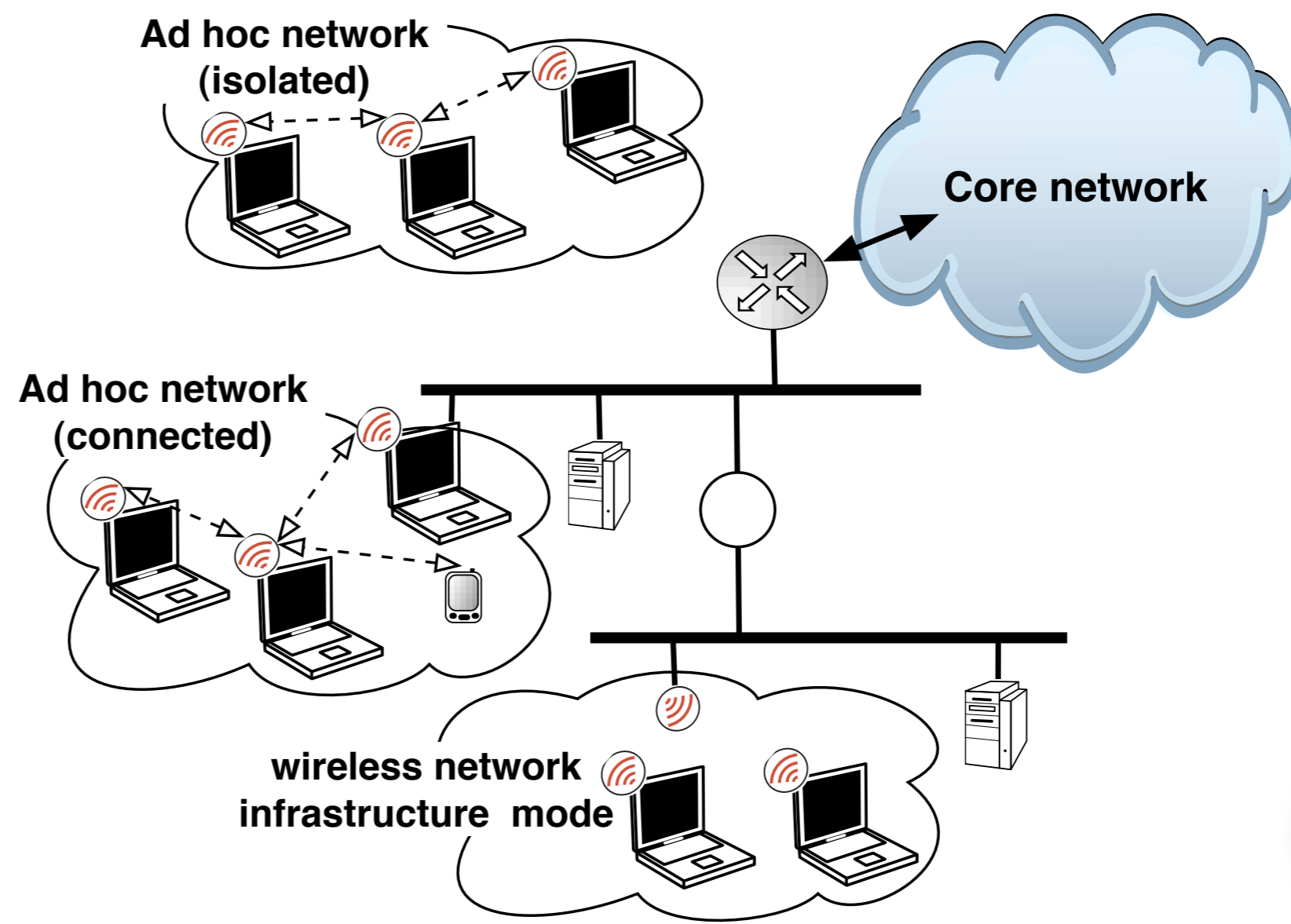


# Interconnection Architecture for Spontaneous Edge Networks

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## Spontaneous network

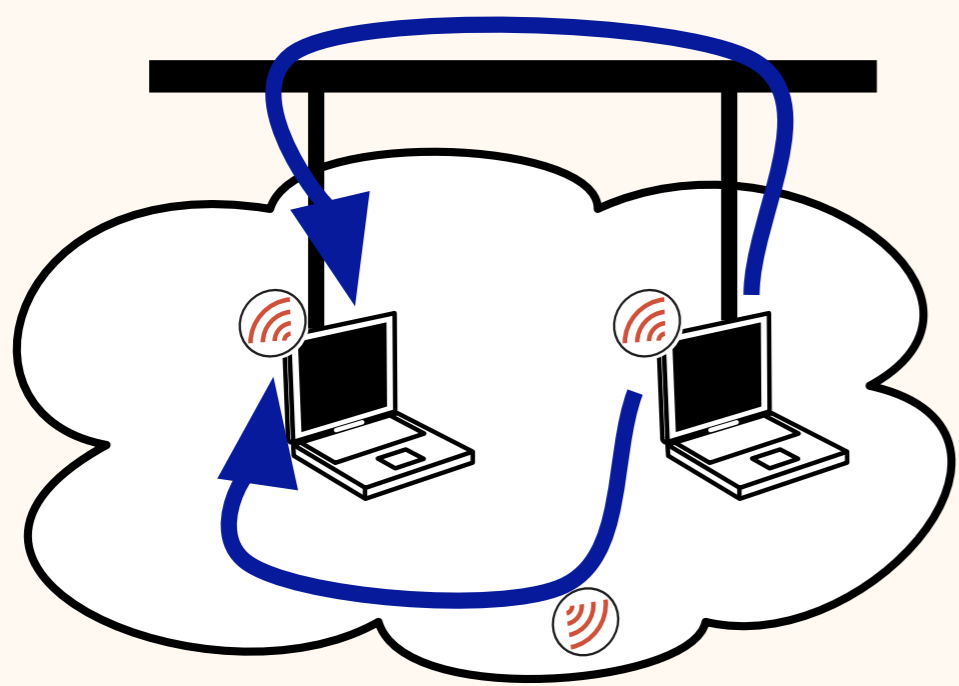
