



DocAve® 6 Replicator

User Guide

Service Pack 3, Cumulative Update 3

Revision K

Issued December 2013

Table of Contents

About DocAve Replicator	5
Complementary Products	5
Submitting Documentation Feedback to AvePoint	5
Before You Begin.....	6
Configuration	6
Agents	6
Required Permissions	6
Local System Permissions	7
Getting Started.....	9
Launching Replicator.....	9
User Interface Overview	10
Basic Steps to Configuring and Creating Replicator Jobs.....	11
Pre-Replicator Job Configurations	12
Configuring the Replicator Database	12
Configuring Devices and Setting Up Storage Policies	13
Configuring Mapping Settings.....	13
Domain Mapping.....	13
User Mapping.....	13
Language Mapping.....	14
Outgoing E-mail Server Settings	14
Enabling One-Way Pull.....	15
Configuring Online Replicator Settings	16
Configuring Network Control.....	16
Configuring Byte-Level Settings (Byte-Level Replication Only).....	17
Setting Up Online Profiles	17
Replication Options.....	19
Conflict Options	23
Configuring Offline Replicator Settings.....	25
Setting Up an Export Profile.....	25

Setting Up an Import Profile	26
Building an Online Replicator Plan.....	27
Creating Containers	31
Creating a Site Collection	32
Creating a Site	32
Creating a List/Library	33
Performing a Byte-level Replication	33
Performing a Three-Way Replication Job	34
Performing a One-Way Pull Replication Job	35
Creating Online Replicator Plans via Excel.....	36
Exporting Online Plans	36
Editing Exported Online Plans.....	36
Importing Online Plans	37
Building an Offline Replicator Plan	38
Setting up an Export Location.....	38
Using Data Export	38
Using Data Import.....	41
Performing a Two-Way Offline Replication Job	43
Replicator for SharePoint Online	44
Replication Details	44
Query Records.....	44
Viewing Detailed Records	45
Exporting Query Records	45
Exporting Replication Job Reports	45
Health Analyzer	47
Collecting Data for Analysis	47
Collect Now	47
Collection Settings	47
Managing Issues.....	48
Exporting Report	48
Mapping Status	49
Replicator Tool	49

DocAve Replicator Use Cases.....	49
Online Replicator for One Farm	50
Online Replicator for Two Farms	50
Mapping 1	51
Mapping 2	51
Moving Site Content to a Target Newly-Created Site.....	52
Appendix A – Supported and Unsupported SharePoint Web Parts.....	53
SharePoint 2010 Web Parts	53
SharePoint 2013 Web Parts	54
Appendix B – Supported and Unsupported SharePoint Elements for Replicator	57
SharePoint 2010 Elements.....	57
SharePoint 2013 Elements.....	58
Appendix C – Supported and Unsupported SharePoint 2013 Social Features	61
Appendix D – Replicator Customization Table.....	62
Appendix E – Supported and Unsupported SharePoint Online Settings	65
SharePoint 2010 Online Settings	65
SharePoint 2013 Online Settings	66
Appendix F – Supported Real-Time Events.....	69
Appendix G – Configuration File	70
Advanced Settings in Configuration Files.....	71
AgentCommonWrapperConfig.config	71
Appendix H – Accessing Replicator using Hot Keys	72
Home Page.....	72
Configure Replicator Database	73
Network Control	73
Byte-Level Settings.....	73
Queue Tools	73
Online Replicator	74
Profile Settings	74
Plan Manager Page	75
Notices and Copyright Information	76

About DocAve Replicator

As Microsoft SharePoint environments grow, data and settings often need to be moved, replicated, and synchronized among sites, or even between geo-distributed farms. DocAve Replicator allows Microsoft SharePoint administrators to replicate content, configurations, securities, and users:

- From one SharePoint location to another
- Within the same farm and across farms
- Within SharePoint 2010 or 2013 on-premises and SharePoint Online, both online and offline

Replication can be “live” (event-triggered) or on a set schedule so that content, configurations, securities, and users can be synchronized between sites and objects. Live replication triggers are fully customizable, and replication can be executed as full or incremental. Incremental replication can be at the file or byte levels. DocAve Replicator provides you with a full range of enterprise-class replication options and features.

Complementary Products

Many products and product suites on the DocAve 6 platform work in conjunction with one another. The following products are recommended for use with Replicator:

- DocAve Connector for collaborating upon network file shares and cloud storage resources directly through SharePoint without migration
- DocAve Content Manager for SharePoint for restructuring or moving SharePoint content
- DocAve Report Center for SharePoint to examine pain points in the SharePoint infrastructure and report on SharePoint user behavior and changes
- DocAve Data Protection for setting backup and recovery points prior to adjusting SharePoint governance policies in this product
- Archiver to reduce SharePoint storage costs by automatically offloading SharePoint content that would ordinarily reside in expensive SQL Server storage to less-expensive hierarchical storage systems, based upon fully customizable business rules
- Storage Manager to mitigate the negative consequences of exponential data growth by combining multiple real-time and scheduled business rules to externalize BLOB content based on file size, type, or other document properties

Submitting Documentation Feedback to AvePoint

AvePoint encourages customers to provide feedback regarding our product documentation. You can [Submit Your Feedback](#) on our website.

Before You Begin

Refer to the sections for system and farm requirements that must be in place prior to installing and using DocAve Replicator.

Configuration

In order to use DocAve Replicator, the DocAve 6 platform must be installed and configured properly on your farm. Replicator will not function without DocAve 6 present on the farm.

Agents

DocAve Agents are responsible for running DocAve jobs and interacting with the SharePoint object model. A DocAve Agent must be installed on at least one of the front-end Web servers.

***Note:** To use Real-Time Replication, DocAve Agents must be installed on all of the front-end Web servers. DocAve Agents enable DocAve Manager to communicate with the respective servers, allowing for Replicator commands to function properly.

***Note:** The use of system resources on a server increases when the installed agent is performing actions. This may affect server performance. However, if the agent installed on a server is not being used, the use of system resources is very low and, therefore, the effect on server performance is negligible.

For instructions on installing the DocAve Platform, DocAve Manager, and DocAve Agents, see the [DocAve 6 Installation Guide](#).

Required Permissions

To install and use Replicator properly, ensure that the agent account has the following permissions.

1. **Local System Permissions:** These permissions are automatically configured by DocAve during installation. Refer to [Local System Permissions](#) for a list of the permissions automatically configured upon installation. If there are no strict limitations within your organization on the permissions that can be applied, you can simply add the **DocAve Agent Account** to the local **Administrators** group to apply all of the required permissions.
2. **SharePoint Permissions:** These permissions must be manually configured prior to using DocAve 6 Replicator; they are not automatically configured.
 - User is a member of the Farm Administrators group. Since Administrator works across farms and on all SharePoint settings and configurations, this account is needed in order to provide the best and most complete quality of service.
 - Full control to all zones of all Web applications via User Policy for Web Applications

- For SharePoint 2013, in Policy for Web application, make sure that the DocAve Agent Account has the **Account operates as System** permission.
 - User Profile Service Application permissions:
 - For SharePoint 2010
 - Use Personal Features
 - Create Personal Site
 - Use Social Features
 - For SharePoint 2013
 - Create Personal Site
 - Follow People and Edit Profile(required for personal storage, newsfeed, and followed content)
 - Use Tags and Notes
 - Managed Metadata Service: Term Store Administrator
 - Business Data Connectivity Service: Full Control
 - Search Service: Full Control
 - User Profile Connection Permission: Full Control
2. **SQL Permissions:** These permissions must be manually configured prior to using DocAve 6 Replicator; they are not automatically configured.
- Database Role of **db_owner** for all the databases related with SharePoint, including Content Databases, Config Database, and Central Admin Database.
 - Creator and Security Admin permission to SQL Server
 - Database Role of **db_owner** for FBA database if forms based authentication (FBA) is enabled in SharePoint Web applications.
 - **DB_owner** to Replicator Database

Local System Permissions

The following Local System Permissions are automatically configured during DocAve 6 installation:

- User is a member of the following local groups:
 - IIS WPG (for IIS 6.0) or IIS IUSRS (for IIS 7.0)
 - Performance Monitor Users
 - DocAve Users (the group is created by DocAve automatically; it has the following permissions):
 - Full control to the Registry of HKEY LOCAL MACHINE\SOFTWARE\AvePoint\DocAve6

- Full control to the Registry of
HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\eventlog
- Full Control to the Communication Certificate
- Permission of **Log on as a batch job** (it can be found within **Control Panel > Administrative Tools > Local Security Policy > Security Settings > Local Policies > User Rights Assignment**)
- Full Control Permission for DocAve Agent installation directory
- Member of WSS_RESTRICTED_WPG_V4
- Member of WSS_WPG
- Member of Administrators (If the SP2010ReplicatorEventhandler.dll does not exist in GAC after the installation, add the agent account to Local Administrator group and then SP2010ReplicatorListener.exe will install the assembly automatically under the agent account.)
- Full Control to the Registry of
“HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services”

Getting Started

SharePoint and the DocAve platform modules have common functionality. While some of this shared functionality is covered in this guide, the primary focus of this document is the functionality that is specific to the DocAve module.

For information on the shared functionality not covered in this document, refer to SharePoint Help.

Refer to the sections below for important information on getting started with Replicator.

Launching Replicator

To launch Replicator and access its functionality, follow the instructions below.

1. Log in to DocAve. If you are already in the software, click the **DocAve** tab. The **DocAve** tab displays all modules on the left side of the window.
2. Click **Administration** to view the Administration modules.
3. Click **Replicator** to launch this module.

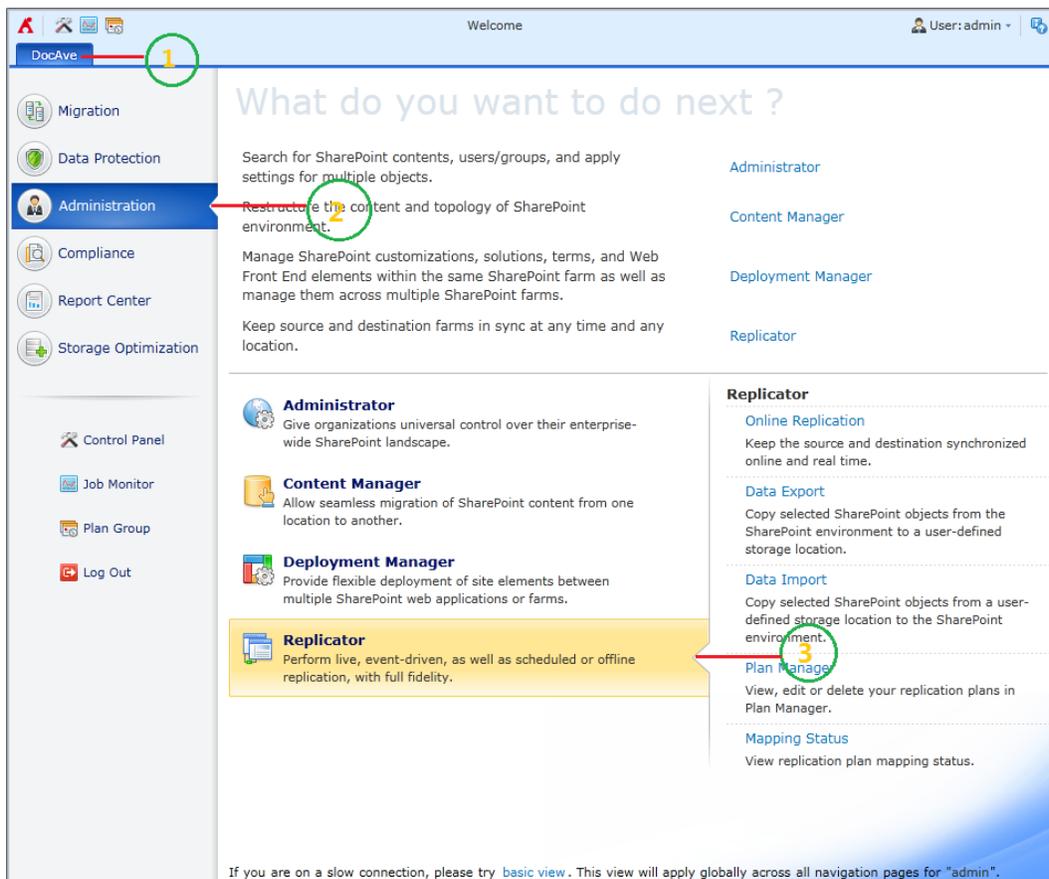


Figure 1: DocAve module launch window.

User Interface Overview

After clicking **Replicator**, the Replicator user interface launches with the **Home** tab active.

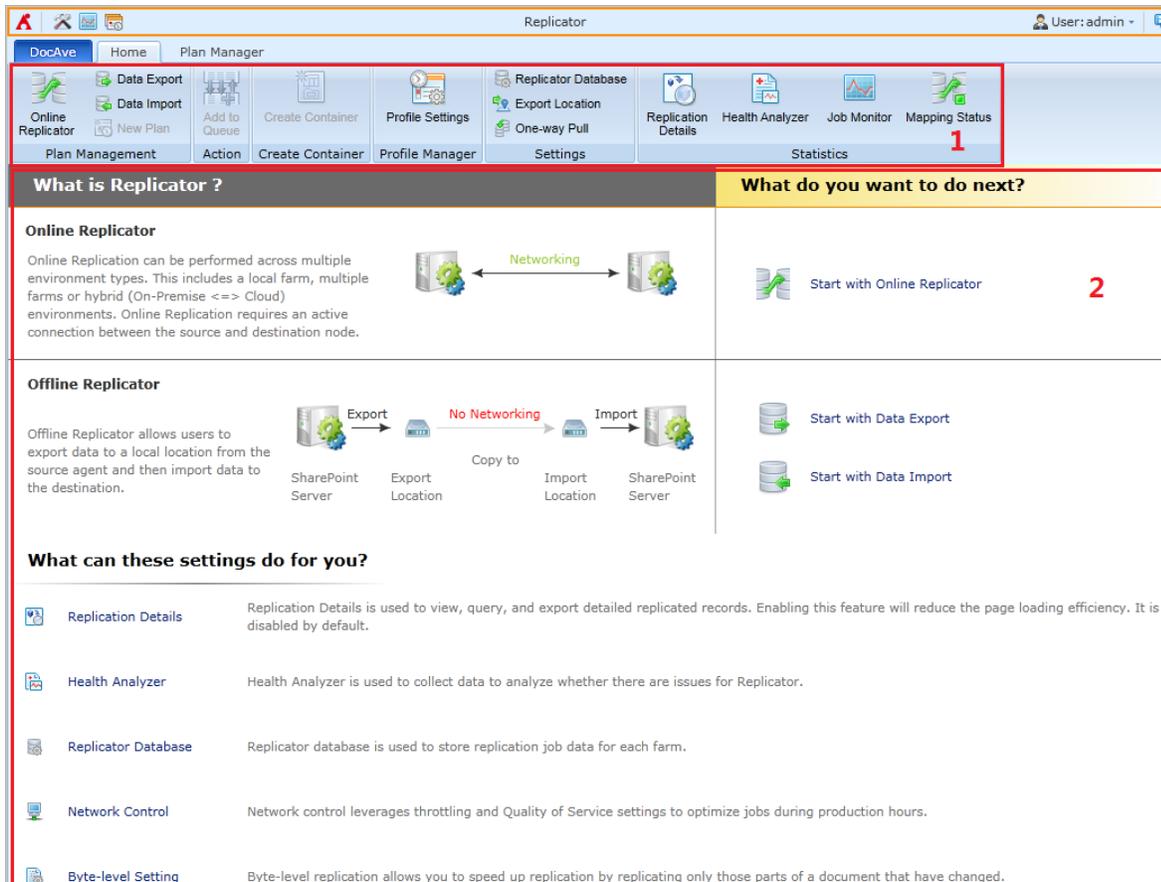


Figure 2: Replicator user interface.

1. The **ribbon** shows the available actions for Replicator.
2. The **workspace** shows explanations and the content that is used during the configuration of actions performed in DocAve products.

