AvePoint DocAve 6 User Guide

DocAve® 6 Replicator

User Guide

Service Pack 8

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The Enterprise-Class **Management Platform** for **SharePoint** Governance

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What's New in this Guide

- Added information about supporting real-time replication from SharePoint on-premises to SharePoint Online.
- Updated Appendix G: Supported Real-Time Events.
- Added information about supporting cross version replication in Publishing Mode.
- Updated the Required Permissions section.

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 provides Sync Mode and Publishing Mode. Sync Mode allows Microsoft SharePoint administrators to replicate content, configurations, and securities. Publishing Mode publishes SharePoint content based on configurable business logic.

Replication can be "live" (event-triggered) or on a set schedule so that content, configurations, and securities can be synchronized between sites and objects. Live replication triggers are fully customizable, and replication can be executed fully or incrementally. 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 below for system and farm requirements that must be in place prior to installing and using DocAve Replicator.

AvePoint's Testing Policy and Environment Support

Supported Software Environments

AvePoint is committed to testing against all major versions and service packs of SharePoint as well as the latest versions of Windows Server and SQL Server, as Microsoft announces support and compatibility.

***Note:** AvePoint does not recommend or support installing DocAve on client operating systems.

Supported Hardware

AvePoint is committed to maintaining a hardware agnostic platform to ensure that DocAve operates on common Windows file sharing and virtualization platforms. To ensure that DocAve is hardware agnostic, AvePoint tests hardware that is intended to support SharePoint and DocAve infrastructure, storage targets, and hardware-based backup and recovery solutions, as supported by AvePoint's partnerships. AvePoint directly integrates with the following platforms: any Net Share, FTP, Amazon S3, AT&T Synaptic, Box, Caringo Storage, Cleversafe, DELL DX Storage, Dropbox, EMC Atmos, EMC Centera, Google Drive, HDS Hitachi Content Platform, IBM Spectrum Scale Object, IBM Storwize Family, Microsoft Azure Storage, NetApp Data ONTAP, NFS, OneDrive, Rackspace Cloud Files, and TSM.

All other hardware platforms that support UNC addressable storage devices are supported.

***Note**: AvePoint has ended the test and development for Caringo Storage and DELL DX Storage in DocAve since DocAve 6 SP7 CU1, as the providers of these two platforms have stopped the platform maintenance.

***Note:** Due to changes in the IBM Tivoli Storage Manager API, DocAve 6 Service Pack 6 and later versions require that TSM Client version 7.1.2 is installed on the Control Service and Media Service servers.

***Note:** Most of the hardware partnerships referenced in this guide are intended to make use of advanced functionality (such as snapshot mirroring, BLOB snapshots, indexing, long-term storage, WORM storage, etc.), and are not indications that any changes to the product are required for basic support. In most cases, hardware can be supported with no change to the product.

Supported Backup and Recovery

DocAve supports BLOB backup storage according to the list of hardware platforms above. BLOB snapshot function, however, is currently only supported on OEM versions and NetApp hardware.

DocAve supports SQL content and Application database backups via the SharePoint Volume Shadow Copy Service (VSS) on all Windows and SQL server platforms listed above. DocAve also supports

snapshot-based SharePoint VSS on all hardware listed above where the hardware partner has certified support with Microsoft.

DocAve supports application and configuration server backups for all the supported software environments listed above. DocAve 6 SP5 or later supports VM backup via Hyper-V/VMWare for the following operating systems: Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Microsoft Hyper–V Server 2012 R2.

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, refer to the DocAve 6 Installation Guide.

Required Permissions

To install and use Replicator properly, ensure that the following permissions are met.

Replicator for SharePoint On-Premises

Before using Replicator for SharePoint on-premises, 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
    - User Profile Service Application permissions:
        - For SharePoint 2010
            - User Profile Connection Permission: Full Control
            - Use Personal Features
            - Create Personal Site
            - Use Social Features
        - For SharePoint 2013 and SharePoint 2016
            - User Profile Connection Permission: Full Control
            - Create Personal Site (required for personal storage, newsfeed, and followed content)
            - Follow People and Edit Profile
            - Use Tags and Notes
    - Managed Metadata Service: Term Store Administrator
    - Business Data Connectivity Service: Full Control
    - Search Service: Full Control
3. **SQL Permissions**: These permissions must be manually configured prior to using DocAve 6 Replicator; they are not automatically configured.
    - For SharePoint 2010 and SharePoint 2016
        - Database role of **db_owner** for all databases related to SharePoint, including Content Databases, Configuration Database, User Profile Service Database, and Central Administration Database.
        - Database role of **db_owner** for FBA database if forms based authentication (FBA) is enabled in SharePoint Web applications.
        - Database role of **db_owner** for Replicator Database.
        - Creator permission to SQL Server.
    - For SharePoint 2013
        - Database role of **SharePoint_Shell_Access** for the following SharePoint related databases: Content Databases, Configuration Database, and Central Administration Database; however, when the DocAve Agent account has this

role for Content Databases, Replicator has some limitations on replicated objects. For more information, see the following AvePoint Knowledge Base article: http://www.avepoint.com/community/kb/limitations-for-docave-6-products-if-docave-agent-account-has-the-sharepoint_shell_access-role. AvePoint recommends that you assign the **db_owner** role of Content Databases to the DocAve Agent account.

***Note**: The **SharePoint_Shell_Access** role can only be assigned via SharePoint 2013 Management Shell. For instructions on how to assign this role to a user, refer to the following Microsoft technical article: https://technet.microsoft.com/en-us/library/ff607596.aspx.

- Database role of **db_owner** for User Profile Service Database.
- Database role of **db_owner** for FBA database if forms based authentication (FBA) is enabled in SharePoint Web applications.
- Database role of **db_owner** for Replicator Database.
- Creator permission to SQL Server.

Local System Permissions

These permissions are automatically configured by DocAve during 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.

- 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 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
  - Full Control to the Registry of "HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services"

Replicator for SharePoint Online

Before using Replicator for SharePoint Online, ensure the following permissions are met:

Registered SharePoint On-Premises Site Collections

The following permissions are required for Replicator to manage registered SharePoint on-premises site collections.

Local System Permissions for Agent Account

The Agent account is on the Agent machine that will run Replicator jobs. The Agent account must have proper Local System permissions.

DocAve automatically configures the Local System permissions during 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.

- 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 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
  - Full Control to the Registry of "HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services"

Required Permissions for the User Used to Register SharePoint On-Premises Site Collections

The user that is used to register SharePoint on-premises site collections in **Control Panel** > **Registered SharePoint Sites** > **Manual Input Mode** must have the following permissions to each site collection:

- User is a member of the **Site Collection Administrator** group.
- User Profile Service Application:

    - User Profile Connection Permission: Full Control
    - User Profile Administrator
    - Create Personal Site (required for personal storage, newsfeed, and followed content)
    - Follow People and Edit Profile
    - Use Tags and Notes
- Managed Metadata Service: Term Store Administrator

The user that is used to register the SharePoint on-premises site collections in **Control Panel** > **Registered SharePoint Sites** > **Scan Mode** must have the following permissions:

- Full Control permission to all zones of all Web applications via User Policy for Web Applications.
- Member has a Database Role of **db_owner** for all of the databases related to SharePoint, including Content Databases, SharePoint Configuration Database, and Central Admin Database.
- User Profile Service Application:
    - User Profile Connection Permission: Full Control
    - User Profile Administrator
    - Create Personal Site (required for personal storage, newsfeed, and followed content)
    - Follow People and Edit Profile
    - Use Tags and Notes
- Managed Metadata Service: Term Store Administrator

Registered SharePoint Online Site Collections

The following permissions are required for Replicator to manage registered SharePoint Online site collections.

Local System Permissions for Agent Account

The Agent account is on the Agent machine that has network connection or has configured **Agent Proxy Settings** before registering SharePoint Online site collections. The Agent account must have proper Local System permissions.

DocAve automatically configures the Local System permissions during 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.

- 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

Required Permissions for the User Used to Register SharePoint Online Site Collections

The user that is used to register SharePoint Online site collections in **Control Panel** > **Registered SharePoint Sites** > **Manual Input Mode** must have the following permissions to each site collection:

- User is a member of the **Site Collection Administrator** group.
- Permissions for User Profile:
  - Create Personal Site (required for personal storage, newsfeed, and followed content)
  - Follow People and Edit Profile
  - Use Tags and Notes
- Managed Metadata Service: Term Store Administrator

The user that is used to register SharePoint Online site collections in **Control Panel** > **Registered SharePoint Sites** > **Scan Mode** must have the following permissions:

- The user role of SharePoint administrator
- Managed Metadata Service: Term Store Administrator
- Permissions for User Profile Service:
  - Create Personal Site (required for personal storage, newsfeed, and followed content)
  - Follow People and Edit Profile
  - Use Tags and Notes

***Note**: To replicate SharePoint Online objects, the **Add and Customize Pages** permission is required. Users with the role of SharePoint administrator or Site Collection Administrator have the **Add and Customize Pages** permission, but you must select **Allow users to run custom script on personal sites** and **Allow users to run custom script on self-service created sites** in **SharePoint admin center** > **settings** > **Custom Script** to enable the permission to these users. Note that the changes will take effect 24 hours after being set.

Health Analyzer

AvePoint recommends using Health Analyzer to check the prerequisites you need to correctly use DocAve Replicator.

***Note**: Only the users in the DocAve **Administrators** group can use Health Analyzer.

For more information about Health Analyzer, refer to the DocAve 6 Installation Guide.

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 product suites on the left side of the window.
2. Click **Administration** to view the Administration modules.
3. Click **Replicator** to launch this module.

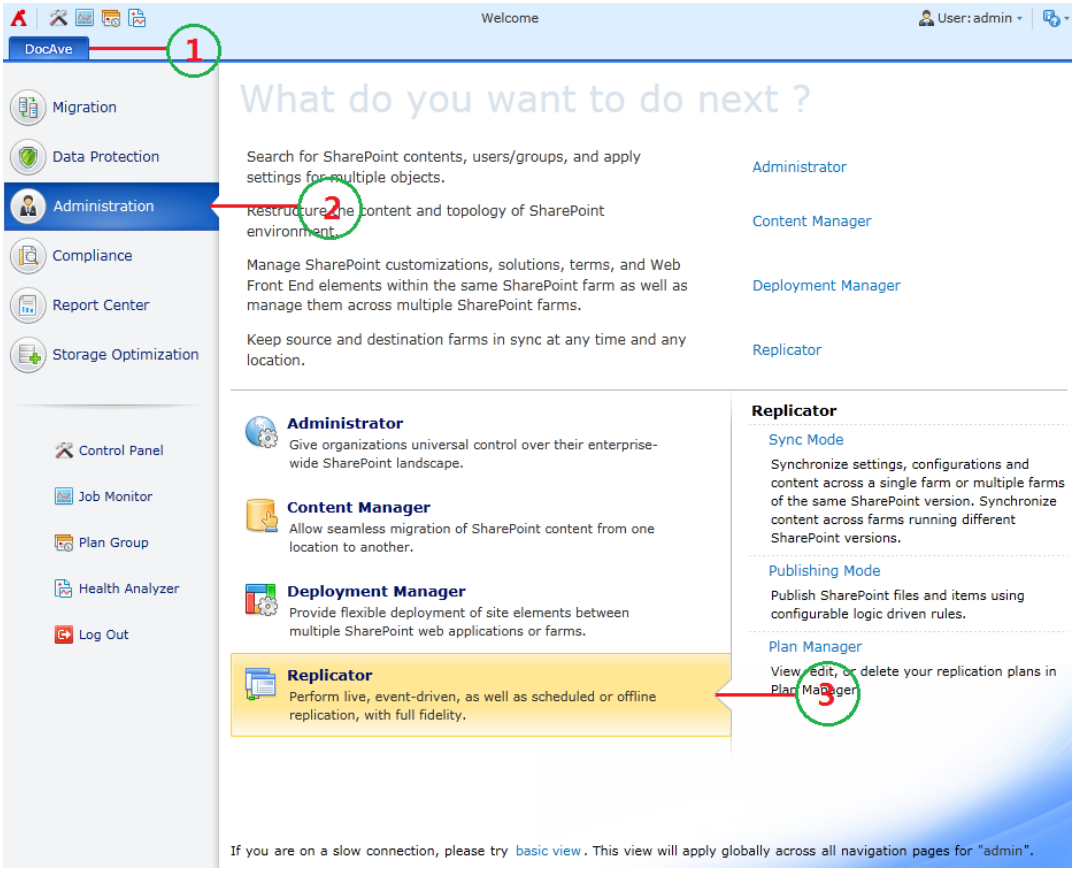


Figure 1: DocAve module launch window.

User Interface Overview

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

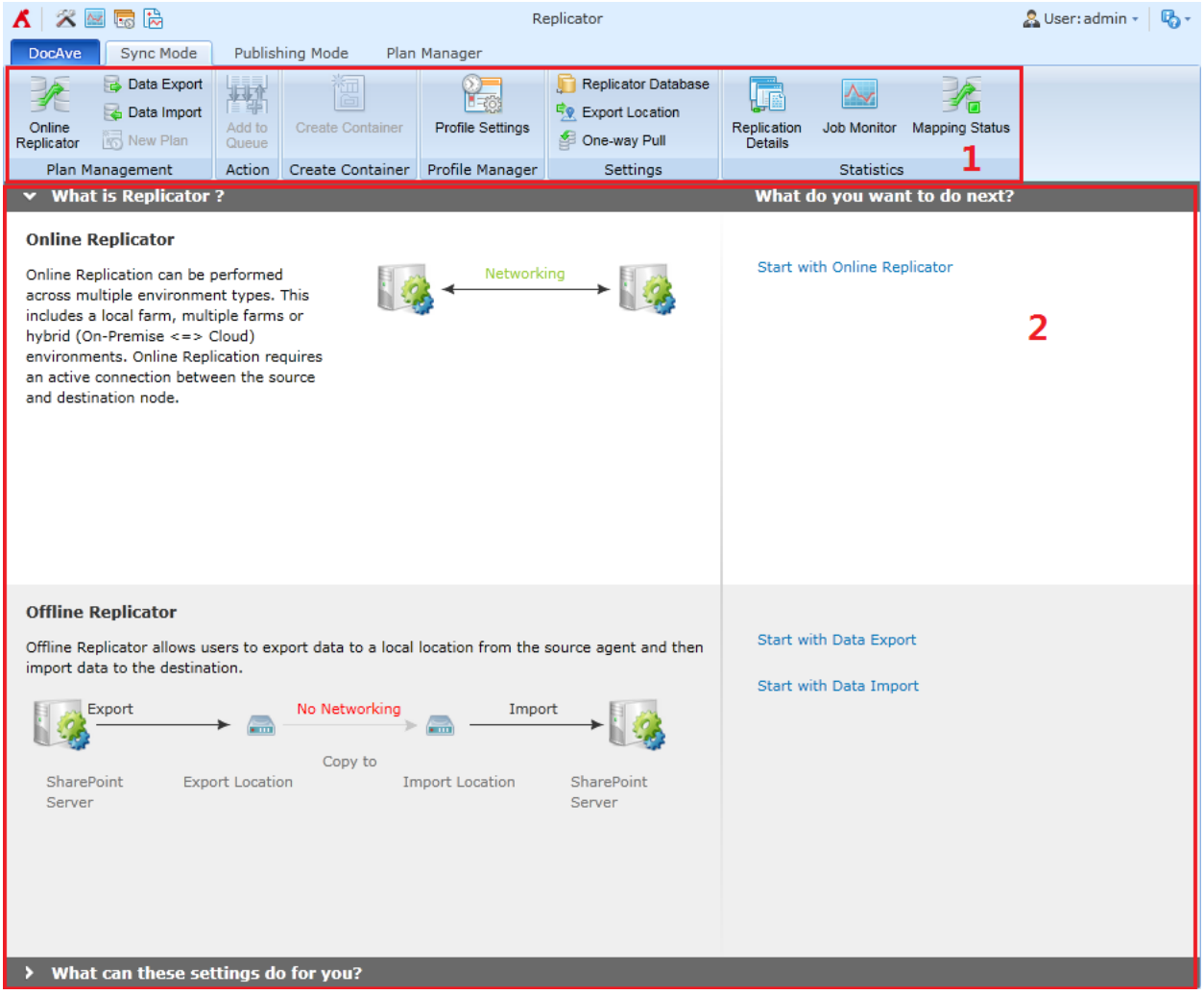


Figure 2: Replicator Sync Mode user interface.

Click the **Publishing Mode** tab to access Publishing Mode.

