



## ExtremeLocation<sup>™</sup> for Retail

### Improving the In-Store Shopper Experience

Brick and mortar retailers are challenged today by online E-tailers who enjoy an analytics advantage - knowing more about the online shopping; when customers shop, their preferred brands, which products they are browsing for, even the mobile device type and model they are shopping with.

Most retailers don't know much about the customers that pass-by or enter their stores. Connecting with shoppers and understanding their preferences enables retailers to personalize and improve the shopper's experience.

### Connecting with Retail Shoppers

The best way to connect with today's shoppers is via their mobile device connected to the store's Wi-Fi network. A survey of 12,000 retail shoppers found that 90 percent of shoppers use their smart phone while in-store shopping<sup>1</sup>. Customers connecting to the guest Wi-Fi network or signing up for a loyalty account will provide valuable analytics.

### Contextual Marketing Powering a Better Experience

Understanding the number and types of visitors in the store, as well as their location, is extremely valuable. How many visitors are connected to the Wi-Fi? How many are loyal customers? Which departments are they in? How long did they stay there? Where do store associates spend most of their time? How many devices are in the store that are potential shoppers that are not connected? What is traffic pattern? How often do they visit and which stores do they frequent? Do they have preferred brands or departments where they shop the most? Are they a loyalty customer? Do you know when a loyalty customer enters the store or if they were recently searching for a product on your website and then visited the store?

These analytics provide retailers deeper insights into their customer's preferences and in-store behavior. With the help of analytics, retailers can optimize the store layout, to better connect associates to shoppers for assistance.

<sup>1</sup> Marketing Land: 90 Percent of Retail Shoppers Use Smartphones in Stores

## Location and Analytics Service

Extreme Networks works closely with retailers globally and has leveraged this experience to create ExtremeLocation, a highly effective, cloud-based location and analytics service. ExtremeLocation helps retailers compete with online E-tailers and offer shoppers a powerful personalized brand experience throughout their chain.

Retailers typically have multiple stores, located within a region, nationally or globally. They need a simple, scalable solution which will allow them to bring new store services up quickly and offer the same experience at every store. ExtremeLocation cloud service enables retailers to easily implement powerful location technology that scales across thousands of branch sites and 100 thousand access points, while collecting analytics systemwide, by site (store), by zone (department) and by associate.

With this knowledge, the retailer will know which stores are doing better, promotions that work better at different stores due to local demographics, and the most popular departments within the stores.

Unique to ExtremeLocation are store associate analytics which empower the retailer with the knowledge of where associates are spending most of their time, and how to quickly connect the nearest associate to the customer that may need assistance.

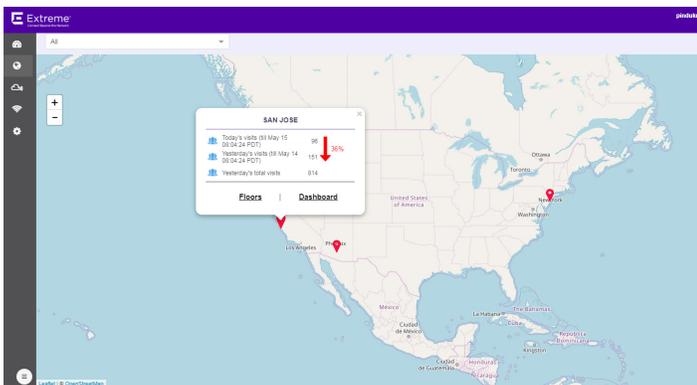


Figure 1: Cloud-Based Location and Analytics Service

## The Components of an ExtremeLocation Solution

ExtremeLocation's cloud service connects with the Extreme access points at the store location. The wireless LAN allows visitors, customers and associates to connect to the Wi-Fi network and ExtremeLocation monitors these connections for analytics.

