



Azure Arc for your hybrid SQL Server Landscape

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Challenges

Complexity

“I need to have health visibility in a single pane of glass to all my existing and future infrastructure and applications.”

Compliance

“I need to manage security and incident management across my public cloud and datacenter assets.”

Best Practices

“I need to know what I can improve on my SQL Server estate”

Regulation

“Our DB layer must remain on-premises due to sensitive data and data availability needs but we want to use cloud features”

Licensing

“We want to license SQL Server in a PAYG model”

Auditing

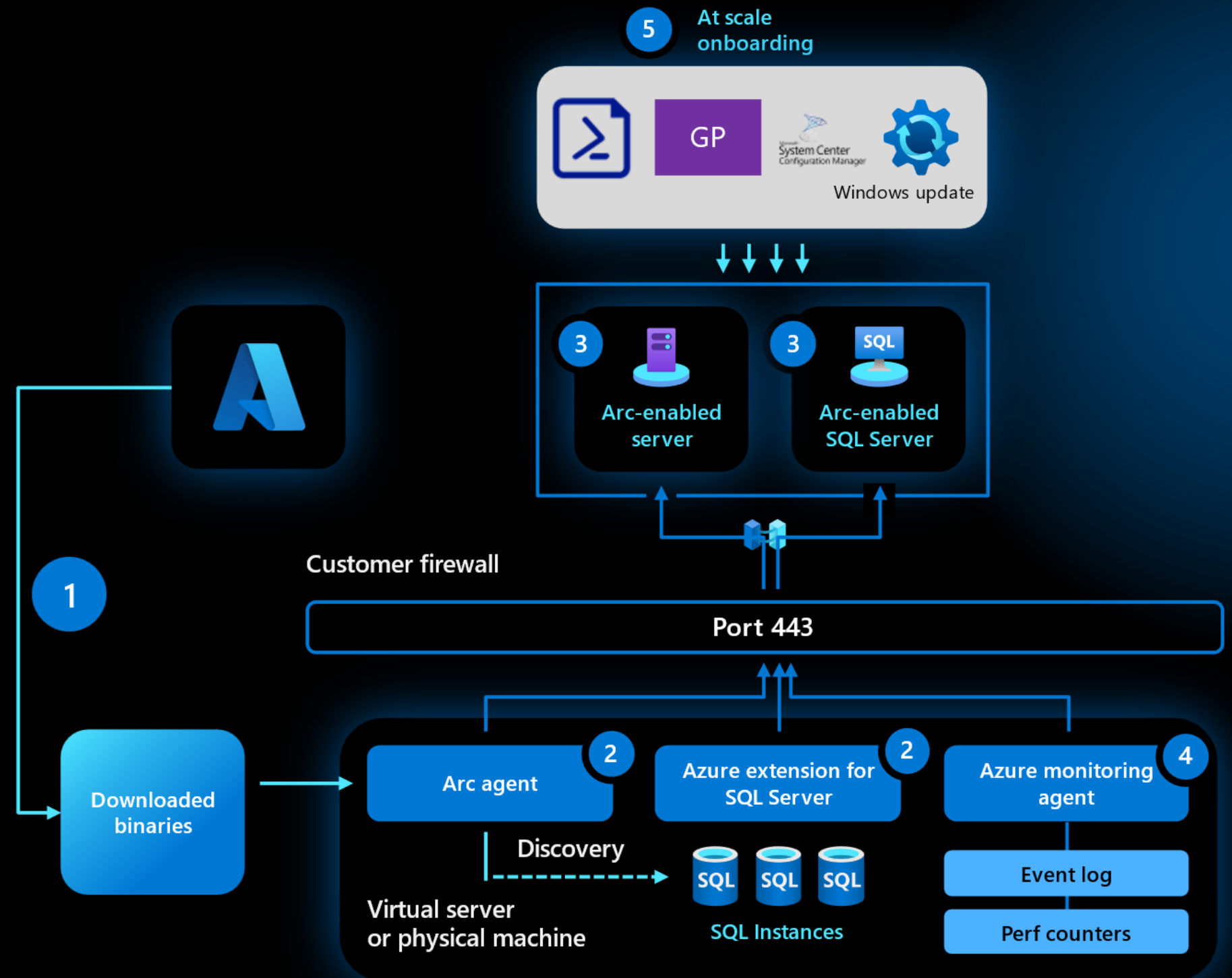
“I want to consolidate auditing information into one location”

Overcome the challenges using Azure Arc

- **Unified Management:**
 - Manage and view all SQL Server instances from Azure.
- **Best Practices Assessment:**
 - Optimize configuration based on Microsoft Support guidelines.
- **Microsoft Entra Authentication:**
 - Enhanced security with centralized identity management.
 - Supports multi-factor authentication (MFA) and single sign-on (SSO).
- **Cost-Effective Licensing:**
 - Apply consistent licensing models.
 - Save on Defender licensing.
- **Hybrid Flexibility:**
 - Extend Azure services beyond Azure.

