

HANDOUT

TruOps Common Language

Location Information Services CLLI Codes

Consistently and accurately defining a location is important when communicating between individuals, departments and companies. Ordering, provisioning, interconnection and servicing are key areas requiring the accurate description of a location, often not satisfied with GPS coordinates or street addresses. Frequently, companies believe they can make do with their own representation of a location only to find their management of locations has become an expensive, complex affair, with numerous entries for the same place, different interpretations of a location and either not enough information, or too many versions of the same information, to fulfill a task.

When interconnecting between Communications Service Providers (CSPs), a CSP's point-of-interface (POI) needs to be communicated in a clear, unambiguous form. With a single street having multiple names, this can be a challenge. Without a uniform approach to location identification, automating the process of interconnection or communicating location is near impossible, forcing stakeholders to manually identify and quality check location information.

Location definition and clarity is often underestimated, with those entering the location information not appreciating the needs of the consumers of that information. Importantly, stricter financial rules require CSPs to identify the location of their assets; this is not easy when there are multiple buildings, cell towers, cabinets that exist on the same property. Without a standardized naming convention, the lack of detail around identifying each structure and what is at that location becomes apparent. Lack of discipline in managing the location information leads to significant overheads and requires additional layers of quality control to avoid mistakes.



Simple differences such naming Main Street as Main St. or where a single location has multiple names can cost a CSP thousands in errors and correcting those errors. Managing location information is more than just describing an address. The type of location, ensuring it is uniquely described internally and between other companies, the use of that location and the equipment available there are used for tracking and running a complex business. Through the discipline and experience of TruOps Common Language the management of the locations becomes efficient, allowing the CSP to concentrate on delivering services to their customers.

- Defining a location in a consistent standardized manner is important.
- Not satisfied with GPS coordinates
- There are numerous ways of identifying the same location.
- A single street can have multiple names, community names and postal boundaries may change
- Automate the communication of locations
- Those entering location information may not appreciate the needs of the consumers of that information
- Stricter financial rules require CSPs to identify the location of their assets.
- Managing a location is more than just describing an address



TruOps Common Language

CLLI Codes

TruOps® Common Language® CLLI™ Codes are globally unique codes of either 8 characters that represent a physical location for a network site (e.g. cell sites, data centers, central offices, customer locations, huts CEVs, poles, manholes etc.) or 11-character codes to represent what type of functionality that site represents (e.g. Servers, Switches/Routers, Wireless Antenna, NCTE, PBX etc.).

CLLI Codes facilitate rapid and accurate communication of points of interface for interconnection. They may also be used to identify the precise location of assets for regulatory and operational reasons. A CLLI Code is required for NPA/NXX assignment and for the ATIS Standard ASR/LSR process.

CLONES and LocateIt®

CLONES is centralized on-demand authoritative database registry for the secure creation, management and storage of all CLLI Codes and attributes for many of the world's largest CSPs. LocateIt validates and standardizes address information entered into CLONES to ensure consistent and accurate naming. The combination of CLONES and LocateIt enables:

- The unique identification of a location for which no street address applies, e.g., a cabinet or a cell site.
- Exact duplicate prevention and possible duplicate checking
- Standardizes community names for geocoding
- Recognizes alternate street names and supports multiple address formats.
- Validates and standardizes street addresses, intersection addresses, and latitude & longitude coordinates.
- An easy-to-understand visual representation of your network through network view's GIS map.

Reduce Costs

CSPs spend precious resources deliberating over naming locations according to some internal standard, analyzing reports for consistency and accuracy, correcting errors in the communication of location information and translating location information between various standards. Use of an unambiguous industry-wide naming standard, ATIS-0300253, eliminates these costs.

The CLLI Code standard is continually assessed to ensure it remains relevant and complete. As new challenges emerge for location identification and the identification of functionality at a location, industrywide solutions are devised and implemented. This saves reinventing the wheel when managing locations internally and removing the need for bespoke translation solutions when communicating between fellow subscribers.

Cost savings are realized by:

- Removing the need to translate various methods of defining locations
- Removing issues related to duplicate entries for the same location
- Eliminating the overhead of internally managing location naming standards - software and human resources

CLLI Code

- 8-character standardized code representing a location
- 11-character standardized code to represent functionality at a location (e.g., small cells, switches, servers, etc.)
- Required for NPA/NXX assignment (LERG)
- Required on ASR/LSRs (ATIS ASOG/LSOG standards) Electronic communication of location information

TruOps Common Language

CLONES/LocateIt

- Central repository of location information used by industry
- REST and Webservices APIs for data access Network view with an interactive digital map feature Validation of addresses Geocoding to associate latitude & longitude and v&h with address
- Support for locations which do not have a street address Network functionality identification down the floor, suite and room
- Remove duplication of address



Resources Available with a Subscription

CLONES/LocateIt and CLLI Codes

Support from our CLLI Subject Matter Experts

XML Extracts of the CLONES database

Industry forums for CSPs to meet and discuss the evolution and best practice of implementing Common Language with other CSPs.

TNS policy management of key data elements, ensuring consistency in the data

Coding discipline and implementation support from Common Language data infrastructure experts.

Key documentation, including, but not limited to:

BR-751-100-050, COMMON LANGUAGE® Geographical Codes

BR-751-100-055, COMMON LANGUAGE® Geographical Code Description and Listings

BR-751-100-460, Switching System Codes

BR-751-100-440, Switching System Codes Private Branch Exchange (PBX) Centrex and Special Service

BR 795-100-100, CLLI™ Codes Description for Location Identification

Find out how TNS can help you with a wide range of telecom solutions:

solutions@tnsi.com
tnsi.com

USA	+1 703 453 8300
Europe	+44 (0)114 292 0200
Asia Pacific	+61 2 9959 0800