



# DocAve® 6 Deployment Manager

## User Guide

Service Pack 6 Cumulative Update 1

Issued December 2015

# Table of Contents

What's New in this Guide .....	6
About Deployment Manager .....	7
Complementary Products .....	8
Submitting Documentation Feedback to AvePoint .....	9
Before You Begin.....	10
AvePoint's Testing Policy and Environment Support.....	10
Supported Hardware.....	10
Supported Backup and Recovery .....	10
Configuration .....	10
Agents .....	11
Required Permissions .....	11
Deployment Manager for SharePoint On-Premises .....	11
Deployment Manager for SharePoint Online .....	12
Getting Started.....	15
Launching Deployment Manager.....	15
Navigating DocAve .....	16
Understanding Deployment Manager .....	18
Deployment Manager Interface.....	19
Online vs. Offline Deployment.....	20
Deployment Mappings.....	21
Creating a Deployment Mapping.....	21
Deployment Mapping Notes.....	25
Deploying One Source Object to Multiple Site Collections or Sites in Destination .....	26
Offline Deployment for Objects in a Web Application .....	27
Offline Solution Deployment .....	29
Creating a Deployment Plan .....	30
Advanced Predefined Scheme Settings .....	32
Configuring Restricted File System Files .....	33
Configuring Queues Locally.....	34

Downloading Queue as Excel Files.....	34
Configuring Queue Excel Files.....	34
Uploading Queue Excel Files.....	37
Queue Tools .....	38
Managing Solutions.....	39
Pre-Creating Solution Queues.....	39
Solution Tools.....	40
Deploying Apps .....	41
Creating a Deployment Mapping for Deploying Apps .....	41
How to Find the Apps Node .....	41
Helpful Notes for Deploying Apps.....	41
Deploying the App Catalog Site to Destination.....	41
Deploying One App to Multiple Site Collections or Sites in Destination .....	43
Offline Deployment for Apps in a Web Application.....	43
Configuring Queues Locally.....	43
App Tools .....	44
Checking for App Updates .....	44
Pushing App Updates.....	45
Using Compare.....	46
Comparing Online .....	46
Creating a Compare Plan .....	47
Comparing in Different Tree Levels .....	49
Rules for Comparing Objects in a Web Application.....	49
Rules for Comparing Web-Front End .....	54
Rules for Comparing Farm Solution .....	56
Rules for Comparing Shared Services .....	57
Using Custom Compare .....	60
Managing Deployment and Compare Plans in Plan Manager .....	61
Using Pattern Manager .....	63
Creating a Pattern.....	63
Editing a Pattern .....	64
Editing Pattern Sources.....	64

Deleting Pattern Sources .....	64
Adding a Pattern Source .....	64
Editing Pattern Settings .....	64
Deleting Patterns .....	65
Exporting Data .....	65
Deploy Source Data in a Pattern to the Destination.....	65
Viewing Version History.....	65
Configuring an Export Location.....	65
Using Pattern Subscription .....	65
Advanced Settings.....	67
Using SharePoint Management Shell.....	68
Appendix A – Conflict Resolution – Web Application Deployment .....	69
Appendix B – Conflict Checks.....	73
Appendix C – Supported and Unsupported Elements for Web Application Deployment.....	74
Appendix D – Supported and Unsupported Workflow Type .....	76
Appendix E – Design Elements Deployment.....	77
Appendix F – Web Front-End Deployment .....	78
Appendix G – Solution Deployment.....	79
Appendix H – Managed Metadata Service Deployment.....	80
Appendix I – Deployment Manager Customization Table .....	81
Appendix J – Advanced Settings in Configuration Files .....	105
AgentCommonWrapperConfig.config .....	105
Restoring Specified Web Properties .....	105
Appendix K – Accessing Deployment Manager Using Hot Keys .....	106
Home Page .....	106
Plan Manager .....	107
Pattern Manager .....	107
Deploy .....	108
Pattern Queue Tools .....	108
App Tools .....	108
Solution Tools for Farm Solutions.....	108
User Solution Tools for User Solutions .....	109

Queue Tools .....	109
Notices and Copyright Information .....	110

## What's New in this Guide

- Minor edits and cover page update for current release.

# About Deployment Manager

Effective management and automation of release operations to promote content, customizations, and design elements throughout SharePoint 2010, SharePoint 2013, SharePoint Online and SharePoint on-premises is vital to a successful deployment. Without proper planning or control, errors or changes during the staging process could result in poor application reliability, increased time-to-value, and project delays.

DocAve Deployment Manager offers a robust solution that automates the change management of SharePoint solutions, customizations, and Web-front end elements, thereby:

- Minimizing human error and cost overruns
- Accelerating service delivery
- Facilitating preproduction testing and deployment operations

**\*Note:** Deployment Manager also support to deploy SharePoint 2013 objects to SharePoint Online.

## 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 Deployment Manager:

- DocAve Content Manager for SharePoint when the deployment of customizations also includes content or structural changes
- DocAve Replicator for SharePoint for copying SharePoint content within the same SharePoint farm or from one SharePoint farm to another
- DocAve Data Protection for setting backup and recovery points prior to adjusting SharePoint governance policies in this product

# Submitting Documentation Feedback to AvePoint

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

# Before You Begin

Refer to the sections for below for system requirements for Deployment Manager.

## AvePoint's Testing Policy and Environment Support

### 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, IBM Storwize Family, FTP, Amazon S3, AT&T Synaptic, Dropbox, Box, Caringo Storage, Del DX Storage, EMC Centra, HDS Hitachi Content Platform, Rackspace Cloud Files, TSM, Network File System, and Windows Azure Storage.

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

**\*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 functionality, 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 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 Deployment Manager, the DocAve 6 platform must be installed and configured properly on your farm. Deployment Manager will not function without DocAve 6 present on the farm.

## Agents

SharePoint Agents are responsible for running DocAve jobs and interacting with the SharePoint object model. DocAve must have one agent installed on at least one of the Web front-end (WFE) servers. DocAve Agents enable DocAve Manager to communicate with the respective servers, allowing for Deployment Manager 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 the server is not being used, the use of system resources is very low and, therefore, the effect on server performance is negligible.

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

## Required Permissions

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

### Deployment Manager for SharePoint On-Premises

To install and use Deployment Manager properly, ensure that the agent account has the following permissions:

1. Local System Permissions: These permissions are automatically configured by DocAve during installation. Refer to [Local System Permissions](#) for a list of the permissions automatically configured upon installation.
2. SharePoint Permissions: These permissions must be manually configured prior to using DocAve 6 Deployment Manager 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.
  - In SharePoint 2010 or SharePoint 2013:
    - Full Control to all zones of all Web applications via User Policy for Web Applications
  - User Profile Service Application permissions:
    - In SharePoint 2010
      - Use Personal Features
      - Create Personal Site
      - Use Social Features
    - In SharePoint 2013

- 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
3. SQL Permissions: These permissions must be manually configured prior to using DocAve 6 Deployment Manager.
- Database Role of db\_owner for all the databases related with SharePoint, including Content Databases, Config Database, and Central Admin Database
  - **dbcreator**, **securityadmin** and **processadmin** server roles in SQL Server

**\*Note:** The AgentService.exe account is used to start the Deployment Manager job. If the AgentService.exe account is the agent account, it requires the permissions listed above. If it is not the agent account, it does not require any special permissions.

## Local System Permissions

The following local system permissions are automatically configured during DocAve 6 installation:

- User is a member of the following local groups:
  - IIS WPG (for IIS 6.0) or IIS IUSRS (for IIS 7.0)
  - Performance Monitor Users
  - DocAve Users (the group is created by DocAve automatically; it has the following permissions):
    - Full Control to the Registry of *HKEY LOCAL MACHINE\SOFTWARE\AvePoint\DocAve6*
    - Full Control to the Registry of *HKEY\_LOCAL\_MACHINE\System\CurrentControlSet\Services\eventlog*
    - Full Control to the Communication Certificate
    - Permission of Log on as a batch job (it can be found within *Control Panel > Administrative Tools > Local Security Policy > Security Settings > Local Policies > User Rights Assignment*)
    - Local Administrator
    - Full Control Permission for DocAve Agent installation directory

## Deployment Manager for SharePoint Online

The following permissions are required for Deployment Manager to perform a Deployment Manager job for SharePoint Online.

## Local System Permissions for Agent Account

The Agent account is on the machine that has network connection or has **Agent Proxy Settings**. This must be done before registering the SharePoint Online site collections.

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 perform the Deployment Manager job for SharePoint Online must have the following permissions:

- User is a member of the **Site Collection Administrator** group.
- User Profile Service Application:
  - Follow People and Edit Profiles
  - Use Tags and Notes
- Managed Metadata Service: Term Store Administrator
- Apps: Read permission to the library “Apps for SharePoint” in Catalog Site.

**\*Note:** To deploy SharePoint Online objects, the Add and Customize Pages permission is required. 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 Add and Customize Pages permission on the Site Collection Administrator and Global Administrator. Note that the setting changes will take effect in 24 hours.

# Getting Started

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

## Launching Deployment Manager

To launch Deployment Manager and access its functionality, complete the following steps:

1. Log in to DocAve. If you are already in the software, click the **DocAve** tab.
2. From the **DocAve** tab, click **Administration** to view the Administration modules.
3. Click **Deployment Manager** to launch this module.

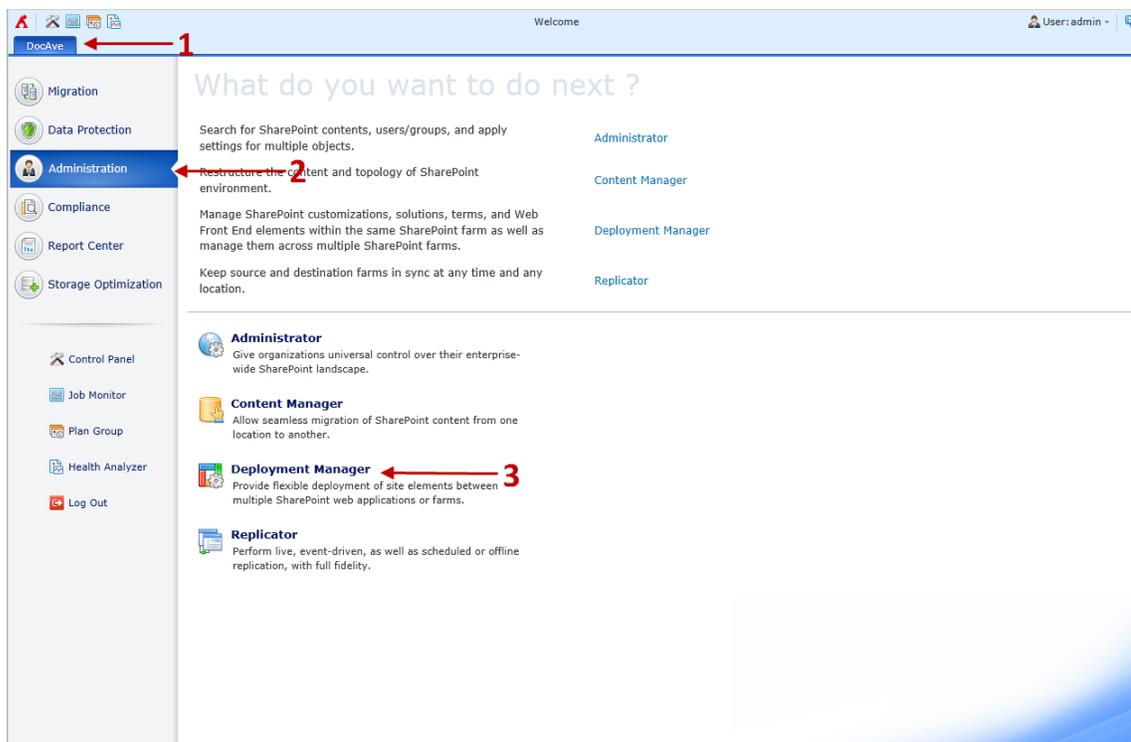


Figure 1: DocAve module launch window.

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

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

**\*Note:** For the rule **Agent Account Cannot be SharePoint System Account**, you can ignore the result of this rule if you are not going to deploy apps on the specific Web applications.

For more information about Health Analyzer, refer to the [DocAve 6 Control Panel Reference Guide](#).

# 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.

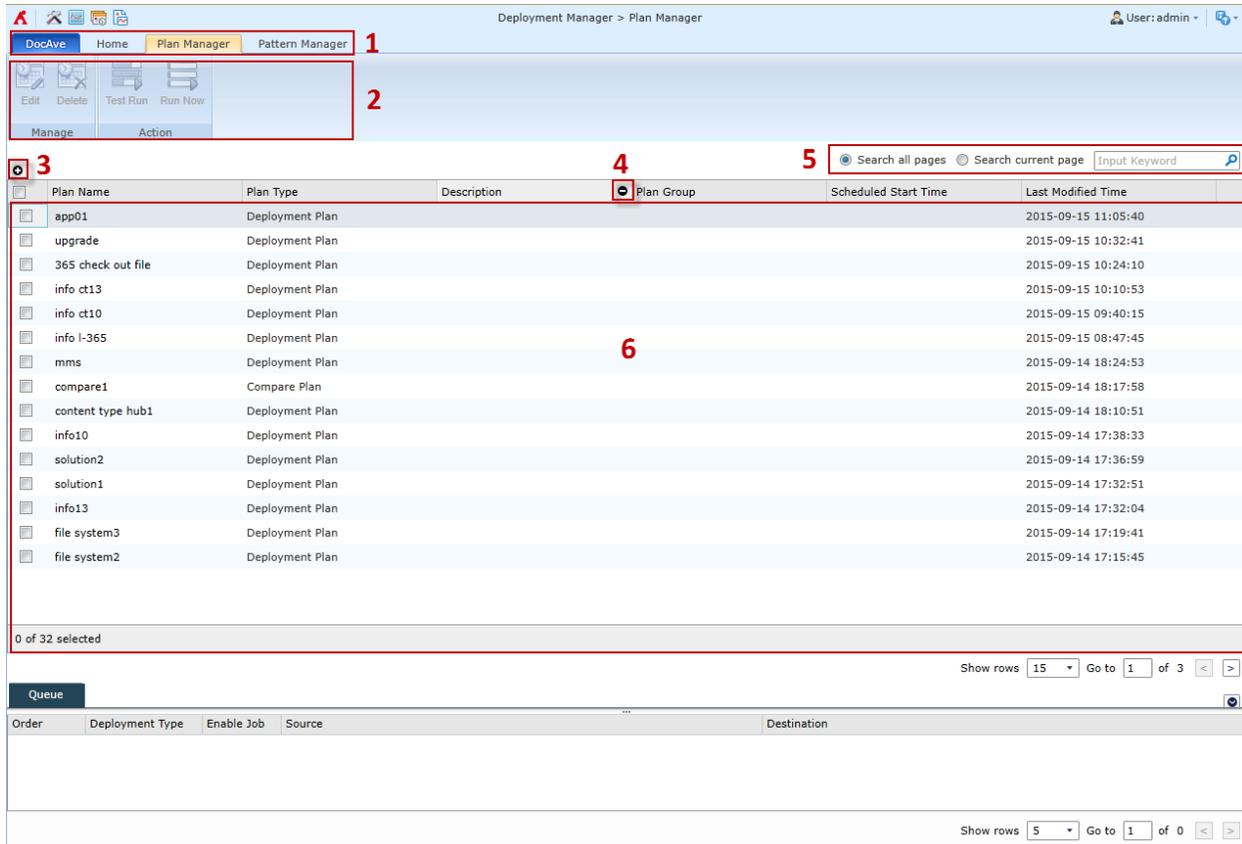


Figure 2: Navigating DocAve.

1. Ribbon Tabs—Allows users to navigate to the DocAve Welcome page and within the active module.
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 checkbox next to the column name in the drop-down list.
4. Hide the column (⊖) – Allows users to hide the selected column.
5. 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.

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

# Understanding Deployment Manager

When Deployment Manager is launched, you are redirected to the **Home** tab where you can manage plans, access the individual settings control panels for customizing plans, and monitor the status of currently running and scheduled plans. This is where you can execute jobs, including solutions deployment and retraction, comparing two selected nodes of the same SharePoint object level, deploying Web applications, Web front-end deployment, and Shared Services deployment.

Deployment manager is intended for moving customizations and design changes through their lifecycle on SharePoint. A plan represents a complete set of customizations that can be moved and deployed together. We recommend using plans to track design changes corresponding to the movement of business solutions, such as custom pages, workflows, content types, or other features as one complete set. Each plan can have:

- Entire Web applications
- Design elements such as site templates
- Solutions and features
- Service applications: managed metadata
- Locally deployed assemblies and reference files: file system files, IIS settings, GAC, Custom Features, and SharePoint Site Definitions, etc.

For detailed information on what exactly is deployed for each element, refer to:

- [Appendix C – Supported and Unsupported Elements for Web Application Deployment](#)
- [Appendix E – Design Elements Deployment](#)
- [Appendix F – Web Front-End Deployment](#)
- [Appendix G – Solution Deployment](#)
- [Appendix H – Managed Metadata Service Deployment](#)

Deployment Manager has Job Monitor integrated so that you can check the status of deployed plans without leaving the Deployment Manager interface. If Job Monitor is accessed within Deployment Manager, it will display all of the Deployment Manager jobs.

To learn more about Job Monitor, see the [DocAve 6 Job Monitor Reference Guide](#).

Security Trimming can be used to limit the functionality in Deployment Manager that a user can use. For details on using security trimming, refer to the [DocAve 6 Control Panel Reference Guide](#).

# Deployment Manager Interface

In Deployment Manager, you will see the following areas:

1. **Tab** – Switch between the tabs in Deployment Manager.
2. **Ribbon** – Toolbar where you can perform certain actions to your mappings and configure related settings.
3. **Source Pane** – Here you can navigate through SharePoint farm structures to find the object you wish to deploy from.
4. **Destination Pane** – Here you can navigate through SharePoint farm structures to find the desired node to deploy to.
5. **Queue** – List of deployment mappings awaiting execution.
6. **Search fields** – Find the desired object via keyword. This is useful if you know what object you are looking for but are not certain where the content lives, or if you have many multiple large environments, this can save you some time finding the desired object.

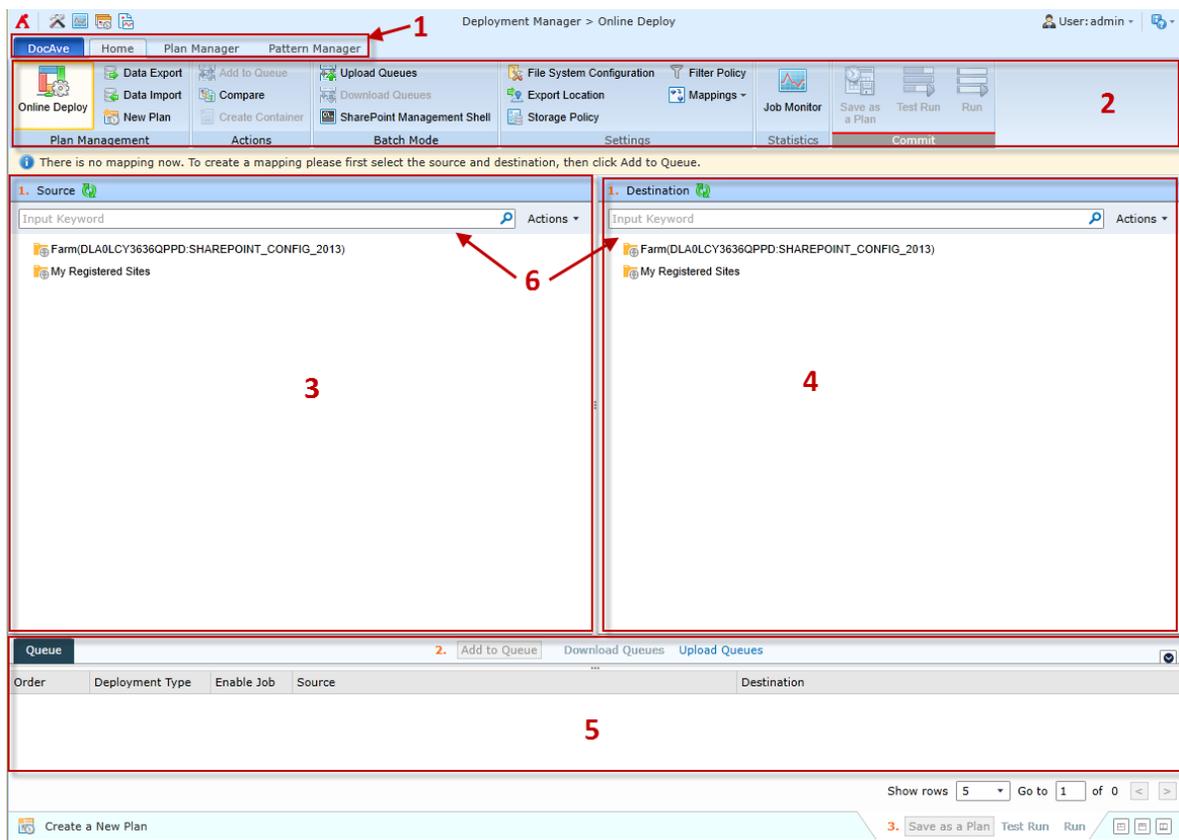


Figure 3: Deployment Manager User Interface.

