

# HTTPClient\_Services

Application service module that provides OpenInsight HTTP communication features.

## Syntax

```
Response = HTTPClient_Services(@Service, @Params)
```

## Returns

The meaning of the response value depends on the service.

## Parameters

| Parameter | Description  |
|-----------|--|
| @Service  | The name of the service being requested. <b>Required.</b>                                |
| @Params   | Generic parameters. Refer to a specific service to determine the actual parameters used. |

## Remarks

[HTTPClient\\_Services](#) provides very useful application services so OpenInsight applications can make HTTP requests to other web servers. The response to each request is kept in memory until the next request is made, thus allowing the developer to get various HTTP response results when it is convenient (such as the body, status code, or response header values).

## Services

| Service | Description |
|---------|-------------|
|---------|-------------|

| <b>SendHTTPRequest</b>        | <p><b>Usage:</b><br/>HTTPClient_Services('SendHTTPRequest', Method, URL, HeaderList, Body, ProxyUser, ProxyPassword, UseAsynchronous, ClientToUse, ClientCertPath, ResponseIsBinary)</p> <p><b>Comments:</b><br/>Calls the indicated HTTP web service routine. This is the primary service of this module. All other services either support this <a href="#">SendHTTPRequest</a> or are dependent upon <a href="#">SendHTTPRequest</a> completing a request. The arguments are defined as follows:</p> <table><tr><th>Argument</th><th>Description</th><th>Importance</th></tr><tr><td>Method</td><td>The HTTP method to submit to the server.</td><td>Required</td></tr><tr><td>URL</td><td>The URL receiving the HTTP request.</td><td>Required</td></tr><tr><td>HeaderList</td><td>An @FM/@VM list of request header names and values.</td><td>Optional</td></tr><tr><td>Body</td><td>The request body to be sent to the server.</td><td>Optional</td></tr><tr><td>ProxyUser</td><td>Username needed to authenticate against a proxy server</td><td>Optional</td></tr><tr><td>ProxyPassword</td><td>Password needed to authenticate against a proxy server.</td><td>Optional</td></tr><tr><td>UseAsynchronous</td><td>Flag to determine if the HTTP request should be processed asynchronously. Default is True.</td><td>Optional</td></tr><tr><td>ClientToUse</td><td>HTTP client to use for the request. Options are <i>ClientXMLHTTP</i>, <i>ServerXMLHTTP</i>, or <i>PowerShell</i>. If True\$ is passed in then <i>ClientXMLHTTP</i> will be used. If False\$ is passed in then <i>ServerXMLHTTP</i> will be used. If any other value is passed in (including an empty string) then <i>ServerXMLHTTP</i> will be used. This will allow for backwards compatibility.</td><td>Optional</td></tr><tr><td>ClientCertPath</td><td>Path to a client-side certificate. This is usually in Location\Certificate Store\Subject format.</td><td>Optional</td></tr><tr><td>ResponseIsBinary</td><td>Boolean flag to indicate if the response is expected to be binary. Default is False\$.</td><td>Optional</td></tr></table> <p><b>Returns:</b><br/>The HTTP response body from the server. The HTTP response body can also be retrieved via the <a href="#">GetResponseBody</a> service.</p> | Argument   | Description | Importance | Method | The HTTP method to submit to the server. | Required | URL | The URL receiving the HTTP request. | Required | HeaderList | An @FM/@VM list of request header names and values. | Optional | Body | The request body to be sent to the server. | Optional | ProxyUser | Username needed to authenticate against a proxy server | Optional | ProxyPassword | Password needed to authenticate against a proxy server. | Optional | UseAsynchronous | Flag to determine if the HTTP request should be processed asynchronously. Default is True. | Optional | ClientToUse | HTTP client to use for the request. Options are <i>ClientXMLHTTP</i> , <i>ServerXMLHTTP</i> , or <i>PowerShell</i> . If True\$ is passed in then <i>ClientXMLHTTP</i> will be used. If False\$ is passed in then <i>ServerXMLHTTP</i> will be used. If any other value is passed in (including an empty string) then <i>ServerXMLHTTP</i> will be used. This will allow for backwards compatibility. | Optional | ClientCertPath | Path to a client-side certificate. This is usually in Location\Certificate Store\Subject format. | Optional | ResponseIsBinary | Boolean flag to indicate if the response is expected to be binary. Default is False\$. | Optional |
|-------------------------------|--|------------|-------------|------------|--------|--|----------|-----|-------------------------------------|----------|------------|---|----------|------|--|----------|-----------|--|----------|---------------|---|----------|-----------------|--|----------|-------------|--|----------|----------------|--|----------|------------------|--|----------|
| Argument                      | Description  | Importance |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| Method                        | The HTTP method to submit to the server.   | Required   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| URL                           | The URL receiving the HTTP request.  | Required   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| HeaderList                    | An @FM/@VM list of request header names and values.  | Optional   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| Body                          | The request body to be sent to the server.   | Optional   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| ProxyUser                     | Username needed to authenticate against a proxy server   | Optional   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| ProxyPassword                 | Password needed to authenticate against a proxy server.  | Optional   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| UseAsynchronous               | Flag to determine if the HTTP request should be processed asynchronously. Default is True.   | Optional   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| ClientToUse                   | HTTP client to use for the request. Options are <i>ClientXMLHTTP</i> , <i>ServerXMLHTTP</i> , or <i>PowerShell</i> . If True\$ is passed in then <i>ClientXMLHTTP</i> will be used. If False\$ is passed in then <i>ServerXMLHTTP</i> will be used. If any other value is passed in (including an empty string) then <i>ServerXMLHTTP</i> will be used. This will allow for backwards compatibility.   | Optional   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| ClientCertPath                | Path to a client-side certificate. This is usually in Location\Certificate Store\Subject format.   | Optional   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| ResponseIsBinary              | Boolean flag to indicate if the response is expected to be binary. Default is False\$.   | Optional   |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| <b>SetRequestHeaderFields</b> | <p><b>Usage:</b><br/>HTTPClient_Services('SetRequestHeaderFields', HeaderList)</p> <p><b>Comments:</b><br/>Sets the Request Header Fields as indicated by the HeaderList argument. The HeaderList should not be formatted as a list rather than an associated multivalue array. This is easier for the developer to manage in the code that calls this service.</p> <p><b>Returns:</b><br/>N/A</p>   |            |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| <b>SetRequestHeaderField</b>  | <p><b>Usage:</b><br/>HTTPClient_Services('SetRequestHeaderField', Name, Value)</p> <p><b>Comments:</b><br/>Sets the indicated Request Header Field with the indicated value.</p> <p><b>Returns:</b><br/>N/A</p>  |            |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| <b>GetRequestHeaderFields</b> | <p><b>Usage:</b><br/>HTTPClient_Services('GetRequestHeaderFields')</p> <p><b>Comments:</b><br/>Returns all of the Request Header Field names and values. This returns an @FM/@VM list of names and values. This is called from the <a href="#">SendHTTPRequest</a> service automatically. The developer does not need to use this service.</p> <p><b>Returns:</b><br/>An @FM/@VM list of request header names and values.</p>  |            |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |
| <b>GetRequestHeaderField</b>  | <p><b>Usage:</b><br/>HTTPClient_Services('GetRequestHeaderField', Name)</p> <p><b>Comments:</b><br/>Returns the value previously set for the indicated Request Header Field.</p> <p><b>Returns:</b><br/>The value previously set for the indicated Request Header Field.</p>   |            |             |            |        |  |          |     |                                     |          |            |   |          |      |  |          |           |  |          |               |   |          |                 |  |          |             |  |          |                |  |          |                  |  |          |

