

Virto SharePoint Workflow Activities Extensions Kit

Release 6.0.2 (SP 2019)

Release 6.0.1 (SP 2016)

Release 5.7.9 (SP 2013)

User and Installation Guide

Table of Contents

OVERVIEW	8
SYSTEM/DEVELOPER REQUIREMENTS	16
OPERATING SYSTEM	16
SERVER	16
BROWSER	16
IMPORTANT NOTE	16
RELEASE NOTES	16
INSTALLATION	22
EXPECTED OUTAGE	22
INSTALLING VIRTO SHAREPOINT WORKFLOW ACTIVITIES KIT	22
INSTALLING VIRTO SHAREPOINT WORKFLOW ACTIVITIES KIT FOR SHAREPOINT 2010	28
INSTALLING VIRTO SHAREPOINT WORKFLOW ACTIVITIES KIT FOR SHAREPOINT 2013	33
HOW DO YOU LICENSE VIRTO WORKFLOW ACTIVITIES KIT?	34
LICENSE ACTIVATION	34
UPGRADING VIRTO SHAREPOINT WORKFLOW ACTIVITIES KIT.....	34
UNINSTALLING VIRTO SHAREPOINT WORKFLOW ACTIVITIES KIT.....	35
START WORKING WITH WORKFLOW ACTIVITIES KIT	35
<i>Activating Activities Kit</i>	35
<i>Running SharePoint Designer</i>	36
<i>Using Created Workflow</i>	39
START WORKING WITH WORKFLOW ACTIVITIES KIT FOR SHAREPOINT 2010.....	41
<i>Activating Activities Kit</i>	41
START WORKING WITH WORKFLOW ACTIVITIES KIT FOR SHAREPOINT 2013.....	42
<i>Activating Activities Kit for Workflow Platform 2013</i>	42
<i>Activating Activities Kit for Workflow Platform 2013</i>	44
<i>Running SharePoint Designer</i>	44
<i>Using Created Workflow</i>	46
VIRTO SHAREPOINT WORKFLOW ACTIVITIES KIT (SHAREPOINT 2010 WORKFLOW PLATFORM)	49
IMPERSONATION ACTIVITIES	49
<i>Set User Token</i>	49
SMS ACTIVITIES	49
<i>Send SMS via Microsoft Office Mobile Service Protocol</i>	49
<i>Send SMS via SMPP server</i>	50
<i>Send SMS via Clickatell Bulk SMS Gateway</i>	51
<i>Send SMS via SmsCountry Bulk SMS Gateway</i>	52
TWITTER ACTIVITIES	52
<i>Virto Workflow Activities Kit Utility for Twitter (WakTwitter.exe)</i>	52
<i>Set Twitter OAuth authentication</i>	54
<i>Send Twitter Message</i>	55
<i>Send Direct Twitter Message</i>	55
XMPP (JABBER, GTALK) ACTIVITIES	56
<i>Send Xmpp (Jabber, GTalk) Instant message</i>	56
EMAIL ACTIVITIES	56
<i>Send Email</i>	56
<i>Send Email with List Item Attachment</i>	57
<i>Send Email with Http File Attachment</i>	57
<i>Send Email with Attachments</i>	58
<i>Forward Email</i>	59
<i>Set Smpt server settings</i>	59
<i>Receive Email</i>	60
TEXT ACTIVITIES	60

<i>Capture text</i>	60
<i>Capture all occurrences of text</i>	61
<i>Replace Text</i>	61
<i>Validate Text</i>	62
<i>Format Field Value</i>	62
<i>Translate Text (Powered by Google translator)</i>	63
<i>Translate Text (Powered by Microsoft translator)</i>	63
<i>Trim Text</i>	64
<i>Substring Text</i>	65
<i>Split Text</i>	65
<i>Join Text</i>	66
<i>Encode Web Text</i>	66
<i>Decode Web Text</i>	67
<i>Converts Number to Hex Text</i>	68
<i>Converts Number to Text</i>	68
<i>Converts Text to Base64</i>	69
<i>Converts Base64 to Text</i>	69
<i>Convert text to upper, lower, title case</i>	70
HTTP ACTIVITIES	70
<i>Send Mailchimp request activity</i>	70
<i>Web Request</i>	72
<i>Receive Html</i>	73
<i>Send Http Post</i>	73
ACTIVE DIRECTORY ACTIVITIES	74
<i>Get user's display name from Active Directory</i>	74
<i>Get user's email from Active Directory</i>	75
<i>Get user's job title from Active Directory</i>	75
<i>Get user's manager from Active Directory</i>	76
<i>Get user's department from Active Directory</i>	76
<i>Get user's custom attribute from Active Directory</i>	77
<i>Set user's custom attribute in Active Directory</i>	79
<i>Set Active Directory authentication</i>	80
<i>Create user in Active Directory</i>	80
<i>Add member to Active Directory group</i>	81
<i>Remove member from Active Directory group</i>	82
<i>Remove all members from Active Directory group</i>	83
<i>Delete user from Active Directory</i>	83
<i>Create group in Active Directory</i>	84
<i>Delete group from Active Directory</i>	85
<i>Get user emails from Active Directory group</i>	85
<i>Get Active Directory groups where user is member</i>	86
<i>Get members of Active Directory group</i>	87
<i>Set user's password in Active Directory</i>	88
<i>Enable a user account in Active Directory</i>	88
<i>Disable a user account in Active Directory</i>	89
PERMISSIONS ACTIVITIES	89
<i>Change site permissions inheritance</i>	89
<i>Grant Permission on site</i>	90
<i>Remove permissions from site</i>	90
<i>Grant Permission on list</i>	91
<i>Remove permissions from list</i>	92
<i>Change list permissions inheritance</i>	92
<i>Grant Permission on Item (Free)</i>	92
<i>Reset List permissions Inheritance (Free)</i>	93
<i>Delete all permission assignment from List Item</i>	94
<i>Delete all user permission assignment from List Item (Free)</i>	94
<i>Delete custom permission from List Item</i>	94
<i>Grant Permission on List Item or Folder extended</i>	95
INFO PATH ACTIVITIES.....	96

<i>Get InfoPath Form Field Inner Text (Free)</i>	96
<i>Get InfoPath Form Field Inner Xml (Free)</i>	96
<i>Set InfoPath form field inner xml (Free)</i>	96
LIST ACTIVITIES	96
<i>Copy List Item extended (Free)</i>	96
<i>Loop through list items and set the value of field</i>	97
<i>Loop through list items and update list items</i>	98
<i>Loop through list items and set the value of field extended</i>	98
<i>Loop through list items and update list items extended</i>	99
<i>Delete List Items</i>	99
<i>Calculate aggregate function</i>	100
<i>Calculate aggregate function extended</i>	101
<i>Get emails from List field</i>	102
<i>Get emails from field in Current Item</i>	102
<i>Generate Report</i>	103
<i>Generate Report extended</i>	104
<i>Approve Item</i>	105
<i>Approve Item extended</i>	106
<i>Reject Item</i>	106
<i>Delete Item extended</i>	107
<i>Delete List Items extended</i>	107
<i>Get field value extended</i>	108
<i>Set Field extended</i>	108
<i>Create List Item extended</i>	108
<i>Update List Item extended</i>	109
<i>Change list item content type</i>	110
<i>Copy List attachments to Document Library</i>	111
<i>Wait For Field Change in current item with Timeout</i>	112
<i>Get list item url</i>	113
<i>Upload attachments</i>	113
<i>Remove attachment</i>	114
<i>Remove all attachments</i>	114
<i>Get emails from List field extended</i>	115
<i>Get emails from field extended</i>	115
<i>Get field values from list</i>	116
<i>Get version history of list item</i>	117
<i>Create Summary task</i>	117
<i>Create task</i>	118
<i>Get current list item attachments urls</i>	119
USER ACTIVITIES	119
<i>Lookup Site User Property (Free)</i>	119
<i>Lookup Initiator User Property</i>	120
<i>Set Site User Property (Free)</i>	121
WORKFLOW ACTIVITIES	121
<i>Start Another Workflow (Free)</i>	121
<i>Start Another Workflow extended</i>	121
<i>Terminate Workflows (Free)</i>	122
<i>Terminate Running Workflow</i>	123
<i>Loop through list items and start workflow</i>	123
DOCUMENT LIBRARY ACTIVITIES	123
<i>Create folder in the document library</i>	123
<i>Create folder in the document library extended</i>	124
<i>Delete folder from the document library</i>	124
<i>Get parent folder ID (Free)</i>	125
<i>Get parent folder name</i>	125
<i>Get parent folder URL</i>	126
<i>Check Out Item extended</i>	126
<i>Check In Item extended</i>	126
<i>Discard Check Out Item extended</i>	127

<i>Publish Item</i>	127
<i>Discard Publish Item</i>	128
<i>Publish Item extended</i>	128
<i>Discard Publish Item extended</i>	128
<i>Save document to file</i>	129
<i>Create document from file</i>	129
<i>Create document from text</i>	130
<i>Rename document</i>	130
<i>Upload documents from folder</i>	131
<i>Download documents to folder</i>	132
<i>Read text content from document</i>	134
<i>Create SharePoint library</i>	134
<i>Create Document Set</i>	135
<i>Convert Word document to PDF</i>	135
FINANCE ACTIVITIES	136
<i>Currency Converter</i>	136
SHAREPOINT SITE MANAGEMENT ACTIVITIES	137
<i>Set SharePoint group's owner</i>	137
<i>Create SharePoint site collection</i>	138
<i>Delete SharePoint site collection</i>	139
<i>Create SharePoint site</i>	140
<i>Delete SharePoint site</i>	142
<i>Rename SharePoint site</i>	142
<i>Create SharePoint group</i>	142
<i>Delete SharePoint group</i>	143
<i>Rename SharePoint group</i>	143
<i>Add user to SharePoint group</i>	144
<i>Remove user from SharePoint group</i>	144
<i>Remove all users from SharePoint group</i>	145
<i>Delete user from SharePoint site collection</i>	145
<i>Set site anonymous access</i>	146
<i>Set list anonymous access</i>	146
<i>Add SharePoint group to Quick Launch</i>	147
<i>Remove SharePoint group from Quick Launch</i>	147
<i>Change page layout</i>	148
<i>Activate SharePoint feature</i>	148
<i>Deactivate SharePoint feature</i>	149
<i>Get current site property</i>	149
<i>Get current web property</i>	150
<i>Set default permission group</i>	150
<i>Create SharePoint list</i>	151
<i>Create Navigation link</i>	152
<i>Create Navigation heading</i>	152
<i>Update site title and description</i>	153
<i>Copy SharePoint group</i>	153
FAX ACTIVITIES	154
<i>Send Fax with List Item attachment</i>	154
<i>Send Fax with Http attachment</i>	154
<i>Send Fax with Attachments</i>	155
CODE ACTIVITIES	156
<i>Execute custom code</i>	156
DATE TIME ACTIVITIES	158
<i>Set Date constant</i>	158
<i>Converts Date from Local Time to UTC</i>	159
<i>Converts Date from UTC to Local Time</i>	160
<i>Converts Date to Text</i>	161
<i>Get Date property</i>	161
<i>Calculate due date</i>	162
DATABASE ACTIVITIES	162

Execute SQL Script	162
Execute SQL Script to Read Data	163
ARRAY LIST ACTIVITIES.....	165
Create array.....	165
Add array item.....	165
Insert array item.....	166
Remove array item.....	166
Remove array item At.....	167
Clear array.....	167
Remove duplicates from array.....	167
Index of array item.....	168
Get array items count.....	168
Get array item.....	168
Set array item.....	169
Except array.....	169
Intersect array.....	169
Concat array.....	170
Select event/odd array items.....	170
FILE ACTIVITIES.....	170
Create directory.....	171
Delete directory.....	171
Delete file.....	172
MANAGED METADATA ACTIVITIES.....	172
Add term to managed metadata.....	172
Remove term from managed metadata.....	173
Create group in managed metadata.....	173
Delete group from managed metadata.....	174
Resolve term internal value from managed metadata.....	174
Get assignable value from taxonomy field.....	175
DEFAULT COLUMN VALUES ACTIVITIES.....	176
Set field default value for folder.....	176
Get field default value for folder.....	176
Remove field default value from folder.....	177
Remove all default values from folder.....	177
IMPORT/EXPORT ACTIVITIES.....	178
Import CSV file into SharePoint list.....	178
IMAGE ACTIVITIES.....	179
Resize Image.....	179
Resize image based on one side.....	180
Resize image by percentage.....	180
Crop image.....	181
CONDITIONS.....	181
Is Role assigned to User (Free).....	181
Is User a member of a SharePoint group (Free).....	181
Is User a member of an Active Directory group (Free).....	181
Item is checked out (Free).....	182
Item is checked out extended (Free).....	182
Current Item exists in the list (Free).....	182
Item exists in the list (Free).....	183
Member exists in Active Directory (Free).....	183
Array contains element (Free).....	183
File exists (Free).....	184
Directory exists (Free).....	184
SharePoint group exists (Free).....	184
User has permission level (Free).....	185
User has permission level in list item (Free).....	185
Workflow is running (Free).....	186
Folder exists at the following url.....	187

VIRTO SHAREPOINT WORKFLOW ACTIVITIES KIT (SHAREPOINT 2013 WORKFLOW PLATFORM)188

LIST ACTIVITIES	188
<i>Get List Items</i>	188
<i>Copy/Move Document</i>	189
<i>Create List Item</i>	191
<i>Update List Item</i>	192
<i>Add/Remove folder</i>	194
<i>Copy/Move Folder</i>	195
<i>Copy/Move Attachments</i>	196
<i>Get Attachments</i>	197
<i>Waiting For Changes Fields</i>	199
STRING ACTIVITIES	201
<i>Split String</i>	201
EMAIL ACTIVITIES	201
<i>Send email with attachments</i>	201
INFOPATH ACTIVITIES	202
<i>Convert InfoPath to PDF</i>	202
PERMISSIONS ACTIVITIES	206
<i>Stop inhereting permissions on list item</i>	206
<i>Stop inhereting permissions on list</i>	207
<i>Stop inhereting permissions on site</i>	208
<i>Restore inhereting permissions on list item</i>	208
<i>Restore inhereting permissions on list</i>	209
<i>Restore inhereting permissions on site</i>	210
<i>Add user to SharePoint group</i>	211
<i>Check if user is a member of SharePoint group</i>	211
<i>Get members of SharePoint group</i>	212
<i>Grant Permission on list item</i>	213
<i>Grant Permission on list</i>	214
<i>Grant Permission on site</i>	215
<i>Remove all list item permissions</i>	217
<i>Remove all list permissions</i>	217
<i>Remove all site permissions</i>	218
<i>Remove permissions from list item</i>	219
<i>Remove permissions from list</i>	220
<i>Remove permissions from site</i>	221
<i>Remove user from SharePoint group</i>	222
ADMINISTRATION ACTIONS	222
<i>Activate SharePoint feature (SharePoint 2013)</i>	222
<i>Create SharePoint group (SharePoint 2013)</i>	223
<i>Create SharePoint list or document library (SharePoint 2013)</i>	225
<i>Create SharePoint site (SharePoint 2013)</i>	226
<i>Create SharePoint site collection (SharePoint 2013)</i>	227
<i>Deactivate SharePoint feature (SharePoint 2013)</i>	229
<i>Delete SharePoint group (SharePoint 2013)</i>	230
<i>Delete SharePoint list or document library (SharePoint 2013)</i>	230
<i>Delete SharePoint site (SharePoint 2013)</i>	231
<i>Delete SharePoint site collection (SharePoint 2013)</i>	232
<i>Get site property as string (SharePoint 2013)</i>	233
<i>Start list workflow (SharePoint 2013)</i>	234
<i>Start site workflow (SharePoint 2013)</i>	235
<i>Update SharePoint group properties (SharePoint 2013)</i>	236
<i>Update SharePoint site properties (SharePoint 2013)</i>	237

Virto SharePoint Workflow Activities Kit

Overview

Virtosoftware has introduced Virto SharePoint Workflow Kit — no-code bunch of SharePoint Activities for creating your own Workflow within SharePoint Workflow Designer. Virto Workflow Kit can be used as Add-on for Standard SharePoint Activities and includes extended activities for sending e-mails, (including possibility to use SMTP-Server), messages to Twitter, Jabber, Miranda, SMS and more.

Virtosoftware expands the range of SharePoint activities, allowing for creating custom activity sets, and thus, more flexible customization of business processes. Virto SharePoint Workflow Kit is a set of no-code blocks that you can easily add to SharePoint Designer and build your own workflow within a minute.

Features List

The whole list of features below is available for usage in case you purchase the Virto SharePoint Workflow Activities Kit. If you use the Evaluation version, only features marked as FREE can be used.

Workflow Activity	State
Send SMS	v 1.0
Send Direct Message to Twitter - HOT!	v 1.0
Send XMPP (Jabber, GTalk) Instant Message	v 1.0
Email Activities Send Email with List Item Attachment Send Email with HTTP File Attachment Send Email with Attachments Receive Email	v 1.0
Text Activities: Capture, Replace, Validate, Format Field, Translate	v 1.0
HTTP Activities Receive HTML Send HTTP Post	v 1.0
Permissions Activities Grant Permission on Item - FREE Reset List Permissions Inheritance - FREE Delete List Item Permission Assignment - FREE	v 1.0
InfoPath Activities Get InfoPath form field inner text - FREE Get InfoPath form field inner xml - FREE Set InfoPath form field inner text - FREE Set InfoPath form field inner xml - FREE	v 1.0

List Activities <i>Copy List Item Extended - FREE</i> <i>Loop Through List Item and set property value</i>	v 1.0
User Activities - Lookup site User Property - FREE	v 1.0
Start Another Workflow – FREE	v 1.0
Conditions <i>Is Role assigned to User - FREE</i> <i>Is User a member of SharePoint Group - FREE</i>	v 1.0
FTP Upload item to server via FTP - FTP this item to this server using this user and password, placing the item in this directory	v 1.1
Active Directory The purpose of this activity is to retrieve a specified user property from Active Directory. Text - Convert String to Date	v 1.1
Grant Permission Activities <i>Delete all list item permission assignment activity.</i> <i>Delete specific user permission from List item permission assignment activity.</i> Filter property to Loop Through List Items activity. Filter supports View Name, View ID and CAML string (<Where>...</Where>; Default value is all items. <i>Grant permission on Item activity.</i> Added multi permission assignment support in PermissionLevel property. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only". Updated "Grant permission on Item" activity. Added OverrideCurrentPermissions property (default value is Yes). You can specify No and new permission will be append to current user permission.	v 1.5
Send SMS Send Sms via Clickatell Bulk Sms Gateway activity. Send Sms via SmsCountry Bulk Sms Gateway activity.	v 1.6
List Activities Delete list items activity with 'filter' property.	v 1.6
Text Activities Trim text activity. Substring text activity.	v 1.6
Document Library Activities Create folder in the document library activity. Delete folder from the document library activity.	v 1.7
Active Directory Set user's custom attribute in Active Directory activity. Set Active Directory authentication activity. Create user in Active Directory activity.	v 1.7
Finance Activity Currency Converter	v 1.8
Active Directory Add user to group Remove user from group	v 1.8
Active Directory Delete user from Active Directory	v 2.0

Send SMS Send SMS via Office Mobile Service Protocol	v 2.0
Mathematical Calculate aggregate function	v 2.0
SharePoint management Create SharePoint site Delete SharePoint site Rename SharePoint site Create SharePoint group Delete SharePoint group Add user to SharePoint group Remove user from SharePoint group Delete user from SharePoint site collection	v 2.0
Fax Send Fax with List Item attachment Send Fax with Http file attachment Send Fax with Attachments	V 2.2
List Activities Generate report Get emails from List field	V 2.4
Text Activities Split text Join text	V 2.4
Email Activities Forward Email Set Smtplib server settings	V 2.4
Code Activities Execute custom code	V 2.5
Date Time Activities Set DateTime constant Converts Date from Local Time to UTC Converts Date from UTC to Local Time Converts Date to Text	V 2.5
Document Library Activities Get parent folder ID Get parent folder name Get parent folder URL	V 2.6
Text Activities Translate text (Powered By Microsoft Translator)	V 2.7
Workflow Activities Terminate workflows	V 2.7
Document Library Activities Item Exists in the List condition Item is Checked Out condition Check Out Item extended Check In Item extended Discard Check Out Item extended Publish item Discard Publish Item	V 2.7

Publish item extended Discard Publish Item extended Create folder in the document library extended	
List Activities Approve Item Reject Item Delete item extended	V 2.7
SharePoint management Set site anonymous access Set list anonymous access Change list permissions inheritance	V 2.7
Document Library Activities Save document to file Create document from file Rename document	V 2.8
SharePoint management Add SharePoint group to Quick Launch Remove SharePoint group from Quick Launch Change list item content type Change page layout. For MOSS only	V 2.8
List Activities Delete list items extended Get field value extended	V 2.8
SQL Activities Execute SQL Script	V 2.8
User Activities Lookup workflow initiator user property	V 2.9
Text Activities: Capture all occurrences of text	v 2.9
Text Activities Encode Web Text / Url Encode Decode Web Text / Url Decode	V 2.9
List Activities Loop through list items and set the value of field extended	V 2.10
Array Activities Create array Add array item Insert array item Remove array item Remove array item At Clear array Remove duplicates from array Index of array item Get array items count	V 3.0
Array Conditions Array contains element	V 3.0
SharePoint management Start another workflow extended Generate report extended	V 3.0

Copy List attachments to Document Library Wait For Field Change in current item with Timeout Create SharePoint site collection Delete SharePoint site collection Activate SharePoint feature Deactivate SharePoint feature	
Active Directory Activities Create group in Active Directory Delete group from Active Directory Get user emails from Active Directory group	V 3.0
Twitter OAuth Activities Set Twitter OAuth authentication Send Twitter Message Send Direct Twitter Message	V 3.0
Document Library Activities Upload documents from folder Download documents to folder	V 3.0
Utility Activities Get Date property Convert Number to Hex text	V 3.0
Managed Metadata Activities (SharePoint 2010 Only) Add term to term store Set folder metadata default value Get folder metadata default value Remove default value from field Remove all default values	V 3.0
Default column values activities (SharePoint 2010 Only) Get field default value for folder Set field default value for folder Remove field default value from folder Remove all default values from folder	V 3.0
List Activities Update List Item extended Loop through list items and update list items extended Get emails from field in Current Item	V 3.1
List Activities Create List Item extended	V 3.2
Managed Metadata Activities (SharePoint 2010 Only) Resolve term internal value from managed metadata Get assignable value from taxonomy field	V 3.2
Active Directory Activities Get Active Directory groups where user is member	V 3.3
Impersonation Activities Set User Token	V 3.3
Network Activities Web Request	V 3.3
File Activities Create document from text	V 3.3

List Activities Get list item url Upload attachments Remove all attachments Remove attachment	V 3.3
User Activities Set site user property (Free)	V 3.3
Text Activities Convert Number to Text Convert Text to Base64 Convert Base64 to Text	V 3.3
File Activities Create directory Delete directory Read text content from document File exists - <i>FREE</i> Directory exists – <i>FREE</i>	V 3.5
SharePoint management Get current site property Get current web property	V 3.5
Active Directory Activities Get members of Active Directory group	V 3.5
List Activities Get emails from field extended Get emails from List field extended	V 3.6
SharePoint management Create SharePoint library Remove all users from SharePoint group Rename SharePoint group	V 3.6
Active Directory Activities Remove all members from Active Directory group	V 3.6
Permissions Activities Change site permissions inheritance Grant permissions on site Remove permissions from site	V 3.7
List Activities Approve Item extended	V 3.7
SharePoint management Set default permission group	V 3.8
Mathematical Calculate aggregate function extended	v 3.8
List Activities Get field values from list	v 3.9
Image Activities Resize image Resize image based on one side Resize image by percentage Crop image	v 4.0

Workflow Activities Terminate running workflow Loop through list items and start workflow	v 4.0
Navigation Activities Create Navigation link Create Navigation heading	v 4.0
Task Activities Create Summary task Create task Calculate due date	v 4.0
Active Directory Activities Set user's password in Active Directory Enable user account in Active Directory Disable user account in Active Directory	v 4.0
SharePoint management Create SharePoint list Create document set Get version history of list item Get list item url extended Grant permission on List Item extended Grant permissions on list Remove permissions from list	v 4.0
PDF Activities Convert Word document to PDF	v 4.0
Import/Export activities Import CSV file into SharePoint list	v 4.0
Array Activities Except array Intersect array Concat array	v.4.1
Text Activities Convert text to upper, lower, title case	v.4.2
SharePoint Site Management activities Update site title and description Copy SharePoint group	v.4.2
Condition Folder exists at the following URL	v.4.2
List Activities Get current list item attachments URLs	v.5.1
Array Activities Select event/odd array items	v.5.1
Send email with attachments	v.5.4.2
Convert InfoPath to PDF	v.5.4.6
Platform 2010 activities	v. 5.7.9 (SP 2013) v. 6.0.1 (SP 2016) v. 6.0.2 (SP 2019)

Support of SSL/TLS has been added to Web Request action.	v. 5.7.9 (SP 2013) v. 6.1.2 (SP 2016) v. 6.1.1 (SP 2019)
Set site master page activity has been added.	v. 5.7.9 (SP 2013) v. 6.1.2 (SP 2016) v. 6.1.1 (SP 2019)

System/Developer Requirements

Operating System

Microsoft Windows Server 2003, 2008, 2012

Server

SharePoint Release 2013:

- Microsoft Windows SharePoint Foundation 2013 or Microsoft Office SharePoint Server 2013;
- Microsoft .NET Framework 4.5;

SharePoint Release 2010:

- Microsoft Windows SharePoint Foundation 2010 or Microsoft Office SharePoint Server 2010;
- Microsoft .NET Framework 3.5;
- Microsoft Office SharePoint Designer 2010.

SharePoint Release 3:

- Microsoft Windows SharePoint Services v3 or Microsoft Office SharePoint Server 2007;
- Microsoft .NET Framework 3.5;
- Microsoft Office SharePoint Designer 2007.

Note: This product is not compatible with SPS 2003 and WSS v2.

Browser

Microsoft Internet Explorer 7 or higher is required.

Important Note

The evaluation version provided so that you can fully try Virto SharePoint Workflow Activities Kit and see for yourself just how this product can meet your real business requirements. The Evaluation version cannot be used for commercial or business purposes other than for evaluating the software.

Release Notes

6.0.2 (2020-11-19)

- License manager has been updated.

5.7.9 (2015-10-13)

- Support of SSL/TLS has been added to Web Request action.
- Minor bug has been fixed in Convert Word to PDF action.

5.1.9 (2015-02-10)

- "Delete user from Active Directory". Fixed the error when a entry has subtrees

5.1.8 (2014-12-17)

- "Web request Activity". Request fails if a postData is string.

5.1.7 (2014-12-1)

- Updated "Calculate aggregate function" and ""Calculate aggregate function extended". Supports calculated columns.

5.1.6 (2014-10-22)

- has been fixed bug of "If user a member of a Active Directory group" condition

5.1.5 (2014-10-03)

- Send Email With Attachments - 403 forbidden if file hosted in SharePoint

5.1.4 (2014-08-25)

- bug with formatting of DateTime field has been fixed

5.1.3 (2014-08-14)

- bug with DateTime field has been fixed

5.1.2 (2014-06-25)

- Get current list item attachments urls activity has been added.
- Select event/odd array items activity has been added.

5.1.1 (2014-02-25)

- Minor bug has been fixed.

5.1.0 (2013-12-25)

- Enterprise license has been added.

5.0.0 (2013-10-24)

- Web license manager

4.2.3 (2013-04-04)

- Minor bug has been fixed

4.2.2 (2013-01-30)

- Added "Copy SharePoint group" activity.
- Added "Folder exists at the following url" condition.
- Minor bug has been fixed.

4.2.0 (2012-10-07)

- Added "Convert text to upper, lower, title case" activity.
- Added "Update site title and description" activity.
- Updated "Create document from file" activity. Added output file url.
- Fixed "Update List Item extended" activity. Mapping fails if a column contains colon character.

4.1.0 (2012-09-18)

- Added "Except array" activity. Returns those elements in first array that do not appear in second array.
- Added "Intersect array" activity. Produces intersection of two arrays.
- Added "Concat array" activity. Concatenates two arrays.
- Updated "Set Date constant" activity. Supports regional settings of current web.
- Updated "Update List Item extended" activity. The activity updates the "Modified" and "Modified by" values.
- Updated "Generate Report" activities. SharePoint 2010 Returns only \r instead of \r\n.
- Fixed "Convert Date to Text" activity. Doesn't resolve regional settings of current web.
- Fixed "Execute custom code" activity. Empty result if the code has variable lookup.
- Fixed "Copy List Item extended" activity. The copy list item does not correctly set the Content Type.
- Fixed "Loop through list items and start workflow" activity. Couldn't find SPWorkflowAssociation by name.
- Fixed the activity doesn't resolve list item url correctly.

4.0.0 (2012-08-14)

- Added "Create SharePoint list" activity.
- Added "Create document set" activity.
- Added "Get version history of list item" activity. Allows access to the version history information of a list item. The activity supports all SharePoint columns.
- Added "Grant permissions on list" activity.

- Added "Remove permissions from list" activity.
- Added "Grant permission on List Item extended" activity.
- Added "Get list item url extended" activity. Allow to get list item url from CAML Query or List View.
- Added "Set user's password in Active Directory" activity.
- Added "Calculate due date" activity. Allows calculating due date from specific time.
- Added "Convert Word document to PDF" activity. (For SharePoint Server 2010 only).
- Added "Enable user account in Active Directory" activity.
- Added "Disable user account in Active Directory" activity.
- Added "Create Summary task" activity.
- Added "Create task" activity.
- Added "Loop through list items and start workflow" activity.
- Added "Create Navigation link" activity. Allows create a new navigation link in Top link bar or Quick launch.
- Added "Create Navigation heading" activity.
- Added "Terminate running workflow" activity. Allows cancel the specified workflow.
- Added "Resize image" activity.
- Added "Resize image based on one side" activity.
- Added "Resize image by percentage" activity.
- Added "Crop image" activity.
- Added "Import CSV file into SharePoint list" activity.
-
- Added "Item exists in the list" condition. Allows to check if item exists at specified url.
- Added "User has permission level" condition. Allows to check current list item and return true if the user has the specified rights; otherwise, false.
- Added "User has permission level in list item" condition. Allows to find list item by specified url and return true if the user has the specified rights; otherwise, false.
-
- Added "VirtolookupSelector Value (as Text)" coercion. <http://www.virtosoftware.com/virtolookup-selector-value-as-text>
-
- Updated Send email activities. Resolving sender (from) address from the user logon name.
- Updated Send email activities. Sender is optional. Gets default sender (from) address from SharePoint Outgoing E-mail settings.
- Updated "Copy List Item extended" activity.
- Updated "Create SharePoint group" activity. Added groups appear in the Quick Launch property. Default value: No.
- Updated "Create List Item extended" activity. Supports create list item in folder.
- Updated "Generate Report" activities. Use <%FieldName;#NetFormat%> construction to format field value from current list item.
- For example: <%Start Date;#D%> uses D - long date output pattern 6/15/2009 1:45:30 PM -> Monday, June 15, 2009.
- Updated "Generate Report" activities. Added ability to resolve culture information from current web.
- Updated "Generate Report" activities. Removed NewLine character between header, row and footer.
- Updated "Upload documents from folder" activity. Continue upload if could not upload file.

- Updated "Start another workflow extended" activity. Supports Content Type workflow.
- Updated "Start another workflow" activity. Supports Content Type workflow.
- Updated "Create SharePoint site" activity. Supports Navigation Inheritance and Navigation properties.
- Updated "Create SharePoint site" activity. Added Locale property.
- Updated "Create SharePoint site collection" activity. Added Locale property.
-
- Fixed "Upload documents from folder" activity. Doesn't set content type correctly.

3.9.2 (2012-02-02)

- Added "Workflow is running" condition. Determines whether workflow is running in the specified list item
- Updated "Create folder in the document library". Supports create folder in list.
- Updated "Create folder in the document library extended". Supports create folder in list.
- Fixed "bulk update" parsing in "Create list item extended" activity.

3.9.0 (2011-12-26)

- Added "Get field values from list" activity. Extracts values from field in Text, Html, Edit Mode and Internal format from filtered list items at specified list and store result in Array.
- Updated "Renumber outline number" activity. Number format: 1.01, 1.02, 1.03.

3.8.0 (2011-12-12)

- Added "Set default permission group" activity. Allows setting default permission groups Visitors/Members/Owners for web.
- Added "Calculate aggregate function extended" activity.
- Updated Send email activities. Removed duplicated email addresses.
- Update "Lookup site user property" and "Lookup initiator user property" activities. Supports Groups property.
- Update "bulk update" activities. Supports to set Group in Person and Group column.
- Fixed "System.ArgumentException: Kan het veld met de naam Title niet vinden." error in "Copy List Item extended" activity.

3.7.6 (2011-11-21)

- Update "Lookup site user property" and "Lookup initiator user property" activities. Supports Groups property.
- Update "bulk update" activities. Supports to set Group in Person and Group column.

3.7.4 (2011-11-08)

- Update "bulk update" activities. Supports Multiline text, Note, Html field types.

3.7.0 (2011-10-18)

- Added "Change site permissions inheritance" activity. Allows either 'Stop inheriting permissions' or 'Inherit permissions from Parent' for specified site.
- Added "Grant permissions on site" activity.
- Added "Remove permissions from site" activity.
- Added "Approve Item extended" activity.
- Fixed System.Runtime.InteropServices.COMException (0x8102001C) error if reset date time field.
- Fixed System.NullReferenceException exception in "Create folder in the document library" action if executes workflow for folder.

3.6.0 (2011-08-17)

- Added "Create SharePoint library" activity. Creates a new Document, Form, Wiki Page or Picture library at specified site.
- Added "Remove all users from SharePoint group" activity.

- Added "Remove all members from Active Directory group" activity.
- Added "Rename SharePoint group" activity.
- Added "Get emails from List field extended" activity. Extracts all emails from field in filtered list items at specified list.
- Added "Get emails from field extended" activity. Extracts all emails from field at specified list item.
- Added "SharePoint group exists" condition.
- Updated "Create SharePoint group" activity. Added description for the group optional property.
- Updated "Copy List Item extended" activity. Added Trigger create event optional property.
- Fixed "Bulk Update" activities. Text after the first line break were deleted if set multiline text. Ex: Comment=[%Current item:Comment%]

3.5.3 (2011-06-20)

- Updated "Grant permission on List Item (Free)", "Delete user permission assignment from List Item", "Delete permission from List Item". User Name property supports comma separator for multiple users/groups.
- Fixed "Send email ..." activities if set email recipients from "People or Group" field.
- Fixed "System.IO.IOException: The process cannot access the file" when trying to use "Upload documents from folder" activity.
- Fixed minor bug with bulk update property if update lookup column.

3.5.1 (2011-06-09)

- Fixed System.NullReferenceException exception in "Web request" activity if could not establish trust relationship for the SSL/TLS secure channel.

3.5.0 (2011-06-08)

- Added "Create directory" activity. Creates all directories and subdirectories in the specified path.
- Added "Delete directory" activity. Deletes the specified directory and if indicated, any subdirectories and files in the directory.
- Added "Read text content from document" activity. Allows to read text content from SharePoint Document, List Item Attachment, Email body and store result in String variable.
- Added "Get current site property" activity. Returns value of current site property Ex: Url, PortalName, PortalUrl, HostName and etc.
- Added "Get current web property" activity. Returns value of current web property. Ex: Url, Name, Description, Created, Language and etc.
- Added "Get members of Active Directory group" activity. Returns members of Active Directory group.
- Added "File exists" (Free) condition. Determines whether the given path refers to an existing file on disk.
- Added "Directory exists" (Free) condition. Determines whether the given path refers to an existing directory on disk.
- Updated "Upload documents from folder" activity. Added "Keep original 'Created', 'Last Modified' and 'Created and Last Modified' date" property.
- Updated "Download documents to folder" activity. Added "Keep original 'Created', 'Last Modified' and 'Created and Last Modified' date" property.
- Update "Get Active Directory groups where user is member" activity. Added Distinguished Name Filter property.

Installation

This section describes how to install, upgrade, uninstall, or contact Support for the Virto SharePoint Workflow Activities Kit.

- [Installing Virto SharePoint Workflow Activities Kit](#)
- [Installing Virto SharePoint Workflow Activities Kit for SharePoint 2010](#)

Expected Outage

The expected outage time is from 2 minutes to several hours depending on your hardware and number of SharePoint sites. Though we recommend all Virto users to upgrade on a weekend.

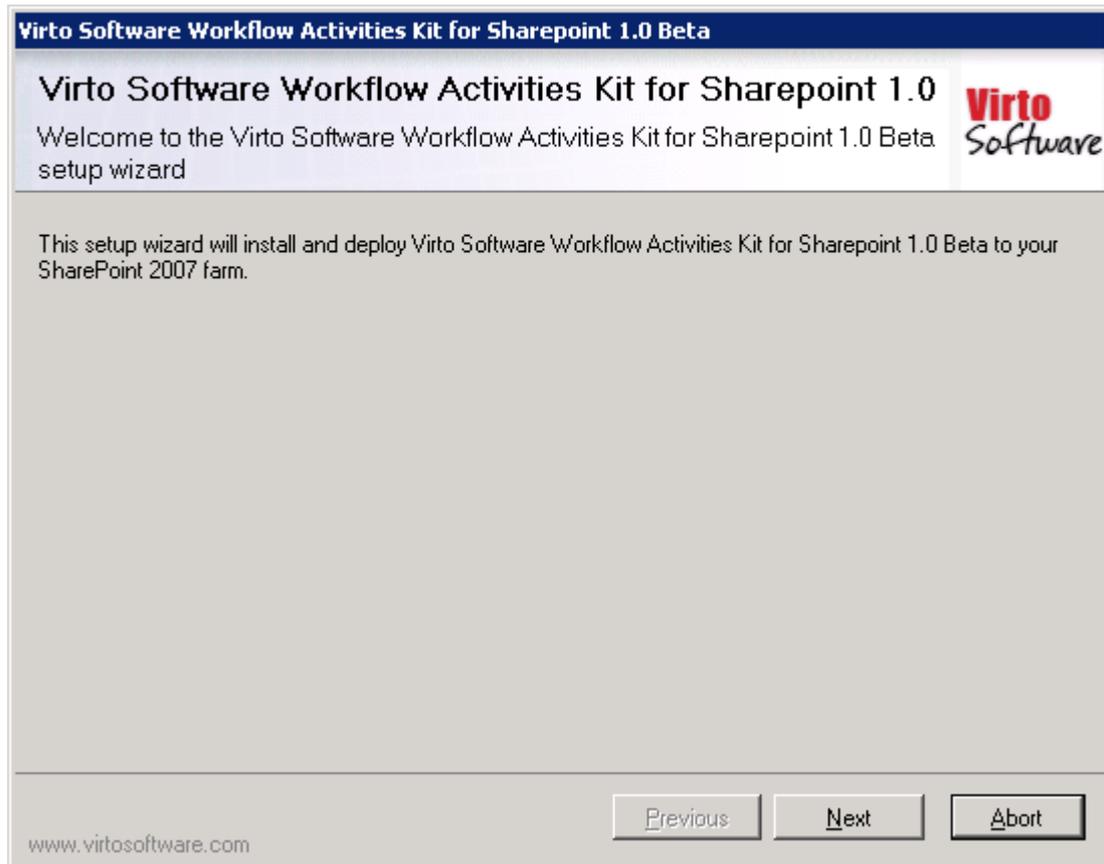
Installing Virto SharePoint Workflow Activities Kit

Before you begin, you need to make sure you have access to the server and your account must have the appropriate administrative privileges to install applications.

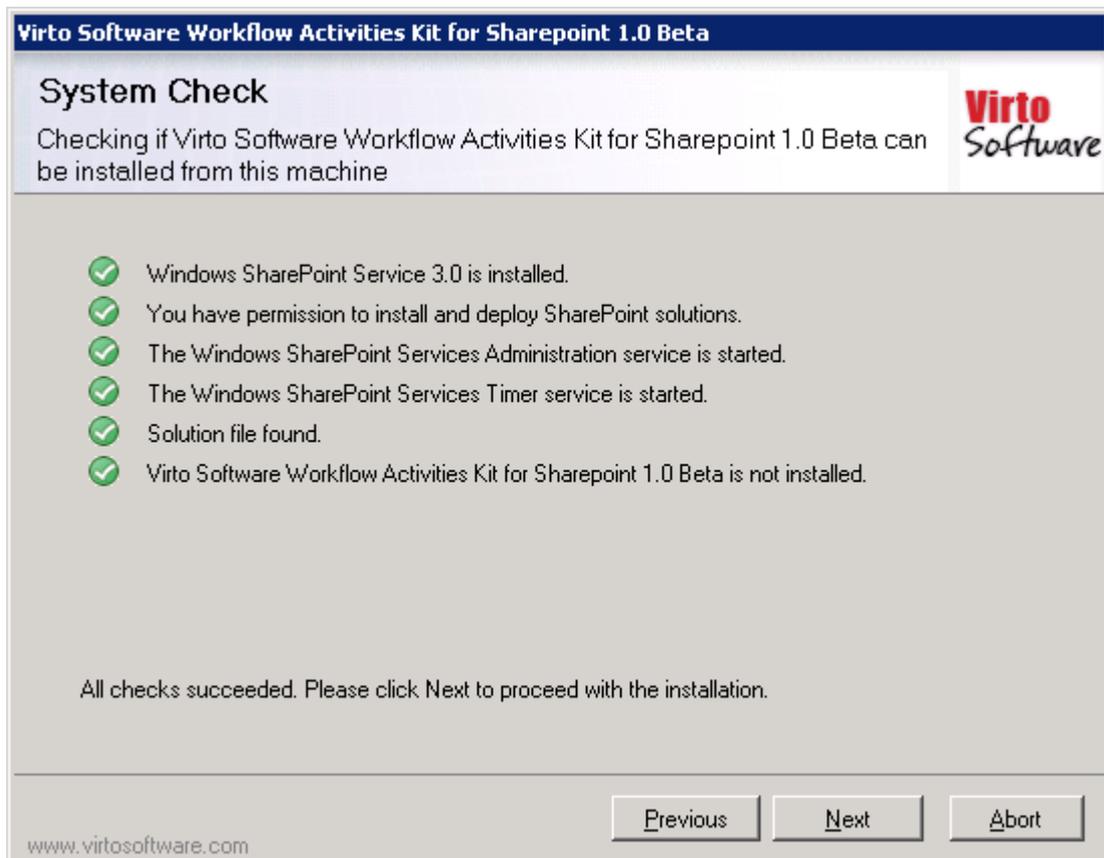
Virto SharePoint Workflow Activities Kit setup program provides links to the various installation components for the calendar.

To access Virto SharePoint Workflow Activities Kit Setup program download **Virto.Sharepoint.Activities.2.6.0.zip** file and unzip it. Run extracted Setup.exe file.

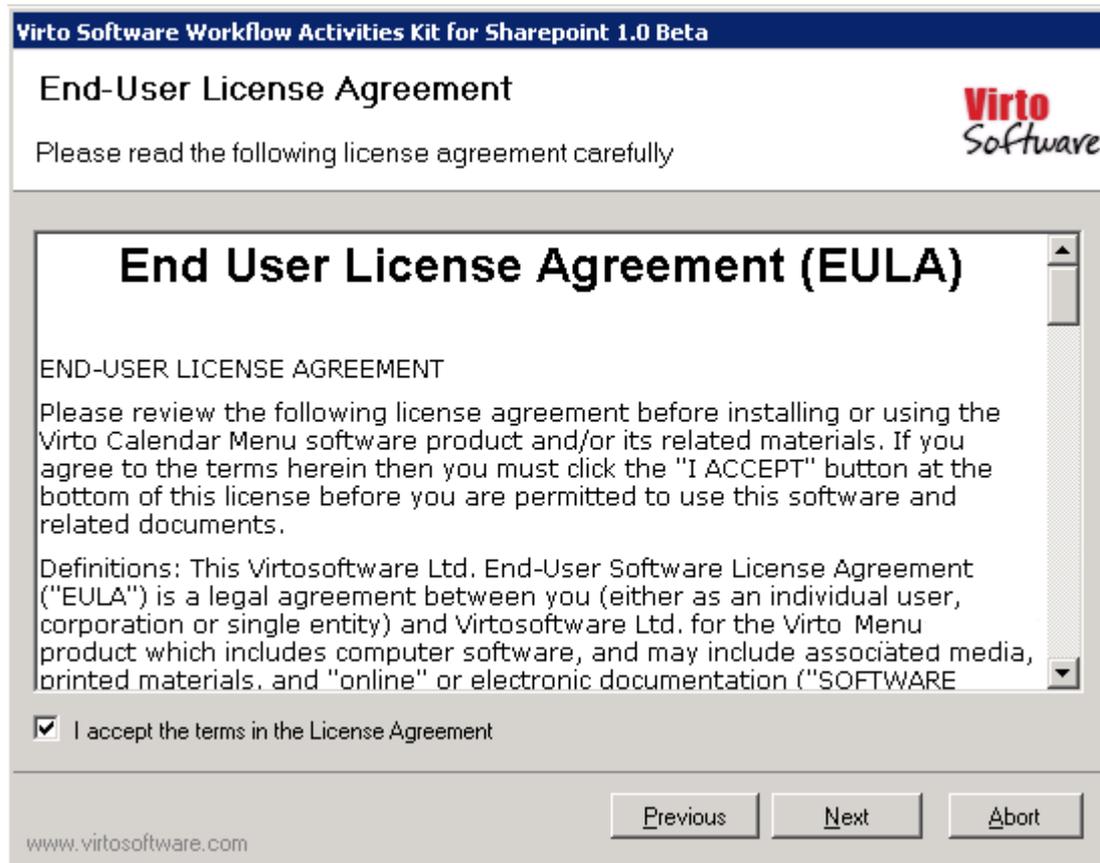
The setup wizard window will appear.



Virto SharePoint Workflow Activities Kit wizard performs a system check prior to the installation. All the system checks must be completed successfully in order to proceed with the installation. After the checks have completed, click "Next".



Check "I accept the terms in the License Agreement" and click "Next".



Virto Software Workflow Activities Kit for Sharepoint 1.0 Beta

End-User License Agreement

Please read the following license agreement carefully

Virto Software

End User License Agreement (EULA)

END-USER LICENSE AGREEMENT

Please review the following license agreement before installing or using the Virto Calendar Menu software product and/or its related materials. If you agree to the terms herein then you must click the "I ACCEPT" button at the bottom of this license before you are permitted to use this software and related documents.

Definitions: This Virtosoftware Ltd. End-User Software License Agreement ("EULA") is a legal agreement between you (either as an individual user, corporation or single entity) and Virtosoftware Ltd. for the Virto Menu product which includes computer software, and may include associated media, printed materials, and "online" or electronic documentation ("SOFTWARE

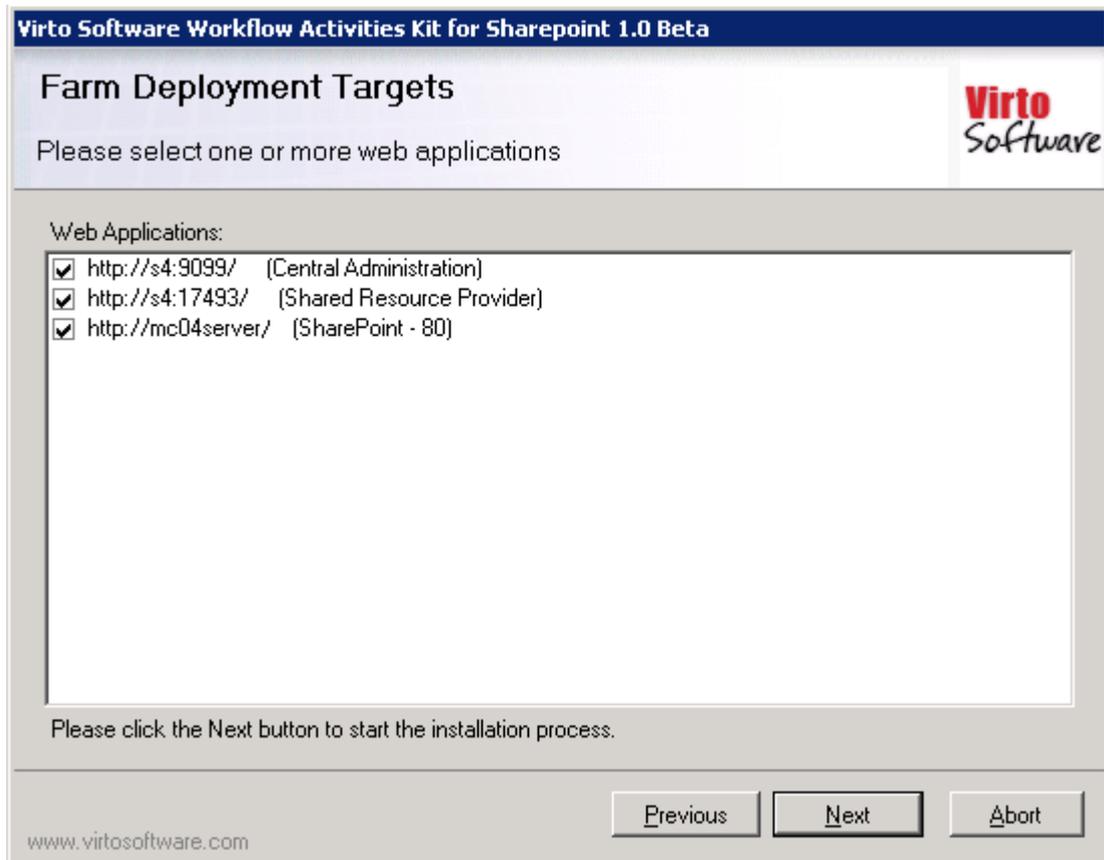
I accept the terms in the License Agreement

[Previous](#) [Next](#) [Abort](#)

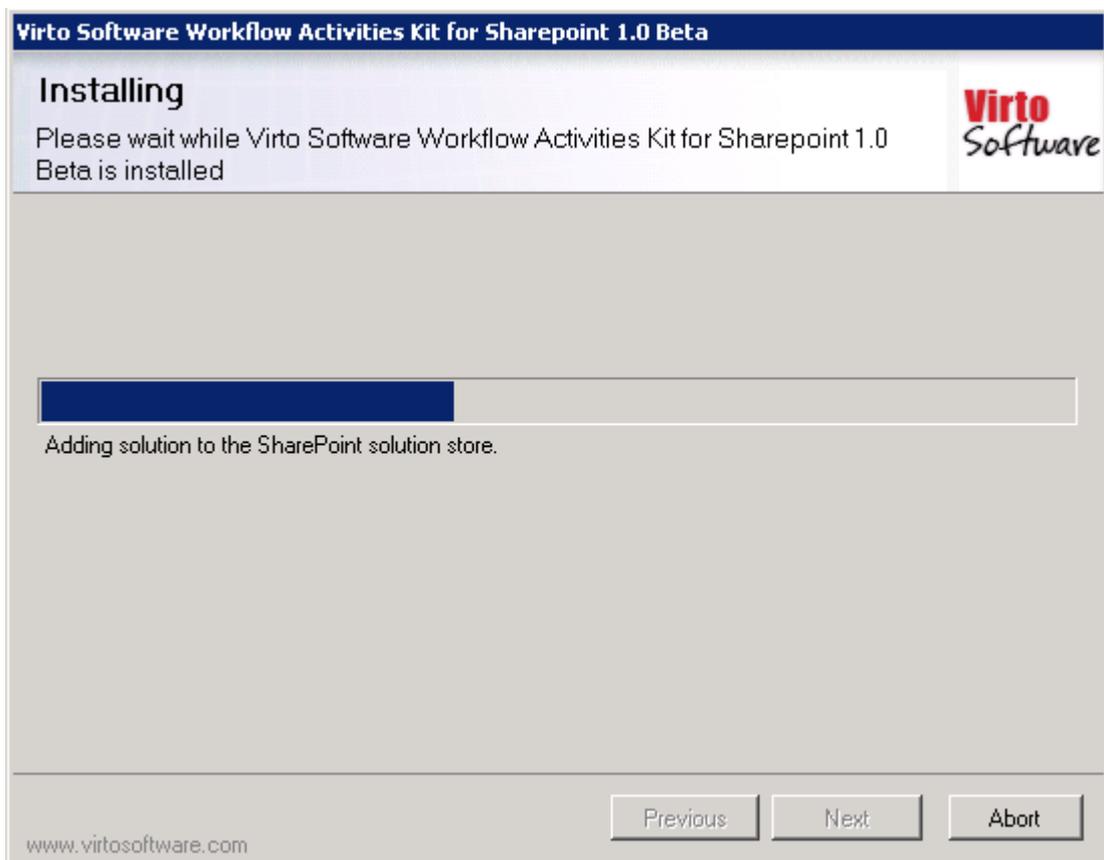
www.virtosoftware.com

Select the web application(s) where you want to install the product.

