Alcatel-Lucent OmniAccess Stellar Asset Tracking

Smart connections to your people and assets in real-time
Asset tracking to optimize your business

Asset tracking enables your business to know where critical and non-critical assets are located in real-time all the time. This includes items such as, wheel chairs and infusion pumps for healthcare, luggage trolleys and supply carts for hospitality, tools and ladders for transportation, among others. With asset tracking, staff and equipment can be located quickly and shown on a floor plan map.

Asset tracking also provides information about usage patterns – even when the equipment is not in use. Knowing if assets are overutilized or underutilized can provide information such as:

- How long people have to wait to get access to the equipment
- Whether assets are sitting in a storage area for long periods of time
- How regularly equipment is being serviced
- How much time personnel spend looking for people and equipment

The latest technology to make its mark on asset tracking is Bluetooth Low Energy (BLE). BLE is a near-field technology that provides better location accuracy and because it uses less energy, BLE devices have a longer battery life which reduces operational and maintenance costs. A BLE solution with an intuitive smartphone app can enable staff to locate personnel and assets on a floor plan map, with a simple auto-text search. And the ability to easily register BLE tags for relevant assets or staff makes life easier for IT.

A BLE asset tracking solution:

- Provides accurate tracking of assets without additional/expensive overlay solutions
- Does not interfere with existing Wi-Fi infrastructure
- Improves battery efficiency for devices using BLE versus Wi-Fi technology
- Ensures better ROI than non-BLE solutions based on equipment, deployment and operational costs

Asset tracking to optimize your business
Tackling business challenges with asset tracking

Organizations face a variety of financial, operational and security challenges every day. Time spent looking for people, or equipment may not seem very high on the priority list, but wasted time means wasted money.

Whether it’s for an emergency situation, for regular use, or for maintenance, assets need to be easily located. In addition to understanding where assets are located, personnel safety and security are also important factors to address. Knowing the location of people, including employees, visitors and contractors means assistance can be quickly dispatched in the event of an emergency.

Geofences, or virtual boundaries, enable the ability to send geonotifications when a person or device equipped with a tag, enters or exits a predefined (geofenced) area. In addition, BLE tags equipped with an alert button can notify personnel of an incident that may require action, complete with indoor geolocation information as soon as the button is pushed. The alert button function can be programmed to provide alerts that cover various uses such as personal security or assistance needed, maintenance required for equipment, and cleaning requested for a room, to name a few. The alert history is available for post-event/notification analysis and alert types can be changed for tags based on specific use case requirements.

Analytics provided by asset tracking offers information about how assets are used, and where they are located. This information helps organizations optimize equipment utilization and reduces the cost of replacing, leasing and over purchasing equipment to ensure availability. Inventory lists can indicate that equipment is properly maintained and optimized based on the data provided. In addition, geonotifications can provide alerts such as, when service is due, or when an asset is being removed or stolen from a building.

Saving time means saving money

Nurses spend more than one hour a day looking for someone or something*. That is time that could be better spent caring for patients. And due to the fact that there are approximately 15–17 devices per bed, and about one quarter of those bedside devices are networked**, locating devices has become more important than ever.

If you can’t find a device or piece of medical equipment you can’t use it. A GE study found that many hospitals are reporting equipment utilization rates of less than 50%***. That’s well below the industry average of 70% to 80%. In addition, misplaced or stolen medical equipment (such as wheel chairs) can cost hospitals millions of dollars each year to replace or lease.

Assets need to be found quickly, whether it’s to address an emergency situation, or to ensure they are accounted for proper maintenance. If medical equipment, such as infusion pumps and patient monitors, aren’t regularly serviced, they cannot be used and must be replaced, which can further increase hospital capital expenses.

Sources:
* ROI of Locatable RTLS for Healthcare whitepaper, April 2015
** Cybersecurity: It’s Clinical, Too, Trustee Magazine, 2017
*** GE Study, 2016
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How it works

The Alcatel-Lucent Enterprise Asset Tracking hardware components work together with the OmniVista Cirrus Asset Manager to provide location information for people and assets using ALE BLE tags. It is necessary to install the Stellar BLE Gateways, which autocalibrate for location accuracy using calibration beacons. Based on the accuracy level expected and environment, a certain density of BLE gateways and autocalibration beacons is required.

