



PNMsoft Knowledge Base  
Sequence User Guides  
**Version Management**

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## General Document Information

### Purpose

This document is designed to instruct global administrators on how to:

- Create workflow packages for export
- Import/Restore workflow packages
- Create new versions of a workflow
- Create a copy of a workflow

### Prerequisites

Basic knowledge of Sequence Administration.

## Overview

The Manage Versions feature provides a convenient way of managing different versions of a Sequence workflow. You can package, restore and move workflow versions from one Sequence environment to another (deployment). You can also create new versions of a workflow and copy workflows.

## Terminology

- **Workflow Space** – A workflow within Sequence Administration is contained within a workflow space. This space can contain several versions of the workflow.
- **Workflow Version** – A specific version of the workflow within a workflow space.
- **Package** - Creating a workflow package saves the current structure of the workflow. The packaged version is named and labeled with a date stamp, and can be restored at any time. The package consists of XML files that hold the data records of the User tables and Workflow Structure tables.
- **Restore** - When a workflow package is restored, it can overwrite the current active version or be created as a new version alongside the existing version(s). Restoring a version may influence the runtime data and existing processes, so it should be performed carefully.

## Creating a Package

You can create a saved, portable version of a workflow using the Create Workflow Package feature. This stores the workflow in XML files that specify all the workflow element definitions. The version is stored as a **.zip** file, which you can easily download and move to another environment.

### Exported package content

The workflow package includes the following objects:

- All relevant records from the workflow definition tables
- The structure of the Workflow User tables (UTCMB), used for Combo box and Option group fields
- The data of the Workflow User tables
- Stored Procedures, used for conditions and activities
- Other objects of the workflow – from tblWorkflowExtraObjects
- Workflow permissions structure

The export process transfers all the following updates carried out on a workflow:

- Modifications in objects' properties, e.g. activities, connections.
- Additions of new workflow objects, including the relevant changes in the User Workflow tables.
- Deletion of objects.

*Note: Sequence packs all the dependent objects into the package as can be seen in the SQL Management studio.*

## Creating a Workflow Package

To create a workflow package:

1. Click the workflow version. The workflow version dashboard appears. Under **Common Tasks**, click **Export Workflow**.

### Export Workflow

The following screen appears:

Create "Travel Request" workflow package  
Create a new workflow version package which can be downloaded as a zip file.

Name

Comments


Create Cancel

**Add Name and Comments**

2. Enter a **Name** for the package, and add any relevant **Comments** about it. Click **Create**.

Once the package creation has succeeded, the following screen appears:

Creation of "Travel Request" workflow package status

 Workflow package was created successfully. [View Log](#)


Close

**Creation of Workflow Package Status**

3. To view the log file of the package creation, click **View Log**.
4. Click **Close**.

The *Manage Saved Packages* screen opens showing the new package and its details.


Manage saved packages for "Travel Request" workflow  
Manage saved workflow packages. You can download a saved package as a zip file or restore it and overwrite the existing version.

| Name      | Comments | Date       | Archived By          |                          |                         |   |
|-----------|----------|------------|----------------------|--------------------------|-------------------------|---|
| Version B |          | 10/03/2016 | System Administrator | <a href="#">Download</a> | <a href="#">Restore</a> |  |

[+ Create new package](#)

Close

**Manage Saved Packages Screen**

5. Click **Download** to download the packaged .zip file to your local machine, if required.  
Click **Restore** to restore this package.  
Click  to delete this package.  
Click **+ Create new package** to create a new package.
6. Click **Close** to exit the wizard.

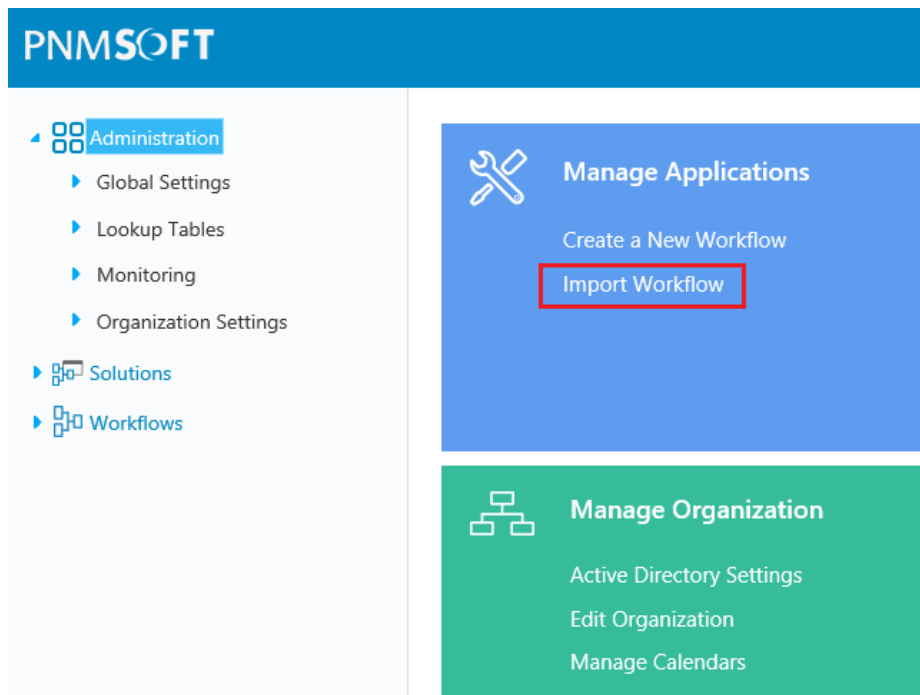


## Importing a Workflow

The *Import Workflow* option enables you to import a workflow package that was created in one Sequence environment, into another Sequence environment. Use this option if the workflow you are importing does not yet exist in the target environment.