SQL Server enabled by Azure Arc architecture

- 1 Generate script & execute on Server
- 2 Local services created
- 3 Arc-enabled server & Arc-enabled SQL Server resources created
- 4 Azure monitoring agent
- 5 Onboard at scale



Inventory & Asset Management

- **Azure Arc enablement creates objects in Azure**
 - Useful for tagging, policies, ...
 - Query them using your favorite tools
- **Create dashboards**
- **Capture performance counters at scale**

Home > Azure Arc

Azure Arc | Machines

Microsoft

Search

+ Add/Create Manage view Refresh Export to

Filter for any field... Subscription equals Microsoft Azure Spor

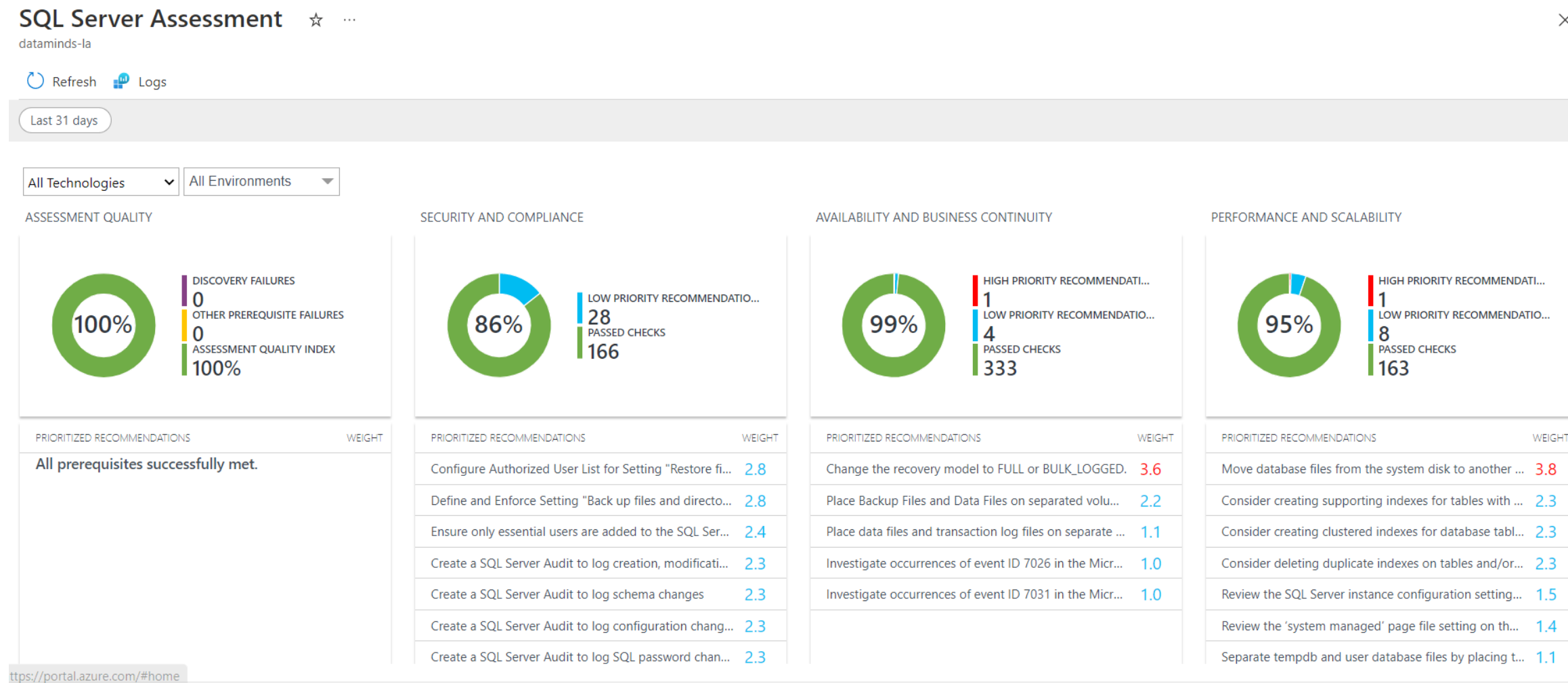
Have Windows Server 2012 machines? Keep machines reaching the end of to Extended Security Updates page in Azure Arc to get started.

