Group1

The sequence of intermediate routers is different in the five trace files, because of Load Balance.

Trace1

TTL 1 to 17 all have 3 probes

router 1: 142.104.68.167,
router 2: 142.104.68.1,
router 3: 192.168.9.5,
router 4: 192.168.10.1,
router 5: 192.168.8.6,
router 6: 142.104.252.37,
router 7: 142.104.252.246,
router 8: 207.23.244.242,
router 9: 206.12.3.17,
router 10: 199.212.24.64,
router 11: 206.81.80.17,
router 12: 72.14.237.123,
router 13: 74.125.37.91,
router 14: 209.85.249.153,
router 15: 209.85.249.155,
router 16: 209.85.250.121.

Trace2

TTL 1 to 17 all have 3 probes

router 1: 142.104.68.167,
router 2: 142.104.68.1,
router 3: 192.168.9.5,
router 4: 192.168.10.1,
router 5: 192.168.8.6,
router 6: 142.104.252.37,
router 7: 142.104.252.246,
router 8: 207.23.244.242,
router 9: 206.12.3.17,
router 10: 199.212.24.64,
router 11: 206.81.80.17,
router 12: 72.14.237.123,
router 13: 74.125.37.91,
router 14: 209.85.246.219,
router 15: 209.85.249.109,
router 16: 209.85.250.57.

Trace3

TTL 1 to 17 all have 3 probes
router 1: 142.104.68.167,
router 2: 142.104.68.1,
router 3: 192.168.9.5,
router 4: 192.168.10.1,
router 5: 192.168.8.6,
router 6: 142.104.252.37,
router 7: 142.104.252.246,
router 8: 207.23.244.242,
router 9: 206.12.3.17,
router 10: 199.212.24.64,
router 11: 206.81.80.17,
router 12: 72.14.237.123,
router 13: 74.125.37.91,
router 14: 209.85.245.65,
router 15: 209.85.247.63,
router 16: 209.85.249.155.

Trace4

TTL 1 to 17 all have 3 probes
router 1: 142.104.68.167,
router 2: 142.104.68.1,
router 3: 192.168.9.5,
router 4: 192.168.10.1,
router 5: 192.168.8.6,
router 6: 142.104.252.37,
router 7: 142.104.252.246,
router 8: 207.23.244.242,
router 9: 206.12.3.17,
router 10: 199.212.24.64,
router 11: 206.81.80.17,
router 12: 72.14.237.123,
router 13: 74.125.37.91,
router 14: 209.85.245.65,
router 15: 209.85.246.219,
router 16: 209.85.250.123.

Trace5

TTL 1 to 17 all have 3 probes
router 1: 142.104.68.167,

router 2: 142.104.68.1,
router 3: 192.168.9.5,
router 4: 192.168.10.1,
router 5: 192.168.8.6,
router 6: 142.104.252.37,
router 7: 142.104.252.246,
router 8: 207.23.244.242,
router 9: 206.12.3.17,
router 10: 199.212.24.64,
router 11: 206.81.80.17,
router 12: 72.14.237.123,
router 13: 209.85.247.61,
router 14: 209.85.249.153,
router 15: 209.85.250.59.

Group2

The sequence of intermediate routers is the same in the five trace files.
TTL 1 to 9 has 3 probes.
router 1: 192.168.0.1,
router 2: 24.108.0.1,
router 3: 64.59.161.197,
router 4: 66.163.72.26,
router 5: 66.163.68.18,
router 6: 72.14.221.102,
router 7: 108.170.245.113,
router 8: 209.85.249.249.

TTL	Average RTT in trace 1	Average RTT in trace 2	Average RTT in trace 3	Average RTT in trace 4	Average RTT in trace 5
1	2.08	2.96	8.08	1.76	1.82
2	12.69	16.05	11.33	13.31	12.84
3	16.56	16.32	26.82	23.35	21.6
4	25.12	21.43	16.02	16.08	18.56
5	21.47	26.25	18.49	28.68	17.62
6	25.04	22.11	21.46	26.19	19.87
7	18.49	78.92	17.65	17.53	24.98
8	29.31	131	22.64	19.49	29.13

The hop at TTL 8 may incur the maximum delay. Because it has the biggest average rtt value.