Mobility Management Protocols for Cloud-Like Architectures

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Cloud Network Architecture

- VMs
- V Switch
- Servers
- Application
- NIC
- TOR
- S
- S-Aggr
- S
- R
- BR
- MN
- Fiber channel
- Storage Center
MIPv6 for Cloud

![Diagram of MIPv6 for Cloud]

- **VMs**
- **V Switch**
- **Servers**
  - **TOR**
  - **NIC**
  - **S**
  - **S-Aggr**
  - **R**
  - **BR**

- **Application**
- **HA Control Plane Function**
- **HA Data Plane Function**
- **Binding Cache Security Associations**
- **Fiber channel**
- **Storage Center**
- **MN**
PMIPv6 for Cloud

VMs
V Switch
Servers

TOR
TOR
TOR
TOR

S
S
S
S

S-Aggr

R
R

BR
BR

MN

LMA

Binding Cache
Security
Associations

Storage Center

MAG Control Plane
Function

MAG Data Plane
Function

Fiber channel
What can we say?

- MIPv6 Cloud MM requires more changes
  - Divide HA operation into Control Plane and Data Plane
  - Distribute Control plane HA

- PMIPv6 Cloud MM requires less changes
  - Divide MAG operation into Control Plane and Data Plane
  - Distribute MAG
Next Steps

- It seems like there is a lot more to do.
- Questions?