



Drive digital transformation with an enterprise-grade Managed Private Cloud

Singtel Managed Private Cloud enables enterprises to enjoy the privacy of on-premise infrastructure with the flexibility and cost efficiency of the cloud. It reduces the need for enterprises to build and maintain their own IT infrastructure while ensuring that their concerns over service reliability, performance, security and data sovereignty are addressed.

Together with the use of Singtel's Cloud Lifecycle Services to ensure success in the managed private cloud deployment, enterprises can have the confidence to make use of cloud to meet their unique business needs and to deliver mission-critical applications.

Managed Private Cloud

Entrust Mission-Critical Applications to the Cloud

As enterprises embark on their digital transformation journey, they will require a cloud strategy that takes into account compliance and data sovereignty requirements of the different jurisdictions where they operate; especially when the data is highly sensitive in nature. Enterprises will also need to have stringent controls and oversight of their IT assets while ensuring high performance, high consistency and low latency for mission-critical applications.

Singtel Managed Private Cloud meets these business requirements by delivering a fully-managed cloud solution that provides enterprises with high resiliency and availability and is able to stand up to scrutiny on the governance and regulatory front.

Tailored to the unique requirements of each enterprise, the solution is based on proven reference architectures and best practices and offered through a hyper-converged or converged infrastructure solution, or a secure bespoke cloud deployment.

Managed private cloud is part of the Singtel Managed Cloud Portfolio, which also includes a suite of Cloud Lifecycle Services (CLS) to help enterprises transition to the next generation of IT infrastructure. The portfolio underpins a reference framework called the Singtel Cloud Operating Model (COM) which helps guide enterprises towards success in achieving cloud maturity.

Drivers behind the adoption of managed private cloud

The adoption of managed private cloud is gaining traction as enterprises shift their IT focus from building and maintaining their own systems to getting a service provider to design, build and operate a scalable cloud environment for them. A managed private cloud:

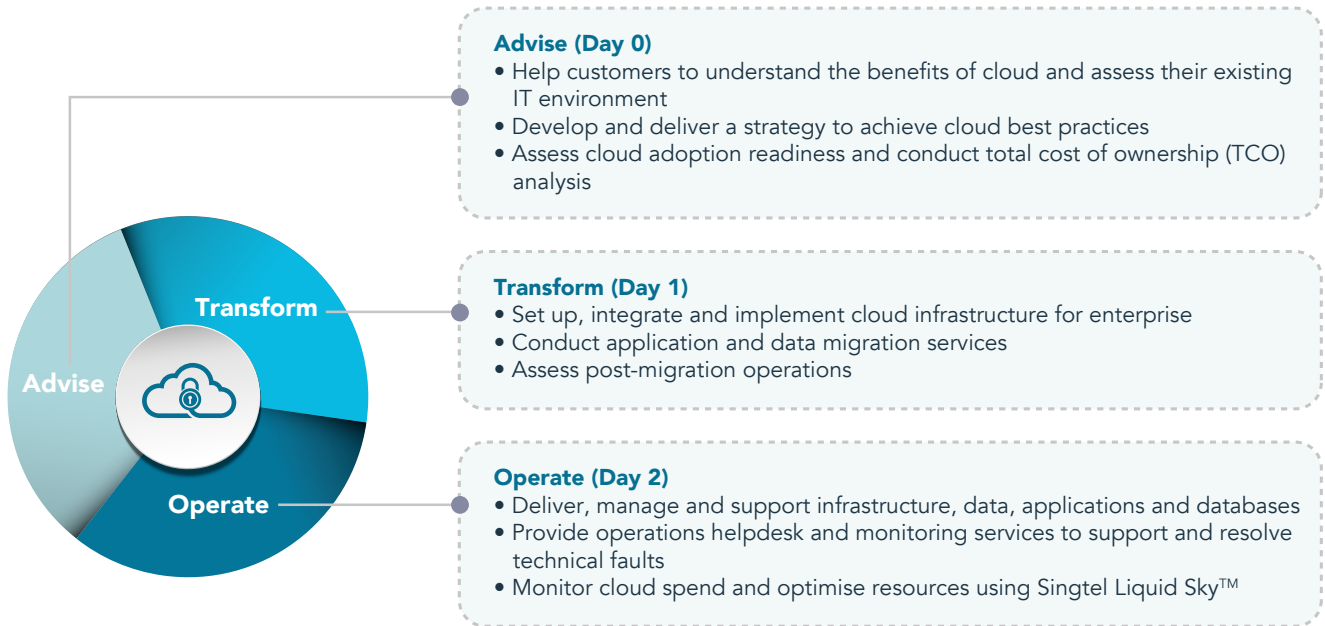
- Drives business agility by enabling IT resources to be provisioned more dynamically than traditional on-premise hardware
- Enables internal business units to share IT resources by making those resources available as a service
- Preserves capex with the transfer of asset ownership to the service provider, reducing asset management responsibilities
- Ensures data sovereignty concerns are addressed by allowing enterprises to retain control over the data

