The RPC-API service must be enabled, by default it is disabled. The RPC-API service default port number is 80. The default port number for the HTTP service is also port 80. The system will not allow both the RPC-API and the HTTP services to use port 80. If it is desired that the RPC-API and HTTP services be enabled simultaneously, set the RPC-API service to another port number. In this example the RPC-API port number will be set to 2000. The RPC-API service for the AFs uses JSON over HTTP protocol to communicate with your API application program. The Postman API Development Tool is used in the procedure.

Connect to the Advanced Features unit:

A connection to the unit may be established using two options:

   a) Directly connected to the Console Interface - COM Port using Putty/Serial connection.
   b) Connected via the IP Management Interface using Putty/SSH connection.

1. Login to the Advanced Features unit, (admin/gtadmin1).
2. Enter the following commands to show the services status:

   ```
   Switch# enable
   Switch# show services
   
   Networking services configuration:
   
   +-----------------+-------------+----------+----------+------------+
   | Service Name    | Status      | Port     | Protocol | Service ACL |
   +-----------------+-------------+----------+----------+------------+
   | http            | enable      | 80       | TCP      | -          |
   | https           | disable     | 443      | TCP      | -          |
   | rpc-api         | disable     | -        | TCP      | -          |
   | telnet          | enable      | 23       | TCP      | -          |
   | ssh             | enable      | 22       | TCP      | -          |
   | snmp            | disable     | 161      | UDP      | -          |
   
   Switch# 
   ```

3. Enter the following commands to enable the RPC-API service:

   ```
   Switch# configure terminal
   Switch(config)# service rpc-api enable port 2000
   Switch(config)# exit
   ```
4. Re-enter the following command to show the services status:

```
Switch# show services
```

Networking services configuration:

<table>
<thead>
<tr>
<th>Service Name</th>
<th>Status</th>
<th>Port</th>
<th>Protocol</th>
<th>Service ACL</th>
</tr>
</thead>
<tbody>
<tr>
<td>http</td>
<td>enable</td>
<td>80</td>
<td>TCP</td>
<td>-</td>
</tr>
<tr>
<td>https</td>
<td>disable</td>
<td>443</td>
<td>TCP</td>
<td>-</td>
</tr>
<tr>
<td>rpc-api</td>
<td>enable</td>
<td>2000</td>
<td>TCP</td>
<td>-</td>
</tr>
<tr>
<td>telnet</td>
<td>enable</td>
<td>23</td>
<td>TCP</td>
<td>-</td>
</tr>
<tr>
<td>ssh</td>
<td>enable</td>
<td>22</td>
<td>TCP</td>
<td>-</td>
</tr>
<tr>
<td>snmp</td>
<td>disable</td>
<td>161</td>
<td>UDP</td>
<td>-</td>
</tr>
</tbody>
</table>

```
Switch#
```

5. Launch the Postman API Development Tool.
6. Select Post

7. Enter the complete URL for the AF: AF IP Address:2000/api/cmd_api/

8. Select Body

9. Select raw

10. Select JSON

The RPC-API commands uses a JSON format. Special attention must be made when entering the commands. The following example will show the Advanced Features firmware version.

```json
{
    "params": {
        "format": "json",
        "version": 1,
        "cmds": ["end", "enable", "show version", "end"]
    }
}
```

11. Select the Send option.
12. The results will be displayed in the bottom panel. Use the slide bar to view the entire results.