

BestRx - Remedy using Azure

Technology Specifications

- *Azure Back-up*
- *Azure Data Factory*
- *Cloud Reporting Service*
- *C9 Sync API (Custom API)*

BestRx is a premier pharmacy management software provider for independent and retail pharmacies. Today they serve more than 75,000 clients and provide products that include pharmacy management as well as patient profile, processing and billing, workflow and reporting applications.

Problem

To stand out in a tightening market and prepare for its next phase of growth, Best RX decided to transform its IT infrastructure and transition to the cloud.

BestRx' s IT department had been using multiple on-prem data servers for backing up all their pharmacy client's on-premise data storage. It was getting difficult for BestRx to manage its growing portfolio of services and increasing volume of data by keeping the back-up databases on prem.

They approached Cloud 9 Infosystems, to assess their situation and design a solution that leveraged Azure Cloud to improve their operational efficiencies.

Solution

Cloud 9 as a strategic Microsoft Gold Partner with deep industry understanding and extensive cloud projects under the belt, we were expertly able to layout a unique 2 phased approach that delivered a comprehensive cloud-based solution to perform "always on" data synchronization from their pharmacies to a centralized server on Azure.

Phase 1

- **Goal:** To build a service that will run continuously and will seamlessly perform full Database Backup operations for each client pharmacy within the required time interval. Upon completing a successful backup, the service should also keep the backup files in Azure blob storage.
- **Goal:** To build a service that will restore pharmacy databases (backup-sets in Cloud) to BestRx Central server.

To fulfill these goals Cloud 9 developed a 3-component integrated solution.

1. **Cloud Reporting Service**
Cloud Reporting service was the main component of the solution as it performed the required Database backups and uploaded them to the designated Cloud storage.
2. **C9 Sync API**
C9 Sync API is an API service in Azure that retrieves Pharmacy information from the BestRx master database (MDB). This API is subsequently used by the Cloud Reporting service to get an update on any and all Pharmacy information.
3. **Azure Data Factory Pipeline**
Azure Data Factory Pipeline was the third component in the integrated solution. It restored all the required database backup sets of all client Pharmacies to the BestRx Central database server.

Phase 2

Cloud 9 worked on a parallel solution to perform the incremental-increased backups option. It was successfully able to deliver the following redesigned components.

1. **Cloud Reporting Service – Enhanced**
Cloud Reporting Service was redesigned to execute the incremental backup(s) of the pharmacy databases and upload them to Azure Blob Storage. Also, the newly refreshed workflow performs a File sync operation for each Pharmacy where it will upload/sync all local Images to the respective blob storage area.
2. **Restore Service**
Restore solution was designed and implemented to restore all the database backup sets for all client Pharmacies to the BestRx Central database server with unique email alert system

The Remedy

ACCESSIBILITY: BestRx can now access the databases for all their pharmacies on the go from anywhere using Azure SQL Server.

PERFORMANCE: It performs continuous and seamless incremental database backup with minimum personal involvement on a specific time interval for any pharmacy.

REPORTING: The company can easily create reports from the centralized server with the restored data from the pharmacy to the main server.

As a result of Cloud 9's assistance, BestRx is now able to operate at a 99.9% uptime and perform under an "always on" Cloud back-up synchronization and reporting structure that has increased BestRx's overall enterprise infra efficiencies by 60%.