Cloud Enterprise Services Digital Cloud Services - Azure

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Challenges for cloud

Cloud enables benefits BUT also brings challenges

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Transitioning to cloud applications

Adopting cloud native ways of working

"Shadow-IT" and losing control

Implementing cloud security policies

Compliance & Legal regulations

Managing costs and optimizing usage

Finding qualified IT staff

Delivering consistent services across clouds

Aligning costs with business value

Evolving industrial scale security threats



Cloud is Revolutionizing IT

Organizations around the world are seeking increased innovation as they make the shift to digital business.

Cloud is at the heart of this change.





New Dynamics Dancing with the Hyperscalers



Google Cloud

Microsoft Azure

Teaming of PARTNERS is needed to deliver the outcome for CUSTOMERS

I Trust is critical

aws

Atos masters the ability to go to market with ALL 3 HYPERSCALERS

PUBLIC CLOUD PROVIDER

ATOS VALUE

Product mindset

Standardized operations

Volume commitments

Contracting topics on specific items

Trusted last mile with secured e2e services

Cover migration and integrate legacy IT

Bundling customer demand

Prime or Subcontract as customer requests



01. Digital Cloud Services (DCS) Overview





Atos Digital Cloud Services (DCS) for AWS, Azure and GCP

- Cloud Native solutions to enable and underpin enterprise digital transformation
- Fast time to innovation with modular products, combined with agile methodologies and tailored service patterns.
- MSP accredited cloud expertise
- Trusted last mile, providing innovation without compromising on security
- Available globally, operated from Romania/Poland/India



Digital Cloud Services (DCS) Overview

Cloud Core

Provides a • customer with a standard process for the provision of a secure public cloud resources governed by a management framework

Service Patterns

Repeatable services ٠ to address a specific customer use case. Service Patterns are building blocks and utilize Cloud Core framework

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Cloud Services

Digital capabilities • provided by a cloud vendor and managed by Atos for its customers

Cloud Advisory

 Advisory service to help customers realize their business and digital transformation goals



Atos Cloud Core Services



Cloud Core Features

Enablement

- Collect customer requirements (workshop)
- Deploy Landing Zone with standard policy controls and Microsoft best practices (CAF)
- Deploy customized hub / spoke network architecture
- Deploy security baseline (CIS/ISO 27001)
- Configure standard rights and IAM controls (leveraging Azure Lighthouse)

Assist

- Deploy monitoring and alerting for Cloud Core components
- Integrate to Atos ITSM system
- Atos service desk for support requests

Financial Management

- Leverages Azure Cost Management:
- Azure cloud usage
- Spend Alerts (warnings when approaching defined spend level)
- Spend Limits (maximum spend, defined by CSP service provider)

Reporting

- Reporting dashboard within Azure console:
- Azure consumption, spend, rightsizing recommendations
- IAM (defined users, roles)
- Applied governance & security policies
 Industry compliance
- Security log exceptions
- Incident/Change overview



DCS - Cloud Core – Enablement

(logical structure of sellable features)



Mandatory Feature(s) - Basic Service

Mandatory Features provided by Atos

- Public Cloud Account / Subscription
 - Supplier-owned contract Supplier resell
 Supplier provisioned vendor support

Customer Landing Zone

- Deployment of customer public cloud account
- Rights Management -Policy and Rights configuration customization and deployment (IAM)
- Cloud Native Console access
- Public Cloud Service(s) Support (Sign off needed by PM)
- Network configuration Standard
- Financial Control customization and setup
- Security settings setup Security Log Monitoring, Technical standards (Atos TSS, CIS Benchmark), RBAC setup

Optional Feature(s)

Optional Features provided by Atos

- ► Customer Landing Zone
 - Network configuration Advanced
 - Customer defined architecture (Inc VPN/WAN)
 - Industry specific network design requirements
 - Technical security standards setup
 - Industry specific compliance requirements
 - External ID provider
- ► ITSM Integration with customer ITSM system and processes
- Certified experts cloud consultancy

Optional Features provided by the Customer

- Public Cloud Account
 - Customer provided public cloud account Customer provisioned cloud vendor support



DCS - Cloud Core –Assist

(logical structure of sellable features)



Mandatory Feature(s) - Basic Service

Mandatory Features provided by Atos

- Public cloud account / subscription
 - Customer access to Atos support processes
 - Support for Atos provisioned public cloud account
 - Support for Customer provisioned public cloud account

► Customer landing zone

- Rights Management support
- Public cloud service support(selected services)
- Cloud network configuration support (Account and Landing Zone)
 + VPN/WAN if selected
- Financial Control
- Security Log monitoring
- Reporting
- Technical assistance for the above services
- Monitoring and corrective actions for the above services

Optional Feature(s)

