Atos Managed Cloud Azure

Inflation, rising energy prices and shifting exchange rates

Geopolitical, supply chain disruptions, and security breaches erode trust

Talent shortages and increased labor costs

We all continue to
face uncertain times

1. The transformation imperative: Digital drivers in Covid-19 pandemic, *The Economist Intelligence Unit, sponsored by Microsoft,* 2021
2. Global migration and modernization perception study commissioned by Microsoft
3. Top strategic technology trends for 2022: 12 trends shaping the future of digital business, *Gartner,* 2022
4. Business in the crosshairs: analyzing attack scenarios by Positive Technologies, Dec 2021
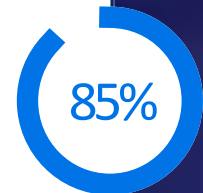
Technology is the foundation to transform and grow
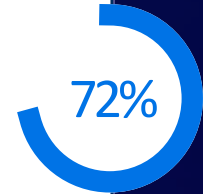
72% of industry's pace of transformation has accelerated as a result of the pandemic[1] creating IT platform complexities that can hamper agility.
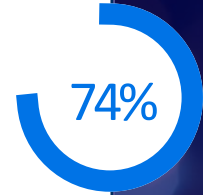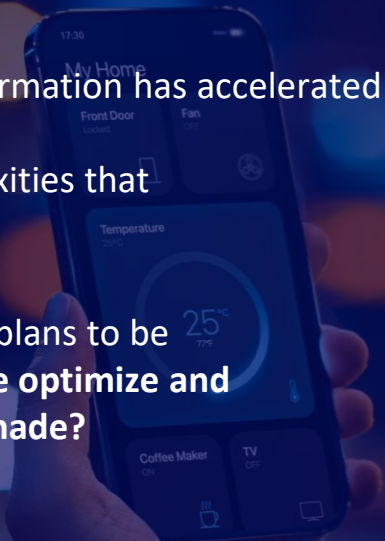
74% of migrated workloads have plans to be modernized[2] **but how can we optimize and maximize the investments made?**

85% of organizations will embrace a cloud-first approach by 2025[3] but how do we ensure it is done efficiently, productively to stay on top?
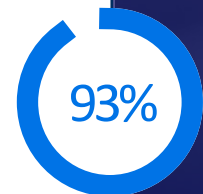
93% of company networks can be penetrated by cybercriminals yet how do we improve protection cost-effectively?

CIO Priorities & Needs

Value extraction from hybrid cloud

Secure use of **data & AI** in the public cloud

New complexity as a result of increased multi-cloud adoption

Governance and **compliance** challenges in a multi-cloud world

Sustainability targets reflecting increased regulations

Cost transparency & containment challenges

Complexity **and Speed of modernization** (Long live the Mainframe)

