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WORLDWIDE INTEROPERABILITY DEMONSTRATION
SUPERCOMM 2005

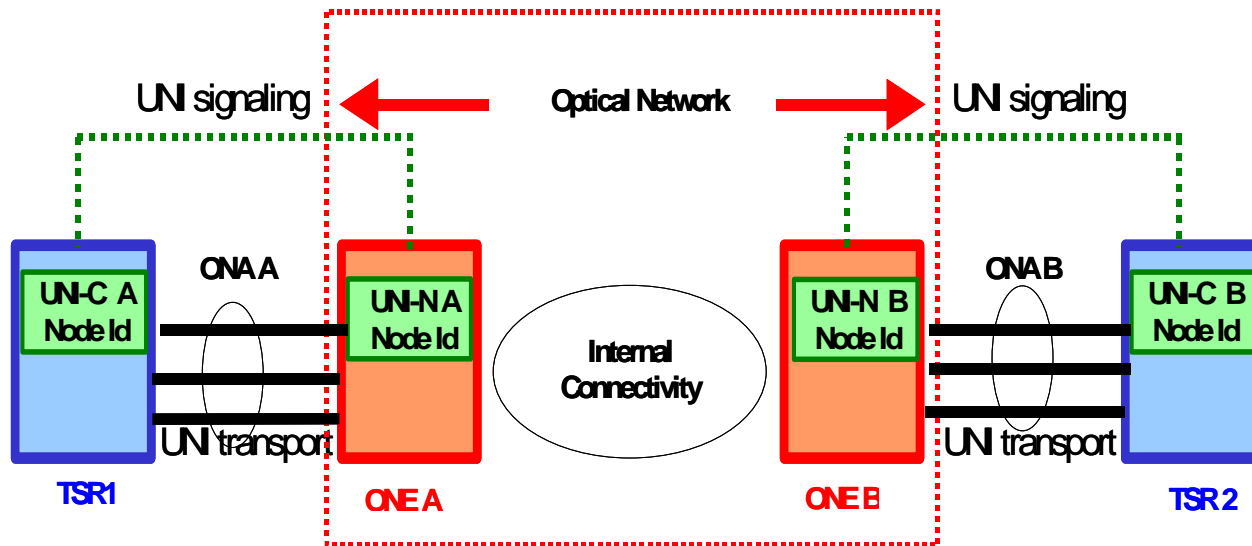
Avici's Carrier-Class Router Family



One design: Three scalable sizes, common set of linecards, common software & features

- ◆ **TSR™**
 - Industry's port density leader
 - 40 linecard slots + 4 route controllers
 - Aggregate capacity 800Gbps per chassis
- ◆ **SSR™**
 - Lower entry cost and operational flexibility
 - 19"/23" rack mountable with 2 SSRs per rack
 - Aggregate capacity 400Gbps per chassis
- ◆ **QSR™**
 - Lowest entry point with growth available
 - 4 QSRs per rack
 - 100% investment protection with TSR/ SSR
 - Aggregate capacity 380Gbps (2 slots used for route controllers in 1st chassis) per chassis

