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November 21, 2018

Letter in Response to RFP for Managed and Hosted Voice Services (OT18027)

Solicitation Number: CRFP 0212 SWC1900000001

Dimension Data North America, Inc.
11730 Plaza America Drive, Suite 340
Reston, VA 20190

If you believe you can do anything,
we're here to help you do it.

Dimension Data Contact Details

We welcome any inquiries regarding this document, its content, structure, or scope. Please contact:

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Mark Atkins
State of West Virginia
Purchasing Division
1900 Kanawha Blvd E.,
Building 5, 10th Floor
Charleston, WV 25305

Re: Managed and Hosted Voice Services (OT18027) Solicitation Number: CRFP 0212
SWC1900000001.

Dear Mr. Atkins,

On behalf of Dimension Data, we thank you for the opportunity to work on the State of
West Virginia RFP for Managed and Hosted Voice Services (OT18027) Solicitation
Number: CRFP 0212 SWC1900000001. While Dimension Data was not able to give a
formal response to this RFP due to compliance and legal constraints surrounding the
response. Dimension Data wanted to share our philosophy and method regarding
these services with the State of West Virginia.

We understand this letter is outside the RFP process and may be disregarded due to
the State's process and procedures. However, Dimension Data understands the
solution that the State is requesting and would provide a solid and flexible solution.
We know the State of West Virginia is looking at Managed Voice Services for the
State's legacy Cisco VoIP environment with an integration for Microsoft Office 365 and
Active Directory.

Dimension Data core business model for over 35 years has been managing on-
premise environments. It would be our pleasure to provide staffing, rebadging of
current contractors and expertise to support this existing legacy environment. Our
solution would show added value by planning, building and offering services to
migrate this environment to a new hosted VOIP platform.

We believe this is only part of the State's Digital Workplace Journey!
Our offering would provide an agnostic integrated framework that will include a
transformational model with Strategic Discovery Workshop, Assessment of current and
future state with Consulting Services to enable a secure and complete Unified
Communications (UC) model. It is our attempt to build a model that will serve the
State for the next 4 to 8 years.

Our approach will enable a fully compatible "WVaaS" UC model!
We provide solutions to our clients with the needed features you would expect from an
expensive legacy system, like multiple lines per user, call recording, conference calls,
an advanced IVRs to handle inbound calls. We can demonstrate how our hybrid
approach can achieve significant cost savings. We can prove how the formation of a
capital expense "Utility" will automate services across your agencies and provide the
state with a flexible approach for additions and changes of future services.

But beyond that, our UCaaS model would include a hybrid proposal and methodology toward:

- The addition of Dimension Data assisted IT Planning Board - *with a Vendor agnostic approach to procurement*
- Unmatched flexibility - *no hardware restrictions to add or remove users or features*
- Voice calls supported - *showing ongoing savings by moving from handset to headsets with advanced productivity*
- Enhanced video conferencing for better collaboration among State employees with Presence Indication and Voicemail to email
- Integrated Mobility - *no matter where you are, in the office, at home or on the go, your UC system can ring all your phones when you receive a call*
- BYoD - *Flexibility to use your own phones,* both desk and mobile phones as well as soft phones

Our UC solution is much more than voice - it is a Digital Workplace and Productivity future of the State of West Virginia.

I will be your authorized to represent Dimension Data and primary point of contact throughout this process. Dimension Data is confident that we can work with the State of West Virginia to deliver high quality individuals that meet the needs of this Service!

Thank you again for the chance to present our model. We are looking forward the chance to discuss our services and support with your team.

Regards,

Robyn Blocher
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11730 Plaza America Dr.
Suite 340
Reston, VA 20190

Executive Summary

Dimension Data would like to thank the State of West Virginia for this opportunity to respond to the Managed and Hosted Voice Services with Hosted Contact Center RFP. We understand the requirements for migration, deployment and management for the current On-site Managed Voice Services and Hosted VoIP Services. In addition, these requirements include designing and migrating to Unified Communications ("UCaaS') and Hosting Contact Center with additional integration of Microsoft Office 365 and Active Directory.

Dimension Data and The NTT Group

Established in 1983, Dimension Data has operations on every inhabited continent, with our core focus areas including network management, Unified Communications, security solutions, data center solutions, client interactive solutions, and a range of professional, consulting and deployment services, all of which are backed-up by a full range of ongoing managed services and support services.

In 2010, Dimension Data was fully acquired by Nippon Telegraph and Telephone (NTT), one of the world's largest companies by revenue (60th in the Fortune Global 100, with revenues more than $96bn), which further strengthened our reach and capabilities as well as providing unrivalled financial stability. This level of financial strength allows Dimension Data to invest in innovation ensuring our clients see the benefits of new technologies and support methodologies.

Our combined company represents one of the industry's most comprehensive services portfolios designed to modernize business and technology, with increased strength in industry consulting and vertical solutions in major segments, including automotive and manufacturing.

Gartner 2018 UCaaS Magic Quadrant - NTT Group is now a Challenger

The 2018 "Magic Quadrant for Unified Communications as a Service, worldwide" has just been released by Gartner. NTT Group (which includes **Dimension Data**) has improved its position by moving from Niche Player to Challenger.

NTT Group

The **NTT Group's** UCaaS portfolio is from the combined assets of Japan-based **NTT Communications**, France-based **Arkadin** and South Africa-based **Dimension Data.** The three UCaaS groups are run as separate business units, though they perform joint marketing, planning and investment. The NTT Group has a Positive financial rating based on Gartner's financial assessment tool.

Gartner analysts have recognised NTT Group - Dimension Data and Arkadin on our efforts to better align our global UCaaS offers alongside our increased expertise in adjacent capabilities such as consulting, WANs, security and managed services. Going forward, Gartner recommends to further develop our NTT Group synergies and brand awareness, while continuing to invest in bots, AI and CPaaS to bring our digital transformation capabilities to the next level.

Dimension Data won the 2018 Technology Services Industry Association (TSIA) STAR Award for Transformation of Support Services. Since its inception in 1990, the STAR Awards have become one of the highest honours in the technology services industry, recognising commitment to outstanding innovation, leadership, and excellence. Winners of this prestigious award undergo the rigorous STAR Awards evaluation process. The Transformation of Support Services award honours those that have transformed their Support Services organisation to keep pace with industry digital transformation.

The winner is required to demonstrate that it has excelled at "best practice" and is truly "innovative" in today's technology industry. It is required to showcase best practices that have positively impacted the company, its customers and employees, ultimately improving business efficiency, growth and profitability.

What makes Dimension Data different?

