Radios, SatCom and Considerations

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- Two Models: Radio and SatCom
- Considerations and Capabilities
- Interfaces and Protocols
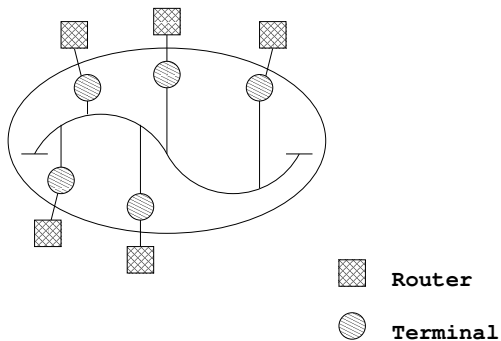
Subnet Model No1: SatCom

Figure: Model typical of SatCom subnets.
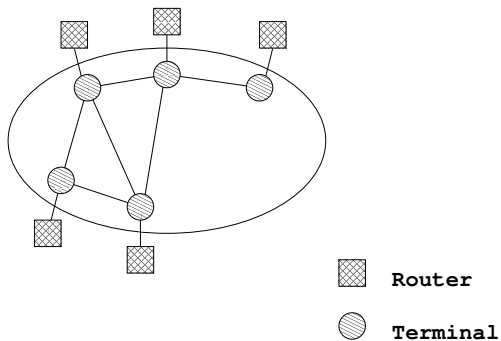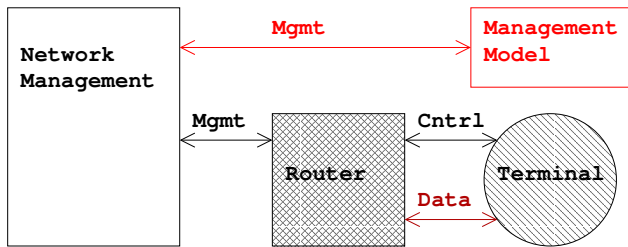
Subnet Model No2: Radio

Figure: Model typical of Radio subnets.

Considerations and Capabilities

- Model – broadcast or non-broadcast multiple access (local scoped broadcast and pt-to-pt)

- Link Mgmt – up/down usemantics tied to model (what does link up mean?), flow control may depend on models

- Link Quality – dynamic or static, delay, BW, security, DSA

- Topology Control – numbers, locations (directional antennas), broadcast versus geo-locational information (for geographic based routing communication), what layer is responsible for routing?

- Precedence and Preemption – mapping to subnet capabilities

- Frame Formats – link level framing, MAC_IDs, P&P

- Control – DLEP

- Address Resolution – bound to subnet model or not

Interfaces

Interactions from perspective of the terminal

Figure: Interface and protocols.

Questions

Thanks !