CT Visa: Migration Accelerator for Azure Synapse to Microsoft Fabric

Traditional Enterprise meets Modern Cloud Solutions

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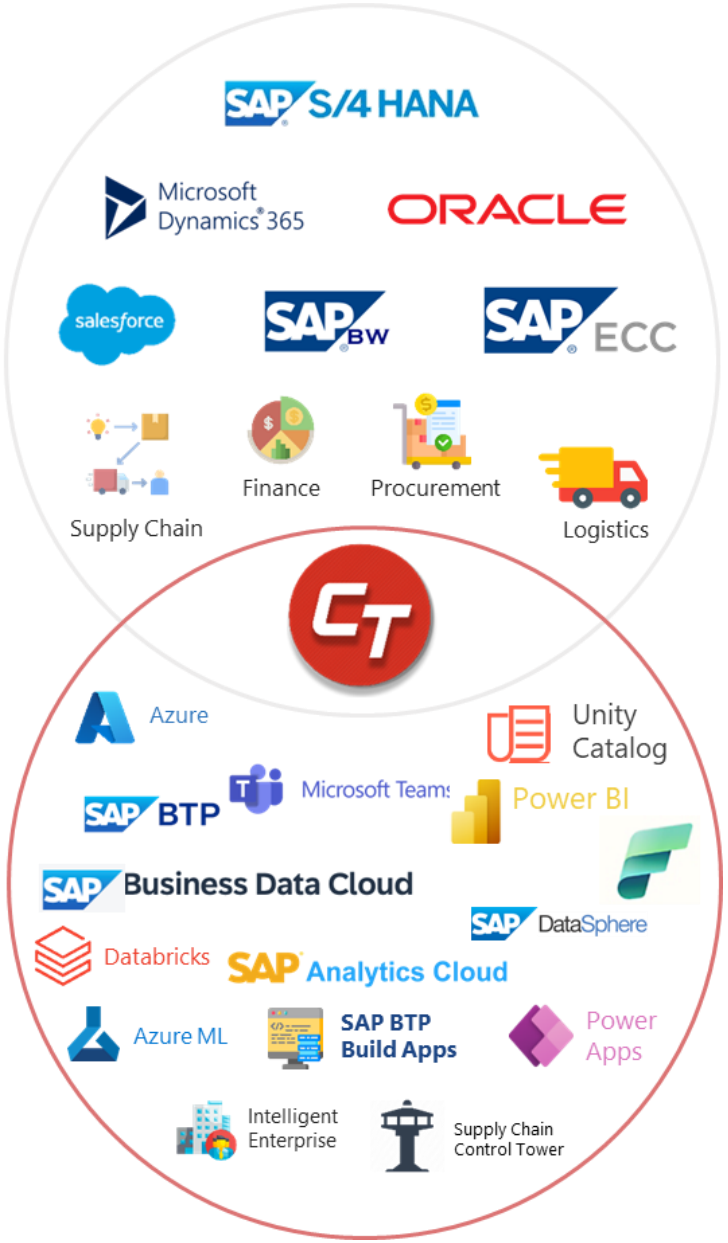

Microsoft Solutions Partner

Microsoft AI
Partner of the Year - Global

Microsoft AI
Partner of the Year - India

Microsoft Rising Star
Partner of the Year - APAC

Azure Data AI
Partner of the Year - Malaysia

Microsoft Country
Partner of the Year - India

databricks Elite Partner

Databricks Partner of the Year - APJ

Partnerships

- Microsoft Solutions Partner
- databricks Elite Partner
- SAP Silver Partner
- sigma
- aws PARTNER Advanced Tier Services

3000+ Employees

1550+ Azure Certifications

500+ Data Scientist Certifications

1000+ Databricks Certifications

Advanced Specialization

- AI & Machine Learning
- Advanced Analytics
- Infra Migration to Microsoft Azure
- Kubernetes
- Cloud Security
- SQL server and Windows Migration server and Windows Migration

Industries We Serve

- Manufacturing
- Retail & CPG
- Financial Services
- Energy & Sustainability
- Healthcare & Life Sciences
- Media & Entertainment
- Education

Global Presence — Americas | Europe | Middle East | APAC (India, SEA, Australia, Japan)

