

The logo for Omni-ID, featuring the company name in a bold, sans-serif font with a registered trademark symbol. The background of the entire page is a close-up photograph of blue and white network cables plugged into a patch panel, with a soft bokeh effect in the background.

Intelligent Tracking & Monitoring Devices

omni-id.com



Customer success story [RFID]

Asset Tracking and Visibility in the IT Data Center

For one global information technology company, tracking IT assets had become an urgent problem. As organization that runs on information technology, the company operates data centers worldwide that both support and enable its global businesses.

Now, more than ever, organizations need to increase efficiency of IT inventory and asset management processes. Unless IT assets can be effectively tracked—either within the data center or by monitoring their entry and exit—companies can't meet service, financial, and legal obligations related to managing those assets.

Data centers, in particular, present inventory challenges that expose companies to higher costs and greater liability. When corporate data is involved, the potential loss of sensitive information housed in data center assets puts organizations at serious security and regulatory risk.

For one global information technology company, tracking IT assets had become an urgent problem. As organization that runs on information technology, the company operates data centers worldwide that both support and enable its global businesses. The use of these IT systems—and the assets that drive them—

requires the company to efficiently manage critical resource tracking and security endeavors, while complying with stringent legal requirements, such as Sarbanes-Oxley regulations. Until recently, tracking IT assets at the company was limited to the use of barcode and human-readable tags. As a result, all asset tracking required labor-intensive physical inventory processes that were both inefficient and prone to errors and omissions.

The Challenge

The company sought to implement data center resource management solution that would improve asset visibility, streamline inventory and reporting, and enable its IT staff to spend more time on their core responsibilities and less time searching for IT assets. RFID technology emerged as the most promising solution to meet this challenge. RFID enables the location and identification of assets without direct line of sight, which is required with barcode. An effective RFID solution could therefore help the company identify and track IT assets more quickly and with greater precision. Such a solution could also enable the company's data center teams to take inventory more often and more accurately, thereby getting them closer to determining when asset losses occur and why.

In order to successfully deploy the solution, the organization would need to address one of the key obstacles to RFID in data center environments—namely, the interference of metals to RFID signals. For that reason, solutions based on conventional RFID tags do not provide the accuracy and reliability necessary to support efficient IT asset tracking. However, the emergence of on-metal active and passive tags (including those from Omni-ID) has enabled RFID-based data center systems to achieve near perfect levels of on- and off-metal performance.

In 2008, the global IT company conducted a time-and-motion study to determine how much efficiency could be gained by deploying an RFID data center inventory management system. One study compared a passive Omni-ID-based RFID solution to manual data gathering and found that the RFID solution was 15 times faster. Compared to barcode data gathering, the solution was four times faster. Based on these results, the company's asset tracking project team determined that a wall-to-wall inventory at a typical data center with 10,000 IT assets could potentially be completed in approximately four hours using passive RFID technology instead of seven working days if it were to be done manually.

“An effective RFID solution could therefore help the company identify and track IT assets more quickly and with greater precision”



The Omni-ID Prox™ tag has been successfully deployed at several of the company's data center facilities—helping the it dramatically reduce the time and resources required for the inventory of IT assets.

The Solution

With its initial RFID study successfully completed, the company moved forward with the initial deployment and continued testing of RFID-based IT asset tracking systems at operations in the United Kingdom and United States. While this was occurring, the company expanded the development of its own RFID product offerings.

In one of its U.K. facilities, the company successfully completed an asset tracking program by fitting campus laptops with Omni-ID Prox™ tags, enabling it to test the company's own RFID capabilities for asset tracking. The company is also using Omni-ID-based passive tag systems to increase the effectiveness and efficiency of IT inventory, auditing, and asset management processes at another larger data center in the U.K. In addition, the company has begun to plan for the use of RFID technology to track nearly 17,000 IT assets in eight outsourcing centers in the U.K.

These deployments add to the company's numerous internal RFID implementations around the globe, including a supply chain management RFID system in place at a manufacturing plant in New York state. An additional 7,000 IT assets are being tracked with the use of Omni-ID tags at a large facility in Texas.

Omni-ID is continuing to work closely with this global company to help it meet its own RFID requirements, while extending the reach of the technology to the company's customers worldwide.

“The addition of Omni-ID tags in our RFID-based IT asset tracking system helped us achieve up to 15x efficiency improvement over manual inventory processes.”

Global Solutions Executive

IT Asset Tracking Solution Benefits

The RFID solution developed for large data center operations of this global information technology company has delivered the following benefits:

- Improved asset visibility
- More streamlined and accurate inventory management
- Greater compliance to financial and accounting requirements
- Reduced number of lost/missing IT assets
- Asset management team return more value to the organization
- Short return-on-investment cycle
- Improved service level agreement (SLA) management through improved maintainability of IT assets

Inventory efficiency has been the most significant benefit achieved by the use of RFID (including Omni-ID tags) in the asset tracking system. Overall, the company's data centers have seen a 15x improvement in the speed of inventory:

Number of IT Assets	Hours for IT Asset Tracking			RFID Resource Time Savings
	Manual	Barcode	RFID	
1,000	5	2	0.4	4.6 hours
5,000	25	8	2.2	3 days
10,000	50	16	4.4	6 days



Visit www.omni-id.com to learn more or email sales@omni-id.com for all product or technology inquiries and we will be pleased to get in touch.

Omni-ID is the leading supplier of passive, low-profile UHF RFID solutions. Through our patented technology, Omni-ID “cracked the code” to overcome the problems traditionally associated with RFID, enabling a broad range of new applications that improve accuracy and efficiency in asset tracking, supply chain management and work-in-process. Our family of versatile RFID tags works reliably in the harshest environments, including on, off, and near metal and liquids and excels in solving tracking and identification challenges with unprecedented accuracy. With offices in the USA, UK, Asia and India backed up by a purpose-built manufacturing facility in China, our mission is to drive the widespread adoption of RFID and wider IoT technologies as the optimal tracking and identification devices.