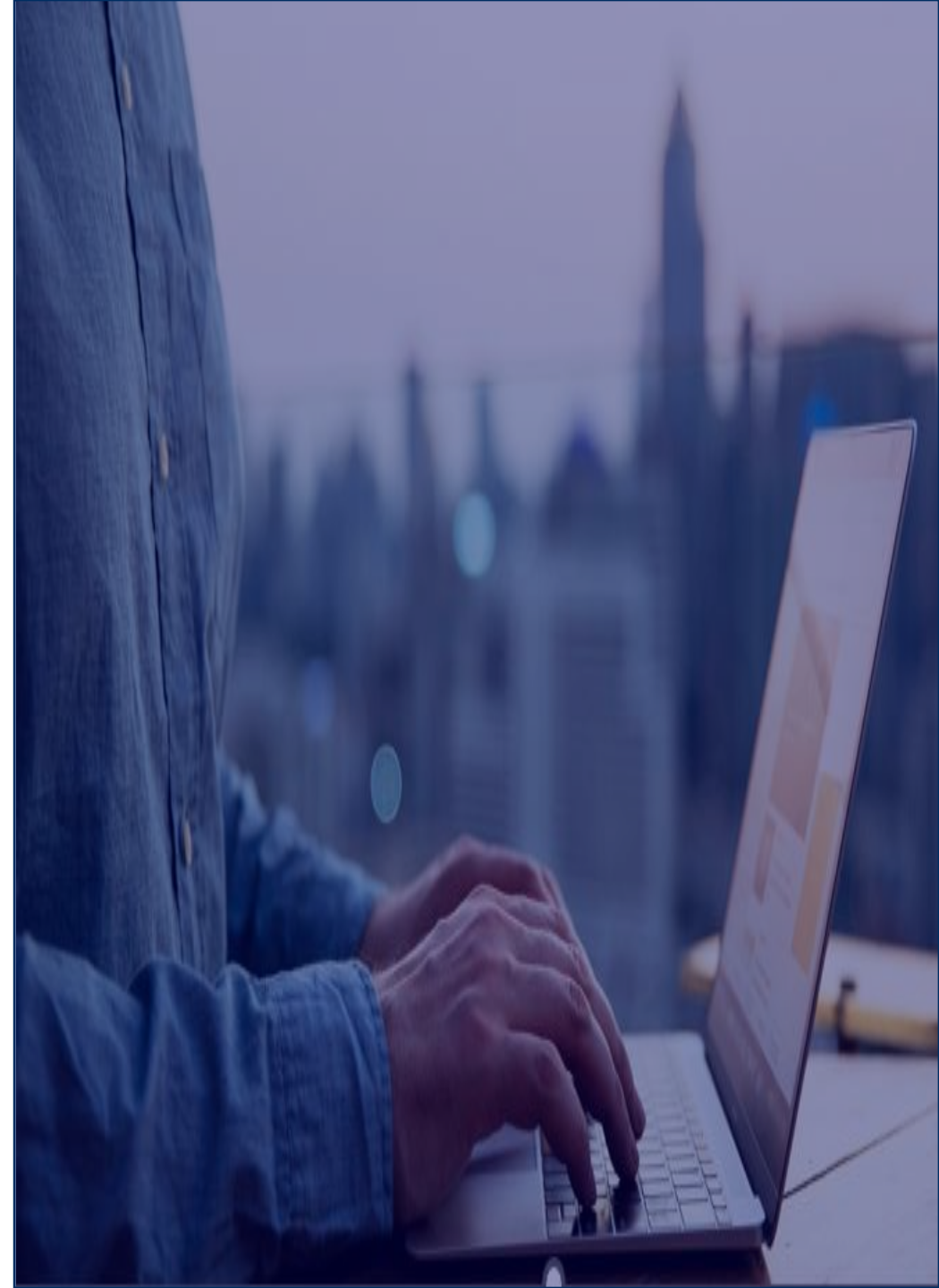Increased Cloud **nationalism** & **sovereignty**

—— Evolving Priorities across the cloud continuum ——

Atos's Focus is on supporting CIOs to:

- **Extract more value from hybrid cloud** (Data and AI) in a secure manner.
- Manage **the complexity** of increasing **multi-cloud** adoption.
- **Navigate** through **security**, **financial** management, **sovereignty**, and **observability** challenges.

Cloud adoption challenges

Organizations want to get to cloud quickly and efficiently

Skillset
Cloud talent is hard to come by and quickly disappears

Legacy processes
Legacy tools and approaches are labor and resource intensive

Vendor lock-in
Heavy weight contracts and SLAs perceive vendor lock-in issues

Lengthy timelines
In-house migration solutions can take months or even years

Inability to grow
As organizations migrate workloads, they want a scaled operations model that enables growth

No Compelling Event
Migration to the cloud is not an end in itself and rarely a differentiating business factor

Atos experience shows

Too much freedom has resulted in lack of governance and chaos…

Too much control impedes productivity and business innovation…

Atos & Microsoft join forces to **minimize** these challenges and **accelerate** your cloud adoption strategy

Atos

The foundation of our solution strategy

Customer intimacy

30yrs+ of Industry leading in Managed Services
Hybrid Cloud Infrastructure and Transformation

We are engaged in CEO summits and Client Advisory Groups to understand our customer pain points and focus on what matters most for them

Fit for purpose

Modernising on-premise and new managed services across the cloud continuum

New adjacent digital capabilities in Cybersecurity, Major Events, Connected Solutions and Digital ID and pioneering decarbonization commitment

Sustainable partner ecosystem

Cloud **centric solution accelerators focused** on specific cloud **pain points**

Harnessing the combined expertise, R&D and investments of select technology partners to accelerate time to Cloud, Data and AI value

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Adopting Hybrid Cloud helps you solve these business challenges

Legacy and aging Infrastructure

Hybrid cloud helps modernize legacy systems without a full-scale overhaul.

