



TURKCELL



odine

UNIFIED TELCO CLOUD ARCHITECTURE in 5G ERA

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Turkcell

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Odine

Partnering to build the networks of tomorrow.

Odine is a global technology partner empowering sustainable network transformation, building resilient and software-defined networks of the future.

Odine is publicly listed on the Borsa İstanbul (BIST: ODINE), demonstrating our commitment to transparency, accountability, and delivering long-term value to our shareholders.

**We work as partners,
not as a supplier to our customers.**



Odine in numbers

20+

Years in Business

170+

Global Customers

23

Countries in Client Base

3

International Office Locations





Services

A suite of services based on sector excellence, technical expertise, and a diverse experience.



Solutions

Advanced solutions designed to evolve your business models and create efficiencies across voice.



Technologies

Leading communication technology and expertise with an ongoing partnership approach.



Cloudification Services

Harness expert cloudification services for tomorrow's networks



Virtualization

Create a fully virtualized environment that is seamlessly designed for scale, evolution and efficiency.



Containerization

Implement containerized network functions to enable more power, memory, and cost-efficient processes.



Edge

Harness more connected and orchestrated edge capabilities that make the most of your use cases.



Turkcell Unified Telco Cloud



**Cloud-Native
Transformation**



**5G-Ready
Network**



**Scalable &
Automated**



**High Traffic Volume
Management**



**Seamless Upgrades
& Orchestration**

Platforms



RED HAT®
OPENSTACK®
PLATFORM



RED HAT®
OPENSIFT
Container Platform

Virtualized Services



+ 25 Openstack Platforms

2 Openshift Platforms

+ 30 Core Network Services

+ 7000 VM

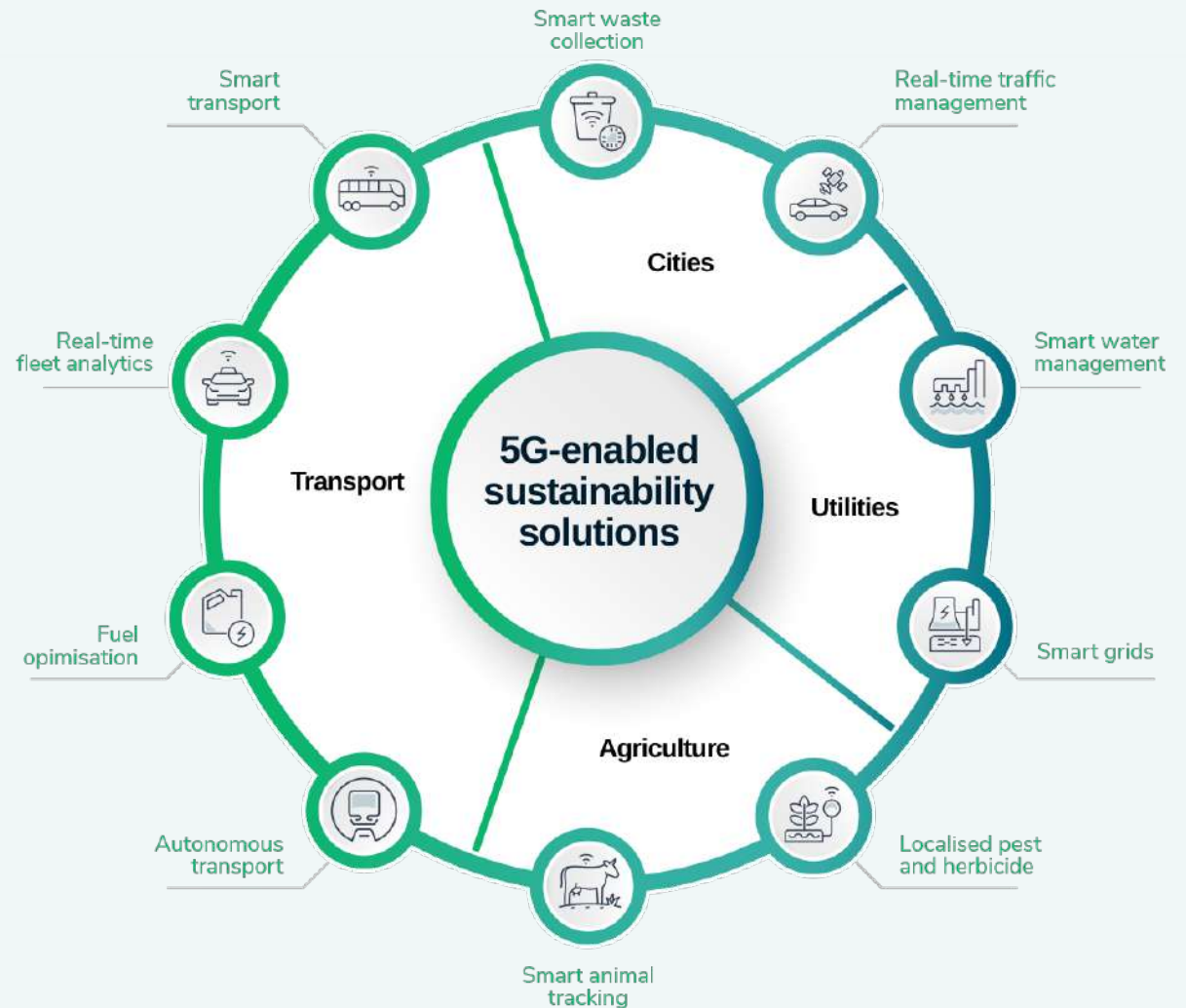
15TB User Plane Capacity

%100 Virtual IMS, 24M
Subscribers

Leveraging 5G Capabilities

The Necessity of 5G

- Faster Data Speeds and Lower Latency
- Support for a Massive Number of Connected Devices
- Enhanced Network Reliability and Coverage





Telco Cloud Transformation



NFV

Openstack

Virtual Machines

Virtual Network Functions
(VNF)

Cloud Native

Openshift

Container Network Functions (CNF)