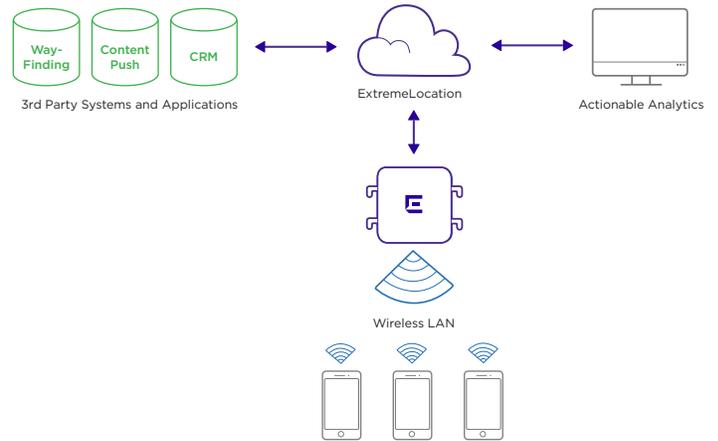


Figure 2: ExtremeWireless WiNG APs are deployed as dedicated sensors.

ExtremeLocation supports ExtremeWireless, ExtremeWireless WiNG APs and is ready to support ExtremeCloud. ExtremeLocation leverages the existing ExtremeWireless or ExtremeWireless WiNG access points to minimize deployment time and cost. In addition, ExtremeLocation supports the integration of WLAN controller to automatically pull tree hierarchy and AP placement to simplify the improvising of location based services. The access points can be used in two mode: as dedicated sensors, or when using RadioShare, as part time sensors, allowing both client traffic as well as sensing to take place.

ExtremeLocation can also be deployed as an overlay location service in conjunction with a third party wireless LAN network.

All the connections and received signal strength indication (RSSI) information for Wi-Fi client devices are monitored and analyzed by ExtremeLocation to estimate the locations for devices and create actionable analytics that can be delivered real time to third party subscribers; like point of sale (POS), CRM or big-data systems. The subscriber uses these real-time location data and notifications to apply policies for interaction and communications, such as push notifications to visitors, loyal customers and associates.

**Note:** ExtremeLocation 1.2 supports the migration of ADSP Proximity to ExtremeLocation.

## Dial-In Location Resolution for Optimum Results

Retail analytics requirements generally range from knowing if shoppers are inside or outside the store, to tracking them to the departmental level. Each retailer has a different guest engagement strategy and brand experience goal. ExtremeLocation accommodates provisioning of various degrees of location resolution to determine the position of a device or user based on the specific needs of the retailer.



Figure 3: Three powerful levels of Locationing.

### Welcoming a Guest to Your Store with Presence

In some cases, the retailer may only need to know if the visitor is inside or outside the store, and if and when they have entered the store and how long they are there. This level of location resolution is considered Presence. It detects only that a customer has entered the store which allows the CRM to push a welcome message, daily specials or a daily coupon designed specifically for that customer. It could detect that a visitor entered the store but left after a few minutes. It is valuable in providing retailers with insight into footfalls, dwell time of visitors, peak versus off peak times, and store performance data. No floorplan or calibration is required.

### Zone Tracking for Department Level Analytics

If the retailer wants to understand activity at the department level or between departments, they can choose to use zone tracking, which locates a device within a defined area. Zone tracking is useful for understanding which departments are more popular, where customers typically shop, or where associates spend most of their time helping customers. ExtremeLocation provides device density heat maps and dwell time heat maps in real time or historically, as well as Motion Path Analysis. Zone tracking does not require RF Finger-printing, but does require a floor plan.