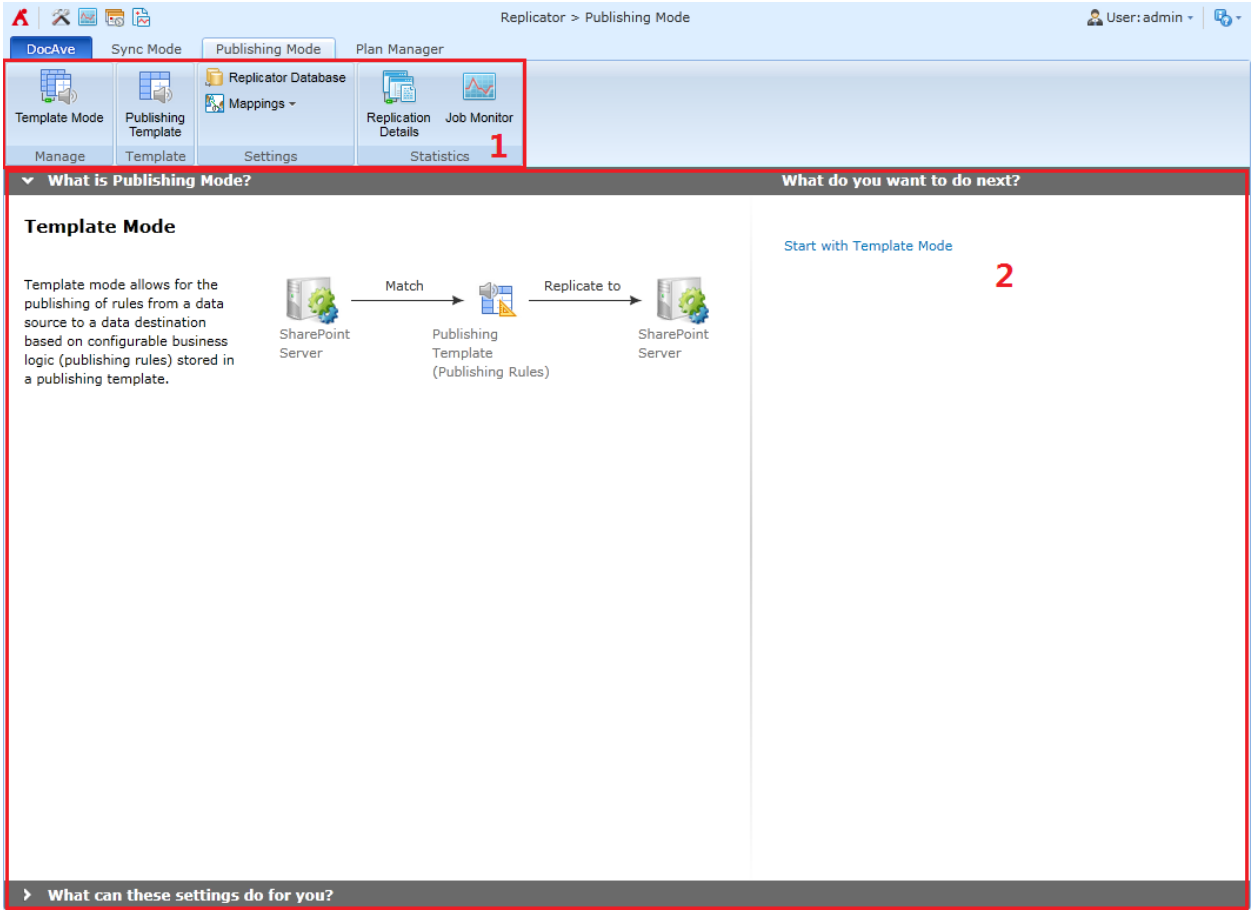


Figure 3: Replicator Publishing Mode user interface.

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.

Navigating DocAve

DocAve mimics the look and feel of many Windows products, making for an intuitive and familiar working environment. While there are many windows, pop-up displays, and messages within DocAve products, they share similar features and are navigated in the same ways.

Below is a sample window in DocAve. It features a familiar, dynamic ribbon, and a searchable, content list view.

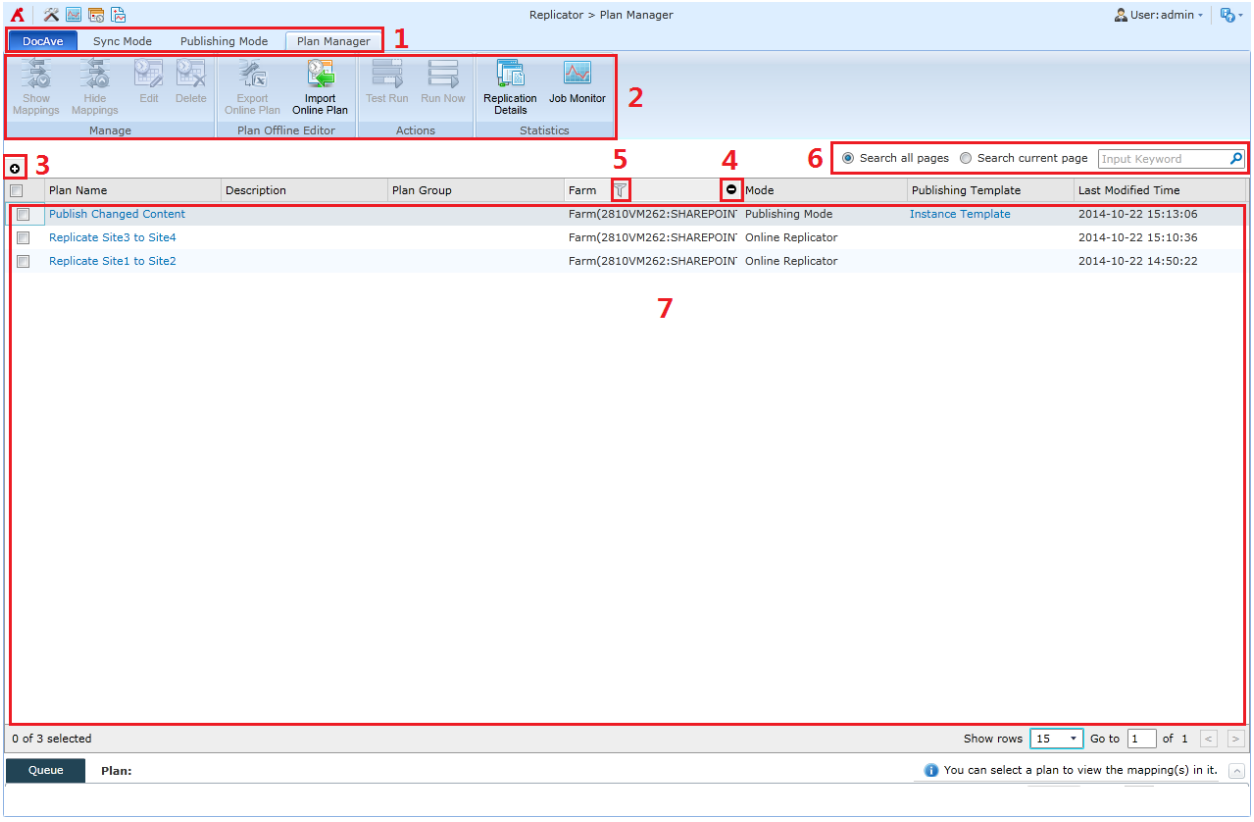


Figure 4: Navigating DocAve.

1. Ribbon Tabs – Allows users to navigate to the DocAve Welcome page and within the active modules.
2. Ribbon Panes – Allows users to access the functionality of the active DocAve module.
3. Manage columns (⊕) – Allows users to manage which columns are displayed in the list. Click the manage columns (⊕) button, and then select the checkboxes next to the column names in the drop-down list.
4. Hide the column (⊖) – Allows users to hide the selected column.
5. Filter the column ( ) – Allows users to filter the information in the List View. Click the filter the column ( ) button next to the column and then select the checkbox next to the column name.
6. Search – Allows users to search the List View pane for a keyword or phrase. You can select **Search all pages** or **Search current page** to define the search scope.

   ***Note:** The search function is not case sensitive.

7. Management Pane – Displays the actionable content of the DocAve module.

Pre-Replicator Job Configurations

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

While you can run a Replicator job without configuring the optional settings below, AvePoint **strongly** recommends that you configure these settings to ensure efficient content management during replication.

- Configuring the Replicator Database (mandatory)
- Configuring Mapping Settings (optional)
- Configuring Network Control (optional)
- Configuring Byte-Level Settings (Byte-Level Replication Only) (optional)
- Configuring Path Settings (only necessary if enabling Differential Data Compression)
- Outgoing E-mail Server Settings(optional)
- Enabling One-Way Pull (optional)
- Configuring Devices and Setting Up Storage Policies (only necessary if backing up environment before replication)

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 Replicator database for a farm, this farm will be available in Replicator and can act as either the source or destination.

1. On the **Sync Mode** or **Publishing Mode** 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 select ( ) button to select **Configure** in the **Farm** column. The **Configure Replicator Database** window appears.
3. Configure the following settings for the database that will store replication job data:
    a. **Agent Group** – Select the default Agent Group, a customized Agent Group from the drop-down list, or 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 entered 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**.

   Optionally, you can set 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 configure a Replicator database by entering a connection string. 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 select an Agent Group for the Replicator database; the other settings above **Advanced** are not required.

4. Click **Save** 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 Mapping Settings

Before performing a replication job, you can optionally define the Domain Mapping, User Mapping, Language Mapping, and Column Mapping settings.

Domain Mapping

Use domain mapping to replace the source domain name with the destination domain name in metadata fields. The domain information of replicated objects' corresponding users and groups is also replaced during the replication job.

To access Domain Mapping, click the **Sync Mode** 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

User mapping replaces the source username with the destination username in metadata fields. The replicated objects' corresponding users are also replaced during the replication job.

To access User Mapping, click the **Sync Mode** 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 replication job is finished. To access Language Mapping, click the **Sync Mode** 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, however, 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. To enable the default language mapping, follow the steps below:

1. Navigate to *…\AvePoint\DocAve6\Agent\data\SP2010\Replicator*.
2. Open the **SP2010Replicator.xml** configuration file with Notepad.
3. 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 a language package (meaning the system language and the SharePoint language are different), disabling the default language mapping will result in the source data being 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.

Column Mapping

Use column mapping to map source columns to destination columns. The destination column name will be replaced with the configured source column name, and you can also add value mappings to map the column values. According to column type, the source column and the destination column can be the same or different. The column type can be changed to Managed Metadata or Lookup.

***Note**: Column Mapping is only supported for one way replication jobs.

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

For specific instructions on setting up user mapping, refer to the DocAve 6 Control Panel Reference Guide.

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 for after or before 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.

To configure network control, complete the following steps:

1. Choose one of the following methods to access the **Network Control** window.
    - On the **Sync Mode** tab, in the **Profile Manager** group, click **Profile Settings**. The **Profile Settings** tab appears. In the **Settings** group, click **Network Control**.
    - On the **Publishing Mode** tab, click **Network Control** on the ribbon.
2. In the **Manage** group, click **Create**. Configure the following settings for the network control:
    a. **Profile Name** – Enter a name for the profile, and enter an optional description.
    b. **Run During** – Enter 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** – Define the working hours by selecting the daily working hours and the working days.
    d. **Connection Retry** – Enter a number for **Retry delay**, and select the unit, **Minute(s)** or **Hour(s)**. Then, enter the number of retry attempts.

    ***Note**: If a network control profile is applied, the source DocAve Agent automatically tries to reconnect to the destination DocAve Agent for thirty minutes. After thirty minutes, the source DocAve Agent tries to reconnect to the destination DocAve Agent according to the retry delay and the number of retries. If the number of retries has been exceeded but the source DocAve Agent still cannot connect to the destination DocAve Agent, the source DocAve Agent stops reconnecting and the replication job will fail.

    ***Note**: If you do not choose to use a network control profile, the source DocAve Agent automatically tries to reconnect to the destination DocAve Agent for thirty minutes. If the source DocAve Agent still cannot connect to the destination DocAve Agent after thirty minutes, the replication job will fail.

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

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

If you are 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 in which to store the original and constructed data for Byte-level replication.

1. On the **Sync Mode** 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 or **My Registered Sites** 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** – Set a retention time period during which the snapshot will be stored and enter 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 of **\\admin-PC\c$**... or **\\admin-PC\shared folder**, and then select a **Managed account profile** from the drop-down list to set up access to the path that will store the snapshot, or click **New Managed Account Profile** to create a new one. For details about managed account profiles, refer to the DocAve 6 Control Panel Reference Guide. Then, click **Validation Test** to validate the account.

    ***Note**: If you choose the format **\\admin-PC\shared folder**, the entered path must be an existing one.
3. Click **Save** to save the settings and return to the **Byte-level Settings** window.
4. To view the configured byte-level settings of a farm or **My Registered Sites**, 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 or **My Registered Sites**, 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 entered 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.

Configuring Path Settings

Use Path Settings to configure differential data compression path for each farm that you are about to enable the Differential Data Compression feature. Differential data compression can generate and

compress differential data (differences between the current backup data and the data in cache folder). This will reduce the size of real-time and publishing mode replication data.

To configure Path Settings, complete the following steps:

1. Choose one of the following methods to access the **Path Settings** window.
    - On the **Sync Mode** tab, in the **Profile Manager** group, click **Profile Settings**. The **Profile Settings** tab appears. In the **Settings** group, click **Path Settings**.
    - On the **Publishing Mode** tab, click **Path Settings** on the ribbon.
2. Select the farm for which you want to configure the differential data compression path, and click **Configure** in the **Manage** group. The **Path Settings > Configure** window appears.

    Configure the following settings:

    a. **Path** – Enter a UNC path as the location where you want to store the original and constructed data when differential data compression is enabled.

    ***Note**: Make sure the UNC path is in the format of **\\admin-PC\c$\data** or **\\admin-PC\shared folder**.

    b. **Managed account profile** – Select a managed account profile from the drop-down list to set up access to the path, or click **New Managed Account Profile** to create a new one. For details about managed account profile, refer to the DocAve 6 Control Panel Reference Guide. Then, click **Validation Test** to validate the account.
3. Click **Save** to save the settings and return to the **Path Settings** window.

To view the path settings of a farm, select the farm and then click **View Details** in the **Manage** group. A summary page appears where you can view the configured path settings, including the path and account.

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 **Sync Mode** tab. In the **Settings** group, click **One-way Pull**. The **One-way Pull** window appears.
2. Select the **Enable one-way pull** checkbox to enable one-way pull replication.
3. Click **OK** to save the changes.

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. 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.

Sync Mode

Sync Mode Replicator synchronizes settings, configurations, and content in the following scenarios:

- From one SharePoint location to another
- Within the same farm and across farms
- Within the same version of SharePoint
- Across different versions of SharePoint (only for Sync Mode online replication)
    - From SharePoint 2010 to SharePoint 2013
    - From SharePoint 2010 to SharePoint 2016
    - From SharePoint 2013 to SharePoint 2010
    - From SharePoint 2013 to SharePoint 2016
    - From SharePoint 2010 experience version to SharePoint 2013 experience version (in SharePoint 2013)
    - From SharePoint 2013 experience version to SharePoint 2010 experience version (in SharePoint 2013)
    - From SharePoint 2016 to SharePoint 2010
    - From SharePoint 2016 to SharePoint 2013
- Within SharePoint on-premises and within SharePoint Online
- Across SharePoint on-premises and SharePoint Online

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

1. To run an Online Replicator job:
    - Setting Up Online Profiles (optional)
    - Building an Online Replicator Plan (mandatory)
2. To run an Offline Replicator job:
    - Setting Up an Export Profile (optional)
    - Setting Up an Import Profile (optional)
    - Building an Offline Replicator Plan (mandatory)

Setting Up Online Profiles

Use the online profile to 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. On the **Sync Mode** tab, click **Profile Settings** in the **Profile Manager** group. The **Profile Settings** tab appears.
2. In the **Options** group, click **Online 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. 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 the 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, domain mapping, or column mapping from the corresponding drop-down lists. If there is no existing language mapping/user mapping/domain mapping/column mapping, click **New Language Mapping**/**New User Mapping**/**New Domain Mapping**/**New Column Mapping** to create a new one. For detailed information about these mappings, refer to the DocAve 6 Control Panel Reference Guide.
9. Configure the **Advanced Options**:
    a. **Data Compression** – 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 data set. Note that small data sets cause slower job execution times.
    b. **Differential Data Compression** – Choose to **Enable differential data compression to accelerate your real-time replication job**. Differential data compression can generate and compress differential data (differences between the current backup data and the data in the cache folder). This will reduce the size of the real-time replication data.