Optional Features provided by Atos

- ► Support for DCS service patterns
- Support for additional integrated products
 - Cloud Management Platform (CMP)
 - Cloud Financial Management (CFM)

Optional Features provided by the Customer

Customer ITSM



DCS - Cloud Core – Financial Control

(logical structure of sellable features)



Mandatory Feature(s) - Basic Service

Mandatory Features provided by Atos

- Customers Cloud Account Usage
 - Spend Thresholds
 - Monitoring and alert workflow
- Remediation actions (Inform or Block)
- Customer defined Usage (I.E. Department or Project)
 - Spend Thresholds
 - Monitoring and alert workflow
 - Remediation actions (Inform or Block)
- Cloud Usage
 - Efficiency / rightsizing recommendations

Optional Feature(s)

Optional Features provided by Atos

- Cloud Account Usage
 - Forensic analysis
- Cloud Usage
 - Agree and implement Efficiency /rightsizing recommendations

Optional Features provided by the Customer



DCS - Cloud Core – Reporting

(logical structure of sellable features)



Mandatory Feature(s) - Basic Service

Mandatory Features provided by Atos

- Reporting
 - A single reporting dashboard covering the items below
 - Public cloud consumption/financial report
 - Public cloud efficiency/rightsizing report
 - RBAC report
 - Security log exception report
 - Incident report
 - Change report

Optional Feature(s)

Optional Features provided by Atos

► Industry compliance reports

Optional Features provided by the Customer



02. DCS Azure





DCS Azure – Cloud Native Services

Vision and scope

- Shared Responsibility Model to allow our customers the flexibility of leveraging full capabilities of the Azure.
- ► DCS Azure approach is to be **cloud native tooling** first.
- Automated deployment leveraging Blueprints / CICD pipelines / Azure Resource Manager templates (ARM)
- Event-Driven Architecture & Intelligent policy to support customer landscape and provide management insights.
- Follow Cloud Industry Standards to meet governance standards and security compliance

Latest DCS Azure Roadmap can be located <u>here</u>





Cloud Service Adoption Framework (example)

Cloud Services Adoption Framework Security Baselines (CIS) & Governance Framework

> Basic Landing Zone Subscription, Tooling, Connectivity, Management, IAM

Org Policies Policies (templates)* requires organization level permissions

Landing Zone Monitoring Customer metrics, Alert policies, Notification channel

MSP Tenant creation

Billing Budget Alerts Custom metrics, Alert policies, Notification channel

Basic reporting Dashboard, Scheduler, Reports & Metrics



workshop

Customer

Define and agree:

- Tenancy designs
- Network design
- Access Management
- Compute services

03. DCS Service Patterns





DCS Azure Service Patterns Repeatable Solutions



- Service pattern is a repeatable service comprising of a combination of hyperscaler cloud services (e.g., EC2, AKS..) and Atos solutions (e.g. APM, CFM) to address a specific customer use case.
- Service patterns are built upon a standard set of cloud services (Cloud Core).
- Service Patterns is re-useable work done for a customer and make it usable for other customer
- > Service Pattern will be available via a digital marketplace.
- Service Pattern examples could include: IOT platform, Disaster recovery service, Operating system management, Application management etc.



DCS Azure – Cloud Native VM OS Management



- The Cloud Native VM OS Management cloud service offers Infrastructure-as-a-Service (IaaS) virtual machine OS management using Azure native capabilities as an optional add-on to DCS Azure Cloud Core. The service consists of a few mandatory elements and several optional elements. The DCS Azure policy-driven governance framework enables our customers (or the Atos delivery team acting on behalf of a customer) to activate Cloud Native VM OS Management and any of the optional elements on an as needed basis, simply by assigning the appropriate tags to virtual machines.
- Cloud Native VM OS Management comprises the following functional elements:
 - ➤ VM OS Monitoring
 - ➤ VM OS Reporting
 - ▷ VM OS ITSM Integration
 - ➤ VM OS Patching
 - ➤ VM OS Backup
 - Recovery Services Vault



04. High-Level DCS Architecture & Journey







DCS tooling overview Azure Cloud Native

Azure DevOps, ARM Templates (CI/CD)

Customer Portal (Lighthouse, BluePrints, Azure Dashboard, Reporting, Logic/Function Apps, ServiceNow)

Azure Monitor, Log Analytics, Security Center, Workbooks

Azure Cost Management, Advisor

Azure Backup

Automation, Security Center, Update Management, Monitor, Azure Policy, Log Analytics, Defender Software Development

Service management, service orchestration

Cloud Native Monitoring

Cloud Native Cloud consumption and budgeting

Cloud Native Backup/Snapshot + Application Aware Backup

Cloud Managed OS + PaaS management



DCS Adoption Journey





Thank you!

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