Showing 1 to 2 of 2 records.

<input type="checkbox"/>	Name ↑↓	Kind ↑↓	Arc agent st
<input type="checkbox"/>	BEWESQL01		Connected
<input type="checkbox"/>	BEWESQL03		Connected

Best Practices

- Enable on demand best practice assessment



Entra ID authentication

1. Modern Identity Management:

1. Microsoft Entra ID (formerly Azure Active Directory) provides centralized identity and access management.
2. Supports multi-factor authentication (MFA) and single sign-on (SSO).

2. Enhanced Security:

1. Removes the need for self-managed secrets.
2. Communicates securely with Azure resources through managed identity authentication.

3. Authentication Options:

1. Available for both Windows and Linux on-premises SQL Server instances.
2. Supported on SQL Server 2022 (16.x) and later versions.

4. Cloud-Based Identity:

1. Enables secure communication between Azure Arc-enabled SQL Servers and Azure services.
2. Enhances security practices beyond traditional username/password-based authentication.

Security

- Defender For SQL can help you discover and mitigate vulnerabilities.
- Advanced Threat Protection
- SQL Injection
- Brute force attacks
- Suspicious database activity
- Integration with Sentinel capabilities for advanced hunting
- Extended Security Updates

Licensing

- License SQL as PAYG
 - Available for SQL 2012 – 2022
 - 3 models
 - LicenseOnly (“Free Editions” or Server + CAL)
 - Paid (Use existing License with SA)
 - PAYG (Hourly rate)