|                                |  |
|--------------------------------|--|
| <b>SetResponseHeaderField</b>  | <p><b>Usage:</b><br/> <code>HTTPClient_Services('SetResponseHeaderField', Name, Value)</code></p> <p><b>Comments:</b><br/> Sets the indicated Response Header Field with the indicated value. This is called from the <a href="#">SendHTTPRequest</a> service automatically after retrieving the response headers fields from the server.</p> <p><b>Returns:</b><br/> N/A</p>  |
| <b>GetResponseHeaderFields</b> | <p><b>Usage:</b><br/> <code>HTTPClient_Services('GetResponseHeaderFields')</code></p> <p><b>Comments:</b><br/> Returns all of the Response Header Field names and values. This returns an @FM/@VM list of names and values.</p> <p><b>Returns:</b><br/> An @FM/@VM list of response header names and values.</p>   |
| <b>GetResponseHeaderField</b>  | <p><b>Usage:</b><br/> <code>HTTPClient_Services('GetResponseHeaderField', Name, Delimiter)</code></p> <p><b>Comments:</b><br/> Returns the value previously set for the indicated Response Header Field. The Name argument is case-insensitive but if the indicated Response Header Field has not been set then an error condition will be set.</p> <p><b>Returns:</b><br/> The value previously set for the indicated Response Header Field.</p>      |
| <b>GetCookie</b>               | <p><b>Usage:</b><br/> <code>HTTPClient_Services('GetCookie', Name, IgnoreAttributes)</code></p> <p><b>Comments:</b><br/> Returns the value for the indicated cookie name. If the IgnoreAttributes argument is True the cookies attributes will be removed. See this section of <a href="#">RFC6265</a> and following for examples of cookie attributes. The default value for IgnoreAttributes is False.</p> <p><b>Returns:</b><br/> See comments.</p> |
| <b>GetCookies</b>              | <p><b>Usage:</b><br/> <code>HTTPClient_Services('GetCookies', Delimiter)</code></p> <p><b>Comments:</b><br/> Returns all cookie strings from the response headers using the indicated delimiter. If the Delimiter argument is empty, all cookie strings will be delimited with @FM.</p> <p><b>Returns:</b><br/> See comments.</p>  |
| <b>SetResponseStatusCode</b>   | <p><b>Usage:</b><br/> <code>HTTPClient_Services('SetResponseStatusCode', Code)</code></p> <p><b>Comments:</b><br/> Sets the response status code generated by the most recent HTTP request. This is called from the <a href="#">SendHTTPRequest</a> service automatically after retrieving the response status from the server.</p> <p><b>Returns:</b><br/> N/A</p>  |
| <b>GetResponseStatusCode</b>   | <p><b>Usage:</b><br/> <code>HTTPClient_Services('GetResponseStatusCode')</code></p> <p><b>Comments:</b><br/> Gets the response status code generated by the most recent HTTP request.</p> <p><b>Returns:</b><br/> The response status code generated by the most recent HTTP request.</p>  |
| <b>SetResponseStatusPhrase</b> | <p><b>Usage:</b><br/> <code>HTTPClient_Services('SetResponseStatusPhrase', Phrase)</code></p> <p><b>Comments:</b><br/> Sets the response status phrase generated by the most recent HTTP request. This is called from the <a href="#">SendHTTPRequest</a> service automatically after retrieving the response status phrase from the server.</p> <p><b>Returns:</b><br/> N/A</p>   |

