# WinWire

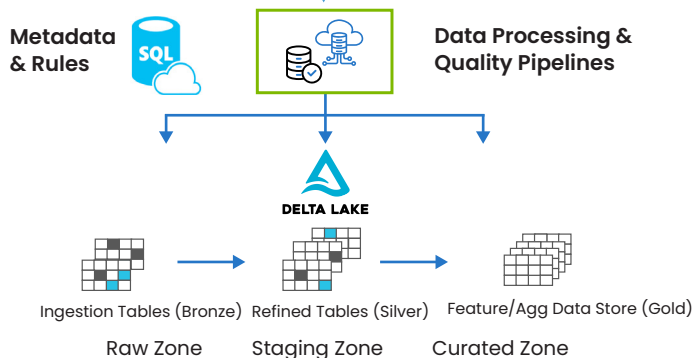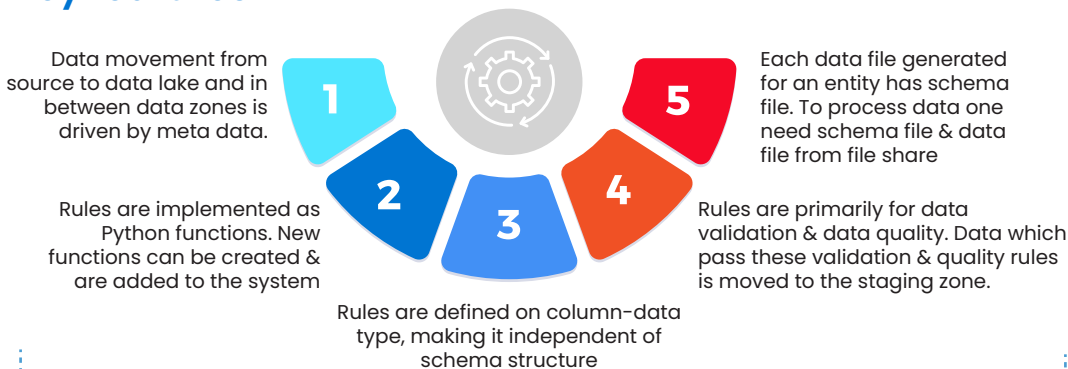# Automated Ingestion & Data Quality (AIDQ) Framework

Organizations gather data from multiple sources in various formats. The greater the number of data sources, the better insights are to make informed decisions, customize offerings, and enhance customer service.

As organizations adopt the modern data architecture of Data Lake and Lake House, they can rapidly end up having a huge number of data ingestion codes, leading to increased cost of maintenance, poor data quality, and standardization issues.

## WinAIDQ Framework

WinWire's Automated Ingestion and Data Quality (WinAIDQ) is a unified, extensible platform-agnostic framework that enables enterprises to adopt a meta-driven reusable data ingestion and quality practice by bringing together well-defined processes and best practices. WinAIDQ expedites data ingestion from multiple sources to data lakes or cloud data warehouses.

## Key features

**1** Data movement from source to data lake and in between data zones is driven by meta data.

**2** Rules are implemented as Python functions. New functions can be created & are added to the system

**3** Rules are defined on column-data type, making it independent of schema structure

**4** Rules are primarily for data validation & data quality. Data which pass these validation & quality rules is moved to the staging zone.

**5** Each data file generated for an entity has schema file. To process data one need schema file & data file from file share

Metadata & Rules → SQL

Data Processing & Quality Pipelines

**DELTA LAKE**

Ingestion Tables (Bronze) → Refined Tables (Silver) → Feature/Agg Data Store (Gold)

Raw Zone    Staging Zone    Curated Zone

• Data processing & quality pipelines are built using Python Notebooks (Spark Pools)/Data Flow
• Allows to keep functions schema agnostic, can be applied to any entity based on configuration.

## Customer Story

A leading animal health company leverages WinAIDQ to standardize and extract valuable Insights about their products, inventory, capacity planning, supply chain to save cost and improve efficiencies.

View customer testimonial

## Key Benefits

- 50% reduction in overall development time.
- Standardized deployable artifacts.
- Metadata-driven ingestion using control & tables.
- Rapid rule-based data quality ingestion and validation.

## Getting Started: Pilot Solution in 4 Weeks

- Architecture and design for data ingestion and data quality management.
- Setup of WinAIDQ, configuration, of metadata.
- Scale out plan for adoption of WinAIDQ.