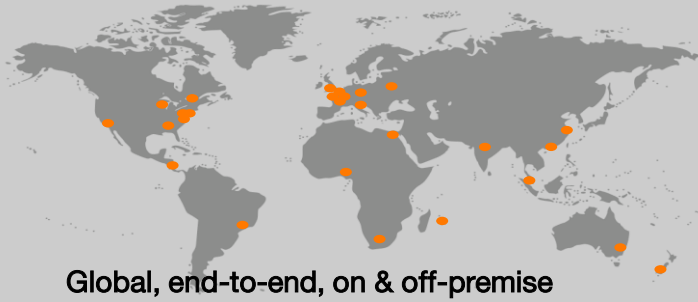


Private Cloud Solutions

Private cloud on converged infrastructure

The **Private Cloud Solutions** from Orange Business Services are deployed by enterprises and public administrations looking for the benefits of the IT modernization with a production grade cloud Infrastructure at scale, while enforcing their own security policies, while complying with the regulatory rules and keeping datacenter location flexibility.



Our solutions

Designed with most recent cloud technologies of Software Defined DataCenter (Compute, Network, Storage), Orchestration and APIs, the solution is customized to the customer specific needs including:

- location off-site and on premise, security, compliance, availability, disaster protection constraints
- ability to handle legacy applications, next gen applications and specific workloads
- end-to-end solution for multi-site cloud, datacenters, wide-area network and internet
- various degrees of managed services on cloud and legacy IT to meet customer objectives
- assistance in the path from the existing infrastructure to the hybrid cloud and IT target
- commitment to service level agreements

The solutions serve 12 main objectives

Data protection deploying managed backup to cloud	Disaster Recovery Plan deploying DRP for virtual infrastructure
Security for agile applications deploying micro-segmentation on private cloud	IT services acceleration evolving from virtualization to Software Defined DataCenter
Cloud native applications deploying VM secured containers, orchestrator and registry	Hybrid service catalogue deploying automation and security across private and public cloud
Private datalake & analytics deploying Hadoop and HDFS managed cluster	ERP & database managed with our SAP™ and managed database practice
Infrastructure outsourcing for your private cloud, middleware and applications	Turnkey migration of applications to private cloud with our migration practice
Easily scaling private cloud with hyper-converged managed private cloud solutions	Branch office extension of your private cloud with WAN, security and multi-sites service catalogue

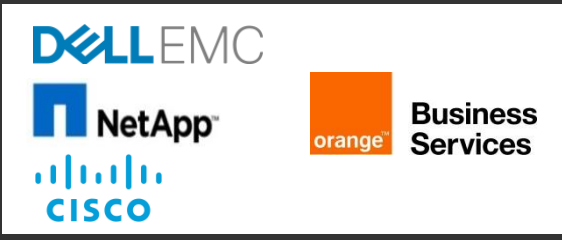
Benefits of the converged IT

The converged infrastructure of the Private Cloud solutions delivers:

- large scale performance
- a rich catalogue of services
- flexibility in the choice of hardware
- production grade availability







Partnership

Our infrastructure partners for the private cloud on converged infrastructure



Our ecosystem

For the catalogue of services of the solution, Orange Business Services partners as well with the following technology providers

Cloud environment 	PaaS 	Object Store 
Backup 	Backup 	Big Data 

Private Cloud Solutions on converged IT

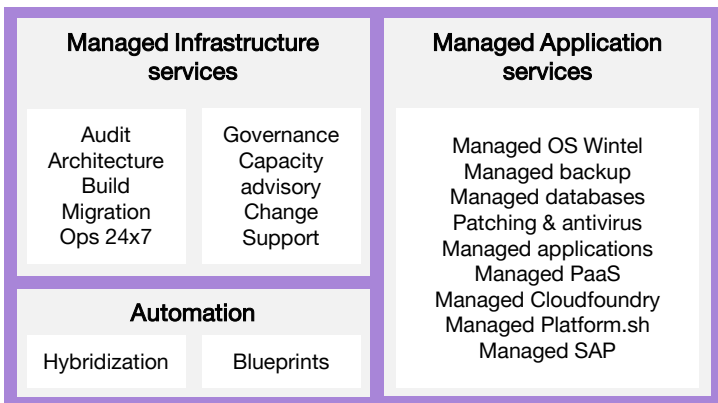
The Private Cloud Solutions service catalogue splits into three main folds:

The private cloud foundation services at the heart of the Infrastructure as a Service.

Available in three packages :

- **On-demand Cloud:** resource allocation through request for change or admin
- **Automated Cloud:** user self-service, open APIs with RBAC and orchestrator
- **Micro-segmented Cloud:** security protection at granularity of each VM & Container, NSX SDN

Portal & API				Remote OPS
REST APIs	Orchestration	RBAC	Public cloud plug-in	
Computing	Storage	Network	Security	
VM VM HA-DC Container Physical server	VM volume SAN NAS S3 OBS S3 GTW	Load Balancer Security groups vLAN Connections Branch Office	Firewall Anti-DDOS IDS HA / PCA Backup PRA	



The private cloud professional and managed services along the whole cycle of the cloud project.

- **Professional services:** expertise and advisory services, from design to run, migration to cloud, governance
- **Managed services:** managed infrastructure, OS, middleware & database, PaaS, applications. Your choice.
- **Automation and hybridization services:** e2e hybridization with public clouds, automation blueprints delivery

The IT specific services since handling the co-existence of cloud and non-cloud IT services in often critical.

- **Managed physical servers and hosting:** complementary to the cloud
- **Managed Datalake and Big Data cluster:** with specific design and middleware
- **Managed Oracle and SAP:** which sometimes involve specific equipment
- **Non cloud IT outsourcing:** when customer want to outsourced other parts of IT

Physical servers	Datalake & Big Data cluster
Co-location	Oracle specific infra
Non cloud IT managed	Other private cloud options

Overview of the converged architecture

