



Alcatel-Lucent OmniAccess Stellar LBS

The Alcatel-Lucent OmniAccess® Stellar LBS solution provides comprehensive indoor location services including way-finding, location-based push notifications and location analytics. OmniAccess Stellar LBS is based on Bluetooth low energy (BLE) technology and provides high location accuracy, scalability, easy installation and management of the complete solution. OmniAccess Stellar LBS provides network infrastructure agnostic indoor location services based on an innovative crowd-sourcing solution.

The OmniAccess Stellar LBS solution enables customer-facing enterprises to provide individual, customized and richer end-user experiences. The ALE LBS solution can enhance the way enterprises engage with their end-users and employees and allow enterprises to understand end-user behavior in a more meaningful way and adjust the enterprise environment to provide better customer service.

The OmniAccess Stellar LBS solution is comprised of the following components:

- OmniAccess Stellar LBS Cloud Manager
- OmniAccess Stellar LBS Installer – a mobile app
- OmniAccess Stellar LBS SDK (software development kit)
- OmniAccess Stellar BLE Beacons – which includes standalone, USB dongle and the OmniAccess Stellar AP123x with built-in BLE

OmniAccess Stellar LBS Cloud Manager

The OmniAccess Stellar LBS Cloud Manager enables deployment, management and maintenance of indoor location services for small to large enterprises. It offers a step-by-step wizard guide ensuring correct installation and functioning of location-based services.

The LBS Cloud Manager is used to manage all configurations related to Stellar BLE Beacons, Geofences, and Geo notification. It enables you to provide faster deployment of multi-site customer facing enterprises and remotely define and manage indoor location services. It also tracks and provides the health status of Stellar BLE beacons including the battery status. The LBS Cloud Manager supports importing multi-format maps for location services and easily integrates with the mobile application and its associated functions such as points of interest, route planning and more. Publication of the positioning database for the OmniAccess Stellar LBS SDK is also managed by the LBS Cloud Manager.

Included in the LBS Cloud Manager is a comprehensive and customizable location analytics dashboard which can be tailored to the enterprise needs. The dashboard allows the user to easily and ergonomically visualize flows, visit times, and occupancy rates of defined places and zones, depending on the criteria selected. Location analytics enable the enterprise to understand the customer's behavior better and enables them to engage with end-users' needs and requirements, which in turn enables a richer customer experience.

All technical documentation, including LBS SDK documentation, is provided for integrating the OmniAccess Stellar LBS SDK into the customer's mobile application.

OmniAccess Stellar LBS Installer App

The OmniAccess Stellar LBS Installer app simplifies the deployment of Stellar BLE Beacons. Once the maps are imported, the Cloud Manager Installer App can be used to scan the Beacons' barcode and place them on the Map where the Beacons are physically installed. The app is also used to calibrate the location signal radius to provide highly accurate location services.

The Installer app enables the network admin to test and ensure location services are working as expected. The app is a key tool for demonstrating indoor location services until an end-user application is developed to integrate the location SDK.

The beacon firmware and configuration can also be securely upgraded "Over- The-Air" by the OmniAccess Stellar LBS Installer app.

OmniAccess Stellar LBS SDK

The OmniAccess Stellar LBS SDK (software development kit) is designed to simplify integrating location services into enterprise mobile applications. GPS-like location coordinates provided by the SDK make it easier to integrate location information into a mobile app. The SDK addresses the simplest, to most complex, requirements while delivering the highest quality performance and reliability. This unique SDK provides the full set of services easily configured and monitored with the Stellar LBS Cloud Manager.

An innovative Fusion algorithm takes advantage of different technologies and sensors that are available in mobile phones to provide accurate location information, along with smooth indoor to outdoor transitions. This feature provides smart sensor management which ensures low power consumption for

GPS and motion sensors, and these sensors are only turned on when necessary. The Fusion algorithm works offline and in device-centric mode, to ensure location services continue to work

without WAN connectivity. The Fusion algorithm functions in the foreground and background, and supports auto wakeup.

The SDK also implements an innovative crowd sourcing method to track the status of OmniAccess Stellar BLE Beacons and reports the status to the Stellar LBS Cloud Manager. This removes the need to install additional BLE gateways to provide location services. The position database (PDB) is automatically synced between the LBS SDK and the Cloud Manager, whenever there is a change in any geo-fence configuration, in addition, a new calibration is performed. The PDB is encrypted to ensure secure access and can only be accessed by the LBS SDK through a secret key provided by authorized sites in the Stellar LBS Cloud Manager.

OmniAccess Stellar LBS Beacons

The OmniAccess Stellar BLE Beacon provides location-based notifications whenever mobile devices, powered with the OmniAccess Stellar LBS SDK, come within range and based on their opt-in preference. This enables public facing enterprises to provide personal and customized user experiences for individual users.

OmniAccess Stellar BLE Beacons are available in three physical form factors:

- OmniAccess Stellar AP123x have a built-in BLE beacon
- OmniAccess Stellar BLE Dongle (USB) beacons can be plugged into OmniAccess Stellar Access Points, OmniAccess Access Points, or other devices which have USB ports (for power only).
- Standalone, battery-powered, OmniAccess Stellar BLE Beacons provide flexibility, enabling them to be placed anywhere in a building. OmniAccess Stellar BLE Beacons provide five years of worry-free service while ensuring stable power output for the duration.

Ordering information

PART NUMBER	DESCRIPTION
OAL-BT-10	OmniAccess Stellar BLE Beacon - Battery powered Beacons - 10 pack
OAL-BT-USB-10	OmniAccess Stellar BLE USB dongle - 10 pack
OAL-BT-MNT-10	Outdoor mount kit for OmniAccess Stellar BLE Beacons - 10 pack
OAL-SDK-LSGS	OmniAccess Stellar LBS 1 yr subscription license for Bluespot, Wayfinding and Geo notification for 100 m ² or 10,000 ft ² .
OAL-SDK-LSGSA	OmniAccess Stellar LBS 1 yr subscription license for Bluespot, Wayfinding, Geo notification and Analytics for 100 m ² or 10,000 ft ² .