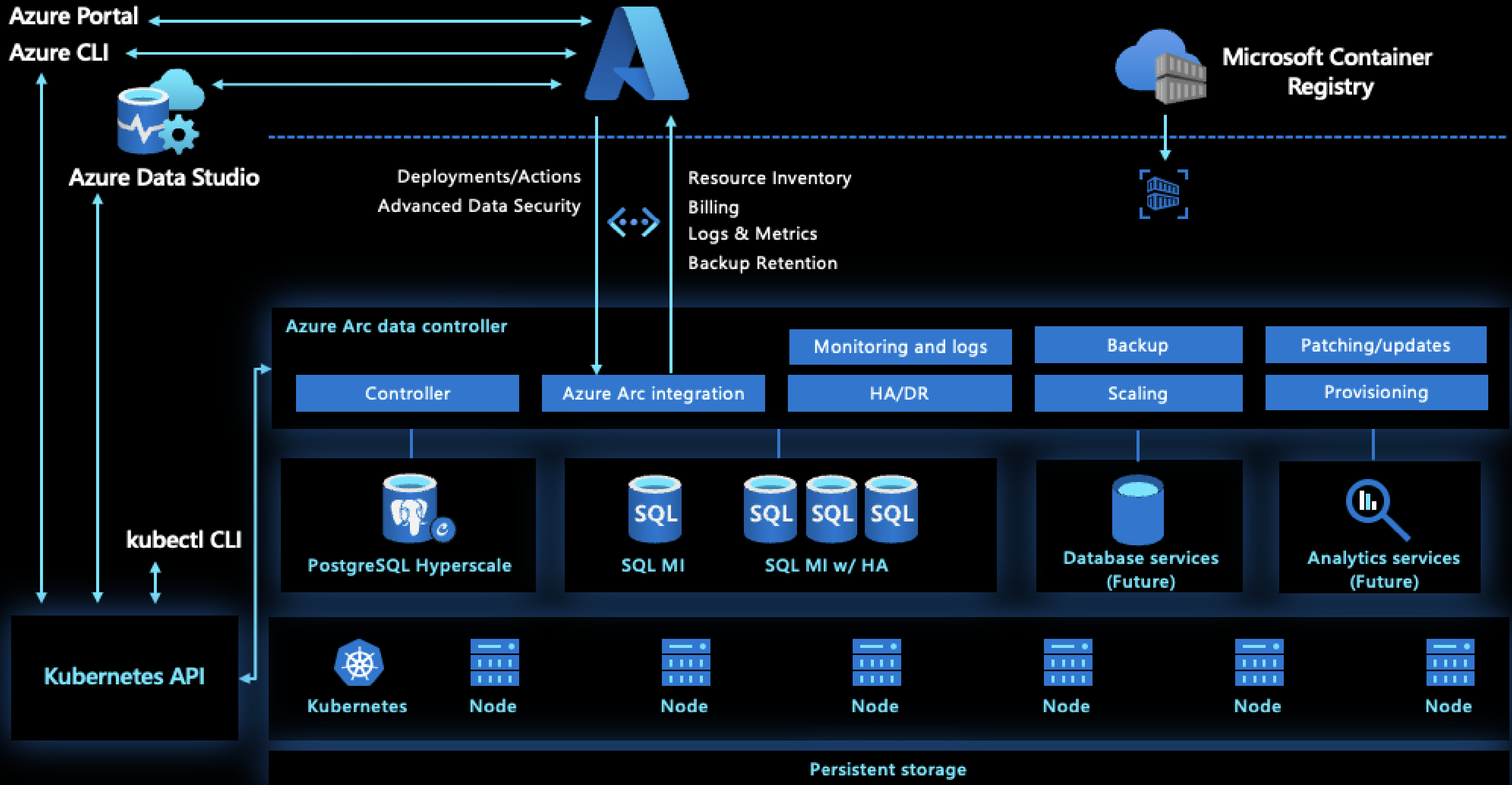
Auditing

- Configure SQL to write to the eventlog and query the data using KQL
- Use SQL Server Auditing / Database Audits
- Check License compatibility
- Leverage the Azure Monitoring Agent (AMA) extension to load your logs onto Log Analytics
- Export Security Logs using AMA
- Log Analytics is immutable
- Create auditing dashboards to view and filter data

Do more with Arc

- Azure App Service (Preview)
- Azure Functions (Preview)
- Azure Logic Apps (Preview)
- Azure Event Grid (Preview)
- Azure API Management (Preview)
- Azure Machine Learning
- Azure Data Services
- SQL Managed Instance
- PostgreSQL (preview)

Azure Arc-enabled data services architecture



Cost governance

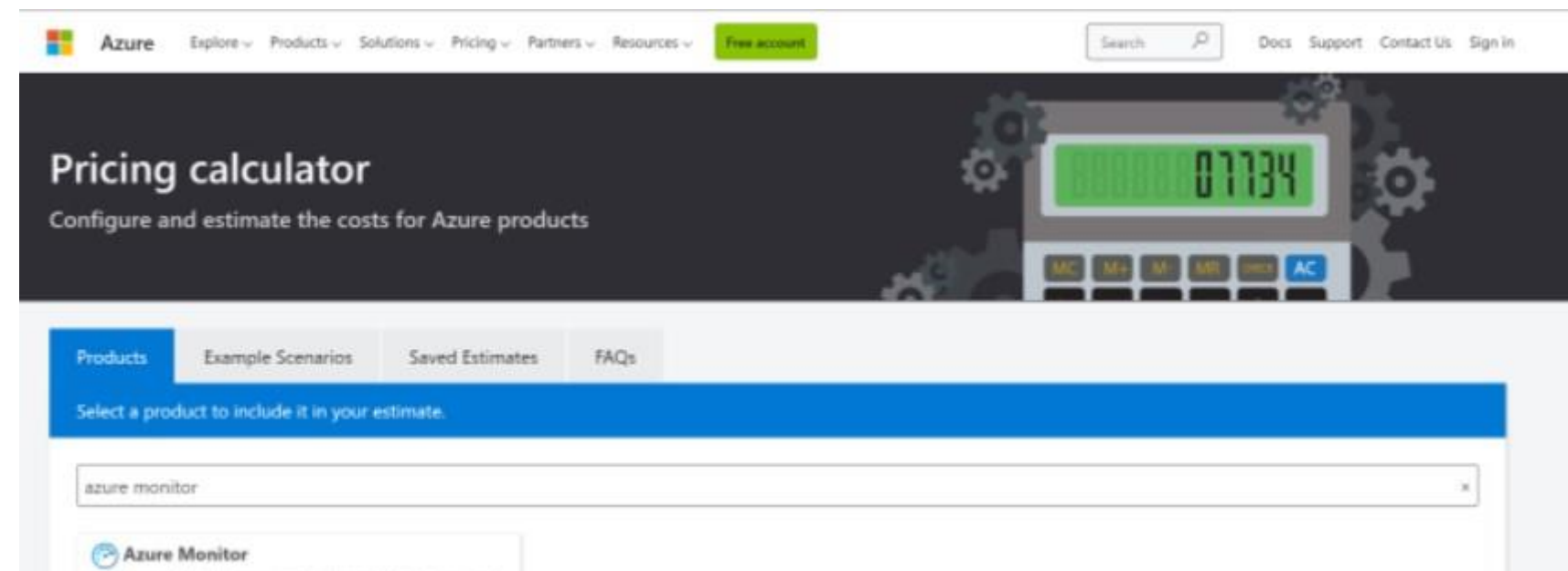
Azure Arc control plane functionality, which is provided at no extra cost includes:

- Arc-enabling a server
- Resource organization through Azure management groups and tags.
- Searching and indexing through Azure Resource Graph.
- Access control through Azure role-based access control (RBAC) at subscription or resource group level.
- Best Practice Analysis
- Windows Admin Center

Azure services used in conjunction to Azure Arc-enabled servers which incur costs according to their usage includes:

- Azure Monitor
- Microsoft Defender for servers / Sentinel
- Azure Automation State Configuration, change tracking, and inventory
- Azure Update Manager
- Log Analytics Usage
- SQL Server PAYG

TIP → Use Azure Pricing Calculator



Demo Time

Summary

Q&A

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Positive digital flow

MORE THAN
27,000
CONSULTANTS

2021
€2.2
BILLION
IN REVENUES

27 COUNTRIES

FRANCE, SPAIN, PORTUGAL, BELGIUM,
MEXICO, LUXEMBOURG, POLAND,
MOROCCO, ROMANIA, BULGARIA,
SWITZERLAND, BRAZIL, TUNISIA,
COLOMBIA, CÔTE D'IVOIRE, PERU,
USA, ANGOLA, CAMEROON,
SINGAPORE, UK, UAE, REP. OF
PANAMA, CHILE, COSTA RICA,
DOMINICAN REPUBLIC, ARGENTINA

6 ACTIVITIES

- + CONSULTING
- + APPLICATION & INFRASTRUCTURE SERVICES
- + SYSTEM INTEGRATION
(Business Solutions, ERP, CRM, PLM...)
- + OUTSOURCING
- + VALUE-ADDED RESELLING
- + SOFTWARE:
 - 4 vertical solutions:
 - Local Government, Insurance, Healthcare & Social, Retail
 - Crosscutting solutions:
 - Time Management (Chronotime)
 - Content Management Solution (Business Document)

MORE

- Proximity-Intimacy-Agility
- Industrialisation-Automation
- Innovation-Business

GROUP ALLIANCES

SAP, Microsoft, Oracle, Salesforce
AWS, IBM, Sage, HRAccess, Google
PTC, Siemens, Dassault Systèmes



7 INNOVATION CENTRES

PARIS, NANTES, LYON,
GHENT, LISBON, MADRID,
CASABLANCA
(Warsaw in 2022)

SPONSOR



Top Sponsor of Paris Saint-Germain Handball



Sponsor of Loitek Gernika Bizkaia (women's basketball)



Sponsor of Sporting Clube de Portugal Futsal

5
VALUES
& PRINCIPLES
OF ACTION

SOLIDARITY
We have a united entrepreneurial spirit.

AMBITION
Our local power fosters our global success.

EXCELLENCE
Our culture of excellence is a product of our daring.

ENGAGEMENT
We keep growing yet stay close to our clients.

INNOVATION
We are constantly co-inventing the technology-based business of our clients.

21 SERVICE CENTRES

APAC (Macau) ■ BRAZIL (São Paulo) ■
COLOMBIA (Bogota) ■
FRANCE (Lille, Lyon, Meudon, Nantes, Toulouse) ■
INDIA (Pune) ■ MOROCCO (Casablanca) ■
POLAND (Warsaw-Poznan-Lublin) ■
PORTUGAL (Lisbon-Covilha-Bragança) ■
ROMANIA (Bucarest-Constanza) ■
SPAIN (Alicante-Bilbao) ■ TUNISIA (Tunis)

10 GROUP PRACTICES

DIGITAL BANKING ■
DIGITAL INSURANCE ■ DIGITAL RETAIL ■
DIGITAL UTILITIES ■ E-HEALTHCARE
INDUSTRY 4.0 ■ SMART CITIES ■
DIGITAL TELECOM ■
DIGITAL TRANSPORT ■
SMART DATA & AI ■

8 BUSINESS SECTORS

FINANCIAL SERVICES
INDUSTRIES
PUBLIC-HEALTHCARE
TELECOM-MEDIA-TECHNOLOGIES
ENERGY-UTILITIES-CHEMICALS
RETAIL-CONSUMER GOODS
TRANSPORTATION-TRAVEL SERVICES
DEFENCE-SECURITY



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CAMEROON | USA | BRAZIL | COLOMBIA | MEXICO | RP OF PANAMA | PERU | CHILI |
COSTA RICA | DOMINICAN REPUBLIC | ARGENTINA | SINGAPORE | UAE

