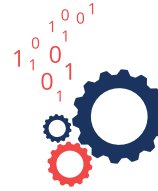


# Agile Data Warehouse Automation



## Answering Business Challenges

Today's business intelligence (BI) teams want to rapidly integrate and transform data to meet fast changing, real-time business analytics requirements. But they struggle with brittle, hand-coded data warehousing processes that increase management complexity, cost and dependence on developer resources.

### Attunity Compose offers a fresh approach to data warehouse automation

Attunity Compose automates the design, implementation and updates of data warehouses and data marts. It minimizes manual, error-prone data warehouse design processes by automating data modeling, ETL generation and workflow. Using Attunity Compose, data architects and project managers can speed analytics projects, optimize process and reduce risk.

Attunity Compose flexibly supports either a model-driven methodology, guided by business processes, or a data-driven methodology that is based on reporting requirements. Both methods can easily adapt to new requirements by rapidly propagating source or model changes through the data warehouse environment.

Attunity Compose also reduces the time and cost of analytics projects on cloud platforms such as Amazon Redshift and Teradata Cloud. Users can quickly spin up, scale up, and iterate their data warehouses, dynamically adjusting data sources and models based on changing business requirements.

Working together with Attunity Replicate data ingestion and replication software, Attunity Compose automates the Extract (the E in the ETL) data process from multiple, heterogeneous sources without manual coding efforts. BI teams can manage and monitor workflow end-to-end, executing tasks as a single process for deployments of any size.

### Benefits

- Accelerate data warehousing projects
- Reduce risk and ensure consistency
- Improve business impact of analytics
- Reduce time, cost and development requirements

**ATTUNITY COMPOSE** | rep64 | rep64/replicate | V2.9.0.98 | Help |

Consolidated Data Ware... | Designer | Monitor

| Section        | Item                              | Count             |
|----------------|-----------------------------------|-------------------|
| DATABASES      | 1 Data Warehouse DWH              | 1                 |
|                | 3 Source Databases AdventureWorks | 3                 |
|                | CRM                               | 1                 |
| MODEL          | 69 Entities                       | 69                |
|                | 92 Relationships                  | 92                |
|                | 223 Attributes (Domains)          | 223               |
| DATA WAREHOUSE | 105 Data Warehouse Tables Present | 105               |
|                | AdventureWorks                    | 4939 instructions |
|                | CRM                               | 117 instructions  |
|                | ERP                               | 301 instructions  |
| DATA MART      | 3 Data Marts Present              | 3                 |
|                | Accounting                        | 387 instructions  |
|                | Marketing                         | 387 instructions  |
|                | Sales                             | 292 instructions  |

## Intuitive Solution for Data Modeling, Execution and Updates

### Extract and sync data from sources with ease

- Load source feeds in real time with Change Data Capture (CDC)
- 'Zero footprint' technology doesn't require agents on source systems
- Integrate with heterogeneous source systems – RDBMS/Mainframe/Hadoop

### Automate model design and source mapping

- Create or import data models
- Enable an agile development approach: implement, change and adjust
- Modify and enhance the data model iteratively
- Map source automatically to data model

### Automate data warehouse and ETL generation

- Auto-generate ETL code to populate and load data warehouses and data marts
- Easily propagate changes in data model and move data to physical structure
- Automatically maintain history of data (e.g., slowly changing dimensions)
- Profile data; identify and remediate issues; improve data quality

### Deploy data marts without manual coding

- Define and manage data marts with a few clicks of a mouse
- Automatically generate ETL to populate a data mart
- Select data mart types from a broad array of options: transactional, aggregated or state-oriented
- Access data with standard enterprise BI visualization tools such as Qlik, PowerPivot, Cognos, SAP BusinessObjects and Tableau

## Key Operational Features

**Workflow Designer and Scheduler:** Attunity Compose provides a built-in workflow designer that runs all data warehouse and data mart ETL tasks as a single, end-to-end process. Users also can schedule workflow execution tasks.

**Lineage and Impact Analysis:** Attunity Compose automatically creates metadata during design phases or during the data warehouse implementation process. It further provides a visual map of data flow from source to data warehouse and data marts to facilitate easy planning and monitoring. Users also can regenerate data lineage when changes are implemented.

**Monitoring and Notification:** Attunity Compose monitors the status of all automatically generated tasks and workflows, enabling users to drill down on information for selected tasks. They also can proactively manage their environment by configuring automatic event notification messages.

**Data Profiling and Quality Management:** Attunity Compose profiles data and helps improve data quality for more accurate reporting. Users can identify data gaps, format discrepancies and other issues, and repair them before loading. They can configure and enforce rules for automatic discovery and remediation of issues with values, formats, data ranges, and duplicates.

**Simplified Development, Testing, Acceptance and Production (DTAP):** Attunity Compose further accelerates data warehousing initiatives with the ability to create and deploy project deployment packages directly from the Compose user interface. Project deployment packages can be used to back up or migrate projects between different project stages.

**Version Control.** Attunity Compose further optimizes the data warehousing process by centralizing and automating project version control. Compose uses the built-in version control Git engine to enable Compose developers to commit project revisions to both local and remote Git repositories. If a mistake is made, Compose developers can easily roll back to earlier versions of the project while minimizing disruption to all team members. Users can also compare, lock and/or merge versions and track changes, improving team productivity and agility.

### Agile Data Warehouse Automation with Attunity Compose