We enable our clients to do great things
We believe we can make a difference. Every day, we enable our clients to **do great things through the use and adoption of technology.**

The world is changing
The world is changing faster than ever, accelerated by disruptive technologies. With every wave of change, there are opportunities for you to respond and reinvent your business. But, **with change comes complexity. We can help you by understanding your business**

We make it our mission to understand your business, and help you navigate this complexity to find new opportunities. We listen, advise, and apply real-world experiences to architect the right solution for you by understanding your market and applying our technical knowledge to **achieve your outcomes, not ours.**

We harness the power of data to turn it into info and insights
We help you to ensure you have the right digital infrastructure in place for your business, so that you can harness the power of your data, turn it into your corporate story information, and extract insights. This allows you to build more valuable relationships with your customers,

embrace the new ways your people want to work, and *navigate a landscape of ever-changing security threats.*

The services we deliver
Our services cover every aspect of architecting, supporting, optimizing, and managing today's IT environments, using the latest in programmable infrastructure. And our platforms give you a *single view of analytics and insights* across your environment, so you have better control and can make decisions quickly.

Our investment in innovation
We believe that our continued investment in innovation enables us to find new and flexible ways to deliver services to you today, and tomorrow. We remain focused on *new capabilities, platforms, and delivery models,* to unlock more value for you now and in the future. We use innovation to fulfil our purpose of making a difference. We're committed to giving back to our communities and protecting the environment with dedicated global programs.

Our people care
Cultural fit and flexibility are critical to your success, so we put you at the center of everything we do. While we drive efficiency through global consistency, it's how much our people care about your business that sets us apart. We empower our 28,000 people on the ground across 47 countries to focus on you and what you need to get done, no matter where you do business. This means we're all personally invested in your business and your success.

Certified from the Top Employer Institute for **excellent employee conditions** for 4 years in a row since 2015	Multiple HR.com LEAD awards for our internal **Dimension Data University (DDU)** and other technology in the workplace	Dimension Data named Microsoft's **2018 Modern Workplace Transformation Partner of the Year** award winner	Dimension Data named Frost & Sullivan's 2017 **Global Systems Integrator Company of the Year**	

How being part of the NTT Group helps our clients
As a proud member of the NTT family, we continuously evaluate market developments, and bring together the best technology, capability, and global infrastructure in your environment. And our long-term partnerships with the leading technology companies give you access to the world's best resources. Through innovation and collaboration initiatives *with the NTT Group, we create industry- and client-specific intellectual property* that makes a difference. This allows you to benefit from the USD 2 billion investment in global research and development.

Why we believe we can make a difference
We believe in the great things that technology can do to accelerate the ambitions of our clients, our people, and the communities we work in every day. We are Dimension Data – a global technology integrator and managed services provider. *We believe we can make a difference.*

Solution Summary

State of West Virginia Challenges

Every organization needs a strong partnership between business and IT to perform at its best. When IT and business fully align, business goals are achieved with empowered employees who deliver great services to customers and support business innovation.

State of West Virginia needs to understand the challenges business face today. Business and IT leaders need to agree on a shared vision for the future. It's often necessary to bring business and technology people together in a structured way to promote dialog and get consensus on the way forward. To maximize business value, you need to build a bridge from business objectives to technology initiatives and enable the IT organization to be a strategic partner to the business.

For State of West Virginia, we would propose to run Cisco's Unified Communications offering initially on premises at your current Data Centers, as requested. As we progress through Consulting and Assessment Phase, we will begin the planning stage for migration to UCaaS. Dimension Data will work closely with the Office of Technology team to determine the best path for a phased migration into our cloud platform.

| State of West Virginia Needs	Dimension Data Delivers
Hosted Contact Center Services	✓
Hosted Voice Services	✓
Integration Support for Migration O365 and Skype for Business	✓
Managed Voice Services — Support of State's Legacy IP Environment	✓
Management and Operation for Onsite Cisco Unified Call Manager (All versions *supported by Cisco)*	✓
Management and Operation Support for Contact Center	✓
Migration Support for Hosted Contact Center	✓
Migration Support to VoIP	✓
Security for Vendor's Hosted Solution	✓
Service and Support for Vendor's Hosted Solution	✓
Single Vendor Solution	✓
Staff Rebadging	✓
Transition from the State's Legacy IP Environment to the Vendor's Hosted Solution	✓
Transition Planning and Migration to UCaaS	✓

Supporting State of West Virginia's Cisco – Microsoft Collaboration Journey

Dimension Data has attempted to demonstrate our ability in managing the existing legacy environment and providing our methodology toward a *Cisco Hosted Voice Service.*

However, like many of our clients, the State of West Virginia has a hybrid infrastructure with WebEx, Cisco Video, Cisco Voice and Microsoft O365 Cloud with a potential impending Skype for Business to Teams roadmap migration. If your organization is like many others, you've got a mix of Cisco and Microsoft unified communications tools in use -- and that can mean interoperability challenges ahead.

Dimension Data is a *vendor agnostic services focused* company. We are happy to support all technologies that our clients believe fit their IT priorities best. Over the years, we have developed strong capabilities on *Cisco, Microsoft and Polycom* to deliver hybrid IT solutions for your business. Our agnostic approach enables your move to the cloud in a manner that is finely tuned to your organizational needs and requirements.

Mixed Vendor Models
Which blend is right for your Organization?
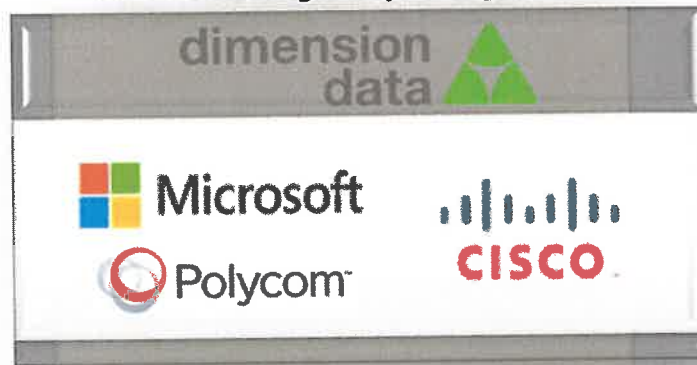
With services to assess, migrate and manage options of public cloud, or a hybrid thereof, the pragmatic reality that not all workloads fit onto the cloud is addressed. We offer a genuine set of solutions, tailored for real-business scenarios. This starts with our people and our experience!

