

Component Reference Guide

Description of the SLIP:td components

Contents

Document History	3
Introduction	4
General configuration	5
String options	5
Conditional Execution	6
SLIP Converters	7
SLIP Core Converters	7
XML Source Reference Splitter	7
XSL Transformation 1.0 Converter	7
Ensure Subtask Preconverter	8
Load Task Source Preparator	8
Open Office XML (OOX) Converter Pack	9
Office Open XML Content Control Update	9
Office Open XML Document Header Footer Removal	10
Office Open XML Document Repair	11
Office Open XML Lock Fields	11
SLIP Client Automation Services (CAS) Converter Pack	11
Excel Client Automation Service Converter	12
PowerPoint Client Automation Service Converter	13
Publisher Client Automation Service Converter	14
Visio Client Automation Service Converter	15
Word Client Automation Service Converter	17
CAS: Upgrade Word Document	18
SLIP PDF Converter Pack	19

	Image to PDF Converter	19
	PDF Compound Converter	20
	PDF Page Number Converter	20
	PDF Watermark Converter	22
	PDF Label Converter	24
	SLIP HTML Converter Pack	26
	SharePoint Word Document to HTML Converter	26
	SLIP Word Document to HTML Converter	27
	SLIP Word Automation Service Converter Pack	28
	Upgrade Word Document Converter	28
	Word Document To MHTML Converter	28
	Word Document To PDF Converter	29
	Word Document To XPS Converter	29
SLI	P Deployers	31
	File System Deployer	31
	List Deployer	32
	Page Deployer	35
	Template Page Deployer	37
	SharePoint Deployer Common Permissions Setting	39
,	Work Library Deployer	42
SLI	P Preparators	44
	Load Task Source Preparator	44
	Assign Task Priority	44
	Define Task Scheduling	44
	Task Action Preparator	45
	Task Expiration Preparator	46
	Task Filter Preparator	47

Document History

Date	Description
September 13, 2011	Started document.
November 8, 2011	Updated information on SharePoint deployers for permission management.
December 1, 2011	Added information on PDF Label Converter.
December 22, 2011	Updated images of components to reflect new conditional processing setting and added section under General Configuration about conditional processing.
December 27, 2011	Added information on new Assign Task Priority and Define Task Scheduling preparators.
February 28, 2012	Adding information on CAS: Upgrade Word Document converter.
September 11, 2012	Adding information on new SharePoint deployer parameter 'Version history'.
November 26, 2012	Adding information on new OOX converter for building metadata from document content.

Introduction

SLIP:td includes a wide range of components that can be configured to suit most enterprise needs. This document describes the purpose and configuration options of the out of the box SLIP:td components which can be assigned to a SLIP Profile.

The SLIP:td components are used to solve general conversion and deployment requirements . Please refer to the remaining SLIP documentation for details on how to install, configure and use the various components.

The sections are organized by type and the package the component is included in.

General configuration

String options

The SLIP:td components are all highly configurable with several settings exposed making it possible to meet most business requirements without code changes. Below are some general string options which can be used when creating profiles and setting up the components.

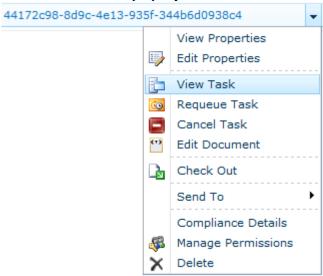
Simple string value

Setting="This is just a plain string"

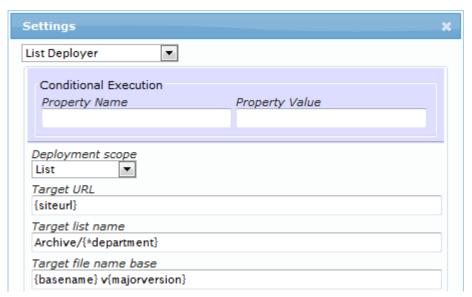
Reference a metadata property

Setting="Include a metadata value from the task item {sitetitle} or from the schema{*department}"

NOTE: The available property names can be found using the "View Task" action menu:



The below sample illustrates how to use each options alone or in combination to setup a generic archiving solution



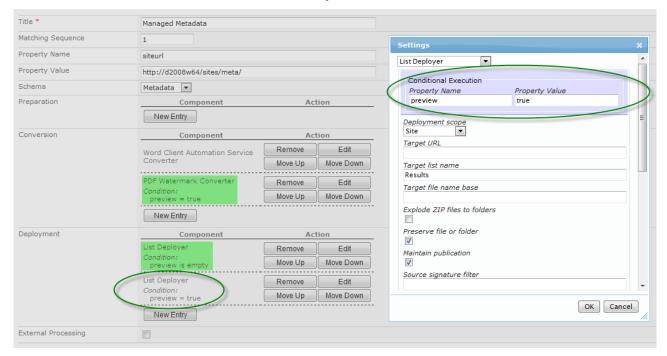
Conditional Execution

The *Conditional Execution* settings exist for all components. They allow you to enable or disable a component based on the value of a piece of metadata without having to create an entirely separate profile.

Say, for example, that you have created a profile that takes care of all the steps to convert and deploy documents from your DMS into your front end site. Now you want to introduce previewing functionality. One way to do this is to deploy into a separate site. This means that the entire conversion logic should remain the same but at the end, the task deployment should be split into production and preview respectively.

This is simply done by adding a deployer with a condition of *preview* = *true* (here we assume that preview tasks are special in that they always contains a property named *preview* that has value *true*). Since preview tasks should not be deployed to the standard site, we also need a condition for the base deployer to prevent it from executing when the preview property is set. That condition should be *preview is empty*.

As a final touch, we want to put a watermark on any PDF files that come through the preview pipeline, so we add a PDF Watermark Converter with a condition of *preview* = *true*.



Task property values can be booleans, URIs, strings, integers, date and time values, etc. The property value that you specify in the Conditional Execution panel is compared case-insensitively to the string-representation of the task property value referred to by the property name field. The string-representation is created using the invariant culture. When the property value field is empty the condition is that the task must have no property with the given name that is not empty or the component will not be executed for that task.

SLIP Converters

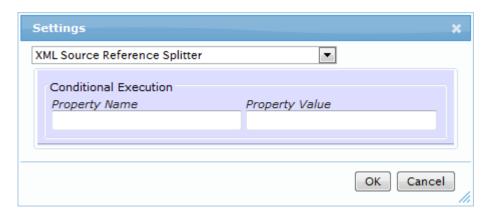
TBD - Introduction to converters and converter packs

SLIP Core Converters

There are a few specialized converters included in the core SLIP Task List infrastructure solution.

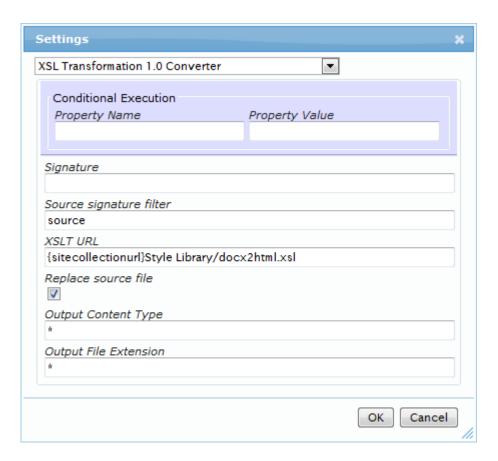
XML Source Reference Splitter

The XML Source Reference Splitter is a specialized converter included in the core SLIP infrastructure. The converter takes a task that must contain an XML document with a list of URLs to documents that should be published. In addition the task may contain a user token that limits the source document versions to only major versions; usually one does not want to publish draft items.



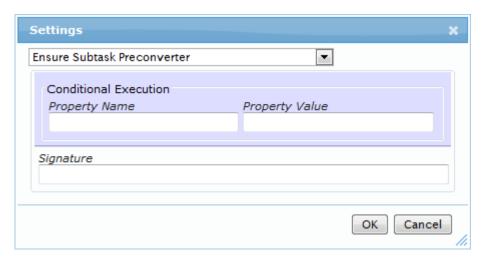
XSL Transformation 1.0 Converter

The XSL Transformation 1.0 Converter is a specialized converter included in the core SLIP infrastructure. The converter allows you to perform an XSL transformation upon one or more source XML files. The output can be HTML, XML or plain text.



Ensure Subtask Preconverter

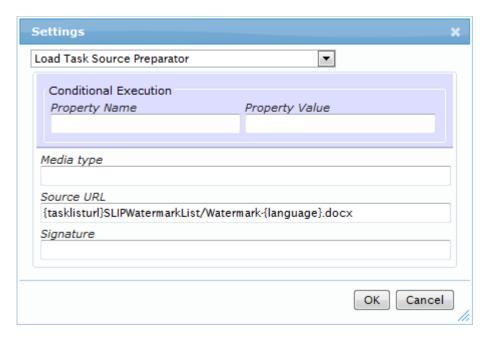
The *Ensure Subtask Preconverter* is a specialized converter included in the core SLIP infrastructure. The converter simply verifies that a set of subtasks have completes successfully. This is useful when performing operations that include several source documents that need a final joining action like PDF compounding for instance.