## Online vs. Offline Deployment

For the objects under the Web application level, Deployment Manager allows you to perform an online deployment. If the source node and the destination node are able to communicate with each other, the solutions may be deployed via online deployment. To perform an online solution deployment, follow the instructions under [Creating a Deployment Mapping](#).

If the source node and the destination node are unable to communicate with each other, solutions and design elements may still be deployed via an offline deployment. Offline deployment involves exporting the solutions and design elements from the source node to an Export Location, and then importing the solutions or design elements from the Export Location to the destination node. To perform an offline solution deployment, see the [Offline Solution Deployment](#) section of this guide. For the information on how to configure a Logical Device, refer to [DocAve 6 Control Panel Reference Guide](#).

**\*Note:** When deploying a solution, the source solution will be loaded to the destination farm through the SharePoint API, and the SharePoint timer job will deploy the solution to the destination farm. DocAve will check the deploying status of the solution in the backend and get the status from the timer job. If the time it takes to check the deploying status exceeds five minutes, the deployment solution job will finish with exceptions due to performance reasons. For more details, navigate to SharePoint Central Administration.

# Deployment Mappings

Creating a deployment mapping is the first step to many of the common uses of Deployment Manager. It allows you to:

- Quickly and easily perform a singular deployment. This may be useful for when a new site is created, and you just wish to add a solution or apply a template to it.
- Configure multiple deployments to run one after another. This may be useful if you have multiple singular deployments to perform. This way you can create all of your mappings during work hours, and then execute the deployments off hours.
- Configure multiple deployments and save as a plan, which allows you to repeat the deployment without having to recreate the same mapping and reconfigure the same settings. This may be useful if you wish to keep the Destination node in sync with the Source node. For example, you have a development environment, a testing environment, a QA environment, and/or multiple farms. Each time you update the node on the development environment, you may wish to have the testing environment updated as well, then update the QA environment for further testing. You may then wish to update all of your farms once the testing is finished. This way, rather than creating a new deployment mapping each time, you can just rerun the plans created for each deployment.

For more information, see the [Creating a Deployment Plan](#) section of this guide.

## Creating a Deployment Mapping

To create a deployment mapping, complete the following steps:

1. In the Source pane, click on a farm to expand its object tree. Continue clicking the relevant objects until you find the object you wish to deploy from. Select the source object.
2. In the Destination pane, click on a farm to expand its object tree. Continue clicking the relevant object until you find the object you wish to deploy to. Select the destination object.
3. Click **Add to Queue** on the ribbon or on the lower right corner of the page. The **Add to Queue** window will pop up. Depending on the mapping you are creating, some of the following settings may be configured:

**\*Note:** Deployments can only be mapped between a source and destination that are using the same version of SharePoint.

**\*Note:** If you manually create a site collection under a FBA Web application in the destination, after clicking **Add to Queue**, a pop-up window will appear to let you select the administrator of the site collection you are about to create.

If the source and destination have different templates, a warning message will appear to warn you that deployment may cause errors. Click **OK** to continue, or click **Cancel** to return to the Source and Destination selection.

- **Reorder the Solutions** – If there are multiple solutions being deployed, you may configure the order that the solutions are deployed in by selecting the desired place in the order column.
- **Conflict Resolution** – Choose **Skip**, **Merge** or **Replace** from the **Container level conflict resolution** drop-down menu. Check the **Check lower objects** checkbox to configure content level conflict resolution. Choose **Skip**, **Overwrite** or **Overwrite by Last Modified Time** from the **Content level conflict resolution** drop-down menu. For detailed information on how Deployment Manager resolves conflicts based on these configurations, see [Appendix A – Conflict Resolution – Web Application Deployment](#). For information on what criteria Deployment Manager checks to determine conflicts, see [Appendix B – Conflict Checks](#).
- **Mappings** – If you have mapping settings in Control Panel, you may choose to apply them to this deployment mapping when adding to the Queue. For more information on these mapping settings, see the [Advanced Settings](#) section of this guide.
- **Filter Policy** – A Filter Policy allows you to designate a specific object or data within each SharePoint level from site collection down to item level.
  - **Source** – Select a Filter Policy from the drop-down menu to filter the source object or data or select **New Filter Policy** to create a new one. For instructions on creating a Filter Policy, see the Filter Policy section of the [DocAve 6 Control Panel Reference Guide](#).
  - **Destination** – Select a Filter Policy from the drop-down menu to filter the destination object or data or select **New Filter Policy** to create a new one. For instructions on creating a Filter Policy, see the Filter Policy section of the [DocAve 6 Control Panel Reference Guide](#).
 

**\*Note:** A filter policy can be selected for the destination only when you deploy the source Site, List/library, Content Type Group/Content type, Column group/Column to multiple destination sites or site collections, otherwise the **Destination** drop-down menu will be greyed out.

**\*Note:** The filter policy in the **Destination** drop-down menu only filters at the site collection level and site level filter rules configured in Filter Policy. Lower level objects or data in the destination cannot be filtered even if the selected Filter Policy contains rules applicable to those objects.
- **Source Content Settings** – Select the source components that you want to deploy to the destination:
  - **Include security** – Enable this option to deploy user and/or group permissions to the destination node.
  - **Include user profile** – Enable this option to deploy a user profile to the destination node. Make sure that the selected destination’s Web application is connected to the User Profile Service Application before you select this option.

- **Include User Content** – Enable this option to deploy the customized content to the destination node. Deployment Manager does not deploy the customized data. For example, the data in the Shared Documents will not be deployed. If you want to deploy the customized data, select this option.
- **Workflow** – Enable the **Include workflow definition** option to also deploy the definition of existing source workflows to the destination node.
- **Deploy to Relative Lists and Sites** – Enable this option to synchronize the source content type to the destination. If you have deployed a content type from the source to the destination before, with this option selected, the content type changes will be synchronized to the destination after this deployment job. When this option is not selected, the content type changes will not be synchronized to the destination content type that has already been used by lists or sites.
- **Configuration** – If you select a folder or an item in the source and then select a folder in the destination, or if you select a root folder and select a list in the destination, this option appears. Choose how to deal with the item dependent columns and content types.
  - Select **Deploy the item-dependent columns and content types to maintain item integrity**, and then select a conflict resolution method for these items' columns and content types from the drop-down list:
    - **Do not deploy the columns and content types, or the corresponding items** – Ignores the conflicting columns, content types, and the corresponding items, and do nothing on the source and destination node.
    - **Overwrite the columns and content types** – Overwrites the destination columns and content types with the source node.
    - **Append the columns and content types to destination** – Keeps the destination columns and content types when there is a conflict. In addition, copy the source columns and content types to the destination node with a numerical suffix added (for example, ColumnName\_1, ColumnName\_2, etc.).
  - Select **Do not deploy the item-dependent columns or content types**. Report the items if the corresponding column or content type is not found in the destination. The corresponding items are not copied to the destination. The job report will show items if the corresponding column or content type is not found in the destination node.
- **Preserve the Null Column Values** – Choose if you want to preserve the null value of item columns in the source. Some values of the newly created columns may be null for previous items, and this option allows you to choose whether to replace the null value with the value in the destination. By default, we will preserve the null value for those items.
- **Web Configuration Settings** – This option appears when you perform an IIS Site Files level deployment. Choose if you want to include Web Configuration in the deployment

job. the following parameters are included for searching the related configuration in web.config files:

configuration/SharePoint/PeoplePickerWildcards;

configuration/system.web/membership/providers;

configuration/system.web/roleManager/providers;

configuration/connectionStrings;

You can customize the parameters according to the XPath format in the left pane of the interface.

Choose whether or not to include the parent node's properties if the parent node does not exist in the destination by clicking the checkbox.

- **Options** – This option appears when you perform a Managed Metadata Service level deployment. Choose the deployment mode, **Full Deployment** or **Incremental Deployment**. A **Full Deployment** deploys all of the source content and settings to the destination, while an **Incremental Deployment** only deploys the modified settings since the last incremental or full deployment.

If selecting **Incremental Deployment**, the following options will be available:

- **Modifications** – Choose if you want to deploy the modifications since the last job.
- **Deletions** – Choose if you want to deploy the deletions since the last job.
- **Apps** – Choose if you want to deploy the apps from the source SharePoint 2013 farm to the destination SharePoint 2013 farm, or from the source SharePoint 2013 farm to SharePoint Online, or from the source SharePoint Online site to the destination SharePoint Online site. Only when the Web application, site collection, site or app level is selected in the source, and the corresponding destination node is selected, can this function appear in the **Add to Queue** window. If you select **Include apps**, the **App conflict resolution** drop-down list appears. Select the conflict resolution (if there is an app whose product ID is same as the source one, a conflict will be judged):
  - **Skip** – The conflicted source app will be skipped to deploy to the destination.
  - **Only Upgrade** – If the conflicted source app version is higher than the destination one, the destination app will be upgraded. If the conflicted source app version is lower than the destination one, the source app will not be deployed, and the destination app cannot be upgraded.

**\*Note:** This option is not supported for the deployment from the source SharePoint 2013 farm to SharePoint Online, or from the source SharePoint Online site to the destination SharePoint Online site.

- **Replace** – The conflicted destination app will be replaced with the source app.
- **Security** – This option appears when you perform a file system level deployment. Select if you want to deploy the file’s security properties to the destination.
- **Manage Metadata Service Settings** – Choose to copy the entire associated Managed Metadata Services, the related term sets, or the terms and their parents associated directly with the content to the destination node. Note that copying the Managed Metadata Service will activate the service in the destination if it is not activated.
- **Refresh All Published Content Types** – This option appears when you deploy the content type. Select if you want to update all published content types the next time the content type subscriber timer job runs.

To edit the deployment mapping, click on the **Queue Tools** tab. You will be redirected to the **Queue Tools** tab of Deployment Manager. For more information, see the [Queue Tools](#) section of this guide.

After a deployment mapping is added to the Queue, the **Queue Tools** tab appears. Click the **Queue Tools** tab to make changes to any of the mappings in the Queue. Refer to the [Queue Tools](#) section of this guide for more information.

When you are finished adding deployment mappings to the Queue, click **Run** on the ribbon or at the bottom of the screen.

To perform multiple deployments, create deployment mappings by repeating the steps in [Creating a Deployment Mapping](#). Each deployment mapping you configure will appear in the Queue. You can change the order in which the deployment mappings are executed by clicking the corresponding drop-down menu in the **Order** column of the Queue, then selecting the desired place in the Queue. Note that five deployment mappings are shown in the Queue. To change the number of deployment mappings displayed in the Queue, click the **Show rows** drop-down menu beneath the Queue, then select the desired number of deployment mappings to display.

## Deployment Mapping Notes

Refer to the following notes for creating a deployment mapping:

- Deployments can only be mapped between a source and destination that are using the same version of SharePoint.
- If you manually create a site collection under a FBA Web application in the destination, after clicking **Add to Queue**, a pop-up window will appear to let you select the administrator of the site collection you are about to create.
- If the source and destination have different templates, a warning message will appear to warn you that the deployment may cause errors. Click **OK** to continue, or click **Cancel** to return to the Source and Destination selection.
- If you select list columns or list content types in the source, you can only select a list or library in the destination.

- If you select a workflow under a list content type in the source, the corresponding list content type is automatically selected, and you can only select a list or library in the destination.
- Only the current version of the workflow created through SharePoint Designer is displayed on the source farm tree. Select this workflow and select a destination node, all of the workflow versions will be deployed to the destination.
- All of the workflow versions generated because of the update of the reusable workflow template (created through SharePoint Designer) are displayed on the source farm tree. Select a workflow version and select a destination node, the selected workflow version will be deployed to the destination.
- Under the **Shared Services** node, expand the **Managed Metadata Service** node. The **Managed Metadata Services** are displayed. The nodes **Unpartitioned Mode** and **Partitioned Mode** are loaded under a service. If a Managed Metadata Service is not partitioned, the data under the service is displayed under the **Unpartitioned Mode** node. If a Managed Metadata Service is partitioned, the data is not displayed under **Partitioned Mode**, the tenant administration sites and the related term stores are displayed under the **Partitioned Mod** node. Right click a tenant administration site, a drop-down list appears. Select **View Site Collections**, a window displaying all of the site collections under the tenant administration site appears. Click a site collection, the site collection is opened in the browser.

You can deploy a source node under **Unpartitioned Mode** to a destination node under **Unpartitioned Mode**, deploy a source node under **Unpartitioned Mode** to a destination node under **Partitioned Mode**, deploy a source node under **Partitioned Mode** to a destination node under **Unpartitioned Mode**, or deploy a source node under **Partitioned Mode** to a destination node under **Partitioned Mode**. For detailed information on the elements that can be deployed from the source to the destination, refer to [Appendix H – Managed Metadata Service Deployment](#).

## Deploying One Source Object to Multiple Site Collections or Sites in Destination

This allows you to deploy one source object to multiple site collections or sites by adding one mapping to your queue. The source supported objects are site, list/library, site content type group/site content type, site column group/site column, or app. The destination supported nodes are Web application and site collection.

- **Deploying to multiple site collections** – Select the source node, and select a destination Web application, click **Add to Queue**, a pop-up window appears, you can select to **Deploy to Top-level site only** or **Deploy to all sites**:
  - If you select **Deploy to Top-level site only** in the pop-up window, the **Add to Queue** window appears, configure the mapping settings and Click **OK** to add this deployment mapping to the Queue. For the details on how to configure

the mapping settings, refer to the [Creating a Deployment Mapping](#) section in this guide. After the deployment job, the source object will be deployed to all the top-level sites under the selected destination Web application.

- If you select **Deploy to all sites**, the **Add to Queue** window pops up, configure the queue settings and Click **OK** to add this deployment mapping to the queue. For the details on how to configure the mapping settings, refer to the [Creating a Deployment Mapping](#) section in this guide. After the deployment job, the source object will be deployed to all the top-level sites and sites under the selected destination Web application.
- **Deploying to multiple sites** – Select the source node, and select a destination site collection, click **Add to Queue**, a pop-up window appears, you can select to **Deploy to Top-level site only** or **Deploy to all sites**:
  - If you select **Deploy to Top-level site only** in the pop-up window, the **Queue Settings** configuration page appears, configure the queue settings and Click **OK** to add this deployment mapping to the queue. After the deployment job, the source object will be deployed to all the top-level sites under the selected destination site collection.
  - If you select **Deploy to all sites**, the **Add to Queue** window appears, configure the queue settings and Click **OK** to add this deployment mapping to the Queue. After the deployment job, the source object will be deployed to all the top-level sites and sites under the selected destination site collection.

Note that when you select a site in the source, you can only select a Web application in the destination if you want to perform the batch settings. If you select a site content type group/site content type, site column group/site column as the source, and select a Web application or site collection as the destination, you can only select **Deploy to Top-level site only** in the pop-up window.

The top-level site can only be deployed to the destination top-level site. If you select a top-level site in the source and select a Web application in the destination, click **Add to Queue**, and the **Deploy to all sites** option will be greyed out.

## Offline Deployment for Objects in a Web Application

To perform an offline deployment for the objects in a Web application, export the objects to an export location and then import the objects to the desired destination node. Make sure the export location is configured before this offline deployment. For the details on how to create an export location, please refer to [DocAve 6 Control Panel Reference Guide](#).

Follow the steps below to export the objects in a Web application:

1. Click **Start with Data Export** in the left-hand pane of the landing page, or click **Data Export** on the ribbon. The **Data Export** interface appears.

2. Select the desired node in the Source pane. You can select the entire Web application or desired objects within the Web application.
3. In the Destination pane, select the export location you wish to export the objects to from the Export Location drop-down menu.
4. Click **Add to Queue** and configure settings in the **Add to Queue** window. For more information on these settings, refer to the [Creating a Deployment Mapping](#) section in this guide.
5. Click **OK** to add to the queue, or **Cancel** to return to the Source and Destination selection interface. If you wish to add other mappings, click **Exit** in the Destination pane, and the data trees will appear in the Destination pane once again.
6. Once you have finished adding mappings to the Queue, click **Save as a Plan** to save this Queue as a plan and follow the instructions in [Creating a Deployment Plan](#). To execute the Queue immediately, click **Run** on the ribbon or click **Run** located at the bottom of the screen.

Follow the steps below to import the Web application level objects:

1. Click **Start with Data Import** in the left-hand pane of the landing page, or click **Data Import** on the ribbon. The **Data Import** interface appears.
2. Select the destination node in the **Destination** pane.
3. In the Source pane, select **Design** from the **Import Type** drop-down menu. The export locations where the objects have been imported will be loaded in the **Source** pane.
4. Click on the desired export location. The folder named **DesignManager2010** (for SharePoint 2010) or **DesignManager2013** (for SharePoint 2013) will be loaded. Click on the folder, the exported plans will appear. You can click the exported plan name to expand to the exported job node, and then select a node. Click the exported job node to see the exported job data in the data tree.
5. Click **Add to Queue**. The **Add to Queue** window will pop up.
6. Configure settings in the **Add to Queue** window. For more information on these settings, refer to the [Creating a Deployment Mapping](#) section in this guide.
7. Click **OK** to add to the queue, or **Cancel** to return to the Source and Destination selection interface. Repeat the previous steps to add more design elements import mappings to the Queue. If you wish to add other mappings, click **Exit** in the Source pane, and the data tree will appear in the Source pane once again.
8. Once you have finished adding mappings to the Queue, click **Save as a Plan** to and follow the instructions in [Creating a Deployment Plan](#). To execute the Queue immediately, click **Run** on the ribbon or click **Run** located at the bottom of the screen.

**\*Note:** In the imported job, if you select an exported site collection node in the source, and select a site collection in the destination, the user solution's conflict resolutions are Skip, Overwrite, and Overwrite by Last Modified Time. But in other jobs, the user solution's conflict resolutions are Skip, Upgrade and Retract/Re-deploy.

## Offline Solution Deployment

To perform an offline solution deployment, export the solutions to a Logical Device and then import the solution to the desired destination node. Make sure a Storage Policy is configured before this offline deployment. For the details on how to configure a Storage Policy, refer to the [DocAve 6 Control Panel Reference Guide](#).

**\*Note:** The EMC Centera, Dell DX Storage, Caringo Storage, OneDrive, Google Drive, and Box type storage devices are not supported in an offline solution deployment.

To export the solutions, complete the following steps:

1. Click **Start with Data Export** in the left-hand pane of the landing page, or click **Data Export** on the ribbon. The **Data Export** interface appears.
2. Select the desired solutions in the **Source** pane.
3. In the Destination pane, select the Storage Policy you want to export the solutions to from the **Solution Store** drop-down menu.
4. Click **Add to Queue**. The **Add to Queue** window will pop up.
5. Enter a description for the solutions, then click **OK** to add to the queue, or **Cancel** to return to the Source and Destination selection interface. Repeat the previous steps to add more solution export mappings to the Queue. If you wish to add other mappings, click **Exit** in the Destination pane, and the data tree will appear in the Destination pane once again.
6. Once you have finished adding mappings to the Queue, click **Save as a Plan** to save and follow the instructions in [Creating a Deployment Plan](#). To execute the Queue immediately, click **Run** on the ribbon or at the bottom of the screen.

To import the solutions, complete the following steps:

1. Click **Start with Data Import** in the left-hand pane of the landing page, or click **Data Import** on the ribbon. The **Data Import** interface.
2. Select the destination node in the Destination pane.
3. In the Source pane, select **Solution** from the **Import Type** drop-down menu.
4. Select **Solution Store** from the **Deploy from** drop-down menu to access the storage policy to which you have previously exported your solutions. Click on a logical device under **Solution Store** to see the solutions the device contains. You can also select the **File System** from the **Deploy from** drop-down menu to access the file system where the solutions you want to import. Select the desired solutions by checking the corresponding checkboxes then click **Add to Queue**. The **Add to Queue** window appears.
5. Select the desired Conflict Resolution method from the drop-down menu. For details on different Conflict Resolution methods, refer to [Appendix A – Conflict Resolution – Web Application Deployment](#). For information on what criteria Deployment Manager checks to determine conflicts, see [Appendix B – Conflict Checks](#).
6. If more than one solution is in this mapping, sort the solutions into your desired order.