Budget and resource Constraints

Hybrid cloud optimizes costs and resource allocation.

Enabling new ways of working

Hybrid cloud supports and enables modern remote work practices.

Modernizing operations

Hybrid cloud introduces the latest cloud technologies, to meet your needs wherever you are in your cloud journey. Key tools like Azure Arc and Defender help to extend advanced cloud benefits to your on-site infrastructure.

Bridge the gap between lines of business and Infrastructure

Unlocking the ability to allow lines of business to embrace the latest and greatest while keeping a managed infrastructure.

Climate change

"Hybrid cloud solutions support sustainability efforts by facilitating efficient resource allocation, reducing physical infrastructure, and optimizing energy consumption. This is achieved through a blend of on-premises and cloud-based solutions, leveraging energy-efficient hardware, data centers, and cloud-enabled services. Ultimately, it minimizes environmental footprint while maximizing resource utilization.

Incorporate GenAI into infrastructure Foundations

A hybrid cloud approach allows organizations to harness the full potential of data and GenAI, driving business growth and competitive advantage.

Cybersecurity

Hybrid cloud allows you to take advantage of cloud-born security solutions in your traditional infrastructure, complete with extended support available through Azure Security Center.

Enhance market agility

Hybrid cloud speeds up product delivery and innovation for a faster time to market, through rapid scaling of web applications and infrastructure that is quick, and cost-effective.

Consume resources on demand

Hybrid cloud's flexible licensing translates into an OPEX cost model that can smooth cash flow.

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Enterprise benefits
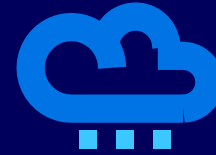
Achieve efficiency, through the ability to leverage cloud without the need for wide scale transformation.
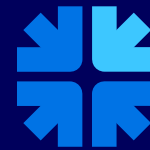
Maximize value, by focusing on maximizing the value of operations while simplifying processes to ready data for seamless integration with AI. This includes minimizing complexities to make data AI-ready and enhance its potential value.

Emerge stronger through advisory services, transformation, and management designed to prepare data ready automation and AI.

AtoS

The what and how?

Building solutions to deliver value for our customers

What

Consistency of Experience

Consistency of services

Write once, deploy many across multiple targets

Consistency of user experience

Supporting Different personas and consumption models

Consistency of Operations

Automation and orchestration

Governance regardless of consumption model

Expense management and control

X-Cloud

How

Selection of **consistent technology** stacks across private, public and sovereign clouds

Choice of consumption either through a curated service catalogue, native cloud consoles, APIs, or CICD pipelines

No vendor lock-in combining native cloud APIs, industry standard configuration Management tools, and CICD pipelines

Cloud agnostic policy-based engine, ensuring compliance by preventive
& retrospective controls, and enterprise grade service management

Predictability, visibility and cost optimization powered by FinOps

The Atos value in Hybrid Multi-Cloud

How we support our Customers

Hybrid multi-cloud ecosystem of partners focused on de-risking modernisation

Advisory and migration expertise

Infra, data and App modernisation

Cloud expertise (private, public and sovereign)

Customer intimacy (business, Infra and App)

Global footprint with local proximity (including Data centres)

Hybrid Multi-cloud Orchestration Platform
| Governance & compliance | FinOps governance | Autonomous Ops | Business process Observability | Infra Observability | App Observability | Security Observability | Resource Management | Cloud agnostic policy mgmt

Global leader
with European roots and deep expertise in data centers, outsourcing and hybrid cloud

World-class partnerships
Partnership ecosystem with industry top players

Decarbonization
Low carbon footprint IT infrastructure services

Multi-services control center
Multi-cloud and core infrastructure management and automation platform

