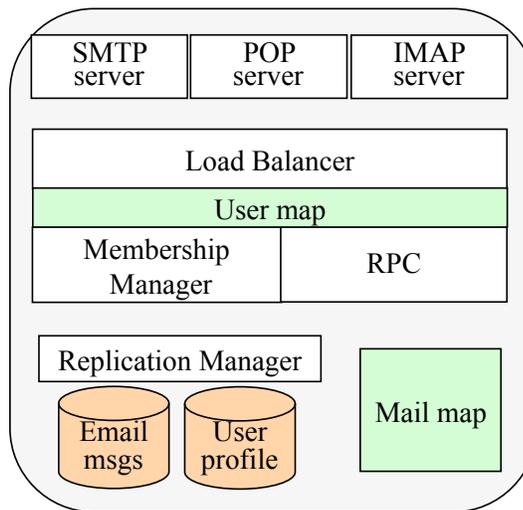
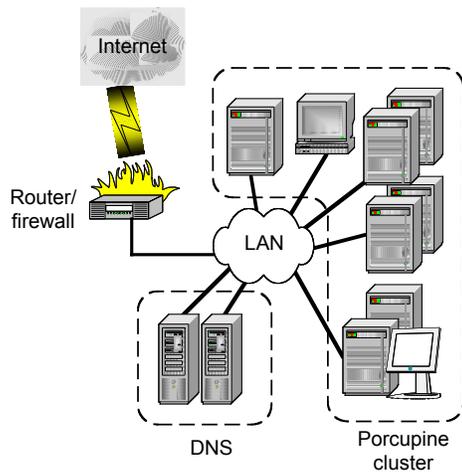


