Self-Learning for Ad Hoc Wireless Networks

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- **Motivation**: the initial version of self-learning released with NFD 0.6.5 supports only point-to-point links (e.g., unicast Ethernet in wired networks).
- **Tasks**:
    - Finish adding EndpointId to the relevant APIs (#4843, #4849)
    - Ethernet multicast face refactoring (#4283)
    - Self-learning strategy version 2 (#4281)
- **Outcome**: self-learning can be used in ad hoc wireless networks, including automatic switching from multicast to unicast; if feasible, give a basic demonstration of the new forwarding strategy.

Completion Status

- Finish adding EndpointId to the relevant APIs
    - #4849: Merged (Forwarder and Strategy)
    - #4843: Submitted for review (Face and LinkService)
        - *Breaks some strategy unit-tests (under investigation)!*

Completion Status

- Ethernet face refactoring (#4283)
  - MulticastEthernetTransport merged into EthernetTransport
  - UnicastEthernetTransport still separate for now, to avoid breaking too many things
    - Eventually should be merged as well
  - Much larger change than anticipated: almost everything in NFD needs to switch to FaceId+EndpointId, including the management layer!
    - May need more design discussion to nail down some details

Completion Status

- Self-learning strategy version 2 (#4281)
  - Started doing some minor refactoring, but largely depends on the previous task