|                                |  |
|--------------------------------|--|
| <b>GetResponseStatusPhrase</b> | <p><b>Usage:</b><br/> <code>HTTPClient_Services('GetResponseStatusPhrase')</code></p> <p><b>Comments:</b><br/> Gets the response status phrase generated by the most recent HTTP request.</p> <p><b>Returns:</b><br/> The response status phrase generated by the most recent HTTP request.</p>  |
| <b>SetResponseBody</b>         | <p><b>Usage:</b><br/> <code>HTTPClient_Services('SetResponseBody', Body)</code></p> <p><b>Comments:</b><br/> Sets the response body generated by the most recent HTTP request. This is called from the <a href="#">SendHttpRequest</a> service automatically after retrieving the response body from the server.</p> <p><b>Returns:</b><br/> N/A</p>   |
| <b>GetResponseBody</b>         | <p><b>Usage:</b><br/> <code>HTTPClient_Services('GetResponseBody')</code></p> <p><b>Comments:</b><br/> Gets the response body generated by the most recent HTTP request. This is the same response that the <a href="#">SendHttpRequest</a> service returns.</p> <p><b>Returns:</b><br/> The response body generated by the most recent HTTP request.</p>  |
| <b>SetTimeoutDuration</b>      | <p><b>Usage:</b><br/> <code>HTTPClient_Services('SetTimeoutDuration', TimeoutDuration)</code></p> <p><b>Comments:</b><br/> Sets the timeout duration that will be used before an HTTP request will abort. This is only applicable if the request is asynchronous. If the timeout duration is empty, a default setting of 30 minutes (1800 seconds) will be set.</p> <p><b>Returns:</b><br/> N/A</p>  |
| <b>GetTimeoutDuration</b>      | <p><b>Usage:</b><br/> <code>HTTPClient_Services('GetTimeoutDuration')</code></p> <p><b>Comments:</b><br/> Returns the timeout duration that will be used before an HTTP request will abort. This is only applicable if the request is asynchronous. If the timeout duration is empty, a default setting of 30 minutes (1800 seconds) will be returned.</p> <p><b>Returns:</b><br/> The timeout duration that will be used before an HTTP request will abort.</p> |
| <b>ClearResponseSettings</b>   | <p><b>Usage:</b><br/> <code>HTTPClient_Services('ClearResponseSettings')</code></p> <p><b>Comments:</b><br/> Clears all of the global common variables used for responses. This is called from the <a href="#">SendHttpRequest</a> service automatically. The developer does not need to use this service.</p> <p><b>Returns:</b><br/> N/A</p>   |
| <b>ClearRequestSettings</b>    | <p><b>Usage:</b><br/> <code>HTTPClient_Services('ClearRequestSettings')</code></p> <p><b>Comments:</b><br/> Clears all of the global common variables used for requests. This is called from the <a href="#">SendHttpRequest</a> service automatically. The developer does not need to use this service.</p> <p><b>Returns:</b><br/> N/A</p>   |

## Params

The proper use of the generic arguments are defined in the definition of each service above.