

Throughput
(Mpps)

Array Hash map LRU hash map

18
12
6
0

baseline

100

5K

10K

50K

100K

Number of flows

The chart displays the throughput of three data structures: Array (blue with a grid pattern), Hash map (purple with diagonal lines), and LRU hash map (orange with horizontal lines). The x-axis represents the number of flows (100, 5K, 10K, 50K, 100K), and the y-axis represents throughput in Mpps (0 to 18). A red dash-dot line at 15 Mpps indicates the baseline. The Array structure maintains a throughput of approximately 14 Mpps across all flow counts. The Hash map and LRU hash map structures show a decrease in throughput as the number of flows increases, starting at approximately 9 Mpps for 100 flows and dropping to around 6 Mpps for 100K flows.

Number of flows	Array (Mpps)	Hash map (Mpps)	LRU hash map (Mpps)
100	~14	~9	~9
5K	~14	~8.5	~8.5
10K	~14	~8	~8
50K	~13.5	~6.5	~7
100K	~12.5	~6	~6.5