



# **DELIVER AGILE RELIABLE NETWORKS**

**with Automated Data Management Services**



Extracting the information by discovering and testing the network using OTDR, SNMP, SYSLOG, XML, JSON, REST API and applying AI/ML technologies to identify and rectify network discrepancies, ensuring data alignment and continuous accuracy through systematic feedback and process improvements.

## KEY CHALLENGES

Inconsistent Data	Increasing Network Complexity	Reduced Capacity	Delay in Rollout	Delay in Business Expansion
Inconsistent and incomplete inventory data, leading to delay in rolling out customer services	Evolution in networks has added complexities which are far away from existing documentation	Lack of Network Alignment and decommissioning leads to reduced capacity and higher in CapEx/OpEx	Difference between the network planning and real network causing delay in customer order rollout	Due to unavailability of network space, the ability to start new services gets delayed



# AUTOMATED DATA MANAGEMENT

1

Discover the Network using the OTDR and using the SNMP or Syslog based Network discovery tools.

2

Identify discrepancies between "as-built" data vs network inventory (DBoR) using AI/ML-driven Anomaly detection and API-based extractions.

3

Post Discrepancy analysis updates the Records (inventory or GIS) using the Business rules or Machine Learning.

4

Reverse engineer the network to synchronize the view of "As-built" and "As-planned" databases. Feedback people & process changes to keep data clean.

# BUILDING BLOCKS FOR SUCCESSFUL DATA MANAGEMENT



## Data Building Blocks

- As-Is Build designs (CAD/PDF)
- Site model
- Asset model
- Planned designs
- Field view data



## Process Flow Building Blocks

- Planning
- Field survey
- Permitting
- As-built



## Stakeholders

- Planning Team
- Engineering team
- Construction team
- Field team
- Permitting Team



## KPI

Lead time – Plan to Build



## Systems

- GIS
- LiDAR
- Physical inventory management
- Logical inventory management
- Other integrated systems



## WHY US?

Cyient's data migration and modernization services provide accurate network inventory data to Communications Service Providers (CSPs), AltNets, and Infrastructure companies, which enables:

Improved Network  
& Effective  
Capacity Planning



Faster Issue  
Resolution & Reduce  
Downtime



Streamlined  
Service  
Delivery



Data-Driven  
Decision-Making



Enhanced Customer  
Experience





## USE CASES

### Case Study #1

#### Copper & Fibre Network Digitization for Tier1 CSP in the UK

Cyient assisted this CSP in digitalizing its copper & fiber network data in Ericsson's Network Engineer through a large data transformation program (PiPeR).

### Case Study #2

#### Data Management Services for Tier 1 CSP in the US

Efficient data governance, thereby, reducing the internal resource cost to the customer.

### Case Study #3

#### Data Transformation for a Leading Telco in Europe

Implementation of an end-to-end telecom asset inventory management system with synchronization of logical data with physical data.

### Case Study #4

#### A trusted partner for a leading CSP in Belgium with over 9+ years of delivery success in the Digi Full Program

Involved in consultancy through the execution phase in providing end-to-end inventory management solutions.



## About Cyient

Cyient (Estd: 1991, NSE: CYIENT) partners with over 300 customers, including 40% of the top 100 global innovators of 2023, to deliver intelligent engineering and technology solutions for creating a digital, autonomous, and sustainable future. As a company, Cyient is committed to designing a culturally inclusive, socially responsible, and environmentally sustainable Tomorrow Together with our stakeholders.

For more information, please visit [www.cyient.com](http://www.cyient.com)



## Contact Us

### North America Headquarters

Cyient, Inc.  
99 East River Drive  
5th Floor  
East Hartford, CT 06108  
USA  
T: +1 860 528 5430  
F: +1 860 528 5873

### Europe, Middle East, and Africa Headquarters

Cyient Europe Limited  
Apex, Forbury Road,  
Reading  
RG1 1AX  
UK  
T: +44 118 3043720

### Asia Pacific Headquarters

Cyient Limited  
Level 1, 350 Collins Street  
Melbourne, Victoria, 3000  
Australia  
T: +61 3 8605 4815  
F: +61 3 8601 1180

### Global Headquarters

Cyient Limited  
Plot No. 11  
Software Units Layout  
Infocity, Madhapur  
Hyderabad - 500081  
India  
T: +91 40 6764 1000  
F: +91 40 2311 0352

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