IOT ve EVNFM

5G Core

IMS Container Transformation

5G Core Trial

IOT Arge Use Cases

Slicing

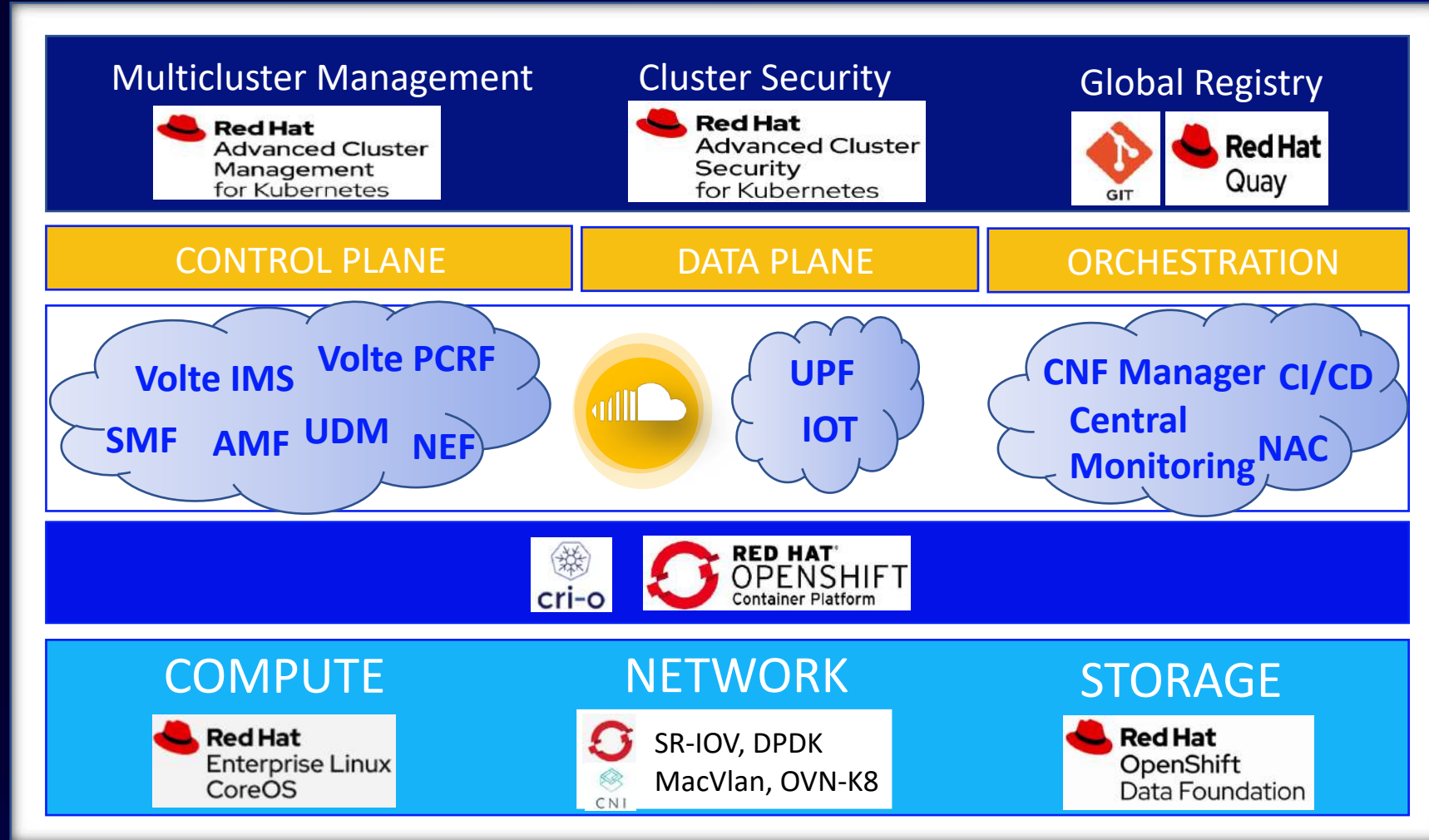
Open RAN