Dimension Data helps Microsoft integrate with Cisco and Cisco integrates with Microsoft

Strategic Discovery Workshop

Dimension Data has considered State of West Virginia requirements and is responding with the following approach:

The *Strategic Discovery Workshop* is a one-day, interactive, consulting-led workshop to ensure alignment between your IT and business goals and the appropriate allocation of resources. Reaching alignment requires that your business and IT teams share and agree upon the definition of success. Whether you're looking to streamline operations or implement significant digital transformation, our Strategic Discovery Workshop helps you:

1. Identify the environmental factors affecting your business;
2. Close gaps between your business and IT strategies;
3. Bring business and IT people together to agree on a common set of goals;
4. Develop a strategic roadmap to achieve goals; and
5. Create the next steps and a prioritized action plan with the right people assigned to projects.

The Strategic Discovery Workshop assists the State of West Virginia in accelerating the move from your current 'as-is' to your desired, 'to-be' state. Following the workshop, IT and business stakeholders will have a common understanding of the current environment, and a clear picture of where the organization wants to be in the future with a roadmap of how to get there.

This workshop brings the appropriate stakeholders from within your organization into contact with Dimension Data's industry aligned enterprise architects and strategic consultants - to agree on a tangible set of primary and secondary objectives.

With a one-day time investment, the Strategic Discovery Workshop rapidly moves you from strategic planning to implementation, with confidence that your execution plans are aligned to the needs of your business.
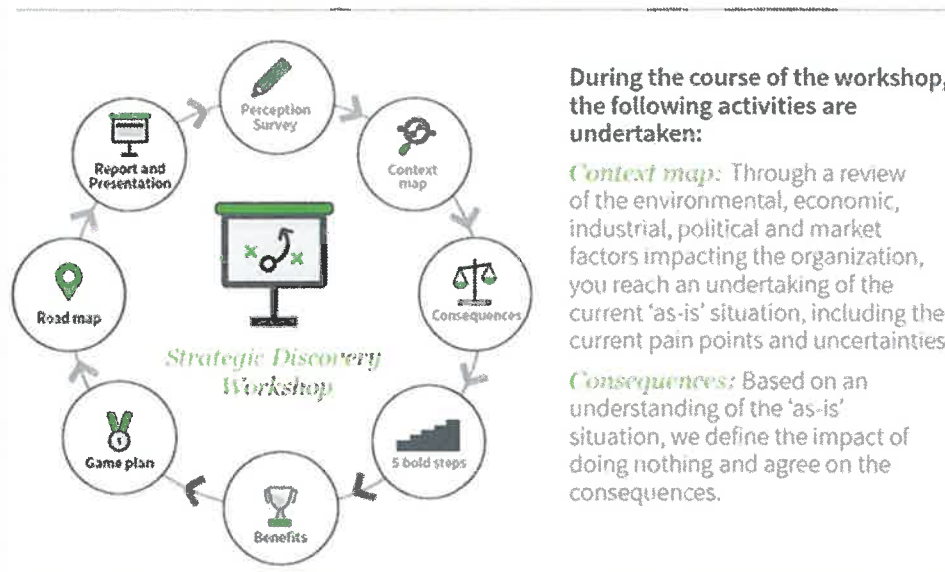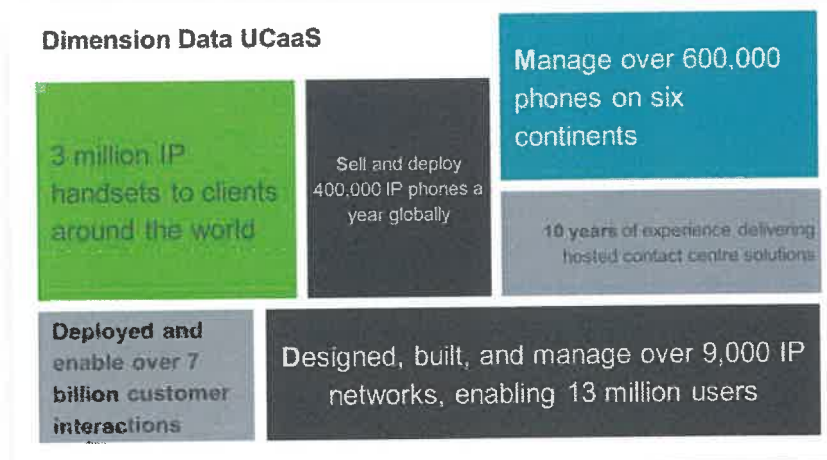
Transformation

We have an enviable record of supplying and deploying Unified Communications solutions for our vast global client base. Dimension Data has extensive expertise in both *Cisco and Microsoft's Unified Communications technologies* and have deployed both architectures to global organizations on many occasions.

Unified Communications Expertise & Thought Leadership

Dimension Data has provided Unified Communications Solutions to our clients for over 10 years. Dimension Data has over 100 outsourced clients with some of our clients being the most recognizable companies in the world. In the Unified Communications arena, Dimension Data has deployed over 3,000,000 handsets. Dimension Data has extensive expertise and certifications in Cisco, Microsoft, Avaya and Genesys Unified Communications technologies. Our expertise provides State of West Virginia with innovation and thought leadership required for a "world class" Unified Communications implementation! We know the common issues and have mitigated the associated risk by solutioning for them in our proposed implementation plan.

Our Collaboration Central Delivery Hub is part of this migration; this hub provides services for other Unified Communications technologies; this approach is *certified by Cisco and fully integrates into our Global Support Centers* with no bolt-on requirements. We believe this will provide State of West Virginia with the best technology and support available in today's marketplace.

Dimension Data's Collaboration Central Delivery Hub for Unified Communications is a proven architecture that will provide the scale, flexibility and security required for organizations such as State of West Virginia. As part of the offering, Dimension Data is including features such as auto provisioning that will streamline the administrative process driving efficiencies and cost savings for State of West Virginia.

As required in the RFP, Dimension Data is prepared to complete the transformation element of the engagement in less than 24 months. Our extensive experience deploying Cisco Unified Communications will significantly mitigate State of West Virginia transformation risk.

Managed Services

Our managed service for Unified Communications and Contact Center is one of the strongest in the world. Dimension Data has been a leader in the Unified Communications market for many years. Dimension Data associates provide 100% of all "day two" managed services, which gives *State of West Virginia "single point of accountability".*

Our managed service for Unified Communications is centralized providing State of West Virginia with economies of scale, full 24/7 availability and a suite of pro-active monitoring tools based on a platform that can scale the service up or down to match any changes in State of West Virginia business requirements

The Unified Communications managed service is provided from our Global Support Centers. This centralization of Unified Communication service ensures minimal business disruption and lower risk for clients who are moving from another Unified Communications architecture.