### To import a workflow:

1. In the Administration > Manage Applications box, click **Import Workflow**.



**Workflows Menu**

The *Import Workflow from Package* screen opens.

Import Workflow from Package  
Import a workflow version from a saved package.

Choose the workflow zip file you would like to import

**Import Workflow from Package**

2. Select the .zip file of the package you wish to import.

*Note: If you attempt to import a workflow that already exists in your current Sequence environment, you will receive an error message instructing you to import into the existing workflow space (see the Restore Workflow section below).*

3. Click **Import**. The following screen appears:

Import Workflow from Package

ObjectsList
 

- SystemTables
  - SystemTable (tblConnectionString)
  - SystemTable (tblCredentials)
  - SystemTable (tblWorkFlowExtraObjects)
  - SystemTable (tblWebServiceConsumers)
  - SystemTable (tblWebServiceListeners)
  - SystemTable (tblExternalAssemblies)
  - SystemTable (tblMessageBehaviorTypes)
  - SystemTable (tblWcfConsumers)
  - SystemTable (tblSAPConsumers)
  - SystemTable (tblSAPConnections)
  - SystemTable (tblCrmConnections)
  - SystemTable (tblCrm2011Connections)
  - SystemTable (tblSharePointConnections)
  - SystemTable (tblRestWcfConsumers)
  - SystemTable (tblTemplateWorkflowStages)
  - SystemTable (tblEmployeeTitle)

**Data import options for all UTCMB tables**:

**File import options for all external files**:

Select general settings for UTCMB tables and external files (this will modify any specific selections in the tree above).

**Select Objects**

4. Select the objects to import from the list of all objects contained in the package. You can click **Validate** to validate the workflow package before import.

*Note: See the [Deployment Best Practices](#) guide for which objects to select depending on your project methodology and application topology.*

*Note: All workflow activities must be imported - you cannot deselect activities from the tree.*

5. (Optional) You can select general import settings for UTCMB tables and external files from the drop-down boxes. These settings will override any specific selections in the tree above:
  - **Data import options for all UTCMB tables:** Incremental / Overwrite Existing Data
  - **File import options for all external files:** Keep Existing Files / Overwrite Existing Files
6. Click **Next**. Several user mapping screens appear, enabling you to map between users and permissions relevant to this workflow from the source to the target environment.

Workflow Pre Import Actions - Map Recipients (Not Matched)

System could not find match for these items.

| Source                                     | Target                          | Type |
|--|---------------------------------|------|
| Viki Kuznetsov - Sharoni (pnmssoft\vickik) | ...                             | User |
| Helen White (SEQDEV\helen)                 | Alex Dyukin (PNMSOFT\alexnd)    | User |
| Peter Green (SEQDEV\peter)                 | Andrew Hart (PNMSOFT\Andrewh)   | User |
| Jack Silver (SEQDEV\jack)                  | Andrew Murphy (PNMSOFT\andrewm) | User |

Back

Next

Cancel

**Map Recipients**

After you have completed the user mappings, the following screen appears:

Ready to Import the Workflow

Click Import to begin the import.

If you want to review or change any of your import settings, click Back. Click Cancel to exit the wizard.