Load Task Source Preparator

The Load Source Preparator will attach a source file to an existing task. This is useful when tasks are batch-generated because the time it takes to transfer the binary source files may be inconvenient to the UI. That

way the source file transfer is done only when required. Also, the watermark construction uses this to load its template prior to the actually PDF Watermark manipulation starts.



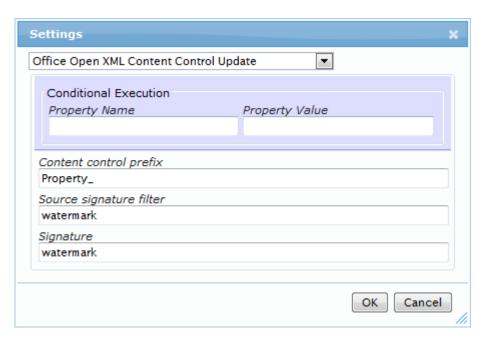
Open Office XML (OOX) Converter Pack

The name of the Open Office XML (OOX) Converter Pack SharePoint solution file is *SLIP OOX Converter Pack.wsp*.

The Office Open XML format enables programmatic manipulation without the use of Office client applications. SLIP:td includes some special purpose converters that manipulate Word documents using the Open XML SDK 2.0 for Microsoft Office:

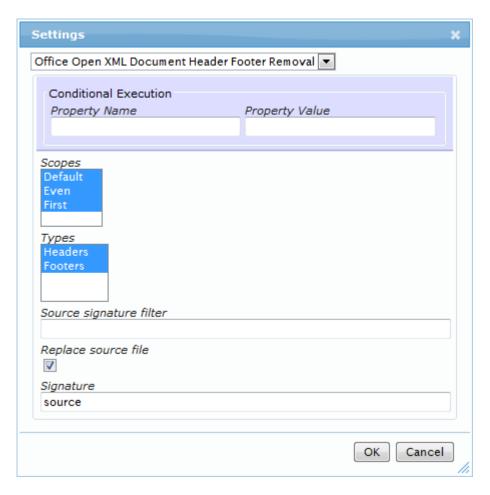
Office Open XML Content Control Update

The *Office Open XML Content Control Update* can populate Word Content Controls with metadata properties from the SLIP task. This converter is commonly used in the SLIP PDF Watermark solution.



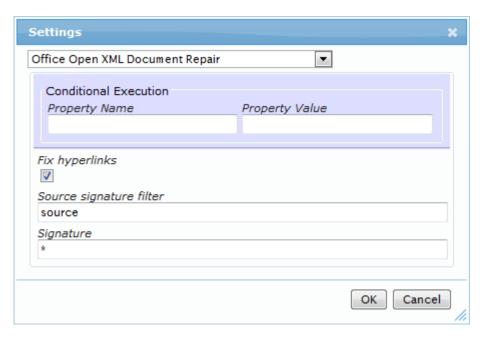
Office Open XML Document Header Footer Removal

The Office Open XML Document Header Footer Removal can remove headers and/or footers from Word documents.



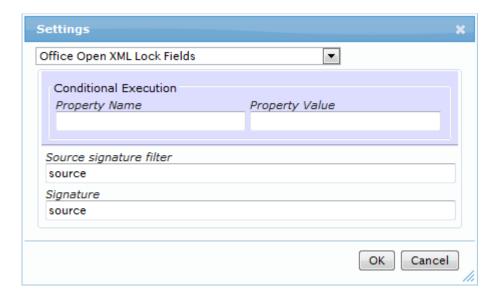
Office Open XML Document Repair

The Office Open XML Document Repair corrects some errors that may emerge when Word documents are upgraded from binary format to Office Open XML format and may prevent the documents from being processed using the Office Open XML SDK.



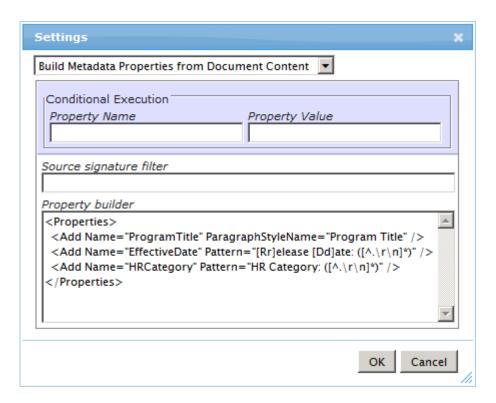
Office Open XML Lock Fields

The Office Open XML Lock Fields sets the lock flag on Word fields. This is necessary when saving as PDF/XPS with WAS because that will update all fields in the document and that is not always desired (e.g. FILE fields).



Build Metadata Properties from Document Content

This converter can read the contents of an Office Open XML document and, based on specified style name and pattern filters, generate metadata properties and add them to the publication metadata.



The properties are generated with *Add* elements that have a required attribute *Name* which specifies the name of the property. Further, either the *ParagraphStyleName* or the *Pattern* attribute must exist on the Add element. *ParagraphStyleName* specifies the display name (the same name you see in Word) of the paragraphs that are searched. Patterns specify a regular expression that is used to select text content. If both are specified, the expression is applied to paragraphs of the specified style only. The special regular expression symbols ^ and \$ match the beginning and end of each paragraph respectively.

For regular expressions the result of the expression is the first capturing group – i.e. the contents of the first parenthesis – except if there are no capturing groups in which case the result is the entire matched value.

Please review the following example for clarification:

```
<Properties>
  <Add Name="ProgramTitle" ParagraphStyleName="Program Title" />
  <Add Name="EffectiveDate" Pattern="[Rr]elease [Dd]ate: ([^.\r\n]*)" />
  <Add Name="HRCategory" Pattern="HR Category: ([^.\r\n]*)" />
  <Add Name="BitOfHeading" ParagraphStyleName="Heading1" Pattern="\w+ ([Oo]f) \w+" />
</Properties>
```

The properties generated by this converter enjoy the benefit of all the metadata manipulation functions defined in the schema mapping. No special syntax is required here. The generated properties are just like properties originating in the document management system.

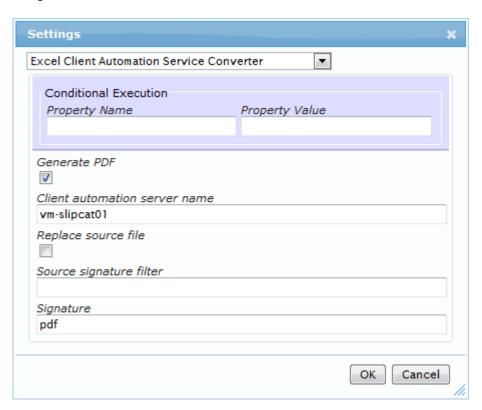
SLIP Client Automation Services (CAS) Converter Pack

SLIP:td includes converters utilizing the *Client Automation Service* (CAS), which is a Windows service that automates Microsoft Word, Excel, PowerPoint and Publisher enabling SLIP to generate PDF, XPS and MHTML files and upgrading binary formats to the newer Office Open XML format.

While the CAS performs the actual conversion work, the actual control elements are the CAS converters installed by activating the *SLIP CAS Converter Pack* site collection feature and configured on the SLIP profiles.

Excel Client Automation Service Converter

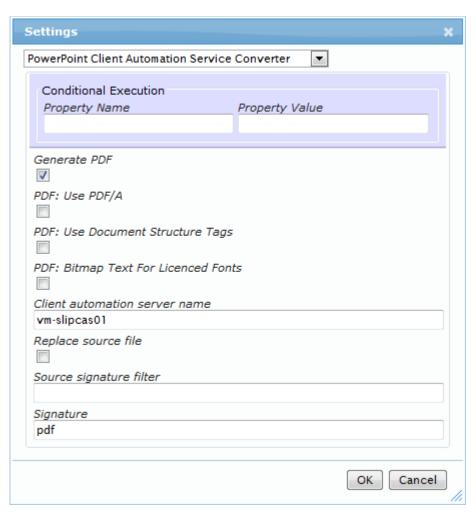
The Excel Client Automation Service Converter is part of the SLIP SharePoint Client Automation Services solution and installed by activating the SLIP CAS Converter Pack site collection feature. The converter handles documents that can be opened by Microsoft Excel and the primary function is to generate PDF files using the Client Automation Service.



Setting	Description
Generate PDF	Specify whether to generate a PDF file
Client automation server name	Specify a host or DNS name to the server processing the conversion synchronously
Replace source file	When enabled the source file is replaced by the converted file. When disabled the converted file is added to the task alongside the source file
Source signature filter	Filters the task sources by creator signature, if specified. Will only deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted with the deployer. When using the * the input signature is written automatically to the output format.

PowerPoint Client Automation Service Converter

The Excel Client Automation Service Converter is part of the SLIP SharePoint Client Automation Services solution and installed by activating the SLIP CAS Converter Pack site collection feature. The converter handles documents that can be opened by Microsoft PowerPoint and the primary function is to generate PDF files using the Client Automation Service.

