

FAQs About **Astera DW Builder**

❖ Astera DW Builder at a Glance

Astera DW Builder is an advanced data warehouse automation platform that offers an agile, metadata-driven approach to building on-prem and cloud data warehouses. It is designed to simplify and streamline the process of design, development, and maintenance, ensuring the fastest time-to-production to fuel your analytics initiative. The solution provides an integrated development environment that automates all standard tasks of dimensional data modeling, dimension and fact loading, and deployment of your data warehouse.

Here are some commonly asked questions answered to help you evaluate the capabilities of Astera DW Builder:

❖ Platform Support

a. What databases, cloud providers, and web applications do your tool support?

Astera DW Builder provides native connectivity to over 40 databases, file systems, cloud providers, and web applications, including SQL Server, PostgreSQL, MariaDB, Vertica, Amazon Redshift, Salesforce, Teradata, SAP, Snowflake, Google Cloud, Microsoft Azure, Excel, CSV, PDF, and many others. You can find the complete list of connectors here: <https://www.astera.com/solutions/integration-solutions/>

b. Do you offer more than ODBC connectivity to source data?

Yes, in addition to providing ODBC connectivity to a large number of sources, the tool offers native connectors to popular databases, web applications, ERP systems, CRMs, and others. Astera DW Builder also supports connectivity through REST APIs.

❖ Design Approach

a. Does your tool support a data-driven or model-driven approach?

Astera DW Builder offers robust data modeling functionality, allowing you to build your data warehouse using both data-driven and model-driven approaches.

You can use the data model-driven approach and build models based on the data available in the source systems by reverse engineering it from an existing source database.

You can use the model-driven approach and build dimensional data models based on the business requirements. You can either start creating from scratch or import erwin data models and go from there.

b. Can you build a conceptual or logical model in your tool?

Astera DW Builder bring all modeling approaches together through a single, code-free platform. . In traditional modeling, it starts with conceptual modeling, then goes to logical modeling, then the design is handed over to developers for physical modeling. But with our product, the conceptual and logical elements are applied at design time, then replicated directly in a physical database via deployment. So the what, why, and how of your data warehouse schema is all integrated into one fluid process.

c. Does the tool require you to load data first before designing models?

No, the tool doesn't require you to load data into it before you can start building your data models. You can create data models from scratch or by reverse-engineering the schema from an existing database. Once the data models have been designed and deployed, you can create ETL flows to load data into your destination data warehouse. It is worth mentioning that you don't need to place any agent in the source database to facilitate data extraction. The data model acts as an abstraction layer that allows users to access source data without directly interfering with operational systems.

❖ Metadata

a. Where does the tool store its metadata?

Before deploying the data models, the metadata is stored in an XML file that is automatically updated in the project file system. After the deployment, the metadata is stored in the metadata repository located on the server. The tool supplies all the metadata from the server to automate subsequent processes.

b. Can developers inspect and alter the metadata?

Astera DW Builder is a code-free data warehousing platform that automatically generates metadata based on the data models you create on a logical level. While developers can inspect the metadata, they cannot manually change it or customize it. The metadata is updated automatically when you introduce changes into your data model deployment, saving the time and effort spent in inspecting and updating the metadata through manual coding.

c. Can developers insert custom code into the metadata?

No. As mentioned in the above question, Astera DW Builder doesn't offer any provision to customize the metadata as the tool generates it automatically behind the scenes.

d. Do you generate BI tool metadata?

No. But the BI tools can use the product generated metadata through the built-in OData module, allowing users to utilize data models for creating reports, dashboards, and other forms of analytics. This enables users to consume data models and bring the data to any BI tool that supports OData calls.

❖ Data Loading & Performance

a. Does your tool have a built-in ETL component or it require a third-party tool?

Astera DW Builder has a built-in ETL/ELT module that has been part of our flagship product, Centerprise, for more than a decade. Featuring an enterprise-grade parallel processing engine, it is capable of replacing handwritten ETL processes with consistent, clean, auto-generated code to fuel your data warehouse loading processes.

b. How does your tool ingest data?

The tool supports batch processing for ingesting data. This is typically done through ETL and ELT processes that are used for populating facts and dimension tables in the data warehouse. This is supplemented by the built-in Job Scheduler that enables you to either load data incrementally or in large batches (full load), based on your preferred database writing strategy. Astera DW Builder also supports micro-batches so you can reduce load times down to minutes depending on your requirements.

c. Does your tool optimize load performance?

Astera DW Builder comes with a built-in pushdown optimization mode, AKA, ELT mode. To improve query performance for loading data into a data warehouse, the tool provides provisions for creating staging tables and enables running complex, high volume processes, like loading fact tables, in ELT mode, allowing you to utilize the superior compute power of your destination database. In addition, the tool creates staging tables if data is being loaded across different database servers (partial push-down). But if the data warehouse is on the same server then you can do full pushdown.

d. Can your tool support incremental loads and change data capture?

