Dimension Data Cloud Services
The solution: Dimension Data Cloud Services

Dimension Data Cloud Services are designed to address the many requirements of an organisation’s journey to the cloud. By combining a services approach, unique technology and architecture, Dimension Data addresses the concerns that typically slow the adoption of cloud computing. Because all of Dimension Data’s Cloud Services are delivered on the same global platform, it’s easier and more cost-effective to move between public, private and hybrid cloud models as the demands of the business change.

Dimension Data Cloud Services

Dimension Data’s Cloud Services provide an offering for each step of an organisation’s journey to the cloud. Our offerings include the following:

- **Cloud Enablement**: advisory and consulting services to help clients understand cloud readiness, governance, IT optimisation, data centre consolidation and technology architecture
- **Cloud and System Integration**: integration services across traditional on-premise IT systems and private, public or hybrid clouds
- **Compute-as-a-Service (CaaS)**: virtual servers and tiered storage are provided as a service in both shared (public) and dedicated (private) environments
  - **Public CaaS**: provides compute resources via a flexible, shared service with both pay-as-you-go and monthly plans. The service includes CPU, RAM and storage on demand as well as a web-based user interface and access to an application interface (API) for provisioning and orchestration. The service includes 24/7 access to a Service Desk and an online Community support portal.
  - **Private CaaS**: provides a predetermined set of compute resources as a dedicated service deployed in a client data centre. The service includes CPU, RAM and storage as well as a web-based user interface and access to an API for provisioning and orchestration. The service includes the cloud infrastructure, implementation, cloud orchestration and automation technology and on-going management by Dimension Data.
  - **Hosted Private CaaS**: a Private CaaS hosted in a Dimension Data data centre.
  - **Provider CaaS**: designed for service providers to offer a branded cloud service, the service can be customised with an organisation’s own brand and deployed in a Dimension Data or client data centre.
  - **Managed Hosting**: dedicated infrastructure and application management services interconnected to our public and private cloud. Includes management of applications, data, databases, networking, virtual and physical servers, optimisation, and performance.
  - **Managed Services**: a set of support services, including patch management, device configuration and backup.
  - **Advanced Cloud Services**: value-added services, including cloud-based back-up and disaster recovery, implemented on our Managed Cloud Platform™ (MCP)
  - **Application Services**: applications hosted and operated on our MCP.

Organisations have looked to cloud computing to improve competitiveness, recognising the benefits of improved business agility, simplified businesses processes and reduced time-to-market. Dimension Data’s enterprise-class cloud services rely on a service model approach for cloud computing that provides on-demand, self-service access to servers, applications and software development platforms.

While the benefits of cloud computing are significant, so is the complexity of planning, building and managing a cloud. Enterprises and service providers have been slower to adopt cloud computing due to concerns about security, compliance, integration, performance, capital expense requirements, and deployment and operational risks – and how to address them.

In order to truly realise the benefits of cloud computing, a cloud service provider should offer:

- A single, global managed platform for public, private and hybrid cloud environments
- Enterprise-class security, controls, reporting and auditing
- A cloud management system that automates provisioning, orchestration and billing
- A web-based user interface to control the system
- An application interface (API) to facilitate integration and management control with in-house and third-party system management applications
- Value added services to enable application migration, systems integration, and management
- Flexible models that reduce the burden and lower the risk of building, operating and supporting cloud infrastructure; and
- Innovative pricing models that minimise capital expense.
Dimension Data Cloud Services

Dimension Data's Cloud Services are delivered on our Managed Cloud Platform™ (MCP), a fully managed cloud delivery platform. Hosted within a Dimension Data or client data centre, the MCP comprises industry-leading hardware and software, coupled with virtualisation technology, operating system software, and Dimension Data CloudControl™, our cloud management system that provides operational control and automation of cloud resource provisioning, orchestration, administration, and billing. Dimension Data’s MCPs include key features such as anti-affinity, Cloud Backup, Tiered Storage, scalable server capabilities and global import and export of clients images.

The MCP can be accessed via a web-based user interface or REST-based API, enabling integration of the platform with third-party cloud or enterprise system management software. Based on the cloud management system of OpSource, Dimension Data’s wholly-owned enterprise cloud and managed hosting business, Dimension Data CloudControl™ was further developed for use across public and private cloud environments with a common framework for management.

As a single platform for all of Dimension Data’s Cloud Services, clients are able to easily move between public cloud, private cloud and hybrid cloud models without having to re-architect and re-integrate the underlying infrastructure, saving time and money. See figure 1 below.

