

# Case Study - Zillow Group



## The Background

Zillow Group houses a portfolio of the largest and most vibrant real estate and home-related brands on the web and mobile. The company's brands focus on all stages of the home lifecycle: renting, buying, selling, financing, and home improvement. Zillow Group is committed to empowering consumers with unparalleled data, inspiration, and knowledge around homes, and connecting them with the right local professionals to help. In addition, Zillow Group develops a comprehensive suite of marketing software and technology solutions to help real estate, rental, and mortgage professionals maximize business opportunities and connect with millions of consumers.

To accomplish its data and voice communications needs, Zillow Group utilizes Threshold Communications as its solution provider. Seattle-based Threshold drives success by delivering all the benefits of a multi-carrier solution while shielding clients from all the traditional headaches of managing multiple network and hardware vendors.

## The Business Challenge

Zillow Group's success was growing the company beyond the capacity of their existing communications infrastructure. Shannon Spivey, Senior Systems Engineer at Zillow, tasked Threshold to source and design a telephony border gateway system to alleviate capacity pressures and future-proof Zillow's network to meet anticipated future capacity.

**High on Zillow's gating criteria list were:**



**Robust  
feature functionality**



**Powerful  
management tools**



**Value**

John Harris, Senior Network Engineer at Threshold, vetted a multitude of different Enterprise Session Border Controller (E-SBC) vendors to determine which vendor would best meet Zillow's criteria. After canvassing the vendor community and analyzing the options, John presented his findings to Zillow Group. John determined the feature functionality of the EdgeMarc 7301 E-SBCs, the extensive management capabilities enabled by EdgeView Service Control Center (EdgeView SCC), and the price-to-value of the overall Ribbon Communications solution was the winning combination. As a result, Zillow Group initiated the deployment of EdgeMarc 7301 E-SBCs across their telephony infrastructure.

Reflecting on network performance post-implementation, Shannon specifically calls out the EdgeMarc 7301's strong security, redundant routing for disaster recovery scenarios, and high capacity. Shannon states: "I really like how robust the 7301 is compared to other products on the market that we considered. The 7301 SBC provides a lot of enterprise features you normally only see in much higher priced SBCs." John states: "EdgeView's ability to back up configurations on EdgeMarc devices is a real differentiator. In any kind of device recovery situation, the ability to re-rack and push an already vetted configuration file using EdgeView SCC to the new device sets Ribbon Communications devices apart."

## The Next Business Challenge

In early 2018, complexity around transaction processing ([PCI-DSS](#)) threatened to complicate Zillow Group's telephony border gateway system. Revised PCI-DSS regulations mandate that any credit card transactions taken over the phone must be completed securely: Protected databases, protected recordings, eliminating DTMF tones from the audio stream, and encrypted processing. Zillow Group identified a "black box" vendor that could ensure PCI Compliance using the installed base of EdgeMarc 7301 SBCs.

Shannon recalls: "We have deployed Ribbon Communications' gear throughout Zillow Group over the past two years. The reliability of the 7301 made it a no-brainer to want to continue working with Ribbon Communications."

Zillow Group approached Threshold with a proposed design change whereby a call is sent to the EdgeMarc 7301 SBC, then looped to the "black box" that enables PCI Compliance. That black box then returns the call back to the EdgeMarc 7301 SBC for continued routing to the offsite hosted PBX. The question remained, would Ribbon Communications be able to integrate the black box into the call flow as proposed?

## Zillow Group Wins Again

Threshold engaged Ribbon Communications to analyze Zillow Group's proposed design change. Shortly thereafter, Ribbon Communications confirmed that the design change would work, but there would need to be significant development and testing between all parties to ensure it would work as intended. Ribbon Communications committed to the development and worked with Threshold and Zillow to successfully implement the solution. John recalls, "It was a difficult custom deployment. It took many months of work banging away at it, testing it, and ironing out all the issues to get it up and running in production."

During the initial EdgeMarc 7301 deployment and again during the implementation of the PCI solution, both Threshold and Zillow Group have come to appreciate the engagement, responsiveness, and availability of Ribbon Communications' technical support personnel. Support tickets were worked quickly and diligently until resolved by a dedicated technician assigned to the account. In fact, John recalls "Ribbon Communications technicians would actually listen to and critically think about the issues we presented. Every time we ran up against a bug, it probably took about two weeks at most to come up with a good fix, squash it and move on." Shannon concurs, saying "I am impressed with the high quality of service Ribbon Communications engineering provides. Ribbon Communications has provided fast, high-quality service over the entire span of this project. They were quick to provide guidance on the design phase as well as troubleshooting and bug fixes for issues we discovered related to my PCI routing requirements in a very short amount of time. Their engineering team is top notch."

Threshold Communications is Zillow Group's full-service telecommunications provider with carrier-neutral facilities in Seattle, in Phoenix, and around the globe. Threshold delivers clients all the benefits of a hybrid multi-carrier solution while shielding clients from all the traditional headaches of managing multiple network and hardware vendors.



"Not many companies offer an SBC that can accomplish what I was attempting to do with our PCI solution. Ribbon Communications has helped Zillow build a stable voice platform to take credit card transactions over the phone securely."

Shannon Spivey, Senior Systems Engineer at Zillow