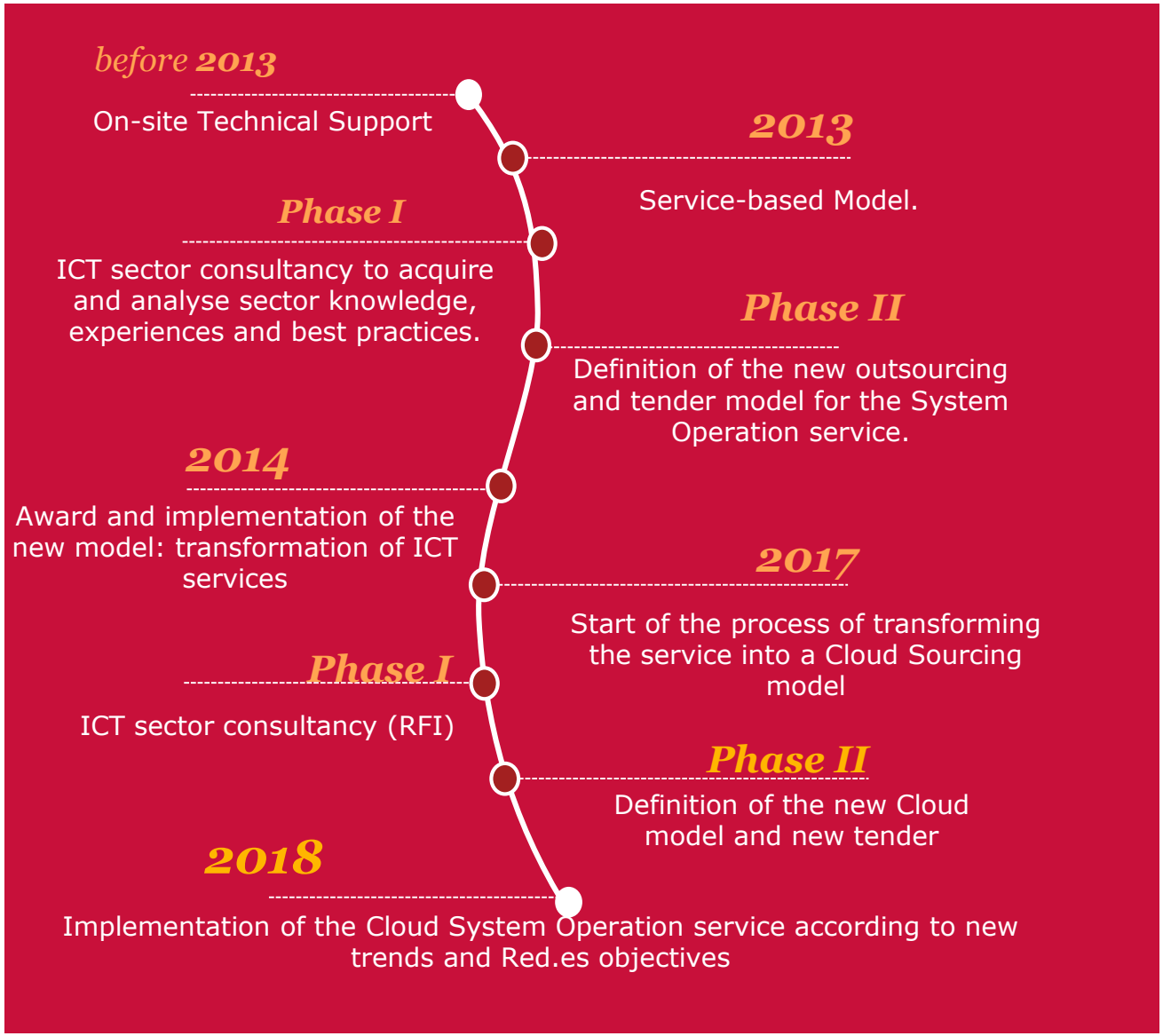
Cloud Systems Operation Service

Red.es

Madrid, October 2018

Introduction



Complex, Changing Environment

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SCOPE

06/2018 - 06/2022

BUDGET

9,956,00.00

GOALS OF THE SERVICE

Operation of a hybrid multicloud service. Technical systems, communications and security infrastructures, Workstation management for good Red.es employee and collaborator performance.