Solution Areas

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Data, AI, Apps & Infra

- Big Data (ADX, Cosmos)
- Fabric
- Open AI
- Cognitive Vision
- Databricks
- AI/ML
- Azure VM
- Azure
- DC Migration
- VPN Gateway
- Load Balancer
- SQL Database
- Application Modernization
- Azure DevOps
- Super Apps

Reduced Cost, Faster Development, Insightful Data

Security

- Identity Governance
- Microsoft Entra ID
- Multi-Factor Authentication
- Endpoint Management
- Azure Sentinel
- Zero Trust
- Defender for Cloud
- Defender for Cloud Apps
- Defender for Endpoint
- Microsoft Purview
- Azure Policy
- Defender XDR

Secure your Data and your business

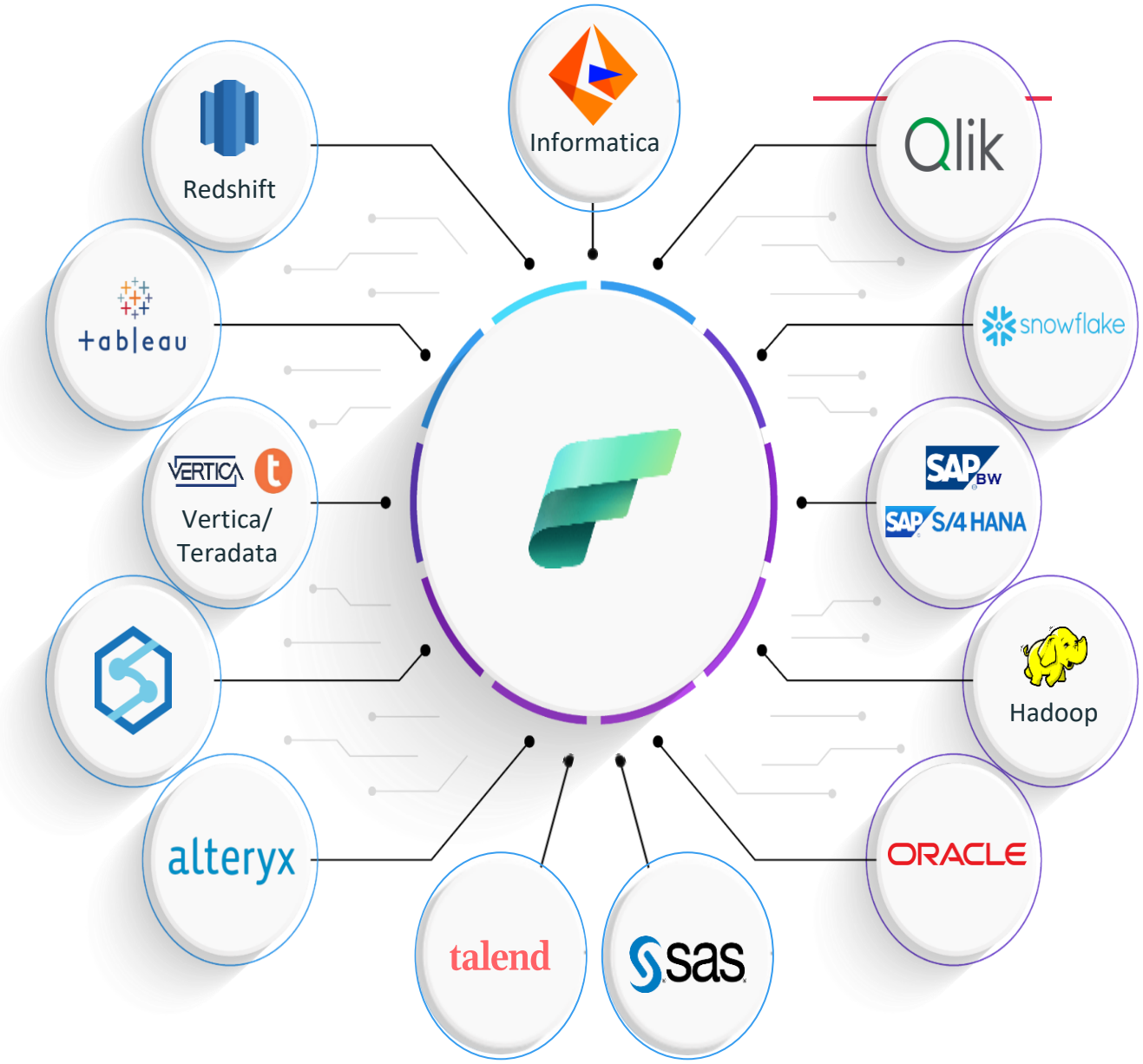
Modern Workplace & Business Apps

- Microsoft Viva
- CoPilot
- 
- SharePoint
- Microsoft Teams
- Power Apps
- Power Platform
- Power Automate RPA
- Power BI
- Microsoft Dynamics 365

Enhanced productivity, ease of business

CT Migration Practice

30+	Presales Solution Architect
45+	Delivery DS
15+	Projects in Last 6 Months
20+	Projects in Progress
300+	DP-600 Certified
150+	DP-700 certified
15+	Accelerators & Frameworks



Celebal Innovations Using Data Services on MS Fabric

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1. Apache Spark Based Analytics Platform

- Spark SQL and DataFrames
- Streaming and Batch Data Support
- ML Libraries
- Graphs and Graph Computation
- Spark Core APIs (R, Scala, Python, and JAVA

2. Unified Data Platform

- Collaborates with all major Data Sources
- Leverage within One-Lake Environment
- Flexibility in variety of data types
- Integration with AD for user management

3. AI & ML/MLOps

- Automated ML Models
- Experiment Tracking
- Model Management
- Model Deployment
- Simplified Machine Learning DevOps

4. Leverage Lakehouse

- Store Disparate Data type
- Prevent delta data loss
- Fluent data stream management

5. Migration Compatibility for SQL

- Migrate from Legacy EDWs like Netezza
- Direct Compatibility with SQL versions

6. Co-Pilot Enablement

- Code Automation
- Data Insights
- Responsible AI

7. OneLake Implementation

- Leverage EDW and Data Lake at once
- Better control over Disparate Data Types
- Store Power BI Datasets
- Increased efficiency for ETL

8. Unified Data Governance

- Azure Purview
- Centralized Governance for Data
- Built-in Data Search and discovery
- Performance and scale
