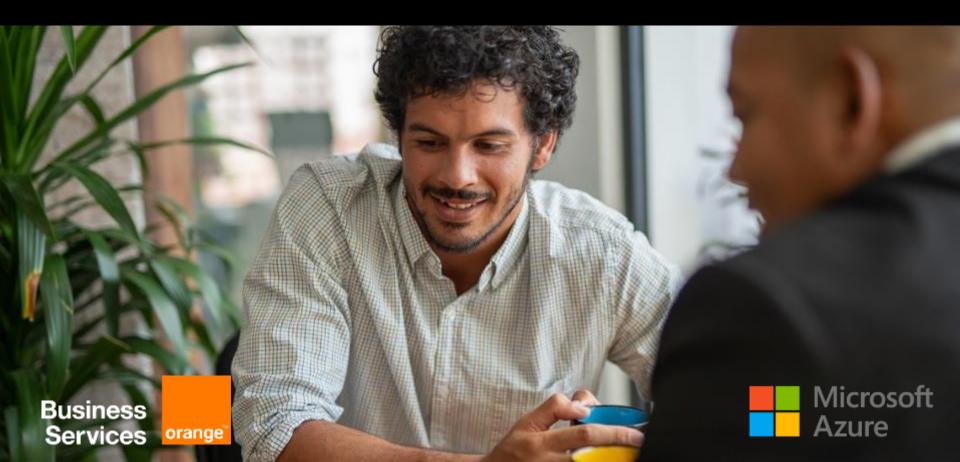
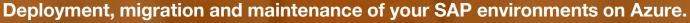
Managed Applications for SAP® on Azure



Managed SAP @OBS on Azure

A strong partnership to support you at all stages of a project





Our certified experts define and deploy the infrastructure best suited to your SAP business needs, and our operational teams guarantee optimal operational maintenance with 24/7 support

Network and Business VPN
Efficient and secure connections

Certified experts, + 15 years experience in Cloud Services

OS / Antivirus / Patching
On VM and BareMetal

Enhanced Security
OCD & Azure Services

Hardened OS images
By security teams

Automated deployments Secure / Fast / Normalized



Cloud platform optimized for SAP

Highest performing and scalable SAP cloud infrastructure and offers SAP HANA virtual machines from 192GB to 12TB, in more regions than any other public cloud provider.

Use Case Scenarios

How Azure & OBS experts can support you

Rehosting (Lift and Shift)

Move SAP landscape to Azure exactly as is, typically maintaining a non-SAP HANA Database (Oracle, MS SQL, DB2 etc.)

- Business outcome : reduce costs, increase agility, shorten learning curve
- Ideal for customers looking to migrate quickly and minimize costs on Azure or who are not yet ready to adopt S/4HANA

Refactoring on Hana

Refactor an SAP app on HANA, away from Oracle, MS SQL or any DB.

- Business outcome: prepare for S/4HANA transformation, simplify data management
- Ideal for customers looking to adopt HANA, but NOT S/4HANA

4 HANA transformation

Completely modernize to SAP S/4HANA

- Business outcome: process modernization, better customer insights, meet S/4HANA performance needs, respect the end of support of SAP ECC
- Ideal for customers seeking advanced analytics in ERP and real-time business processes

S/4 HANA PoC

Prepare our customers migration or conversion to SAP S/4 HANA®.

- Business outcome: leverage SAP
 S/4 Hana benefits
- Ideal for customers who want to prepare migration & answer key questions for their project (Is my system eligible for SAP S/4 HANA® migration?, What are the timeframes and associated costs for switching to S/4 HANA®?...)

We provide a unique set of Professional & Managed Services across connectivity, design, migration, security and local delivery





Run

Project management (Project point and Steerco)

Transition - Detailed methodological approach

Organisation and Governance

Workshops

Reversibility plan

Knowledge transfer (2 months)

Technical architecture

Project Kick off

 Setting of objectives, scope, commitment and technical constraints

Planning

- Support and resume of the kick-off meeting including Record of Information, Decisions and Actions
- Transition planning
- Initialisation of the Project Scoreboard

<u>Definition of the organisation with</u> the teams

Define the integration of Véolia's application support into the Orange support model.

