

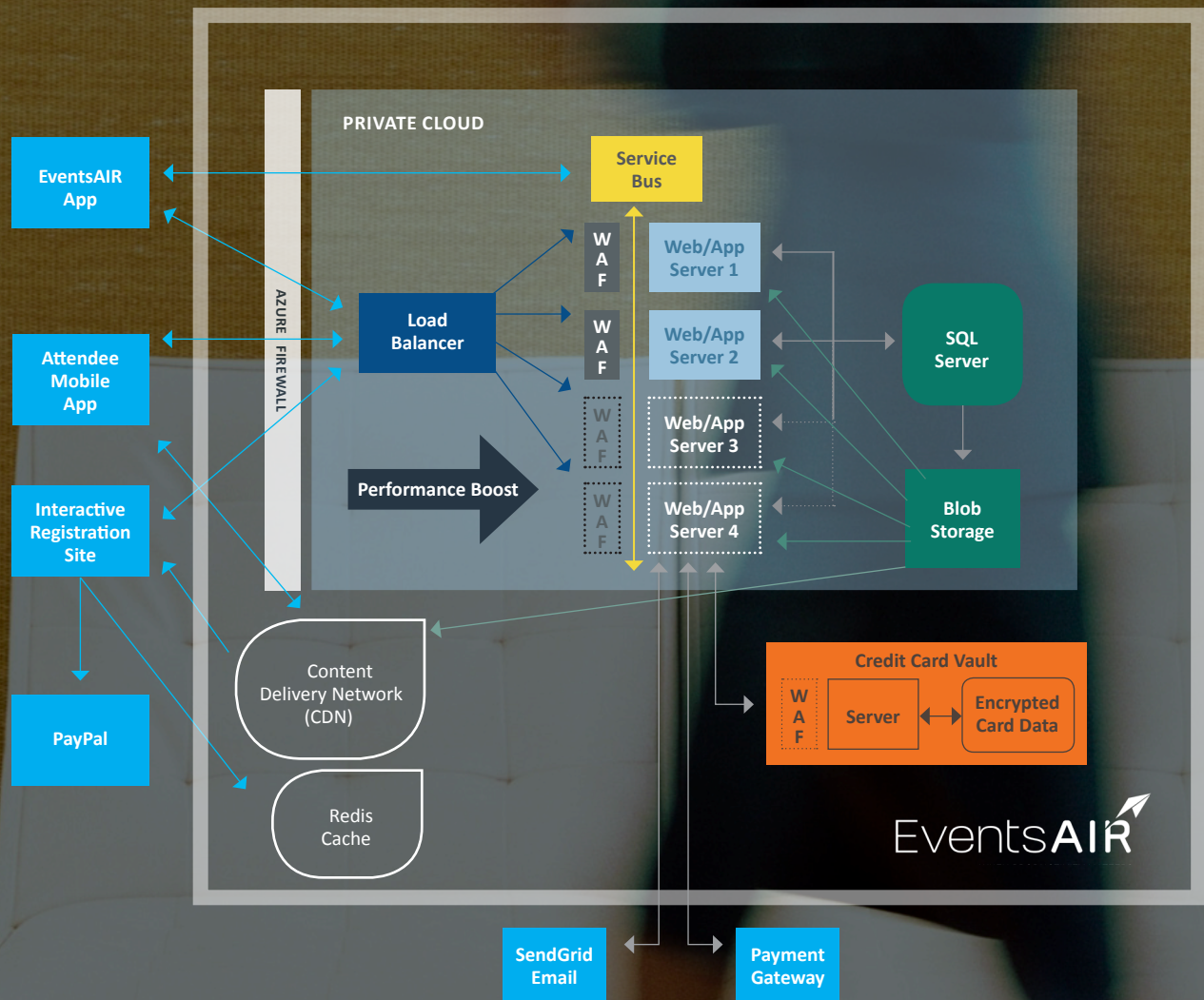
# TECHNICAL BRIEFING WHITE PAPER

EventsAIR® is a comprehensive SaaS (Software as a Service) event management solution capable of managing any event from a 20 person seminar to an Olympic Games and everything in-between.