- Automated Lineage for all workloads

Measurable Benefits of Microsoft Fabric Adoption

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1
30-50%
Faster Data Processing with optimized pipelines

2
80% Less
Data Duplication with a unified data Lakehouse

3
50% Less
Manual Effort due to automation & low-code implementation

4
3x Faster Deployment
compared to traditional data warehouses

5
5x Faster
Insights with AI-driven analytics and automation

6
40% Cost Reduction
by eliminating redundant infrastructure

7
30-50% Lower
Operational Costs vs. legacy systems

8
99.99%
Uptime & Reliability with built-in cloud scalability

9
70% Reduction
ETL Time with integrated ELT pipelines

CT Visa: Migration Accelerator for All Migrations to Fabric

CT Visa is the migration accelerator for Azure Synapse to Microsoft Fabric. This is a comprehensive migration tool that automates the migration of various data assets from EDW system to Cloud Platform, including complex SQL queries and ETL workloads. It streamlines the transition by ensuring compatibility and minimizing manual effort and enabling seamless integration with Fabric's Lakehouse, data engineering, and Power BI layers.

Data Governance + Dashboards + Documentation + Deployment = Imagine the possibilities that can be unlocked

Features

Data Validation

Ensuring post-migration **data integrity** entails verifying the absence of data loss or duplication, the preservation of **referential integrity**, and the **continued accuracy** of dependent business logic and analytical processes.

Data Governance

Replication and **implementation** of the best data governance practices for a **secure migration and implementation** experience

Rollback strategies

Detailed migration strategies for effective **rollback procedures** to ensure a robust and **cost-effective** migration supported by **potent rollback mechanisms**

Key Benefits

- Real-Time query report for data validation
- Accelerating migration by 70%
- Automated migration process – Effortless integration & target migration platform
- 30-35% decrease in Total Cost of Ownership
- Uses optimized algorithms to optimize performance and resource usage

With Celebal Technologies, accelerate your digital transformation and make your migration journey swift and successful.

Why Transition from Synapse to Microsoft Fabric?

