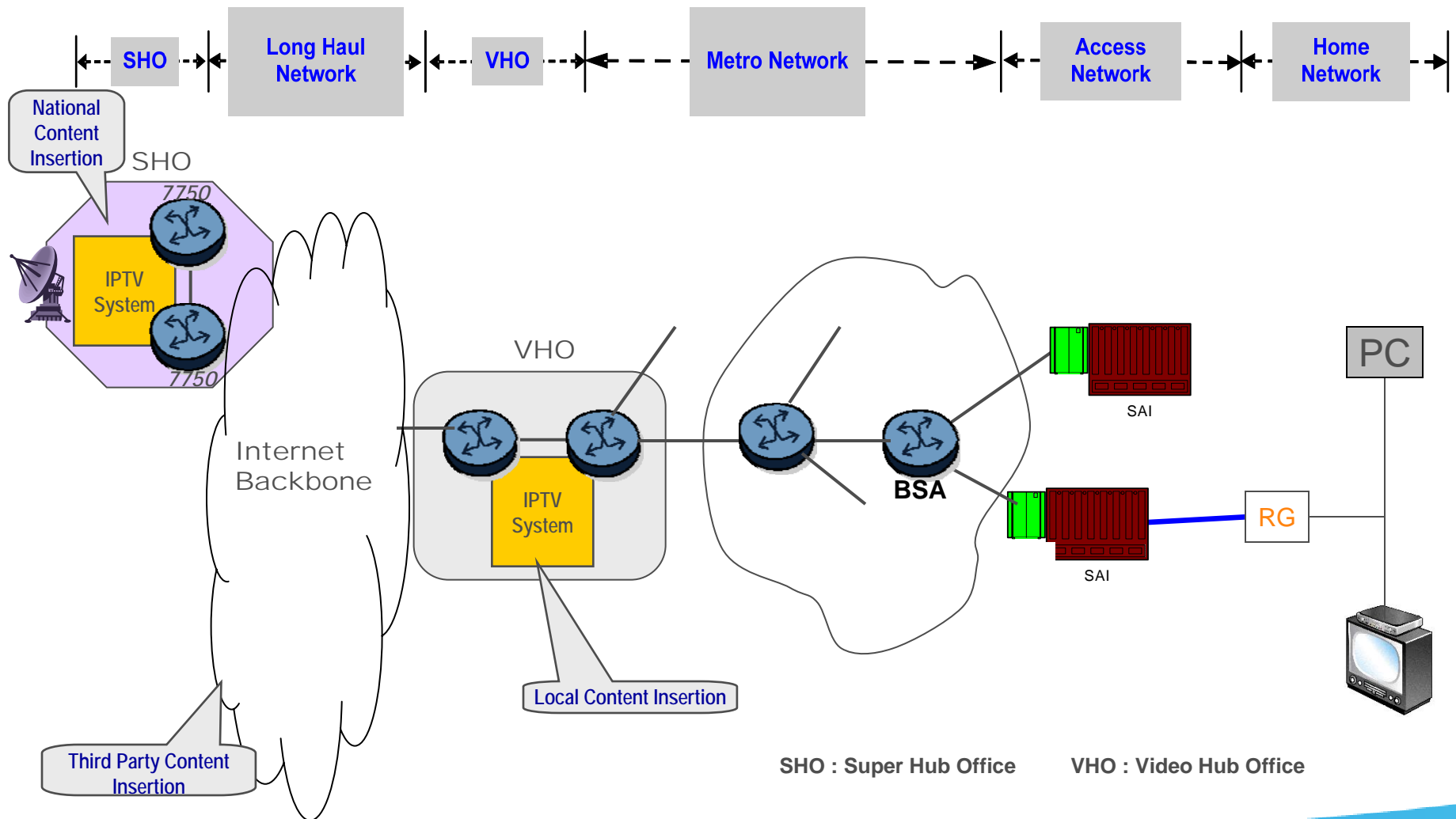


Challenges in Carrier IPTV

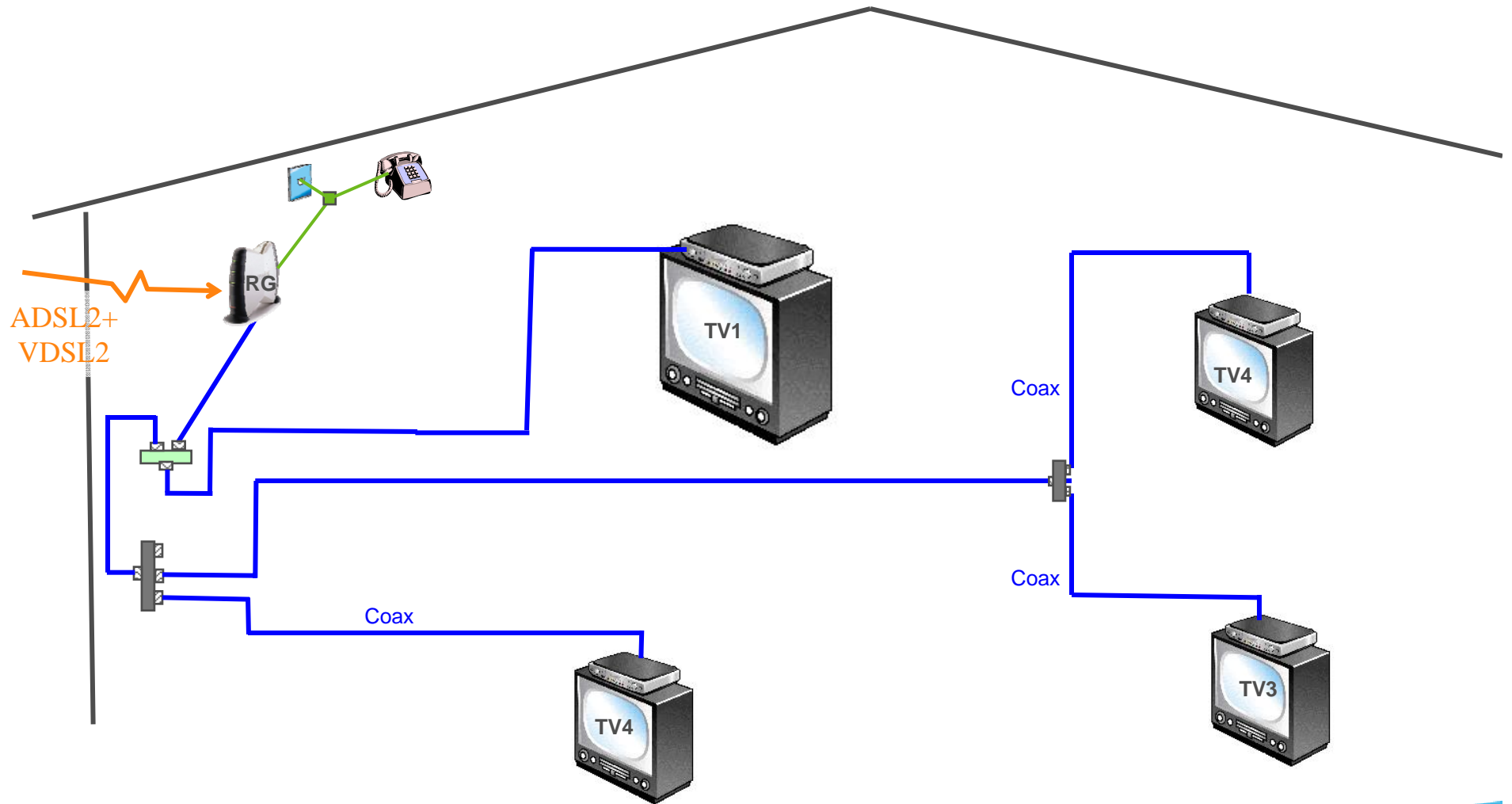
Chris Chase
AT&T Labs



Carrier Architecture



Home Network



Network Errors

- WAN and metro
 - Random loss
 - Link events
 - Router events
 - Maintenance events
- Access
 - Unprotected
 - FTTN
 - Noisy environment
- Home network
 - Noisy, error prone

Scaling Constraints

- Large scale object replication
 - VOD
 - Updates
 - Ad's
- CPU
- Fast Channel Change (FCC)
 - Bandwidth for FCC
- CAC – call admission control for streams (e.g., VOD)