Fortinet Presence Analytics Solution
Using Wi-Fi to turn visitors into retail revenue

Retail is in crisis. Online retailers are winning, and retail stores are closing in record numbers. Fortinet’s Presence Analytics solution allows traditional retailers to beat online retailers at their own game.

Fortinet Presence Analytics is a secure cloud-based big data analytics and customer engagement solution designed to empower bricks and mortar retailers with the types of consumer analytics and micro-targeting capabilities that until now have been the exclusive privilege of online retailers.

By capturing real-time analytics of consumer traffic patterns, retailers can learn more about their customers, and measure the effectiveness of marketing campaigns and merchandising. Fortinet Presence Analytics can also correlate and combine store-captured data with cloud-sourced demographic and consumer behavioral data for real-time, location based marketing to proactively influence customers and drive in-store sales.

Coming soon to your store…

Diagram 1: Fortinet Presence Analytics Solution Components.
Online retail is killing it

Bricks and mortar retailers have been losing out to online stores for too long. Online retailers have mastered analytics and conversion optimization. They can compute the loyalty and lifetime value of every customer, measure marketing performance in a heartbeat, and precision-target their offers through a plethora of channels.

Most bricks and mortar retailers have none of those capabilities. They know next to nothing about their customers. Who buys, who doesn’t, and why not! The bigger the store, the more impersonal and disconnected it is from its customers.

With this disparity, it is not surprising that US online retail is growing at 12% CAGR and accounted for over 8% of all retail sales in 2013. While, in the UK, which in 2013 had the highest percentage of online retail share in the world at 12.7%, a shocking 20% of stores may close by 2018.

Faced with increasingly savvy digitally connected shoppers, who think nothing of searching online for a lower price while in your store, capturing the sale and building loyalty is the challenge of the decade for store owners. Traditional retailers need to tech-up fast, if they are to survive.

Beat online retail at their own game

Fortinet is helping store owners level the playing field and reclaim the sales they deserve, by turning the omnipresence of smartphones into an asset instead of a threat.

This revolutionary Presence Analytics solution uses Wi-Fi to gain intelligence from nearby smartphones, either inside or passing by the store. This allows retailers to gain valuable insights from presence and positioning data, connect with customers and drive sales through real-time location based marketing.

It is not often that IT has an opportunity to directly impact the bottom line in a dramatic and visible way. But this is such a case. Leveraging standard Wi-Fi technology deployed in the retail store, the Presence Analytics solution can be deployed to gather shopper intelligence that can be used to directly boost sales, measure campaign effectiveness, build customer loyalty and improve store efficiency.

Solution overview

Fortinet’s Presence Analytics solution uses an on premises or centralized FortiGate plus FortiAP or FortiWiFi wireless access points distributed in the store, coupled with the cloud based FortiPresence big data analytics service.

The solution empowers retailers with ability to measure consumer behavior, connect to customers through social Wi-Fi and offline channels and influence them directly in the store. It begins with detecting the presence of a shopper in or near your store. Here’s how it works:

**Measure: Presence and positioning analytics**

Wi-Fi devices continually probe the air to discover the access points around them. When a device approaches or enters your store, FortiAP or FortiWiFi access points detect its presence, and then log its MAC address and the signal strength. With a minimum of three access points it is also possible to determine a mobile device’s position – to an accuracy of around 10 feet.

Although this presence and positioning data is anonymous, properly used it has tremendous value.
Visitor loyalty and dwell time: You can learn how long an individual stays in the store, where he or she lingers and how frequently they return. With appropriate placement of access points, it is even possible to deduce if a sale was made, by detecting a device at the checkout for an extended period, or positioning data can be correlated with sales transaction timestamps for greater accuracy.

Aggregated visitor flows: Aggregated positioning data, plotted as a heat map, lets retailers visualize how visitors flow through the store. They can use this to make informed decisions about changes in merchandising, layout, and adjust staffing to match customer demand in an area, or shorten payment queues. Plus they can immediately measure how such actions impact footfall, dwell time and sales.