- Definition of the technical characteristics of the perimeter of the solution to operate
- Decisions and arbitration
- Initiation of the Quality Assurance Plan (QAP)
- Reporting including detailed deployment planning and project progress status

<u>Definition of the Reversibility</u> <u>Plan:</u>

- Scope
- Planning
- Expected deliverables (DAT, operating sheets, support)

Knowledge acquisition

- Face-to-face with the current provider
- Existing architecture
- Changes and ongoing operations
- Operational documentation
- Incident management and resolution
- Installation of the base and support tools

Shadow

 Monitoring of operations and resolution of incidents on the existing application by the current service provider, with monitoring by the OBS teams (face-to-face + remotely)

Primary

 Carrying out operations and resolving incidents on the existing application by OBS, with the support of the current service provider (faceto-face + remotely).

<u>Drafting of a detailed Technical</u> <u>Architecture Document:</u>

- Application products
- Network architecture
- Security

Removal of the assumptions made during the definition of the technical architecture

Review and validation by OBS, partners & customer

Project management (Project point and Steerco)

Transformation - Detailed methodological approach

Preparing for migration

DEV environment Installation

PRE-PROD environment Installation

Acceptance report

PROD environment Installation

Final nigration



- Kick off project
- Presentation of the project plan and validation of objectives
- Pre-analysis of the adaptations to be made
- Technical architecture validation workshop
- Definition of the test plan
- Definition of the organisation with the teams

- Deployment of the network layer (mail order, Subnet, etc)
- Deployment of VMs
- Installation of SAP software and database, interfaces, SSAS, IIS), etc.)
- Technical acceptance
 - Creation of "blank" VM images
- Database migration (SWPM or DMO operations)
- Configuration of application components
- Scheduling configuration
- Functional validation
- Configuration of infrastructure services for monitoring, alerting and security

- Deployment of the network layer (mail order, Subnet, etc)
- Deployment of VMs from VM images of the DEV environment
- Technical acceptance
- Database migration (SWPM or DMO operations)Configuration of application components
- Scheduling configuration
- Functional validation
- Configuration of services for monitoring, alerting and security
- User tests
- Go/No Go
- Updating of documentation

- Deployment of VMs from VM images of the DEV environment
- Technical acceptance
- Database migration (SWPM or DMO operations)
 (blank MEPs)
- Configuration of application components
- Scheduling configuration
- Functional validation
- Configuration of services for monitoring, alerting and security
- Integration tests
- Performance tests

- Definitive switchover (MEP after Go / No Go)
- Final technical and functional validations
- Scale for Go-Live

Managed SAP OBS Portfolio Run

Design

Migration

Run

Change management



- Catalogue
- Authorised administrator
- Client notification on SWAN tool

Incident monitoring



- 24/7 monitoring
- Security incident response team (BSO)
- Compliance with SLAs
- Delivery of a RCA for P1s
- Customer notification on OCEANE tool

Automation of operations



- Secure access to client environments
- Script execution from a bastion
- OBS managed flow

Keeping your applications up to date



- Operating system fixes (Linux and Windows)
- SAP update
 - Database update
- Security patching