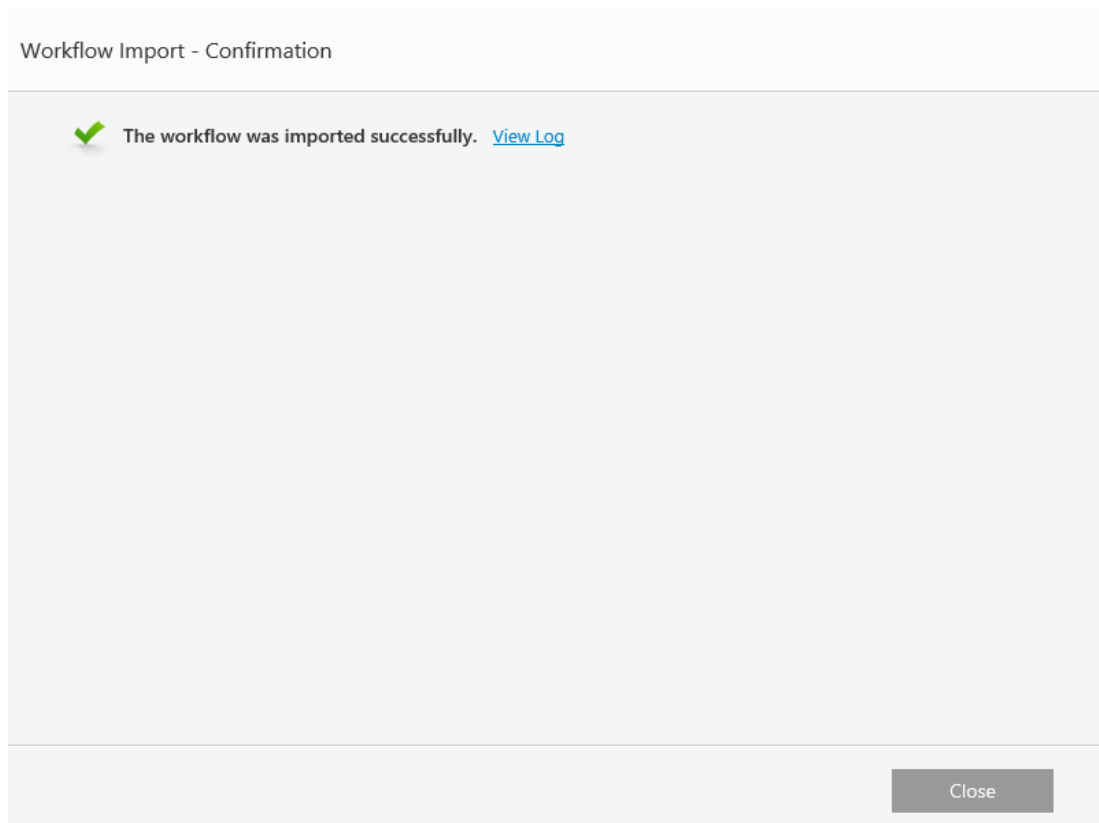
Back

Import

Cancel

**Ready to Import**

7. Click **Import**. The *Confirmation* screen appears, notifying you that the import was completed successfully. Click **View Log** to view the import log.



**Confirmation Screen**

8. Click **Close**. The workflow is now listed in the Workflow tree and you can begin to edit it from there.

*Note: At the end of the import process, define permissions according to the appropriate user's role, group membership, and position in the organization, if you have not fully mapped these during import.*

## Restoring a Workflow

You can restore an existing workflow from a package. Using this option you can rewrite the exiting version with the version in the package or create a new version alongside the existing version(s).

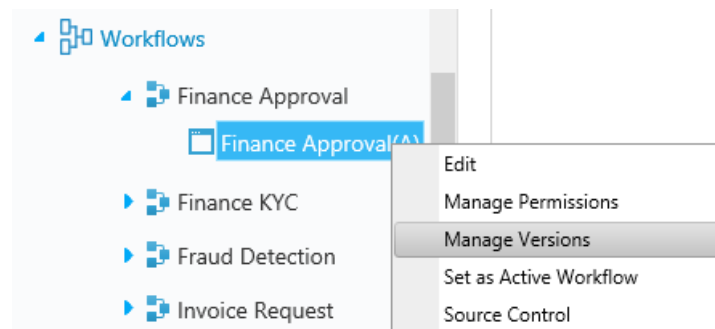
Here are some examples of why you might wish to overwrite an existing version:

- The packaged version is a newer version from a development or testing environment, and you now want to deploy that newer version to your production environment.
- You have made changes to a workflow that you wish to rollback. Therefore, you are restoring a saved package and overwriting these undesirable changes.

*Note: This action requires careful attention, since it may cause data loss in existing Flowtime processes.*

### To restore a workflow from a package:

1. In the **Administration**, in the Workflows tree, find the workflow for which you want to restore a version. Right-click it and select **Manage Versions**.








**Workflows Tree**

The *Manage Versions* wizard opens.

Manage "Finance Approval" Versions  
Manage workflow versions using the options below.

What would you like to do?

-  [Create a new workflow version](#)  
Create a new version of this workflow under this workflow space.
-  [Create a copy of this workflow](#)  
Create a copy of this workflow and save it with a new name.
-  [Restore workflow](#)  
Restore a workflow version from a saved package.
-  [Manage saved packages](#)  
Manage saved workflow version packages, or create a new workflow version package.
-  [Create a new workflow package](#)  
You can export the package as a zip file.

Close

### Manage Versions

2. Click **Restore Workflow**. The *Restore Workflow* screen appears.

Restore "Finance Approval" workflow  
Restore a workflow version from a saved package.

Choose the workflow zip file you would like to restore

Overwrite existing workflow version

Create new version and make this version active

Generate new data tables (UACT...) for the duplicated activities

#### Restore Workflow

3. Select the .zip file of the workflow package you wish to restore.
4. Select if to **overwrite the existing version with the package (and make this version active)**, or if to **create a new version** with the package. If you selected the latter option, you can also select whether or not to **Generate new data tables (UACT...) for duplicate activities**.
5. Click **Restore**. The following screen appears:



Restore "Finance Approval" workflow

ObjectsList

- SystemTables
  - SystemTable (tblConnectionString)
  - SystemTable (tblCredentials)
  - SystemTable (tblWorkFlowExtraObjects)
  - SystemTable (tblWebServiceConsumers)
  - SystemTable (tblWebServiceListeners)
  - SystemTable (tblExternalAssemblies)
  - SystemTable (tblMessageBehaviorTypes)
  - SystemTable (tblWcfConsumers)
  - SystemTable (tblSAPConsumers)
  - SystemTable (tblSAPConnections)
  - SystemTable (tblCrmConnections)
  - SystemTable (tblCrm2011Connections)
  - SystemTable (tblSharePointConnections)
  - SystemTable (tblRestWcfConsumers)
  - SystemTable (tblTemplateWorkflowStages)
  - SystemTable (tblEmployeeTitle)

Data import options for all UTCMB tables: Incremental

File import options for all external files: Overwrite Existing File

Select general settings for UTCMB tables and external files (this will modify any specific selections in the tree above).

Buttons: Validate, Back, Next, Cancel

#### Select Objects

6. Select the objects to restore from the list of all objects contained in the package. You can click **Validate** to validate the workflow package before import.

*Note: See the [Deployment Best Practices guide for which objects to select depending on your project methodology and application topology.](#)*

7. (Optional) You can select general import settings for UTCMB tables and external files from the drop-down boxes. These settings will override any specific selections in the tree above.
  - **Data import options for all UTCMB tables:** Incremental / Overwrite Existing Data
  - **File import options for all external files:** Keep Existing Files / Overwrite Existing Files
8. Click **Next**. Several user mapping screens will appear enabling you to map between users and permissions relevant to this workflow from the source to the target environment.

