

# Implementing High Availability for an Application

## DESCRIPTION

**Project Agenda:** To implement high availability for an application

### Description:

Contoso clinic is one of the reputed clinics based in the United States with office locations in Alpharetta and Dallas. It helps treat patients with different kinds of ailments. Contoso clinic's IT department has a website that allows a customer support representative to search for patients in their database and schedule their appointments.

Contoso clinic's IT department treats this website as mission-critical and wants it to be available all the time, as in its absence, they will not be able to set up appointments for the patients, which can result in business loss.

Contoso clinic's IT also stores customers' confidential data in the database. You need to help them store this confidential data without getting compromised.

Contoso clinic's IT also needs you to help them migrate this to Azure to leverage the latest features that it provides.

Contoso clinic's IT team also wants this site to be backed up to prevent any disasters.

Contoso Clinic has these SLA levels to be maintained at any cost:

RTO <= 90 Mins

RPO <= 6 Hours

99.99% Availability

Latency of 5-10 milliseconds in accessing customer data is perfectly acceptable for this clinic.

They have a regulatory or data residency requirement, that is, no data should be moved out of the US in any case.

While maintaining these requirements, they also want to ensure that they are limiting their budget and not overspending on any infrastructure costs.

Contoso clinic's IT does not want any credentials to be made public. They want everything to be running in a private environment with no public connectivity.

For this requirement, you can only use a single region and deploy everything in the same region by copying the database in GRS Storage for database.

**Tools Required:** An Azure Account with root access

### **Expected Deliverables:**

Create two VMs using templates

Install IIS

Connect two VMs

# Implementing High Availability for an Application

Download, extract, and upload a source code from a given repository

Access the website

Create Azure SQL using ARM template

Upload the same source code

Import the database

Test the app and visit the patients' page to verify the data