Appliance migration to Azure Synapse
Migrate your current data warehouse solutions to Azure Synapse quickly

Accelerate your current cloud journey by adopting modern data platforms and migrate your data warehouse in on-premise/other clouds to Azure Synapse with Mindtree’s self-migration solution.

Below are the core features of our solution:

1. **True Platform**
   Provides a platform to accelerate the migration of on-prem data warehouses/cloud DW to cloud data warehouses

2. **Self-service**
   Customers can configure their DW and test the migration by themselves

3. **Automation-enabled**
   Helps with below functionalities
   - Automated assessment and reporting
   - Automated data type and schema conversion
   - Automated movement of data
   - Automated reconciliation and reporting

4. **Always ON**
   Always on UI & logics, which are 24x7 live and working platforms – ready as MVP and readily deployable

5. **Technology-agnostic**
   Supports migration from all source data warehouses like Snowflake, BigQuery, RedShift, GreenPlum, Teradata, Netezza and Oracle

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**Customer Challenges**

1. Deriving meaningful insights from data and converting knowledge into action
2. Accelerating speed to discover, automated data type, DDL, DML conversion to Synapse
3. Migrate data from on-premises to cloud to leverage advantages of cost and agility. High ROI for the migration efforts with reduced cost to insights
Tools and Technologies

- Data Orchestration: Synapse Data integration
- Data Lake: Azure Data Lake Storage
- Data Catalogue: Azure Data Catalogue
- Data warehouse: Azure Synapse – Dedicated SQL Pools
- Data Transformation: Synapse Spark Pool
- DW Environment: Azure Synapse Analytics

How it Works?

The logical solution view has the flow in which the data migration is performed and is as below:

1. Supports all data warehouses as source - Snowflake, BigQuery, RedShift, GreenPlum, Teradata, Netezza, Oracle.

2. Source DW Analyzer: This provides assessment and fitment analysis for the source and its support on the Synapse dedicated pool. It analyses the data type support, schemas and DML, and generates a fitment analysis report. Azure Synapse Pathway would be used for assessment and report generation.

3. Lexer, Parser and Optimizer: The SQL statements are broken into logical tokens and parsed using a set of parser rules. The schema is generated and optimized for synapse dedicated SQL pool support. It is augmented by the master optimization rules catalog and dictionary, which can be enriched according to the customer’s requirements.
4. Data Migrator – Scripts are generated for all DDL and DML, and data is migrated at scale to Azure Synaps. The source target metadata is captured for data governance in Azure data catalog.

5. Reconciler – The source and target data are validated and reconciled. The report is generated for reference.

**Benefits**

1. **Jumpstart your migration**: 50% efficiency and time-to-market through automation and swift migration to Azure Synapse.

2. **Customization and test**: Self-service capabilities with dedicated environments for each of our customers, who work along with the Mindtree team to customize solutions as needed.

3. **Reduced cost-per-Insight**: 30% migration effort saving and ability for quick MVP with less turn-around time. Easy to productionalize, since it is completely automated.

4. **Establish a data and analytics market place**: Ability to leverage our unified platform to initiate data sharing in the market place - Metadata-driven data pipeline design, which enables automated sharing.

**Delivery Approach**

Below is the proposed delivery approach on swift migration to Azure Synapse. Within six months, the customer can complete their DW migration and achieve RoI, enable data sharing in the market place and derive business insights from Azure Synapse.
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About Mindtree

Mindtree [NSE: MINDTREE] is a global technology consulting and services company that enables enterprises across industries to drive superior competitive advantage, customer experiences and business outcomes by harnessing digital and cloud technologies. A digital transformation partner to more than 260 of the world’s most pioneering enterprises, Mindtree brings extensive domain, technology and consulting expertise to help reimagine business models, accelerate innovation and maximize growth. As a socially and environmentally responsible business, Mindtree is focused on growth as well as sustainability in building long-term stakeholder value. Powered by more than 31,900 talented and entrepreneurial professionals across 24 countries, Mindtree — a Larsen & Toubro Group company — is consistently recognized among the best places to work.

For more, please visit www.mindtree.com or @Mindtree_Ltd.