Workflow Pre Import Actions - Map Recipients (Not Matched)

System could not find match for these items.

| Source                                     | Target                          | Type |
|--|---------------------------------|------|
| Viki Kuznetsov - Sharoni (pnmssoft\vickik) | ...                             | User |
| Helen White (SEQDEV\helen)                 | Alex Dyukin (PNMSOFT\alex)      | User |
| Peter Green (SEQDEV\peter)                 | Andrew Hart (PNMSOFT\Andrew)    | User |
| Jack Silver (SEQDEV\jack)                  | Andrew Murphy (PNMSOFT\andrewm) | User |

Back

Next

Cancel

**Map Recipients**

After you have completed the user mappings, the following screen appears:

Ready to Import the Workflow

Click Import to begin the import.

If you want to review or change any of your import settings, click Back. Click Cancel to exit the wizard.

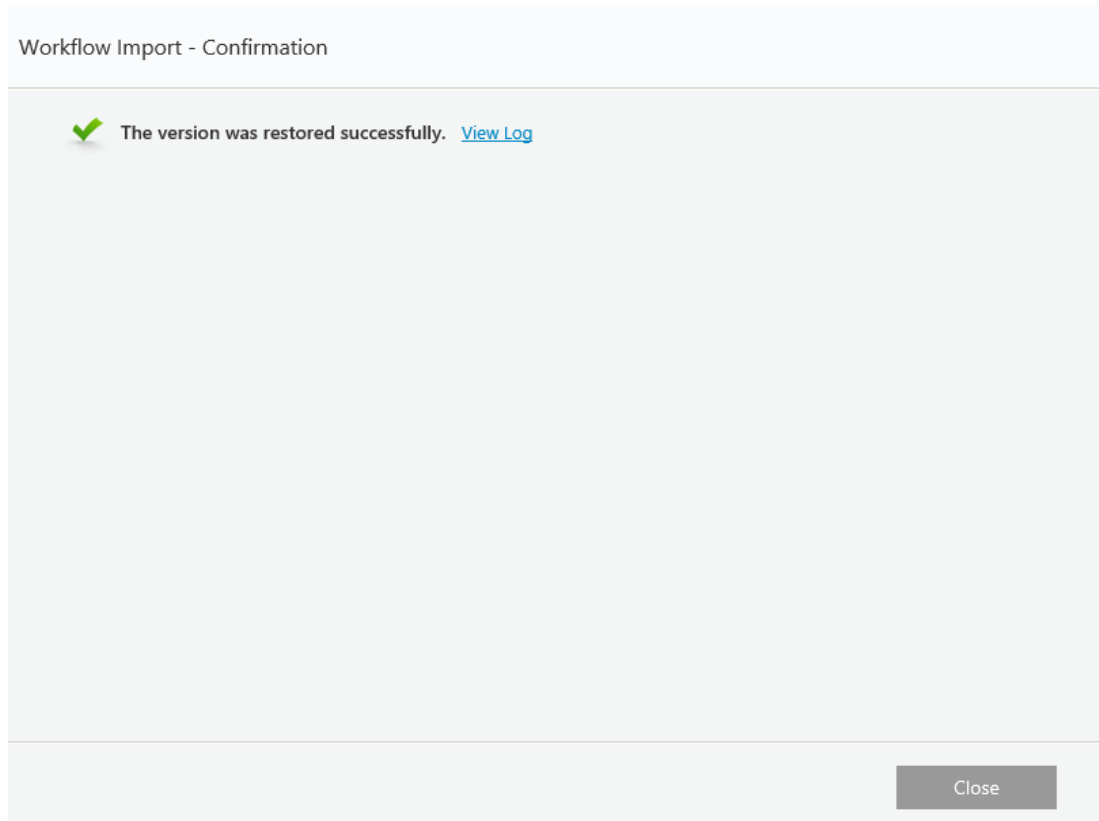
Back

Import

Cancel

**Ready to Import**

9. Click **Import**. The *Confirmation* screen appears, notifying you that the import was completed successfully. Click **View Log** to view the import log.



**Confirmation Screen**

10. Click **Close**. The workflow is restored (either as a new version, or overwriting the existing version – depending on which option you selected in the wizard).

*Note: At the end of the restore process, define permissions according to the appropriate user's role, group membership, and position in the organization, if you have not fully mapped permissions during the restore.*

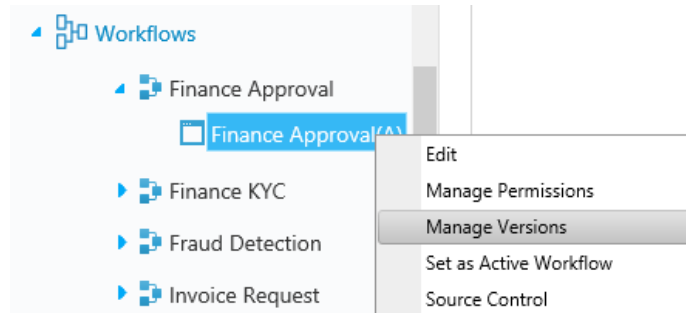
A log file is generated and placed under the "Shared Resources" folder. The log file allows the user to detect incompatibilities that may have appeared during the import process, and to fix those problems before re-attempting a restore action.