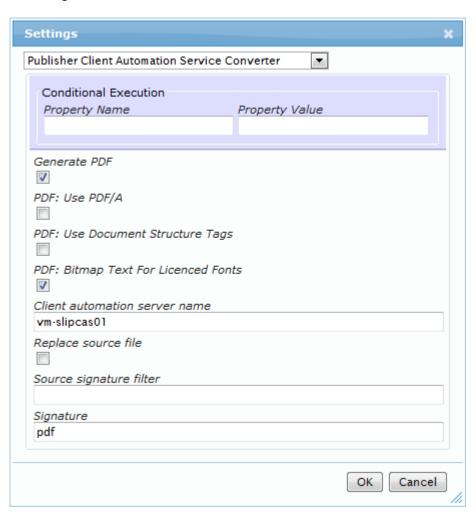


Setting	Description
Generate PDF	Specify whether to generate a PDF file.
PDF: Use PDF/A	Ensure that the output PDF conforms to ISO 19005-1 (PDF/A).
PDF: Use Document Structure Tags	Tags the PDF text with invisible structural markup for accessibility.
PDF: Bitmap Text Licensed Fonts	If checked replaces the fonts with bitmap representations (larger file
	and text may appear jagged when zoomed). If unchecked the
	licensed fonts may be substituted by the PDF reader application.
PDF/XPS: Lock fields	If checked all fields are locked before saving to prevent automatic
	update. If unchecked, fields are allowed to update automatically and
	that is not always desired (e.g. FILE fields).
Client automation server name	Specify a host or DNS name to the server processing the conversion
	synchronously.
Replace source file	When enabled the source file is replaced by the converted file. When
	disabled the converted file is added to the task alongside the source

	file.
Source signature filter	Filters the task sources by creator signature, if specified. Will only
	deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted
	with the deployer. When using the * the input signature is written
	automatically to the output format.

Publisher Client Automation Service Converter

The *Publisher Client Automation Service Converter* is part of the *SLIP SharePoint Client Automation Services* solution and installed by activating the *SLIP CAS Converter Pack* site collection feature. The converter handles documents that can be opened by Microsoft Publisher and the primary function is to generate PDF files using the Client Automation Service.

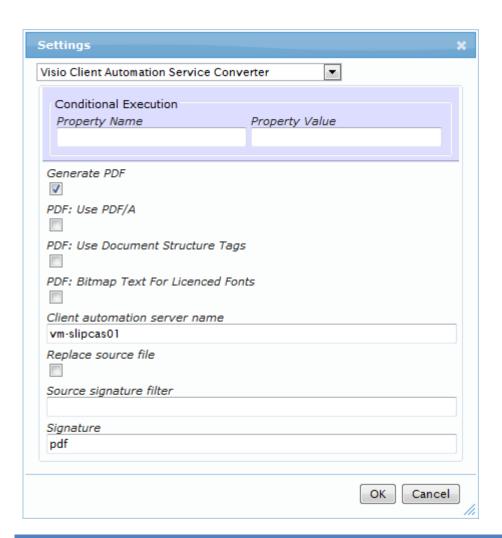


Setting	Description
Generate PDF	Specify whether to generate a PDF file.
PDF: Use PDF/A	Ensure that the output PDF conforms to ISO 19005-1 (PDF/A).
PDF: Use Document Structure Tags	Tags the PDF text with invisible structural markup for accessibility.
PDF: Bitmap Text Licensed Fonts	If checked replaces the fonts with bitmap representations (larger file
	and text may appear jagged when zoomed). If unchecked the

	licensed fonts may be substituted by the PDF reader application.
PDF/XPS: Lock fields	If checked all fields are locked before saving to prevent automatic
	update. If unchecked, fields are allowed to update automatically and
	that is not always desired (e.g. FILE fields).
Client automation server name	Specify a host or DNS name to the server processing the conversion
	synchronously.
Replace source file	When enabled the source file is replaced by the converted file. When
	disabled the converted file is added to the task alongside the source
	file.
Source signature filter	Filters the task sources by creator signature, if specified. Will only
	deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted
	with the deployer. When using the * the input signature is written
	automatically to the output format.

Visio Client Automation Service Converter

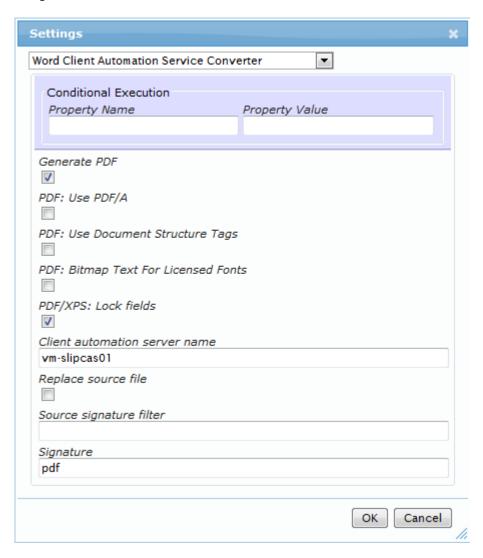
The *Visio Client Automation Service Converter* is part of the *SLIP SharePoint Client Automation Services* solution and installed by activating the *SLIP CAS Converter Pack* site collection feature. The converter handles documents that can be opened by Microsoft Visio and the primary function is to generate PDF files using the Client Automation Service.



Setting	Description
Generate PDF	Specify whether to generate a PDF file.
PDF: Use PDF/A	Ensure that the output PDF conforms to ISO 19005-1 (PDF/A).
PDF: Use Document Structure Tags	Tags the PDF text with invisible structural markup for accessibility.
PDF: Bitmap Text Licensed Fonts	If checked replaces the fonts with bitmap representations (larger file and text may appear jagged when zoomed). If unchecked the licensed fonts may be substituted by the PDF reader application.")
PDF/XPS: Lock fields	If checked all fields are locked before saving to prevent automatic update. If unchecked, fields are allowed to update automatically and that is not always desired (e.g. FILE fields)
Client automation server name	Specify a host or DNS name to the server processing the conversion synchronously
Replace source file	When enabled the source file is replaced by the converted file. When disabled the converted file is added to the task alongside the source file
Source signature filter	Filters the task sources by creator signature, if specified. Will only deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted with the deployer. When using the * the input signature is written automatically to the output format.

Word Client Automation Service Converter

The Word Client Automation Service Converter is part of the SLIP SharePoint Client Automation Services solution and installed by activating the SLIP CAS Converter Pack site collection feature. The converter handles documents that can be opened by Microsoft Word. The primary function of the converter is to generate PDF, XPS and MHTML files and upgrading binary formats to the newer Office Open XML format using the Client Automation Service.

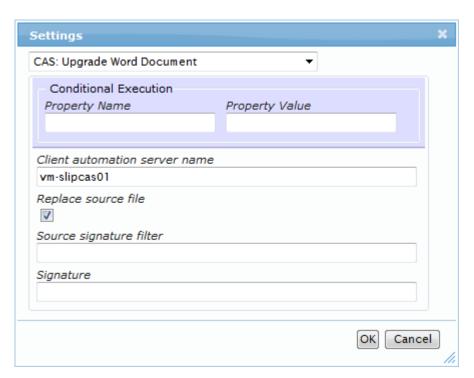


Setting	Description
Generate PDF	Specify whether to generate a PDF file.
PDF: Use PDF/A	Ensure that the output PDF conforms to ISO 19005-1 (PDF/A).
PDF: Use Document Structure Tags	Tags the PDF text with invisible structural markup for accessibility.
PDF: Bitmap Text Licensed Fonts	If checked replaces the fonts with bitmap representations (larger file and text may appear jagged when zoomed). If unchecked the licensed fonts may be substituted by the PDF reader application.
PDF/XPS: Lock fields	If checked all fields are locked before saving to prevent automatic update. If unchecked, fields are allowed to update automatically and that is not always desired (e.g. FILE fields).
Client automation server name	Specify a host or DNS name to the server processing the conversion

	synchronously.
Replace source file	When enabled the source file is replaced by the converted file. When disabled the converted file is added to the task alongside the source file.
Source signature filter	Filters the task sources by creator signature, if specified. Will only deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted with the deployer. When using the * the input signature is written automatically to the output format.

CAS: Upgrade Word Document

This converter is part of the *SLIP SharePoint Client Automation Services* solution and installed by activating the *SLIP CAS Converter Pack* site collection feature. The converter upgrades Word documents to the newest format available.