datos abiertos

dominios es

SPT Servicio de Pago Telemático

#MWC18

Creating a Better Future

Ciudades e islas Inteligentes
Agenda Digital para España

Ayudas BandaAncha 30 Mbps

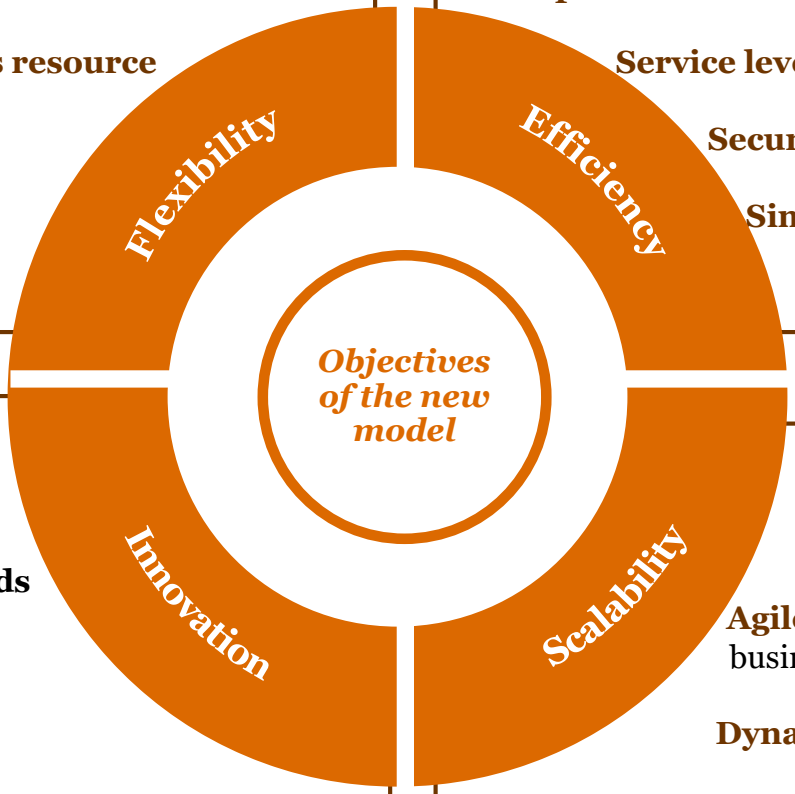
ontsi Observatorio nacional de las telecomunicaciones y de la SI

Objectives

Rapid response to service demands as a result of the entity's business (*time to market*), to favour service delivery to third parties

Rapid response to new business resource demands :

- Private cloud
- Public Cloud
- Etc.



Streamlining and sharing resources

Cost optimisation

Service levels according to business demands

Security and reliability (trust)

Simple management (no

Guarantee the elimination of barriers to IT innovation.

Evolution in line with **market trends** but minimising risk:

- Standardisation procedure
- Security policies
- Product certification
- Etc.

Redefinition of service models (payment for use)

Agile to increase/decrease according to business needs.

Dynamic, can be adjusted to any change

Scalable based on clear and detailed criteria

Key Topics

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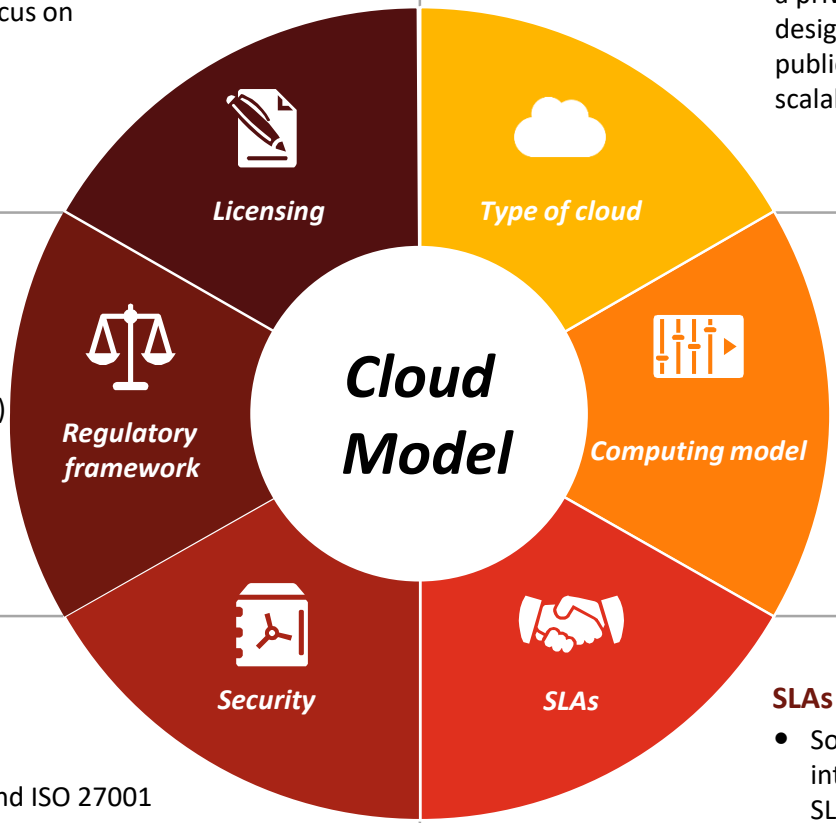
Licensing

- Red.es licence to reuse investment (BYOL Bring Your Own Licences)
- Licenses included in the service: focus on SAS models (Software as a Service)

Type of Cloud

- Hybrid Cloud in Sourcing, but the Red.es private cloud will have the specifications and flexibility of a private cloud -such as dedicated resources, design adaptation or audits- and the functions of a public cloud such as shared resources that favor scalability and standardization



Regulatory framework

- European framework: datacenter and data located in European Union
- LOPD (Spanish Data Protection Act)
- GDPR
- Red.es regulations
- Critical point: service transition
- IT cost control and governance

Computing model

- Initial IaaS model (Infrastructure as a Service)
- Flexible to the evolution of PaaS models (Platform as a Service)
- Computing capacities in SaaS models (Software as a Service), especially for workstations