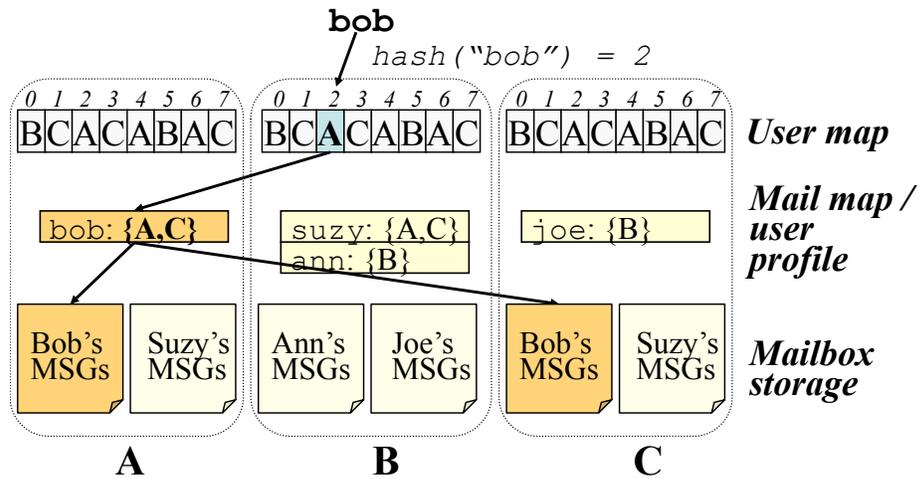
Porcupine



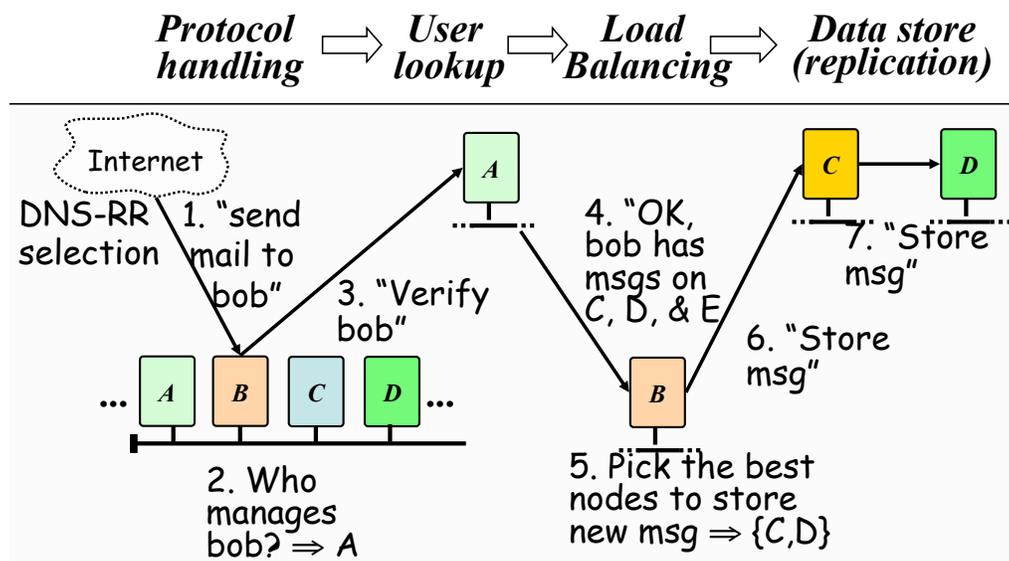
Porcupine Architecture



Porcupine Data Structures

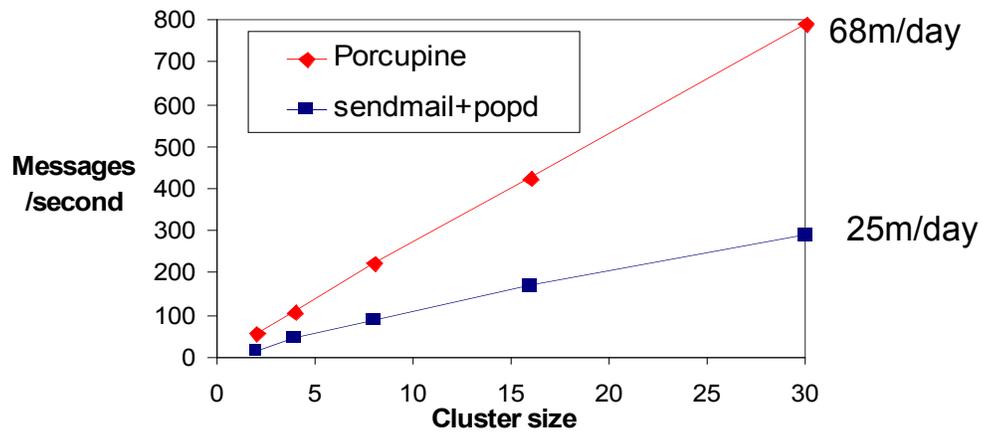


Sending Mail in Porcupine

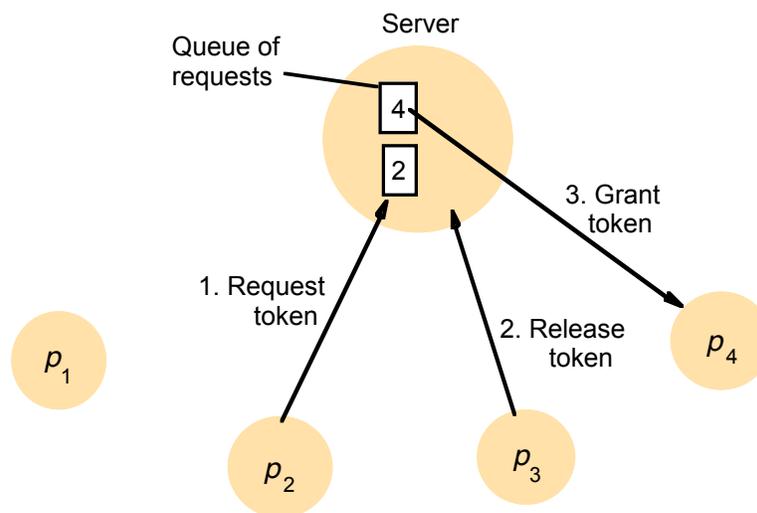


Porcupine Performance

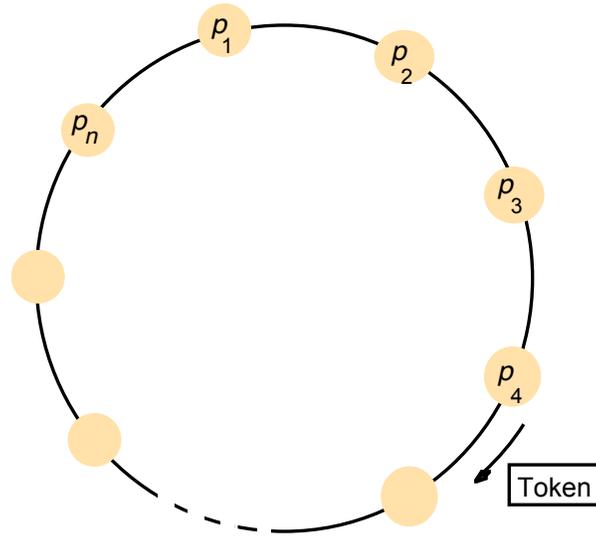
POP performance, no email replication



