

# URL

All URL adapter parameters, that are specified on the **URL alias**, can also be supplied dynamically via action script. Find below a list of all relevant parameters of the URL adapter and their description.

With the URL adapter, it is possible to get and put messages via file transfer protocols: **FTP**, **FTPS** and **SFTP**. These protocols often get confused and mixed up due to the similarity in function and names. Please refer to [Using the URL Adapter with the FTP Protocol and Related Protocols](#) for a distinction and more information on the usage with the URL adapter.

## Stereotype Attributes

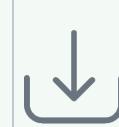
### URL Alias

Attribute	Description	Allowed Values / Examples	
<b>Name</b>	Specify a name for the alias.	any string	
<b>Standard</b>			
<b>protocol</b>	Transport protocol.	one of: ldap, ldaps, file, ftp, ft�, sftp, gopher, <b>http</b> (default), https, telnet	
<b>port</b>	Machine port number the service is binding to. This port number can be given at service level only.	a valid port number (default: <b>80</b> )	
<b>path</b>	HTTP path for the SOAP request.		
<b>host</b>	Host name. Default is "localhost" if no value is specified.	a valid hostname (default: <b>localhost</b> )	
<b>method</b>	HTTP method of the URL adapter call. Default is "POST" if no value is specified.	one of: get, <b>post</b> (default), read, write, put, list, patch, head, options, delete	
<b>Advanced</b>			
<b>user</b>	Username/password.		
<b>followRedirections</b>	The maximum number of redirects to follow.	any positive integer or 0	
<b>ignoreHttpErrors</b>	If true, HTTP error codes > 300 will not cause an exception in the model. This implies, that the response body is accessible even if HTTP errors occur. The default value is false.	true	Ignore HTTP error codes > 300.
		false	Do not ignore HTTP errors (default).
<b>options</b>	Native cURL options as listed on <a href="#">Setting cURL Options on the URL Adapter</a> .  Use one of the following syntax rules: <ul style="list-style-type: none"><li>• values separated by ' , ' in one line</li><li>• values separated by ' ' in one line</li><li>• list of tagged values</li></ul>	valid <a href="#">cURL options</a> , e.g. CURLOPT_TIMEOUT=20	
<b>requestHttpHeaderRoles</b>	In the context of HTTP based adapters ( <a href="#">URL</a> , <a href="#">REST</a> ), enable automatic header generation for the listed headers. These definitions overwrite the default behavior, and <b>X-Transaction-Id</b> , <b>X-Request-Id</b> , <b>X-Sender-Host</b> and/or <b>X-Sender-Service</b> will be substituted by this definition.  <b>requestHttpHeaderRoles</b> can hold a list of definitions in format <code>&lt;http header name&gt;:&lt;role&gt;</code> , that will automatically be generated for each adapter call on this alias. <code>&lt;role&gt;</code> can be one of the listed allowed values (one list entry per line). Refer to <a href="#">HTTP Header Support &gt; Overwriting the Standard HTTP Headers</a> for more details on header roles.	client_host	Provide the client host in a header <code>&lt;http header name&gt;</code> instead of <b>X-Sender-Host</b> .
		client_service	Provide the client service in a header <code>&lt;http header name&gt;</code> instead of <b>X-Sender-Service</b> .
		correlation_id	Provide the correlation ID in a header <code>&lt;http header name&gt;</code> instead of <b>X-Request-Id</b> .
		transaction_id	Provide the transaction ID in a header <code>&lt;http header name&gt;</code> instead of <b>X-Transaction-Id</b> .

### On this Page:

- **Stereotype Attributes**
  - URL Alias
  - URL Adapter
- **URL Adapter Operations**
  - Incoming Parameters
  - Outgoing Parameters
- **URL Utility Functions**
- **URL Adapter Parameter Types**
  - Authentication
  - Certificate
  - Entry
  - HeaderField
  - Key
  - Option
  - Proxy
  - SSL
  - URL

### UrlAdapter\_Example



Click the icon to download a simple example model that shows the usage of the URL adapter in **Sc heer PAS Designer**.