Basic Steps to Configuring and Creating Replicator Jobs

The following are the order of steps required to configure and create a Replicator job:

1. Perform pre-Replicator job configurations:

- [Configuring the Replicator Database](#) (mandatory)
- [Configuring Devices and Setting Up Storage Policies](#) (only necessary if backing up environment before Replication)
- [Configuring Mapping Settings](#) (optional)
- [Outgoing E-mail Server Settings](#) (optional)

2. To run an Online Replicator job:

- [Configuring Network Control](#) (optional)
- [Configuring Byte-Level Settings \(Byte-Level Replication Only\)](#)(optional)
- [Setting Up Online Profiles](#) (optional)
- [Building an Online Replicator Plan](#) (mandatory)

3. To run an Offline Replicator job:

- [Setting Up an Export Profile](#) (mandatory)
- [Setting Up an Import Profile](#) (mandatory)
- [Building an Offline Replicator Plan](#) (mandatory)

Pre-Replicator Job Configurations

The sections below detail the configurations needed prior to setting up a Replicator job.

Configuring the Replicator Database

In order to use Replicator, you must configure a *dedicated* Replicator database in SQL for every farm that will be using Replicator. A Replicator database stores the job data for each farm. After configuring the Replication database for a farm, this farm will be available in Replicator and can act as either the source or destination.

1. On the **Home** tab, click **Replicator Database** in the **Settings** group.
2. Select the farm that will be using Replicator and click **Configure** in the **Manage** group on the ribbon, or click the  icon to select **Configure** in the **Farm** column. The **Configure Replicator Database** page appears.
3. Configure the following settings for the database that will store replication job data:
 - a. **Agent Group** – Select the default Agent group or select a previously-configured Agent Group from the drop-down list. If desired, click **New Agent Group** to create a new one. For details on Agent Groups, refer to the [DocAve 6 Control Panel Reference Guide](#).
 - b. **Configure Replicator Database** – Replicator supplies a default **Database Server** and **Database Name**. If desired, enter a new database server and database name in the corresponding fields. If the database does not exist, DocAve creates a database using the specified name. However, AvePoint recommends that you use the default database for most instances.
 - c. **Authentication** – Select the authentication mode for the Replicator database. If you select **SQL authentication**, you must also provide the necessary information in the **Account** and **Password** fields. Validate the SQL database account by clicking **Validation Test**.
 - **Failover Database Server** – Specify a failover database server. In the event that the Replicator database collapses, you can transfer the data stored in the Replicator database to this standby database.
 - d. **Advanced** – Click **Advanced** to specify a Replicator database by entering a connection string directly. Select the **Edit connection string directly** checkbox to activate this feature, and then enter the connection string according to the examples listed in the left pane. If you select the **Edit connection string directly** checkbox, you only need to specify an Agent Group for the Replicator database; the other settings above **Advanced** are not required.
4. Click **OK** to finish and save the configuration.

5. If using Replicator on more than one farm, repeat the procedure above on each farm as well.
6. To view a configured Replicator database's details, select the farm and click **View Details** in the **Manage** group. A summary page appears where you can view detailed information such as Agent Group, Database Server, Database Name, and Authentication.

Configuring Devices and Setting Up Storage Policies

In order to perform a backup of the environment prior to a Replicator job, it is necessary to first configure one or more physical devices and then set up a storage policy. If you are not backing up your environment prior to running a Replicator job, this step is not necessary.

***Note:** Replicator only supports Net Share storage devices.

In addition, DocAve has the ability to treat multiple storage devices as a single logical unit when saving backup data. This is especially useful for very large Replicator plans, as many small drives can be combined. Therefore, define a logical drive only when you want to back up the environment before replication.

For instructions on defining devices and setting up storage policies, refer to the [DocAve 6 Control Panel Reference Guide](#).

Configuring Mapping Settings

Before performing a replication job, you may want to define the Domain Mapping, User Mapping, and Language Mapping settings.

Domain Mapping

Use domain mapping if, in the destination node, you wish to change (in metadata fields) a source domain name. During replication, Replicator changes the source domain name in the destination node according to your specified domain name.

To access Domain Mapping, click **Home** tab > **Profile Settings** in the **Profile Manager** group > **Mappings** in the **Settings** group > **Domain Mapping**. The Control Panel appears.

For specific instructions on setting up domain mapping, refer to the [DocAve 6 Control Panel Reference Guide](#).

User Mapping

Use user mapping if, in the destination node, you wish to change (in metadata fields) an existing source node username. During replication, Replicator replaces the source username in metadata fields with your specified username in the destination node metadata fields.

To access User Mapping, click **Home** tab > **Profile Settings** in the **Profile Manager** group > **Mappings** in the **Settings** group > **User Mapping**. The Control Panel appears.

For specific instructions on setting up user mapping, refer to the [DocAve 6 Control Panel Reference Guide](#).

Language Mapping

Use language mapping to display the destination content in a language that is different from the source content language after the plan has been executed. To access Language Mapping, click **Home** tab > **Profile Settings** in the **Profile Manager** group > **Mappings** in the **Settings** group > **Language Mapping**. The Control Panel appears. For specific instructions on setting up language mapping, refer to the [DocAve 6 Control Panel Reference Guide](#).

By default, the default language mapping is disabled. If the language in the destination environment is the same as the language in the source environment, AvePoint replicates the source data to the destination using the source language.

If the language in the destination environment is different from the language in the source environment, you must enable the default language mapping to successfully replicate the source data to the destination. Navigate to ...*AvePoint\DocAve6\Agent\data\SP2010\Replicator*. Open the **SP2010Replicator.xml** configuration file with Notepad. Then, find the element **SupportDefaultLanguageMapping="False"** and modify the value to **True**. The source data will now be replicated to the destination using the destination language.

If the destination node is a manually-entered node and the destination environment has language package (which means the system language and the SharePoint language are different), and the default language mapping is disabled, the source data is replicated to the destination using the source language. If the default language mapping is enabled, the source data is replicated to the destination using the language of the data string that is firstly retrieved by the destination DocAve Agent.

Outgoing E-mail Server Settings

Configure outgoing e-mail to track the status of services or jobs. This is done through the Control Panel.

For instructions on setting up outgoing e-mail server settings, refer to the [DocAve 6 Control Panel Reference Guide](#).

Enabling One-Way Pull

Use one-way pull replication when a poor connection exists between the DocAve Manager and your data source. To perform a one-way pull replication job, you must first enable the feature by completing the following steps:

1. Go to the **Home** page. In the **Settings** group, click **One-way Pull**. The **One-way Pull** page appears.
2. Select the **Enable one-way pull** checkbox to enable one-way pull replication.
3. Click **OK** to save the changes.

Configuring Online Replicator Settings

An Online Replicator plan replicates content, configurations, securities, and users from one SharePoint location to another, either across the same online farm or across multiple online farms.

While it is theoretically possible to run an Online Replicator job without configuring the settings described in the sections below, AvePoint **strongly** recommends that you configure these settings to ensure appropriate content management during replication.

See the sections below for instructions on configuring Replicator for online jobs.

Configuring Network Control

Configure the Network Control feature to optimize your replication job by making full use of network resources during the replication. For example, replicating a massive amount of data may affect network performance. In this case, use Network Control to set the starting time of the replication job to be during non-working hours.

If a large replication job must be performed during working hours, set up a bandwidth limit for the job to minimize the impact on the network. Additionally, you can set up a connection retry for the replication job in the event that the job fails due to a network outage.

1. On the **Home** tab, in the **Profile Manager** group, click **Profile Settings**. The **Profile Settings** tab appears. In the **Settings** group, click **Network Control**. The **Network Control** pop-up window appears.
2. From the **Manage** group, click **Create**. Configure the following settings for the network control:
 - a. **Profile Name** – Enter a name for the profile, and add an optional description.
 - b. **Run During** – Specify the job's data transfer rate during working hours and non-working hours and select corresponding unit (**KB/Second** or **MB/Second**). AvePoint recommends that you use a lower speed during working hours and a higher speed during non-working hours.
 - c. **Define Work Schedule** – Specify the working hours by selecting the daily working hours and the working days.
 - d. **Connection Retry** – Specify a **Retry delay** and the units. Then, enter the number of retry attempts.

***Note:** If a network control profile is applied, the source DocAve Agent tries to reconnect to the destination DocAve Agent for thirty minutes. After thirty minutes, the source DocAve Agent stops reconnecting and Replicator does not replicate the data in the mapping until a network connection is available.

***Note:** If you do not choose to use a network control profile, by default Replicator attempts to re-connect every three seconds until the connection is available.

3. Click **OK** to save the settings. The profile is now listed in the **Network Control** page. On this page you can select a specific profile, click **Edit** to modify the configurations, or click **Delete** to remove the profile.

Configuring Byte-Level Settings (Byte-Level Replication Only)

If you're [Performing a Byte-level Replication](#), AvePoint recommends that you configure byte-level settings for each farm. These settings define snapshot retention time, data size limits, and the location to store the original and constructive data for Byte-level replication.

1. On the **Home** tab, in the **Profile Manager** group, click **Profile Settings**. The **Profile Settings** tab appears. In the **Settings** group, click **Byte-level Settings**. The **Byte-level Settings** window appears.
 2. All farms configured for Replicator are listed. Select the farm to which you want to apply this feature, and click **Configure** in the **Manage** group. The **Configure Byte-level Settings** page appears. Configure the following settings:
 - a. **Configure Snapshot Settings** – Specify a retention time period for the snapshot to be stored and specify the **Data size limit**. When the entered retention time expires, the snapshot is automatically deleted. Note that byte-level replication is effective only if the selected data size to be transferred is larger than the **Data size limit**.
 - b. **Path** – Enter the UNC path in the format `\\admin-PC\c$\...` or `\\admin-PC\shared folder`, and then define the **Username** and **Password** to set up access to the path that will store the snapshot.
- *Note:** The path you specify must be an existing one.
3. Click **OK** to save the settings and return to the **Byte-level Settings** interface.
 4. To view a farm's configured byte-level settings, click **View Details** in the **Manage** group. A summary page appears where you can view the byte-level settings you configured for the selected farm, including the snapshot settings and path information.

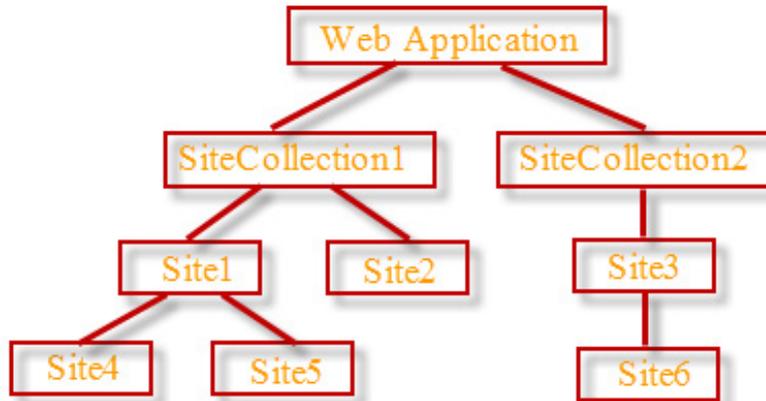
***Note:** Byte-level replication can only be applied between two farms that have Byte-level Settings configured on them. Also, the specified paths must be different in order to ensure Byte-level replication performs properly. The Byte-level settings for the source farm will take effect during the replication.

Setting Up Online Profiles

Use the Online Profile to specify and define numerous settings including Replication Options, Conflict Options, Filter Options, Mapping Options and Advanced Options. Follow the instructions below to create an Online Profile.

1. From the **Home** tab, in the **Profile Manager** group, click **Profile Settings**. The **Profile Settings** window appears with the Online Mapping settings.
2. From the **Profile Settings** tab, in the **Options** group, ensure **Online Profile** is highlighted.
3. From the **Profile Settings** tab, under the **Profile/Sub-profile Management** group, click **New**.
4. Enter a profile name in the pop-up window and click **OK**.
5. In the sub-profiles pane on the left, select the **Replication Options**. For details about this section, refer to [Replication Options](#).
6. In the sub-profiles pane on the left, select the **Conflict Options**. For details about this section, refer to [Conflict Options](#).
7. In the sub-profiles pane on the left, select the **Filter Options**. Select a filter policy from corresponding drop-down list. If there is no existing filter policy, click **New Filter Policy** to create a new one. For detailed information about creating a filter policy, refer to the [DocAve 6 Control Panel Reference Guide](#).
8. In the sub-profiles pane on the left, select the **Mapping Options**. Select the language mapping, user mapping and domain mapping from corresponding drop-down lists. For detailed information about the three mappings, refer to the [DocAve 6 Control Panel Reference Guide](#).
9. Configure the **Advanced Options**:
 - a. Select an optional **Data Compression** setting. Select the **Compression** checkbox to enable data compression, and then choose a compression level using the slider. A low compression level results in a faster compression rate but a larger data set, while a high compression level results in a slower compression rate but a smaller, better quality data set. Note that small data sets cause slower job execution times.
 - b. Select the **Encryption** checkbox (optional) to enable data encryption. Note that encrypting data causes slower job execution times. If you enable data encryption, select a previously-configured security profile or a provided default security profile from the drop-down list. For more details on setting up a security profile, refer to the [DocAve 6 Control Panel Reference Guide](#).
 - c. **Backup Environment Before Replication** — Select this option to back up the environment before the replication. Select a storage policy from corresponding drop-down list for the backup job. For details regarding storage policy, refer to the [DocAve 6 Control Panel Reference Guide](#). Backing up before replication enables you to revert the destination environment back to the original environment (the environment before the replication).
 - d. **Concurrent Threads** — Specify the number of threads to run in the same mapping at a time. This number should be a reasonable one based upon your computer system configuration. If the number you select is too high, this may be a drain on system resources. The default and recommended number is 2. The minimum unit for the

concurrent thread is subsite; if the mapping level is list level or folder level, it only starts one thread.



For example, the screenshot above is the source structure. There is a replication job on the Web application level from source to destination. If the **Concurrent Threads** value is **2**, it replicates two sites simultaneously, in random order, during a replication job. Please note subsite *Site4*, *Site5*, or *Site6* can be replicated only when their parent site (*Site1* or *Site3*) is replicated.

- e. **Network Control** — Select a network control profile from the drop-down list to optimize your replication efficiency. For details regarding this feature, refer to [Configuring Network Control](#).
 - f. **Enable Byte-level** — Choose whether or not to enable byte-level replication, which replicates the updated data. If you choose **Yes**, [Configuring Byte-Level Settings \(Byte-Level Replication Only\)](#) is required. For detailed instructions, refer to [Configuring Byte-Level Settings \(Byte-Level Replication Only\)](#).
10. Click **Save** to save the profile. Alternatively, click **Save as** and enter a profile name to save it as another profile. Select **Save and replace existing profile** to replace the original profile. Otherwise, it is saved without removing the original profile. Click **Discard Changes** to clear all the modifications that were made to the current profile.

Replication Options

Replication Options allow you to configure which security settings (from site collection level down to item level), configuration settings (from site collection level down to list level), and content can be replicated. Set up a sub-profile for Replication Options by the following steps.

1. From the **Home** tab, in the **Profile Manager** group, click **Profile Settings**. The **Profile Settings** window appears with the Online Mapping settings.
2. From the **Profile Settings** tab, in the **Options** group, ensure **Online Profile** is highlighted.
3. Click Replication Options on the left-hand panel, and from the **Profile Settings** tab, under the **Sub-profile** group, click **Edit Sub-profile** to make the **Replication Options** field active.

4. From the **Profile Settings** tab, under the **Profile/Sub-profile Management** group, click **New**.
5. **Enter a profile name** in the pop-up window and click **OK**.
6. Click the **Security** tab. If you want to replicate source security to the destination, select the **Replicate security** checkbox, and then select which securities you want to replicate. All source securities you select are replicated to the destination.
 - **Site Collection Level** —User, Groups. As all configurations for site collection are saved in the root site, you must also select the options under Site level if you wish to replicate the site collection level security properly.
 - **Site Level** — Users, Groups, Permission levels, Site permission. **Permission levels** enable you to replicate customized permission levels from the source to the target properly.
 - **List Level** — Users, Groups, List permission.
 - **Folder Level** — Users, Groups, Folder permission.
 - **Item Level** — Users, Groups, Item permission.

***Note:** Ensure that the source’s parent (along with its security settings) is either being replicated with the source or is already replicated to the destination. This ensures that the permission for the source can be replicated properly. Otherwise, Replicator only replicates the value of the metadata (such as Modified by, Created by, etc.) to the destination.

- **Receive security changes from data destination (in two-way replication)** — The security changes in the destination are merged with the source in order to maintain the consistency of security in the source and destination. This selection only supports two-way replication.
- **Enable sync deletions for users and groups** — Synchronously deletes users and groups on one side based on the deletions made on the other side. In one way replication, this option deletes users and groups on the destination based on the deletions made on the source.