Security

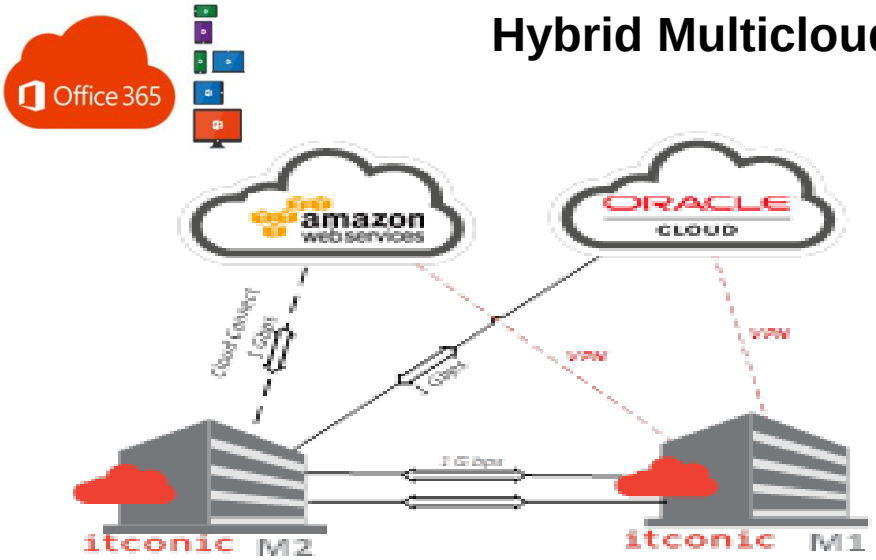
- National Security Scheme (ENS) and ISO 27001
- Integration with Managed Security Office (SOC)

SLAs

- Sourcing-based model, the sourcer or integrator will be liable for compliance with SLAs.
- Service oriented

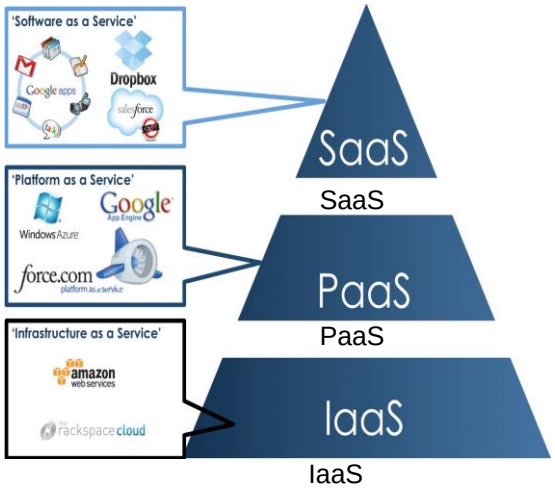
ICT Infrastructure

Hybrid Multicloud Architecture



Public (Amazon Web Services and Oracle Cloud) and private cloud (private Equinix Cloud) which remain as unique entities but coexist as their technology allows data or applications to be shared.

Computing resources in different models



Software as a Service: Software is offered directly for a specific use.

Platform as a Service: Provision of a comprehensive platform with the software necessary to execute applications or services.

Infrastructure as a Service: Provision of a cloud infrastructure for operating applications or software.

O365, WebTV, Cloud Videoconference.

Oracle databases, CMS (Drupal, Wordpress, …)

Web Front end and Back end applications, J2EE

Service portfolio

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ICT Infrastructure

- IaaS
- PaaS
- SaaS
- Housing
- SW licences
- Proprietary infrastructure
- Backup & Restore
- Communication lines

Office Management

- Room and Audiovisual Resource Management
- Data Processing Centre Management
- Local network management
- Web TV Live Streaming

Workstation

- Workstation equipment
- Workstation support
- Workstation services

IT Operation and Support

IT security

IT governance

Applications

- Applications portfolio
- Certification office

"Rediseñando lo que somos para transformar lo que hacemos"

ULTRA HD — Mejor calidad de imagen

Mejor calidad de sonido — dts Virtual:X

Mejor experiencia en reuniones

Word, Excel, PowerPoint, Outlook, OneNote, Publisher, SharePoint, OneDrive para la Empresa, Skype, Access