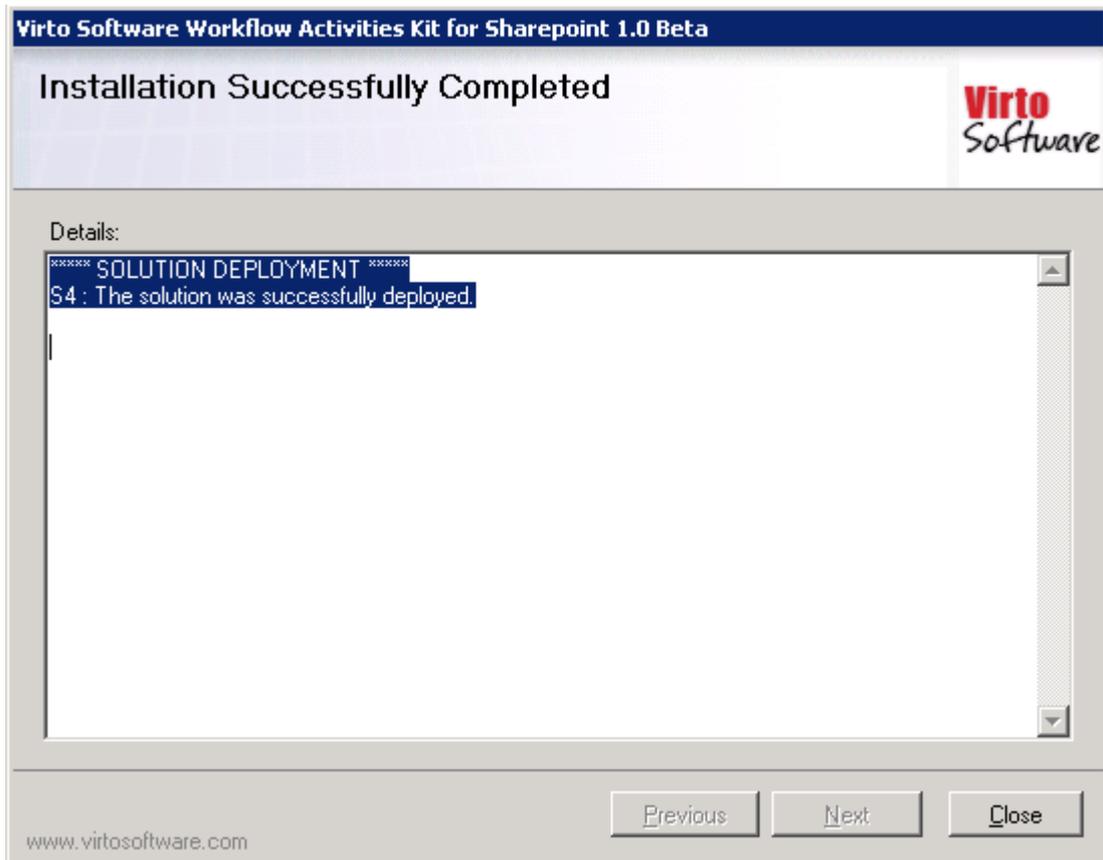
Warning: You must be logged in to the SharePoint server with a Site Collection Administrator account to automatically activate this feature.



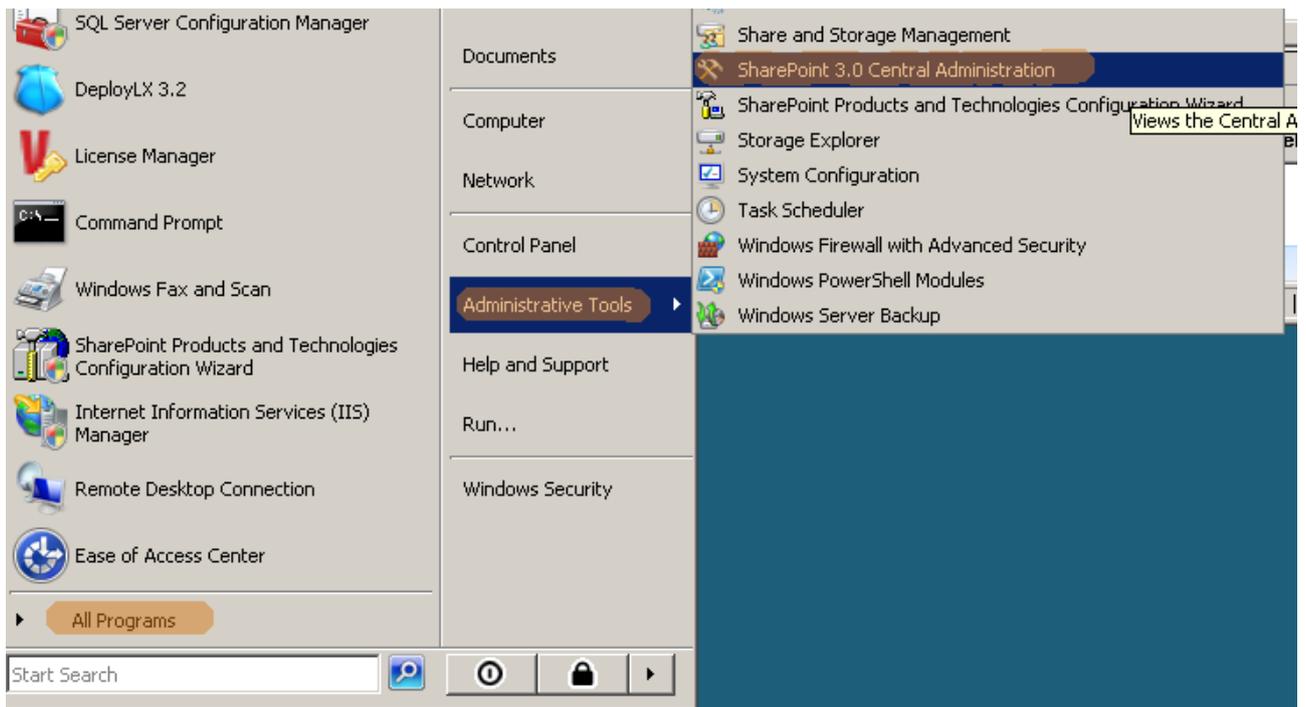
Then click "Next".



Click "Close" to complete the installation.



You should activate the feature for desired web applications, before using in SharePoint Designer, otherwise SharePoint Designer would block adding activities to the workflow. Run “SharePoint 3.0 Central Administration”.



Go to “Application Management” → “Manage Web Application Features”

Home | Operations | **Application Management**

Central Administration > Application Management

Application Management

This page contains links to pages that help you configure settings

SharePoint Web Application Management

- Create or extend Web application
- Remove SharePoint from IIS Web site
- Delete Web application
- Define managed paths
- Web application outgoing e-mail settings
- Web application general settings
- Content databases
- Web.config Modifications
- **Manage Web application features**
- Web application list

SharePoint Site Management

And activate the feature for desired web applications (usually it's Sharepoint - 80 or Sharepoint - 443).

Central Administration > Application Management > Manage Web Application Features

Manage Web Application Features

This page allows you to manage web application features.

Web Application: **http://s4:17493/**

Name	Status
 Office Server Enterprise Search Uses the Office Server Search Service for search over broad enterprise content. In addition to list and site scopes, provides search over people profiles, business data, remote and custom content sources. Uses multiple tabs to display results in the Search Center.	Deactivate Active
 Office Server Site Search Uses the Office Server Search Service for site and list scoped searches.	Deactivate Active
 Office SharePoint Server Enterprise Web application features Features such as the business data catalog, forms services, and Excel Services, included in the Office SharePoint Server Enterprise License	Deactivate Active
 Office SharePoint Server Standard Web application features Features such as user profiles and search, included in the Office SharePoint Server Standard License	Deactivate Active
 Virtio Software Workflow Activities Kit for SharePoint 2.4.1 Helps to create advanced workflows using SharePoint Designer by providing kit of custom workflow activities. For more info go to http://www.virtosoftware.com	Activate

If you have a non-English installation of SharePoint, you may have to copy to copy VirtioWorkflow.ACTIONS from [SP HIVE]\TEMPLATE\1033\Workflow to [SP HIVE]\TEMPLATE\YOUR LCID\Workflow.

Installing Virto SharePoint Workflow Activities Kit for SharePoint 2010

Before you begin, you need to make sure you have access to the server and your account must have the appropriate administrative privileges to install applications.

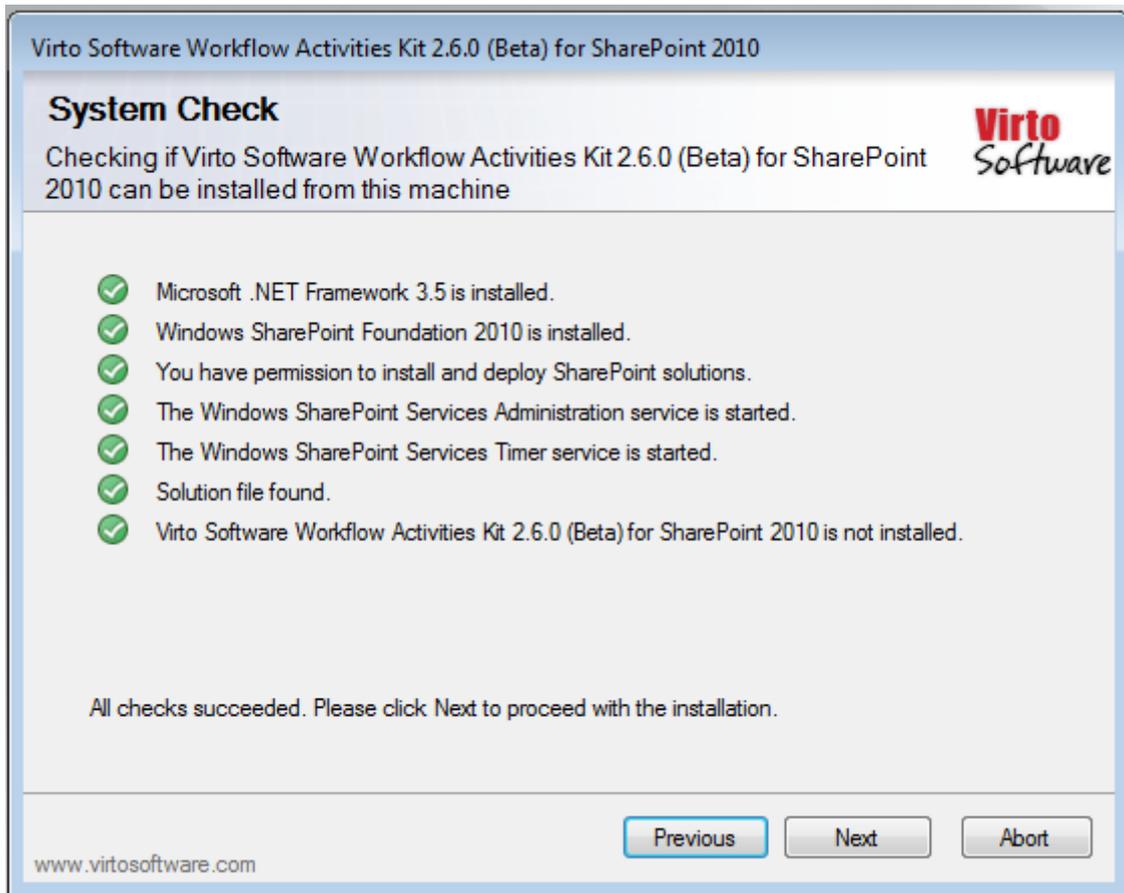
Virto SharePoint Workflow Activities Kit for SharePoint 2010 setup program provides links to the various installation components for the calendar.

To access Virto SharePoint Workflow Activities Kit for SharePoint 2010 Setup program download **Virto.Sharepoint.Activities.2010.2.6.0.Beta.zip** file and unzip it. Run extracted Setup.exe file.

The setup wizard window will appear.



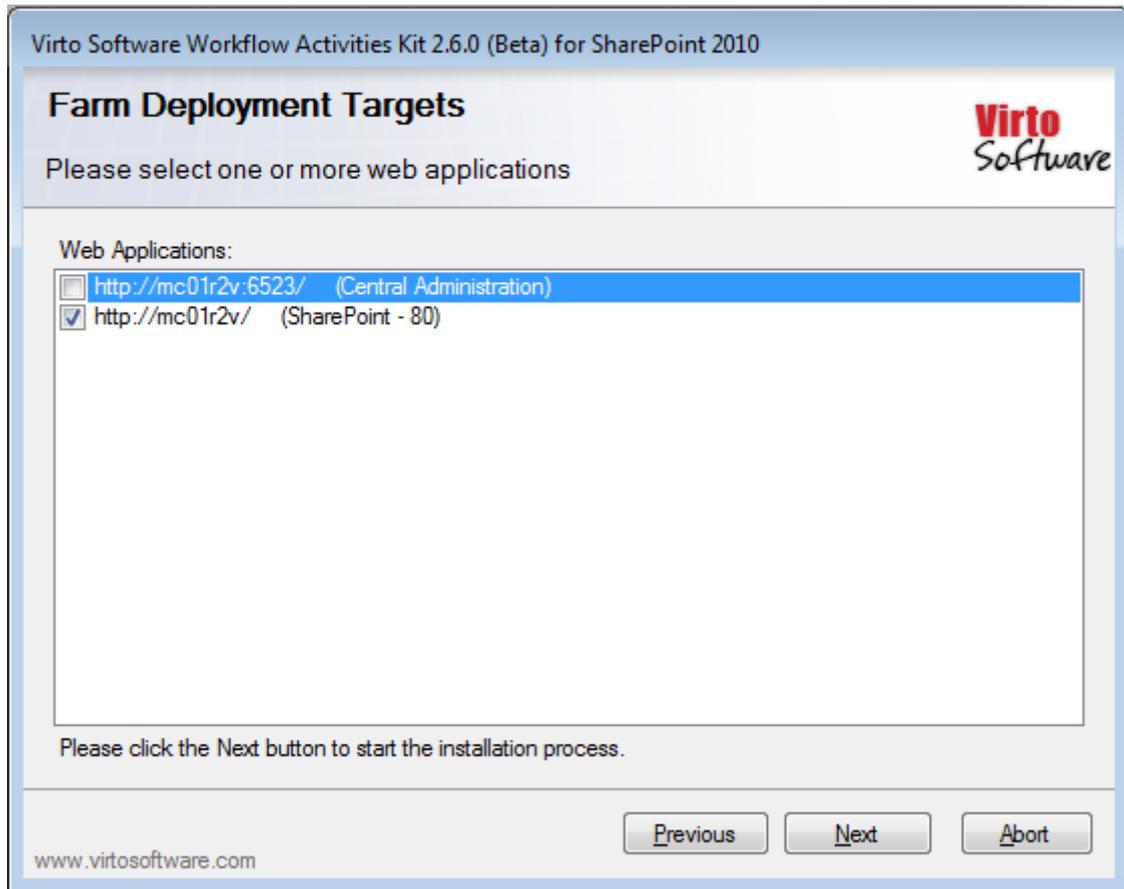
Virto SharePoint Workflow Activities Kit wizard performs a system check prior to the installation. All the system checks must be completed successfully in order to proceed with the installation. After the checks have completed, click "Next".



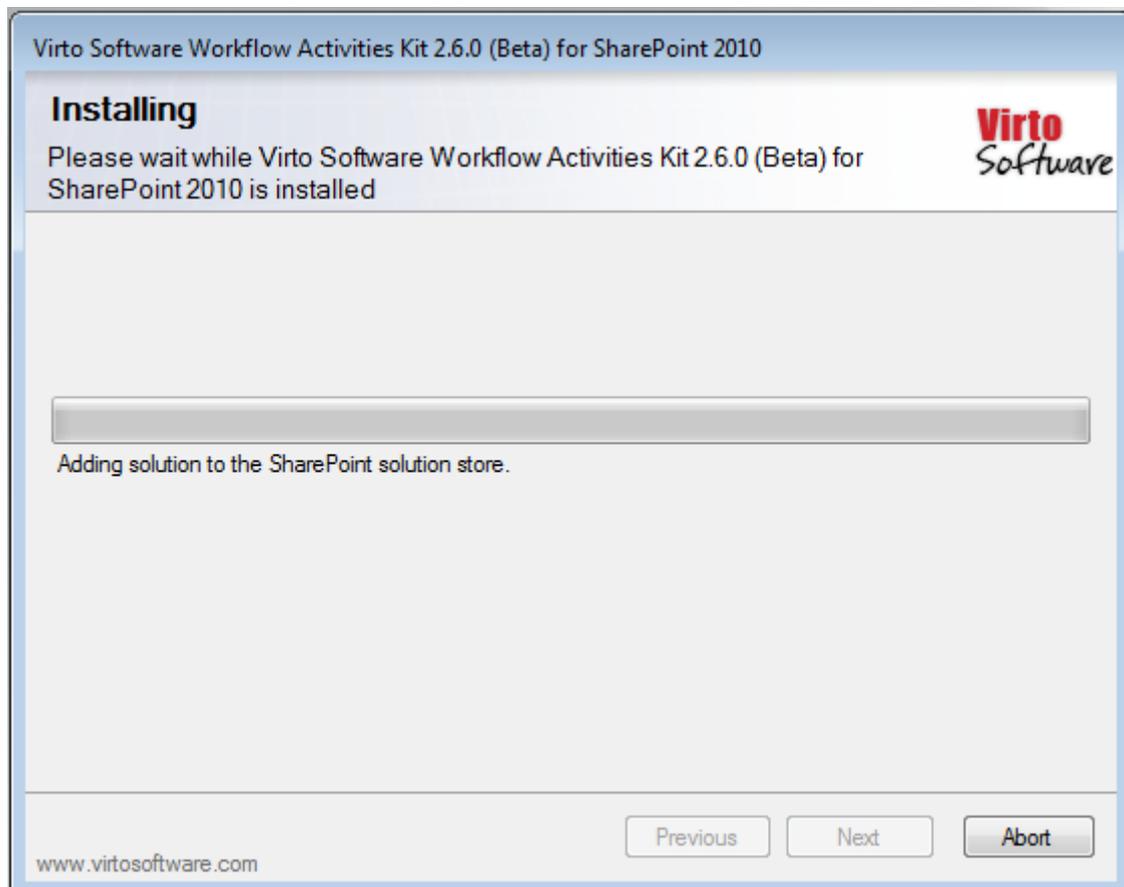
Check “I accept the terms in the License Agreement” and click “Next”.

Select the web application(s) where you want to install the product.

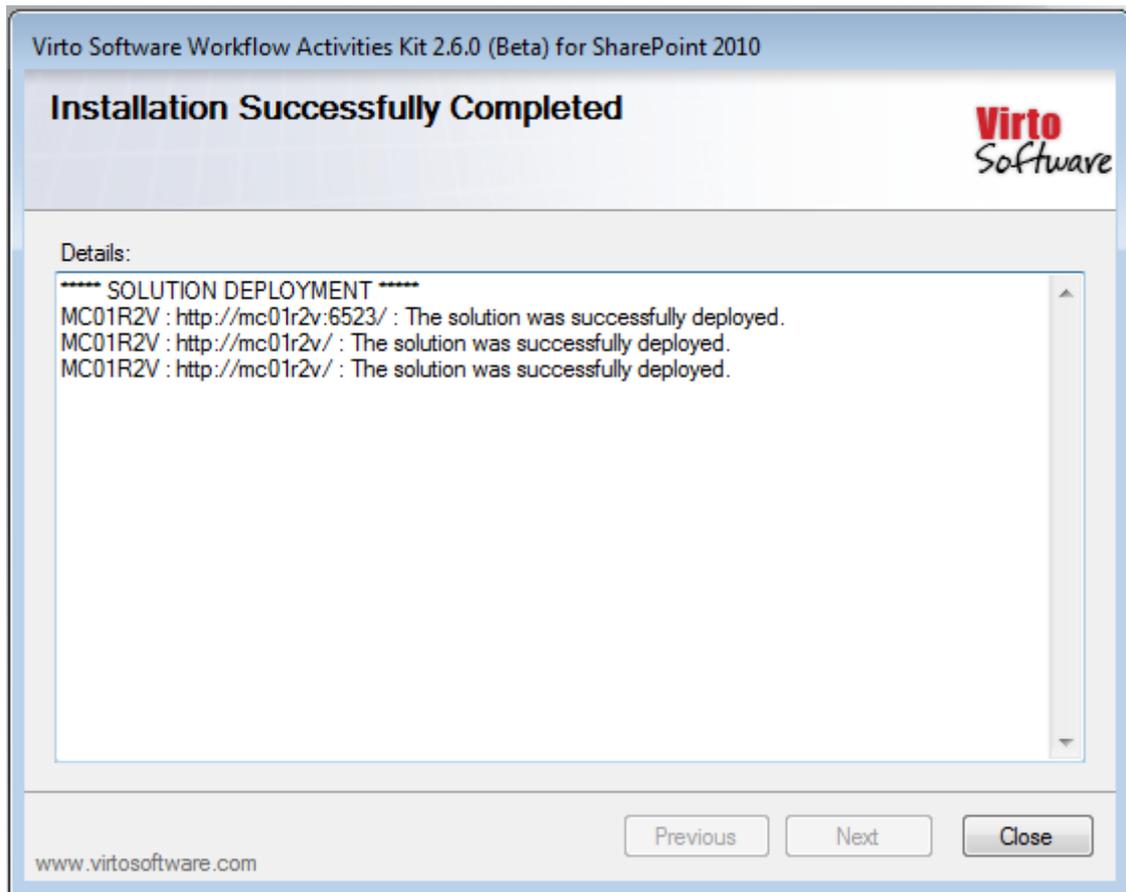
Warning: *You must be logged in to the SharePoint server with a Site Collection Administrator account to automatically activate this feature.*



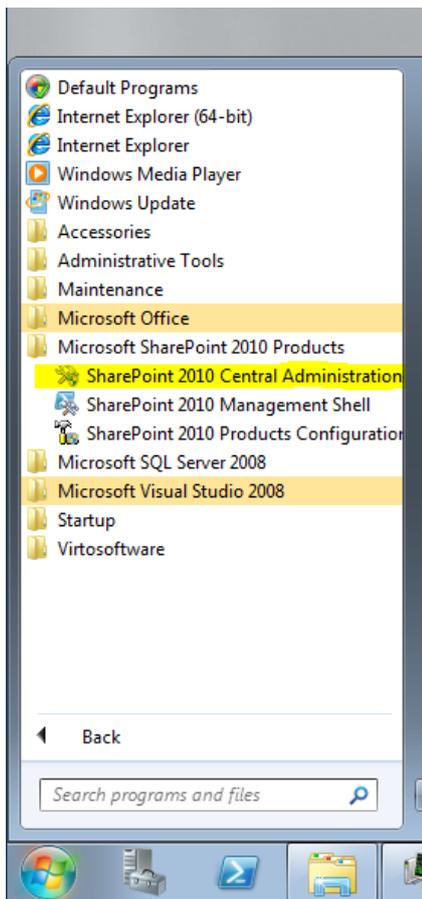
Then click "Next".



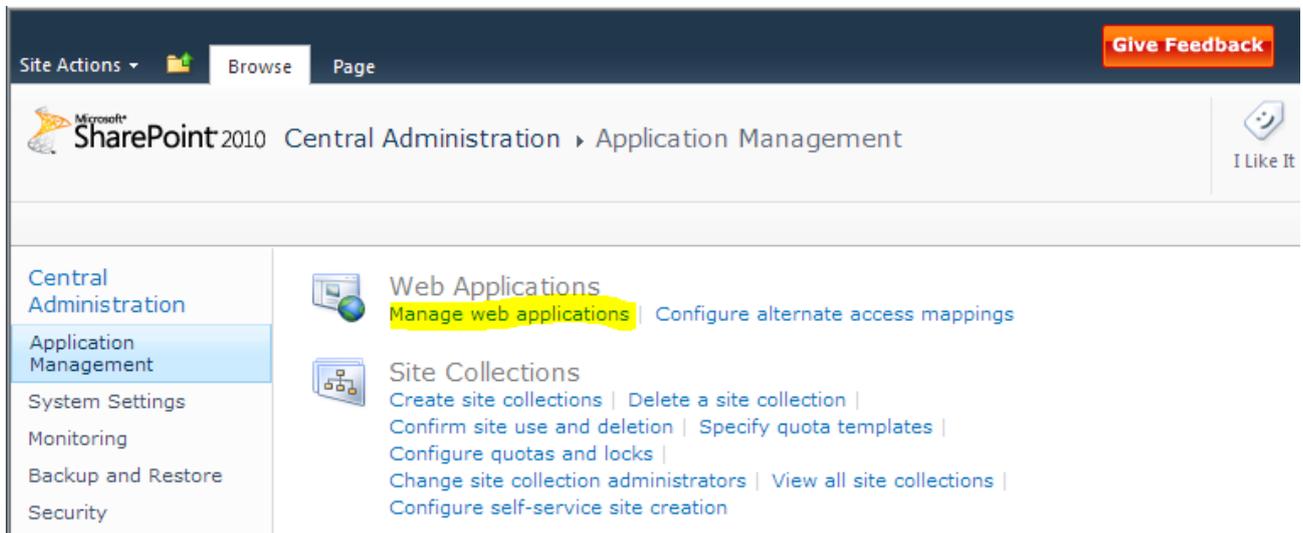
Click “Close” to complete the installation.



You should activate the feature for desired web applications, before using in SharePoint Designer, otherwise SharePoint Designer would block adding activities to the workflow. Run “SharePoint 2010 Central Administration”.



Go to “Application Management” → “Manage web applications”



Select desired web application (usually it's Sharepoint - 80 or Sharepoint - 443) and press “Manage Features” button.

Site Actions ▾ Browse Web Applications Give Feedback

New Extend Delete
 Contribute

General Settings ▾
 Manage Features
 Managed Paths
 Service Connections
 Manage

Authentication Providers
 Self-Service Site Creation
 Security

Blocked File Types
 User Permissions
 Web Part Security

User Policy
 Anonymous Policy
 Policy

Name	URL
SharePoint - 80	http://mc01r2v/
SharePoint Central Administration v4	http://mc01r2v:6523/

Central Administration
 Application Management
 System Settings
 Monitoring
 Backup and Restore

And activate the feature.

Manage Web Application Features OK

Name	Status
Document Sets metadata synchronization Provides the infrastructure to synchronize metadata for Document Sets.	Activate
Office Server Enterprise Search Uses the Search Server Service for search over broad enterprise content. In addition to list and site scopes, provides search over people profiles, business data, remote and custom content sources. Uses multiple tabs to display results in the Search Center.	Activate
Office Server Site Search Uses the Search Server Service for site and list scoped searches.	Activate
SharePoint Server Enterprise Web application features Features such as Visio Services, Access Services, and Excel Services, included in the SharePoint Server Enterprise License.	Activate
SharePoint Server Standard Web application features Features such as user profiles and search, included in the SharePoint Server Standard License.	Activate
Virtto Software Workflow Activities Kit 2.6.0 (Beta) for SharePoint 2010 Helps to create advanced workflows using SharePoint Designer by providing kit of custom workflow activities. For more info go to http://www.virtosoftware.com	Activate

If you have a non-English installation of SharePoint, you may have to copy to copy `VirttoWorkflow.ACTIONS` from `[SP HIVE]\TEMPLATE\1033\Workflow` to `[SP HIVE]\TEMPLATE\YOUR LCID\Workflow`.

Installing Virtto SharePoint Workflow Activities Kit for SharePoint 2013

The installation is similar to the process described for SharePoint 2010 version.

How do you license Virto Workflow Activities Kit?

You need 1 product license for each SharePoint Server.

SharePoint executes workflow instances in one of two places depending on the last action. If the last action in the workflow was waiting on a user input, the workflow continues to execute on the SharePoint Front-End Web Server where the user completed that input. If the workflow is continued from a delay timer or from an event being received elsewhere, it executes within the SPTimer service on any SharePoint Server where SPTimer service is running.

In SharePoint 2010, you can set the preferred server where the SPTimer service runs. In this case, you need 1 product license for each SharePoint Front-End Web Server and 1 product license for each SharePoint Server where SPTimer service is working. To do this, click in the Manage Content Databases menu of the Application Management section of SharePoint Central Administration. Then click on your content database and scroll down to the setting for Preferred Server for Timer Jobs. You can also manually stop the SPTimer service on any servers you don't want it to run on.

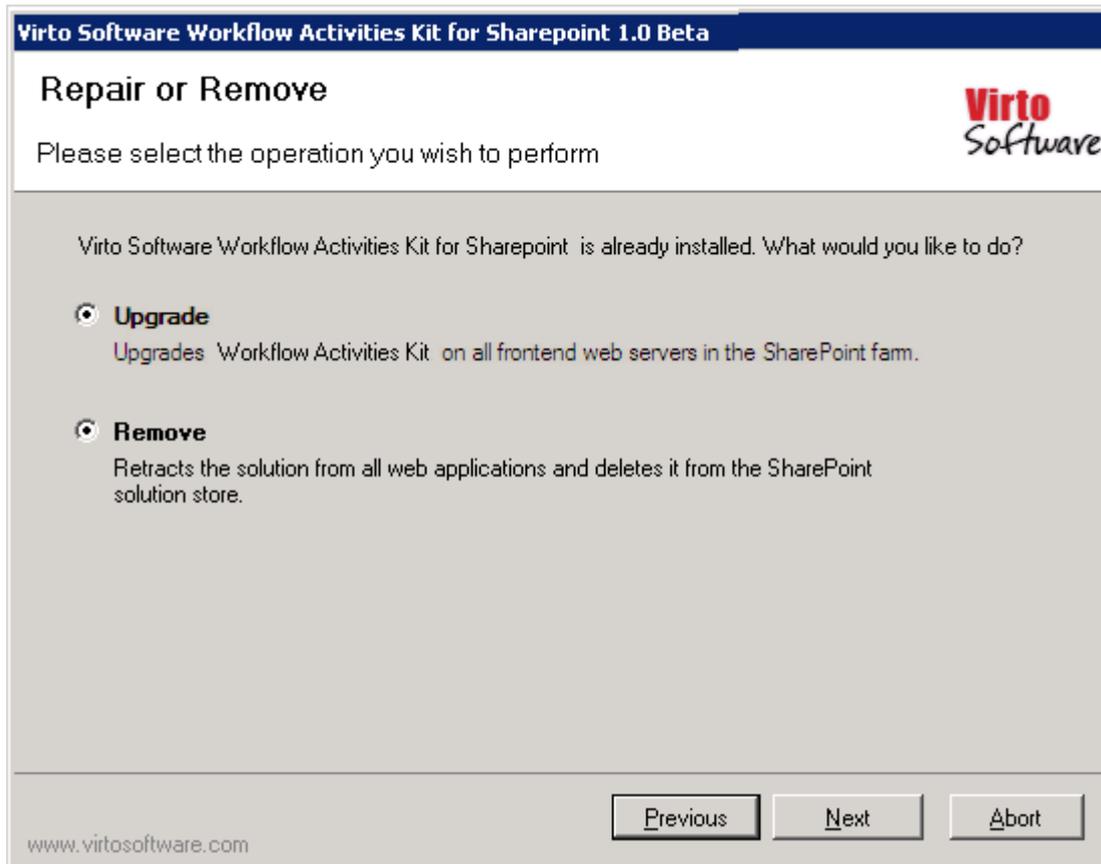
License Activation

To see full instruction for successful activation of your component, please download "Virto License Manager" PDF instruction from [Downloads](#) section of our site or read it in [Wiki](#).

Upgrading Virto SharePoint Workflow Activities Kit

If you already use Virto SharePoint Workflow Activities Kit and need to upgrade it to the latest version, download the.zip file from <http://www.virtosoftware.com>. Unzip the file and run setup.exe as it is described in the *Installing Virto SharePoint Workflow Activities Kit* section.

On the step 3 you will see the window as follows:



Check the box “Upgrade” and click “Next”.

Note: if you had activated the license while installing the previous Virto SharePoint Workflow Activities Kit version, you do not need to activate it now.

Uninstalling Virto SharePoint Workflow Activities Kit

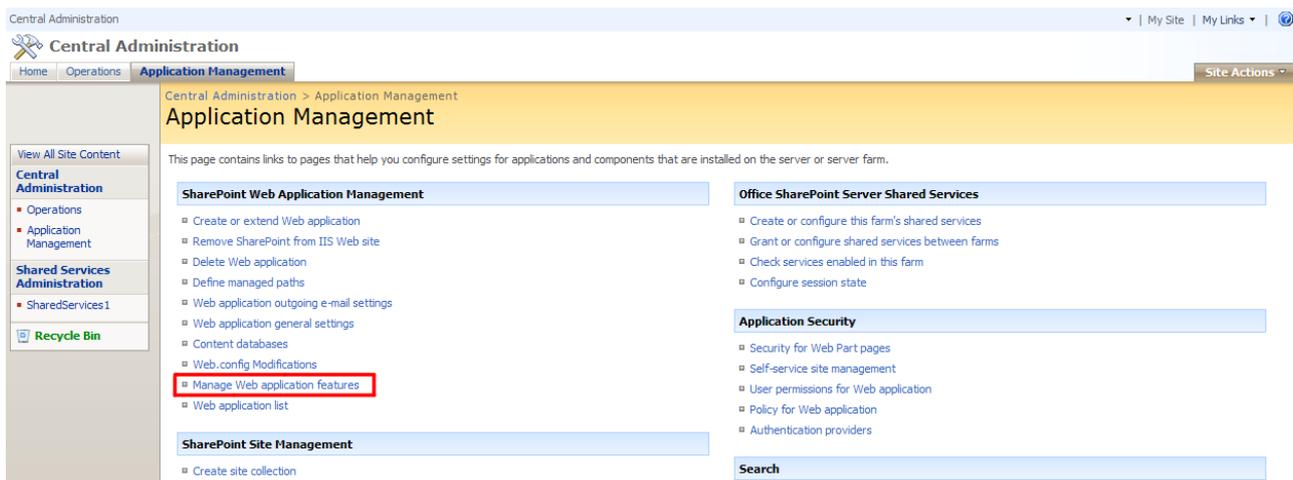
To uninstall the Add-On:

1. Double click the Setup.exe extracted from downloaded **Virto.Sharepoint.Activities.1.0beta.zip** file.
2. The program performs the system checks again. Once that has successfully completed, the program prompts you to Repair or Remove the solution. Select Remove, and click “Next”.

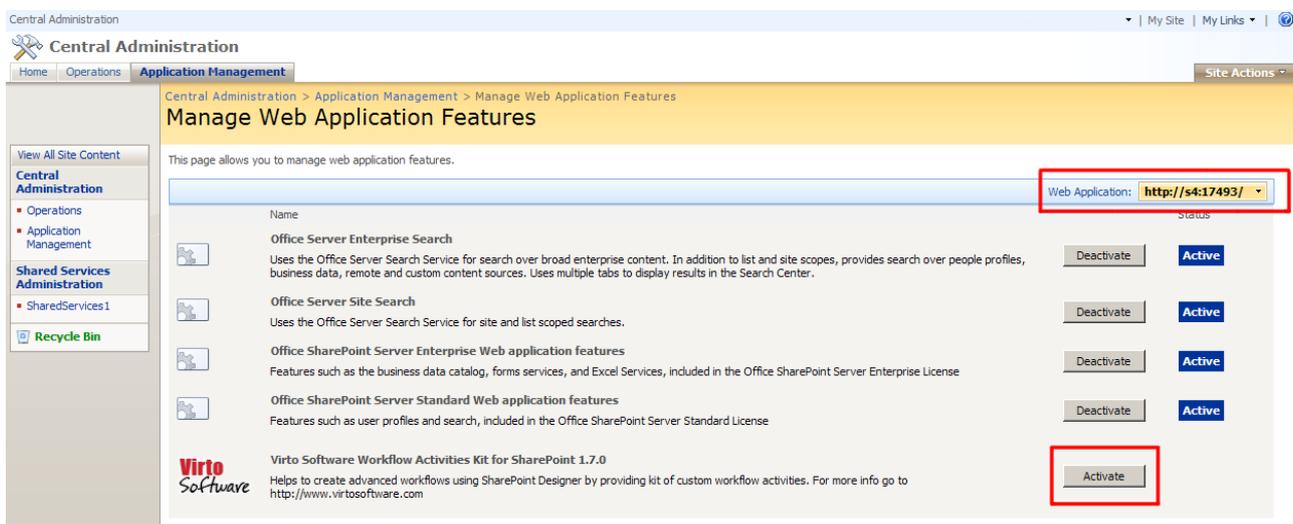
Start Working with Workflow Activities Kit

Activating Activities Kit

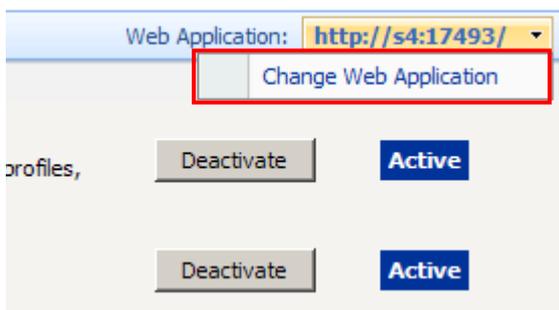
When the installation process is complete, go to the SharePoint site and find “Central Administration - Application Management - Manage Web Application Features”.



Activate the feature for desired web applications (usually it's SharePoint - 80 or SharePoint - 443).

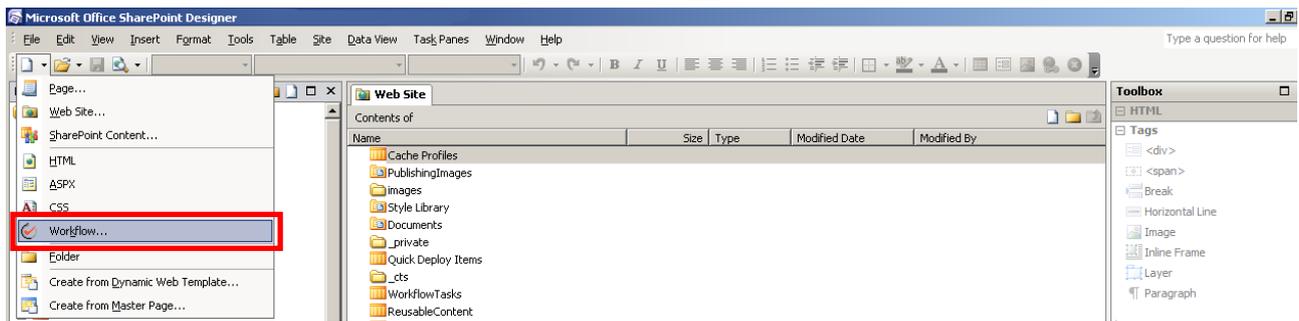


Note: make sure that you selected the web application on which the web part is installed. If not, select the required Web Application using “Change Web Application” button.

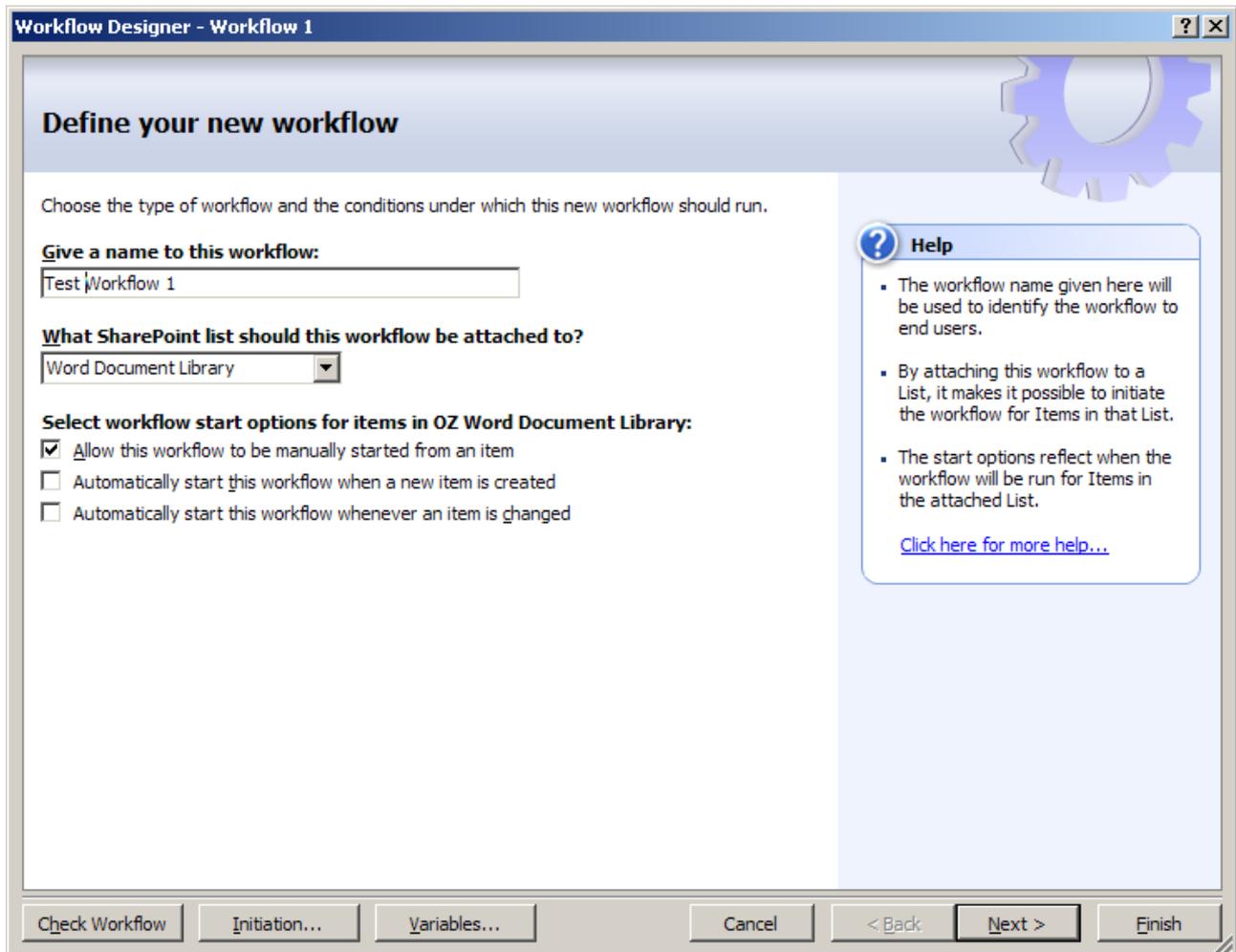


Running SharePoint Designer

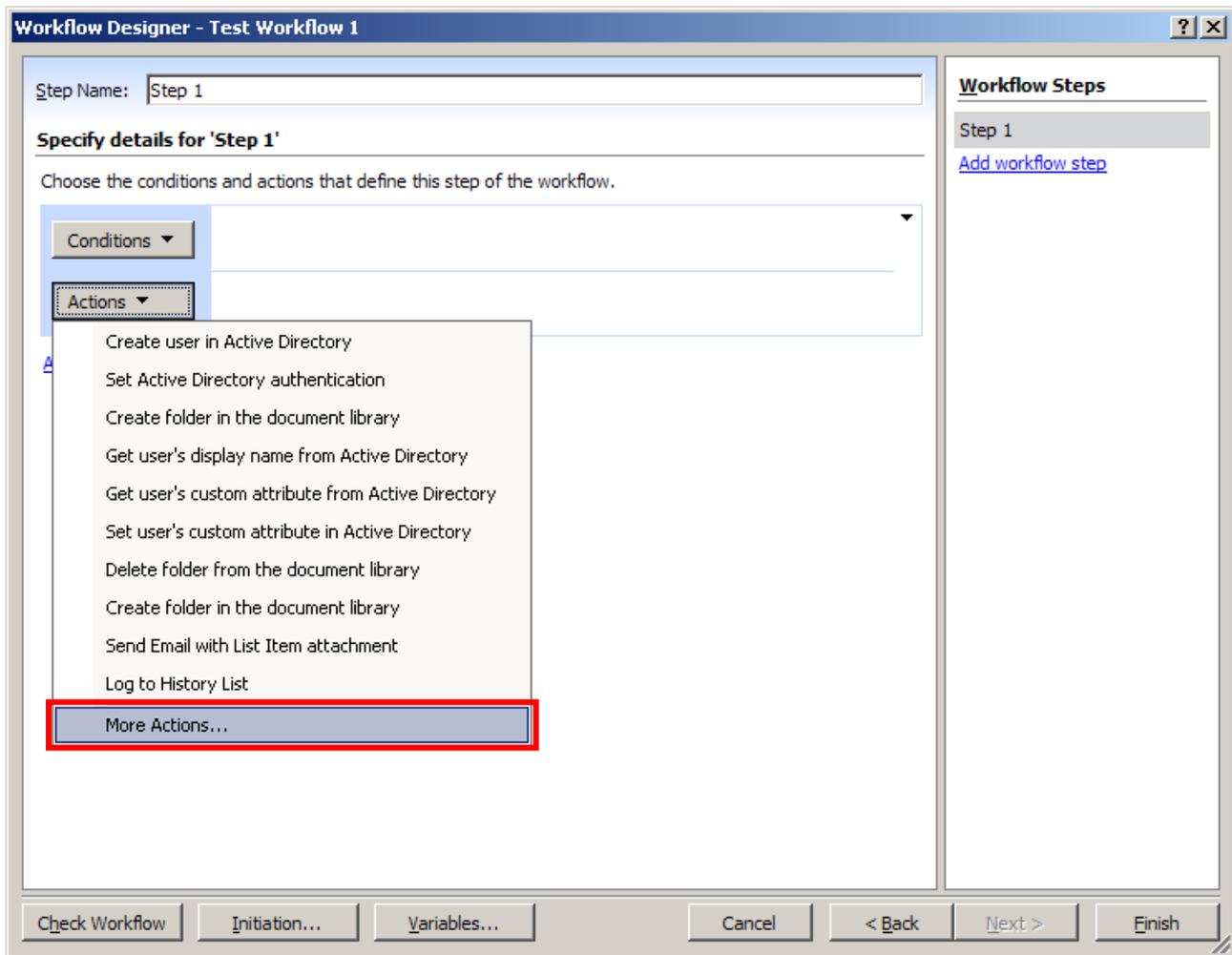
Open up Microsoft Office SharePoint Designer. Then connect to your site. Create a new workflow (“File – Workflow”).



Type the name of new workflow and select SharePoint list which the new workflow should be attached to. Click “Next”.

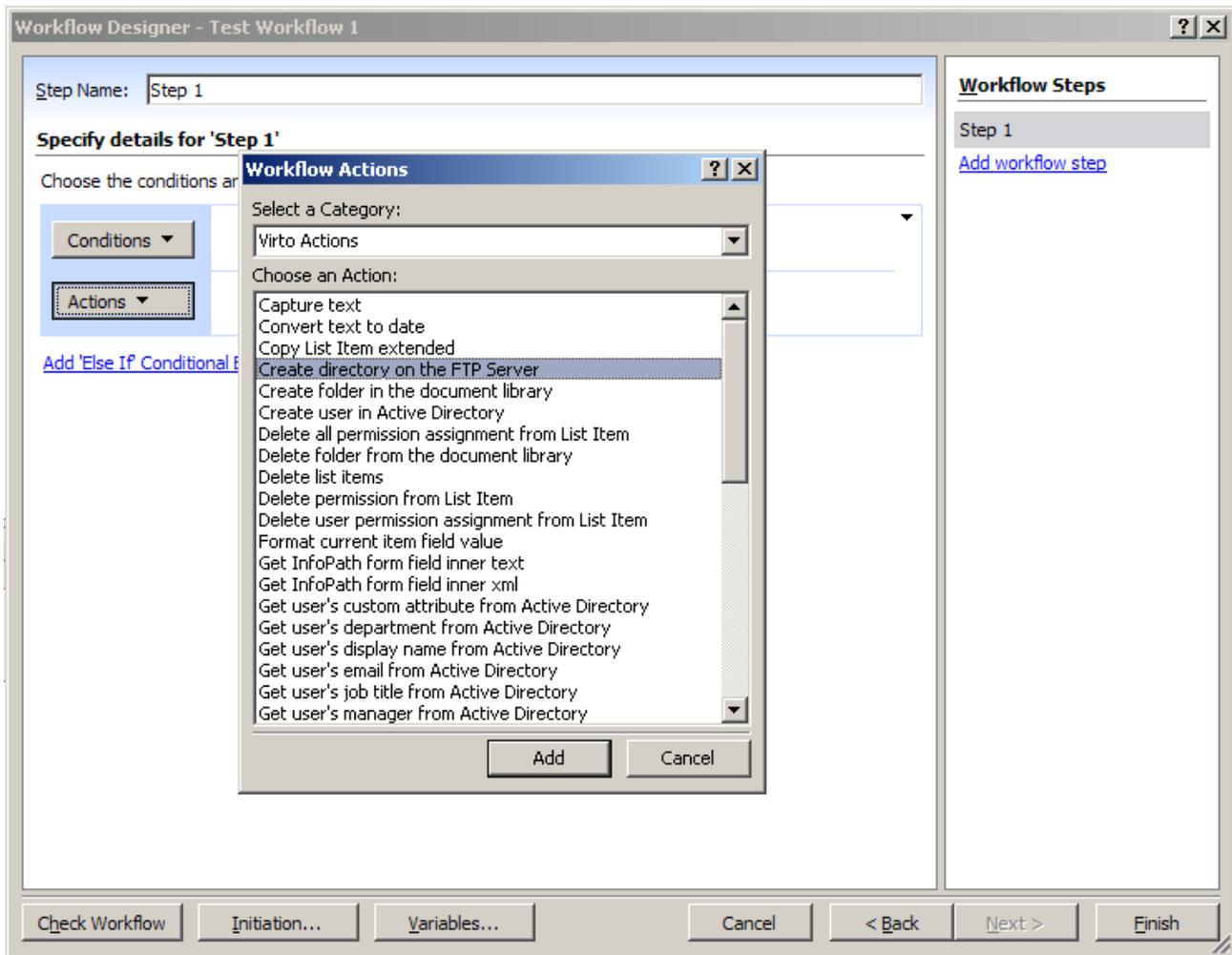


Then click “Actions” and select “More Actions” in the drop down.