## Creating a New Version

You can create a new version of a workflow from the Manage Versions wizard.

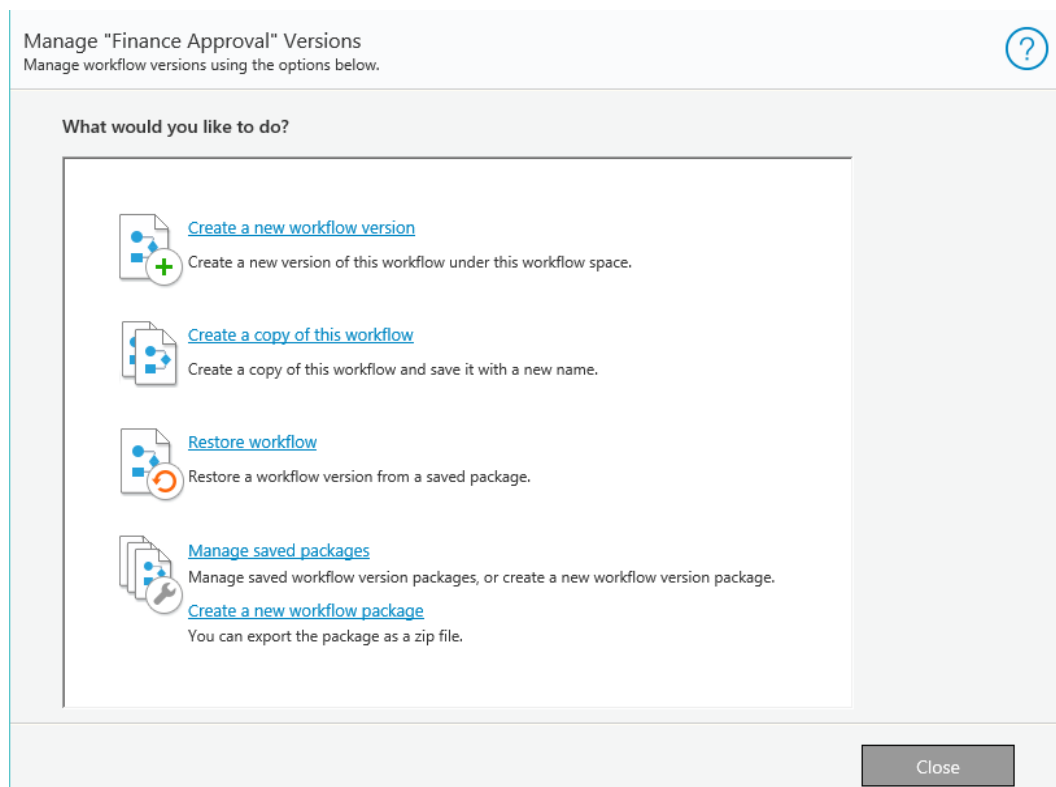
### To create a new version:

1. In the **Administration**, in the Workflows tree, find the workflow for which you want to create a new version. Right-click it and select **Manage Versions**.



**Workflows Tree**

The *Manage Versions* wizard opens.



**Manage Versions**

2. Click **Create a new workflow version**. The *New Version Wizard* screen appears.

Create new version for "Finance Approval" workflow  
Create a new version of this workflow under the same workflow space.

**Name**  
Finance Approval\_13032016112916

Generate new data tables (UACT..) for the duplicated activities  
 Make new version active

**Create New Version**

3. Enter the **Name** of the new version.
4. If you select **Generate new data tables (UACT...)**, the UACT tables will be duplicated with an extension and used as the new workflow version's data source. If you do not select this option, the new version will use the same data storage as the existing active workflow version.
5. Select/deselect **Make new version active** depending on if you want the new version to be the active version or not.
6. Click **Create**. When completed, the *Version Creation Status* screen opens, informing you if operation was a success.

Version creation status for "Finance Approval" workflow

 New workflow version was created successfully.

Close

**Version Creation Status**

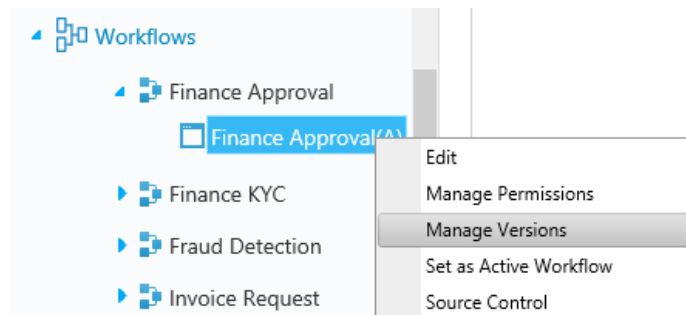
7. Click **Close**. The new workflow version is now in the workflow space alongside the existing version(s).

## Creating a Copy of a Workflow

You can create a copy of a workflow and have it placed in a new workflow space using the Manage Versions wizard.

