Valcom Session Initiation Protocol (SIP) VIP devices are compatible with BroadSoft’s BroadWorks hosted SIP server. The Valcom device is defined as a Generic SIP Phone in the BroadWorks system. Authentication is supported if it is enabled in BroadWorks.

The following steps outline the typical configuration process using a Valcom PagePro IP Paging Server (VIP-201) as an example.

1. Login to your BroadSoft account with a User ID and Password that has administrative privileges.

2. Create a user account for the Valcom device by selecting Users under the Basic column of the Profile page.
3. Click the Add button to create a new user.

4. Enter the user information for your installation, then click the OK button when finished.

5. From the Options menu select the Resources page, then select Identity/Device Profiles in the Configuration column.
6. Click the Add button to create new device.

7. Enter a name for the Valcom device, in this case “Valcom2”.
   Select “Generic SIP Phone” from the dropdown list for Identity/Device Profile Type.
   Select “SIP 2.0” for the Protocol.
   Enter the IP address that has been assigned to the Valcom device in the Host Name/IP address field.
   Port should be the default 5060.
   Transport must be selected as “UDP”.
   All other information on this screen is optional. Click the OK button when finished.
8. Return to the Profile page and select Users in the Basic column.

9. Click the Search button to list all users, or enter a search string to filter the results. Locate the user created in step 4. In our example, this would be ValcomUser2.

10. Click the Edit link on the line with the User to edit this user.
11. Select Addresses in the Basic column.

12. On the Addresses page, select the phone number from the list box and enter the extension information. Select Identity/Device Profile option, select the profile to associate (in our example this would be Valcom2 from step 7) and enter the phone number in the Line/Port field. Add the user alias (user from step 4) if needed. Select the appropriate server if more than one is available for your installation. Click the OK button when finished.
13. If using Authentication, select Utilities from the Options menu. On the Utilities page, click the Authentication link. If the Authentication link is not listed, then the Authentication Service is not enabled for this user.

If Authentication is already enabled, skip to Step 14 to enter the authentication credentials, or skip to Step 15 if not using authentication.

i) To enable Authentication Service for this user, follow these two steps. Edit the user account by following previous steps 8, 9, and 10, then select Assign Services from Profile advanced menu.
ii) Select Authentication from Available Services list, and click the Add button to move it to the User Services list. Click OK to save the change, then return to the beginning of step 13.

14. Type in the user name and password information. For our example we used ValcomUser2; this information will be used when configuring the Valcom device in the VIP-102B tool in the next step. Click OK to save this information.
15. Open the Valcom VIP-102B IP Solutions Setup tool interface for the Valcom SIP enabled VIP device.

Note: The information contained in this guide is limited to configuration of the “SIP” tab in the VIP-102B IP Solutions Setup Tool for the Valcom VIP device that is to be registered to the SIP server. More information on Valcom VIP device configuration, such as IP address assignment, relay activation, etc, may be found in the VIP-102B Reference Manual. This document may be downloaded from our website at [http://www.valcom.com](http://www.valcom.com)

Required Fields: Phone Number, Authentication Name, Secret, SIP Server, Register, SIP Server Port, SIP Port, RTP Port, DNS server addresses (on the Network tab). Other fields are optional.

Note: If using authentication, the Authentication Service must be assigned to the user defined for this device, on the BroadWorks server. Authentication information (from step 14) will be used here.

For our example below, the Phone Number is the full 10 digit phone number setup on the BroadWorks Server, “2418880182”.

Authentication Name and Secret are the Authentication credentials set on the BroadWorks server in Step 14. The SIP Server is the name of our BroadWorks Server, “as.iop1.broadworks.net”. Because the server name is used, at least one valid DNS IP address entry must be made on the Network tab. DNS entry is not required if using the IP address of the BroadWorks server. The Register check box is checked, to instruct the VIP device to register with the BroadWorks server.

SIP Server Port is the port number on which the BroadWorks Server is listening for SIP data and SIP Port is the port number on which the Valcom VIP device is listening for SIP data. By default this is set for “5060”. RTP Port is the port number on which the Valcom VIP device is set to send/receive audio packets. The default value is “20000”.

When the Valcom VIP device configuration is complete, select the “Update Changed Devices” button, at the upper left. When the update is complete, click Reset to reboot the Valcom device.
16. To verify registration, return to the BroadWorks webpage. Select Users from the Profile page.

17. Click the Search button to list all users, or enter a search string to filter the results. Locate the user created in step 4. In our example, this would be ValcomUser2.

18. Click edit to edit this user
19. Select Utilities from the options and then Registrations from Utilities page

20. Valid registration for this user should be displayed similar to this:

   **Registrations**
   Displays all the static and dynamic registrations for a user.

   - **Endpoint Type:** Primary
   - **Line/Port:** 2418880182@as.loc1.broadworks.net
   - **Identity/Device Profile Name:** Valcom2 (Group)
   - **URI:** sip:2418880182@70.155.101.141:5060
   - **Expiration:** Tue Aug 17 13:38:14 EDT 2010