    If enabled, you must configure the differential data compression path first. For more information about how to configure the path, refer to Configuring Path Settings.

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

    ***Note**: If you enable the differential data compression feature, the data compression feature will not take effect on the real-time replication even though the **Compression** checkbox is selected.

c. **Enable Byte-level** – Choose to **Enable byte-level to accelerate your Sync Mode online replication job**. If you select the checkbox, you must configure the byte-level settings first. For detailed instructions, refer to Configuring Byte-Level Settings (Byte-Level Replication Only).

d. **Backup Environment Before Replication** – Select this option to back up the environment before the replication. Select a storage policy from the drop-down list for the backup job, or click **New Storage Policy** to create a new one. 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).

   ***Note**: For two way replication jobs, the source environment and the destination environment are both backed up. When reverting the environment, you can choose to revert the source environment or the destination environment.

e. **Concurrent Threads** – Choose 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.

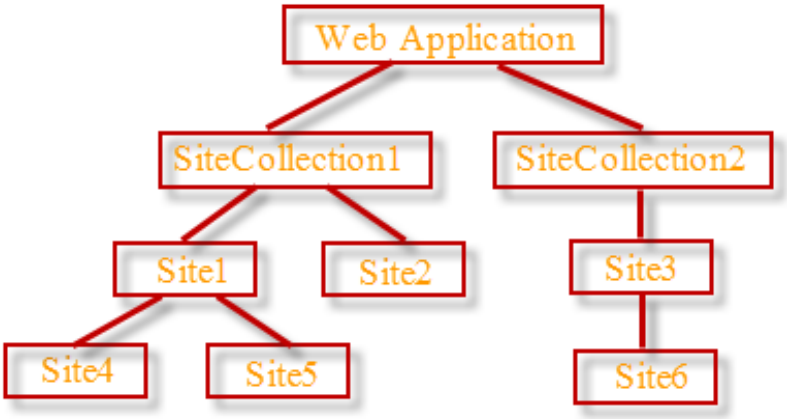


Figure 5: A sample structure for concurrent threads.

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. Note that subsite *Site4*, *Site5*, or *Site6* can be replicated only when their parent site (Site1 or Site3) is replicated.

f. **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.

10. When you have finished configuring the profile, choose one of the following options:
    - Click **Save** to save the profile.
    - Click **Save As** and enter a profile name to save it as another profile. Select **Save and replace the existing profile** to replace the original profile. Otherwise, it is saved without removing the original profile.
    - Click **Discard Changes** to clear all 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. On the **Sync Mode** tab, click **Profile Settings** in the **Profile Manager** group. The **Profile Settings** tab appears.
2. In the **Options** group, click **Online Profile**.
3. Click **Replication Options** on the left-hand panel.
4. In the **Sub-profile** group, click **Edit Sub-profile** to make the **Replication Options** field active.
5. In the **Profile/Sub-profile Management** group, click **New**.
6. Enter a profile name in the pop-up window and click **OK**.
7. 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** – **Users** and **Groups**. As all configurations for site collection are saved in the top-level 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**, and **Site permission**. **Permission levels** enable you to replicate customized permission levels from the source to the target properly.
    - **List Level** – **Users**, **Groups**, and **List permission**.
    - **Folder Level** – **Users**, **Groups**, and **Folder permission**.
    - **Item Level** – **Users**, **Groups**, and **Item permission**.
    - **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 option 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 synchronized to the source.
- **Include users and groups without permissions** – Choose whether or not to replicate users and groups that have no permissions from the source to the destination.
- **Enable sync deletions for permissions and permission levels** – If you run an incremental replication job with this option selected, the deletions for permissions and permission levels will also be synchronized from the source to the destination.

8. Click the **Configuration** tab. Choose whether to replicate configuration. If you want to replicate the source configuration to the destination, select 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**: If you want to keep the dependency between a Web part and its dependent library/list after the replication job, ensure that the Web part and the library/list are in a same mapping. 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 and the same type 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**.

***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 active 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.

- **List Level** – **List settings**, **List alerts**, **Personal views**, **Public views**.
  - To use the list alerts in the destination properly, the destination Web application must have the **Web Application Outgoing E-Mail Settings** configured before the replication job is performed.
  - If there is a destination 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 destination public view with the same URL as the source, the destination original public view is overwritten by the source public view.
- **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** (This is available when the **List settings** is deselected in **List Level**.) – Click **Advanced**, then choose one of the following options:
  - **Replicate the item-dependent columns and content types to maintain item integrity**

    If you choose this option, select a conflict resolution:

    - **Do not replicate the columns and content types, or the corresponding items**
    - **Overwrite the columns and content types**
  - **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.**

9. 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** – Choose whether to replicate workflow definitions and workflow instances:

- **Include workflow definition** – Select this option to replicate the definition of existing workflows for the selected content from the source node to the destination node.
- **Include workflow instances** – Select this option to replicate the instance of existing workflows for the selected content from the source node to the destination node. With **Include workflow instances** 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.

  ***Note:** DocAve can maintain the state of a running workflow between the source and destination during a replication, but must write directly to the Content Database to do so. Microsoft does not support database writing methods, and using such methods may void the Microsoft Terms of Service. For instructions on how to replicate running workflows, see the following Knowledge Base article: Maintaining the State of Running Workflows.

- **User Profiles** – Choose whether or not to replicate the source 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 farms and different domains, AvePoint recommends that you set up a user mapping for the source user who has a user profile in User Profile Service Application.

- **Metadata Service** – Choose whether or not to replicate 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.

    ***Note**: The synchronized deletion of terms is unsupported.

    ***Note**: The reuse, merge, and move actions of term sets and terms are unsupported. If a term set/term is moved in the data source, the replication result in the data destination will be a new term set/term created in the new location and the previous term set/term remaining in the old location.

    ***Note**: The properties of groups, term sets, and terms are unsupported for overwrite. After the source groups, term sets, or terms have been replicated to the data destination, editing the source properties and re-running the replication job will not replicate the changed properties to the data destination.

  - If you select both **Replicate metadata service** and **Replicate the related terms only**, only the currently used metadata service terms will be replicated.

***Note**: If **Replicate metadata service** is selected and the profile is applied to a real-time replication job, only the related terms will be replicated, even if **Replicate the related terms only** is not selected.

- **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, 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.

10. When you have finished configuring the sub-profile, choose one of the following options:
    - Click **Save** to save the sub-profile.
    - Click **Save as** and enter a sub-profile name to save it as another sub-profile. Select **Save and replace the existing profile** to replace the original sub-profile. Otherwise, it is saved without removing the original sub-profile.
    - Click **Discard Changes** to clear all modifications that were made to the current sub-profile.

***Note**: Not all of the Replication Options are supported for cross version replication (across different versions SharePoint or different experience versions SharePoint). Refer to the table below for details.

Supported and Unsupported Online Replication Options for Cross Version Replication

The following table lists the supported and unsupported online Replication Options for cross version replication.

Functionality Name			Support Status
Security	Site Collection Level	Users	Supported
		Groups	Supported
	Site Level	Users	Supported
		Groups	Supported
		Permission Levels	Supported
		Site Permission	Supported
	List Level	Users	Supported
		Groups	Supported
		List Permission	Supported
	Folder Level	Users	Supported
		Groups	Supported
		Folder Permission	Supported
	Item Level	Users	Supported
		Groups	Supported

Functionality Name			Support Status
		Item Permission	Supported
	Receive security changes from data destination (in two-way replication)		Supported
	Enable sync deletions for users and groups		Supported
	Include the groups without permissions		Supported
	Enable sync deletions for permissions and permission levels		Supported
Configuration	Site Collection Level	Site collection features and properties	Unsupported
		Site collection search scopes and search keywords	Unsupported
	Site Level	Site features and properties	Unsupported
		Site column and content type	Supported
		Navigation and quick launch	Unsupported
		Site template and list template	Unsupported
		Web parts, page layout, master page and other hidden lists	Unsupported
	List Level	List Settings	Supported
		List Alerts	Supported
		Personal Views	Unsupported
		Public Views	Unsupported
	Receive configuration changes from data destination (in two-way replication)		Supported
Content	Workflow	Include Workflow Definition	Unsupported for: SharePoint 2013 to SharePoint 2010, SharePoint 2016 to SharePoint 2010
		Include Workflow Instance	Unsupported for: SharePoint 2013 to SharePoint 2010, SharePoint 2016 to

Functionality Name			Support Status
			SharePoint 2010
	User Profiles		Supported
	Metadata Service	Replicate Metadata Service	Supported
		Replicate the related terms only	Supported
	Receive deletions from data destination		Supported

Conflict Options

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

1. On the **Sync Mode** tab, click **Profile Settings** in the **Profile Manager** group. The **Profile Settings** tab appears.
2. In the **Options** group, click **Online Profile**.
3. Click **Conflict Options** on the left-hand panel.
4. In the **Profile/Sub-profile Management** group, click **New**.
5. Enter a profile name in the pop-up window and click **OK**.
6. 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.
        - **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.

      ***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.

7. 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. The folder is within the parent folder in which the content should have been replicated. The conflict folder is named **_ReplicationConflicts_**.

   - **Conflict Notification** – Select a report recipient who will receive the conflict report in case of a conflict, and enter relevant parameters if necessary, then click **Add**. If selecting **E-mail Address**, enter an e-mail address that will receive the conflict report. If selecting **User Column**, enter the value of a SharePoint Person or Group column.

     ***Note:** Ensure the Conflict Resolution setting is appropriate for your particular deployment. Improper configuration can lead to unintended overwriting of content.

8. When you have finished configuring the sub-profile, choose one of the following options:

   - Click **Save** to save the sub-profile.

   - Click **Save as** and enter a sub-profile name to save it as another sub-profile. Select **Save and replace the existing profile** to replace the original sub-profile. Otherwise, it is saved without removing the original sub-profile.

   - Click **Discard Changes** to clear all modifications that were made to the current sub-profile.

Configuring Offline Replicator Settings

An offline Replicator plan replicates content, configurations, and securities 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. On the **Sync Mode** tab, click **Profile Settings** in the **Profile Manager** group. The **Profile Settings** tab appears.
2. In the **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. Click **Replication Options** on the left-hand panel. 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; **Cancel workflows after the replication**, **Restart workflows from 0% after the replication**, and **Receive deletions from data destination** in the **Content** tab.

6. Click **Filter Options** on the left-hand panel and select a filter policy from the drop-down list. 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** on the left-hand panel and configure the following options.
   - **Data Compression** – 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 data set. Note that small data sets cause slower job execution times.

- **Differential Data Compression** – Select the **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.

- **Data Encryption** – Select the **Encryption** checkbox to enable data encryption. Note that encrypting data causes slower job execution times. If you enable data encryption, choose a 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. When you have finished configuring the profile, choose one of the following options:
   - Click **Save** to save the profile.
   - Click **Save as** and enter a profile name to save it as another profile. Select **Save and replace the existing profile** to replace the original profile. Otherwise, it is saved without removing the original profile.
   - Click **Discard Changes** to clear all modifications that were made to the current profile.

Setting Up an Import Profile

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

1. On the **Sync Mode** tab, click **Profile Settings** in the **Profile Manager** group. 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/content types and whether to replicate the source content.
   - If you choose **Replicate the item-dependent columns and content types to maintain item integrity**, choose 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 the **Content** tab in Conflict Options.
7. Click **Mapping Options** from the panel on the left to select your language, user, domain, and column mappings. 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.

   Select the **Backup before replication** checkbox to back up the data source or data destination 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).

9. When you have finished configuring the profile, choose one of the following options:
   - Click **Save** to save the profile.
   - Click **Save as** and enter a profile name to save it as another profile. Select **Save and replace the existing profile** to replace the original profile. Otherwise, it is saved without removing the original profile.
   - Click **Discard Changes** to clear all modifications that were made to the current profile.

Building an Online Replicator Plan

An online Replicator plan replicates content, configurations, and securities in the following environments:

- From one SharePoint location to another
- Across the same online farm or across multiple online farms
- Across the same version SharePoint or across the different version SharePoint
- Within SharePoint on-premises or SharePoint Online

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

1. On the **Sync Mode** tab, click **Online Replicator** in the **Plan Management** group.
2. In the **Source** pane, click the farm name or **My Registered Sites** 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 match the

entered characters. You can only search out the nodes whose name is displayed within the currently expanded tree.

- To narrow down the search criteria and display fewer nodes on the tree, right-click a node and select **Advanced Search**. In the **Advanced Search** window, click **Add a Criterion** and configure the following settings:

  i. **Rule** – Select the rule for this search. The table below lists the supported rules for each node that is supported for Advanced Search.

Environment	Node	Rule
SharePoint On-Premises	Farm Level	Web Application: URL
	Web Application Level	Site Collection: Name
		Site Collection: URL
	Sites	Site: Name
		Site: URL
	Lists	List/Library: Name
		List/Library: URL
	Folders	Folder: Name
		Folder: URL
SharePoint Online (My Registered Sites)	Sites	Site: Name
		Site: URL
	Lists	List/Library: Name
		List/Library: URL
	Folders	Folder: Name
		Folder: URL

  ii. **Condition** – Select the condition for the rule from the drop-down list.

  iii. **Value** – Enter the value for the rule in the text box.

  iv. To add more criteria, click **Add a Criterion**, and repeat steps above. You can change the logical relationships between the criteria by clicking the **And** or **Or**. By default, the logical relationship is set to **And**. **And** means that the child nodes that meet all of the criteria will be included in the result. **Or** means that the child nodes that meet any criterion will be included in the result. The **Basic Filter Condition** area displays the logic relationships of filter criteria.

  v. Click **Search** to start searching the child nodes.

- Right-click a node and select **Show Other Mappings**. The **Show other mappings** window appears and the associated node mappings are displayed.

3. In the **Destination** pane, click the farm name or **My Registered Sites** to expand the data tree.

   - Select the node where you will import the replicated data. 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 Creating Containers. 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 that contains the nodes that match the entered characters.

- To narrow down the search criteria and display fewer nodes on the tree, right-click a node and select **Advanced Search**. In the **Advanced Search** window, click **Add a Criterion** and configure the following settings:

  i. **Rule** – Select the rule for this search. The table below lists the supported rules for each node that is supported for Advanced Search.

Environment	Node	Rule
SharePoint On-Premises	Farm Level	Web Application: URL
	Web Application Level	Site Collection: Name
		Site Collection: URL
	Sites	Site: Name
		Site: URL
	Lists	List/Library: Name
		List/Library: URL
	Folders	Folder: Name
		Folder: URL
SharePoint Online (My Registered Sites)	Sites	Site: Name
		Site: URL
	Lists	List/Library: Name
		List/Library: URL
	Folders	Folder: Name
		Folder: URL

  ii. **Condition** – Select the condition for the rule from the drop-down list.

  iii. **Value** – Enter the value for the rule in the text box.

  iv. To add more criteria, click **Add a Criterion**, and repeat steps above. You can change the logical relationships between the criteria by clicking the **And** or **Or**. By default, the logical relationship is set to **And**. **And** means that the child nodes that meet all of the criteria will be included in the result. **Or** means that the child nodes that meet any criterion will be included in the result. The **Basic Filter Condition** area displays the logic relationships of filter criteria.

  v. Click **Search** to start searching the child nodes.

- Right-click a node, and select **Show Other Mappings**. The **Show other mappings** window appears and the associated node mappings are displayed.

***Note**: If the selected source node and destination node are in different SharePoint versions or in different SharePoint experience versions, a message appears to remind that only content will be replicated in mappings of this type.

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.
   - On the **Queue Tools** tab, click **Add New Mappings** in the **Continue** group. The **Sync Mode** 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.
   - **Order** – Select the order to execute one mapping in the replication job.
   - **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.
   - **Real-Time** – Choose whether or not to enable real-time replication for the selected mappings. If you enable this option, select the detailed content for which you want to enable real-time replication. For detailed supported real-time events, refer to Appendix G: Supported Real-Time Events.
   - **Enable Mapping** – Choose whether or not to enable the selected mappings in the plan you wish to create.
   - **Profile** – Choose an online profile from the drop-down list for the selected mappings. For instructions, refer to Setting Up Online Profiles.
   - **Source Agent Group** – Select a source Agent Group to execute the selected mappings from the drop-down list. For details regarding creating an Agent Group, refer to DocAve 6 Control Panel Reference Guide.
   - **Destination Agent Group** – Select a destination Agent Group to execute the selected mappings from the drop-down list. For details regarding creating an Agent Group, refer to DocAve 6 Control Panel Reference Guide.

***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** tab appears. Configure the following settings.
9. **Plan Name** – Enter a name for the plan, and enter an optional description.
10. **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 appears.