We will leverage our proven governance model to ensure our managed service offering exceeds State of West Virginia expectations. Dimension Data's governance model encompasses a structured review program for monthly and quarterly reviews as well as a relationship mapping and executive sponsor program to foster strong relationships, strategic dialogue and thought leadership.

Dimension Data Differentiators

Ease of Doing Business

Dimension Data understands that State of West Virginia requires a flexible business model including commercial terms and "day 2" support. In our response we have demonstrated our flexibility by agreeing to many of the RFP requests. We have "solutioned to yes" where possible. In areas where we could not comply 100% we offered clarification and an approach to help State of West Virginia meet its business objective tied to each specific question.

Top 10 Reasons to Choose Dimension Data

Dimension Data helps Microsoft integrate to Cisco and Cisco integrate to Microsoft	Proven experience and 15-year track record in collaboration and productivity solutions	Named a Leader in the ISG Provider Lens: Digital Workplace Services Archetype Report 2017	We employ over 580 dedicated contact center experts around the world	Cisco Global Services Partner of the Year, Americas
Global Elite Launch Partner for Microsoft Skype for Business	Cisco Master Managed Services Channel Partner	Global Elite Launch Partner for Microsoft Skype for Business	Dimension Data has the most Cisco Certified Internet Experts (CCIEs) outside of Cisco.	Manage 350,000 seats of Skype for Business and Lync Enterprise Voice and deployed over 1.7 million seats

Beyond commercial terms and pricing, Dimension Data has a very client centric governance model including an account management approach that is conducive to flexibility and an ease of doing business. Our Client Managers are the general managers of the account relationship. They will be your advocate and are responsible for the commercial relationship, client satisfaction and the overall engagement. This resource has the autonomy to make decisions on

behalf of Dimension Data in support of the client. This approach ensures that requests are handled quickly without bureaucratic delays.

Dimension Data is Cisco's largest global partner; this is demonstrated by the fact that we are one of very few Cisco Global Platinum level partners with an outstanding Professional Services team including technicians with over 4000 certifications. We pride ourselves on the flexibility of our approach because of the complexities of our client environments. Dimension Data associates have earned more Cisco certifications than any other company with 29,000 credentials. Dimension Data has the most Cisco Certified Internet Experts (CCIEs) outside of Cisco.

Automation
We call our service delivery platform GSOA (or the Global Services Operating Architecture). It is an architecture built from a variety of best-in-class tools bolted together with middleware to enhance automation and deployment. Our solution contains products from EMC, Microsoft, and even SaaS tools such as Service-Now.com which is our IT Service Management tool. For process integration, we have a very powerful and flexible approach that leverages Cisco's Service Grid platform – this allows multiple parties to engage in complex multi-party process service management integration. In addition to this e-bonding architecture, we have a robust and proven methodology for driving complex integrations called IT service integration, or ITSI. It focuses on process alignment at a macro ITIL level and at a detailed per service level. Our automation capabilities allow us to execute faster with fewer errors.

Teamwork and Collaboration
We understand that our clients are looking for partners to assist them in their long-term transformational journey to take advantage of the emerging technologies and digital business models. We work with clients like yourself every day who are interested in expanding into new territories, reducing costs, improving employee or customer experience, or simply trying to maintain a competitive advantage in the market.

To meet our client specific needs, we bring together our deep experience and expertise in consulting, design services, deployment services, and project and program management services – to be able to deliver the right IT solutions for you. We leverage our deep expertise in Client Experience and Collaboration, End-user computing, Digital, Networking, Data Center, and Security to assist you in shaping your IT strategy, defining the solution architecture and delivery model, and then designing and implementing the technology solution to deliver tangible business results.
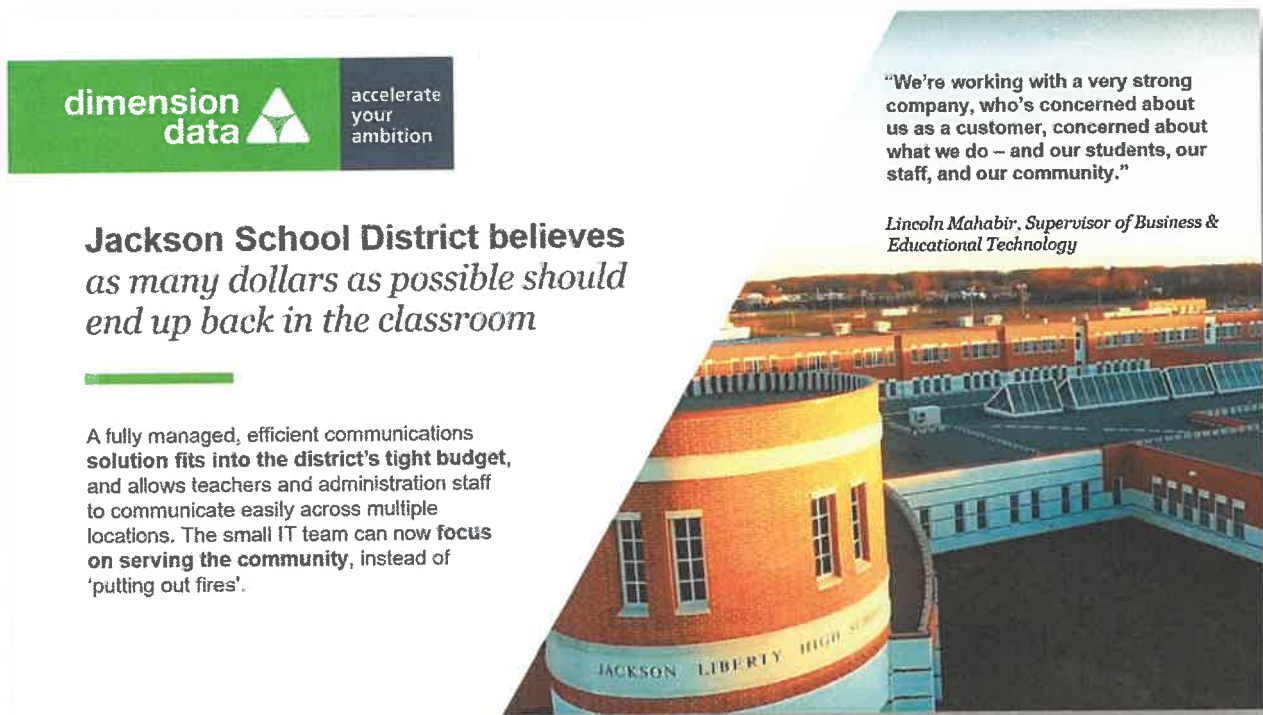
In Summary

We are confident that we have a solution that meets and exceeds State of West Virginia's requirements. Dimension Data's ability to execute has developed us a reputable track record in providing minor managed services and major IT outsourcing alike. We have successfully implemented turnkey services of a similar nature in all the geographies in which we operate.