In two way replication, if you also select Receive security changes from destination (in two-way replication), this feature deletes users and groups on one side based on the deletions made on the other side. If you do not select Receive security changes from destination (in two-way replication), the deletions on destination cannot be synced to the source.

- **Include users and groups without permission(s)** – Choose whether to replicate groups that don’t have permissions from the source to the destination.
- **Enable sync deletions for permissions and permission levels** –When you run an incremental replication job and select the **Enable sync deletions for permissions and permission levels** option, the deletions for permissions and permission levels will also be synchronized from the source to the destination.

7. Click the **Configuration** tab. Choose whether to **Replicate configuration**. If you want to replicate the source configuration to the destination, select check the **Replicate configuration** checkbox, and then select the configurations you want to replicate.

- **Site Collection Level** – Site collection features and properties, Site collection search scopes, and search keywords.
- **Site Level** – Site features and properties, Site column and content type, Navigation and quick launch, Site template and list template, Web parts, page layout, master pages and other hidden lists.

***Note:** When replicating Web parts, the dependency is also replicated to the destination. Web parts and the dependent libraries or lists will keep consistent after the replication job. If a Web part and the dependent library/list are in the same library or list, perform at least a list level replication job. Otherwise, perform at least a site level replication job.

- If a **Site column and content type** with the same name as the source already exists in destination, Replicator overwrites the **column** in the destination.
- **Hidden lists** are lists that cannot be viewed in the **All Site Content** page (such as the lists used to save the site template and list template, Web parts, page layout, master pages, and the lists that are hidden by the users).

***Note:** By default, the regional settings of the source SharePoint site are not replicated to the destination. To replicate the regional settings, navigate to ...\\AvePoint\DocAve6\Agent\data\SP2010\Replicator. Open the **SP2010Replicator.xml** configuration file with Notepad. Then, find the element **ReplicateWebRegionalSetting="False"** and modify the value to **True**.

- **List Level** — List settings, List alerts, Personal views, Public views.
 - In order to use the List alerts in destination properly, the Web Application Outgoing E-Mail Settings for the specified destination Web application must be configured before running the Alerts replication job.
 - If there is a personal view with the same name as the source for one user, Replicator merges the view settings from the source to the destination.
 - If there is a public view with the same URL as the source, the destination original public view is overwritten by source public view.

***Note:** Replicator can only activate the features in destination site collection. If one feature is active in the source and inactive in the destination, after the replication job, this feature in destination is activated. But if one feature is inactive in the source and active in the destination, after the replication job, this feature is still activated in the destination.

***Note:** Make sure that at least one feature exists both in the source and in the destination. If one feature only exists in the source, Replicator does not install this feature. It is necessary to manually install the feature on the destination before running

the replication job or use DocAve Deployment Manager to deploy the source structure to destination directly.

- **Receive configuration changes from data destination (in two-way replication)** — The configuration changes in the destination are merged to the source in order to maintain the consistency of configuration settings in the source and destination.
 - **Deal with the item-dependent column and content types** — Choose whether to replicate the item-dependent columns and content types when you want to replicate all default configurations. If you choose **Replicate the item-dependent columns and content types to maintain item integrity**, specify a conflict resolution: **Do not replicate the columns and content types, or the corresponding items** or **Overwrite the columns and content types** from the drop-down list to handle conflicts. You can also choose **Do not replicate the item-dependent columns or content types. Report the items if the corresponding column or content type is not found in destination**.
8. Click the **Content** tab. Choose whether to replicate Workflow, User Profiles, and Metadata Service. If you want to replicate them from the source to destination, select the **Replicate content** checkbox, and then select the content you want to replicate.
- **Workflow** — Select the **Include workflow definition** to replicate the definition of existing workflows for the selected content from the source node to the destination node. Select **Include workflow instances** to replicate the instance of existing workflows for the selected content from the source node to the destination node. With **Include workflow instance** selected, **Include completed workflow instances** is mandatory and **Include running workflow instances** is optional. If you select to replicate the running workflow instance, you can further choose **Cancel workflows after the replication** or **Restart workflows from 0% after the replication** to define the status of workflows after the replication job. .
 - **User Profiles** — Select whether or not to replicate the user profiles to destination.
***Note:** This feature only works for site collection and Web application level replication jobs. The User Profile Service Application for both the source and destination must already be created. If the replication job is across different agents, it is recommended setting up the user mapping for the source user who has a user profile in User Profile Service Application.
 - **Metadata Service** — If you select **Replicate metadata service** and do not select **Replicate the related terms only**, all of the metadata service terms will be replicated; if you select both **Replicate metadata service** and **Replicate the related terms only**, only the currently-used metadata service terms will be replicated.
 - **Receive deletions from data destination** — Deletions in the data destination are merged to the data source in a two-way replication job in order to maintain the consistency of source and destination.

***Note:** By default, real content externalized by Storage Manager/Connector is replicated to the destination and is stored in the database of the destination SharePoint environment, which can be accessed directly after the job. If you do not wish to replicate this real content to the

destination, navigate to ... \AvePoint\DocAve6\Agent\data\SP2010\Replicator\SP2010Replicator.xml and modify the value of **BackupExtenderOrConnectorData** attribute to **False**. Then, both the stubs and the real content will not be replicated to the destination.

9. Click **Save** to save the sub-profile. Alternatively, click **Save as** and enter a sub-profile name to save it as another sub-profile. Select **Save and replace existing profile** to replace the original sub-profile. Otherwise, it is saved without removing the original sub-profile. Click **Discard Changes** to clear all the modifications that were made to the current sub-profile.

Conflict Options

Use the Conflict Options sub-profile feature to define what actions Replicator takes if the Configuration or Content objects in the source are the same as the ones in the destination. To set up a sub-profile for Conflict Options:

1. From the **Home** tab, in the **Profile Manager** group, click **Profile Settings**. The **Profile Settings** window appears with the Online Mapping settings.
2. From the **Profile Settings** tab, in the **Options** group, ensure **Online Profile** is highlighted.
3. From the **Profile Settings** tab, under the **Profile/Sub-profile Management** group, click **New**.
4. **Enter a profile name** in the pop-up window and click **OK**.
5. Click **Conflict Options** on the left-hand panel and click the **Configuration** tab to define how Replicator will handle configuration conflicts.
 - **Conflict Resolution** — Choose how to handle a conflict between the source and destination. **Data source always wins** regards the changes on the source as valid and changes on the destination as invalid if there is a conflict. **Data destination always wins** considers the changes on the destination as valid and the changes on the source as invalid if there is a conflict.
***Note:** This configuration conflict only occurs during two-way replication.
 - **Conflict Action** — Choose a method to handle the conflicting data. **Skip** ignores the conflicting data and performs no action on the source and destination, while **Overwrite** replicates the conflicting data to the source/destination based on the conflict resolution rule selected in **Conflict Resolution**. Note that this setting only applies to configuration, not Security settings or User Permissions.
***Note:** If the destination site collection is Content Type Hub, selecting **Overwrite** to handle a conflict overwrites the destination content type with the source content type. If this occurs and you publish the destination content type, all other site collections that used this content type will be affected.
6. Click the **Content** tab to define how Replicator will handle content conflicts.
 - **Conflict Resolution** — Choose how to handle a conflict between the source and destination.

- **Data source always wins** regards the changes on the source as valid and changes on the destination as invalid if there is a conflict. **Data destination always wins** considers the changes on the destination as valid and the changes on the source as invalid if there is a conflict.
 - **Item with latest modification time wins** regards the changes within an item/file with the most recent modified time as valid if there is a conflict with an item/file.
 - **Item with higher version number wins** looks upon the changes of an item/file whose version is higher as the valid one if there is a conflict in item/file.
 - Rearrange the order of conflict resolutions by selecting relevant number from the **Order** drop-down list to modify the priority of conflict resolutions.
 - **Conflict Action** — Choose a method to handle the conflicting data. **Skip** ignores the conflicting data and performs no action on the source and destination. **Overwrite** replicates the conflicting data to the source/destination based on the conflict resolution rule that is selected in **Conflict Resolution**, while **Manual conflict resolution** moves conflicting content to a folder that is generated automatically during the replication within the parent folder in which the content should have been replicated. The conflict folder is named **_ReplicationConflicts_**.
 - **Conflict Notification** — Select a report recipient from the drop-down list who will receive the conflict report in case of a conflict and input relevant parameters if necessary and click **Add**. If select **E-mail Address**, input an e-mail address which you want to receive the conflict report. If select **User Column**, input the user or group of *person and group* column in SharePoint.

***Note:** Ensure the Conflict Resolution setting is appropriate for your particular deployment. Improper configuration can lead to unintended overwriting of content.
7. Click **Save** to save the sub-profile. Alternatively, click **Save as** and enter a sub-profile name to save it as another sub-profile. Select **Save and replace existing profile** to replace the original sub-profile. Otherwise, it is saved without removing the original sub-profile. Click **Discard Changes** to clear all the modifications that were made to the current sub-profile.

Configuring Offline Replicator Settings

An Offline Replicator plan replicates content, configurations, securities, and users from one offline SharePoint location to another offline location.

While it is theoretically possible to run an Offline Replicator job without configuring the settings described in the sections below, AvePoint **strongly** recommends that you configure these settings to ensure appropriate content management during replication.

See the sections below for instructions on configuring Replicator for offline jobs.

Setting Up an Export Profile

Create an Export Profile to configure replication export options, filter options, and other advanced options.

1. From the **Home** tab, in the **Profile Manager** group, click **Profile Settings**. The **Profile Settings** tab appears.
2. In **Options** group, click **Export Profile**.
3. In the **Profile/Sub-profile Management** group, click **New**.
4. Enter a profile name in the pop-up window and click **OK**.
5. Select the **Replication Options**. For details about this section, refer to [Replication Options](#).

***Note:** The following settings supported in Online Profile are not available in Export Profile: **Receive security changes from data destination (in two-way replication)**, **Enable sync deletions for users and groups**, and **Enable sync deletions for permissions and permission levels** in the **Security** tab; **Receive configuration changes from data destination (in two-way replication)** and **Deal with the item-dependent column and content types** in the **Configuration** tab; **Receive deletions from data destination** in the **Content** tab.

6. Click **Filter Options** from the panel on the left. If there is no existing filter policy, click **New Filter Policy** to create one. For details about creating a filter policy, refer to the [DocAve 6 Control Panel Reference Guide](#).
7. Click **Advanced Options** from the panel on the left.
 - Select an optional **Data Compression** setting. Select the **Compression** checkbox to enable data compression, and then choose a compression level using the slider. A low compression level results in a faster compression rate but a larger data set, while a high compression level results in a slower compression rate but a smaller, better quality data set. Note that small data sets cause slower job execution times.
 - Select the optional **Differential data compression** checkbox to generate and compress differential data (differences between the current backup data and the data in cache folder) to reduce the size of exported data.

***Note:** To use this function, you must install the **Remote Differential Compression** feature on the servers that have source and destination DocAve Agents installed. On these servers, navigate to **Server Manager > Features > Add Features**, and add the desired feature.

***Note:** If you select the differential data compression feature, the data compression feature will not take effect even though the **Compression** checkbox is selected.

- Select the **Encryption** checkbox (optional) to enable data encryption. Note that encrypting data causes slower job execution times. If you enable data encryption, choose a previously-configured security profile or the provided default security profile from the drop-down list. For more details on setting up a security profile, refer to the [DocAve 6 Control Panel Reference Guide](#).
8. Click **Save** to save the profile. Alternatively, click **Save as** and enter a profile name to save it as another profile. Select **Save and replace existing profile** to replace the original profile. Otherwise, it is saved without removing the original profile.

Setting Up an Import Profile

Create an Import Profile to configure replication import options, conflict options, and other advanced options.

1. From the **Home** tab, in the **Profile Manager** group, click **Profile Settings**. The **Profile Manager** tab appears.
2. In **Options** group, click **Import Profile**.
3. In the **Profile/Sub-profile Management** group, click **New**.
4. Enter a profile name in the pop-up window and click **OK**.
5. Click **Replication Options** from the left-hand pane to decide how to deal with the item-dependent columns and content types.
 - If you choose **Replicate the item-dependent columns and content types to maintain item integrity**, specify a conflict resolution for dependent items **Do not replicate the columns and content types, or the corresponding items** or **Overwrite the columns and content types** from the drop-down list to handle conflicts.
 - You can also choose **Do not replicate the item-dependent columns or content types. Report the items if the corresponding column or content type is not found in destination** to deal with the item-dependent columns and content types.
6. Select the **Conflict Options**. For details about this section, refer to [Conflict Options](#).
7. Click **Mapping Options** from the panel on the left to select your Language, User, and Domain mapping. For details about these mapping options, refer to the [DocAve 6 Control Panel Reference Guide](#).

8. Click **Advanced Options** from the left-hand panel to choose whether to back up environment before replication.
 - **Backup Environment Before Replication** — Select this option to back up the data source or data destination content before the replication. Select a storage policy from corresponding drop-down list for the backup job. For details regarding storage policy, refer to the [DocAve 6 Control Panel Reference Guide](#). Backing up before replication enables you to revert the source or destination environment back to the original environment (the environment before the replication).
9. Click **Save** to save the profile. Alternatively, click **Save as** and enter a profile name to save it as another profile. Select **Save and replace existing profile** to replace the original profile. Otherwise, it is saved without removing the original profile.

Building an Online Replicator Plan

An Online Replicator plan replicates content, configurations, securities, and users from one SharePoint location to another, either across the same online farm or across multiple online farms.

To build an Online Replicator plan, complete the following steps:

1. From the **Home** tab, in the **Plan Management** group, click **Online Replicator**.
2. In the **Source** pane, click the farm name to expand the data tree.
 - Select the node whose data you wish to replicate. If working with a large environment, enter the keyword of the node (for example, site URL, site title, or site/list/item name) into the **Input Keyword** text box to search for the desired node. As you type, this will search out the node only to the expanded level that contains the nodes that matches the character entered. You can only search out the nodes whose name is displayed within the currently expanded tree.
 - Right-click the specified node, and select **Show Other Mappings**. The **Show other mappings** page appears and the associated node mappings will be displayed.
 - Select the source node by checking the corresponding radio button.
3. In the **Destination** pane, click the farm name to expand the data tree.
 - Select to where you will import the replicated data. If working with a large environment, enter the keyword of the node (for example, site URL, site title, site/list/item name) into the **Input Keyword** text box to search for the desired node. As you type, this will search out the node only to the expanded level which contains the nodes that matches the character entered.
 - Right-click the specified node, and select **Show Other Mappings**. The **Show other mappings** page appears and the associated node mappings will be displayed.
 - Select the destination node by clicking the corresponding radio button. You can also create a new site collection, site, list, or folder by entering the specified name and

clicking Create Container. For details on creating containers, refer to the [Creating Containers](#) section of this guide.

***Note:** Make sure that the source node and the destination node are in the same version SharePoint. If the site in SharePoint 2013 is a SharePoint 2010 mode site, it can only be replicated to the same mode site.

4. Select an online profile from the **Add to Queue with profile** drop-down list. For instructions, refer to [Setting Up Online Profiles](#).
5. Click **Add to Queue** to add this mapping to the Queue; the **Queue Tools** tab is enabled.
6. To add additional mappings to the Queue:
 - In the **Queue** section, select a mapping and configure the selected mapping.
 - From the **Queue Tools** tab, in the **Continue** group, click **Add New Mappings**. The **Home** tab becomes active; follow steps 2 through 5 above to create and add a new replication mapping.

***Note:** Click **Delete** on the ribbon to remove a selected mapping.

7. To edit selected mappings in the **Queue** section, select operations from the **Queue Tools** tab > **Manage Queue** group.
 - **Mapping Type** – Select a mapping type for the selected mappings. **One way** () only replicates data from source to destination, while **Two way** () performs dual replication between the source and destination; this means that data in the source is replicated to the destination and data in the destination is replicated to the source. **One-way pull** () replicates the data from destination (data source) to source (data destination).
- *Note:** The one-way pull option is only available when you enable one-way pull. For more information about how to enable one-way pull, refer to [Enabling One-Way Pull](#).
- **Profile** – Choose an online profile from the drop-down list for the selected mappings. For instructions, refer to [Setting Up Online Profiles](#).
 - **Real-Time** – Choose whether or not to enable real time replication for the selected mappings. If you enable this option, select the detailed contents for which you want to enable real time replication. For detailed supported Real-Time events, refer to

- [Appendix F – Supported Real-Time](#) Events.
- **Source Agent Group** – Select an Agent Group for the selected mappings from the drop-down list. For details regarding creating an Agent Group, refer to [DocAve 6 Control Panel Reference Guide](#).
- **Enable Mapping** – Choose whether or not to enable the selected mappings in the plan you wish to create.