Singtel Cloud Lifecycle Services for Singtel Managed Private Cloud

Singtel Cloud Lifecycle Services (CLS) support enterprises in the deployment of Singtel Managed Private Cloud as well as other stages of the enterprise cloud adoption journey. CLS encompasses an analysis of the enterprise's current state through to solution design, migration and deployment of the desired outcome. The services are delivered by certified Singtel professionals with in-depth experience in carrying out large cloud deployments for commercial and government sectors.

Singtel brings together different cloud components that are suited to different workloads and combine them to deliver reliability, performance and other capabilities that are required by the enterprise. This involves integration across the different cloud platforms, networking and data centre stacks, and meeting the compliance requirements of various industries.

Singtel Cloud Lifecycle Services



Components and Features of Singtel Managed Private Cloud

Singtel Managed Private Cloud is an Infrastructure-as-a-Service offering that encompasses design, build, migrate and operate. It is:

| |
|---------------------------------------------------------------------------------------------------------------------------|
| A dedicated infrastructure delivered over a range of technology platforms |
| Cloud-enabled, with the ability to scale as the business grows |
| Software-defined and consumed via industry-standard application programming interfaces (APIs), consoles or catalogues |
| Owned, and with the option to be managed, by Singtel |
| Hosted on the customer site or at a Singtel Data Centre |
| Offered through a consumption-based model with a monthly recurring charge for hardware, software and value-added services |
| Backed by a Service Level Agreement (SLA) that is committed against the service catalogue |

Business Applications

Singtel Managed Private Cloud solution architectures are suited for different enterprise profiles and use cases.



Hyper-converged infrastructure

Hyper-converged infrastructure refers to a software-centric architecture with compute, storage, networking and other resources tightly integrated in a box. This is suitable for rapid deployment with low maintenance requirements. It is suitable for:

- Remote office deployment
- Application development/testing
- Mid-scale apps



Converged infrastructure

The converged infrastructure is a hardware-based integration architecture which combines discrete building blocks for servers, storage and networking. It is suitable for:

- Central data centre deployment
- Traditional Tier 1 apps that require multi-site native replication
- Virtual desktop infrastructure



Custom-build

This is a bespoke architecture customised to meet the unique requirements of an organisation. It is suitable for:

- Meeting stringent availability, performance and reliability requirements
- Mission-critical monolithic/mixed workloads

Benefits



Comprehensive security

- Security is addressed with a full suite of solutions from protection to threat detection, response and recovery.
- Your entire cloud infrastructure is safeguarded across multiple platforms - Managed Private Cloud, Managed Virtual Private Cloud and Managed Public Cloud.
- Data protection services are available to ensure data availability and reliability.



Seamless interoperability

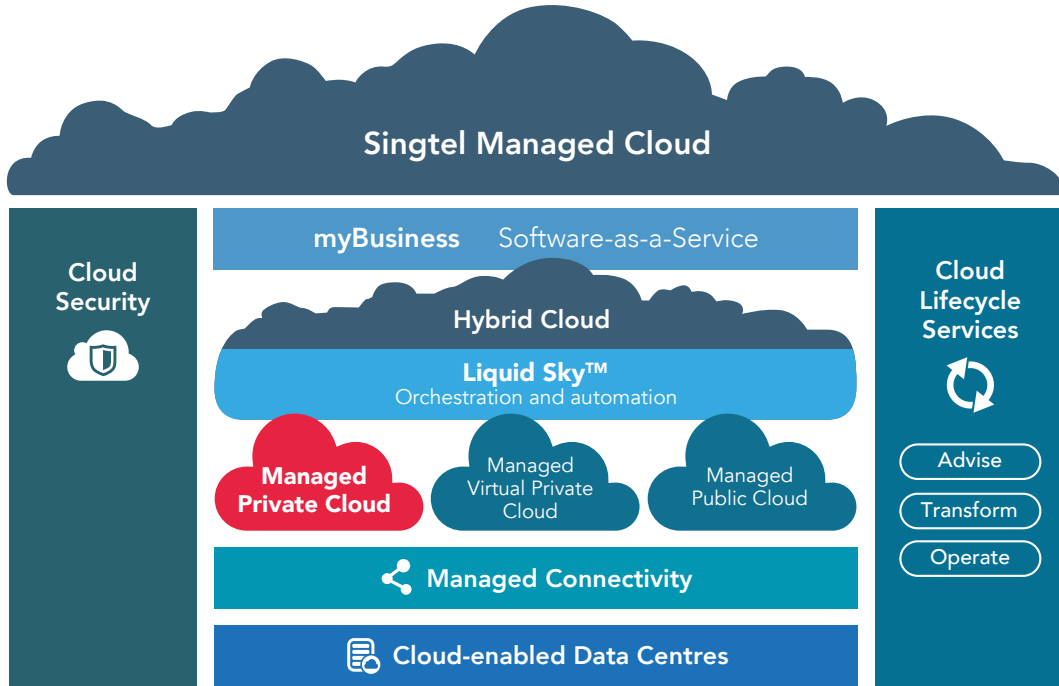
- Singtel Managed Private Cloud is hybrid-ready and can be integrated seamlessly with other cloud platforms.
- Workload deployment is standardised through automation across the hybrid cloud.
- Web apps can be ported easily across the underlying infrastructure and operating systems.
- Mobility is supported with compatibility across different mobile devices and endpoints.