UNI Reference Model

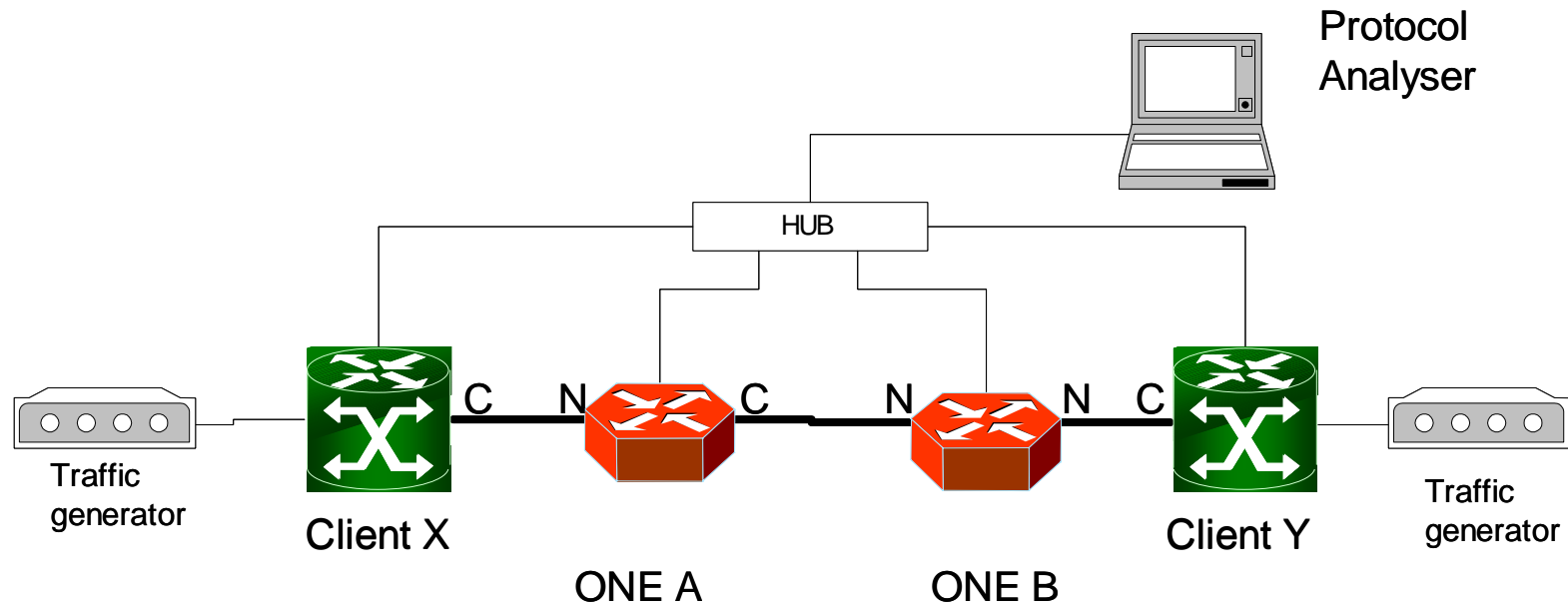


- Use out-of-band signaling channel and RSVP-TE signaling method
- Support UNI connection setup, tear down procedures to establish a single UNI link, Multiple connections under a same TNA
- Connection types include:
 - Transparency: section/line/path
 - Framing: SONET/SDH, Ethernet
 - SONET types: STS-3, STS-12, STS-48, STS-192, GbE, 10GE

Avici OIF UNI Offering (contd.)

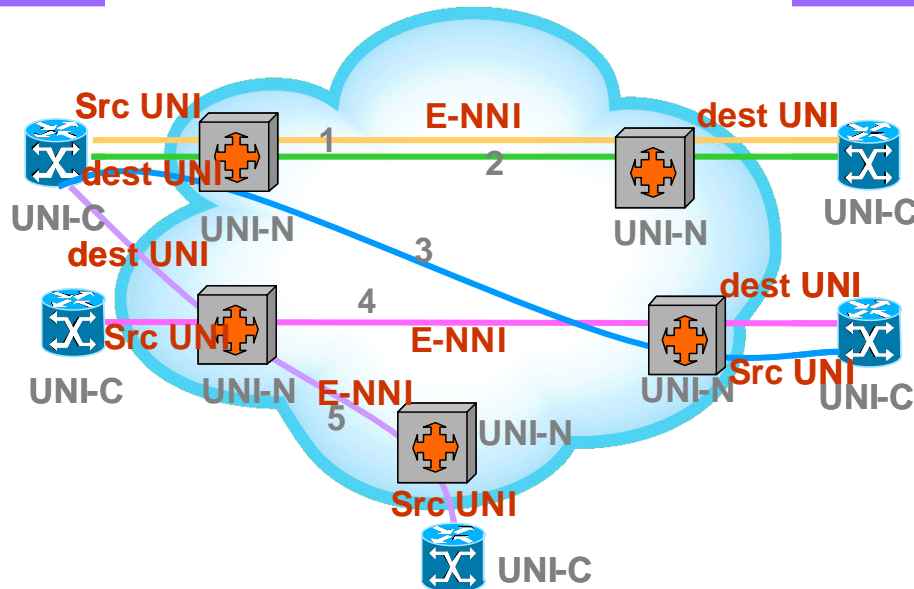
- Comply with OIF UNI 1.0, UNI 1.0 R2 Implementation Agreement
- Demonstrated interoperable with OIF E-NNI /GMPLS solution over multi vendor, multi domain SONET /SDH network
- Implemented advanced UNI features
 - Bandwidth efficiency
 - Non disruptive bandwidth modification
 - Bandwidth on demand (prove of concept)
 - Bandwidth adjustment based on time stamps (prove of concept)
 - Link bundling
 - Multiple links under one UNI connection (link bundling for aggregation, diversification and protection)
- Support Fast fail over between UNI member link (similar behavior to Composite Link)
- Demonstrated Scalable and robust implementation to work in a multi node, multi domain network configuration

