

## Trace Route

TraceRoute is a tool that traces the route ( the specific gateway computer at each hop) from a client machine to the remote host by reporting all router IP addresses between. It also calculates and displays the amount of time each hop takes. TraceRoute is a handy tool for both understanding where problems exist in the Internet network and getting a detailed sense of the Internet itself.

The screenshot shows the 'Tracert Dialog' window. At the top, there's a 'Tracert Host' field containing 'www.nsauditor.com', a 'Hops' field with '30', and a 'Timeout' field with '3000'. There are 'Tracert' and 'Stop' buttons. Below is a 'Tracert Result' table with columns: Hop, Min, Avg, Max, Host IP, Host Name, Country, and C. The table lists 17 hops. A context menu is open over the 4th hop, showing options: 'Save As ...', 'Copy All ...', and 'Close'. The 4th hop is highlighted in blue.

Hop	Min	Avg	Max	Host IP	Host Name	Country	C.
▶ 1	146	157	170	80.86.228.230	nas3.netsys.am	Germany	B
▶ 2	130	152	164	80.86.228.225	ng.netsys.am	Germany	B
▶ 3	145	159	169	80.86.225.1	ng.netsys.am	Germany	B
▶ 4	130	160	212	80.86.224.2	netsys.am		C
▶ 5	*	*	*	*	*		*
▶ 6	167	178	184	212.73.64.134	armentel.net		C
▶ 7	176	197	224	195.5.5.154	Border1-Core.ukrtel.net		B
▶ 8	183	219	252	195.5.53.54		Ukraine	B
▶ 9	184	202	225	213.248.69.65	bpt-b1-pos0-2.telia.net	Russian Federation	B
▶ 10	210	220	232	213.248.64.25	ffm-bb2-pos1-2-0.telia.net		C
▶ 11	215	225	237	213.248.64.66	ffm-b3-pos1-1-0.telia.net		C
▶ 12	199	223	257	213.248.77.182	global-01985-ffm-b3.telia.net	Russian Federation	B
▶ 13	376	384	390	67.17.68.149	so1-0-0-2488M.ar3.LAX1.gblx...	United States	A
▶ 14	383	388	399	64.208.205.202	Mzima-UPGRADE.ge-7-1-0.4...	United States	B
▶ 15	375	389	403	216.193.192.26	ge1-2.ar01.lax02.mzima.net	United States	C
▶ 16	373	388	399	216.193.192.66		United States	C
▶ 17	375	387	405	216.193.202.108		United States	A

To start the process enter the host address into **Tracert Host** and click on the **Tracert** button.

The following parameters can be set during the process:

**Hops** - the number of hops to trace.

**Timeout** – the maximum time that TraceRoute will wait for the response from router.

The tracing process results can be stored in the text file by right clicking and selecting **Save As** popup menu item.

To stop the tracing process click **Stop**.