Walk-in conversion rate: The most obvious driver of sales, is the shop window. Its job is to convert walk-by to walk-in. More walk-ins naturally leads to more sales. Finally retailers have a way to measure if the shop window is doing its job, and can see when it gets stale and conversion rate falls.

Sales impact: When visitor data is correlated with sales, retailers can directly measure the commercial impact of marketing campaigns and in-store merchandising changes. It puts tremendous power in the hands of store managers to continually experiment and improve.

Staffing and opening hours: The same data plotted over time, helps store owners match staffing to visitor flow throughout the day or week and optimize store opening hours, lowering staffing costs by as much as 20%.

Campaign measurement: For the first time ever, marketing managers can instantly measure marketing campaigns in terms of footfall, dwell time, bounce rates across all stores, and be able to compare store performance, just days after launching a campaign.

Raw data access: Finally, all of the data in the Fortinet Presence Analytics cloud belongs to you and may be downloaded in CSV format at any time for further analysis or archiving.
Connect: Social Wi-Fi opt-in and social marketing

Presence and position analysis is just the beginning. Fortinet enables two more levels of customer engagement. The first of these is social engagement – connecting with your customers. When stores get their shoppers to use the in-store Wi-Fi for Internet access, they open a wealth of marketing opportunities. Wi-Fi login can be encouraged with incentives such as same-day coupons for certain products, to drive opt-ins and enable an ongoing social connection with the customer.

Through Fortinet’s branded captive portal which allows access via Facebook social login or by entering an email address, retail marketers can build that elusive opt-in market list and leverage profile and demographic information for precisely targeted email and social media marketing.

The social login splash page (captive portal), is your first touch point. You might promote a stock clearance item to an unidentified visitor. After login, you might redirect the visitor to your Facebook page, where you invite them to like you – many will, thus promoting your store for free on social media channels. Or visitors may be directed to a customized landing page. Most social login solutions end here.

With the Fortinet Presence Analytics solution, visitors can be targeted more precisely, based on a range of criteria, such as their current location in the store, new versus repeat visitor, or even demographic or personal data harvested from big data sources.

After login, a visitor could be directed to a personalized landing page promoting something applicable to the visitor’s age group, gender, or even shopping history based on the data acquired in real-time through big data integration in the cloud.

Of course the real jewel from this social engagement is the opt-in list, and the opportunity this allows to reach and influence your prospects over time through email, banner retargeting, and social media communication.

Influence: Real-time location-based marketing

Fortinet takes Presence Analytics further still – beyond passive analytics and social Wi-Fi. The solution empowers retailers to use real-time location and in-store behavior, to proactively influence the consumer to buy right there, right now. Only Fortinet’s Presence Analytics solution has the power to enable precision marketing of offers and messages that are directly relevant to a shopper’s immediate objectives. With Fortinet Presence Analytics, you can turn the growing problem of showrooming – shoppers with the savvy to search for a better price online while in your store – into an opportunity!

Deep packet inspection on a FortiGate puts you one step ahead by being able to detect what a shopper is browsing for and to counteract it on-the-fly. This visibility is integrated into the Presence Analytics influence engine, letting retailers cook up instant deals to price-match competitive pricing found by the price-checking shopper, and present a targeted offer in real-time to the shoppers device or nearby digital signage.

Still didn’t get the sale? Why not push a targeted “Wait, don’t leave without buying …” offer to them on digital signage along their exit path from the store.
The marketing opportunities do not end there. Throughout the visitor’s experience it is possible to use location tracking to build an “interest” profile of the visitor based on where the visitor has dwelled the longest. This information can be used to fuel targeted marketing efforts during current or future store visits (e.g. web banners, digital signage), and in-between visits (e.g. email, ad retargeting, social media outreach) to maintain awareness and drive future store visits.

Solution features

Our integrated solution delivers real-time analytics and reports on presence and position, enables social Wi-Fi and opt-in marketing capabilities, and gives you the means to directly influence customer behavior with real-time location-based marketing. We even have an API that lets you integrate your own business system into the end-to-end solution.

