Azure Environment Analysis Report | Altair Integrated Services

Generated: October 14, 2025 **For:** Azure Managed Services Provider Evaluation **Subscription:** Azure subscription 1 **ID:** [redacted]

Summary

Environment Overview

Category	Details
Subscription	Azure subscription 1 (Altair Integrated Services)
Regions	East US (backend/database), East US 2 (frontend)
Architecture	Full-stack cloud-native - Backend (Container Apps) + Frontend (Static Web Apps)
Environments	2 (Staging + Production)
Resource Groups	3

Resource Inventory

Resource Type	Count	Details
Virtual Machines	0	None - fully cloud-native architecture
Container Apps	2	Staging + Production backends
Static Web Apps	3	Staging + Production frontends + Landing page
Container Registries	2	Standard tier
PostgreSQL Databases	2	Flexible Server v17
Storage Accounts	0	None - using DB storage
Key Vaults	2	Secret management
Log Analytics Workspaces	2	Monitoring & logging

Compute Capacity

Environment	CPU (per replica)	Memory (per replica)	Replicas	Status
Staging	3 cores	6 GiB	1-10	**Running**
Production	0.5 cores	1 GiB	1-10	**Running**

Storage Capacity

- **Database:** 64 GB total (32 GB × 2)
- **Ephemeral:** Up to 100 GiB (scaled across replicas)
- **Images:** ~2-5 GB (container registry)

Key Technologies

- **Backend Compute:** Azure Container Apps (serverless containers)
- **Frontend Hosting:** Azure Static Web Apps (serverless)
- **Database:** PostgreSQL 17 Flexible Server
- **Security:** Azure Key Vault, Managed Identities, Auto SSL
- **Monitoring:** Log Analytics, Azure Monitor
- **Networking:** Public endpoints, custom domains, SSL/TLS, Global CDN
- **CI/CD:** Azure Container Registry + GitHub Actions

Monthly Service Hours

- **Container Apps:** 24/7 operation with auto-scaling
- **Databases:** 24/7 availability
- **Static Web Apps:** 24/7 globally distributed hosting
- **Regions:** East US + East US 2

1. Virtual Machines & Compute Resources

Virtual Machines

Answer: The organization does NOT use traditional virtual machines.

The infrastructure is entirely containerized using Azure Container Apps, which provides:

- Automatic scaling based on demand
- Pay-per-use pricing model
- No VM management overhead
- Container orchestration without Kubernetes complexity

Azure Container Apps (Serverless Containers)

The application uses **2 Azure Container Apps** for the backend services:

Staging Environment STAGING

- **Name:** app-risqai-backend
- **Resource Group:** group-risqai-staging
- **FQDN:** [redacted]
- **CPU:** 3 cores per container
- **Memory:** 6 GiB per container
- **Ephemeral Storage:** 8 GiB per container
- **Scaling:** Min 1 / Max 10 replicas
- **Port:** 3000
- **Status:** Running

Production Environment PRODUCTION

- **Name:** app-risqai-backend-prod
- **Resource Group:** group-risqai-production
- **FQDN:** [redacted]
- **CPU:** 0.5 cores per container
- **Memory:** 1 GiB per container
- **Ephemeral Storage:** 2 GiB per container
- **Scaling:** Min 1 / Max 10 replicas
- **Port:** 3000
- **Status:** **Running**

Compute Summary

Environment	Container App	CPU	Memory	Storage	Replicas	Status
Staging	app-risqai-backend	3 cores	6 GiB	8 GiB	1-10	**Running**
Production	app-risqai-backend-prod	0.5 cores	1 GiB	2 GiB	1-10	**Running**

> ### Total Potential Compute
>
> - **Staging:** Up to 30 CPU cores and 60 GiB memory (at max scale)
> - **Production:** Up to 5 CPU cores and 10 GiB memory (at max scale)

Azure Static Web Apps (Frontend)

The application uses **3 Azure Static Web Apps** for frontend hosting:

Staging Frontend STAGING

- **Name:** frontend-risqai-staging
- **Resource Group:** group-risqai-staging
- **Location:** East US 2
- **SKU:** Standard
- **Default Hostname:** [redacted].azurestaticapps.net
- **Custom Domains:** [redacted]
- **GitHub Integration:** Connected (staging branch)
- **Status:** Succeeded

Production Frontend (App) PRODUCTION

- **Name:** frontend-risqai-production
- **Resource Group:** group-risqai-production
- **Location:** East US 2
- **SKU:** Standard
- **Default Hostname:** [redacted].azurestaticapps.net
- **Custom Domains:** [redacted], [redacted]
- **GitHub Integration:** Connected (master branch)
- **Status:** Succeeded

Production Frontend (Landing Page) PRODUCTION

- **Name:** landing-page-prod
- **Resource Group:** group-risqai-production
- **Location:** East US 2
- **SKU:** Standard
- **Default Hostname:** [redacted].azurestaticapps.net
- **Custom Domains:** [redacted], [redacted]
- **GitHub Integration:** Connected to separate repository (main branch)
- **Staging Environment Policy:** Enabled
- **Status:** Succeeded

