### Using the GeoCall Bulk Positive Response Service

#### Introduction

The response service can be used to provide the center with multiple ticket responses with a single service call. The service is based on submitting a simple XML document to a HTTP endpoint using the standard POST HTTP verb. The HTTP response will indicate any general issues with the connection and the body of the response will be a similar XML document with result codes for each item.

#### HTTP

The service will be accessible through the following SSL-enabled URL:

Test URL:

https://test.geocall.ga811.com/geocall/api/app/response/bulk

Production URL:

https://geocall.ga811.com/geocall/api/app/response/bulk

The HTTP request should include an XML request document. This document should be submitted to the URL using the HTTP POST verb. Upon success, the HTTP result will contain a response document.

The following HTTP status might be returned:

|  |  |  |
| --- | --- | --- |
| **Code** | **Status** | **Description** |
| 200 | OK | The document was processed. The body of the response is the result document. |
| 400 | Bad Request | The format of the request document was incorrect. This normally would be caused by a malformed XML request document. |
| 401 | Access Denied | Authentication for the request failed. Check the authentication supplied in the request document or call the center to verify your credentials. |
| 500 | Internal Error | There was an internal error. The document should be resubmitted. |

#### Request and Response Document

The request document is an XML document with the following general format:

<locateResponses xmlns="http://schemas.progressivepartnering.com/geocall/v3/response/v1">

<auth user="response.test" password="test" />

<responses>

<response>

<ticket>200131-001002</ticket>

<code>XYZ01</code>

<facilities>Water</facilities>

<action>1A</action>

<comment>Comment for this action</comment>

<result></result>

</response>

<response>

<ticket>200131-001002</ticket>

<code>XYZ02</code>

<facilities>Sewer</facilities>

<action>1A</action>

<comment>More comments</comment>

<result></result>

</response>

<response>

<ticket>200131-001002</ticket>

<code>ABC20</code>

<facilities>Telecommunication</facilities>

<action>1A</action>

<comment>More comments</comment>

<result></result>

</response>

</responses>

</locateResponses>

Special things to note about the XML format:

* XML is case sensitive
* The default namespace for the document must be specified. This will be used for version management in case the formatting of the document needs to be adjusted in the future.

The default namespace for the XML request should be:

http://schemas.progressivepartnering.com/geocall/v3/response/v1

##### Elements

The XML request and response documents are identical for simplicity. In most programming languages, this should allow the same object to be serialized to the request and de-serialized from the response. In the request document the ‘result’ element is optional, but will be present in the response document with the result of the requested response.

The element descriptions are:

|  |  |
| --- | --- |
| **Element** | **Description** |
| locateResponses | Root element for the document. Do not forget to add the default namespace to the root element. See the examples. |
| auth | Authentication information element. Authentication information should be given to you by the center. This element should have two attributes:   |  |  | | --- | --- | | user | The user name to use for authentication. | | password | The password for the given user. |   Note: in the response document, the user and password elements are intentionally blank so the response document can be safely logged without exposing credential information. |
| responses | Container element for the response element list. |
| response | The container element for the response information. |
| ticket | The ticket number for which to respond. |
| code | The code responding. |
| facilities | The list of facilities for the response. The center will work with you to provide a facility or list of facilities for which to respond. NOTE: The facility you should include is sent with the ticket in the Service Areas Section (Text formats) or Member Section (XML or HTML formats) of the ticket.  Example: Gas  Example: Sewer |
| action | A valid response code, such as 1A, 1B, 3A, etc. |
| comment | A comment for this response. This will be recorded with the response. NOTE: This comment will not be visible to excavators or members. |
| result | In the request document, this element is optional and if exists it is ignored.  In the response document, this is the result of the requested response. The possible result values are:   |  |  | | --- | --- | | **Result** | **Description** | | NoCode | The code specified was either not given or not a valid code. | | NoOrganization | The code specified was not attached to any organization elements within the system. This is probably a configuration issue and the center should be notified. | | NoTicket | The ticket was either not specified or the ticket number specified was not a valid ticket. | | InvalidAction | The action specified was not a valid action. Check to make sure that the action submitted was a valid action for the center. | | NoResponsesFound | There were no responses found for the specified ticket, code, and facilities specified in the request. Check that all of these elements are correct or contact the center to troubleshoot. | | DatabaseFailure | There was a database error of some type. The request should be tried again. | | Success | The response was successful. | | Other text – these are validation errors (see below) | Validation error – the text in the validation error describes why the response was not accepted by the system. | |

