Automated Electronic Positive Response via TCP Connection

Automated Electronic Positive Response (EPR) via TCP Connection

Requirements

- Must be a MEMBER of DigAlert
- Must have a valid user account. User accounts are available by contacting the center PRIOR to any posting (live or test).

- Connect to respapi.digalert.org via TCP/7377 (This URL is for PRODUCTION use only. All responses submitted to this URL will show on real active tickets and deliver to excavators)
- In the dialog below the (left arrow) means it comes from the server and the (right arrow) means it is sent to the server
- Multiple 'DATA' statements can be sent in a single logon session. However, a reply must be received BEFORE the next one is sent.

TESTING Automated EPR

For members needing to test Automated EPR via TCP Connection use the following URL

- Connect to testresp.digalert.org via TCP/7377 (this URL is for TESTING purposes only. All responses submitted to this URL will NOT show on tickets or deliver to excavators)
- To verify the response was successful, first log into testresp.digalert.org via a web browser. Click https://newtint.digalert.org/newtinweb/gen_resp_inquiry_usas.nas, enter the ticket number and click Submit.
Components of the DATA command

REQUIRED commands
DATA Ticket, MemberCode, Respondent, ResponseCode

Optional commands
DATA Ticket, MemberCode, Respondent, ResponseCode, URL, Comments

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ticket</td>
<td>The complete ticket number EXCLUDING the revision (A121231234)</td>
</tr>
<tr>
<td>Member Code</td>
<td>The member code posting the response</td>
</tr>
<tr>
<td>Respondent</td>
<td>The person's name or initials of who is entering the response. A minimum of</td>
</tr>
<tr>
<td></td>
<td>three (3) characters are required. If the person only has two initials,</td>
</tr>
<tr>
<td></td>
<td>send a space between them to fulfill the 3 character requirement.</td>
</tr>
<tr>
<td>ResponseCode</td>
<td>The three digit code indicating the response of the locate request. These</td>
</tr>
<tr>
<td></td>
<td>codes can be found <a href="#">Electronic Positive Response Codes</a></td>
</tr>
<tr>
<td>URL</td>
<td>This is an optional argument used to attached a link to the member's web</td>
</tr>
<tr>
<td></td>
<td>site with additional information for this ticket. It has a maximum length</td>
</tr>
<tr>
<td></td>
<td>of 255 characters and must be properly encoded according to RFC 3986</td>
</tr>
<tr>
<td>Comments</td>
<td>This is an optional argument used to add additional comments to store with</td>
</tr>
<tr>
<td></td>
<td>the response. This has a maximum length of 255 characters</td>
</tr>
</tbody>
</table>

After the socket is connected, normally a 220 reply will be seen. However, there can also be one of the following which will cause the server to immediately disconnect.

- 421 Service not available
- 421 Error: `<MachineName> Newtin delivery system too busy`
- 421 Error: `<MachineName> Too many connections from same IP Address`

If no valid response is entered within 45 seconds of logging in, or submitting a previous valid response, the connection will be disconnected after receiving:

- 522 Session expired

Sequence of Transmission

220 Response system ready
USER MemberCode
331 User name okay, need password
PASS password

230 User logged in, proceed
OR
530 Not logged in
DATA (Ticket,MemberCode,Respondent,ResponseCode)

OR

DATA (Ticket,MemberCode,Respondent,ResponseCode,URL,Comment)

If you wish to send any optional fields, you must send all.

Example:

DATA A121231234,MBR,ME,010,,COMMENT
DATA A121231234,MBR,ME,010,URL,
DATA A121231234,MBR,ME,010,URL,COMMENT

Possible results:

OK

251 Duplicate response (same response code that was already sent)

252 Ticket has been cancelled

450 Insufficient information

451 Invalid ticket

452 Ticket has expired

453 Invalid member code

453 Cannot respond for a contract locator

453 Cannot respond for an excluded member

454 Member not on ticket

454 Member not allowed for current login

455 Invalid response code

455 Invalid response code for ticket category

456 Invalid explanation code

457 Respondent name under 3 bytes (use "F L" if no middle initial)

457 Malformed URL

457 URL is too long

QUIT

221 Thank you for your response
A sample VB.Net application that shows how to use TCP connections to communicate with EPR can be downloaded from https://code.digalert.org.

Important!

The application should not blindly resend responses that fail to be accepted. Any response that has been repeatedly rejected should be manually checked. Any response that has not been accepted for more than 7 days since it was entered should have its status cleared so that the application no longer tries to submit it.