



## **Content Matrix**

### **PowerShell Distributed Migration>**

January 09, 2018

## Copyright

© Metalogix International GmbH, 2002-2018

All rights reserved. No part or section of the contents of this material may be reproduced or transmitted in any form or by any means without the written permission of Metalogix International GmbH.

Content Matrix is a trademark of Metalogix International GmbH.

Windows SharePoint Services is either a registered trademark or a trademark of Microsoft Corporation in the United States and/or other countries. Other product and company names mentioned herein may be the trademarks of their respective owners.

## Technical Support

For information about Metalogix Technical support visit <http://metalogix.com/support>.

Technical support specialists can be reached by phone at +1-202-609-9100. The level of technical support provided depends upon the support package that you have purchased. Contact us to discuss your support requirements.

# Contents

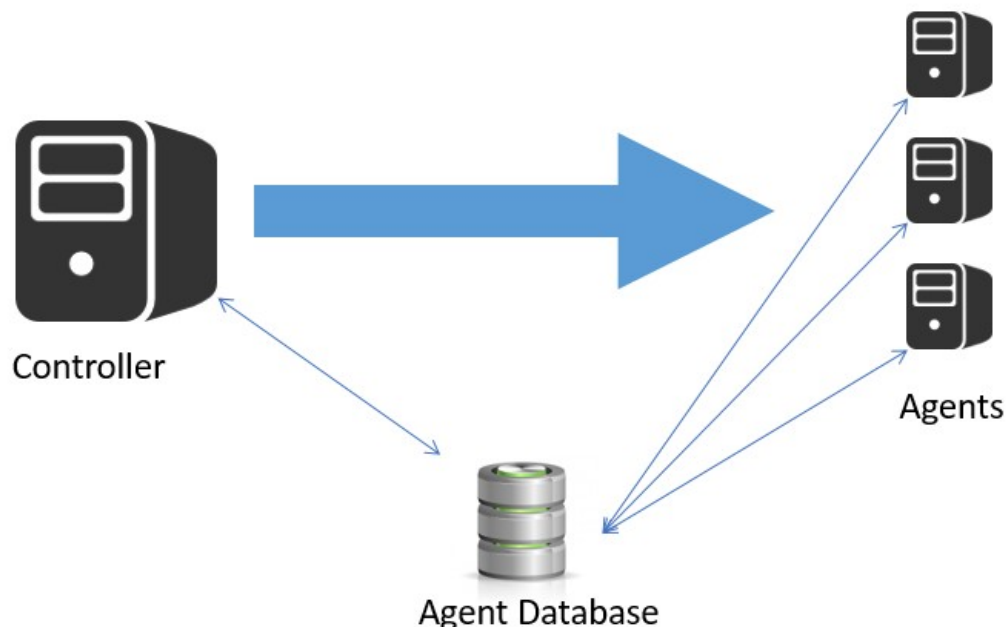
- Introduction ..... 4**
- Distributed Migration Configuration ..... 5**
- Extended Cmdlet Parameters ..... 6**
  - AgentDatabase ..... 6
  - Certificate ..... 6
  - RunRemotely ..... 7

# Introduction

A constant best-practice when performing large migrations is the concept of concurrent migrations. This is a best-practice for both on-premises and SharePoint Online migrations in order to leverage the resources of a multitude of different machines to move content as fast as possible from one location to another.

Previously this practice involved a multitude of manual work; this manual work includes identifying the machines, installing Content Matrix, configuring jobs individually on each machine, following up on the jobs logs for each machine, etc. This practice can be time-consuming and adds a significant level of complexity to large-scale migration efforts. The introduction of Content Matrix – Distributed Migration is to help in alleviating some of aforementioned concerns by providing a user interface that will allow the distribution of migration jobs across multiple different machines (Agents) from one interface (Controller).

In an effort to address this need, Content Matrix had delivered an interface that will help in managing multiple migration jobs across a multitude of different Agents from a single Controller in the following model:



## Configuration

# Distributed Migration Configuration

To appropriately configure Content Matrix – Distributed Migration please refer to the documentation located at: [https://www.metalogix.com/help/Content-Matrix/SharePoint/index.html?configuring\\_for\\_distributed\\_migration.html](https://www.metalogix.com/help/Content-Matrix/SharePoint/index.html?configuring_for_distributed_migration.html)

It is expected that this documentation has been used to configure the Agent Database, to provision the Agents, fully configure the Controller, and the remaining associated steps prior to leveraging the PowerShell capabilities.