**Dimension Data Managed Cloud Platform™**

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**Dimension Data CloudControl™**

- Guarantees on availability, performance and service experience
- Self-service, web-based administrative interface and API for control of both public and private cloud
- Dimension Data CloudControl™ – an integrated cloud system management software that provides automation, orchestration, provisioning, metering and billing
- Control of hardware-based networking for configuration cloud-based VLANs, firewalls, load-balancing multicast and network address translation (NAT)
- Technical Operations – a set of support services available on request covering areas such as patch management, device configuration and back-up
- Common architecture across private cloud and public cloud environments enabling organisations to interconnect cloud environments to support bursting or community clouds

**Figure 1: Dimension Data Managed Cloud Platform™**

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Dimension Data Cloud Services

Dimension Data offers several types of MCPs to complement our Cloud Services:

• **Public MCP**: deployed around the world, Public MCPs are accessible via the Internet and meet the requirements of a true public cloud: self-service, pay-per-use and with standardised services. Dimension Data’s Public CaaS are delivered from our Public MCPs.

• **Private MCP**: deployed in a client data centre or a third-party data centre, a Private MCP is dedicated to a single client. Private MCPs deliver a fully managed private cloud service.

• **Hosted Private MCP**: hosted by Dimension Data, the Hosted Private MCP is dedicated to a single client. Hosted Private MCPs deliver a fully managed private cloud service.

• **Provider MCP**: deployed in a service provider data centre or a third-party data centre, a Provider MCP is dedicated to a single service provider for the use of its clients. Provider MCPs deliver a fully managed private cloud service that can be productised into a White Label public or private cloud offering.

Cloud Communities are supported within the architecture, on a public or private basis with enterprise grade security, allowing for organisations such as education institutions, government agencies, or trading partners to cost-effectively offer cloud services to all community members.

Dimension Data Managed Cloud Platforms are fully managed. This significantly reduces the time to market and operational risks associated with building a private cloud in-house. Additional advantages of Dimension Data’s Managed Cloud Platform include the following:

• **Single platform**: the MCP supports both our public and private cloud environments and provides easy migration of workloads.

• **Fast implementation**: we provide global procurement, delivery and implementation. Your pre-integrated Private MCP architecture may be up and running in weeks from order.

• **Comprehensive management**: your Managed Private Cloud is managed and operated by Dimension Data on your behalf. Systems management (operating system patching, maintenance, software upgrades) is included in the service suite.

• **Global procurement**: you benefit from Dimension Data’s global procurement and delivery expertise and reach.

• **Availability and support**: we offer redundancy, 24x7 support and community-based self-service, service level guarantees for availability and performance.

Dimension Data CloudControl™

Dimension Data CloudControl™ is a sophisticated cloud management system developed by Dimension Data that provides complete automation of the orchestration, administration, provisioning, management, support, metering and billing of cloud-based resources. In building Dimension Data CloudControl™, we leveraged the same operations principles and architecture used to manage complex application hosting environments for some of the largest software-as-a-service companies. Dimension Data CloudControl™ goes beyond providing simple provisioning of virtual machines onto physical servers. The cloud management system also provides the following:

• **Easy-to-use interface**: an intuitive web-based user interface and a robust REST-based API that allows full control and administration of your cloud-based servers and storage.

• **Granular control of resources**: Cloud Servers can be configured on the fly, allowing customisation of CPU, memory and storage on servers without having to create a new instance.

• **Import, export and cloning of operating system and software images**: images can be deployed on servers using an image library with standard images for Microsoft Windows Server, Red Hat Linux, Ubuntu and CentOS as well as popular images of commercial software such as Microsoft Windows SQL Server. Images can be imported, exported and cloned.
• Hardware-based networking: configurable networking of hardware-based VLANs, firewalls, load balancing, multicast and NAT.

• Security and controls: VLANs, configurable firewalls, VPN and encrypted data in-flight and at rest, tiered user accounts, self-service configurations, user permissions, reporting and auditing.

• Performance guarantees: network and server uptime guarantees, response time guarantees and latency guarantees.

• Single pane of glass: Easy and flexible web-based user interface and RESTful API for provisioning and orchestration. Common user interface across public and private clouds.

• Metering and billing: All elements are metered with comprehensive and granular billing for showback, chargeback and end-user billing.

Dimension Data CloudControl™ provides significant value above simple systems management tools and cloud orchestration technologies.

Dimension Data global availability
Dimension Data’s Cloud Services are available worldwide.

Our Public CaaS and Hosted Private CaaS are accessible via the Internet from anywhere in the world, anytime. Our Public MCPs are physically deployed in San Jose, California, and Ashburn, Virginia, USA; Amsterdam, the Netherlands; London, UK; Sydney, Melbourne, Australia; Johannesburg, South Africa; Hong Kong, China; and Tokyo, Japan. Private MCPs are deployed within client data centres and can be accessed via their private network or the public Internet.

With more than 23,000 employees and presence in 58 countries with reach to more than 100 countries, Dimension Data is well positioned to serve the needs of global enterprises and service providers.

