Group1

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.

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

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.