---

NOTE: Configuring the Agent-Controller Model MUST be done from the user interface prior to leveraging with PowerShell, or else Distributed Migration will be unsuccessful.

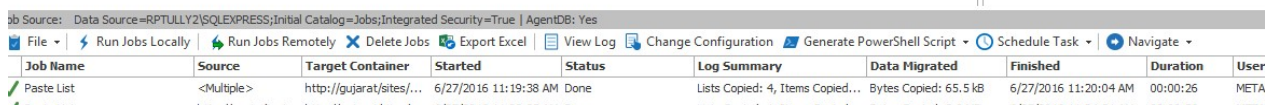
---

# Extended Cmdlet Parameters

All of the existing Content Matrix PowerShell parameters will continue to function within the context of a local migration. For remote migrations those same cmdlets will need three parameters/switches employed in order to ensure proper migration:

## AgentDatabase

The first required parameter is the path to the previously configured Agent Database. This path should be represented in the form of a SQL Connection String. This connection string can easily be obtained from the Jobs pane of the Content Matrix console as noted in the following screenshot:



Job Name	Source	Target Container	Started	Status	Log Summary	Data Migrated	Finished	Duration	User
Paste List	<Multiple>	http://gujarat/sites/...	6/27/2016 11:19:38 AM	Done	Lists Copied: 4, Items Copied...	Bytes Copied: 65.5 kB	6/27/2016 11:20:04 AM	00:00:26	META

By specifying this parameter, the information about the job will be written to the database to be queried from either PowerShell or the Content Matrix console, while Agent information can now be parsed to distribute the migration efforts.

NOTE: Unlike other some other databases used in Content Matrix, the Agent Database must be a full SQL database, not a SQL CE database.

**Type:** System.String

**Example:**

```
Copy-MLSharePointsiteCollectionwithConfigFile -Source $source -Target $Target -
JobConfigFile $filePath -AgentDatabase "Data Source=RPTULLY2\SQLEXPRESS`;Initial
Catalog=Jobs`;Integrated Security=true`;" -Certificate "TestCertificate" -RunRemotely
```

## Certificate

One of the steps of Distributed Migration requires the encryption and decryption of secure passwords and other information. As a result, a security certificate is generated when leveraging the Distributed Migration Wizard (though it may be substituted for any certificate you create yourself). Please see the documentation at [https://www.metalogix.com/help/Content-Matrix/SharePoint/index.html?509\\_certificates\\_for\\_remote\\_agents.html](https://www.metalogix.com/help/Content-Matrix/SharePoint/index.html?509_certificates_for_remote_agents.html). The aforementioned certificate is required to be on both the Controller and the Agent; this step is performed for you when leveraging the Distributed Migration Wizard but may be required to perform manually if the Wizard is not leveraged.

This parameter represents the name of the registered certificate that exists at both the Controller and the Agent and that will be used for encryption and decryption protocols.

**Type:** System.String

**Example:**

```
Copy-MLSharePointSiteCollectionWithConfigFile -Source $source -Target $Target -  
JobConfigFile $filePath -AgentDatabase "Data Source=RPTULLY2\SQLEXPRESS;Initial  
Catalog=Jobs;Integrated Security=true;" -Certificate "TestCertificate" -RunRemotely
```

## RunRemotely

Once both the Agent Database and the Certificate parameters have been provided, each migration cmdlet needs to be specified to run remotely or run locally. The default behavior is to run a job locally, however enabling the switch "RunRemotely" will result in leveraging the Agent-Controller model provided both the Agent Database and the Certificate have been specified.

---

NOTE: Enabling this switch without setting both the AgentDatabase and Certificate parameters may result in unexpected behavior that would be considered undesirable.

---

**Type:** System.Management.Automation.SwitchParameter

### Example:

```
Copy-MLSharePointSiteCollectionWithConfigFile -Source $source -Target $Target -  
JobConfigFile $filePath -AgentDatabase "Data Source=RPTULLY2\SQLEXPRESS;Initial  
Catalog=Jobs;Integrated Security=true;" -Certificate "TestCertificate" -RunRemotely
```