Building on 25 years of experience in creating highly specialized events software for the world market, EventsAIR, with its underlying technology, is delivering the performance, functionality security and reliability that event managers expect.

This White Paper is targeted for a technical audience within an organization evaluating or implementing EventsAIR and gives an overview of the various technical components that support EventsAIR. The information contained in this White Paper is “Commercial In Confidence” and not for distribution without express permission from Centium Software.

# THE ROBUST AND SCALABLE SOLUTION POWERED BY AZURE



## CLOUD SERVICES FROM MICROSOFT AZURE

Microsoft Azure Cloud Services and the technical infrastructure provide the backbone for EventsAIR. EventsAIR directly utilizes and extends the highly robust and scalable Azure environment and uses the following components:

**Azure Service Bus** | each EventsAIR customer gets their own dedicated namespace on the Azure Service Bus. The Service Bus is leveraged to significantly improve performance and allow for rapid scalability and background processing of time consuming tasks (eg large email blasts).

**Azure Cloud SQL Server** | each EventsAIR customer has a dedicated SQL Server. This is provided as Platform as a Service (PaaS) which ensures high availability and performance scaling. The database is backed up every minute and can be restored to any point within the last 14 days.

**Azure Application & Web Servers** | depending on the level of your EventsAIR subscription, you will either receive dedicated servers or low contention shared servers. Customers are allocated a minimum of two web and application servers (for redundancy). A load balancer distributes load between each server. This configuration allows for minimal downtime during performance boosting and upgrades.

**Azure Redis Cache** | EventsAIR utilizes the Redis Cache to improve the online experience for event attendees. As each field is completed on a Registration Form, the data is temporarily saved in the Redis Cache, enabling the attendee to return later and complete the form. This also streamlines movement between pages in the Registration Form and significantly reduces the time for an attendee to submit their registration.

**Azure Content Delivery Network (CDN)** | EventsAIR heavily leverages the power of the Azure CDN. All static data such as CSS files, images and JavaScript are published to the CDN. This provides attendees registering for your events a much faster Registration Form load experience

as a large volume of the content is being sourced from a local CDN server across the global Microsoft network. The CDN is also heavily leveraged for the Attendee Mobile App, which caches all static data and the core app files on the CDN, making the App very fast and not susceptible to thousands of people accessing it at the same time. The CDN delivers better performance and user experience for your attendees who are far from the content source. This solution also scales to handle instantaneous high loads at the start of your events.

**Azure Global Data Centers** | EventsAIR customers are provisioned in the data center physically nearest their location. Data centers exist in the US, Europe, Brazil, Japan, South-East Asia and Australia. Latency is reduced by utilizing the nearest data center.

**Azure Firewall** | all traffic into the EventsAIR environment is protected by the robust Azure Firewall. This is one of two firewalls that data will pass through.

**Azure Blob Storage** | EventsAIR stores lots of big data objects, such as photos, images and documents. Constantly accessing these objects from the SQL Server creates significant performance challenges. When this type of data is received, it is stored in the SQL Server and also in Blob storage. All reads of this data come from the Blob storage.

**Private Cloud** | every EventsAIR customer has a private cloud environment that has a number of levels of isolation from other customers:

- Dedicated namespace on the Azure Service Bus to ensure all messages are isolated
- Dedicated SQL Server to ensure data and server load are isolated
- Isolated Memory on shared Application & Web Servers or dedicated servers (depends on subscription level)
- Dedicated Blob storage



#### **EVENTSAIR SERVICE LEVEL AGREEMENT (SLA)**

EventsAIR gives you an SLA with an uptime guarantee of 99.99% availability. The partnership with Microsoft Azure, combined with our rigorous testing methods and release management, allows us to provide you with this stable, scalable and highly available environment.

