eQx

eQx Cloud Migration and Modernization Plan

Overview

In late 2024, Michetti Information Solutions Inc. (MIS) purchased eQx Systems. It was generally accepted that MIS would continue to provide existing support but at the same time, "modernize" eQx by improving its look, feel and fundamental architecture.

In 2025, our plan is to have eQx undergo a major shift. While functionality will either remain or improve, we plan on making eQx a cloud-based system as opposed to a structure that operates in an on-premises database. We have two main goals:

1. Modernize the user interface by converting the legacy Oracle Forms and Reports into a responsive web application hosted on the cloud built with enterprise level software and

2. Migrate from an on-premises environment to a cloud-native architecture hosted on Microsoft Azure in the Central Canada Region just north of Toronto. Azure has Systems and Organization Controls 2 Type 2 approval and is designed to ensure the security of sensitive customer data. SOC 2, Type 2 compliance is expected to become the standard for organizations that store data in the cloud.

This initiative ensures that while core functionality is enhanced, data is maintained. The underlying technology will be future-proof, scalable and more secure. We are calling this our **2025 Modernization Initiative: Oracle Forms/Reports to Blazor + Cloud Transition.**

The following pages outline this in more detail.

Current Environment (Legacy Architecture)

eQx currently operates in a fully on-premises, isolated environment.

Typically, there are two servers hosted and maintained by the client: The first server houses the Oracle Database while the second server contains Oracle WebLogic for application communication. The eQx client software must be installed or accessible by all user computers and access is limited to users within the site network, or via VPN and remote desktop for remote access. eQx personnel configure the Oracle Database on one server and the application communication software (Oracle WebLogic) on the other server.

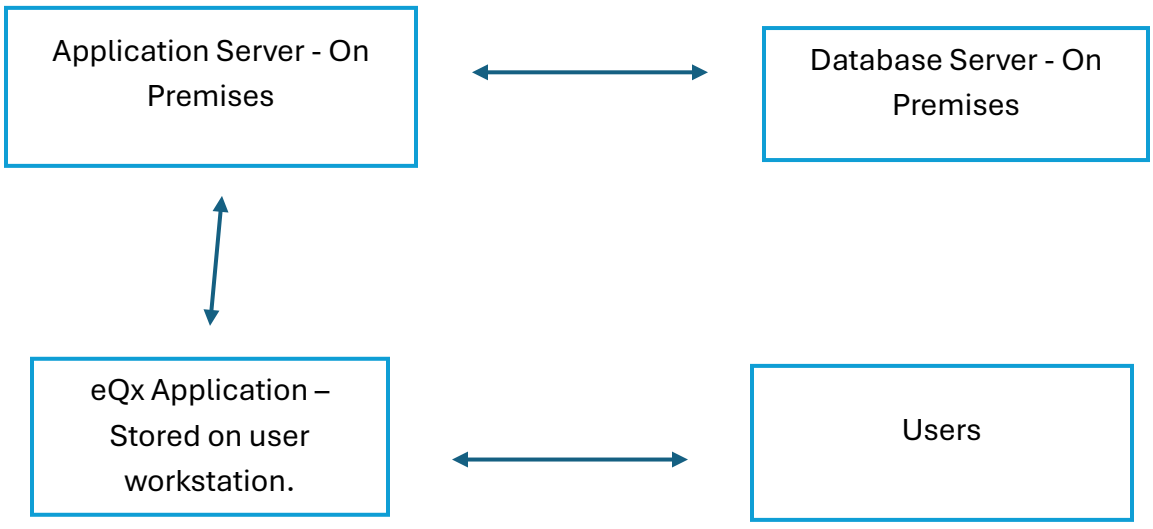
Pros:

- Full client ownership and visibility of data
- Possible low latency when accessed on-site

Cons:

- Requires dedicated IT resources for maintenance and security (extra costs required)
- Risk of data loss due to physical or environmental hazards (e.g., fire)
- Limited remote accessibility – must have a complicated VPN + RDP setup
- Slower release cycles for bug fixes and feature updates

Isolated Environment



Planned Environment – Microsoft Azure – Central Canada location

Our plan is to move eQx to Microsoft Azure, using datacenters located in Central Canada. This ensures data stays within Canada while still leveraging the reliability and scalability of Microsoft Azure. Key changes include:

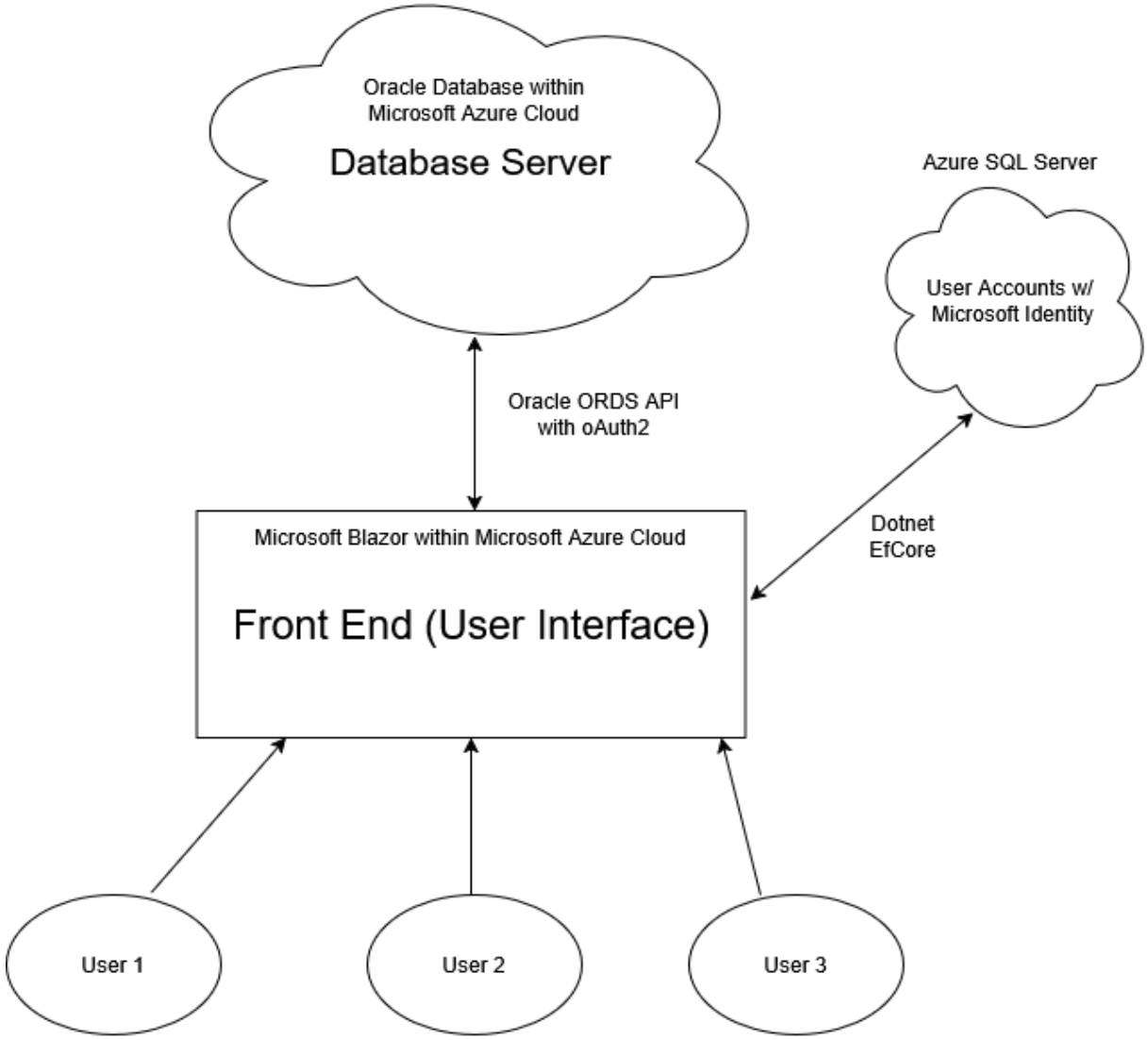
- Hosting the database and infrastructure in Azure with built-in high availability, disaster recovery and backups. It is possible to have a backup every 1-5 minutes on the cloud.
- Replacing the current user interface (Oracle Forms) with a modern web user interface they can access via a browser. This eliminates the need for local installations.
- Integrating Azure Active Directory for secure Single Sign-On (SSO) and access management
- Faster and more secure updates, bug fixes, and security patches

Pros:

- Reduced client IT overhead – infrastructure and security are managed by us
- Improved security using Microsoft's enterprise-grade tools
- Better user experience with a modern web interface
- Faster updates and support
- Accessible securely from anywhere
- Scalable and customizable for future growth

Cons:

- Less physical control over the data (offset by encryption and access control policies)



The database will be hosted in the Azure cloud server and our newly developed web-based user interface will interact with it, allowing users to securely access eQx directly through their browsers.