Hamvoip LSNODES Howto

lsnodes is a web access program that displays information and sends commands on your Allstar servers and the nodes the 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 -

Selected system state	0
Signal on input	NO
System	ENABLED
Parrot Mode	DISABLED
Scheduler	ENABLED
Tail Time	STANDARD
Time out timer	ENABLED
Incoming connections	ENABLED
Time out timer state	RESET
Time outs since system initialization	0
Identifier state	QUEUED FOR CLEANUP
Kerchunks today	0
Kerchunks since system initialization	0
Keyups today	499
Keyups since system initialization	923
DTMF commands today	0
DTMF commands since system initialization	6
Last DTMF command executed	80
TX time today	00:54:5348
TX time since system initialization	01:58:33379
Uptime	22:27:44
Nodes currently connected to us	41427, 27048, 27054, 28325
	29299, 28232, 44190, 41820
	43855, 41751, 41839, 43628
	28201, 45226, 28796, 29971
	44006, 41139, 41195, 45176
	29916, 44036, 44211, 42440
	43410, 29980, 44178, 41750
	41814, 28258, 43859, 42058
	42701, 42593, 42291, 40961
	40879, 42064, 40561
Autopatch	ENABLED
Autopatch state	DOWN
Autopatch called number	N/A
Reverse patch/IAXRPT connected	DOWN
User linking commands	ENABLED
User functions	ENABLED

Node	Call	Description	Location
27225	WA3DSP	Philadelphia Hub	Richboro, PA 18954
27048*	W2GLD	446.500 -	Mobile Node - Location Varies
27054*	W2GLD	224.500 -	Pinckney, Michigan
28201	KB2AYS	445.125-	BLUE ANCHOR, NJ
28232	KC5CZX	444.175mhz +5	Lubbock TX
28258	WA2WWK	441.0125	Amherst/NY
28325*	W3YT	146.865(-) Repeater	123.0 Hz Treasure Island, FL
28796	KC4RPP	443.100	Harry Naples, FL
29299	KB5ELT	441.300 +	Houston Texas
29916	N3VSI	146.560 Simplex	Larry - Edgewood, MD
29971	WA3EZT	446.2 simplex	Jenkintown, PA 19046
29980	WB2JJO	146.595	Petersburg, NJ
40561	WA3DSP	ECHOLINK 147090	Richboro, PA 18954
40879	WA3DSP	223.16/76 PL 131.8	Abington, PA
40961	WA3DSP	146.565 Simplex 88.5	Cape May, NJ
41139	WA3DSP	RPi3 Mobile Node	RPi3 Mobile Node
41195	WD9EQD	BF-888S uNode	Bill - Smithville, NJ
41426	KC5CZX	Spoke Node	Lubbock Texas
41427*	KD8WOF	Youngstown Hub	Youngstown, Ohio
41750	N3AQJ	446.825- PL 110.9	Fairfield/CT
41751	W6EL	446.860-	Glendale, CA
41814	N3OOU	147.585	Philadelphia PA
41820	WA3ADI	145.59 PL 146.2	Havertown, PA
41839	KD2ARB	223.400 Simplex	Belle Mead NJ
42058	WB2JJO	223.440	Petersburg, NJ 08270
42064	WA3GM	145.58	Ambler PA
42221	KD8WOF	EchoLink-200987	Youngstown, Ohio
42291	WA3DSP	446.15 Simplex 88.5	Richboro, PA 18954
42331	KD8WOF	RF	Youngstown, Ohio
42440	N3OOU	445.975	Philadelphia PA 19145
42593	N3JHS	446.100 Simplex 88.5	Levittown,PA
42701	KH2EI	147.565	Hellertown, PA. USA
43410	WA3GM	446.250	Ambler, PA
43628	W9SBE	446.200	Lockport, IL.
43855	WA3ADI	RPi3 Mobile Node	RPi3 Mobile Node
43859	WB3DZZ		Warrington, PA
44006	W2BTF		Ruskin, FL
44036	N3YYZ	444.850	Collings Lakes, NJ
44178	WB3DZZ		Warrington PA
44190	WA9AZA	446.100 Simplex	Milwaukee, Wisconsin
44211	KD2AGT		Atlantic City Area, NJ
45176	K0AAJ	430.000 -5Mhz	Springfield Missouri
45226	KK4HAX	146.415 Simplex	St. James City, FL, USA

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.

