



TRANSITIONING TO PACKET TECHNOLOGY

Best Practices from FNT Software

Modernizing electric grids enables utilities to keep pace with the digital age, capitalize on new business opportunities, meet customer demands, and improve operational efficiencies. After working with numerous utilities that have gone through the network transformation process, FNT has identified best practices for simplifying the transition from TDM to packet-based networks.

1. LEVERAGE A CENTRAL DATA MODEL

A master reference database of all physical, logical and virtual assets and resources is crucial to gain a clear view of the grid's current state, map out individual transformation steps, and seamlessly execute network migration and rollout actions. FNT Command features a common central database for all network data to ensure that all activities are based on the same consistent view of the network.

2. AUTOMATE TASK PLANNING

The best way to ensure a smooth network transition is to find a tool that can support both legacy and new technologies side by side and manage the change properly without impacting services. By automating the transformation steps via a documentation and planning platform, FNT Command ensures that network resource and service data is up-to-date and accurate.

FNT Command also features a robust planning mode functionality that includes resource assignment and auto-routing capabilities which span the logical layer to encompass nodes, sites, and the passive cable infrastructure layer. With access to available redundancy information and corresponding SLA data, utility providers can identify if any services need to be rerouted to avoid disruption or an SLA breach.

3. IMPLEMENT UNIFIED RESOURCE MANAGEMENT

Unified resource management allows utility providers to leverage one central database across active telco transport network, including passive inside/outside plant infrastructure, plus IT and data center resources.

Unified resource management from FNT covers the entire spectrum of assets and resources within one integrated data model, enabling users to navigate between the different layers and across all resource types:

- **Active telco transport network** (classical telco network infrastructure such as DWDM, MPLS, Carrier Ethernet, SONET/SDH)
- **Passive inside and outside plant infrastructure** (cable infrastructures such as trenches, ducts, micro-ducts, splice enclosures and cassettes, patch panels, all cable types in the field and within the building)
- **Mobile Radio Access Network devices** and resources (antennas, active nodes, cells and configuration data per site)
- **Virtual resources** of NFVI and VNFs (IT server, storage, data center infrastructure capabilities to manage floor space, power and cooling capacities)

To be truly unified, resource management must:

- ✓ Rely on a vendor and technology agnostic master reference database. This database will supply all relevant information for operational processes such as planning, engineering, service fulfillment, and service assurance.
- ✓ Provide full transparency across the network. This will enable network operators to document, plan and manage inside and outside plant cable network infrastructure as well as telco transport network resources during their transition to packet based networks.

About FNT

Powerful, reliable and flexible infrastructures are the basis for all digital business processes and applications, especially those supporting Smart Cities, Industry 4.0 or 5G. With FNT's integrated software solutions, organizations can record, document and manage complex and heterogeneous IT, telecommunications and data centre infrastructures from the physical level all the way up the stack to business services. FNT stores this information in a manufacturer independent, uniform data model. In this way,

BENEFITS

Automated planning and engineering processes support:

- Auto-routing of connections across the network
- Redundancy checks across all layers
- Work order distribution
- Database updates when changes are implemented

Service assurance processes support:

- Uptime during and after the transformation
- Operational efficiency
- Customer satisfaction
- SLA compliance

KEY TAKEAWAY

Adhering to the principles of unified resource management is critical to maintain a high-performing communications network during the transformation process and after. Automating via a unified management platform inclusive of planning, documentation, and management not only provides a complete view of all network resources and the ability to manage them holistically, it also enables the provisioning of accurate data to other tools and solutions within the OSS/IT environment.

Interested in learning more?



Download our white paper here.

© Copyright (C) FNT GmbH, 2019. All rights reserved. The content of this document is subject to copyright law. Changes, abridgments, and additions require the prior written consent of FNT GmbH, Ellwangen, Germany. Reproduction is only permitted provided that this copyright notice is retained on the reproduced document. Any publication or translation requires the prior written consent of FNT GmbH, Ellwangen, Germany.