***Note:** Mappings that are applied on the same plan must be using the same source farm.

8. Click **Save As a Plan** to save the settings as a plan. The **Save As a Plan** window appears. Configure the following settings.

- **Plan Name** – Enter a name for the plan, and add an optional description.
- **Schedule** – Choose whether or not to use a schedule.
 - **No Schedule** – The plan is not run on any schedule and must be initiated manually.
 - **Configure the schedule myself** – Configure a customized schedule, and run the plan by schedule.

Click **Add Schedule** and the **Add Schedule** window pops up.

- **Options** – Choose the replication mode, Full Replication or Incremental Replication. **Full Replication** replicates all of the source content to the destination, while **Incremental Replication** only replicates the modified content (**Add**, **Delete**, and **Modify**) since last incremental or full replication. If selecting **Incremental Replication**, the following options come enabled.
- **Modifications** – Choose whether or not to replicate the modifications since last job.
- **Deletions** – Choose whether or not to replicate the deletions since last job.
- **Reference Time** – Choose whether to replicate contents created or modified at a specified interval. If you choose to use a reference time, specify the time to replicate contents created or modified. Enter an integer into the textbox and select **Minute(s)**, **Hour(s)**, or **Day(s)** from the drop-down list.

***Note:** It is **recommended** specifying a reference time when the recurrence schedule configured in **Range of Recurrence** is **End after 1 occurrence**.

***Note:** For the source files and items, if only the permissions are modified in the replication job, then only the permissions are replicated to the destination, and the current file version or item version is not replicated.

- **Schedule Type** – Select a recurring schedule, **Minute(s)**, **Hour(s)**, **Day(s)**, **Week(s)**, or **Month(s)** from the drop-down list.
- **Schedule Settings** –Specify the frequency at which you run the rerunning schedule. Enter the required information according to the selected schedule type.
- **Range of Recurrence** – Specify when to start and end the running recurring schedule.
 - **Start time** – Set up the time to start the plan and Time Zone can be changed under the Start time. Note that the start time cannot be earlier than the current time.
 - **No end date** – Select this option to repeat running the plan until being stopped manually.
 - **End after specified occurrence(s)** – Select this option to stop the plan after specified occurrences that you configure in the text box.
 - **End by** – Set up the time to end the recurrence of plans.

Click **OK** to save the settings. After configuring the schedule for this replication job, click **Calendar View** to view the job in a calendar view.

- **Notification** - Allows you to choose the type of notification report, and designate which DocAve user will receive an e-mail notification report when a certain triggering event occurs. Select a Notification Profile you previously created from the drop-down menu. Click **View** beside the drop-down menu to view details of the Notification Profile or click **New Notification Profile** from the drop-down menu. For information on creating a Notification Profile, see the [DocAve 6 Control Panel Reference Guide](#).
- **Associated Plan Group** – Add the plan to one or more plan groups to manage multiple plans with common settings. Select a plan group you previously created from the drop-down menu or click **New Plan Group** from the drop-down menu to create a new one. For information on creating a plan group, see the [DocAve 6 Control Panel Reference Guide](#).

9. When finished configuring the plan, select one of the following options:

- Click **OK** to save the plan you have configured.
- Click **OK**, then select **OK and Run Now** to save the plan and execute it right away. The **Run Now** interface appears. In the **Options** section, configure the following settings:
 - **Full Replication** – Replicate all of the source content to the destination
 - **Incremental Replication** – Only replicate the modified content (**Add**, **Delete**, and **Modify**) since last incremental or full replication. If you select Incremental Replication, configure the following settings:
 - **Modifications** – Choose whether or not to replicate the modifications since last job.

- **Deletions** – Choose whether or not to replicate the deletions since last job.
- **Reference Time** – Choose whether to replicate contents created or modified at a specified interval. If you choose to use a reference time, specify the time to replicate contents created or modified. Enter an integer into the text box and select **Minute(s)**, **Hour(s)**, or **Day(s)** from the drop-down list.

***Note:** The default maximum storage time of a SharePoint change log is 60 days. If the reference time you configure is greater than 60 days, by default, DocAve only runs an incremental replication for modifications within 60 days. If the reference time exceeds 60 days and you wish DocAve to run full replication job, navigate to ... \AvePoint\DocAve6\Agent\data\SP2010\Replicator and open the **SP2010Replicator.xml** configuration file with Notepad. Then, find the element **ForceFullForInvalidReferenceTime** and modify the value to **True**.

***Note:** In the case where you copy the database from the source to the destination, and make some changes in the source, then you choose to run an incremental replication job from the source to the destination, only the latest version of the modified object will be replicated to the destination.

***Note:** For the source files and items, if only the permissions are modified in the replication job, only the permissions are replicated to the destination and the current file version or item version is not replicated.

10. Click **OK** to run the job.

***Note:** If two or more mappings in a replication plan have inclusion relationship similar to the diagram below, the content in Mapping-B is not replicated when Mapping-A is run and the content in Mapping-B is replicated only when Mapping-B is run. To replicate the content in Mapping B by using Mapping A, Mapping-B must be deleted before running Mapping-A.

Order	Mapping Type	Realtime	Enable Mapping	Source	Destination
1	→	No	Enable	http://08r2sp1sp10ca:824/sites/docave6.1	http://08r2sp1sp10ca:824/sites/NOTES
2	→	No	Enable	http://08r2sp1sp10ca:824/sites/docave6.1/0615cm	http://08r2sp1sp10ca:824/sites/NOTES/docave6.1

Figure 3: Example of mappings with inclusion relationship

Creating Containers

DocAve allows you to create containers in SharePoint without leaving the DocAve interface. This way you can continue to perform content management tasks without having to create all of the necessary containers before using Replicator.

***Note:** Create Container can be only used to create sites, lists, and folders on the SharePoint Online environments.

To create a container, in the Destination pane, enter the name of a new container in the available field, and then click **Create Container**. The **Create Container** interface will pop up. Depending on the container type you are creating. (Note that when creating a folder, no settings need to be configured, and clicking **Create Container** at folder level will create a folder immediately.) Configure the settings for each type of container as follows:

Creating a Site Collection

Configure these settings in the Create Site Collection page.

- **Title and Description** – Enter the **Title** of the new site collection, and a **Description** for future references.
- **Template Selection** – Select the desired language from the **Select a language** drop-down menu. Then select a site template for this new site collection. Click on a tab to access the templates listed in that category, or click on the Custom tab and select **<Select Template Later ...>** to not choose a template upon creation.
- **Primary Site Collection Administrator** – Enter the **Username** of the primary administrator for this site collection.
- **Secondary Site Collection Administrator** – Enter the **Username** of the secondary administrator for this site collection.
- **Quota Template** – Select the storage quota template to apply to this site collection.
- **Content Database** – Select the Content Database for this site collection.

Click **OK** to create the new site collection, or click **Cancel** to close the Create Container interface.

Creating a Site

Configure these settings in the Create Site page.

- **Title and Description** – Enter the **Title** of the new site, and a **Description** for future references.
- **Template Selection** – Select the desired language from the **Select a language** drop-down menu. Then select a site template for this new site. Click on a tab to access the templates listed in that category.
- **Permissions** – Select **Use unique permissions** to allow a unique set of users access to this new site. Select **Use same permissions** as parent site to allow the same users who can access the parent site access to this new site.
- **Navigation** – Choose whether a link to this site appears in the Quick Launch and top link bar of the parent site.
- **Navigation Inheritance** – Choose whether to use the top link bar from the parent site.

Click **OK** to create the new site, or click **Cancel** to close the Create Container interface.

Creating a List/Library

Configure these settings in the Create List page.

- **Object Type** – Choose whether you wish to create a **List** or a **Library**.
- **Category** – Select the category for the new list or library.
- **Navigation** – Choose whether to a link to this library/list appears in the Quick Launch.
- **Document Template** (for Library only) – For a new library, you may also select the default document template for new files created in this library.
- **Document Version History** (for Document Library, Form Library and Wiki Page Library) – Choose whether to create a version each time you edit a file in this library.
- **Picture Version History** (for Picture Library only) – Choose whether to create a version each time you edit a file in this picture library.
- **Data Connection Version History** (for Data Connection Library only) – Choose whether to create a version each time you edit a file in this data connection library.
- **Item Version History** (for Report Library and Asset Library) – Choose whether to create a version each time you edit a file in this list.

Click **OK** to create the new list or library, or click **Cancel** to close the Create Container interface.

Performing a Byte-level Replication

In cases where there is only a small change to the content (for example, when only the title of a file is changed), byte-level replication can be leveraged to transfer only the change to the file instead of transferring the entire file.

Byte-level replication is optimal for limited/poor connection scenarios, pseudo real-time synchronization, and large file sizes. By minimizing the amount of data transferred, Byte-level replication reduces the impact on bandwidth and infrastructure while ensuring content stays synched.

***Note:** Byte-level replication can only be applied between two farms, both of which must have byte-level settings configured. In addition, the specified paths must be different in order to ensure the proper function of byte-level replication. The Byte-level settings for the source farm are used during the replication.

To perform byte-level replication, complete the following steps:

1. Within Replicator, configure the byte-level settings. Example settings are shown below. For instructions, refer to [Configuring Byte-Level Settings \(Byte-Level Replication Only\)](#).

Figure 4: Example of Byte-level settings

- With these example settings, the snapshots are kept for 365 days and the byte-level replication is applied to any selected data whose size is larger than 200KB. In this case, as farm TECHWRITER01 is the source, the configuration for TECHWRITER01 is used during the replication.
 - **Data size limit** is intended to prevent scenarios where the act of byte-level replication generates more system usage overhead than the transfer of the entire file itself.
2. Set up an online profile. In **Advanced Options**, select **Yes** to enable **Byte-level replication**. For instructions, refer to [Setting Up Online Profiles](#).
 3. Build a full online replication plan. For instructions, refer to [Building an Online Replicator Plan](#).
 4. Run the replication job. If the selected content meets the trigger condition, byte-level replication is performed.

Performing a Three-Way Replication Job

Use three-way replication in order to keep three sites in sync with one another by running two-way replication job for each mapping. For the procedure below, let's assume that we are setting up three-way replication for three sites: one in AvePoint_New York, one in AvePoint_London, and one in AvePoint_Toyko. AvePoint_New York is the headquarters, so the other two branches must stay synced with this site.

To set up and run a three-way replication job, complete the following steps:

1. Within Replicator, set up a conflict profile with the settings shown below. For instructions, refer to [Conflict Options](#).

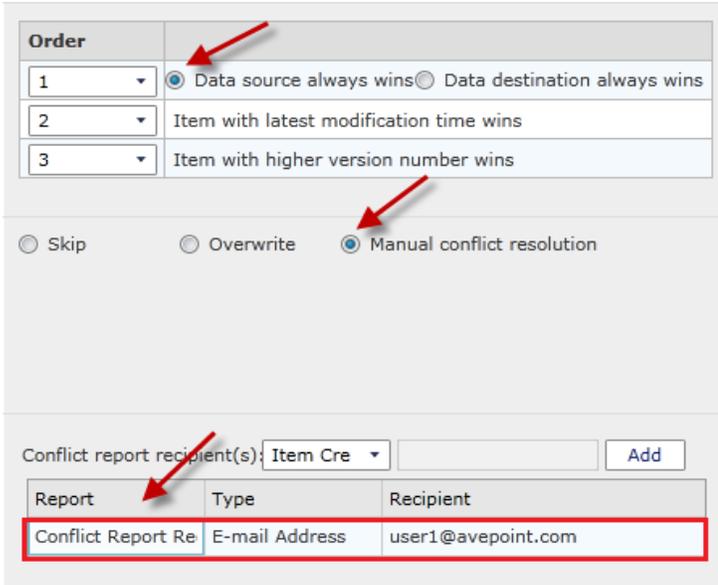


Figure 5: Setting up a conflict sub-profile.

2. Set up a full online profile. For instructions, refer to [Setting Up Online Profiles](#).
3. Build a full online replication plan. For instructions, refer to [Building an Online Replicator Plan](#). In our example, there are two mappings for this plan: one is between New York site and the London site, and the other is between New York site and the Tokyo site. See the image below.

Order	Mapping Type	Realtime	Enable Mapping	Source	Destination
1	two way	No	Enable	http://2710vm26:1000/ AvePoint New York	http://2710vm26:1000/ AvePoint London
2	two way	No	Enable	http://2710vm26:1000/ AvePoint New York	http://2710vm26:1000/ AvePoint Tokyo

Figure 6: Mappings for three-way replication

4. Run a full replication in order to sync the branch offices with the headquarters.
5. Next, build an online incremental replication plan. For instructions, refer to [Building an Online Replicator Plan](#). Choose for this plan to run on a schedule, or for the plan to run in real time.

Performing a One-Way Pull Replication Job

In cases where the connection between DocAve Manager and your data source is poor, use a one-way pull replication job. Use the one-way pull replication to replicate the content from the destination node to the source node.

In a one-way pull replication job, the selected destination node is referred to as the data source and the selected source node is referred to as data destination.

To set up and run a one-way pull replication job, complete the following steps:

1. From the **Home** tab, in the **Settings** group, click **One-way Pull**. The **One-way Pull** page appears.

2. Select the **Enable one-way pull** checkbox to enable the one-way pull replication.
3. Build a full online replication plan. For instructions, refer to [Building an Online Replicator Plan](#).
4. Run the one-way pull replication job.

Creating Online Replicator Plans via Excel

To add a large number of new mappings to an already-created online Replicator plan, it may be more efficient to export the online plans and set up the mappings via Excel while the import of online plans provides you with the same experiences to manage the imported plan.

Exporting Online Plans

To export online plans, complete the following steps:

1. From the **Plan Manager** tab, select one of the saved online plans.
2. In the **Plan Offline Editor** group, click **Export Online Plan**. Save the exported plan file to your specified location. The file is named according to the selected online plan.

Editing Exported Online Plans

To edit an online Replicator plan via Excel, complete the following steps:

1. Browse to the location where you stored the exported plan file, and open the file.
 2. In the Excel file, add new mappings by entering or selecting the value for the mapping settings.
 - **Plan Setting** – Specify a Plan Name, and an optional **Description**.
 - **Mapping Setting** – Set up the mapping settings.
 - **Mapping Number** – Choose to enter the order number for each mapping.
 - **Mapping Type** – Select the mapping type from the drop-down list.
 - **Real-Time** – Choose whether or not to perform the real-time replication. If you do not want to perform the real-time replication, enter **No**. Otherwise, enter the elements that you want to perform the real-time replication. Separate the elements by ; with no space before and after it. The ten available elements are **FoldersOrItemsCreated; FoldersOrItemsUpdated; FoldersOrItemsDeleted; FoldersOrItemsMoved; CheckedIn; CheckedOut; ListAdded; ListDeleted; CheckedOutDiscarded; ListColumnChanged; SiteCollectionDeleted; SiteMove; SiteDelete; VersionDelete; WorkflowStart; WorkflowComplete; UsersInGroupOrGroupsCreate; UsersInGroupOrGroupsUpdate; UsersInGroupOrGroupDelete; PermissionOrPermissionLevelCreate; PermissionOrPermissionLevelUpdate; PermissionOrPermissionLevelDelete**.
- *Note: VersionDelete, UsersInGroupOrGroupsCreate; UsersInGroupOrGroupsUpdate; UsersInGroupOrGroupDelete;**

PermissionOrPermissionLevelCreate; PermissionOrPermissionLevelUpdate; PermissionOrPermissionLevelDelete are only supported for SharePoint 2013.