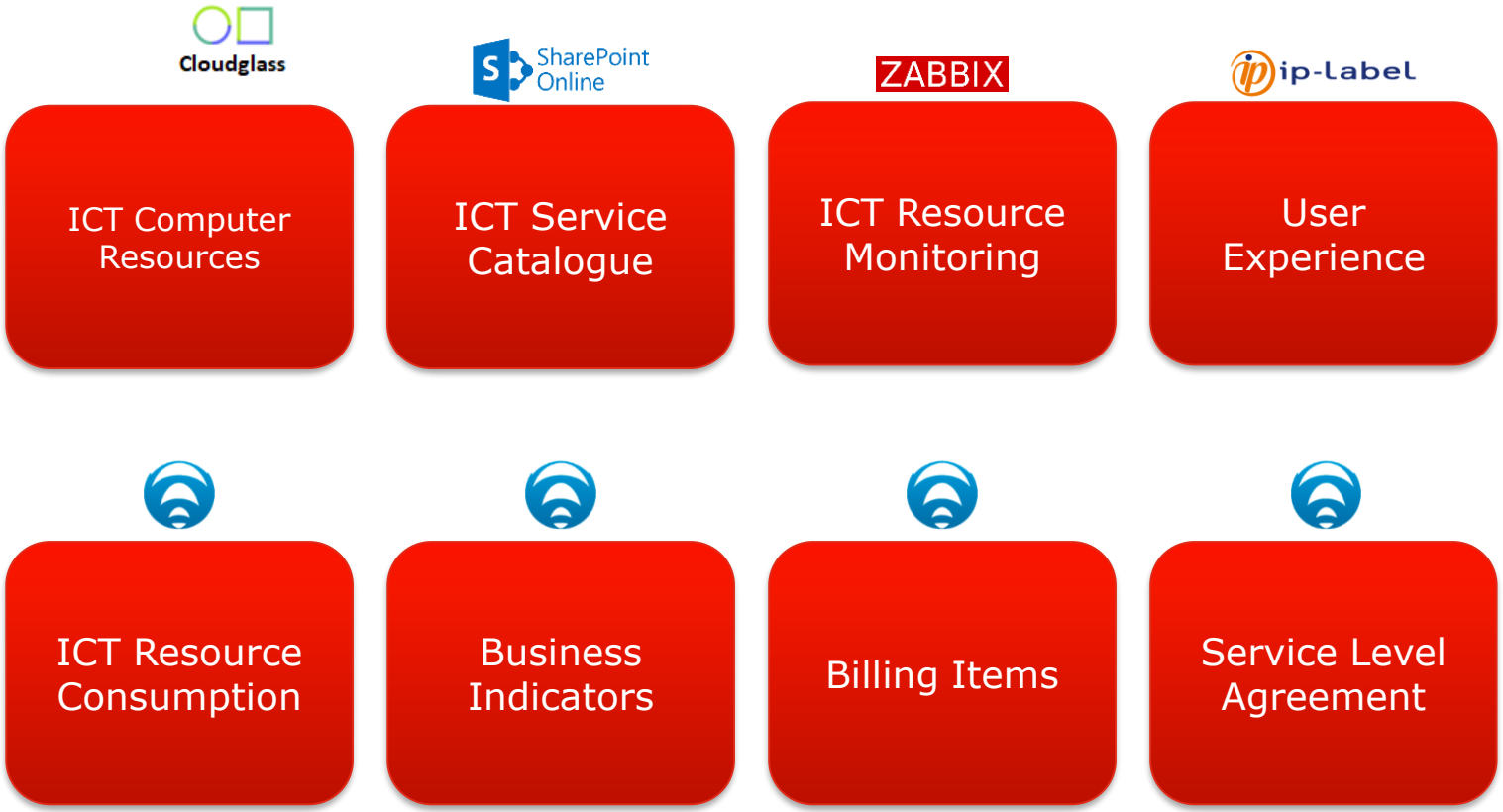
Office 365 Enterprise E3

Nuevas opciones

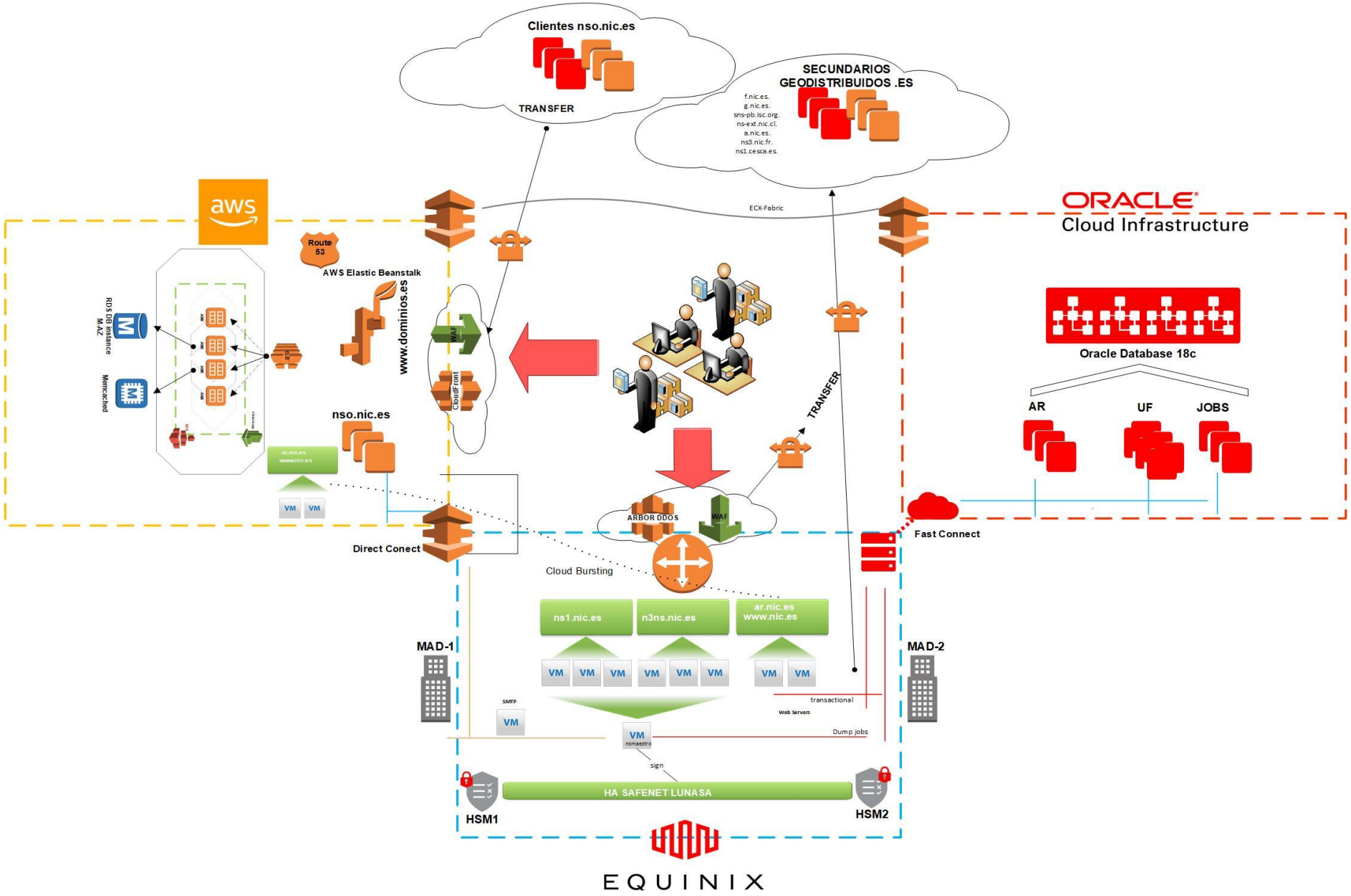
- **Conexión remota** a la pantalla (wireless)
- Videoconferencia **cloud multidispositivo**
- **Movilidad** (todo el equipamiento en un único soporte)

