Configuring and Accessing a DashBoard Proxy Server

A DashBoard proxy server enables users on remote DashBoard clients to connect to openGear frames through the proxy server instead of connecting to them directly.

A DashBoard proxy server is useful in the following situations:

- DashBoard users must control OGP binary devices from distant locations.
  Without using a proxy server, DashBoard sometimes experiences a considerable delay when populating the DashBoard tree and accessing devices. This is because the high number of messages exchanged introduces significant cumulative latency. Connecting to devices indirectly via a proxy server at the facility where the devices are located typically provides faster access.

- Some devices can accept only a single connection.
  The proxy server connects to the device directly. Remote DashBoard clients connect to the device indirectly via the proxy server.

- You want to expose only a single IP address between sites.
  The proxy server enables remote DashBoard clients to use a single IP address to access and control all devices shared by the proxy server. This eliminates any need for remote users to establish separate connections to individual frames.

Configure a DashBoard Proxy Server

You can set up and configure a DashBoard proxy server to share selected frames and devices. If required later, you can unshare individual frames and/or devices.

To set up and configure a DashBoard proxy server:

1. On the DashBoard proxy server computer, Install DashBoard.
   For more information, see Installing DashBoard.

2. Add all the local devices to the DashBoard basic tree view.
   For more information, see Adding openGear Frames to DashBoard.

3. For each frame or device you want to share, right-click its name in the basic tree, and then click Share Frame or Share Device.
4. In the basic tree, expand the **DashBoard Services** node and then double-click **DashBoard Proxy Server**.

The **DashBoard Proxy Server** interface appears, listing the **Shared Frames**.

5. In the **Manual Connection Port** box, type the number of an open port on your computer to allow remote DashBoard clients to fetch the shared frame information over HTTP. Ports **80** and **8080** are recommended.

   **Tip:** Make a note of the proxy server’s IP address and the manual connection port number so you can provide this information to remote users.

   Specifying a manual connection port makes it easy for remote users to add all of the frames shared by the proxy server at once, and under a single node in the DashBoard basic tree view.

6. Click the **Manual Connection Port ON** button.

   **IMPORTANT:** To enable the sharing of frames, firewalls must allow access to both the **Manual Connection Port** and the port required by each shared frame, as listed in the **Port** column of the **Shared Frames** list.

7. If remote DashBoard users may want to access individual shared frames instead of all shared frames, make a list of the shared frames and their **Port** numbers. Provide this information to the remote users.
To unshare individual frames and/or devices:

1. On the DashBoard proxy server computer, in the basic tree view, expand the DashBoard Services node and then double-click DashBoard Proxy Server.

   The DashBoard Proxy Server interface appears, listing the Shared Frames.

   ![Shared Frames screenshot]

   **Shared Frames**

<table>
<thead>
<tr>
<th>Port</th>
<th>Frame Name</th>
<th>IP</th>
<th>Primary Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>5255</td>
<td>803 Provider</td>
<td>localhost:8778</td>
<td>localhost:8778</td>
</tr>
<tr>
<td>5256</td>
<td>803 Ben’s laptop</td>
<td>10.64.104.141:5254</td>
<td>10.64.104.141:5254</td>
</tr>
<tr>
<td>5257</td>
<td>PowerPlay Server</td>
<td>10.64.53.20:5254</td>
<td>10.64.53.20:5254</td>
</tr>
</tbody>
</table>

2. For each frame you want to unshare, find it in the Shared Frames list and then click the corresponding Unshare button.

   The Confirm dialog box appears.

3. Click Yes.

   The frame disappears from the list.

4. Click the Shared Devices button.

   The Shared Devices list appears.

   ![Shared Devices screenshot]

   **Shared Devices**

<table>
<thead>
<tr>
<th>Virtual Slot</th>
<th>Real Slot</th>
<th>Frame</th>
<th>Device Name</th>
<th>Primary Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>Ross Video ACID Cameras</td>
<td>Camera Server</td>
<td>com.rossvideo.internal.camera-bc&gt;Slot 0</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Ross Video ACID Cameras</td>
<td>ACID Camera</td>
<td>com.rossvideo.internal.camera-bc&gt;Slot 1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Panasonic Cameras</td>
<td>Panasonic Camera</td>
<td>com.rossvideo.internal.camera-bc&gt;Slot 1</td>
</tr>
</tbody>
</table>

5. For each device you want to unshare, find it in the Shared Devices list and then click the corresponding Unshare button.

   The Confirm dialog box appears.

6. Click Yes.

   The device disappears from the list.

**Access Frames Shared by a DashBoard Proxy Server**

On a DashBoard client computer, you can add a connection to access all the frames shared by a DashBoard proxy server, or you can add connections to access individual frames.
When you add a connection to access all the frames, they are listed under a single node in the DashBoard basic tree. If you add a connection to an individual frame, it appears as a separate node.

To access all the frames that are shared by a DashBoard proxy server:
   The Manually Detect Device dialog box appears.

   ![Manually Detect Device](image)

   - **IP Address**: 127.0.0.1:80
     - **Attribute**: rememberConnection, equipmentType, serviceUrl, index-url, valid, discoveryType, long-name, node-name, node-image-url, node-id
     - **Value**: true, structure, service.broadcast_equipment, http://127.0.0.1:80/connector/frame-list.xml, true, SLP, DashBoard Proxy Server (127.0.0.1:80), DashBoard Proxy Server, http://127.0.0.1:80/connector/icon.png, proxy-frames:127.0.0.1:80

2. In the IP Address box, type IP address of the DashBoard Proxy Server followed by a colon and the port number specified on the DashBoard proxy server as the Manual Connection Port. For example, 127.0.0.1:80.

3. Click Detect Settings, wait until the proxy server’s information is detected, and then click Finish.
   A new node named DashBoard Proxy Server appears in the basic tree view. This node contains one node for each shared frame.

To access an individual frame that is shared by a DashBoard proxy server:
1. On the DashBoard client computer, navigate to File > New > TCP/IP DashBoard Connect or openGear Device, and then click Next.
   The TCP/IP DashBoard Connect/openGear Device dialog box appears.
2. In the **IP Address** box, type IP address of the DashBoard proxy server. For example, `86.75.30.9`.

3. In the **Display Name** box, type a name for the frame, as you want it to appear in the basic tree.

4. For **Protocol**, select **JSON**.

5. In the **Port** list, type the port number of the frame, or select it from the list. For example, `5255`.

6. Click **Finish**.

The frame node appears in the basic tree view.