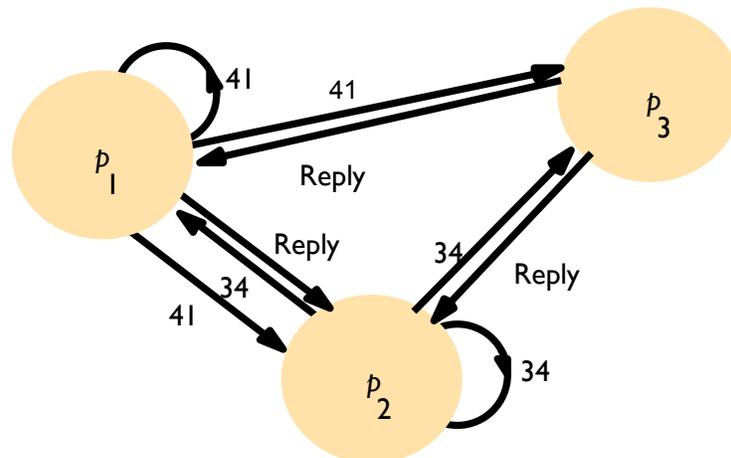
Centralized Mutual Exclusion



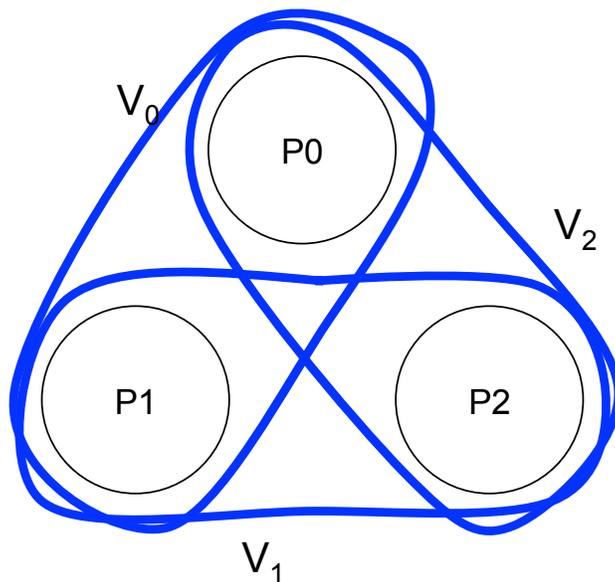
Token Ring Approach



Multicast Approach



Voting Approach



Voting Example

$$V_0 = \{0, 1, 2\}$$

$$V_1 = \{1, 3, 5\}$$

$$V_2 = \{2, 4, 5\}$$

$$V_3 = \{0, 3, 4\}$$

$$V_4 = \{1, 4, 6\}$$

$$V_5 = \{0, 5, 6\}$$

$$V_6 = \{2, 3, 6\}$$

Consensus