Dimension Data has a transformative vision for State of West Virginia. A vision that includes this service consisting of mature, proven processes, toolsets, highly skilled resources, vendor partnerships, geographical coverage, and service attributes. A vision specifically designed to address the many business and IT objectives identified in the RFP, providing both the solution/services and corresponding business outcomes. It caters for a successful execution, calculated transition plan, with a non-disruptive cadence, using a strong understanding of State of West Virginia's IT organization and the importance for this to be another successful milestone for State of West Virginia. We look forward to working with you over the coming months and years to make this new vision a reality.

Appendix A: Case Studies

The Jackson School District is a comprehensive community public school district, serving students in kindergarten through twelfth grade from Jackson Township, in Ocean County, New Jersey, United States. The District provides technology-enriched programs to educate and inspire over 9,000 students to become critical thinkers. Jackson's students continue to evolve technologically, and when the time came to update the district's communications, they needed a solution that could do the same through a fully managed and hosted cloud solution, Jackson School District is providing 8,500 students with better learning outcomes by enabling teachers and administrative staff to easily collaborate across their 11 locations.

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Jackson School District believes *as many dollars as possible should end up back in the classroom*

A fully managed, efficient communications **solution fits into the district's tight budget**, and allows teachers and administration staff to communicate easily across multiple locations. The small IT team can now **focus on serving the community**, instead of 'putting out fires'.

"We're working with a very strong company, who's concerned about us as a customer, concerned about what we do – and our students, our staff, and our community."

Lincoln Mahabir, Supervisor of Business & Educational Technology

Dimension Data provides the following services to Jackson Schools; Cloud Services for Cisco (CSfC) telephony system, managed services, collaboration tools, networking, security and Data Center. Hosted by Dimension Data and built on the Cisco Hosted Cloud Solution (HCS) the cloud solution supports up to 1,000 users.

Case Studies Attachment and Link for additional details:
https://www.youtube.com/watch?v=RPG5q_Kp8zA

"In my interactions with Dimension Data, it became apparent to me that **I was dealing with an organization that was somewhat unusual**. They listened, they seemed to reflect, **they seemed more interested in actually meeting our needs than in just selling us stuff.**" Shawn Cabey, Assistant Superintendent **Westside Union School District**

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Westside Union School District
*understands that technology is
the future of education*

Serving nearly 10,000 students, Westside Union School District works with Dimension Data provide a **world-class learning environment** where students benefit from **choice-based programs, a motivated learning environment and modern technology** that supports the district's tradition of high academic achievement
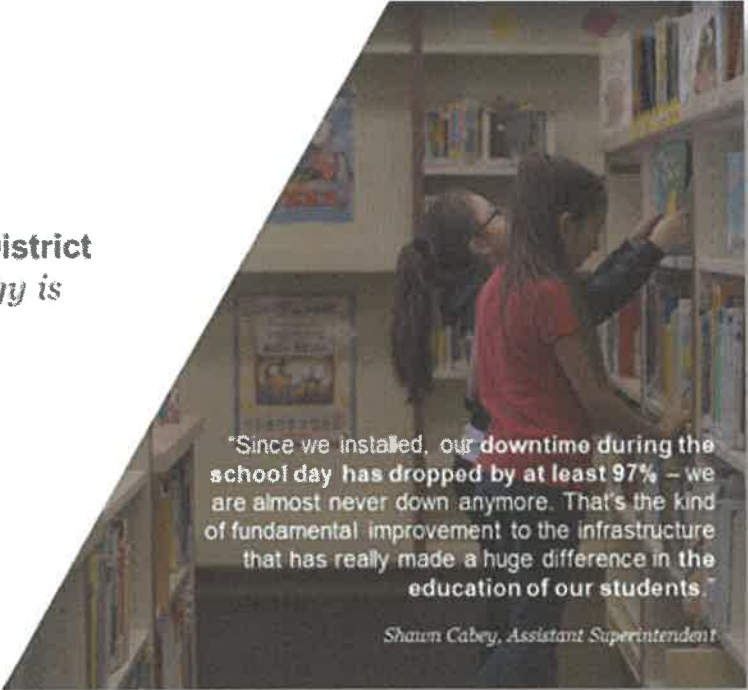
"Since we installed, our downtime during the school day has dropped by at least 97% – we are almost never down anymore. That's the kind of fundamental improvement to the infrastructure that has really made a huge difference in the education of our students."

Shawn Cabey, Assistant Superintendent

dimension data

JACKSON SCHOOL DISTRICT

Jackson School District | Americas | United States | Education | Hybrid cloud

Using the cloud, Jackson School District enables *better learning outcomes*

At a glance

Which services?
- Network Optimisation Assessment
- Cloud Services for Cisco (CSfC) telephony system
- Managed Services

Which technologies?
- Collaboration Tools
- Networking
- Security
- Data centre

Which partners?
Cisco

'Students benefit from investments the district and Board of Education have made in technology, our curriculum and our facilities – all of which will have a real and lasting impact on how our students learn.'

Lincoln Mahabir, Supervisor of Technology, Jackson School District

Why the district needs technology to support education?

Jackson School District provides technology-enriched programmes to educate and inspire over 9,000 students to become critical thinkers. Jackson's students continue to evolve technologically and when the time came to update the district's communications, they needed a solution that could do the same.

Read more

How cloud enables learning outcomes?

The district chose a cloud solution, because it brought value to staff, teachers and students. Moreover, it helps to contain costs over time, results in savings and provides the district with the ability to be flexible and add future services.

Read more

What 21st century technology does for the district?

A fully managed, efficient communications solution fits into the district's tight budget, and allows teachers and administration staff to communicate easily across multiple locations. The small IT team can now focus on serving the community, instead of 'putting out fires'.

Read more

'We couldn't have done this without Dimension Data. They are truly a partner that is integral to our success not only for our IT team, but for our staff, teachers and students.'

Lincoln Mahabir, Supervisor of Technology, Jackson School District

Why the district needs technology to support education?

Jackson School District provides technology-enriched programmes to educate and inspire over 9,000 students to become critical thinkers. Jackson's students continue to evolve technologically, and when the time came to update the district's communications, they needed a solution that could do the same.

The district serves students across six elementary, two middle and two high schools. It's critical for administrators and teachers to communicate often, easily and reliably. The district was faced with a dilemma, in that their Avaya telephone system was reaching end of life and they risked losing support.

Although the IT team of two is driven to provide the school community with tools to facilitate education in the 21st century, they struggled to keep up with the demand for high-level support.

