



Introducing: A Mobile Conference Experience

Each year, tens of thousands of VMware customers, partners and fans flock to San Francisco to attend VMware's flagship VMworld conference. VMware's goal each year is to provide maximum value to conference attendees and 2014 marked the year that the conference went 100% digital, with all event logistics and schedules available via a mobile app, rather than the traditional printed program. The mobile app was expected to help attendees navigate and enhance their experience through innovative, useful and fun features. With the bar set high, VMware selected raw engineering's built.io Conference App as its official VMworld app.

Meeting Both Business and IT Requirements

VMware had used other mobile apps at past events but struggled with cookie-cutter design, as well as limited add-on and integration options, resulting in lackluster user engagement. Based on these trials, VMware had developed a clear business vision and in parallel mapped out precise IT requirements for the VMworld 2014 mobile app. Thus, the mobile app accompanying its marquee event had several hurdles to clear, with extensive reviews concerning both the feature set and the overall solution architecture.

Customer Details

- Global 2,000 software company with \$5.2B revenues in 2013.
- #3 on 2013 Forbes list of World's Most Innovative Companies.
- www.vmware.com

Event & App Details

- VMworld US: August 2014, San Francisco, 24,000 attendees.
- VMworld Europe: October 2014, Barcelona, 9,000 attendees.
- www.vmworld.com

Business

Mandated functionality included the ability to view and build schedules, the reservation of seats for popular breakout sessions, as well as the collection of feedback via surveys. The VMware events team wanted the flexibility to make updates to the agenda in realtime and inform attendees of any changes to their personal schedule. Other requirements included being able to communicate daily conference highlights, encouraging attendees to connect on social channels, and capturing useful insights into conference behavior and app usage.

Key Results

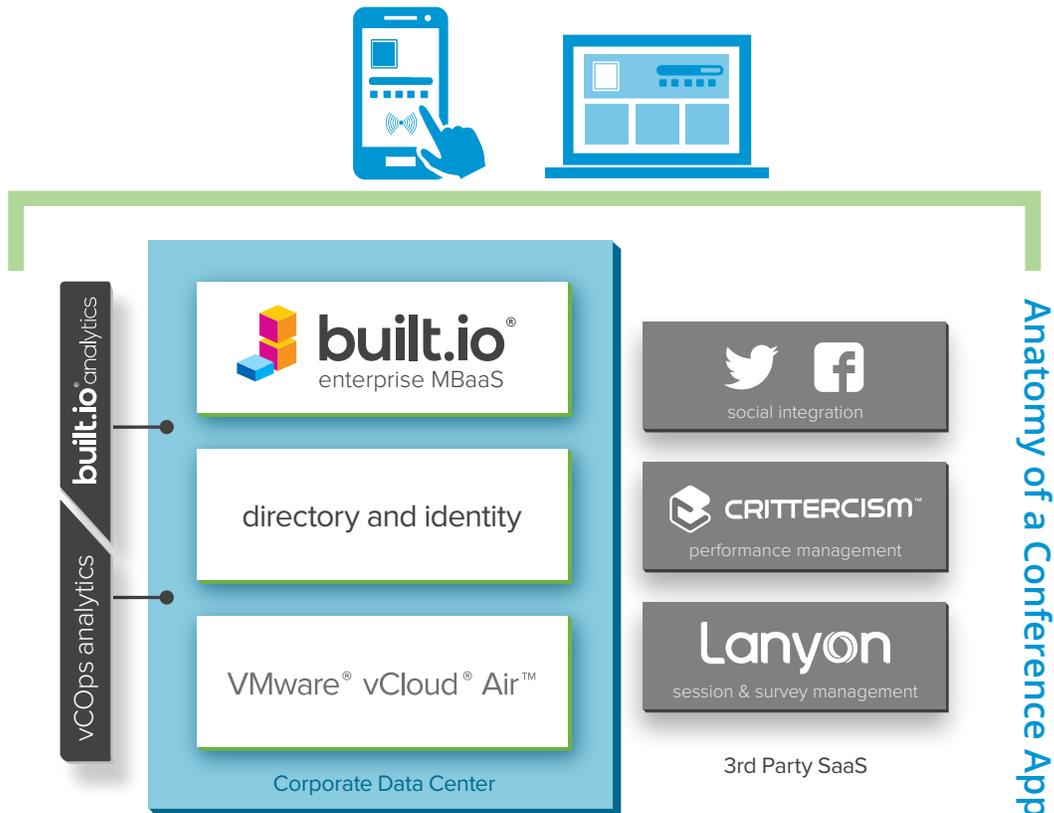
- Native mobile app customized and deployed in 6 weeks.
- Realtime, in-app content changes managed directly by VMware events team.
- Daily analytics reports based on 100 Million tracked data points.
- Unlimited, targeted notifications based on precise attendee segmentation.
- Solution architecture meets strict IT security and legal requirements.
- Withstands peak loads 10x higher than a consumer app with 1 Million users.
- Investment protection with 95% of app reusable between multiple conferences.