Note: If you have a non-english installation of sharepoint, you need to copy `VirtoWorkflow.ACTIONS` from `[SP HIVE]\TEMPLATE\1033\Workflow` to `[SP HIVE]\TEMPLATE\YOUR LCID\Workflow`

Then select "Virto Actions" as a category and choose the required action from the list and click "Add".



Using Created Workflow

Now go to SharePoint site to the list for which you have created the workflow. Click the required element and select "Workflows" in the drop down.

Home > Word Document Library > 111

Word Document Library

New | Upload | Actions | Settings

Type	Name	Modified
Folder	Current	9/23/2009 11:39 AM
Word Document	Sd	9/23/2009 11:33 AM

- View Properties
- Edit Properties
- Manage Permissions
- Edit in Microsoft Office Word
- Delete
- Send To
- Check Out
- Workflows**
- Alert Me

Select the required workflow from the list.

 **Collect Feedback**
Routes a document for review. R
document owner when the workf

 **Test Workflow 1**

Then click "Start" to run the selected workflow.

Test Workflow 1

To initiate Test Workflow 1, click Start.

Start Cancel

Now see the result of workflow activity (creating of a directory on the FTP server in this case).

Type	Name	Modified	Modified By
Folder	.Current	9/23/2009 11:39 AM	System Account
Folder	BBB Test	10/1/2009 12:30 PM	System Account

Start Working with Workflow Activities Kit For SharePoint 2010

Activating Activities Kit

When the installation process is complete, go to “Application Management” → “Manage web applications”

SharePoint 2010 Central Administration > Application Management

Web Applications
[Manage web applications](#) | [Configure alternate access mappings](#)

Site Collections
[Create site collections](#) | [Delete a site collection](#) |
[Confirm site use and deletion](#) | [Specify quota templates](#) |
[Configure quotas and locks](#) |
[Change site collection administrators](#) | [View all site collections](#) |
[Configure self-service site creation](#)

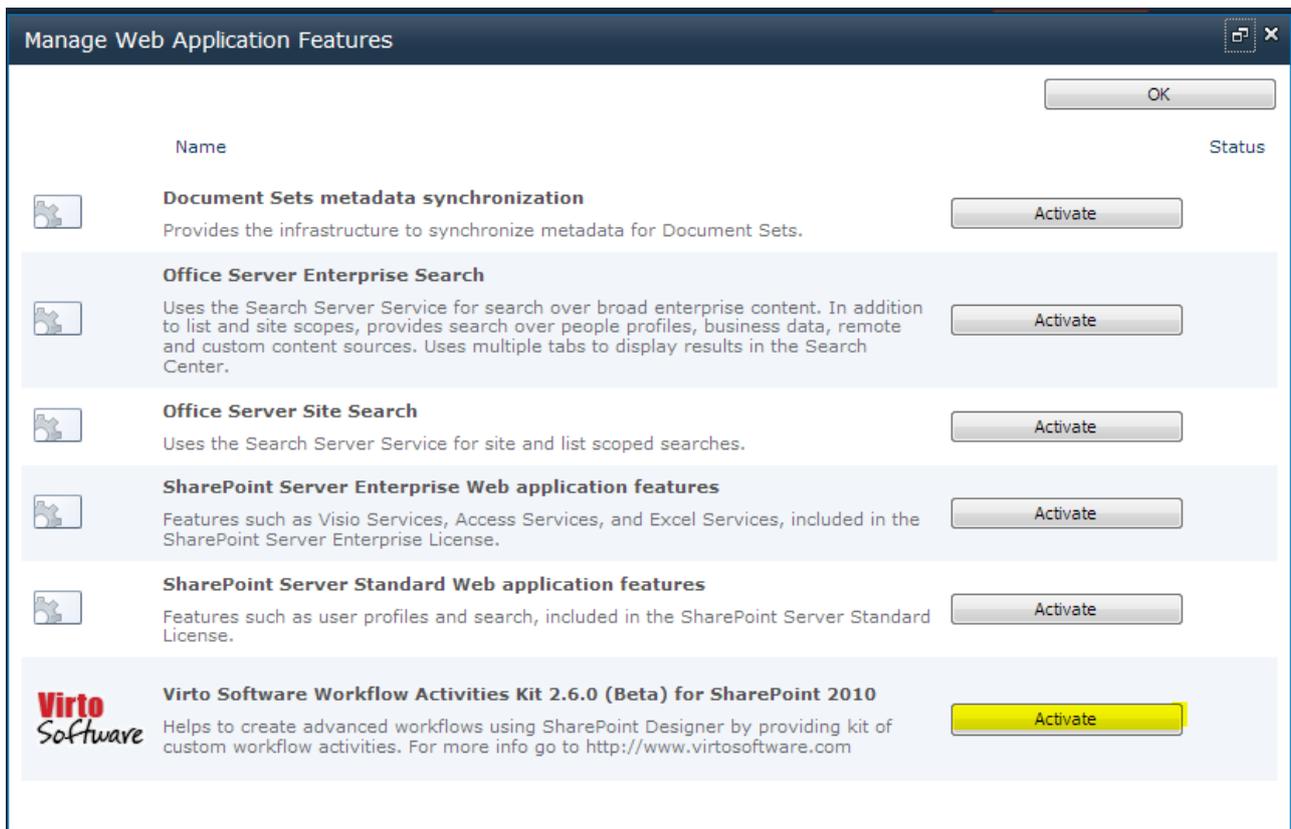
Select desired web application (usually it's Sharepoint - 80 or Sharepoint - 443) and press “Manage Features” button.

Web Applications

Manage Features

Name	URL
SharePoint - 80	http://mc01r2v/
SharePoint Central Administration v4	http://mc01r2v:6523/

And activate the feature.



If you have a non-English installation of SharePoint, you may have to copy to copy `Virtosoftware.ACTIONS` from `[SP HIVE]\TEMPLATE\1033\Workflow` to `[SP HIVE]\TEMPLATE\YOUR LCID\Workflow`.

Start Working with Workflow Activities Kit For SharePoint 2013

Activating Activities Kit for Workflow Platform 2013

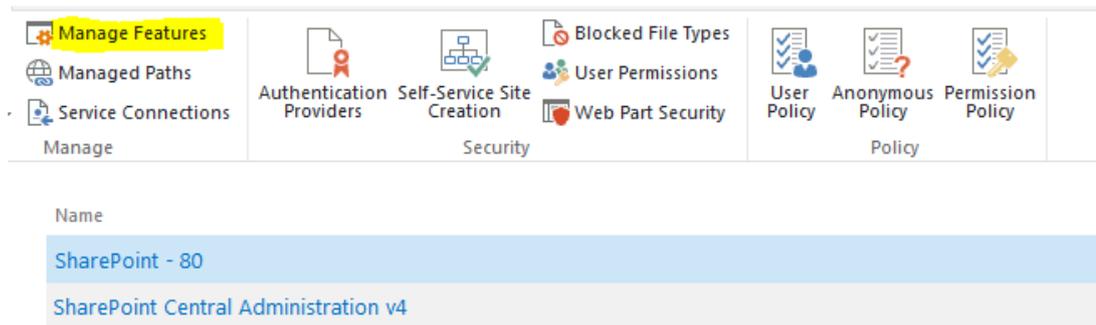
When the installation process is complete, go to “Application Management” → “Manage web applications”

Application Management

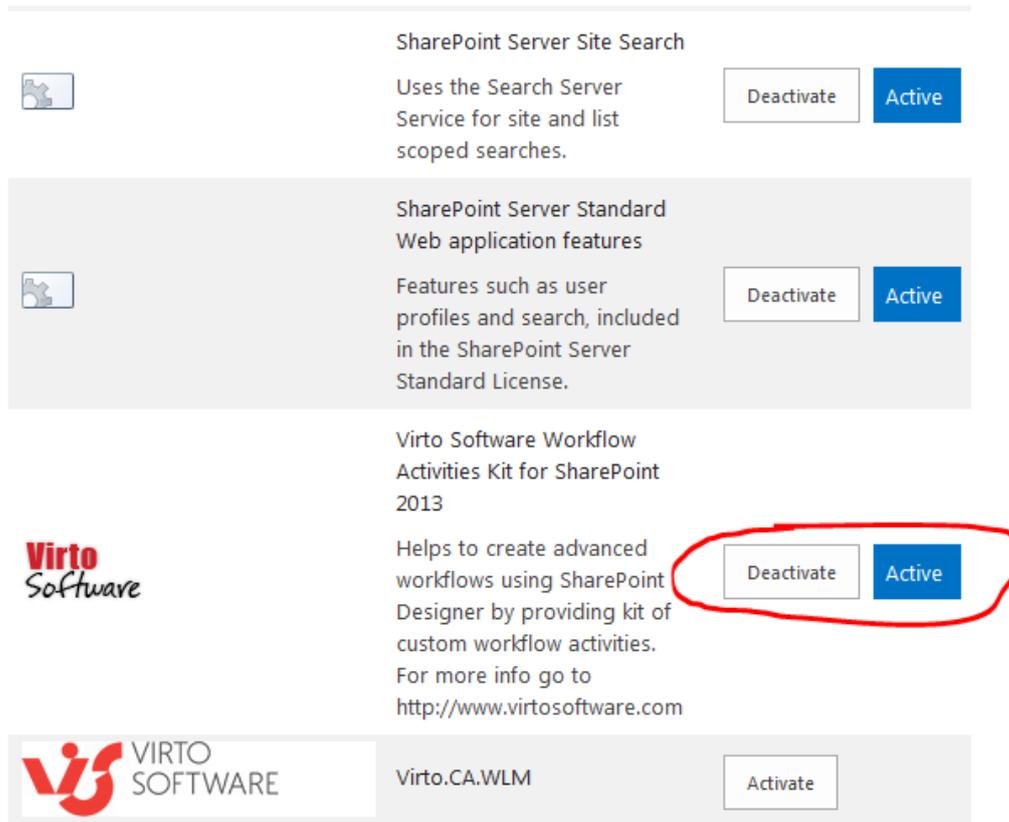
- 
Web Applications
[Manage web applications](#) | [Configure alternate access mappings](#)
- 
Site Collections
[Create site collections](#) | [Delete a site collection](#) | [Confirm site use and deletion](#) | [Specify quota templates](#) | [Configure quotas and locks](#) | [Change site collection administrators](#) | [View all site collections](#) | [Configure self-service site creation](#)
- 
Service Applications
[Manage service applications](#) | [Configure service application associations](#) | [Manage services on server](#)
- 
Databases
[Manage content databases](#) | [Specify the default database server](#) | [Configure the data retrieval service](#)

Select desired web application (usually it's Sharepoint - 80 or Sharepoint - 443) and press “Manage

Features" button.



And activate the feature.



If you have a non-English installation of SharePoint, you may have to copy to copy VirttoWorkflow.ACTIONS from [SP HIVE]\TEMPLATE\1033\Workflow to [SP HIVE]\TEMPLATE\YOUR LCID\Workflow.

Activating Activities Kit for Workflow Platform 2013

When the installation process is complete, go to site where you will to install Virto Workflow Activity, then go to “Site Settings”.

Select “Manage site features”, then activate “Virto Software Workflow Activities Kit for SharePoint 2013”

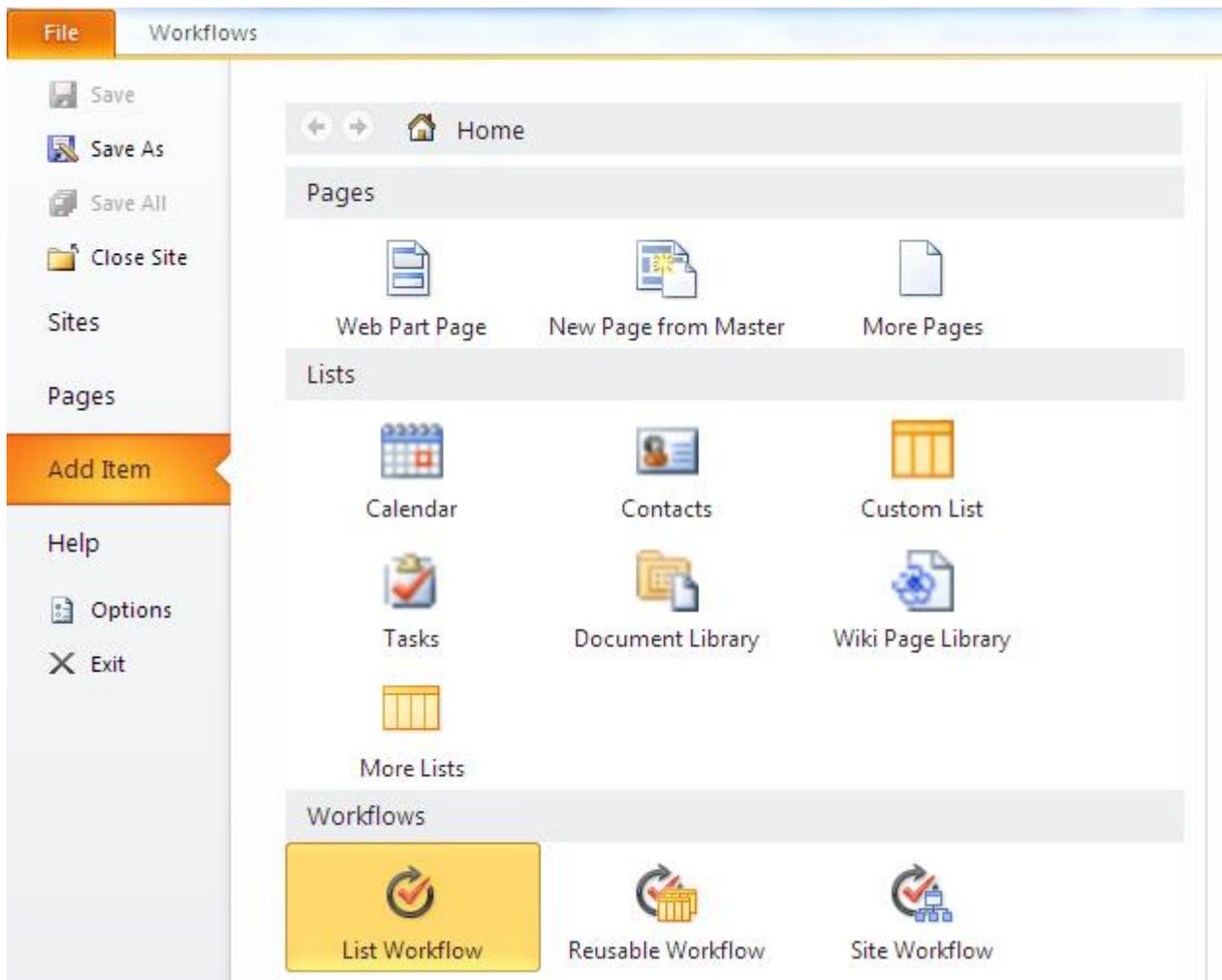
Site Settings

The screenshot shows the SharePoint Site Settings interface. On the left, there are navigation menus for 'Users and Permissions', 'Web Designer Galleries', 'Site Administration', and 'Search'. The 'Site Actions' menu is expanded, and 'Manage site features' is highlighted in yellow. The main content area displays a list of site features with their descriptions and control buttons. The 'Virto Software Workflow Activities Kit for SharePoint 2013' feature is circled in red and has an 'Active' button.

Feature Name	Description	Control
Site Mailbox	The Site Mailbox app helps you keep email and documents close together by connecting your site to an Exchange mailbox. You can then view your email on SharePoint, and view site documents in Outlook.	Activate
Site Notebook	Creates a Microsoft OneNote 2010 notebook in the Shared Documents library and places a link to it on the Quick Launch. This feature requires a properly configured WOPI application server to create OneNote 2010 notebooks.	Activate
Team Collaboration Lists	Provides team collaboration capabilities for a site by making standard lists, such as document libraries and issues, available.	Deactivate Active
Virto Software Workflow Activities Kit for SharePoint 2013	Helps to create advanced workflows based on the SharePoint Workflow 2013 platform using SharePoint Designer by providing kit of custom workflow activities	Deactivate Active
Wiki Page Home Page	This site feature will create a wiki page and set it as your site home page.	Deactivate Active
Workflow Task Content Type	Adds the SharePoint 2013 Workflow Task content type to the site.	Deactivate Active
Workflows can use app permissions	Allow workflows to read from and to write to all items in this site.	Activate

Running SharePoint Designer

Open up Microsoft Office SharePoint Designer 2010. Then connect to your site. Create a new workflow (“File – Add item – List Workflow”).



Type the name of new workflow and select SharePoint list which the new workflow should be attached to. Click "Create".

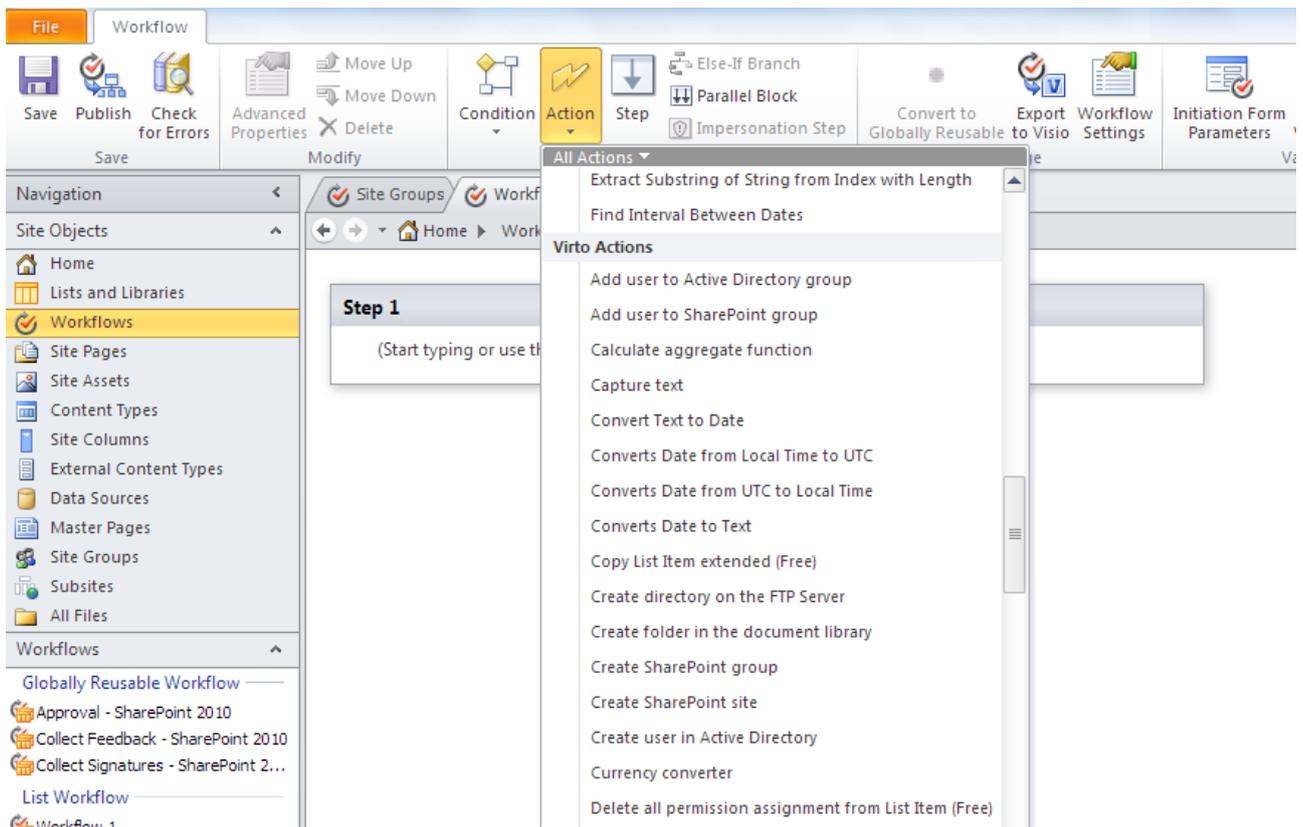
List Workflow

 Create a workflow that is attached to a list and can be initiated from a list item. The workflow name given here will be used to identify the workflow to end users.

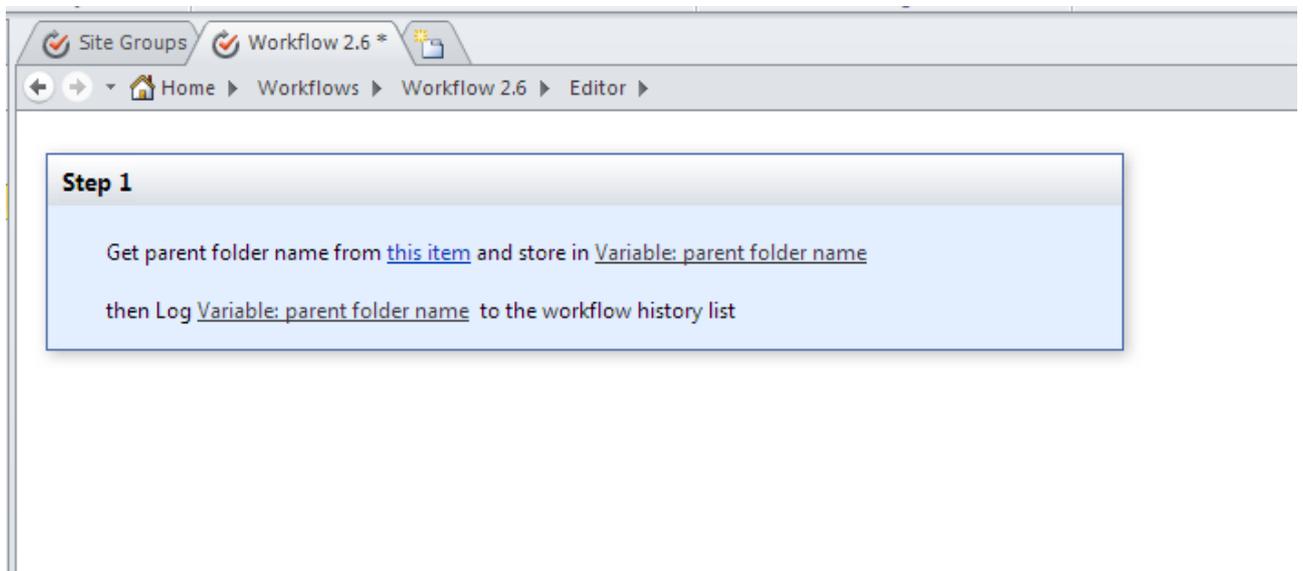
Specify the name for the new workflow:

Specify the list to associate with the new workflow:

Then start typing or use the insert group in the Ribbon.



Then select “Virtos Actions” as a category and choose the required action from the list.



Using Created Workflow

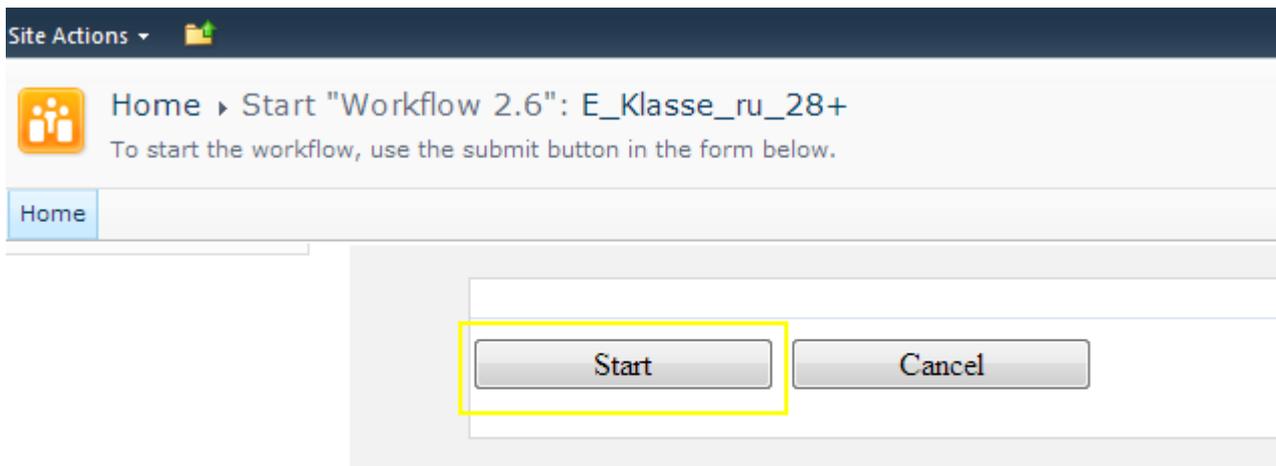
Now go to SharePoint site to the list for which you have created the workflow. Click the required element and select “Workflows” in the drop down.

The screenshot shows the SharePoint interface for a document library. The top navigation bar includes 'Site Actions', 'Browse', 'Documents', and 'Library'. The breadcrumb path is 'Home > My Documents > Parent Folder : All Documents'. A table lists documents with columns for 'Type', 'Name', and 'Modified'. The document 'E_Klasse_ru_28+' is selected, and a context menu is open over it. The menu options are: 'Add new', 'View Properties', 'Edit Properties', 'Check Out', 'Workflows' (highlighted), 'Send To', 'Manage Permissions', and 'Delete'. The left sidebar contains navigation links for 'Home', 'Documents', 'My Documents', 'Lists', 'Tasks', 'Discussions', 'Recycle Bin', and 'All Site Content'.

Select the required workflow from the list.

The screenshot shows the 'Start a New Workflow' dialog. It features a list of workflow options. The first option is 'Approval - SharePoint 2010' with a description: 'Routes a document for approval. Approvers can approve or reject the document, reassign the approval task, or request changes to the document.' The second option, 'Workflow 2.6', is highlighted with a yellow rectangular box. Below the list is a 'Workflows' section with the instruction 'Select a workflow for more details on the current status or history.' and a 'Name' input field. The 'Running Workflows' section is partially visible at the bottom.

Then click "Start" to run the selected workflow.



Now see the result of workflow activity.

Virto SharePoint Workflow Activities Kit (SharePoint 2010 Workflow Platform)

Impersonation Activities

Set User Token

This activity allows running Virto SharePoint Workflow Activities from custom user account (not System Account) in Current Step.

Note: By default, Virto SharePoint Workflow Activities run under System Account. If you want to use custom user context, add “Set User Token” activity in the current step above any activity from Virto SharePoint Workflow Activities Kit. All activity after “Set User Token” in the current step will be executed from specified user account.

Conditions ▾

Actions ▾ Run Virto Activities in [this user](#) user context

SharePoint Workflow Designer Phrase

Run Virto Activities in [this user](#) user context

Parameters

Parameter	Description
this user	User login name

For example: “Create list item extended” and “Upload attachments” will be executed under “DOMAIN\ash” user account in the current step.

Conditions ▾

Actions ▾ Run Virto Activities in [DOMAIN\ash](#) user context

then Create list item with [Title=Virto Task](#) at [http://mc01/sites/home/Lists/Tasks](#) . Trigger create event [No](#) . Store new list Id in [Variable: variable](#)

then Store [http://mc01/sites/home...](#) in [Variable: variable1](#)

then Upload [http://mc01/sites/home...](#) attachments to list item at [Variable: variable1](#)

[Add 'Else If Conditional Branch](#)

Sms Activities

Send SMS via Microsoft Office Mobile Service Protocol

This activity allows sending long SMS message to specified phone number(s) via Microsoft Office Mobile protocol.

Conditions ▾

Actions ▾ Send SMS [this message](#) to [this phone number](#) . Use OMS service [this url](#) , user [this user](#) and password [this password](#) .

To use this activity, you need to subscribe to a Text Message (SMS) Service from a Service Provider. You can find a list of Service Providers [here](#).

SharePoint Workflow Designer Phrase

Send SMS this message to this phone number. Use Office Mobile Service server this url, user this user and password this password.

Parameters

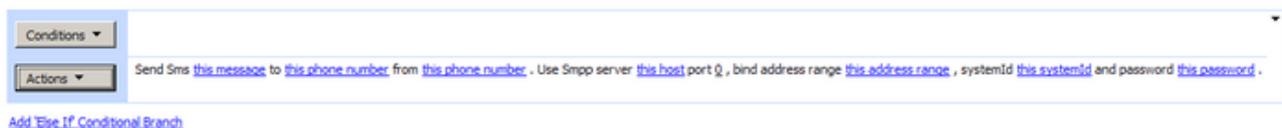
Parameter	Description
this message	SMS Message. Supports long text SMS. Contact with your provider to get more information about maximum message length.
this phone number	Destination phone number. Supports several mobile phones separated with ';' or ','
this url	Office Mobile Service server. List of Service Providers http://messaging.office.microsoft.com/HostingProviders.aspx
this user	Account name. Kindly obtain your User Name and Password from the Text Message (SMS) Service Provider.
this password	Account password. Kindly obtain your User Name and Password from the Text Message (SMS) Service Provider.

You can find more information about Office Mobile Protocol [here](#).

SharePoint 2010 Note: Virto SharePoint Workflow Activities Kit for SharePoint 2010 allows using default settings from SharePoint 2010 Outbound Sms Service Account. If you leave "this url" empty, the activity will get url, user and password from current SharePoint 2010 Outbound Sms Service Account.

Send SMS via SMPP server

This activity allows sending a single SMS message (maximum 140 chars) to specified phone number via SMPP server.



SMPP connection is ideal if you need to send out a high volume of messages each month, and to do so at high speed. Public SMS Gateways supports SMS gateway via SMPP.

SharePoint Workflow Designer Phrase

Send Sms this message to this phone number from this phone number Use Smpp server this host port this port, bind address range this address range, systemId this system id, and password this password.

Parameters

Parameter	Description
this message	SMS Message (maximum 140 chars)

this phone number	Destination phone number
this phone number	Source phone number
this host	SMPP Server domain or IP address
this port	SMPP Server port
this address range	Address range
this system id	Account system Id
this password	Account password

Send SMS via Clickatell Bulk SMS Gateway

This activity allows sending a single SMS message to specified phone number via Clickatell Bulk SMS Gateway.

Before using the activity you should:

Step 1. Register on www.clickatell.com

Step 2. Register for the HTTP product. Go to the HTTP API page and click on the grey button near the top right hand corner of the page which reads 'Register for Free'.

Step 3. Next, fill in your registration details on the registration form and press "submit". The 3 bits of information that you will need to send an SMS will be your "username", your "password", and your API_ID. Your API_ID gets issued immediately upon confirmation of registration.

Note, once you have registered and been activated you will automatically receive 10 FREE SMS credits which you can use for testing.

Step 4. Have the following information ready and pass valid values to the activity:

user: xxxxx

password: xxxxx

api_id: xxxxx

SharePoint Workflow Designer Phrase

Send Sms this message to this phone number. Use Clickatell gateway api_id this api id, user this user and password this password.

Parameters

Parameter	Description
this message	SMS Message
this phone number	Destination phone number
this sender id	Optional. The source/sender address that the message will appear to come from also known as "Sender ID". These must be registered within your Clickatell online account and approved by Clickatell before they may be used.
this api id	Clickatell API Id
this user	Clickatell Account name

this password Clickatell Account password

Send SMS via SmsCountry Bulk SMS Gateway

This activity allows sending a single SMS message to specified phone number via SmsCountry Bulk Sms Gateway.

[Add 'Else If' Conditional Branch](#)

Before using the activity you should:

Step 1. Register on www.smscountry.com

Step 2. Register for the HTTP API product.

Step 3. Have the following information ready and pass valid values to the activity:

user: xxxxx

password: xxxxx

sender id: xxxxx (Optional)

SharePoint Workflow Designer Phrase

Send Sms this message to this phone number. Use SmsCountry gateway sender id this sender id, user this user and password this password.

Parameters

Parameter	Description
this message	SMS Message
this phone number	Destination phone number
this sender id	SmsCountry Sender Id
this user	SmsCountry Account name
this password	SmsCountry Account password

Twitter Activities

Virto Workflow Activities Kit Utility for Twitter (WakTwitter.exe)

Twitter activities use OAuth protocol for authentication. OAuth is a simple way to publish and interact with protected data, more info here <http://oauth.net> and <http://dev.twitter.com/pages/auth> .

Virto Workflow Activities Kit is registered Twitter application. You should grant permissions for Virto Workflow Activities Kit application before using Twitter activities.

You should use Virto Workflow Activities Kit Utility for Twitter (**WakTwitter.exe**) to allow Virto Workflow Activities Kit application to connect to your account and get **token** and **security token**.

Virto Workflow Activities Kit installation adds WakTwitter.exe into [SP Hive]\Bin folder.

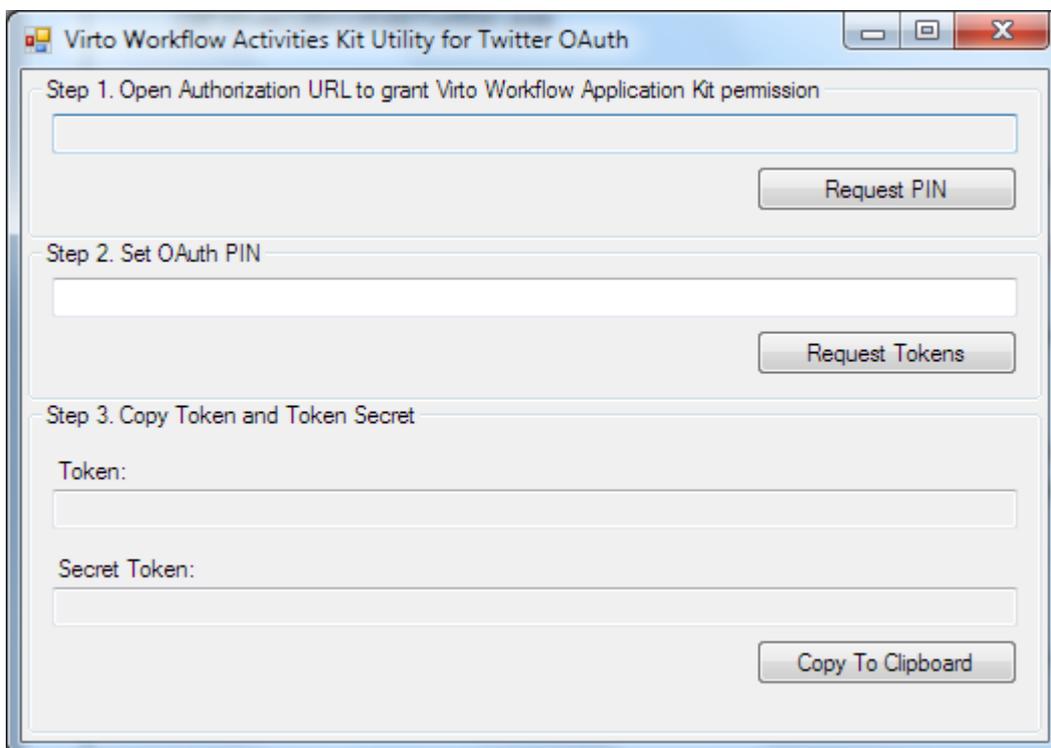
Usually:

"c:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\BIN\WakTwitter.exe"
for SharePoint 2007

"c:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\14\BIN\WakTwitter.exe"
for SharePoint 2010

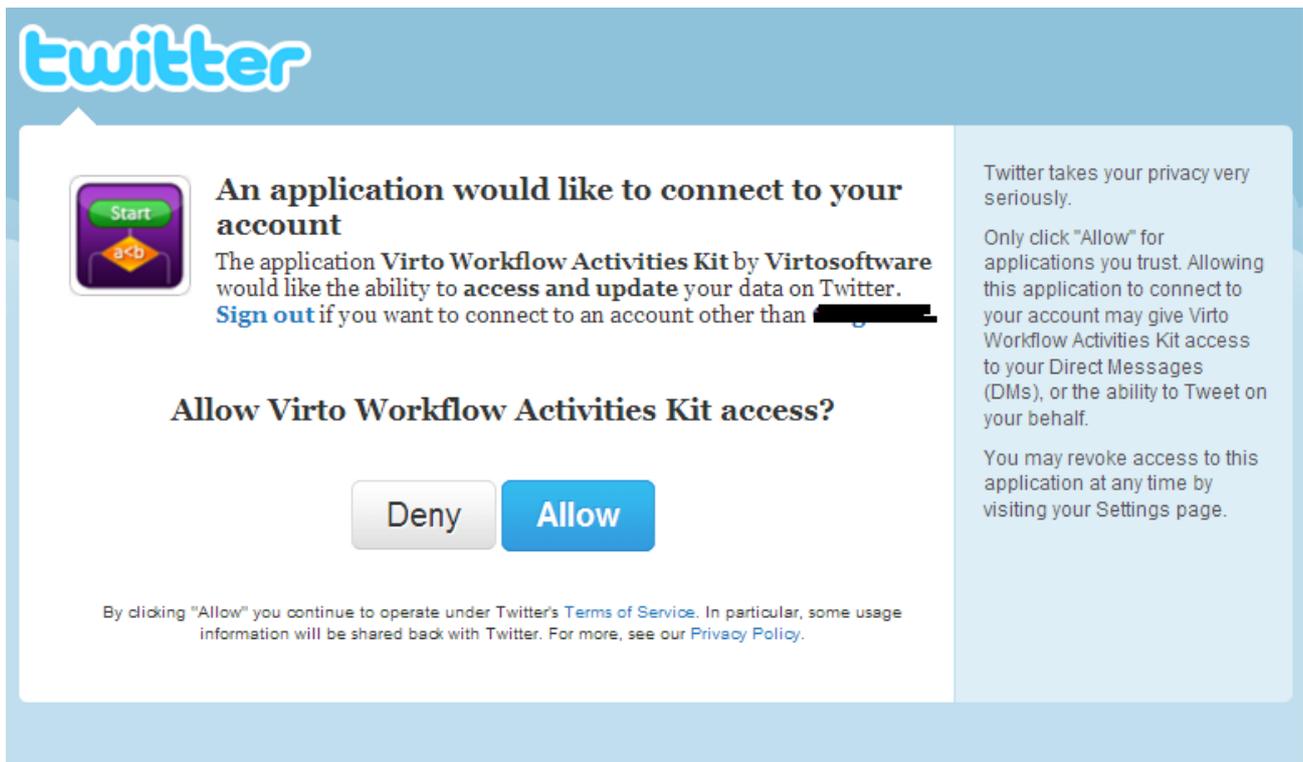
Next Steps show how to allow Virto Workflow Activities Kit application to connect to your account and get **token** and **security token**

Step 1. Run WakTwitter.exe application from Virto Workflow Activities Kit.



Step 2. Click "Request PIN" button to request Twitter PIN code for Virto Workflow Activities Kit application

WakTwitter application requests token from Twitter site and open browser page with request page. You should allow Virto Workflow Activities Kit application to connect to your account. You may revoke access to this application at any time by visiting your Settings page.



Step 3. Copy PIN from Web Page to WakTwitter

Simply return to WakTwitter, enter the following PIN and click "Request Tokens" button to complete the process.

Step 2. Set OAuth PIN

8765778

Request Tokens

Step 3. Copy Token and Token Secret

Step 4. Save Token and Security Token

Keep Token and Security Token. You should use them in "Set Twitter OAuth authentication" activity.

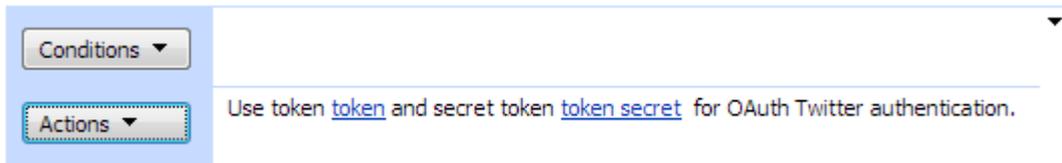
Set Twitter OAuth authentication

This activity sets twitter OAuth authentication for all twitter activities below.

Note: You should use this activity before any twitter activity to set twitter oAuth authentication.

Note: To create token and secret token for your account you should use [SP Hive]\Bin\WakTwitter.exe utility.

Any twitter activity in the current step would use parameters from this activity for user authentication. Add a new "Set Twitter OAuth authentication" to override authentication settings.



SharePoint Workflow Designer Phrase

Use token token and secret token secret token for OAuth Twitter authentication.

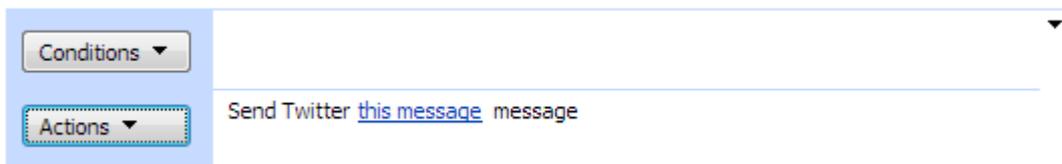
Parameters

Parameter	Description
token	OAuth token
secret token	OAuth secret token

Send Twitter Message

This activity updates the authenticating user's status.

Note: You should use "Set Twitter OAuth authentication" activity before this activity to set user authentication.



Note: You should use

SharePoint Workflow Designer Phrase

Send Twitter this message message.

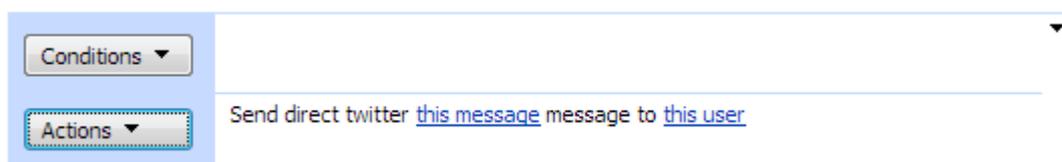
Parameters

Parameter	Description
this message	The text of your status update, up to 140 characters. URL encode as necessary.

Send Direct Twitter Message

This activity sends a new direct message to the specified user from the authenticating user.

Note: You should use "Set Twitter OAuth authentication" activity before this activity to set user authentication.



Note: User could be user's screen name or ID of the user.

SharePoint Workflow Designer Phrase

Send Twitter this message to this user.

Parameters

Parameter	Description
this message	The text of your direct message. Be sure to URL encode as necessary, and keep the message under 140 characters.
this user	The screen name of the user who should receive the direct message. Or The ID of the user who should receive the direct message. Helpful for disambiguating when a valid user ID is also a valid screen name.

Xmpp (Jabber, GTalk) Activities

Send Xmpp (Jabber, GTalk) Instant message

This activity allows sending a new Xmpp (Jabber, GTalk) instant message to specified user.



[Add 'Else If' Conditional Branch](#)

If Xmpp (Jabber) server field is empty, activity will resolve it by sender account.

SharePoint Workflow Designer Phrase

Send Xmpp (Jabber) instant message this message to this jid by logging on to this server with this this jid and this password.

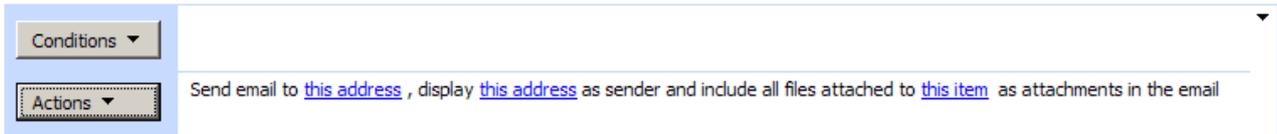
Parameters

Parameter	Description
this message	Xmpp (Jabber) Message
this jid	Destination Xmpp (Jabber) account
this server	Optional. If Xmpp (Jabber) server field is empty, activity will resolve it by sender account.
this jid	Sender Xmpp (Jabber) account
this password	Sender Xmpp (Jabber) account password

Email Activities

Send Email

This activity allows sending html formatted email via Smtip server.



SharePoint Workflow Designer Phrase

Send email to this address, blind carbon copy to this address, display this address as sender and include all files attached to this item as attachments in the email.

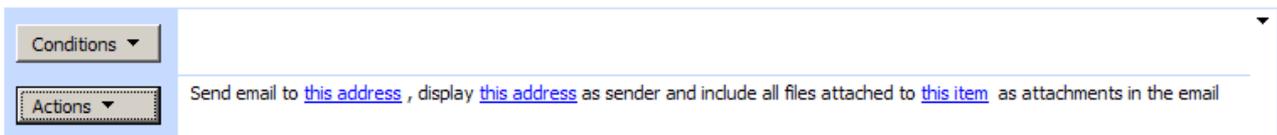
Parameters

Parameter	Description
this address	Email message and destination email address
this address	Optional. Blind carbon copy
this address	Sender email address

By default, activity uses the default site outbound mail service. If you want to use custom SMTP Server settings, use “Set Smtip server settings” activity before.

Send Email with List Item Attachment

This activity allows sending html formatted email with list item attachments and document library content as files attached to an email via Smtip server.



SharePoint Workflow Designer Phrase

Send email to this address, blind carbon copy to this address, display this address as sender and include all files attached to this item as attachments in the email.

Parameters

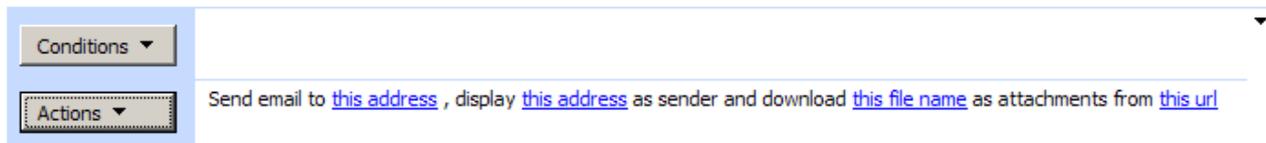
Parameter	Description
this address	Email message and destination email address
this address	Optional. Blind carbon copy
this address	Sender email address
this item	Current list item

By default, activity uses the default site outbound mail service. If you want to use custom SMTP Server settings, use “Set Smtip server settings” activity before.

Send Email with Http File Attachment

This activity allows sending html formatted email emails with attachment retrieved using a web request via Smtip server. Executing Reporting Services report and sending it as an attachment from within SPD

workflow would be one such example. Request url is fully customizable and can include workflow variables. Both http and https requests are supported. Activity impersonates SharePoint account when getting file.



SharePoint Workflow Designer Phrase

Send email to this address, blind carbon copy to this address, display this address as sender and download this file name as attachments from this url

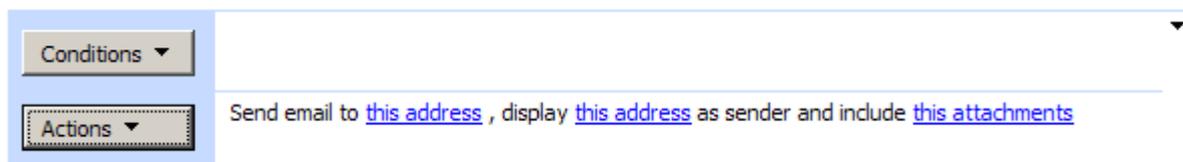
Parameters

Parameter	Description
this address	Email message and destination email address
this address	Optional. Blind carbon copy
this address	Sender email address
this file name	Attachment file name
this url	Direct web link to attachment

By default, activity uses the default site outbound mail service. If you want to use custom SMTP Server settings, use "Set Smtplib server settings" activity before.

Send Email with Attachments

This activity allows sending html formatted email emails with multiple attachments via Smtplib server. Attachments multiline text field supports url and local disk path. Both http and https requests are supported. Activity impersonates SharePoint account when getting file.



SharePoint Workflow Designer Phrase

Send email to this address, blind carbon copy to this address, display this address as sender and include this attachments

Parameters

Parameter	Description
this address	Email message and destination email address
this address	Optional. Blind carbon copy
this address	Sender email address
this attachments	Attachment list. Attachment can be either file path or web link.

By default, activity uses the default site outbound mail service. If you want to use custom SMTP Server settings, use "Set Smtplib server settings" activity before. SSL and TLS Smtplib connections are supported.

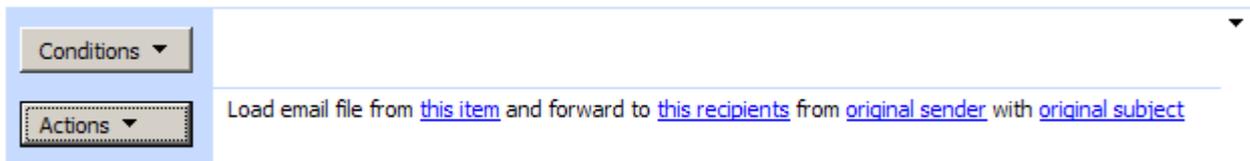
Forward Email

This activity allows forwarding the attached email file in EML format (EML file is plain text in MIME format, containing the e-mail header as well as the message contents and attachments) from selected list item.

The activity tries finding email (file with .eml extension) in either list item attachments or file library file. The activity modifies only recipients, sender and subject headers. The email body and attachments are the same, the activity don't add any modifications.

The activity can be useful in many scenarios:

- User uploads eml file to file library (from external program or email server) and email is forwarded automatically
- External system (for example [Virto Incoming E-mail Feature for Microsoft SharePoint](#)) loads a new email from email server, saves the email to the list and forwards email
- Help desk system registers email adds ticket to the subject and forward to issue responsible.



SharePoint Workflow Designer Phrase

Load email file from this item and forward to this recipients from original sender with original subject

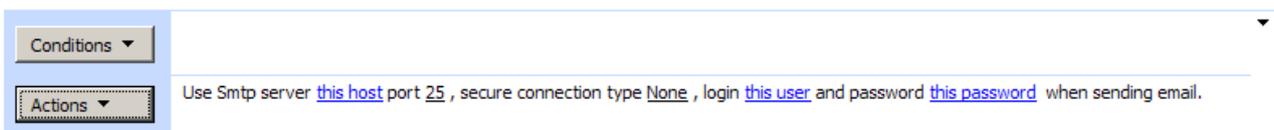
Parameters

Parameter	Description
this item	
this recipients	Email recipients addresses
original sender	Optional. Email sender. If property is empty, original email recipient will be used
original subject	Optional. Email subject. If property is empty, original email subject will be used

By default, activity uses the default site outbound mail service. If you want to use custom SMTP Server settings, use "Set Smtt server settings" activity before.