Example of an OIF-UNI 1.0 Interop Configuration



- IP Control Channel Configuration
- Manually Configure Neighbor Discovery Information (port information etc)
- UNI signaling (RSVP-TE)
- UNI Transportation Connection verification

Examples of TNA (ONA) Assignment



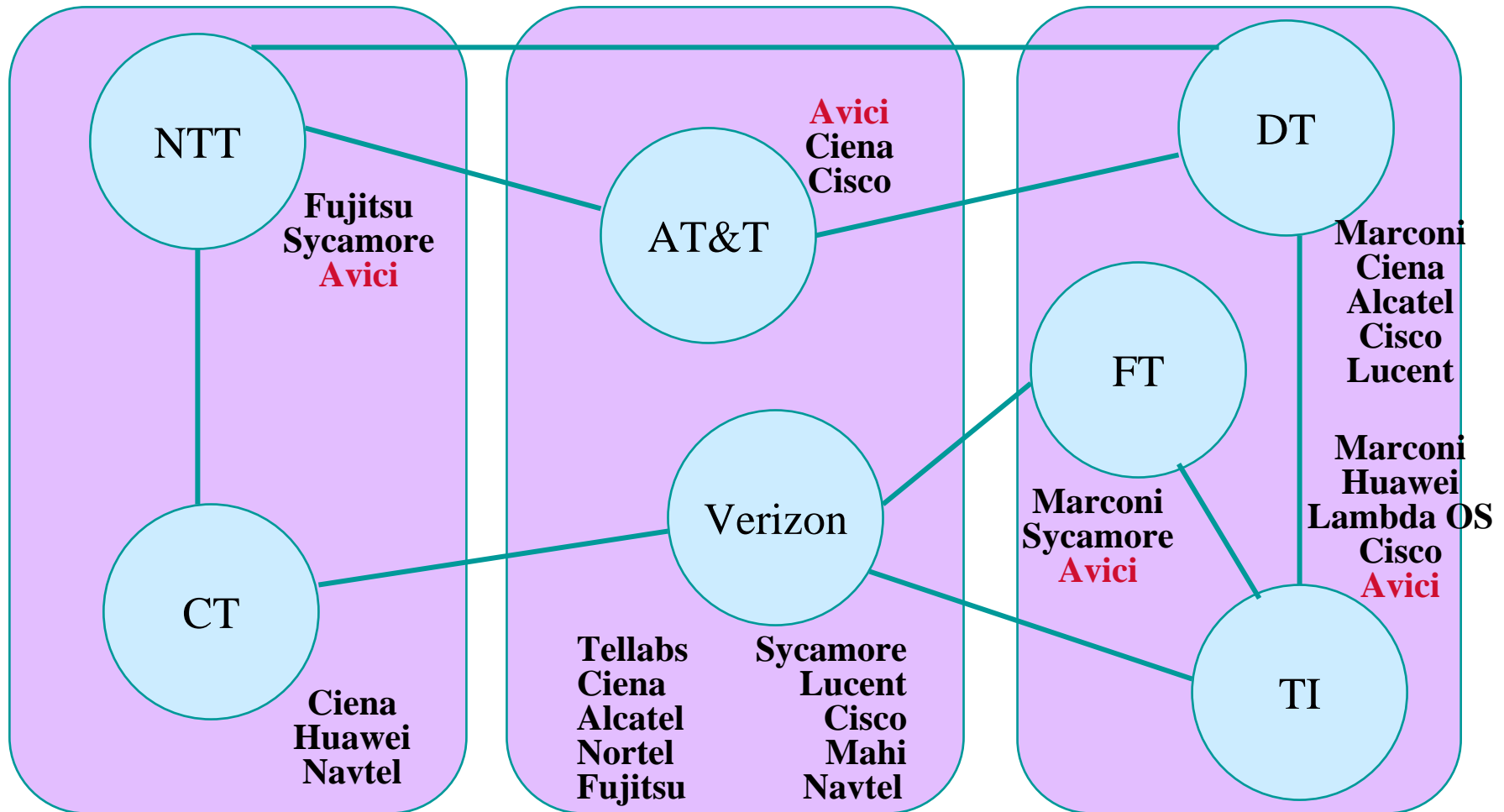
[UNI 1.0] TNA address uniquely identifies the data endpoints of a connection. When the same TNA is assigned to more than one data link terminating on a client, each data link is additionally qualified by the logical port ID.