- **Enable Mapping** – Choose whether to enable or disable the mapping from the drop-down list. If you choose to disable the mapping, this mapping will be skipped during the replication.
- **Source** – Enter the full path of the source node.
- **Source Web Application** – Enter the Web application URL of the source node.
- **Destination** – Enter the full path of the destination node.
- **Destination Web Application** – Enter the Web application URL of the destination node.
- **Level** – Choose the level of the specified source node and destination node from the drop-down list.
- **Profile** – Enter a profile name to specify the profile you want this mapping to be associated with. You must make sure the profile name you entered already exists.
- **Source Farm** – Enter the farm name to specify the source farm. To get the specific name of the farm you want to choose, go to **Control Panel > Agent Monitor**.
- **Source Agent Group** – Enter the Agent Group name to specify the source Agent Group. To get the specific name of the Agent Group you want to choose, go to **Control Panel > Agent Groups**.
- **Destination Farm** – Enter the farm name to specify the destination farm. To get the specific name of the farm you want to choose, go to **Control Panel > Agent Monitor**.
- **Destination Agent Group** – Enter the Agent Group name to specify the destination Agent Group. To get the specific name of the Agent Group you want to choose, go to **Control Panel > Agent Groups**.

Importing Online Plans

To import online plans, complete the following steps:

1. From the **Plan Manager** tab, in the **Plan Offline Editor** group, click **Import Online Plan**. The **Import Online Plan** page appears.
 - **Import File** – Browse to the file location where you have stored the exported plan file.
 - **Conflict Options** – Select a conflict option from the drop-down list. A conflict occurs when the plan name in the Excel file you are about to import already exists in the **Plan Manager**. **Skip** keeps the plan in the **Plan Manager** and does not import the Excel file; **Merge** adds the mappings in the Excel file to the same-named plan in the Plan Manager; **Replace** deletes the same plan in the Plan Manager first, and then imports the Excel.

2. Click **OK** to import the plan to **Plan Manager**.
3. After the plan is successfully imported, the job is started, and you can go to the **Job Monitor** to view details about this import job.

Building an Offline Replicator Plan

Replicator offers the ability to replicate content from an offline source to an offline destination. The process includes setting up an export location, exporting the data to the export location, physically transporting the export location to the destination location, and then importing the data to the destination location.

Setting up an Export Location

The export location is an external system storage that will contain the exported data to be replicated. This export location is physically transported to the destination location where the import is to be performed.

To set up the export location, complete the following steps:

1. From the **Home** tab, in the **Settings** group, click **Export Location**. The Control Panel **Export Location** tab appears in the pop-up window.
2. Configure the export location. For instructions on creating an export location, refer to [DocAve 6 Control Panel Reference Guide](#).
3. Click **OK** to save the configurations. The export location will be available in the Export Location drop-down list when configuring a Data Export. Refer to [Using Data Export](#).

Using Data Export

To export data to an export location in order to perform an offline replication, complete the following steps:

1. From the **Home** tab, in the **Plan Management** group, click **Data Export**.
2. In the **Source** pane, click the farm name to expand the data tree.
 - Select the node whose data you wish to export. If working with a large environment, enter the keyword of the node (for example, site URL, site title, or site/list/item name) into the **Input Keyword** text box to search for the desired node. As you type, this will search out the node only to the expanded level which contains the nodes that matches the character entered.
 - Select the source node by checking the corresponding checkbox.

3. In the Destination pane, select an export location from the drop-down list. If there is no existing export location, select **New Export Location** to create a new one. Refer to [Setting up an Export Location](#).
4. Select an export profile from the **Add to Queue with profile** drop-down list and click **Add to Queue**. For instructions on setting up an export profile, refer to [Setting Up an Export Profile](#).
5. To batch configure selected mappings in the **Queue** section, select operations from the **Queue Tools** tab > **Manage Queue** group.
 - **Profile** – Click **Profile** on the ribbon to activate it and the Profile interface appears. Then select an Export Profile from the drop-down list for the selected mappings.
 - **Source Agent Group** – Click **Source Agent Group** to activate it and the Source Agent Group interface appears. Then select an Agent Group for the selected mappings from the drop-down list.
 - **Enable Mapping** – Choose whether or not to enable the selected mappings in the plan you wish to create.

***Note:** Mappings that are applied on the same plan must use the same source farm.

6. Click **Save As a Plan** to save the settings as a plan. The **Save As a Plan** tab appears. Configure the following settings.
 - **Plan Name** – Enter a name for the plan, and add an optional description.
 - **Schedule** – Choose whether or not to use a schedule.
 - **No Schedule** – Run the plan immediately.
 - **Configure the schedule myself** – Configure a customized schedule, and run the plan by schedule.

Click **Add Schedule**; the **Add Schedule** window pops up.

- **Options** – Choose the replication mode from the drop-down list. **Full Replication** replicates all of the source content to the destination, while **Incremental Replication** only replicates the modified content (**Add**, **Delete**, and **Modify**) since last incremental or full replication. If selecting **Incremental Replication**, the following options come enabled.
 - **Modifications** – Choose whether or not to replicate the modifications since last job.
 - **Deletions** – Choose whether or not to replicate the deletions since last job.
 - **Reference Time** – Choose whether to replicate contents created or modified at a specified interval. If you choose to use a reference time, specify the time to replicate contents created or modified. Enter an integer into the textbox and select Minute(s), Hour(s), or Day(s) from the drop-down list.

***Note:** For the source files and items, if only the permissions are modified in the replication job, only the permissions are replicated to the destination and the current file version or item version is not replicated.

- **Schedule Type** – Select a recurring schedule by **Minute(s)**, **Hour(s)**, **Day(s)**, **Week(s)**, or **Month(s)** from the drop-down list.
 - **Schedule Settings** – Specify the frequency you want to run schedule. Enter the required information according to the selected schedule type.
 - **Range of Recurrence** – Specify when to start and end the running recurring schedule.
 - **Start time** – Set up the time to start the plan and Time Zone can be changed under the Start time. Note that the start time cannot be earlier than the current time.
 - **No end date** – Select this option to repeat running the plan until being stopped manually.
 - **End after specified occurrence(s)** – Select this option to stop the plan after specified occurrences that you configure in the text box.
 - **End by** – Set up the time to end the recurrence of plans.
 - Click **OK** to save the settings. After configuring the schedule for this replication job, click **Calendar View** to view the job in a calendar view.
 - **Notification** - Allows you to choose the type of notification report, and designate which DocAve user will receive an e-mail notification report. Select a Notification Profile you previously created from the drop-down menu. Click **View** beside the drop-down menu to view details of the Notification Profile or click **New Notification Profile** from the drop-down menu. For information on creating a Notification Profile, see the [DocAve 6 Control Panel Reference Guide](#).
7. **Associated Plan Group** – Add the plan to one or more plan groups to manage multiple plans with common settings. Select a plan group you previously created from the drop-down menu or click **New Plan Group** from the drop-down menu to create a new one. For information on creating a plan group, see the [DocAve 6 Control Panel Reference Guide](#).
8. When finished configuring the plan, select one of the following options:
- Click **OK** to save the plan you have configured.
 - Click **OK**, then select **OK and Run Now** to save the plan and execute it right away. Then the **Run Now** interface appears. In the **Options** section, configure the following settings:
 - **Full Replication** – Replicate all of the source content to the destination.
 - **Incremental Replication** – Only replicate the modified content (**Add**, **Delete**, and **Modify**) since last incremental or full replication. If you select Incremental Replication, configure the following settings:
 - **Modification** – Choose whether to replicate the modifications since last job.

- **Deletion** – Choose whether to replicate the deletions since last job.
- **Reference Time** – Choose whether to replicate contents created or modified at a specified interval. If you choose to use a reference time, specify the time to replicate contents created or modified. Enter an integer into the textbox and select Minute(s), Hour(s), or Day(s) from the drop-down list.

***Note:** The default maximum storage time of a SharePoint change log is 60 days. If the reference time you configure is greater than 60 days, by default, DocAve only runs an incremental replication for the modifications within 60 days. If the reference time exceeds 60 days and you wish DocAve to run full replication job, navigate to ...*AvePoint\DocAve6\Agent\data\SP2010\Replicator* and open the **SP2010Replicator.xml** configuration file with Notepad. Then, find the element **ForceFullForInvalidReferenceTime** and modify the value to **True**.

***Note:** In the case where you copy the database from the source to the destination, and make some changes in the source, then you choose to run an incremental replication job from the source to the destination, only the latest version of the modified object will be replicated to the destination.

***Note:** For the source files and items, if only the permissions are modified in the replication job, only the permissions are replicated to the destination and the current file version or item version is not replicated.

9. Click **OK** to **run** the job.

Using Data Import

To import data to the destination location in order to perform an offline replication, complete the following steps:

1. From the **Home** tab, in the **Plan Management** group, click **Data Import**.
2. In the **Source** pane, on the **Browse** tab, click the farm name to expand the export location. Click the export location to load the **Replicator** folder in the UNC path. Then click the folder named by the plan name to load mappings and select your desired mapping. To see details of the exported data in the source tree, click the **Details** tab.
3. In the **Destination** pane, click the farm name to expand the data tree.
 - Select the node which you wish to import the exported data to. If working with a large environment, enter the keyword of the node into the Input Keyword text box to search for the desired node. As you type, this will search out the node only to the expanded level which contains the nodes that matches the character entered.
 - Select destination node by clicking the corresponding radio button. You can also create a new site collection, site, list or folder by entering the specified name and click **Create Container**. For details on creating a container, refer to [Creating Containers](#).

4. Select an import profile from the **Add to Queue with profile** drop-down list and click **Add to Queue**. For more information, refer to [Setting Up an Import Profile](#).
5. To batch configure selected mappings in the **Queue** section, select operations from the **Queue Tools** tab > **Manage Queue** group.
 - **Profile** – Click **Profile** on the ribbon to activate it and the **Profile** interface appears. Then select an Import Profile from the drop-down list for the selected mappings.
 - **Enable Mapping** – Choose whether or not to enable the selected mappings in the plan you wish to create.
 - **Destination Agent Group** – Select an Agent Group for the selected mappings. For details regarding creating an Agent Group, refer to [DocAve 6 Control Panel Reference Guide](#).
6. Click **Save As a Plan** to save the settings as a plan. The **Save As a Plan** tab appears. Configure the following settings.
 - **Plan Name** – Enter a name for the plan, and add an optional description.
 - **Schedule** – Choose whether or not to use a schedule.
 - **No Schedule** – Run the plan immediately.
 - **Configure the schedule myself** – Configure a customized schedule, and run the plan by schedule.

Click **Add Schedule**; the **Add Schedule** window pops up.

- **Schedule Type** – Select a recurring schedule by **Minute(s)**, **Hour(s)**, **Day(s)**, **Week(s)**, or **Month(s)** from the drop-down list.
 - **Schedule Settings** – Specify the frequency you want to run the schedule. Enter the required information according to the selected schedule type.
 - **Range of Recurrence** – Input the start time for the job and select the end time of the recurring schedule.
 - Click **OK** to save the settings. After configuring the schedule for this replication job, click **Calendar View** to view the job in a calendar view.
- **Notification** - Allows you to choose the type of notification report, and designate which DocAve user will receive an e-mail notification report when a certain triggering event occurs. Select a Notification Profile you previously created from the drop-down menu. Click **View** beside the drop-down menu to view details of the Notification Profile or click **New Notification Profile** from the drop-down menu. For information on creating a Notification Profile, see the [DocAve 6 Control Panel Reference Guide](#).
7. When finished configuring the plan, select one of the following options:
 - Click **OK** to save the plan you have configured.
 - Click **OK**, then select **OK and Run Now** to save the plan and execute it right away.

***Note:** The exported data can only be imported into the same DocAve version. If you wish to import the previous data using a newer version of DocAve, AvePoint recommends exporting data through the

newer version using the Export Plan that you configured in the older version of DocAve, and then running the import job.

Performing a Two-Way Offline Replication Job

If two sites must be kept in sync despite being separated by a firewall or no connection, the system administrator can use two-way offline replication to accomplish the sync between two sites. To perform a two-way offline replication job, complete the following steps:

1. Within Replicator, set up the same export location for both farms. Set the same UNC path for both farms. See the example below. For more information, refer to [Setting up an Export Location](#).

Field	Value (Left)	Value (Right)
Name	ExportLocation1	ExportLocation2
Description		
Farm	Farm(TECHWRITER01:SHAREPO)	Farm(TECHWRITER02:SHAREPO)
UNC path	\\TECHWRITER01\C\$\ExportLocation1	\\TECHWRITER01\C\$\ExportLocation1
Username	ccbranch\add	ccbranch\add
Password

Figure 7: Example export locations for two-way offline replication.

2. Build an export plan for the source and an export plan for the destination. For more information, refer to [Using Data Export](#).
***Note:** Since these two locations are on two different farms, the export plan must be built separately for each.
3. After the full export jobs complete, build an import plan for the source and an import plan for the destination. For more information, refer to [Using Data Import](#).
***Note:** Since these two locations are on two different farms, the export plan must be built separately for each. When scheduling the import jobs, ensure that they are set to run *after* the export jobs.
4. Once complete, the two-way offline replication plan will run at the specified times.

***Note:** Incremental replication is not possible in this scenario because DocAve Replicator has no access to the destination Replicator database; without access to the destination database, it is impossible to compare changes in content.

Replicator for SharePoint Online

Replicator allows you to replicate content between Microsoft SharePoint 2010 and SharePoint 2013 and Office SharePoint Online and from Office SharePoint Online to Office SharePoint Online. To perform this function properly, you must configure your SharePoint Sites in Control Panel. For more information, see the [DocAve 6 Control Panel Reference Guide](#).

For details on how to perform a replication job with the SharePoint Online, refer to [Building an Online Replicator Plan](#). Note that certain settings are unsupported when the destination node is in a SharePoint Online environment.

For supported and unsupported settings for SharePoint Online, refer to [Appendix E – Supported and Unsupported SharePoint Online Settings](#).

***Note:** Replicator for SharePoint Online only supports the Create Container function for site, list, and folder level in a SharePoint Online destination node.

Replication Details

In the Replication Details area you can view, query, and export detailed replicated records. You can also configure Report Settings to export replication job reports.

On the **Home** tab, in the **Statistics** group, click **Replication Details** on the ribbon. The **Replication Details** tab appears.

Query Records

1. By default, the records of all replication jobs are displayed when you enter the interface for the first time. In this interface, you can change the number of records displayed per page by selecting the desired number from the **Show-rows** drop-down menu in the lower right-hand corner.

You can customize how these records are displayed with the following buttons:

-  – Manages which columns are displayed in the list so that only information you want to see is shown. Click , and then select the checkbox next to the column name to have that column shown in the list.
-  – Allows you to hide the column. Click  in the column title to hide the column.

2. To query your desired replicated records, you can define a query scope by clicking **Query Scope**. Configure the following settings:
 - **Time Range** – Specify the time range of the records to add to your scope.
 - **All jobs** – All replication jobs are added into your scope.
 - **Jobs within** – Select your desired time range from the drop-down menu or select **Custom** and define your time range from the calendar.
 - **Plan Name** – Select your desired plan from the drop-down menu to add to your scope. By default, **All Plans** is selected.
 - **Mapping Selection** – Select your desired mappings from the drop-down menu to add to your scope. By default, **All Mappings** is selected.
***Note:** This field only appears after you have selected a plan under Plan Name.
 - **Object Type** – Select your desired SharePoint object type from the drop-down menu to add to your scope. By default, all object types are selected.
 - **Status** – Select your desired job status from the drop-down menu to add to your scope. By default, all statuses are selected.
3. Click **Apply** to finish defining your scope and start to query your desired records or click **Cancel** to exit. To redefine your query scope, click **Reset**.

Viewing Detailed Records

To view details of a specific record, select your desired record, and click **View Details** on the ribbon, or right-click the record name and select **View Details**. In the pop-up **View Details** interface, you can review basic information and advanced information about the selected record.

Exporting Query Records

When you finish querying your desired records, you are allowed to export the query results. Click **Export Query Result** in the **Query Action** area on the ribbon and the export interface pops up. In the pop-up window, select the report format as **XLS**, **CSV**, or **TXT**, and then click **Export** to export the query results immediately.

Exporting Replication Job Reports

Report Settings allow you to specify a location to store replication job reports and set the maximum time to retain the reports. Click **Report Settings** on the ribbon and the **Report Settings** interface pops up. In the pop-up window, configure the following settings:

1. **Report Location** – Specify a Universal Naming Convention path to the location to store the job reports and credentials of the location. Select the **Use the Net Share path as the report location** checkbox and enter the **UNC path**, **Username**, and **Password** in the corresponding textboxes.

2. **Maximum Time to Retain Reports** – Specify the maximum time to retain the replication job reports by entering your desired number of days in the textbox.
3. Click **OK** to finish configuring the report settings.

Health Analyzer

Health Analyzer checks if there are issues that will affect replication jobs.