Set Smtt server settings

This activity allows defining SMTP server connection settings for all "Send Email ..." activities below. SSL and TLS Smtt connections are supported.



SharePoint Workflow Designer Phrase

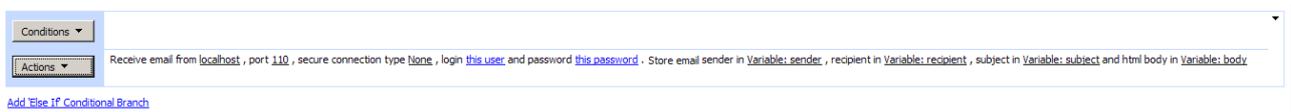
Use Smtt server this host port 25, secure connection type None, login this user and password this password when sending email.

Parameters

Parameter	Description
this host	Name or IP address of the host computer used for SMTP transactions.
25	Optional. The port to be used on host. Default value is 25
None	Optional. Secure connection type. Supports: None, SSL and TLS.
this user	Optional. SMTP user account
this password	Optional. SMTP user password. If password field is empty, authentication is skipped.

Receive Email

This activity allows receiving an email from Pop3 server and stores sender, recipient, subject and body to variables.



If Pop3 server field is empty, activity will use default site outbound mail service.

SharePoint Workflow Designer Phrase

Receive email from this host, port this port, secure connection type None, login this user and password this password. Store email sender in sender, recipient in recipient, subject in subject and html body in body.

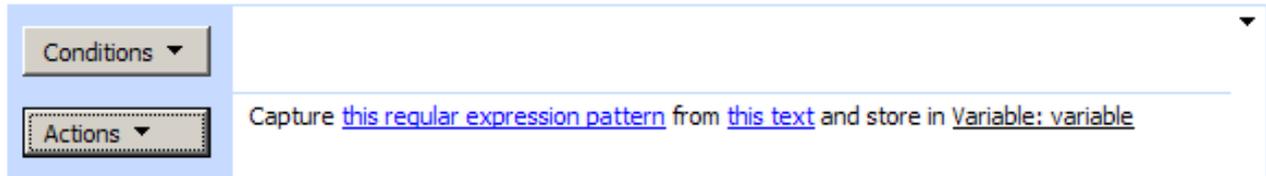
Parameters

Parameter	Description
this host	Optional. POP3 Server host. If POP3 server field is empty, activity will use default site outbound mail service
this port	POP3 Server port. Default value is 110.
None	Secure connection type. Supports: None, SSL and TLS
this user	Optional. POP3 user account
this password	Optional. POP3 user password
sender	This activity will place sender email into an output variable
recipient	This activity will place recipient email into an output variable
subject	This activity will place email subject into an output variable
body	This activity will place email body into an output variable

Text Activities

Capture text

This activity Searches the specified input string for an occurrence of the regular expression and stores result in to text variable.



[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Capture this regular expression pattern from this text and store in Variable: variable.

Parameters

Parameter	Description
this regular expression pattern	Regular expression pattern. Look Regular Expression for more information
this text	The string to search for a match
variable	This activity will place result into an output variable

Capture all occurrences of text

This activity searches the specified input string for all occurrences of a regular expression and store result in to array.



You can use "Join text" activity to create single string from captured items.

SharePoint Workflow Designer Phrase

Capture all occurrences of this regular expression pattern from this text and store in Variable: variable.

Parameters

Parameter	Description
this regular expression pattern	Regular expression pattern. Look Regular Expression for more information
this text	The string to search for a match
variable	This activity will place results into an output variable

Replace Text

This activity replaces all strings that match a regular expression pattern with a specified replacement string and stores result in variable.

[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Find this regular expression pattern in this text, replace with this replacement and store in Variable: variable.

Parameters

Parameter	Description
this regular expression pattern	Regular expression pattern. Look Regular Expression for more information
this text	The string to search for a match.
this replacement	The replacement string
variable	This activity will place result into an output variable

Validate Text

This activity allows validating that string matches a regular expression pattern and stores logical result in variable.

[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

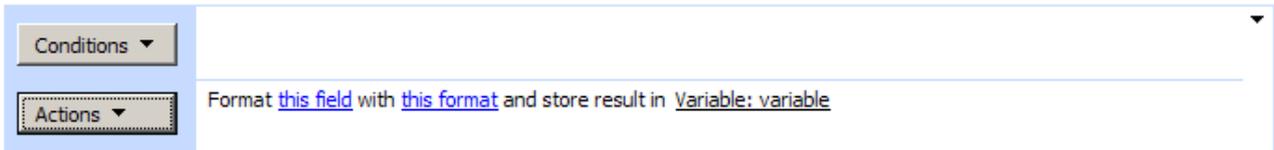
this text matches this regular expression pattern and store in Variable: variable.

Parameters

Parameter	Description
this text	The string to search for a match.
this regular expression pattern	Regular expression pattern. Look Regular Expression for more information
variable	This activity will place result into an output variable

Format Field Value

This activity uses the composite formatting feature of the .NET Framework to convert the value of an object to its text representation and embed that representation in a string.



[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

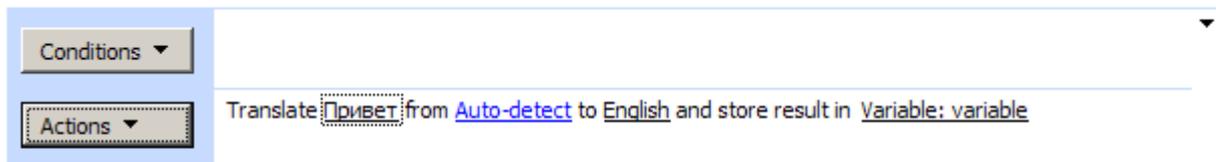
Format this field with this format and store in Variable: variable.

Parameters

Parameter	Description
this field	The current list item field
this format	.NET Framework format. Ex: "d" for date time field returns short date format "4/17/2006"
variable	This activity will place result into an output variable

Translate Text (Powered by Google translator)

This activity allows translating text and store result in variable. Powered by online Google translator.



[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Translate this text from Auto-detect to choose and store result in Variable: variable

Parameters

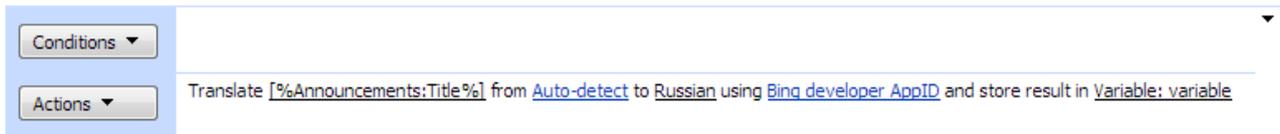
Parameter	Description
this text	Original text
Auto-detect	Original text language. Default value is "Auto-detect", activity will try resolve original language automatically.
choose	Destination text language.
variable	This activity will place result into an output variable

Supported Languages

Go to <http://translate.google.com> to view Languages available for translation

Translate Text (Powered by Microsoft translator)

This activity allows translating text and store result in variable. Powered by Bing Microsoft translator.



SharePoint Workflow Designer Phrase

Translate this text from Auto-detect to choose using Bind developer AppId and store result in Variable: variable

Parameters

Parameter	Description
this text	Original text
Auto-detect	Original text language. Default value is "Auto-detect", activity will try resolve original language automatically.
choose	Destination text language.
Bind developer AppId	The AppID parameter is a value that enables the API to validate that a request is from a registered Bing application developer.
variable	This activity will place result into an output variable

Note: Getting an AppID is a straightforward process. First, go to the Bing Developer Center (<http://www.bing.com/developers/appids.aspx>) and sign in with your Windows Live ID. After signing in, you will be presented with a link to create a new AppID. Click the link, then supply basic information about your application and review the Terms of Use. After you have supplied the information and reviewed the Terms of Use, you will be presented with an AppID.

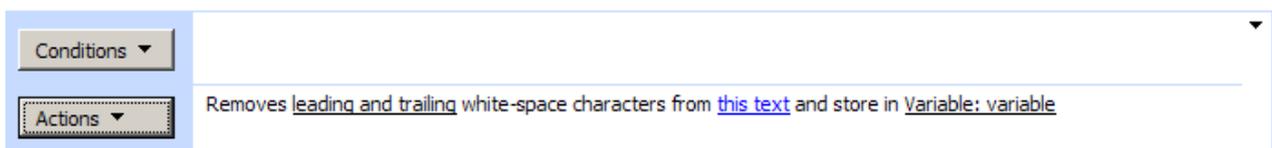
Note: By default Bing has intentional throughput limit, which is there to protect the MT service. If you need a higher throughput limit for commercial use, send email to mtlic@microsoft.com and ask for the commercial use agreement.

Supported Languages

Go to <http://www.microsofttranslator.com> to view Languages available for translation

Trim Text

This activity allows removing white-space characters from the text and store result in variable.



[Add 'Else If' Conditional Branch](#)

The activity can remove leading, trailing and leading and trailing white-space characters.

SharePoint Workflow Designer Phrase

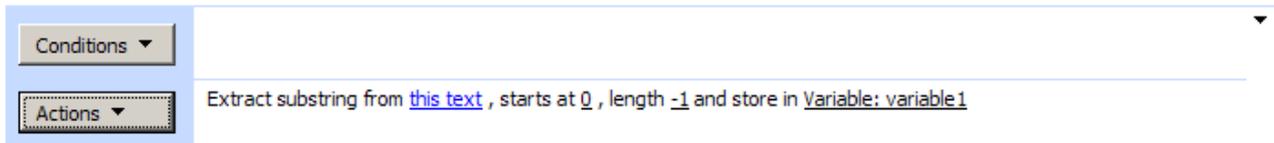
Removes leading and trailing white-space characters from this text and store in Variable: variable.

Parameters

Parameter	Description
leading and trailing	Trim mode. Supported: leading and trailing, only leading and only trailing modes
this text	Original text
variable	This activity will place result into an output variable

Substring Text

This activity allows extracting substring from the text and store result in variable.



[Add 'Else If' Conditional Branch](#)

You should specify the zero-based starting character position of a substring in this instance and the number of characters in the substring, if length is -1, length will be ignored.

SharePoint Workflow Designer Phrase

Extract substring from this text, starts at 0, length -1 and store in Variable: variable.

Parameters

Parameter	Description
this text	Original text
start index	The zero-based starting character position of a substring in this instance.
length	The number of characters in the substring. Set -1 to ignore length.
variable	This activity will place result into an output variable

Split Text

This activity returns a string array (store in variable) that contains the substrings in this string that are delimited by elements of a specified string array.



SharePoint Workflow Designer Phrase

Splits this text using this delimiter and store in Variable: variable.

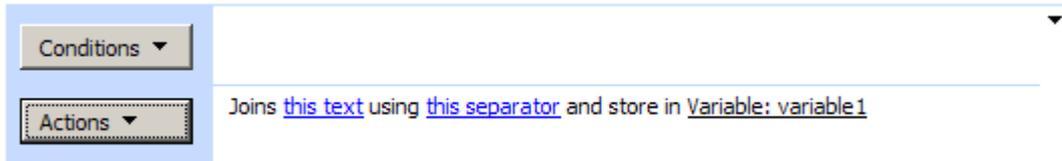
Parameters

Parameter	Description
this text	Original text
this delimiter	A string that delimit the substrings. Multi delimiters are supported, use new line (\r\n) to insert additional delimiters.

variable	This activity will place an array of string result into an output variable
----------	--

Join Text

This activity concatenates a specified separator between each element of a specified array.



SharePoint Workflow Designer Phrase

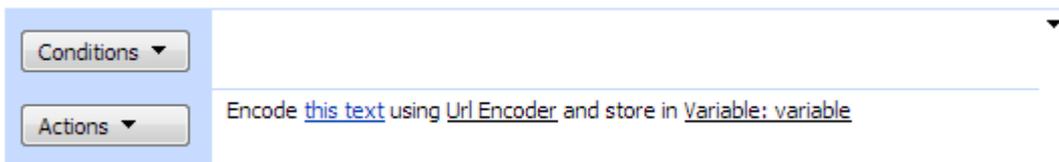
Joins this items using this separator and store in Variable: variable.

Parameters

Parameter	Description
this items	An array of String.
this separator	An item separator.
variable	This activity will place string result into an output variable

Encode Web Text

This activity provides methods for encoding URLs when processing Web requests.



Supported Encoders:

Encoder	Description
Url Encoder	Encodes a URL string. If characters such as blanks and punctuation are passed in an HTTP stream, they might be misinterpreted at the receiving end. URL encoding converts characters that are not allowed in a URL into character-entity equivalents; URL decoding reverses the encoding. For example, when embedded in a block of text to be transmitted in a URL, the characters < and > are encoded as %3c and %3e.
Url Path Encoder	Encodes the path portion of a URL string for reliable HTTP transmission from the Web server to a client. URL encoding ensures that all browsers will correctly transmit text in URL strings. Characters such as ?, &, /, and spaces may be truncated or corrupted by some browsers so those characters must be encoded in <A> tags or in query strings where the strings may be re-sent by a browser in a request string.
Html Encoder	Converts a string to an HTML-encoded string. If characters such as blanks and punctuation are passed in an HTTP stream, they might be misinterpreted at the receiving end. HTML encoding converts characters that are not allowed in HTML into character-entity equivalents; HTML

	decoding reverses the encoding. For example, when embedded in a block of text, the characters < and > are encoded as < and > for HTTP transmission.
Html Attribute Encoder	Minimally converts a string into an HTML-encoded string. method converts only quotation marks ("), ampersands (&), and left angle brackets (<) to equivalent character entities.

Note: You can encode a URL using with the **Url Encoder** or the **Url Path Encoder**. However, the methods return different results. The **Url Encoder** converts each space character to a plus character (+). The **Url Path Encoder** converts each space character into the string "%20", which represents a space in hexadecimal notation. Use the Url Path Encoder method when you encode the path portion of a URL in order to guarantee a consistent decoded URL, regardless of which platform or browser performs the decoding.

SharePoint Workflow Designer Phrase

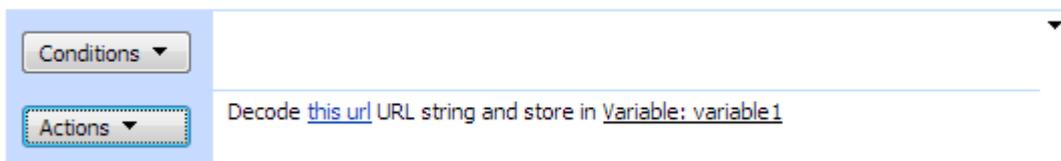
Encode this text using this encoder and store in Variable: variable.

Parameters

Parameter	Description
this text	Original text
this encoder	Encoder. Activity supports several encoders: <ul style="list-style-type: none"> • Url Encoder • Url Path Encoder • Html Encoder • Html Attribute Encoder
variable	This activity will place result into an output variable

Decode Web Text

This activity provides methods for decoding URLs when processing Web requests.



Supported Encoders:

Encoder	Description
Url Decoder	Converts a string that has been encoded for transmission in a URL into a decoded string. If characters such as blanks and punctuation are passed in an HTTP stream, they might be misinterpreted at the receiving end. URL encoding converts characters that are not allowed in a URL into character-entity equivalents; URL decoding reverses the encoding. For example, when embedded in a block of text to be transmitted in a URL, the characters < and > are encoded as %3c and %3e.
Html Decoder	Converts a string that has been HTML-encoded for HTTP transmission into a decoded string. If characters such as blanks and punctuation are passed in

an HTTP stream, they might be misinterpreted at the receiving end. HTML encoding converts characters that are not allowed in HTML into character-entity equivalents; HTML decoding reverses the encoding. For example, when embedded in a block of text, the characters < and > are encoded as < and > for HTTP transmission.

SharePoint Workflow Designer Phrase

Decode this text using this decoder and store in Variable: variable.

Parameters

Parameter	Description
this text	Original text
this decoder	Decoder. Activity supports several decoders: <ul style="list-style-type: none"> • Url Decoder • Html Decoder
variable	This activity will place result into an output variable

Converts Number to Hex Text

This activity converts the number to a string of hexadecimal digits.

SharePoint Workflow Designer Phrase

Converts 0 to Hex text and store result in hex text.

Parameters

Parameter	Description
0	The source number
hex text	An output text.

Converts Number to Text

This activity converts the value of the current Number object to its equivalent string representation using the specified format.

SharePoint Workflow Designer Phrase

Converts Integer number 0 to text with this format and store result in variable.

Parameters

Parameter	Description
Integer	Number Format <ul style="list-style-type: none"> Integer Float
0	Number variable
this format	Numeric format string.

For more information about numeric format specifiers, see [Standard Numeric Format Strings](#) and [Custom Numeric Format Strings](#).

Converts Text to Base64

This activity converts text in to Base64 string using specified encoding.

SharePoint Workflow Designer Phrase

Converts this text to Base64 using Default encoding and store result in variable.

Parameters

Parameter	Description
this text	Original text
Default	Encoding: <ul style="list-style-type: none"> Default - current ANSI code page ASCII - ASCII (7-bit) character set Big Endian Unicode - UTF-16 format that uses the big endian byte order Unicode - UTF-16 format using the little endian byte order UTF32 - UTF-32 format using the little endian byte order UTF7 - UTF-7 format UTF8 - UTF-8 format

Converts Base64 to Text

This activity converts Base64 string in to text string using specified encoding.

SharePoint Workflow Designer Phrase

Converts this base64 text Base64 to Text using Default encoding and store result in variable.

Parameters

Parameter	Description
this base64 text	Base64 string
Default	Encoding: <ul style="list-style-type: none"> • Default - current ANSI code page • ASCII - ASCII (7-bit) character set • Big Endian Unicode - UTF-16 format that uses the big endian byte order • Unicode - UTF-16 format using the little endian byte order • UTF32 - UTF-32 format using the little endian byte order • UTF7 - UTF-7 format • UTF8 - UTF-8 format

Convert text to upper, lower, title case

This activity converts text to upper, lower or title case.

Step 1

Convert this text to Upper case and store in Variable: variable

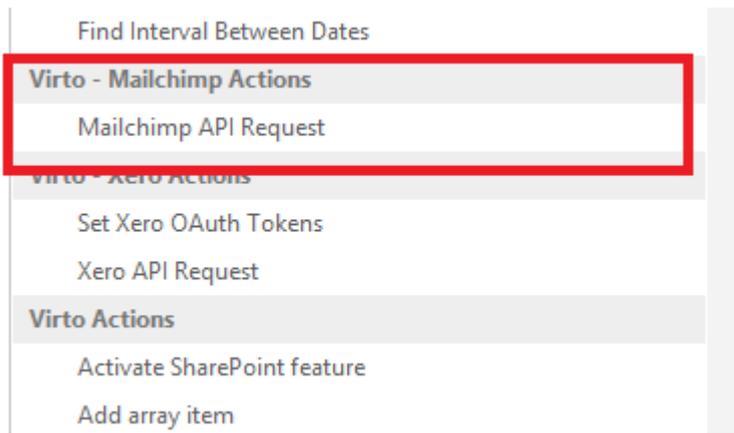
SharePoint Workflow Designer Phrase

Convert this text to Upper case and store in variable

Parameters

Parameter	Description
this text	Original text
Upper	Case format: <ul style="list-style-type: none"> • Upper • Lower • Title • Automatic

Http Activities**Send Mailchimp request activity**



Workflow phrases

Mailchimp request
Send Mailchimp request to this URL using GET method with this API key and these headers headers and this request request. Store response in Variable: Response1 and http status in Variable: Status1

Parameters

Input parameters

Parameters	Description	Example
this URL	The absolute URL of the Mailchimp API endpoint	https://us8.api.mailchimp.com/3.0/lists , https://us8.api.mailchimp.com/3.0/reports ,
Method	GET, POST, PUT	
this API key	The API Key from your Mailchimp account	
these headers	HTTP headers. See Also http://www.w3.org/Protocols/rfc2616/rfc2616-sec14.html .	
this request	Request body parameters formatted as JSON	<pre>{ "name": "", "contact": { "company": "", "address1": "", "address2": "", "city": "", "state": "", "zip": "", "country": "", "phone": "" }, "permission_reminder": "", "use_archive_bar": "", "campaign_defaults": { "from_name": "", "from_email": "", "subject": "" } }</pre>

		<pre> "language": "" }, "notify_on_subscribe": "", "notify_on_unsubscribe": "", "email_type_option": "", "visibility": "" } </pre>
ToXML	Convert response data to XML	Yes, No

Example

MailChimp

Send Mailchimp request to <https://us8.api.mailchimp.com/3.0/lists> using GET method with [708276c319b7acd824-us8](#) and [these headers](#) headers and [this request](#) request. Store response in [Variable: Response](#) and http status in [Variable: Status](#) then Log [%Variable: Status%] to the workflow history list

then Log [%Variable: Response%] to the workflow history list

Web Request

This activity makes a web request to an Uniform Resource Identifier. Use this activity to connect and communicate SharePoint with the external system.

Conditions ▼

Actions ▼

Send Web Request to [this url](#) using [POST](#) method with [this headers](#) headers and [this request](#) request in [Text](#) mode.

. Use [this user](#) and [this password](#) credentials. Store response in [Variable: response](#) and http status in [Variable: http status](#)

SharePoint Workflow Designer Phrase

Send Web Request to [this url](#) using [POST](#) method with [this headers](#) and [this request](#) request in [Text](#) mode. Use this user and this password credentials. Store response in [response](#) and http status in [http status](#)

Parameters

Parameter	Description
this url	Web url. Ex: http://mysite/default.aspx
POST	Http Method: GET, POST, PUT and etc. See Also http://www.w3.org/Protocols/rfc2616/rfc2616-sec9.html#sec9
this headers	HTTP headers. See Also http://www.w3.org/Protocols/rfc2616/rfc2616-sec14.html .
this request	If Request mode is Text HTTP request message text. See Also http://www.w3.org/Protocols/rfc2616/rfc2616-sec4.html#sec4.3 If Request mode is SharePoint File SharePoint File Url, Web Url or Local Disk Path. Activity will send file content as http request. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf

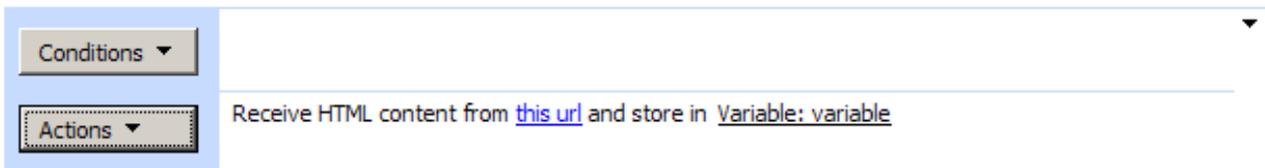
Ex: c:\publicfolder\report.pdf
 Ex: http://externalserver/report.pdf

Note: You could use "Get list item url" activity to resolve current file url.

Text	Request mode: <ul style="list-style-type: none"> • Text – the activity uses request from this request variable • SharePoint file – the activity reads SharePoint file url from this request variable and sends SharePoint file as request data.
response	HTTP response body See Also http://www.w3.org/Protocols/rfc2616/rfc2616-sec6.html#sec6
http status	An Integer representing the status of the HTTP output returned to the client. The default value is 200 (OK). For a listing of valid status codes, see Http Status Codes .

Receive Html

This activity receives html content from specified url and stores it in variable. Both http and https requests are supported. Activity impersonates SharePoint account when getting request.



[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Receive HTML content from this url and store in Variable: variable

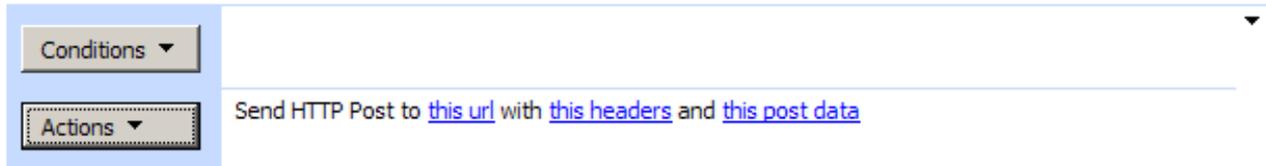
Parameters

Parameter	Description
this url	Web url. Ex: http://mysite/default.aspx

Also, you can use this activity to post SMS (SMS Gateways supports SMS gateway via HTTP/S) or call web service method.

Send Http Post

This activity sent direct Http Post to specified url. Both http and https requests are supported. Activity impersonates SharePoint account when getting request.



[Add 'Else If Conditional Branch](#)

SharePoint Workflow Designer Phrase

Send HTML Post to this url with this headers and this post data.

Parameters

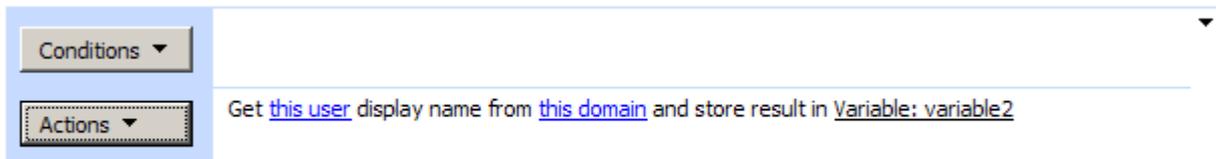
Parameter	Description
this url	Web url. Ex: http://mysite/default.aspx
this headers	HTTP headers. See Also http://www.w3.org/Protocols/rfc2616/rfc2616-sec14.html .
this post data	HTTP Post message body. See Also http://www.w3.org/Protocols/rfc2616/rfc2616-sec4.html#sec4.3

Also, you can use this activity to post SMS (SMS Gateways supports SMS gateway via HTTP/S) or call web service method.

Active Directory Activities

Get user's display name from Active Directory

This activity allows receiving user's display name from Active Directory and stores result in variable.



[Add 'Else If Conditional Branch](#)

If attribute does not exist, this method returns empty string.

SharePoint Workflow Designer Phrase

Get this user display name from this domain and store result in Variable: variable.

Parameters

Parameter	Description
this user	User login name. Ex: "user@domain", "domain\user" or "user"
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

Get user's email from Active Directory

This activity allows receiving user’s email from Active Directory and stores result in variable.

[Add 'Else If' Conditional Branch](#)

If attribute does not exist, this method returns empty string.

SharePoint Workflow Designer Phrase

Get this user email from this domain and store result in Variable: variable.

Parameters

Parameter	Description
this user	User login name. Ex: “user@domain”, “domain\user” or “user”
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

Get user's job title from Active Directory

This activity allows receiving user’s job title from Active Directory and stores result in variable.

[Add 'Else If' Conditional Branch](#)

If attribute does not exist, this method returns empty string.

SharePoint Workflow Designer Phrase

Get this user job title name from this domain and store result in Variable: variable.

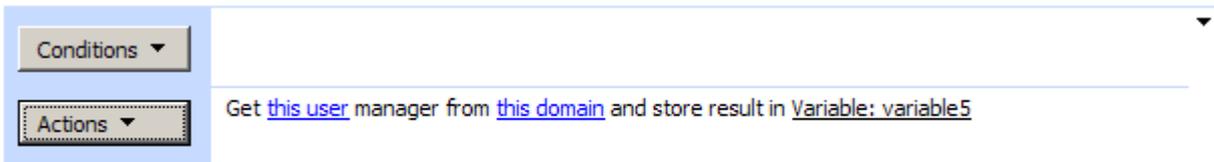
Parameters

Parameter	Description
this user	User login name. Ex: “user@domain”, “domain\user” or “user”
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use "Set Active Directory authentication" activity before.

Get user's manager from Active Directory

This activity allows receiving user's user manager from Active Directory and stores result in variable.



[Add 'Else If' Conditional Branch](#)

If attribute does not exist, this method returns empty string.

SharePoint Workflow Designer Phrase

Get this user manager from this domain and store result in Variable: variable.

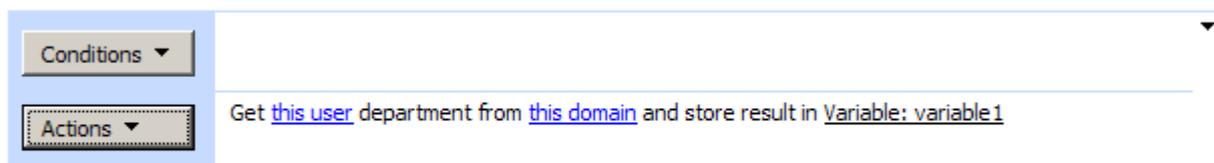
Parameters

Parameter	Description
this user	User login name. Ex: "user@domain", "domain\user" or "user"
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use "Set Active Directory authentication" activity before.

Get user's department from Active Directory

This activity allows receiving user's department from Active Directory and stores result in variable.



[Add 'Else If' Conditional Branch](#)

If attribute does not exist, this method returns empty string.

SharePoint Workflow Designer Phrase

Get this user department from this domain and store result in Variable: variable.

Parameters

Parameter	Description
this user	User login name. Ex: "user@domain", "domain\user" or "user"
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

Get user's custom attribute from Active Directory

This activity allows receiving user's or secure group custom attribute from Active Directory and stores result in variable.



[Add 'Else If' Conditional Branch](#)

If attribute does not exist, this method returns empty string.

SharePoint Workflow Designer Phrase

Get this user this attribute from this domain and store result in Variable: variable

Parameters

Parameter	Description
this user	User or secure group login name. Ex: “user@domain”, “domain\user” or “user”
this attribute	Attribute name
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before. See “LDAP Attribute” table to determine the attribute name.

Table: LDAP Attributes

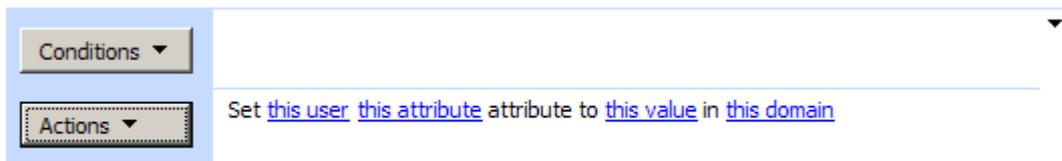
LDAP Attribute	Example
CN - Common Name	CN=Guy Thomas. Actually, this LDAP attribute is made up from givenName joined to SN.
description	What you see in Active Directory Users and Computers. Not to be confused with displayName on the Users property sheet.
displayName	displayName = Guy Thomas. If you script this property, be sure you understand which field you are configuring. DisplayName can be confused with CN or description.
DN - also distinguishedName	DN is simply the most important LDAP attribute. CN=Jay Jamieson, OU= Newport,DC=cp,DC=com
givenName	Firstname also called Christian name
homeDrive	Home Folder : connect. Tricky to configure
name	name = Guy Thomas. Exactly the same as CN.
objectCategory	Defines the Active Directory Schema category. For example,

	objectClass = Person
objectClass	objectClass = User. Also used for Computer, organizationalUnit, even container. Important top level container.
physicalDeliveryOfficeName	Office! on the user's General property sheet
profilePath	Roaming profile path: connect. Trick to set up
sAMAccountName	sAMAccountName = guyt. Old NT 4.0 logon name, must be unique in the domain. Can be confused with CN.
SN	SN = Thomas. This would be referred to as last name or surname.
userAccountControl	Integer value. Used to select user account options checkboxes. Complete list of user account control values you can find on http://msdn.microsoft.com/library/default.asp?url=/library/en-us/adschema/adschema/a_useraccountcontrol.asp
userPrincipalName	userPrincipalName = guyt@CP.com Often abbreviated to UPN, and looks like an email address. Very useful for logging on especially in a large Forest. Note UPN must be unique in the forest.
homeMDB	Here is where you set the MailStore
legacyExchangeDN	Legacy distinguished name for creating Contacts. In the following example, Guy Thomas is a Contact in the first administrative group of GUYDOMAIN: /o=GUYDOMAIN/ou=first administrative group/cn=Recipients/cn=Guy Thomas
mail	An easy, but important attribute. A simple SMTP address is all that is required billyn@ourdom.com
mAPIRecipient - FALSE	Indicates that a contact is not a domain user.
mailNickname	Normally this is the same value as the sAMAccountName, but could be different if you wished. Needed for mail enabled contacts.
mDBUseDefaults	Another straightforward field, just the value to:True
msExchHomeServerName	Exchange needs to know which server to deliver the mail. Example: /o=YourOrg/ou=First Administrative Group/cn=Configuration/cn=Servers/cn=MailSrv
proxyAddresses	As the name 'proxy' suggests, it is possible for one recipient to have more than one email address. Note the plural spelling of proxyAddresses.
targetAddress	SMTP:@ e-mail address. Note that SMTP is case sensitive. All capitals means the default address.
showInAddressBook	Displays the contact in the Global Address List.

c	Country or Region
company	Company or organization name
department	Useful category to fill in and use for filtering
homephone	Home Phone number, (Lots more phone LDAPs)
l (Lower case L)	L = Location. City (Maybe Office
location	Important, particularly for printers.
manager	Boss, manager
mobile	Mobile Phone number
ObjectClass	Usually, User, or Computer
OU	Organizational unit. See also DN
postalCode	Zip or post code
st	State, Province or County
streetAddress	First line of address
telephoneNumber	Office Phone

Set user's custom attribute in Active Directory

This activity allows setting user or secure group custom attribute in Active Directory. Special permissions are required to actually update information.



[Add 'Else If Conditional Branch](#)

SharePoint Workflow Designer Phrase

Set this user this attribute to this value in this domain.

Parameters

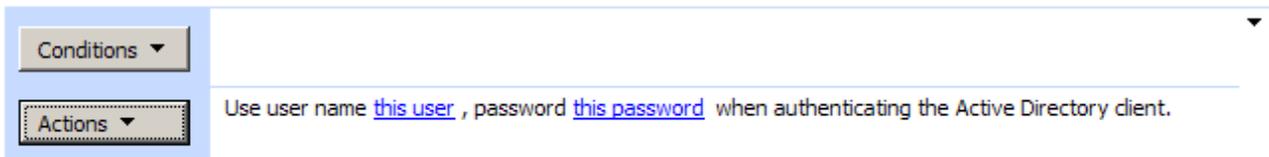
Parameter	Description
this user	User login name. Ex: "user@domain", "domain\user" or "user"
this attribute	Attribute name
this value	Attribute value
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

See complete list of user attribute name in “Get user's custom attribute from Active Directory” activity.

Set Active Directory authentication

This activity allows defining Active Directory authentication information for all Active Directory activities below.



[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

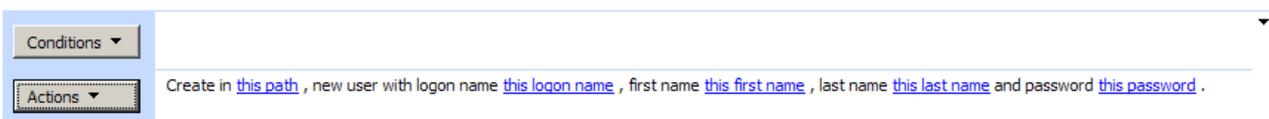
Use user name this user, password this password when authentication the Active Directory client.

Parameters

Parameter	Description
this user	The user name to use when authenticating the client. Ex: “user@domain”, “domain\user”.
this password	Password

Create user in Active Directory

This activity allows creating user in Active Directory.



[Add 'Else If' Conditional Branch](#)

Activity creates user in Active Directory and initializes sAMAccountName, userPrincipalName, sn, givenName, displayName, userAccountControl properties. You can set additional properties via “Set user's custom attribute in Active Directory” activity.

AD Property Name	Value
sAMAccountName	Login property value without domain. userlogin@yourdomain.local
userPrincipalName	Login property value. userlogin@yourdomain.local
sn	LastName property value.
givenName	FirstName property value.
displayName	Auto. “[FirstName] [LastName]”
userAccountControl	ADS_UF_NORMAL_ACCOUNT ADS_UF_DONT_EXPIRE_PASSWD

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

SharePoint Workflow Designer Phrase

Create in this path, new user with logon name this logon name, first name this first name, last name this last name and password this password.

Parameters

Parameter	Description
this path	Correct LDAP path to folder. Ex: “OU=TestOU,DC=yourdomain,DC=local”.
	Use Active Directory Explorer (http://technet.microsoft.com/en-us/sysinternals/bb963907.aspx) to get correct path.
this logon name	User login name with domain. Ex: userlogin@yourdomain.local , yourdomain\userlogin
this first name	First name
this last name	Last name
this password	Optional. User password

Add member to Active Directory group

This activity allows adding member to Active Directory group.



[Add 'Else If Conditional Branch](#)

If the user or secure group exists, this method does nothing.

Note: Allowed multiple users or groups separated ';'.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

SharePoint Workflow Designer Phrase

Add member this member to this group group in this domain.

Parameters

Parameter	Description
this member	User login name. Ex: “user@domain”, “domain\user” or “user”.
	Allowed multiple users or groups separated ';'. Ex: “user1; domain\user2”
this group	Path to existing user group.
	Supported formats: <ul style="list-style-type: none"> • Full LDAP path “CN= group,OU=Test,DC=yourdomain,DC=local” • Simple path from root with domain “yourdomain\test\group” or

“yourdomain/test/group”

- Simple path from root without domain “test\group” or “test/group”, domain will be resolved automatically.
- The logon name. Ex: “group”.

Use Active Directory Explorer (<http://technet.microsoft.com/en-us/sysinternals/bb963907.aspx>) to get correct LDAP path.

Supports multiple destination groups separated ';':

this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.
-------------	---

Remove member from Active Directory group

This activity allows removing member from Active Directory group.

[Add 'Else IF' Conditional Branch](#)

If the user or secure group doesn't exist, this method does nothing.

Note: Allowed multiple users or groups separated ';':

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

SharePoint Workflow Designer Phrase

Remove member this member from this group group in this domain.

Parameters

Parameter	Description
this member	User login name. Ex: “user@domain”, “domain\user” or “user”
this group	Path to existing user group.

Supported formats:

- Full LDAP path “CN= group,OU=Test,DC=yourdomain,DC=local”
- Simple path from root with domain “yourdomain\test\group” or “yourdomain/test/group”
- Simple path from root without domain “test\group” or “test/group”, domain will be resolved automatically.
- The logon name. Ex: “group”.

Use Active Directory Explorer (<http://technet.microsoft.com/en-us/sysinternals/bb963907.aspx>) to get correct path.

	Supports multiple destination groups separated ';'
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

Remove all members from Active Directory group

This activity allows removing all members from Active Directory group.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

SharePoint Workflow Designer Phrase

Remove all members from this group group in this domain.

Parameters

Parameter	Description
this group	<p>Path to existing user group.</p> <p>Supported formats:</p> <ul style="list-style-type: none"> • Full LDAP path “CN= group,OU=Test,DC=yourdomain,DC=local” • Simple path from root with domain “yourdomain\test\group” or “yourdomain/test/group” • Simple path from root without domain “test\group” or “test/group”, domain will be resolved automatically. • The logon name. Ex: “group”. <p>Use Active Directory Explorer (http://technet.microsoft.com/en-us/sysinternals/bb963907.aspx) to get correct path.</p>
	Supports multiple destination groups separated ';'
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

Delete user from Active Directory

This activity allows removing user from Active Directory.

If the user doesn't exist, this method throws exception.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use "Set Active Directory authentication" activity before.

SharePoint Workflow Designer Phrase

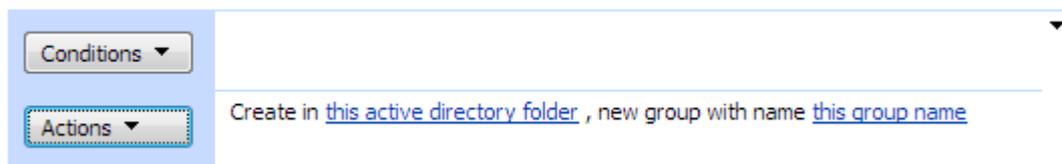
Delete this user from this domain.

Parameters

Parameter	Description
this user	User login name. Ex: "user@domain", "domain\user" or "user"
this domain	Allowed multiple users or groups separated ';'. Ex: "domain\user1;domain\user2" Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

Create group in Active Directory

This activity allows creating group in Active Directory.



Activity creates group in Active Directory and initializes sAMAccountName properties.

AD Property Name	Value
sAMAccountName	group name.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use "Set Active Directory authentication" activity before.

SharePoint Workflow Designer Phrase

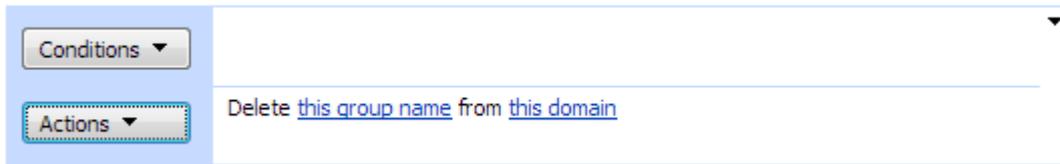
Create in this path, new user with logon name this logon name, first name this first name, last name this last name and password this password.

Parameters

Parameter	Description
this active directory folder	Correct LDAP path to folder. Ex: "OU=TestOU,DC=yourdomain,DC=local". Use Active Directory Explorer (http://technet.microsoft.com/en-us/sysinternals/bb963907.aspx) to get correct path.
this group name	Group name with domain. Ex: "Administrators"

Delete group from Active Directory

This activity allows removing group from Active Directory.



If the group doesn't exist, this method throws exception.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use "Set Active Directory authentication" activity before.

SharePoint Workflow Designer Phrase

Delete this group name from this domain.

Parameters

Parameter	Description
this group name	Group name. Ex: "Administrators", "DOMAIN\Administrators", "Administrators@DOMAIN"
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the group name.

Get user emails from Active Directory group

This activity extracts all emails from Active Directory vgroup and stores result in variable. If group includes sub-group, all users from sub-group will be extracted automatically.

You can use it to get email recipients from Active Directory group. The activity enumerates members of AD group, then extracts emails from members and returns a string with unique emails, concatenated by semicolon (";").



By default, activity uses the current user when authenticating. If you want to use custom authentication, use "Set Active Directory authentication" activity before.

SharePoint Workflow Designer Phrase

Get user emails from this group name in this domain and store result in variable.

Parameters

Parameter	Description
this group name	Group name. Ex: "Administrators", "DOMAIN\Administrators", "Administrators@DOMAIN"
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the group name.

Get Active Directory groups where user is member

This activity returns collection of Get Active Directory groups where user is member. Supports “Distinguished Name” or “Account Name” output format.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

Note: Activity reads information from **memberOf** attribute. The **memberOf** attribute is a multi-valued attribute that contains groups of which the user is a direct member, depending on the domain controller (DC) from which this attribute is retrieved:

- At a DC for the domain that contains the user, **memberOf** for the user is complete with respect to membership for groups in that domain; however, **memberOf** does not contain the user's membership in domain local and global groups in other domains.
- At a GC server, **memberOf** for the user is complete with respect to all universal group memberships.

If both conditions are true for the DC, both sets of data are contained in **memberOf**.

Be aware that this attribute lists the groups that contain the user in their member attribute—it does not contain the recursive list of nested predecessors. For example, if user O is a member of group C and group B and group B were nested in group A, the **memberOf** attribute of user O would list group C and group B, but not group A.

This attribute is not stored—it is a computed back-link attribute.

More info about **memberOf** attribute you could find here <http://msdn.microsoft.com/en-us/library/ms677943.aspx>

SharePoint Workflow Designer Phrase

Get Account Name of Active Directory groups where this user is member from this domain and store result in variable.

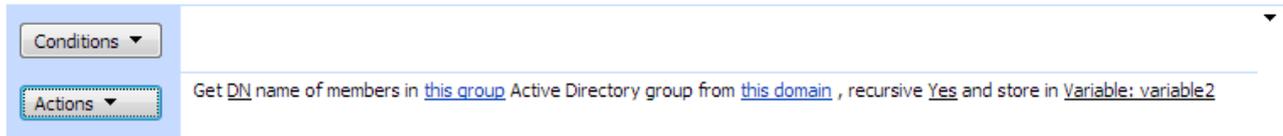
Parameters

Parameter	Description
Account Name	Type of items in response. <ul style="list-style-type: none"> • DN – returns Distinguished Name of group • Account Name – returns account name of group
this user	User or group login name. Ex: “user@domain”, “domain\user” or “user”
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the group name.

Variable	Output. Array List
----------	---------------------------

Get members of Active Directory group

This activity returns collection of members of Active Directory group. Supports “Distinguished Name” or “Account Name” output format.



By default, activity uses the current user when authenticating. If you want to use custom authentication, use “Set Active Directory authentication” activity before.

Note: Activity reads information from **member** attribute. The **member** attribute is a multi-valued attribute that contains groups of which the user is a direct member, depending on the domain controller (DC) from which this attribute is retrieved

More info about memberOf attribute you could find [http://msdn.microsoft.com/en-us/library/ms676914\(v=VS.85\).aspx](http://msdn.microsoft.com/en-us/library/ms676914(v=VS.85).aspx)

SharePoint Workflow Designer Phrase

Get DN of member in this group Active Directory group from this domain, recursive Yes and store result in variable.

Parameters

Parameter	Description
DN	Type of items in response. <ul style="list-style-type: none"> • DN – returns Distinguished Name of user • Account Name – returns account name of user
this group	Path to existing user group. <p>Supported formats:</p> <ul style="list-style-type: none"> • Full LDAP path “CN= group,OU=Test,DC=yourdomain,DC=local” • Simple path from root with domain “yourdomain\test\group” or “yourdomain/test/group” • Simple path from root without domain “test\group” or “test/group”, domain will be resolved automatically. • The logon name. Ex: “group”. <p>Use Active Directory Explorer (http://technet.microsoft.com/en-us/sysinternals/bb963907.aspx) to get correct LDAP path.</p> <p>Supports multiple destination groups separated ';'</p>
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the group name.
Recursive	Set Yes to extract users from sub-group recursive; otherwise No
Variable	Output. Array List

Set user's password in Active Directory

This activity allows changing a password in Active Directory.

Step 1

Set [this user](#) new password to [this value](#) in [this domain](#)

By default, activity uses the current user when authenticating. If you want to use custom authentication, use "Set Active Directory authentication" activity before.

SharePoint Workflow Designer Phrase

Set [this user](#) new password to [this value](#) in [this domain](#).

Parameters

Parameter	Description
this user	User login name. Ex: "user@domain", "domain\user" or "user"
this value	New password
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

Enable a user account in Active Directory

This activity allows enabling a user account in Active Directory.

Step 1

Enable [this user](#) account in [this domain](#)

SharePoint Workflow Designer Phrase

Enable [this user](#) account in [this domain](#)

Parameters

Parameter	Description
this user	User login name. Ex: "user@domain", "domain\user" or "user"
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

Disable a user account in Active Directory

This activity allows disabling a user account in Active Directory.

Step 1

Disable [this user](#) account in [this domain](#)

SharePoint Workflow Designer Phrase

Disable [this user](#) account in [this domain](#)

Parameters

Parameter	Description
this user	User login name. Ex: "user@domain", "domain\user" or "user"
this domain	Optional. Domain name. You should enter domain name if user name without a domain, otherwise it will be calculated from the user name.

By default, activity uses the current user when authenticating. If you want to use custom authentication, use "Set Active Directory authentication" activity before.

Permissions Activities

Change site permissions inheritance

This activity either stops or restores inheriting permission from Parent for specified site.

Step 1

[Stop inheriting permissions](#) at [site url](#)

Note: If permission has been already inherited or detached, the action does nothing.

SharePoint Workflow Designer Phrase

[Stop inheriting permissions](#) at [site url](#).

Parameters

Parameter	Description
Stop inheriting permissions	<ul style="list-style-type: none"> Stop inheriting permissions and copy permissions Inherit permissions from Parent
site url	Optional. The URL of the site. If site url is empty, current site url will be used. Example: http://mycompany

Grant Permission on site

This activity grants permission on the site. You can override or append user or group grant permissions.

Value of permission field by default can be one of the following values:

Full Control
Design
Contribute
Read

If any custom permission levels are defined, you can also specify those. For help on creating custom permission levels see <http://technet2.microsoft.com/Office/en-us/library/c5dd8b7e-202d-4d33-8535-5c03f88ea1ff1033.mspx?mfr=true>

Step 1

Grant [this permission level](#) permission on [site url](#) to [this members](#). Override current permissions: [No](#).

The activity supports multi permission assignment. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".

SharePoint Workflow Designer Phrase

Grant [this level](#) permission on [site url](#) to [this members](#). Override current permissions: No

Parameters

Parameter	Description
this permission level	Permission level string. Multi permission assignments are supported. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".
site url	Optional. The URL of the site. If site url is empty, current site url will be used. Example: http://mycompany
this members	User or SharePoint Group name. Ex: "user@domain", "domain\user", "Viewers". It allows multiple values separated by a semicolon.
Override current permissions	No – a new permission will be added to existed permissions Yes – a new permission will override (remove) all old permissions

Remove permissions from site

This activity deletes all roles assigned to users on site.

Step 1

Remove permission in [site url](#) for [this members](#)

SharePoint Workflow Designer Phrase

Remove permission in site url for this memebres.

Parameters

Parameter	Description
site url	Optional. The URL of the site. If site url is empty, current site url will be used. Example: http://mycompany
this members	User name. Ex: "user@domain", "domain\user". It allows multiple values separated by a semicolon.

Grant Permission on list

This activity grants permission on the list. You can override or append user or group grant permissions.

Value of permission field by default can be one of the following values:

Full Control
Design
Contribute
Read

If any custom permission levels are defined, you can also specify those. For help on creating custom permission levels see <http://technet2.microsoft.com/Office/en-us/library/c5dd8b7e-202d-4d33-8535-5c03f88ea1ff1033.aspx?mfr=true>

Step 1

Grant this permission level permission on list url to this members . Override current permissions: No .

The activity supports multi permission assignment. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".

SharePoint Workflow Designer Phrase

Grant this level permission on list url to this members. Override current permissions: No

Parameters

Parameter	Description
this permission level	Permission level string. Multi permission assignments are supported. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".
list url	The URL of the list.
this members	User or SharePoint Group name. Ex: "user@domain", "domain\user", "Viewers". It allows multiple values separated by a semicolon.
Override current permissions	No – a new permission will be added to existed permissions Yes – a new permission will override (remove) all old permissions

Remove permissions from list

This activity deletes all roles assigned to users on site.

Step 1

Remove permission in [list url](#) for [this members](#)

SharePoint Workflow Designer Phrase

Remove permission in [list url](#) for [this memebres](#).

Parameters

Parameter	Description
list url	The URL of the list.
this members	User name. Ex: "user@domain", "domain\user". It allows multiple values separated by a semicolon.

Change list permissions inheritance

This activity either stops or restores inheriting permission from Parent.

Note: If permission has been already inherited or detached, the action does nothing.

SharePoint Workflow Designer Phrase

[Stop inheriting permissions](#) at [list url](#).

Parameters

Parameter	Description
Stop inheriting permissions	<ul style="list-style-type: none"> Stop inheriting permissions and copy permissions Inherit permissions from Parent
list url	The URL of the list. Example: http://mycompany/Lists/PublicList

Grant Permission on Item (Free)

This activity grants permission on the list item. You can override or append user grant permissions.