- Unmanaged
- Multi-hop
- Heterogeneous links
- Sensors / actuators



Context

## Multiple routes

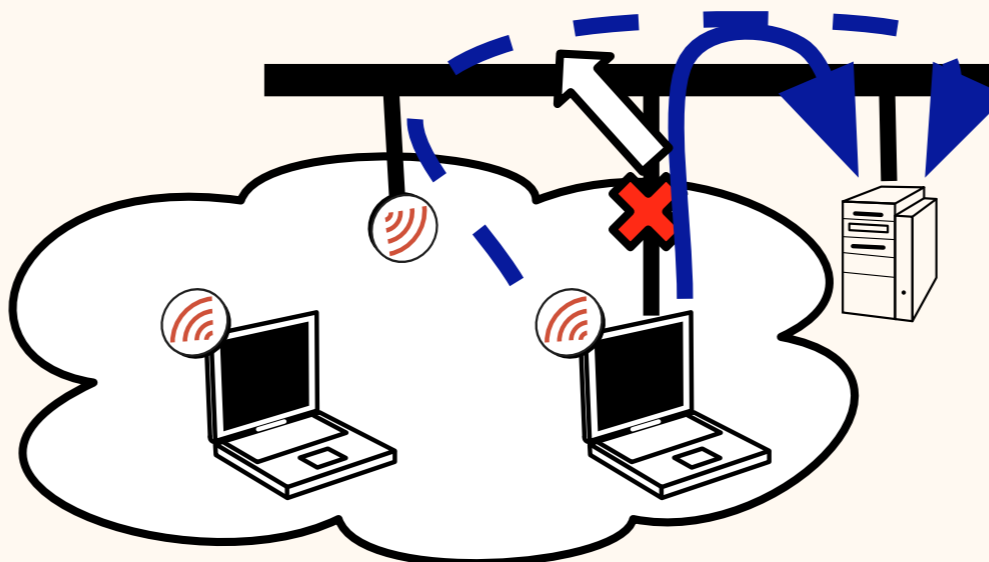
Use the right path for each type of traffic



