FTP_Client

The `FTP_Client` element is used to upload a local file to one or more FTP servers. If there are multiple FTP servers specified, the file is uploaded concurrently to the FTP servers.

Settings

Name (Label)	Type	Req'd	Single Setting Value	Substitution Allowed	Default	Validation Enforced by Call Studio	Notes
filename (Name of file to be transferred)	string	Yes	`true`	`true`	None	Must be a valid Windows filename.	This setting specifies the full pathname of the file to transfer. Alternatively, a path relative to the application directory can be used.
remote_filename (Remote Filename)	string	No	`true`	`true`	None	If specified, must be a valid Windows filename.	This is the FTP server target filename. If a remote filename is not specified, the remote filename will be the same as the input filename.
ftp_hosts (FTP Server or FTP Servers)	string	Yes	`true`	`true`	None	Must conform to the format listed in "Notes".	This is the list of FTP server host names or IP addresses to transfer the file to. Each FTP server entry may optionally specify a port number (default port:21), username and password in the format

						Validation will fail if the password is set, but the username is not.	host|port|username|password. Server entries are delimited by a space character. You can enter multiple hosts on one line or separate lines or both. If any field requires spaces, vertical bars (|) or equals symbols (=), they may be escaped with \s, \p or \e, respectively.
ftp_user (Default Username)	string	Yes	`true`	`true`	None	Validation will fail if the password field is set while this field is not set.	User name to use when transferring the file. This value may be overridden on a per-server basis. If left blank, "anonymous" will be assumed.
ftp_password (Default Password)	string	No	`true`	`true`	None	n/a	This is the password to use when transferring the file. This value can be overridden on a per-server basis.
ftp_path (FTP Path)	string	No	`true`	`true`	None	Must be a valid Windows pathname.	This is the directory on the FTP server where to transfer the file. Use the forward slash as the directory delimiter `dir/subdir`. The directory will be created if it does not already exist.
delete_file_on_success (Delete file if file transferred successfully)	boolean	No	`true`	`true`	true	n/a	This setting deletes the file after it has been successfully transferred to all FTP Server(s).

Note Default ftp_user/ftp_password will be used if ftp_hosts setting does not include a username/password in its definition.

Note It is important to ensure that the FTP Server(s) are open for write access.

Note The file to be uploaded is assumed to be a binary file.

✎

Note   If a large file is to be transferred and the network connection to the FTP servers is slow and there are multiple FTP servers, consider implementing VXML 'fetchaudio' functionality in the element before the FTP element so that the caller does not hear silence while the FTP operation is in progress.

✎

Note   The http client response timeout setting on the gateway must be set to accommodate the time it takes to complete the largest anticipated FTP file transfer. If an FTP file transfer takes longer than the configured duration in seconds for http client response timeout, the FTP transfer will complete correctly, but the **call will drop as soon as the configured timeout duration is met**.

Element Data

Element data is created *only* when the `exit state` setting is not *done*. If the exit state is *done*, no element data is created.

Name	Type	Notes
failed_servers	string	One or more space delimited host names or IP addresses of Server(s) where the input file was not successfully transferred. This data is created only if the exit state is not *done*.
failed_server_reasons	string	One or more space delimited reason codes indicating why a file was not successfully transferred: • `connection_error`: There was an error connecting to the FTP server. This may be caused by an invalid or blocked port. • `extraneous_data`: There were extra fields for a given server in the ftp_hosts setting. • `invalid_filename`: The name of the file to transfer is invalid or the file doesn't exist. • `invalid_port`: The port for an FTP server is invalid. • `missing_username`: The password for an FTP server was specified, but the username was left blank. They must either both be specified or both left blank. • `unknown`: An unknown error has occurred. • `unknown_host`: An FTP server could not be reached. Possible reasons include an incorrect hostname or network connectivity problems. A three-digit number: An FTP server sent back an unexpected reply code. Additional information will appear in the error log. • `A three-digit number`: An FTP server sent back an unexpected reply code. Additional information will appear in the error log.

		• `A Java exception:` An unexpected exception was handled. Additional information will appear in the error log.
failed_servers_count	string	Number of failed FTP transfers. This data is created only if the exit state is not *done*.

Exit States

Name	Notes
error	This exit state is used if an error occurred and the file was not transferred to any FTP Server(s).
partial_success	This exit state is used when not all FTP transfers were successful.
done	This exit state means the file was successfully transferred to all FTP Server(s).

Other

Studio Element Folder: Integration

Class Name: com.cisco.cvp.vxml.custelem.FTP

Events

Name (Label)	Notes
Event Type	You can select Java Exception as event handler type.

The output of the Customer_Lookup element can be in JSON format . To know more about parsing the JSON Data refer to "Parsing JSON Data" section in *User Guide for Cisco Unified CVP VXML Server and Cisco Unified Call Studio.*