      - **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 you select **Incremental Replication**, the following options are 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.

        ***Note**: Replicator supports synchronously deleting folders/files/items from end-user Recycle Bin. If the folders/files/items have been replicated by Replicator, the synchronization of complete deletion is supported. If the folders/files/items have not been replicated by Replicator, the synchronization of deleting folders/files is supported, but the synchronization of deleting items is unsupported.

      - **Reference Time** – Choose whether to replicate content created or modified at a specific interval. If you choose to use a reference time, define the time to replicate content 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**: AvePoint recommends that you define 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** – Define the frequency at which you run the rerunning schedule. Enter the required information according to the selected schedule type.

  ***Note**: If your selected schedule type is **Minute(s)**, **Hour(s)**, or **Month(s)**, you can select the **Advanced** checkbox to select the time interval.

- **Range of Recurrence** – Choose 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 **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 the occurrences that you enter in the text box.
  - **End by** – Set up the time to end the recurrence of plans and the Time Zone can be changed under **End by**.

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.

***Note**: If the plan is added to a plan group, the plan schedule will be managed by the plan group schedule. The schedule settings defined here will take effect if the plan is executed independent of the plan group or removed from the group.

11. **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 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, refer to DocAve 6 Control Panel Reference Guide.

    Optionally, choose whether to **Enable Real-Time replication notification**. When this option is selected, an e-mail that contains detailed real-time replication results will be sent to the recipients. After selecting the **Enable Real-Time replication notification** checkbox, configure the following settings:

    a. Select a notification profile 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, refer to DocAve 6 Control Panel Reference Guide.

    b. Choose to send the notification for **Success** or **Failure**.

c. **Interval** – Choose **Immediately** to send the notification once the plan is run, or select a specific interval by selecting **15**, **30**, or **45** from the drop-down menu after **Every** and selecting **Minute(s)**, **Hour(s)**, or **Day(s)**.

12. **Associated Plan Group** – Add the plan to one or more plan groups to manage multiple plans with common settings. Select a plan group 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, refer to DocAve 6 Control Panel Reference Guide.

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

    - Click **Save** to save the plan you have configured.
    - Click the triangle next to **Save**, then select **Save and Run Now** to save the plan and execute it right away. The **Run Now** window 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.

              ***Note**: Replicator supports synchronously deleting folders/files/items from end-user Recycle Bin. If the folders/files/items have been replicated by Replicator, the synchronization of complete deletion is supported. If the folders/files/items have not been replicated by Replicator, the synchronization of deleting folders/files is supported, but the synchronization of deleting items is unsupported.

            - **Reference Time** – Choose whether to replicate content created or modified at a specified interval. If you choose to use a reference time, define the time to replicate content 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 made 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.

14. 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.

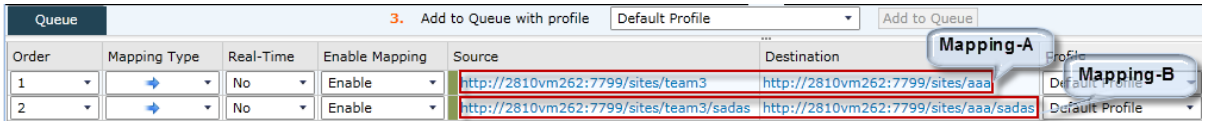


Figure 6: Example of mappings with inclusion relationship

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 or in the **Source** pane (only for one-way pull mapping), enter the name of a new container in the available field, and then click **Create Container**. The **Create Container** window appears. Depending on the container type you are creating, configure the settings for each type of container as follows. Note that when creating a folder, no settings need to be configured, and clicking **Create Container** at folder level will create a folder immediately.

Creating a Site Collection

Configure these settings in the **Create Container** window:

- **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 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** window.

Creating a Site

Configure these settings in the **Create Container** window:

- **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 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** window.

Creating a List/Library

Configure these settings in the **Create Container** window:

- **Object Type** – Choose to create a **List** or a **Library**.
- **Category** – Select the category for the new list or library.
- **Navigation** – Choose whether a link to this library/list appears in the Quick Launch.
- **Document Template** (for Document Library and Form Library) – Select the default document template for new files created in this library.
- **Document Version History** (for Document Library and Form 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.
- **Slide Version History** (for SharePoint 2010 Slide Library only) – Choose whether to create a version each time you edit a file in this slide library.

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

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).

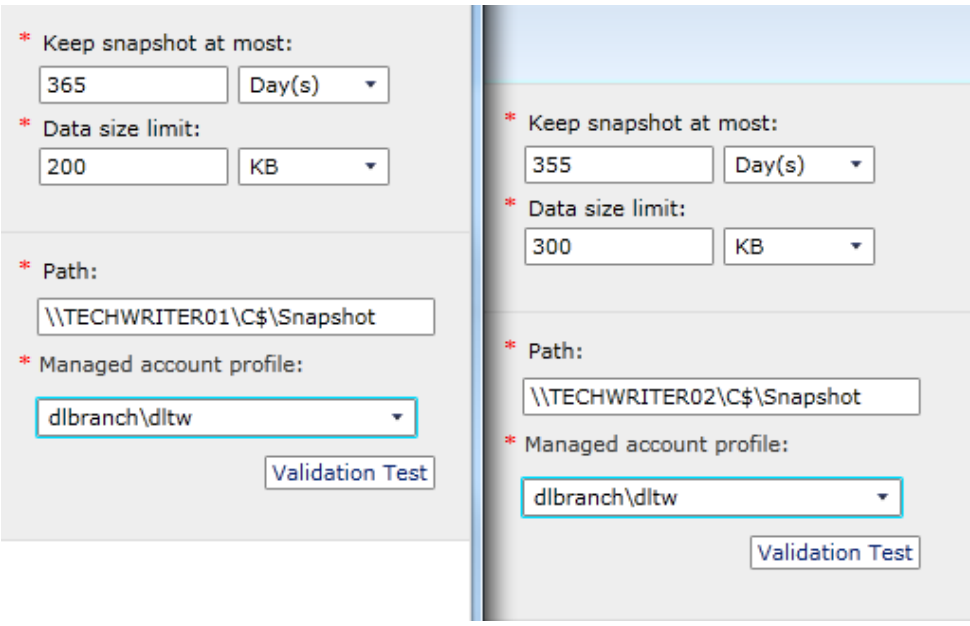


Figure 7: Example of Byte-level settings

- 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 **Enable byte-level to accelerate your Sync Mode online replication job**. 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 the **Conflict Options** sub-profile with the settings shown below. For instructions, refer to Conflict Options.

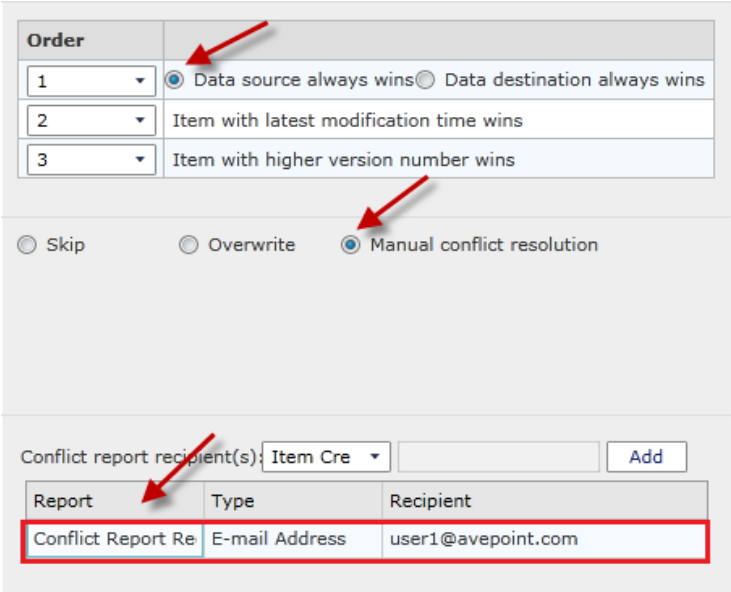


Figure 8: **Setting up a conflict sub-profile.**

***Note**: For the conflict resolutions for configuration and content, AvePoint recommends that you set one same node as the win node.

2. Set up an online profile. For instructions, refer to Setting Up Online Profiles.
3. Build an 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.

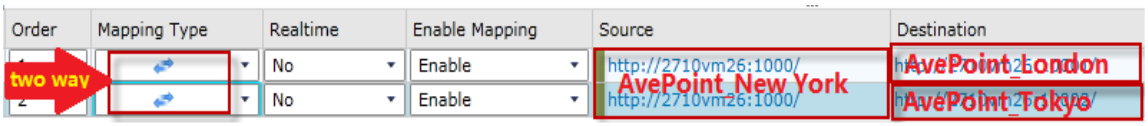


Figure 9: Mappings for three-way replication

4. Run a full replication job in order to sync the branch offices with the headquarters.
5. After the full replication job, you can perform an online incremental replication job to synchronize changes. 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. On the **Sync Mode** tab, click **One-way Pull** in the **Settings** group. The **One-way Pull** window appears.
2. Select the **Enable one-way pull** checkbox.
3. Build mappings with the mapping type of one-way pull.
4. Create a plan and perform a full online replication job. For instructions, refer to Building an Online Replicator Plan.

Creating Online Replicator Plans via Excel

To add a large number of new mappings to an existing 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. On 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 desired location. The file is named by the name of 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** – Enter a **Plan Name**, and an optional **Description**.
    - **Mapping Setting** – Set up the mapping settings.
        - **Mapping Number** – 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 or after it. The following elements are available:
            - 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, and PermissionOrPermissionLevelDelete are only supported for SharePoint 2013 and SharePoint 2016.

- **Enable Mapping** – Choose 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 URL of the Web application where the source node is located.
- **Destination** – Enter the full path of the destination node.
- **Destination Web Application** – Enter the URL of the Web application where the destination node is located.
- **Level** – Choose the mapping level from the drop-down list.
- **Profile** – Enter the name of an existing profile that will be applied to the mapping.
- **Source Farm** – Enter the name of the farm where the source node is located. To get the specific name of the farm you want to choose, go to **Control Panel** > **Agent Monitor**.
- **Source Agent Group** – Enter the name of an Agent Group that will be used as 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 name of the farm where the destination node is located. To get the specific name of the farm you want to choose, go to **Control Panel** > **Agent Monitor**.
- **Destination Agent Group** – Enter the name of an Agent Group that will be used as 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. On the **Plan Manager** tab, click **Import Online Plan** in the **Plan Offline Editor** group. The **Import Online Plan** window appears.
    - **Import File** – Browse to the file location where the configured plan file is stored.
    - **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. On the **Sync Mode** tab, click **Export Location** in the **Settings** group. The **Control Panel** > **Export Location** window appears.
2. Click **Create** on the ribbon and configure the export location settings. For details, refer to the DocAve 6 Control Panel Reference Guide.
3. After the export location is created, the export location will be available to select when 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. On the **Sync Mode** tab, click **Data Export** in the **Plan Management** group.
2. In the **Source** pane, click the farm name or **My Registered Sites** 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.
    - To narrow down the search criteria and display fewer nodes on the tree, right-click the specified node and select **Advanced Search**. In the **Advanced Search** interface, click **Add a Criterion** and configure the following settings:
        i. **Rule** – Select the rule for this search. The table below lists the supported rules for each node that is supported for Advanced Search.

Environment	Node	Rule
SharePoint On-Premises	Farm Level	Web Application: URL
	Web Application Level	Site Collection: Name
		Site Collection: URL
	Sites	Site: Name
		Site: URL
	Lists	List/Library: Name
		List/Library: URL
	Folders	Folder: Name
		Folder: URL
SharePoint Online (My Registered Sites)	Sites	Site: Name
		Site: URL
	Lists	List/Library: Name
		List/Library: URL
	Folders	Folder: Name
		Folder: URL

        ii. **Condition** – Select the condition for the rule from the drop-down list.
        iii. **Value** – Enter the value for the rule in the text box.
        iv. To add more criteria, click **Add a Criterion**, and repeat steps above. You can change the logical relationships between the criteria by clicking the **And** or **Or**. By default, the logical relationship is set to **And**. **And** means that the child nodes that meet all of the criteria will be included in the result. **Or** means that the child nodes that meet any criterion will be included in the result. The **Basic Filter Condition** area displays the logic relationships of filter criteria.
        v. Click **Search** to start searching the child nodes.

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.
    - **Order** – Select the order to execute one mapping in the replication job.
    - **Profile** – Click **Profile** on the ribbon; the **Profile** window appears. Then, select an export profile from the drop-down list for the selected mappings.
    - **Source Agent Group** – Click **Source Agent Group** on the ribbon; the **Source Agent Group** window 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.
7. **Plan Name** – Enter a name for the plan, and add an optional description.
8. **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 appears.

        - **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 you choose **Incremental Replication**, the following options are 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.

              ***Note**: Replicator supports synchronously deleting folders/files/items from end-user Recycle Bin. If the folders/files/items have been replicated by Replicator, the synchronization of complete deletion is supported. If the folders/files/items have not been replicated by

Replicator, the synchronization of deleting folders/files is supported, but the synchronization of deleting items is unsupported.

- **Reference Time** – Choose whether to replicate content created or modified at a specific interval. If you choose to use a reference time, define the time to replicate content 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**: 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, **Minute(s)**, **Hour(s)**, **Day(s)**, **Week(s)**, or **Month(s)** from the drop-down list.
- **Schedule Settings** – Define the frequency you want to run schedule. Enter the required information according to the selected schedule type.

  ***Note**: If your selected schedule type is **Minute(s)**, **Hour(s)**, or **Month(s)**, you can select the **Advanced** checkbox to select the time interval.

- **Range of Recurrence** – Choose 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 the occurrences that you enter in the text box.
  - **End by** – Set up the time to end the recurrence of plans and Time Zone can be changed under **End by**.

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.

9. **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 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, refer to the DocAve 6 Control Panel Reference Guide.
10. **Associated Plan Group** – Add the plan to one or more plan groups to manage multiple plans with common settings. Select a plan group 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, refer to the DocAve 6 Control Panel Reference Guide.

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

    - Click **Save** to save the plan you have configured.
    - Click the triangle next to **Save**, and then select **Save and Run Now** to save the plan and execute it right away. Then the **Run Now** window 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.

              ***Note**: Replicator supports synchronously deleting folders/files/items from end-user Recycle Bin. If the folders/files/items have been replicated by Replicator, the synchronization of complete deletion is supported. If the folders/files/items have not been replicated by Replicator, the synchronization of deleting folders/files is supported, but the synchronization of deleting items is unsupported.

            - **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 made 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.

12. Click **OK** to run the data export job.

Using Data Import

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

1. On the **Sync Mode** tab, click **Data Import** in the **Plan Management** group.
2. In the **Source** pane, on the **Browse** tab, click the farm name or **My Registered Sites** 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 or **My Registered Sites** to expand the data tree.
   - Select the node which you wish to import the exported data to. 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. 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.
   - To narrow down the search criteria and display fewer nodes on the tree, right-click the specified node and select **Advanced Search**. In the **Advanced Search** interface, click **Add a Criterion** and configure the following settings:
     i. **Rule** – Select the rule for this search. The table below lists the supported rules for each node that is supported for Advanced Search.

Environment	Node	Rule
SharePoint On-Premises	Farm Level	Web Application: URL
	Web Application Level	Site Collection: Name
		Site Collection: URL
	Sites	Site: Name
		Site: URL
	Lists	List/Library: Name
		List/Library: URL
	Folders	Folder: Name
		Folder: URL
SharePoint Online (My Registered Sites)	**Sites**	Site: Name
		Site: URL
	Lists	List/Library: Name
		List/Library: URL
	Folders	Folder: Name
		Folder: URL

     ii. **Condition** – Select the condition for the rule from the drop-down list.

     iii. **Value** – Enter the value for the rule in the text box.

iv. To add more criteria, click **Add a Criterion**, and repeat steps above. You can change the logical relationships between the criteria by clicking the **And** or **Or**. By default, the logical relationship is set to **And**. **And** means that the child nodes that meet all of the criteria will be included in the result. **Or** means that the child nodes that meet any criterion will be included in the result. The **Basic Filter Condition** area displays the logic relationships of filter criteria.

v. Click **Search** to start searching the child nodes.

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; the **Profile** window 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 the 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.

4. **Plan Name** – Enter a name for the plan, and add an optional description.

5. **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 appears.

     - **Schedule Type** – Select a recurring schedule, **Minute(s)**, **Hour(s)**, **Day(s)**, **Week(s)**, or **Month(s)** from the drop-down list.
     - **Schedule Settings** – Define the frequency you want to run the schedule. Enter the required information according to the selected schedule type.
     - **Range of Recurrence** – Enter 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.