Atos Managed
Cloud Azure

Atos Managed Cloud Azure Foundations

Accelerating Cloud Transformation through solution accelerators

Governance and Observability

API First, Infrastructure as Code approach

Lifecycle Management

Sustainability

IT Service Management Service (ITSM)

Security and Compliance

Modular Designed to Scale

Reliability

Benefit from our experience, expertise and partner ecosystem to innovate and scale up

1. Streamlined Cloud Migration.

2. Mature Cloud Operations.

3. Addressing barriers to adopt.

4. A defined cloud destination.

Our experts build resilient, manageable and observable platforms

Customer Centric Approach, industry based

Maximum flexibility to harness any cloud for an all-encompassing cloud strategy

Managed Cloud Azure

Your **Azure foundation** managed, end-to-end

24x7 Monitoring
Continuous monitoring of metrics and logs for anomaly detection for IaaS and PaaS deployed Services.

Alerting
Anomalous metrics or logs generate automated alerts to our Cloud-Ops for service resolution of incidents.

Service Management
Service reliability delivered at a high, scalable and performant standards, using IT Service Management (ITSM) tools (automatic ticket creation, logging and efficient response)

Cloud Security Foundations
Build on Cloud Security Foundation standards the landing zone provides security by design.

Continuous Improvement (CI)
CI catalogue development and management aligned to Well-Architect frameworks

FinOps
Provision of established governance and budget tracking, aided by monitoring and automation.

Authentication Services
Identity and access management (IAM), Single Sign-On (SSO), Security assertion, and 3rd party authorization services.

CSP Instance Management
Management of Virtual instances, including all Major OS versions via CSPs

Automation
Implementing automation to reduce human error and enhance efficiency by automating repetitive tasks.

Capacity Planning
Facilitating peak load and optimal performance by effectively managing resource capacity.

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Portfolio Offering

Modular approach to meet enterprise varying needs

Cloud Security Services

- Security Architecture
- Identity & Access Management
- Security & Compliance Management
- Workload Protection

Atos Managed Cloud Azure

Managed Azure
Simplifying the complexities of public cloud - Azure

- Managed Azure VM
- Managed Azure Backup
- Managed PaaS
- Managed DR
- Managed AVS
- Managed ACS/AKS

Managed Hybrid
Unlocking the true potential of hybrid cloud services

- **Managed Azure ARC**
  - ARC enabled ESU
  - ARC enabled VM
  - ARC enabled SQL
  - ARC enabled AKS
  - ARC enabled VMware
- **Managed DR**
- **Managed Azure Stack HCI**

Managed Sovereign
Addressing Sovereign needs (Microsoft Cloud for Sovereignty)

- MCFS ASSESS
- Managed VM (MCFS)
- Managed PaaS (MCFS)
- Managed ACS/AKS (MCFS)
- Managed DR

Managed Multi Cloud
Consistent experience Azure, Hybrid, AWS, GCP

- Managed Multi-Cloud
- Private Cloud
- Azure
- AWS
- GCP

Managed Landing Zone
Cloud Deploy & Cloud Ops Components

AtoS

- Customer Onboarding
- Billing & Account Mgmt
- Service Management
- Automation
- Governance
- Reporting

- L1-L4 CloudOps
- Cloud Services Life-cycle management
- WAF & CAF*
- Monitoring & Observability

Cloud Decarbonization Services

- Cloud Advisory
- Cloud Migration
- Cloud FinOps

WAF – Well Architected Framework
CAF – Cloud Adoption Framework

Atos Managed Cloud Azure

Enhanced Observability

Continuous Monitoring

Manage VM/Operating System

Cloud Security

Policy Driven Governance

Billing Dashboard

Disaster Recovery

EDR Solutions

Managed Landing Zone

Management & Observability

Atos Managed Cloud Azure

Managed Azure
Managed Hybrid
Managed Multi-Cloud
Managed Sovereign

Managed AVS / Azure Stack HCI

24x7 Monitoring & Alerting

Patch Management

Landing Zone Life-cycle management

Platform Ops

Managed Database (IaaS & PaaS)

