

# advantage made with data

IBM and the Australian Open



**In the business of tennis, data is the #1 seed. Fans have real-time access to crowd locations, court-by-court action and social buzz. Players can fine-tune their game with data insights. Tennis Australia can gauge social media reaction through sentiment analysis. All this is then used to predict and allocate cloud capacity used by millions of devices around the world. Today, there's a new way to gain advantage, and it's made with IBM™**

For two weeks every January, Tennis Australia welcomes hundreds of thousands of tennis fans to Melbourne Olympic Park for the Australian Open Grand Slam. Millions more around the world arrive via [ausopen.com](http://ausopen.com) to catch the latest scores, match stats, player insights and breaking news – all powered by IBM data technologies.

Of course, the potential of IBM's technologies goes way beyond tennis. If you're in business and looking for a competitive advantage, applying IBM's data analytics, cloud computing, mobile and social capabilities can be an absolute game changer.

## Relevant insights give a real-time edge

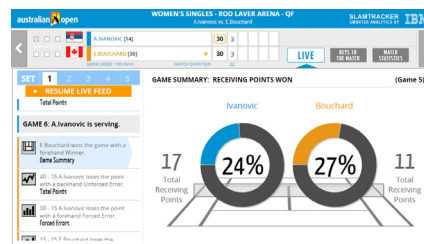
In every sport, the more you know, the more insight you have and the better your chance of enjoying success. Whether you're a player, a fan, or even a broadcaster.

IBM SlamTracker™ analyses over eight years of Grand Slam data, (more than 41 million data points) to identify patterns in players and their styles.

Before each match, IBM analyses historical matches between the players (for first-time matches, players with similar styles are analysed). This analysis identifies key performance indicators—what players need to do in order to do well in a match—known as

'Keys to the Match'. Fans, media, players and coaches can then access Keys to the Match on the Australian Open website.

For 2015, SlamTracker has been redesigned to feature point-by-point visual analysis that adds context to the on-court action. The data points include: type of shot, scores, serve percentages, duration, winners, points and serve speed. This year, IBM has upped the ante by tracking new data like ball and player movement — where the ball travels and how far a player runs in a given match.



## More demand, more delivery

For two weeks every summer, demand for information from Australian Open fans is at its highest. So much so that during the tournament, Tennis Australia's IT infrastructure must expand drastically to meet audience demand and deliver a unique and satisfying experience.

The solution was for IBM to set up a private cloud that could be shared by other like-minded organisations with similar demand spikes at different times of the year. Those organisations include the US Open, Roland Garros, Wimbledon, the US Open golf tournament, the Masters, and the Tony Awards.

In the past, monitoring Tennis Australia's server workloads, and the adjusting resources, has been a manual and reactive task. But once Tennis Australia started applying IBM analytics, they gained the ability to accurately predict, allocate, monitor and adjust capacity. It was done quickly, easily, and more cost effectively than ever.

Now, tournament, player and social sentiment data is analysed to assess when and how much capacity will be needed during the event.

Resources can be automatically increased or decreased accordingly. This approach, known as Dynamic Provisioning, analyses historic web use, player popularity, the schedule of play, and the nature of social media buzz about particular matches. The result is just the right amount of resources to deliver a great visitor experience, and minimal energy and money wastage.



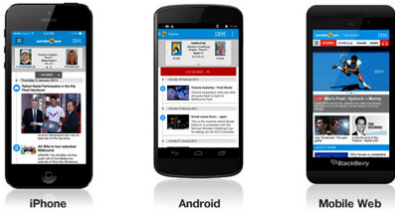
The private cloud meets higher fluctuating demands, while reducing the need for additional infrastructure and its associated expense. Since 2008, page views to the private cloud have grown by 42%, while the cost of each page view has dropped by 35%.

With the scalable and flexible private cloud, Tennis Australia can more effectively meet data demands, reduce energy expenditure and predict IT costs.

## More people. More engaged.

The Australian Open is one of the most popular annual sporting events in the world. Yet most of the fans who follow the action will never visit Rod Laver Arena – not in person, anyway. Those who can't be in Melbourne can still experience all the action, live, from wherever they are via tablets, smartphones and desktop computer. Importantly, the same mobile technology is rapidly expanding how people are experiencing the rest of their world – including your own business' products and services.

Tennis fans with a popular mobile device can keep up-to-date on all the on-court action wherever they are simply by visiting the mobile-friendly [ausopen.com](http://ausopen.com) site. They can also download the IBM-powered Australian Open app. That way, they have easy access to up-to-the-minute news, match data, player stats, video, radio, social media and more.



In 2014, the official Australian Open App was downloaded more than 1.2 million times across iPhone, iPad and Android devices and there was a 91% increase in mobile site page views, with more than 35 million page views at m.ausopen.com.