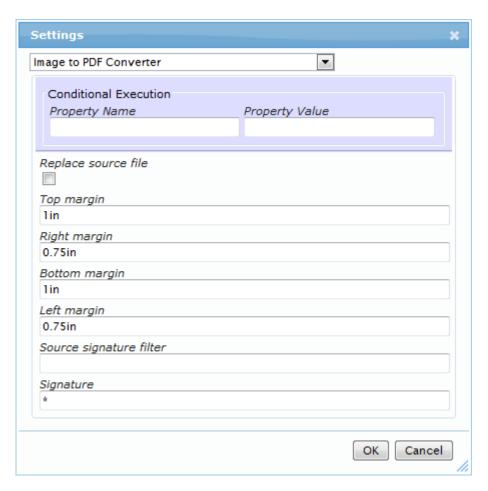
Setting	Description
Client automation server name	Specify a host or DNS name to the server processing the conversion synchronously.
Replace source file	When enabled the source file is replaced by the converted file. When disabled the converted file is added to the task alongside the source file.
Source signature filter	Filters the task sources by creator signature, if specified. Will only deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted with the deployer. When using the * the input signature is written automatically to the output format.

SLIP PDF Converter Pack

SLIP:td includes a series of converters that create and manipulate PDF document using PDFsharp.

Image to PDF Converter

The *Image to PDF Converter* generates a single-page PDF document with an image from a GIF, JPEG, PNG or TIFF file.

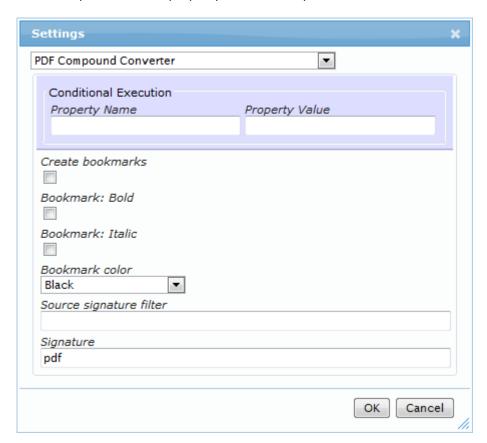


Setting	Description
Replace source file	When enabled the source image is replaced by the PDF document. When disabled the PDF document is added to the task alongside the
	source image.
Top margin	Specify the top margin.
Right margin	Specify the right margin.
Bottom margin	Specify the bottom margin.
Left margin	Specify the left margin.
Source signature filter	Filters the task sources by creator signature, if specified. Will only
	deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted
	with the deployer. When using the * the input signature is written
	automatically to the output format.

PDF Compound Converter

The *PDF Compound Converter* generates one big PDF document from several smaller ones. It can optionally create an outline (navigation bookmarks) in the resulting document.

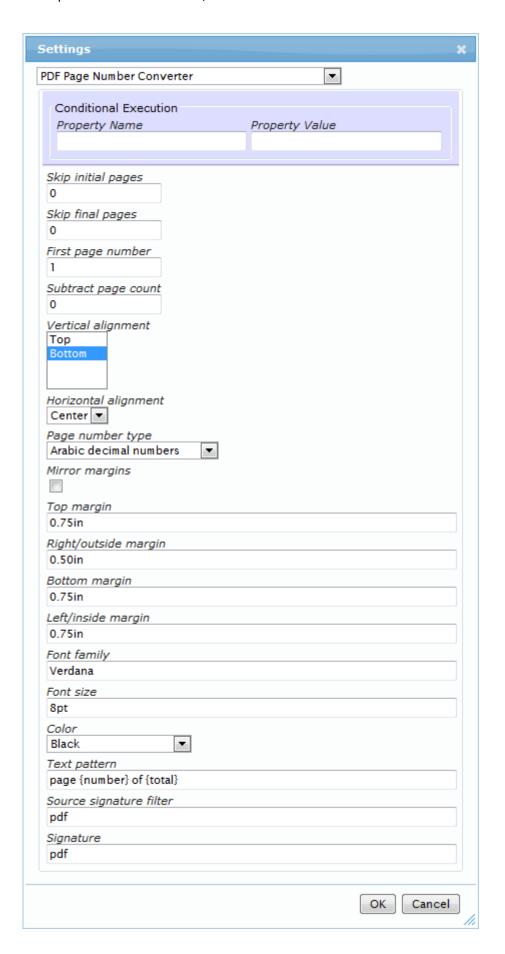
TBD – sample XML file or property from PA Compound??



Setting	Description
Bookmark: Bold	When enabled
Bookmark: Italic	When enabled
Bookmark: Color	Select the color
Source signature filter	Filters the task sources by creator signature, if specified. Will only
	deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted
	with the deployer. When using the * the input signature is written
	automatically to the output format.

PDF Page Number Converter

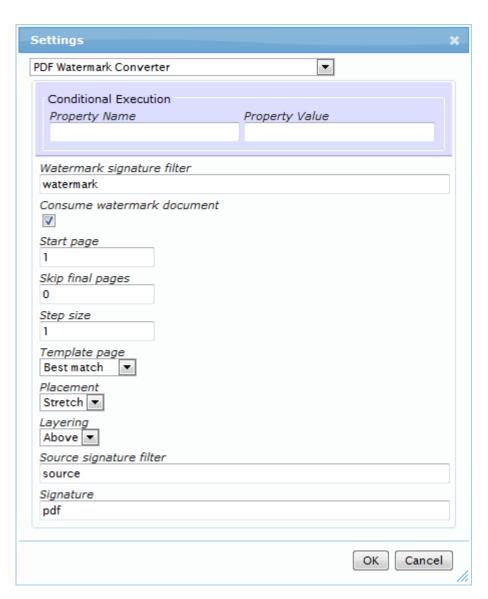
The *PDF Page Number Converter* stamps page numbers onto the pages of an existing PDF document. This can be done in many different ways to suit the actual requirement.



Conditional processing Obsolete: This setting is whether this converter runs. superseded by the general Conditional Execution setting. Skip initial pages Specify the name of a piece of task metadata that should determin whether this converter runs. Specify the name of a piece of task metadata that should determin whether this converter runs. Superseded by the general Specify how many pages to skip at the beginning of the document. Value must be greater than or equal to 0. Default is 0.	
Superseded by the general Conditional Execution setting. Skip initial pages Specify how many pages to skip at the beginning of the document.	
Conditional Execution setting. Skip initial pages Specify how many pages to skip at the beginning of the document.	
Skip initial pages Specify how many pages to skip at the beginning of the document.	
Value must be greater than or equal to 0. Default is 0.	غ -
<u> </u>	j
Skip final pages Specify how many pages to skip at the end of the document. Value	
must be greater than or equal to 0. Default is 0.	
First page number Specify the first page number to use. Value must be greater than o	r
equal to 1. Default is 1.	
Subtract page count When displaying the total number of pages, use this parameter to	
subtract from that value. This is useful if you want to exclude the	
front page from the total number of pages for instance. Value mus	št
be greater than or equal to 0. Default is 0.	
Vertical alignment Specify where to place the page numbers, at the top or at the	
bottom each page. Both may be selected for combined top and	
bottom placement. Horizontal alignment Specify how to align the page numbers horizontally on the pages.	
Page number type Specify which kind of page numbers to use. When applied even pages have left (incide margin at the right side	- of
Mirror margins When enabled even pages have left/inside margin at the right side the page and right/outside margin at the left side of the page. Who	
disabled the left and right margin values apply directly to the left a	
right side of the page.	1110
Top margin Specify the top margin.	
Right/outside margin Specify the right margin.	
Bottom margin Specify the bottom margin.	
Left/inside margin Specify the left margin.	
Font family Select the font family for the page numbers.	
Font size Specify the font size for the page numbers.	
Color Select the text color for the page numbers.	
Text pattern Specify the text pattern to be inserted with the using {number} and	d
{total} in any string combination, e.g. "Page {number} of {total}"	
Source signature filter Filters the task sources by creator signature, if specified. Will only	
process sources that are marked with the specified creator signatu	ıre.
Signature When specified, a signature is associated with each file created by	
the converter. Use * to reuse the source signature for the output f	ile.

PDF Watermark Converter

The *PDF Watermark Converter* can stamp a PDF document with the contents from another PDF document. Like the *PDF Page Number Converter*, this converter also has many options to fine-tune the result. The input watermark template file is normally attached to the task using the Load Task Source Preparator described elsewhere in this document.