### Related Pages:

- [Using the URL Adapter with the FTP Protocol and Related Protocols](#)

		<code>passthrough</code>	Pass a present header <http header name> to the called service.
		<code>passthrough=</code> <request header name>	Pass an incoming header <request header name> to the called service under the name of <http header name>. This is equivalent to renaming a header.
<b>digestAlgorithm</b>	Generates a HTTP <b>digest</b> header using the specified algorithm. When applied, a <b>digest</b> header is generated using the specified algorithm, and sent with the request. The generated header conforms with RFC3230 and RFC5843.  <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">(i) Only one value is supported (no multi-value header).</div>	<b>None</b>	No header generated (default).
		MD5	Generate header using MD5 algorithm.
		SHA	Generate header using SHA algorithm.
		SHA-1	Generate header using SHA-1 algorithm.
		SHA-256	Generate header using SHA-256 algorithm.
		SHA-512	Generate header using SHA-512 algorithm.
<b>Proxy</b>			
<b>proxyURL</b>	URL of the proxy server.		
<b>proxyUser</b>	Proxy user.		
<b>proxyType</b>	Type of the proxy	one of: HTTP, SOCKS5	
<b>SSL</b>			
<b>sslCAInfo</b>	Name of the file containing additional certificates for the connection verification (e.g. additional root CAs).		
<b>sslCertificateFile</b>	Name of the file that contains the client certificate.		
<b>sslPrivateKeyFile</b>	Name of the file that contains the private key.		
<b>sslPrivateKeyPassword</b>	Password for the private key.		
<b>sslCertificateType</b>	Type of the certificate.	one of: <b>PEM</b> (default), DER	
<b>sslVerifyHost</b>	Whether to verify the host information from the SSL connection.	<b>On</b>	Verification on.
		<b>Off</b>	Verification off (default).
		<b>Existence</b>	Limit verification to the mere existence of the host.
<b>sslVerifyPeer</b>	Whether to verify the peer information from the SSL connection.	<b>On</b>	Verification on (default).
		<b>Off</b>	Verification off.
<b>sslPrivateKeyType</b>	Type of the private key.	one of: <b>PEM</b> (default), DER	

## URL Adapter

The Runtime uses **Transfer-encoding: chunked** for POST requests. You can override this behavior by setting

- Transfer-Encoding: <empty string>
- Content-Length: <length of the body>"

Attribute	Type	Description	Allowed Values

<b>alias</b>		Specify the URL alias the adapter should use to establish the connection.	any valid URL alias												
<b>headerParameters</b>	Array of <a href="#">HeaderField</a>	<p>Supply additional header information for the URL adapter call in form of name and value pairs (see type <a href="#">Header Field</a> below).</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <span style="color: #0070C0; font-size: 1.5em; border-radius: 50%; padding: 2px 5px; margin-right: 10px;">i</span> The xUML Runtime assigns a correlation ID to each adapter call. This ID is stored in header field <b>X-Bridge-CorrelationID</b>. Adapter calls can be identified by this ID. Also, it is logged to the transaction log.         </div> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <span style="color: #FFA500; font-size: 1.5em; border-radius: 50%; padding: 2px 5px; margin-right: 10px;">!</span> If you set this header manually, the new header will be send to the target URL. Nevertheless, the correlation ID logged to the transaction log will still be the one generated by the Runtime!         </div>													
<b>digestAlgorithm</b>		<p>Generates a HTTP <b>digest</b> header using the specified algorithm. When applied, a <b>digest</b> header is generated using the specified algorithm, and sent with the request. The generated header conforms with RFC3230 and RFC5843.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <span style="color: #0070C0; font-size: 1.5em; border-radius: 50%; padding: 2px 5px; margin-right: 10px;">i</span> Only one value is supported (no multi-value header).         </div>	<table border="1" style="width: 100px; border-collapse: collapse;"> <tr><td style="text-align: center; padding: 2px;">N o ne</td><td>No header generated (default).</td></tr> <tr><td style="text-align: center; padding: 2px;">M D5</td><td>Generate header using MD5 algorithm.</td></tr> <tr><td style="text-align: center; padding: 2px;">S HA</td><td>Generate header using SHA algorithm.</td></tr> <tr><td style="text-align: center; padding: 2px;">S H A -1</td><td>Generate header using SHA-1 algorithm.</td></tr> <tr><td style="text-align: center; padding: 2px;">S H A -2 56</td><td>Generate header using SHA-256 algorithm.</td></tr> <tr><td style="text-align: center; padding: 2px;">S H A -5 12</td><td>Generate header using SHA-512 algorithm.</td></tr> </table>	N o ne	No header generated (default).	M D5	Generate header using MD5 algorithm.	S HA	Generate header using SHA algorithm.	S H A -1	Generate header using SHA-1 algorithm.	S H A -2 56	Generate header using SHA-256 algorithm.	S H A -5 12	Generate header using SHA-512 algorithm.
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S H A -2 56	Generate header using SHA-256 algorithm.														
S H A -5 12	Generate header using SHA-512 algorithm.														