Global IT Governance panel

A single control panel offers an overview of the main service indicators.



Architecture Diagram



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Appendix Examples

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Cloudglass

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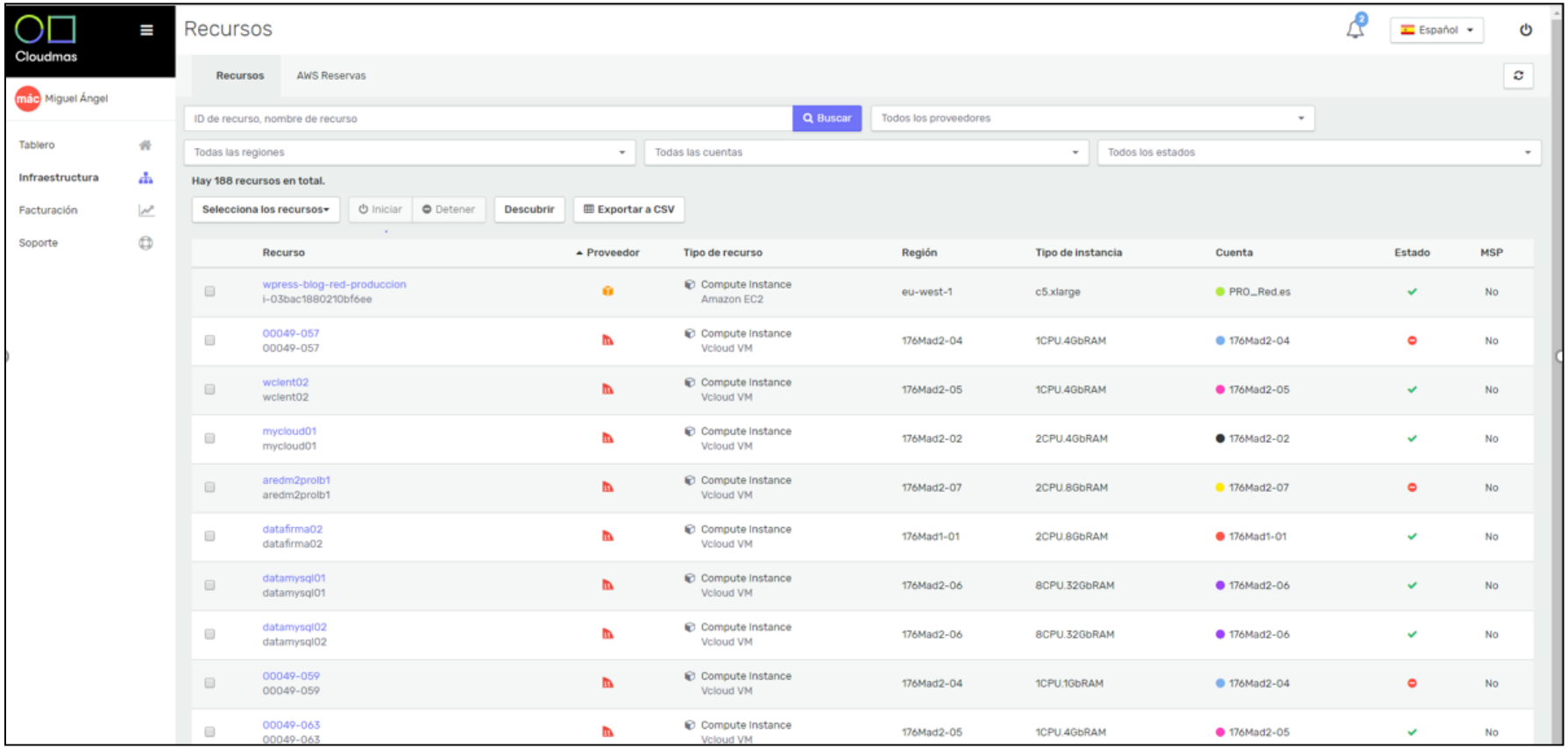
Online infrastructure control tool deployed in the Cloud