Enhanced manageability

- Singtel Cloud Lifecycle Services facilitate cloud adoption and management, and support organisations in every stage of their cloud journey.
- A self-service orchestration portal enables the cloud to be managed easily and efficiently.

Singtel Cloud Operating Model and Singtel Managed Cloud Portfolio



According to research firm IDC, there are five stages to cloud maturity - ad hoc, opportunistic, repeatable, managed and optimised. The Singtel Hybrid Cloud Operating Model (COM) helps enterprises to determine their current level of maturity and what their end stage should look like. It also identifies current gaps and opportunities for capability development, and provides a checklist of activities that enterprises need to accomplish in order to build those capabilities and achieve their target stage. These activities are focused around Governance, Information Assurance, Service Integration, Service Operations, Service Management and People Development.

Underpinning the COM is the Singtel Managed Cloud Portfolio which provides businesses with the tools, infrastructure platforms and expertise they need to succeed at each stage of cloud maturity. The portfolio comprises Managed Public Cloud, Managed Private Cloud, Managed Virtual Private Cloud as well as a suite of Cloud Lifecycle Services and an innovative hybrid cloud management tool (Liquid Sky™) for service automation and orchestration.

We also have a full range of services encompassing security, data centres, network connectivity and managed services to help businesses in their cloud journey.

Why Singtel



The only cloud service provider to offer a COM designed to drive enterprises towards cloud maturity. COM provides a framework to help enterprises build capabilities and achieve successful outcomes required for each stage of cloud maturity.



Highly skilled, certified cloud experts with multi-disciplinary experience in cloud solution architecture, consultation, project management and SysOps administration to support businesses in their cloud strategy planning, migration, operations and management.



The most complete selection of cloud platforms from public clouds to virtual private cloud and private cloud platforms, allowing you to choose the best fit for the different workloads that you have.



Backed by a full suite of market leading network connectivity, security and data centre offerings and managed services from Singtel.



Extensive experience in delivering secure managed services and deploying large-scale cloud projects including the Singapore government cloud.



Highly-resilient world-class data centres built to TIA# Tier 4 specifications, providing secure and trusted hosting to meet businesses' data sovereignty requirements.



A single point of contact for customers looking to grow their presence in Singapore and the region.

#Telecommunication Industry Association, which publishes the Telecommunications Infrastructure Standard for Data Centres.

About Singtel

Singtel is Asia's leading communications group providing a portfolio of services including voice and data solutions over fixed, wireless and Internet platforms as well as infocomm technology and pay TV. The Group has presence in Asia, Australia and Africa with over 610 million mobile customers in 24 countries, including India, Indonesia, the Philippines and Thailand. It also has a vast network of offices throughout Asia Pacific, Europe and the United States.

Singtel Cloud Awards

Asia Communication Awards

Best Enterprise Service - Connectivity as a Service (2013)
Best Cloud Service (2011 & 2012)
Project of the Year - G-Cloud (2014)

Cloud & DevOps Awards 2016

Best Cloud Computing Adoption Project (G-Cloud)

Computerworld SG Readers' Choice Awards

Best Data Centre and Hosting Services Provider
(2007 & 2009 - 2013)
Best Managed Connectivity Services Provider (2006 - 2013)

Computerworld Singapore Customer Care Award
Cloud Services (2012 - 2013)

Frost & Sullivan Asia Pacific ICT Awards

Telecom Cloud Service Provider of the Year (2012, 2016)

IDC MarketScape in Asia Pacific 2013

A Leader for Datacenter and Hosted Cloud Services*

NetworkWorld Asia Readers' Choice Product Excellence
Awards (2013)

Managed Infrastructure Services
Cloud Infrastructure Provider

Telco Cloud Forum Awards 2016

Telco Cloud of the Year