## URL Adapter Operations

In general, three adapter operations can be used: **request**, **streamFromFile** and **streamToFile**. Exceptions are **Idap** and **Idaps** where **streamToFile** is not available. Depending on the protocol used, the parameters of the operation differ slightly.

### Incoming Parameters

Attribute	Type	Direction	Restrictions		Description
			to listed protocol only	to listed method only	
<b>authentication</b>	<a href="#">Authentication</a>	in	ldap, ftp, ftps, sftp, http, https		This parameter provides an object of type <b>Authentication</b> containing the user and the password.
<b>commands</b>	Array of String	in	ftp, ftps		Use this parameter to specify ftp commands. All commands are executed <i>after</i> executing the ftp method. For a list of available ftp commands see <a href="#">RFC 959</a> .
<b>content</b>	Blob	in		post, put, write	Use this parameter to supply the content to be used by the listed method.

<b>followRedirects</b>	Integer	in	http, https		Specifies the maximum number of redirects to follow.
<b>headerParameters</b>	Array of <a href="#">HeaderField</a>	in	http, https		Use this parameter to supply additional header information for the URL adapter call in the form of name and value pairs.
<b>ignoreHTTPErrors</b>	Boolean	in	http, https		If true, HTTP error codes > 300 will not cause an exception in the model. This implies, that the response body is accessible even if HTTP errors occur. The default value is false.
<b>method</b>	String	in			This parameter provides the method of the URL adapter call.
<b>options</b>	Array of <a href="#">Option</a>	in	ldap, ftp, ftps, sftp, http, https		Use this parameter to specify cURL options for the URL adapter call.
<b>proxy</b>	<a href="#">Proxy</a>	in	ldap, ftp, ftps, sftp, http, https		Use this parameter to supply necessary proxy information.
<b>ssl</b>	<a href="#">SSL</a>	in	https, ftps		Use this parameter to supply SSL information.
<b>streamSource</b>	String	in	ftp, ftps, sftp, http, https	post, put	If you want to use file streaming with streaming method <b>toFile</b> , supply the streaming target here. Then, <b>response</b> is not used.
<b>streamTarget</b>	String	in	ftp, ftps, sftp, http, https	get, post, put, list	If you want to use file streaming with streaming method <b>toFile</b> , supply the streaming target here. Then, <b>response</b> is not used.
<b>url</b>	String	in			This parameter contains the URL that will be accessed by the adapter. The URL contains protocol, port and path.