Edge Cloud

Edge Computing

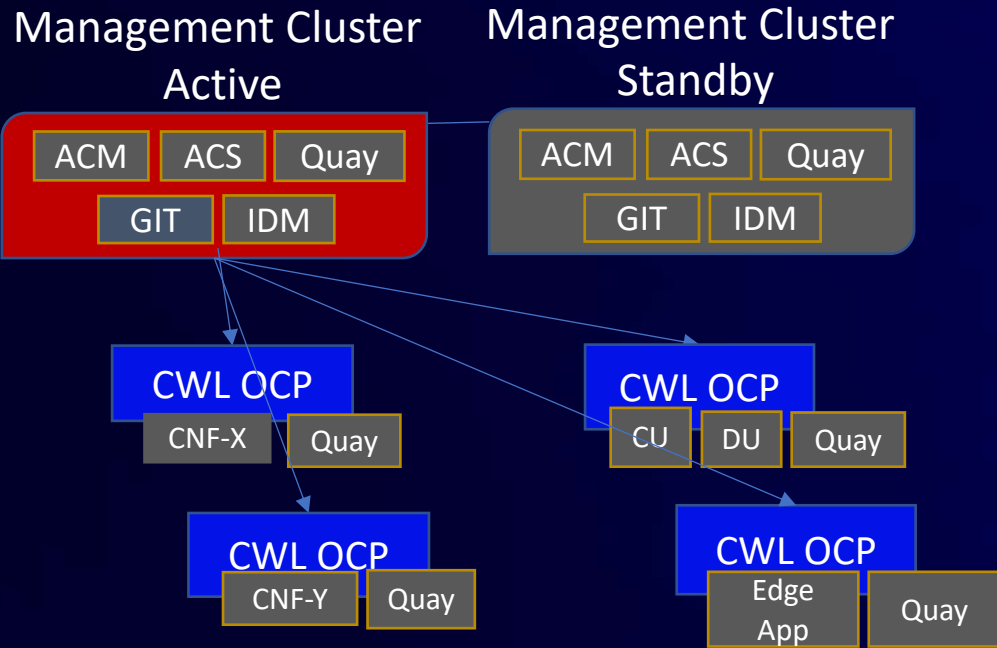


OpenShift Architecture

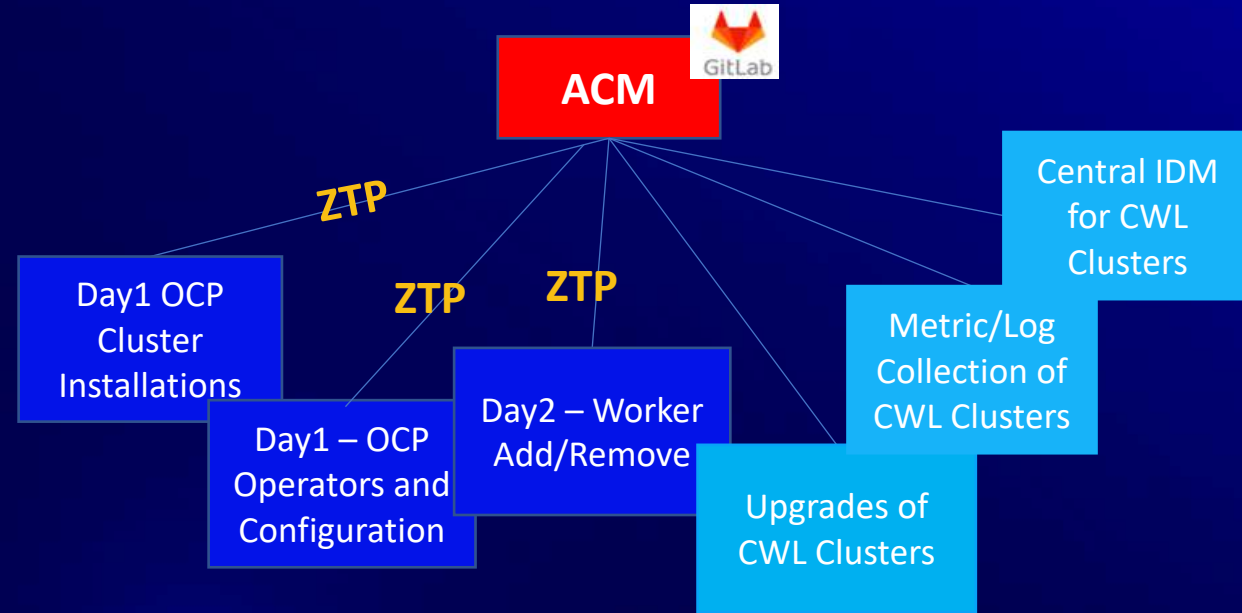