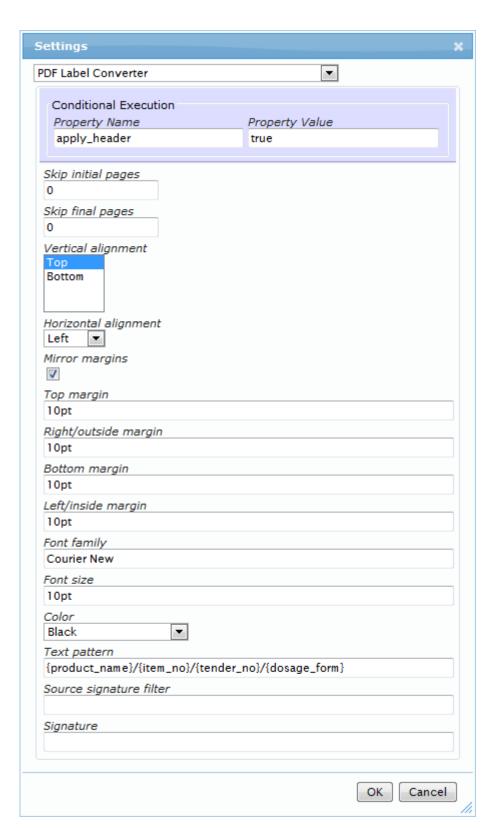


Setting	Description
Watermark signature filter	Filters the task sources by creator signature. The first match will be used as watermark.
Consume watermark document	When enabled the watermark document source is removed after use. When disabled the watermark document source is left untouched.
Start page	Specify the page number of the first page to watermark. Value must be greater than or equal to 1. Default is 1.
Skip final pages	Specify how many pages to skip at the end of the document. Value must be greater than or equal to 0. Default is 0.
Step size	Use this setting to watermark only every nth page. Default is 1 to watermark every page.
Template page	Specify which page from the template document to use for watermarking (Default: Best match). • Best match: Analyzes the template document and tries to
	find the best match based on page aspect ratio (in effect, orientation) and size. This option allows you to use a single

	watermark template to fit multiple page orientations and
	margins.
	 First page: Use the design from the first page.
	 Second page: Use the design from the second page.
Placement	Defines how the watermark is placed upon the pages (Default:
	Stretch).
	 Center: watermark on the pages
	 Stretch: watermark to fit the pages
	 Scale the watermark to fit the pages
Layering	Defines how the watermark is layered upon the pages (Default:
	Above).
	 Above: Inserts the watermark data above the document
	content
	 Below: Inserts the watermark data below the document
	content
Source signature filter	Filters the task sources by creator signature, if specified. Will only
	deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted
	with the deployer. When using the * the input signature is written
	automatically to the output format.

PDF Label Converter

The *PDF Label Converter* can stamp a PDF document with a custom label that may be constructed using Task metadata properties and metadata mapping values. Like the *PDF Page Number Converter* it has many options for adjusting the label style.



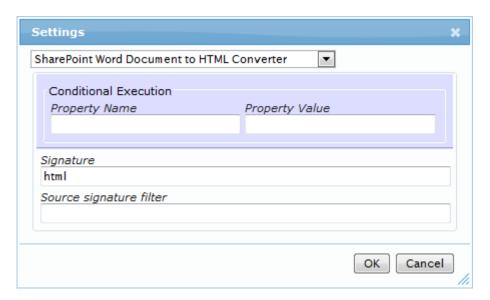
Setting	Description
Conditional processing	Optionally specify the name of a piece of task metadata that should
Obsolete: This setting is	determine whether this converter runs.
superseded by the general	
Conditional Execution setting.	

Skip initial pages	Specify how many pages to skip at the beginning of the document.
	Value must be greater than or equal to 0. Default is 0.
Skip final pages	Specify how many pages to skip at the end of the document. Value
	must be greater than or equal to 0. Default is 0.
Vertical alignment	Specify where to place the labels, at the top or at the bottom each
	page. Both may be selected for combined top and bottom
	placement.
Horizontal alignment	Specify how to align the labels horizontally on the pages.
Mirror margins	When enabled even pages have left/inside margin at the right side of
	the page and right/outside margin at the left side of the page. When
	disabled the left and right margin values apply directly to the left and
	right side of the page.
Top margin	Specify the top margin.
Right/outside margin	Specify the right margin.
Bottom margin	Specify the bottom margin.
Left/inside margin	Specify the left margin.
Font family	Select the font family for the labels.
Font size	Specify the font size for the labels.
Color	Select the text color for the labels.
Text pattern	Specify the text pattern to be inserted on each page. You may use
	string options as detailed in the section General configuration string
	options.
Source signature filter	Filters the task sources by creator signature, if specified. Will only
	process sources that are marked with the specified creator signature.
Signature	When specified, a signature is associated with each file created by
	the converter. Use * to reuse the source signature for the output file.

SLIP HTML Converter Pack

SharePoint Word Document to HTML Converter

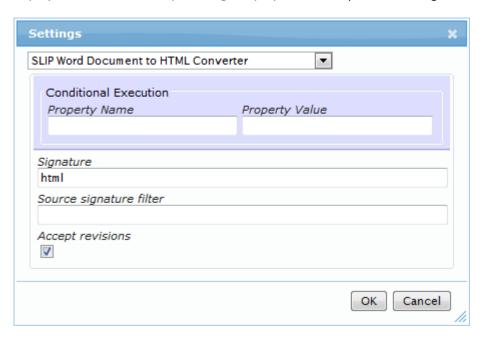
TBD



Setting	Description
Source signature filter	Filters the task sources by creator signature, if specified. Will only deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted with the deployer. When using the * the input signature is written automatically to the output format.
Accept revisions	When enabled accepts all track change revisions made to the document. If unselected the revisions are left untouched in the document.

SLIP Word Document to HTML Converter

The SLIP Word Document to HTML Converter can produce contemporary standards-compliant XHTML from an Office Open XML Word document (DOCX/DOCM/DOTX/DOTM). Since the conversion result, besides the HTML document, usually also contains images, the entire result set is packaged into a ZIP-file. The SLIP Page Deployer and the SLIP Template Page Deployer include special handling of such HTML-packages.



Setting	Description
Source signature filter	Filters the task sources by creator signature, if specified. Will only deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted with the deployer. When using the * the input signature is written automatically to the output format.
Accept revisions	When enabled accepts all track change revisions made to the document. If unselected the revisions are left untouched in the document.

SLIP Word Automation Service Converter Pack

SLIP:td includes converters utilizing the *Word Automation Services* (WAS,) application service available in a SharePoint 2010 farm to produce PDF, XPS and MHTML files from Word documents. The WAS is also used for upgrading binary Word documents to the newer *Office Open XML* formats.

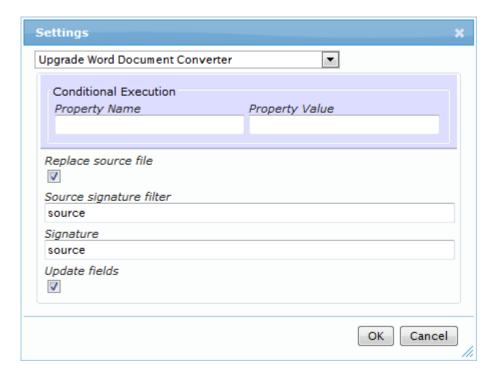
While the WAS performs the actual conversion work, the actual control elements are the WAS converters installed by activating the *SLIP WAS Converter Pack* site collection feature and configured on the SLIP profiles.

Before using the SLIP WAS Converter Pack a Word Automation Services application must be created and configured correctly with the Central Administration > Application Management > Manage service applications.

Upgrade Word Document Converter

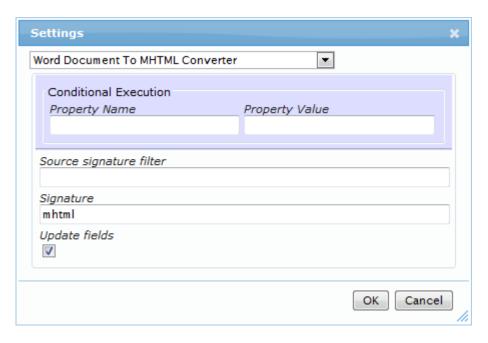
The *Upgrade Word Document Converter* is part of the *SLIP SharePoint Word Automation Services* solution and installed by activating the *SLIP WAS Converter Pack* site collection feature. The converter upgrades a Word document to the latest Office Open XML version.

This is useful for migration and when the documents must be processed further by the *SLIP HTML Converter* for instance.



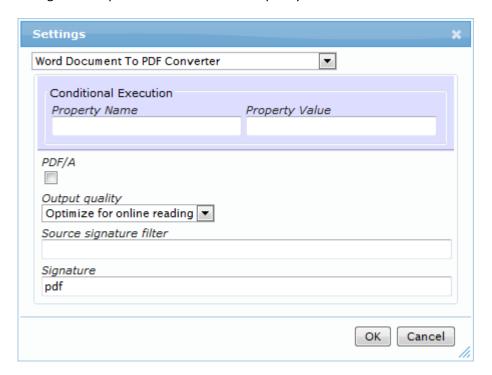
Word Document To MHTML Converter

The Word Document To MHTML Converter saves the document as MHTML using the Word Automation Services (WAS,) application service.



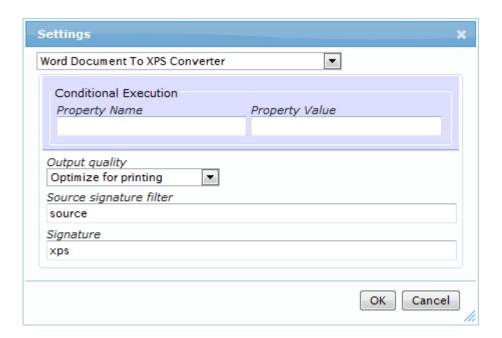
Word Document To PDF Converter

The Word Document To PDF Converter saves the document as PDF using the Word Automation Services (WAS,) application service with full fidelity like saved using the Microsoft Office client. The converter has configuration options to control the PDF quality.