6. **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 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, refer to the DocAve 6 Control Panel Reference Guide.

7. When finished configuring the plan, select one of the following options:
    - Click **Save** to save the plan you have configured.
    - Click the triangle next to **Save**, then select **Save 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.

Mapping Status

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

1. On the **Sync Mode** tab, click **Mapping Status** in the **Statistics** group. The **Mapping Status** tab appears.
2. Select a farm or **My Registered Sites** 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 selected plan.
4. Mapping status of plans in the selected farms is displayed. You can view source information, status, destination information, and details.
    - Source information contains source URL, source Agent name, connection status, and the 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, the number of received items and sent items.
    - For finished or running mapping, click **Details** to view mapping in **View Mappings** tab in Job Monitor.

Publishing Mode

Publishing Mode Replicator publishes your desired SharePoint folders, files, and items according to the configurable logic rules.

Publishing Mode replication supports the following scenarios:

- From one SharePoint location to another
- Within the same farm and across farms
- Within the same version of SharePoint
- Across different versions of SharePoint
    - From SharePoint 2010 to SharePoint 2013
    - From SharePoint 2010 to SharePoint 2016
    - From SharePoint 2013 to SharePoint 2010
    - From SharePoint 2013 to SharePoint 2016
    - From SharePoint 2010 experience version to SharePoint 2013 experience version (in SharePoint 2013)
    - From SharePoint 2013 experience version to SharePoint 2010 experience version (in SharePoint 2013)
    - From SharePoint 2016 to SharePoint 2010
    - From SharePoint 2016 to SharePoint 2013
- Within SharePoint on-premises
- From SharePoint on-premises to SharePoint Online

***Note**: If your DocAve 6 Service Pack 8 was updated from Service Pak 6 or later version, SharePoint Online is disabled in Publishing Mode. Complete the following steps to enable SharePoint Online in Publishing Mode:

1. Go to the DocAve Agent server, and navigate to *…\AvePoint\DocAve6\Agent\data\SP2010\Replicator*.
2. Find the **SP2010Replicator.xml** file and open it with Notepad.
3. Find the IsSupportO365InRealTimeAndPMode attribute and modify the value to True.
4. Save and close the file.

To perform a template mode replication job in Publishing Mode, you must complete the following steps:

1. Configuring a Publishing Template (mandatory)
2. Building a Template Mode Replication Plan (mandatory)

To access Publishing Mode, click the **Publishing Mode** tab.

Publishing Template

Use a publishing template to manage the publishing rules that are used to publish the SharePoint files and items according to specific conditions.

To access Publishing Template, click **Publishing Template** on the ribbon.

In the **Publishing Template** window, all of the configured publishing templates are displayed.

Managing Publishing Templates

In the **Publishing Template** window, you can perform the following actions:

- **Create** – To create a new publishing template, click **Create** on the ribbon. For more information, refer to Configuring a Publishing Template.
- **View** – To view the configurations of a publishing template, select the checkbox before the template name, and then click **View** on the ribbon. The configuration details will appear.
- **Edit** – To change the configurations of a publishing template, select the checkbox before the template name, and then click **Edit** on the ribbon. For details on editing configurations for a publishing template, refer to Configuring a Publishing Template.
- **Delete** – To delete a publishing template, select the checkbox before the template name, and then click **Delete** on the ribbon.

Configuring a Publishing Template

In the **Publishing Template** > **Create** or **Publishing Template** > **Edit** window, configure the following settings:

1. **Template Name** – Enter the name of the publishing template.
2. **Description** (Optional) – Enter the description of the publishing template.
3. **Apply Publishing Rules On** – Choose to apply the publishing rules to **All lists** or **Specific lists**.
4. **Publishing Rules** – Configure the conditions and actions for your publishing rules.
    a. Click **Add a Condition** under **Specify the list scope** (only appears when **Specific lists** is selected in step 3). A section appears under **Specify the list scope**.
        i. Select **List Name**, **List Template Name**, or **Content Type Name** from the first drop-down list.
        ii. Select **Equals**, **Does Not Equal**, **Contains**, **Does Not Contain**, **Matches**, **Does Not Match**, **Matches Regular Expression**, or **Does Not Match Regular Expression** from the second drop-down list.
        iii. Enter a value in the **Value** text box.

***Note**: The entered list name, list template, or content type name is not case sensitive.

iv. Click **Add a Condition** and repeat the steps above to add multiple list scope conditions.

v. Select the number from the **Order** drop-down list to define the order of the conditions.

The logic options **And** and **Or** are selectable. By default, the logic is set to **And**. If desired, change the logic to **Or** by clicking **And**.

- **And** –The list that meets all of the conditions will be added to the scope.
- **Or** – The list that meets any one of the conditions will be added to the scope.

To delete a list scope condition, click the delete ( ) button. You can also click the add one ( ) button to add one more rule to filter the list scope.

b. Click **Add a Condition** under **If these conditions are met**. The **Add Condition** window appears.

i. Select your desired conditions by selecting the corresponding checkboxes.

- **Column Value** – The action will be activated when the specified column's value matches the condition.
- **Any Folders/Files/Items Are Deleted** – The action will be activated whenever a folder, file, or item is deleted from the source.

ii. Click **Add** on the ribbon.

iii. If you add the **Any Folders/Files/Items Are Deleted** condition, the **Any folders/files/items are deleted** section appears under **If these conditions are met** and this condition is included in the publishing rule.

iv. If you add the **Column Value** condition, a section appears under **If these conditions are met**. Configure the following settings:

- Enter the column name in the **Column Name** text box.

  ***Note**: The entered column name is not case sensitive. Internal name and display name are both supported.

- Select **Equals**, **Does Not Equal**, **Contains**, **Does Not Contain**, **Matches**, **Does Not Match**, **Matches Regular Expression**, or **Does Not Match Regular Expression** from the drop-down list.
- Enter the column value or the regular expression in the **Column Value** text box.

  ***Note**: The entered column value is case sensitive.

v. Click **Add a Condition** and repeat the steps above to add multiple conditions.

vi. Select the number from the **Order** drop-down list to define the order of the conditions.

The logic options **And** and **Or** are selectable. By default, the logic is set to **And**. If desired, change the logic to **Or** by clicking **And**.

- **And** –The folder, file, or item that meets all of the conditions will be executed the specified actions.
- **Or** – The folder, file, or item that meets any one of the conditions will be executed the specified actions.

You can click the delete (✕) button to delete a condition.

c. Click **Add an Action** under **Then take the following actions**. The **Add Action** window appears.

i. Select your desired actions by selecting the corresponding checkboxes.

- **Copy** – Copy the source folders, files, or items to the destination.
- **Delete** – Delete the folders, files, or items from the destination.
- **Update Column Value** – Update the column value in the destination.
- **Send E-mail** – Send an e-mail to your specified users.
- **Update Approval Status** – Update Approval Status to the selected value in the destination folders, files or items.

ii. Click **Add** on the ribbon.

iii. Configure the following settings for the selected actions:

- **Copy** – Copy **All Versions**, **Current Version**, **Major Versions**, or **Latest _ Versions** of folders, files, or items to the destination, using **Overwrite** or **Append** (only for Current Version) conflict option, **Keep** or **Do Not Keep** security settings and copy **All** or **Exclude** column information.

  ***Note**: If you select **Exclude**, a text box appears to allow you enter column names. The entered column name is not case sensitive. Internal name and display name are both supported. Separate multiple column names with semicolons.

- **Delete** – Delete **Minor Versions**, **All Versions**, or **Current Item** of the corresponding folders, files, or item in the destination.
- **Update Column Value** – Enter the column name in the **Column Name** text box and enter your desired column value in the **Column Value** text box. The column value will be updated in the corresponding folders, files, or items in the destination.

***Note**: The entered column name is not case sensitive. Internal name and display name are both supported. The entered column value is case sensitive.

- **Send an E-mail** – Click **E-mail** to define the e-mail message in the **E-mail Settings** window. Configure **To**, **Cc**, **Subject**, and **Body** in the corresponding fields.

  DocAve Replicator provides several references for Subject and Body. The reference will be replaced by the specific data of your environment. Select a reference from the drop-down list and click **Add** to add the reference into the text box. You can also enter your desired content in the text boxes.

  Then, click **OK** on the ribbon to save your configurations.

  ***Note**: To receive e-mails, you must configure the Outgoing E-mail Settings first in **Control Panel** > **User Notification Settings**. For more information, refer to the DocAve 6 Control Panel Reference Guide.

- **Update Approval Status** – Update the value of Approval Status to: **Approved**, **Pending**, **Draft**, or **Rejected** in the corresponding folder, files, or items in the destination **With** or **Without** the comment. If you select **With**, enter your comment in the text box.

iv. Click **Add an Action** and repeat the steps above to add multiple actions.

v. Select the number from the **Order** drop-down list to define the order of the actions.

You can click the delete (✕) button to delete an action.

d. Click **Add an Else-If Branch** to add a mutual exclusion criterion, and then refer to the instructions in step **b** and step **c** to add the conditions and actions.

***Note**: If you want to change the order of the else-if branch with that of the main publishing rule, click the up (↑) button or the down (↓) button to move.

5. Click **Save** on the ribbon to save this publishing template.

Building a Template Mode Replication Plan

Template Mode allows for the publishing of rules from a data source to a data destination based on the publishing rules that are stored in a publishing template. To build a template mode replication plan, complete the following steps:

1. In the **Publishing Mode** tab, click **Template Mode** in the **Manage** group.

2. Configure your desired mappings in the **Mapping Selection** page.

   a. 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.

      - To narrow down the search criteria and display fewer nodes on the tree, right-click the specified node and select **Advanced Search**. In the **Advanced Search** interface, click **Add a Criterion** and configure the following settings:

        - **Rule** – Select the rule for this search. The table below lists the supported rules for each node that is supported for Advanced Search.

Node	Rule
Farm Level	Web Application: URL
Web Application Level	Site Collection: Name
	Site Collection: URL
Sites	Site: Name
	Site: URL
Lists	List/Library: Name
	List/Library: URL
Folders	Folder: Name
	Folder: URL

        - **Condition** – Select the condition for the rule from the drop-down list.

        - **Value** – Enter the value for the rule in the text box.

        To add more criteria, click **Add a Criterion**, and repeat steps above. You can change the logical relationships between the criteria by clicking the **And** or **Or**. By default, the logical relationship is set to **And**. **And** means that the child nodes that meet all of the criteria will be included in the result. **Or** means that the child nodes that meet any criterion will be included in the result. The **Basic Filter Condition** area displays the logic relationships of filter criteria.

        Click **Search** to start searching the child nodes.

      - Right-click a node, and select **Show Other Mappings**. The **Show other mappings** window appears and the associated node mappings are displayed.

   b. In the **Destination** pane, click the farm name or **My Registered Sites** to expand the data tree.

- Select to where you will import the replicated data. 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 Creating Containers. 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.
- To narrow down the search criteria and display fewer nodes on the tree, right-click the specified node and select **Advanced Search**. In the **Advanced Search** interface, click **Add a Criterion** and configure the following settings:
  - **Rule** – Select the rule for this search. The table below lists the supported rules for each node that is supported for Advanced Search.

Node	Rule
Farm Level	Web Application: URL
Web Application Level	Site Collection: Name
	Site Collection: URL
Sites	Site: Name
	Site: URL
Lists	List/Library: Name
	List/Library: URL
Folders	Folder: Name
	Folder: URL

  - **Condition** – Select the condition for the rule from the drop-down list.
  - **Value** – Enter the value for the rule in the text box.
- Right-click a node, and select **Show Other Mappings**. The **Show other mappings** window appears and the associated node mappings are displayed.

c. Click **Add to Queue** to add this mapping to the queue.

***Note**: Template mode only supports one way replication.

d. In the **Queue** section, configure the following options:

- **Order** – Select the order that this mapping is executed in the queue.
- **Enable Mapping** – Choose whether to enable this mapping.
- **Source Agent Group** – Select a source Agent Group to execute the selected mappings from the drop-down list. For more information, refer to the DocAve 6 Control Panel Reference Guide.
- **Destination Agent Group** – Select a destination Agent Group to execute the selected mappings from the drop-down list. For more information, refer to the DocAve 6 Control Panel Reference Guide.

3. Click **Next** to proceed to the next step.
4. In the **Publishing Rules** page, choose to apply an existing publishing template to the selected mappings or create new publishing rules to apply to the selected mappings.
    - **Apply an existing publishing template to the selected mappings** – Select a publishing template from the drop-down list. The configured publishing rules are displayed. You can also add, delete, or modify the publishing rules by clicking **Create new publishing rules based on the selected template**.
    - **Create new publishing rules to apply to the selected mappings** – Configure the necessary settings to create the publishing rules. For detail information, refer to Configuring a Publishing Template. After finish configuring the publishing rules, you can also click **Save As a Template** to save the newly created publishing rules in a publishing template. Then, enter the template name in the **Save As a Template** window and click **Save**.
5. Click **Next** to proceed to the next step.
6. In the **Plan Settings** page, configure the following settings:
    a. **Plan Name** – Enter the **Plan Name** and **Description** in the corresponding text boxes.
    b. **Legacy Content Publishing** – Choose whether to publish the legacy content during the template mode replication job. In addition to the content that triggers the publishing rules, the previously existing source content that meets the rule criteria will also be replicated to the destination. Select the **Publish legacy content** checkbox and then configure the following settings:
        - **Legacy content range** – Choose the range of the legacy content.
            - **Publish all content** – All of the legacy content that matches the rule criteria will be published.
            - **Publish content created or modified within** – Enter a positive integer in the text box and select **Minute(s)**, **Hour(s)**, or **Day(s)** as the unit. The legacy content created or modified within the range and matches the rule criteria will be published.
        - **Legacy content publishing method** – Choose one of the following methods to publish the legacy content.
            - **Publish legacy content at the end of the wizard** – The legacy content that matches the rule criteria will be published will be published immediately when the wizard is finished.
            - **Configure the legacy content publishing schedule myself** – Configure a schedule to publish the legacy content. Select the start time to publish the legacy content that matches the rule criteria. You can also configure the time zone by clicking the displayed time zone.

c. **Publishing for Changed Content** – Choose one of the following methods to publish the content that has changed between the last job start time and the current job start time, and matches the rule criteria.

   - **Publish changed content immediately** – The changed content will be published immediately when the wizard is finished.
   - **Configure the changed content publishing schedule myself** – Configure a schedule to publish the changed content. Select the start time. Define the interval by entering a positive integer in the text box and selecting **Minute(s)**, **Hour(s)**, **Day(s)**, **Week(s)**, or **Month(s)** as the unit. You can also configure the time zone by clicking the displayed time zone.

d. **Notification** (This field only appears when the **Publish legacy content** checkbox is selected) – 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 from the drop-down list.
   - Click **View** beside the drop-down menu to view details of the notification profile.
   - Click **New Notification Profile** from the drop-down list. For information on creating a notification profile, refer to the DocAve 6 Control Panel Reference Guide.

e. Click the **Advanced** link to configure the advanced plan settings.

   - **User Mapping** – Select a user mapping from the drop-down list to replace existing source usernames with existing or default destination usernames in the metadata fields. You can also click **New User Mapping** from the drop-down list. For details on creating a user mapping, refer to DocAve 6 Control Panel Reference Guide.
   - **Domain Mapping** – Select a domain mapping from the drop-down list to replace the source domain name with the destination domain name. You can also click **New Domain Mapping** from the drop-down list. For details on creating a domain mapping, refer to DocAve 6 Control Panel Reference Guide.
   - **Language Mapping** – Select a language mapping from the drop-down list to map the source list name or column name to another language in the destination. You can also click **New Language Mapping** from the drop-down list. For details on creating a language mapping, refer to DocAve 6 Control Panel Reference Guide.
   - **Data Compression** – 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 time but a larger data set, while a high compression level results in a slower compression time but a smaller, better quality data set. Note that small data sets cause slower job execution times.

- **Differential Data Compression** – Choose to **Enable differential data compression to accelerate your publishing mode replication job**. Differential data compression can generate and compress differential data (differences between the current backup data and the data in cache folder). This will reduce the size of publishing mode replication data.

  If enabled, you must configure the differential data compression path first. For more information about how to configure the path, refer to Configuring Path Settings.

  ***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 enable the differential data compression feature, the data compression feature will not take effect on publishing mode replication even though the **Compression** checkbox is selected.

- **Network Control** – Select a network control profile from the drop-down list to optimize your replication efficiency. For more information about network control, refer to Configuring Network Control.