A key feature of the solution is FortiGate’s deep packet inspection capability. This makes it possible to capture competitive pricing and vendor information from showroomers in your stores. Competitive insight is extremely valuable, as it is normally difficult and expensive to obtain.

Another important enabler is Fortinet’s unique influence engine, which uses rules to append opt-in user profiles with additional consumer and demographic information gleaned from big data sources in the cloud.

Finally, unlike solutions which try to lay claim on your data, Fortinet recognizes all collected data as belonging exclusively to you, and we provide you the means to access all of it.

Diagram 8: Real-Time Marketing on Digital Signage.

<table>
<thead>
<tr>
<th>Presence Analytics</th>
<th>Positioning Analytics</th>
<th>Engagement Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Total visitor traffic</td>
<td>• Heat maps with animated flows</td>
<td>• Conversion and bounce rates</td>
</tr>
<tr>
<td>• Dwell time duration</td>
<td>• Real-time density, staff resources</td>
<td>• Social Wi-Fi demographics</td>
</tr>
<tr>
<td>• Real time visit capture rate</td>
<td>• Popularity and cumulative dwell time</td>
<td>• Visitor contact information</td>
</tr>
<tr>
<td>• A/B comparison across stores</td>
<td>• Flow analysis: actual, net and total flow</td>
<td>• Wayfinding and related services</td>
</tr>
<tr>
<td>• Repeats, frequency, recency, duration</td>
<td></td>
<td>• Security and staff rostering</td>
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<tr>
<td>Report Generation</td>
<td>Competitor Intelligence</td>
<td>Influence Engine</td>
</tr>
<tr>
<td>• Custom report generator</td>
<td>• Websites visited, pages viewed</td>
<td>• Real-time targeted ads generation</td>
</tr>
<tr>
<td>• Scheduled reports to email recipients</td>
<td>• Product / price views</td>
<td>• Integration of big data sources</td>
</tr>
<tr>
<td>• Location and site comparatives</td>
<td>• Merchant dashboard</td>
<td>• Digital signage integration</td>
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<tr>
<td>• Raw data download</td>
<td></td>
<td>• API for loyalty app, third party services</td>
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Solution advantages

To compete with online retailers, store owners must embrace innovative customer analytics and engagement solutions. Presence Analytics marks the beginning a new era in retail. What will follow, face recognition, biometrics?

Retailers should be wary of point-products which only address a fraction of the opportunity. Sooner or later, they will need an end-to-end solution with the right architecture, capabilities and security to handle future innovations.

With its strong background in security hardware and software, Fortinet is well positioned to play a strategic role in transforming the way retailers interact with their customers.

Fortinet’s Presence Analytics solution already addresses a much larger scope of capabilities than most competing point products by enabling retailers to not only measure shopper behavior and connect to them, but also to influence shopper behavior using real-time big data analytics.

The end-to-end solution delivers:

- Wi-Fi, security, and analytics
- Captive portal with social and other opt-in methods
- The only solution with a cloud-based Influence Engine:
  - Big-data integration with consumer data sources
  - Price matching/competitive offer creation
  - Digital signage integration
- Store to store or area to area comparative analysis
- Ability to calibrate system accuracy yourself
- Analytics data belongs to you, not anyone else
- Expert professional services support

Transforming the shopping experience

Are you ready to transform the retail shopping experience? Imagine the impact you could have on customer loyalty if you could recognize your customers, acknowledge them, and anticipate their wants.

It will take considerable finesse to reintroduce the intimacy of the corner store without being invasive. Ironically, online retailers have achieved a certain level of intimacy. However, traditional retailers now have the power to do much better. Those that do will be able to hold their own against online retailers, and will have a competitive advantage over their peers.

Fortinet Presence Analytics can help you can achieve that transformation. Our team is here to help you realize your vision for customer engagement and sales growth.

For more information on the Fortinet’s Presence Analytics solution, please go to www.fortinet.com/products/fortiap/fortipresence.html