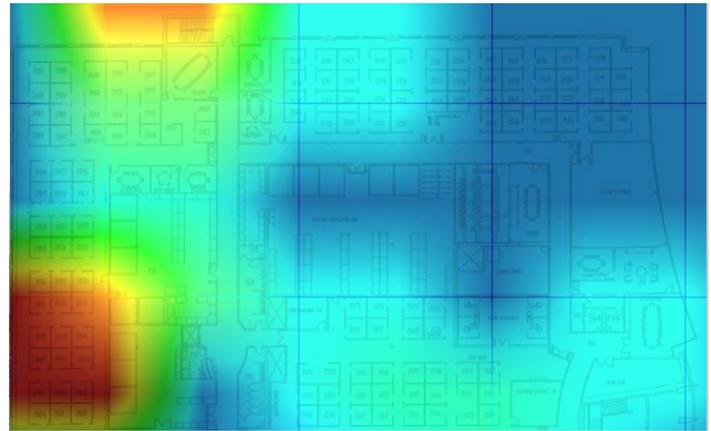


Figure 4: Device density heat maps require a floor plan.

### Connecting Associates and Customers with Position Tracking

Position tracking delivers the highest level of location accuracy for Wi-Fi client devices. Position tracking is used when a retailer wants to know which aisle or which product the customer is nearby or evaluating. Using the position information of the shopper and finding the nearest associate would result in quicker response time in helping the customer. If the shopper has been there a while, the CRM system could push a discount coupon as an incentive to immediately purchase the product. Position tracking can also be used for wayfinding. Position tracking requires a floor map, RTLS site survey, and location grade network to achieve the highest accuracy.

With ExtremeLocation presence, zone tracking, and position tracking, the retailer can dial-in the level of location resolution that meets their business needs.

### Elevating the Guest Experience with Powerful Insights

ExtremeLocation brings out the true value of location-based services by delivering powerful analytics and trends which can be viewed by administrators or extracted by campaign and policy engines via the RESTful APIs. Extensive real-time and historical location analytics are available by site, zone, and associate for selected durations. Administrators can view real-time dashboards and monitor sites, zones, and associates trends. In addition, administrators can create customer reports on-demand or via a schedule.

## Optimizing Store Performance with Site Analytics

Retailers can obtain greater insights into their visitors and store performance with site analytics. By understanding the overall footfalls (visits) in the store, retailers can rank their top and bottom performing sites and correlate visits to promotions to help tune them to the demographics of the stores. These analytics can be analyzed hourly, today, yesterday, last week to help optimize best timing of peak and off-peak hours and provided in PDF or CSV formats. With this powerful information, retailers can better understand trends in capture rates and engagement of shoppers and loyalty customers, differentiating between new visits and repeat.

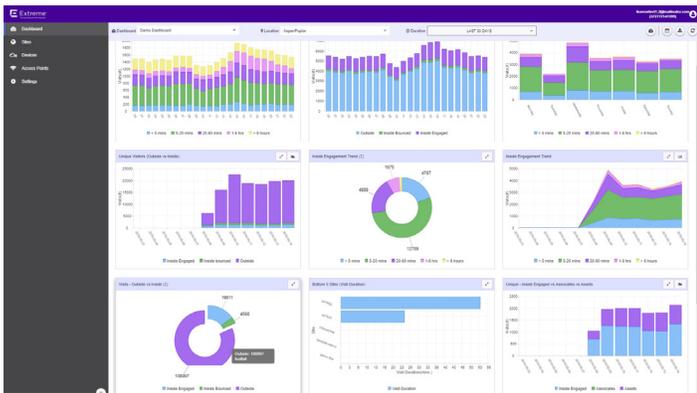


Figure 5: Site Analytics – Obtain insights into visitor and store performance.

## Understanding Department Trends with Zone Analytics

A retailer will use zone analytics to collect deeper insights within a site, down to the department level, to understand the number of visits shoppers have made to a department, the number of unique visitors, what the top and bottom 5 departments are, along with the customer engagement times within those departments. Zone analytics also provide powerful device and engagement heat maps which provide a quick visual of activity in the departments.

## Workforce Optimization with Associate Analytics

Improving the customer experience is not just about knowing where the customers are, but also where the store associates are to better serve those customers. Associate analytics help the retailer better connect their customers with store associates, finding the closest associate, understanding how much time associates are spending in each department and what the ratio of associates to visitors is in every zone. With this information, retailers can better serve the shoppers and improve their overall experience within the store, elevating the brand experience.