UNI connection	Config. example of source TNA	Config. example of destination TNA	Comments
LSP 1	1.1.1.1	2.2.2.2	
LSP 2	1.1.1.1	2.2.2.2	LSP2 has diff client and network port Ids than LSP1 (on src and dest side).
LSP 3	1.1.1.1	4.4.4.4	have the same src TNA as LSP1 with diff port Ids
LSP 4	3.3.3.3	4.4.4.4	
LSP 5	5.5.5.5	6.6.6.6	has diff src TNA than LSP1 because src UNI-N is different

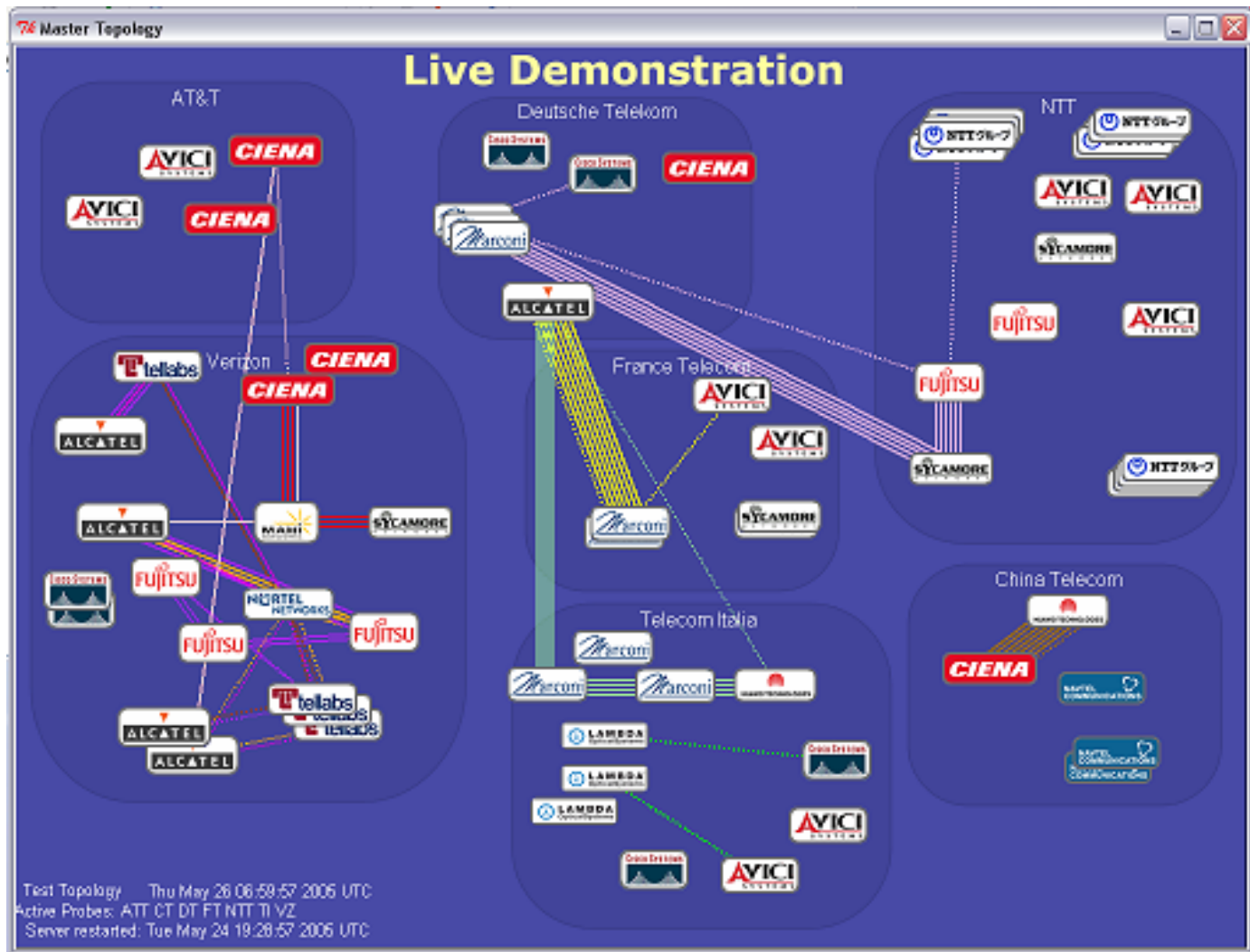
Avici Platforms At the Heart of the 2005 Demo

- ◆ **Avici TSR and SSR Core Routers in 2005 Demo**
 - Platforms for seamless integration between various vendors in the optical network domain.
 - Provide OIF/UNI client signaling for POS and Gigabit Ethernet enabling scalable dynamic bandwidth provisioning
 - Play the role of UNI connection initiator and terminator.
 - Support routing protocols over OIF/UNI provisioned interfaces.
 - Video Server applications use Avici's Gigabit Ethernet interface provisioned by UNI client.

