**MAPR**

**Emtec**
Business & Technology Empowered

# OPTIMIZE BIG DATA WITH EMTEC, MAPR AND MICROSOFT AZURE

## UNLOCK NEW DATA CAPABILITIES BY INTEGRATING AZURE AND MAPR

Big data is the gateway for organizations to get insights into massive datasets, predict new trends, correlate data, and find patterns. These digital transformation initiatives in data analytics are enabling new trends and innovations in the enterprise.

Microsoft Azure Cloud promises a high-availability platform for your data analytics needs with on-demand scalability and flexibility on a pay-as-you-go model. The integration of this technology with MapR clusters enables cost-friendly and on-demand Azure cloud services.

## Take Control of Data Growth by Integrating Big Data and Cloud

The large and expeditiously growing volume of data within on-premise systems has been mostly untapped by current analytical applications and data warehousing systems.

IT teams are under tremendous pressure to capture and analyze this massive chunk of structured and unstructured data so it can be used in decision-making processes. Combining both the performance and functionality of cloud with big data gives the one-two punch organizations need to and optimize big data analysis and consumption.

Emtec, a Microsoft Gold Partner, delivers enterprise applications with the MapR Converged Data Platform in Azure Cloud as a cost-effective approach to big data, potentially saving millions of dollars.

## Moving on-premise Data to Azure to Optimize MapR
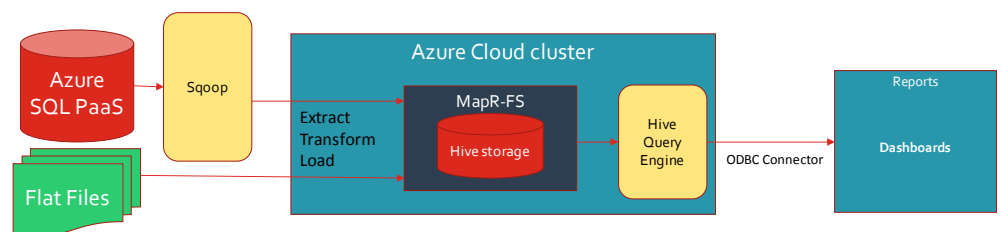


Integration of MapR and Microsoft Azure delivers simplified deployment, unlimited scaling and seamless interoperability.

When preparing data to be moved from on-premise to cloud, Emtec investigates the type of data that will be moved, and provides an evaluation and determination of cloud readiness for existing applications.

Emtec ensures proper data segregation and then makes the decision on what data needs to be retained in the captive center and what needs to be moved.

# OPTIMIZE BIG DATA AND CLOUD

## Emtec – MapR and Azure Integration Stages

1.  **Cluster infrastructure:** This collection of infrastructure is the set of hardware and software that manages the functioning of nodes that work together as a cluster. Emtec's begins the implementation by setting up the client's cluster infrastructure in Azure.

2.  **Resource groups:** These groups facilitate ways to monitor, control access and manage the allocation of assets that are required to run an application, or to be used by the client. Emtec creates these resource groups.

3.  **Azure storage:** This elastic cloud storage is the solution for applications that are dependent on durability, availability and scalability. Emtec creates an Azure storage account for the client in this stage.

4.  **Security policy for resource group:** The security policy is the set of controls that are preferred for resources within the subscription period of the resource group. Emtec customizes these depending on client needs and the sensitivity of the data. The customization can be done by selecting ON or OFF from different types of recommendations in the Azure Security Policies.

5.  **Field level security in Hive columns:** The next stage includes field-level security in Hive columns by writing custom UDF for encryption and decryption of the columns. Business-critical data needs to be safeguarded in the database by encrypting it, and decrypting it to make it accessible during the times of need.

6.  **Virtual network:** The Azure Virtual Network service enables a safe and secure connection of Azure resources with other virtual networks. Emtec monitors the creation of the VNet to ensure it's connected to the client's on-premise network and represents it in the cloud. VNet is the rational isolation of the Azure cloud committed to the subscription.

7.  **Disaster recovery:** Emtec ensures fully secured disaster recovery by utilizing MapR special capabilities that include mirroring, and table and stream replication. The MapR platform has built-in, enterprise-class DR for files, events and databases. Emtec delivers real-world DR scenarios with MapR in recovering lost data that prevents failed productivity and revenue loss.