The Stellar BLE gateway collects asset tag data required for location accuracy and relays it to OmniVista Cirrus Asset Manager which accurately calculates the position of people and assets based on the built-in location engine. The location information is then displayed in the OmniVista Cirrus Asset Manager tools and mobile app. This information is never shared and only used for location accuracy and conforms to the European General Data Protection Regulation (GDPR) and similar personal security regulatory requirements.

When it comes to locating equipment and people, Alcatel-Lucent OmniAccess® Stellar Asset Tracking provides the smart connections that help organizations, provide a safe and secure environment, and optimize operational efficiency.

The ALE Asset Tracking solution enables enterprises to locate people and assets, quickly and accurately. From a business perspective, asset tracking can reduce the amount of lost or missing equipment, improve workflows and reduce operating costs.

With OmniAccess Stellar Asset Tracking, organizations can:

• Free up time that can be better spent attending to more pertinent tasks
• Reduce the cost of replacing equipment that can’t be found
• Locate people quickly in an emergency situation
• Provide an unparalleled level of security for all

Locate people and assets in real-time

OmniAccess Stellar Asset Tracking saves time with simple-to-use features such as:

• Easy search interface for non-technical staff
• Role-based access for locating an asset
• Search based on individual asset/person name or on a category of asset/person
• Web and mobile app-based asset search with optimized responsive design
• Customizable asset category parameters for various industry use cases

Tracking objects and people in real-time can help improve process and workflows in healthcare, hospitality, transportation, education and government.

Benefits include:

• Improved equipment utilization and reduced overhead costs
• Better tracking of assets in and around the facility to avoid theft
• Improved efficiency by reducing the time required to locate resources

View all assets

See which assets are available then find them on a floor plan map. Equipment and role specific icons make it easy to locate the person or asset you need based on the icon graphic and color. Custom fields can be implemented to set up personalized parameters directly through the app.
Asset Tracking solution components at a glance

The following diagram highlights the key components of the OmniAccess Stellar Asset Tracking solution.

OmniAccess Stellar BLE infrastructure

- **OmniAccess Stellar AP1201BG BLE Gateway** and/or **OmniAccess Stellar Access Points** with built-in BLE radios receive BLE frames from the asset tags and then relays the location information to the Alcatel-Lucent OmniVista® Cirrus Asset Manager via Alcatel-Lucent OmniAccess Stellar Access Points, or third-party Wi-Fi or LAN infrastructure.

- **Autocalibration beacons** provide fixed reference points for the gateways, which improves tag accuracy.

- **Mobile BLE tags** (square, card-shaped, coin-sized, and with wristband) for people and assets provide a simple and non-obtrusive way to track what's important, whether it's people or equipment. Tags have built-in accelerometers to reduce battery consumption and precisely track movement. Tags also support programmable alert capability with the press of a button, to cover various uses. Assigning an asset tag is as simple as scanning the tag's QR code into the smartphone app. Various attributes can be assigned to each tag including: asset name, department to which a tag is associated, asset category, future service date, and geonotifications.

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**Brochure**
OmniAccess Stellar Asset Tracking
Cloud management

Alcatel-Lucent OmniVista® Cirrus Asset Manager provides management, search, statistics and analytics, and geonotification capabilities. It stores and organizes every data point to enable accurate analysis and workflow optimization. It also provides real-time floor plan map views of all assets and people wearing tags, including employees, security staff, as well as, daytime contractors.