The iPad app gives fans watching matches on TV or online an interactive, second-screen experience. Developed in collaboration with Tennis Australia, the app lets fans follow their favourite players and show their support in real time through social media. It even tracks how popular those players are using social sentiment analysis. New in 2015 is video streaming and video on demand enabling fans to get closer to the action online.

### Analysis from the courts to the social media arena

IBM's analysis of the Australian Open goes beyond the stars battling it out on-court. It also incorporates what fans are saying online, as well as identifying which players are standing out as social media champions. That's why IBM has built in Social Media Analytics technology into Tennis Australia's Social Leaderboard on the Australian Open website. It tracks each player's tournament journey, identifies the most popular players, and calculates the percentage of positive and negative social sentiment from fans.

IBM and Tennis Australia tracked 8,595,362 Twitter references about players during the 2014 tournament. On Twitter, @australianopen grew to 440,567 followers, an increase of more than 65,000 fans, up 80% 2013.

Advanced analytics and natural language processing of the social media data also provided a deeper understanding of public opinion about the players. Tennis Australia can use these insights in planning their own social media campaigns and shaping the real time conversation accordingly.

IBM CrowdTracker also includes a social map that provides a view on popular Instagram spots, Twitter stats and sample photos shared via social media. It also has a locator for Aus Open's Selfie Station promotion.

These capabilities are delivered on infrastructure that can access, store and analyse any data regardless of how fast it's moving, what type it is or where it's coming from.

### Bringing live action to the rest of the world

With the IBM Chair Umpire (CHUMP) solution, each point, game and set is captured directly from the court with input from the chair umpire and the courtside statisticians.

Real-time data is fed directly to the Australian Open website, TV broadcasters and media—keeping millions of tennis fans around the world updated with every serve, return, winner, error and thousands of other data points.

Tennis Australia is also committed to providing additional onsite media for journalists and broadcasters. AOVision allows users to select and view up to five live streams, player interviews and archived videos at the same time from a number of the digitally encoded channels on the internal TV system.

### Enhanced security for a better fan experience

A high-traffic website like ausopen.com is not immune to security threats, so IBM ensures it is fully protected. IBM Internet Security System (ISS) blocks potentially malicious attackers and prevents access to hosting infrastructure without slowing down the availability of the site.

Unlike a firewall which blocks all content, ISS also inspects all visitors to the website and their behaviour. This allows the website to remain interactive for tennis fans, while still securing it from fraudulent activity.

IBM takes a layered approach to security with best practices, security defences, security checks and balances to protect valuable business information within the cloud.

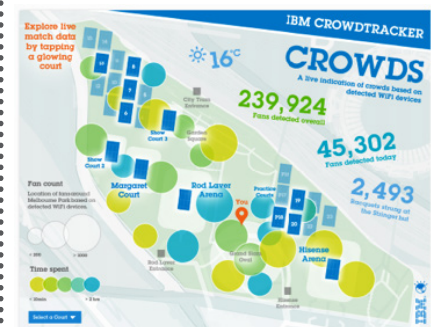
As part of its disaster transparency strategy, data is replicated across three global Service Delivery Centres. The design helps safeguard vital information and enables faster time-to-market for Tennis Australia.

### A new interactive experience for fans

With this in mind, IBM has assisted Tennis Australia to develop a new tool that provides fans with insights to make decisions about how they can best plan their tournament experience via IBM CrowdTracker.

Available through the Australian Open website and official apps, IBM CrowdTracker gives fans a birds-eye view of the precinct to see what crowds are doing on site and on line. Using live data from a range of sources, IBM is able to give fans a real-time insight into:

- **Where they are** – through GPS tracking they can see where they are on site
- **Where the crowds are** – using data obtained via Wi-Fi enabled device signals, fans can see where the biggest crowds are and quickly find the most popular spots
- **Social buzz** – the same map also provides a view on popular Instagram spots, Twitter stats and sample photos shared via social media. It also includes a locator for Aus Open's Selfie Station promotion
- **Court by court insights** – the map includes glowing courts to indicate where matches are currently underway so fans can decide where to go. More importantly, they can click on each court to see real time court data such as scores and stats, social sentiment about that match as well as player bios.



Using the same information that drives CrowdTracker and integrating these with key operations data feeds, IBM has also developed and built a single, easy to read, operational dashboard to help Tennis Australia to make decisions in real time.

The Operations Dashboard not only shares with Tennis Australia a real time high level view of the tournament, it also includes alerts to identify situations that management need to be aware of and provide Next Best Action alternatives to address issues as they arise.

Today, there's a new way to gain advantage, and it's made with IBM™

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