TruOps Common Language

Maximize Fiber Services and Wholesale Dark Fiber Revenue by Streamlining Interconnection, Billing and Ordering

Industry-Standard Nomenclature Help Fiber Providers Maximize ROI, Growth and Competitiveness.

Challenges

New entrants to the wholesale dark fiber market need to start monetizing their assets and growing market share

Incumbent fiber providers need to grow the market for their enterprise and consumer services

Service providers use a data infrastructure and framework that companies new to telecom may not be aware of

Misunderstandings about route capabilities undermine interconnection, customer acquisition, billing accuracy, revenue opportunities and market growth

Solution

Leverage industry standard to identify, classify and understand key attributes of every fiber route

Use of TruOps® Common Language® CLLI Codes™ will ensure the precise location details, functionality of equipment and virtual functions at a particular location

Use TruOps® Common Language® CLEI™ Codes to streamline asset management and ensure accuracy

Utilize TruOps® Common Language® NC/NCI™ Codes to simplify provisioning and billing

Results

Provide accurate, detailed fiber route information to service providers using their preferred nomenclature

Monetize dark fiber and grow market share

Launch and expand ethernet private line, FTTH and other services for the consumer and enterprise markets

Verify billing

Maximize operational efficiency and accuracy

Challenge:
Navigating the Wholesale Dark Fiber Market

When you don't know how the game is played, it's tough to compete — let alone win. Sounds obvious, but that's exactly what companies do when they enter a new market without understanding all of the critical success factors.

Take the fiber market. Electrical co-ops, municipalities, investor-owned utilities, data center operators and tower/site companies are among those using construction, acquisition or both to build extensive portfolios of dark fiber. But it's difficult to monetize those investments, build market share and fund additional growth without the tools necessary to conduct business with the incumbent communications service provider ecosystem.

For example, service providers need to know the precise geographic location, capabilities and other key characteristics of each fiber route to support interconnection, provision services for their customers and exchange accurate bills with their network partners. This information also must be presented in the industry-standard format that service providers already use.

If you can't meet those fundamental requirements, you'll struggle to find partners to light up your dark fiber. You'll also struggle to launch and expand your own fiber services for the consumer and enterprise markets, such as E-LAN and FTTH.

TruOps Common Language

Solution: Authoritative Information in an Industry-Standard Framework

For over 40 years, service providers, equipment vendors and other telecom ecosystem members have relied on TruOps Common Language to identify, classify and understand the location and other attributes of every piece of infrastructure. 94 million connections each day are managed using Common Language, and it is the only industry registry with more than 15 million registered network locations and millions more of interconnection points, further highlighting its role as the trusted, go-to resource for the telecom industry.

The Common Language framework includes an industry-standard data infrastructure that enables you to speak the same language as service providers. That clarity helps avoid misunderstandings about the location and capabilities of your fiber routes.

Common Language CLLI Codes enable you to identify, classify and understand the location and other attributes of every piece of your fiber infrastructure. This helps makes you a more attractive partner to service providers. For example, it helps your service provider customers quickly build out their 5G mobile sites, capture market share and drive a return on their 5G investments. The ATIS-Industry Numbering Committee (INC) guidelines require that CLLI Codes be provided by service providers to obtain numbering resource assignments from the North American Numbering Plan Administrator (NANPA).

CLLI Location and Entity Registration

CLLI Codes are geographic identifiers that uniquely specify the location of sites within a network

Locations Registry is a single source of network location information that enables service providers to achieve efficient network operations and provides seamless collaboration with their trading partners

Network Site is an existing location where one or more network functions exist

Network Entity refers to any functional category of telecommunications equipment at a network site

ZYXWVU + TS + R01
Geocode   Site Code   Entity

ZYXWVUTSR01

Entity types at a site (This is a small subset)

- End Office Digital Switching Systems
- Tandem Office Switch
- Digital Packet Device (e.g., Router, Packet Sw)
- Optical Switch
- Point of Interface (POI)
- Mobile Switching Center
- Gateway (e.g., access, signaling)
- Software Cross-Connectable Units (e.g., DCS)
- Frames
- Radio Base Station (BSC)
- Session Border Controller
- PON Optical Line Terminal
- Repeaters/Regenerators
- Customer Premises Equipment

Common Language NC/NCI Codes provide you with a stable naming scheme for describing network channels, circuit-interface characteristics and associated interface specifications. NC and NCI Code sets simplify the provisioning and billing processes, and their standard, compact format makes it easy for you to order access services.

Finally, a Common Language CLEI Code is a globally unique identifier that telecom manufacturers assign to their products before they're sold to service providers. Using CLEI Codes helps you streamline asset management and ensure accuracy.