7. Click **OK** to add to the queue, or **Cancel** to return to the Source and Destination selection interface. Repeat the previous steps to add more solution import mappings to the Queue. If you wish to add other mappings, click **Exit** in the Source pane, and the data tree will appear in the Source pane once again.
8. Once you have finished adding mappings to the Queue, click **Save as a Plan** to save this queue as a plan. Follow the instructions in [Creating a Deployment Plan](#) to configure the plan settings. To execute the Queue immediately, click **Run** on the ribbon or at the bottom of the screen.

## Creating a Deployment Plan

Deployment mappings can be executed immediately after they are created or saved within plans to be executed at a later time. This also allows you to repeat the same deployment without having to recreate all of the mappings or reconfigure all of the settings.

To create a deployment plan, create deployment mappings by repeating the steps in [Creating a Deployment Mapping](#). Each deployment mapping you configure will appear in the queue. You can change the order in which the deployment mappings are executed by clicking the corresponding drop-down menu in the **Order** column of the queue, then selecting the desired place in the queue. Five deployment mappings are shown in the queue. To change the number of deployment mappings displayed in the queue, click the **Show rows** drop-down menu beneath the queue, then select the desired number of deployment mappings to display.

When you are finished adding deployment mappings to the queue, click **Save as a Plan** on the ribbon or located at the bottom of the screen. You will be brought to the **Save as a Plan** interface. Configure the following settings:

- **Plan Name** – Type in a **Plan Name** and an optional **Description**.
- **Backup Environment Before Running Plan** – Enable this option to back up the destination environment before running the plan. You must then select a storage policy. Enabling this option allows you to use the Rollback feature in Job Monitor.

**\*Note:** The DocAve Agent must be installed on the machine where the SQL Server resides for rolling back the Metadata Service deployment job.

- **Schedule Selection** – Choose if you want to add a schedule.

If you select **No Schedule**, the plan is not run on any schedule and must be initiated manually;

If you select **Configure the schedule myself** to configure a customized schedule, and run the plan by schedule. Click **Add Schedule** and the **Add Schedule** window pops up.

- **Type** – Select the type of recurring schedule: **By hour**, **By day**, **By week**, or **By month**.

- **Schedule Settings** – Set up the frequency for the scheduled job. If you select the type as **By hour**, **By week**, or **By month**, you will have the option to check the **Advanced** checkbox to configure more settings for the frequency. For more information, see the [Advanced Predefined Scheme Settings](#) section below.
- **Range of Recurrence** – Specify when to start and end the running recurring schedule.
  - **Start time** – Set up the time to start the plan and Time Zone can be changed under the **Start time**. Note that the start time cannot be earlier than the current time.
  - **No end date** – Select this option to repeat running the plan until being stopped manually.
  - **End after specified occurrence(s)** – Select this option to stop the plan after specified occurrences that you configure in the text box.
  - **End by** – Set up the time to end the recurrence of plans and the Time Zone can be changed under **End by**.

Click **OK** to save the settings. After configuring the schedule for this 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 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.

- **Notification** – Choose the type of notification and designate which DocAve user will receive the e-mail notification report. Select a notification profile from the drop-down list. Click **View** beside the drop-down list to view details of the notification profile, or click **New Notification Profile**. For information on creating a notification profile, see the [DocAve 6 Control Panel Reference Guide](#).
- **Associate 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**. For information on creating a plan group, see the [DocAve 6 Control Panel Reference Guide](#).

When you are finished configuring the plan settings, click **Save** on the ribbon or located at the bottom of the screen. When a drop-down list appears, click **Save** to save the plan; click **Save and Test Run** to test run the plan; or click **Save and Run Now** to run immediately. Click **Cancel** to return to creating deployment mappings without saving the plan.

**\*Note:** The nodes under **Web Application** including the user solution support the **Include New** function; the newly created site, list, user solution, etc. will be included in the corresponding plan each time the plan runs.

## Advanced Predefined Scheme Settings

The following advanced settings are available for configuring a predefined scheme:

### By Hour

- **Specify production time: From ... to ...** – Run the backup job on the selected production time.
- **Select time below** – Select the time you want to run the backup job. To add several run job time, click **Add**.

### By Week

**Run every ... week(s); On ...** – Specify the days of the week to run the plan on, and after how many weeks to recur.

### By Month

- **On day ... of ...** – Select the day and the month to run the backup job.
- **Day ... of every ...month(s)** – Select the day and the month interval to run the backup job.
- **The ... .. of every ... month(s)** – Select the time and the interval for the backup job.
- **The ... .. of ...** – Select the day and the month for the backup job.

# Configuring Restricted File System Files

In order to avoid affecting the function of the SharePoint system after the File System Deployment, Deployment Manager also provides a way to block some files, which will be restricted to deploy from the source to the destination.

To configure restricted file system files, complete the following steps:

1. Select **File System Configuration** on the ribbon of the **Settings** group. The **File System Configuration** window appears. Click **Close** to exit the window.  
All of the Web front-end servers are displayed in this window.
2. Select **Configure** after the Web front-end on which the files that you will configure reside, or select the Web front-end, and then select **Configure** on the ribbon of the **File System Configuration** window. The **Configure** interface appears.

\*Note: You can also right click on the Web front-end server in the source farm tree, and then click **Configuration** in the appeared menu to configure the restricted files on the Web front-end server.

1. Configure settings in the **Configure** interface:
  - **Restricted File Type** – Enter the file extensions in the text box. Use the semicolon (;) as the separator. The file types in the corresponding Web front-end server will be restricted from deployment to the destination.
  - **Restricted Paths** – The file paths and the files contained in those paths will be restricted from deployment to the destination. Click **Add** to add more paths. Click the delete (X) button to delete the added path.
2. Click **OK** to save the settings. Click **Close** to exit the **Configure** interface and return to the **File System Configuration** window without saving any changes.

# Configuring Queues Locally

You can download the deployment queue as an Excel file to your computer to be configured locally. After it is configured, it can be uploaded to DocAve Deployment Manager. This allows you to conveniently deploy multiple objects from the source nodes to destinations instead of adding multiple mappings to the Queue in the DocAve Deployment Manager.

## Downloading Queue as Excel Files

Refer to the following steps to download the Excel file:

1. Create a deployment mapping according to your requirement. The **Download Queues** button will be highlighted on the ribbon. For more information on how to create a deployment mapping, refer to the [Creating a Deployment Mapping](#) section in this guide.
2. Click **Download Queues**, the browser download prompt appears.
3. Click **Save** and select a location where you want to store the file in the pop-up **Save As** window.

## Configuring Queue Excel Files

You can configure all deployment mappings in an Excel file, including design element mappings, WFE mappings, solution mappings, and shared service mappings. This section below illustrates how to configure a Queue Excel file:

- Design element type configuration:

Order	Plan Category	Plan Type
1	Design Element	Deploy

Figure 4: Design element type configuration part in the Excel file.

- **Order** – The order the mappings will be deployed. All cells in the same row are configurations for a single mapping.
  - **Plan Category** – This indicates the mapping type. For the design element mapping, the value of the Plan Category is design element.
  - **Plan Type** – There are three plan types for a design element mapping: Deploy, Import, and Export.
- Design element tree configuration:

Source Farm	Source Path	Source Node Level	Checked	Select All	Include New
Farm(SWEETS	http://sweet	WebApplication	True	True	True

Figure 5: Design element tree configuration part in the Excel file.

- **Source Farm** – Enter the source farm name. If the plan type is Import, you need to leave this field blank.
- **Source Path** – Enter the source path information. Refer to the following table to configure the source path for each source object.

Source Object	Source Path
Web application	Web application name For example: <i>http://webapp:2000/</i>
Site collection	Site collection URL For example: <i>http://webapp:2000/sites/urllname</i>
Top-level site	Site collection URL For example: <i>http://webapp:2000/sites/urllname</i> <b>*Note:</b> The value of the <b>Source Node Level</b> you specified should be <b>Site</b> .
Site	Site URL For example: <i>http://webapp:2000/sites/subsitename</i>
Site settings	Site URL/site settings For example: <i>http://webapp:2000/sites/subsitename/Site Settings</i>
SharePoint designer objects (in site level)	Site URL For example: <i>http://webapp:2000/sites/urllname</i> <b>*Note:</b> The value of the <b>Source Node Level</b> you specified should be <b>DesignObjRootFolder</b> .
SharePoint designer objects (in list level)	List path For example: <i>http://webapp:2000/sites/urllname/subsitename/Lists/*:{listname}</i> <b>*Note:</b> The value of the <b>Source Node Level</b> you specified should be <b>DesignObjRootFolder</b> .
List	Site URL/lists/*:{List Name} For example: <i>http://webapp:2000/sites/urllname/subsitename/Lists/*:{listname}</i>
Site column	Site URL/*:{Site Column Name} For example: <i>http://webapp:2000/sites/urllname/*:{sitecolumnname}</i>
Content type	Site URL/content type name For example: <i>http://webapp:2000/sites/urllname/contenttypename</i>
List settings	List path/list settings For example: <i>http://webapp:2000/sites/urllname/subsitename/Lists/*:{listname}/List Settings</i>

Source Object	Source Path
Root folder	List path For example: <i>http://webapp:2000/sites/urlname/subsitename/Lists/*:{listname}</i> <b>*Note:</b> The value of the <b>Source Node Level</b> you enter should be <b>RootFolder</b> .
Folder	Root folder path/folder name For example: <i>http://webapp/sites/Lists/*:{listname}/foldername</i>
Item	Folder path/item ID or document name For example: <i>http://webapp:2000/sites/urlname/Lists/*:{listname}/foldername/itemID or documentname</i>
Design folder (in site level)	SharePoint designer objects path/*:{Design Folder Name} For example: <i>http://webapp:2000/sites/urlname/*:{designfoldername}</i>
Design folder (in list level)	SharePoint designer objects path/*:{Design Folder Name} For example: <i>http://webapp:2000/sites/urlname/Lists/*:{listname}/designfoldername</i>
Design item (in site level)	Design folder path/item ID or document name For example: <i>http://webapp:2000/sites/urlname/*:{designfoldername}/itemID or documentname</i>
Design item (in list level)	Design folder path/item ID or document name For example: <i>http://gxzhang2010/sites/Lists/*:{ListName}/itemID or document name</i>
File system folder	Export location name/DesignManager2010/exported plan name/exported job ID Example: <i>exportlocationname/DesignManager2010/jobID</i>

## Uploading Queue Excel Files

Once you have finished configuring the Queue file, refer to the following steps to upload the Excel file:

1. In the **Home** tab of Deployment Manager, click **Upload Queues** on the ribbon, the browser Open window appears.
2. Select the configured Excel file and click **Open** to upload it.
3. After clicking **Open** in the pop-up the window, you will see the following message: **The job {0} is started, please go to Job Monitor if you want to view the job details.** You can click the link in the message to go to the **Job Monitor** to see the uploading job information. The detailed mapping information will be displayed in **Job Monitor**, refer to [DocAve 6 Job Monitor Reference Guide](#).
4. After the uploading job finished, an instant plan will be created, you can manage this plan in Plan Manager.

# Queue Tools

Queue tools allow you to manage the Deployment mappings in the **Home** tab of Deployment Manager.

The following actions can be performed in the Queue Tools tab:

- **Add New Mappings** – Click **Add New Mappings**. This brings you back to the **Home** tab to create a new deployment mapping.
- **Edit** – Edit the selected mapping. Your selections will appear in the **Source** and **Destination** pane where you can make changes to the mapping.
  - **Edit Mapping Settings** – Click **Edit** on the ribbon, and click **Edit Mapping Settings** in the drop-down menu or click **Mapping Settings** on the lower-left corner of the screen. The **Mapping Settings** interface appears. For the details on how to configure the mapping settings, refer to the [Creating a Deployment Mapping](#) section in this guide.
  - **Edit Mapping Source and Destination** – You can directly edit the selected mapping's source and the destination when you access to the **Queue Tools** interface. Or you can make edits after you have edited the mapping settings.

Once you have finished editing the selected mapping's settings, the **Edit Mapping Source and Destination** will be highlighted. Click **Edit** on the ribbon, and click **Edit Mapping Source and Destination** from the drop-down menu or click **Edit Mapping Source and Destination** on the lower-left of the screen.

- **Delete** – Delete the selected mapping. A warning will pop-up confirming the deletion. Click **OK** to proceed with the deletion, or click **Cancel** to return to the **Queue Tools** tab without deleting the mapping.
- **Disable** – Disable the selected mapping in the plan. Disabled mappings will be skipped when the plan is run.
- **Enable** – Enable the selected mapping in the plan.
- **Create Container** – In the **Destination** pane, enter the name of a new container in the available field then click **Create Container**. The **Create Container** interface appears. Select the object type then choose the category for the new list or library from the drop-down menu.
- **Cancel** – Exit the **Queue Tools** interface.
- **Edit Plan Settings** – Click to access to the **Edit Plan Settings** interface. For more detailed on how to configure the plan settings, refer to the [Creating a Deployment Plan](#) section in this guide.
- **Save Mapping** – Save any changes made to the selected mapping.

# Managing Solutions

The following two sections explain how to manage solutions through pre-creating solution queues and using the solution tools.

## Pre-Creating Solution Queues

Pre-creating solution queues allows you to configure groups of solutions to be managed together with specific actions. Saved queues allow you to repeat similar actions without having to go through the configuration steps each time.

To create a user solutions queue, complete the following steps:

1. Click **Start with Online Deploy** in the left-hand pane of the landing page or click **Online Deploy** on the ribbon.
2. In the Source pane, click the farm name to expand its data tree. Then select a Web application to expand the data tree to the User Solution Gallery node, click the **User Solution Gallery** and select the user solution(s).
3. Click **Add to Queue** on the ribbon or on the middle lower part of this interface, the **Add to Queue** window pops up.
4. Select the actions **Activate**, **Deactivate** or **Upgrade** for the solutions. For the details on the actions for solutions, refer to the [Solution Tools](#) section in this guide.
5. Click **OK** to add to the queue, or **Cancel** to return to the **Source** and **Destination** selection interface. Repeat the previous steps to add more solution import mappings to the queue.
6. Once you have finished adding mappings to the Queue, click **Save as a Plan** to save this queue as a plan and follow the instructions in [Creating a Deployment Plan](#). To execute the queue immediately, click **Run** on the ribbon or at the bottom of the screen.

To manage farm solutions through adding to queue, complete the following steps:

1. Click **Start with Online Deploy** in the left-hand pane of the landing page.
2. In the **Source** pane, click the farm name to expand its data tree. Then click **Farm Solutions** and select the farm solutions you want to manage.
3. Click **Add to Queue** on the ribbon, the **Add to Queue** window pops up.
4. Select the actions **Retract** or **Remove** for the farm solutions. For the details on the actions for solutions, refer to the [Solution Tools](#) section in this guide.

You should also configure the **Solution Information** in this page. If you select to retract the farm solutions, then choose the Web applications where you want to retract from. If you select to remove this farm solutions, then you can view the solution information in the **Solution Information** field.

5. Click **OK** to add to the queue, or **Cancel** to return to the **Source** and **Destination** selection interface. Repeat the previous steps to add more solution import mappings to the queue.

Once you have finished adding mappings to the queue, click **Save as a Plan** to save this queue as a plan and follow the instructions in [Creating a Deployment Plan](#). To execute the queue immediately, click **Run** on the ribbon or click **Run** located at the bottom of the screen

## Solution Tools

Whenever a solution is selected in the **Source** pane, the **Solution Tools** tab will appear at the top of the Deployment Manager interface. Click on the **Solution Tools** tab to manage deployed solutions.

For farm solutions, you can perform the following actions on any selected solutions:

- **Details** – Review detailed information about the selected solutions in a pop-up window. In the **Details** pane, click on the tab to display information about the corresponding solution. Click **Retract** on the ribbon to retract the solution, or click **Remove** on the ribbon to remove the solution.
- **Retract** –In the **Retract Solutions** interface, choose the Web application to retract each solution. When you have finished making your selections, click **OK** to retract the solution, or **Cancel** to return to the **Solution Tools** page. Retracted solutions remain in the Solution Store and may be redeployed later.
- **Remove** – Remove the solutions from the Solution Store. Once a solution has been removed, it cannot be redeployed until it has been reinstalled to the Solution Store.

For the user solutions, you can perform the following actions on any selected solutions:

- **Activate** – Activate the solution within the local farm.
- **Deactivate** – Deactivate the solution within the local farm.
- **Upgrade** – Upgrade the currently active solution to the selected version.

# Deploying Apps

In SharePoint 2013 and SharePoint Online, Deployment Manager supports deploying apps from the source to the destination.

## Creating a Deployment Mapping for Deploying Apps

If you select a Web application, site collection, site or app as the source node and then select a destination node to create a deployment mapping, in the **Add to Queue** window, you can select to deploy the source apps to the destination by selecting the **Include apps** checkbox. For detailed information on creating a deployment mapping, refer to [Creating a Deployment Mapping](#).

## How to Find the Apps Node

If you want to deploy an app to the destination, you must first select an app in the source and then select a destination node to create a mapping. To find the apps node in the source:

1. Click on the farm tree to expand to the site collection level.
2. Expand the site collection to the top-level site or to the site where the deployed apps reside. The apps node appears under the top-level site or the site level.

## Helpful Notes for Deploying Apps

- You can deploy the source app to a destination web application, site collection or site. If there is an app whose product ID is same as the selected source one in the destination, the source app can also be deployed to this destination app.
- You can deploy the app along with its app data by completing the following:
  - Select the desired app node and the related App Data node on the farm tree.
  - Deploy the app by selecting the desired app node and deselecting the related app data node on the source farm tree; then select the destination node to perform the deployment.

## Deploying the App Catalog Site to Destination

Deployment Manager also supports deploying the source App Catalog Site to a destination. You must select the App Catalog Site as the source, and refer to the following conditions when selecting a different destination node level:

- Select a Web application as the destination:
  - If there is an App Catalog Site type site collection under the selected web application that has the same relative URL as the source App Catalog Site,

and the destination site collection has the same template as the source App Catalog site, the source App Catalog Site, along with its data, will be deployed to the destination site collection.

- If there is an App Catalog Site type site collection under the selected web application that has the same relative URL as the source App Catalog Site, and the destination site collection has a different template from the source App Catalog site, the source App Catalog Site will be deployed to the destination site collection, but the deployed App Catalog Site cannot be used to add apps.
- If there is no App Catalog Site type site collection under the selected web application that has the same relative URL as the source App Catalog Site, an App Catalog Site will be created, and the source App Catalog Site, along with its data, will be deployed to the destination site.
- Select a site collection as the destination:
  - If the site collection is an App Catalog Site and has the same template as the source, the source App Catalog Site, along with its data, will be deployed to the destination site collection.
  - If the site collection is an App Catalog Site but has a different template from the source, the source App Catalog Site will be deployed to the destination site collection, but the deployed App Catalog Site cannot be used to add apps.
  - If the site collection is not an App Catalog Site, the source App Catalog Site will be deployed to the destination site collection, but the deployed App Catalog Site cannot be used to add apps.
- Manually create a site collection as the destination:
  - If the newly created site collection has been set to be an App Catalog Site in SharePoint and its template is the same as the source, the source App Catalog Site, along with its data, will be deployed to the destination site collection.
  - If the newly created site collection has been set to be an App Catalog Site in SharePoint and its template is different from the source, the source App Catalog Site will be deployed to the destination site collection, but the deployed App Catalog Site cannot be used to add apps.
  - If the newly created site collection is not set to be an App Catalog Site in SharePoint, the source App Catalog Site will deploy to the destination site collection, but the deployed App Catalog Site cannot be used to add apps.

## Deploying One App to Multiple Site Collections or Sites in Destination

An app is supported to deploy to multiple site collections or sites in destination. For more information on Deployment Mapping, refer to [Deploying One Source Object to Multiple Site Collections or Sites in Destination](#). Refer to [Deployment Mapping Notes](#) for the notes of creating a deployment mapping.

## Offline Deployment for Apps in a Web Application

An app is supported to perform an offline deployment. Refer to [Offline Deployment for Objects in a Web Application](#) for details.

## Configuring Queues Locally

The app queue is also supported to configure locally. Refer to [Configuring Restricted File System Files](#) for details.

# App Tools

App Tools allows you to check the upgrade status of an app and upgrade the app. When you select the Web Application, Site Collection, Site and App level in the source, the **App Tools** tab appears.