With a USD 135 million budget for all their needs ¬– from paper towels to IT, costs were also a consideration. Since the budget comes from taxpayer pockets, they need to ensure that as many dollars as possible end up back in the classroom.

Lincoln Mahabir, Supervisor of Technology at Jackson School District adds, 'We needed something more than just a telephone. It had to be part of an integrated package of communication.'

How cloud enables learning outcomes?

The district chose a cloud solution, because it brought value to staff, teachers and students. Moreover, it helps to contain costs over time, results in savings and provides the district with the ability to be flexible and add future services.

The district selected Dimension Data's Cloud Services for Cisco (CSfC), which is a fully managed and hosted enterprise telephony system to provide efficient communication across all the district's locations.

Hosted by Dimension Data and built on the Cisco Hosted Cloud Solution (HCS), this freed up Jackson's IT resources for other critical support and met their needs for future scalability. The cloud solution is leased for six years and supports up to 1,000 users.

The solution also offers other benefits such as predictable costs and the ability to add Unified Communications features (such as Call Control, Voicemail, Instant Messaging and Presence) as required by the business.

To ensure that the district's network was running at full potential before the solution went live, Dimension Data conducted a Network Optimisation Assessment. A team of engineers spent time onsite to upgrade the district's backend and help them transition onto the new platform.

What 21st century technology does for the district?

A fully managed, efficient communications solution fits into the district's tight budget, and allows teachers and administration staff to communicate easily across multiple locations. The small IT team can now focus on serving the community, instead of 'putting out fires'.

Jackson relies on Dimension Data's expertise to administer, maintain and upgrade the system. The IT team now spends less time dealing with technology interruptions and issues, and instead can focus on serving administration and teachers who in turn serve students.

The district is also experiencing savings in that they don't have to employ staff to run a new communications system. The solution can be scaled according to their demand and lays the foundation for future technology implementations, such as unified communications and video.

Jackson is also setting an example for other schools. They're utilising the latest technology on a tight budget to facilitate communication. Moreover, the system has unique features, such as 'All Call' which serves as an internal 911 system. The phone system turns into an intercom at the click of a button, which allows teachers to alert the entire school if they come across intruders.

Technology accelerates digital business

'Communicating effectively saves everyone in our district time and eliminates the frustration and worry that can go along with using an outdated system. Our new system is reliable and can grow with us," says Lincoln Mahabir, Supervisor of Technology, Jackson School District.

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Camberwell Girls Grammar School
An Anglican School

'I am so excited we are providing our girls with **an education** that really will **prepare them for their future**.'

Debbie Dunwoody
Principal
Camberwell Girls Grammar School

Australia | Education

Technology to enable creativity, collaboration and innovation in education

Challenge

Camberwell Girls Grammar School wanted to provide teachers and students with a more dynamic and productive learning environment to maintain its position as a school of choice through the delivery of leading-edge learning.

To accelerate its ambition of 'educating tomorrow's woman', CGGS knew it needed to teach twenty-first century skills of creativity, collaboration and innovation in the students' approach to learning.

Solution

Deployment of the Cisco Collaboration platform – including voice, video, compute, WebEx, Show & Share – integrated with Microsoft Active Directory and Exchange, and third party applications that record and deliver learning activity as a service catalogue.

Result

- Staff and students have access to a wider range of resources, people and experience through interactive, connected learning.

- Productivity gains through recording of classroom learning for re-use and future reference.

- More engaged students and improved capacity to learn as students share their learning through collaboration – interacting and learning in ways that resonate with them rather than through more traditional teaching methods.

A 21st century education

Camberwell Girls Grammar School (CGGS) is an independent girls' school located in the eastern suburbs in Melbourne. With approximately 800 students and over 100 staff located on two campuses, it is one of Victoria's leading independent girls' schools, noted for achieving exceptional academic results.

The school wanted to provide teachers and students with a more dynamic and productive learning environment by implementing technology common in higher education and business. This investment was seen by the school as a critical step to maintaining its position as a school of choice, through the delivery of leading edge learning programs to staff and students.

"We're all about educating tomorrow's woman here at Camberwell Girls. We know that we are going through a time of quite rapid change in the world, where if we want our students to thrive, we've got to teach them the 21st century skills of creativity, collaboration and how they can be innovative in their approach to learning," said Debbie Dunwoody, Principal, CGGS.

Solution

Kicking off the year with collaboration

Camberwell Girls Grammar School, in partnership with Dimension Data, embarked on a full-scale deployment of the Cisco Collaboration platform. The solution utilised Cisco technologies for voice, video and compute, integrated with Microsoft Active Directory and Exchange, as well as third party applications that record and deliver learning activity as a service catalogue.

"Deployed here in the school is a full range of Cisco technologies – from the infrastructure layers of networking, wi-fi, switching and routing to the full collaboration stack, which includes videoconferencing, WebEx and Show and Share technologies," said Michael Slip, General Manager – Communications, Dimension Data

With a requirement to have the solution up and running by late January, before commencement of the school year, the team had to work towards a very tight deadline. In addition, the IT team at CGGS was small, which required effective planning so that Dimension Data could deploy the solution and then hand this to CGGS for the wider rollout, end user support and business-as-usual operation.

Dimension Data delivered the project on time and on budget to the satisfaction of CGGS.

"Dimension Data has been a wonderful partner in this whole program," said Debbie Dunwoody.

Result

Collaboration crosses learning boundaries

According to Michael Slip, the school has fully embraced collaboration:

"[CGGS is] a shining light. They're an example of an organisation that has really adopted the technology and are extracting the value."

The collaboration solution is also generating positive feedback from the staff at CGGS. Kim Perkins, Head of Digital Learning at CGGS said:

"This is probably the most exciting period of my teaching career. The possibilities that this collaboration communications technology has opened up, the excitement that it generates among the students and the uptake by the staff has been one of the most impressive changes of implementations of technology."

The collaboration solution is having an impact on the way that teachers and students are working at CGGS, with interactive classroom learning allowing the students to have access to people and experiences beyond the boundaries of the classroom and in locations across Australia and internationally.

"In Year 6 we did a science activity with an organisation called 'Fizzics' and they did chemical experiments that we couldn't do here at school and the girls loved that. They saw amazing reactions and things that are a bit dangerous to do in the classroom virtually. Given the ability to bring experts into the classroom, there are really no boundaries to where an incursion could take us," said Meagan Wilson, Year 5 and 6 Team Leader, CGGS.

