Integrated Network Solutions

Realworld’s Telecom Capacity Management (TCM) was developed to meet the network planning, facility planning and management needs of the telecom industry. It extends and enhances the GE Energy Network Inventory product set and encompasses solutions for inside and outside plant management and for fixed and mobile network resources.

Overview

In any industry, it is crucial to keep an accurate record of what you own and lease to get the best return on your investment. In the telecom industry documenting your inventory is critical. Keeping track of how you are using your key resources, how much capacity you have left and where this is will minimise cost and maximise profit.

Realworld offers the complete capacity management solution for the telecom industry. Users can document, view, reserve and analyse the utilisation of network and facility resources.

TCM was developed in response to the clear needs of Realworld’s telecom customers. It has been deployed and accepted into operational use at a number of Telecom customer sites. This integrated, modular and highly scalable product supports the needs of fixed and mobile network operators. It also plays an integral part in operational and business support systems, supporting network and facility planning; and sales and marketing.

TCM is made up of:

- **Internal Capacity Management (ICM):** Providing capacity planning and management of key internal and co-location facility resources at Equipment sites within a telecom network.

- **External Capacity Management (ECM):** Supporting capacity planning and management of underground route, duct and conduit space within a telecom network.

- **Capacity Management extensions to LightPath and Wireless Network Inventory:**

  - **Fixed Capacity Management:** Working in conjunction with Realworld’s LightPath product, TCM integrates resource management with network assignment. Users can track assignable fibers, copper pairs and ports in their network.

  - **Wireless Capacity Management:** TCM extensions also enable mobile users to track key Wireless resources such as tower and platform space.

**Internal Capacity Management**

Internal Capacity Management (ICM) provides capacity planning and management of key internal and co-location facility resources at equipment sites, and exchanges, within a telecom network.

ICM provides the ability to track and reserve internal and co-location space within a room or rack. It allows users to place and manage additional equipment, such as mains power. Configurable thresholds provide immediate feedback on resource utilisation and provide alerts and warnings as capacity limits are reached. The user can also create reports to aid planning, sales and regulatory requirements.
Internal Capacity Management (Cont...)

ICM’s key features are:

- **Floor and rack space management:** Provides the ability to define, manage and allocate space within a room or rack. Space can be designated for internal use, within a suite line or for co-location use.

- **Additional Equipment Inventory:** Extends the inventory model of GE Energy’s Physical Network Inventory (PNI) for ancillary equipment. This includes air conditioning and security units. Thresholds can be defined for power units to track power usage and ensure uninterruptible power supply needs are met.

- **Thresholding:** Automatically monitors the utilisation of key resources such as power and space. Immediate graphical feedback is offered in a ‘traffic light’ style format, when the secondary or primary thresholds have been reached.

- **Reporting:** A wide set of configurable reports are also provided to aid planning, sales and also regulatory requirements. These can be output directly to external systems such as Excel.

External Capacity Management

External Capacity Management (ECM) supports capacity planning and management of underground route, duct and conduit space within a telecom network.

ECM provides the ability to track space within underground routes, ducts and conduits. Capacity utilisation thresholds can be defined and can be used to colour the network, providing immediate visual feedback on the utilisation of the network. The user can also create duct space utilisation reports.

**ECM’s key features are:**

- **Thresholding:** Enables thresholds to be defined for underground routes enabling the user to monitor the utilisation of external capacity.

- **Utilisation Calculation:** Can be configured to calculate space utilisation in a number of different ways, such as “only calculate the available space in sub-ducts” or “calculate free space based on the number of cables per sub duct” or on actual cable and sub duct sizes.

- **Graphical Reporting:** Once the threshold has been defined for a route, it will be coloured using a style based on its utilised capacity. E.g. green, yellow, red.

- **Auto Routing:** Planners can quickly determine available routes between two points in the civil network.

- **Utilisation Reporting:** includes a number of pre-configured reports, including duct capacity reports, which can be output to external systems such as Excel.