#### **WEB APPLICATION FIREWALL (WAF)**

In addition to the Azure Firewall, a WAF secures the EventsAIR web servers by actively monitoring all requests and blocking certain requests. The WAF has the following features:

- Blocked requests include
  - SQL Injection
  - Web Directory Traversal
  - XSS Injection
- Scans all requests and processes them based on filter settings
- Every blocked request is logged
- Authentication scanning allows to scan for brute force attacks on accounts or DoS attacks on system accounts
- Blocking robots

#### **PCI DSS COMPLIANCE V3.0 LEVEL 1**

Level 1 is highest level of PCI DSS compliance certification and guarantees the safety of your attendees' Credit Card and personal data. Level 1 certification also means that EventsAIR is not reliant on self-assessment, but undergoes a yearly audit by an approved auditor, is exposed to an external Penetration Test and quarterly external vulnerability assessments. Level 1 compliance also requires a rigorous set of security policies and processes are followed, to keep your credit card data safe at all times.

#### **EVENTSAIR CREDIT CARD VAULT**

A popular feature of EventsAIR is the PCI DSS Compliant Credit Card Vault. This allows event organizers to safely capture and store attendees credit card details required to guarantee a hotel room without the need to charge the card. The credit card vault is maintained in a separate Azure environment and protected by a third firewall and will only accept traffic from specified EventsAIR servers. The Credit Card Vault is not available externally. Each customer is given a unique encrypted key pair and all credit card data stored in the vault is double encrypted. Card data is automatically deleted 14 days after an event and all access to the Credit Card Vault is logged.

#### **PAYMENT GATEWAYS**

To process payments, EventsAIR offers tightly and securely integrated Payment Gateways in various locations. To utilize real-time credit card payments, you will need to have an account with one of the EventsAIR Payment Gateways. The Payment Gateway will provide you with the details needed by EventsAIR (typically an API Token, certificate or username/password and account details) which are entered into EventsAIR and you're ready to process credit cards. Popular payment gateways include Authorize.net, Payflow Pro, Stripe and Moneris.

#### **INTEGRATION WITH PAYPAL EXPRESS CHECKOUT**

To reduce registration abandonment, you can allow your attendees to pay with PayPal accounts. You just need to create a PayPal account to enable you to receive payments and enter your PayPal account details into EventsAIR. This can be offered in addition to your Payment Gateway.

## **SUPPORT 24X7X365**

EventsAIR is supported 24/7/365 from Centium Software's three global locations (US, UK and Australia). Support is logged via a ticketing system with a target response time of 60 minutes. For urgent assistance, customers can speak to one of our professional support staff.

## **EVENTSAIR RELEASE MANAGEMENT**

The EventsAIR development team is committed to a 2 weekly minor release cycle to protect you from bugs and introduce new features. Customers in a critical event phase have the option to 'pin' a release to be excluded from the 2 weekly cycle. This provides for additional confidence, that absolutely nothing can go wrong during your event. Un-pinning the release will quickly bring you up to date with the latest, thoroughly tested release. Prior to any release, an email, alerting you of the pending release, is sent.

## **DEPLOYMENT**

As a SaaS product, all the EventsAIR processing work executes in your private Azure cloud infrastructure. EventsAIR is accessed in a variety of ways. Attendees access it online via HTML5 forms and HTML5 Mobile Apps. Event organizers access it via the EventsAIR Windows App (requires Microsoft Windows 7+) and HTML5 Organizer Mobile App. The EventsAIR Windows App is a Click-Once App (same as Google Chrome) and does not need any special permissions or technical knowledge to install. When a user account is created, they will automatically be sent their login instructions and a link to install the EventsAIR App. Providing event managers with an App allows for a rich and productive user experience and additional security user features not supported by browsers, to be included. A lite browser based version of EventsAIR, for event managers on the go, will be released in Q2 2016.

## **SCALABILITY**

No event is large enough to stress the EventsAIR Azure Cloud Infrastructure. The higher your load, the more Azure resources will be added to service your event. EventsAIR also leverages the power of the Azure Service Bus to manage the processing of large tasks (eg emails, reports etc) and to notify users instantly of important information (eg Event alerts, run sheet updates etc).