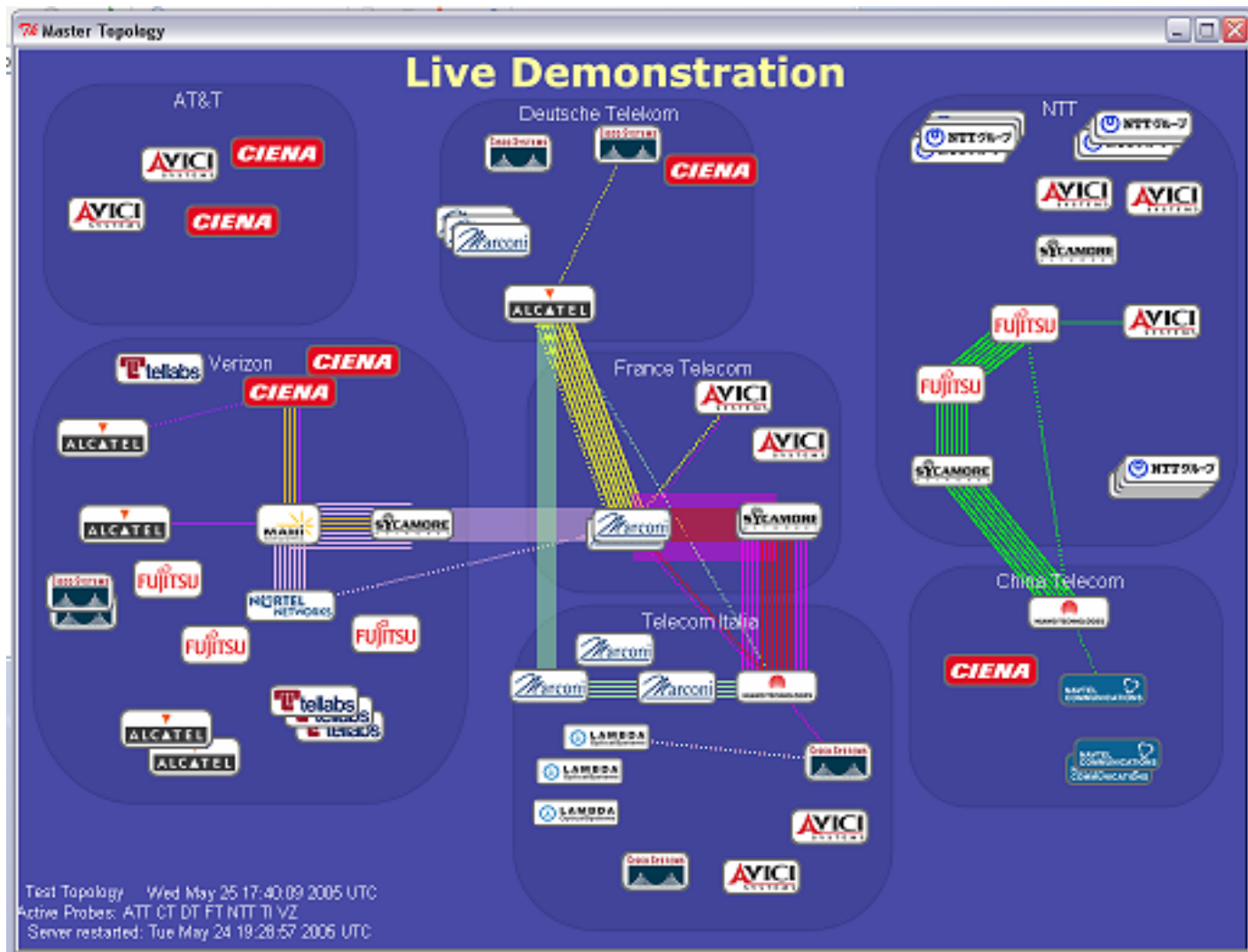
Avici Presence within Worldwide Topology (Bearer + Control Plane Topology)



Avici Presence within Worldwide Topology (contd.)



Avici Presence within Worldwide Topology (contd.)



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