"[We were able to connect to an archaeologist] who works for part of the year in Turkey [and] is involved in a dig in the ancient city of Collosae. We got the whole Year 7 group involved – he was able to see them, speak to them [and] address them personally by name [from the dig site]. It was quite an amazing experience for them," continued Duncan Reid, Head of Religious Education, CGGS.

Principal, Debbie Dunwoody, said "We've had students there with divers swimming on the Great Barrier Reef, hearing about their experiences. Our students have been looking at the dairy industry with experts in California. We've had students talking directly with an author about the work that they have been doing with one of their books."

The school is also making productivity gains by recording classroom learning for re-use and future reference, and the collaboration solution is empowering students and teachers in ways that were not possible with more traditional teaching methods.

Ben Jenkinson, Director of Teaching and Learning Innovation, says the school is "flying" with the Show and Share technology.

The students are also finding that Show and Share is improving their capacity to learn:

"If you learn from someone your age, it's a lot easier to understand and I can also compare my results. You can see whether you got something similar or that we probably didn't do [something] properly, or that we got an error in our experiments," said Year 9 students, Emma and Yasmine.

"Now I am not controlling it, the students are controlling it and they are sharing it with each other," continued Ben Jenkinson.

Productivity via collaboration

The benefits of collaboration are not limited to learning and are being felt in other areas of the school as well, including the Human Resources department, who are using it to assist with their recruitment processes.

"From a recruitment perspective we're using WebEx. We are able to safely connect with the [interviewee] anywhere, anytime and with such ease of use. The other side of WebEx is that we can actually record the interview," said Erin Colwell, Director of Human Resources, CGGS.

IT Operations Manager, Nathan Campbell, used WebEx during the interview phase of his recruitment:

"I applied from WA so we did a WebEx initially. It was a one-click, one-touch process with Cisco WebEx [and] the whole personal, in-the-room feeling was there."

An education for the future

According to Michael Slip:

"The kids themselves are now becoming digital natives and [are] getting ready for the corporate environments they are probably going to be employed in."

Principal, Debbie Dunwoody, acknowledges the benefits and value of the collaboration solution:

"It's been an incredibly exciting time. We've been all throughout Australia and to many places around the world already, in such a short space of time."

"I am so excited we are providing our girls with an education that really will prepare them for their future."

Services overview

- Requirements analysis and environment assessment
- Professional services for the design, build, deployment and transition into production of the collaboration solution
- Supply of Cisco technology products
- Project management delivered via Primer® methodology

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Australia | Government

World's first Cloud-enabled G20 Leaders' Summit

Australian Government
Department of the Prime Minister and Cabinet

Australia 2014
G20

'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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WA Department of Education relies on Office 365 to provide emails for all public school students

Department of Education, Western Australia

industry:

Education

country:

Australia

business challenge:

To provide secure and age-appropriate email services for all kindergarten to Year 12 students with automated provisioning, integration with administration systems and shared password sign-on.

solution:

Office 365 hosted email service for up to 350,000 students integrated with in-house student administration systems.

results:

- Automated provisioning.

- Large (25GB) mailboxes at no cost provided by Office 365 For Education Program.

- Greatly improved email experience resulting in increased uptake.

- Direct access to email from school portal.

- First implementation of Office 365 solution for K-12 education institution in Australia.

Executive Summary

The WA Department of Education needed to **migrate its in-house email service** for students to a new system integrated with Oracle Collaboration Suite, used extensively for administration purposes. Dimension Data leveraged the extensibility of **Microsoft Forefront Identity Manager** (FIM 2010 R2), the PowerShell scripting language and the Extensible Connectivity Management Agent to develop and demonstrate, within two weeks, a solution to integrate Oracle Collaboration Suite with Microsoft Office 365. It has now been **rolled out to several hundred schools** and is serving thousands of students.

Client Overview

The Department of Education provides high quality education for children and young people throughout Western Australia. It operates 770 schools with some 265,000 students. With over 33,000 full-time equivalent staff, it is the largest employer in the state.

Business Challenge

The Department needed to migrate an existing in-house email service for students based on the Oracle Collaboration Suite that was nearing end of life and that had been poorly accepted by schools to a new system able to integrate with Oracle Collaboration Suite, which is used extensively by the Department for administration purposes.

A pilot of Microsoft Live@Edu had to be abandoned because it provided access to social media sites, making it unsuitable for use by young children. To replace it Microsoft offered the Department early access to Office 365 and recommended Dimension Data to provide an implementation service because of Dimension Data's experience gained from implementing Live@Edu at other education sites.

A major challenge facing the Dimension Data team was the need to integrate Office 365 with Oracle Collaboration Suite, the primary repository of all data on student and staff, so as to enable automatic creation of email addresses when students are added to the system and to provide single password sign-on so that users could log into their school's web portal and then with one click gain access to their email.

Solution Delivered

Dimensional Data leveraged the extensibility of Microsoft Forefront Identity Manager (FIM 2010 R2), the PowerShell task-based command line shell scripting language and the Extensible Connectivity Management Agent (ECMA 2) to build a multi-threaded Management Agent for Office 365. The challenge to provision 350,000 students into a cloud services inspired the development team to design the multi-threaded agent to cater for the volume. This increased the provisioning rate from 7,500 per day to 50,000 per day.

The FIM 2010 solution was able to extract the user information from Oracle Collaboration Suite and provisioned all students into Office 365 using the Dimension Data Cloud Identity Management PowerShell Management Agent (CIM) to enable the Department to

"Dimension Data have been great. They have been very **responsive**, they have come in, listened to our needs, made suggestions and worked closely with our enterprise architects and worked quickly and diligently to come up with a **solution that fits our business needs**."

Tim Yorke, Director Strategic Service Delivery, Department of Education, Western Australia

provide email services to every student in WA's public schools. The Cloud Identity Management PowerShell Management Agent (CIM) manages users as part of the Microsoft Online component of Office 365 and also controls the licensing of users for various Office 365 components.

Dimension Data Practice Manager, Jaen Snyman, said: "Microsoft's toolset at the time was only available to do synchronisation from Active Directory to Office 365. Without our solution, the Department would have had to manually import and modify student data to get it into Office 365."

He added: "Education has different requirements from enterprises. There are very many groups and many different classrooms each with its own manager. We had to cater for that environment. We had set up many distribution groups so that people could, for example, send emails to only one class if they want to."

Dimension Data was able to demonstrate its solution to the Department after only two weeks of development and to demonstrate that FIM 2010 R2 was the ideal identity management solution. As a result the Department opted for Office 365 without going to the market for possible alternatives.

Snyman said: "The ease which we used ECMA as an extensible development platform showed that if the Department wants to do anything additional at a later stage, that won't require a major rework."