7. Click **Next** to go to the **Overview** page. The configurations on this plan are displayed.
8. Click **Finish** to finish configuring the wizard and save the template mode replication plan. The template mode replication job will be performed automatically once there is source content that meets the publishing rules.

   ***Note**: If you select the **Publish legacy content** checkbox and choose **Publish legacy content at the end of the wizard** in **Plan Settings** page, a template mode replication job is executed automatically to replicate the existing source content that meets the publishing rules to the destination.

Plan Manager

The Plan Manager interface allows users to view mappings, edit, delete, run, and test replication plans, and export/import online replication plans. Click the **Plan Manager** tab next to the **Publishing Mode** tab.

In the **Plan Manager** interface, all of the replication plans are displayed. To change the number of plans displayed per page, select the desired number from the **Show rows** drop-down menu in the lower-right corner. To sort the plans, click the column heading such as **Plan Name** and **Mode**.

You may perform any of the following actions on a selected plan:

- **Show Mappings** – Show the mappings in the **Queue** section.
- **Hide Mappings** – Hide the displayed mappings.
- **Edit** – Edit the selected plan.
- **Delete** – Delete the selected plan.
- **Export Online Plan** – Export an online replication plan.

  ***Note**: If you select multiple online replication plans and click **Export Online Plan**, an Excel file will be exported and the configurations of each plan will reside in one sheet.

- **Import Online Plan** – Import an online replication plan.

  ***Note**: If the imported Excel file contains multiple sheets, multiple online replication plans will be imported one by one.

- **Test Run** – Perform a test run job for the selected plan.
- **Run Now** – Perform a replication job for the selected plan.
- View Publishing Template – For a Publishing Mode plan, click the value in the **Publishing Template** column. The **View Publishing Template** window appears. The detailed publishing rules of the applied publishing template are displayed.
- **Replication Details** – Navigate to the Replication Details interface.
- **Job Monitor** – Navigate to the Job Monitor interface.

Replication Details

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

On the **Sync Mode**, **Publishing Mode**, or **Plan Manager** tab, in the **Statistics** group, click **Replication Details** on the ribbon. The **Replication Details** tab appears.

When you access the interface for the first time, the records of failed replications within the last five days are displayed in the **Job Trigger** tab and **Automatic Trigger** tab. The **Job Trigger** tab displays the replication records triggered by Sync Mode replication jobs; whereas, the **Automatic Trigger** tab displays the replication records triggered by real-time replications and Publishing Mode replications.

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.

Query Records

To query specific replicated records, complete the following steps:

1. Click **Query Scope** to define a query scope. Configure the following settings:
    - **Time Range** – Choose 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.
    - Replication Mode (for **Automatic Trigger** only) – Select the replication mode to add to your scope, **Sync Mode Real-Time Replication** and/or **Publishing Mode**.
    - **Plan Name** – Select a plan from the drop-down menu to add to your scope. By default, **All Plans** is selected.
    - **Mapping Selection** – Select 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 one or more SharePoint object types from the drop-down menu to add to your scope. By default, all object types are selected.
    - **Status** – Select one or more record statuses from the drop-down menu to add to your scope. By default, **Failed** is selected.
2. Click **Query** to finish defining your scope and start to query your records or click **Close** to exit. To redefine your query scope, click **Reset**.
3. Click **Query** next to **Query Scope** to search the records that meet your scope again.

Retrying Automatic Triggered Objects

In the **Automatic Trigger** tab, you can choose to perform replications for specific objects.

To replicate specific objects, choose your desired objects by selecting the corresponding checkboxes and then click **Retry** on the ribbon. The selected objects will be replicated to the destination.

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 **View Details** window, you can review basic information and advanced information about the selected record.

Exporting Query Records

When you finish querying your records, you can export the query results. Click **Export Query Result** in the **Query Action** area on the ribbon. In the **Export Query Result** window, select the report format as **XLS**, **CSV**, or **TXT**, and then click **Export** to export the query results.

Configuring Report Settings

Report Settings allow you to choose 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** window appears. In the pop-up window, configure the following settings:

1. **Report Location** – Enter a Universal Naming Convention path to the location that will store the job reports and enter the credentials of the location.
    a. Select the **Use a Net Share path as the report location** checkbox.
    b. Enter the **UNC path** in the text box.
    c. Select a **Managed account profile** from the drop-down list or click **New Managed Account Profile** to create a new one. For details, refer to the DocAve 6 Control Panel Reference Guide.
    d. Click **Validation Test** to validate the managed account profile.
2. **Maximum Time to Retain Reports** – Enter the maximum days to retain the replication job reports.
3. Click **Save** to finish configuring the report settings.

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 the DocAve_ReplicatorDatabase. After deleting the configuration of Profile Settings, the incremental replication can be run successfully. Use the **Replicator Analyzer Tool** to modify the **SP2010Replicator.xml** configuration files 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.

Replicator for SharePoint Online

Replicator allows you to replicate content between SharePoint on-premises and SharePoint Online, and from SharePoint Online to SharePoint Online. To perform this function properly, you must configure your **Registered SharePoint Sites** in **Control Panel** and configure **Replicator Database** in Replicator **Sync Mode**. For more information, refer to the DocAve 6 Control Panel Reference Guide and Configuring the Replicator Database.

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 F: 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.

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

Web Part		Support Status	Note
	Media Web Part	Supported	
	Page Viewer	Supported	
	Picture Lib Slideshow Web Part	Supported	
Outlook Web App	My Calendar	Supported	
	My contacts	Supported	
	My Inbox	Supported	
	My Mail Folder	Supported	
	My Tasks	Supported	
Social Collaboration	Contact Details	Supported	The related user information of this Web part is also replicated to the destination when replicating the Contact Details Web part.
	Note Board	Supported	
	Organization Browser	Supported	
	Site Users	Supported	
	Tag Cloud	Supported	
	User Tasks	Supported	
Search	Advanced Search Box	Unsupported	
	Dual Chinese Search	Unsupported	
	Federated Results	Unsupported	
	People Refinement Panel	Unsupported	
	People Search Box	Unsupported	
	People Search Core Results	Unsupported	
	Refinement Panel	Unsupported	
	Related Queries	Unsupported	
	Search Action Links	Unsupported	
	Search Best Bets	Unsupported	
	Search Box	Unsupported	
	Search Core Results	Unsupported	
	Search Paging	Unsupported	
	Search Statistics	Unsupported	
	Search Summary	Unsupported	
	Search Visual Best Bet	Unsupported	
	Top Federated Results	Unsupported	

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		Support Status	Note
Business Data	Business Data Actions	Supported	
	Business Data Connectivity Filter	Supported	
	Business Data Item	Supported	
	Business Data Item Builder	Unsupported	
	Business Data List	Supported	
	Business Data Related List	Supported	
	Excel Web Access	Supported	
	Indicator Details	Supported	
	Status List	Supported	
	Visio Web Access	Supported	
Content Rollup	Categories	Unsupported	
	Content Query	Supported	
	Relevant Documents	Supported	
	RSS Viewer	Supported	
	Site Aggregator	Supported	
	Sites in Category	Unsupported	
	Summary Links	Supported	
	Table of Contents	Supported	
	WSRP Viewer	Supported	
	Timeline	Supported	
	Term Property	Supported	
	Project Summary	Supported	
	Content Search	Supported	
Filters	Apply Filters Button	Supported	
	Choice Filter	Supported	
	Current User Filter	Supported	
	Data Filter	Supported	
	Page Filtered Filter	Supported	
	Query String(URL) Filter	Supported	
	SharePoint List Filter	Supported	
	SQL Server Analysis Service Filter	Unsupported	
	Text Filter	Supported	
Forms	HTML Form Web Part	Supported	
	InfoPath Form Web Part	Supported	
Media and Content	Content Editor	Supported	
	Image Viewer	Supported	

Web Part		Support Status	Note
	Media Web Part	Supported	
	Page Viewer	Supported	
	Picture Lib Slideshow Web Part	Supported	
	Silverlight Web Part	Supported	
	Script Editor	Supported	
	Get Start with your site	Supported	
Search	Refinement	Supported	
	Popular Items	Supported	
	Search Navigation	Supported	
	Search Results	Supported	
	Taxonomy Refinement Panel	Unsupported	
Social Collaboration	Contact Details	Supported	The related user information of this Web part is also replicated to the destination when replicating the Contact Details Web part.
	Note Board	Supported	
	Organization Browser	Supported	
	Site Users	Supported	
	Tag Cloud	Supported	
	User Tasks	Supported	
Blog	Blog Archives	Supported	
	Blog Notifications	Supported	
	Blog Tools	Supported	
Community	About this community	Supported	
	Join	Supported	
	My membership	Supported	
	Tools	Supported	
	What's happening	Supported	
Document Sets	Document Set Contents	Supported	
	Document Set Properties	Supported	
Search-Driven Content	Catalog-Item Reuse	Unsupported	
	Items Matching a Tag	Unsupported	
	Pages	Unsupported	
	Pictures	Unsupported	
	Search Box	Supported	
	Recently Changed Items	Unsupported	
	Recommended Items	Unsupported	
	Videos	Unsupported	
	Web Pages	Unsupported	
	Wiki Pages	Supported	

SharePoint 2016 Web Parts

The following table lists the supported and unsupported SharePoint 2016 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		Support Status	Note
Business Data	Business Data Actions	Supported	
	Business Data Connectivity Filter	Supported	
	Business Data Item	Supported	
	Business Data Item Builder	Unsupported	
	Business Data List	Supported	
	Business Data Related List	Supported	
	Excel Web Access	Supported	
	Indicator Details	Supported	
	Status List	Supported	
	Visio Web Access	Supported	
Content Rollup	Categories	Unsupported	
	Content Query	Supported	
	Relevant Documents	Supported	
	RSS Viewer	Supported	
	Site Aggregator	Supported	
	Sites in Category	Unsupported	
	Summary Links	Supported	
	Table of Contents	Supported	
	WSRP Viewer	Supported	
	Timeline	Supported	
	Term Property	Supported	
	Project Summary	Supported	
	Content Search	Supported	
Filters	Apply Filters Button	Supported	
	Choice Filter	Supported	
	Current User Filter	Supported	
	Data Filter	Supported	
	Page Filtered Filter	Supported	
	Query String(URL) Filter	Supported	
	SharePoint List Filter	Supported	
	SQL Server Analysis Service Filter	Unsupported	
	Text Filter	Supported	
Forms	HTML Form Web Part	Supported	
	InfoPath Form Web Part	Supported	
Media and Content	Content Editor	Supported	
	Image Viewer	Supported	

Web Part		Support Status	Note
	Media Web Part	Supported	
	Page Viewer	Supported	
	Picture Lib Slideshow Web Part	Supported	
	Silverlight Web Part	Supported	
	Script Editor	Supported	
	Get started with your site	Supported	
Search	Refinement	Supported	
	Search Box	Supported	
	Search Navigation	Supported	
	Search Results	Supported	
	Taxonomy Refinement Panel	Supported	
Social Collaboration	Contact Details	Supported	
	Note Board	Supported	
	Organization Browser	Supported	
	Site Users	Supported	
	Tag Cloud	Supported	
	User Tasks	Supported	
Blog	Blog Archives	Supported	
	Blog Notifications	Supported	
	Blog Tools	Supported	
Community	About this community	Supported	
	Join	Supported	
	My membership	Supported	
	Tools	Supported	
	What's happening	Supported	
Document Sets	Document Set Contents	Supported	
	Document Set Properties	Supported	
Search-Driven Content	Catalog-Item Reuse	N/A	
	Items Matching a Tag	Supported	
	Pages	Supported	
	Pictures	Supported	
	Popular Items	Supported	
	Recently Changed Items	Supported	
	Recommended Items	Supported	
	Videos	Supported	
	Web Pages	Supported	
	Wiki Pages	Supported	

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	Support 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	Partially Supported	Only support workflow definition for SharePoint Online
	SharePoint Designer Workflow	Partially Supported	Only support workflow

Source	Type	Support Status	Note
			definition for SharePoint Online
	Nintex Workflow	Partially Supported	For replication from SharePoint 2010 on-premises to SharePoint Online, only support Nintex Workflow definitions.
	Visual Studio Workflow	Unsupported	
	Visio Workflow	Unsupported	
***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. ***Note:** DocAve can maintain the state of a running workflow between the source and destination during a replication, but must write directly to the Content Database to do so. Microsoft does not support database writing methods, and using such methods may void the Microsoft Terms of Service. For instructions on how to replicate running workflows, see the following Knowledge Base article: Maintaining the State of Running Workflows.			
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	
	Full HTML content with formatting and constraints for publishing	Supported	
	Image with formatting and constraints for publishing	Supported	
	Hyperlink with formatting and constraints for publishing	Supported	
	Summary Links data	Supported	
	Rich media data for publishing	Supported	

Source	Type	Support Status	Note
	Managed Metadata	Supported	
Security & Properties	Version Settings	Supported	
	Column Settings	Supported	
	Permissions	Supported	
Version Histories	Documents	Supported	
	Lists	Supported	

SharePoint 2013 Elements

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

Source	Type	Support Status	Note
Libraries	Document Library	Supported	
	Form Library	Supported	
	Wiki Page Library	Supported	
	Picture Library	Supported	
	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	Partially Supported	Only support workflow definition for SharePoint Online
	SharePoint Designer Workflow	Partially Supported	Only support workflow definition of SharePoint

Source	Type	Support Status	Note
			2010 Platform Workflow and SharePoint 2013 Platform Workflow for SharePoint Online. For SharePoint 2013 Platform Workflow of SharePoint Online, only support site workflow, list workflow, and the reusable workflow that has been applied. SharePoint 2013 Platform Workflow of SharePoint on-premises only support workflow definition.
	Nintex Workflow	Partially Supported	For replication from SharePoint 2013 on-premises to SharePoint Online, only support Nintex Workflow definitions.
	Visual Studio Workflow	Unsupported	
	Visio Workflow	Unsupported	
***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. ***Note:** DocAve can maintain the state of a running workflow between the source and destination during a replication, but must write directly to the Content Database to do so. Microsoft does not support database writing methods, and using such methods may void the Microsoft Terms of Service. For instructions on how to replicate running workflows, see the following Knowledge Base article: Maintaining the State of Running Workflows.			
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	

Source	Type	Support Status	Note
	Hyperlink or Picture	Supported	
	Calculated	Supported	
	Task Outcome	Supported	
	Full HTML content with formatting and constraints for publishing	Supported	
	Image with formatting and constraints for publishing	Supported	
	Hyperlink with formatting and constraints for publishing	Supported	
	Summary Links data	Supported	
	Rich media data for publishing	Supported	
	Managed Metadata	Supported	
	Business Data	Supported	
Security & Properties	Version Settings	Supported	
	Column Settings	Supported	
	Permissions	Supported	
Version Histories	Documents	Supported	
	Lists	Supported	

SharePoint 2016 Elements

The following table lists the currently supported and unsupported SharePoint 2016 elements in Replicator.

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

Source	Type	Support Status	Note
	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	Partially Supported	Only support workflow definition for SharePoint Online
	SharePoint Designer Workflow	Partially Supported	Only support workflow definition and workflow instance of SharePoint 2010 Platform Workflow
	Nintex Workflow	Unsupported	
	Visual Studio Workflow	Unsupported	
	Visio Workflow	Unsupported	
***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. ***Note:** DocAve can maintain the state of a running workflow between the source and destination during a replication, but must write directly to the Content Database to do so. Microsoft does not support database writing methods, and using such methods may void the Microsoft Terms of Service. For instructions on how to replicate running workflows, see the following Knowledge Base article: Maintaining the State of Running Workflows.			
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	

Source	Type	Support Status	Note
	Calculated	Supported	
	Task Outcome	Supported	
	Full HTML content with formatting and constraints for publishing	Supported	
	Image with formatting and constraints for publishing	Supported	
	Hyperlink with formatting and constraints for publishing	Supported	
	Summary Links data	Supported	
	Rich media data for publishing	Supported	
	Managed Metadata	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 Social Features

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 (OneDrive for Business)		Supported	
Blog		Supported	
Tag		Supported	The #tag is stored in Managed Metadata Service as a system term.
Microblog and Feed	Post	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Reply	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Like	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
	Picture	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Link	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	@	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Mentions	Partially Supported	Unsupported for two way replication;

Social Feature		Status	Note
			Unsupported for replication for SharePoint Online
	Tag	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
Follow	People	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
	Site	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Document	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Tag	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
Community Site	Categories	Supported	
	Discussion Board	Supported	
	Members	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Budge	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
	Reputation	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Best Reply	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online

Social Feature		Status	Note
	Question	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
	Community Setting	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
Community Portal		Supported	

SharePoint 2016 Social Features

The following table lists the supported and unsupported SharePoint 2016 social features in Replicator.