Word Document To XPS Converter

The *Word Document To XPS Converter* saves the document as XPS using the *Word Automation Services* (WAS,) application service. The converter has configuration options to control the PDF quality.

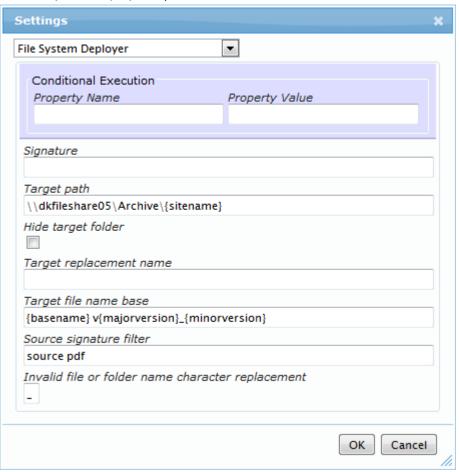


SLIP Deployers

In the following sections all out of the box SLIP Deployers are described in detail including the various configuration options.

File System Deployer

The File System Deployer is part of the core SLIP Task List Infrastructure and writes output to a file system.

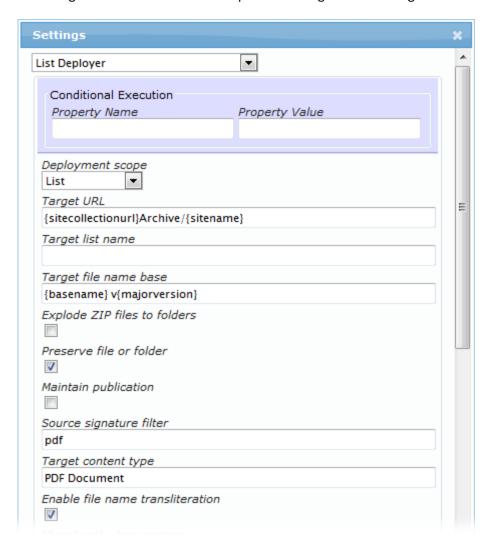


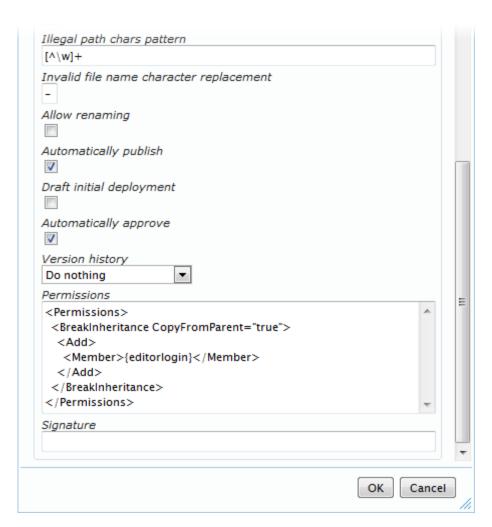
Setting	Description
Signature	This setting is currently not used for this component.
Target Path	Specifies the folder path task output should be placed. The path may be specified as a file URL (i.e. file:///F:/Path/To/Folder) or an UNC file path (i.e. \dkfileshare05\Archive\{sitename\}">\lambdakfileshare05\Archive\{sitename\}">\lambdakfileshare0\$). It's possible to use any combination of string options to define the entire path. Folders are created as necessary. IMPORTANT : The account running the SharePoint Timer Service requires sufficient read/write access to the file share. If this requirement is not fulfilled "Access denied" exceptions are reported in the SLIP Log.
Hide target folder	When ticked the target folder will be marked hidden when created.
Target replacement name	When specified, the destination folder is renamed according to this value after deployment is completed. If a folder with that name already exists it is replaced and all existing content is discarded.

Target file name base	Specifies which file name to use for the task output. The file extension is
	controlled by the task source.
Source signature filter	Filters the task sources by creator signature, if specified. Will only deploy sources that are marked with the specified creator signature
	sources that are marked with the specified creator signature
Invalid file or folder name	Specifies which character to use when replacing invalid characters in file and
character replacement	folder names.

List Deployer

The *List Deployer* is part of the core SLIP Task List Infrastructure and deploys items to a list or document library. The List Deployer is commonly used to replicate/copy approved documents from a controlled authoring environment to consumer portals or long term archiving libraries.





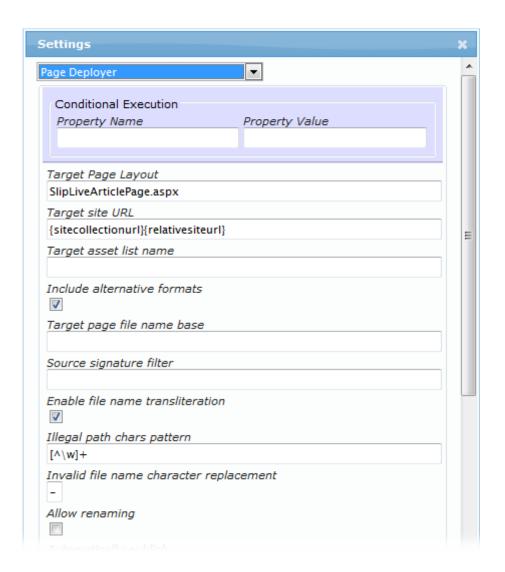
Setting	Description
Deployment scope	Select the scope of the deployment. Options available are: Folder List Site Site Collection
Target URL	Specifies the entire SharePoint URL where the task output should be placed. Folders are created as necessary.
Target list name	<i>Deprecation</i> - Specify the name of the target list if not already part of the Target URL above.
Target file name base	Specifies which file name to use for the task output. The file extension is controlled by the task source
Explode ZIP files to folders	Specifies whether to extract ZIP files into a folder. Specialized setting used for custom implementation and ZIP files generated using the System.IO.Packaging namespace.
Preserve file or folder	Specifies whether to reuse the file or folder from one deployment to the next
Maintain publication	Specifies whether to clean up previous deployments based on the publication id.
Target content type	Specifies which content type to use for the task output. You may

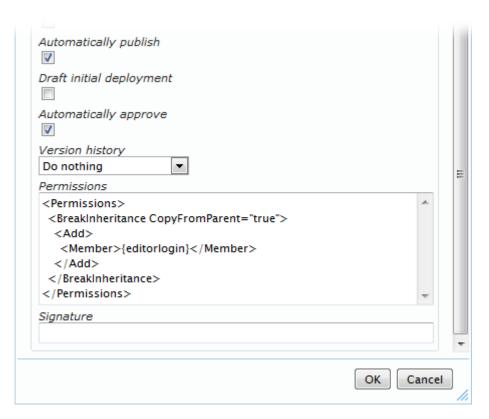
	specify a content type ID of the form '0x01' or a content type name
Enable file name transliteration	When enabled, any characters in the page file name outside the
	ASCII range are replaced by one or more ASCII characters that
	approximate the original character
Illegal path chars pattern	This regular expression is used to replace characters are not wanted
	or allowed in target file names. The default pattern is [^\w]+ which
	matches all sequences of characters that are neither letters, digits
	nor underscores. To replace only as absolutely necessary, use the
	expression [~#%&*{}\\:<>?/ ""\x00-\x1F\x7F-\x9F] ^\. \.\. \.\$
	which can be surrounded by ()+ to replace sequences with a single
	replacement character
Invalid file name character	Specifies which character to use when replacing invalid characters in
replacement	file names
Allow renaming	When enabled, published items may be renamed, to match a new
	naming scheme or a title change. Version history and item identity is
	preserved, but this may break incoming links.
Automatically publish	Specifies whether to publish content as a major version when
	deploying. This only applies to libraries where minor (draft) versions
	are enabled
Draft initial deployment	When enabled the initial creation of an item will not be published as
	specified by the 'Automatically publish' option. Subsequent updates
	will be automatically published. This parameter has no effect if the
	'Automatically publish' option is not enabled. Also, this only applies
	to libraries where minor (draft) versions are enabled.
Automatically approve	Specifies whether to approve content when deploying. This only
	applied to libraries where moderation (content approval) is enabled
Version history	This option allows you to delete or recycle historic versions of the
	deployed item. You may clear all historic versions or only drafts.
Permissions	Controls the item level permissions. Please see the section
	SharePoint Deployer Common Permissions Setting below for syntax
	details.
Source signature filter	Filters the task sources by creator signature, if specified. Will only
	deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted
_	with the deployer.

Page Deployer

The *Page Deployer* is part of the SLIP SharePoint Publishing Foundation and creates SharePoint Publishing web pages using standard SharePoint page layout. The page deployer but requires a publishing site.

Activate the *SLIP SharePoint Page Deployer* site collection feature on the site collection hosting the SLIP Task List to assign the Page Deployer to SLIP Profile. Before the Page Deployer is working you must also activate the *SLIP SharePoint Publishing Infrastructure* site collection feature on the site collection and sub sites you want to deploy publishing pages to.