Management and Communication Orchestrator

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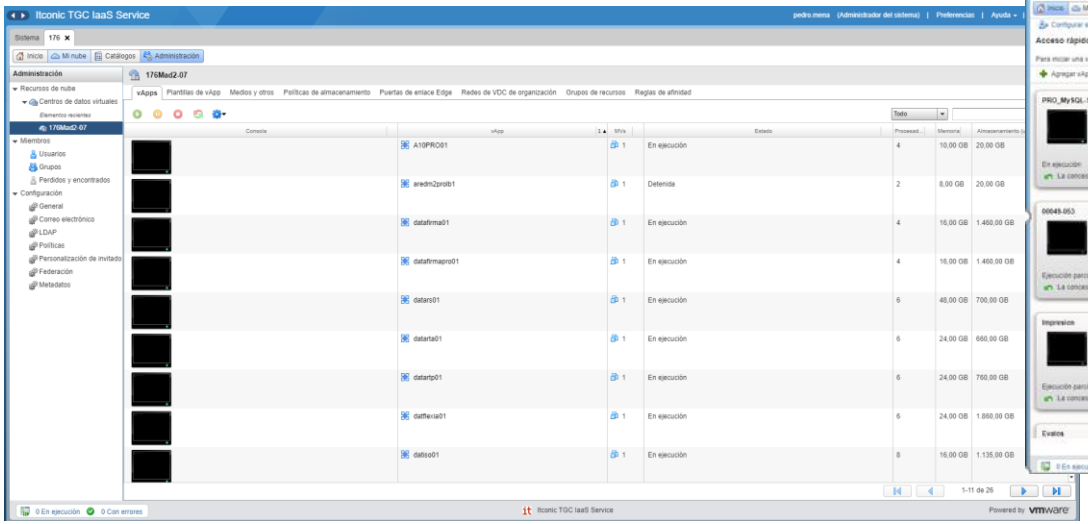
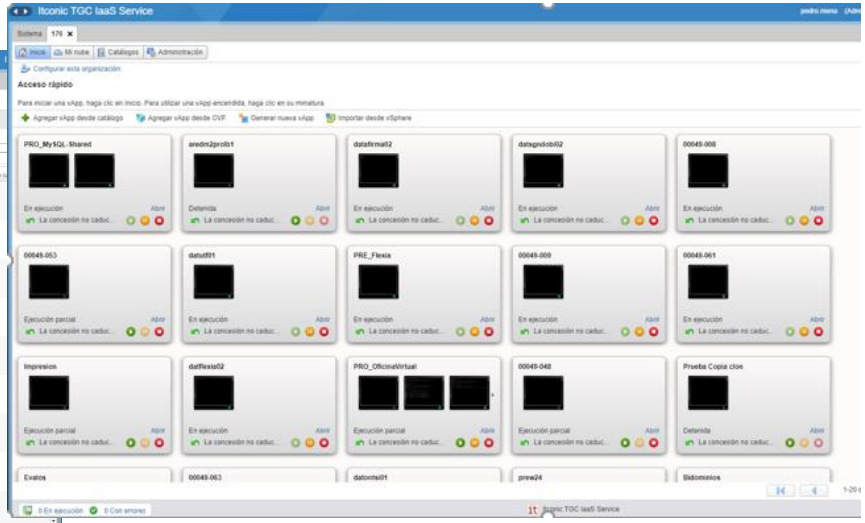
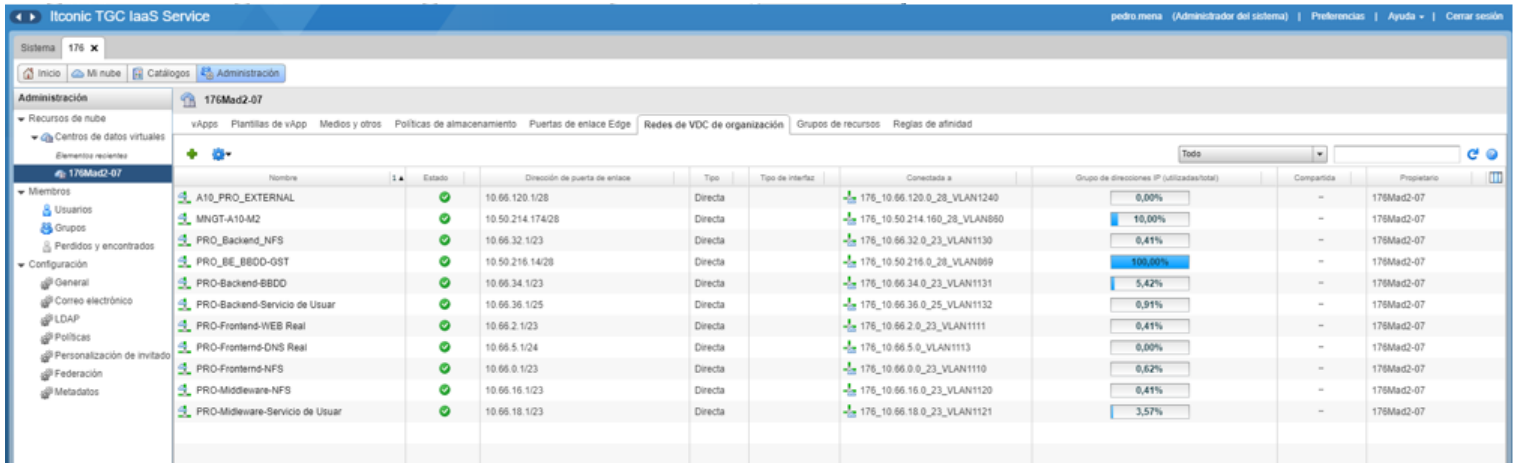
Equinix VMWare Cloud Platform