Operational Benefits



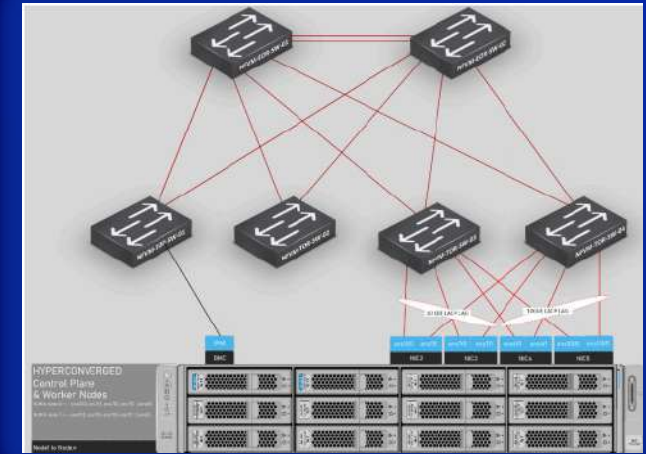
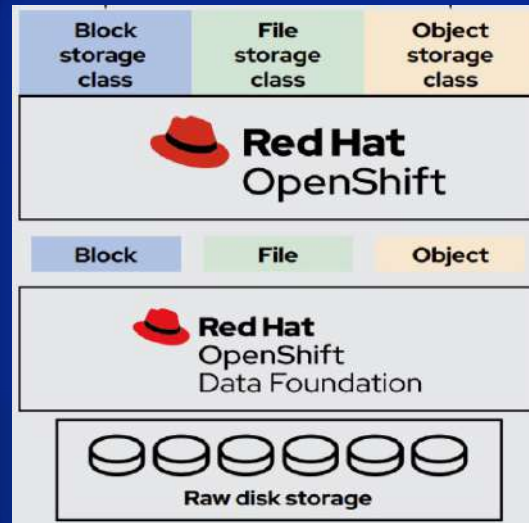
- ACM**
- Central Management
 - Central Monitoring



