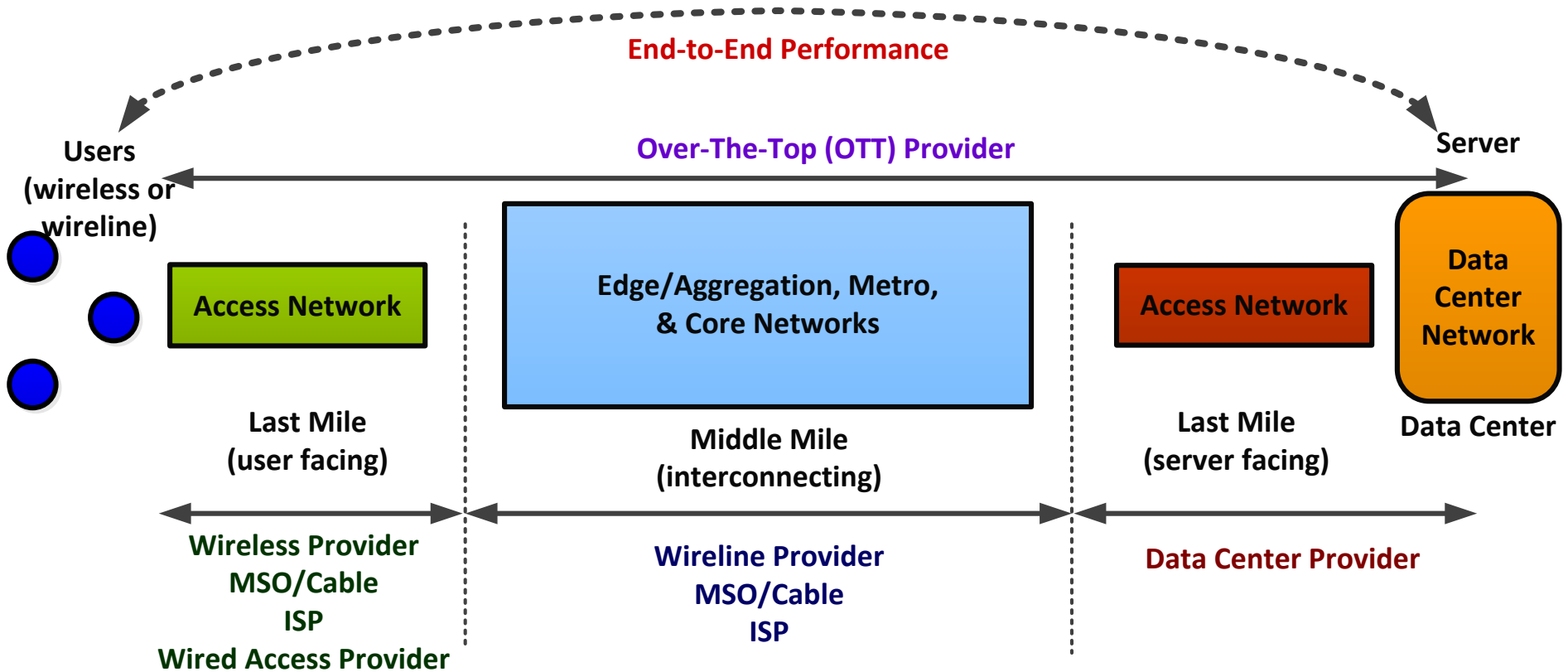


Network-Centric Performance Management – So Near and Yet So Far?

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A Simplified View of the End-to-End Network & Distribution of Operators

Metanoia, Inc.
Critical Systems Thinking™



Composition of the Panel

- Have three perspectives represented on the panel:
 - **Operators**– OTT (LinkedIn), Middle-mile/Infrastructure (Tata)
 - **System Vendors** (Cisco (switches/routers), ADVA (Ethernet/optical gear))
 - **Software Providers** (InfoVista, Opnet)
- Focus on: *having configured the network*, how does each operator segment *monitor activity*, *measure critical parameters that affect network performance*, and *co-operate to correct performance in service of the end-user?*

What is the Goal of Network-Centric Performance Management?

To ensure that the end-to-end network is running reliably and efficiently, with each segment playing it's role

- **Fundamental network entities – switches, routers, queues, flows are operating correctly**
- **Network impairments are identified, detected, isolated and corrected to maintain end-to-end function**
- **Network as a whole is able to support advanced end-user applications efficiently**

Main Components in Performance Mgt.

- ***Monitoring*** – network, elements, resources, users, ...
- ***Identification*** of the Problem (active/passive) & ***Triage***
- ***Troubleshooting & Fixing/Correction*** of the problem

A lot needs to happen behind-the-scenes to achieve this seemingly simple goal!

In particular, we'll focus on a few broad areas ...

Focus of Today's Panel

- **Key advances in performance monitoring of fundamental network-level activities**
- **Ownership and sharing of performance data across operators/segments**
- **Fault detection, isolation and communication across boundaries – network segments, organizational boundaries**
- **Proactive vs Reactive performance management**
- **Role of real-time performance mgt. & monitoring and practicality of automated network enforcement**

Ok, let's dive right in!