Social Feature		Status	Note
My Site		Supported	
SkyDrive Pro (OneDrive for Business)		Supported	
Blog		Supported	
Tag		Supported	The #tag is stored in Managed Metadata Service as a system term.
Microblog and Feed	Post	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Reply	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Like	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
	Picture	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Link	Partially Supported	Unsupported for two way replication;

Social Feature		Status	Note
			Unsupported for replication for SharePoint Online
	@	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Mentions	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Tag	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
Follow	People	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
	Site	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Document	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Tag	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
Community Site	Categories	Supported	
	Discussion Board	Supported	
	Members	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Budge	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online

Social Feature		Status	Note
	Reputation	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Best Reply	Partially Supported	Unsupported for two way replication; Unsupported for replication for SharePoint Online
	Question	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
	Community Setting	Partially Supported	Unsupported for two way replication; Unsupported for real-time replication; Unsupported for replication for SharePoint Online
Community Portal		Supported	

Appendix D: Supported and Unsupported SharePoint Content/Property/Security/Site Template for Cross Version Replication

Cross version replication replicates content, securities, users, and the content's related configurations from:

- SharePoint 2010 to SharePoint 2013
- SharePoint 2013 to SharePoint 2010
- SharePoint 2010 experience version to SharePoint 2013 experience version (in SharePoint 2013)
- SharePoint 2013 experience version to SharePoint 2010 experience version (in SharePoint 2013)
- SharePoint 2010 to SharePoint 2016
- SharePoint 2016 to SharePoint 2010
- SharePoint 2013 (SharePoint 2010 experience version) to SharePoint 2016
- SharePoint 2013 (SharePoint 2013 experience version) to SharePoint 2016
- SharePoint 2016 to SharePoint 2013 (SharePoint 2010 experience version)
- SharePoint 2016 to SharePoint 2013 (SharePoint 2013 experience version)

Supported and Unsupported SharePoint Content/Property/Security for Cross Version Replication (SharePoint 2010 to SharePoint 2013)

The following table lists the SharePoint content/property/security that is supported and unsupported to be replicated from SharePoint 2010 to SharePoint 2013.

Type		Support Status	Note
Libraries	Document Library	Supported	
	Form Library	Supported	
	Wiki Page Library	Supported	
	Picture Library	Supported	
	Translation Management Library	Unsupported	This template does not exist in SharePoint 2013.
	Data Connection Library	Supported	
	Slide Library	Supported	
	Report Library	Supported	

Type		Support Status	Note
	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	Unsupported	
	Import Spreadsheet	Unsupported	
Web Pages	Basic Page	Unsupported	
	Web Part Page	Unsupported	
	Sites and Workspaces	Unsupported	
Workflow	SharePoint Built-in Workflow	Supported	
	SharePoint Designer Workflow	Supported	
	Nintex Workflow	Supported	
	Visual Studio Workflow	Supported	
	Visio Workflow	Unsupported	
	Azure Workflow	Unsupported	
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	
	Managed Metadata	Supported	
	Calculated	Supported	
	Business Data	Unsupported	

Type		Support Status	Note
Security & Property	Version Settings	Supported	
	Column Settings	Supported	
	Permissions	Supported	
Version Histories	Documents	Supported	
	Lists	Supported	

Supported and Unsupported SharePoint Content/Property/Security for Cross Version Replication (SharePoint 2013 to SharePoint 2010)

The following table lists the SharePoint content/property/security that is supported and unsupported to be replicated from SharePoint 2013 to SharePoint 2010.

Type		Support Status	Note
Library	Document Library	Supported	
	Form Library	Supported	
	Wiki Page Library	Supported	
	Picture 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	
	Promoted Links	Unsupported	This list template does not exist in SharePoint 2010.
	External List	Unsupported	
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	Unsupported	
	Import Spreadsheet	Unsupported	
Web Pages	Basic Page	Unsupported	

Type		Support Status	Note
	Web Part Page	Unsupported	
	Sites and Workspaces	Unsupported	
Workflow	SharePoint Built-in Workflow	Unsupported	
	SharePoint Designer Workflow	Unsupported	
	Nintex Workflow	Unsupported	
	Visual Studio Workflow	Unsupported	
	Visio Workflow	Unsupported	
	Azure Workflow	Unsupported	
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	
	Managed Metadata	Supported	
	Calculated	Supported	
	Business Data	Unsupported	
	Task Outcome	Unsupported	
Security & Property	Version Settings	Supported	
	Column Settings	Supported	
	Permissions	Supported	
Version Histories	Documents	Supported	
	Lists	Supported	
Social Computing Pages	Home	Unsupported	Do not exist in SharePoint 2010.
	Categories	Unsupported	
	Members	Unsupported	
	About	Unsupported	
	Administration Settings	Unsupported	
Social Computing Pages	Discussions	Unsupported	
	Categories	Unsupported	
	Badges	Unsupported	
	Community Members	Unsupported	

Supported and Unsupported SharePoint Content/Property/Security for Cross Version Replication (SharePoint 2010 to SharePoint 2016)

The following table lists the SharePoint content/property/security that is supported and unsupported to be replicated from SharePoint 2010 to SharePoint 2016.

Type		Support Status	Note
Libraries	Document Library	Supported	
	Form Library	Supported	
	Wiki Page Library	Supported	
	Picture Library	Supported	
	Translation Management Library	N/A	
	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	N/A	
	KPI Lists	N/A	
	Import Spreadsheet	Supported	
Web Pages	Basic Page	Supported	
	Web Part Page	Supported	
	Sites and Workspaces	Supported	
Workflow	SharePoint Built-in Workflow	Supported	
	SharePoint Designer Workflow	Supported	
	Nintex Workflow	N/A	
	Visual Studio Workflow	N/A	
	Visio Workflow	N/A	

Type		Support Status	Note
	Azure Workflow	N/A	
RSS		N/A	
Alerts		N/A	
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	
	Managed Metadata	Supported	
	Calculated	Supported	
	Business Data	N/A	
Security & Property	Version Settings	Supported	
	Column Settings	Supported	
	Permissions	Supported	
Version Histories	Documents	Supported	
	Lists	Supported	

Supported and Unsupported SharePoint Content/Property/Security for Cross Version Replication (SharePoint 2013 to SharePoint 2016)

The following table lists the SharePoint content/property/security that is supported and unsupported to be replicated from SharePoint 2013 to SharePoint 2016.

Type		Support Status	Note
Library	Document Library	Supported	
	Form Library	Supported	
	Wiki Page Library	Supported	
	Picture 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	

Type		Support Status	Note
	Contacts	Supported	
	Discussion Board	Supported	
	Promoted Links	Supported	
	External List	Unsupported	
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	
	KPI Lists	N/A	
	Import Spreadsheet	Supported	
Web Pages	Basic Page	Supported	
	Web Part Page	Supported	
	Sites and Workspaces	Supported	
Workflow	SharePoint Built-in Workflow	Supported	
	SharePoint Designer Workflow	Supported	
	Nintex Workflow	N/A	
	Visual Studio Workflow	N/A	
	Visio Workflow	N/A	
	Azure Workflow	N/A	
RSS		Supported	
Alerts		Unsupported	
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	
	Managed Metadata	Supported	
	Calculated	Supported	
	Business Data	Unsupported	
Security & Property	Version Settings	Supported	
	Column Settings	Supported	
	Permissions	Supported	

Type		Support Status	Note
Version Histories	Documents	Supported	
	Lists	Supported	
Social Computing Pages	Home	N/A	
	Categories	N/A	
	Members	N/A	
	About	N/A	
	Administration Settings	N/A	
Social Computing Pages	Discussions	N/A	
	Categories	N/A	
	Badges	N/A	
	Community Members	N/A	

Supported and Unsupported SharePoint Content/Property/Security for Cross Version Replication (SharePoint 2016 to SharePoint 2010)

The following table lists the SharePoint content/property/security that is supported and unsupported to be replicated from SharePoint 2016 to SharePoint 2010.

Type		Support Status	Note
Library	Document Library	Supported	
	Form Library	Supported	
	Wiki Page Library	Supported	
	Picture Library	Supported	
	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	Unsupported	
	External List	Unsupported	
Tracking Lists	Links	Supported	
	Calendar	Supported	
	Tasks	Unsupported	
	Issue Tracking	Supported	
	Survey	Supported	
Custom Lists	Custom List	Supported	
	Custom List in Datasheet View	Supported	

Type		Support Status	Note
	KPI Lists	N/A	
	Import Spreadsheet	Supported	
Web Pages	Basic Page	Unsupported	
	Web Part Page	Unsupported	
	Sites and Workspaces	Supported	
Workflow	SharePoint Built-in Workflow	Supported	
	SharePoint Designer Workflow	Supported	
	Nintex Workflow	N/A	
	Visual Studio Workflow	N/A	
	Visio Workflow	N/A	
	Azure Workflow	N/A	
RSS		Supported	
Alerts		Unsupported	
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	
	Managed Metadata	Supported	
	Calculated	Supported	
	Business Data	Unsupported	
Security & Property	Version Settings	Supported	
	Column Settings	Supported	
	Permissions	Supported	
Version Histories	Documents	Supported	
	Lists	Supported	
Social Computing Pages	Home	N/A	
	Categories	N/A	
	Members	N/A	
	About	N/A	
	Administration Settings	N/A	
Social Computing Pages	Discussions	N/A	
	Categories	N/A	
	Badges	N/A	
	Community Members	N/A	

Supported and Unsupported SharePoint Content/Property/Security for Cross Version Replication (SharePoint 2016 to SharePoint 2013)

The following table lists the SharePoint content/property/security that is supported and unsupported to be replicated from SharePoint 2016 to SharePoint 2013.

Type		Support Status	Note
Library	Document Library	Supported	
	Form Library	Supported	
	Wiki Page Library	Supported	
	Picture Library	Supported	
	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	N/A	
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	N/A	
	Import Spreadsheet	N/A	
Web Pages	Basic Page	Supported	
	Web Part Page	Supported	
	Sites and Workspaces	N/A	
Workflow	SharePoint Built-in Workflow	Supported	
	SharePoint Designer Workflow	Supported	
	Nintex Workflow	N/A	
	Visual Studio Workflow	N/A	
	Visio Workflow	N/A	
	Azure Workflow	N/A	
RSS		N/A	
Alerts		N/A	

Type		Support Status	Note
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	
	Managed Metadata	Supported	
	Calculated	Supported	
	Business Data	N/A	
Security & Property	Version Settings	Supported	
	Column Settings	Supported	
	Permissions	Supported	
Version Histories	Documents	Supported	
	Lists	Supported	
Social Computing Pages	Home	N/A	
	Categories	N/A	
	Members	N/A	
	About	N/A	
	Administration Settings	N/A	
Social Computing Pages	Discussions	N/A	
	Categories	N/A	
	Badges	N/A	
	Community Members	N/A	

Supported and Unsupported SharePoint Site Template for Cross Version Replication

The following table lists the supported and unsupported site template for cross version replication.

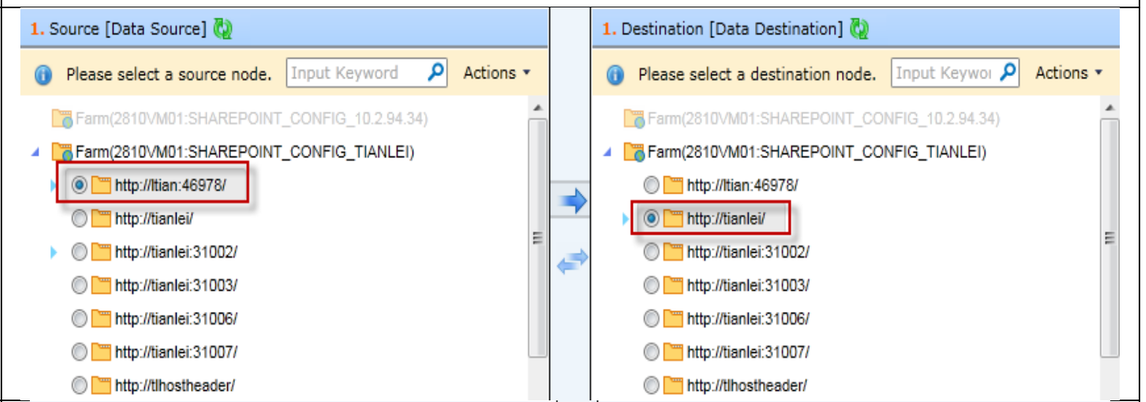
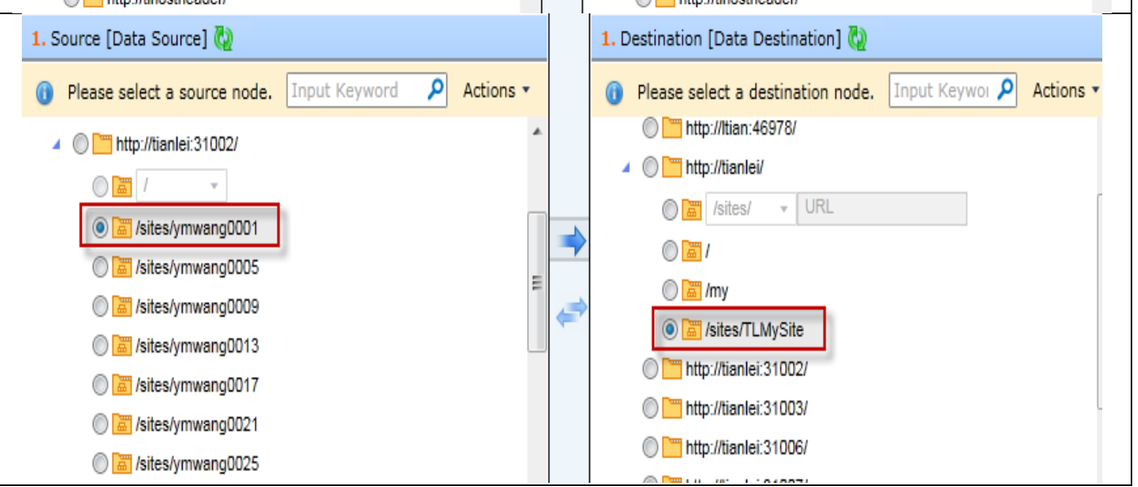
Site Template	SharePoint 2010 to 2013 Support Status	SharePoint 2010 to 2016 Support Status	SharePoint 2013 to 2010 Support Status	SharePoint 2013 to 2016 Support Status	SharePoint 2016 to 2010 Support Status	SharePoint 2016 to 2013 Support Status
Team Site	Supported	Supported	Supported	Supported	Supported	Supported
Blank Site	Supported	Supported	Supported	Supported	Supported	Supported
Document Workspace	Supported	Supported	Supported	Supported	Supported	Supported
Basic Meeting Workspace	Supported	Supported	Supported	Supported	Supported	Supported
Blank Meeting Workspace	Supported	Supported	Supported	Supported	Supported	Supported
Decision Meeting Workspace	Supported	Supported	Supported	Supported	Supported	Supported
Social Meeting Workspace	Supported	Supported	Supported	Supported	Supported	Supported
Multipage Meeting Workspace	Supported	Supported	Supported	Supported	Supported	Supported
Central Admin Site	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Wiki Site	Supported	N/A	Supported	N/A	N/A	N/A
Blog	Supported	Supported	Supported	Supported	Supported	Supported
Group Work Site	Unsupported	Supported	Unsupported	Supported	Supported	Supported
Tenant Admin Site	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Access Services Site	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Assets Web Database	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Charitable Contributions Web Database	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Contacts Web Database	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Issues Web Database	Unsupported	N/A	Unsupported	N/A	N/A	N/A