## Enabling QoS routing

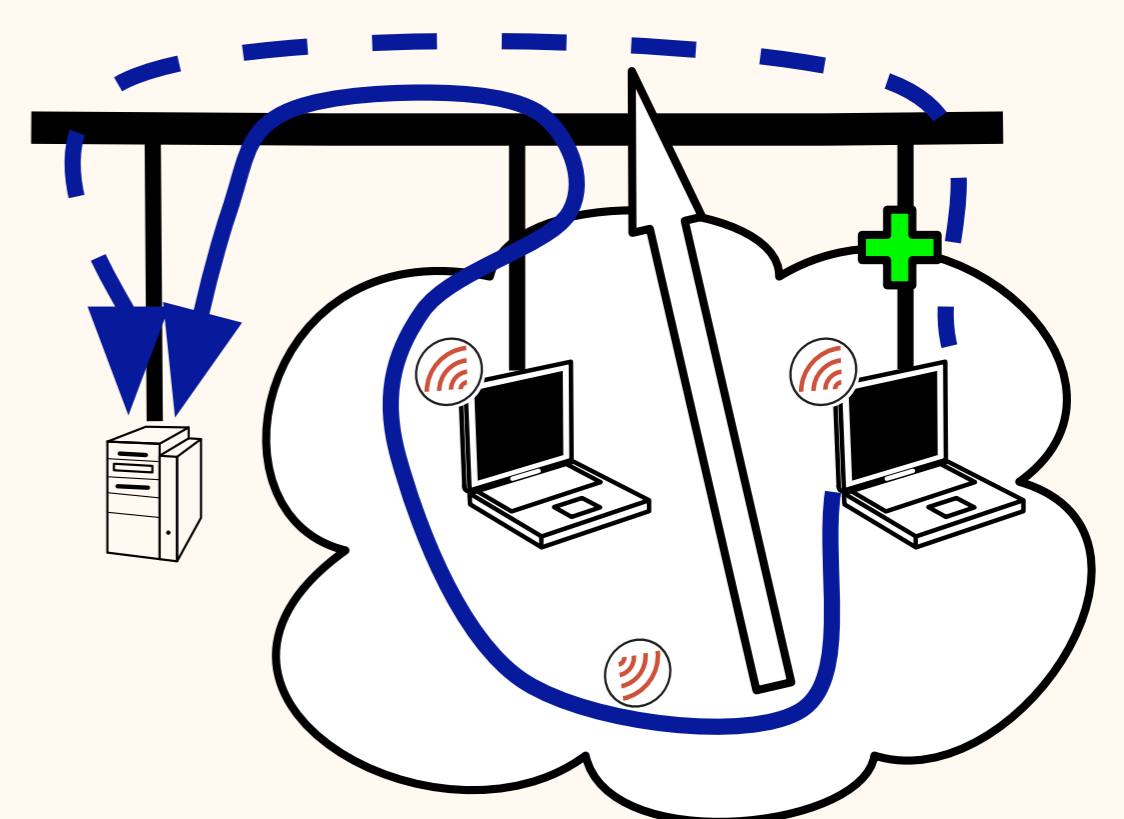
### Backup routes

Adjust to the changing topology



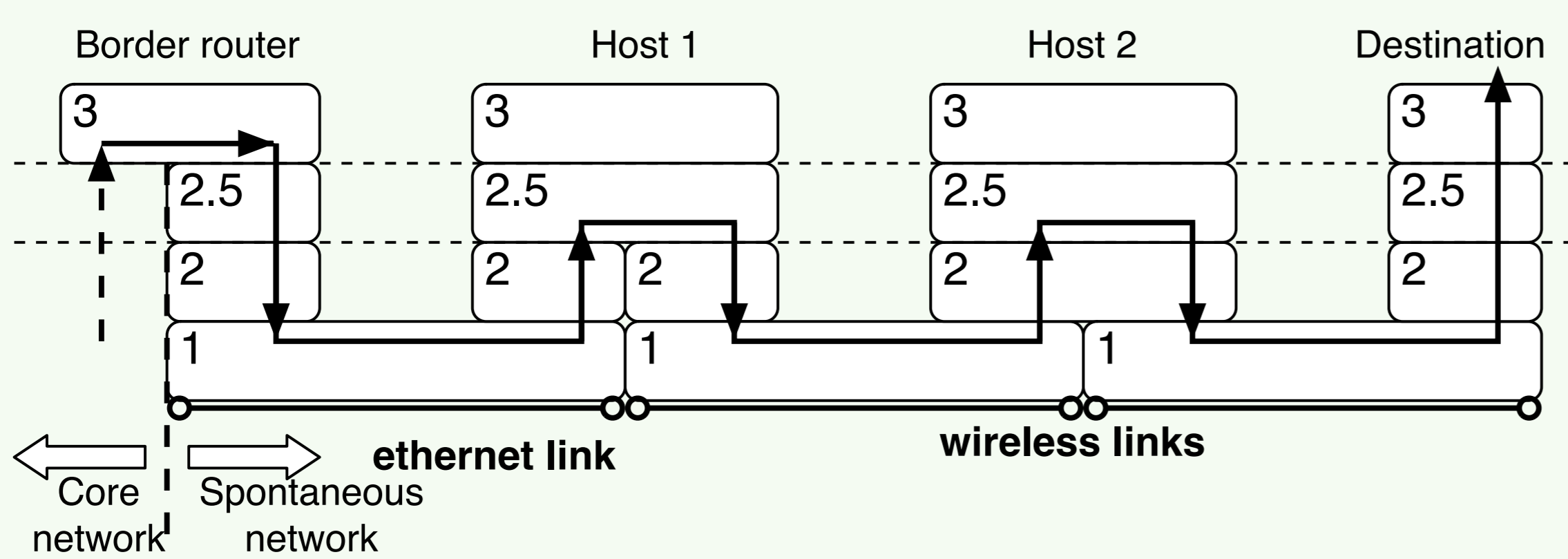
## Connection optimizations

Adapt to varying conditions



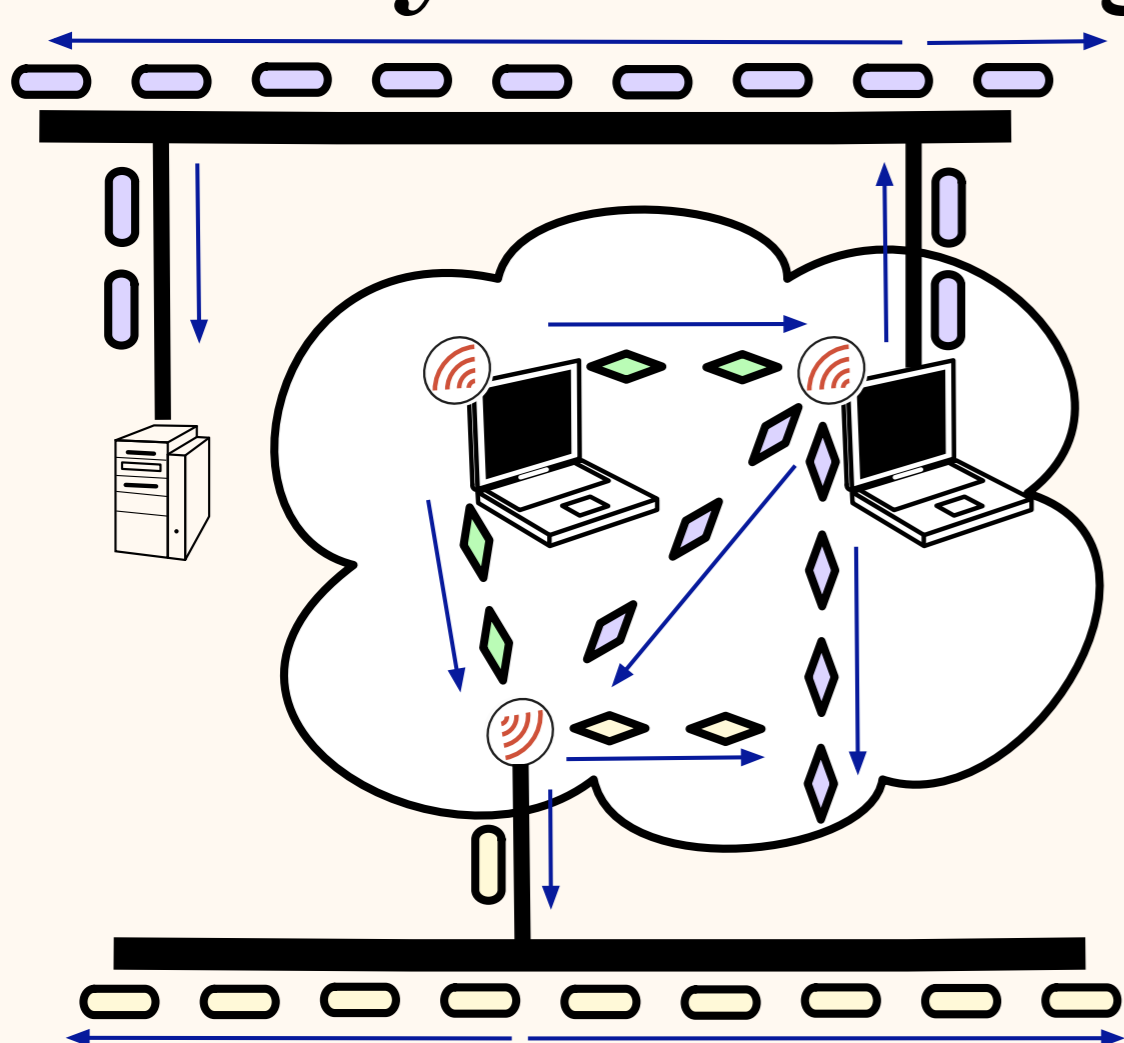
What is Lilith?

## 2.5 layer-based interconnection architecture



- single IP subnet
- based on MPLS
- on-demand LSP establishment
- ad hoc routing protocol
- multihop routing

## Layer 3 broadcasts on various layer 2 technologies



## Broadcast handling

### Need for special handling of broadcast packets

- broadcast packets are needed for routing, auto-configuration, and service discovery
- "broadcast abuse" may impact performance

## Concatenate broadcasts

- delay sending
- bundle packets

