FTP receive

FTP receive is a default Switch app that downloads jobs from an FTP site and injects them into the flow. The syntax is similar to the syntax of a Submit hierarchy.

If your system environment requires FTP connections to pass through a proxy server, you need to set up the FTP proxy preferences to provide Switch with the configuration details of the proxy server. See the *Switch preferences: FTP proxy* in the *Switch Reference Guide*.

Keywords

If you enter one of the following keywords in the Search field at the top of the Flow elements pane, the **FTP receive** element will be shown in the list:

- Internet
- web
- FTP
- FTPS
- SFTP
- network
- communication
- transfer
- input
- download

Connections

FTP receive does not allow incoming connections.

FTP receive injects folder filter properties into its outgoing connections so that it is possible to include/exclude certain subfolders in the incoming job folders for particular connections. Also see the "skip folders" property described below.

Properties

Property	Description
Element type	The flow element type: FTP receive. This property is useful to identify renamed flow elements. It cannot be changed.
Name	The name of the flow element displayed in the canvas.

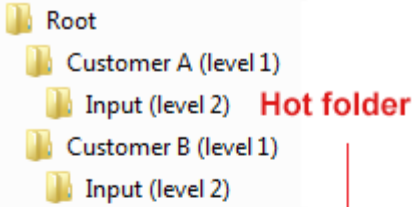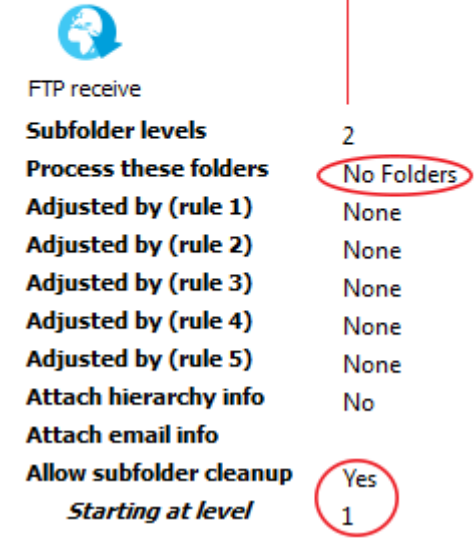| Property	Description
Description	A description of the flow element displayed in the canvas. This description is also shown in the tooltip that appears when moving your cursor over the flow element
Server type	Select **FTP** or **SFTP** or **FTPS**. • If you select **FTP**, you have to set the subordinate property *Passive mode* (see further). • If you select **SFTP**, you have to choose the preferred *Authentication method* (see further). • If you select **FTPS**, you have to set two subordinate properties (*Passive mode* and *Ignore server certificate errors*) (see further).
Passive mode	*Only available if server type = FTP or FTPS* If set to **Yes**, FTP receive uses passive mode to communicate with the FTP(S) server; otherwise it uses active mode.
Ignore server certificate errors	*Only available if server type = FTPS* If set to **Yes**, the server certificate errors will be ignored when connecting to the FTPS server. Examples of certificate errors: • Self-signed certificate • Invalid host name • Expired certificate
Use system cryptography library	*Only available if server type = FTPS or SFTP* This property specifies which cryptography library to use for securing communications with the HTTPS server. • *Yes* (default): The native system library is used. • *No*: The library bundled with Enfocus Switch is used. **Note:** In case Switch cannot connect to the server, try changing the value of this property, as this might resolve the connection problem.
Authentication method	*Only available if server type = SFTP* You have two options: • **Password**: Switch logs on to the server with the user name and password filled in below. • **Public key**: Switch logs on to the server using key pairs (public key + private key) which can be generated with the PuTTY Key Generator.

Property	Description

	The public key is the key used on the server, which must be configured to use public key configuration.
	
	The private key is the key used by Switch. You must set the following subordinate properties:
	
	• **Certificate store type**: Format in which the key was saved.
	
	    Note: If you want to use a PGP file (that is a PuTTY key file) as the key file for the SFTP server, you first need to convert it into a PEM file (=file type that is supported by the FTP tools in Switch). To perform the conversion, you can use the PuTTY Key Generator: open the PuTTY key file in the utility and then export it, using the main menu item **Conversions** > **Export OpenSSH key**.
	
	• **Certificate store path**: Full path to the certificate file, which contains the private key.
	
	• **Certificate store password**: Password used to save and encode the generated keys. If no password was used, this field should remain empty.
	
	    Note: Alternatively, you can set the authentication method when selecting the FTP directory (See the **FTP directory** property: click and **Choose FTP directory**).

User name	The login name for the FTP server. For anonymous login, use "anonymous" as user name. **Note:** If you're using the FTP proxy protocol, append an @ sign and the target FTP site address (domain or IP address) to the regular user name (<ftpserverusername>@<ftpserveraddress>).
Password	The password for the FTP server. For anonymous use, enter an e-mail address as password. This property is not available if you have chosen for Public key as authentication method for the SFTP server.
FTP server address	The URL or IP address of the FTP server from which jobs are to be retrieved.