Value of permission field by default can be one of the following values:

Full Control
Design
Contribute

Read

If any custom permission levels are defined, you can also specify those. For help on creating custom permission levels see <http://technet2.microsoft.com/Office/en-us/library/c5dd8b7e-202d-4d33-8535-5c03f88ea1ff1033.aspx?mfr=true>

Step 1

Grant [this level](#) permission on [this item](#) to [this user](#) . Override current permissions: [Yes](#) .

The activity supports multi permission assignment. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".

SharePoint Workflow Designer Phrase

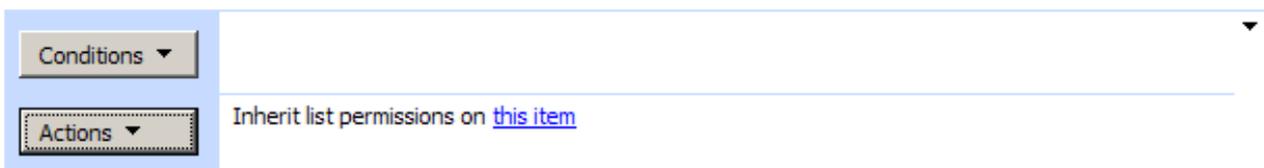
Grant [this level](#) permission on [this item](#) to [this user](#).

Parameters

Parameter	Description
this level	Permission level string. Multi permission assignments are supported. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".
this item	List item
this user	User name. Ex: "user@domain", "domain\user". It allows multiple values separated by a semicolon.
Override current permissions	No – a new permission will be added to existed permissions Yes – a new permission will override (remove) all old permissions

Reset List permissions Inheritance (Free)

This activity allows resetting list permissions inheritance.



[Add 'Else If Conditional Branch](#)

SharePoint Workflow Designer Phrase

Inherit list permissions on [this item](#).

Parameters

Parameter	Description
this item	List item

Delete all permission assignment from List Item

This activity remove all permission assignment from list item, breaking list permission inheritance if necessary.

[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Delete all permission assignment in this item.

Parameters

Parameter	Description
this item	List item

Delete all user permission assignment from List Item (Free)

This activity deletes all roles assigned to a user on item, breaking list permission inheritance if necessary.

[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

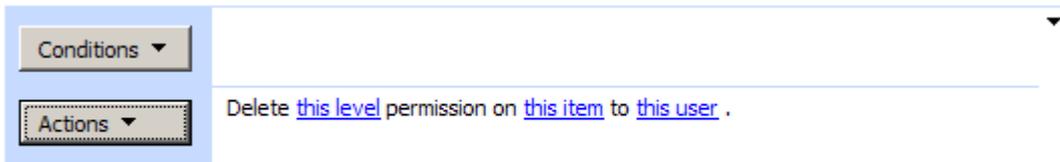
Delete permission assignment in this item for this user.

Parameters

Parameter	Description
this item	List item
this user	User name. Ex: "user@domain", "domain\user". It allows multiple values separated by a semicolon.

Delete custom permission from List Item

This activity deletes specific roles assigned to a user on item, breaking list permission inheritance if necessary.



Conditions ▾

Actions ▾ Delete [this level](#) permission on [this item](#) to [this user](#) .

[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Delete [this level](#) permission on [this item](#) to [this user](#) .

Parameters

Parameter	Description
this level	Permission level string. Multi permission assignments are supported. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".
this item	List item
this user	User name. Ex: "user@domain", "domain\user". It allows multiple values separated by a semicolon.

Grant Permission on List Item or Folder extended

This activity grants permission on the list item or folder. You can override or append user grant permissions.

Value of permission field by default can be one of the following values:

Full Control
Design
Contribute
Read

If any custom permission levels are defined, you can also specify those. For help on creating custom permission levels see <http://technet2.microsoft.com/Office/en-us/library/c5dd8b7e-202d-4d33-8535-5c03f88ea1ff1033.msp?mfr=true>

Step 1

Grant [this level](#) permission on [list item url](#) to [this user](#) . Override current permissions: [Yes](#) .

The activity supports multi permission assignment. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".

SharePoint Workflow Designer Phrase

Grant [this level](#) permission on [list item url](#) to [this user](#) . Override current permissions: Yes

Parameters

Parameter	Description
this level	Permission level string. Multi permission assignments are supported. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".
list item url	Full list item or folder url Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf http://mysharepoint/Lists/List%20with%20Approve/1_.000 http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1 http://mysharepoint/MyDocs/Shared%20Documents/Folder
this user	User name. Ex: "user@domain", "domain\user". It allows multiple values separated by a semicolon.
Override current permissions	No – a new permission will be added to existed permissions Yes – a new permission will override (remove) all old permissions

Info Path Activities

Get InfoPath Form Field Inner Text (Free)

This action gets InfoPath form field inner text. See

<http://blogs.msdn.com/infopath/archive/2006/06/07/621202.aspx> for instructions on how to get XPath query for your form.

Get InfoPath Form Field Inner Xml (Free)

This action gets InfoPath form field inner xml. See

<http://blogs.msdn.com/infopath/archive/2006/06/07/621202.aspx> for instructions on how to get XPath query for your form.

Set InfoPath form field inner xml (Free)

This action sets InfoPath form field inner xml. See

<http://blogs.msdn.com/infopath/archive/2006/06/07/621202.aspx> for instructions on how to get XPath query for your form.

List Activities

Copy List Item extended (Free)

This action copies list items.

Feature Matrix

Feature	List Items	Files	Notes
Copy Item	X	X	
Move Item	X	X	
Overwrite Item on Destination		X	

Specify Destination Subfolders		X	when copying/moving files in and out of doc. libs, path to a sub folder can be specified as the destination (ex. http://moss/site/doclib/subfolder)
Copy/Move File Attributes		X	when copying/moving files in and out of doc. libs, any attributes that exist in destination lib. are also set
Copy/Move Item History		X	List item history is never kept, file version history is always copied/moved
Copy/Move Item Attachments	X		
Copy/Move Item Cross Site	X	X	
Copy/Move Item with Person Fields Cross Site	X	X	

Conditions ▼

Actions ▼

Copy item in [this list](#) to list at [this url](#) , Overwrite existing items. Store resulting list item id in Variable: variable

[Add 'Else If' Conditional Branch](#)

Warning:

This custom action presents a potential security issue. Because it runs as SHAREPOINT\system it can copy file/items to any site in the farm. A user with access to create SPD workflows on any one site can set this activity up to copy to sites that he does not have access to. If you do not want this behavior we suggest you remove this activity from VirtoWorkflow.ACTIONS file, located in [SPHive]\TEMPLATE\1033\Workflow\ folder.

Loop through list items and set the value of field

This activity allows looping through list items and setting the value of field.

Conditions ▼

Actions ▼

Loop through all items and set field to value . Trigger update event No .

SharePoint Workflow Designer Phrase

Loop though all items and set field to value. Trigger update event No.

Parameters

Parameter	Description
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
Field	Field name
Value	New value
<u>No</u>	Indicates that activity triggers item update event. Default value No. Note: Can loop workflow activities, if set YES.

Loop through list items and update list items

This activity allows looping through list items and updating multiple list item fields.

The activity uses default update list item user interface to select fields, you should ignore any “warning”, because activity will use only list id, property name and value from the control.

SharePoint Workflow Designer Phrase

Loop through all items and update items in this list. Trigger update event No.

Parameters

Parameter	Description
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
this list	List data source and updated field list
<u>No</u>	Indicates that activity triggers item update event. Default value No. Note: Can loop workflow activities, if set YES.

Loop through list items and set the value of field extended

This activity finds list by url and allows looping through list items and setting the value of field.

SharePoint Workflow Designer Phrase

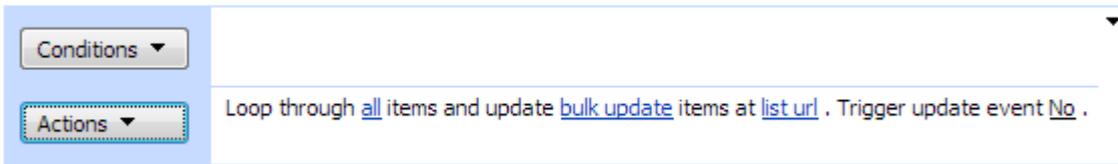
Loop though all items and set field to value. Trigger update event No.

Parameters

Parameter	Description
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
Field	Optional. Field name
Value	Optional. New value
list url	Full list url Ex: http://mysharepoint/MyDocs/Shared%20Documents Ex: http://mysharepoint/Lists/List%20with%20Approve
<u>No</u>	Indicates that activity triggers item update event. Default value No. Note: Can loop workflow activities, if set YES.

Loop through list items and update list items extended

This activity finds list by url and allows looping through list items and updating multiple list item fields.



SharePoint Workflow Designer Phrase

Loop through all items and update bulk update items at list url . Trigger update event No .

Parameters

Parameter	Description
all	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
bulk update	Bulk update string. Includes field name and field value lines. [FieldName1]=[Value1] ... [FieldNameN]=[ValueN] Use string <%FieldName%> construction to resolve field value from current list item. FieldName can be field display name, field id (GUID) or field index (int). Note: Use vti_title field to update title Use ModerationInformation.Status field to update content approval status for an item. Use ModerationInformation.Comment field to update comment that addresses why the item was approved or rejected. Example: Description=Test Description Start Date=2010-12-10T12:30:00 Published=1 Choice=My Choice #3 Lookup=12;# vti_title=My Super Title ModerationInformation.Status= Approved
list url	Full list url Ex: http://mysharepoint/MyDocs/Shared%20Documents Ex: http://mysharepoint/Lists/List%20with%20Approve
<u>No</u>	Indicates that activity triggers item update event. Default value No. Note: Can loop workflow activities, if set YES.

Delete List Items

This activity allows looping through list items and delete item.

The screenshot shows a workflow designer interface. On the left, there are two dropdown menus: 'Conditions' and 'Actions'. The 'Actions' menu is selected, and the text 'Delete all items' is displayed in the main area.

[Add 'Else IF' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Delete all items.

Parameters

Parameter	Description
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter deletes all items.

Calculate aggregate function

This activity calculates aggregate numerical function from a numeric column for selected item in list and store result in variable.

The screenshot shows a workflow designer interface. On the left, there are two dropdown menus: 'Conditions' and 'Actions'. The 'Actions' menu is selected, and the text 'Calculate this function on this field from all items in this list and store result in Variable: variable' is displayed in the main area.

SharePoint Workflow Designer Phrase

Calculate this function on this field from all items in this list and store result in variable

Parameters

Parameter	Description
this function	Name of the aggregate function. Available Functions: Count, Avg, Min, Max, Standard Deviation, Mode.
this field	Optional. Numerical field on which mathematical function will be performed. Field display name. Field unique ID (Guid). Field index (int). Not required for Count function.
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
this list	Source list
Variable	This activity will place function result into an output variable (Double).

Available Functions

Name	Description
Count	Total number of items
Sum	The sum of items
Avg	Average of values from the specified column
Max	Smallest non-null value in the specified column

Min	Largest non-null value in the specified column
Standard Deviation	A measure of the variation in a distribution of values from the specified column, equal to the square root of the arithmetic mean of the squares of the deviations from the arithmetic mean; the square root of the variance http://en.wikipedia.org/wiki/Standard_deviation
Mode	The mode is the value that occurs the most frequently in a data set or a probability distribution. http://en.wikipedia.org/wiki/Mode_%28statistics%29

Calculate aggregate function extended

This activity finds list by url and calculates aggregate numerical function from a numeric column for selected item in list and store result in variable.

Step 1

Calculate [this function](#) on [this field](#) from [all](#) items at [list url](#) and store result in [Variable: variable](#)

SharePoint Workflow Designer Phrase

Calculate [this function](#) on [this field](#) from [all](#) items at [list url](#) and store result in [variable](#)

Parameters

Parameter	Description
this function	Name of the aggregate function. Available Functions: Count, Avg, Min, Max, Standard Deviation, Mode.
this field	Optional. Numerical field on which mathematical function will be performed. Field display name. Field unique ID (Guid). Field index (int). Not required for Count function.
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
list url	Full list url Ex: http://mysharepoint/MyDocs/Shared%20Documents Ex: http://mysharepoint/Lists/List%20with%20Approve
Variable	This activity will place function result into an output variable (Double).

Available Functions

Name	Description
Count	Total number of items
Sum	The sum of items
Avg	Average of values from the specified column
Max	Smallest non-null value in the specified column
Min	Largest non-null value in the specified column
Standard Deviation	A measure of the variation in a distribution of values from the specified column,

equal to the square root of the arithmetic mean of the squares of the deviations from the arithmetic mean; the square root of the variance

http://en.wikipedia.org/wiki/Standard_deviation

Mode

The mode is the value that occurs the most frequently in a data set or a probability distribution.

http://en.wikipedia.org/wiki/Mode_%28statistics%29

Get emails from List field

This activity extracts all emails from a field in filtered list items and stores result in variable.

You can use it to get email recipients from external list. The activity enumerates list items, then extracts emails from specific field and returns a string with unique emails, concatenated by semicolon (“;”). Supports automatic detection of email from user string (DOMAIN\userName) and SPUser(s) object.



SharePoint Workflow Designer Phrase

Get emails from all items, from this field in current list and store result in variable.

Parameters

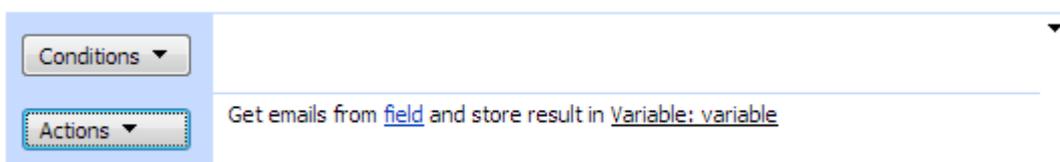
Parameter	Description
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
this field	Field display name. Field unique ID (Guid). Field index (int).
current list	Optional. Source list. Default value is current list.

Get emails from field in Current Item

This activity extracts all emails from a field in current list item and stores result in variable.

The read field value from specific field and returns a string with unique emails, concatenated by semicolon (“;”).

Supports automatic detection of email from user string (DOMAIN\userName) and SPUser(s) object.



SharePoint Workflow Designer Phrase

Get emails from field and store result in variable.

Parameters

Parameter	Description
Field	Field name.
current list	Optional. Source list. Default value is current list.

Generate Report

This activity allows generating a text report from filtered list items as a data source.

The activity loads selected items from the list, creates text report (see schema below) and stores the result in text variable. You can use HTML tags to format report.

The activity can be useful in many scenarios:

- Create user's active jobs report, add report into email body and send email.
- Create client incidents report, add report into email body and send email to client.
- Create administrator's warnings report, add report into SMS message and send SMS.
- Create dynamic CAML queries.
- Create dynamic email, SMS, instant message contact list.
- Create any text-based (HTML, XML and so on) documents.
- etc.

Scheme of the report:

[Header]

[Row for List Item 1]

[Row for List Item 2]

...

[Row for List Item N]

[Footer]

To display field value from current list item in the Row Template, you should use the <%FieldName%> construction. The <%FieldName%> construction is active text marker, the activity finds a marker, resolves the field, gets field value and replaces marker with the value in text format. The following code displays the value of the variable name. Field Name can be field Display name, Field ID (GUID) or Field Index (int).

The row template is:

```
User '<%First Name%>'. His email is '<%E-mail Address%>'.
```

If value of "First Name" field was "Frank" and value of "E-mail Address" field was frank@mycompany.com, the activity would write the following string in the report:

```
User 'Frank'. His email is 'frank@mycompany.com'.
```

You can use <%FieldName;#NetFormat%> construction to format field value from current list item. For example: <%Start Date;#D%> uses D - long date output pattern 6/15/2009 1:45:30 PM -> Monday, June 15, 2009.



SharePoint Workflow Designer Phrase

Generate report using this header, this row template, this footer from all items in current list and store result in variable.

Parameters

Parameter	Description
this header	Optional. The template for the heading section of the report
this row template	Optional. The template for the report rows. Use string <%FieldName%> construction to resolve field value from current list item. FieldName can be field display name, field id (GUID) or field index (int).
this footer	Optional. The template for the footer section of the report
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items. Use <OrderBy>...</OrderBy> element to sort list items.
current list	Optional. Source list. Default value is current list.

Generate Report extended

This activity allows generating a text report from filtered list items as a data source.

The activity loads selected items from the list, creates text report (see schema below) and stores the result in text variable. You can use HTML tags to format report.

The activity can be useful in many scenarios:

- Create user's active jobs report, add report into email body and send email.
- Create client incidents report, add report into email body and send email to client.
- Create administrator's warnings report, add report into SMS message and send SMS.
- Create dynamic CAML queries.
- Create dynamic email, SMS, instant message contact list.
- Create any text-based (HTML, XML and so on) documents.
- etc.

Scheme of the report:

[Header]

[Row for List Item 1]

[Row for List Item 2]

...

[Row for List Item N]

[Footer]

To display field value from current list item in the Row Template, you should use the <%FieldName%> construction. The <%FieldName%> construction is active text marker, the activity finds a marker, resolves the field, gets field value and replaces marker with the value in text format. The following code displays the value of the variable name. Field Name can be field Display name, Field ID (GUID) or Field Index (int).

The row template is:

```
User '<%First Name%>'. His email is '<%E-mail Address%>'.
```

If value of “First Name” field was “Frank” and value of “E-mail Address” field was frank@mycompany.com, the activity would write the following string in the report:

```
User 'Frank'. His email is 'frank@mycompany.com'.
```

You can use <%FieldName;#NetFormat%> construction to format field value from current list item. For example: <%Start Date;#D%> uses D - long date output pattern 6/15/2009 1:45:30 PM -> Monday, June 15, 2009.



SharePoint Workflow Designer Phrase

Generate report using this header, this row template, this footer from all items at list url and store result in variable.

Parameters

Parameter	Description
this header	Optional. The template for the heading section of the report
this row template	Optional. The template for the report rows. Use string <%FieldName%> construction to resolve field value from current list item. FieldName can be field display name, field id (GUID) or field index (int).
this footer	Optional. The template for the footer section of the report
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items. Use <OrderBy>...</OrderBy> element to sort list items.
list url	Full list url Ex: http://mysharepoint/MyDocs/Shared%20Documents Ex: http://mysharepoint/Lists/List%20with%20Approve

Approve Item

This activity approves the item and it will become visible to all users.

SharePoint Workflow Designer Phrase

Approve [this list item](#) with comment: [comment](#).

Parameters

Parameter	Description
this list item	List item to approve
Comment	Optional. A string that contains the comment.

Approve Item extended

This activity approves the item and it will become visible to all users by list url.

SharePoint Workflow Designer Phrase

Approve [this list item url](#) with comment: [comment](#).

Parameters

Parameter	Description
this list item url	Full list item url to delete. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf Ex: http://mysharepoint/Lists/List%20with%20Approve/1 .000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1
Comment	Optional. A string that contains the comment.

Reject Item

This activity Rejects the item and it will be returned to its creator and not appear in public views.

SharePoint Workflow Designer Phrase

Reject [this list item](#) with comment: [comment](#).

Parameters

Parameter	Description
this list item	List item to approve
Comment	Optional. A string that contains the comment.

Delete Item extended

This activity deletes the item by url.

SharePoint Workflow Designer Phrase

Check out item at this list item url.

Parameters

Parameter	Description
this list item url	Full list item url to delete. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf Ex: http://mysharepoint/Lists/List%20with%20Approve/1 .000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1

Delete List Items extended

This activity finds list by url and allows looping through list items and delete them.

SharePoint Workflow Designer Phrase

Delete all items at list url.

Parameters

Parameter	Description
All	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter deletes all items.
list url	Full list url Ex: http://mysharepoint/MyDocs/Shared%20Documents Ex: http://mysharepoint/Lists/List%20with%20Approve

Get field value extended

This activity finds the list item by url, returns value from specified field and stores result in variable.

SharePoint Workflow Designer Phrase

Get value from this field at list item url and store result in variable.

Parameters

Parameter	Description
this field	Field display name. Field unique ID (Guid). Field index (int).
this list item url	Full list item url Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf Ex: http://mysharepoint/Lists/List%20with%20Approve/1 .000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1

Set Field extended

This activity finds the list item by url and updates value of specified field. The activity runs associated workflows after update.

SharePoint Workflow Designer Phrase

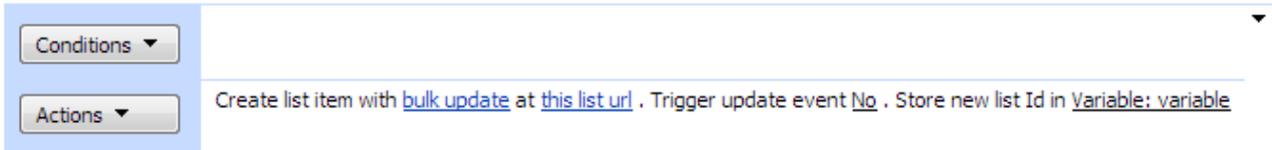
Set field to value at list item url. Trigger update event No

Parameters

Parameter	Description
Field	Field display name. Field unique ID (Guid). Field index (int).
Value	New value
this list item url	Full list item url Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf Ex: http://mysharepoint/Lists/List%20with%20Approve/1 .000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1
<u>No</u>	Indicates that activity triggers item update event. Default value No. Note: Can loop workflow activities, if set YES.

Create List Item extended

This activity finds the list by url and creates list item. The activity triggers create event.



SharePoint Workflow Designer Phrase

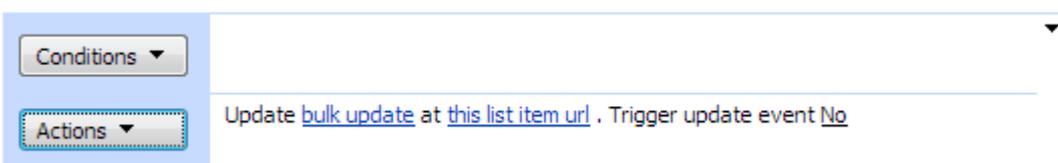
Create list item with bulk update at this list url . Trigger create event No . Store new list id in variable

Parameters

Parameter	Description
bulk update	Bulk update string. Includes field name and field value lines. [FieldName1]=[Value1] ... [FieldNameN]=[ValueN] Note: Use vti_title field to update title Use ModerationInformation.Status field to update content approval status for an item. Use ModerationInformation.Comment field to update comment that addresses why the item was approved or rejected. Example: Description=Test Description Start Date=2010-12-10T12:30:00 Published=1 Choice=My Choice #3 Lookup=12;# vti_title=My Super Title ModerationInformation.Status= Approved
this list url	Full list url Ex: http://mysharepoint/MyDocs/Shared%20Documents Ex: http://mysharepoint/Lists/List%20with%20Approve
<u>No</u>	Indicates that activity triggers item create event. Default value No.
Variable	List Item Id

Update List Item extended

This activity finds the list item by url and updates multiple field. The activity triggers update event.



SharePoint Workflow Designer Phrase

Update bulk update at list item url . Trigger update event No

Parameters

Parameter	Description
bulk update	<p>Bulk update string. Includes field name and field value lines.</p> <pre>[FieldName1]=[Value1] ... [FieldNameN]=[ValueN]</pre> <p>Use string <%FieldName%> construction to resolve field value from current list item. FieldName can be field display name, field id (GUID) or field index (int).</p> <p>Note: Use vti_title field to update title Use ModerationInformation.Status field to update content approval status for an item. Use ModerationInformation.Comment field to update comment that addresses why the item was approved or rejected.</p> <p>Example: Description=Test Description Start Date=2010-12-10T12:30:00 Published=1 Choice=My Choice #3 Lookup=12;# vti_title=My Super Title ModerationInformation.Status= Approved</p>
this list item url	<p>Full list item url</p> <p>Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf Ex: http://mysharepoint/Lists/List%20with%20Approve/1 .000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1</p>
<u>No</u>	<p>Indicates that activity triggers item update event. Default value No.</p> <p>Note: Can loop workflow activities, if set YES.</p>

Change list item content type

This activity finds the list item by url and changes list item content type.

You can use “Check Out Item extended” and “Check In Item extended” activities to check-out and check-in list item, before modifications.

The screenshot shows a configuration window for a workflow activity. On the left, there are two dropdown menus: 'Conditions' and 'Actions'. The 'Actions' dropdown is expanded, showing a single option: 'Set [this content type](#) content type at [list item url](#)'. The text 'this content type' and 'list item url' are underlined and blue, indicating they are clickable links.

Note: You can use Content Types as Statuses, see more information

<http://www.sharepoint911.com/blogs/laura/Lists/Posts/Post.aspx?ID=49>

Note: If url is empty, current list item would be used.

SharePoint Workflow Designer Phrase

Set this content type content type at list item url

Parameters

Parameter	Description
this content type	The name of content type that is associated with the item.
this list item url	Full list item url Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf Ex: http://mysharepoint/Lists/List%20with%20Approve/1_.000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1

Copy List attachments to Document Library

This activity allows copy list item attachments to document library

You can use bulk update property to update fields of all the copied files.

SharePoint Workflow Designer Phrase

Copy this item attachments to list url, Overwrite existing items. Use bulk update to update fields

Parameters

Parameter	Description
this item	List item to extract attachments
list url	Parent folder url. Example: http://mycompanydomain/site/doclib/subfolder
Overwrite	Indicates that activity overwrites existent files
bulk update	Optional. Bulk update string. Includes field name and field value lines. [FieldName1]=[Value1] ... [FieldNameN]=[ValueN]

Note:

Use **vti_title** field to update title

Use **ModerationInformation.Status** field to update content approval status for an item.

Use **ModerationInformation.Comment** field to update comment that addresses why the item was approved or rejected.

Example:

Description=Test Description

Start Date=2010-12-10T12:30:00

Published=1
 Choice=My Choice #3
 Lookup=12;#
 vti_title=My Super Title

Wait For Field Change in current item with Timeout

This activity wait for field changes periodically in current item with timeout and store timeout result in to variable.

Note: Default Wait For Field Change in current item activity

1. Doesn't detect code or workflow modifications
2. Doesn't detect status modifications
3. Doesn't have timeout

You could use this activity to implement wait for field change logic with timeout and process custom logic use timeout result, for example send notifications email if timeout was occurred.

See Workflow example below (Step 1 and Step 2):

Specify details for 'Step 1'

Choose the conditions and actions that define this step of the workflow.

Conditions ▼	
Actions ▼	Wait for <u>Title</u> to contain <u>Finish</u> , recheck every <u>00:05:00</u> with timeout: <u>1,00:00:00</u> . Store timeout flag in <u>Variable: isTimeOut</u>

Specify details for 'Step 2'

Choose the conditions and actions that define this step of the workflow.

Conditions ▼	If <u>Variable: isTimeOut</u> equals <u>Yes</u>
Actions ▼	Log <u>Send email to Manager</u> to the workflow history list
Conditions ▼	
Actions ▼	Log <u>Continue Business Logic</u> to the workflow history list

First step wait for “Title” field to contain “Finish” text in current item with 24 hours (1 day) timeout.

Second step analyses timeout result and Send email to manager if timeout was occurred, otherwise continue business process.

Conditions ▼	
Actions ▼	Wait for <u>field</u> to equal <u>value</u> , recheck every <u>00:00:00</u> with timeout <u>00:00:00</u> . Store timeout flag in <u>Variable: isTimeoutResult</u>

SharePoint Workflow Designer Phrase

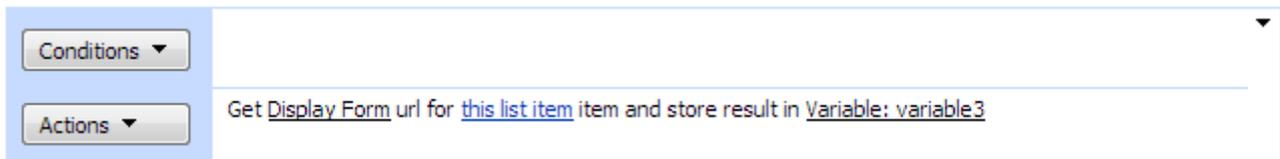
Wait for field to equal value, recheck every 00:00:00 with timeout 00:00:00 . Store timeout flag in isTimeoutResult

Parameters

Parameter	Description
Field	Current list field
to equal	Operator
Value	Value to compare
recheck every <u>00:00:00</u>	Indicates the length of the delay in the workflow between next check. Examples: 00:05:00 – every 5 minutes 02:00:10 – every 2 hours and 10 minutes 1.00:00:00 – every 1 day
timeout <u>00:00:00</u>	The time until the wait times out. Ex: 00:00:00 – without time out 23:00:00 – 23 hours 1.00:00:00 – 1 day
<u>isTimeoutResult</u>	Timeout result. if true, timeout was occurred. Otherwise false.

Get list item url

This activity returns Display Form, Edit Form and Native url for selected list item.



SharePoint Workflow Designer Phrase

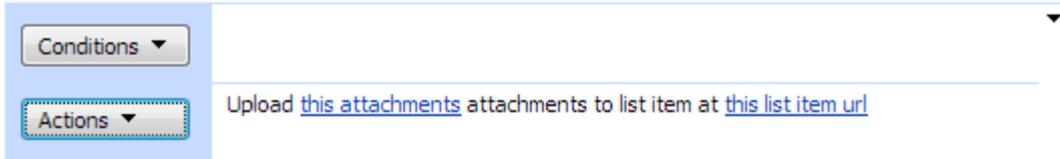
Get Display Form url for this list item item and store result in variable.

Parameters

Parameter	Description
Display Form	Output url format: <ul style="list-style-type: none"> • Display Form – link on list item display form • Edit Form – link on list item edit form • Native Form – inner sharepoint list item url
this list item	Selected list item

Upload attachments

This activity uploads list item attachments from SharePoint Document Library, Web or Local Disk. Attachments multiline text field supports url and local disk path. Both http and https requests are supported.



SharePoint Workflow Designer Phrase

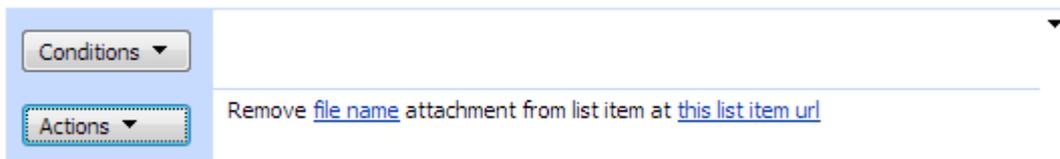
Upload this attachments attachments to list item at this list item url

Parameters

Parameter	Description
this attachments	Attachment list. Attachment can be either file path or web link. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf c:\publicfolder\report.pdf http://externalserver/report.pdf
this list item url	Optional. Full list item url. If list item url is empty, attachments will be uploaded to current item. Ex: http://mysharepoint/Lists/List%20with%20Approve/1_000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1

Remove attachment

This activity removes attachment by file name or index from specified list item.



SharePoint Workflow Designer Phrase

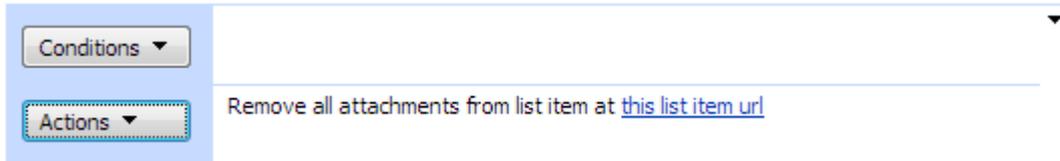
Remove file name attachments from list item at this list item item

Parameters

Parameter	Description
file name	Attachment's file name or index in attachment collection.
this list item url	Optional. Full list item url. If list item url is empty, attachments will be uploaded to current item. Ex: http://mysharepoint/Lists/List%20with%20Approve/1_000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1

Remove all attachments

This activity removes all attachments from list item.



SharePoint Workflow Designer Phrase

Remove all attachments from list item at [this list item url](#)

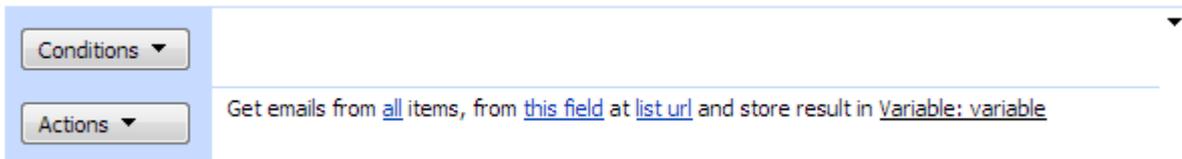
Parameters

Parameter	Description
this list item url	Optional. Full list item url. If list item url is empty, attachments will be uploaded to current item. Ex: http://mysharepoint/Lists/List%20with%20Approve/1_.000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1

Get emails from List field extended

This activity extracts all emails from a field in filtered list items and stores result in variable.

You can use it to get email recipients from external list. The activity enumerates list items, then extracts emails from specific field and returns a string with unique emails, concatenated by semicolon (“;”). Supports automatic detection of email from user string (DOMAIN\userName) and SPUser(s) object.



SharePoint Workflow Designer Phrase

Get emails from [all](#) items, from [this field](#) in [current list](#) and store result in [variable](#).

Parameters

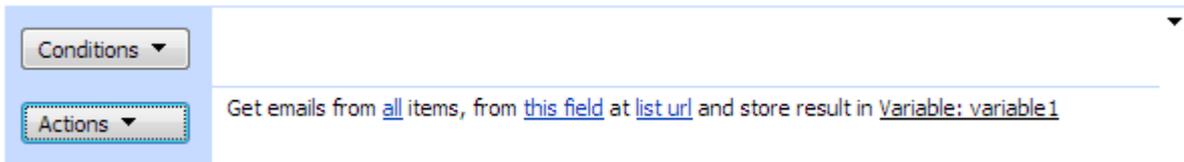
Parameter	Description
all	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
this field	Field display name. Field unique ID (Guid). Field index (int).
current list	Optional. Source list. Default value is current list.

Get emails from field extended

This activity finds the list item by url and extracts all emails from a field and stores result in variable.

The read field value from specific field and returns a string with unique emails, concatenated by semicolon (“;”).

Supports automatic detection of email from user string (DOMAIN\userName) and SPUser(s) object.



SharePoint Workflow Designer Phrase

Get emails from this field at this list item url and store result in variable.

Parameters

Parameter	Description
this field	Field name.
this list item url	Full list item url Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf Ex: http://mysharepoint/Lists/List%20with%20Approve/1 .000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1
current list	Optional. Source list. Default value is current list.

Get field values from list

This activity extracts values from field in Text, Html, Edit Mode and Internal format from filtered list items at specified list and store result in Array.



SharePoint Workflow Designer Phrase

Get emails from this field at this list item url and store result in variable.

Parameters

Parameter	Description
Text	Format: <ul style="list-style-type: none"> • Text - The value as plain text without any formatting • Html - The value in HTML format. • Edit Mode - The field value that is rendered in Edit mode. • Internal - The value in inner SharePoint format
all	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
this field	Field name.
list url	Optional. Source list. Default value is current list. Full list url Ex: http://mysharepoint/MyDocs/Shared%20Documents Ex: http://mysharepoint/Lists/List%20with%20Approve

Get version history of list item

This activity allows access to the version history information of a list item and store result in variable. You can get the first value, the previous value (great for checking if an item changed), of the last value that was different. The activity supports all SharePoint columns.

SharePoint Workflow Designer Phrase

Get First Value from version history of this item for this field and store in variable.

Parameters

Parameter	Description
First Value	Mode: <ul style="list-style-type: none"> • First Value - the original value • Previous Value • Last Different
this item	List item
this field	Field name.

Create Summary task

This activity allows creating summary task and returns summary task id that you can use as parent task.

Note: Using this activity you can create child summary tasks for new element. For example, a user creates a Summary Task 1 and then the workflow would create Summary Task 2 as a child of Summary Task 1, then Summary Task 3 as a child of Summary Task 2 and etc.

Step 1

Create a new summary task this title from start date to due date in parent task with bulk update at this list url. Trigger create event No. Store new task id in Variable: variable

SharePoint Workflow Designer Phrase

Create a new summary task this title from start date to due date in parent task with bulk update at this list url. Trigger create event No. Store new task id in variable

Parameters

Parameter	Description
this title	Title of task
start date	Start date
due date	Due date
parent task	Optional. Parent task. The parent task string supports Parent Task ID or path to parent task. Otherwise a summary task would be created in root. Ex: 12 Summary Task 1\ Summary Task 2\ Summary Task 3 Summary Task 1/Summary Task 2/ Summary Task 3
this list url	Full list url Ex: http://mysharepoint/Lists/Tasks
bulk update	Optional. Bulk update string. Includes field name and field value lines. [FieldName1]=[Value1]

...
[FieldNameN]=[ValueN]

Note:

Use **vti_title** field to update title

Use **ModerationInformation.Status** field to update content approval status for an item.

Use **ModerationInformation.Comment** field to update comment that addresses why the item was approved or rejected.

Example:

Description=Test Description

Start Date=2010-12-10T12:30:00

Published=1

Choice=My Choice #3

Lookup=12;#

ModerationInformation.Status= Approved

trigger create event Indicates that activity triggers item create event. Default value No.

Note: Can loop workflow activities, if set YES.

Create task

This activity allows creating SharePoint task and returns task id.

Note: Using this activity you can create child tasks for new element. For example, a user creates a Summary Task 1 and then the workflow would create Task 2 as a child of Summary Task 1 and etc.

Step 1

Create a new task [this title](#) from [start date](#) to [due date](#) in [parent task](#) with [bulk update](#) at [this list url](#) . Trigger create event [No](#) . Store new task id in [Variable: variable1](#)

SharePoint Workflow Designer Phrase

Create a new task [this title](#) from [start date](#) to [due date](#) in [parent task](#) with [bulk update](#) at [this list url](#).

Trigger create event [No](#). Store new task id in variable

Parameters

Parameter	Description
this title	Title of task
start date	Start date
due date	Due date
parent task	Optional. Parent task. The parent task string supports Parent Task ID or path to parent task. Otherwise a summary task would be created in root. Ex: 12 Summary Task 1\ Summary Task 2\ Summary Task 3 Summary Task 1/Summary Task 2/ Summary Task 3
this list url	Full list url Ex: http://mysharepoint/Lists/Tasks

bulk update	<p>Optional. Bulk update string. Includes field name and field value lines. [FieldName1]=[Value1] ... [FieldNameN]=[ValueN]</p> <p>Note: Use vti_title field to update title Use ModerationInformation.Status field to update content approval status for an item. Use ModerationInformation.Comment field to update comment that addresses why the item was approved or rejected.</p> <p>Example: Description=Test Description Start Date=2010-12-10T12:30:00 Published=1 Choice=My Choice #3 Lookup=12;# ModerationInformation.Status= Approved</p>
trigger create event	<p>Indicates that activity triggers item create event. Default value No. Note: Can loop workflow activities, if set YES.</p>

Get current list item attachments urls

This activity allows receiving item attachments URLs and stores result in variable.

Step 1

Get current item attachment urls and store result in Variable: variable

SharePoint Workflow Designer Phrase

Get current item attachments URLs and store result in variable.

Parameters

Parameter	Description
variable	This activity will place result into an output variable

Throws error, if either user or property don't exist.

User Activities

Lookup Site User Property (Free)

This activity allows receiving user property from SharePoint site and stores result in variable.

[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Lookup this property property for this user, store in Variable: variable.

Parameters

Parameter	Description
this property	User property name
this user	User name

Throws error, if either user or property don't exist.

Lookup Initiator User Property

This activity allows receiving workflow initiator property and stores result in variable.

SharePoint Workflow Designer Phrase

Lookup this property property for Initiator and store result in variable.

Parameters

Parameter	Description
this property	<p>User property name. Default value is LoginName. In most cases you would use LoginName or Name. Also available:</p> <ul style="list-style-type: none"> • Sid - the unique security ID for the network account of the user. • ID - the member ID for the user. • LoginName - the user name of the user. • Name - the display name of the user. • IsDomainGroup - a boolean value that indicates whether the user is a domain group. • Email - the e-mail address of the user. • RawSid - the system ID of the user in binary format. • Notes - notes for the user. • And etc. Find more user properties here http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.spuser_properties%28v=office.12%29.aspx

Throws error, if either user or property don't exist.

Set Site User Property (Free)

This activity allows setting user property from SharePoint site.



SharePoint Workflow Designer Phrase

Set this property property for this user to value.

Parameters

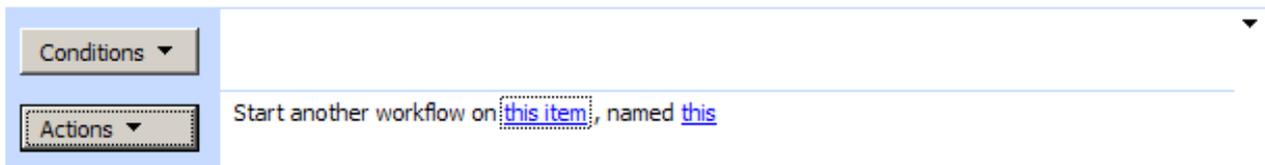
Parameter	Description
this property	User property name
this user	User name
this value	Property value

Throws error, if either user or property don't exist.

Workflow Activities

Start Another Workflow (Free)

This activity allows starting another workflow.



[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Start another workflow on this item, named this.

Parameters

Parameter	Description
this item	SharePoint list item on which to run the workflow
this	Name of existing workflow to run

Start Another Workflow extended

This activity finds the list item by url and runs workflow as a specific user with custom association data.



Note: If list item url is empty, current list item will be used.

Note: If workflow association is empty, default will be used.

Note: If user is empty, System Account will be used.

SharePoint Workflow Designer Phrase

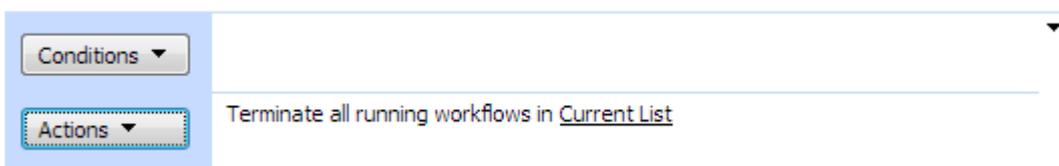
Start another workflow at this list item url, named this with default association data. Run As default user

Parameters

Parameter	Description
this list item url	Optional. Full list item url. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf Ex: http://mysharepoint/Lists/List%20with%20Approve/1_000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1
this	Name of existing workflow to run
default association data	Optional. The workflow association on which to base the new workflow instance
default user	Optional. Workflow Initiator login name. If user is empty, System Account will be used.

Terminate Workflows (Free)

This activity terminates all running or faulting workflows on the current list or current item.



You can use the activity to terminate all list or list item workflows automatically if an error occurs or the workflow stops responding.

Note: Terminating the workflow will set its status to Canceled and will delete all tasks created by the workflow.

SharePoint Workflow Designer Phrase

Terminates all running workflows in Current List.

Parameters

Parameter	Description
Current List	Specifies scope. Supports Current List or Current Item

Terminate Running Workflow

This activity allows canceling the specified workflow. You can use "Workflow is running" condition to determine whether workflow is running in the specified list item

Step 1

Terminate this running workflow on this item

SharePoint Workflow Designer Phrase

Terminate this running workflow on this item.

Parameters

Parameter	Description
this item	SharePoint list item on which to cancel the workflow
this	Name of running workflow

Loop through list items and start workflow

This activity finds list by url and allows looping through list items and starting workflow for multiple list items.

SharePoint Workflow Designer Phrase

Loop through all items at list url and start workflow named this with default association data.

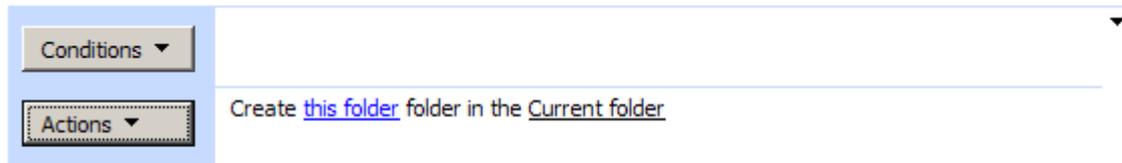
Parameters

Parameter	Description
all	Optional. List item filter. The filter string supports View Name, View ID and CAML string (<Where>...</Where>). Empty filter returns all items.
list url	Full list url Ex: http://mysharepoint/MyDocs/Shared%20Documents Ex: http://mysharepoint/Lists/List%20with%20Approve
<u>workflow name</u>	Name of existing workflow to run
default association data	Optional. The workflow association on which to base the new workflow instance

Document Library Activities

Create folder in the document library

This activity creates all folders and subfolders as specified by folder name.



[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Create this folder folder in the Current folder.

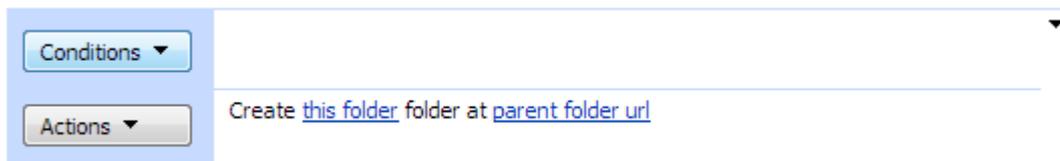
Parameters

Parameter	Description
this folder	New folder name. Folder name supports multi name separated by '\' or '/'. For example if folder name is 'My Folder1\My Folder2', activity will create 'My Folder1' folder and subfolder 'My Folder2'.
current folder	You can specify who is the parent of this folder: current or document library root folder.

If the folder already exists, this method does nothing.

Create folder in the document library extended

This activity creates subfolders at specified folder.



SharePoint Workflow Designer Phrase

Create this folder folder at parent folder url.

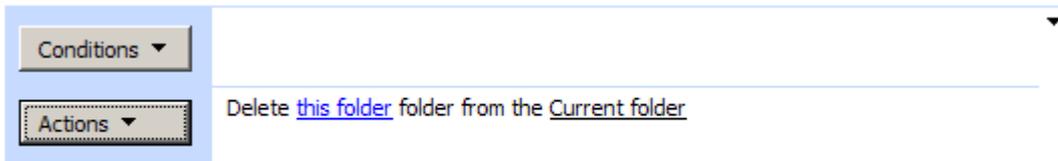
Parameters

Parameter	Description
this folder	New folder name. Folder name supports multi name separated by '\' or '/'. For example if folder name is 'My Folder1\My Folder2', activity will create 'My Folder1' folder and subfolder 'My Folder2'.
Parent folder url	Parent folder url. Example: http://mycompanydomain/site/doclib/subfolder

If the folder already exists, this method does nothing.

Delete folder from the document library

This activity deletes folder as specified by folder name.



[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Delete this folder folder from the Current folder.

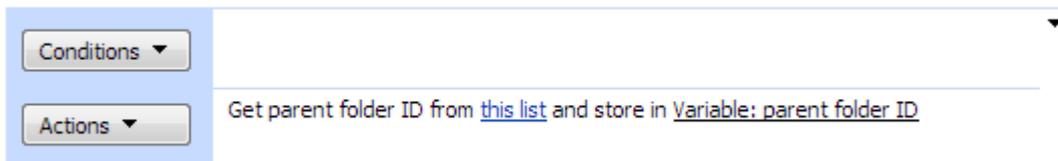
Parameters

Parameter	Description
this folder	Folder name. Folder name supports multi name separated by '\ ' or '/'. For example if folder name is 'My Folder1\My Folder2', activity will delete 'My Folder2' in 'My Folder1'.
current folder	You can specify who is the parent of this folder: current or document library root folder.

If the folder doesn't exist, this method does nothing.

Get parent folder ID (Free)

This activity returns list item id of the parent folder of an item.



SharePoint Workflow Designer Phrase

Get parent folder ID from this item and store in variable.

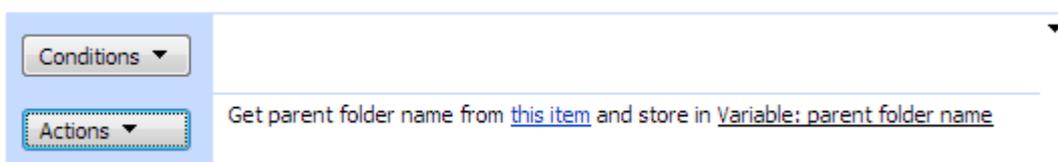
Parameters

Parameter	Description
this item	Current item

If parent folder is root, the activity returns 0.

Get parent folder name

This activity returns name of the parent folder of an item.



SharePoint Workflow Designer Phrase

Get parent folder name from this item and store in variable.

Parameters

Parameter	Description
this item	Current item

If parent folder is root, the activity returns an empty string.

Get parent folder URL

This activity returns the Web site-relative URL of the parent folder of an item.

SharePoint Workflow Designer Phrase

Get parent folder URL from this item and store in variable.

Parameters

Parameter	Description
this item	Current item

If parent folder is root, the activity returns an empty string.

Check Out Item extended

This activity finds the document by url and checks out the specified document.

SharePoint Workflow Designer Phrase

Check out item at this list item url.

Parameters

Parameter	Description
this list item url	Full list item url to check out. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf

Check In Item extended

This activity finds the document by url and checks in the specified document.

SharePoint Workflow Designer Phrase

Check in item at [this list item url](#) with comment: [comment](#).

Parameters

Parameter	Description
this list item url	Full list item url to check out. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf
comment	A string that contains a comment about the check in.

Discard Check Out Item extended

This activity finds the document by url and undoes the check-out of a document.

SharePoint Workflow Designer Phrase

Discard check out of item at [this list item url](#).

Parameters

Parameter	Description
this list item url	Full list item url to check out. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf

Publish Item

This activity submits the file for content approval with the specified comment.

SharePoint Workflow Designer Phrase

Publist [this list item](#) with comment: [comment](#).

Parameters

Parameter	Description
this list item	File to publish

Comment	Optional. A string that contains the comment.
---------	--

Discard Publish Item

This activity removes the file with the specified comment from content approval.

SharePoint Workflow Designer Phrase

Discard publish of [this list item](#) with comment: [comment](#).

Parameters

Parameter	Description
this list item	File to unpublish
Comment	Optional. A string that contains the comment.

Publish Item extended

This activity finds the document by url and submits the file for content approval with the specified comment.

SharePoint Workflow Designer Phrase

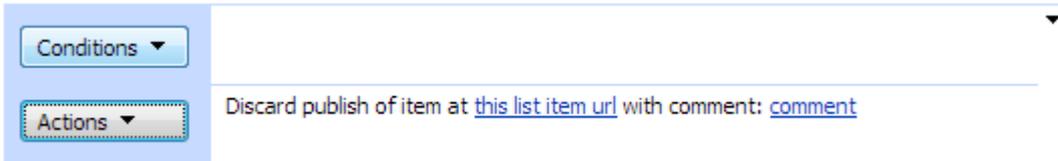
Publist [this list item url](#) with comment: [comment](#).

Parameters

Parameter	Description
this list item url	Full list item url to publish. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf
comment	Optional. A string that contains the comment.

Discard Publish Item extended

This activity finds the document by url and removes the file with the specified comment from content approval.



