Guide



© 2023 Quest Software Inc. ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.
Attn: LEGAL Dept.
4 Polaris Way
Aliso Viejo, CA 92656

Refer to our Web site (<https://www.quest.com>) for regional and international office information.

Patents

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <https://www.quest.com/legal>.

Trademarks

Quest, the Quest logo, and Metalogix are trademarks and registered trademarks of Quest Software Inc. and its affiliates. For a complete list of Quest marks, visit <https://www.quest.com/legal/trademark-information.aspx>. All other trademarks and registered trademarks are property of their respective owners.

Legend

 **CAUTION:** A caution icon indicates potential damage to hardware or loss of data if instructions are not followed.

 **IMPORTANT, NOTE, TIP, MOBILE OR VIDEO:** An information icon indicates supporting information.

Contents

Introduction to Replicator Programming Interfaces	4
Web Service Configuration	5
Authentication	5
Web Service Request URL	5
WSS40	5
WSS30	5
Web Service Methods	6
GetReplicatorVersion()	6
GetReplicatorStatus	6
GetReplicatorEnabledWebApps	7
GetReplicatorEnabledServers	7
GetLastProcessTimeForWebApp	8
GetLastProcessTimeForServer	8
GetReplicatorStats	9
Web Service Sample	11
Sample Location	11
Description of Sample	11
Sample Actions	11
The Code	12
About	13
Contact Quest	13
Technical Support Resources	13

Introduction to Replicator Programming Interfaces

Replicator has introduced an initial API that provides status information on the operation of Replicator. This API can be used to query replicator as to the current heart beat of the services and basic information about each replication server that is defined for each web application.

The intended audience for this document is developers looking to create a monitoring dashboard to check on the status of replicator or to create an alerting mechanism.

i | **NOTE:** the API is only available with the Enterprise Edition. Additional API documentation is available from support for utilizing PowerShell and other web services.

Web Service Configuration

Authentication

The Replicator StatusInfo Web Service runs under the same security context as Central Administrator. Therefore you must provide the same credentials that the Central Admin Application Pool is running under, when making the Web Service call from a remote Server. If you do not do so you will receive an unauthorized exception. This is demonstrated in the sample application that is described below.

Web Service Request URL

The URL used when making a Web Service call will depend on the name of the server and the port that is being used for the Central Administrator application. Here are the formats of the URLs that must be used:

WSS40

`http://SERVER_NAME: PORT/_admin/Synergy/Replicator/StatusInfo.asmx`

Sample - `http://corporateserver:9000/_admin/Synergy/Replicator/StatusInfo.asmx`

In this case, the server name is "corporateserver" and the port being used by Central Admin is 9000.

WSS30

`http://SERVER_NAME: PORT/Synergy/Replicator/StatusInfo.asmx`

Sample - `http://corporateserver:9000/Synergy/Replicator/StatusInfo.asmx`

In this case the server name is corporateserver and the port being used by Central Admin is 9000.

Web Service Methods

GetReplicatorVersion()

Description	Returns the version of Replicator that the remote server is running.
Method Declaration	public string GetReplicatorVersion ()
Input(s)	None
Output	Return Type: String
Sample Output	2.5.0.0

GetReplicatorStatus

Description	Returns the status of the Replication Service and Replication Transport Service on the remote server.
Method Declaration	public int GetReplicatorStatus(int repServiceTypeNumber)
Input(s)	repServiceTypeNumber: Interger Possible Input values: 1 - TransportService 2 - ReplicatorService Sample Input: 2
Output	Return Type: Integer Possible output values: 1 - Running 2 - Stopped 3 - Unknown
Sample Output	1

GetReplicatorEnabledWebApps

Description	Returns a list of all the Web Application URLs on the Remote server that are currently enabled for Replication.
Method Declaration	public string[] GetReplicatorEnabledWebApps()
Input(s)	None
Output	Return Type: string array Possible output values: Any list of strings
Sample Output	http://CorporateServer http://CorporateServer:8888 http://CorporateServer:9000

GetReplicatorEnabledServers

Description	Returns a list of all the Server Names on the Remote server, for a given Web Application, that is currently enabled for Replication. The server is returned if it is enabled for either inbound or outbound processing.
Method Declaration	public string[] GetReplicatorEnabledServers(string webAppURL)
Input(s)	webAppURL: String Possible Input values: Any String that represents a valid WEB Application URL. Sample Input: http://CorporateServer:9000
Output	Return Type: string array Possible output values: Any list of strings
Sample Output	http://CorporateServer http://CorporateServer:8888