## Outgoing Parameters

Attribute	Type	Direction	Restrictions		Description
			to listed protocol only	to listed method only	
<b>httpHeaderMap</b>	Map of <a href="#">Entry</a>	out			<p>Header information as a map. The map contains arrays of header value strings whereas the header name is the key of the map.</p> <ul style="list-style-type: none"> <li>Header names are lowercase and treated case insensitive.</li> <li>Multiple headers with the same name are treated as arrays.</li> </ul> <p>Refer to <a href="#">HTTP Header Support</a> for more information on the standard xUML HTTP headers.</p>
<b>httpStatus</b>	Integer	out	http, https		Contains the HTTP status code of the response.
<b>response</b>	Blob	out		get, post, put, list, read	Contains the response content in relation to the used method.

## URL Utility Functions

Function	Parameter	Direction	Return Value	Description	Example
<b>parseUrl()</b>	urlString of type String	in	object of type <a href="#">URL</a>	Parses an URL given in a <b>String</b> variable into a data structure. For details see <a href="#">parseUrl() Function</a> .	create aUrlObject; set aUrlObject = urlString. parseUrl();

<b>composeUrl()</b>	urlStructure of type <a href="#">URL</a>	in	String	Builds a <b>String</b> containing a URL from an object of type <b>URL</b> . For details see <a href="#">composeUrl() Function</a> .	aUrlString = composeUrl(aUrlObject);
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## URL Adapter Parameter Types

### Authentication

Name	Type	Description
<b>password</b>	String	Password needed for authentication.
<b>username</b>	String	Username needed for authentication.

### Certificate

Name	Type	CURL Option	Description	Allowed Values / Examples
<b>file</b>	String	<a href="#">CURLOPT_SSLCERT</a>	Name of the file containing the client certificate.	
<b>type</b>	String	<a href="#">CURLOPT_SSLCERT_TYPE</a>	Type of the certificate.	PEM, DER

### Entry

Name	Type	Description
<b>key</b>	String	The header name is the key of the map.
<b>value</b>	Any	Value of the header field.

### HeaderField

Name	Type	Description
<b>name</b>	String	Name of the header field.
<b>value</b>	String	Value of the header field.

### Key

Name	Type	CURL Option	Description	Allowed Values / Examples
<b>file</b>	String	<a href="#">CURLOPT_SSLKEY</a>	Name of the file containing the private key.	
<b>type</b>	String	<a href="#">CURLOPT_SSLKEYTYPE</a>	Type of the key.	PEM, DER
<b>password</b>	String	<a href="#">CURLOPT_KEYPASSWD</a>	Password for the private key.	

### Option

Name	Type	Description	Allowed Values / Examples
<b>name</b>	String	Native cURL option.	<a href="#">CURLOPT_CONNECTTIMEOUT</a>
<b>value</b>	String	Value of the cURL option.	10

## Proxy

Name	Type	CURL Option	Description	Allowed Values / Examples
url	String	CURLOPT_PROXY	URL of the proxy server.	
type	String	CURLOPT_PROXYTYPE	Type of the proxy.	HTTP, SOCKS5
authentication	Authentication	CURLOPT_PROXYUSERPWD	Proxy user.	

## SSL

Name	Type	CURL Option	Description	Allowed Values / Examples	
verifyPeer	String	CURLOPT_SSL_VERIFY_PEER	Whether to verify the peer information from the SSL connection.	On	Verification on (default).
				Off	Verification off.
verifyHost	String	CURLOPT_SSL_VERIFYHOST	Whether to verify the host information form the SSL connection.	On	Verification on (default).
				Off	Verification off.
				Existance	Limit verification to the mere existence of the host.
cainfo	String	CURLOPT_CAINFO	Name of the file containing additional certificates for the connection verification (e.g. additional root CAs).		
certificate	Certificate		Client certificate.		
key	Key		Private key of client certificate.		

## URL

Name	Type	Description	Allowed Values / Examples
scheme	String	URL scheme.	https:
user	String	User.	
password	String	Password.	
host	String	Name of the host.	acme.com
port	Integer	Port number.	8080
path	String	Path.	resources/logo.png
query	String	Query parameters.	?download=true
fragment	String	URL fragment.	#anAnchor