- **Asset management:** Site configuration, subscription; assign or reassign a device or person to a tag; each device can be associated with an image, a category, customized relevant parameters like geonotifications which issues notifications when an asset is removed from a designated area or geofence

- **Search:** Provides real-time location data on assets:
  - Simplified search for equipment, a person or a category of equipment/person
  - Advanced search with filtering feature
  - Future advanced search combining multiple choices (asset + service + availability)
  - Optimized and responsive search, which enables a user to modify and manage custom fields directly by clicking on an icon, for example: notify that an asset is not available or add a note

- **Asset inventory:** A complete inventory list of asset tags ensures all your equipment is accounted for. This simplifies IT’s role in managing and maintaining the asset tracking network, while providing real-time audit data for operations, such as current battery life status of all tags.

- **Statistics and analytics:** Provide real-time and historical location data that allows IT, staff, and operations to fully understand the location, movement and utilization of assets. Insightful analytics such as heat maps and geonotification data help organizations make better business decisions. Cloud APIs can also be leveraged by a third-party system for even more business intelligence analytics.

- **Contact tracing:** Provides real-time monitoring on the number of people in a specific area to enforce social distancing as well as historical data to use in tracing historical contact flow where necessary.

- **Geonotifications and push-button alerts:** Uses geofencing for contextual alerts to individuals or groups when certain conditions are detected such as entries/exits, to and from a defined area, personal assistance requirements, and security breaches. Alert histories are available for post-event/notification analysis.

**Mobile application**

The simple smartphone app and web interface are essential tools that help track objects and people in real-time. Additionally web-based and mobile app-based notifications ensure the right people get notified about a relevant event or when equipment needs maintenance.
Asset Tracking in industries

**Healthcare**
Locating clinicians and patients quickly improves care delivery, operational workflows and on-site security. Real-time location identification for equipment such as beds, wheelchairs, and monitors ensures people have what they need, when they need it.

**Hospitality**
In the hospitality industry asset tracking lets hoteliers locate equipment in real-time. It reduces equipment loss for items such as TVs, irons, trays, and carts among other assets.

**Education**
Smart connections optimize campus operations with real-time asset tracking for equipment including laptops, tablets, lab equipment and sports equipment. In addition, knowing where personnel, and visitors are helps improve security and safety for all.

**Transportation**
With asset tracking transportation operators can identify the location of luggage, wheelchairs, defibrillators, and Ground Support Equipment (GSE) including ladders, trailers, loaders and tow bars. In addition tracking passengers, emergency personnel and traveling minors improves safety and security.

**Government**
Provide safe environments for people and secure environments for assets including tools, trucks, phones, important documents and archived records.

Proof of concept

ALE is working with customers to develop proof of concepts across industries in real-world environments.

**Transportation**
In rail transportation passengers are often relegated to storing luggage in a common holding compartment in the carriage in which they are seated. Many are often hesitant to do so as they are concerned about theft. With asset tracking passengers can track their bags and get real-time alerts about any baggage movement.

**Hospitality**
In the cruise line industry passengers are equipped with bracelets and a mobile app to track family members while on board the ship. In the event of an emergency situation cruise operators can use asset tracking to quickly manage an evacuation order. Asset tracking can also be used to optimize resource and equipment usage.

**Healthcare**
From assisted living to hospital environments, asset tracking is saving time and money. Recent hands-on collaboration with individuals in the healthcare industry confirms that asset tracking accuracy in real-time is freeing up staff time to provide improved patient care, as well it enables optimized equipment utilization and can, in fact, reduce equipment loss. The intuitive interface and ease-of-use means healthcare professionals can quickly and accurately find what they need, when they need it.
Conclusion

Organizations need to operate effectively while keeping an eye on costs. Knowing the location of staff, as well as asset utilization, arms you with the tools to maximize the value of your people and your assets. Comprehensive analytics, such as historical data, management of flows within a geographic area, lets you optimize and adapt your environment for maximum results, to improve efficiency and reduce operational costs.

The ALE OmniAccess Stellar Asset Tracking solution lets industries locate assets and people, in real-time. Knowing where your assets are can save the cost of acquiring new equipment if it can't be found. The ability to quickly locate equipment reduces the time that staff spends looking for assets and frees up time to address other business concerns.

To learn more about the ALE Asset Tracking solution or request a demo, contact us today.