#### Validation Errors

The result node in the returned document may contain validation errors. The text of the result describes why the response was not accepted. The following is the list of validation errors you may receive as-of 8/1/2021. Note that the [x] text below will be replaced by the actual value passed to GeoCall.

|  |
| --- |
| Comment length of [x] exceeds the 1000 character limit.  User [x] does not have permission to respond for this service area. |
| Invalid action specified |
| Response [x] is not allowed for emergency notification.  Please use 1A to 8G. |
| Response [x] is not allowed for Normal tickets.  Please use 1A to 8G. |
| Response [x] is not allowed for Design tickets. Please use 9A, 9B, 9C, or 9D |
| Response [x] not valid: Large Project, member marking per law, LP02 - Mark 1A to 8G |
| LPE Phase 1: Please respond 10C, 10D, 10G, or 10H regarding the Large Project |
| LPE Phase 2: Please respond 1A - 8G |
| LPE Phase 2: Member accepted LP or is Clear or not a provider, last Action is not LP02, LP03, or LP04 |
| This ticket expired on [x]. You can't add a response to an expired ticket. |
| Response [x] is not allowed for Large Project Meeting. Please use 10A, 10B, 10E, or 10F |
| This large project meeting ticket meeting date expired on [x]. You can't add a response after that. |
| This ticket expired on [x]. You can't add a response to an expired ticket.  It is also possible that multiple validation errors will be returned. For instance:  <result>Comment length of 1017 exceeds the 1000 character limit. This ticket expired on 3/4/2021.  You can't add a response to an expired ticket.</result> |

#### Sample Responses:

You can send a response for a single ticket using this API, for instance:

##### Single Response:

<locateResponses xmlns="http://schemas.progressivepartnering.com/geocall/v3/response/v1">

<auth user="response.test" password="test" />

<responses>

<response>

<ticket>201121-001001</ticket>

<code>TEST01</code>

<facilities>Water</facilities>

<action>1A</action>

<comment>Comment for this action</comment>

<result></result>

</response>

</responses>

</locateResponses>

##### Multiple Response:

You can also send responses for multiple service areas on the same ticket by including a response for each service area you are responding for on a ticket, such as below, sending a response for the test02 service area code, and one for the test03 service area code:

<locateResponses xmlns="http://schemas.progressivepartnering.com/geocall/v3/response/v1">

<auth user="response.test" password="test" />

<responses>

<response>

<ticket>201121-001021</ticket>

<code>TEST02</code>

<facilities>Water</facilities>

<action>1A</action>

<comment>Comment for this action</comment>

<result></result>

</response>

<response>

<ticket>201121-001021</ticket>

<code>TEST03</code>

<facilities>Sewer</facilities>

<action>8A</action>

<comment>Comment for this action</comment>

<result></result>

</response>

</responses>

</locateResponses>

You can also include responses for multiple tickets, as below:

<locateResponses xmlns="http://schemas.progressivepartnering.com/geocall/v3/response/v1">

<auth user="response.test" password="test" />

<responses>

<response>

<ticket>201121-001023</ticket>

<code>TEST02</code>

<facilities>Water</facilities>

<action>1A</action>

<comment>Comment for this action</comment>

<result></result>

</response>

<response>

<ticket>201121-0010257/ticket>

<code>TEST02</code>

<facilities>Water</facilities>

<action>3A</action>

<comment>Comment for this action</comment>

<result></result>

</response>

</responses>

</locateResponses>

You can also include responses for multiple service areas and multiple tickets. Simply include a response node for each ticket and service area you are responding for. The GeoCall reply will contain the result for each <response> in the <result> node of the reply XML document.