On the **Home** tab, in the **Statistics** group, click **Health Analyzer** on the ribbon. The **Health Analyzer** tab appears.

Collecting Data for Analysis

Before performing a replication job, some issues that affect the replication may exist. To guarantee the success of replication, you can collect data to analyze whether there are issues for Replicator. It supports to collect data immediately or to collect data as scheduled.

Collect Now

To collect data to analyze immediately, in the **Health Analyzer** interface, click **Collect Now** on the ribbon. Then a health analyzer job is started. When the health analyzer job is finished, you can view the result of analysis.

Collection Settings

To collect data to analyze as scheduled, in the **Health Analyzer** interface, click **Collection Settings** on the ribbon. In the pop-up **Collection Settings** interface, configure the following settings to add a schedule:

1. **Scheduled Collection** – Select the **Enable scheduled collection** checkbox to enable scheduled collection which will collect data according to the configured schedule. If the checkbox is selected, the following sections appear.
2. **Schedule** – Specify how often the data will be collected to analyze by entering your desired number in the textbox and selecting **Hours**, **Days**, **Weeks**, or **Months** from the drop-down list.
3. **Schedule Settings** – Specify the start and end time of the schedule.
 - **Start time** – Set up the start time to start running the health analyzer job. Time zone can be changed under the Start time. Note that the start time cannot be earlier than the current time.
 - **No end date** – Select this option to repeat running the health analyzer job until being stopped manually.
 - **End after specified occurrences** – Select this option to stop the health analyzer job after specified occurrences that you configure in the textbox.
 - **End by** – Set up the time to end the recurrence of the health analyzer job.
4. **Notification** – Select a previously-configured e-mail notification profile for sending the notification report. For more information on working with notification profiles, refer to the [DocAve 6 Control Panel Reference Guide](#).

5. **Notification Settings** – You can define what kinds of issues will be sent to you by selecting your desired issue types from the drop-down list and the issues severity, **Warning** or **Error**.

Managing Issues

When a health analyzer job is finished, issues are displayed in the **Health Analyzer** interface. By default, issues and the related information are all displayed, including farm, agent/Web Front End name, and issue type.

Perform the following actions in the **Health Analyzer** interface:

1. **Filter** –To filter your desired issues, select **Farm, Agent, Issue Type,** or **Issue Severity** from the **Group by** drop-down list.
2. **View Details** – Click the issue and the **View Details** interface pops up. The related information and the solution are provided.
3. **Refresh** – To check whether an issue still exists, click **Refresh** at the end of a piece of issue.

Exporting Report

To export the detailed analysis result, click **Export Report** on the ribbon. In the pop-up window, select your desired report format from the drop-down list to export the report.

Mapping Status

The mapping status of plans is displayed in the **Mapping Status** page.

1. On the **Home** tab, in the **Statistics** group, click **Mapping Status** and the **Mapping Status** tab appears.
2. Select a specified farm from the **Farm** drop-down list to filter plans or use the default **All** farms.
3. Select a plan from the **Plan** drop-down list to view the mapping status of the specified plan.
4. Mapping status of plans in the selected farms is displayed. You can view source information, mapping status, destination information, and Details.
 - Source information contains source URL, source Agent Name, Connection status, number of sent items and received items.
 - Status contains the mapping status, size of transferred data, total size, and statistics of Error, Conflict, and Retry.
 - Destination information contains destination URL, destination Agent Name, Connection status, number of received items and sent items.
 - For Finished mapping, click **Details** to view mapping in **View Mappings** tab in Job Monitor.

Replicator Tool

The **Replicator Analyzer Tool** and the **Data Transfer Service Tool** are provided with the Replicator module. Refer to [DocAve 6 Supplementary Tools User Guide](#) for instructions on using the tools.

The **Replicator Analyzer Tool** is used to delete the configuration of Profile Settings of failed jobs from DocAve_ReplicatorDatabase. After deleting the configuration of Profile Settings, the incremental replication can be done successfully. Use the **Replicator Analyzer Tool** to modify the SP2010Replicator.xml configuration file in bulk.

The **Data Transfer Service Tool** is used to check the newly-added and modified data in the source export location and transfer the new data to the destination export location. The import job is triggered automatically and the new data is imported to the destination node. **The Data Transfer Service Tool** is integrated with Replicator's differential compression function.

DocAve Replicator Use Cases

The following use cases apply the procedures described in this guide to several real-world situations. These use cases are intended to give the user an idea of when and why one would use common DocAve Replicator functionality. Note that these situations assume that the DocAve platform and applicable

modules have been installed successfully, and that the prerequisite conditions are met (appropriate permissions for the Agent account, creation of logical devices, etc.).

Online Replicator for One Farm

One common application of Replicator on a single farm is the replication of one calendar to several other calendars in that same farm. In this scenario, assume that the Vice President of Product Development for a software organization would like to release an internal Product Release Calendar (PRC) to the organization every week; the calendar will display the target release dates for the various products in development. Due to the nature of software development, product release target dates change frequently, and as a result, the PRC will change just as frequently. The organization's SharePoint administrator, Joe, can use DocAve Replicator to account for the dynamic scheduling issues and to ensure that the entire organization is viewing the same official PRC.

First, Joe checks SharePoint permissions to ensure that the source PRC is viewable and editable only by the VP. Because the calendar is on a Product Development site that is only accessible to the VP, Joe is confident that only the VP can modify the content within the calendar. Then, Joe accesses DocAve Replicator and clicks **Online Replicator** to build a one way, online mapping plan (refer to [Building an Online Replicator Plan](#)). Joe expands the farm tree and selects the PRC in the **Source** pane. Next he must select a destination.

For the destination, Joe intends on replicating the PRC to each department's official SharePoint calendar. To do this, he must create a mapping for each desired location. Joe selects the PRC as the **Source**. In the **Destination** pane, he expands the Sales department Web application, navigates down to the Sales calendar, and selects the calendar for the destination. Joe clicks **Apply** to add the mapping to the **Queue**. He then repeats this process, selecting each department's calendar as the **Destination** and adding each mapping to the **Queue**. When finished, Joe clicks **Save**, creates a **Plan** name, and schedules the plan to run every Friday at 5 pm.

Lastly, Joe saves and enables the new plan. With these mappings in place and a weekly replication schedule established, Joe can be sure that the latest PRC will be replicated from the source location (the VP's calendar) to the various destination locations (calendars for Sales, HR, Manufacturing, etc.).

Online Replicator for Two Farms

In addition to being useful on a single farm, online replication is also beneficial in multi-farm environments, especially environments with farms that are separated by vast distances or poor internet connections. In either case, the use of real-time, byte-level online replication is recommended.

For this example, assume that an organization has two offices; one of the offices is in the United States, and the other office is in China. The SharePoint administrator for the US farm, Joe, wants to use DocAve Replicator to keep content synched between these two farms.

Joe's first step is to identify the content that he wants to replicate. In the interest of reducing the duration of Replicator job times and maintaining acceptable system performance, Joe wants to limit the scope of the mappings to only the content that must stay current on both farms. Consequently, Joe decides to create mappings for two different libraries. The first library is a collection of Excel spreadsheets that detail pricing information for various products. The other library contains large Excel files that contain up-to-the-minute accounting information for the organization; both the US and China Accounting Team edit this document on a daily basis.

Now that Joe has decided upon which lists/libraries to replicate, he begins to create the mappings. Joe creates the following mappings and adds them to the **Queue**:

Mapping 1

For the pricing spreadsheets library, Joe configures the mappings as follows:

- **Mapping Type:** One-way replication to the China farm because product pricing is determined in the US office and then disseminated to the rest of the organization.
- **Real Time:** Real-Time replication is not necessary because the pricing information does not change frequently.
- **Enable Mapping:** Joe selects **Enable** because he wants this mapping to take effect immediately.
- Joe applies the **Default Profile**; he wants to replicate **Security, Configuration, and Content** because the settings for this library are identical across both farms. All other default profile settings are applicable to this mapping.

Mapping 2

For the accounting Excel documents, Joe configures the mappings as follows:

- **Mapping Type:** Two-way replication because frequent edits to the documents will be made by both China and U.S. employees.
- **Real-time:** Joe enables **Real-time** replication to ensure that all numbers in the Excel documents are current when viewed by any employee at either office.
- **Enable Mapping:** Joe selects **Enable** because he wants this mapping to take effect immediately.
- Joe creates a new **Profile**. He wants to replicate **Security, Configuration, and Content** because the settings for this library are identical across both farm. For **Conflict Options**, Joe sets the **Conflict Resolution** to **Data destination always wins** because the primary Accounting Office is in China. Joe selects **Enable Byte-level settings** so that changes to the Excel files are replicated only when the size of the Excel files to be transferred is larger than the data size limit that is configured in **Byte-level Settings**. With these mapping configurations, Joe can be sure that he is utilizing Replicator features appropriately. He chooses to only replicate content that must stay current on both farms, reducing the duration of Replicator job times and ensuring acceptable system

performance. He uses Real-Time replication where applicable, and applies suitable Conflict Resolution settings to each mapping. This use case demonstrates that the key to developing efficient Replicator jobs involves understanding each job and customizing each mapping according to its purpose.

Moving Site Content to a Target Newly-Created Site

In some cases, it may be desirable to replicate existing content to a new site. For example, assume that a New York-based company is opening a new marketing office in Paris. In this case, the New York SharePoint administrator would create a new Marketing site for Paris, then replicate the New York Marketing site content to the Paris site.

To move site content to a target newly-created site:

1. From the **Home** tab, in the **Plan Management** group, click **Online Replicator**.
2. In the **Source** pane, select the site that you wish to replicate. If working with a large environment, enter the site collection URL into the **Input Keyword** text box to search for the desired site collection. Select the source site by checking the corresponding check box.
3. In the **Destination** pane, expand the destination data tree to the site level of the desired destination site collection.
4. Select radio button to the left of the “manual input” text box. Enter the site tile for this newly created site.
5. Click the **Create Container** button to the right of the text box. Or, on the **Home** tab, in the **Plan Management** group, click **Create Container**. The **Create Site Collection** window appears.
6. In the **Create Site Collection** page, configure the new site.
7. When finished, click **OK** to create the new site. This newly-created site is now listed under the Sites node of the specified site collection.
8. Finish creating an Online Replicator plan. For more information, refer to [Building an Online Replicator Plan](#).
9. When the job is run, the content in the source site is replicated to the newly-created target site.

Appendix A – Supported and Unsupported SharePoint Web Parts

SharePoint 2010 Web Parts

The following table lists the supported and unsupported SharePoint 2010 Web parts in Replicator.

***Note:** By default, customized Web parts are unsupported. Please contact AvePoint technical support if you require customized Web part support.

	Web Part	Supported	Unsupported
Business Data	Business Data Actions	√	
	Business Data Connectivity Filter	√	
	Business Data Item	√	
	Business Data List	√	
	Business Data Related List	√	
	Chart Web Part	√	
	Excel Web Access	√	
	Indicator Details	√	
	Status List	√	
	Visio Web Access	√	
Content Rollup	Categories	√	
	Content Query	√	
	Relevant Documents	√	
	RSS Viewer	√	
	Site Aggregator	√	
	Sites in Category	√	
	Summary Links	√	
	Table Of Contents	√	
	Web Analytics Web Part	√	
	WSRP Viewer	√	
XML Viewer	√		
Filters	Apply Filters Button	√	
	Choice Filter	√	
	Current User Filter	√	
	Date Filter	√	
	Page Field Filter	√	
	Query String(URL) Filter	√	
	SharePoint List Filter	√	
	Text Filter	√	
Forms	HTML Form Web Part	√	
	InfoPath Form Web Part	√	
Media and Content	Content Editor	√	
	Image Viewer	√	

	Web Part	Supported	Unsupported
	Media Web Part	√	
	Page Viewer	√	
	Picture Lib Slideshow Web Part	√	
Outlook Web App	My Calendar	√	
	My contacts	√	
	My Inbox	√	
	My Mail Folder	√	
	My Tasks	√	
Social Collaboration	Contact Details *Note: The related user information of this Web part is also replicated to the destination when replicating the Contact Details Web part.	√	
	Note Board	√	
	Organization Browser	√	
	Site Users	√	
	Tag Cloud	√	
	User Tasks	√	

SharePoint 2013 Web Parts

The following table lists the supported and unsupported SharePoint 2013 Web parts in Replicator.

***Note:** By default, customized Web parts are unsupported. Please contact AvePoint technical support if you require customized Web part support.

	Web Part	Supported	Unsupported
Business Data	Business Data Actions	√	
	Business Data Connectivity Filter	√	
	Business Data Item	√	
	Business Data Item Builder		√
	Business Data List	√	
	Business Data Related List		√
	Excel Web Access	√	
	Indicator Details	√	
	Status List	√	
Content Rollup	Visio Web Access	√	
	Categories		√
	Content Query	√	
	Relevant Documents	√	
	RSS Viewer	√	
	Site Aggregator	√	
	Sites in Category		√

	Web Part	Supported	Unsupported
	Summary Links	√	
	Table of Contents	√	
	WSRP Viewer	√	
	Timeline	√	
	Term Property	√	
	Project Summary	√	
	Content Search	√	
Filters	Apply Filters Button	√	
	Choice Filter	√	
	Current User Filter	√	
	Data Filter	√	
	Page Filtered Filter	√	
	Query String(URL) Filter	√	
	SharePoint List Filter	√	
	SQL Server Analysis Service Filter		√
	Text Filter	√	
Forms	HTML Form Web Part	√	
	InfoPath Form Web Part	√	
Media and Content	Content Editor	√	
	Image Viewer	√	
	Media Web Part	√	
	Page Viewer	√	
	Picture Lib Slideshow Web Part	√	
	Silverlight Web Part	√	
	Script Editor	√	
	Get Start with your site	√	
Search	Refinement	√	
	Popular Items	√	
	Search Navigation	√	
	Search Results	√	
	Taxonomy Refinement Panel		√
Social Collaboration	Contact Details *Note: The related user information of this Web part is also replicated to the destination when replicating the Contact Details Web part.	√	
	Note Board	√	
	Organization Browser	√	
	Site Users	√	
	Tag Cloud	√	
	User Tasks	√	
Blog	Blog Archives	√	
	Blog Notifications	√	

	Web Part	Supported	Unsupported
	Blog Tools	√	
Community	About this community	√	
	Join	√	
	My membership	√	
	Tools	√	
	What's happening	√	
Document Sets	Document Set Contents	√	
	Document Set Properties	√	
Search-Driven Content	Catalog-Item Reuse		√
	Items Matching a Tag		√
	Pages		√
	Pictures		√
	Search Box	√	
	Recently Changed Items		√
	Recommended Items		√
	Videos		√
	Web Pages		√
	Wiki Pages	√	

Appendix B – Supported and Unsupported SharePoint Elements for Replicator

SharePoint 2010 Elements

The following table lists the currently supported and unsupported SharePoint 2010 elements in Replicator.

Source	Type	Status	Note
Libraries	Document Library	Supported	
	Form Library	Supported	
	Wiki Page Library	Supported	
	Picture Library	Supported	
	Translation Management Library	Supported	
	Data Connection Library	Supported	
	Slide Library	Supported	
	Report Library	Supported	
	Asset Library	Supported	
	DocAve Content Library	Supported	
DocAve Media Library	Supported		
Communications List	Announcements	Supported	
	Contacts	Supported	
	Discussion Board	Supported	
Tracking Lists	Links	Supported	
	Calendar	Supported	
	Tasks	Supported	
	Project Tasks	Supported	
	Issue Tracking	Supported	
	Survey	Supported	
Custom Lists	Custom List	Supported	
	Custom List in Datasheet View	Supported	
	Language and Translators	Supported	
	KPI Lists	Supported	
	Import Spreadsheet	Supported	
Web Pages	Basic Page	Supported	
	Web Part Page	Supported	
	sites and Workspaces	Supported	
Workflow	SharePoint Built-in Workflow	Supported	Only support workflow definition for SharePoint Online

Source	Type	Status	Note
	SharePoint Designer Workflow	Supported	Only support workflow definition for SharePoint Online
	Nintex Workflow	Supported	Unsupported for SharePoint Online
	Visual Studio Workflow	Supported	
	Visio Workflow	Unsupported	
	Azure Workflow	Unsupported	
<p>*Note: For the supported workflow, workflow definition, and workflow instance (including completed workflow instance and running workflow instance) are both supported to be replicated. For the running workflow instance, in Profile Settings, you can choose to cancel or restart the workflow after the replication job.</p>			
RSS		Supported	
Alerts		Supported	
Metadata	Single line of text	Supported	
	Multiple lines of text	Supported	
	Choice (menu to choose from)	Supported	
	Number	Supported	
	Currency	Supported	
	Date and Time	Supported	
	Look up	Supported	
	Yes/No	Supported	
	Person or Group	Supported	
	Hyperlink or Picture	Supported	
	Calculated	Supported	
Security & Properties	Business Data	Supported	
	Version Settings	Supported	
	Column Settings	Supported	
Permissions	Permissions	Supported	
	Documents	Supported	
	Lists	Supported	

SharePoint 2013 Elements

The following table lists the currently supported and unsupported SharePoint 2013 elements in Replicator.

