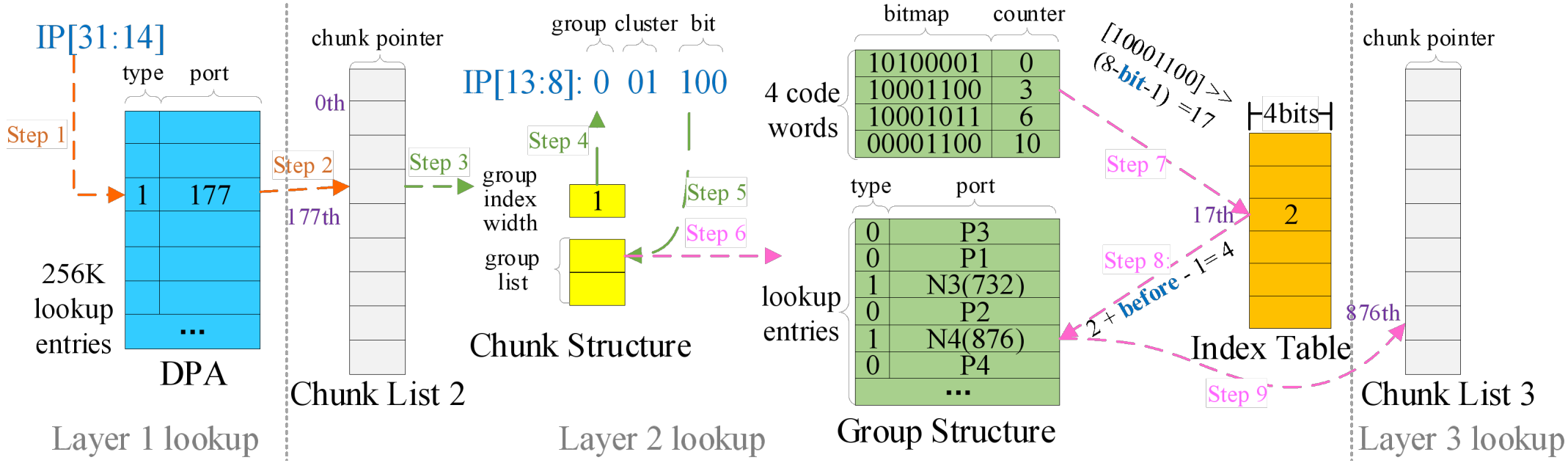
OBMA for LPM

OBMA_B

与IWQoS版本相近：

Storage：Overlay bitmap, not use sparse chunk

Update：Adaptive grouping, 24-level optimization（50% update meets）

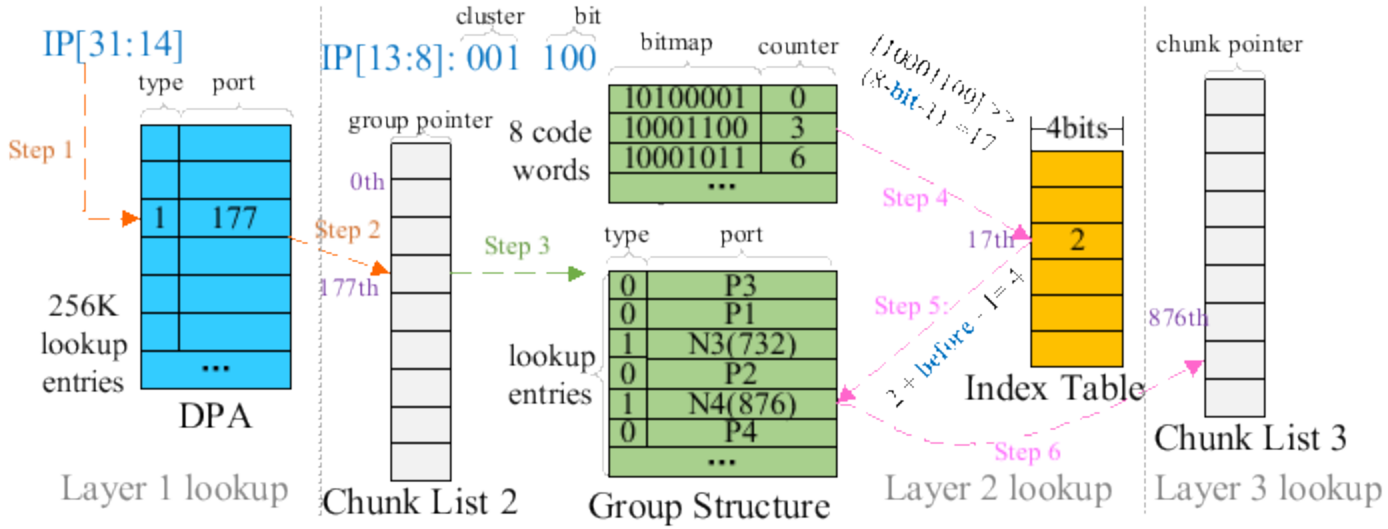


OBMA_L

Compared with OBMA_B

