

Unit 03

Wednesday, April 26, 2023 11:48 PM

- Location Management,
- Location Based Services,
- Automatically Locating Mobile Users,
- Locating and Organizing Services,
- Issues and Future Directions,
- Mobile IP,
- Comparison of TCP and Wireless.

Mobile IP → designed by IETF (Internet Engineering Task Force)

→ Mobile Internet Protocol {standard comm. protocol}
↳ allow device users to move from one N/W to other without changing their IP
IP change → {device needs to be reconfigured?}

Design Goals

- Take issues with Transparency
- Size & frequency of routing protocols → as minimum as possible
- Simple Implementation of Mobile Node software

Requirements

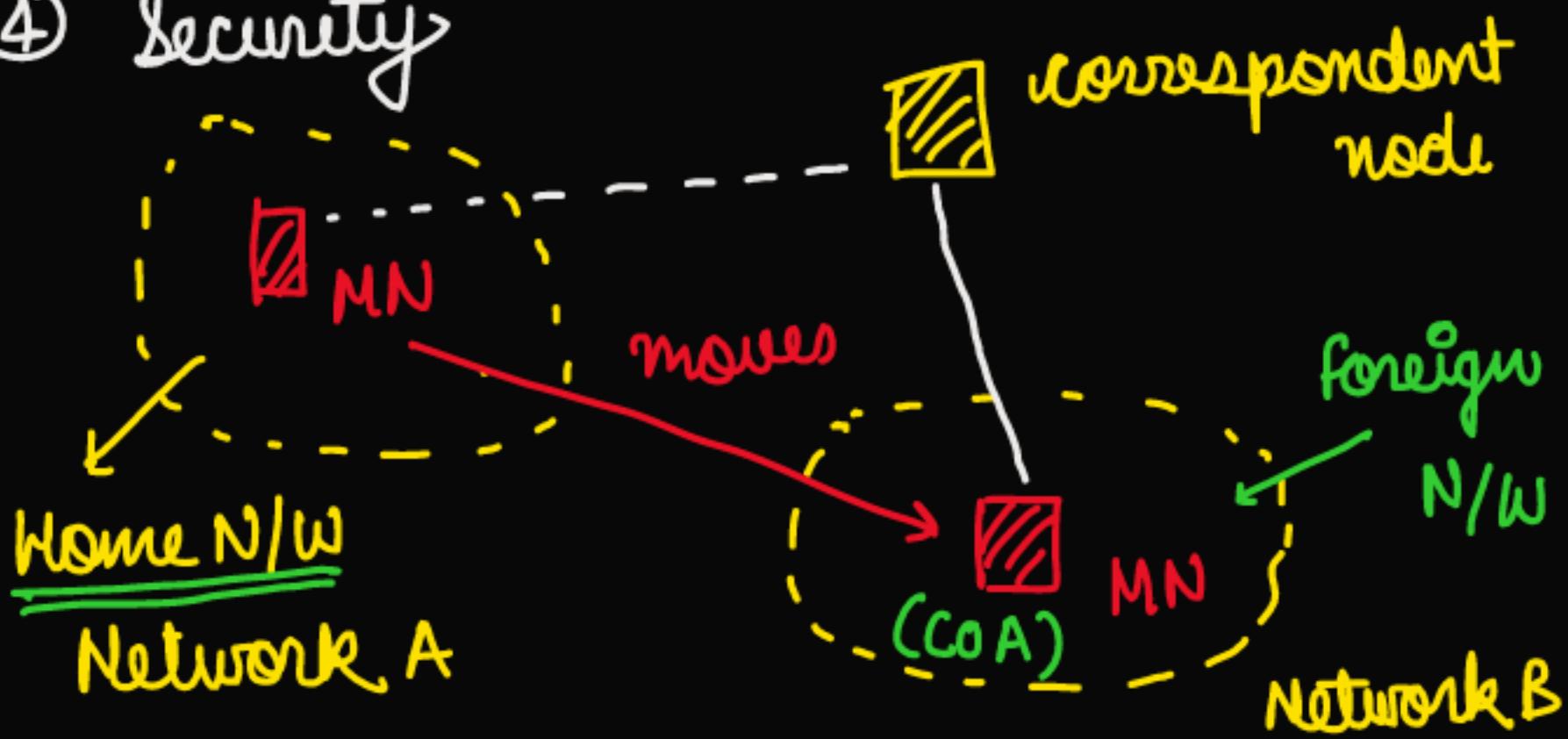
- ① Compatibility
- ② Transparency
- ③ Scalability & efficiency
- ④ Security

Entities & Terminology

- ① Mobile Node (MN)
- ② Correspondent Node (CN)
- ③ Home Network (HN)
- ④ Foreign Network (FN)
- ⑤ Care of Address (COA) → defines current location of MN in terms of IP

↳ all packets are sent to COA not MN
(tunneling mechanism)

Home Agent □ □ □ □ □ (COA) end point
Tunnel → Packets



⑥ Foreign Agent COA → provides services to MN during its visit
↳ implemented on Router

⑦ Co-located COA → MN acquires temporary IP address, which act as COA

⑧ Home Agent (HA) → located in Home Network

⑨ Tunnel → path taken by encapsulated packets