Source	Type	Status	Note
Libraries	Document Library	Supported	
	Form Library	Supported	
	Wiki Page Library	Supported	
	Picture Library	Supported	

Source	Type	Status	Note
	Data Connection Library	Supported	
	Report Library	Supported	
	Asset Library	Supported	
	DocAve Content Library	Supported	
	DocAve Media Library	Supported	
Communications List	Announcements	Supported	
	Contacts	Supported	
	Discussion Board	Supported	
	Promoted Links	Supported	
	External List	Supported	
Tracking Lists	Links	Supported	
	Calendar	Supported	
	Tasks	Supported	
	Issue Tracking	Supported	
	Survey	Supported	
Custom Lists	Custom List	Supported	
	Custom List in Datasheet View	Supported	
	KPI Lists	Supported	
	Import Spreadsheet	Supported	
Web Pages	Basic Page	Supported	
	Web Part Page	Supported	
	sites and Workspaces	Supported	
Workflow	SharePoint Built-in Workflow	Supported	Only support workflow definition for SharePoint Online
	SharePoint Designer Workflow	Supported	Only support workflow definition of SharePoint 2010 Workflow for SharePoint Online
	Nintex Workflow	Supported	Unsupported for SharePoint Online
	Visual Studio Workflow	Supported	
	Visio Workflow	Unsupported	
	Azure Workflow	Unsupported	
<p>*Note: For the supported workflow, workflow definition, and workflow instance (including completed workflow instance and running workflow instance) are both supported to be replicated. For the running workflow instance, in Profile Settings, you can choose to cancel or restart the workflow after the</p>			

Source	Type	Status	Note
replication job.			
RSS		Supported	
Alerts		Supported	
Metadata	Single line of text	Supported	
	Multiple lines of text	Supported	
	Choice (menu to choose from)	Supported	
	Number	Supported	
	Currency	Supported	
	Date and Time	Supported	
	Look up	Supported	
	Yes/No	Supported	
	Person or Group	Supported	
	Hyperlink or Picture	Supported	
	Calculated	Supported	
Business Data	Supported		
Security & Properties	Version Settings	Supported	
	Column Settings	Supported	
	Permissions	Supported	
Version Histories	Documents	Supported	
	Lists	Supported	

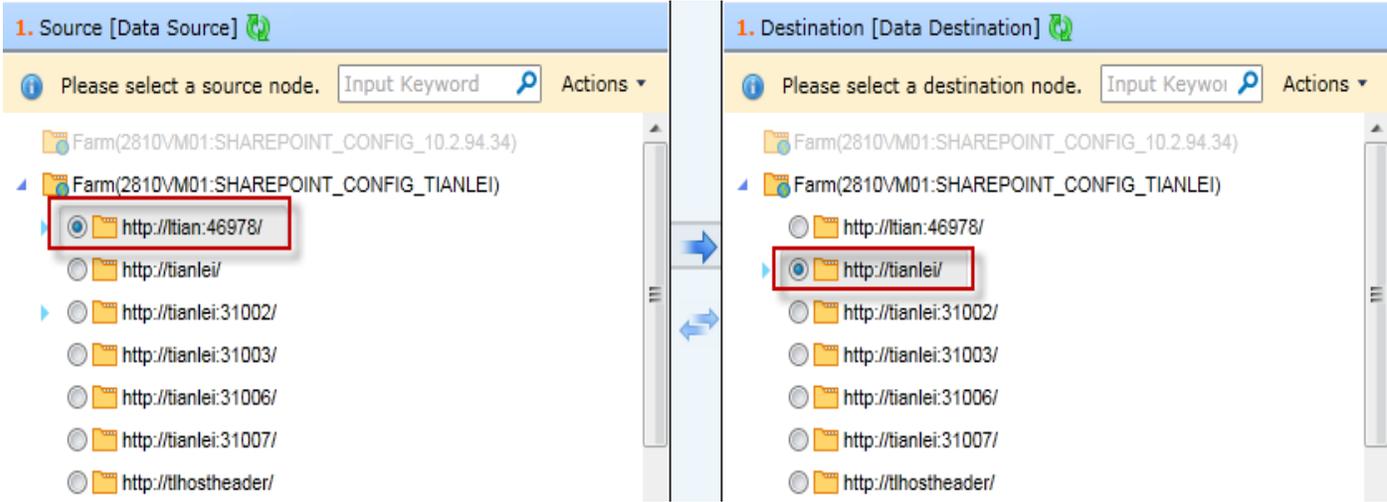
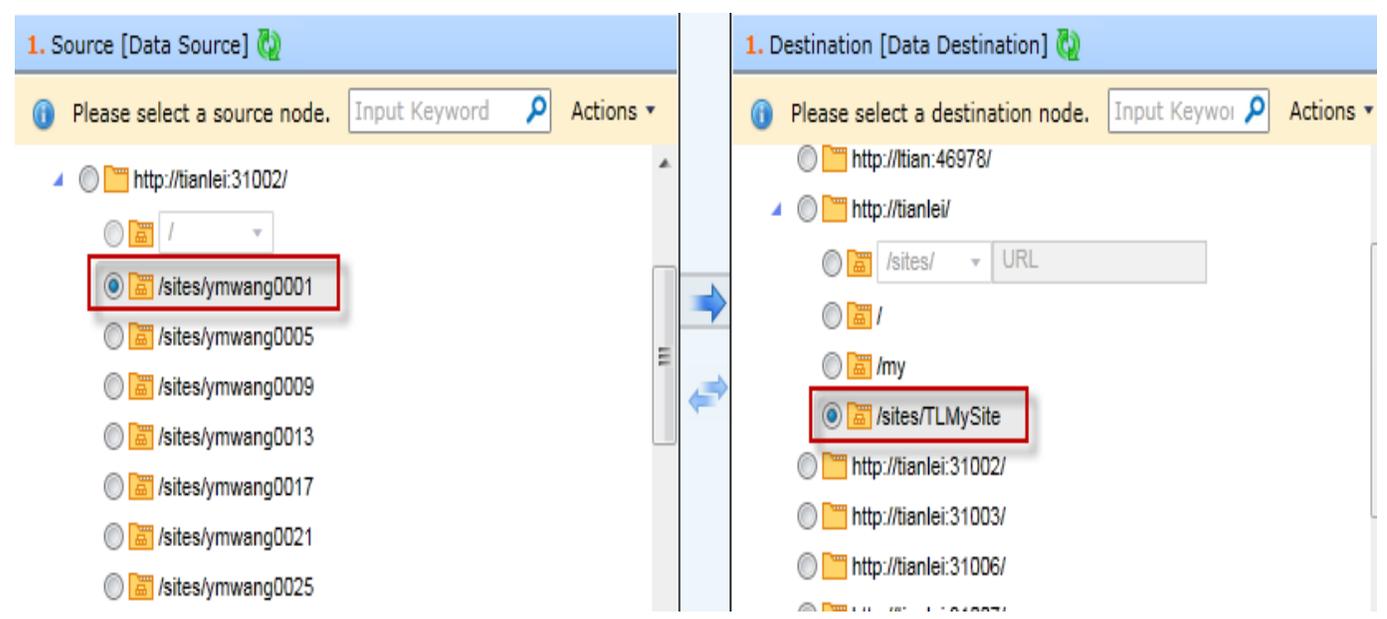
Appendix C – Supported and Unsupported SharePoint 2013 Social Features

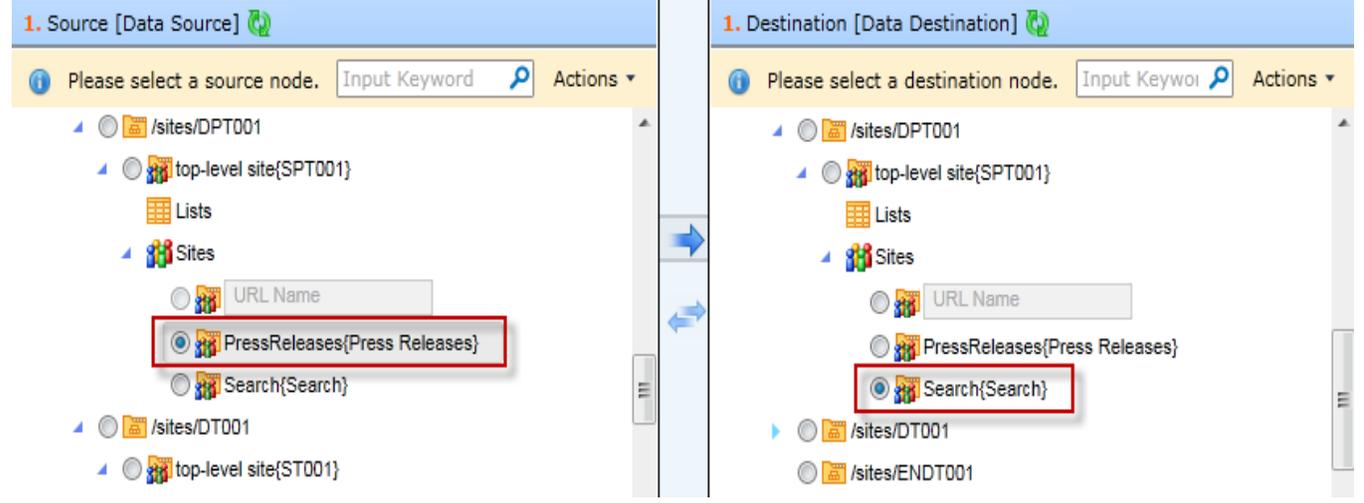
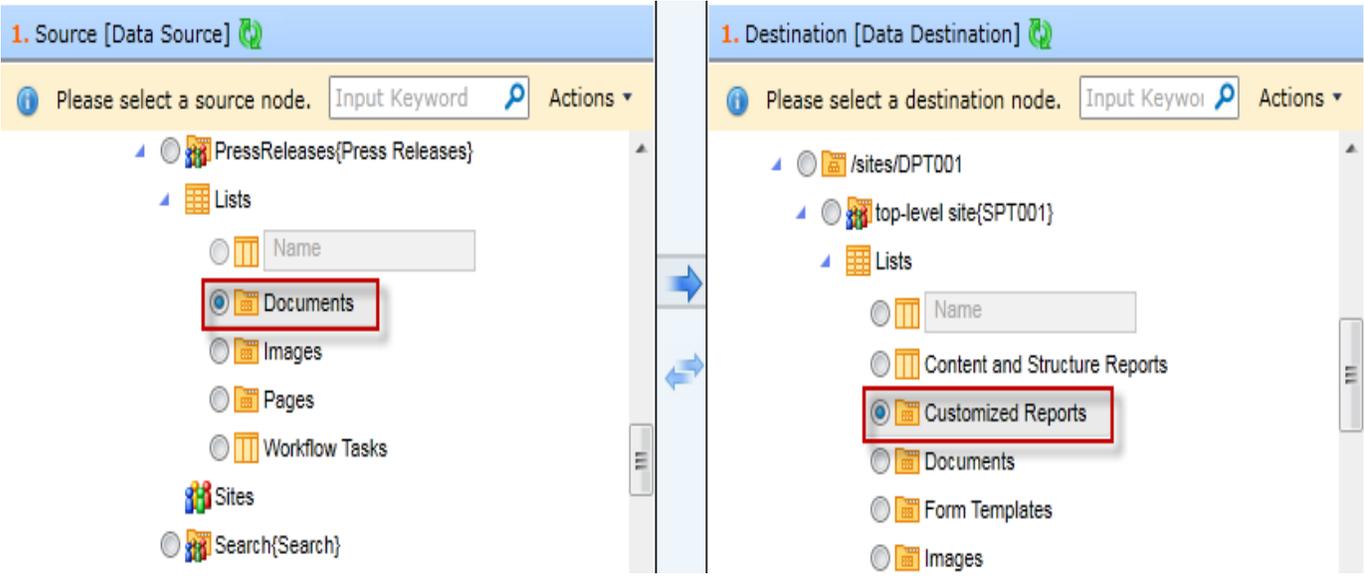
The following table lists the currently supported and unsupported SharePoint 2013 social features in Replicator.

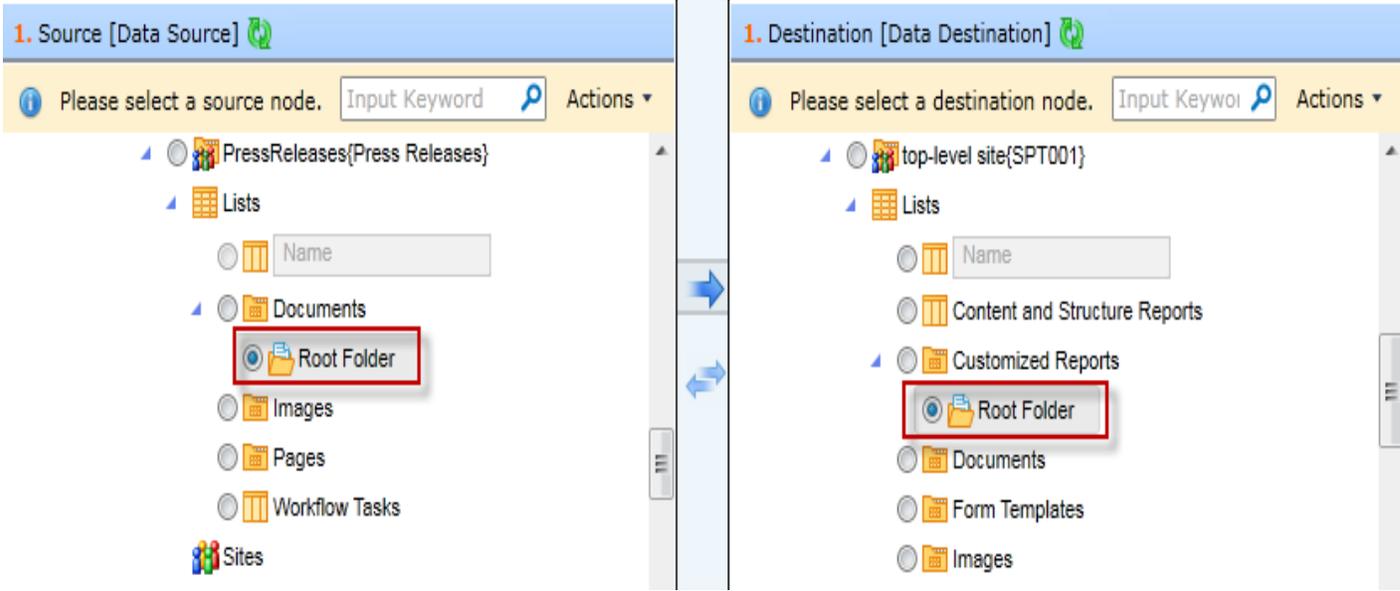
Social Feature		Status	Note
My Site		Supported	The head portraits of the users are not supported.
SkyDrive Pro		Supported	
Blog		Supported	
Tag		Supported	The #tag is stored in Managed Metadata Service as a system term.
Microblog and Feed	Post	Supported	
	Reply	Supported	
	Like	Supported	
	Picture	Supported	
	Link	Supported	
	@	Unsupported	
	Mentions	Unsupported	
	Tag	Unsupported	
Follow	People	Supported	
	Site	Supported	
	Document	Supported	
	Tag	Supported	
Community Site	Categories	Supported	
	Discussion Board	Supported	
	Members	Supported	
	Budge	Supported	
	Reputation	Supported	
	Best Reply	Supported	
	Question	Supported	
	Community Setting	Supported	
Community Portal		Supported	

Appendix D – Replicator Customization Table

In the following table, a ✓ means that the corresponding SharePoint object is supported for replication to the corresponding SharePoint object level.

