

Network Management Scenarios for RELOAD

draft-peng-p2psip-network-management-
scenarios-02

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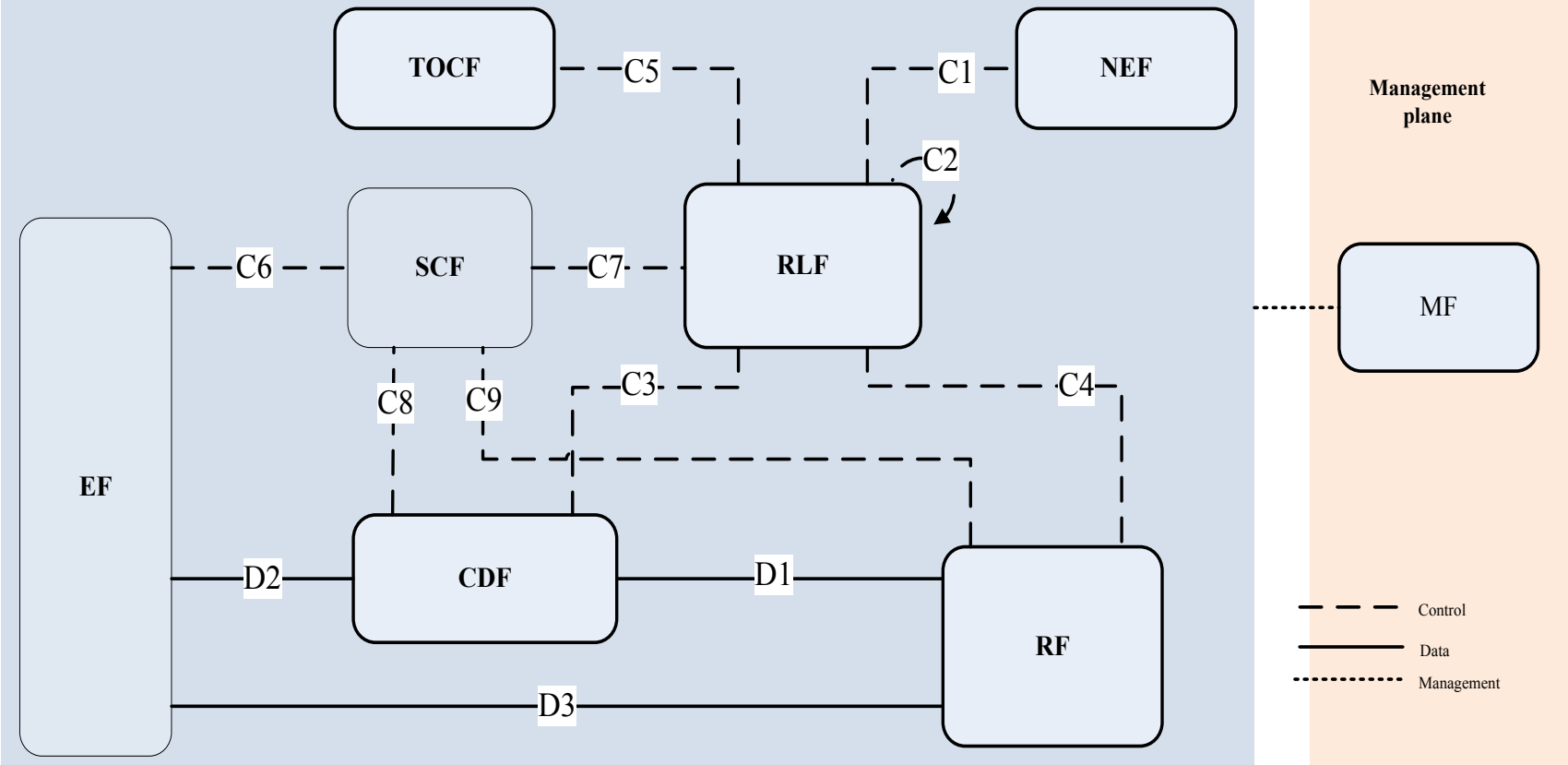
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Scenarios: Global Internet Case