GitHub & DevOps

Continuous Improvement

Incident Management

Managed AKS/ACS

Landing Zone Foundation

Atos Managed Cloud Azure

Customer Journey Overview
A journey leveraging both Microsoft Azure services and Atos Capabilities

Development Principles

Consistency of services	Consistency of user experience	Consistency of operations
Write once, deploy many across multiple targets	Supporting different personas and consumption models	Highly automated & orchestrated governance & operations

Developed for our customers

Cloud adoption frameworks

Pre-move

Cloud Strategy Azure

Azure Smart Assessment

Plan

Migration Plan & Design

During move

Ready

Migration Plan & Design

Adopt

Cloud Migrations

Migrate

Modernize

Take an iterative approach with each wave comprising a defined set of workloads

Operate

Managed Azure

Post move

Govern

Managed Hybrid

Managed Cloud Security

Secure

Managed Cloud FinOps

Managed Multi-Cloud

Managed sovereign cloud

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Atos Manage Azure Solutions

Atos

High Level Engagement Model

Managed Landing Zone – Ready to migrate in weeks.

| A WORKSHOP | B READINESS | C DEPLOYMENT / TRANSFORMATION | D DELIVERY | E MIGRATION |

Phase 1

Information Gathering Workshop
- ✓ Kickoff
- ✓ Customer workshop
- ✓ Design detailing
- ✓ Final Roll out design
- ✓ Formal Approval

GREEN FIELD / BROWN FIELD

Phase 2 & 3

Roll out of design, Azure account & Managed Landing zone Deployment
- ✓ Account Setup and Configuration
- ✓ Cloud Account Integration
- ✓ GitHub rollout and DevOps config
- ✓ Configuration as a Code
- ✓ Landing Zone rollout via end-to-end IaC API driven automation
- ✓ Network Connectivity
- ✓ Testing & Validation
- ✓ Validate security measures and compliance
- ✓ ITSM Integration
- ✓ Establish stakeholder Communication

Phase 4

Start Service operation
- ✓ Review the design
- ✓ Design Documentation
- ✓ Transition to Cloud migration
- ✓ Transition to Cloud-Ops

Start of Migration Activities

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Atos Managed Landing Zone

Service Description

Atos **Managed Landing Zone for Azure** offering sits at the center all our Azure **Cloud solutions**, for a **seamless** and **secure transition** to the cloud.

Its **scalable** and **modular architecture** accommodates all application portfolios and **facilitates frictionless onboarding** and **efficient workload management.**

Atos **Managed Landing zone** service **simplifies** and **automates** complex cloud deployments and **promotes innovation**, **agility**, and **cost-effectiveness** while maintaining **security** at every level.