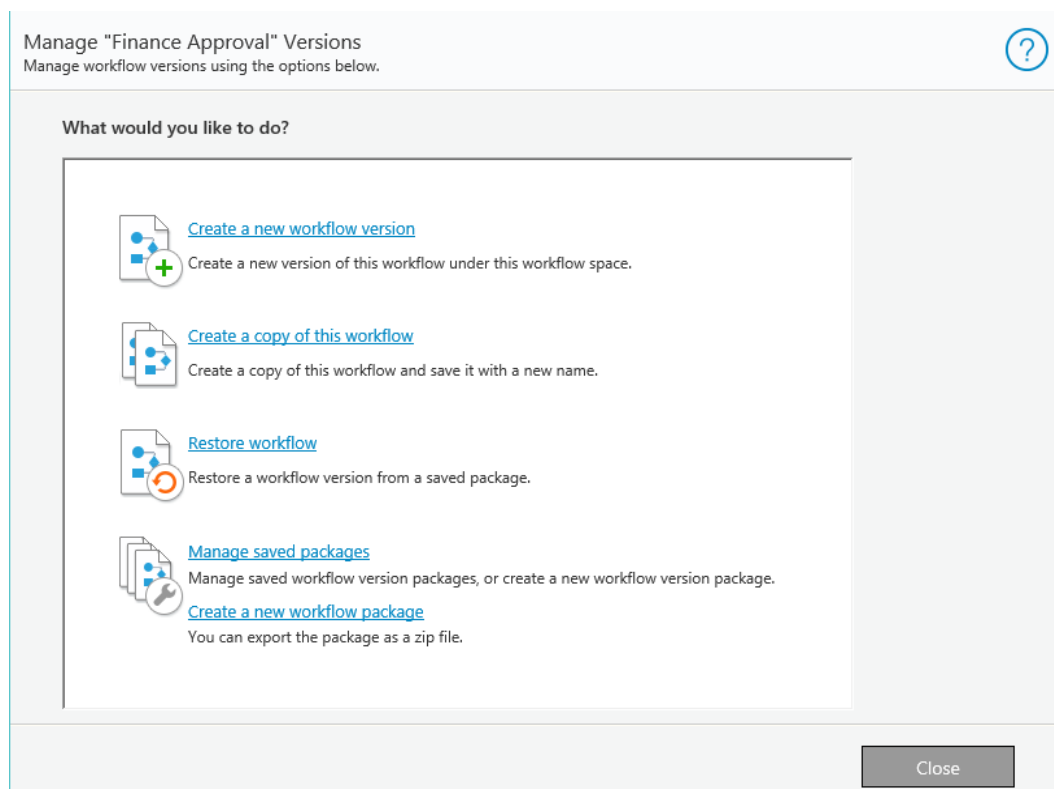
### To create a copy of a workflow:

1. In the **Administration**, in the Workflows tree, find the workflow for which you want to create a copy. Right-click it and select **Manage Versions**.



**Workflows Tree**

The *Manage Versions* wizard opens.



**Manage Versions**

2. Click **Create a copy of this workflow**. The *Create a Copy of Workflow* screen appears.

Create a copy of "Finance Approval" workflow  
Create a copy of this workflow and save it with a new name in a new workflow space.

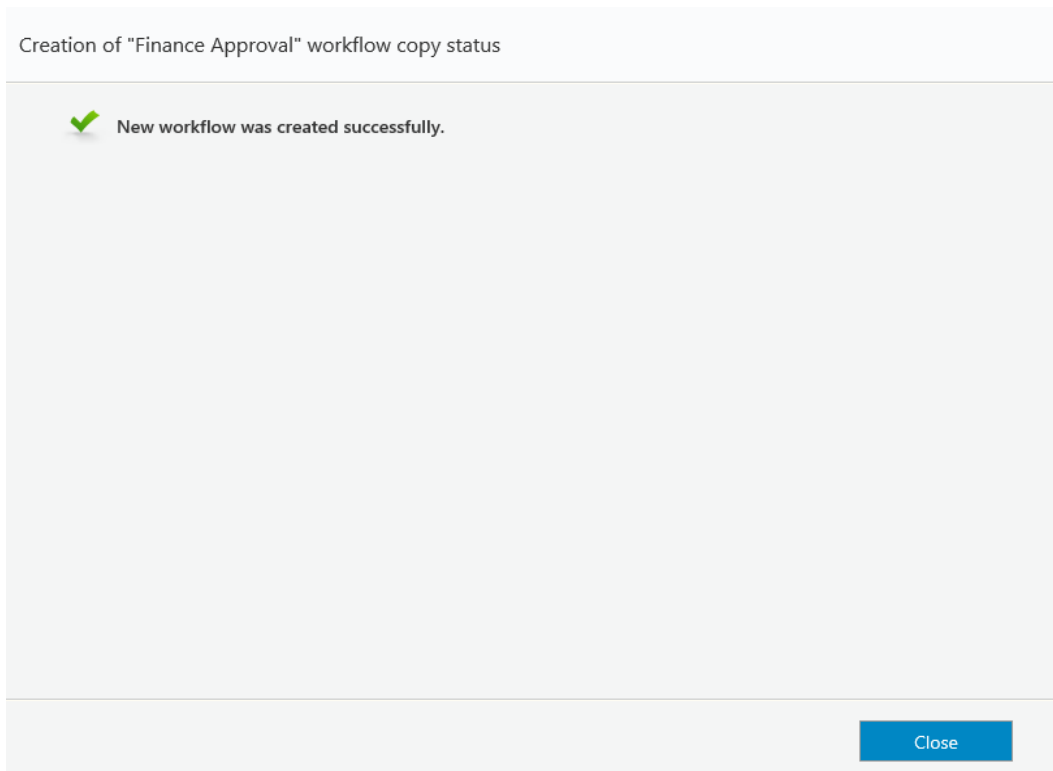
Name  
Ver\_A

Create Cancel

**Workflow Duplication Wizard**

3. Enter the **Name** of the new workflow.
4. Click **Create**. When completed, the *Confirmation* screen opens.





**Confirmation Screen**

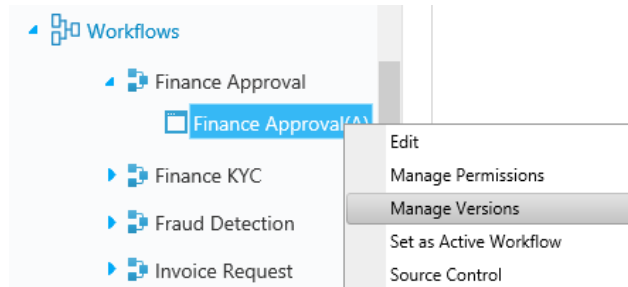
5. Click **Close**. The new workflow now appears in the workflow tree in its own workflow space.