TruOps Common Language for Fiber Providers

Site Discovery:
123 MAIN DR, ANYTOWN, ST 10001

1 record found
CLLI: ZYXWUTS01

LAT: 35.019444
LON: -115.473555

Date Record Created: 09/27/2019
Status: Active
Site Description: Customer Building, Cell Site
Record Creator: XYZ Telecom

Network Entities: 21

Entity Code	Entity Type	Description	Company (Creator)
X01	DIGITAL PACKET DEVICE	ROUTERS	XYZ Telecom
Y21	DIGITAL PACKET DEVICE	10G CSIFA	First Cellular
X12	DIGITAL PACKET DEVICE	SWITCH, ETHERNET NTE	Gold Wireless
X30	DIGITAL PACKET DEVICE	ETHERNET NTE CIENA-MI13XC047	Gold Wireless
Y22	DIGITAL PACKET DEVICE	SFLS59	First Cellular
X22	DIGITAL PACKET DEVICE	SWITCH, ETHERNET NTE	First Cellular
R55	DIGITAL PACKET DEVICE	CELL SITE	MG Broadband
X22	DIGITAL PACKET DEVICE	SWITCH, ETHERNET NTE	MG Broadband
Y11	MOBILE/SWITCHING CENTER (MSC)/MOBILE TELEPHONE SWITCHING OFFICE (MTSO)	GOLD WIRELESS SERVICES	XYZ Telecom
X33	PROCESSOR/SERVER GROUPING	RET CONTROLLER	TelcoView LLC
X07	FRAMES	DSX-1 RR 01 LINEUP	XYZ Telecom
X08	FRAMES	LCIE RR 1 LINEUP	XYZ Telecom
X13	MISCELLANEOUS NONSWITCHING ENTITY	COLOCATION / CAGE	XYZ Telecom
X21	RADIO ACCESS NETWORK EQUIPMENT	CELL SITE EQUIPMENT	First Cellular
Y34	RADIO ACCESS NETWORK EQUIPMENT	BASE STATION	Gold Wireless
X45	FACILITY/CIRCUIT POINT OF INTERFACE (POI)	HICAP SPECIAL ACTL/SC-G23 (PFM)	XYZ Telecom
X12	MISCELLANEOUS OPTICAL EQUIPMENT	TEMP REMOTE MUX #1	TelcoView LLC

* All entries shown use fictitious data and are for illustration purposes only.

TruOps Common Language

Results:
Maximize Revenue Opportunities and Operational Efficiencies

The enterprise, residential broadband and mobile markets are as highly competitive as they are dependent on fiber. Fiber infrastructure providers that show they understand the nuances of how service providers operate have a major advantage over those that don't.

Common Language provides the industry-standard naming convention and framework you need to be competitive and successful in the wholesale fiber market. It lays the foundation you need to create the ordering guide ("carrier coding guide") that service providers look for when interconnecting. Other key benefits include:

Cost-Effective Asset Management
Deploying a standardized naming system across your entire business allows you to simplify asset and inventory management. You can easily integrate Common Language codes into your current systems as well, helping you improve network utilization even as you modernize.

Optimized Network Performance
With Common Language, you can accurately report usage of assets, which helps with database design and reconciliation, service activation and process flow-through, allowing you to plan network changes and upgrades for maximized performance.

Decreased Operational Costs
When you apply a single standard terminology to network elements, you instantly improve communications across your organization, which can help you design layouts and complete work orders with fewer errors and save considerable operational expenses. Through improved forecasting and planning, you can also reduce spend on excess inventory.
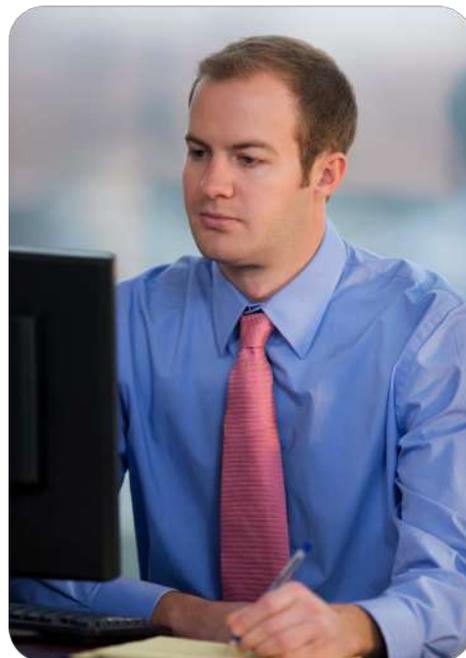
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