- ZTP**
- Declarative Approach
 - Central GIT Repos



Design Challenges



CNF Readiness

- Lifecycle Management
- CNF Certification Process



Storage

- External ODF Challenges

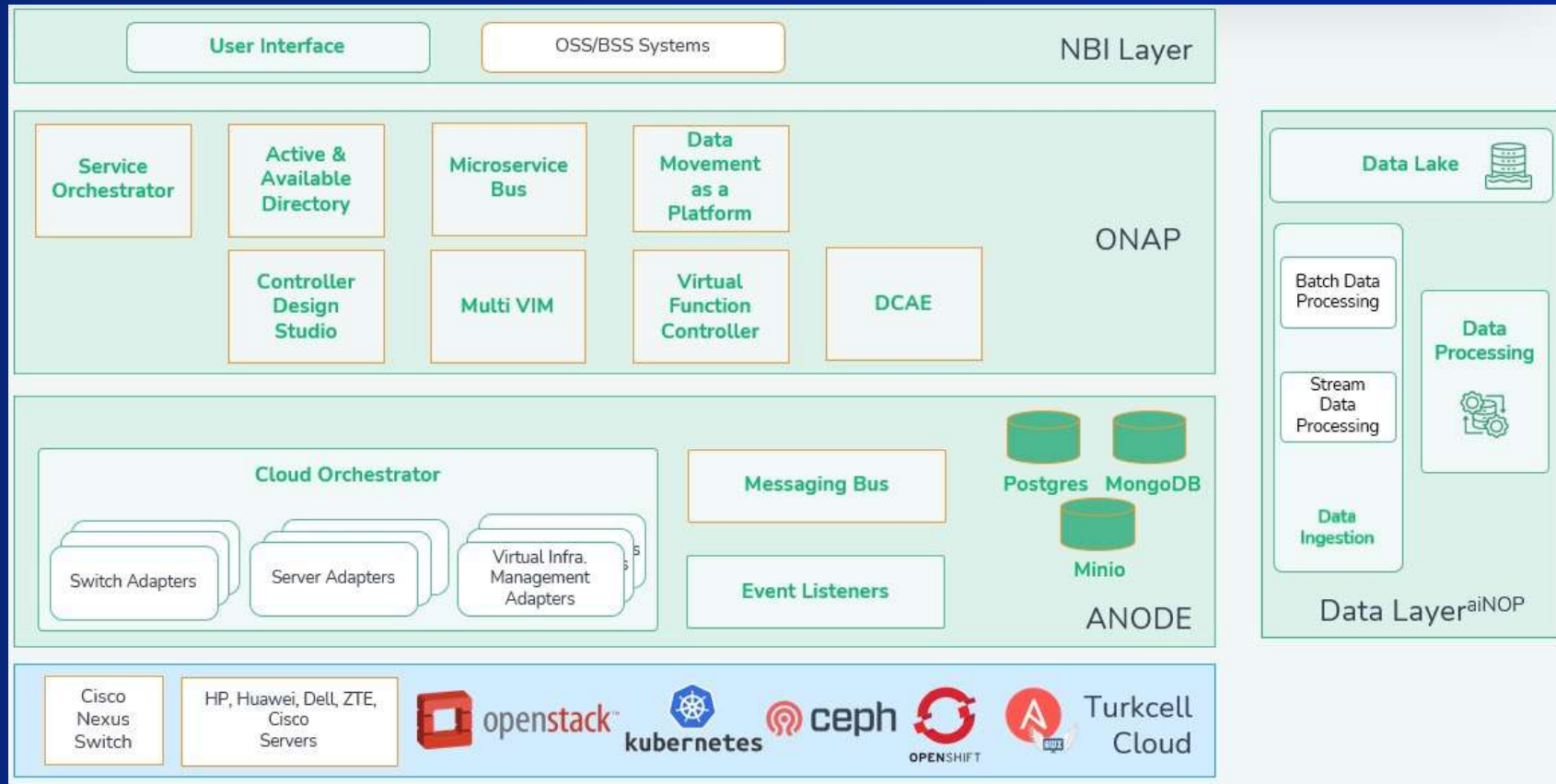


Networking

- NIC Design Changes
- Telco Specific CNI (DPDK, SR-IOV)



Infra Automation Platform



Orchestration Architecture



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