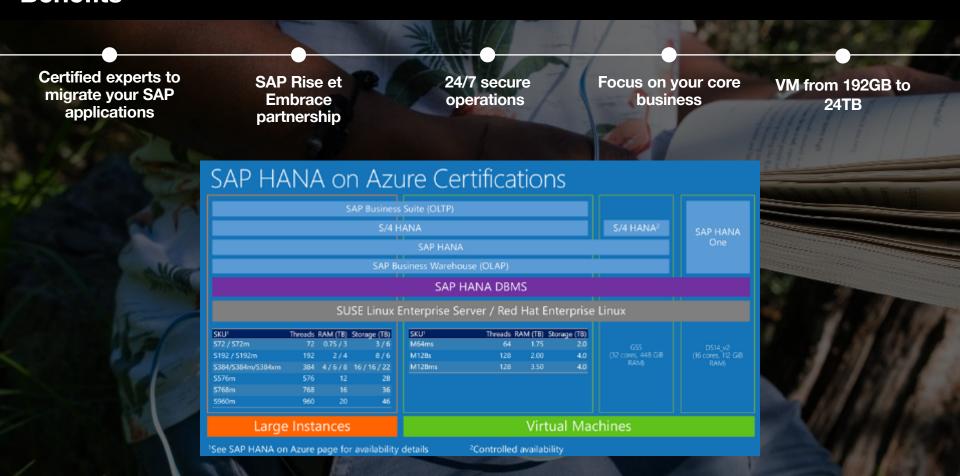
Reporting



Monthly report with:

- Early Watch
- Evolution Database
- Number of users
- Summary of operations carried out

SAP on Azure Benefits



SAP on Azure

Design

Migration

Run

■ Native services for SAP

- Network services
- Computing services
- Storage services
- Monitoring service
- Security services

4 Business continuity

- Azure site recovery
- VM Backup/Restore
- Annual DRP test
- Data replication with Azure storage redundancy
- Azure backup for HANA databases
- High availability of SAP services for ASCS/ERS and HSR

Certified VM flavors

- SAP HANA Certified Virtual Machine Flavors Set
- Series : M, S, E

5 Systems supervision

- GRAM checks the services exposed on the Internet
- ITSM Cockpit monitors SAP activities
- Azure monitor supervises HA and DR status and HANA metrics

3 Secure architecture

- Network segmentation
- Encrypted Azure Disk
- On-the-fly encryption of HANA databases
- Security patching
- SAP master key change
- Azure key vault

6 Scalability of resources

- Scale up/down of HANA VMs
- Scale in/out of a HANA resource pool
- Template change possible in the same series as the initial VM

SAP workload on Azure Build

Design

Migration

Run

Automation of deployment

Automating deployments with Azure DevOps:

- Terraform
- Gitlab
- Concourse
- Ansible

Migration

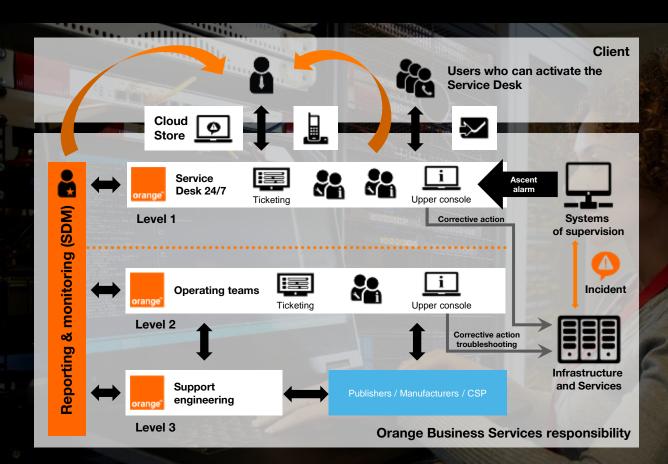
- Azure Migration Tools
- SAP Migration Tools
- Migration of BW, ECC... environments in remote or in-place

Technical tests

- Environmental testing
- Functional testing
- Performance testing
- Security testing

Adaptation

- REX on resources
- SAP REX
- Adaptation of the setup according to the tests carried out



Incident handling

- In proactive mode, following the detection of an incident by the supervision tools
- In reactive mode, following an incident report by the Customer's teams

Set-up

The same teams are in charge of OS, app, middleware and cloud management

Thank you