Property	Description
	Note: If you're using the FTP proxy protocol, this should be the URL or IP address of the proxy server.
Port	The port used by the FTP server. Default values: • FTP and FTPS: 21 • SFTP: 22 **Note:** If port 990 is specified for the FTPS server, the *implicit FTPS mode* is enabled. Using any other port for the FTPS server enables *explicit FTPS mode* (the STARTTLS command will be sent to the server to set up the secure communication channel).
FTP directory	The directory on the FTP(S)/SFTP site from which jobs are to be retrieved. If the path starts with a forward slash "/", it is relative to the user's home directory. If the path starts with a double forward slash, it is relative to the FTP site's system root. This is only useful if the user has access to the complete file system on the FTP site.
Leave originals on server	If set to **Yes**, incoming jobs are left untouched on the FTP site; Switch never writes to the site so read-only access rights suffice. For more details, refer to *Leaving originals in place* in the *Switch Reference Guide*. If set to **No** (default), incoming jobs are removed from the FTP site; Switch needs full access rights to rename, create and remove files and folders on the FTP site.
Ignore updates	The **Ignore updates** option is available only if **Leave originals on server** is set to **Yes**. If set to **Yes**, a job will only be processed once, regardless of any changes to the file size or modification date. This can be used for workflows where the input job is replaced by the processing result, to avoid triggering endless loops. If set to **No**, the job will be reprocessed when its file size or modification date is different. This allows processing jobs which have the same file name as previously submitted jobs.
Minimum file size (KB)	Used to set the minimum file size (in KB) limit before Switch picks up the files or folders. To set no limits, leave it empty.
Check every (minutes)	The frequency of checking the FTP directory for new jobs.

Property	Description
Time-of-day window	If set to **Yes**, the tool checks for new arrivals only during a certain time of the day (specified in the subordinate properties).
Allow from (hh:mm) *Allow to (hh:mm)*	The time-of-day window during which to check for new arrivals; the values are structured as "hh:mm" (hours, minutes) indicating a time of day on a 24 hour clock; an empty value means midnight; two identical values mean that the tool always detects jobs.
Day-of-week window	If set to **Yes**, the tool checks for new arrivals only during certain days of the week (specified in the subordinate properties).
Allow from *Allow to*	The days of the week (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday) during which to check for new arrivals; two identical values mean that the tool only checks for new arrivals on that specific day.
Day-of-month window	If set to **Yes**, the tool checks for new arrivals only during a certain day of the month (specified in the subordinate properties).
Day	The day in the month during which to check for new arrivals, as a number in the range [1 . . 31]; the default value of one means the first or the last day of the month (depending on the following property).
Relative to	Determines whether the day of the month is relative to **Start of month** or **End of the month**.
Subfolder levels	The number of nested subfolder levels considered to be hot folders (as opposed to job folders); see also the description on subfolders earlier.
Process these folders	Defines the initial set of folders that should be processed. This set can be adjusted by defining rules in the subsequent properties.
Adjusted by (rule 1) .....(rule 5)	This property defines a rule for adjusting the set of folders to be processed, by including or excluding folders matching or not matching a folder name. Different rules can be applied and will be processed in the order as they are specified. Additional properties for this rule are: • The **Folder name** used for matching. • The **Levels**, limiting the range of subfolder levels on which the rule applies.

Property	Description

	• A **Restriction**, based on the folder name of the parent or ancestors for the folder. If folder Y contains subfolder X; Y is X's parent folder. If folder Z contains subfolder Y; Z is one of X's ancestors. The folder that contains folder Z is also one of X's ancestors, and so on.
	
	• **Nesting**, defining whether this rule operates on subfolders of the target folder, which are deeper in the hierarchy than the defined level range. The matching rule is also applied on these subfolders.
	Options:
	  • **Exclude/Include nested subfolders as well**
	  • **Don't exclude/include nested subfolders**

Attach hierarchy info	If set to **Yes**, (part of) a job's submit location is added to its hierarchy location path as it is submitted in the flow; for more details, see *Using hierarchy info* in the *Switch Reference Guide*.
Include FTP name	Only available if **Attach hierarchy info** is enabled. If set to **Yes**, the name of the flow element is included at the top of the remembered location path.
Include subfolder levels	Identifies the number of hierarchy segments in the hierarchy information.
Save top subfolders	If set to **Yes**, the top-most subfolders are remembered in the location path, otherwise the bottom-most subfolders are remembered.
Attach email info	E-mail addresses and body text specified with the editor for this property are added to each job's e-mail info as the job is injected in the flow; the information added can vary depending on the subfolder in which the job was located; see *Using hierarchy info* in the *Switch Reference Guide*.
Allow subfolder cleanup	If set to **Yes**, empty subfolders in the hot folder will be removed starting from the level defined in the next property (*Starting at level*). **Note:** This option is useful if **Process these folders** is set to **No Folders** (see higher), because in that case only *files* are taken from the FTP, while (empty) folders are left.
Starting at level	The folder level (inside of the hot folder) where the folder cleanup should start: • Level 1 deletes all empty subfolders in the hot folder

Property	Description
	• Level 2 deletes all empty subfolders of subfolders of the hot folder • etc. In the example below, empty subfolders in the hot folder (= Input (level2)) will be removed.