



AUTOMATING LARGE-SCALE IT ASSET TRACKING AND DATA CENTER MANAGEMENT



IT Asset Management

BUSINESS CHALLENGE

A leading Fortune 100 tech company is experiencing significant growth, requiring them to increase the number of data center campuses they use to manage their online site user traffic. This expansion has driven them to seek a more automated method of receiving goods into data centers and tracking their current inventory.

The company currently has 5 data campuses, each housing an average of 3 data centers. Each data center contains 8 data halls, each filled with hundreds of racks. This makes equipment tracking very challenging.

Three employees are dedicated to conducting inventory counts. Initially, counts were reported on a quarterly basis, but the desire to maintain a higher level of accuracy has led the company to move to a monthly inventorying schedule. Bar codes are used to register incoming equipment and conduct inventory counts. Since bar codes require a line of sight to be read, they are inherently a very manual method for asset tracking.

In fact, it took these 3 individuals 3 days per data center to count inventory. For the growth the company is experiencing and planning, this was not a scalable solution.

SOLUTION

Realizing the need to automate their asset-tracking process, the company reviewed numerous solutions prior to choosing RFID as the best and most cost-effective asset-tracking solution to meet their requirements.

Also, asset-tracking requirements, scope and custom solutions were identified. Field-based asset-tracking application engineers surveyed the process and made recommendations based on the customer's application. The goal was to develop an RFID solution that automates the tracking of preconfigured racks and replacement inventory. Replacement inventory was to be tracked at several key locations:

- Entry to the data center upon receiving
- Into and out of storerooms
- Into the data hall



Assets and consumable parts are now tracked via an automated transaction process. Inventory is managed by the system. The software has a dashboard feature that can be viewed on laptops, tablets and smart devices.



SOLUTION *(continued)*

For a comprehensive asset-tracking solution, the company utilizes a combination of passive RFID tags and other asset-tracking system components in the following areas:

Receiving Dock

As product is received on the dock, individual items are affixed with a passive tag. For this application, RFID labels are the standard tags used to track inventory. The tags provide product position and other key data points throughout the internal supply chain process.

Asset Inventory and Hub Rooms

Asset-tracking devices monitor materials as they enter and leave the inventory and hub rooms. Each shelf in the inventory room is associated with an asset-tracking device. Assets and products are added to inventory when tag presence is within tracking device range.

Bulk inventory is managed using RFID tags. Plastic bins and metal containers are tagged with RFID tags. Each tag has a designated minimum reorder point. As products are removed from the bins, the software compares the total quantity picked versus the minimum reorder point and places an order for bins containing minimum reorder thresholds.

Data Halls

Static tracking devices are also placed in halls to follow the movement of items. An asset location is immediately identified since each tracking device has a specific placement. The devices record several key data points to accomplish this task.

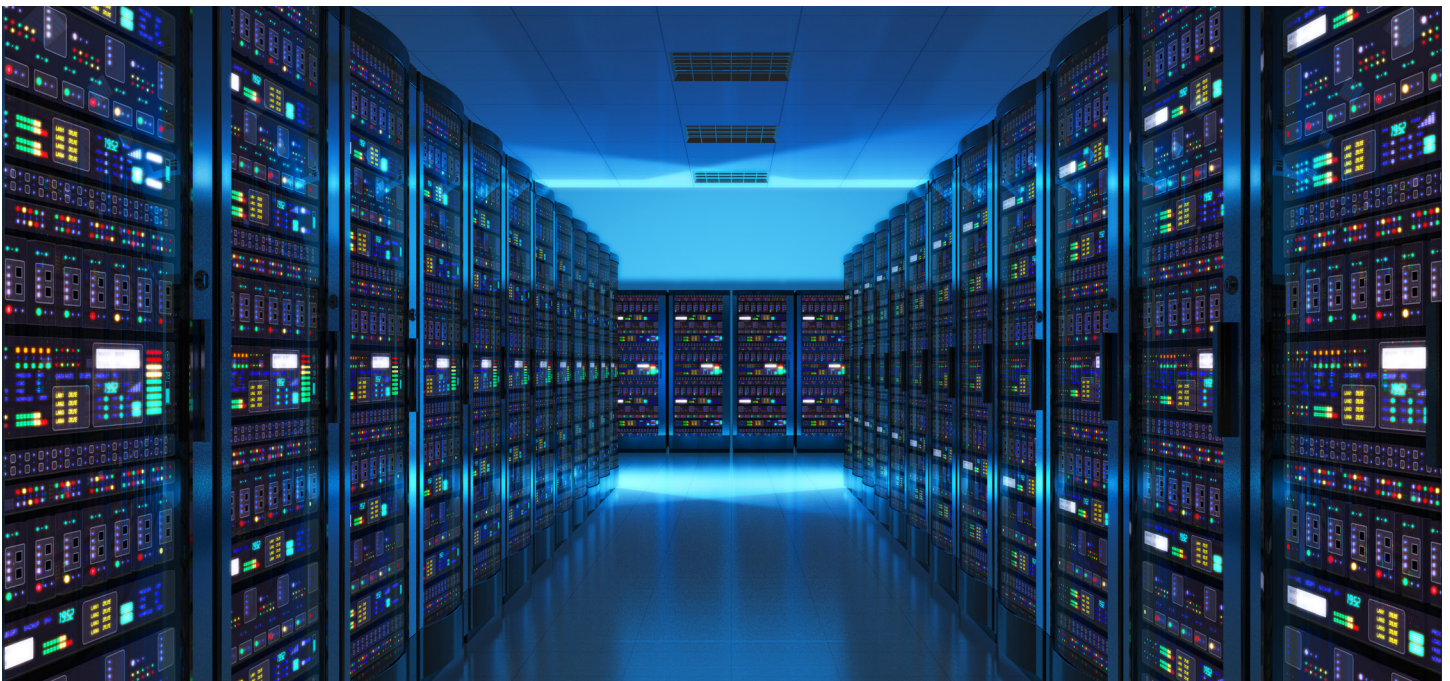
Molex Advantages

An asset-management solution provides customers with several critical efficiencies and operational improvements. The following lists several advantages of incorporating an asset-tracking system for automating data center management:

1. Datacom products are received and automatically reconciled with procurement purchase orders.
2. Equipment is tracked throughout the building, including inventory rooms, halls and storage areas.
3. Transactions—such as receipt into the storage room as well as removal—occur automatically and are reported into the enterprise resource planning (ERP) system of record.
4. Highly accurate, perpetual inventory levels are reported, allowing the customer to optimize assets.

Industries

Industrial, Commercial, Industrial Automation, Data Center Solutions, Medical



Contact Molex for more information about asset-tracking solutions in data center management.

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