Selected system state	0
Signal on Input	NO
System	ENABLED
Parrot Mode	DISABLED
Scheduler	ENABLED
Tail Time	STANDARD
Time out timer	ENABLED
Incoming connections	ENABLED
Time out timer state	RESET
Time outs since system initialization	0
Identifier state	QUEUED FOR CLEANUP
Kerchunks today	0
Kerchunks since system initialization	0
Keyups today	500
Keyups since system initialization	924
DTMF commands today	0
DTMF commands since system initialization	6
Last DTMF command executed	80
TX time today	00:54:53899
TX time since system initialization	01:58:34230
Uptime	22:28:48
Nodes currently connected to us	41427, 43622, 27048, 27054 28325, 29299, 28232, 44190 41820, 43855, 41751, 41839 43628, 28201, 45226, 28796 29971, 44006, 41139, 41195 45176, 29916, 44036, 44211 42440, 43410, 29980, 44178 41750, 41814, 28258, 43859 42058, 42701, 42593, 42291 40961, 40879, 42064, 40561
Autopatch	ENABLED
Autopatch state	DOWN
Autopatch called number	N/A
Reverse patch/IAXRPT connected	DOWN
User linking commands	ENABLED
User functions	ENABLED

Node	Peer	Reconnects	Direction	Connect Time	Connect State
41427	24.144.254.81	1	IN	14:04:00.967	ESTABLISHED
40561	127.0.0.1	0	OUT	14:03:59.445	ESTABLISHED
42064	71.185.58.36	1	IN	14:03:59.202	ESTABLISHED
40879	192.168.0.134	0	OUT	14:03:58.48	ESTABLISHED
40961	76.117.192.17	0	OUT	14:03:56.738	ESTABLISHED
42291	192.168.0.152	0	OUT	14:03:55.449	ESTABLISHED
42593	100.11.250.237	0	IN	14:03:55.235	ESTABLISHED
42701	24.102.251.44	0	IN	14:03:54.830	ESTABLISHED
42058	73.150.154.206	1	IN	14:03:53.819	ESTABLISHED
43859	173.62.241.67	0	IN	14:03:53.613	ESTABLISHED
28258	68.133.7.200	2	IN	14:03:53.13	ESTABLISHED
41814	23.24.37.150	0	IN	14:03:52.404	ESTABLISHED
41750	24.45.97.94	2	IN	14:03:51.443	ESTABLISHED
44178	173.62.241.67	2	IN	14:03:50.603	ESTABLISHED
29980	73.150.154.206	2	IN	14:03:49.522	ESTABLISHED
43410	71.185.58.36	2	IN	14:03:48.292	ESTABLISHED
42440	23.24.37.150	2	IN	14:03:48.137	ESTABLISHED
44211	75.146.254.186	0	IN	13:20:09.737	ESTABLISHED
44036	73.195.241.98	0	IN	13:18:13.32	ESTABLISHED
29916	68.134.66.249	0	IN	13:09:57.292	ESTABLISHED
45176	173.27.99.21	0	IN	12:49:20.157	ESTABLISHED
41195	73.198.247.191	0	IN	12:38:47.251	ESTABLISHED
41139	192.168.0.204	0	IN	12:03:02.352	ESTABLISHED
44006	173.170.252.23	0	IN	09:51:20.812	ESTABLISHED
29971	71.185.187.203	2	IN	09:23:57.15	ESTABLISHED
28796	73.156.182.28	0	IN	07:31:56.600	ESTABLISHED
45226	76.3.169.47	0	IN	05:13:43.35	ESTABLISHED
28201	73.197.158.102	0	IN	04:05:55.10	ESTABLISHED
43628	71.194.27.14	0	IN	03:29:34.637	ESTABLISHED
41839	73.194.98.161	0	IN	02:46:58.648	ESTABLISHED
41751	68.119.130.152	0	IN	02:39:55.297	ESTABLISHED
43855	73.30.176.239	0	IN	02:24:08.190	ESTABLISHED
41820	73.30.176.239	0	IN	02:20:44.200	ESTABLISHED
44190	75.9.92.212	0	IN	01:36:47.7	ESTABLISHED
28232	50.27.46.200	0	IN	00:38:30.298	ESTABLISHED
29299	69.151.241.210	0	IN	00:37:34.130	ESTABLISHED
28325	65.34.1.117	0	IN	00:33:51.351	ESTABLISHED
27054	75.135.150.209	0	IN	00:18:58.578	ESTABLISHED
27048	75.135.150.209	2	IN	00:12:26.33	ESTABLISHED
43622	82.81.207.154	0	IN	00:00:07.365	ESTABLISHED

Host	Node	State
67.215.233.178:4569	40561	Registered
67.215.233.178:4569	29015	Registered
67.215.233.178:4569	29014	Registered
67.215.233.178:4569	27225	Registered

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 ▾	

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

ber is carried f   number can I
the same ser\   node numbe

assigned Alls   ven node. Us
r common co\   ow" and ente
window. Some   de be given
. Commands   he command
radio via DTM   e 40000

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.

<!-- 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>