SharePoint Workflow Designer Phrase

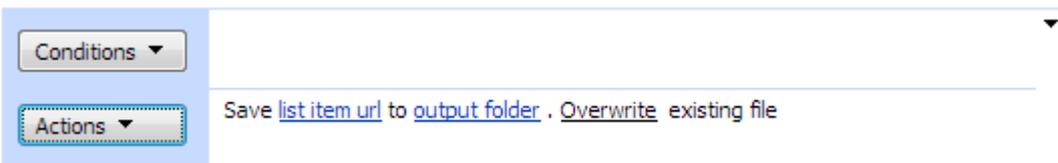
Discard publish of this list item url with comment: comment.

Parameters

Parameter	Description
this list item url	Full list item url to publish. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf
comment	Optional. A string that contains the comment.

Save document to file

This activity finds the document by url and saves a file or attachments to output folder on local disk.



SharePoint Workflow Designer Phrase

Save this list item url to output folder . Overwrite existing file

Parameters

Parameter	Description
this list item url	Optional. Full list item url. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf If url is empty, current list item would be used.
Output folder	Optional. The location of the folder where you want to save the document.
Overwrite	Overwrite – activity would overwrite existing file on local disk Do not Overwrite Create unique name – activity would create unique file name if file exists.

Create document from file

This activity creates a new document from file.



SharePoint Workflow Designer Phrase

Create document from file path to parent folder url . Overwrite existing document

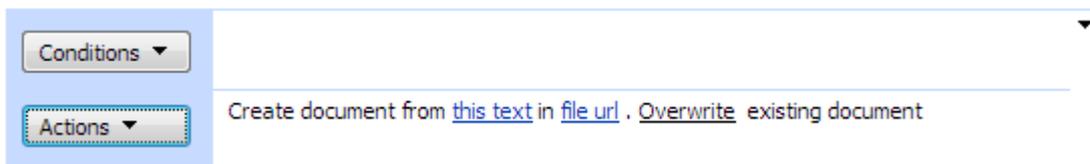
Parameters

Parameter	Description
file path	URL for the file containing the document to load. The URL can be either a local file or an HTTP URL (a Web address).
parent folder url	Full url to folder. Ex: http://mysharepoint/MyDocs/Shared%20Documents
Overwrite	Overwrite – activity would overwrite existing file Do not Overwrite Create unique name – activity would create unique file name if file exists.

Create document from text

This activity allows to create any text document (TXT, HTML and etc) and save result into SharePoint Document library or local disk.

Note: You could combine this activity with “Generate report” activity to create professional HTML or Txt reports in SharePoint.



SharePoint Workflow Designer Phrase

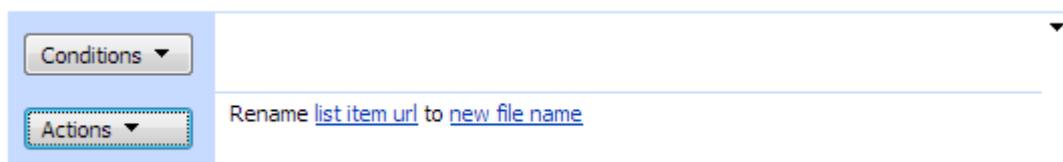
Create document from this text in file url . Overwrite existing document

Parameters

Parameter	Description
this text	Text file content
file url	SharePoint full file url or local disk path Ex: http://mysharepoint/MyDocs/Shared%20Documents/report.html Ex: c:\Reports\SharePoint Report.txt
Overwrite	Overwrite – activity would overwrite existing file Do not Overwrite

Rename document

This activity finds the document by url and set a new document name and title.



Note: The activity doesn't modify file extension or content type.

SharePoint Workflow Designer Phrase

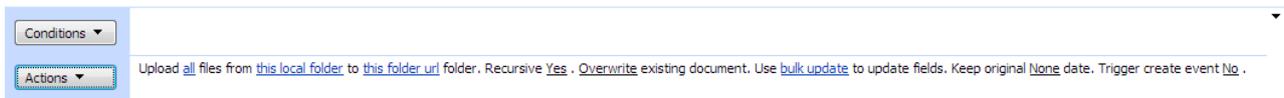
Rename list item url to new file name

Parameters

Parameter	Description
this list item url	Optional. Full list item url. Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf If url is empty, current list item would be used.
new file name	The name of a new file without extension

Upload documents from folder

This activity uploads SharePoint documents and folder from local disk.



The following wildcard specifiers are permitted in search pattern.

Wildcard character:

- * - Zero or more characters.
- ? - Exactly zero or one character.

Characters other than the wildcard specifiers represent themselves. For example, the search pattern string "*t" searches for all names in path ending with the letter "t". The search pattern string "s*" searches for all names in path beginning with the letter "s".

Note: When using the asterisk wildcard character in a search pattern, such as "*.txt", the matching behavior when the extension is exactly three characters long is different than when the extension is more or less than three characters long. A search pattern with a file extension of exactly three characters returns files having an extension of three or more characters, where the first three characters match the file extension specified in the search pattern. A search pattern with a file extension of one, two, or more than three characters returns only files having extensions of exactly that length that match the file extension specified in the search pattern. When using the question mark wildcard character, this method returns only files that match the specified file extension. For example, given two files, "file1.txt" and "file1.txtother", in a directory, a search pattern of "file?.txt" returns just the first file, while a search pattern of "file*.txt" returns both files.

The following list shows the behavior of different lengths for the search pattern parameter:

- "*.abc" returns files having an extension of .abc, .abcd, .abcde, .abcdef, and so on.
- "*.abcd" returns only files having an extension of .abcd.
- "*.abcde" returns only files having an extension of .abcde.
- "*.abcdef" returns only files having an extension of .abcdef.

You can use bulk update property to update fields of all uploaded files.

SharePoint Workflow Designer Phrase

Upload all files from this local folder to this folder url folder. Recursive Yes. Overwrite existing document. Use bulk update to update fields

Parameters

Parameter	Description
All	Optional. Search pattern. The search string to match against the names of files in path. The parameter cannot end in two periods ("..") or contain two periods ("..") followed by "\" or "/", nor can it contain any of the invalid path characters. Empty search pattern returns all files.
this local folder	The path to local folder. Ex: c:\temp\
this folder url	Full url to folder. Ex: http://mysharepoint/MyDocs/Shared%20Documents
Yes	Set Yes to upload files from sub-folder recursive. Set No to upload files from current folder only.
Overwrite	Overwrite – activity would overwrite existing file Do not Overwrite – activity skips file if file exists in the SharePoint folder
bulk update	Optional. Bulk update string. Includes field name and value lines. [FieldName1]=[Value1] ... [FieldNameN]=[ValueN] Note: Use vti_title field to update title Use ModerationInformation.Status field to update content approval status for an item. Use ModerationInformation.Comment field to update comment that addresses why the item was approved or rejected. Example: Description=Test Description Start Date=2010-12-10T12:30:00 Published=1 Choice=My Choice #3 Lookup=12;# vti_title=My Super Title ModerationInformation.Status= Approved
Keep original date	None – don't modify Created – set original Created date Last Modified – set original Last Modified date Created and Last Modified – set original Create and Last Modified date
Trigger create event	Indicates that activity triggers item created event. Default value No. Note: Can loop workflow activities, if set YES.

Download documents to folder

This activity downloads SharePoint documents and folder to local disk.

Conditions ▼	
Actions ▼	Download <u>all</u> documents from <u>this folder url</u> to <u>this local folder</u> folder. Recursive <u>Yes</u> . <u>Overwrite</u> existing files. Keep original <u>None</u> date

The following wildcard specifiers are permitted in search pattern.

Wildcard character:

* - Zero or more characters.

? - Exactly zero or one character.

Characters other than the wildcard specifiers represent themselves. For example, the search pattern string "*t" searches for all names in path ending with the letter "t". The search pattern string "s*" searches for all names in path beginning with the letter "s".

Note: When using the asterisk wildcard character in a search pattern, such as "*.txt", the matching behavior when the extension is exactly three characters long is different than when the extension is more or less than three characters long. A search pattern with a file extension of exactly three characters returns files having an extension of three or more characters, where the first three characters match the file extension specified in the search pattern. A search pattern with a file extension of one, two, or more than three characters returns only files having extensions of exactly that length that match the file extension specified in the search pattern. When using the question mark wildcard character, this method returns only files that match the specified file extension. For example, given two files, "file1.txt" and "file1.txtother", in a directory, a search pattern of "file?.txt" returns just the first file, while a search pattern of "file*.txt" returns both files.

The following list shows the behavior of different lengths for the search pattern parameter:

"*.abc" returns files having an extension of .abc, .abcd, .abcde, .abcdef, and so on.

"*.abcd" returns only files having an extension of .abcd.

"*.abcde" returns only files having an extension of .abcde.

"*.abcdef" returns only files having an extension of .abcdef.

SharePoint Workflow Designer Phrase

Download all documents from this folder url to this local folder folder. Recursive Yes. Overwrite existing document

Parameters

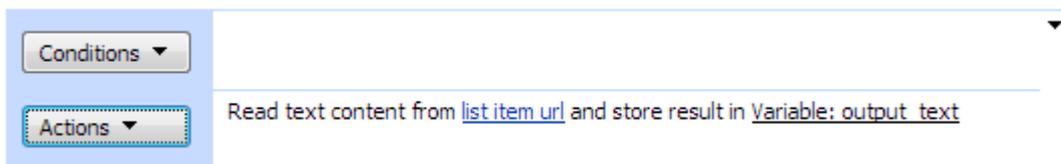
Parameter	Description
All	Optional. Search pattern. The search string to match against the names of files in path. The parameter cannot end in two periods ("..") or contain two periods ("..") followed by "\" or "/", nor can it contain any of the invalid path characters. Empty search pattern returns all files.
this local folder	The path to local folder. Ex: c:\temp\
this folder url	Full url to folder. Ex: http://mysharepoint/MyDocs/Shared%20Documents
Yes	Set Yes to download files from sub-folder recursive. Set No to download files from current folder only.

Overwrite	Overwrite – activity would overwrite existing file Do not Overwrite – activity skips file if file exists in the local folder
Keep original date	None – don't modify Created – set original Created date Last Modified – set original Last Modified date Created and Last Modified – set original Created and Last Modified date

Read text content from document

This activity allows reading any text document (TXT, HTML, EMail and etc) and saving result into variable.

Note: Using this activity you can get information from an email that was saved in an email enabled list.



SharePoint Workflow Designer Phrase

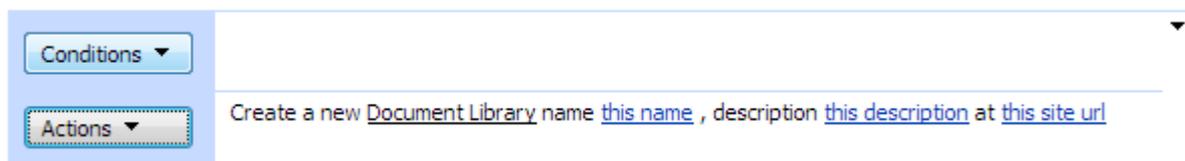
Read text content from list item url and store result in: output text

Parameters

Parameter	Description
list item url	Optional. Full list item url. Ex: http://mysharepoint/MyDocs/Shared%20Documents/Report.txt If url is empty, current list item would be used.

Create SharePoint library

This activity allows creating new Document, Form, Wiki Page or Picture library at specified site.



SharePoint Workflow Designer Phrase

Creates a new Document Library name this name, description this description at this site url

Parameters

Parameter	Description
Document Library	Document library type: Document Library, Form Library, Wiki Page Library, Picture Library
this name	name of library
this description	description on library

this site url **Optional.** The URL of the site where the library is being created. Default value is current site.

Create Document Set

This activity allows creating new Document Set at specified folder.

Step 1

Create [this name](#) document set at [parent folder url](#)

Note: You will need to activate the Document Set for document library before you can create Document Set. More info: <http://office.microsoft.com/en-us/sharepoint-server-help/CH010372625.aspx?CTT=97>

SharePoint Workflow Designer Phrase

Creates [this name](#) document set at [parent folder url](#)

Parameters

Parameter	Description
this name	Name of document set
this parent folder url	Parent folder url. Example: http://mycompanydomain/site/doclib http://mycompanydomain/site/doclib/subfolder

Convert Word document to PDF

This activity allows converting Word Documents to PDF using SharePoint Server 2010 and Word Services.

Note: This activity uses SharePoint 2010 Word Automation Services available with SharePoint Server 2010. When you've executed the activity, the file will be added to the Timer Job schedule to be run by SharePoint. The activity doesn't wait result.

Note: The activity supports .docx, .docm, .dotx, .dotm, .doc, .dot, .rtf, .mht, .mhtml, .xml (Word Xml) files.

Step 1

Convert file from [list item url](#) and save to [this output folder](#)

SharePoint Workflow Designer Phrase

Convert [this word document url](#) Word file to PDF and store result in [this output folder](#)

Parameters

Parameter	Description
list item url	Optional. Full list item url. Ex: http://mysharepoint/MyDocs/Shared%20Documents/Report.txt If url is empty, current list item would be used.
this output folder	Optional. Full url to folder. Ex: http://mysharepoint/MyDocs/Shared%20Documents If url is empty, current folder would be used.

Finance Activities

Currency Converter

This activity converts all major world currencies using last exchange rate information. Powered by Online Yahoo Finances.

[Add 'Else If' Conditional Branch](#)

SharePoint Workflow Designer Phrase

Convert 0 of this currency to this currency and store result in Variable: variable

Parameters

Parameter	Description
0	Amount in original currency.
this currency	Original currency. See supported currency list below.
this currency	Destination currency. See supported currency list below.
Variable	This activity will place result into an output variable.

Table: Supported currency list

Albanian Lek (ALL)	Gold Ounces (XAU)	Panama Balboa (PAB)
Algerian Dinar (DZD)	Guatemala Quetzal (GTQ)	Papua New Guinea Kina (PGK)
Aluminium Ounces (XAL)	Guinea Franc (GNF)	Paraguayan Guarani (PYG)
Argentine Peso (ARS)	Guyana Dollar (GYD)	Peruvian Nuevo Sol (PEN)
Aruba Florin (AWG)	Haiti Gourde (HTG)	Philippine Peso (PHP)
Australian Dollar (AUD)	Honduras Lempira (HNL)	Platinum Ounces (XPT)
Bahamian Dollar (BSD)	Hong Kong Dollar (HKD)	Polish Zloty (PLN)
Bahraini Dinar (BHD)	Hungarian Forint (HUF)	Qatar Rial (QAR)
Bangladesh Taka (BDT)	Iceland Krona (ISK)	Renminbi (CNY)
Barbados Dollar (BBD)	Indian Rupee (INR)	Romanian New Leu (RON)
Belarus Ruble (BYR)	Indonesian Rupiah (IDR)	Russian Rouble (RUB)
Belize Dollar (BZD)	Iran Rial (IRR)	Rwanda Franc (RWF)
Bermuda Dollar (BMD)	Iraqi Dinar (IQD)	Samoa Tala (WST)
Bhutan Ngultrum (BTN)	Israeli Shekel (ILS)	Sao Tome Dobra (STD)
Bolivian Boliviano (BOB)	Jamaican Dollar (JMD)	Saudi Arabian Riyal (SAR)
Botswana Pula (BWP)	Japanese Yen (JPY)	Seychelles Rupee (SCR)
Brazilian Real (BRL)	Jordanian Dinar (JOD)	Sierra Leone Leone (SLL)
British Pound (GBP)	Kazakhstan Tenge (KZT)	Silver Ounces (XAG)

Brunei Dollar (BND)	Kenyan Shilling (KES)	Singapore Dollar (SGD)
Bulgarian Lev (BGN)	Korean Won (KRW)	Slovak Koruna (SKK)
Burundi Franc (BIF)	Kuwaiti Dinar (KWD)	Slovenian Tolar (SIT)
Cambodia Riel (KHR)	Lao Kip (LAK)	Solomon Islands Dollar (SBD)
Canadian Dollar (CAD)	Latvian Lat (LVL)	Somali Shilling (SOS)
Cape Verde Escudo (CVE)	Lebanese Pound (LBP)	South African Rand (ZAR)
Cayman Islands Dollar (KYD)	Lesotho Loti (LSL)	Sri Lanka Rupee (LKR)
CFA Franc (BCEAO) (XOF)	Liberian Dollar (LRD)	St Helena Pound (SHP)
CFA Franc (BEAC) (XAF)	Libyan Dinar (LYD)	Sudanese Dinar (SDD)
Chilean Peso (CLP)	Lithuanian Lita (LTL)	Swaziland Lilageni (SZL)
Chinese Yuan (CNY)	Macau Pataca (MOP)	Swedish Krona (SEK)
Colombian Peso (COP)	Macedonian Denar (MKD)	Swiss Franc (CHF)
Comoros Franc (KMF)	Malawi Kwacha (MWK)	Syrian Pound (SYP)
Copper Pounds (XCP)	Malaysian Ringgit (MYR)	Taiwan Dollar (TWD)
Costa Rica Colon (CRC)	Maldives Rufiyaa (MVR)	Tanzanian Shilling (TZS)
Croatian Kuna (HRK)	Maltese Lira (MTL)	Thai Baht (THB)
Cuban Peso (CUP)	Mauritania Ougulya (MRO)	Tonga Pa'anga (TOP)
Cyprus Pound (CYP)	Mauritius Rupee (MUR)	Trinidad & Tobago Dollar (TTD)
Czech Koruna (CZK)	Mexican Peso (MXN)	Tunisian Dinar (TND)
Danish Krone (DKK)	Moldovan Leu (MDL)	Turkish Lira (TRY)
Djibouti Franc (DJF)	Mongolian Tugrik (MNT)	UAE Dirham (AED)
Dominican Peso (DOP)	Moroccan Dirham (MAD)	Ugandan Shilling (UGX)
East Caribbean Dollar (XCD)	Myanmar Kyat (MMK)	Ukraine Hryvnia (UAH)
Ecuador Sucre (ECS)	Namibian Dollar (NAD)	United States Dollar (USD)
Egyptian Pound (EGP)	Nepalese Rupee (NPR)	Uruguayan New Peso (UYU)
El Salvador Colon (SVC)	Neth Antilles Guilder (ANG)	Vanuatu Vatu (VUV)
Eritrea Nakfa (ERN)	New Zealand Dollar (NZD)	Venezuelan Bolivar (VEB)
Estonian Kroon (EEK)	Nicaragua Cordoba (NIO)	Vietnam Dong (VND)
Ethiopian Birr (ETB)	Nigerian Naira (NGN)	Yemen Riyal (YER)
Euro (EUR)	North Korean Won (KPW)	Zambian Kwacha (ZMK)
Falkland Islands Pound (FKP)	Norwegian Krone (NOK)	Zimbabwe Dollar (ZWD)
Fiji Dollar (FJD)	Omani Rial (OMR)	
Gambian Dalasi (GMD)	Pacific Franc (XPF)	
Ghanian Cedi (GHC)	Pakistani Rupee (PKR)	
Gibraltar Pound (GIP)	Palladium Ounces (XPD)	

SharePoint Site Management activities

Set SharePoint group's owner

Specify who has permission to edit the list of group members

SharePoint Designer phrase

Set [this user](#) as owner of [this group](#) at [site url](#) .

Parameters

Input parameters

Parameter	Description	Example
this user	User login name, e-mail.	"mycompany\john; john@gmail.com"
this group	Name of the SharePoint group.	Home owners, 4, Home Viewers
Site URL	The URL of a source	https://contoso/SiteUrl;

	SharePoint site. If the value field is empty, current site will be used.	https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
--	--	---

Example

Step 1

Set [MC47\bob](#) as owner of [NVDev Visitors](#) at [http://mc47](#) .

Create SharePoint site collection

This activity creates a new top-level Web site in the current web application.

Conditions ▾

Actions ▾

Create a new site collection titled [this title](#) at [this url](#) , using [this template](#) , description [this description](#) . Site Collection administrator: [primary](#) and [secondary](#) .

Note: By defining managed paths, you can specify which paths in the URL namespace of a Web application are used for site collections. You can specify that one site collection or more than one site collection exists at a specified path. For example, an explicit path of hr indicates that the URL [http://server/hr](#) is a site collection, whereas a wildcard path of "sites" indicates that child URLs of [http://server/sites/](#), such as [server/sites/team](#), are site collections. To add a new URL Path go to the Define Managed Paths page (Central Administration > Application Management > Define Managed Paths).

SharePoint Workflow Designer Phrase

Create a new site collection titled [this title](#) at [this url](#), using [this template](#), description [this description](#). Site collection administrator: [primary](#) and [secondary](#).

Parameters

Parameter	Description
this title	The title of the new site. The maximum length is 255 characters.
this url	The complete URL where the site should be created. http://server01/sites/MySitex . To add a new URL Path go to the Define Managed Paths page (Central Administration > Application Management > Define Managed Paths).
this template	Optional. Specifies the type of template to be used by the newly created site. If you do not specify a template to use, the owner can choose a template when he or she first browses to the site. The value may be in the form: <ul style="list-style-type: none"> name#configuration. If you do not specify the configuration, (for example, STS) configuration 0 is the default (for example, STS#0). template title from Site Template Gallery (for example, "Example

	template")
	<ul style="list-style-type: none"> template file name from Site Template Gallery (for example, ExampleTemplate.stp).
this description	Optional. Description of the new site.
Primary	Specify the administrator for this Web site collection.
Secondary	Optional. Specify the secondary administrator for this Web site collection.

Note: The template should be uploaded to Site Template Gallery (see below) or added to the global templates list by using the STSADM -o AddTemplate command (<http://technet.microsoft.com/en-us/library/cc287945.aspx>).

Valid values available in a default installation include:

- STS#0: Team Site
- STS#1: Blank Site
- STS#2: Document Workspace
- MPS#0: Basic Meeting Workspace
- MPS#1: Blank Meeting Workspace
- MPS#2: Decision Meeting Workspace
- MPS#3: Social Meeting Workspace
- MPS#4: Multipage Meeting Workspace
- BLOG#0: Blog
- WIKI#0: Wiki Site

Upload and use a site template (.stp) in SharePoint

Log on to SharePoint as an administrator to the site collection where you want to upload the template. Make sure to browse to the top level site of the site collection.

- Click the Site Actions button → Site Settings → Modify All Site Settings
- Go to the Galleries section and select Site templates.
- On the Site Template Gallery page, select 'Upload' or 'Upload multiple documents'
- On the Upload Template: Site Template Gallery page, browse to the .stp file and click OK to upload the file.
- You have now successfully uploaded the file and are ready to use it.

Enumerates all site templates with PowerShell

```
[System.Reflection.Assembly]::LoadFrom("..\12hive..\ISAPI\Microsoft.SharePoint.dll");
$globalAdmin = New-Object -TypeName "Microsoft.SharePoint.Administration.SPGlobalAdmin";
$webTemplates = $globalAdmin.VirtualServers[0].GetWebTemplates("1033");
$webTemplates | Select Name, Description;
```

Delete SharePoint site collection

This activity completely deletes a top-level site and any subsites of that site on this web application.

Conditions ▾	
Actions ▾	Delete this url site

SharePoint Workflow Designer Phrase

Delete [this url](#) site collection.

Parameters

Parameter	Description
this url	The URL of the site collection to be deleted.

Create SharePoint site

This activity creates a new SharePoint site. Creates a subsite at the specified Uniform Resource Locator (URL).

Step 1

Create a new site titled [this title](#) at [this url](#), using [this template](#), description [this description](#), use unique permission [No](#), t

[No](#), use the top link bar from the parent site [No](#), display this site on the Quick Launch [No](#) and on the Top Link [No](#) of the parent site.

SharePoint Workflow Designer Phrase

Create a new site titled [this title](#) at [this url](#), using [this template](#), description [this description](#), use unique permission [No](#), use the top link bar from the parent site [No](#), display this site on the Quick Launch [No](#) and in the Top Link [No](#) of the parent site.

Parameters

Parameter	Description
this title	The title of the new site. The maximum length is 255 characters.
this url	The complete URL where the site should be created or relative url to the current site. Example: if parent site is http://server01/MyDocs , a correct url for new sub site should be http://server01/MyDocs/MyChild or MyChild if workflow is running on http://server01/MyDocs site.
this template	Optional. Specifies the type of template to be used by the newly created site. If you do not specify a template to use, the owner can choose a template when he or she first browses to the site. The value may be in the form: <ul style="list-style-type: none"> name#configuration. If you do not specify the configuration, (for example, STS) configuration 0 is the default (for example, STS#0).

	<ul style="list-style-type: none"> • template title from Site Template Gallery (for example, "Example template") • template file name from Site Template Gallery (for example, ExampleTemplate.stp).
this description	Optional. Description of the new site.
use unique permission	Specifies whether the site has unique permissions instead of inheriting them from the parent. Default value is No.
use the top link bar from the parent site	Specify whether this site will have its own top link bar or use the one from its parent.
display this site on the Quick Launch	Specify whether links to this site appear in the Quick Launch and the top link bar of the parent site.
display this site in the Top Link	Specify whether links to this site appear in the Quick Launch and the top link bar of the parent site.

Note: The template should be uploaded to Site Template Gallery (see below) or added to the global templates list by using the STSADM -o AddTemplate command (<http://technet.microsoft.com/en-us/library/cc287945.aspx>).

Valid values available in a default installation include:

- STS#0: Team Site
- STS#1: Blank Site
- STS#2: Document Workspace
- MPS#0: Basic Meeting Workspace
- MPS#1: Blank Meeting Workspace
- MPS#2: Decision Meeting Workspace
- MPS#3: Social Meeting Workspace
- MPS#4: Multipage Meeting Workspace
- BLOG#0: Blog
- WIKI#0: Wiki Site

Upload and use a site template (.stp) in SharePoint

Log on to SharePoint as an administrator to the site collection where you want to upload the template. Make sure to browse to the top level site of the site collection.

- Click the Site Actions button → Site Settings → Modify All Site Settings
- Go to the Galleries section and select Site templates.
- On the Site Template Gallery page, select 'Upload' or 'Upload multiple documents'
- On the Upload Template: Site Template Gallery page, browse to the .stp file and click OK to upload the file.
- You have now successfully uploaded the file and are ready to use it.

Enumerates all site templates with PowerShell

```
$site = Get-SPSite "http://yoursite"
$webTemplates = $site.GetWebTemplates("1033");
```

\$webTemplates | Select Name, Title, Description;

Delete SharePoint site

This activity deletes the SharePoint site by site url.

[Add 'Else If' Conditional Branch](#)

Note: Use Delete SharePoint site collection activity to delete parent site.

SharePoint Workflow Designer Phrase

Delete this url site.

Parameters

Parameter	Description
this url	The URL of the subsite to delete.

Rename SharePoint site

This activity renames the SharePoint site by site url.

SharePoint Workflow Designer Phrase

Rename this url to this new name.

Parameters

Parameter	Description
this url	The URL of the subsite you want to rename.
this new name	The new name.

Create SharePoint group

This activity adds a new SharePoint group to current site.

SharePoint Workflow Designer Phrase

Create [this group](#) and make [this user](#) the owner, give [this permission level](#), can view: [Group Member](#), can edit: [Group Owner](#), add [members](#) at [site url](#)

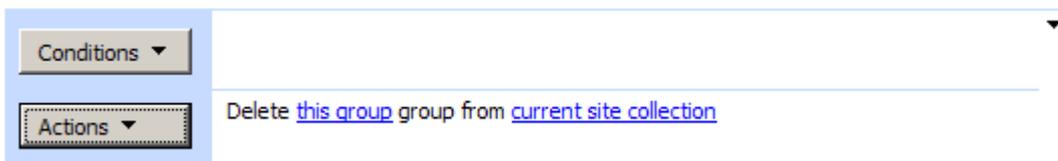
Parameters

Parameter	Description
this group	Name of the new SharePoint group
this user	Optional. Single User login or Group name. The owner can change anything about the group such as adding and removing members or deleting the group. Only one user or group can be the owner. If user is empty, the user who created the Web site will be used.
this permission level	Optional. The permission level that you want members of this SharePoint group to have on this site. Multi permission assignments are supported. Use ',' or ';' separator to grant several permission. Example: "Approve, Read, View Only".
Group Member	Specify who has permission to see the list of group members: Group Member (default) or Everyone.
Group Owner	Specify who has permission to edit the list of group members: Group Owner (default) or Group Members
Members	Optional. The members of the group. Use ',' or ';' separator to identify multiple users. Example: "DOMAIN\User_Alias; DOMAIN\User_Alias2"
site url	Optional. The URL of the site collection where the group is being created. Default value is current site collection.

Note: You can set permission level if the site is not inherited permissions from the site collection. Otherwise you would get "This operation is not allowed on an object that inherits permissions" error.

Delete SharePoint group

This activity removes SharePoint group from the current site.



SharePoint Workflow Designer Phrase

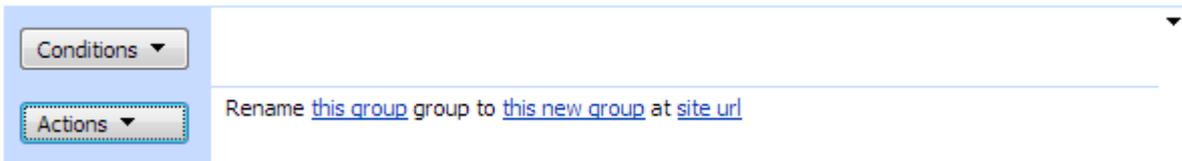
Delete [this group](#) group from [current site collection](#)

Parameters

Parameter	Description
this group	Name of the SharePoint group
current site collection	Optional. The URL of the site collection where the group is being deleted. Default value is current site collection.

Rename SharePoint group

This activity renames SharePoint group.



SharePoint Workflow Designer Phrase

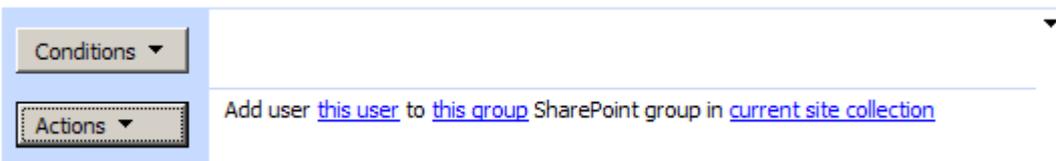
Rename this group group to this new group at site url

Parameters

Parameter	Description
this group	Current name of the SharePoint group
this new group	New name of the SharePoint group
site url	Optional. The URL of the site collection where the group is being deleted. Default value is current site collection.

Add user to SharePoint group

This activity adds user to existing SharePoint group.



SharePoint Workflow Designer Phrase

Add user this user to this group SharePoint group in current site collection

Parameters

Parameter	Description
this user	User login name. Allowed multiple users or groups separated ';'. Ex: "user1; domain\user2"
this group	Name of the SharePoint group.
current site collection	Optional. The URL of the site collection to which the user account is being added. Default value is current site collection.

Remove user from SharePoint group

This activity removes user from existing SharePoint group.



SharePoint Workflow Designer Phrase

Remove user this user from this group SharePoint group in current site collection

Parameters

Parameter	Description
this user	User login name.
	Allowed multiple users or groups separated ';'. Ex: "user1; domain\user2"
this group	Name of the SharePoint group
current site collection	Optional. The URL of the Web site from which the user account is being deleted. Default value is current site collection.

Remove all users from SharePoint group

This activity removes all users from existing SharePoint group.

SharePoint Workflow Designer Phrase

Remove all users from this group SharePoint group in current site collection

Parameters

Parameter	Description
this group	Name of the SharePoint group
current site collection	Optional. The URL of the Web site from which the user account is being deleted. Default value is current site collection.

Delete user from SharePoint site collection

This activity removes user from existing SharePoint site.

SharePoint Workflow Designer Phrase

Delete user this user from SharePoint site collection

Parameters

Parameter	Description
this user	User login name.
	Allowed multiple users or groups separated ';'. Ex: "domain\user1;domain\user2"

Set site anonymous access

This activity configures anonymous access to a Web site.

Note: To perform this action, an administrator must have enabled anonymous access for the Web application.

Note: Enabling anonymous access makes a Web server inherently less secure because anonymous users and authenticated users that have not been granted access to your site can potentially change settings or content on your site or launch a denial of service attack against your server, and their actions cannot be traced to an authenticated user account.

SharePoint Workflow Designer Phrase

Anonymous user can access: Nothing at site url

Parameters

Parameter	Description
Nothing	Anonymous access: <ul style="list-style-type: none"> • Nothing - Not applicable • Lists and libraries - Read lists and libraries on which the View Items permission has been granted to anonymous users. • Entire Web site - Read any lists, libraries, or folder within a list or library that inherits its permissions from the site, and open and read any list items or documents in those lists and libraries.
site url	Optional. The URL of the site collection where anonymous access is being modified. Default value is current site collection.

See Also: [Enable anonymous access](#)

Set list anonymous access

This activity configures anonymous access to a list.

Note: To perform this action:

1. Administrator must have enabled anonymous access for the Web application.

2. Have enabled anonymous access on a site. You can use **Set site anonymous access** activity to enable anonymous access on a site.
3. List or library should use unique permissions. You can use **Change list permissions inheritance** activity to stop inheriting permissions.

Note: Enabling anonymous access makes a Web server inherently less secure because anonymous users and authenticated users that have not been granted access to your site can potentially change settings or content on your site or launch a denial of service attack against your server, and their actions cannot be traced to an authenticated user account.

SharePoint Workflow Designer Phrase

Anonymous user can Add: No , Edit: No, Delete: No, View: No Items to list at list url

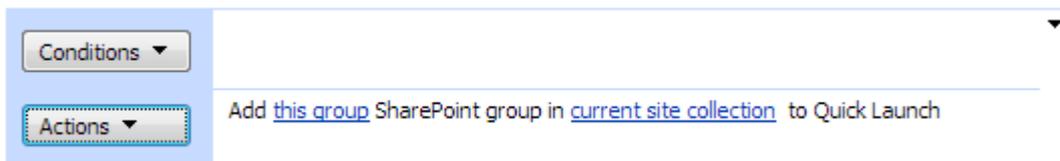
Parameters

Parameter	Description
No	Set Yes(No) to grant (forbid) anonymous permissions for list or library.
list url	The URL of the list where anonymous access is being modified. Example: http://mycompany/Lists/PublicList

See Also: [Enable anonymous access](#)

Add SharePoint group to Quick Launch

This activity adds group to Quick Launch on the People and Groups page.



SharePoint Workflow Designer Phrase

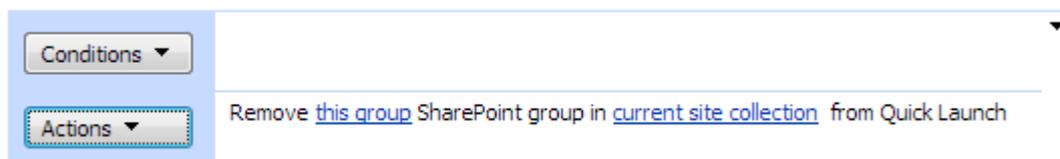
Add user this user to this group SharePoint group in current site collection

Parameters

Parameter	Description
this group	Name of the SharePoint group.
current site collection	Optional. The URL of the site collection to which the user account is being added. Default value is current site collection.

Remove SharePoint group from Quick Launch

This activity removes group from Quick Launch on the People and Groups page.



SharePoint Workflow Designer Phrase

Remove user this user from this group SharePoint group in current site collection

Parameters

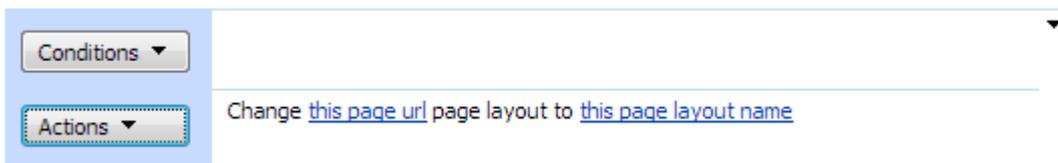
Parameter	Description
this group	Name of the SharePoint group
current site collection	Optional. The URL of the Web site from which the user account is being deleted. Default value is current site collection.

Change page layout

This activity changes page's layout to the new one.

Note: For MOSS Only

You should specify full url of the page and the name of the new page layout. Activity loads page from site that supports publishing (PublishingWeb) and modifies layout. You can use "Check Out Item extended" and "Check In Item extended" activities to check-out and check-in page, before modifications.



SharePoint Workflow Designer Phrase

Remove user this user from this group SharePoint group in current site collection

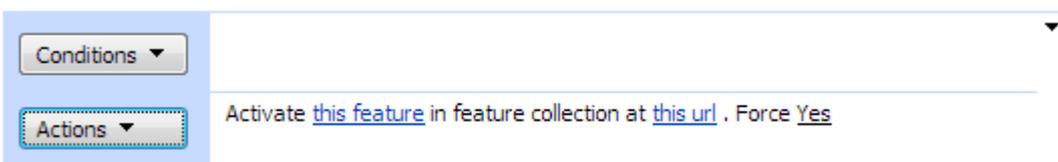
Parameters

Parameter	Description
this page url	full url of the page
this page layout name	the name of the new page layout.

Activate SharePoint feature

This activity activates a feature in the feature collection.

Note: You must first determine the scope of the feature. If the scope is Web-based or is a site collection scope, the url parameter is required. However, if the scope is farm-based, the url parameter is not required.



SharePoint Workflow Designer Phrase

Activate this feature in feature collection at this url . Force Yes

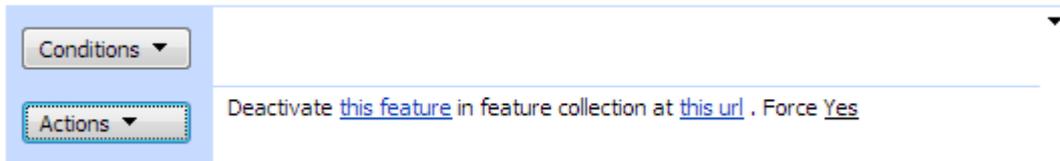
Parameters

Parameter	Description
this feature	Feature Display name or Feature ID - GUID that identifies the feature definition to add Ex: Virto Alerts Customizer for SharePoint Web Part Ex: 04a03950-8f99-4ebd-9437-67be388e514c
this url	Optional. Complete site or web url. If url is empty, current url will be used. If feature's scope is farm-based, the url parameter is not required.
Force <u>Yes</u>	Specifies that an activation of the feature will be forced

Deactivate SharePoint feature

This activity deactivates a feature in the feature collection.

Note: You must first determine the scope of the feature. If the scope is Web-based or is a site collection scope, the url parameter is required. However, if the scope is farm-based, the url parameter is not required.



SharePoint Workflow Designer Phrase

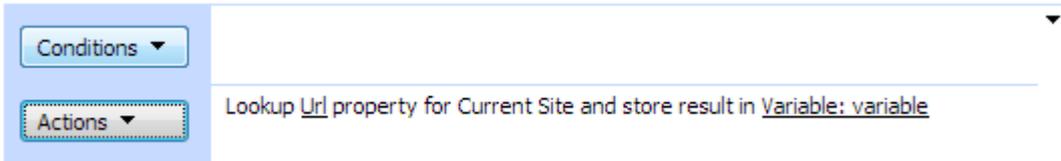
Activate this feature in feature collection at this url . Force Yes

Parameters

Parameter	Description
this feature	Feature Display name or Feature ID - GUID that identifies the feature definition to remove Ex: Virto Alerts Customizer for SharePoint Web Part Ex: 04a03950-8f99-4ebd-9437-67be388e514c
this url	Optional. Complete site or web url. If url is empty, current url will be used. If feature's scope is farm-based, the url parameter is not required.
Force <u>Yes</u>	Specifies that a deactivation of the feature will be forced

Get current site property

This activity reads current SharePoint site property and stores result in variable.



SharePoint Workflow Designer Phrase

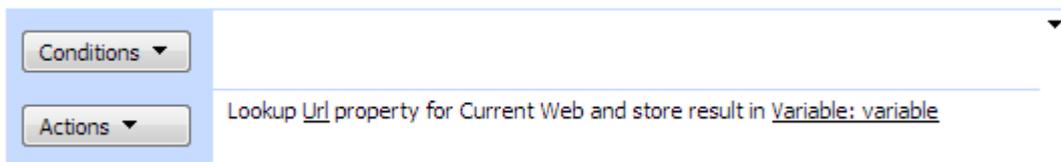
Lookup Url property for Current Web and store result in variable

Parameters

Parameter	Description
Url	Name of SPSite property. Default Value Url
	Find more user properties here: http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.spweb_properties.aspx

Get current web property

This activity reads current SharePoint web property and stores result in variable.



SharePoint Workflow Designer Phrase

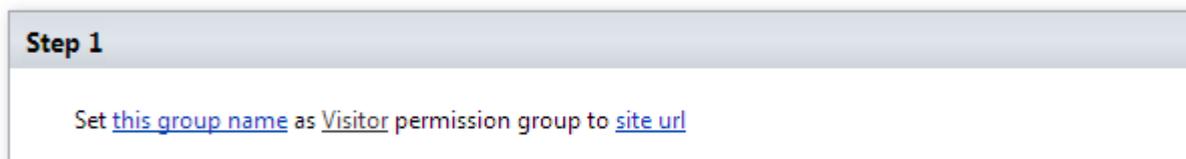
Lookup Url property for Current Site and store result in variable

Parameters

Parameter	Description
Url	Name of SPSite property. Default Value Url
	Find more user properties here: http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.spsite_properties.aspx

Set default permission group

This activity allows setting default permission groups Visitors/Members/Owners for web.



SharePoint Workflow Designer Phrase

Set this group name as Visitor permission group to site url

Parameters

Parameter	Description
this group name	Name of the SharePoint group
Visitor	<ul style="list-style-type: none"> • Visitors – default visitor group of the website. • Members - default group for users who have been given contribute permissions to the website. • Owners – default owner groups of the website.
site url	Optional. The URL of the site collection where anonymous access is being modified. Default value is current site collection.

Create SharePoint list

This activity creates a new SharePoint list or document library using specified template.

Step 1

Create a new list titled this title at parent site url, using this template, description this description, display on Quick Launch No and store list url in Variable: new list url

SharePoint Workflow Designer Phrase

Create a new list titled this title at parent site url, using this template, description this description, display on Quick Launch Yes and store list url in variable.

Parameters

Parameter	Description
this title	The title of the new list. The maximum length is 255 characters.
parent site url	Optional. The complete URL where the list should be created or empty value if create list in the current site. Example: http://server01
this template	Specifies the name of list template to be used by the newly created list.
this description	Optional. Description of the new site.
display on Quick Launch	Yes if the list appears on the Quick Launch area of the homepage; otherwise, No.

Enumerates all list templates with PowerShell

```
$site = Get-SPSite http://yoursite
$web = $site.OpenWeb();
$listTemplates = $site.GetCustomListTemplates($web);
$listTemplates | Select Name;
$listTemplates = $web.ListTemplates;
```

\$listTemplates | Select Name;

Create Navigation link

This activity creates a new navigation link in either Top link bar or Quick launch.

Step 1

Create navigation link [web address](#) with [description](#) in [this heading](#) in [Quick Launch](#) at [current site url](#)

SharePoint Workflow Designer Phrase

Create navigation link [web address](#) with [description](#) in [this heading](#) in [Quick Launch](#) at [current site url](#)

Parameters

Parameter	Description
web address	URL that points to content.
description	Optional. Display name for the node.
this heading	Optional. Set name of parent Heading for Quick launch navigation. For example: Site, Pictures and etc
Quick Launch	Quick Launch – Create a new link in Quick launch navigation Top Link Bar - Create a new link in Top link bar navigation
current site url	Optional. The URL of the site where the navigation item is being created. Default value is current site.

Create Navigation heading

This activity creates a new navigation heading in Quick launch.

Step 1

Create navigation heading [web address](#) with [description](#) at [current site url](#)

SharePoint Workflow Designer Phrase

Create navigation heading [web address](#) with [description](#) at [current site url](#)

Parameters

Parameter	Description
web address	URL that points to content.
description	Optional. Display name for the node.
current site url	Optional. The URL of the site where the navigation item is being created. Default value is current site.

Update site title and description

This activates updates site title and description

Step 1

Set [this new title](#) title and [this new description](#) description at [this site url](#)

SharePoint Workflow Designer Phrase

Set [the this new title](#) title and [this new description](#) description at [this site url](#)

Parameters

Parameter	Description
this new title	URL that points to content.
this new description	Description of site.
this site url	The URL of the subsite you want to update.

Copy SharePoint group

This activity creates a copy of the specified SharePoint group to another site.

Step 1

Copy [group name](#) SharePoint group from [source site url in one site collection](#) to [destination site url in other site collection](#)

SharePoint Workflow Designer Phrase

Copy [group name](#) SharePoint group from [source site url in one site collection](#) to [destination site url in other site collection](#)

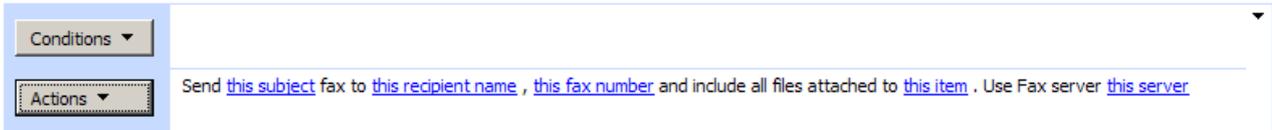
Parameters

Parameter	Description
group name	SharePoint Group name. Ex: "Viewers"
from source site url in one site collection	the URL of the source subsite
destination site url in other site collection	the URL of the destination subsite

Fax activities

Send Fax with List Item attachment

This activity allows sending fax with list item attachments and document library content via Windows Fax Service.



The activity uses Windows Fax Service. It should be installed and configured. The activity uses the default sender attributes.

Fax installation guide:

1. Setting up a modem
2. Installing the Windows Fax Service
3. Create a fax printer
4. Configure the fax client. Allow SharePoint accounts to send fax.
5. Send fax

SharePoint Workflow Designer Phrase

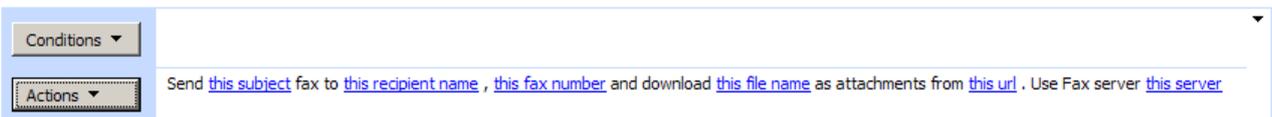
Send this subject fax to this recipient name, this fax number and include all files attached to this item. Use Fax server this server.

Parameters

Parameter	Description
this subject	Fax subject.
this recipient name	Optional. The name of the fax recipient.
this fax number	The fax number of the fax recipient.
this item	Current list item.
this server	Optional. The name of the target fax server. If this parameter is empty, the method connects the application to the fax server on the local computer. For example: \\servername\Fax

Send Fax with Http attachment

This activity allows sending fax with attachment retrieved using a web request.



Both http and https requests are supported. Activity impersonates SharePoint account when getting file. Executing Reporting Services report and sending it as an attachment from within SPD workflow would be one such example. Request url is fully customizable and can include workflow variables.

The activity uses Windows Fax Service. It should be installed and configured. The activity uses the default sender attributes.

Fax installation guide:

1. Setting up a modem
2. Installing the Windows Fax Service
3. Create a fax printer
4. Configure the fax client. Allow SharePoint accounts to send fax.
5. Send fax

SharePoint Workflow Designer Phrase

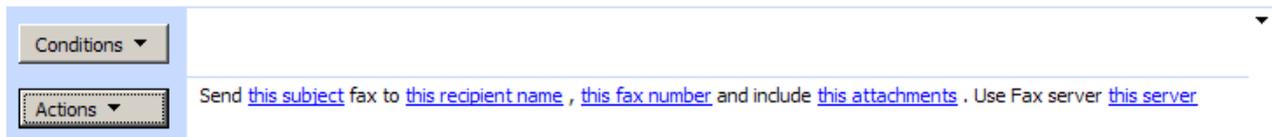
Send this subject fax to this recipient name, this fax number and download this file name as attachments from this url. Use Fax server this server.

Parameters

Parameter	Description
this subject	Fax subject.
this recipient name	Optional. The name of the fax recipient.
this fax number	The fax number of the fax recipient.
this file name	Optional. Attachment file name. If file name is empty, file name will be resolved from response.
this url	Direct web link to attachment
this server	Optional. The name of the target fax server. If this parameter is empty, the method connects the application to the fax server on the local computer. For example: \\servername\Fax

Send Fax with Attachments

This activity allows sending fax with multiple attachments via Windows Fax Service.



Attachments multiline text field supports url and local disk path. Both http and https requests are supported. Activity impersonates SharePoint account when getting file.

The activity uses Windows Fax Service. It should be installed and configured. The activity uses the default sender attributes.

Fax installation guide:

1. Setting up a modem
2. Installing the Windows Fax Service
3. Create a fax printer
4. Configure the fax client. Allow SharePoint accounts to send fax.
5. Send fax

SharePoint Workflow Designer Phrase

Send this subject fax to this recipient name, this fax number and include this attachments. Use Fax server this server.

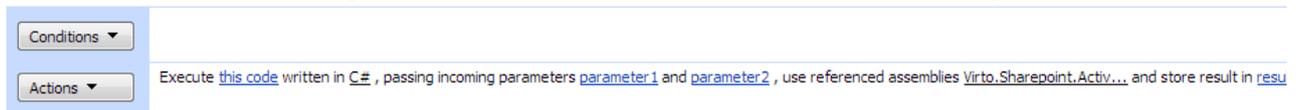
Parameters

Parameter	Description
this subject	Fax subject.
this recipient name	Optional. The name of the fax recipient.
this fax number	The fax number of the fax recipient.
this attachments	Optional. Attachment file name. If file name is empty, file name will be resolved from response.
this server	Optional. The name of the target fax server. If this parameter is empty, the method connects the application to the fax server on the local computer. For example: \\servername\Fax

Code activities

Execute custom code

This activity allows executing a custom C# or VB.NET code from SharePoint Designer Workflows.



You can use this activity to invoke custom C# or VB.NET code from SharePoint Designer with no need to create complex Visual Studio workflows. Don't worry about namespaces, class or method name, the activity takes a script like approach.

Note: The code should include using (includes) section and code lines without method (Sub procedure) declaration.

Note: The activity uses .NET 3.5 to compile custom code. So, all .NET 3.5 futures are available from the code.

The following example reads XML from parameter1, selects node by XPath from parameter2 and stores string result to output variable.

[C#]

```
using System.Xml;

XmlDocument xmlDoc = new XmlDocument();
xmlDoc.LoadXml((string)Context.InParameter1);
XmlNode node = xmlDoc.SelectSingleNode((string)Context.InParameter2);
Context.Result = node.InnerText;
```

[VB.NET]

```
Imports System
Imports System.Xml

Dim xmlDoc As XmlDocument = new XmlDocument()
xmlDoc.LoadXml(Context.InParameter1 As String)
Dim node As XmlNode = xmlDoc.SelectSingleNode(Context.InParameter2 As String)
Context.Result = node.InnerText
```

You should use Context variable to access incoming parameters and return result from your custom code.