Use one group to reduce the number of memory visits

Fixed grouping [0-3-3] in layer 2, and [0-5-3] in layer three



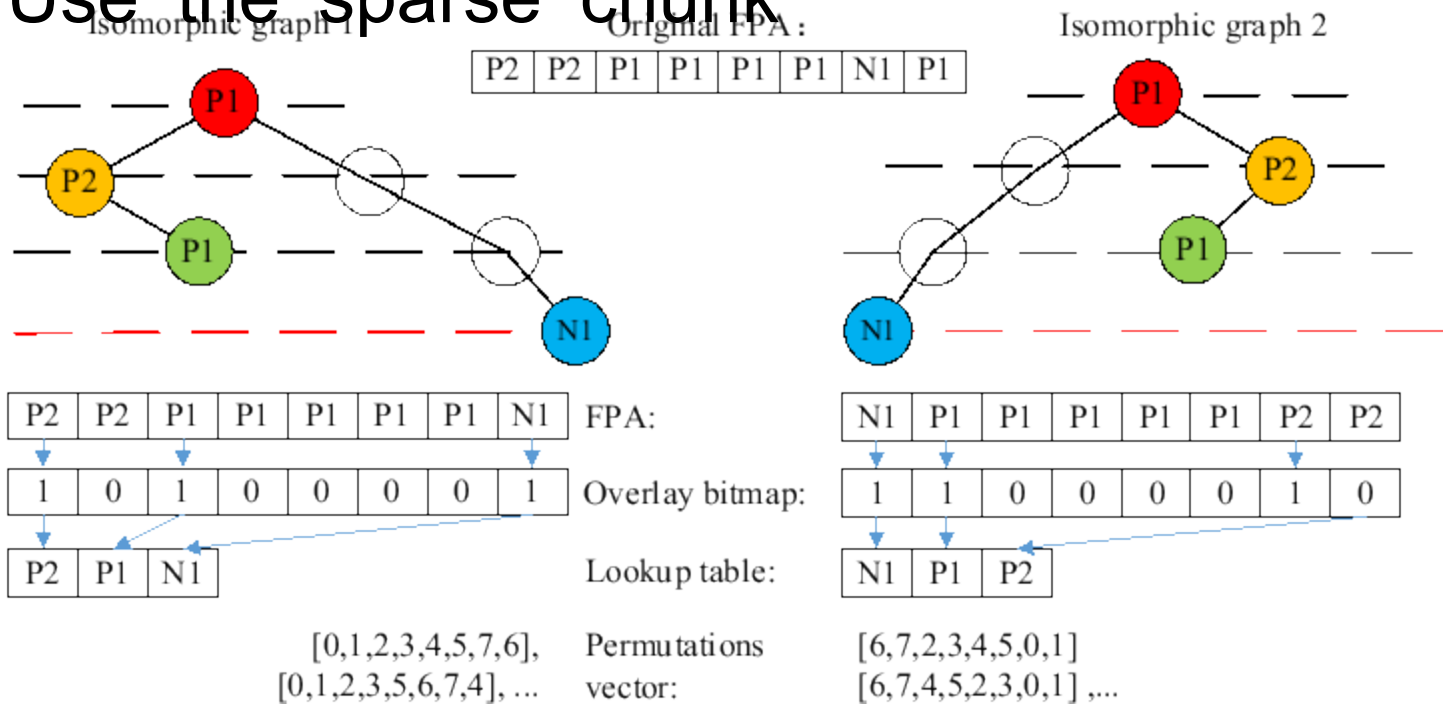
OBMA_S

压缩率(%)	理论下界	M=2	M=3	M=4	M=5	M=6
n=8	12.5	50. 0	48. 97	51. 66	54. 79	57. 82
n=16	6.25	29.37	27.76	29.08	30.80	32.56