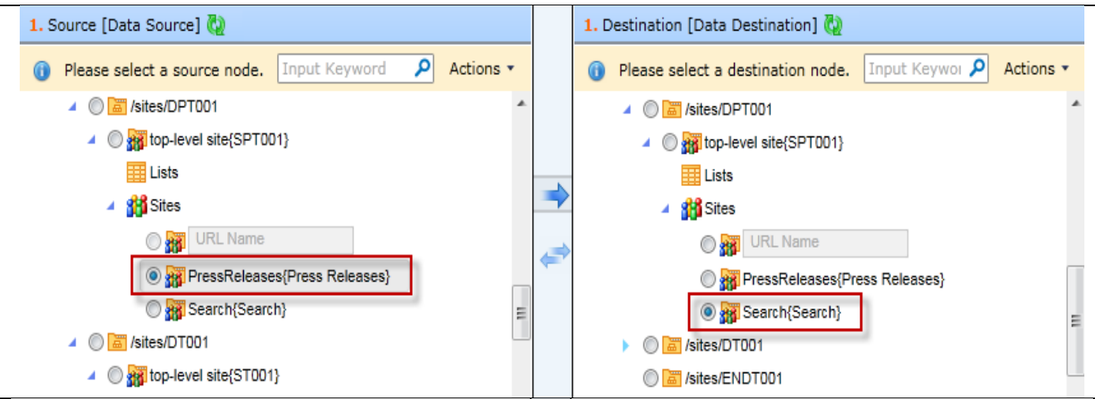
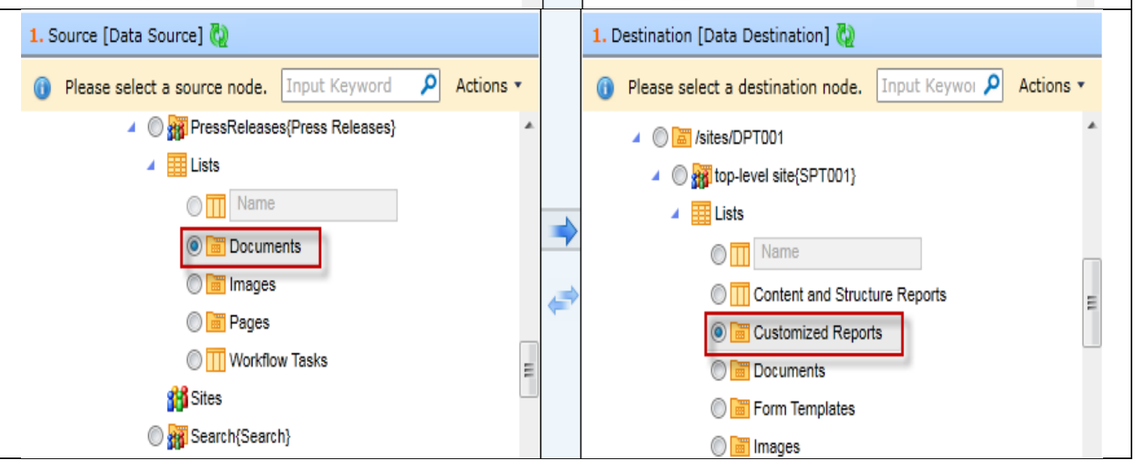
Site Template	SharePoint 2010 to 2013 Support Status	SharePoint 2010 to 2016 Support Status	SharePoint 2013 to 2010 Support Status	SharePoint 2013 to 2016 Support Status	SharePoint 2016 to 2010 Support Status	SharePoint 2016 to 2013 Support Status
Projects Web Database	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Document Center	Supported	Supported	Supported	Supported	Supported	Supported
Records Center	Unsupported	Supported	Unsupported	Supported	Supported	Supported
Shared Services Administration Site	Unsupported	N/A	Unsupported	Supported	Supported	Supported
PerformancePoint	Unsupported	N/A	Unsupported	Supported	Supported	Supported
Business Intelligence Center	Unsupported	N/A	Unsupported	Supported	Supported	Supported
Personalization Site	Unsupported	N/A	Unsupported	Supported	N/A	N/A
News Site	Unsupported	N/A	Unsupported	Supported	Supported	Unsupported
Publishing Site	Supported	N/A	Supported	Supported	Unsupported	Supported
Press Releases Site	Unsupported	N/A	Unsupported	Supported	Supported	Unsupported
Publishing Site with Workflow	Unsupported	N/A	Unsupported	Supported	Unsupported	Supported
Site Directory	Unsupported	N/A	Unsupported	Supported	Supported	Supported
Community Area Template	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Report Center	Unsupported	N/A	Unsupported	N/A	N/A	Supported
Collaboration Portal	Unsupported	N/A	Unsupported	Supported	Supported	Supported
Enterprise Search Center	Unsupported	N/A	Unsupported	Supported	Unsupported	Supported
Profiles	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Publishing Portal	Supported	N/A	Supported	Supported	Supported	Supported
My Site Host	Unsupported	N/A	Unsupported	Supported	N/A	Unsupported
Enterprise Wiki	Supported	N/A	Supported	Supported	Unsupported	Supported
Basic Search Center	Unsupported	N/A	Unsupported	Supported	Supported	Supported
FAST Search Center	Unsupported	N/A	Unsupported	Supported	N/A	N/A
Visio Process Repository	Unsupported	N/A	Unsupported	Supported	Supported	Supported

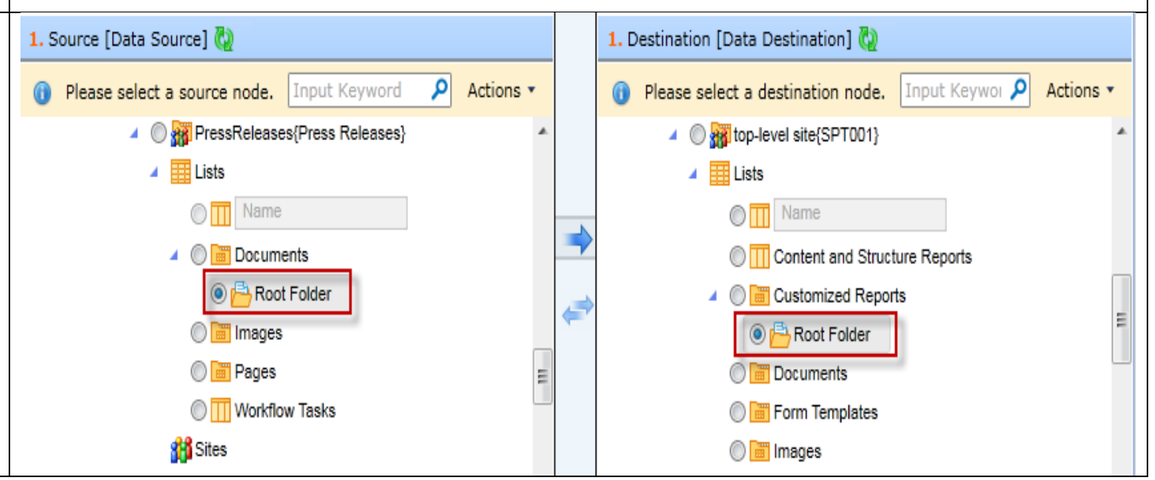
Site Template	SharePoint 2010 to 2013 Support Status	SharePoint 2010 to 2016 Support Status	SharePoint 2013 to 2010 Support Status	SharePoint 2013 to 2016 Support Status	SharePoint 2016 to 2010 Support Status	SharePoint 2016 to 2013 Support Status
App Template	Unsupported	N/A	Unsupported	N/A	N/A	N/A
App Catalog Site	Unsupported	N/A	Unsupported	N/A	Unsupported	N/A
Access Services Site	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Access Services Site Internal	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Access Services Site	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Developer Site	Unsupported	N/A	Unsupported	Supported	Supported	Supported
Academic Library	Unsupported	N/A	Unsupported	N/A	N/A	N/A
eDiscovery Center	Unsupported	N/A	Unsupported	Supported	Unsupported	Supported
eDiscovery Case	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Storage And Social SharePoint Portal Server Personal Space	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Storage Only SharePoint Portal Server Personal Space	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Empty SharePoint Portal Server Personal Space	Unsupported	N/A	Unsupported	N/A	N/A	N/A
Project Site	Unsupported	N/A	Unsupported	Supported	Unsupported	Supported
Product Catalog	Unsupported	N/A	Unsupported	Supported	Unsupported	Unsupported
Community Site	Unsupported	N/A	Unsupported	Supported	Unsupported	Supported
Community Portal	Unsupported	N/A	Unsupported	Supported	Unsupported	Supported

Appendix E: 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	√					
Site Collection		√				

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

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

Appendix F: 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 ***Note**: Only supports real-time replication from SharePoint on-premises to SharePoint Online.						Partially Supported
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			Supported
			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	Workflow Definition		Supported
				Workflow Instance		Unsupported
			Metadata Service			Unsupported
			User Profiles			Supported
			Receive deletions from data destination			Supported
	Conflict Options	Configuration	Conflict Resolution			Supported
			Conflict Action			Supported
		Content	Conflict Resolution			Supported

Functionality Name				Support Status
			Conflict Action	Supported
			Conflict Notification	Supported
	Filter Options	Filter Policy		Supported
	Mapping Options	Language Mapping		Supported
		User Mapping		Supported
		Domain Mapping		Supported
	Advanced Options	Data Compression		Supported
		Differential Data Compression		Unsupported
		Backup Environment Before Replication		Supported
		Concurrent Thread		Supported
		Network Control		Supported
		Enable Byte-level		Unsupported
	Path Settings			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-premises to SharePoint Online)			Supported
Rename	List Rename			Supported
Storage Optimization Combination	SharePoint on-premises 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

Functionality Name						Support Status
Real-time ***Note**: Only supports real-time replication from SharePoint on-premises to SharePoint Online.						Partially Supported
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			Supported
			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	Workflow Definition		Supported
				Workflow Instance		Unsupported
			Metadata Service			Supported
			User Profiles			Supported
			Receive deletions from data destination			Supported
	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				Supported
	Advanced Options	Data Compression				Supported
		Differential Data Compression				Unsupported
		Backup Environment Before Replication				Supported
		Concurrent Thread				Supported

Functionality Name				Support Status
		Network Control		Supported
		Enable Byte-level		Unsupported
	Path Settings			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-premises to SharePoint Online)			Supported
Rename	List Rename			Supported
Storage Optimization Combination	SharePoint on-premises to SharePoint Online			Supported

SharePoint 2016 Online Settings

The following lists the supported and unsupported settings for SharePoint Online for SharePoint 2016.

Functionality Name				Support Status
Mapping Type	One Way			Supported
	Two Way			Supported
	One-way Pull			Supported
Real-time ***Note**: Only support reals-time replication from SharePoint on-premises to SharePoint Online.				Partially Supported
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	Supported
			Include the groups without permissions	Supported

Functionality Name						Support Status
			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	Workflow Definition		Supported
				Workflow Instance		Unsupported
			Metadata Service			Supported
			User Profiles			Supported
			Receive deletions from data destination			Supported
	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				Supported
	Advanced Options	Data Compression				Supported
		Differential Data Compression				Unsupported
		Backup Environment Before Replication				Supported
		Concurrent Thread				Supported
		Network Control				Supported
		Enable Byte-level				Unsupported
	Path Settings					Unsupported
Notification						Supported
Associated Plan Group						Supported
Create Container		Site Collection				Unsupported
		Site				Supported
		Library/List				Supported
		Folder				Supported
Export & Import Online Plan						Supported

Functionality Name			Support Status
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-premises to SharePoint Online)		Supported
Rename	List Rename		Supported
Storage Optimization Combination	SharePoint on-premises to SharePoint Online		Supported

Appendix G: Supported Real-Time Events

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

Actions	Real-Time Events	Within SharePoint On-Premises	From SharePoint On-Premises to SharePoint Online
Site Collection Action	Delete	Supported	Unsupported
Site Actions	Move	Supported	Supported
	Delete	Supported	Supported
List Actions	Add	Supported	Supported
	Delete	Supported	Supported
	Column Changes	Supported	Supported
Document Actions	Check In	Supported	Unsupported
	Check Out	Supported	Unsupported
	Discard Check Out	Supported	Unsupported
Folder/Item Actions	Create	Supported	Supported
	Update	Supported	Supported
	Delete	Supported	Supported
	Move	Supported	Supported
Version Action	Delete	Only supported for SharePoint 2013 and SharePoint 2016	Supported
Workflow Actions	Start	Supported	Unsupported
	Complete	Supported	Unsupported
Users in Group/Groups Actions	Create	Only supported for SharePoint 2013 and SharePoint 2016	Supported
	Update		Supported
	Delete		Supported
Permission/Permission Level Actions	Create	Only supported for SharePoint 2013 and SharePoint 2016	Supported
	Update		Supported
	Delete		Supported

Appendix H: 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 elements in **SP2010Replicator.xml**.

Element	**Function Description**
ForceKeepIncrementalJob	This element controls whether to force the increment job to perform an incremental job for the first time replication. The default value is false. • 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	This element controls whether to synchronize the renamed lists to the destination. The default value is False. • 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	This element controls whether to synchronize the renamed documents and folders to the destination. The default value is True. • 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	This element controls whether to replicate the Tags&Notes to the destination. The default value is False. • True – Replicate the Tags&Notes to the destination. • False – Do not replicate the Tags&Notes to the destination.
BackupExtenderOrConnectorData	This element controls whether to replicate stub data (EBS&RBS) to the destination. The default value is True. • True – Replicate the source real content of files to the destination. • False – Do not replicate files to the destination.
BackupNintexWorkflowForO365	This elements controls whether to replicate site or list level Nintex Workflow definitions from SharePoint 2010/2013 on-premises to SharePoint Online. The default value is False. • True – Replicate site or list level Nintex Workflow definitions from SharePoint 2010/2013 on-premises to SharePoint Online. • False – Do not replicate site or list level Nintex Workflow definitions from SharePoint 2010/2013 on-premises to SharePoint Online.
IsSupportO365InRealTimeAndPMode	This element controls whether to enable real-time replication from SharePoint on-premises to SharePoint Online and whether to enable SharePoint Online in Publishing Mode. The default value is True. ***Note**: If your DocAve 6 Service Pack 8 was updated from Service Pack 6 or later version, the default value is False. • True – Enable real-time replication from SharePoint on-premises to SharePoint Online; enable SharePoint Online in Publishing Mode. • False – Disable real-time replication from SharePoint on-premises to SharePoint Online; disable SharePoint Online in Publishing Mode.

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 I: Accessing Replicator using Hot Keys

In order to work faster and improve productivity, DocAve supports hot key mode. 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 **Sync Mode** tab.

Operation Interface	Hot Key
Sync Mode	H
Publishing Mode	M
Plan Manager	P
DocAve Home Page	1
AvePoint Official Website	2
Control Panel	3
Job Monitor	4
Plan Group	5
Health Analyzer	6
Account Information	9
Help and About	0

Sync Mode

Functionality Name and Hot Key			
Online Replicator	M		
Data Export	DE		
Data Import	DI		
Profile Settings	PS		
Replicator Database	PD		
Export Location	E		
One-way Pull	T	OK	O
		Cancel	C
Replication Details	RD	View Details	V
		Report Settings	R
		Export Query Result	E
		Retry	T
		Close	X
Job Monitor	J		
Mapping Status	U	Close	X

Replicator Database

Functionality Name and Hot Key			
Configure	G	Save	O

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

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
		Column Mapping	C
Storage Policy	T		
Network Control	WT		
Byte-level Settings	B		
Path Settings	P		
Set as Default	A		
Edit Sub-profile	E		
New	N		
Delete	D		
Save	S	Save	S
		Save as	A
Discard Changes	C		
Close	X		

Network Control

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

Byte-Level Settings

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

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	RC		
Profile Settings	PS		
Replicator Database	PD		
Export Location	E		
One-way Pull	T	OK	O
		Cancel	C
Replication Details	RD		
Job Monitor	J		
Mapping Status	U	Close	X
Save As a Plan (for a newly created plan)	S		
Save (for a edited plan)	S	Save	N
		Save and Run Now	B
Queue Tools	V		

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
Add New Mappings	A		
Edit Plan Settings	E		
Save as a Plan (for a newly created plan)	S		

Functionality Name and Hot Key			
Save (for an edited plan)	Save	Save	N
		Save and Run Now	B
Cancel	C		

Publishing Mode

Functionality Name and Hot Key	
Template Mode	TM
Publishing Template	TP
Replicator Database	PD
Mappings	I
Replication Details	RD
Job Monitor	J

Publishing Template

Functionality Name and Hot Key			
Create	N	Save	S
		Cancel	C
View	V	Cancel	C
Edit	E	Save	S
		Cancel	C
Delete	D		
Close	X		

Template Mode

Functionality Name and Hot Key	
Publishing Template	TP
Replicator Database	PD
Mappings	I
Network Control	WT
Path Settings	PS
Create Container	RC
Add to Queue	Q
Delete	D
Back	B
Next	N
Finish	F
Cancel	C

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 (Template Mode Plan)	E	Next	N		
		Finish	F		
		Cancel	C		
Edit (Sync Mode Plan)	E	Save	S	Save	N
				Save and Run Now	B
	Cancel	C			
Delete	D				
Export Online Plan	O				
Import Online Plan	I				
Test Run	T	OK	O		
		Cancel	C		
Run Now	R	OK	O		
		Cancel	C		
Replication Details	RD				
Job Monitor	J				

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