## Checking for App Updates

Refer to the following steps to check whether the apps need to be updated:

1. Select a Web application, site collection or site in which the apps will be checked. The **App Tools** tab appears.
2. Click the **App Tools** tab. The **Check Update** button appears on the ribbon.
3. Click **Check Update** on the ribbon. A message appears. You can select the **Include apps that do not need to be updated in the job details** checkbox to include the information of the apps that do not need to be upgraded in the job report. Then, click **OK**.

**\*Note:** You can also click **Add to Queue** on the middle lower interface to add the mapping to queue. You can add multiple mappings to queue and then click **Check Update**.

4. A message appears on the top of the screen. Click the **Job Monitor** link in the message.
5. In Job Monitor, after the job finishes, you can select the job, and then click **View Details** on the ribbon. The **Details** interface appears.
6. Select **Queue** in the interface.
7. Select the mapping you want to view details for and click **View Details** in the ribbon.
8. In the Job Details interface, click the **Details** tab. If the value in the **Update Status** column is **true**, the app will need to be upgraded.

If you want to download the job details, select the **Job Monitor** tab, then select the job, and click **Download** on the ribbon. Select **Download Job Details** from the drop-down list and then save the **Job Details** file. In the Excel report, you can view the **Report** tab to view the app update information.

	A	B	C	D	E	F	G	H
1		Report1						
2	Ork Status	App Name	Farm Name	Related Site URL	Current Version	Update status	Comment	
3	1	Successful Basic SharePoint-hos	W1:SHAREPOINT_CONFIG)	http://dpm13-farm1-w1:8001/sites/Vict0	2.0.0.0	False		
4	2	Successful SharePointApp7	W1:SHAREPOINT_CONFIG)	http://dpm13-farm1-w1:8001/sites/Vict0	1.1.3.1	False		
5	3	Successful QuickInfo	W1:SHAREPOINT_CONFIG)	http://dpm13-farm1-w1:8001/sites/Vict0	1.0.0.0	True		
6								
7								
8								
9								
10								

Figure 6: App Update Details in the Excel Report.

## Pushing App Updates

Refer to the following steps to update the apps:

1. Select a Web application, site collection, site or app. The **App Tools** tab appears.
2. Click the **App Tools** tab. The **Push Update** button appears on the ribbon.
3. Click **Push Update**. A window appears. Refer to the following steps:
  - a. Configure the following settings in the window:
    - **Method** – There are two radio buttons in this field:
      - **Update the selected apps** – This radio button is only enabled when you select apps that can be updated. Select the radio button and then click **OK**. The selected apps will be updated.
      - **Upload update report** – Select this radio button, then upload the report file. The apps in the report file will be updated.
    - **Upload File** – Select **Upload** to upload a previously exported report Excel file. Refer to [Checking for App Updates](#) for details on how to export an Excel report. You can edit the Excel report to add or remove the apps that you do not want to upgrade.
    - **Plan Name** – Enter a name for the plan. Optionally, enter a description for the plan.
  - b. Click **OK** to run the job.

# Using Compare

The compare feature allows you to identify differences between the source and the destination object. This feature supports: Web applications, Web front-end, farm solutions, and shared services.

By using the compare feature, once the differences are identified between the source and destination, you can select objects from either the source or destination to be deployed to the other side that does not have the same object.

In the **Home** tab of Deployment Manager, click **Compare** on the ribbon. You will be redirected to the **Compare** interface.

## Comparing Online

To compare objects online, complete the following steps:

1. Under the **Tree** tab, within the **Source** pane, click the farm name to expand its data tree, and gain access to its SharePoint objects.
2. Within the **Destination** pane, click the farm name to expand its data tree and gain access to its SharePoint objects.
3. Click **Web Applications**, **Web Front End**, or **Shared Services** to expand the data tree to the node you want to compare. **Farm Solutions** can be directly selected for comparing.
4. After selecting the nodes that you want to compare, click **Compare** on the ribbon or on the left corner of the screen. A drop-down list appears.
5. Select **Compare Online**. You are redirected to a screen under the **Comparison** tab. The nodes you selected under the **Tree** tab are displayed in the source pane and destination pane. Expanding the data tree in the Source pane will also expand the data tree in the Destination pane.

If there is a difference between the Source and Destination nodes on a certain object level, the objects will be highlighted in light orange, and a checkbox will appear in front of the source node.

When comparing objects in the Web application level, and there are differences between the Source and Destination nodes on the files/items level, Site Settings level, List Settings level and Apps level, an ellipsis button (⋮) will appear after the source node. If you click the ellipsis button (⋮), a pop-up window appears displaying the different compared elements.

- a. Check the checkbox in front of an object to create a deployment mapping. An arrow will appear between the **Source** pane and the **Destination** pane after you check the corresponding checkbox.

- If an object exists in the source tree, but does not exist in the destination, a right arrow ( ➔ ) appears. In this case, the source object will deploy to the destination.
  - If an object exists in the destination tree, but does not exist in the source, a left arrow ( ➜ ) appears. In this case, the destination object will deploy to the source.
  - If the compared source and destination have the different objects, a two-way arrow ( ↔ ) appears. You can choose to deploy objects from the source to the destination or from the destination to the source by changing the arrow direction.
- b. Click **Add to Queue** on the ribbon to add this mapping to the queue. The **Add to Queue** window will appear. For information on how to configure queue settings, see the [Creating a Deployment Mapping](#) section of this guide.

All of the mappings will be added to the queue in the **Home** page. To run the job directly, click **Run** in the ribbon or in the lower right corner of the **Home** page. Or you can save this queue as a plan.

**\*Note:** The selected objects in the source and destination must be using the same version of SharePoint in order to enable the **Compare Online** button.

## Creating a Compare Plan

You can create a compare plan to generate a comparison report that shows the differences between the source and destination objects under the **Web Applications** node.

**\*Note:** SharePoint Online objects do not support the function.

Refer to the following steps to create a compare plan:

1. Under the **Tree** tab, within the **Source** pane, click the farm name to expand its data tree to show its SharePoint objects.
2. Within the **Destination** pane, click the farm name to expand its data tree to show its SharePoint objects.
3. Click **Web Applications** to expand the data tree to the node you want to compare.

**\*Note:** To refresh an object, right click the object then click **Refresh**.

**\*Note:** For sites, you can right click and select **Copy URL** to copy the URL of this node, or click **Open in browser** to open it.

4. After selecting the nodes, click **Create Compare Plan** on the ribbon, or click **Compare** on the left corner of the screen and then select **Create Compare Plan** from the list that appears.
5. Configure the following settings in the **Create Compare Plan** interface:

- **Plan Name** – Enter a plan for the plan, and enter an optional description.
- **Comparison Report Setting** – Select whether or not to include the objects that are same in the selected source and destination nodes in the comparison report.
- **Schedule Selection** – Choose if you want to add a schedule.

If you select **No Schedule**, the plan is not run on any schedule and must be initiated manually. If you select **Configure the schedule myself** to configure a customized schedule. Click **Add Schedule** and the **Add Schedule** window appears.

- **Type** – Select the type of recurring schedule: **By hour**, **By day**, **By week**, or **By month**.
- **Schedule Settings** – Set up the frequency for the scheduled job. If you select the type as **By hour**, **By week**, or **By month**, you can also select the **Advanced** checkbox to configure more settings for the frequency. For more information, see the [Advanced Predefined Scheme Settings](#) section below.
- **Range of Recurrence** – Specify when to start and end the running the recurring schedule.
  - **Start time** – Set up the time to start the plan under the **Start time**. Note that the start time cannot be earlier than the current time.
  - **No end date** – Select this option to run the plan indefinitely or until you stop the plan manually.
  - **End after specified occurrence(s)** – Select this option to stop the plan after a specified number of occurrences.
  - **End by** – Set up the time to end the plans.

Click **OK** to save the settings. After configuring the schedule for this 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 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.

- **Notification** – Choose the type of notification and designate which DocAve user(s) will receive the e-mail notification report. Select a notification profile from the drop-down list. Click **View** next to the drop-down list to view the details of the notification profile, or click **New Notification Profile**. For information on creating a notification profile, see the [DocAve 6 Control Panel Reference Guide](#).
- **Associate 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**. For information on creating a plan group, see the [DocAve 6 Control Panel Reference Guide](#).

6. Click **Save** on the ribbon or at the bottom of the screen. Click **Save** to save the plan, or click **Save and Run Now** to run it immediately. Click **Cancel** to return the **Compare** interface without saving the plan.

After the job finishes, you can go to the Job Monitor to view the job information. Select the checkbox before the job, click **Download** on the ribbon, and then click **Download Job Details** from the drop-down list to generate the comparison report.

## Comparing in Different Tree Levels

Deployment Manager allows you to compare Web applications, Web-front end, farm solutions, and shared services. The following sections illustrate the comparing rules and conditions of the objects in each level.

### Rules for Comparing Objects in a Web Application

Refer to the following rules when you compare the objects in a Web application:

- Objects in the Web application support the comparison between:
  - The source site collection and the destination site collection
  - The source site and the destination site
- You can directly select the user solution gallery node under the **Tree** tab in the **Compare** page, and then click **Compare** on the ribbon to compare the user solutions under the **Comparison** tab. Alternatively, you can select the user solution's corresponding site or site collection and click **Compare** on the ribbon to compare the user solutions under the **Comparison** tab.
- Site collections with the same URL cannot be compared.
- Sites with the same URL cannot be compared.
- If the workflow, item, file, content type, and column in the source are the same as those in the destination, they cannot be loaded in the compare tree.
- Specific rules for site content types:
  - The source and destination site content types are compared by their content type IDs. If the IDs are the same, the site content types will be compared by their settings.
  - The source and destination site content types with the different content type IDs will be highlighted in the compare tree. You can add them to the queue by selecting the corresponding checkbox.
  - If the source and destination content types have the same content type ID, but their settings are different, the content type will be highlighted in the compare tree. You can add to the queue by selecting the corresponding checkbox.

- If the source and destination settings of the content types are the same and they have the same content type IDs, they will not be displayed in the compare tree.
- Specific rules for site settings: If there are some differences between the source and destination site settings, the site settings will be highlighted in the compared tree. You can add to queue by selecting the corresponding checkbox. Click the details button (⋮) to view the detailed elements of the source and destination site settings.
- Specific rules for apps:
  - The source and destination apps are compared by their product IDs. If the product IDs of the source app and the destination app are different, apps will be highlighted in the compare tree. You can add to queue by selecting the corresponding checkbox.
  - If the product IDs are the same, the apps will be compared by their versions; if their versions are different, the apps will be highlighted in the compared tree. You can add to queue by selecting the corresponding checkbox.
  - If there are some differences between the source and destination apps, the apps will be highlighted in the compared tree. You can add to the queue by selecting the corresponding checkbox. Click the details button (⋮) to view a detailed version information of the apps.
- Specific rules for list settings:
  - If there are some differences between the source and destination list settings, the list settings will be highlighted in the compared tree. You can add to queue by selecting the corresponding checkbox. Click the details button (⋮) to view the detailed elements of the source and destination list settings.
- Specific rules for items:
  - The source and destination items are compared by their item IDs. If the item IDs of the source item and the destination item are different, items will be highlighted in the compare tree. You can add to queue by selecting the corresponding checkbox.
  - If the item IDs are the same, the items will be compared by their last modifiers, last modified time, version count and their latest versions. If their last modifiers, last modified time, version count or their latest versions are different, the items will be highlighted in the compared tree. You can add to your queue by selecting the corresponding checkbox. Click the details button (⋮) to view the detailed differences of the source and destination items.
  - If the items have the same IDs, and their last modifiers, last modified time, version count and latest versions are the same, then they will be compared by their versions. If their versions are different, they will be highlighted in the compared tree. You can add to your queue by selecting the corresponding checkbox. The pop-up bubble appears after clicking the

details button (⋮), the following message appears: **There are differences between the source and destination versions of this file/item. To view the differences, open the file/item in SharePoint.**

For example, if the source and destination items' ID, last modifiers, last modified time, version count, and latest versions are the same, but the item versions in the source are 1.0, 2.0, 4.0, then the item versions in the destination are 1.0, 3.0, 4.0, then the items are different and they will be highlighted in the compared tree.

- Specific rules for files:
  - The source and destination files are compared by their names (including the extension). If the source file name and the destination file name are different, the files will be highlighted in the compare tree. You can add to the queue by selecting the corresponding checkbox.
  - If the file names are the same, the files will be compared by their last modifiers, last modified time, version count, and their latest versions. If their last modifiers, last modified time, version count, or their latest versions are different, the files will be highlighted in the compare tree. You can add to your queue by selecting the corresponding checkbox. Click the details button (⋮) to view the detailed differences of the source and destination files.
  - If the source and destination files have the same names, and their last modifiers, last modified time, version count, and latest versions are the same, then they will be compared by their versions. If their versions are different, they will be highlighted in the compare tree. You can add to your queue by selecting the corresponding checkbox. The pop-up message appears after clicking the details button (⋮), and the following message is displayed: **There are differences between the source and destination versions of this file/item. To view the differences, open the file/item in SharePoint.**

For example, if the source and destination files' name, last modifiers, last modified time, version count, and latest versions are the same, but the file versions in the source are 1.0, 1.1, 1.2, 1.3, and 2.0 and the file versions in the destination are 1.0, 1.2, 1.3, 1.4, and 2.0, then the files are different and they will be highlighted in the compared tree.

## Supported Objects and Comparing Conditions for SharePoint On-Premises

The followings are the objects that are supported to be compared and their comparing conditions:

Supported Objects	Elements Compared	
Site settings	Look and Feel	Title, description, and icon (in SharePoint 2010)

Supported Objects	Elements Compared	
		Title, description, and logo (in SharePoint 2013)
		Welcome page
		Navigation
		Tree view
		Site theme (in SharePoint 2010)
		Look (in SharePoint 2013)
		Page layouts and site templates
	Image Renditions (in SharePoint 2013)	
	Site Administration	Regional settings
		RSS
		Search and offline availability
		Site Closure and Deletion (in SharePoint 2013)
	Site Collection Administration	Site Policies (in SharePoint 2013)
	Site Actions	Features
		Event Handlers
	Reporting Services	Reporting Services Site Settings
	Search	Search and offline availability (in SharePoint 2013)
Search Settings		
Sites	URL	
Apps	Product ID Version	
Site Workflow	Name	
Lists/libraries	Title	
List Workflow	Name	
Site content types	ID Content type settings	
Site content type workflow	Name	
Site columns	ID Column Properties	
List settings	Title, description and navigation (in SharePoint 2010) List name, description and navigation (in SharePoint 2013)	
	Versioning settings Advanced settings	
	Rating settings	
	Audience targeting settings	
	Enterprise Metadata and Keywords Settings	

Supported Objects	Elements Compared
	Columns setting
	Content type Setting
	Event Handlers
	Workflow Settings
	Validation settings
	RSS settings
	List Properties
	Information management policy settings
List column	ID
List content type	Parent site content type ID + list content type name
List content type workflow	Name
Folder	Name
Items	ID
	Last Modifier
	Last Modified Time
	Latest Version
	Version Count
	Versions
Files	Name + file extension
	Last Modifier
	Last Modified Time
	Latest Version
	Version Count
	Versions
User solutions	Solution name + extension, solution status

### Supported Objects and Comparing Conditions for SharePoint Online

Supported Objects	Elements Compared
SharePoint Designer Objects (Site level)	Folder Name
Site	URL
Lists	Name
Folder	Name
File	Name + Extension, Last Modifier, Version, Version Count, Last Modified Time
Item	TpGuid, Last Modifier, Version, Version Count, Last Modified Time
SharePoint Designer Objects (List Level)	Folder Name
Design Lists	Name

## Rules for Comparing Web-Front End

Refer to the following rules when you compare the Web-front end level:

- The Web-front end level supports the comparison between:
  - The source Web-front end and the destination Web-front end
  - The source IIS site files and the destination IIS Site files
  - The source IIS site and the destination IIS site
  - The source global assembly cache and the destination global assembly cache
  - The source custom features and the destination custom features
  - The source SharePoint site definitions and the destination SharePoint site definitions
  - The source file system and the destination file system
- Specific rules for IIS site files:
  - The IIS sites will be highlighted in the compare tree if their IDs or names are different. You cannot add to queue.
  - If the source and destination IIS sites have the same ID or name, they will not be highlighted. You can continue to load the files or folders by clicking the IIS sites, these folders and files are compared by their names.
    - The source and destination folders or files will be highlighted if their names are different, you can add to queue after selecting the corresponding checkbox.
    - If the source and destination files under the IIS sites have the same name, they will not be displayed in the compare tree.
    - If the source and destination folders under the IIS sites have the same name, they are not highlighted. You can click the folders to expand to the file level, but if the source and destination files under these folders have the same name, they will not be displayed in the compare tree.

**\*Note:** Web.config files are not supported to compare.
- Specific rules for global assembly cache:
  - The source and destination global assembly cache files with the same names will not be displayed in the tree.
  - The source and destination global assembly cache files with the different names will be highlighted in the compare tree. You can add to your queue by selecting the corresponding checkbox.
- Specific rules for custom features:

- The source and destination custom features with the same feature ID will not be displayed in the compare tree.
- The source and destination custom features with the different feature IDs will be highlighted in the compare tree, you can add to your queue by selecting the corresponding checkbox.
- Specific rules for site definitions:
  - The source and destination site definitions with the same site template names or configuration IDs will not be displayed in the compare tree.
  - The source and destination site definitions with the same site templates but different configuration IDs will be highlighted in the compare tree. You can add to your queue by selecting the corresponding checkbox.
  - The source and destination site definitions with the same configuration IDs but different site templates will be highlighted. You can add to your queue by selecting the corresponding checkbox.
  - The source and destination site definitions with the different site templates and configuration IDs will be highlighted. You can add to your queue by selecting the corresponding checkbox.
- Specific rules for file system:
  - The source and destination file system files or folders with the same names and same modified time will not be displayed in the compare tree.
  - The source and destination file system files or folders with the different names are highlighted in the compare tree. You can add to the queue by selecting the corresponding checkbox.
  - The source and destination file system files or folders with the same names but different modified time will be highlighted in the compare tree. You can add to your queue by selecting the corresponding checkbox.

## Supported Objects and Comparing Conditions

The followings are the objects that are supported to compare and their comparing conditions:

Supported Objects	Comparing Conditions	
	In the Same Farm	Across Farms
IIS site files	ID	Name
IIS sites	Do not compare the IIS sites, only compare the folders or files under the IIS sites, you can refer to rules for IIS site files section for more information.	
Global assembly cache	Name	Name
Custom features	Feature ID	Feature ID
Site definitions	Site template name Configuration ID	Site template name Configuration ID

Supported Objects		Comparing Conditions	
		In the Same Farm	Across Farms
File System	Files	Name, Last Modified Time	Name, Last Modified Time
	Folders	Name, Last Modified Time	Name, Last Modified Time

## Rules for Comparing Farm Solution

Refer to the following rules for comparing farm solutions:

- The source and destination farm solutions with the same solution IDs will not be displayed in the compare tree.
- The source and destination farm solutions with the different solution IDs will be highlighted in the compare tree. You can add to your queue by selecting the corresponding checkbox.

## Supported Objects and Comparing Conditions

The followings are the objects that are supported to compare and their comparing conditions:

Supported Objects	Comparing Conditions	
Farm solutions	Solution ID	Solution ID

## Rules for Comparing Shared Services

Refer to the following rules for comparing shared services objects:

- Specific rules for content type hub:
  - The source and destination content type hubs are compared by their content type IDs. If their content type IDs are the same, the content type hubs will be compared by their settings.
  - The source and destination content type hubs with different content type IDs will be highlighted in the compare tree. You can add to queue by selecting the corresponding checkbox.
  - If the source and destination content type hubs have the same content type ID, but their settings are different, the content type hubs will be highlighted in the compare tree. You can add to queue by selecting the corresponding checkbox.
  - If the source and destination settings of the content type hubs are the same and they have the same content type IDs, they will not be displayed in the compare tree.
- Specific rules for term group:
  - The source and destination term groups are compared by their names, if their names are the same, then the term groups will be compared by their settings.
  - The source and destination term groups with the different names will be highlighted in the compare tree. You can add to queue by selecting the corresponding checkbox.
  - If the source and destination term groups have the same name, but their settings are different, the term groups will be highlighted in the compare tree. You can add to queue by selecting the corresponding checkbox.
  - If the source and destination term groups have the same name and settings, but the term sets in the term groups are different, the term groups will not be highlighted. You can add the term sets under the term groups to queue by selecting the corresponding checkbox.
- Specific rules for term set:

- The source and destination term sets are compared by their names, if their names are the same, then the term groups will be compared by their settings.
- The source and destination term sets with the different names will be highlighted in the tree. You can add to queue by selecting the corresponding checkbox.
- If the source and destination term sets have the same settings and names, and the terms under them are the same, the term sets will not be displayed in the tree.
- If the source and destination term sets have the same name but different settings, they will be highlighted in the tree. You can add to queue by selecting the corresponding checkbox.
- If the source and destination term sets have the same name and settings, but the terms in the term groups are different, the term groups will be not be highlighted. You can add the term sets under the term groups to queue by selecting the corresponding checkbox.
- Specific rules for term:
  - The source and destination terms are compared by their names, if their names are same, then the term groups will be compared by their settings.
  - The source and destination terms with different names will be highlighted in the tree. You can add to queue by selecting the corresponding checkbox.
  - If the source and destination terms have the same name, but their settings are different, the terms will not be highlighted in the tree. But there is no checkbox in front of the term, you can only add to queue by selecting the corresponding checkbox before the term set.
  - If the source and destination terms have the same name and settings, but the deep-level terms are different, the current level terms will not be highlighted. You can click the term to expand to the deep-level terms, the deep-level terms will be highlighted. There is no checkbox in front of the term, you can only add to queue by selecting the corresponding checkbox before the term set.