AWS Orchestrator

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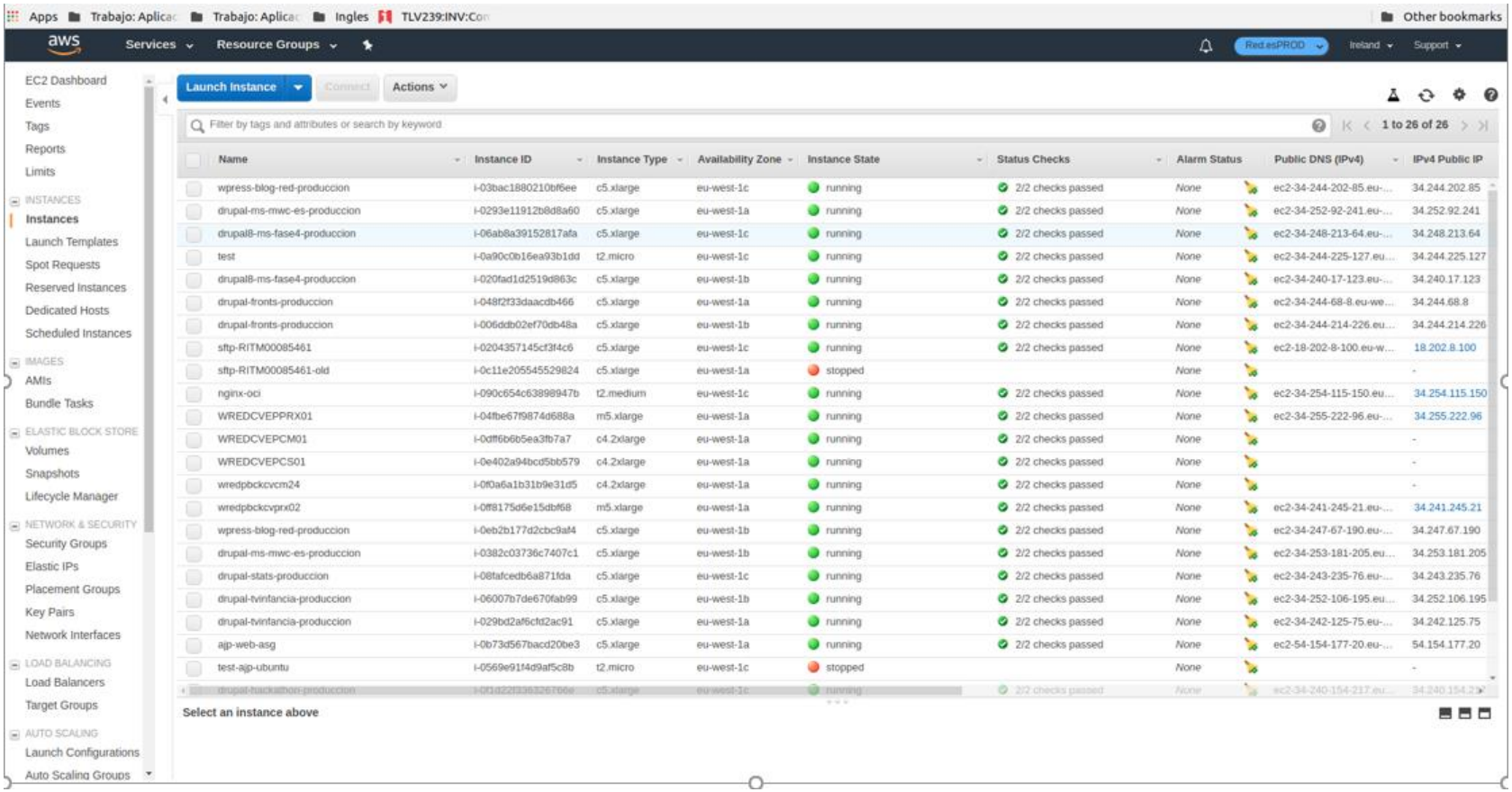