Compared with OBMA_B

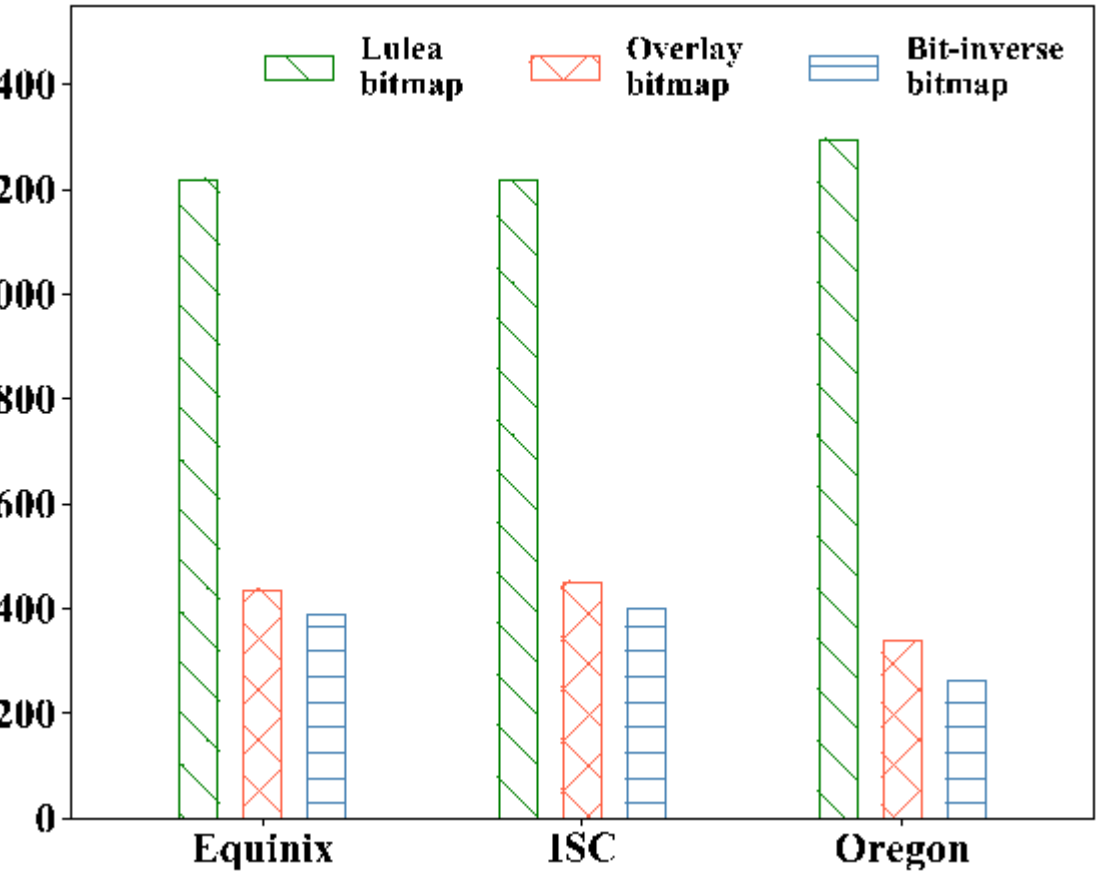
Use Bit Inversion Sequence to compress the overlay bitmap further