- Typical application – Skype
- Need network management to ensure network stability and efficient operation
- Provide enterprise management tools to help adoption in private networks
- Troubleshooting capability is important
- Loose control on nodes
- Centralized operation and management required (draft-bryan-p2psip-app-scenarios-00)

Scenarios: Carrier's dedicated network Case

- Typical application – ITU-T DSN



Scenarios: Carrier's dedicated network Case

- P2P nodes are normally owned by the carrier
- The numbers of P2P servers may be huge
- Locate and managing P2P resources
- Require strict control over managed P2P servers
- Centralized management is required by ITU-T

Scenarios: Enterprise network

- RELOAD adopted by enterprises
- Ensure efficient operation
- Prevent miss use of the IT resource
- Centralized operation and management required (draft-bryan-p2psip-app-scenarios-00)

Comparing Management Scenarios

	Internet	Carrier's dedicated network	Enterprise Network
Monitoring dedicated devices	Y	Y	Y
Gathering Network statistics	Y	Y	Y
Fault alarming	Y	Y	Y
Disposing malicious/fault user nodes	Y		Y
Controlling user nodes	Y		Y
Trouble shooting	Y	Y	Y
Control level	Loose	Strict	Medium

Relationship to diagnostics draft

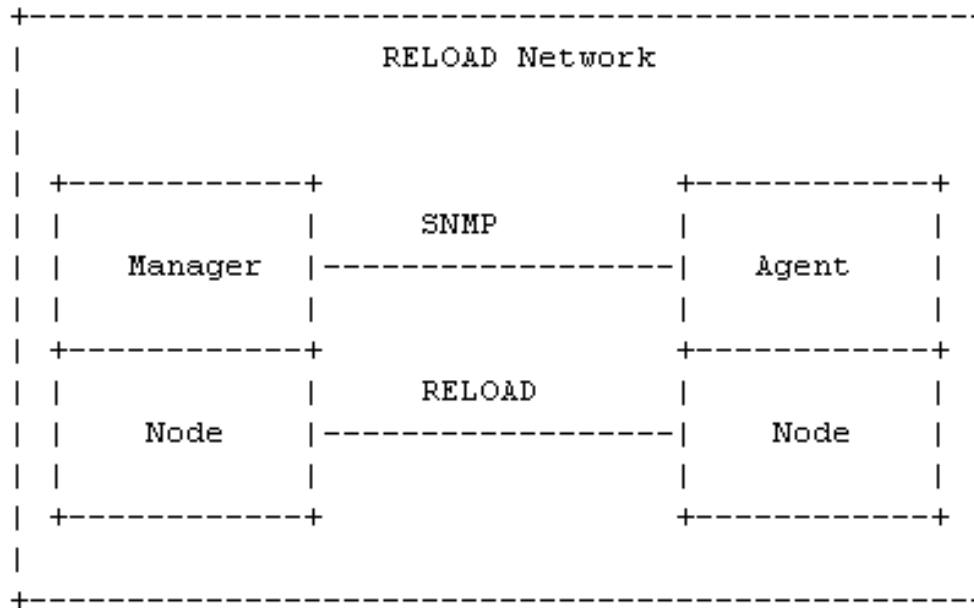
- Diagnostics draft provides built-in mechanisms for network diagnostics
- P2P network management provide broader management capabilities
- Diagnostics mechanisms can be used by network management systems

Challenge of RELOAD network management

- Scalability
- Nodes constantly leave and join
- Management of resources
- NAT and firewall problems
- Multi-hop routing

Proposed solution for management

- Proposed solution for network management --
SNMP usage for RELOAD
see: draft-peng-p2psip-snmp-00



- Use RELOAD to locate manager and node/
resources, Appattach for SNMP connection

Next Steps

- Get more comments on management scenarios and SNMP usage solution
- Summarize the network management requirements
- SNMP usage vs. other solutions?

Q&A

Thanks!