Static Web Apps Features

- Globally distributed static content
- Built-in CI/CD from GitHub
- Automatic HTTPS/SSL for custom domains
- Free SSL certificates
- GitHub Actions for deployment
- Preview environments (landing page)

2. Container Infrastructure

Azure Container Registry

The environment uses **2 Azure Container Registries** to store and manage container images:

Environment	Name	Login Server	SKU	Status
Staging	[redacted]	[redacted].azurecr.io	Standard	**Succeeded**
Production	[redacted]	[redacted].azurecr.io	Standard	**Succeeded**

Container Registry Features

- Azure AD authentication enabled
- Admin user enabled for CI/CD
- Public network access enabled
- Export policy enabled
- Image retention: 7 days (currently disabled)
- Geo-replication: Not configured
- Zone redundancy: Disabled

3. Database Services

PostgreSQL Flexible Server

The application uses **2 PostgreSQL Flexible Server instances** for database services:

Environment	Server Name	Version	SKU	vCores	Storage	Auto-Grow	Status
Staging	[redacted]	17.5	Standard_B2s (Burstable)	2	32 GB	No	**Ready**
Production	[redacted]	17.5	Standard_D2ds_v5 (General Purpose)	2	32 GB	Yes	**Ready**

Staging Database Details

- **FQDN:** db-risqay-staging.postgres.database.azure.com
- **Tier:** Burstable
- **Backup Retention:** 7 days
- **Geo-Redundant Backup:** Disabled
- **High Availability:** Disabled
- **SSL:** Required
- **Created:** August 12, 2025

Production Database Details

- **FQDN:** db-risqai-production.postgres.database.azure.com
- **Tier:** General Purpose
- **Backup Retention:** 7 days
- **Geo-Redundant Backup:** Disabled
- **High Availability:** Disabled
- **SSL:** Required
- **Created:** August 26, 2025

Database Total Capacity

Total Database Storage: 64 GB (32 GB × 2 instances)

4. Storage Requirements Summary

Database Storage

- Staging Database: 32 GB (PostgreSQL)
- Production Database: 32 GB (PostgreSQL)
- **Total Persistent Storage: 64 GB**

Container Ephemeral Storage

- Staging Container: 8 GiB per replica (max 10 replicas = 80 GiB potential)
- Production Container: 2 GiB per replica (max 10 replicas = 20 GiB potential)

Storage Accounts

Note: No standalone Azure Storage Accounts detected. The application uses:

- Database storage for persistent data
- Container ephemeral storage for temporary files
- Container registries for image storage

Total Infrastructure Storage

~64-100 GB (accounting for databases, images, and ephemeral storage)

5. Security & Secrets Management

Azure Key Vault

The environment uses **2 Key Vault instances** for secure secrets management:

Environment	Name	Location	Purpose
Staging	[redacted]	East US	Encryption keys for staging
Production	[redacted]	East US	Encryption keys for production

Managed Identities

System-Assigned Identities

- Staging Container App: [redacted]
- Production Container App: [redacted]

These identities provide secure, credential-free access to Azure services including Container Registry and Key Vault.

Secrets Management

Container apps use Azure-managed secrets for:

- Database connection strings [redacted]
- Authentication credentials (Auth0) [redacted]
- API keys (OpenAI, SendGrid) [redacted]
- JWT secrets [redacted]
- CSRF tokens [redacted]
- Encryption keys [redacted]

SSL/TLS Certificates

Environment	Custom Domain	Certificate Management	Binding Type
Staging	api.preview.risqai.co	Azure Managed	SNI Enabled
Production	api.app.risqai.co	Azure Managed	SNI Enabled

6. Monitoring & Logging

Log Analytics Workspaces

The environment uses **2 Log Analytics Workspaces** for centralized logging and monitoring:

Environment	Workspace Name	Pricing Tier	Retention	Daily Quota
Staging	[redacted]	Pay-as-you-go	30 days	Unlimited
Production	[redacted]	Pay-as-you-go	30 days	Unlimited

Monitoring Features

- Container App logs captured in Log Analytics
- Database metrics available through PostgreSQL insights
- Public network access enabled for both ingestion and query
- Data retention: 30 days
- No daily quota limits configured

7. Networking

Network Architecture

> **Note:** No custom Virtual Networks (VNets) detected. Container apps and databases use Azure-managed networking with public endpoints.

The application uses public networking for all services.

Custom Domains

Environment	Application Domain	Container App FQDN
Staging	[redacted]	[redacted].eastus.azurecontainerapps.io
Production	[redacted]	[redacted].eastus.azurecontainerapps.io

Outbound IP Addresses

Container Apps Outbound IPs

Both container apps share a pool of approximately **96 outbound IP addresses** for external communications.

Use Case: These IPs can be provided to external services for firewall whitelisting when the application needs to make outbound connections. (Specific IPs redacted from this report but available upon request.)

Network Security

Current Configuration

- Public endpoints for all services
- No private networking (VNet integration)
- No network security groups (NSGs) configured
- SSL/TLS encryption for all connections
- Database port 5432 accessible with SSL requirement

Document Control

Report Version: 1.0

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Sensitive Data: All credentials, keys, and secrets redacted

This report is intended for evaluation by Azure Managed Services providers. All sensitive information including passwords, connection strings, API keys, and secrets have been redacted.