Use the sparse chunk

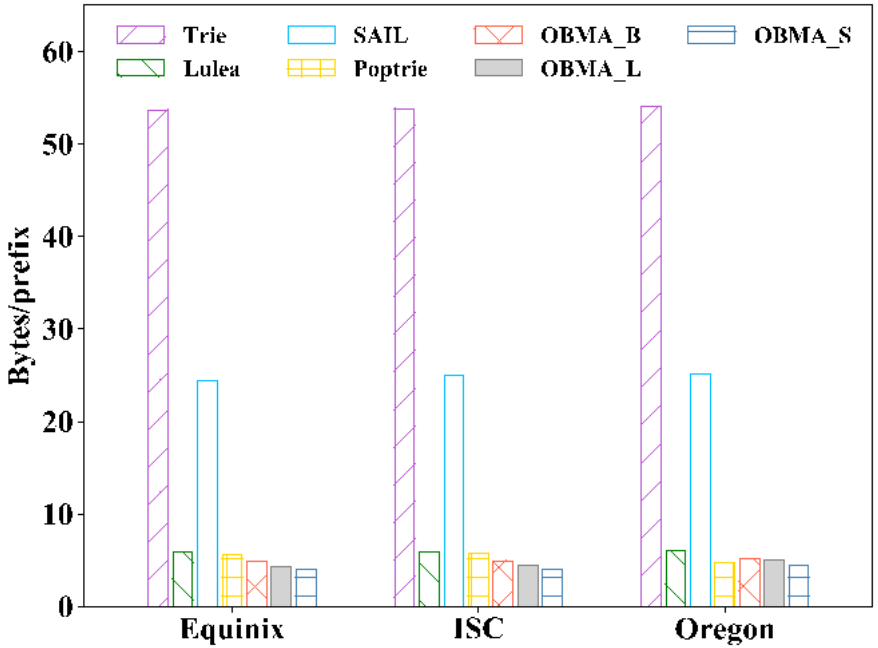


BIS=001

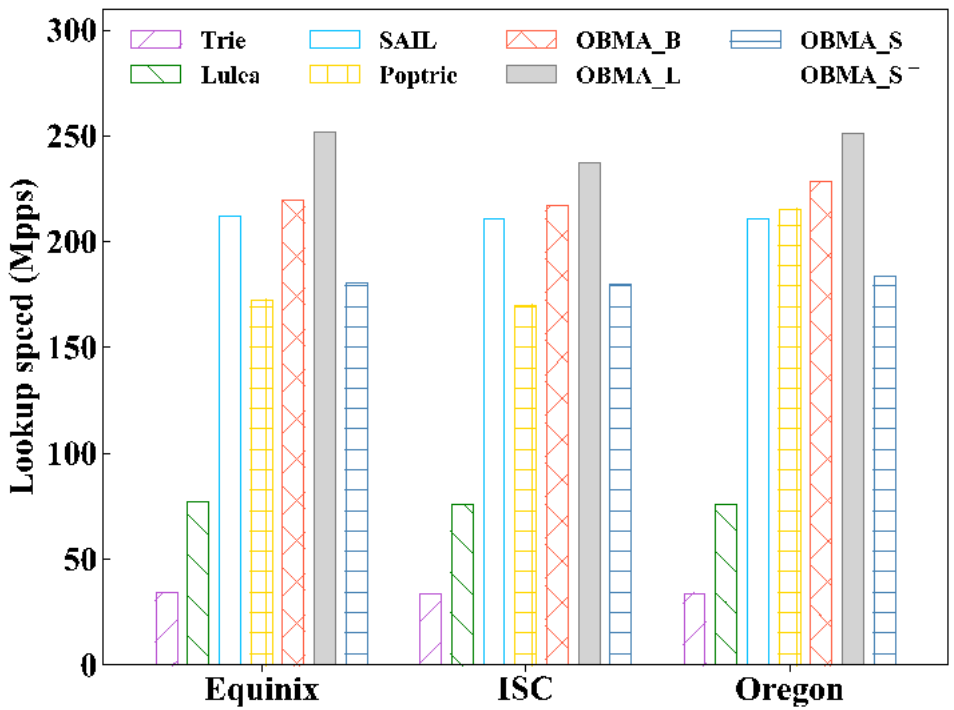
Evaluation

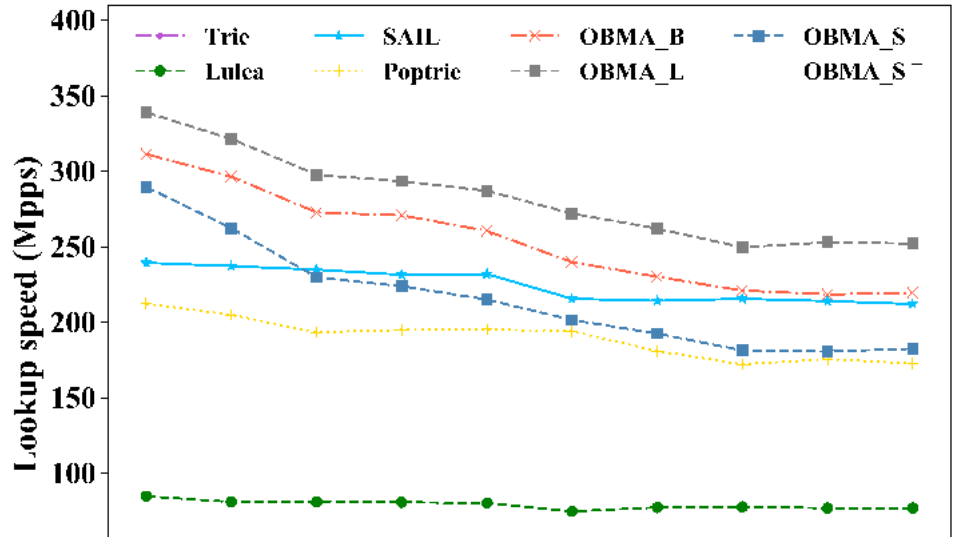