## **PEAK LOAD SCALING**

We actively monitor your EventsAIR private cloud for performance. We also analyze your event setup and key dates. From all of this data we can pro-actively and reactively boost the capacity of your private cloud so that your event managers and attendees are not impacted by transient peaks in load. To prevent the pain of slow performance during those times, we boost the power of your EventsAIR Infrastructure by up to 200% for the duration of 48 hours per month (in 4 hour blocks) at no additional cost.

## **SENDGRID EMAIL INFRASTRUCTURE**

SendGrid is the largest Email Infrastructure provider in the world and is tightly integrated via an API into EventsAIR. This provides for reliable email delivery as well as real-time analytics and reporting of deliveries, bounces, spam, clicks and opens. SendGrid is provided as part of EventsAIR.

## **INTEGRATION WITH POWERFUL GOOGLE ANALYTICS**

EventsAIR has tight integration with the Google Analytics API which allows you to monitor your registration sites and mobile apps from within EventsAIR. EventsAIR will also automatically insert the Google Analytics script in all online sites. All you need is a Google Account.

## **INTERACTIVE REGISTRATION SITES**

EventsAIR allows your event managers to create registration sites for browsers and mobile devices (Android, iOS, Windows Phone) using responsive design. This means your registration sites scale automatically to match the size of the device using Bootstrap technology. Your event managers can also easily configure the style/branding or you can add a custom Bootstrap CSS file. Interactive sites are built using an intuitive drag and drop builder and can include social login, payment procession, workflow logic, inventory holding and confirmation emails. The interactive registration sites are a robust and performance optimized platform to interact with attendees.

## **THE EVENTSAIR APP STORE**

Useful apps, which have been purpose built to address a specific events functionality will continuously be developed by Centium Software and third party providers who make use of our powerful APIs to ensure seamless integration between the apps and EventsAIR. All these Apps can be installed from the EventsAIR App Store.

### ATTENDEE MOBILE APPS

Your event managers will be able to build comprehensive mobile apps for attendees to use at your event in just minutes. The use of HTML5 Apps guarantees browser independence and instantly deploy to the end device. All data is cached locally on the device so that your attendees can work offline and synchronize automatically with EventsAIR when they come online. Updates to your app are instantly available to all your attendees.

Data for the Attendee App is delivered in three ways. Static data such as images, photos and static content are delivered rapidly from the CDN. Attendee lists, speakers, sponsors, exhibitors and agenda data which is relatively static during the event is updated every 5 minutes to the CDN and downloaded to Mobile Apps if the data has changed. Live data such as My Agenda, Messages, Alerts and News are delivered directly from EventsAIR.

### ORGANIZER MOBILE APPS

In addition to Attendee Mobile Apps, your event managers will be able to build comprehensive organizer apps for event staff to use at your event. These are also HTML5 Apps and access the EventsAIR data in real-time. The Organizer App can be configured to access the attendee's registration data, run sheets, messages, alerts, reports and complete check-in for the event as well as sessions and social functions.

### QR CODES AND BARCODES

EventsAIR provides each attendee with a unique encrypted QR code and Barcode. These can be included in confirmation emails, printed on name badges and display in the Attendee App. The event organizers can use the Organizer App or the Onsite Portal App to scan attendees and check them in to the event or a session or social function.

### ONSITE DATA AT YOUR EVENTS

In Q4 2015, you will have the ability to deploy a local version of your event data onto a Windows laptop or PC at your events. Event managers simply install the "Onsite Data" version of EventsAIR onto a laptop. This version includes MS SQL 2012 Express and the EventsAIR Data Sync service. Once these are installed, all data for the specified event will be synchronized in both directions from the cloud and local database. Other laptops on the same network can also connect to the primary laptop. This facility overcomes issues and risk at venues with unreliable or slow internet.

For more product information, please visit [www.eventsair.com/info](http://www.eventsair.com/info)

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