Description	Returns a list of all the Server Names on the Remote server, for a given Web Application, that is currently enabled for Replication. The server is returned if it is enabled for either inbound or outbound processing.
	http://CorporateServer:9000

GetLastProcessTimeForWebApp

Description	Returns the last Date and Time that the specified Web Application was processed by Replicator on the Remote Server.
Method Declaration	public DateTime GetLastProcessTimeForWebApp (string webAppURL)
Input(s)	webAppURL: String Possible Input values: Any String that represents a valid WEB Application URL. Sample Input: -http://CorporateServer:9000
Output	Return Type: DateTime
Sample Output	11/22/2016 9:14:07 AM

GetLastProcessTimeForServer

Description	Returns the last Date and Time that the specified Web Application was processed by Replicator on the Remote Server.
Method Declaration	public DateTime GetLastProcessTimeForWebApp (string webAppURL, string serverName)
Input(s)	webAppURL: String serverName: String Possible Input values: Any String that represents a valid WEB Application URL.

Description	Returns the last Date and Time that the specified Web Application was processed by Replicator on the Remote Server.
	The Name of a server given when Configuration Replicator Servers. Sample Input: http://CorporateServer:9000 CorporateServer 80
Output	Return Type: DateTime
Sample Output	11/22/2016 9:14:07 AM

GetReplicatorStats

Description	Returns stats for the specified Web Application on the specified Remote Server.
Method Declaration	public string GetReplicatorStats(string webAppURL, string serverName)
Input(s)	webAppURL: String serverName: String Possible Input values: Any String that represents a valid WEB Application URL. The Name of a server given when Configuration Replicator Servers. Sample Input: http://CorporateServer:9000 CorporateServer 80
Output	Return Type: String
Sample Output	<?xml version="1.0"?> <ReplicatorWebStats> <Server Name="SharePoint - 80" Address="CorporateServer " Port="80" LastProcessTime="10/22/2007 2:54:18 PM" InboundEnabled="True" OutboundEnabled="True" StatsOutboundPackageCount="0"

Description	Returns stats for the specified Web Application on the specified Remote Server.
	<code>StatsOutboundDepth="5" StatsInboundPackageCount="0" StatsInboundDepth="2" /> </ReplicatorWebStats></code>

Web Service Sample

Sample Location

In order to demonstrate the use of the Replicator StatusInfo Web Service, we have created a sample using Visual Studio.

In WSS40 Installations, the sample can be found here:

C:\Program Files\Metalogix\Replicator\WSS40\Samples>StatusInfoWEBSERVICE

In WSS30 Installations, the sample can be found here:

C:\Program Files\Metalogix\Replicator\WSS30\Samples>StatusInfoWEBSERVICE

Description of Sample

The sample application demonstrates all of the Web Service methods that were described above.

In order for this sample to work correctly in your SharePoint environment you will need to fill in/modify the following fields:

1. Web Service URL - (http://SERVER_NAME:9000/_admin/Synergy/Replicator/StatusInfo.asmx)
2. Domain - (Active Directory Domain, If not in domain leave empty)
3. Username - (Username being used by Central Admin App Pool on remote server)
4. Password - (Password being used by Central Admin App Pool on remote server)

Sample Actions

Get List Button (Under Replicator Status) - This will return a list of all the Web Applications that are enabled for Replicator on the remote Server. Each entry will be added to the *ReplicatorEnabledWebApps* listbox. When selecting different items in the listbox it will populate the *Web Application URL* textbox.

Check Status - Will fetch the remaining fields (*Replicator Version*, *Last Processed Time*, *Replicator Service Status*, etc.) for the URL specified in *Web Application URL* textbox.

Get List Button (Server Status) - This will return a list of all the Servers that are enabled for selected Web Application. Each entry will be added to the *ReplicatorEnabledServers* listbox. When selecting different items in the listbox it will populate the *Server Name URL* textbox.

Server Status - Will fetch the *Last Processed Time*, and *Web Stats* for the URL specified in *Web Application URL* textbox and the Server Name.

The Code

The *prepareWEBSERVICERequest* method demonstrates how to specify the remote URL and credentials to be used when making the Web service request.

butGetList_Click - Demonstrates the *GetReplicatorEnabledWebApps* Web Service method described above.

butCheckStatus_Click - Demonstrates the remaining Web Service methods described above.

About

We are more than just a name. We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation™.

Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece — you — to the community, to the new Quest.

Contact Quest

For sales or other inquiries, visit www.quest.com/contact.

Technical Support Resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions

- Chat with support engineers online
- View services to assist you with your product