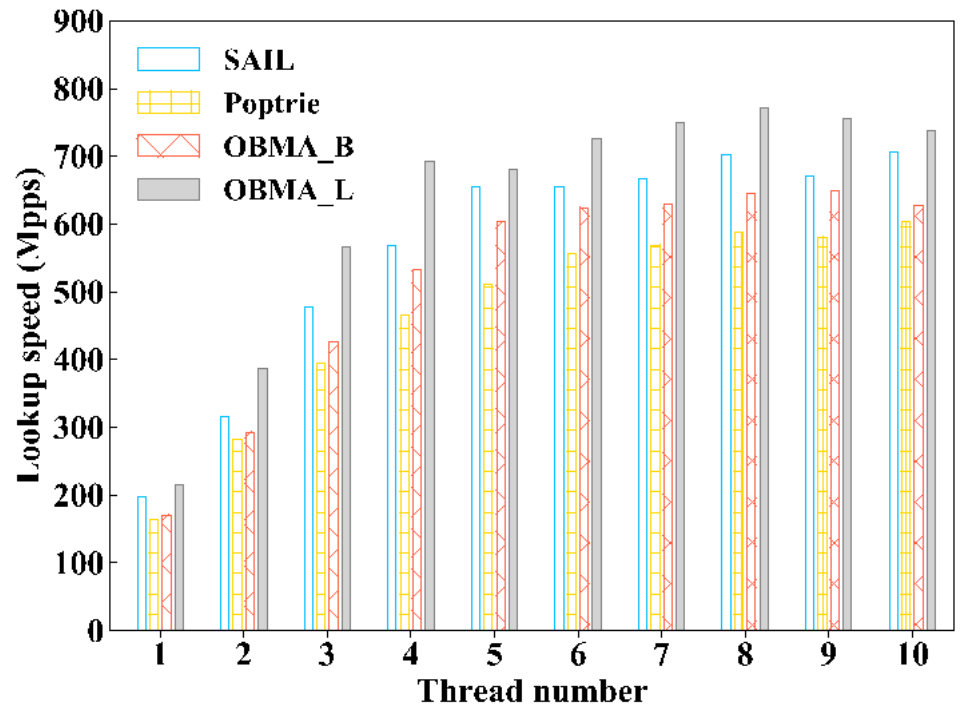
Inversion bitmaps on Equinix, ISC and Oregon



Storage efficiency of Trie, Lulea, SAIL, Poptrie, OBMA_B and OBMA_S on the tables







