

Demo: Multiple-namespace Resolution

Scenario:

Communication in Heterogeneous Wireless Networks

- ▶ In existing solution, the communication between different network is often bridged by IP.
- ▶ Carrying messages by IP brings overhead.

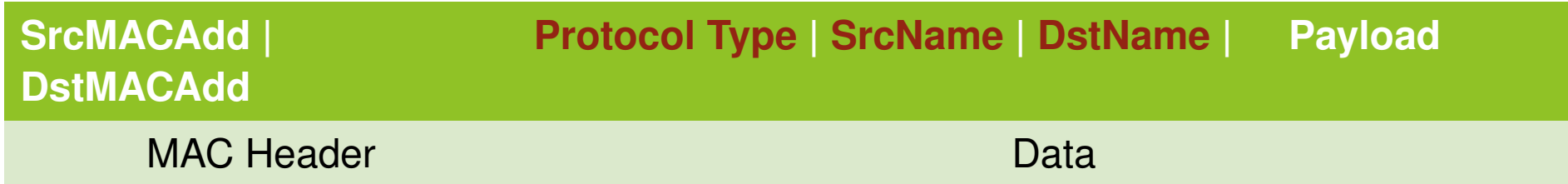
Our Solution

- ▶ In our new solution, messages are carried by Ethernet frames with specified name for routing.
- ▶ The gateway(Multiple-namespace-enabled router) process the resolution and routing. At the same time, the packet may be converted to corresponding format for current network.
- ▶ Traditional switch(link-layer Device) can be placed on the link between two Multiple-namespace-enabled routers.

Demo Topology

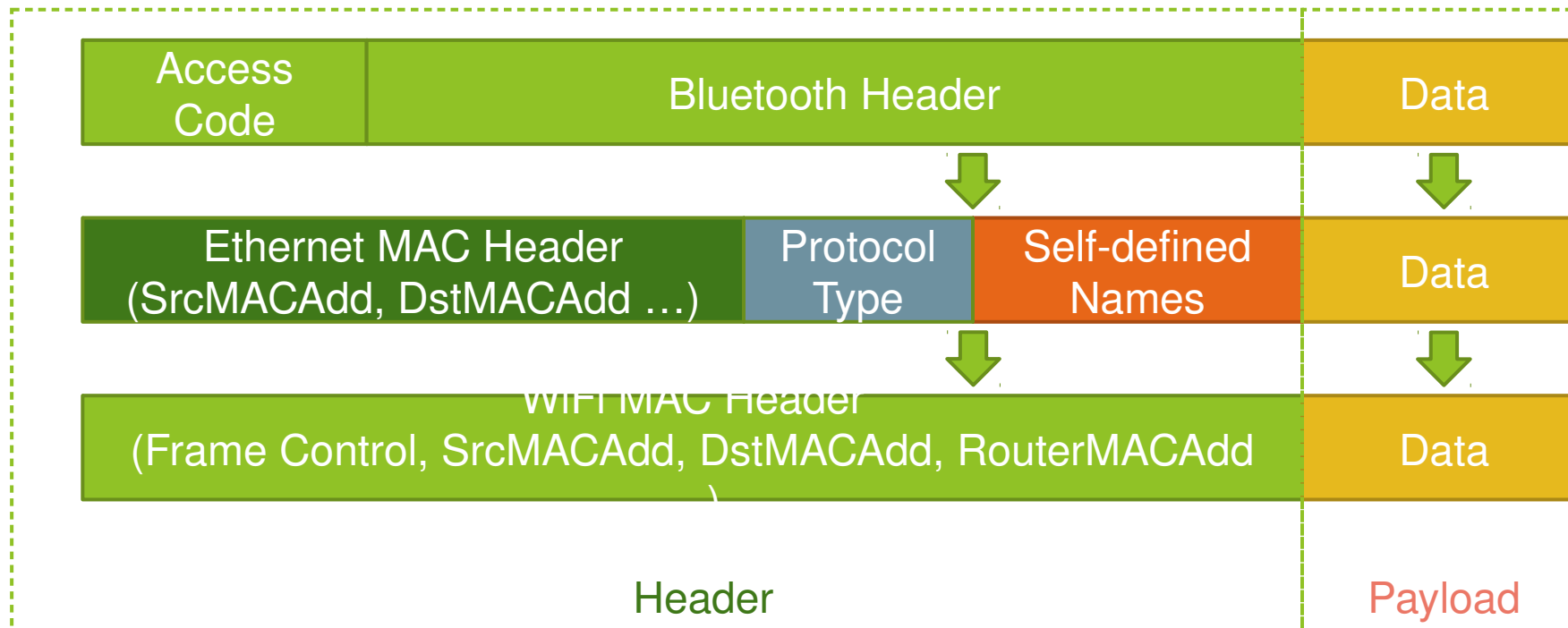


Link-layer Frame Format



Translation

- ▶ Modify the MAC Headers of Packets/Frames in MAC layer/Link-layer
- ▶ Example: Bluetooth->Ethernet->WiFi



Performance

