

Overview

Bleu Proximity is a compelling solution for integrating iBeacon technology into your apps and your solutions. With a tight integration of the hardware, software, and deployment tools, Bleu Proximity focuses on wide scale deployment in a cost effective and efficient manner.

Bluetooth-based Proximity

Smart phones have long had the capability to detect location based on GPS. However, effective use of GPS requires line-of-sight to GPS satellites and takes a while to resolve the phone's position. The current GPS system also has limitation as to how accurately it can resolve a position. This makes it difficult for indoor proximity detection and navigation. With the release of iOS 7, Apple introduced iBeacon to enable iPhones to detect proximity to Bluetooth devices that support the iBeacon protocol. iBeacons fills the gap that GPS cannot. It also provided the ability to provide notifications to applications when nearby a monitored iBeacon. This provides apps running on iOS 7 the ability to engage the user based on close proximity detection to areas of interest.

Large Scale Deployments

With organizations that have a large number of locations or square footage that needs to be covered by iBeacon technology, deployment costs and support are the major cost drivers for deploying iBeacons. Large organizations may have a solution to engage customers with Passbook or their own apps, but want to provide further engagement by easily detecting proximity to a organization's physical locations. Each iBeacon is configured with identifiers that are broadcast over Bluetooth to identify the organization, general location, or a specific area within the physical location. Since each device has a range of about 150 ft, it may require thousands of iBeacons to be deployed through the organizations locations. The beacons become part of the infrastructure, so tracking, replacement, power, and hardware placement can drive up support costs. Bleu Proximity makes it easy to deploy and manage a large number of Bleu Proximity Beacons, called Bleu Stations.

Bleu Stations

Bleu Stations are Bluetooth devices are compatible with Apple's iBeacon. They are fully compatible with iOS 7 on iPhone. Along with the basic feature of broadcasting the location identifiers, each Bleu Station has an administrative service that allows for management. Settings for a Bleu Station can be securely changed over-the-air via an iOS app and this makes for easy initial deployment and onsite provisioning. The form factor of the Bleu Station is very low profile, and is only slightly larger than a standard USB connector. The USB connector is used for power only, and since battery

installation and replacement can be a major cost driver for post-deployment support, Bleu Stations are powered exclusively via the USB connector. Since USB ports are increasingly ubiquitous, Bleu Stations can be deployed in USB to AC adaptors, in Point of Sales registers with a free USB port, in the auxiliary port of a WiFi access point, or in any device that has an available USB port. The use of USB power drives down the cost of monitoring and replacement of batteries on an ongoing basis, and allows for Bleu Stations to be deployed and running for years.

Zero Configuration and Zero Tech Deployment

While installing a few iBeacon compatible devices is relatively straightforward, provisioning and deploying thousands of devices can be a difficult and costly proposition. Bleu Proximity drives down the cost of deployment through Zero Configuration and Zero Tech deployment. Zero Configuration deployment means that the person deploying the Bleu Station simply plugs in the Bleu Station, and the Bleu Stations is automatically configured by an iOS device within range of the Bleu Stations. This is accomplished by including the Bleu Proximity software in your app that is running on premises. This may be a Point of Sale app, a rewards program scanning station, or any app your organization controls that is in range of the Bleu Station iBeacons. Bleu Proximity provides the software to connect and configure the Bleu Stations that any end user can do easily. IT would specify the settings for each location that a Bleu Stations would be deployed, and the local device would automatically configure the devices.

For more complex environments that require individual settings for each Bleu Station, Bleu Proximity features zero tech deployment. Zero Tech Deployment allows a person onsite that is not part of the IT staff to deploy Bleu Station beacons. Using either our Bleu Enterprise app or integrating the features into an organizations own administration app, the person onsite would plug in a new Bleu Stations, and then use the software to select the new Bleu station and associate it with a physical location from a list of locations pre-defined by IT. This frees IT from having to visit each physical location to deploy iBeacons, but allows IT to specify where Bleu Stations beacons would be deployed and the settings for each device. Onsite deployment would be handled by any staff that can plug in a Bleu Station, select it from a list, and then select the name of the location. This drives down both the cost of deployment and the cost of replacement due to hardware failure or theft.

Conclusion

Bleu Proximity facilitates the large scale deployment of iBeacon technology in a cost effective manner by providing appropriate hardware, software, and tools for mass deployment. With our Zero Configuration and Zero Tech deployment, scaling your iBeacon deployment from a few beacons to thousands of beacons can be done in a cost effective manner by leveraging local resources and using our tools and software to provision the devices in the field. With central IT control of the settings but easily

deployment in the field, Bleu Proximity is a great solution for wide scale deployment of iBeacon technology to take full advantage of increase customer engagement through iBeacon.