ms over different

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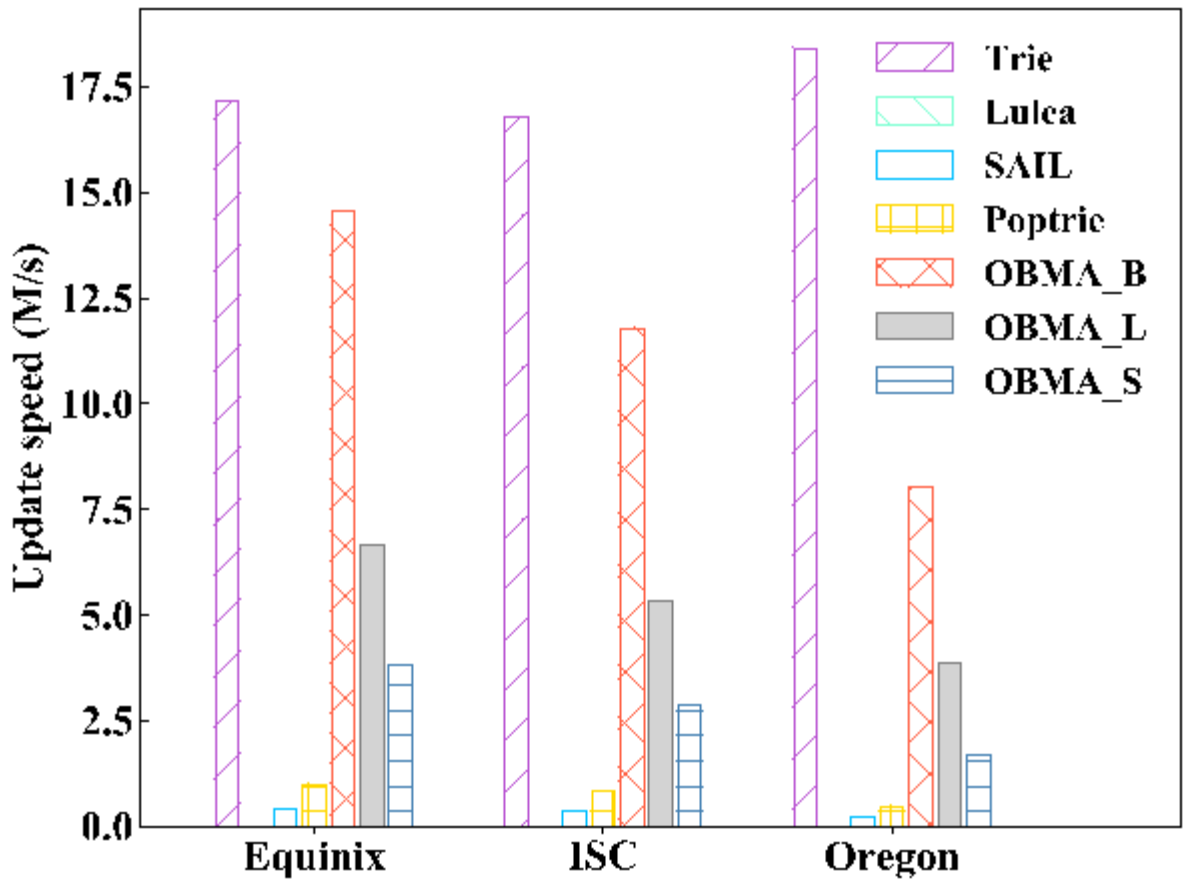
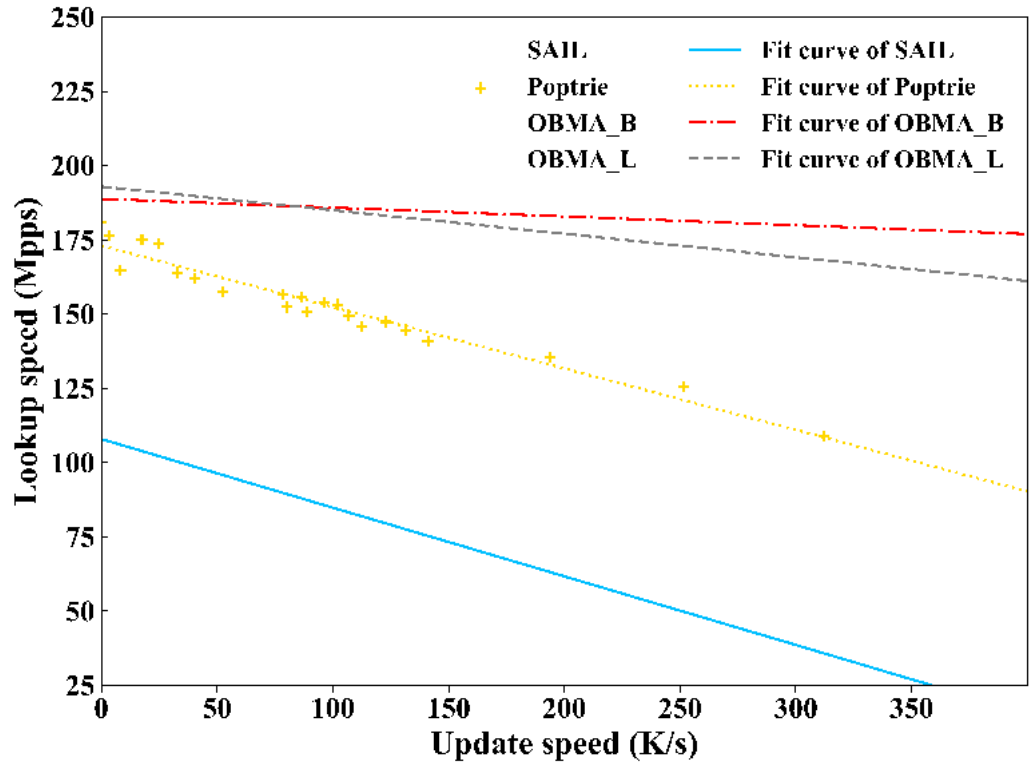
Lookup speed of the algorithms on Equinix, ISC

ie, OBMA_B and OBMA_



Update speed of Trie, Lulea, SAIL, Poptrie and OBMA_B on Equinix, ISC and Oregon



Joint performance of lookup and update with single-threading on Equinix