You can add Embedding Workflow Lookup variables to the code. At runtime all lookup variables are placed into the code as text, so please make sure that the generated syntax is still valid.

For example, the following code will not execute correctly:

```
string userFirstName = [%Variable: firstName%];
```

As this may result in the following code:

```
string userFirstName = Frank;
```

To solve this problem, add quotes around the variable as follows:

```
string userFirstName = "[%Variable: firstName%]";
```

Which will result in to the following, syntactically correct, code:

```
string userFirstName = "Frank";
```

The **Context** variable includes several properties which you can use in the code:

Properties

Property	Type	Description
WorkflowContext	WorkflowContext	Gets workflow context.
CurrentList	SPList	Gets the current SPList object.
CurrentListItem	SPLListItem	Gets the current SPLListItem object
InParameter1	Object	Gets the incoming parameter #1
InParameter2	Object	Gets the incoming parameter #2
CurrentActivity	Activity	Get the current activity.
WorkflowInstanceId	Guid	Gets the Guid associated with the workflow instance.
ActivationProperties	SPWorkflowActivationProperties	Represents the initial properties of the workflow instance as it starts.
Result	Object	Gets or sets the output result.

The activity makes the following Assembly References available by default:

```
Virto.Sharepoint.Activities, Version=1.0.0.0, Culture=neutral, PublicKeyToken=7b70ddd211dc63c8
System, Version=2.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089
System.Data, Version=2.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089
System.Xml, Version=2.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089
mscorlib, Version=2.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089
System.Core, Version=3.5.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089
System.Workflow.ComponentModel, Version=3.0.0.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35
Microsoft.SharePoint, Version=12.0.0.0, Culture=neutral, PublicKeyToken=71e9bce111e9429c
Microsoft.SharePoint.Workflows, Version=12.0.0.0, Culture=neutral, PublicKeyToken=71e9bce111e9429c
Microsoft.SharePoint.WorkflowActions, Version=12.0.0.0, Culture=neutral,
PublicKeyToken=71e9bce111e9429c
```

Note: Assembly should be installed in the global assembly cache (GAC).

You can add (remove) reference to the custom assemblies. The string line is long form of assembly name.

Note: Reference to the Virto.Sharepoint.Activities assembly is required.

SharePoint Workflow Designer Phrase

Execute this code written in C#, passing incoming parameters parameter1 and parameter2, use referenced assemblies Virto.Sharepoint.Acti... and store result in result.

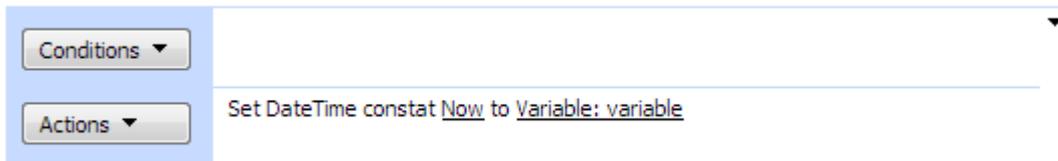
Parameters

Parameter	Description
this code	C# or VB.NET code
C#	Type of the code. C# or VB.NET
parameter1	Optional. The incoming parameter #1. Default value is null.
Parameter2	Optional. The incoming parameter #2. Default value is null.
Virto.Sharepoint.Acti...	Optional. The list of referenced assemblies. The string line is long form of assembly name. Example: <code>System, Version=2.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089</code>

Date Time activities

Set Date constant

This activity allows setting Date Time constant: *Now, Utc Now, Today, Yesterday, Tomorrow, Begin of this Week, End of this Week and etc* to variable.



The activity stores time constant to variable and you can use correct time in other workflow actions. The table below shows all constant, description and sample result if current time is 12 February 2010 16:20 (UTC+2:00).

Name	Description	Example
Now	The current date and time on this computer, expressed as the local time.	12 February 2010 16:20
UtcNow	The current date and time on this computer, expressed as the Coordinated Universal Time (UTC).	12 February 2010 14:20
Today	The current date.	12 February 2010 00:00
Yesterday	The yesterday date.	13 February 2010 00:00
Tomorrow	The tomorrow date.	14 February 2010 00:00
Begin of this Week	Begin of this week. Note: Sunday is the first day of the week.	7 February 2010 23:59
End of this Week	End of this week. Note: Saturday is the last day of the week.	13 February 2010 00:00
Begin of this Month	Begin of this month.	1 February 2010 00:00
End of this Month	End of this month.	28 February 2010 23:59

Begin of this Year	Begin of this year	1 January 2010 00:00
End of this Year	End of this year	31 December 2010 23:59

SharePoint Workflow Designer Phrase

Set DateTime constant Now to variable.

Parameters

Parameter	Description
Now	One of date time constant: <ul style="list-style-type: none"> • Now • UtcNow • Today • Yesterday • Tomorrow • Begin of this Week • End of this Week • Begin of this Month • End of this Month • Begin of this Year • End of this Year

Converts Date from Local Time to UTC

This activity allows converting the value of the current DateTime variable from local time in specified Time Zone to Coordinated Universal Time (UTC).

You can specify custom time zone to convert the time more correctly.

This method does not change the value of date. Instead, it returns a new date whose value is the result of this activity.

SharePoint Workflow Designer Phrase

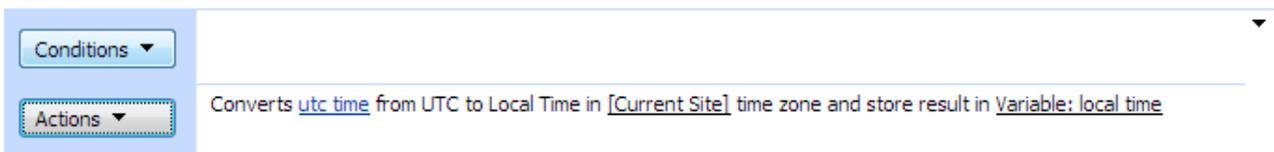
Converts local time from Local Time in [Current Site] time zone to UTC and store result in utc time.

Parameters

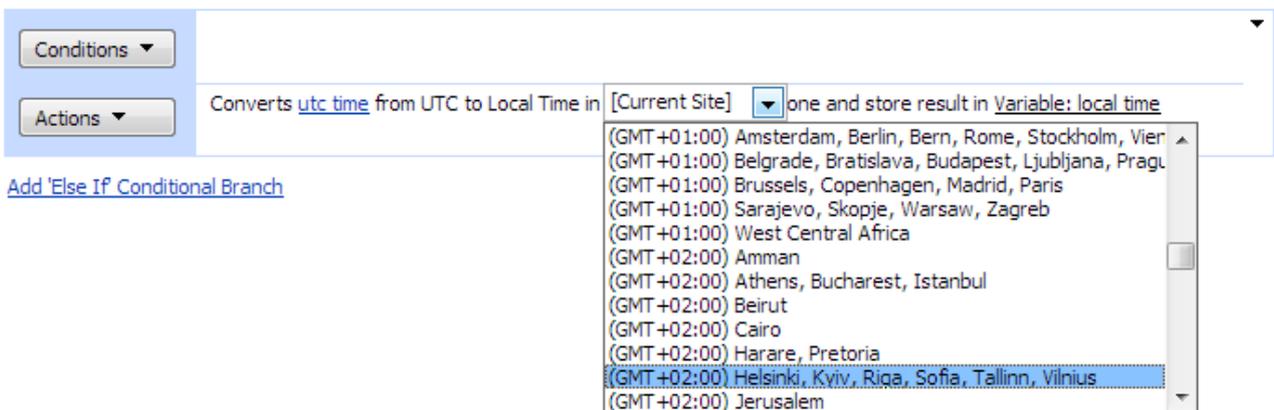
Parameter	Description
local_time	DateTime variable
[Current Site]	Optional. Time zone. Default value is current site time zone, but you can select you custom time zone.

Converts Date from UTC to Local Time

This activity allows converting the value of the current DateTime variable from to Coordinated Universal Time (UTC) to local time in specified Time Zone.



You can specify custom time zone to convert the time more correctly.



This method does not change the value of date. Instead, it returns a new date whose value is the result of this activity.

SharePoint Workflow Designer Phrase

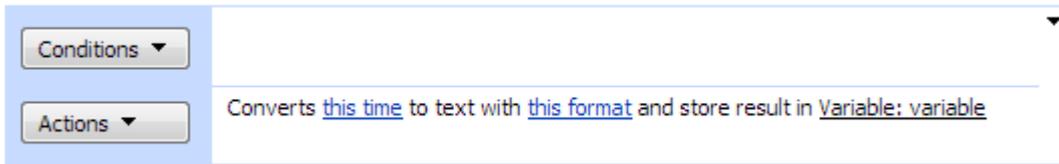
Converts utc time from UTC to time zone in [Current Site] time zone and store result in utc time.

Parameters

Parameter	Description
utc_time	DateTime variable
[Current Site]	Optional. Time zone. Default value is current site time zone, but you can select you custom time zone.

Converts Date to Text

This activity converts the value of the current DateTime object to its equivalent string representation using the specified format.



SharePoint Workflow Designer Phrase

Converts this time to text with this format and store result in variable.

Parameters

Parameter	Description
this_time	DateTime variable
this format	A DateTime format string.

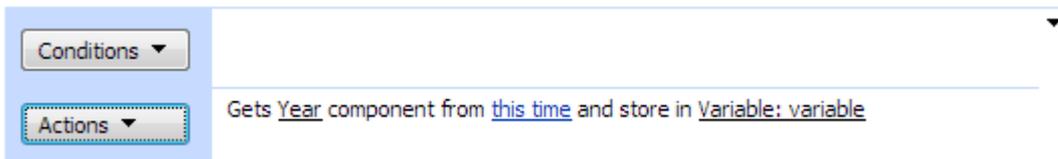
The following links describe the time format strings:

[Standard Date and Time Format Strings](#)

[Custom Date and Time Format Strings](#)

Get Date property

This activity gets Year, Month, Day, Hour, Minute, Second, Ticks, Day Of Week, Day Of Year, Week Of Year component from Date to Number.



SharePoint Workflow Designer Phrase

Get Year component from this time and store in variable.

Parameters

Parameter	Description
Year	Property name. Year - Gets the year component of the date represented by this instance. Month - Gets the month component of the date represented by this instance. Day - Gets the day of the month represented by this instance. Hour - Gets the hour component of the date represented by this instance Minute - Gets the minute component of the date represented by this instance. Second - Gets the second component of the date represented by this instance. Ticks - Gets the number of ticks that represent the date and time of this instance. Day Of Week - Gets the day of the week represented by this instance. (Sunday = 0 ... Saturday = 6)

Day Of Year - Gets the day of the year represented by this instance (value between 1 and 366)

Week Of Year - Gets the week of the year represented by this instance (value between 1 and 51)

this time DateTime variable

Calculate due date

This activity allows calculating due date from specific time.

Step 1

Calculate due date from [this time](#) for 0 days, 0 hours, 10 minutes and store result in [Variable: due date result](#) .

This method does not change the value of date. Instead, it returns a new date whose value is the result of this activity.

SharePoint Workflow Designer Phrase

Calculate due date from [this time](#) for 0 days, 0 hours, 10 minutes and store result in [due date time](#).

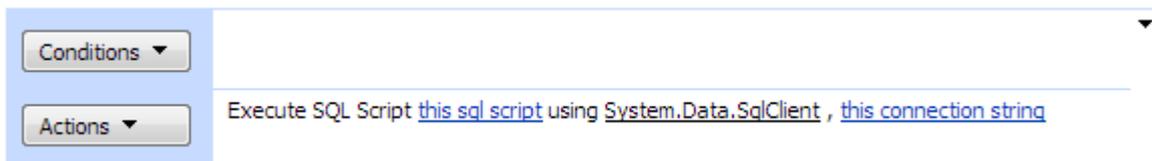
Parameters

Parameter	Description
this_time	DateTime variable
0 days, 0 hours, 10 minutes	A number of whole days, hours and minutes for due date.

Database Activities

Execute SQL Script

This activity executes SQL statements from within SharePoint Designer workflows.



Note: Default is MS SQL Server (System.Data.SqlClient) provider. You can use other providers like ODBC, Oracle.

Activity supports multiple batches separated by GO command. GO is not a Transact-SQL statement; it is a command recognized by the activity. The activity interpret GO as a signal that they should send the current batch of Transact-SQL statements to an instance of SQL Server. The current batch of statements is composed of all statements entered since the last GO, or since the start of the ad hoc session or script if this is the first GO.

A Transact-SQL statement cannot occupy the same line as a GO command. However, the line can contain comments.

Example: Sql script

```
USE AdventureWorks;
GO
DECLARE @MyMsg VARCHAR(50)
SELECT @MyMsg = 'Hello, World.'
PRINT @MyMsg
GO
SELECT @@VERSION;
GO
```

SharePoint Workflow Designer Phrase

Execute SQL Script this sql script using this provider name , this connection string

Parameters

Parameter	Description
this sql script	SQL statements. Supports multiple batches separated by GO command.
this provider name	The .NET ADO Provider. Default is MS SQL Server (System.Data.SqlClient). You can use other providers like <ul style="list-style-type: none"> • "System.Data.Odbc" - Odbc Data Provider • "System.Data.OleDb"- OleDb Data Provider • "System.Data.OracleClient" - OracleClient Data Provider • "System.Data.SqlClient" - SqlClient Data Provider • "System.Data.SqlServerCe.3.5" - Microsoft SQL Server Compact Data Provider • Etc <p>Additional information about providers you can find here http://msdn.microsoft.com/en-us/library/dd0w4a2z.aspx</p>
this connection string	The connection string, e.g. "Data Source=localhost\SQLEXPRESS;Initial Catalog=test;Integrated Security=SSPI"

Execute SQL Script to Read Data

This activity executes SQL statements from within SharePoint Designer workflows and returns the result back to workflow.

Execute SQL Script To Read Data

Execute SQL script this sql script to read data using System.Data.SqlClient , this connection string and store result in Variable: variable

Note: Default is MS SQL Server (System.Data.SqlClient) provider. You can use other providers like ODBC, Oracle, etc.

Activity supports multiple batches separated by GO command. GO is not a Transact-SQL statement; it is a command recognized by the activity. The activity interprets GO as a signal that should send the

current batch of Transact-SQL statements to an instance of SQL Server. The current batch of statements is composed of all statements entered since the last GO, or since the start of the ad hoc session or script if this is the first GO. A Transact-SQL statement cannot occupy the same line as a GO command.

However, the line can contain comments.

To return result from the SQL script to a workflow you should fill the output variable value.

Working with Parameter Placeholders

The syntax for parameter placeholders depends on the data provider. The .NET Framework data providers handle naming and specifying parameters and parameter placeholders differently. This syntax is customized to a specific data provider. The syntax for common data providers is described in the following table.

Data provider	Parameter naming syntax
System.Data.SqlClient	Uses output parameter in the format <i>@output_result</i> .
System.Data.OleDb	Uses positional parameter markers indicated by a question mark (?).
System.Data.Odbc	Uses positional parameter markers indicated by a question mark (?).
System.Data.OracleClient	Uses output parameter in the format <i>:output_result</i> (or <i>output_result</i>).

Example: Sql script for System.Data.SqlClient provider

```
GO
declare @var varchar(10)
set @var1 = 'sample'
set @output_result = @var1
GO
```

Example: Sql script for System.Data.OleDb provider

```
GO
declare @var1 varchar(10)
set @var1 = 'test'
set ? = @var1
GO
```

SharePoint Workflow Designer Phrase

Execute SQL Script this sql script using this provider name, this connection string and store result in Variable:variable

Parameters

Parameter	Description
this sql script	SQL statements. Supports multiple batches separated by GO command.
this provider name	The .NET ADO Provider. Default is MS SQL Server (System.Data.SqlClient). You can use other providers like <ul style="list-style-type: none"> • "System.Data.Odbc" - Odbc Data Provider

- "System.Data.OleDb" - OleDb Data Provider
- "System.Data.OracleClient" - OracleClient Data Provider
- "System.Data.SqlClient" - SqlClient Data Provider
- "System.Data.SqlServerCe.3.5" - Microsoft SQL Server Compact Data Provider
- Etc

Additional information about providers you can find here
<http://msdn.microsoft.com/en-us/library/dd0w4a2z.aspx>

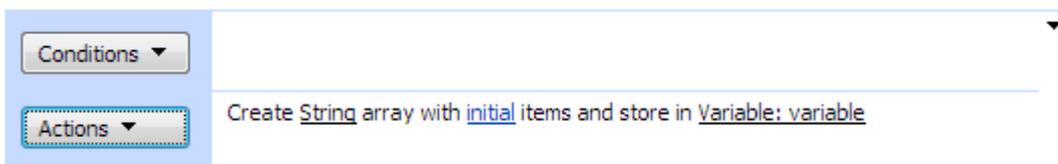
this connection string	The connection string, e.g. "Data Source=localhost\SQLEXPRESS;Initial Catalog=test;Integrated Security=SSPI"
Variable:variable	Gets or sets the output result.

Array List activities

Some activities, like "Send email ...", "Assign a To-do Item", "Assign a Form to a Group", "Capture text", "Split text" and etc support Array List but SharePoint Designer doesn't allow to create, edit or update array. Using these activities you can create, edit and update array.

Create array

This activity creates an Array List variable, load initial items and store result to output variable.



SharePoint Workflow Designer Phrase

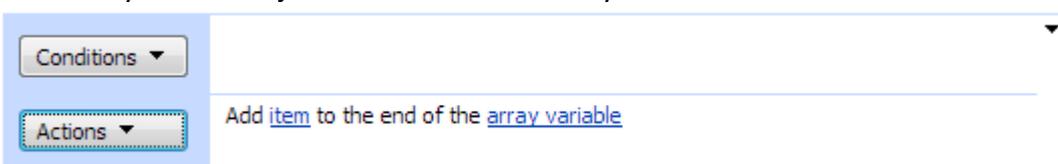
Create String array with initial items and store in variable

Parameters

Parameter	Description
String	Type of Array. String, DateTime, Number.
initial	Optional. Initial array items, separated by ;. Example: string1;string2;string3 123;-25.5;0;12 2010-10-25 12:30; 2010-10-26 12:30; 2010-10-27 12:30

Add array item

This activity adds an object to the end of the Array List.



SharePoint Workflow Designer PhraseAdd item to the end of array variable**Parameters**

Parameter	Description
item	The Object to be added to the end of the Array List.
array variable	Array List

Insert array item

This activity inserts an element into the Array List at the specified index.

SharePoint Workflow Designer PhraseInsert item into array variable at 0 index**Parameters**

Parameter	Description
item	The Object to be added to the end of the Array List.
array variable	Array List
<u>0</u> index	The zero-based index at which value should be inserted.

Remove array item

This activity removes the first occurrence of a specific object from the Array List.

SharePoint Workflow Designer PhraseRemove item from the array variable**Parameters**

Parameter	Description
item	The Object to remove from the Array List.
array variable	Array List

Remove array item At

This activity removes the element at the specified index of the Array List.

SharePoint Workflow Designer Phrase

Remove the element at Q index of the array variable

Parameters

Parameter	Description
item	The Object to remove from the Array List.
<u>Q</u> index	The zero-based index of the element to remove.

Clear array

This activity removes all elements from the Array List.

SharePoint Workflow Designer Phrase

Remove all elements from the array variable

Parameters

Parameter	Description
-----------	-------------

Remove duplicates from array

This activity removes duplicates from the Array List.

For example if array contains str1, str2, str3, str1 items. The output array would contain str2, str3, str1 only.

SharePoint Workflow Designer Phrase

Remove duplicates from the array variable

Parameters

Parameter	Description
-----------	-------------

Index of array item

This activity returns the zero-based index of the first occurrence of a value in the Array List or in a portion of it.

Conditions ▼	
Actions ▼	Find index of <u>item</u> in the <u>array variable</u> and store in <u>Variable: result</u>

SharePoint Workflow Designer Phrase

Find index of item in the array variable and store in result

Parameters

Parameter	Description
item	The Object to locate in the ArrayList.

Get array items count

This activity returns the number of elements actually contained in the Array List.

Conditions ▼	
Actions ▼	Gets the number of elements in the <u>array variable</u> and store in <u>Variable: result</u>

SharePoint Workflow Designer Phrase

Get the number of elements in the array variable and store in result

Parameters

Parameter	Description
-----------	-------------

Get array item

This activity reads the element from the Array at the specified index and store result in variable.

Conditions ▼	
Actions ▼	Get element at <u>0</u> index in the <u>array variable</u> and store in <u>result</u>

SharePoint Workflow Designer Phrase

Get elements at 0 index in the array variable and store in result

Parameters

Parameter	Description
index	The zero-based index of the element to get or set.

Set array item

This activity sets the element at the specified index.

SharePoint Workflow Designer Phrase

Set elements at 0 index in the array variable to item

Parameters

Parameter	Description
index	The zero-based index of the element to get or set.

Except array

This activity returns those elements in first array that do not appear in second array.

SharePoint Workflow Designer Phrase

Produces elements in first array variable that do not appear in second array variable and store result in variable.

Parameters

Parameter	Description
first array variable	Array list.
second array variable	Array list.
variable	This activity will place result into an output variable.

Intersect array

This activity produces intersection of two arrays.

SharePoint Workflow Designer Phrase

Produces intersection of first array variable and second array variable and store result in variable.

Parameters

Parameter	Description
first array variable	Array list.
second array variable	Array list.
variable	This activity will place result into an output variable.

Concat array

This activity concatenates two arrays.

Step 1

Concatenates [first array variable](#) and [second array variable](#) and store result in [Variable: variable](#)

SharePoint Workflow Designer Phrase

Concatenates [first array variable](#) and [second array variable](#) and store result in [variable](#).

Parameters

Parameter	Description
first array variable	Array list.
second array variable	Array list.
variable	This activity will place result into an output variable.

Select event/odd array items

This activity allows receiving even or odd items the array and stores result in variables.

Step 1

Select [Even](#) items of the [array variable](#) array and store them in [Variable: variable](#)

SharePoint Workflow Designer Phrase

Select [Even](#) items of the [array variable](#) array and store them in [variable](#).

Parameters

Parameter	Description
event	Selecting pattern: <ul style="list-style-type: none"> • Even • Odd
array variable	Array list.
variable	This activity will place result into an output variable.

File activities

The section contains activities that that provide basic file and directory support.

Create directory

This activity creates all directories and subdirectories in the specified path.

Any and all directories specified in path are created, unless they already exist or unless some part of path is invalid. The path parameter specifies a directory path, not a file path. If the directory already exists, this method does nothing.

You can create a directory on a remote computer, on a share that you have write access to. UNC paths are supported; for example, you can specify the following for path: \\2009\Archives\December.

Creating a directory with only the colon character (:) is not supported, and will cause an exception to be thrown.

SharePoint Workflow Designer Phrase

Create all directory and subdirectories in the specified path

Parameters

Parameter	Description
the specified path	The directory path to create.

Delete directory

This activity deletes the specified directory and, if indicated, any subdirectories and files in the directory.

The path parameter is not case-sensitive.

If the Remove subdirectories and files is Yes, the user must have write permission for the current directory as well as for all subdirectories.

The behavior of this method differs slightly when deleting a directory that contains a reparse point, such as a symbolic link or a mount point. If the reparse point is a directory, such as a mount point, it is unmounted and the mount point is deleted. This method does not recurse through the reparse point. If the reparse point is a symbolic link to a file, the reparse point is deleted and not the target of the symbolic link.

In some cases, if you have the specified directory open in Windows Explorer, the Delete method may not be able to delete it.

SharePoint Workflow Designer Phrase

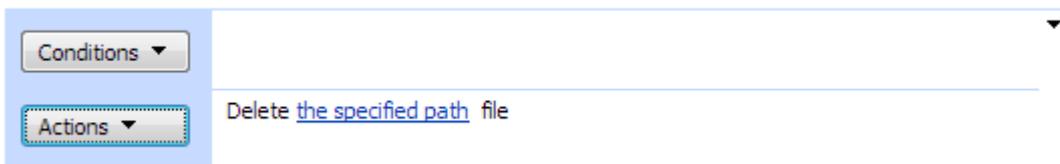
Delete the specified path directory. Remove subdirectories and file No

Parameters

Parameter	Description
the specified path	The directory path to create.
Remove subdirectories and file	Yes to remove directories, subdirectories, and files in path; otherwise, No.

Delete file

This activity deletes the specified file.



If the file to be deleted does not exist, no error is thrown.

SharePoint Workflow Designer Phrase

Delete the specified path file

Parameters

Parameter	Description
the specified path	The name of the file to be deleted. Wildcard characters are not supported.

Managed metadata activities

Note: Managed metadata activities are available for SharePoint 2010 only

SharePoint 2010 now includes a dedicated service for managing metadata within the enterprise. The managed metadata service allows content owners to maintain a centrally managed structured taxonomy as well as allowing users to contribute to an unstructured 'folksonomy' in the form of managed keywords. This makes it much easier for users to classify content, and guides users to use consistent terms, improving the quality of metadata in the system. Using these activities you can work with Managed metadata from SharePoint Designer.

Add term to managed metadata

This activity adds terms to the managed metadata store.

Step 1

Add this term to this group in default term store at this url . Language 1033

Note: If group or term item doesn't exist, activity will create a new element; otherwise continue.

SharePoint Workflow Designer Phrase

Add this term to this group in default term store at this site url. Language 1033

Parameters

Parameter	Description
this term	Path of term set and terms, separated by ' ' or ';' Ex: "Week" – creates term set "Week" Ex: "Week Mon" – creates term set "Week" and sub term "Mon" Ex: "Week Mon AM" – creates term set "Week", sub term "Mon" and sub term "AM" Note: The single name cannot exceed 255 characters, and it cannot contain any of the following illegal characters: ; " < > & tab
this group	Name of term group
default term store	Optional. Name of Term store if name is empty, first term store will be used
this site url	Optional. Site url. If is empty, current site will be used
1033	The language that the new term name is in. Default 1033 - English - United States. The following table lists the locales/languages with an assigned Locale ID (LCID).

Remove term from managed metadata

This activity removes terms from the managed metadata store.

Step 1

Remove this term from this group in default term store at this site url . Language 1033

SharePoint Workflow Designer Phrase

Remove this term from this group in default term store at this site url. Language 1033

Parameters

Parameter	Description
this term	Path of term set and terms, separated by ' ' or ';' Ex: "Week" – removes term set "Week" Ex: "Week Mon" – removes term set "Week" and sub term "Mon" Ex: "Week Mon AM" – removes term "AM" Note: The single name cannot exceed 255 characters, and it cannot contain any of the following illegal characters: ; " < > & tab
this group	Name of term group
default term store	Optional. Name of Term store if name is empty, first term store will be used
this site url	Optional. Site url. If is empty, current site will be used
1033	The language that the new term name is in. Default 1033 - English - United States. The following table lists the locales/languages with an assigned Locale ID (LCID).

Create group in managed metadata

This activity creates group in the managed metadata store.

Step 1

Create [this group](#) in [default term store](#) at [this site url](#) . Set [this group managers](#) as group managers and [this contributors](#) as contributors

Note: If group doesn't exist, activity will create a new element; otherwise ignore.

SharePoint Workflow Designer Phrase

Create [this group](#) in [default term store](#) at [this site url](#). Set [this group managers](#) as group managers and [this contributors](#) as contributors

Parameters

Parameter	Description
this group	Name of term group
default term store	Optional. Name of Term store if name is empty, first term store will be used
this site url	Optional. Site url. If is empty, current site will be used
this group managers	Optional. Enter user names, group names, or e-mail addresses in order to grant group manager permissions. Separate multiple users with semicolons. These users will have contributor permissions and will also able to add users to the contributor role.
this contributors	Optional. Enter user names, group names, or e-mail addresses. Separate them with semicolons. These users will have full permissions to edit terms and term set hierarchies within this group.

Delete group from managed metadata

This activity removes group from the managed metadata store.

Step 1

Delete [this group](#) in [default term store](#) at [this site url](#)

SharePoint Workflow Designer Phrase

Delete [this group](#) from [default term store](#) at [this site url](#)

Parameters

Parameter	Description
this group	Name of term group
default term store	Optional. Name of Term store if name is empty, first term store will be used
this site url	Optional. Site url. If is empty, current site will be used

Resolve term internal value from managed metadata

Resolves the internal values of a taxonomy field in this format: "WSSID;#VAL|GUID".

Step 1

Resolve [this term](#) internal value from [this group](#) in [default term store](#) at [this site url](#) . Language [1033](#) . Store result in [Variable: variable](#)

This is necessary because SharePoint workflow uses different formats to get and set managed metadata field values. When retrieving a managed metadata field value, SharePoint returns the format "VAL|GUID". When setting a value, the format "WSSID;#VAL|GUID" is instead required, where WSSID is the ID of the associated row in the hidden taxonomy list.

Note: Activity creates Wssid automatically for terms that are not yet referenced from the site.

SharePoint Workflow Designer Phrase

Resolve [this term](#) internal value from [this group](#) in [default term store](#) at [this site url](#) . Language [1033](#) . Store result in [variable](#)

Parameters

Parameter	Description
this term	Path of term set and terms, separated by ' ' or ';' Ex: "Week" – removes term set "Week" Ex: "Week Mon" – removes term set "Week" and sub term "Mon" Ex: "Week Mon AM" – removes term "AM" Note: The signle name cannot exceed 255 characters, and it cannot contain any of the following illegal characters: ; " < > & tab
this group	Name of term group
default term store	Optional. Name of Term store if name is empty, first term store will be used

Get assignable value from taxonomy field

Returns assignable value from taxonomy field in this format: "WSSID;#VAL|GUID".

Step 1

Get assignable value from [this field](#) taxonomy field in [this item](#) and store result in [Variable: variable](#)

This is necessary because SharePoint workflow uses different formats to get and set managed metadata field values. When retrieving a managed metadata field value, SharePoint returns the format "VAL|GUID". When setting a value, the format "WSSID;#VAL|GUID" is instead required, where WSSID is the ID of the associated row in the hidden taxonomy list.

Activity supports managed metadata fields that accept multiple values.

Note: If you want to update managed metadata fields that accept multiple values, you should use [\[TaxonomyFielName\]_0](#) column.

SharePoint Workflow Designer Phrase

Get assignable value from [this field](#) in [this item](#) and store result in [variable](#)

Parameters

Parameter	Description
this field	Field display name. Field unique ID (Guid). Field index (int).
this item	List item

Default column values activities

Note: Location based metadata defaults are available for SharePoint 2010 only

SharePoint 2010 allows you to set defaults at the document library and folder level. This means that users do not have to enter the same metadata over and over if they are uploading content into a repository that has a shared set of metadata. Using these activities you can change the default column values for documents added to specific folder.

Set field default value for folder

This activity sets a default value on a field to apply to documents added to the specified location.

Step 1

Set column defaults [this default value](#) for [this column](#) at [this folder url](#)

SharePoint Workflow Designer Phrase

Set column defaults [this default value](#) for [this column](#) at [this folder url](#)

Parameters

Parameter	Description
this default value	The default value
this column	Name of the field for which to set the default. Field unique ID (Guid). Field index (int). Internal name of field.
this folder url	Full url to folder. Ex: http://mysharepoint/MyDocs/Shared%20Documents

Get field default value for folder

This activity gets a default value on a field to apply to documents added to the specified location.

Step 1

Get column defaults for [this column](#) at [this folder url](#) and store result in [Variable: variable](#)

SharePoint Workflow Designer Phrase

Get column defaults for [this column](#) at [this folder url](#) and store result in [variable](#)

Parameters

Parameter	Description
this column	Name of the field for which to set the default. Field unique ID (Guid). Field index (int). Internal name of field.
this folder url	Full url to folder. Ex: http://mysharepoint/MyDocs/Shared%20Documents

Remove field default value from folder

This activity removes the default value set on the field indicated by field name parameter at the folder location.

Step 1

Remove field default from [this column](#) at [this folder url](#)

SharePoint Workflow Designer Phrase

Remove column defaults from [this column](#) at [this folder url](#)

Parameters

Parameter	Description
this column	Name of the field for which to set the default. Field unique ID (Guid). Field index (int). Internal name of field.
this folder url	Full url to folder. Ex: http://mysharepoint/MyDocs/Shared%20Documents

Remove all default values from folder

This activity removes all of the default values set on the document library.

Step 1

Remove column defaults from [this folder url](#)

SharePoint Workflow Designer Phrase

Remove column defaults from [this folder url](#)

Parameters

Parameter	Description
this folder url	Full url to folder. Ex: http://mysharepoint/MyDocs/Shared%20Documents

Import/Export activities

Import CSV file into SharePoint list

This activity allows importing records from CSV file into SharePoint list.

Step 1

Import CSV file [this file url](#) into SharePoint list [this list url](#) using [default mapping](#) . Delimiter: , , Text Qualifier: " . Trigger create event [No](#) .

SharePoint Workflow Designer Phrase

Import CSV file [this file url](#) into SharePoint [list this list url](#) using [default mapping](#) . Delimiter: , , Text Qualified: " . Trigger create event: No.

Parameters

Parameter	Description
this file url	URL for the file containing the document to load. The URL can be either a local file or an HTTP URL (a Web address). Ex: c:\Task.csv Ex: http://externalsite.com/Task.csv Ex: http://sharepointportal/Shared%20Documents/CSVTest.csv
this list url	Full list url or folder url in the list Ex: http://mysharepoint/Lists/Tasks Ex: http://mysharepoint/Lists/Tasks/Folder
default mapping	Optional. Defines SharePoint field and CSV column pair. [SharePointFieldName1]=[CsvColumnName1] ... [SharePointFieldNameN]=[CsvColumnNameN]

If mapping is empty, the activity will try to copy each CSV column into SharePoint fields. If SharePoint field doesn't exist in the list, the activity will skip the column.

Note:

Use **vti_title** field to update title

Use **ModerationInformation.Status** field to update content approval status for an item.

Use **ModerationInformation.Comment** field to update comment that addresses why the item was approved or rejected.

Note:

Use [SharePointFieldName1]=DefaultValue:[DefaultValue] to set default value into SharePoint field.

Example:

Ex: copy Title CSV column to Title SharePoint field

Title=Title

Ex: copy Begin Date CSV column to Start Date SharePoint field

Start Date=Begin Date

Ex: set Status SharePoint field to In Progress

Status=DefaultValue:In Progress

Ex: set Start Date SharePoint field to 2010-12-10 12:30:00

Start Date=DefaultValue:2010-12-10T12:30:00

Ex: set Published SharePoint field to true

Published=DefaultValue:1

Delimiter	The delimiter character separating each field: <ul style="list-style-type: none"> • ; • , • Tab • [Space]
Text Qualifier	The quotation character wrapping every field: <ul style="list-style-type: none"> • “ • ’

Image activities

Resize Image

This activity allows resizing image in SharePoint Document Library.

Note: The activity overwrites the original image.

Step 1

Resize [this image file url](#) image using width 100 pixels, height 100 pixels, smart cropping Yes

SharePoint Workflow Designer Phrase

Resize [this image file url](#) image using width 100 pixels, height 100 pixels, smart cropping Yes

Parameters

Parameter	Description
this image file url	URL for the image file. Ex: http://sharepointportal/ Shared%20Documents/ProductImage.jpg
width	A new width in pixels
height	A new height in pixels
smart cropping	Crop image to keep aspect ratio

Resize image based on one side

This activity allows resizing image in SharePoint Document Library.

Note: The activity overwrites the original image.

Step 1

Resize [this image file url](#) image based on one side Width exactly = 100 pixels

SharePoint Workflow Designer Phrase

Resize [this image file url](#) image based on one side Width exactly = 100 pixels

Parameters

Parameter	Description
this image file url	URL for the image file. Ex: http://sharepointportal/ Shared%20Documents/ProductImage.jpg
mode	<ul style="list-style-type: none"> • Width • Height • Long Side • Short Side
value	A new value in pixels

Resize image by percentage

This activity allows resizing image in SharePoint Document Library.

Note: The activity overwrites the original image.

Step 1

Resize [this image file url](#) image by 50 percentage

SharePoint Workflow Designer Phrase

Resize [this image file url](#) image by 50 percentage

Parameters

Parameter	Description
this image file url	URL for the image file. Ex: http://sharepointportal/ Shared%20Documents/ProductImage.jpg
percentage	A new value in percentage

Crop image

This activity allows cropping image in SharePoint Document Library.

Step 1

Crop [this image file url](#) image using x-offset 0, y-offset 0, width 100 pixels, height 100 pixels

SharePoint Workflow Designer Phrase

Crop [this image file url](#) image using x-offer 0, y-offset 0, width 100, height 100.

Parameters

Parameter	Description
this image file url	URL for the image file. Ex: http://sharepoinportal/ Shared%20Documents/ProductImage.jpg
x-offset	horizontal coordinate of left edge of the cropping rectangle (zero represents the existing left edge of the image)
y-offset	vertical coordinate of top edge of the cropping rectangle (zero represents the existing top edge of the image)
width	width of the cropping rectangle, i.e., the resulting image
height	height of the cropping rectangle, i.e., the resulting image

Conditions

Is Role assigned to User (Free)

This condition checks that user is assigned with specified role.

Is User a member of a SharePoint group (Free)

This condition checks that user is member of specified SharePoint group.

Is User a member of an Active Directory group (Free)

This condition checks that user is member of specified Active Directory group.

Conditions ▼ If [this user](#) is a member of [this group](#) Active Directory group in [this domain](#) ▼

Actions ▼

SharePoint Workflow Designer Phrase

If [this user](#) is a member of [this group](#) Active Directory group in [this domain](#).

Parameters

Parameter	Description
this user	User login name. Ex: "user@domain", "domain\user" or "user"
this group	Path to existing user group.
	<p>Supported formats:</p> <ul style="list-style-type: none"> • Full LDAP path "CN= group,OU=Test,DC=yourdomain,DC=local" • Simple path from root with domain "yourdomain\test\group" or "yourdomain/test/group" • Simple path from root without domain "test\group" or "test/group", domain will be resolved automatically. <p>Use Active Directory Explorer (http://technet.microsoft.com/en-us/sysinternals/bb963907.aspx) to get correct LDAP path.</p>
this domain	Domain name.

Item is checked out (Free)

This condition checks that current document is checked out.

Item is checked out extended (Free)

This condition checks that specified document is checked out.

Conditions ▼ If Item at [this list item url](#) is checked out ▼

Actions ▼

Url Examples:

Link to document library item

<http://mysharepoint/MyDocs/Shared%20Documents/OMS.pdf>

Current Item exists in the list (Free)

This condition checks that current document is exists in the specified folder.

Conditions ▼ If Current item exists in the list at [this url](#) ▼

Actions ▼

Url Examples:

Link to document library folder

<http://mysharepoint/MyDocs/Shared%20Documents>

Item exists in the list (Free)

This condition checks that list item is exists at specified url.

Step 1

If [this list item url](#) item exists

(Start typing or use the Insert group in the Ribbon.)

Url Examples:

<http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf>

http://mysharepoint/Lists/List%20with%20Approve/1_.000

<http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1>

<http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1>

Member exists in Active Directory (Free)

This condition checks that current user or group is exists in AD.

Conditions ▼

If [this member](#) exists in Active Directory in [this domain](#)

▼

Actions ▼

Array contains element (Free)

This condition determines whether an element is in the ArrayList.

Conditions ▼

If [array variable](#) array contains [element](#)

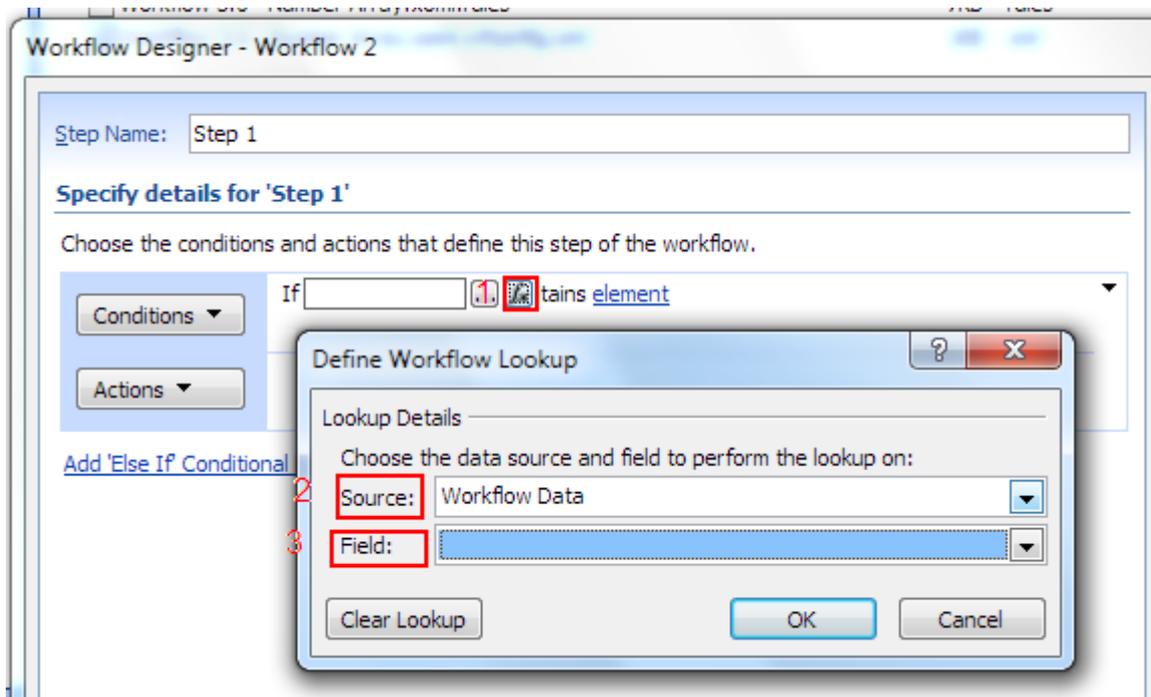
▼

Actions ▼

The array and element variables should be added in the workflow.

To select variable:

1. Click variable link
2. Click Display data binding button
3. Select "Workflow Data" data source
4. Select variable
5. Click OK button to commit



File exists (Free)

This condition determines whether the specified file exists.

Conditions ▾ If File path exists ▾

Actions ▾

Directory exists (Free)

This condition determines whether the specified directory exists.

Conditions ▾ If Directory path exists ▾

Actions ▾

SharePoint group exists (Free)

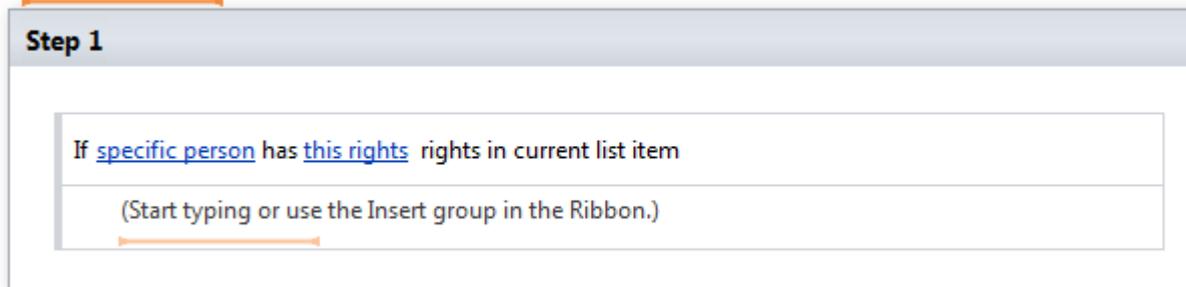
This condition determines whether the specified sharepoint group exists.

Conditions ▾ If SharePoint grop this group name exists at site url ▾

Actions ▾

User has permission level (Free)

This condition determines if the user has the specified permission level in current list item.



Parameters

Parameter	Description
specific person	User or group
this permission level	<p>Value of permission field by default can be one of the following values:</p> <ul style="list-style-type: none"> Full Control Design Contribute Read <p>If any custom permission levels are defined, you can also specify those. For help on creating custom permission levels see http://technet2.microsoft.com/Office/en-us/library/c5dd8b7e-202d-4d33-8535-5c03f88ea1ff1033.mspx?mfr=true</p> <p>The built-in permissions available in Windows SharePoint Services are supported</p> <p>Ex:</p> <ul style="list-style-type: none"> OpenItems EditListItems <p>http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.spbasepermissions%28v=office.12%29.aspx</p>

User has permission level in list item (Free)

This condition finds list item by specified url and determines if the user has the specified permission level in the list item.

Step 1

If [specific person](#) has [this rights](#) rights in [this list item url](#)

(Start typing or use the Insert group in the Ribbon.)

Parameters

Parameter	Description
specific person	User or group
this permission level	<p>Value of permission field by default can be one of the following values:</p> <p>Full Control Design Contribute Read</p> <p>If any custom permission levels are defined, you can also specify those. For help on creating custom permission levels see http://technet2.microsoft.com/Office/en-us/library/c5dd8b7e-202d-4d33-8535-5c03f88ea1ff1033.mspx?mfr=true</p> <p>The built-in permissions available in Windows SharePoint Services are supported</p> <p>Ex: OpenItems EditListItems</p> <p>http://msdn.microsoft.com/en-us/library/microsoft.sharepoint.spbasepermissions%28v=office.12%29.aspx</p>
this list item url	<p>Full list item url</p> <p>Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf</p> <p>Ex: http://mysharepoint/Lists/List%20with%20Approve/1_.000</p> <p>Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1</p> <p>Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1</p>

Workflow is running (Free)

This condition determines whether workflow is running in the specified list item.

Step 1

If [this workflow](#) workflow is running in [this list](#)

(Start typing or use the Insert group in the Ribbon.)

Parameters

Parameter	Description
this list item	SharePoint list item
this workflow	Name of workflow

Folder exists at the following url

This condition checks that folder exists at the following url.

Step 1

If Folder exists at [folder url](#)

(Start typing or use the Insert group on the Ribbon.)

Else

(Start typing or use the Insert group on the Ribbon.)

Folder URL Examples:

<http://mysharepoint/Document%20Library/folder>

Virto SharePoint Workflow Activities Kit (SharePoint 2013 Workflow Platform)

List Activities

Get List Items

This activity allows getting list items using Caml Query from any site.

SharePoint Designer phrase

Stage: Get List Items By Query
Getting items from List identifier using Caml Query and save to Variable: dictionary
Transition to stage
Go to End of Workflow

Parameters

Output parameters

Parameter	Description	Example
Items	The dictionary that represents the items	Variable:Items
Item Count	The number of items in the dictionary	Variable:Count

Input parameters

Parameter	Description	Example
List identifier	List for querying. The value could be list name, list base template, guid (not supported with multiple sites) or list URL (The web site relative URL).). If the value field is empty, current list will be used.	Documents [%Workflow Context: List ID %] 107 /Lists/Tasks
Caml Query	CAML query that will be run	<View Scope='RecursiveAll'> <Query> <Where> <Contains> <FieldRef Name='FileLeafRef' /> <Value Type='File'> .docx </Value> </Contains> </Where>

		<pre> <OrderBy> <FieldRef Name='ID' /> </OrderBy> </Query> <ViewFields> <FieldRef Name='FileLeafRef' /> <FieldRef Name='FileRef' /> </ViewFields> <RowLimit>10</RowLimit> </View> </pre>
Folder Path	The web site relative URL of a list folder from which results will be returned	/Lists/ListName/Folder1/SubFolder
Site URLs	The URLs of a SharePoint sites (semicolon delimited). If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]subSite

Example

Stage: Get List Items

Get items from [/Lists/Tasks/](#) using [Caml Query](#) and save to [Variable: dictionary](#)
then Set [Variable: index](#) to [0](#)

Loop: 1

The contents of this loop will run [Variable: count](#) times

Get [\(\[%Variable: index%\] \)/Title](#) from [Variable: dictionary](#) (Output to [Variable: itemTitle](#))
then Log [\[%Variable: itemTitle%\]](#) to the workflow history list
then Calculate [Variable: index plus 1](#) (Output to [Variable: calc](#))
then Set [Variable: index](#) to [Variable: calc](#)

Transition to stage

Go to [End of Workflow](#)

Copy/Move Document

Activity allows to copy/move document to a folder. Cross site copy/move is also supported.

SharePoint Designer phrase

Stage: Copy/Move Document

Copy document from [Source URL](#) to [DestinationUrl](#)

Transition to stage

Go to [End of Workflow](#)

Parameters

Input parameters

Parameter	Description	Example
Method	Copy or Move	Copy(0), Move(1)
SourceUrl	The URL of the document to be copied/moved. You can use absolute URL as well as web site relative URL.	[%Current Item: Encoded Absolute URL%] /Source Documents/report.xls https://contoso/SiteUrl/LibraryName/FolderName/DocumentName.docx [%Workflow Context:Current Site URL%]/siteURL//Source Documents/report5.xls /Documents/report.xls
DestinationUrl	The URL where the source document will be copied/moved. You can use absolute URL as well as web site relative URL	https://contoso/SiteUrl/LibraryName/FolderName [%Workflow Context:Current Site URL%]/siteURL/Source Documents /Documents/
SiteURL	The URL of a SharePoint site. If the value field is empty, current site will be used.	[%Workflow Context:Current Site URL%]/ https://contoso/SiteUrl/
Overwrite	Overwrite a file if there is a file with the same name	Yes/No

Example

Stage: Copy/Move Document

Move document from [%Current Item:Encoded Absolute URL%] to <http://contoso/archive/reports>

Transition to stage

Go to [End of Workflow](#)

Create List Item

This activity creates list item on any site.

SharePoint Designer phrase

Stage: Create List Item

Create item with [this field values](#) in [this list](#) (Output to Variable: item ID)

Transition to stage

Go to [End of Workflow](#)

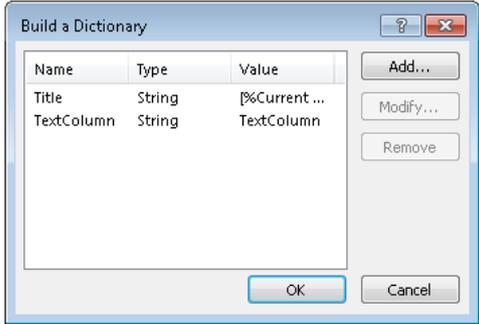
Parameters

Output parameters

Parameter	Description	Example
itemID	ID of created item	Variable:ItemID

Input parameters

Parameter	Description	Example
List identifier	The list where the item will be created. The value could be list name, guid or list URL (the web site relative URL). If the value field is empty, current list will be used.	Documents [%Workflow Context: List ID %] /Lists/Tasks
FieldValues	Dictionary contains field values for setting in created item. You can specify fields using Display Name, Internal Name or GUID.	[{ 'Title' : 'New Item' }, { 'FieldName' : 'FieldValue' }]

		
Folder Path	If you want to create new item in specific folder you can specify this parameter. It can be web site relative URL to folder	/Lists/ListItem/Folder1/SubFolder
Site URL	The URL of a SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]subSite
TriggerEvent	Indicates that activity triggers item create event	Yes

Example

Stage: Create List Item

Build [...] Dictionary (Output to Variable: fieldValues)

then Create item with Variable: fieldValues in [%Workflow Context:List ID%] (Output to Variable: itemID)

then Log [%Variable: itemID%] to the workflow history list ▼

Transition to stage

Go to End of Workflow

Update List Item

This activity updates the list item on any site.