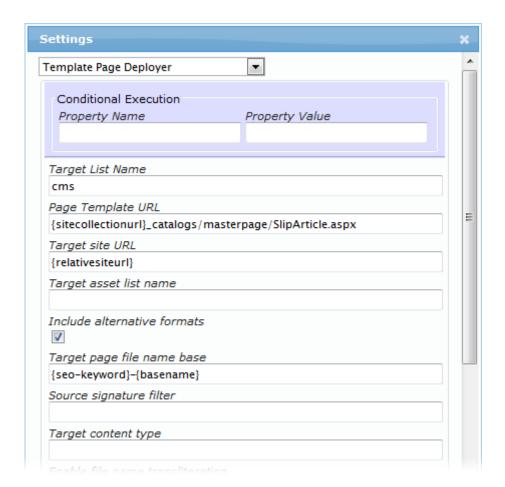


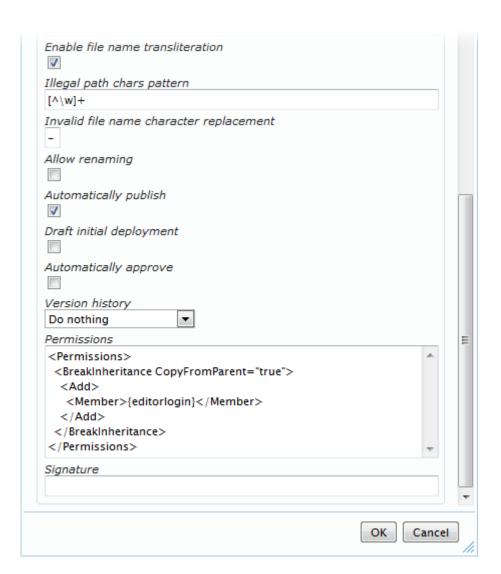
Setting	Description
Target Page Layout	Specifies which page layout to use when creating the page
Target site URL	Specifies the SharePoint site URL where the page and assets should be created. Folders are not created/supported.
Target assets list name	Specify the name of the list used to store all elements like images and non-HTML elements. If no value is specified the default Assets list name will be used. The list will be created automatically as necessary.
Include alternative formats	Specifies whether to deploy non-HTML assets to asset list
Target page file name base	Specifies which page file name to use for the page. The .aspx extension is automatically amended by the deployer
Enable file name transliteration	When enabled, any characters in the page file name outside the ASCII range are replaced by one or more ASCII characters that approximate the original character
Illegal path chars pattern	This regular expression is used to replace characters are not wanted or allowed in target file names. The default pattern is [^\w]+ which matches all sequences of characters that are neither letters, digits nor underscores. To replace only as absolutely necessary, use the expression [~#%&*{}\\:<>?/ ""\x00-\x1F\x7F-\x9F] ^\. \.\ .\\$ which can be surrounded by ()+ to replace sequences with a single replacement character
Invalid file name character replacement	Specifies which character to use when replacing invalid characters in file names
Allow renaming	When enabled, published items may be renamed, to match a new naming scheme or a title change. Version history and item identity is preserved, but this may break incoming links.

Automatically publish	Specifies whether to publish content as a major version when deploying. This only applies to libraries where minor (draft) versions are enabled
Draft initial deployment	When enabled the initial creation of an item will not be published as specified by the 'Automatically publish' option. Subsequent updates will be automatically published. This parameter has no effect if the 'Automatically publish' option is not enabled. Also, this only applies to libraries where minor (draft) versions are enabled.
Automatically approve	Specifies whether to approve content when deploying. This only applied to libraries where moderation (content approval) is enabled
Version history	This option allows you to delete or recycle historic versions of the deployed item. You may clear all historic versions or only drafts.
Permissions	Controls the item level permissions. Please see the section SharePoint Deployer Common Permissions Setting below for syntax details.
Source signature filter	Filters the task sources by creator signature, if specified. Will only deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted with the deployer.

Template Page Deployer

The *Template Page Deployer* is part of the core SLIP Task List Infrastructure and creates basic web pages, possibly with HTML content, by copying an existing template page and filling out properties. This is opposed to proper SharePoint publishing pages which use a page layout, but requires a publishing site.





Setting	Description
Target List Name	Specify the name of the target list the page should be created
Page Template URL	Specify the URL to the template file. The URL can be fully qualified to
	any file or site-relative to target site URL.
Target site URL	Specifies the SharePoint site URL where the page and assets should
	be created. Folders are not created/supported.
Target assets list name	Specify the name of the list used to store all elements like images
	and non-HTML elements . If no value is specified the default Assets
	list name will be used. The list will be created automatically as
	necessary.
Include alternative formats	Specifies whether to deploy non-HTML assets to asset list
Target page file name base	Specifies which page file name to use for the page. The .aspx
	extension is automatically amended by the deployer
Target content type	Specifies which content type to use when creating the page. You may
	specify a content type ID of the form '0x01' or a content type name
Enable file name transliteration	When enabled, any characters in the page file name outside the
	ASCII range are replaced by one or more ASCII characters that
	approximate the original character

Illegal path chars pattern	This regular expression is used to replace characters are not wanted or allowed in target file names. The default pattern is [^\w]+ which matches all sequences of characters that are neither letters, digits nor underscores. To replace only as absolutely necessary, use the expression [~#%&*{}\\:<>?/ ""\x00-\x1F\x7F-\x9F] ^\. \.\ \.\\$ which can be surrounded by ()+ to replace sequences with a single replacement character
Invalid file name character	Specifies which character to use when replacing invalid characters in
replacement	file names
Allow renaming	When enabled, published items may be renamed, to match a new naming scheme or a title change. Version history and item identity is preserved, but this may break incoming links.
Automatically publish	Specifies whether to publish content as a major version when deploying. This only applies to libraries where minor (draft) versions are enabled
Draft initial deployment	When enabled the initial creation of an item will not be published as specified by the 'Automatically publish' option. Subsequent updates will be automatically published. This parameter has no effect if the 'Automatically publish' option is not enabled. Also, this only applies to libraries where minor (draft) versions are enabled.
Automatically approve	Specifies whether to approve content when deploying. This only applied to libraries where moderation (content approval) is enabled
Version history	This option allows you to delete or recycle historic versions of the deployed item. You may clear all historic versions or only drafts.
Permissions	Controls the item level permissions. Please see the section SharePoint Deployer Common Permissions Setting below for syntax details.
Source signature filter	Filters the task sources by creator signature, if specified. Will only deploy sources that are marked with the specified creator signature.
Signature	When specified a signature value is written to each format outputted with the deployer.

SharePoint Deployer Common Permissions Setting

The *Permissions* setting is shared between the List Deployer, Page Deployer and Template Page Deployer. It allows you to control the item level security of the published items such as pages, files and asset folders. The current UI only provides a text box for entering the XML that defines the permission assignments. By default the field is either empty, or contains the empty element <Permissions/>. This makes no changes to the published items.

There are two main options for permission control: BreakInheritance and ResetInheritance.

BreakInheritance stops permission inheritance from the parent list or folder while ResetInheritance restores the permission inheritance chain. When stopping the inheritance you have the option to copy the parent permissions onto the item in question or to start with a clear permission set. This is controlled by the CopyFromParent attribute on the BreakInheritance element.

The following table outlines the main permission options.

Markup Effect

<permissions></permissions>	Existing/default permission set is left untouched.
<pre><permissions> <breakinheritance copyfromparent="false"></breakinheritance> </permissions></pre>	Permission inheritance is stopped and the item starts with a clear permission set.
<pre><permissions> <breakinheritance copyfromparent="true"></breakinheritance> </permissions></pre>	Permission inheritance is stopped and the parent permission assignments are copied onto the item.
<pre><permissions> <resetinheritance></resetinheritance> </permissions></pre>	Permission inheritance is restored. This option is mostly useful if the item was deployed with the <i>BreakInheritance</i> option in the past.

If you use the option to stop permission inheritance, you are able to adjust the items permission set independently of its parent. You may choose to remove and add permission assignments by using the *Add* and *Remove* elements. You may enter as many *Add* and *Remove* elements as you need within the *BreakInheritance* element. Removals are always performed before additions.

The *Member* element refers to a user or a group by name. The member lookup mechanism is fairly lenient on the kinds of name that you can specify.

The following table outlines how the *Add* and *Remove* elements may be used. The *Member* element is described later.

Markup	Effect
<pre><permissions> <breakinheritance copyfromparent="false"></breakinheritance></permissions></pre>	Building on the empty permission set, we add the user <i>contoso\john_smith</i> to the permission set. By default this user will be assigned the permission level of type <i>Reader</i> .
<pre><permissions> <breakinheritance copyfromparent="false"></breakinheritance></permissions></pre>	Each Add element may contain any number of Member elements. Here we have also added contoso\jane_done in addition to contoso\john_doe. Both users are assigned the Reader type permission level.
<pre><permissions></permissions></pre>	When choosing to copy the parent permission set, we may need to remove some assignments. This example shows how to remove two SharePoint groups entirely from the permission set. We still add the two user accounts like before.

