

Protocol Considerations for Resource Mobility in Clouds

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Agenda

- Problem Statement
- Considerations
- Summary
- Discussion

Problem Statement

- Intra-inter domains with multiple data centers
- Need to signal [on demand] resources in the form of virtual machines that could move across data centers intra-inter domains
- Assumption of existence of trust boundaries

Considerations

- End point addressability and state?
- Data exchange and formats between domains
- MTU and so called “trombone” effect?
- Geographical proximity?
- Protocols e.g. TCP?
- Signalling for resource availability?
- Security considerations, e.g. protection trojan horse, worms etc
- Management e.g. notion of autonomic, resource discovery

Summary

- See re-use of IETF-developed protocols
- Perhaps opportunity to for further development
 - Network is table stakes e.g. VLAN, VPN in context of “network virtualization” what should the scaling properties be?
- Internet Drafts, deliverables, etc
 - By IETF-79 meeting prepare “draft-morrow-clouds-resource-mobiity-protocol-00-src.txt”

DISCUSSION

Thank you