



Australia | Government

World's first Cloud-enabled G20 Leaders' Summit



'The IT system can't fail when the world is watching. Instead, it was a triumph. G-Net not only met, but exceeded, our expectations.'

Elizabeth Kelly,
Deputy Secretary
Department of the Prime Minister and Cabinet

*Image courtesy of G20 Australia



Challenge

- There was no margin for error for what is the highest profile event in the world. Virtual desktop and secure internet connection with rapid upload capability were needed to keep 7,000 world leaders and media seamlessly connected during the 2014 G20 Leaders' Summit.
- Infrastructure needed to be robust and agile enough to scale to unknown demand – and for the ICT to be 'turned on' for the two-day event, and then 'turned off', without leaving the Australian Government with unwanted assets.



Solution

- A fully consumptive, secure network solution was developed and delivered along with a bespoke, virtualised desktop.
- BYOD secure connection, high speed data upload and print-anywhere functionality delivered a seamless user experience across the event's secure zone, which included the conference centre and 12 hotels.
- Full services provided from Dimension Data's Melbourne Managed Cloud Platform, with built-in redundancy and automatic failover to the MCP in Sydney.



Result

- All the world leaders, dignitaries, media and guests experienced flawless, fully secure communication and collaboration across the secure zone.
- The cloud solution was not only a small fraction of the cost compared to using traditional compute and storage, but its consumption basis also eliminated the need for Government capital expenditure, and meant no assets to depreciate following the event's conclusion.
- Cloud delivered agility that traditional models could not provide, along with extremely high availability and reduced risk.

Challenge

The Group of Twenty (G20) is the premier forum for international economic cooperation and decision-making. Its membership comprises 19 countries and the European Union. In 2014 Australia hosted the annual G20 event in Brisbane, playing host to 23 world leaders, around 4,000 delegates and 3,000 mostly international media. The Department of the Prime Minister and Cabinet was responsible for hosting G20 in 2014.

No margin for error

Attendees at the G20 Leaders' Summit represented 85 per cent of global GDP, and host city Brisbane had the world's attention for the two-day event.

It was essential that as soon as the world's leaders landed at Brisbane Airport, they could get on with the business of governing the world, without technology being an impediment. Just as important was ensuring that the world's media enjoyed a seamless end-user experience and could send their broadcast reports around the globe, while Australia was on centre stage. In the words of the Department's CIO, Radi Kovacevic, "There was absolutely no margin for error".

Unique scale and timeframe

The Department of the Prime Minister and Cabinet (PM&C), responsible for G20 in 2014, did not have the resources or skill-sets to develop or deliver the right technology solution. It needed a trusted partner that could provide not only the right approach, but deliver on the intensive requirements. "The G20 event was the hugest thing that the Department has ever done, ever", explains Kovacevic.

Adding to the challenge was the fact that unknown delegate and media numbers meant unknown connection and bandwidth requirements, necessitating an agile solution capable of dramatically scaling to address demand, while being manageable and cost effective.

Finally, the one-off nature of the event presented a unique challenge – the Department didn't want to be left with significant infrastructure that no longer had a use following the event's conclusion.

It was therefore key to have the ability to 'turn on' the ICT for the duration of the event, and then turn it off. According to Kovacevic, "We had to think of a different way of delivering a virtual desktop cloud experience".

Solution

Secure, seamless experience

Dimension Data was awarded the contract to deliver and support the G20 network and desktop environment, known as G-Net. The overarching goal was for technology to be an enabler to the event: flawless connectivity and virtual desktop experience for media and delegates was fundamental to the event's success.

The cloud solution developed by Dimension Data delivered a fully consumptive solution for network, including WiFi, security, BYOD management, and a bespoke virtualised desktop for all the world leaders, dignitaries, media and secure guests.

It was made up of three components. Firstly, dual cloud platforms in Sydney and Melbourne delivered the vast majority of the services to the world leaders, media and delegates. Secondly, a secure wireless network was deployed inside the convention centre, and finally integration of 12 hotels and the convention centre created the entire secure zone.

This meant attendees were provided with wireless access to their BYOD devices, seamlessly and securely for communication and collaboration. It meant enabling print-anywhere functionality. It meant media updates, including live video, were able to be sent over converged infrastructure to the world.

A blended team of the Department of the Prime Minister and Cabinet and over 100 Dimension Data personnel provided 24x7 on-site end-user and infrastructure support services during the event.

In addition to the two-day Leaders' Summit in November, the virtual desktop experience was delivered to over 30,000 delegates as part of the four Sherpa meetings in the months leading up to it.

Consumption based services

Dimension Data's IT-as-a-service solution was unique because all the services were delivered on a consumption basis – meaning there was no capital expenditure for the Government, and it was not left with assets to depreciate once the event concluded.

"We didn't have to buy anything. Everything was brought on by Dimension Data. Within 24 hours after the event's conclusion, it was all gone."

The Government only paid for infrastructure and services while they were in use. Instead of an annual contract value, there was a weekly contract value. Once the event was over, the payment ceased. Even when taking into account the built-in redundancy with automatic failover to the Sydney cloud, the cost was still minimal compared to traditional hardware models.

 Result

World-first innovation

Dimension Data's expertise and innovation ensured the Brisbane G20 Leaders' Summit set the benchmark for future G20 events. From an ICT perspective, the event was ground-breaking. It was the first time cloud had been used to deliver secure networking and virtual desktop, as well as ensure significant cost savings for this annual event.

Kovacevic says "The ICT was absolutely flawless. It was highly available, it was fully secure. It met all the expectations, and exceeded all the expectations of everyone who was there."

The ability to dynamically scale the infrastructure on-demand ensured a seamless end-user experience, where neither access nor speed was an impediment to full participation of the event.

Enabling the Government to consume the infrastructure as-a-service, meant no costly capital expenditure and no residual assets to manage or depreciate following the conclusion of the event. At the same time, the overall cost of the cloud solution was significantly less than a traditional hardware approach.

Innovation, balanced against potential risks, showcased the ingenuity of Australia and Australian IT, delivering a win-win for the Government, and for the G20 attendees.

"It was a huge step for the Department of the Prime Minister and Cabinet. To be able to do it on such a large scale, in front of billions of people, was awesome".

Services overview

- Dual cloud platforms
- Bespoke virtual desktop
- Secure wireless network
- Integration of secure zone

G20 by the numbers:

- 10,000 mobile devices supported
- 700 concurrent thin client desktop sessions
- 300 wireless access points
- 220 tonnes of hardware
- Two Dimension Data Managed Cloud Platforms

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Botswana • Congo • Burundi
Democratic Republic of the Congo
Gabon • Ghana • Kenya
Malawi • Mauritius • Morocco
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Tanzania • Uganda
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