It is possible to be a bit more specific when adding and removing permission levels. It is useful, for instance, to assign one or more specific permission levels to a member. Permission levels may be referenced by

name or by type. SharePoint predefines four types that can be used in this context¹: Reader, Contributor, WebDesigner and Administrator.

The following table lists some default permission level types and their corresponding default names in English and Danish.

Туре	Name in English locale	Name in Danish locale
Administrator	Full Control	Fuld kontrol
WebDesigner	Design	Designe
Contributor	Contribute	Bidrage
Reader	Read	Læse
Guest	Limited Access	Begrænset adgang

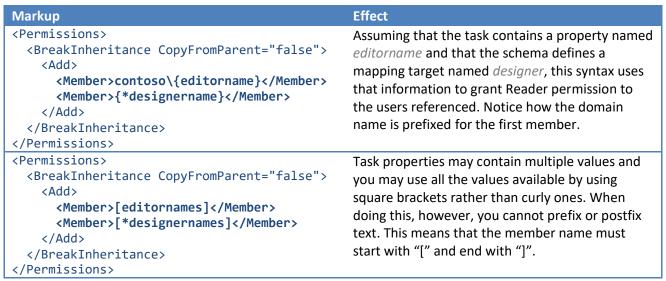
Likewise it is also useful to remove one or more specific permission levels from a member without removing that member entirely from the permission set.

Use either a Name attribute or a Type attribute on a Level element.

```
Markup
<Permissions>
                                                  Here we first revoke the permission level of type
  <BreakInheritance CopyFromParent="true">
                                                  Contributor from the member
    <Remove>
                                                  contoso\iohn smith.
      <Member>contoso\john_smith</Member>
                                                  Following that we ensure that the member
      <Level Type="Contributor"/>
                                                  contoso\eddie_more is granted the permission
    </Remove>
                                                  level with name Contribute.
    <Add>
      <Member>contoso\eddie more</Member>
      <Level Name="Contribute"/>
    </Add>
  </BreakInheritance>
</Permissions>
<Permissions>
                                                  You may apply several permission levels to several
  <BreakInheritance CopyFromParent="true">
                                                  members and, conversely, revoke more than one
    <Remove>
                                                  permission level from several members at a time.
      <Member>Intranet Site Members
                                                  Here Intranet Site Members and Intranet Site
      <Member>Intranet Site Owners
                                                  Owners lose their WebDesigner and Contributor
      <Level Type="WebDesigner"/>
                                                  permissions. Further, contoso\john_smith and
      <Level Type="Contributor"/>
                                                  contoso\iane doe are granted Reader and
    <Remove>
    <Add>
                                                  Contributor rights while contoso\jo king is just
      <Member>contoso\john smith
                                                  granted Reader rights.
      <Member>contoso\jane doe</Member>
      <Level Type="Reader"/>
      <Level Name="Contribute"/>
    </Add>
    <Add>
      <Member>contoso\jo_king</Member>
      <Level Type="Reader"/>
    </Add>
  </BreakInheritance>
</Permissions>
```

¹ There are also permission level types called *Guest* and *None*, but those cannot be used in this context.

The member names do not have to be static either. Just like most other SLIP:td component settings you may use curly bracket notation to reference either a task property name or a schema mapping target name in order to build a member name. When using curly braces only the first value of the task property is used. To use all the values, use square brackets instead.



For further assistance in writing Permissions markup, you can rely on this XML schema and DTD:



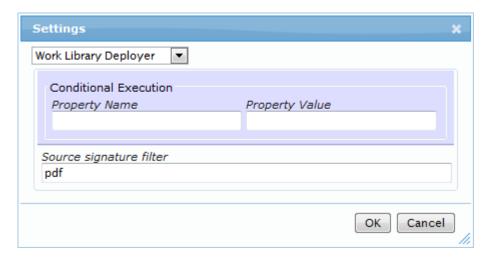


Permissions.xsd

Permissions.dtd

Work Library Deployer

The *Work Library Deployer* is part of the core SLIP Task List Infrastructure and deploys to a special document library that acts as a temporary storage. This is used in the SLIP PDF compounding for instance.



Setting	Description
Source signature filter	Filters the task sources by creator signature, if specified. Will only
	deploy sources that are marked with the specified creator signature.

Create subsite path

The deployer *Create subsite path* is part of the core SLIP Task List Infrastructure and ensures a series of subsites from a start site. It allows you to control the URL generation based on the given path using simple transformation, transliteration and regular expression replacement.



SLIP Preparators

The core SLIP infrastructure includes a few preparators that allow you to manipulate tasks before the actual processing starts.

Load Task Source Preparator

Works both as a preparator and a converter. See Load Task Source Preparator in the converter section.

Assign Task Priority

The *Assign Task Priority* preparator controls the task priority. The priority value must be non-negative and can be drawn from task metadata properties using curly brackets. See also the String options section.

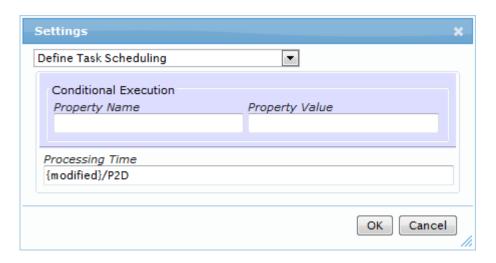


In the example above, we assign a high priority to preview tasks. The default priority is 1.0.

Setting	Description
Task Priority	Specify a non-negative integer or real value. Values closer to 0 have higher priority. Use curly bracket notation to reference task metadata properties.

Define Task Scheduling

The *Define Task Scheduling* preparator controls the processing time for a task. You may specify an absolute date and time or a relative delay from now until the time when the task should be processed. Valid values are ISO 8601 date and time values, ISO 8601 duration values or ISO 8601 interval values. You may use curly bracket notation to draw values from task metadata properties.

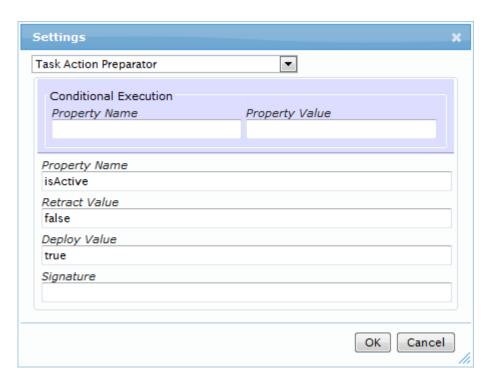


In the example above the task will be processed two days after the time the document was modified.

Setting	Description
Processing Time	Specifies when the task should be processed. Specify a an absolute
	time using ISO 8601 combined date and time notation. Specify a
	delay using ISO 8601 duration notation. Specify an offset using ISO
	8601 time interval notation. Metadata replacement is possible using
	curly brackets.
	Examples: '{delay}', 'P2D', '{created}/P2D', '{created}/{offset}'
	For further information see http://en.wikipedia.org/wiki/ISO-8601 .

Task Action Preparator

The *Task Action Preparator* is part of the core SLIP Task List Infrastructure and allows you to override the task action; whether it deploys or retracts content can be controlled with metadata properties. This is commonly used to allow authors to retract content from the web without deleting or unpublished the source document in the document management system.

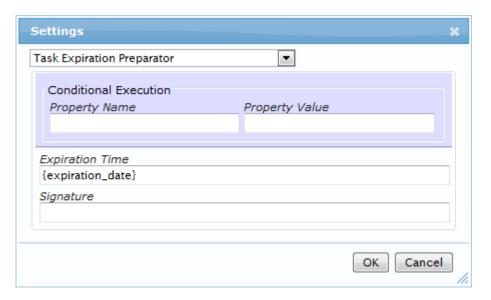


NOTE: If the property or matching value is not found the task action will not be effected.

Setting	Description
Property name	Name of the property
Retract Value	Value which will change the task type to "Retract"
Deploy Value	Value which will change the task type to "Deploy"
Signature	When specified a signature value is written to each format outputted
	with the deployer.

Task Expiration Preparator

The *Task Expiration Preparator* is part of the core SLIP Task List Infrastructure and generates a new Retract task for future processing that will retract the content being deployed by the current task.



NOTE: If a property is specified but not found no Expiration task will be created.

Setting	Description
Expiration Time	Specifies when the expiration task should be processed. Specify a time for deletion using ISO 8601 combined date and time notation.
	Specify a time offset for deletion using ISO 8601 duration notation. Specify a lifetime using ISO 8601 time interval notation. Metadata replacement is possible using curly brackets.
	Examples: '{expires}', 'P2D', '{lifetime}', '{created}/P2D', '{created}/{lifetime}'
	For further information see http://en.wikipedia.org/wiki/ISO_8601 .
Signature	When specified a signature value is written to each format outputted with the deployer.

Task Filter Preparator

The *Task Filter Preparator* simply deletes all tasks matched by the assigned Profile. The preparator doesn't need any configuration. You should only add it to a profile if you want to delete some incoming task without further processing.



Setting	Description
Signature	When specified a signature value is written to each format outputted
	with the deployer.