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Benefits

Modernize Data Platform

Microsoft Fabric combines Power BI, Azure Synapse Analytics, and Azure Data Factory into a unified SaaS platform, facilitating seamless data management and analytics with AI-driven insights.

Enhanced Security and Governance

Fabric integrates with Microsoft Purview, offering advanced data security and compliance. It ensures consistent security enforcement across all data engines and workloads with a universal security model.

Improves Efficiency

Fabric optimizes performance and reduces operational costs by utilizing unified compute capacities, allowing unused capacity in one workload to be used by another.

Unified Data Management

Fabric's OneLake provides a single, unified storage system that eliminates data silos, ensuring easy data discovery, sharing, and consistent policy and security enforcement.

Future-Readiness

As Microsoft advances its cloud offerings, Fabric represents the future of its data platform. Migrating to Fabric ensures organizations stay aligned with the latest innovations, features, and support from Microsoft.

Scalability

Fabric supports enhanced scalability, managing larger datasets and complex queries efficiently. It integrates multiple data sources and offers a hierarchical data organization model.

CT Visa is an accelerator designed to modernize the enterprise data platform by transitioning workloads from Azure Synapse to Microsoft Fabric, improving data management efficiency, security, and operational performance.

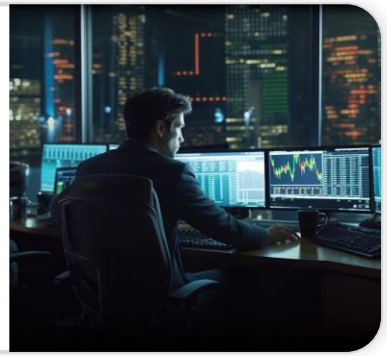
Migration Process

1 Deploy

Deploy Spark clusters, pipelines, and storage configurations in Fabric, ensuring all components are optimized for performance and security.

2 Convert

Convert SQL or Spark scripts to Fabric Notebooks, addressing compatibility issues and ensuring functional consistency.



3 Ingest

Ingest data and scripts into the Fabric environment, automating the process with Fabric pipelines for efficient migration.

4 Log

Maintain detailed logs of migration activities for transparency, troubleshooting, and auditing purposes.

5 Analyze

Analyze the migrated data and workloads to verify performance, accuracy, and system stability, leveraging Fabric's monitoring tools.

6 Validate

Validate the migrated data and workloads through testing to ensure accuracy, integrity, and optimal performance.

Migration Scenarios

Scenario 1 – Dedicated SQL Pool to Fabric Synapse Warehouse

- **Process Flow:**

  How do we seamlessly transition SQL Pools to Fabric Warehouses?

Scenario 2 – Dedicated SQL Pool to Fabric Lakehouse (Notebooks)

- **Process Flow:**

  How do we adapt SQL Pools for Lakehouse integration?

Scenario 3 – Apache Spark to Fabric Lakehouse (Notebooks)

- **Process Flow:**

  How do we migrate Spark processes to Fabric Lakehouse?

Scenario 1: Dedicated SQL Pool to Fabric Synapse Warehouse

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Process Flow

Synapse Environment

Creation of Meta Data Table

Fabric Environment

Load the Metadata Table into the Fabric Pipeline

Run all the create script through Fabric Pipeline and maintain Logs

- Schema
- Table
- Views
- Create Stored-procedure

Scenario 2: Dedicated SQL Pool to Fabric Lakehouse (Notebooks)

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Process Flow

Synapse Environment

Creation of Meta Data Table

Using OpenAI to adapt code for Fabric compatibility

Fabric Environment

Load the Metadata Table into the Fabric Pipeline

Run all the create script through Fabric Pipeline and maintain Logs

- Schema
- Notebook
- Table
- Views

Scenario 3: Apache Spark to Fabric Lakehouse (Notebooks)

Process Flow

Synapse Environment

Apache Spark Notebooks

Fabric Environment

API Call

Notebook Run

Run all the create script through Fabric Pipeline and maintain Logs

- Schema
- Notebook
- Table
- Views

Efficiency Impact Analysis of Migration Accelerator

	Small
	Migration
Tables	50-100
Views	20-30
Stored Procedures	30-50
Functions	20-30
Volume	500 GB
Weeks	2 Weeks

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Thank You