## Supported Objects and Comparing Conditions

The following table includes the supported objects to compare and their comparing conditions:

Supported Objects	Comparing Conditions
Content type hub	Content type ID Settings
Term group	Name Settings
Term set	Name Settings
Term	Name Settings

## Using Custom Compare

Deployment Manager provides you with a way to customize your compare condition. The detailed information of your desired compare objects will be listed in the comparison report.

For more information, refer to ... \AvePoint\DocAve6\Agent\Documents\SDK\DeploymentManager\AgentCommonCustomCompareAPI.chm.

# Managing Deployment and Compare Plans in Plan Manager

Once a deployment plan has been created, you can access it by clicking on the **Plan Manager** tab. In the Plan Manager interface, you will see a list of all Deployment Plans.

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

- **Edit** – Click **Edit** on the ribbon, or right-click at the plan name and then select **Edit** from the drop-down menu.

For a deployment plan, you will be redirected to the **Queue Tools** interface. For more information on the mapping settings, refer to [Queue Tools](#); Click **Edit Plan Settings** on the ribbon. Configure the settings described in the [Creating a Deployment Mapping](#) section of this guide.

For a compare plan, you will be redirected to the **Edit** interface. You can then edit the selected node in the tree. Click **Settings** on the ribbon, and configure the settings described in the [Creating a Compare Plan](#) section of this guide. Clicking **Source and Destination** can return to the node selection interface.

- **Delete** – Click **Delete** on the ribbon, or right-click at the plan name and then select **Delete** from the drop-down menu. A warning message will appear to confirm the deletion. Click **OK** to delete the selected plan, or click **Cancel** to return to **Plan Manager** without deleting the selected plan. The running job cannot be deleted.
- **Test Run** – Click **Test Run** on the ribbon. The following objects are supported to be tested in the destination:
  - **Site Definition** – The site definition is tested according to the template of the selected site in the source.  
**\*Note:** When the corresponding site or site collection is required to be created in the destination for a deployment job, the destination will be tested if it contains the site definition of the source site that will be deployed.
  - **Assemblies** – The assemblies are tested according to the Event Receiver.  
**\*Note:** Currently, only the assemblies used by the site or list type Event Receiver are supported to be tested.
  - **Solutions and custom features** – Refer to the following conditions of testing the solutions and custom features:
    - When the site collection or site is selected in the source for performing a deployment manager plan, the solutions or custom features are tested according to the features of the selected site collection features or site features in the source.

- When the content type is selected in the source for performing a deployment manager plan, the solutions or custom features are tested according to the Feature ID of the selected content type in the source.
- When the list is selected in the source for performing a deployment manager plan, the solutions or custom features are tested according to the Template Feature ID of the selected list in the source.

You can see the results of the test run in Job Monitor. For more information, see the [DocAve 6 Job Monitor Reference Guide](#).

**\*Note:** The offline deployment plan does not support test runs.

- **Run Now** – Click **Run Now** on the ribbon. You will see the message: **The job is started, please go to Job Monitor if you want to view the job details.** Click the hyperlink to access Job Monitor for Deployment Manager. For more information on Job Monitor, see the [DocAve 6 Job Monitor Reference Guide](#).

# Using Pattern Manager

Pattern Manager allows you to create a pattern, manage patterns, and deploy a pattern to the destination. The selected source data and specified queue settings can be saved into a pattern for deploying the solution to a desired destination.

Click the **Pattern Manager** tab in Deployment Manager. The **Pattern Manager** interface appears. You can manage the created patterns in the interface.

## Creating a Pattern

Refer to the following steps to create a pattern:

1. Click **Create** on the ribbon. The **Create** window appears.
2. In the **Farm** field, select the **SharePoint On-Premises** option or **Registered SharePoint Sites** option. Then select a SharePoint On-Premises farm or registered SharePoint Sites group.
3. In the **Scope** field, select a scope level: **Site collection**, **Site**, or **List** to define the scope where the data in the pattern can be deployed.
4. Click **Save** to save the settings.
5. The Source selection interface appears. The farm that you have selected in the **Create** window is displayed. Expand the farm tree to the node that you want to select. Then, select the node. The **Add to Pattern** button at the bottom of the interface is enabled.  
  
**\*Note:** If you have selected the **Site collection** scope in the **Create** window, you cannot select the **Lists**, **Site Content Types**, **Site Columns**, **Workflows** nodes in this Source selection interface.
6. Click **Add to Pattern**. Configure the settings in the pop-up window. For details about these settings, refer to [Creating a Deployment Mapping](#).
7. Click **OK** to save the settings in the **Add to Pattern** interface. Click **Cancel** to exit the window without any changes.
8. A pattern source is added in the **Queue** field at the bottom of the interface. You can add more pattern sources in the queue. Refer to step 5, 6, and 7. After a pattern source is added, the **Pattern Queue Tools** tab appears, which allows you to edit the pattern source. For detailed information, refer to [Editing a Pattern](#).
9. After you have add one pattern source in the queue, the **Save as a Pattern** button on the ribbon or at the lower-right corner of the interface is enabled.
10. Click the **Save as a Pattern** button. An interface appears. Configure the following settings:
  - **Pattern Name** – Enter a pattern name. Then, enter an optional description for the pattern.

- **Export Location** – Select an export location to store the pattern data. Select New Export Location to create a new one. For detailed information on how to create an export location, refer to the [DocAve 6 Control Panel Reference Guide](#).
11. Click **Save and Export** to save the pattern and export the pattern data to the selected export location. Click **Cancel** to exit the interface without any changes. The saved pattern will be displayed in the **Pattern Manager** interface.

## Editing a Pattern

Select the pattern you want to edit in the Pattern Manager interface. The **Pattern Queue Tools** interface appears.

### Editing Pattern Sources

All of the pattern sources saved in the pattern are displayed in the **Pattern Queue** field at the bottom of the interface. Refer to the following steps to edit the pattern source:

1. Select the pattern source in **Pattern Queue** that you want to edit. The corresponding tree is displayed, your selections will appear in the tree where you can make changes.
2. Click **Save Pattern Source Changes** on the ribbon to temporarily save the changes. Before the data are saved and exported, the changes in the **Pattern Queue Tools** interface will be saved temporarily; if you exit the **Pattern Queue Tools** interface, the changes will be reverted and not saved.
3. Click **Save and Export** to save the pattern changes and export the data to the export location.

### Deleting Pattern Sources

Select one or more pattern sources in the **Pattern Queue** field at the bottom of the interface. Click **Delete** to delete the pattern sources. Click **Save and Export** to save the pattern changes and export the data to the export location.

### Adding a Pattern Source

Click **Add Pattern Source** on the ribbon to add a pattern source. Then you can add a new pattern source. The added pattern source is displayed in the **Pattern Queue** field. Click **Save as a Pattern**, and click **Save and Export** in the appeared interface. Then, the added pattern source will be added into this pattern.

### Editing Pattern Settings

Click **Edit Pattern Settings** on the ribbon. The Edit Pattern interface appears. You can edit the pattern description depending on your requirement. Then, click **Save and Export** to save the pattern changes and export the data to the export location.

## Deleting Patterns

Select one or more patterns in the **Pattern Manager** interface, and then select **Delete** on the ribbon to delete the patterns.

## Exporting Data

Select one or more patterns and then click **Export** on the ribbon to export the selected pattern data again.

## Deploy Source Data in a Pattern to the Destination

Select a pattern and then click **Deploy** on the ribbon. The **Deploy** interface appears.

In the Source pane, select a pattern version. Then the corresponding pattern data will be loaded. Click on the pattern name. The pattern sources in the pattern are displayed. Select a pattern source, the tree and the corresponding selection is loaded. You can review the selection.

Select the destination object in the Destination pane. Then click **Add to Queue**. For detailed information on how to create a deployment mapping, refer to [Creating a Deployment Mapping](#).

## Viewing Version History

Select a pattern, and then click **View Version History** to view the pattern's version history.

Click on the pattern name in the window, and the versions are displayed. Click each version, all of the pattern sources are displayed. Select a pattern source, the tree and the corresponding selection is loaded for your review.

You can delete the history versions by clicking **Delete** on the ribbon. Click **Close** to close the window.

**\*Note:** the version that has been deployed and the current version of the pattern cannot be deleted.

## Configuring an Export Location

Configure an export location for storing the saved source data. For detailed on how to configure an export location, see the [DocAve 6 Control Panel Reference Guide](#).

## Using Pattern Subscription

Select a pattern, and then click **Pattern Subscription**. The **Pattern Subscription** interface appears. The destination URLs that have been deployed with any version of the pattern are displayed in this interface. You can view the deployed pattern source's version and Deploy Date after the URL.

The **Update Scope** option is enabled if the deployed pattern source is not the latest version.

Select **Update Scope** after a destination URL, and a message appears to prompt you whether to deploy the latest version of the pattern source to the destination URL. Click **OK**, and the **Add to Queue** window appears. Configure the settings and then click **OK**. The **Deploy** interface appears, and the mapping is added into the Queue. Then, you can choose to run or save the queue as another plan.

Selecting **Update Scope** option in the ribbon can update the pattern sources to the latest version in bulk.

# Advanced Settings

For advanced users, Deployment Manager offers these additional settings that can be configured and saved to run as part of more complex plans:

- Domain Mapping is used to replace a source domain name with a domain name in the destination. The user in the source group will be mapped to the destination user which has the same name.
- User Mapping is beneficial for migrating groups of users from one domain to another and for migrating an individual user's content and permissions to another user.
- Language Mapping allows you to set a different language for the destination than the language used in the source. By creating a rule for Language Mapping, you can apply these rules without having to recreate them each time.
- Export Location allows you to configure locations on external system storage that you want Deployment Manager to export data. By configuring external system storage, you can also export design elements to the file system. This is useful in cases where two farms are unable to communicate with each other. You can use export locations to perform offline deployments whereby you deploy from an external device.
- Storage Policy allows you to select a logical device to use when storing solutions, or when performing imports and exports for offline deployment.
- Filter Policy allows you to set up filter rules so you can control what objects and data within any SharePoint level appear so that you can target content to migrate more precisely. By setting up and saving filter policies, you can apply the same filter policies to different plans without having to recreate them each time.

While these settings can be accessed in Deployment Manager, they are configured in the Control Panel. For more detailed information about these settings, see the [DocAve 6 Control Panel Reference Guide](#).

# Using SharePoint Management Shell

Deployment Manager provides you with SharePoint Management Shell to directly perform the SharePoint Management Shell Commands. Refer to the following steps to use SharePoint Management Shell:

1. In the **Home** tab of Deployment Manager, click **SharePoint Management Shell** on the ribbon. The **SharePoint Management Shell** interface appears.
2. Select a farm in the **Farm Selection** drop-down menu, the corresponding agents will be loaded.
3. Select an agent that is responsible for running the SharePoint Management Shell in the **Agent Selection** drop-down menu.
4. Enter the **SharePoint Management Shell** command.
5. You can add the command to queue by clicking **Add to Queue** below the command or on the ribbon, and then the **SharePoint Management Shell** interface will exit.
6. Repeat steps 1 through 5 to add more mappings to the queue.
7. Once you have finished adding mappings to the queue, click **Save as a Plan** to save this queue as a plan and follow the instructions in [Creating a Deployment Plan](#). To execute the queue immediately, click **Run** located at the bottom of the screen.

## Appendix A – Conflict Resolution – Web Application Deployment

Check Lower Objects	Skip	Merge	Replace
<ul style="list-style-type: none"> <li>• Check lower objects unchecked</li> </ul>	<ul style="list-style-type: none"> <li>• If there is no conflict between source and destination, a new SharePoint object will be created on destination.</li> <li>• If there is a conflict between source and destination, it will ignore the conflicting data and do nothing on source and destination.</li> </ul>	N/A	<ul style="list-style-type: none"> <li>• If there is no conflict, a new SharePoint object will be created on destination.</li> <li>• If there is a conflict for design list, content type or content column, it will update destination data based on source one.</li> <li>• If there is a conflict on source and destination other than design list, content type or content column, it will update destination data based on source one. SharePoint object will be created on destination.</li> </ul>

Check Lower Objects	Skip	Merge	Replace
<ul style="list-style-type: none"> <li>• Check lower objects checked</li> <li>• Content level: Skip</li> </ul>	<ul style="list-style-type: none"> <li>• If there is no conflict on the container level, a new container will be created on destination.</li> <li>• If there is no conflict on the content level, new content will be created on destination.</li> <li>• If there is a conflict on the container, it will ignore the conflict and do nothing with the container on source and destination.</li> <li>• If there is a conflict on the content level, it will ignore the conflict and do nothing with the content on source and destination.</li> </ul>	<ul style="list-style-type: none"> <li>• If there is no conflict on the container level, a new container will be created on destination.</li> <li>• If there is no conflict on the content level, new content will be created on destination.</li> <li>• If there is a conflict on the container level, it will update destination container based on source one.</li> <li>• If there is a conflict on the content level, it will ignore the conflict and do nothing with the content on source and destination.</li> </ul>	N/A

Check Lower Objects	Skip	Merge	Replace
<ul style="list-style-type: none"> <li>• Check lower objects checked</li> <li>• Content level: Overwrite</li> </ul>	<ul style="list-style-type: none"> <li>• If there is no conflict on the container level, a new container will be created on destination.</li> <li>• If there is no conflict on the content level, new content will be created on destination.</li> <li>• If there is a conflict on the container level, it will ignore the conflict and do nothing with the container on source and destination.</li> <li>• If there is a conflict for content level, it will update the conflict on destination based on the source data.</li> </ul>	<ul style="list-style-type: none"> <li>• If there is no conflict on the container level, a new container will be created on destination.</li> <li>• If there is no conflict on the content level, new content will be created on destination.</li> <li>• If there is a conflict on the container level, it will update destination container based on source one.</li> <li>• If there is a conflict on the content level, it will update the content on destination based on the source data.</li> </ul>	N/A
<ul style="list-style-type: none"> <li>• Check lower objects checked</li> <li>• Overwrite by last modified time</li> </ul>	<ul style="list-style-type: none"> <li>• If there is no conflict on the container level, a new container will be created on destination.</li> <li>• If there is no conflict on the content level, new content will be created on destination.</li> </ul>	<ul style="list-style-type: none"> <li>• If there is no conflict on the container level, a new container will be created on destination.</li> <li>• If there is no conflict on the content level, new content will be created on destination.</li> </ul>	N/A

Check Lower Objects	Skip	Merge	Replace
	<ul style="list-style-type: none"> <li>• If there is a conflict on the container level, it will ignore the conflict and do nothing with the container on source and destination.</li> <li>• If there is a conflict on the content level, and the modified time of source content is later than the destination one, it will update the conflicting content on destination based on the source data.</li> <li>• If there is conflict on the content level, and the modified time of source content is earlier than the destination, it will ignore the conflict and do nothing with the content on source and destination.</li> </ul>	<ul style="list-style-type: none"> <li>• If there is a conflict on the container level, it will update the destination container based on source one.</li> <li>• If there is a conflict on the content level, and the modified time of source content is later than the destination one, it will update the content on destination based on the source data.</li> <li>• If there is a conflict on the content level, and the modified time of source content is earlier than the destination, it will ignore the conflict and do nothing with the content on source and destination.</li> </ul>	

## Appendix B – Conflict Checks

Conflict Resolution Checking Rules	
Objects	Checking Rules
Site Collection	URL
Site	URL
List	List Title
Folder	Folder Name
Document	Name
Item	TP_IP
Content type	Find and compare By Schema, id, name or parent
Column	Find and compare By Schema, id, InternalName, StaticName or DisplayName
Apps	Product ID
Workflow	Workflow Name

## Appendix C – Supported and Unsupported Elements for Web Application Deployment

Source Content	Status
Web application	Supported
Site collection	Supported
Site	Supported
Site settings	Supported
SharePoint designer objects	Supported
Announcements	Supported
Calendar	Supported
MicroFeed	Supported
AppData	Supported
Content and structure reports	Supported
Customized reports	Supported
Composed looks	Supported
Links	Supported
Reusable content	Supported
Shared documents	Supported
Site collection help	Supported
Tasks	Supported
Team discussion	Supported
Cache profiles	Supported
Content type publishing error log	Supported
Converted forms	Supported
Form templates	Supported
List template gallery	Supported
Long running operation status	Supported
Master page gallery	Supported
Notification list	Supported
Quick deploy Items	Supported
Relationships list	Supported
Reporting metadata	Supported
Reporting templates	Supported
Shared packages	Unsupported
Site assets	Supported
Site collection documents	Supported
Site collection images	Supported
Site pages	Supported
Project policy item list	Supported
Solution gallery	Supported

<b>Source Content</b>	<b>Status</b>
Style library	Supported
Suggested content browser locations	Supported
Taxonomy hidden list	Supported
Theme gallery	Supported
User information list	Supported
Variation labels	Supported
Web part gallery	Supported
wfpub	Supported
Workflow tasks	Supported
Content types	Supported
Site columns	Supported
User solution gallery	Supported
InfoPath templates	Supported

## Appendix D – Supported and Unsupported Workflow Type

SharePoint Version Workflow Type	SharePoint 2010	SharePoint 2013	SharePoint Online
SharePoint Built-in Workflow	Supported	Supported	Supported
SharePoint Designer Workflow	Supported	Supported	Supported
Nintex Workflow	Supported	Supported	Unsupported
Visual Studio Workflow	Supported	Unsupported	Unsupported
Visio Workflow	Unsupported	Unsupported	Unsupported
Azure Workflow	Unsupported	Unsupported	Supported

## Appendix E – Design Elements Deployment

Source Element	Destination Element	Handle
Web application	Web application	For Web application level: do nothing. For the sub levels under Web application: deploy the site collection to the destination, refer to <b>Site Collection to Site Collection</b> for details.
Site collection	Site collection	For site collection level: deploy the settings, features, users, groups, permissions and related data of services (metadata service) of site collection to the destination. For the sub levels under site collection: deploy the root site to the destination, refer to <b>Site to Site</b> for details.
Site collection	Web application	The same as <b>Site Collection to Site Collection</b> .
Site	Site	For site level: deploy features, content types, columns, site settings, navigation and securities to the destination. For the sub levels under site: deploy the following objects to destination. <ol style="list-style-type: none"> <li>1. List.</li> <li>2. SharePoint designer objects.</li> <li>3. Design list.</li> <li>4. Site.</li> <li>5. Site settings.</li> </ol>

## Appendix F – Web Front-End Deployment

Source Element	Destination Element	Handle
IIS site	IIS site files	Deploy all the files (excluding web.config) under IIS virtual directory of relevant IIS site, FBA node in the web.config file under the virtual directory, and the FBA node in the web.config file under Security Token.
GAC	GAC	Deploy all the GAC files.
Custom feature	Custom features	Deploy related folders under <i>C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\TEMPLATE\FEATURES</i> (In SharePoint 2013, the related folders are under <i>C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\15\TEMPLATE\FEATURES</i> ), and referred files for custom features and dll files in GAC to the destination.
Site definition	Site definitions	Deploy related folders under <i>C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\TEMPLATE\SiteTemplates</i> (In SharePoint 2013, the related folders are under <i>C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\15\TEMPLATE\SiteTemplates</i> ), referred files of site definition, and features to the destination.
File System	File System	Deploy the source file system files or folders to the destination file system.

