lsnodes is a web access program that displays information and sends commands on your Allstar servers and the nodes they are connected to. This information can be accessed locally or remotely with proper port forwarding on a web browser. Lsnodes is pre-installed on all hamvoip images.

The proper way to enter lsnodes is via a URL entered in your web browser. Here are some examples.

For most systems using it locally you would enter this URL:

http://<local-IP-address>/cgi-bin/lsnodes_web?node=<node number> or

http://192.168.0.216/cgi-bin/lsnodes_web?node=41760

Of course entering your local IP address and node number. The node number has to be on a server at the entered IP address.

If you switched your local HTTP address (default 80) then you would also enter the port. In this case shown as 8080.

http://<local-IP-address:port>/cgi-bin/lsnodes_web?node=<node number>

http://192.168.0.216:8080/cgi-bin/lsnodes_web?node=41760

If you are accessing lsnodes from outside your LAN you would use your public IP address or domain name and port forward to the local IP address of your server in your router.

http://<Public-IP-address or domain name>/cgi-bin/lsnodes_web?node=<node number>

or add the port if other than 80.

http://<Public-IP-address or domain name:port>/cgi-bin/lsnodes_web?node=<node number>

You should define URL's for each of your nodes and save them as favorites. They can be displayed in different tabs in your browser. I often have several open at a time so it is easy to switch between nodes.

To access the nodes information remotely you would need to port forward the HTTP port. This is usually port 80 but is often defined to another value like 8080 or one of your choice. The http port is defined in the /etc/httpd/conf/httpd.conf file. Look for ‘Listen’ When changed you will need to restart httpd or reboot your system for it to take effect.

# Change this to Listen on specific IP addresses as shown below to
# prevent Apache from glomming onto all bound IP addresses.
#
# Listen 80

The following pages show examples of a well populated Lsnodes screen -
This shows the upper right screen where all of the connected nodes are displayed. Not shown is the right scrollbar which allows you to scroll down to the next screen if the number of connected nodes exceeds on screen.

The left screen displays information about your server. Many of the items apply to using your server as a repeater controller.
Scrolling down shows the information about the connections. How long they have been connected, how many retries, IP address, and whether the connection was incoming or outgoing.

Below that is shown the nodes and their registration status on this server.

At the top of the lsnodes window, shown here to the right – is information about the node. The last update date and time for the screen and the public IP address for this node.

Just below that information are two links. One shows the graphical (balloon) map of the connected nodes. The other enters the command window.

The command window is shown on the next page -
Node/Command Input

Local Node: 27225

Remote Node: 

Enter Command Below or use Dropdown: 

Command: 

Submit

Node/Command Input

Local Node: 27225

Remote Node: 

Enter Command Below or use Dropdown: 

Connect
Connect Permanant
Disconnect
Disconnect Permanant
Monitor Link
Monitor Link Permanant
Disconnect ALL Nodes
System Status
Macro 1
Macro 2
Macro 3
Macro 4
Macro 5
Local Play ID
Local Play Time
Local Play 24H Time
Please note that this is the new lsnodes command window introduced in the hamvoip V1.5 image. Prior versions did not have the drop-down window.

The node number is carried from the display page. A different node number can be entered but it must reside on the same server you are interrogating. Enter just the node number for status.

Command is an assigned Allstar function which will be sent to the given node. Use the drop down to quickly enter common commands or select "Enter Command Below" and enter a command in the command window. Some commands require that a "Remote" node be given such as connect and disconnect. Commands are preceded by a '*' and are the same commands that would be entered on the radio via DTMF. Example - *340000 - connect to node 40000

If just the node number is entered the status page for that node is displayed with a refresh time of 1 minute. If both the node and a valid command are entered the command is executed and the status page is displayed with an update 5 seconds later. Subsequent refreshes are at 1 minute. The status page can be manually updated at any time by hitting the browser reload button.

**In hamvoip V1.5 or later drop downs can be changed or additional drop down commands can be added by editing the form script found in /srv/http/lsnodes/lsnodes_form.php as shown below.**

```html
<!-- Add additional drop down options below -->

<option value="">Enter Command Below or use Dropdown</option>
<option value="*3">Connect</option>
<option value="*73">Connect Permanant</option>
<option value="*1">Disconnect</option>
<option value="*71">Disconnect Permanant</option>
<option value="*2">Monitor Link</option>
<option value="*78">Monitor Link Permanant</option>
<option value="*76">Disconnect ALL Nodes</option>
<option value="*70">System Status</option>
<option value="*51">Macro 1</option>
<option value="*52">Macro 2</option>
<option value="*53">Macro 3</option>
<option value="*54">Macro 4</option>
<option value="*55">Macro 5</option>
<option value="*80">Local Play ID</option>
<option value="*81">Local Play Time</option>
<option value="*82">Local Play 24H Time</option>
```