Dimension Data’s CloudControl™ cloud management system enables federation between Public and Private MCPs. Our strategically located Public MCPs have the ability to interconnect or ‘peer’ with one another and other Private MCPs, as capacity requirements ebb and flow to create a ‘Cloud Exchange’. This means performance and latency may be optimised and time-to-service reduced. This model also ensures that any data sovereignty requirements on your part may be satisfied. See figure 2 below.

Our Public CaaS and Hosted Private CaaS are accessible via the Internet from anywhere in the world, anytime.
Dimension Data differentiators

**Hybrid cloud architecture**
Dimension Data’s MCP architecture supports public, private hybrid cloud models, which improves our clients’ ability to optimise cost, risk and agility.

**Powerful automation technology**
Our Dimension Data CloudControl™ cloud management system goes beyond providing orchestration and provisioning of cloud servers and storage. Dimension Data CloudControl™ automates administration, metering and billing and provides an easy-to-use interface.

Dimension Data CloudControl™ addresses the needs of security, control, performance and ease-of-use.

**Global management and support**
Our cloud services are fully managed and include the procurement, delivery, implementation and management of public and private clouds. This allows organisations to quickly benefit from the cost and agility benefits of cloud computing, without compromising on risk and execution.

**Experience and expertise**
Dimension Data provides a combination of cloud enablement, cloud integration, consulting, global procurement, cloud operations and SaaS hosting expertise and a commitment to innovation and client satisfaction. Our deep systems integration expertise across multiple IT domains enables Dimension Data to provide complete solutions at every stage of an organisation’s journey to the cloud.

**Our solution approach**
Dimension Data provides organisations with services that help them at each step in their journey towards cloud architectures – public, private or a combination of both – through:

- Assessing the correct cloud architecture and strategy;
- Supporting cloud enablement projects such as virtualisation;
- Building and managing private cloud architectures;
- Leveraging public cloud services; and
- Implementing and supporting hybrid cloud environments.

For businesses just setting out on their cloud journey, we offer a range of **Cloud Enablement Services**. Our consulting professionals help clients understand their cloud readiness by undertaking impact and risk assessments of specific technologies and architectures. We use this information to craft structured roadmaps for enterprise architecture and cloud services to reflect unique business position, needs and capabilities.

Our assessments cover areas such as technology lifecycle management, virtualisation, performance, data centre migration and server consolidation. We can also undertake an assessment of your current architecture’s capability to support the move to the cloud.

Any business making its move into the cloud must contend with the challenge of effectively integrating legacy, physical infrastructure and services (including the network, security, data centre environments) with those of the private and public cloud. Here, there are a myriad of touchpoints and interdependencies that need to be taken into account. Dimension Data’s **Cloud and System Integration Services** take the guesswork out of unifying the old and the new. With a sound and longstanding track record in systems integration, and honed cross-domain capabilities, Dimension Data ensures that all the elements are assimilated in a structured and logical fashion, mitigating risk every step of the way.

We also offer a number of **Advanced Cloud Services**: value-added services implemented on our MCP. In addition, we can provide **Application Services**: applications hosted and operated on our MCP.

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Dimension Data Cloud Services

**Dimension Data CloudControl™**
automates administration, metering and billing and provides an easy-to-use interface.
Dimension Data provides organisations with services that help them at each step in their **journey towards cloud architectures**.

**Why Dimension Data?**

Mapping a migration path and architectural design for cloud requires an in-depth understanding of an organisation’s entire IT infrastructure, architecture and relative interdependencies and risks. Dimension Data offers a unique blend of capabilities, assets and experience that sets us apart from other cloud service providers.

Our **heritage in systems integration, mature managed services skills and technical expertise in areas like networking, data centre solutions, security solutions, Microsoft solutions and IT services** positions us well to help clients determine the correct cloud strategy, migrate to cloud and manage their cloud infrastructure on an ongoing basis.

The experience we have gained across the globe in managed services, service level management and **IT outsourcing** give us practical, hands-on experience that reduces risk for our clients.

If you’re considering cloud services, or are in the process of migrating elements of your infrastructure to the cloud, you need a partner with the requisite insights and the experience to allow you to move forward with confidence, while avoiding costly missteps. Contact us to discuss how our Cloud Services can help you optimise your costs, improve sustainability, keep business risk in check and inject agility into your business model.

**About Dimension Data:**

- Founded in 1983
- Wholly owned subsidiary of the NTT Group
- 6,000 clients across all major industry verticals
- Established global footprint coupled with unrivalled experience in emerging markets
- In 2011, Dimension Data was positioned in the Leaders Quadrant of Gartner’s Communications Outsourcing and Professional Services Magic Quadrant (COPS) report
- Our global procurement and logistics experts provide 24x7x365 cross-border shipping and customs clearance support

For further information visit: [www.dimensiondata.com/cloud](http://www.dimensiondata.com/cloud)