## Appendix G – Solution Deployment

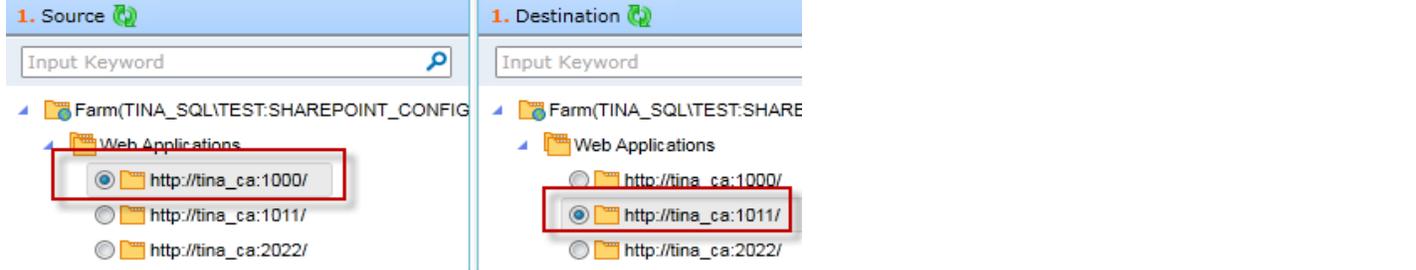
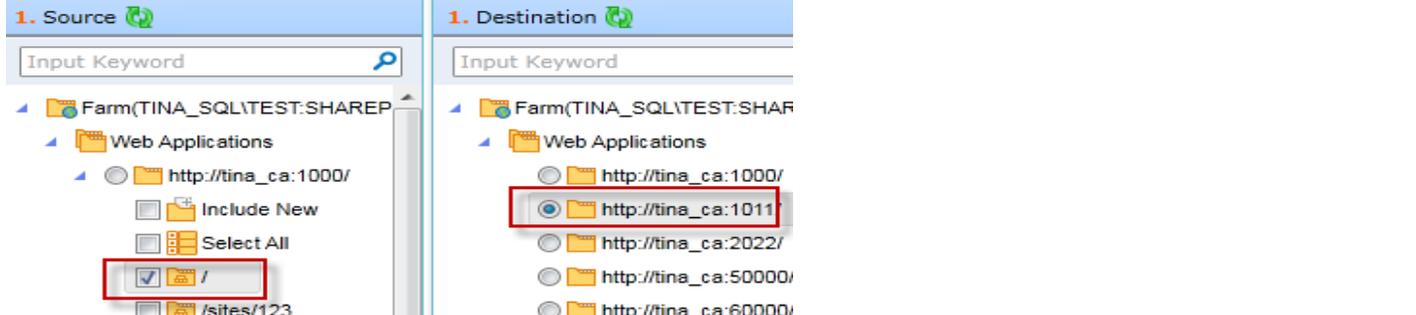
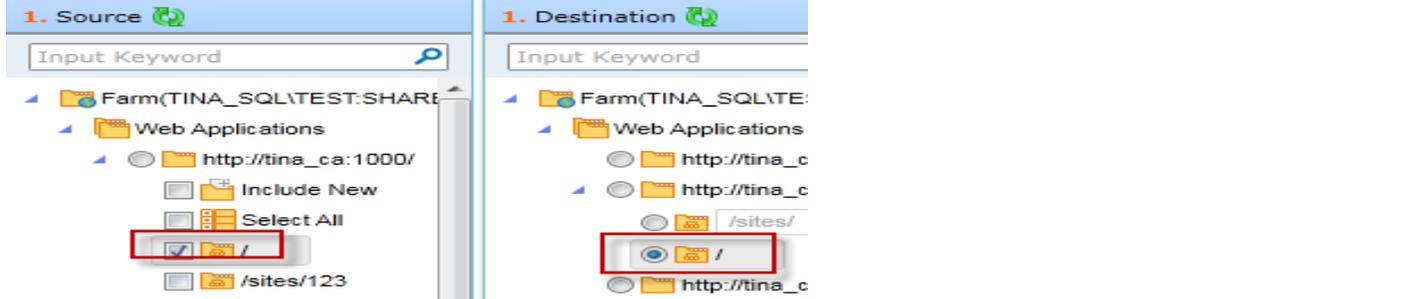
Source Element	Destination Element	Handle
Farm solution	Farm	Deploy a solution to a farm.
Farm solution	Web application	Deploy a solution to a Web application.
Farm solution	Storage policy	Export a solution to the storage policy.
User solution	Farm	Deploy a user solution to a farm.
User solution	Web application	Deploy a user solution to a Web application.
User solution	Site collection	Deploy a user solution to a site collection.
User solution	Storage policy	Export a user solution to the storage policy.
Storage policy	Farm	Import a solution from the storage policy and deploy it to a farm.
Storage policy	Web application	Import a solution from the storage policy and deploy it to a Web application.
Storage policy	Site collection	Import a solution from the storage policy and deploy it to a site collection.
File system	Farm	Deploy a solution to a farm.
File system	Web application	Deploy a solution to a Web application.
Farm solution	N/A	Retract the solution on the source under the <b>Solution Tools</b> tab separately.
Farm solution	N/A	Remove the solution on the source under the <b>Solution Tools</b> tab separately.
User solution	N/A	Activate the solution on the source under the <b>Solution Tools</b> tab separately.
User solution	N/A	Deactivate the solution on the source under the <b>Solution Tools</b> tab separately.
User solution	N/A	Upgrade the solution on the source under the <b>Solution Tools</b> tab separately.

## Appendix H – Managed Metadata Service Deployment

Source Element	Destination Element	Handle
Global term group	Global term group	Deploy all the term groups under global term group to the destination, refer to <b>Term Group to Term Group</b> for details.
Term group	Global term group	Deploy the term group to the destination, refer to <b>Term Group to Term Group</b> for details.
Term group	Term group	Deploy the description of term group, configurations of group managers and contributors, and all the term sets under it to the destination. For how to deploy the term set, refer to <b>Term Set to Term Set</b> .
Term set	Term group	Deploy the term set to the destination, refer to <b>Term Set to Term Set</b> for details.
Term set	Term set	Deploy the term set properties (including Description, Owner, Contract, Stakeholders, Submission Policy and configurations of Available for Tagging to destination), terms under the term set and term properties (including Available for Tagging, Description, Deprecate and other labels), and sub terms together with their properties to the destination.
Content type hub	Content type hub	Deploy all the content types under content type hub to the destination, refer to <b>Content Type to Content Type Hub</b> for details.
Content type	Content type hub	Deploy the field links and settings of the content type to the destination.

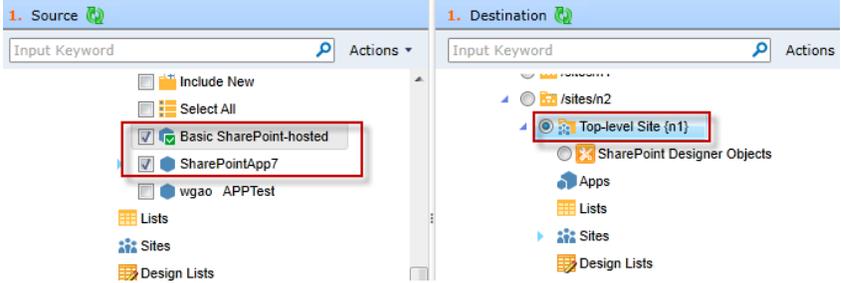
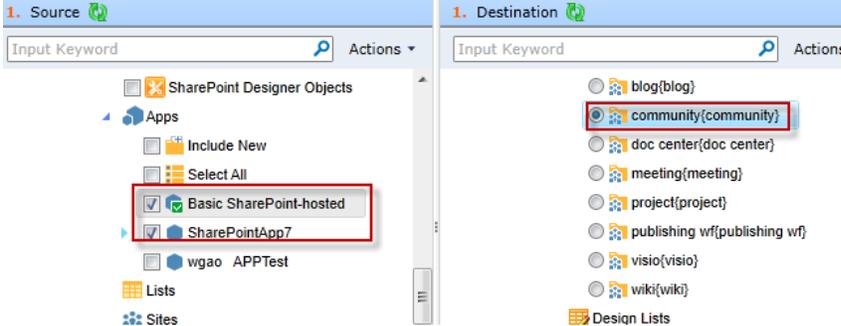
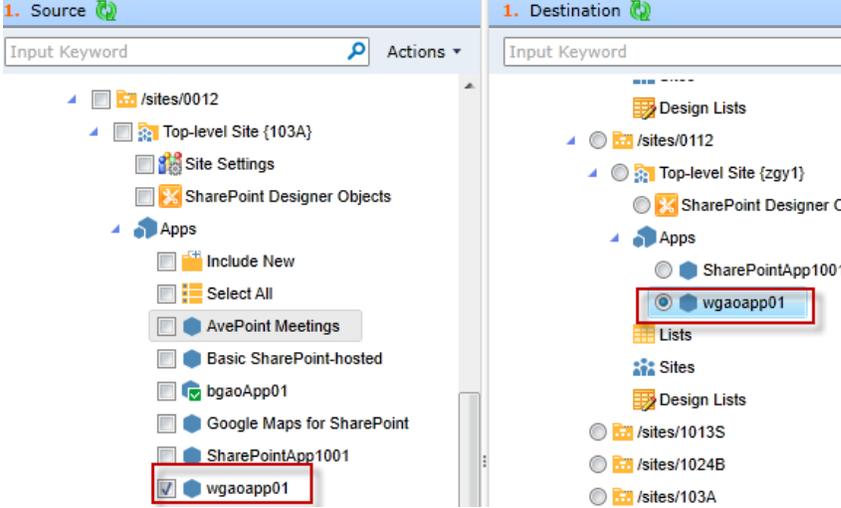
## Appendix I – Deployment Manager Customization Table

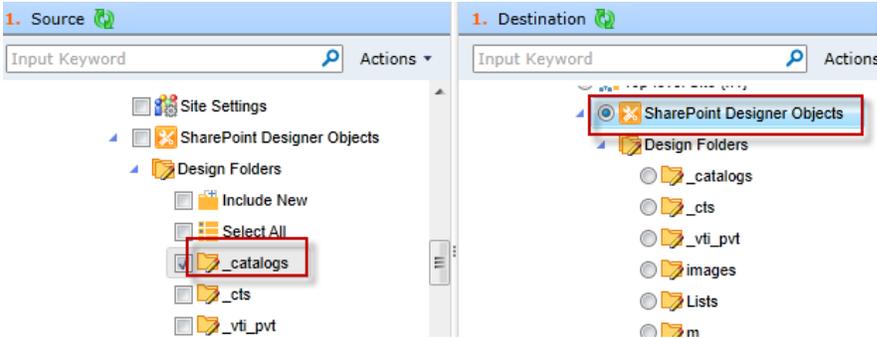
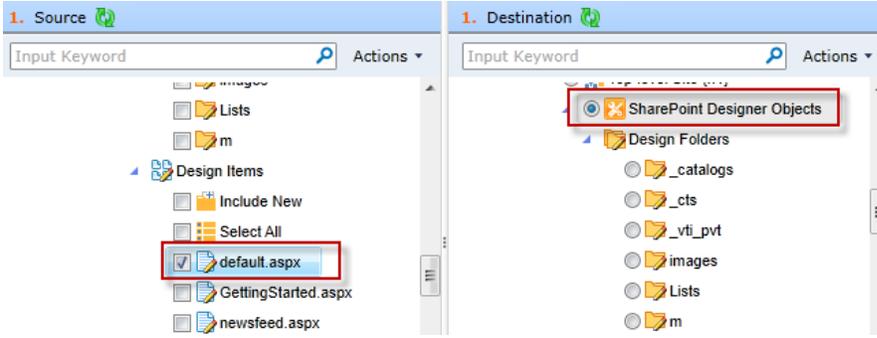
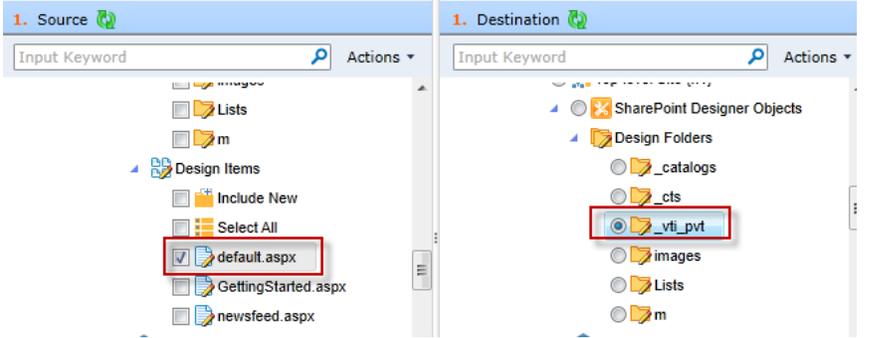
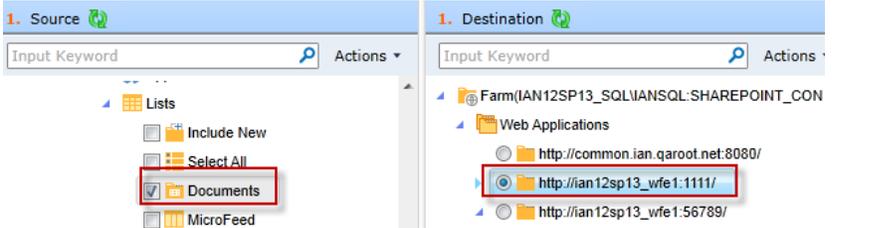
The following is the customization table of Deployment Manager.

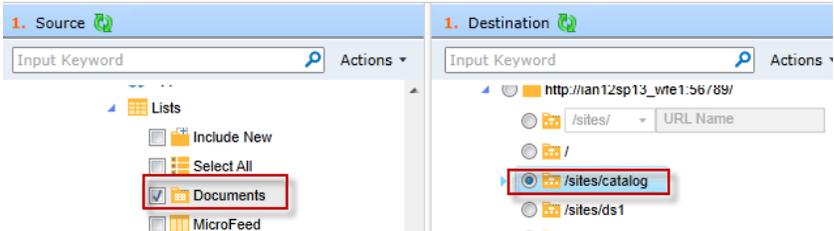
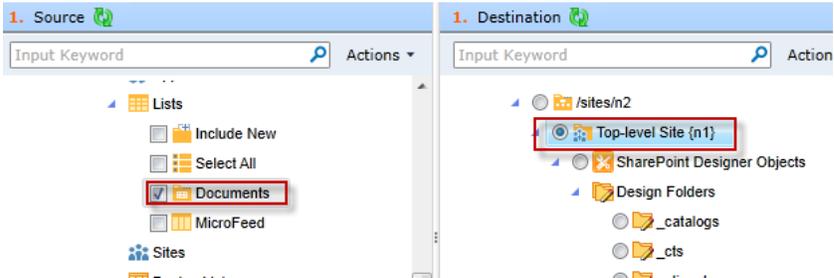
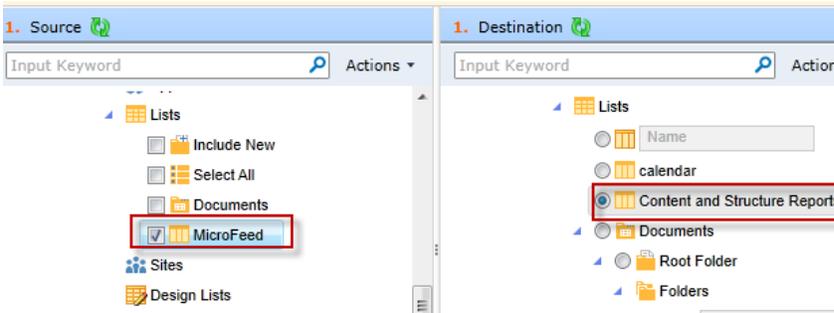
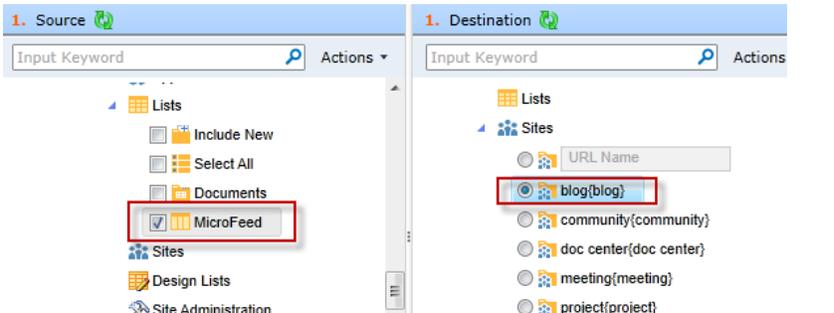
Deploy From/To/ What to deploy	Source	Destination	Screenshot
Web application	Web application	Web application	
Site collection	Site collection	Web application	
Site collection	Site collection	Site collection	

Deploy From/To/ What to deploy	Source	Destination	Screenshot	
Top-level site	Top-level site	Web application		
Top-level site	Top-level site	Site collection		
Top-level site	Top-level site	Top-level site		
Site settings	Site settings	Top-level site		

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Site settings	Site settings	Site	
SharePoint designer objects	SharePoint designer objects	SharePoint designer objects	
SharePoint designer objects	SharePoint designer objects	Design folder	
Apps	App	Web Application	
Apps	App	Site Collection	

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Apps	App	Top-level Site	
Apps	App	Site	
Apps	App	App (the app node can be deployed to the app node when you select the same app in the source and destination, but the source and destination sites where the app resides are different.)	

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Design folder	Design folder	SharePoint designer objects	
Design item	Design item	SharePoint designer objects	
Design item	Design item	Design folder	
List/library	List/library	Web application	

Deploy From/To/ What to deploy	Source	Destination	Screenshot
List/library	List/library	Site collection	
List/library	List/library	Top-level site	
List/library	List/library	List/library	
List/library	List/library	Site	

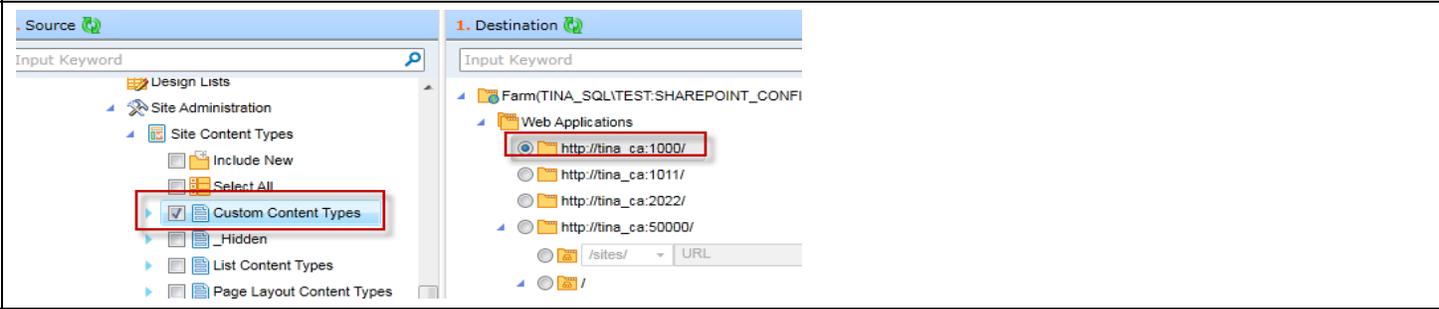
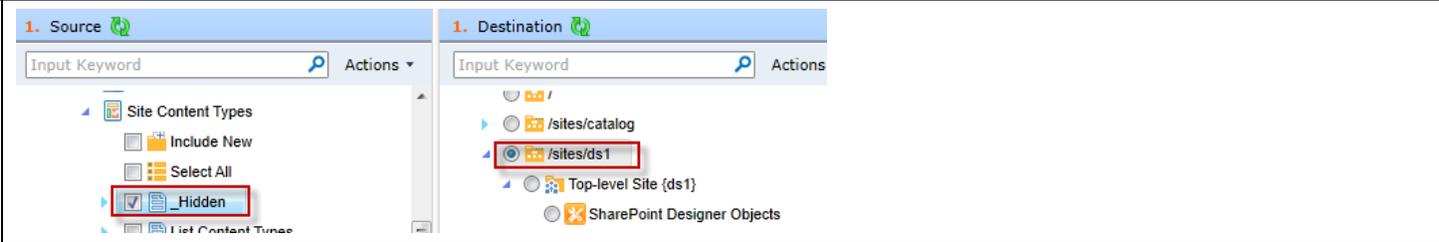
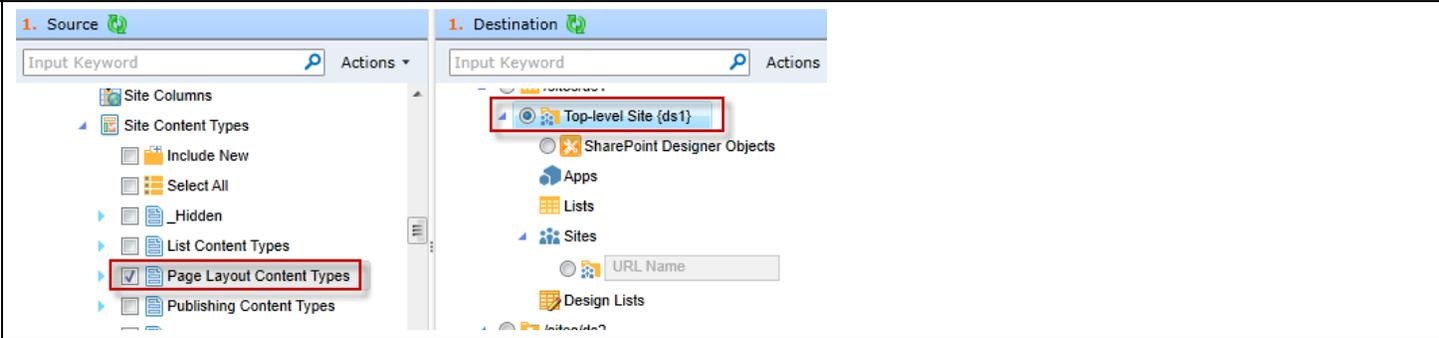
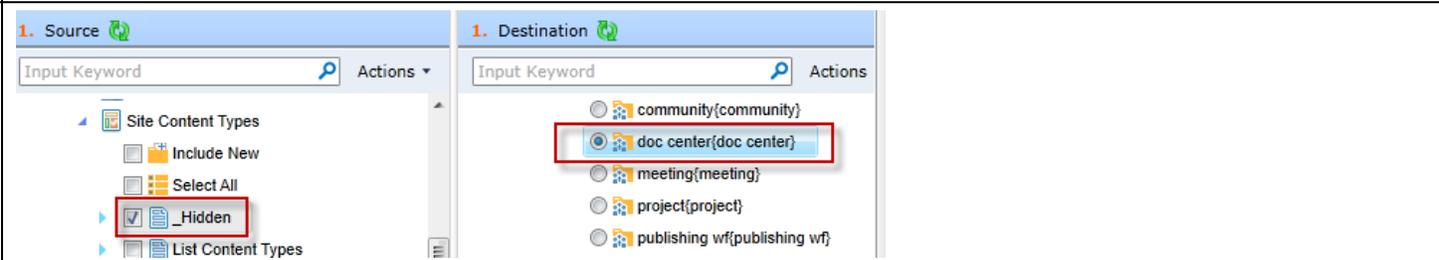
Deploy From/To/ What to deploy	Source	Destination	Screenshot
List settings	List settings	List	
Root folder	Root folder	Library	
Folder	Folder	Folder	
Item	Item	Folder	