Scalable
Modular Architecture

IaC and Automation
Standardized provisioning workflows

Built on Microsoft Well Architected Framework

Policy-as-Code
Enforces Organizational Standards

API First
Solution Integration

Code Security
Atos SDLC Best Practice

Operated
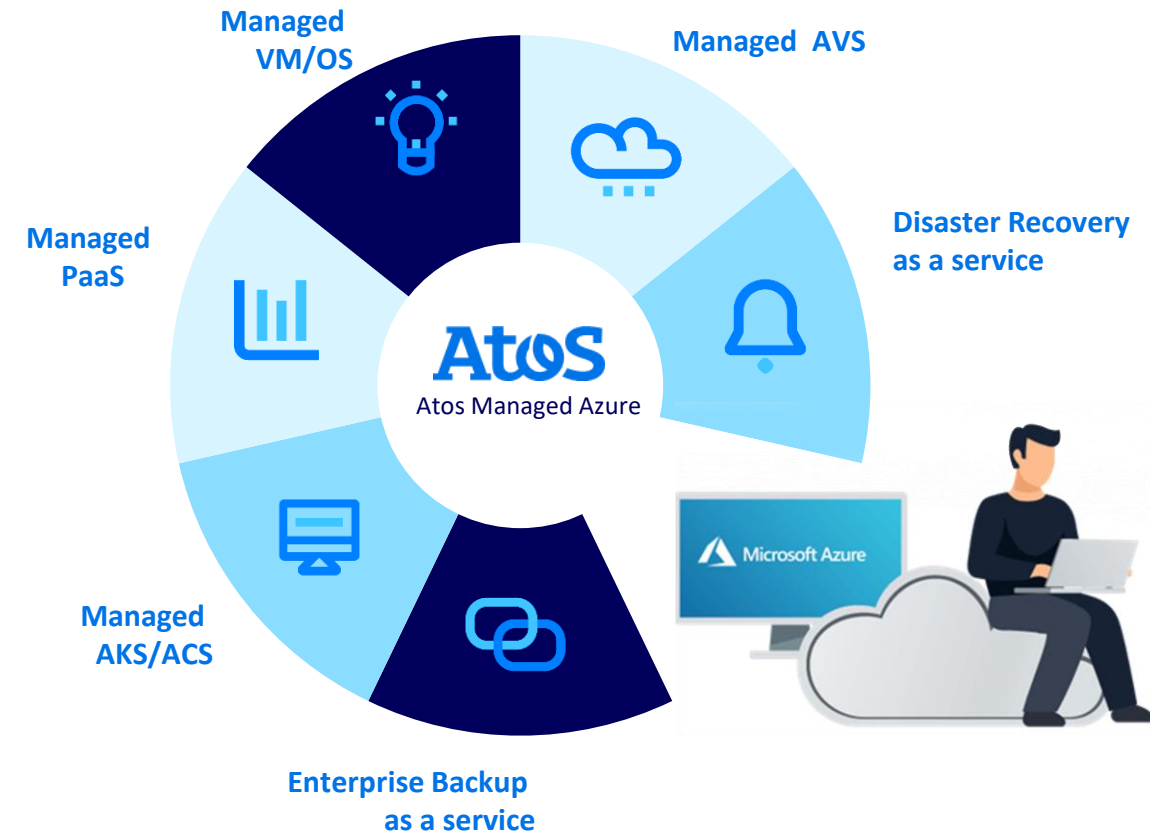Globally, Nearshore & Onshore

GitOps
as Source of Truth

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Atos Managed Azure
Service Description

Atos **Managed Azure** Services offer a cloud-native approach for providing managed services.

- Seamlessly integrated with our Managed Landing Zone, to benefit from **robust architectural foundations** and **associated policies**

- With the cloud first approach the services leverages **cloud native solutions** along with **DevSecOps-powered CI/CD** to **automate** complex, iterative, and time-consuming **tasks** associated with managing **infrastructure** and **enforced compliance**

- Highly **industrialized secure** and **reliable delivery** of Azure Managed Services allows **customers** to **focus** on their **core business**

Managed VM/OS

Managed AVS

Disaster Recovery as a service

Managed PaaS

Atos

Atos Managed Azure

Managed AKS/ACS

Enterprise Backup as a service

Microsoft Azure

AtoS

Managed Azure

Attain the ultimate agility, security, and optimization for provisioned cloud resources

Technical Service Management

Regular business reviews providing insights, analysis, recommendations and advice on your cloud environment.

Trend Analysis

Monitoring Data retention for trend analysis to enable baseline and insights for future analysis, audit, customer forensic requirements.

Compliance & Regulatory

Templates, policies and analysis enabling the achievement and maintenance of regulatory frameworks.

Continuous Improvement (CI)

CI catalogue development and management aligned to Well-Architect frameworks

Managed Runbook

The Cloud-Ops team will maintain a runbook to automate routine maintenance and respond to system alerts and outages.

Endpoint Detection & Response

Detection and response to threats, including endpoint protection, vulnerability management and asset management associated to cloud resources.

Manage Cloud Native Services

Take control of next gen cloud native services, like serverless functions and PaaS. Integrating managed services with all of your Cloud IT.

Cost Performance Tracking

Provision of established governance and budget tracking, aided by monitoring and automation.