## Managing Saved Packages

You can view and manage saved workflow packages from the Manage Versions wizard.

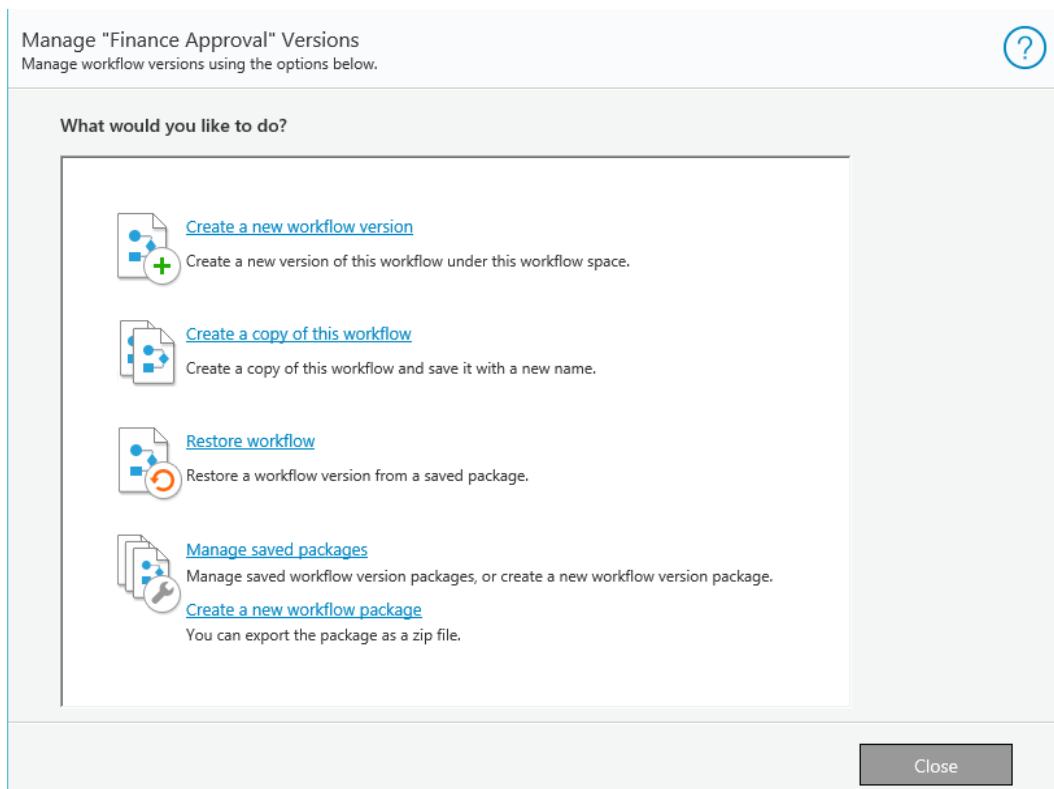
**To manage saved packages:**

1. In the **Administration**, in the Workflows tree, find the workflow which you want to manage. Right-click it and select **Manage Versions**.



**Workflows Tree**

The *Manage Versions* wizard opens.






**Manage Versions**

2. Click **Manage saved packages**. The *Manage Saved Packages* screen appears:

Manage saved packages for "Finance Approval" workflow


Manage saved workflow packages. You can download a saved package as a zip file or restore it and overwrite the existing version.

| Name  | Comments                        | Date       | Archived By          |                          |                         |   |
|-------|---------------------------------|------------|----------------------|--------------------------|-------------------------|---|
| Ver_C | This is the development vers... | 13/03/2016 | System Administrator | <a href="#">Download</a> | <a href="#">Restore</a> |  |
| Ver_B |                                 | 13/03/2016 | System Administrator | <a href="#">Download</a> | <a href="#">Restore</a> |  |
| Ver_A |                                 | 13/03/2016 | System Administrator | <a href="#">Download</a> | <a href="#">Restore</a> |  |

[+ Create new package](#)

Close

**Manage Saved Packages**

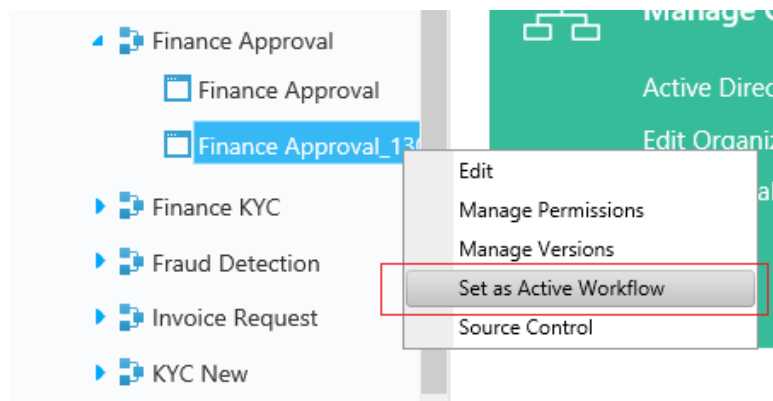
- Select a package and click **Download** to download the package .zip.
- Click **Restore** to restore the package.
- Click  to delete the package.
- Click **+ Create new package** to create a new package.

