

NetCracker Asset Management

A typical Tier 1 Communications Service Provider (CSP) spends up to 8% of its revenues acquiring network assets. It spends 3 times as much deploying and operating those assets.

A well-thought-out asset management strategy can save a CSP millions if not billions of dollars over the life of the network and have a direct impact on its balance sheet.

In recent years the challenge of optimizing and managing assets has multiplied. CSPs are no longer responsible for just the network assets; today they're also responsible for managing the logical and IT assets. Additionally, equipment and devices have become much more complex. For example, customer premises equipment (CPE) has evolved dramatically from having a simple internal structure or set of options (such as a POTS telephone) to being a complicated set of devices such as PDAs, provider-managed business/home LAN equipment, and IPTV STBs that require professional management. Simultaneously, the service provider network itself has moved past Layer 4 of the OSI model and now includes data centers with services and licensed software that are needed to deliver converged, enterprise services.

The capital constraints of the last few years have

The Asset Management Challenge

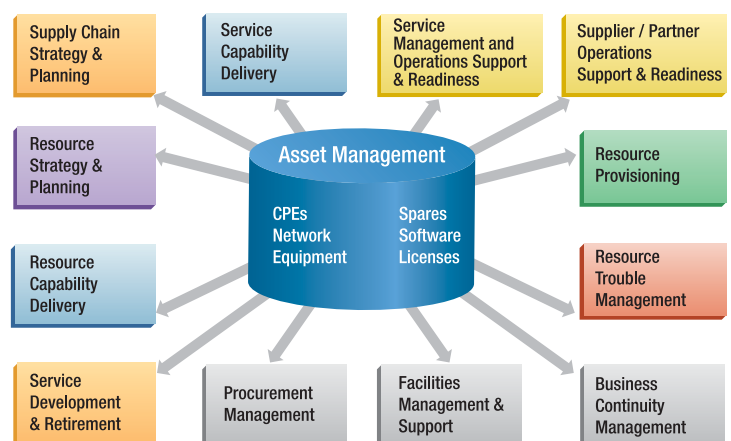
made the efficient use of existing assets all the more important, especially when it comes to managing expensive spares for modern telecom equipment. Reduced CapEx budgets have also led to maintaining an optimal level of equipment in stock, a task made more challenging because the equipment originates with different vendors and sources.

Strict audit regulations like the Sarbanes-Oxley Act (SOX) now demand a much higher visibility and understanding of network-related assets used for service delivery. Information such as current location, status, and utilization is no longer sufficient for regulatory compliance. Predictive and forecasting information, such as available capacity to support revenue growth, is also necessary.

Such a level of detail can only be ensured through the availability of precise network configuration data. Information on modern network-related assets such as CPE, software, data centers, network equipment, and spares can no longer be managed just as "line items" in existing financial systems or in static IT infrastructure management tools. It now requires convergence-age systems like NetCracker Asset Management.

NetCracker's Asset Management module leverages and extends the capabilities of the Resource Inventory and Outside Plant modules by giving service providers tools to track all network-related assets (including CPE, software licenses, and spares) throughout their lifecycle, in a single, centralized data repository. NetCracker Asset Management tracks the "what," "where," and "who" related to each asset.

NetCracker Asset Management



To correctly represent the complicated structure of modern network-related assets, NetCracker Asset Management relies on extensions to the powerful Resource Inventory meta data-driven object model and covers:

- Physical assets such as sites, network hardware, Network Management Systems (NMSs), Element Management Systems (EMSs), Network Elements (NE), PC hardware and accessories, power equipment, and wires, as well as CPE including STBs and cable/DSL modems
- Non-physical assets such as software, licenses, and support and maintenance contract details

NetCracker Asset Management focuses on supporting the following activities:

- IMACDs: Proper management of typical installation, move, add, change, and delete requests that occur throughout the lifecycle of an asset
- Requisition Ordering: Issuing a request for an asset item that is either reserved in a warehouse if available or is requested from procurement
- Auto-Replenishment procedures that keep the stock of assets at a level that is optimal to the service provider's needs, balancing CapEx with time
- Detailed, configurable query, search, and reporting on complex asset information

NetCracker Asset Management has a number of components designed to minimize manual and routine tasks and enable the correct and optimal management of assets:

- The Warehouse Management component enables equipment stock to be kept at optimal levels and also enables reservation and requisition requests to be processed for bundled assets. This is supported by the tracking of all data related to assets and asset transactions (for example, asset item ID, vendor name, stock availability, date of receipt, or asset depreciation transactions). The asset-related information is made readily available through a central repository that allows stock availability information to be incorporated in operations and maintenance processes, planning and development processes, and fulfillment processes. The information is also available for asset management reporting and analysis.

- The Spare Parts Management component enables a hierarchical data organization that allows all relationships between asset items and asset item groups to be defined. It ensures the specification of sub-components, hardware, or other software that requires attribute checks (such as version number and size). It also provides for hierarchical search and sorting capabilities and enables at-a-glance views.

- The IMACD Tracking component provides comprehensive lifecycle management for telecom and IT infrastructure from delivery to retirement. It supports IMACD order and request management and provides due regard to the specifics of physical and non-physical assets.

- The CPE Lifecycle Management component provides end-to-end lifecycle management for all asset items and produces an extensible set of CPE-specific statuses. The CPE statuses are administrator-defined parameters and trigger the automatic generation of proper work orders.

- The Requisitioning Catalog contains information about materials, bundles, and different types of accounts (e.g., warehouses, shipper accounts, and vendor accounts).

NetCracker Asset Management also allows the asset model to be extended with additional objects and attributes that denote customer-specific assets and the relationships between them. Asset Management's flexibility enables it to create customer-specific object hierarchies and modify existing hierarchies. NetCracker's fully configurable asset management rules provide for the customization of asset management processes in accordance with corporate policies by defining status change thresholds, points of report generation, automatic messaging, and other criteria.

Asset Management can be easily integrated with external systems such as financial systems (for data on the depreciation of assets) and procurement systems (for auto-replenishment and restocking).

Mapped to eTOM, Asset Management corresponds primarily to Level 2 processes of the Operations Support & Readiness and Fulfillment branches in the Resource domain.

Benefits of NetCracker Asset Management

- Managing the entire lifecycle of modern network-related assets used to deliver services to customers increases operational efficiency.
- Maintaining optimal stock levels and tracking the end-to-end lifecycle of spares reduces capital expenses.

- Tracking detailed information about all network-related assets from CPE to installed software and spares in a single, centralized system makes it easier to comply with Sarbanes-Oxley and other regulations.