Benefits gained from the solution include:

- Large mailboxes (25GB limits) at no cost as part of the Office 365 for education program.
- Much better user experience and take-up by students of all ages.
- Automated provisioning and very little management overhead.

- Office 365 provides the security and reliability required by the Department for its email service.

Value Derived

Tim Yorke Director, Strategy Service Delivery in the Department of Education, said: "Dimension Data came in and worked with our in house technical people to design a system that would provide the outcome we wanted and then put that service in place. They designed the interface between the different applications, tested them and then actioned the provisioning for all students."

Yorke explained: "We needed an engine that would take the student data from Oracle Collaboration Suite and provision it into an Office 365 account so that as a student enrols an automated process kicks off and produces an email account in Office 365 for the student that is linked back through our tools that identify students and verify their access. This means that when they log on to our portal their identification details are passed between our system and Office 365 so the student is verified and can access their email."

The Department's policy is to devolve decision-making to individual schools so each school must decide if it wants its students to have email. However mailboxes have been provisioned for all 265,000 students in the Department's 770 schools and these mailboxes will be synchronised with the register of enrolled students.

"Whether the school intends to use email or not, an account has been provisioned for all students. The provisioning module that Dimension Data worked on with us keeps that provisioning up to date as students come and go," Yorke said.

The solution developed by Dimension Data also ensures that students have just one password for the school's web portal and their Office 365 email account. "To get into their Office 365 account they come to our portal, log in with their password and see a button for email, click on that and their Office 365 email opens," Yorke said. "It's a seamless process."

Yorke concluded: "Dimension Data have been great. They have been very responsive, they have come in, listened to our needs, made suggestions and worked closely with our enterprise architects and worked quickly and diligently to come up with a solution that fits our business needs."

He added: "In WA Dimension Data is the company that has the most experience in implementing Live@Edu, and now Education 365. They have done this for a number of the universities, and for the TAFE colleges. However this is the first time they have done it for an education institution that caters for kindergarten. We have the additional complication of having to protect young children from harm."

The new system went live with a limited number of schools at the start of the 2013 school year. In the second term some 200 schools were cut over from the old system and more schools will be added as they request email services.

Now the Department is looking at additional features to enhance the system. "Dimension Data is now designing the capability for teachers to look into the mailboxes of all students," Yorke said. "There is degree of comfort and safety that comes from that. We call that the duty of care component."

City of Cape Town Saves 40% on Telecom Bills, Improves Efficiency to Serve Ratepayers Better

Challenge

- high cost and complexity of managing ageing network and communication infrastructure across multiple sites
- no visibility or metrics to allow improvement
- compromised organisational communication and collaboration

► Read more ...

Solution

- centralised private voice cloud, SIP trunking infrastructure and broadband network among 80 buildings and 11,000 users
- telecom expense management services
- inter-building fibre connectivity
- Microsoft® Lync integration for unified communications and collaboration

► Read more ...

Result

- 40% annual savings on voice calling costs (will pay back technology refresh in nine months)
- reduced management costs
- improved collaboration through unified communications capabilities
- improved service delivery and turnaround times

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'As a world-class city, **Cape Town strives to keep on the cutting edge of technology**, especially when it will **help us spend ratepayers' money more efficiently**.'

Demetri Qually, Mayoral Committee Member for Corporate Services

⊗ Challenge

Wide geographic spread

The City of Cape Town has a population of almost four million citizens, and its vision is to become a world-class metropolis. The city runs its operations from many buildings and offices spread out over a large geographical area. This complicated the use of a single wide area network (WAN) to connect the various sites, which was compounded by ageing infrastructure. Its multiple Telkom Diginet WAN links were difficult to manage and wasted bandwidth. This negatively affected collaboration among divisions in different buildings and among various localities. It also slowed down employees' interaction with critical business systems such as SAP, which is traditionally bandwidth intensive. These challenges damaged the internal user experience, which filtered down to ratepayers' negative perceptions of the city's service delivery. Also, its existing network infrastructure wasn't ready to accommodate IP telephony, which could hold a host of benefits in terms of cost reduction and efficiency improvements.

Ageing telephony systems

The city also struggled with an ageing telephony system. The environment was highly fragmented: it had multiple TDM PBXs, many prime rate interfaces from Telkom, and – much like its network – the communications infrastructure wasn't ready for convergence. This environment that was difficult and costly to manage – the city paid an annual telecom cost of ZAR 100 million. These 'wasted' funds and inefficiencies hindered the city from offering its citizens cheaper, better services, and from investing more in important projects such social upliftment elsewhere within its boundaries.

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⊙ Solution

Building a metro area network, voice cloud

Given the City of Cape Town's infrastructure and communications challenges, its goal was to build a world-class broadband metro area network (MAN) and voice network to; improve service delivery and turnaround times to its citizens; improve the efficiency of its employees; reduce operational expenditure on its current infrastructure; reduce its dependency on a single telecom service provider (Telkom); and consolidate and simplify its data and voice infrastructure. The City of Cape Town contracted Dimension Data to transform its voice and network infrastructure across 80 buildings, for 11,000, users for a period of three years. Dimension Data helped the municipality to create a centralised, private voice cloud infrastructure based on carrier-grade soft switch technology from BroadSoft, as well as a Session Initiation Protocol (SIP) trunking system

using Acme Packet technology. In addition, the city achieved significant cost reductions through Dimension Data's outsourced telecom expense management solution, as well as through inter-building fibre connectivity. Dimension Data also helped the municipality roll out Microsoft® Lync, which enabled unified communications and collaboration across the organisation's many localities.

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⊙ Result

Massive savings, effective collaboration

Dimension Data's solution has helped the City of Cape Town save as much as 40% on annual voice costs. The city would earn back what it spent on the technology refresh in as little as nine months. 'Telephone calls between buildings are now carried by the corporate data network using the city's fibre optic cables,' said Mayoral Committee Member for Corporate Services, Demetri Qually. 'Previously, calls between city employees incurred a cost for being carried by Telkom, but now we have our own high-speed network and can carry these calls ourselves. The network has no call-length costs, so staff can call one another as regularly and for as long as necessary,' he added.

Telephone calls and conferencing are now far more cost-effective than face-to-face meetings, which used to involve expensive and time-consuming travel. Telephone numbers can be transferred between these buildings, so that they stay with the same employee wherever he or she is working. More city buildings that already have fibre optic connections will be added to the internal telephone network. The telecoms division plans to lay optic fibre to 200 more city buildings over the next three years, which will also then benefit from free calls across the internal network.

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Services overview

- professional services
- procurement and logistics of all technologies, delivered on time
- testing of phone technologies
- telecom expense management services
- outsourcing of voice environment

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