## Setting a Version as the Active Version

When you have several versions of a workflow in the same workflow space, one of these versions is the active version. New instances of the process run by default on the active version.

**To set another version of a workflow as the active version:**

1. In the **Administration**, in the Workflow tree, right click the version you want to set as the active version, and click **Set as Active Workflow**.



**Set as Active Workflow**

The version now shows an (A) appended to its name, indicating that it is now the active version.

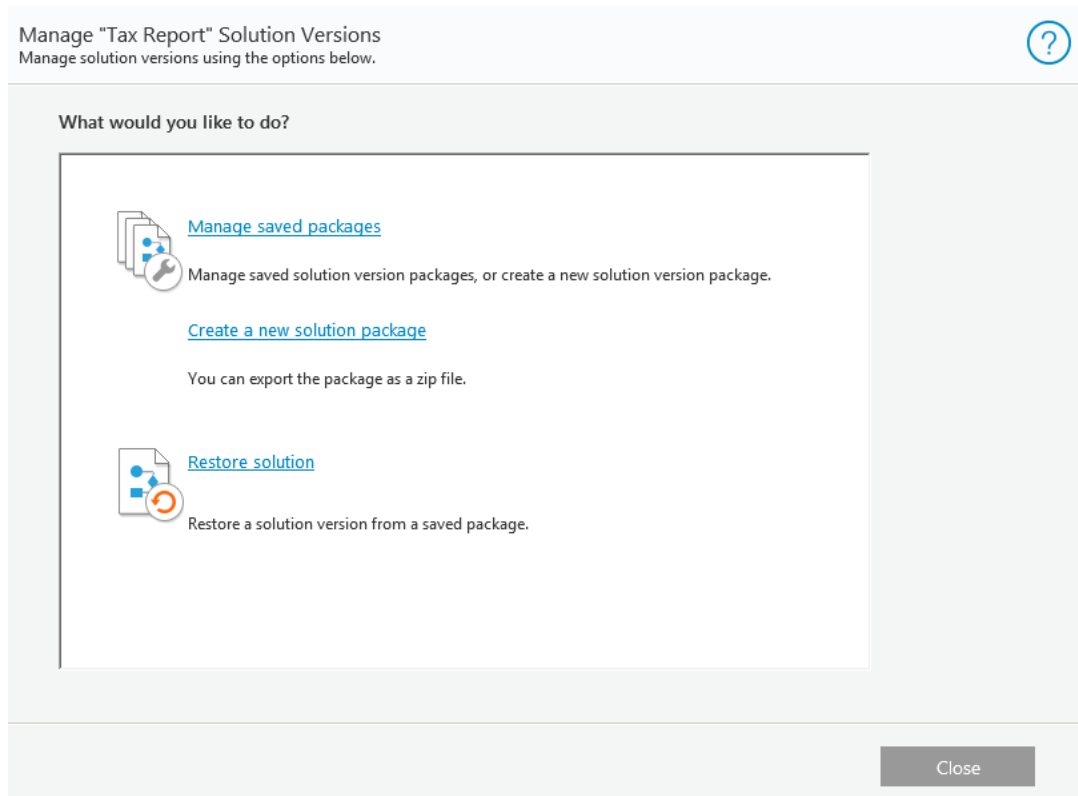
## Solution Version Management

APPLIES TO: Sequence 8.x

Creating solution versions and importing them into another Sequence environment is very similar to performing the same actions on workflows (as described in the sections above). This section notes a few differences and issues to be aware for solution version management.

To manage solution versions, right-click the solution, and select **Manage Versions**.

The Solution Version Management wizard appears:



**Solution Version Management Wizard**

Here you can perform version management actions such as creating package for export, restoring (importing) a saved package, and managing saved packages.

### Restoring a Version

If you restore a solution which already exists in your environment, you will overwrite the existing version with the restored version.

### Solution Export/Import

#### Which elements are included?

When creating a solution package for export/import, it is important to note that only the Solution definition is included in the package, but not the solution's workflows. This definition includes elements such as Reference to the master workflow, Resources References, Plan (for HotOperations solutions), etc. You must export/import the solution's workflows separately.

*Note: from version 8.2, during import, you can map the Plan Allocation resource groups from source to target environment.*

Solution Pre Import Actions - Plan Allocation Resource

| Source               | Target  |
|----------------------|---|
| East Operations Team | East Operations Team <input type="button" value="..."/> |
| West Operations Team | West Operations Team <input type="button" value="..."/> |

Back Next Cancel

**Plan Allocation Resource Mapping**

## Import Validation

When you import a solution package, you can validate that the package includes all the necessary elements, by clicking **Validate**:

Ready to Import the Solution

Click Import to begin the import.

If you want to review or change any of your import settings, click Back. Click Cancel to exit the wizard.

Validate Back Import Cancel

### Import Validation

Sequence validates if the Solution package includes required elements such as Roles, Master Workflow, Resources (for HotOperations solutions).

If the validation succeeds, a success message appears. Otherwise, the missing elements are listed.

## Best Practices

For information about Version Management and Deployment best practices, see the following resources:

- [Workflow Versioning Best Practices](#)
- [Deployment Best Practices](#)
- [Deployment Template](#)