SharePoint Designer phrase

Stage: Update List Item

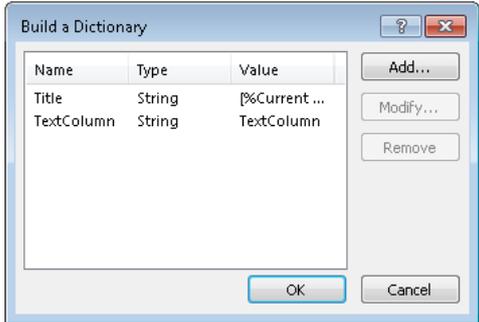
Update [this item](#) in [this list](#) with [this field values](#)

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
Item ID	ID of item for update. If the value field is empty, current item ID will be used.	Variable:ItemID
List identifier	The list where the item will be updated. The value could be list name, guid or list URL (the web site relative URL). If the value field is empty, current list will be used.	Documents [%Workflow Context: List ID %] /Lists/Tasks
FieldValues	Dictionary contains data for update. You can specify fields using Display Name, Internal Name or GUID.	[{ 'Title' : 'New Item' }, { 'FieldName' : 'FieldValue' }] 
Site URL	The URL of a SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]subSite
TriggerEvent	Indicates that activity triggers an item update event	Yes

Example

Stage: Update List Item

Build [...] Dictionary (Output to Variable: dictionary)

then Update Current Item:ID in [%Workflow Context:List ID%] with Variable: dictionary

Transition to stage

Go to End of Workflow

Add/Remove folder

This activity allows to delete or create folder in a list or in a library on specified site.

SharePoint Designer phrase

Stage: Add/Remove folder

Add folder in [this list](#) at [this path](#)

Transition to stage

Go to [End of Workflow](#)

Parameters

Input parameters

Parameter	Description	Example
Method	Add or Remove	Add(0),Remove(1)
List identifier	The URL of the library or of the list where the folder will be created/removed. The value could be list name, guid or list url (the web site relative URL. If the value field is empty, current list will be used.	Documents [%Workflow Context: List ID %] /Lists/Tasks
Site URL	The URL of a SharePoint site. If the value field is empty, current list will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]subSite
Folder Path	The path where the folder will be created/removed. The workflow action will create all folders included into the path. You can use absolute URL, domain relative URL, site relative URL, list relative URL	http://contoso/sites/site/Lists/ListName/Folder1/SubFolder /sites/site/Lists/ListName/Folder1/SubFolder /Lists/ListName/Folder1/SubFolder /Folder1/SubFolder

Example

Stage: Add/Remove folder
Remove folder in [%Workflow Context:List ID%] at /FolderForRemoving
Transition to stage
Go to <u>End of Workflow</u>

Copy/Move Folder

This activity allows to copy/move a folder in other folder. Cross site copy is supported.

SharePoint Designer phrase

Stage: Copy/Move Folder
Move folder from <u>Source URL</u> to <u>DestinationUrl</u>
Transition to stage
Go to <u>End of Workflow</u>

Parameters

Input parameters

Parameter	Description	Example
Method	Copy or Move	Copy(0), Move(1)
SourceUrl	The URL of the folder to be copied/moved. You can use absolute URL as well as web site relative URL.	[%Current Item: Encoded Absolute URL%] /Source Documents/folder https://contoso/SiteUrl/LibraryName/FolderName [%Workflow Context:Current Site URL%]/siteURL//Source Documents/ /Documents/
DestinationUrl	The URL where the source folder will be copied/moved. You can use absolute URL as well as web site relative URL	https://contoso/SiteUrl/LibraryName/FolderName [%Workflow Context:Current Site URL%]/siteURL/Source Documents /Documents/
SiteURL	The URL of a	[%Workflow Context:Current Site URL%]/

	SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl/
Overwrite	Overwrite a file if there is a file with the same name	Yes/No
OnlyContent	if it is yes, will be processed only the content of a folder will be processed	Yes/No

Example

Stage: Copy/Move Folder

Move folder from [%Current Item:Encoded Absolute URL%] to <http://contoso/archive/reposts>

Transition to stage

Go to [End of Workflow](#)

Copy/Move Attachments

This activity allows to copy/move attachments from list item to other folder. Cross site copy is supported.

SharePoint Designer phrase

Stage: Copy/Move Attachment

Copy attachments from [this item](#) from [this list](#) to [DestinationUrl](#)

Transition to stage

Go to [End of Workflow](#)

Parameters

Output parameters

Parameter	Description	Example
URLs	Returns a list of copied files	Variable:fileURLs

Input parameters

Parameter	Description	Example
Method	Copy or Move	Copy(0), Move(1)
ItemID	The ID of the source item.	Variable:ItemID
List identifier	The list where the item	[%Workflow Context: List ID %]

	will be stored. The value could be list name, guid or list url (the web site relative URL). If the value field is empty, current list will be used.	/Lists/Tasks Tasks
DestinationUrl	The URL where the source folder will be copied/moved. You can use absolute URL as well as web site relative URL	https://contoso/SiteUrl/LibraryName/FolderName [%Workflow Context:Current Site URL%]/siteURL/Source Documents /Documents/
SiteURL	The URL of a SharePoint site. If the value field is empty, current site will be used.	[%Workflow Context:Current Site URL%]/ https://contoso/SiteUrl/
Overwrite	Overwrite a file if there is a file with the same name	Yes/No

Example

Stage: Copy/Move Attachment

Copy attachments from Current Item:ID from [%Workflow Context:List ID%] to [%Workflow Context:Current Site URL%]...

then Get (0) from Variable: FileURLs (Output to Variable: filePath)

then Log [%Variable: filePath%] to the workflow history list

Transition to stage

Go to End of Workflow

Get Attachments

Activity allows to get attachments from list item and save is as dictionary.

SharePoint Designer phrase

Stage: Get Attachments

Get attachments from this item from this list and save to Variable: dictionary

Transition to stage

Go to End of Workflow

Parameters

Output parameters

Parameter	Description	Example
Attachments	The dictionary that represents the attachments	Variable:attachments

Input parameters

Parameter	Description	Example
ItemID	The ID of the source item.	Variable:ItemID
List identifier	The list where the item will be stored. The value could be list name, guid or list url (the web site relative URL. If the value field is empty, current list will be used.	[%Workflow Context: List ID %] /Lists/Tasks Tasks
SiteURL	The URL of a SharePoint site. If the value field is empty, current site will be used.	[%Workflow Context:Current Site URL%]/ https://contoso/SiteUrl/

Example

Stage: Get Attachments

Get attachments from Current Item:ID from [%Workflow Context:List ID%] and save to Variable: attachments

then Count Items in Variable: attachments (Output to Variable: count)

then Set Variable: index to 0

Loop: loop through attachments

The contents of this loop will run Variable: count times

Get ([%Variable: index%])/FileName from Variable: attachments (Output to Variable: fileName)

then Get ([%Variable: index%])/ServerRelativeURL from Variable: attachments (Output to Variable: serverRelativeURL)

then Get ([%Variable: index%])/AbsoluteURL from Variable: attachments (Output to Variable: absoluteURL)

then Get ([%Variable: index%])/Author from Variable: attachments (Output to Variable: author)

then Get ([%Variable: index%])/Length from Variable: attachments (Output to Variable: size)

then Get ([%Variable: index%])/TimeCreated from Variable: attachments (Output to Variable: timeCreated)

then Get ([%Variable: index%])/TimeLastModified from Variable: attachments (Output to Variable: timeLastModified)

then Log [%Variable: fileName%] to the workflow history list

then Log [%Variable: serverRelativeURL%] to the workflow history list

then Log [%Variable: absoluteURL%] to the workflow history list

then Log [%Variable: author%] to the workflow history list

then Log [%Variable: size%] bytes to the workflow history list

then Log [%Variable: timeCreated%] to the workflow history list

then Log [%Variable: timeLastModified%] to the workflow history list

then Calculate Variable: index plus 1 (Output to Variable: calc)

then Set Variable: index to Variable: calc

Transition to stage

Go to End of Workflow

Waiting For Changes Fields

This activity intended to waiting for field changes in current item. Activity triggers after value changing in some field of the current item.

SharePoint Designer phrase

Stage: Waiting for changes

Wait for changes in this fields (Output to Variable: this dictionary)

Transition to stage

Go to End of Workflow

Parameters

Output parameters

Parameter	Description	Example
Changes	The dictionary that represents the changes Structure of the changes dictionary: - (0) - Field - BeforeValue - AfterValue - (1) - Field - BeforeValue - AfterValue	Variable:changes

Input parameters

Parameter	Description	Example
Field Names	Comma separated list of internal field names to track	Status; Priority

Example

Stage: Waiting for changes

Wait for changes in TextColumn; NumberColumn (Output to Variable: changes)

then Set Variable: index to 0

Loop: loop through changes

The contents of this loop will run 2 times

Get ([%Variable: index%])/BeforeValue from Variable: changes (Output to Variable: beforeValue)

then Get ([%Variable: index%])/AfterValue from Variable: changes (Output to Variable: afterValue)

then Get ([%Variable: index%])/Field from Variable: changes (Output to Variable: fieldName)

then Log [%Variable: fieldName%] - changed from... to the workflow history list

then Calculate Variable: index plus 1 (Output to Variable: calc)

then Set Variable: index to Variable: calc

Transition to stage

Go to End of Workflow

String Activities

Split String

This activity allows splitting string by specified substring to the string array.

SharePoint Designer phrase

Stage: Split String
Split <u>this string</u> by <u>this symbols</u> (Output to <u>Variable: dictionary</u>)
Transition to stage
Go to <u>End of Workflow</u>

Parameters

Output parameters

Parameter	Description	Example
SplitResult	The dictionary that represents a collection of substrings	Variable:splitResult

Input parameters

Parameter	Description	Example
Source String	Source string	test1;test2;test3;test4
Separate Symbols	Separator string	; , #;

Example

Stage: Split String
Split <u>test1; test 2; test 3; test 4</u> by <u>;</u> (Output to <u>Variable: strings</u>)
then Get (<u>1</u>) from <u>Variable: strings</u> (Output to <u>Variable: string</u>)
then Log [% <u>Variable: string</u> %) to the workflow history list
Transition to stage
Go to <u>End of Workflow</u>

Email Activities

Send email with attachments

This activity allows sending html formatted email via Smtip server, specified in SharePoint settings. Attachments multiline text filed supports URL and local disc path.

SharePoint Designer phrase

Stage: Send email with attachments

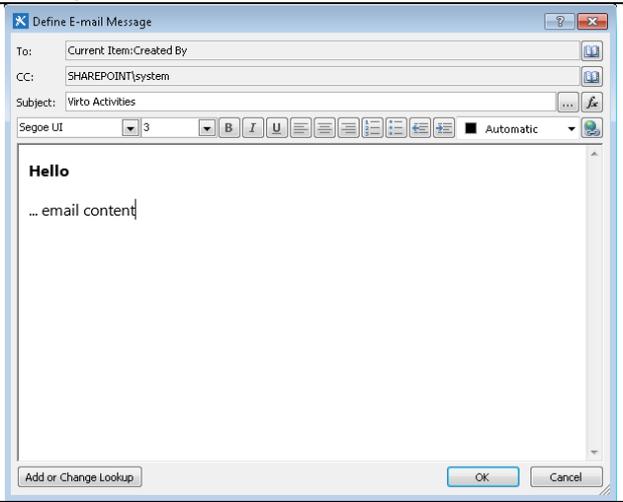
Send email to [these users](#) ,blind carbon copy to [this address](#) , display [this address](#) as sender and include [this attachments](#)

Transition to stage

Go to [End of Workflow](#)

Parameters

Input parameters

Parameter	Description	Example
this users	Email message and destination email address	
this address	Optional. Blind carbon copy	nbrook@virtoway.com
this address	Sender email address	support@virtosoftware.com
this attachments	Direct web links or local paths to attachments(semicolon delimited)	http://SPSite/ /Shared%20Documents/t1.txt; https://site/t1.jpg;

Example**Stage: Send email with attachments**

Send email to [SHAREPOINT\system](#) ,blind carbon copy to [nbrook@virtoway.com](#) , display [support@virtosoftware.com](#) as sender and include [http://SPSite/ /Shared%20Documents/t1...](#)

Transition to stage

Go to [End of Workflow](#)

InfoPath activities**Convert InfoPath to PDF**

This activity allows user to Convert InfoPath to PDF and save to document library.

SharePoint Designer phrase

Stage: Convert InfoPath To PDF

Convert [this InfoPath form](#) to PDF and save to [this library](#)

Transition to stage

Go to [End of Workflow](#)

Parameters

Input parameters

Parameter	Description	Example
SourceSiteURL	The URL of a source SharePoint site. If the value field is empty, current site will be used	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
SourceList	The list where the InfoPath form is. The value could be list name, GUID or list URL (the web site relative URL). If the value field is empty, current list will be used	Documents [%Workflow Context: List ID %] /Lists/ Documents
SourceItem	The URL of the InfoPath form to be converted. You can use absolute URL as well as web site relative URL. Or you can to specify the list item ID.	[%Variable:ItemID%] [%Current Item: Encoded Absolute URL%] /Source Documents/report.xml https://contoso/LibraryName/DocumentName.xml
DestinationSiteURL	The URL of a destination SharePoint site. If the value field is empty, current site will be used	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
DestinationList	The list where the PDF file will be created. The value could be list name, GUID or list URL (the web site relative URL).	Documents [%Workflow Context: List ID %] /Lists/ Documents
ViewName	Specify the view name of InfoPath form that you want to convert	myView [%Variable:ViewName %]

Example

Stage: Convert InfoPath form to PDF

Convert [%Current Item:Encoded Absolute URL%] to PDF and save to /Shared Documents

Transition to stage

Go to [End of Workflow](#)

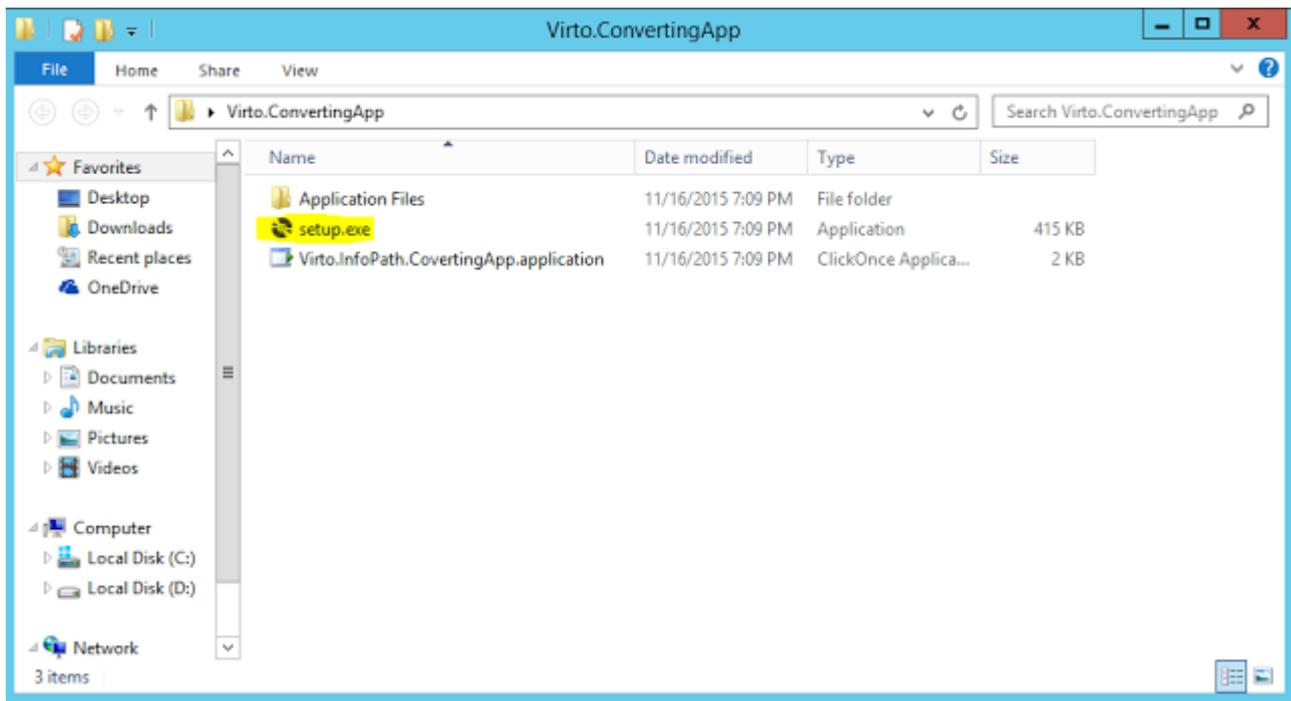
Installation and Usage

To start using "Convert InfoPath to PDF" action, you should install Virto Converting App from the setup package. Please do the following prerequisites for correct working process.

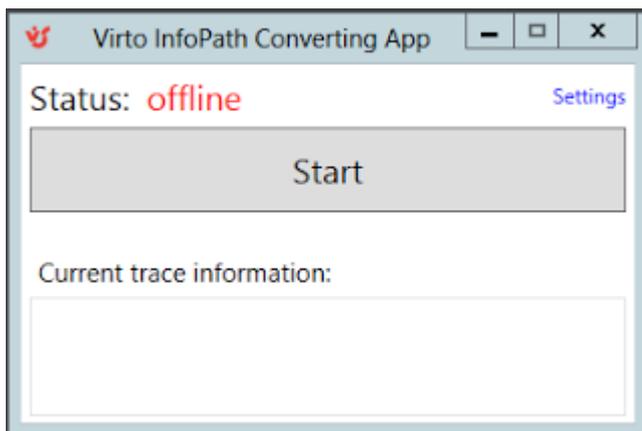
- 1) Virto Converting App must be installed on some server in your network. Microsoft InfoPath must be also installed on this server.
- 2) Virto Converting App must be run under account which has access to your SharePoint Central admin and SharePoint itself. Ideally this account must be present in farm administrators group in Central Admin (Security\Manage farm administrators group).
- 3) Please make sure that you are able to run Microsoft InfoPath under the account on the server, open any InfoPath form locally and save it as PDF.
- 4) This account must have "Log on as service" permissions to avoid closing Virto Converting App when you log off from the server.
- 5) To add "Log on as a service" permissions on domain controller:
 - a. Run Start > Control Panel > Administrative Tools > Local Security Policy
 - b. Select Local Policies > User Rights Assignment > Log on as a service
 - c. Click Add User or Group, and then add the appropriate account to the list of accounts that possess the Log on as a service right.
- 6) Configure connection of Virto Converting App to Central Admin according to described steps and start the app.

Normally, .NET Framework is already installed on a server or workstation. It can be obtained via Windows Update if necessary. InfoPath comes as a part of Microsoft Office Professional Plus 2013. Make sure you have this version of Microsoft Office, and that InfoPath is deployed. Make sure InfoPath is ready to work.

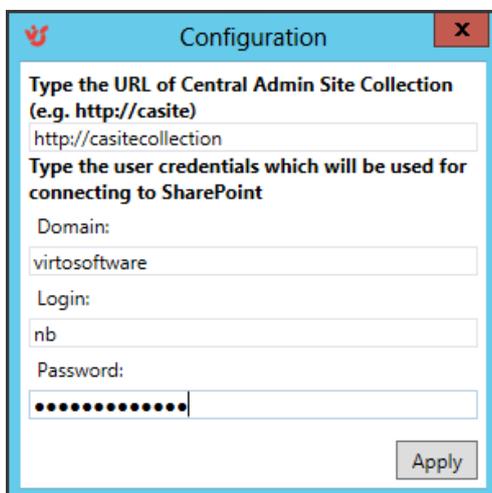
Unzip the installation "Virto.SharePoint.Activities.Setup" archive and locate the "Virto.ConvertingApp" folder. Find setup.exe file there and run it.



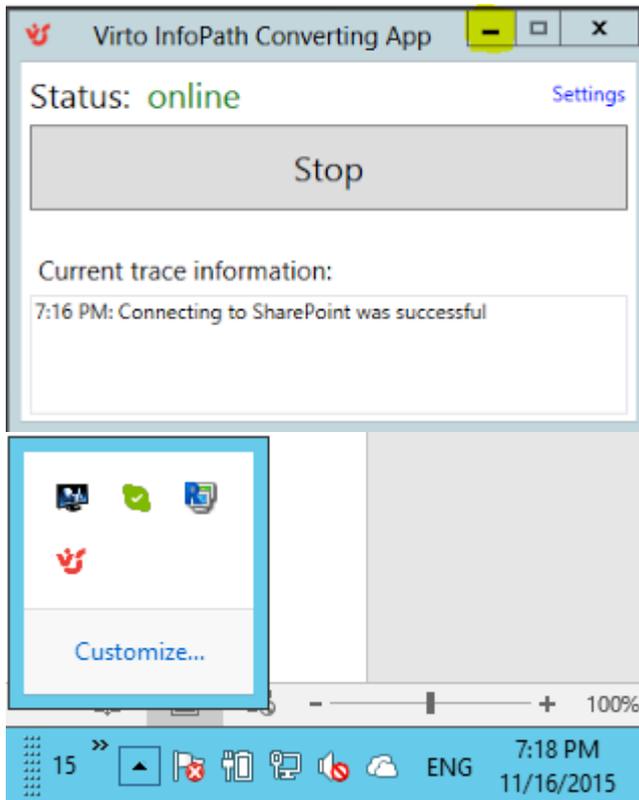
Click the “Install” button. The application starts immediately after installing.



In the beginning you should configure it. Click on the “Settings” link. Fill form and click the “Apply” button.



Then you can start application. To start the app, you should click on “Start” button. Make sure that status is “online” and there are no errors in the “Current trace information” textbox. You can hide the app in the tray. To do it click on “Minimize” button.



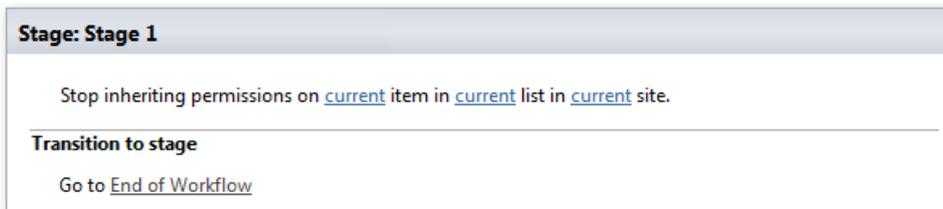
The application can be uninstalled via Add/Remove Programs.

Permissions Activities

Stop inheriting permissions on list item

This activity stops inheriting permission from Parent for specified list item.

SharePoint Designer phrase



Parameters

Input parameters

Parameter	Description	Example
Current item	Item ID. If the value field is	[%Variable:ItemID%], Current Item:ID

	empty, current item ID will be used.	
Current list	Name or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Stop inheriting permissions on Current Item:ID item in [%Workflow Context:List Name%] list in http://contoso/SiteURL site.

Transition to stage

Go to End of Workflow

Stop inheriting permissions on list

This activity stops inheriting permission from Parent for specified list.

SharePoint Designer phrase

Stage: Stage 1

Stop inheriting permissions on current list in current site.

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
Current list	Title or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Stop inheriting permissions on Workflow Context:List Name list in Workflow Context:Current Site URL site.

Transition to stage

Go to End of Workflow

Stop inheriting permissions on site

This activity stops inheriting permission from Parent for specified site.

SharePoint Designer phrase

Stage: Stage 1

Stop inheriting permissions on current site.

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Stop inheriting permissions on Workflow Context:Current Site URL site.

Transition to stage

Go to End of Workflow

Restore inheriting permissions on list item

This activity restores inheriting permission from Parent for specified list item.

SharePoint Designer phrase

Stage: Stage 1

Restore inheriting permissions on current item in current list in current site.

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
Current item	Item ID. If the value field is empty, current item ID will be used.	[%Variable:ItemID%], Current Item:ID
Current list	Title or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example**Stage: Stage 1**

Restore inheriting permissions on Current Item:ID item in Workflow Context:List Name list in Workflow Context:Current Site URL site. ▼

Transition to stage

Go to End of Workflow

Restore inheriting permissions on list

This activity restores inheriting permission from Parent for specified list.

SharePoint Designer phrase

Stage: Stage 1

Restore inheriting permissions on current list in current site.

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
-----------	-------------	---------

Current list	Title or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Restore inheriting permissions on Workflow Context:List Name list in Workflow Context:Current Site URL site.

Transition to stage

Go to End of Workflow

Restore inheriting permissions on site

This activity restores inheriting permission from Parent for specified site.

SharePoint Designer phrase

Stage: Stage 1

Restore inheriting permissions on current site.

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Restore inheriting permissions on Workflow Context:Current Site URL site.

Transition to stage

Go to End of Workflow

Stage: Stage 1

Check if user [the following user\(s\)](#) is member of [this](#) SharePoint group in [current site](#) . Store boolean result in the following [Variable: variable](#) .

Transition to stage

Go to [End of Workflow](#)

Parameters

Input parameters

Parameter	Description	Example
The following user(s)	User login name, e-mail. Allowed multiple users or groups separated ';'	"mycompany\john; john@gmail.com"
This group	Name or id of the SharePoint group.	Home Owners, Home Viewers, 5
Current site	The URL of the site collection to which the user account is being added. Default value is current site url.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
Variable	Override current permissions	No – a new permission will be added to existed permissions Yes – a new permission will override (remove) all old permissions

Example

Stage: Stage 1

Check if user [john@gmail.com](#) is member of [Sales](#) SharePoint group in [Workflow Context:Current Site URL](#) . Store boolean result in the following [Variable: No](#) .

Transition to stage

Go to [End of Workflow](#)

Get members of SharePoint group

This activity returns collection of SharePoint group members. Supports "Distinguished Name" or "Account Name" output format.

SharePoint Designer phrase

Stage: Stage 1

Get members of [this](#) SharePoint group in [current site](#) . Store users collection in the following [Variable: variable](#) .

Transition to stage

Go to [End of Workflow](#)

Parameters

Input parameters

Parameter	Description	Example
This group	Name or ID of the SharePoint group.	Home owners, 4, Home Viewers
Current site	The URL of the site collection to which the user account is being added. Default value is current site collection.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
Variable	Result is Dynamic value	<pre>[{ "Id": "27", "LoginName": "i:0#.f membership john@contoso.microsoft.com", "Email": "john@contoso.onmicrosoft.com" }, { "Id": "23", "LoginName": "i:0#.f membership john @contoso.microsoft.com", "Email": " john @contoso.microsoft.com" }]</pre>

Example

Stage: Stage 1

Get members of [Sales](#) SharePoint group in [Workflow Context:Current Site URL](#) . Store users collection in the following [Variable: variable1](#) .

Transition to stage

Go to [End of Workflow](#)

Grant Permission on list item

This activity grants permission on the list item. You can override or append user grant permissions.

Value of permission field by default can be one of the following values:

Full Control
 Design
 Contribute
 Read

SharePoint Designer phrase

Stage: Stage 1

Grant [the following](#) permission(s) on [current](#) item in [current](#) list on [current](#) site to [user\(s\)/group\(s\)](#) . Override current unique permissions [No](#) .

Transition to stage

Go to [End of Workflow](#)

The activity supports multi permission assignment. Use ‘,’ or ‘;’ separator to grant several permission. Example: "Approve, Read, View Only".

Parameters

Input parameters

Parameter	Description	Example
The following	Permission level string. Multi permission assignments are supported. Use ‘,’ or ‘;’ separator to grant several permission. Example:	Approve, Read, View Only.
Current item	Item ID. If the value field is empty, current item ID will be used.	[%Variable:ItemID%], Current Item:ID
Current list	Title or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
User(s)/group(s)	User login, e-mail, group name, group ID	“user@domain”, “domain\user”. It allows multiple values separated by a semicolon.
Variable	Override current permissions	No – a new permission will be added to existed permissions Yes – a new permission will override (remove) all old permissions

Example

Stage: Stage 1

Grant [View Only](#) permission(s) on [Current Item:ID](#) item in [Workflow Context:List Name](#) list on [Workflow Context:Current Site URL](#) site to [Sales](#) . Override current unique permissions [No](#) .

Transition to stage

Go to [End of Workflow](#)

Grant Permission on list

This activity grants permission on the list. You can override or append user or group grant permissions. Value of permission field by default can be one of the following values:

Full Control
Design
Contribute
Read

SharePoint Designer phrase

Stage: Stage 1

Grant the following permission(s) on current list on current site to user(s)/group(s) . Override current unique permissions No .

Transition to stage

Go to End of Workflow

The activity supports multi permission assignment. Use ‘;’ or ‘,’ separator to grant several permission. Example: "Approve, Read, View Only".

Parameters

Input parameters

Parameter	Description	Example
The following	Permission level string. Multi permission assignments are supported. Use ‘;’ or ‘,’ separator to grant several permission. Example:	Approve, Read, View Only.
Current list	Title or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
User(s)/group(s)	User login, e-mail, group name, group ID	“user@domain”, “domain\user”. It allows multiple values separated by a semicolon.
Variable	Override current permissions	No – a new permission will be added to existed permissions Yes – a new permission will override (remove) all old permissions

Example

Stage: Stage 1

Grant View Only permission(s) on Workflow Context:List Name list on Workflow Context:Current Site URL site to Sales . Override current unique permissions No .

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

Grant Permission on site

This activity grants permission on the site. You can override or append user or group grant permissions.

Value of permission field by default can be one of the following values:

Full Control
Design
Contribute
Read

SharePoint Designer phrase

Stage: Stage 1

Grant the following permission(s) on current site to user(s)/group(s) . Override current unique permissions No .

Transition to stage

Go to End of Workflow

The activity supports multi permission assignment. Use ‘,’ or ‘;’ separator to grant several permission. Example: "Approve, Read, View Only".

SharePoint Workflow Designer Phrase

Grant this level permission on site url to this members. Override current permissions: No

Parameters

Input parameters

Parameter	Description	Example
The following	Permission level string. Multi permission assignments are supported. Use ‘,’ or ‘;’ separator to grant several permission. Example:	Approve, Read, View Only.
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
User(s)/group(s)	User login, e-mail, group name, group ID	“user@domain”, “domain\user”. It allows multiple values separated by a semicolon.
Variable	Override current permissions	No – a new permission will be added to existed permissions Yes – a new permission will override (remove) all old permissions

Example

Stage: Stage 1

Grant View Only permission(s) on Workflow Context:Current Site URL site to Sales . Override current unique permissions No .

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

Remove all list item permissions

This activity removes all permission assignment from list item, breaking list permission inheritance if necessary.

SharePoint Designer phrase

Stage: Stage 1

Remove all permissions on [current](#) item in [current](#) list in [current](#) site.

Transition to stage

Go to [End of Workflow](#)

Parameters

Input parameters

Parameter	Description	Example
Current item	Item ID. If the value field is empty, current item ID will be used.	[%Variable:ItemID%], Current Item:ID
Current list	Title or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Remove all permissions on [Current Item:ID](#) item in [Workflow Context:List Name](#) list in [Workflow Context:Current Site URL](#) site.

Transition to stage

Go to [End of Workflow](#)

Remove all list permissions

This activity removes all permission assignment from list, breaking list permission inheritance if necessary.

SharePoint Designer phrase

Stage: Stage 1

Remove all permissions for [current](#) list on [current](#) site.

Transition to stage

Go to [End of Workflow](#)

Parameters

Input parameters

Parameter	Description	Example
Current list	Title or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Remove all permissions for Workflow Context:List Name list on Workflow Context:Current Site URL site.

Transition to stage

Go to End of Workflow

Remove all site permissions

This activity deletes all roles assigned to users on site.

SharePoint Designer phrase

Stage: Stage 1

Remove all permissions for current site.

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Remove all permissions for Workflow Context:Current Site URL site.

Transition to stage

Go to End of Workflow

Remove permissions from list item

This activity removes permission assignment from list item.

SharePoint Designer phrase

Stage: Stage 1

Remove the following permission(s) from current item in current list on current site for user(s)/group(s) .

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
The following	Permission level string. Multi permission assignments are supported. Use ‘,’ or ‘;’ separator to grant several permission. Example:	Approve, Read, View Only.
Current item	Item ID. If the value field is empty, current item ID will be used.	[%Variable:ItemID%], Current Item:ID
Current list	Title or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
User(s)/group(s)	User login, e-mail, group name, group ID	“user@domain”, “domain\user”. It allows multiple values separated by a semicolon.

Example

Stage: Stage 1

Remove View Only permission(s) from Current Item:ID item in Workflow Context:List Name list on Workflow Context:Current Site URL site for Sales .

Transition to stage

Go to End of Workflow

Remove permissions from list

This activity removes permission assignment from list.

SharePoint Designer phrase

Stage: Stage 1

Remove the following permission(s) on current list on current site for user(s)/group(s) .

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
The following	Permission level string. Multi permission assignments are supported. Use ',' or ';' separator to grant several permission. Example:	Approve, Read, View Only.
Current list	Title or Url of chosen list. If the value field is empty, current list will be used.	Tasks [%Workflow Context:List Name%] /Lists/ Tasks
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
User(s)/group(s)	User login, e-mail, group name, group ID	"user@domain", "domain\user". It allows multiple values separated by a semicolon.

Example

Stage: Stage 1

Remove View Only permission(s) on Workflow Context:List Name list on Workflow Context:Current Site URL site for Sales .

Transition to stage

Go to End of Workflow

Remove permissions from site

This activity removes permission assignment from site.

SharePoint Designer phrase

Stage: Stage 1

Remove the following permission(s) on current site for user(s)/group(s) .

Transition to stage

Go to End of Workflow

Parameters

Input parameters

Parameter	Description	Example
The following	Permission level string. Multi permission assignments are supported. Use ‘,’ or ‘;’ separator to grant several permission. Example:	Approve, Read, View Only.
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
User(s)/group(s)	User login, e-mail, group name, group ID	“user@domain”, “domain\user”. It allows multiple values separated by a semicolon.

Example

Stage: Stage 1

Remove View Only permission(s) on Workflow Context:Current Site URL site for Sales .

Transition to stage

Go to End of Workflow

Remove user from SharePoint group

This activity allows removing member from a SharePoint group.

SharePoint Designer phrase

Stage: Stage 1

Remove [the following user\(s\)](#) from [this group](#) SharePoint group in [current site](#)

Transition to stage

Go to [End of Workflow](#)

If the user or secure group doesn't exist, this method does nothing.

Parameters

Input parameters

Parameter	Description	Example
The following user(s)	User login name, e-mail. Allowed multiple users or groups separated ';'	"mycompany\john; john@gmail.com"
this group	Name or ID of the SharePoint group.	Home owners, 4, Home Viewers
Current site	The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Remove [john@gmail.com](#) from [Sales](#) SharePoint group in: [Workflow Context:Current Site URL](#)

Transition to stage

Go to [End of Workflow](#)

Administration Actions

Activate SharePoint feature (SharePoint 2013)

This activity activates a feature in the feature collection.

Note: You must first determine the scope of the feature. If the scope is Web-based or is a site collection scope, the url parameter is required. However, if the scope is farm-based, the url parameter is not required.

SharePoint Designer phrase

Activate [the following](#) feature on [current](#) site (site collection). Force [Yes](#) .

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Activate [the following](#) feature on [current](#) site. Force [Yes](#)

Parameters

Input parameters

Parameter	Description	Example
this feature	Feature Display name or Feature ID - GUID that identifies the feature definition to add	Ex: Virto Alerts Customizer for SharePoint or 04a03950-8f99-4ebd-9437-67be388e514c
current site	Optional. Complete site or web url. If url is empty, current url will be used. If feature's scope is farm-based, the url parameter is not required.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
Force Yes	Specifies that an activation of the feature will be forced	Yes No

Example

Stage: Stage 1

Activate [7ad5272a-2694-4349-953e-ea5ef290e97c](#) feature on [current](#) site (site collection). Force [Yes](#) .

Transition to stage

Go to [End of Workflow](#)

Create SharePoint group (SharePoint 2013)

This activity adds a new SharePoint group to current site.

Stage: Stage 1

Create SharePoint group with [the following](#) name, with [this description](#) description at [current](#) site and make [this user](#) the owner, give [the following](#) permissions, only [Group Members](#) can view, only [Group Owner](#) can edit, add [the following](#) members.

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Create SharePoint group with the following name, this description description at current site and make this user the owner, give the following permissions, only Group Members can view, only Group Owner can edit, add the following members.

Parameters

Input parameters

Parameter	Description	Example
The following group	Name of the new SharePoint group	My custom group, [%Variable:groupName%]
this description	Optional. Description of the new group.	My custom group with custom permissions
Current site	Optional. The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
this user	Optional. Single User login or Group name. The owner can change anything about the group such as adding and removing members or deleting the group. Only one user or group can be the owner. If user is empty, the user who created the Web site will be used.	"user@domain", "domain\user". It allows multiple values separated by a semicolon.
the following permission	Optional. Permission level string. Multi permission assignments are supported. Use ',' or ';' separator to grant several permission.	Approve, Read, View Only.
Group Members	Specify who has permission to see the list of group members: Group Member (default) or Everyone.	"user@domain", "domain\user". It allows multiple values separated by a semicolon.
Group Owner	Specify who has permission to edit the list of group members: Group Owner (default) or Group Members	"user@domain", "domain\user". It allows multiple values separated by a semicolon.
the following members	Optional. The members of the group. Use ',' or ';' separator to identify multiple users.	"DOMAIN\User_Alias; DOMAIN\User_Alias2"

Example

Stage: Stage 1

Create SharePoint group with SEO name, with SEO description at current site and make MC07\ezh the owner, give Approve permissions, only Everyone can view, only Group Owner can edit, add ash@virto.com; nb@virto.com members.

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

Note: You can set permission level if the site is not inherited permissions from the site collection. Otherwise you would get "This operation is not allowed on an object that inherits permissions" error.

Create SharePoint list or document library (SharePoint 2013)

This activity creates a new SharePoint list or document library using specified template.

Stage: Stage 1

Create list with the following name and the following description using Generic list template on current site. Display on quick launch No. Save created list url in Variable: new list url variable.

Transition to stage

Go to End of Workflow

SharePoint Workflow Designer Phrase

Create list with the following name and the following description using Generic list template on current site. Display on Quick Launch No. Save created list url in Variable: new list url variable.

Parameters

Input parameters

Parameter	Description	Example
The following name	Name of the new SharePoint list	The title of the new list. The maximum length is 255 characters.
The following description	Optional. Description of the new list or library.	My custom list
Generic list	Predefined list of available templates. Default value is Generic list corresponds to Custom list in SharePoint.	Generic list, Document Library, Links, Survey, etc.
Current site	Optional. The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
Display on Quick Launch	Optional. Yes if the list appears on the Quick Launch area of the homepage; otherwise, No.	Yes No
Variable: new list url	Set by this activity. The complete URL where the list should be created or empty value if create list in the current site.	Example: http://server01

Example

Stage: Stage 1

Create list with Test list WFFF name and the following description using Generic list template on current site. Display on quick launch No. Save created list url in Variable: new list url variable. ▾

Transition to stage

Go to End of Workflow

Create SharePoint site (SharePoint 2013)

This activity creates a new SharePoint site or subsite at the specified URL.

Stage: Stage 1

Create new SharePoint site with the following name, the following url and the following template in current site. Use the following description,

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

, use unique permissions No, use Top Link Bar No from parent site, display this site on Quick Launch No and on the Top Link Bar Yes of the parent site. Locale 1033

SharePoint Workflow Designer Phrase

Create new site with the following name, the following url and the following template in current site. Use the following description, use unique permissions No, use top link bar No from the parent site, display this site on Quick Launch No and on the Top Link Bar No of the parent site. Locale 1033

Parameters

Input parameters

Parameter	Description	Example
The following name	Name of the new SharePoint site	The title of the new site. The maximum length is 255 characters.
The following url	The complete URL where the site should be created or relative url to the current site.	Example: if parent site is http://server01/MyDocs , a correct url for new sub site should be http://server01/MyDocs/MyChild or MyChild if workflow is running on http://server01/MyDocs site.
The following template	Specifies the type of template to be used by the newly created site. If you do not specify a template to use, the owner can choose a template when he or she first browses to the site.	The value may be in the form: <ul style="list-style-type: none"> name#configuration. If you do not specify the configuration, (for example, STS) configuration 0 is the default (for example, STS#0). template title from Site Template Gallery (for example, "Example template") template file name from Site Template Gallery (for example, ExampleTemplate.stp).
Current site	Optional. The URL of a source SharePoint site. If the value field is empty, current site will be used.	https://contoso/SiteUrl ; https://contoso/Sites/SiteUrl ; [%Workflow Context:Current Site URL%]/subSite

The following description	Optional. Description of the new site.	Your site description
Use unique permissions	Specifies whether the site has unique permissions instead of inheriting them from the parent. Default value is No.	Yes No
Use top link bar <u>No</u> from the parent site	Specify whether this site will have its own top link bar or use the one from its parent.	Yes No
display this site on Quick Launch <u>No</u>	Specify whether links to this site appear in the Quick Launch and the top link bar of the parent site.	Yes No
display this site on the Top Link Bar <u>No</u> of the parent site	Specify whether links to this site appear in the Quick Launch and the top link bar of the parent site.	
Locale	Locale ID of newly created site.	Default value is 1033 (English)

Example

Stage: Stage 1

Create new SharePoint site with Test subsite 002 name, subsite002 url and Team Site template in current site. Use the following description, use unique permissions No,

Transition to stage

Go to End of Workflow

use unique permissions No, use Top Link Bar No from parent site, display this site on Quick Launch No and on the Top Link Bar Yes of the parent site. Locale 1033

Create SharePoint site collection (SharePoint 2013)

This activity creates a new top-level Web site in the current web application.

Stage: Stage 1

Create new SharePoint site collection with the following name, the following url and the following template. Use the following description. Primary site collection administrator login or e-mail, secondary site collection administrator login or e-mail.

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

Note: By defining managed paths, you can specify which paths in the URL namespace of a Web application are used for site collections. You can specify that one site collection or more than one site collection exists at a specified path. For example, an explicit path of hr indicates that the URL http://server/hr is a site collection, whereas a wildcard path of "sites" indicates that child URLs of http://server/sites/, such as server/sites/team, are site collections. To add a new URL Path go to the Define Managed Paths page (Central Administration > Application Management > Define Managed Paths).

SharePoint Workflow Designer Phrase

Create new SharePoint site collection with the following name, the following url and the following template. Primary site collection administrator login or e-mail, secondary site collection administrator login or e-mail.

Parameters

Input parameters

Parameter	Description	Example
The following name	Name of the new SharePoint site collection	The title of the new site collection. The maximum length is 255 characters.
The following url	The complete URL where the site should be created. To add a new URL Path go to the Define Managed Paths page (Central Administration > Application Management > Define Managed Paths).	Example: http://server01/sites/MySitex .
The following template	Specifies the type of template to be used by the newly created site. If you do not specify a template to use, the owner can choose a template when he or she first browses to the site.	The value may be in the form: <ul style="list-style-type: none"> • name#configuration. If you do not specify the configuration, (for example, STS) configuration 0 is the default (for example, STS#0). • template title from Site Template Gallery (for example, "Example template") • template file name from Site Template Gallery (for example, ExampleTemplate.stp).
The following description	Optional. Description of the new site.	
Primary administrator login or e-mail	Specify the administrator for this Web site collection.	"user@domain", "domain\user".
Secondary administrator login or e-mail	Optional. Specify the administrator for this Web site collection.	"user@domain", "domain\user".

Example

Stage: Stage 1

Create new SharePoint site collection with Site collection 2 name, <http://mc07/sites/sc2> url and Team Site template.

Transition to stage

Go to [End of Workflow](#)

Use [Site collection 2 Description](#) description. Primary site collection administrator [mc07\Administrator](#) , secondary site collection administrator [login or e-mail](#) .

Deactivate SharePoint feature (SharePoint 2013)

This activity deactivates a feature in the feature collection.

Note: You must first determine the scope of the feature. If the scope is Web-based or is a site collection scope, the url parameter is required. However, if the scope is farm-based, the url parameter is not required.

SharePoint Designer phrase

Stage: Stage 1

Deactivate [the following](#) feature on [current](#) site (site collection). Force [Yes](#) .

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Deactivate [the following](#) feature on [current](#) site. Force [Yes](#)

Parameters

Input parameters

Parameter	Description	Example
this feature	Feature Display name or Feature ID - GUID that identifies the feature definition to remove	Ex: Virto Alerts Customizer for SharePoint 04a03950-8f99-4ebd-9437-67be388e514c
current site	Optional. Complete site or web url. If url is empty, current url will be used. If feature's scope is farm-based, the url parameter is not required.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
Force Yes	Specifies that an deactivation of the feature will be forced	Yes No

Example

Stage: Stage 1

Deactivate [04a03950-8f99-4ebd-9437-67be388e514c](#) feature on [current](#) site (site collection). Force [Yes](#) .

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

Delete SharePoint group (SharePoint 2013)

This activity removes SharePoint group from the current site.

Stage: Stage 1

Delete [the following](#) SharePoint group at [current](#) site.

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Delete [the following](#) SharePoint group from [current](#) site.

Parameters

Input parameters

Parameter	Description	Example
The following group	Name of the SharePoint group	
current site	Optional. The URL of the site collection where the group is being deleted. Default value is current site collection.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Delete [SEO](#) SharePoint group at [current](#) site.

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

Delete SharePoint list or document library (SharePoint 2013)

This activity removes SharePoint list or document library from the current site.

Stage: Stage 1

Delete [the following](#) list on [current](#) site.

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Delete [the following](#) list from [current](#) site.

Parameters

Input parameters

Parameter	Description	Example
The following list	Name or Id (guid) of the SharePoint list or document library	My list 04a03950-8f99-4ebd-9437-67be388e514c
current site	Optional. The URL of the site collection where the list or document library is being deleted. Default value is current site collection.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Delete [Test list WFFF](#) list on [current](#) site.

Transition to stage

Go to [End of Workflow](#)

Delete SharePoint site (SharePoint 2013)

This activity deletes the SharePoint site by site url.

Stage: Stage 1

Delete SharePoint site at the [the following](#) url

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Delete SharePoint site at the [the following](#) url.

Parameters

Input parameters

Parameter	Description	Example
The following url	The URL of the subsite to delete. Root site in site collection can't be deleted.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Note: Use Delete SharePoint site collection activity to delete parent site.

Example

Stage: Stage 1

Delete SharePoint site at the [Workflow Context:Current Site URL](#) url

Transition to stage
(Insert go-to actions with conditions for transitioning to the stage)

Delete SharePoint site collection (SharePoint 2013)

This activity completely deletes a top-level site and any subsites of that site on this web application.

Stage: Stage 1

Delete SharePoint site collection at [the following](#) url

Transition to stage
(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Delete SharePoint site collection at the [the following](#) url.

Parameters

Input parameters

Parameter	Description	Example
The following url	The URL of the site collection to be deleted.	https://contoso/SiteUrl;

Example

Stage: Stage 1

Delete SharePoint site collection at Workflow Context:Current Site URL url

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

Get site property as string (SharePoint 2013)

This activity represents requested site property as string.

Stage: Stage 1

Get the following property of current site as string and save it to Variable: sprop variable

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Get the following property of current site as atring and save it to Variable: sprop variable.

Parameters

Input parameters

Parameter	Description	Example
The following property	Site property which you want to get	MySiteProperty
current site	Optional. Site which property you want to get. Default value is current site url.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite
Variable: sprop	Result (set by this activity). After successful workflow execution contains requested site property.	

Example

Stage: Stage 1

Set Variable: sprop to 1

then Get vti_categories property of current site as string and save it to Variable: sprop variable

then Log Variable: sprop to the workflow history list

Transition to stage

Go to End of Workflow

Start list workflow (SharePoint 2013)

This activity starts list workflow on a chosen site.

Stage: Stage 1

Start list workflow with the following name on current list on current list item on current site.

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Start list workflow with the following name on current list on current list item on current site.

Parameters

Input parameters

Parameter	Description	Example
The following name	Workflow name which you want to start on site	My custom workflow
current list	Optional. List name or id which you want to start workflow for. If empty current list will be used.	Full list url Ex: http://mysharepoint/MyDocs/Shared%20Documents Ex: http://mysharepoint/Lists/List%20with%20Approve
current list item	Optional. List item or id which you want to start workflow for. If empty current list	Full list item url Ex: http://mysharepoint/MyDocs/Shared%20Documents/MSOMS.pdf Ex: http://mysharepoint/Lists/List%20with%20Approve/1_000 Ex: http://mysharepoint/Lists/List%20with%20Approve/DispForm.aspx?ID=1 Ex: http://mysharepoint/Lists/List%20with%20Approve/EditForm.aspx?ID=1

	item will be used.	
current site	Optional. Site where you want to start workflow. If empty current site url will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Start list workflow with My workflow name on current list on current list item on current site.

Transition to stage

Go to End of Workflow

Start site workflow (SharePoint 2013)

This activity starts site workflow on a chosen site.

Stage: Stage 1

Start site workflow with the following name on current site.

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Start site workflow with the following name on current site.

Parameters

Input parameters

Parameter	Description	Example
The following name	Workflow name which you want to start on site	
current site	Optional. Site where you want to start	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

	workflow. If empty current site url will be used.	
--	---	--

Example

Stage: Stage 1

Start site workflow with My site workflow name on current site.

Transition to stage

Go to End of Workflow

Update SharePoint group properties (SharePoint 2013)

This activity updates properties of a SharePoint group

Stage: Stage 1

Update variable properties of the following group on current site

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Update variable properties of the following group on current site.

Parameters

Input parameters

Parameter	Description	Example
Group properties variable	Dictionary variable which contains group properties	[%Variable:groupProperties%]
The following group	Group name or ID which properties you want to update.	Home owners, 4, Home Viewers
current site	Optional. Site where you want to update group properties. If empty current site url will be used.	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

Example

Stage: Stage 1

Build {...} Dictionary (Output to Variable: dictionary) ▼

then Update Variable: dictionary properties of Test group group on current site

Transition to stage

Go to End of Workflow

Build a Dictionary ? X

Name	Type	Value
Name	String	Test group...

Add...
 Modify...
 Remove

OK Cancel

Update SharePoint site properties (SharePoint 2013)

This activity updates properties of a SharePoint site

Stage: Stage 1

Update variable properties on current site

Transition to stage

(Insert go-to actions with conditions for transitioning to the stage)

SharePoint Workflow Designer Phrase

Update variable properties on current site.

Parameters

Input parameters

Parameter	Description	Example
Group properties variable	Dictionary variable which contains site properties	[%Variable:siteProperties%]
current site	Optional. Site where you want to update properties. If empty	https://contoso/SiteUrl; https://contoso/Sites/SiteUrl; [%Workflow Context:Current Site URL%]/subSite

current site url will be used.

Example

Stage: Stage 1

Build {...} Dictionary (Output to Variable: dictionary)

then Update Variable: dictionary properties on current site

Transition to stage

Go to End of Workflow

Build a Dictionary ? X

Name	Type	Value
Customprop	String	WWWWW...

Add...
Modify...
Remove

OK Cancel