Replicate To What to Replicate	Web Application	Site Collection	Site	List	Folder	What to Select When Replicating
Web Application	✓					 <p>The screenshot shows two side-by-side panels for configuring a replication. The left panel is titled '1. Source [Data Source]' and contains a search bar and a tree view of nodes. The tree view shows a hierarchy starting with 'Farm(2810VM01:SHAREPOINT_CONFIG_10.2.94.34)', followed by 'Farm(2810VM01:SHAREPOINT_CONFIG_TIANLEI)', and then several sub-nodes including 'http://tian:46978/' which is selected with a red box. The right panel is titled '1. Destination [Data Destination]' and also has a search bar and a tree view. It shows a similar hierarchy, with 'http://tianlei/' selected in the tree view, also highlighted with a red box. A double-headed arrow between the panels indicates bidirectional replication.</p>
Site Collection		✓				 <p>The screenshot shows two side-by-side panels for configuring a replication. The left panel is titled '1. Source [Data Source]' and contains a search bar and a tree view of nodes. The tree view shows a hierarchy starting with 'http://tianlei:31002/', followed by a dropdown menu, and then several sub-nodes including '/sites/ymwang0001' which is selected with a red box. The right panel is titled '1. Destination [Data Destination]' and also has a search bar and a tree view. It shows a hierarchy starting with 'http://tian:46978/', followed by 'http://tianlei/', and then several sub-nodes including '/sites/TLMySite' which is selected in the tree view, also highlighted with a red box. A double-headed arrow between the panels indicates bidirectional replication.</p>

What to Replicate	Replicate To					What to Select When Replicating
	Web Application	Site Collection	Site	List	Folder	
Site			√			
List				√		

What to Replicate	Replicate To					What to Select When Replicating
Folder	Web Application	Site Collection	Site	List	Folder	 <p>The screenshot shows two side-by-side panels for selecting source and destination nodes. The left panel, titled '1. Source [Data Source]', shows a tree view under 'PressReleases(Press Releases)' with 'Root Folder' selected under the 'Documents' folder. The right panel, titled '1. Destination [Data Destination]', shows a tree view under 'top-level site(SPT001)' with 'Root Folder' selected under the 'Customized Reports' folder. Both 'Root Folder' items are highlighted with a red box. A central vertical bar contains arrows indicating the replication direction.</p>

Appendix E – Supported and Unsupported SharePoint Online Settings

SharePoint 2010 Online Settings

The following lists the supported and unsupported settings for SharePoint Online for SharePoint 2010.

Functionality Name					Support Status	
Mapping Type	One Way				Supported	
	Two Way				Supported	
	One-way Pull				Supported	
Real-time					Unsupported	
Source Agent Group					Supported	
Destination Agent Group					Supported	
Profile Settings	Replication Options	Security	Replicate security		Supported	
			Receive security changes from data destination (in two-way replication)		Supported	
			Enable sync deletions for users and groups		Unsupported	
			Include the groups without permissions		Supported	
			Enable sync deletions for permissions and permission levels		Unsupported	
	Configuration	Replicate configuration	Site Collection Level	Site collection features and properties		Supported
				Site collection search scopes and search keywords		Unsupported
			Site Level	Supported		
			List Level	Supported (List alerts-Unsupported)		
		Content	Workflow	Unsupported		
			Metadata Service			Unsupported
			Receive deletions from data destination			Unsupported
	Conflict Options	Configuration	Conflict Resolution			Supported
			Conflict Action			Supported
		Content	Conflict Resolution			Supported
			Conflict Action			Supported
			Conflict Notification			Supported
Filter Options	Filter Policy			Supported		
Mapping	Language Mapping			Supported		

Functionality Name			Support Status
	Options	User Mapping	Supported
		Domain Mapping	Unsupported
	Advanced Options	Data Compression	Supported
		Data Encryption	Supported
		Backup Environment Before Replication	Supported
		Concurrent Thread	Supported
		Network Control	Supported
		Enable Byte-level	Unsupported
Notification			Supported
Associated Plan Group			Supported
Create Container	Site Collection		Unsupported
	Site		Supported
	Library/List		Supported
	Folder		Supported
Export & Import Online Plan			Supported
Security Trimming			Supported
Include & Exclude	Include new		Supported
	Exclude site		Supported
Implicit & Explicit	Mapping 1: site collection level. Mapping 2: list level		Supported
Version Level	Document	Major version	Supported
		Major and minor version	Supported
	Item	Major version	Supported
Synchronized Deletion	Item, file, folder, list (SharePoint on premise to SharePoint Online)		Supported
Rename	List Rename		Supported
Storage Optimization Combination	SharePoint on premise to SharePoint Online		Supported

SharePoint 2013 Online Settings

The following lists the supported and unsupported settings for SharePoint Online for SharePoint 2013.

Functionality Name			Support Status	
Mapping Type	One Way		Supported	
	Two Way		Supported	
	One-way Pull		Supported	
Real-time			Unsupported	
Source Agent Group			Supported	
Destination Agent Group			Supported	
Profile Settings	Replication Options	Security	Replicate security	Supported
			Receive security changes from data destination (in two-way replication)	Supported
			Enable sync deletions for users and groups	Unsupported

Functionality Name					Support Status	
			Include the groups without permissions		Supported	
			Enable sync deletions for permissions and permission levels		Unsupported	
		Configuration	Replicate configuration	Site Collection Level	Site collection features and properties	Supported
					Site collection search scopes and search keywords	Unsupported
				Site Level	Supported	
				List Level	Supported (List alerts-Unsupported)	
				Content	Workflow	Unsupported
			User profiles	Unsupported		
			Metadata Service		Unsupported	
			Receive deletions from data destination		Unsupported	
	Conflict Options	Configuration	Conflict Resolution		Supported	
			Conflict Action		Supported	
		Content	Conflict Resolution		Supported	
	Conflict Action		Supported			
	Conflict Notification		Supported			
	Filter Options	Filter Policy	Folder	Name Contains	Supported	
			Item	Created Time After	Supported	
			Document	Created By Contains	Supported	
			Attachment	Name Contains	Supported	
	Mapping Options	Language Mapping			Supported	
		User Mapping		Supported		
		Domain Mapping		Unsupported		
	Advanced Options	Data Compression		Supported		
		Data Encryption		Supported		
		Backup Environment Before Replication		Supported		
		Concurrent Thread		Supported		
		Network Control		Supported		
		Enable Byte-level		Unsupported		
Notification					Supported	
Associated Plan Group					Supported	
Create Container	Site Collection				Unsupported	
	Site				Supported	
	Library/List				Supported	
	Folder				Supported	
Export & Import Online Plan					Supported	
Security Trimming					Supported	

Functionality Name		Support Status	
Include & Exclude	Include new	Supported	
	Exclude site	Supported	
Implicit & Explicit	Mapping 1: site collection level. Mapping 2: list level	Supported	
Version Level	Document	Major version	Supported
		Major and minor version	Supported
	Item	Major version	Supported
Synchronized Deletion	Item, file, folder, list (SharePoint on premise to SharePoint Online)	Supported	
Rename	List Rename	Supported	
Storage Optimization Combination	SharePoint on premise to SharePoint Online	Supported	

Appendix F – Supported Real-Time Events

The following table provides the currently supported Real-Time events.

Actions	Real-Time Events
Site Collection Action	Delete
Site Actions	Move
	Delete
List Actions	Add
	Delete
	Column Changes
Document Actions	Check In
	Check Out
	Discard Check Out
Folder/Item Actions	Create
	Update
	Delete
	Move
Version Action (Only supported for SharePoint 2013)	Delete
Workflow Actions	Start
	Complete
Users in Group/Groups Actions (Only supported for SharePoint 2013)	Create
	Update
	Delete
Permission/Permission Level Actions (Only supported for SharePoint 2013)	Create
	Update
	Delete

Appendix G – Configuration File

DocAve Replicator has a configuration file named **SP2010Replicator.xml** allowing you to customize some Replicator default settings by modifying the elements in the configuration file. This file resides in ...*\AvePoint\DocAve6\Agent\data\SP2010\Replicator* by default. Refer to the table below for the functions of each element in **SP2010Replicator.xml**.

Element	Function Description
<ForceKeepIncrementalJob>	<p>This element controls whether to force the increment job to perform an incremental job for the first time replication. The default value is false.</p> <ul style="list-style-type: none">• True – When performing an incremental job, it will execute an incremental job for the first time.• False – When performing an incremental job, it will execute a full replication job for the first time.
<ListRenameEnabled>	<p>This element controls whether to synchronize the renamed lists to the destination. The default value is False.</p> <ul style="list-style-type: none">• True – The modification of the list name will be synchronized to the destination during the replication.• False – If the name of the list is changed, it will be regarded as a new list during the replication.
<DocumentAndFolderRenameEnabled>	<p>This element controls whether to synchronize the renamed documents and folders to the destination. The default value is True.</p> <ul style="list-style-type: none">• True – The modification of the document name or folder name will be synchronized to the destination during the replication.• False – If the name of document or folder is changed, it will be regarded as a new document or folder during the replication.

Element	Function Description
<IsReplicateDocTagging>	<p>This element controls whether to replicate the Tags&Notes to the destination. The default value is False.</p> <ul style="list-style-type: none"> • True – Replicate the Tags&Notes to the destination. • False – Do not replicate the Tags&Notes to the destination.
<BackupExtenderOrConnectorData>	<p>This element controls whether to replicate stub data (EBS&RBS) to the destination. The default value is True.</p> <ul style="list-style-type: none"> • True – Replicate the source real content of files to the destination. • False – Do not replicate files to the destination.

Advanced Settings in Configuration Files

AgentCommonWrapperConfig.config

Configure the **AgentCommonWrapperConfig.config** file to specify whether to restore custom properties in the SharePoint property bag.

Go to the machines with DocAve Agent installed and open the ... \AvePoint\DocAve6\Agent\bin directory to find the **AgentCommonWrapperConfig.config** file.

Restoring Specified Web Properties

Open the **AgentCommonWrapperConfig.config** file and find the **WrapperCommon** node. Within this node, find the **<RestoredAllWebProperties>False</RestoredAllWebProperties>** node and the **<SpecialWebPropertyNames></SpecialWebPropertyNames>** node. These two nodes are added to the configuration file automatically when you first run a Replicator job.

- If you do not want to restore custom properties in the property bag, use the default **False** value. When using the **False** value, you can also add the specific custom properties in the **SpecialWebPropertyNames** node, and the custom properties you specified will be restored. Use a semicolon to separate the custom properties. For example, **<SpecialWebPropertyNames>property1; property 2; property3</SpecialWebPropertyNames>**.
- *Note:** The build-in properties in property bag are all restored.
- If you want to restore all properties including the custom and build-in properties, change **False** to **True**. When using the **True** value, you can add the specific properties in the **SpecialWebPropertyNames** node, and the properties you specified will not be restored.

Appendix H – Accessing Replicator using Hot Keys

In order to work faster and improve your productivity, DocAve supports hot key mode for you to perform corresponding actions quickly by only using your keyboard. To access hot key mode from the Replicator interface, press the **Ctrl + Alt + Z** key combination on your keyboard.

The following table provides a list of hot keys for the top level. Each time you want to go back to the top level after accessing the interface of lower level, press **Ctrl + Alt + Z** on the keyboard.

For example, continue pressing **H**, you are brought to the **Home** tab.

Operation Interface	Hot Key
Home	H
Plan Manager	P
DocAve Home Page	1
DocAve Online Community	2
Control Panel	3
Job Monitor	4
Plan Group	5

Home Page

Functionality Name and Hot Key			
Online Replicator	M		
Data Export	DE		
Data Import	DI		
New Plan	N		
Add to Queue	Q		
Create Container	CC		
Profile Settings	P		
Replicator Database	G		
Export Location	E		
One-way Pull	T	OK	O
		Cancel	C
Replication Details	RD	View Details	V
		Report Settings	R
		Export Query Result	E
		Close	X
Health Analyzer	HA	Collect Now	CN
		Collection Settings	CS
		Export Report	E
		Close	X
Job Monitor	J		
Mapping Status	U	Close	X
Save as a Plan	S		

Configure Replicator Database

Functionality Name and Hot Key					
Configure	G	OK	O		
		Cancel	C		
View Details	V	Configure	G	OK	O
			Cancel	C	
		Close	X		
Close	X				

Network Control

Functionality Name and Hot Key			
Create	N	OK	O
		Cancel	C
Edit	E	OK	O
		Cancel	C
Delete	D		
Close	X		

Byte-Level Settings

Functionality Name and Hot Key			
Configure	G	OK	O
		Cancel	C
View Details	V	Configure	G
		Close	X
Close	X		

Queue Tools

Functionality Name and Hot Key			
Delete	D		
Mapping Type	M		
Real-Time	R		
Enable Mapping	B		
Profile	P		
Source Agent Group	G	OK	O
		Cancel	C
Destination Agent Group	T	OK	O
		Cancel	C
Job History	J		
Add New Mappings	A		
Edit Plan Settings	E		

Functionality Name and Hot Key	
Save as a Plan	S

Online Replicator

Functionality Name and Hot Key			
Online Replicator	M		
Data Export	DE		
Data Import	DI		
New Plan	N		
Add to Queue	Q		
Create Container	CC		
Profile Settings	P		
Replicator Database	G		
Export Location	E		
One-way Pull	T	OK	O
		Cancel	C
Job Monitor	J		
Mapping Status	U	Close	X
Save as a Plan	S		

Profile Settings

Functionality Name and Hot Key			
Online Profile	MP		
Export Profile	ME		
Import Profile	MI		
Filter Policy	F		
Mappings	I	Domain Mapping	D
		User Mapping	U
		Language Mapping	L
Storage Policy	T		
Network Control	G		
Byte-level Settings	B		
Set as Default	A		
Edit Sub-profile	E		
New	N		
Delete	D		
Save	S	Save	S
		Save as	A
Discard Changes	C		
Close	X		

Plan Manager Page

To access the Plan Manager page by using hot keys, in the Replicator interface, use key combinations of **Ctrl + Alt + Z** to access the Hot Key mode, and then press **P** on the keyboard to enter the Home page.

The following is a list of hot keys for the functionalities on the ribbon of the Plan Manager page.

For example, continue pressing **S**, you are brought to the Show Mappings interface.

Functionality Name and Hot Key			
Show Mappings	S		
Hide Mappings	H		
Edit	E		
Delete	D		
Export Online Plan	O		
Import Online Plan	I		
Test Run	T	OK	O
		Cancel	C
Run Now	R	OK	O
		Cancel	C

Notices and Copyright Information

Notice

The materials contained in this publication are owned or provided by AvePoint, Inc. and are the property of AvePoint or its licensors, and are protected by copyright, trademark and other intellectual property laws. No trademark or copyright notice in this publication may be removed or altered in any way.

Copyright

Copyright © 2012-2013 AvePoint, Inc. All rights reserved. All materials contained in this publication are protected by United States copyright law and no part of this publication may be reproduced, modified, displayed, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of AvePoint, 3 Second Street, Jersey City, NJ 07311, USA or, in the case of materials in this publication owned by third parties, without such third party's consent.

Trademarks

AvePoint[®], DocAve[®], the AvePoint logo, and the AvePoint Pyramid logo are registered trademarks of AvePoint, Inc. with the United States Patent and Trademark Office. These registered trademarks, along with all other trademarks of AvePoint used in this publication are the exclusive property of AvePoint and may not be used without prior written consent.

Microsoft, MS-DOS, Internet Explorer, Microsoft Office SharePoint Servers 2007/2010/2013, SharePoint Portal Server 2003, Windows SharePoint Services, Windows SQL server, and Windows are either registered trademarks or trademarks of Microsoft Corporation.

Adobe Acrobat and Acrobat Reader are trademarks of Adobe Systems, Inc.

All other trademarks contained in this publication are the property of their respective owners and may not be used such party's consent.

Changes

The material in this publication is for information purposes only and is subject to change without notice. While reasonable efforts have been made in the preparation of this publication to ensure its accuracy, AvePoint makes no representation or warranty, expressed or implied, as to its completeness, accuracy, or suitability, and assumes no liability resulting from errors or omissions in this publication or from the use of the information contained herein. AvePoint reserves the right to make changes in the Graphical User Interface of the AvePoint software without reservation and without notification to its users.

AvePoint, Inc.
Harborside Financial Center, Plaza 10
3 Second Street, 9th Floor
Jersey City, New Jersey 07311
USA