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Workflow under lists	Workflow	List/Library	<p>The screenshot shows two side-by-side views of a SharePoint site. The left view, labeled '1. Source', shows a tree structure under 'Top-level Site (jack)'. The 'Workflows' folder is expanded, and a workflow named '13 vrf 519' is selected. The right view, labeled '1. Destination', shows a tree structure under 'Top-level Site (Jason)'. The 'Documents' folder is selected, and a red box highlights it.</p>
Workflow under list content type	Workflow	List/Library	<p>The screenshot shows two side-by-side views of a SharePoint site. The left view, labeled '1. Source', shows a tree structure under 'List Administration'. The 'List Content Types' folder is expanded, and a content type named 'wf test1' is selected. The right view, labeled '1. Destination', shows a tree structure under 'http://sp13workflow12:21092/'. The 'Documents' folder is selected, and a red box highlights it.</p>

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Site	Site	Web application	
Site	Site	Site collection	
Site	Site	Top-level site	
Site	Site	Site	

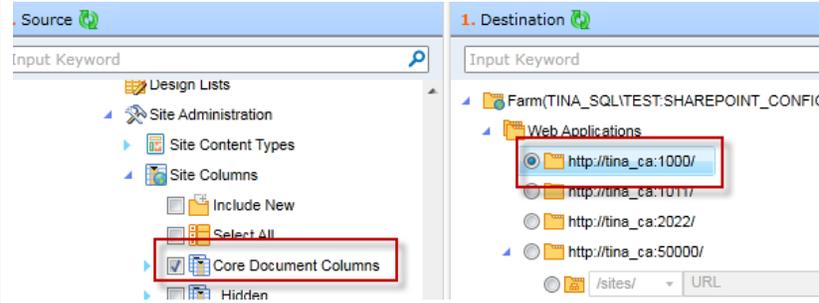
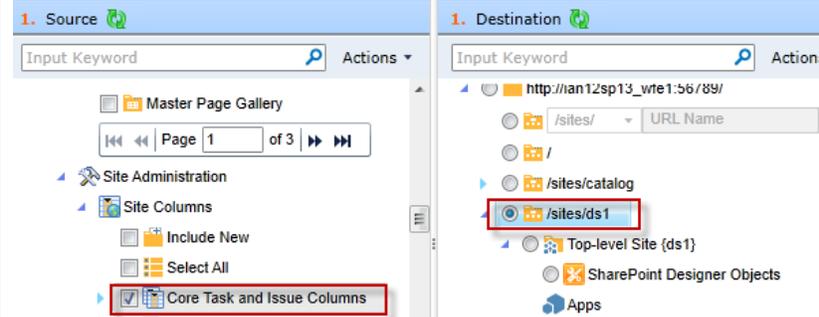
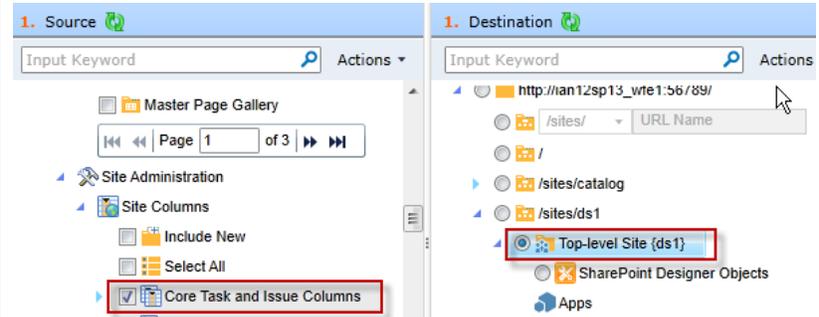
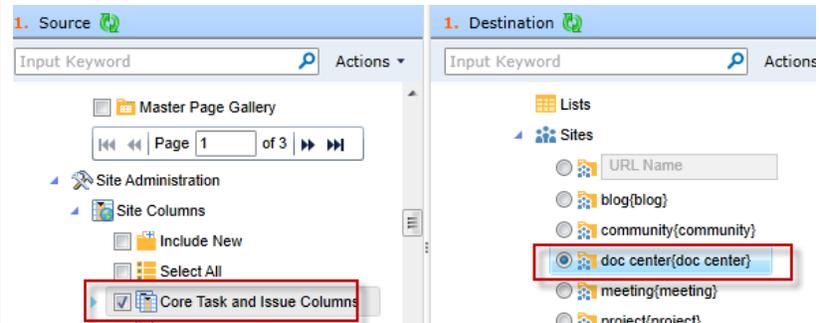
Deploy From/To/ What to deploy	Source	Destination	Screenshot
Workflow under site	Workflow	Top-level site	<p>The screenshot shows two panels: '1. Source' and '1. Destination'. In the Source panel, the tree view shows 'Workflows' expanded, with 'site wf 519' selected and highlighted with a red box. In the Destination panel, the tree view shows 'Top-level Site (Jason)' selected and highlighted with a red box.</p>
Workflow under site	Workflow	Site	<p>The screenshot shows two panels: '1. Source' and '1. Destination'. In the Source panel, the tree view shows 'Workflows' expanded, with 'site wf 519' selected and highlighted with a red box. In the Destination panel, the tree view shows 'site 1 (site 1)' selected and highlighted with a red box.</p>
Design list	Design list	Web application	<p>The screenshot shows two panels: '1. Source' and '1. Destination'. In the Source panel, the tree view shows 'Design Lists' expanded, with 'Cache Profiles' selected and highlighted with a red box. In the Destination panel, the tree view shows 'Web Applications' expanded, with 'http://common.ian.qaroot.net:8080/' selected and highlighted with a red box.</p>

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Design list	Design list	Site collection	<p>The screenshot shows two side-by-side views of the SharePoint Designer interface. The left view, labeled '1. Source', shows a tree structure with 'Cache Profiles' selected and highlighted with a red box. The right view, labeled '1. Destination', shows a tree structure with '/sites/catalog' selected and highlighted with a red box.</p>
Design list	Design list	Top-level site	<p>The screenshot shows two side-by-side views of the SharePoint Designer interface. The left view, labeled '1. Source', shows a tree structure with 'Cache Profiles' selected and highlighted with a red box. The right view, labeled '1. Destination', shows a tree structure with 'Top-level Site (ds1)' selected and highlighted with a red box.</p>
Design list	Design list	Site	<p>The screenshot shows two side-by-side views of the SharePoint Designer interface. The left view, labeled '1. Source', shows a tree structure with 'Cache Profiles' selected and highlighted with a red box. The right view, labeled '1. Destination', shows a list of site components with 'publishing wf(publishing wf)' selected and highlighted with a red box.</p>
Design list	Design list	Design list	<p>The screenshot shows two side-by-side views of the SharePoint Designer interface. The left view, labeled '1. Source', shows a tree structure with 'Cache Profiles' selected and highlighted with a red box. The right view, labeled '1. Destination', shows a list of design lists with 'Content type publishing error log' selected and highlighted with a red box.</p>

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Content type group	Content type group	Web application	 <p>The screenshot shows two panes. The 'Source' pane on the left displays a tree view under 'Site Content Types' with 'Custom Content Types' selected and highlighted by a red box. The 'Destination' pane on the right shows a tree view under 'Web Applications' with the URL 'http://tina_ca:1000/' selected and highlighted by a red box.</p>
Content type group	Content type group	Site collection	 <p>The screenshot shows two panes. The 'Source' pane on the left displays a tree view under 'Site Content Types' with '_Hidden' selected and highlighted by a red box. The 'Destination' pane on the right shows a tree view under '/sites/' with '/sites/ds1' selected and highlighted by a red box.</p>
Content type group	Content type group	Top-level site	 <p>The screenshot shows two panes. The 'Source' pane on the left displays a tree view under 'Site Content Types' with 'Page Layout Content Types' selected and highlighted by a red box. The 'Destination' pane on the right shows a tree view under 'Top-level Site {ds1}' with 'Top-level Site {ds1}' selected and highlighted by a red box.</p>
Content type group	Content type group	Site	 <p>The screenshot shows two panes. The 'Source' pane on the left displays a tree view under 'Site Content Types' with '_Hidden' selected and highlighted by a red box. The 'Destination' pane on the right shows a list of sites with 'doc center{doc center}' selected and highlighted by a red box.</p>

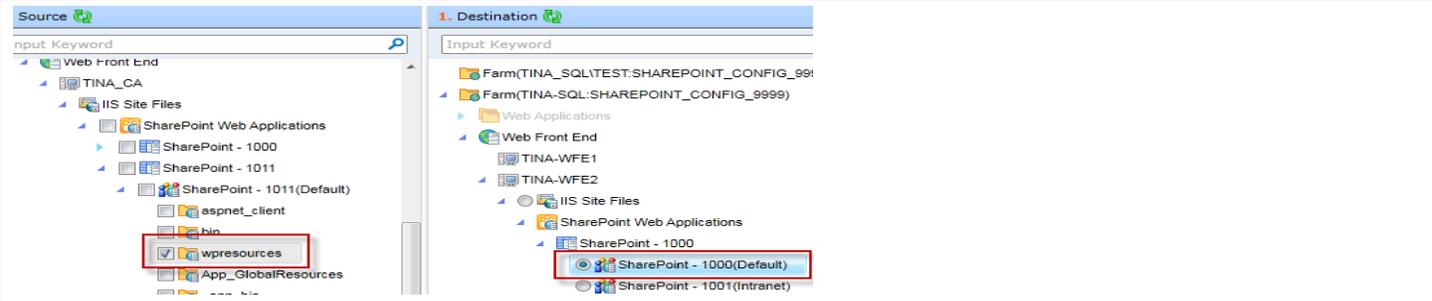
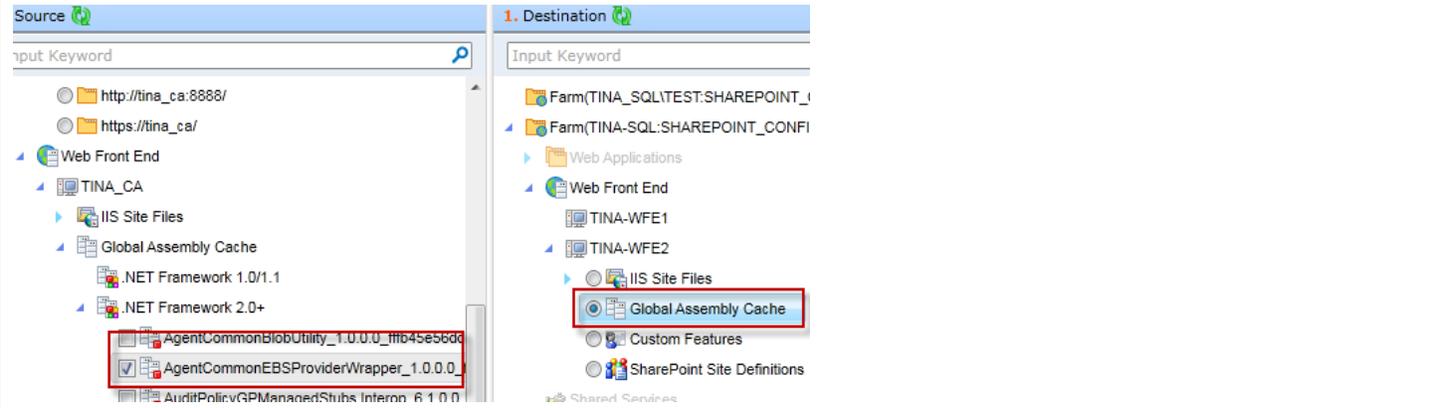
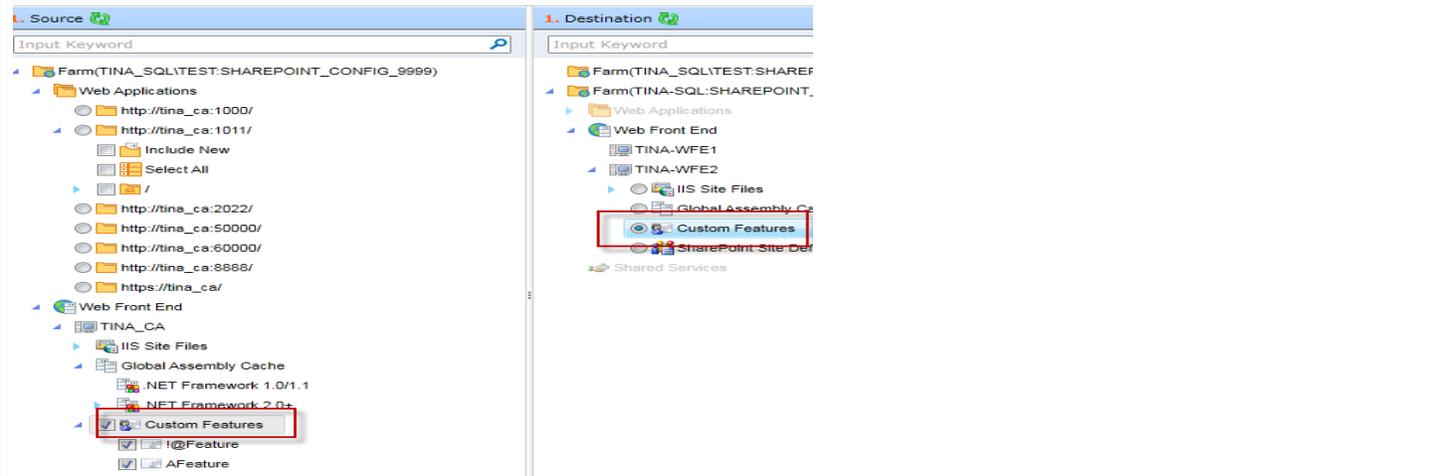
Deploy From/To/ What to deploy	Source	Destination	Screenshot
Workflow under site content type	Workflow	Web application	<p>The screenshot shows two panels: '1. Source' and '1. Destination'. In the 'Source' panel, the tree view is expanded to 'Workflows' under 'test', with 'wf test1' selected. In the 'Destination' panel, the tree view is expanded to 'Web Applications', with 'http://sp13workflow12-21092/' selected.</p>
Workflow under site content type	Workflow	Site collection	<p>The screenshot shows two panels: '1. Source' and '1. Destination'. In the 'Source' panel, the tree view is expanded to 'Workflows' under 'test', with 'wf test1' selected. In the 'Destination' panel, the tree view is expanded to 'Web Applications', with '/sites/ds' selected.</p>

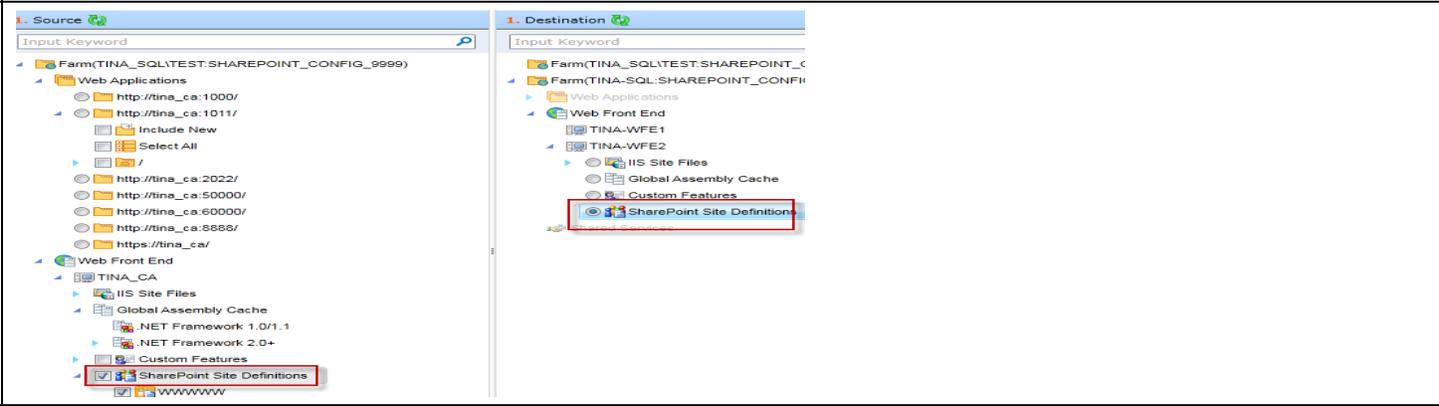
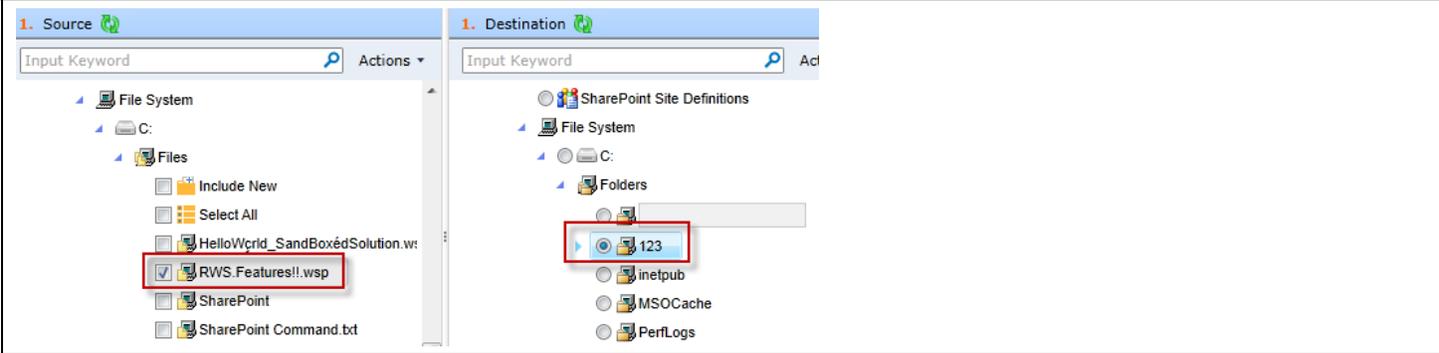
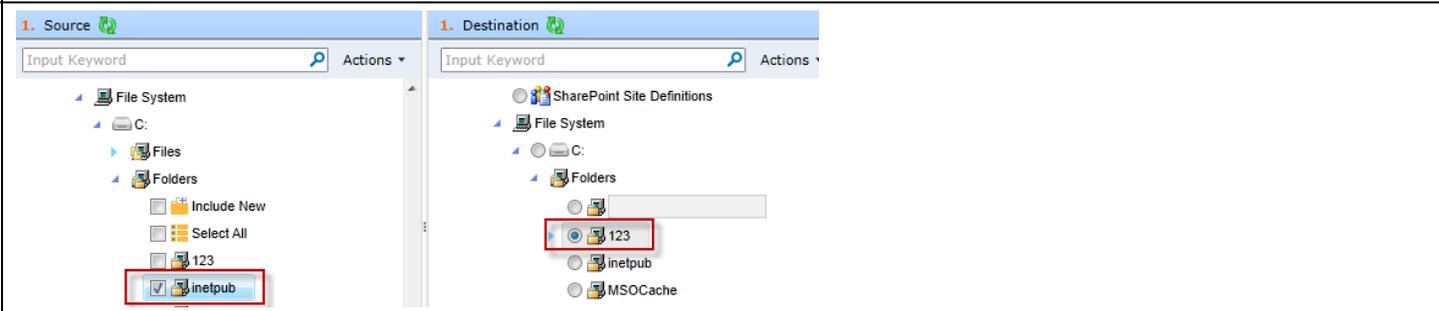
Deploy From/To/ What to deploy	Source	Destination	Screenshot
Workflow under site content type	Workflow	Top-level site	
Workflow under site content type	Workflow	Site	