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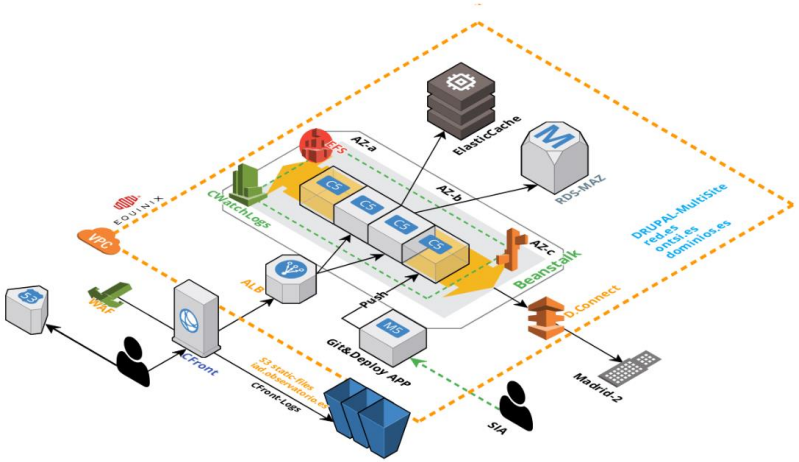
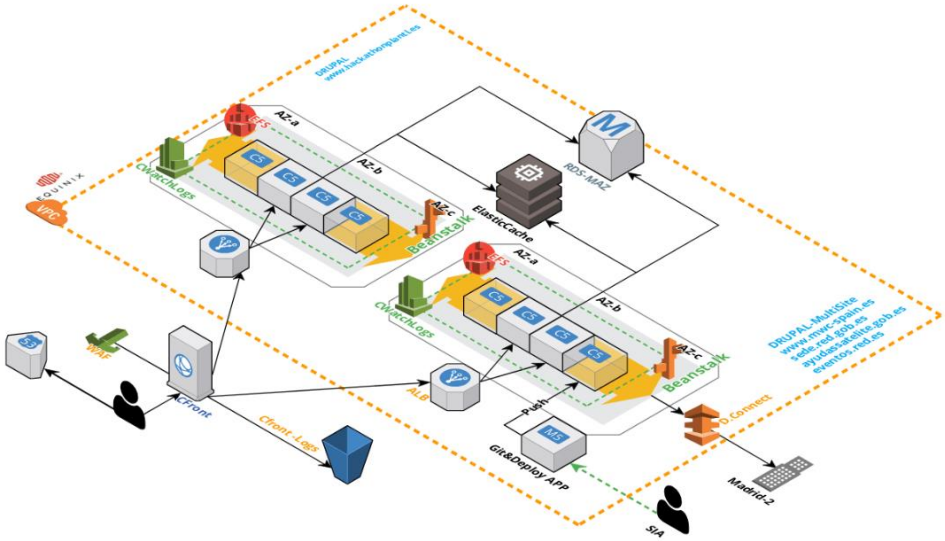
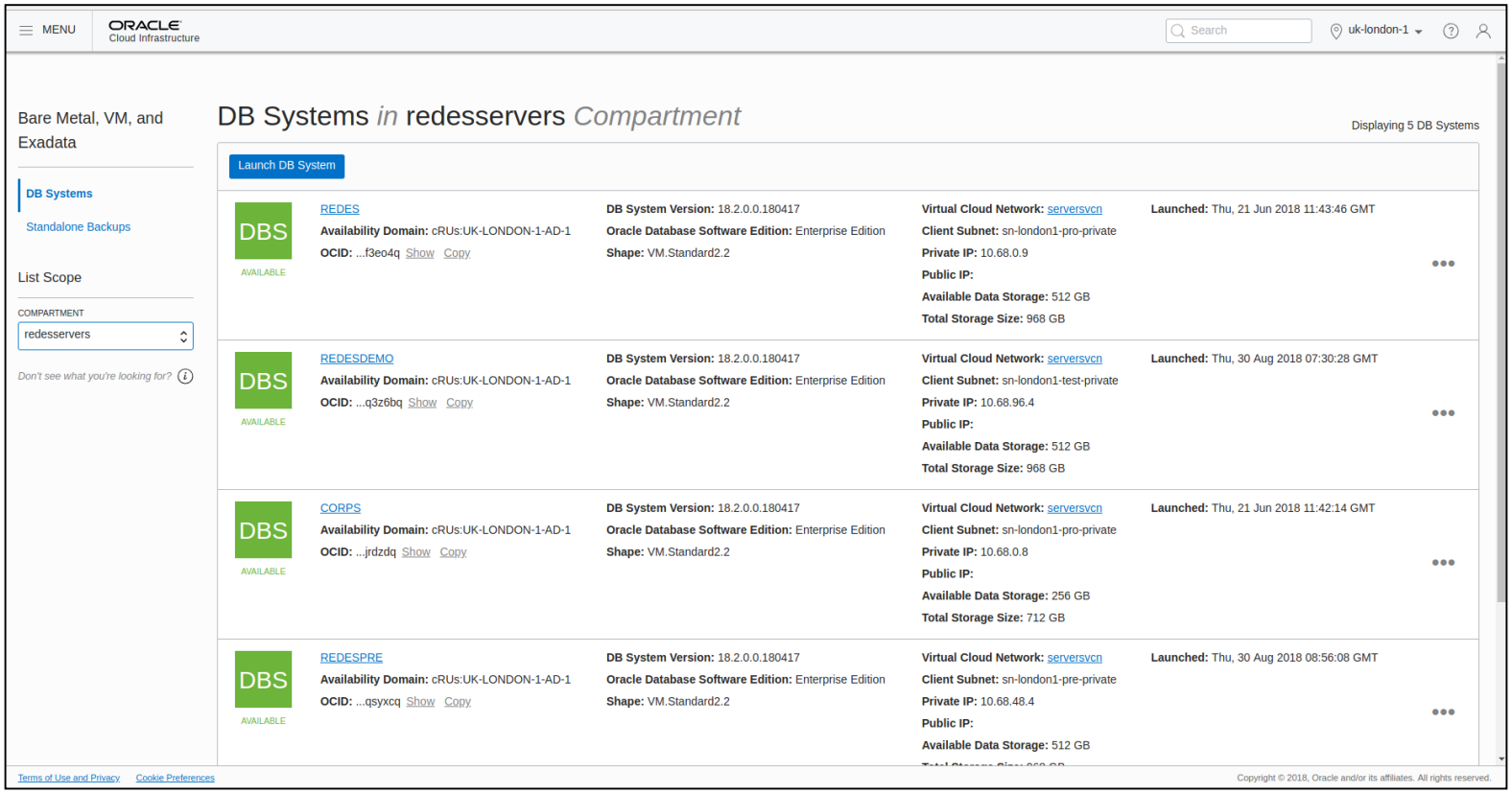
Architectures deployed for applications.





OCI Orchestrator

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