IT

Since the mobile app was managing personally identifiable information (PII), the solution had to pass a rigorous security and legal review. Furthermore, VMware mandated the use of its corporate identity and authentication system. Anticipating intense app usage, IT was also concerned about the ability to maintain service levels and keep the app responsive during peak usage times. End-to-end monitoring capabilities – spanning the app, mobile services and supporting infrastructure – were crucial for control of the entire system and another must-have.

An Integrated Solution

VMware wanted the built.io Conference App to present key information provided by 3rd party systems in a mobile-friendly way. Using APIs to connect the built.io Conference App to these systems allowed attendees to create personalized schedules, reserve seats in breakout sessions, provide feedback via surveys, and engage on social channels – all in one place.



Integrations Included

- VMware's corporate identity system, providing authentication and access to registration and attendee data.
- Lanyon, providing the backend for registration, session management, and surveys.
- Crittercism, providing mobile app performance management for a real-time view of key diagnostics including service and network performance.
- Twitter, providing in-app social sharing.



The built.io Conference App satisfied our strict security requirements and – backed by VMware's vCloud Air infrastructure – provided app and backend scalability a conference of this magnitude demands.

Mathew Lodge
VP of Cloud Services
VMware



Mobile services provided directly by the underlying mobile platform built.io included a business user-friendly content management system for realtime in-app content changes, mobile analytics and built-in notifications.

Dedicated to Enterprise Scale

During the VMworld 2014 US conference alone, hundreds of millions of data points were tracked and millions of API calls processed. Both conferences resulted in highly synchronous app behavior: Thousands of attendees simultaneously exiting a keynote would check their schedule in the app all at once. Consequently, the supporting mobile backend had to withstand spikes up to 2,000 API requests per second. This kind of scale is 10x larger than many consumer apps with 1 Million users.

To guarantee scalability, the backend was powered by a dedicated instance of built.io, raw engineering's mobile platform running on VMware's hybrid cloud infrastructure vCloud® Air™. Running the mobile backend on vCloud Air meant that operations staff were able to monitor the system end-to-end in realtime and proactively add extra capacity, as needed.

Benefits for Attendees and Organizers

The built.io Conference App – featuring custom design and integrations – was built and deployed in less than 6 weeks, after passing all IT and legal reviews by VMware. This aggressive “time to market” was made possible because the cloud infrastructure and mobile services were available as a pre-built, proven, and tested stack, with raw engineering's mobile platform built.io running on VMware vCloud Air infrastructure.

VMware's events team was able to update in-app content in realtime to accommodate a living agenda and dynamic logistics. Leveraging built-in analytics allowed VMware to gain valuable insights into attendee behavior and preferences. For example, they discovered that one of the popular features was the

#vmworldselfie button, which allowed attendees to live-tweet photos from the show floor via the social section of the app.

The built.io Conference App – powered by built.io and VMware’s vCloud Air – was able to effortlessly scale and handle the at times colossal load on the supporting backend.

After receiving positive feedback from attendees, VMware was able to immediately re-deploy the app for its VMworld 2014 Europe conference just weeks after the US show. Demonstrating continued return on the original investment and customizations, VMware was able to reuse 95% of the US app at its European event and refresh all content using the built-in CMS without additional development.