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Managed Azure VM

VM resource and OS Management

The service is focused on lifecycle management of the VM resources along with OS Management services.
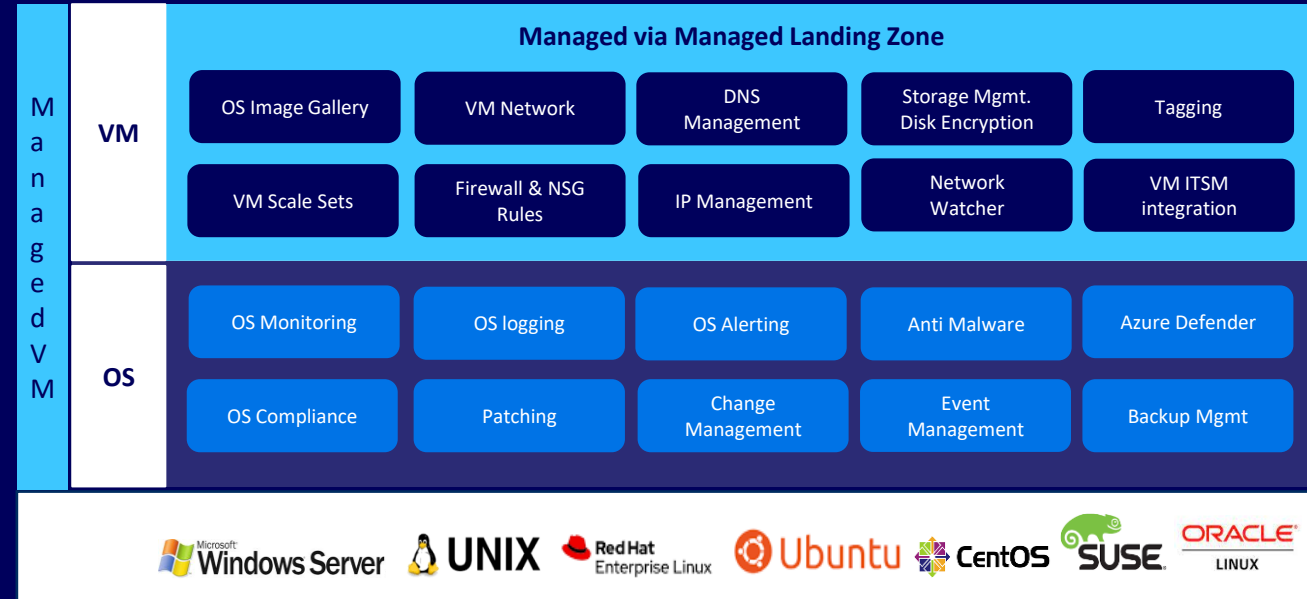
The services emphasis on:

- Provisioning, scaling and cloud compliance of the VM resources

- Comprehensive Monitoring & Alerting of Operating system

- Automated Patching

- Anti Malware

- OS backups management

- Break fix and trouble shooting

- Root cause analysis

Infrastructure Services | On-Demand Reporting | IT Service Management | Global/Local Operations

Managed VM

Managed via Managed Landing Zone

| VM | OS Image Gallery | VM Network | DNS Management | Storage Mgmt. Disk Encryption | Tagging |
| | VM Scale Sets | Firewall & NSG Rules | IP Management | Network Watcher | VM ITSM integration |

| OS | OS Monitoring | OS logging | OS Alerting | Anti Malware | Azure Defender |
| | OS Compliance | Patching | Change Management | Event Management | Backup Mgmt |

Microsoft Windows Server | UNIX | Red Hat Enterprise Linux | Ubuntu | CentOS | SUSE | ORACLE LINUX

Managed PaaS & IaaS DB

DBA support for **IaaS** Databases

- Provisioning, Logging, Monitoring

- Backups & Restore

- Database tuning

- Data Base patch and upgrade management

Support for **PaaS** Databases

- Logging, Monitoring and Alerting

- Dashboards and Reports

- Security and Governance

- Backups & Business continuity

- Deployment Accelerators

Azure PaaS Solutions

Platform as a Service

Azure SQL
Managed instance

Azure SQL Database
Virtualized databases

Infrastructure
as a Service

SQL Server on
Azure VM
Virtualized
machines

Azure PaaS Solutions

Azure SQL

Azure Cosmos DB

Azure Database for MYSQL

Azure Database for PostgreSQL

Azure Database for Redis

Thank you!

Atos