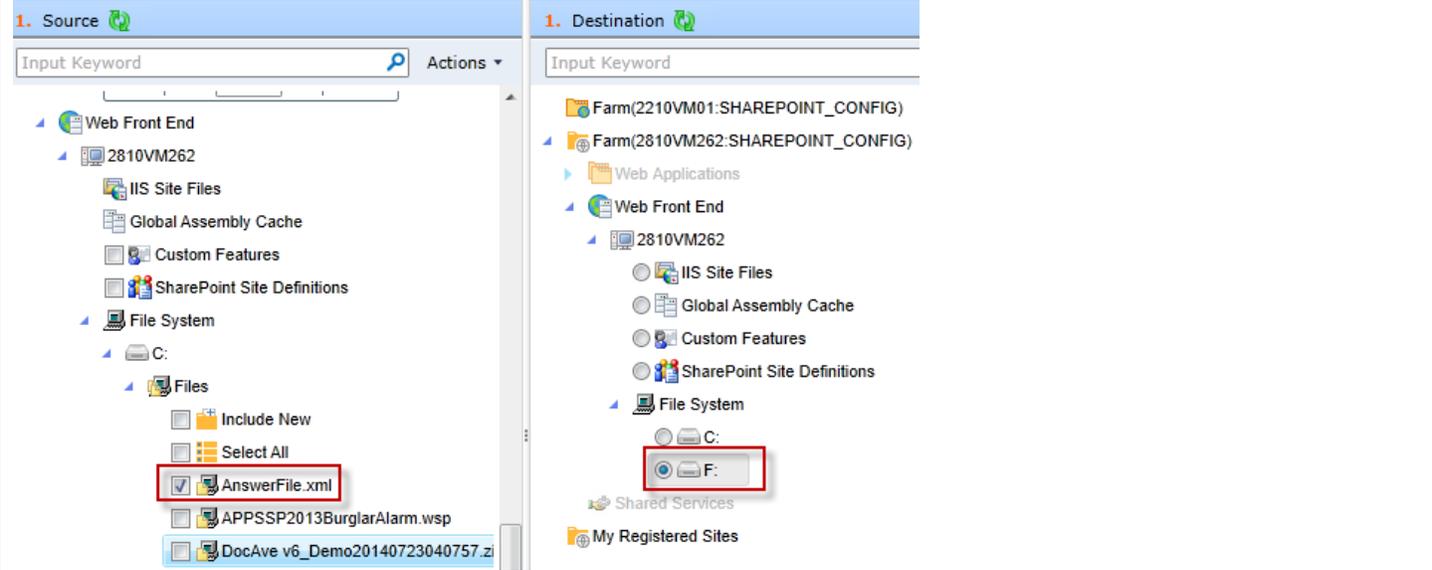
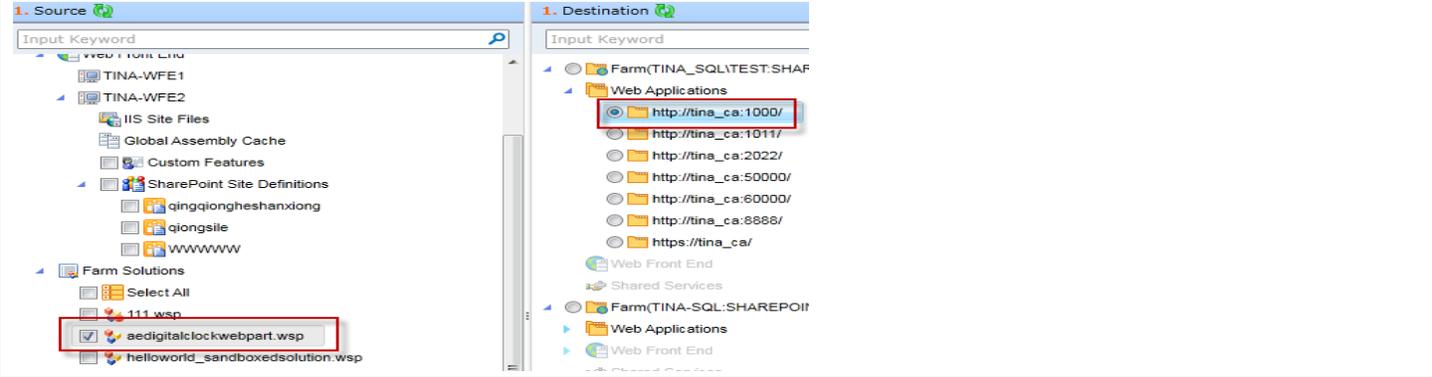
Deploy From/To/ What to deploy	Source	Destination	Screenshot
Site column	Site column	Web application	
Site column	Site column	Site collection	
Site column	Site column	Top-level site	
Site column	Site column	Site	

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Workflow under top-level site	Workflow	Top-level site	<p>The screenshot shows two panels: '1. Source' and '1. Destination'. In the Source panel, the tree view shows a site structure with 'Workflows' selected, and 'site wf 519' is highlighted with a red box. In the Destination panel, the tree view shows a site structure with 'Top-level Site {Jason}' selected, and it is highlighted with a red box.</p>
Workflow under top-level site	Workflow	Site	<p>The screenshot shows two panels: '1. Source' and '1. Destination'. In the Source panel, the tree view shows a site structure with 'Workflows' selected, and 'site wf 519' is highlighted with a red box. In the Destination panel, the tree view shows a site structure with 'site1{site1}' selected, and it is highlighted with a red box.</p>
User solution	User solution	Farm	<p>The screenshot shows two panels: '1. Source' and '1. Destination'. In the Source panel, the tree view shows a site structure with 'User Solution Gallery' selected, and 'SharePointProject1212.wsp' is highlighted with a red box. In the Destination panel, the tree view shows a site structure with 'Farm(TINA_SQLTEST.SHAREPOINT_CONFIG_9999)' selected, and it is highlighted with a red box.</p>

Deploy From/To/ What to deploy	Source	Destination	Screenshot
User solution	User solution	Web application	
User solution	User solution	Site collection	
SharePoint Web applications	SharePoint Web applications	IIS site files	
SharePoint websites	SharePoint websites	IIS site files	

Deploy From/To/ What to deploy	Source	Destination	Screenshot
SharePoint website	SharePoint website	SharePoint website	
GAC files	GAC files	Global assembly cache	
Custom features	Custom features	Custom features	

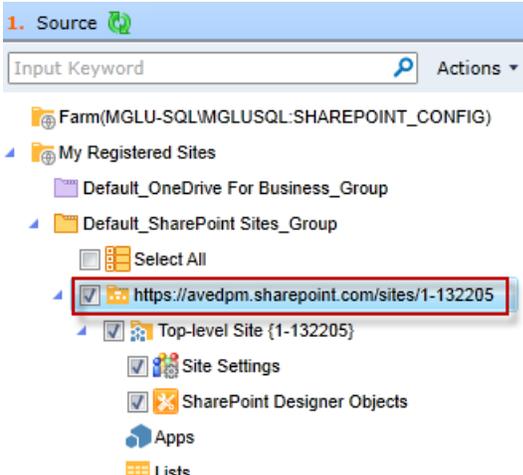
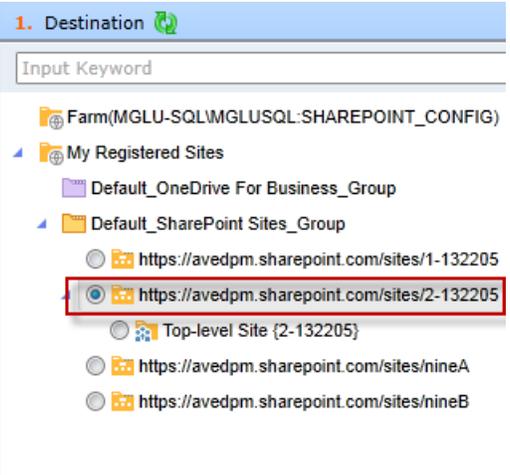
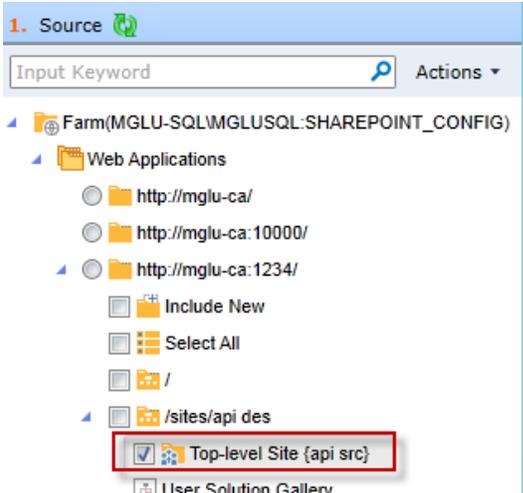
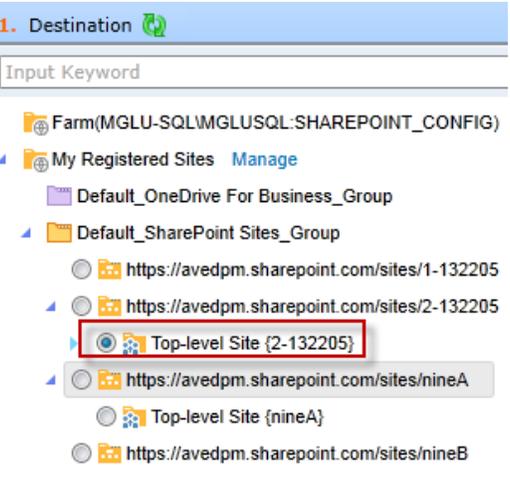
Deploy From/To/ What to deploy	Source	Destination	Screenshot
SharePoint site definitions	SharePoint site definitions	SharePoint site definitions	
File System	File	Folder	
File System	Folder	Folder	

Deploy From/To/ What to deploy	Source	Destination	Screenshot
File System	File/Folder	Disk	 <p>The screenshot shows two panes: '1. Source' and '1. Destination'. In the Source pane, the path is 'Web Front End &gt; 2810VM262 &gt; File System &gt; C: &gt; Files', with 'AnswerFile.xml' selected. In the Destination pane, the path is 'Farm(2810VM262:SHAREPOINT_CONFIG) &gt; Web Front End &gt; 2810VM262 &gt; File System &gt; F:', with 'F:' selected.</p>
Farm solution	Farm solution	Farm	 <p>The screenshot shows two panes: 'Source' and '1. Destination'. In the Source pane, the path is 'Farm Solutions', with 'aedigitalclockwebpart.wsp' selected. In the Destination pane, the path is 'Farm(TINA-SQL:SHAREPOINT_CONFIG)', with the farm name selected.</p>
Farm solution	Farm solution	Web application	 <p>The screenshot shows two panes: '1. Source' and '1. Destination'. In the Source pane, the path is 'Farm Solutions', with 'aedigitalclockwebpart.wsp' selected. In the Destination pane, the path is 'Farm(TINA-SQL:SHAREPOINT_CONFIG) &gt; Web Applications', with 'http://tina_ca:1000/' selected.</p>

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Global term group	Global term group	Global term group	<p>The screenshot shows two side-by-side views: '1. Source' and '1. Destination'. Both views have an 'Input Keyword' field and an 'Actions' dropdown. The source view shows a tree structure with 'Global Term Group' selected under 'Term Store'. The destination view shows a similar tree structure with 'Global Term Group' selected under 'Term Store'.</p>
Term group	Term group	Global term group	<p>The screenshot shows two side-by-side views: '1. Source' and '1. Destination'. Both views have an 'Input Keyword' field and an 'Actions' dropdown. The source view shows a tree structure with 'group1' selected under 'Term Store'. The destination view shows a similar tree structure with 'Global Term Group' selected under 'Term Store'.</p>

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Term group	Term group	Term group	<p>The screenshot shows two side-by-side views of the Deployment Manager interface. The left view, titled '1. Source', displays a tree structure under 'Managed Metadata Service'. The path is: Managed Metadata Service &gt; Multi-tenant Mode &gt; http://sp13workflow12:21092/sites/tenancyAdmin02 &gt; Term Store &gt; Global Term Group &gt; group1. The 'group1' node is selected and highlighted with a red box. The right view, titled '1. Destination', shows a tree structure under 'Managed Metadata Service'. The path is: Managed Metadata Service &gt; Traditional Mode &gt; Term Store &gt; Global Term Group &gt; People. The 'People' node is selected and highlighted with a red box.</p>
Term set	Term set	Term group	<p>The screenshot shows two side-by-side views of the Deployment Manager interface. The left view, titled '1. Source', displays a tree structure under 'Tenant Managed Metadata01'. The path is: Tenant Managed Metadata01 &gt; Multi-tenant Mode &gt; http://sp13workflow12:21092/sites/tenancyAdmin02 &gt; Term Store &gt; group1 &gt; term set1. The 'term set1' node is selected and highlighted with a red box. The right view, titled '1. Destination', shows a tree structure under 'Managed Metadata Service'. The path is: Managed Metadata Service &gt; Traditional Mode &gt; Term Store &gt; Global Term Group &gt; People. The 'People' node is selected and highlighted with a red box.</p>

Deploy From/To/ What to deploy	Source	Destination	Screenshot
Term set	Term set	Term set	
Content type hub	Content type hub	Content type hub	
Content type	Content type	Content type hub	

Deploy From/To/ What to deploy	Source	Destination	Screenshot	
SharePoint Online object	SharePoint Online object	SharePoint Online object		
SharePoint 2013 object	SharePoint 2013 object	SharePoint Online object		

# Appendix J – Advanced Settings in Configuration Files

## AgentCommonWrapperConfig.config

Configure the **AgentCommonWrapperConfig.config** file to specify whether to restore custom properties in 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 Deployment Manager job.

- If you do not want to restore custom properties in 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 the semicolon sign to separate the custom properties, for example, `<SpecialWebPropertyNames>property1; property 2; property3</SpecialWebPropertyNames>`. Note that 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 K – Accessing Deployment Manager Using Hot Keys

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

The following table provides a list of hot keys at the top level. Using the hot key listed below to access to the corresponding product interface. For example, continue pressing **H** to jump to the **Home** tab.

Operation Interface	Hot Key
Home	H
Plan Manager	P
DocAve Home Page	1
DocAve Online Community	2
Control Panel	3
Job Monitor	4
Plan Group	5
Health Analyzer	6

## Home Page

To access the Home page using hot keys in the Deployment Manager interface, press the **Ctrl + Alt + Z** key combination to access hot key mode, and then press **H** on the keyboard to enter the **Home** page.

The following table provides a list of hot keys for functionalities on the ribbon of the **Home** page. For example, continue pressing **Y** to jump to the **Online Deploy** interface.

Functionality Name and Hot Key					
Online Deploy		Y			
Data Export		O			
Data Import		I			
New Plan		NP			
Add to Queue	Q	OK		O	
		Cancel		C	
Compare	P	Compare	P	Compare Now	N
				Generate Comparison Report	R
		Add to Queue		Q	
		Close		X	
Create Container	CC	OK		O	
		Cancel		C	

Functionality Name and Hot Key						
Upload Queues		UQ				
Download Queues		DQ				
SharePoint Management Shell		SS				
File System Configuration		FS	Configure	C	OK	O
			Close	X	Close	C
		Export Location		E		
Storage Policy		SP				
Filter Policy		FP				
Mappings	M	Domain Mapping		DM		
		User Mapping		UM		
		Language Mapping		L		
Job Monitor		J				
Save as a Plan	A	Save		Q		
		Save and Run Now		P		
		Save and Test Run		T		
		Cancel		C		
Test Run		T				
Run		R				
Plan Manager		P				
Pattern Manager		TM				

## Plan Manager

The following table provides a list of hot keys for functionalities on the **Plan Manager** page.

Functionality Name and Hot Key	
Edit	E
Delete	D
Test Run	T
Run Now	R

## Pattern Manager

The following table provides a list of hot keys for functionalities on the **Pattern Manager** page.

Functionality Name and Hot Key	
Create	C
Edit	E
Delete	D
Export	G
Deploy	P
View Version History	V

Functionality Name and Hot Key	
Export Location	E
Pattern Subscription	S

## Deploy

The following table provides a list of hot keys for functionalities on the **Deploy** page.

Functionality Name and Hot Key	
Add to Queue	Q
Create Container	CC
Save as a Plan	S
Run	R
Cancel	X

## Pattern Queue Tools

The table provides a list of hot keys for functionalities on the **Pattern Queue Tools** page.

Functionality Name and Hot Key	
Pattern Queue Tools	TQ
Delete	D
Add Pattern Source	A
Edit Pattern Settings	E
Save Pattern Source Changes	S
Cancel	C

## App Tools

The following table provides a list of hot keys for functionalities on the **App Tools** page.

Functionality Name and Hot Key			
Check for Updates	C		
Push Update	P	OK	O
		Cancel	C

## Solution Tools for Farm Solutions

The following table provides a list of hot keys for functionalities on the Solution Tools for Farm Solutions page.

Functionality Name and Hot Key			
Details	D	Remove	RM
		Close	X
		Retract	RT

Functionality Name and Hot Key					
				Cancel	C
		Close	X		
Retract	R	OK	O		
		Cancel	C		
Remove	M				

## User Solution Tools for User Solutions

The following table provides a list of hot keys for functionalities on the Solution Tools for User Solutions page.

Functionality Name and Hot Key	
Activate	A
Deactivate	D
Upgrade	U

## Queue Tools

The following table provides a list of hot keys for functionalities on the **Queue Tools** page.

Functionality Name and Hot Key			
Edit	E	Edit Mapping Settings	P
		Edit Mapping Source and Destination	Q
Delete		D	
Disable		I	
Enable		B	
Create Container		CC	
Add New Mappings		M	
Edit Plan Settings		EP	
Save Mapping		S	
Cancel		X	

# Notices and Copyright Information

## Notice

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

## Copyright

Copyright © 2012-2015 AvePoint, Inc. All rights reserved. All materials contained in this publication are protected by United States and international copyright laws and no part of this publication may be reproduced, modified, displayed, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of AvePoint, 3 Second Street, Jersey City, NJ 07311, USA or, in the case of materials in this publication owned by third parties, without such third party's consent. Notwithstanding the foregoing, to the extent any AvePoint material in this publication is reproduced or modified in any way (including derivative works and transformative works), by you or on your behalf, then such reproduced or modified materials shall be automatically assigned to AvePoint without any further act and you agree on behalf of yourself and your successors, assigns, heirs, beneficiaries, and executors, to promptly do all things and sign all documents to confirm the transfer of such reproduced or modified materials to AvePoint.

## Trademarks

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

Microsoft, MS-DOS, Internet Explorer, Office, Office 365, SharePoint, Windows PowerShell, SQL Server, Outlook, Windows Server, Active Directory, and Dynamics CRM 2013 are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

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

All other trademarks contained in this publication are the property of their respective owners and may not be used without such party's consent.

## Changes

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

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