With components like Job Scheduler, you can perform incremental loads by using time-based and event-based triggers, allowing you to specify when and how frequently the data warehouse is refreshed and updated with incoming data. This allows you to update your data warehouse with the most recent data regularly.

To detect changes in the source data, we have a built-in Change Data Capture (CDC) component that allows you to write the newer records into your destination as soon as they come in your operational data sources.

e. Can your tool connect to applications as well as databases?

Astera DW Builder provides native connectivity to a wide range of databases and applications. You can find the complete list of connectors here: <https://www.astera.com/solutions/integration-solutions/>

f. Can your tool profile data before loading?

The tool has a dedicated Data Profile transformation that provides a complete data field statistic – basic and detailed – containing information such as the data type, minimum/maximum values, data count, error count, etc. The statistics are collected for each of the selected fields at the time the dataflow runs. You can drag and drop the Data Profile transformation in your ETL/ELT flows.

g. Does your tool support data matching and cleansing rules?

Astera DW Builder provides various transformations to scrub and massage your data. Some of the popular transformations include Data Cleanse, Data Quality Rules, Merge, and Distinct. You can find details about each transformation here: <https://docs.astera.com/>

c. What components do the tool support, and how do they interact?

Astera DW Builder comprises two main components, Client and Server. The Client is the frontend application that allows users to design and develop their data warehouse processes. The Server works on the backend and handles the execution and processing of jobs created on the Client. The product is based on the .Net Core framework, and the components communicate with one another via REST calls.

d. What other tools are required, if any, to use your product?

The product requires either SQL Server or PostgreSQL to create the repository database. Other than that, Astera DW Builder has all the features and functionalities you need to build and deploy your data warehouse.

e. Do you run on private or public clouds?

Astera DW Builder can be installed on desktop machines and can also be installed on cloud VM machines. Based on the infrastructure bandwidth and limitations, you can choose to deploy the product on both an on-premise network and public clouds.

❖ Product Architecture

a. What are your tool's systems requirements?

The system requirements of the Astera DW Builder can be found here: <https://www.astera.com/system-requirements/>

b. What does it use for a server?

The server can be any powerful dedicated machine capable of handling jobs that users execute via the Astera DW Builder client. We can provide multiple servers for production and testing/sandboxing based on the business requirements, allowing you to keep the environments separate. A single server can connect to multiple clients running on different systems, as the architecture communicates with its components via REST calls.

❖ Data Modeling

a. What types of models does your tool generate? What's the preferred or default model?

Our tool generates entity-relationship models (ER models) that create a blueprint of how entities are related to one another in the database and information about the fields and attributes present in the database tables. You can create dimensional data models and define the structure of your data warehouse for data storage and retrieval. The tool supports both star and snowflake schemas for this purpose. It enables you to create and deploy your data warehouse's logical and physical models through its feature-rich dimensional data modeler.

In addition, Astera DW Builder allows building native data models that are either made from scratch or via reverse engineering from an existing database. We also support data models built on Erwin Data Modeler and allow importing them into the tool.

b. Does your tool import Erwin or packaged models?

The product allows importing Erwin models and modifying them to complete your data models for deployment. You can create dimensional models based on the imported model and forward engineer it to make the destination database consistent with your source data model.

c. Can your tool reengineer a model from an existing database?

Yes, the product allows you to reserve engineer a model from a source database, fetching all the entities, schema, relationships and all the related metadata to create a complete ER diagram automatically. All it takes is setting up the connection to your on-prem or cloud database, and the product will do the rest for you.

d. Can the model control the physical implementation of the data?

Yes, it can. In Astera DW Builder, data models work as the nucleus of data warehousing and analytics. This means that you can customize your dimensional data models based on your reporting and analysis needs.

e. Does the tool apply default or customer-driven naming convention to all fields?

The tool applies the database's naming convention when objects are imported from it. However, they can be customized based on your preference. You can also change the column names in your data models to ensure better understanding between teams when the project is handed off to the next team.

❖ Data Quality

a. How does the tool handle deduplication?

The product has Distinct transformation that can perform deduplication. You can also pick the latest version among the duplicate records with the Sort transformation, allowing you to identify and take the most recent data in your data warehouse.

b. Is there a provision for profiling data?

Astera DW Builder comes with a dedicated Data Profile transformation. It provides the following options:

- **Basic Statistics:** This is the default mode. It captures the most common statistical measures for the field's data type.
- **No Statistics:** No statistics is captured by the Data Profile.
- **Detailed Statistics – Case Sensitive Comparison:** Additional statistical measures are captured by the Data Profile, for example Mean, Mode, Median etc., using case-sensitive comparison for strings.
- **Detailed Statistics – Case Insensitive Comparison:** Additional statistics are captured by the Data Profile, using case insensitive comparison for strings.

The product also allows you to capture statistics for selected fields from one or several objects using Field Profile.

c. Can you assign custom business rules to your data before loading?

Yes, you can assign any number of custom business rules when creating dataflows for loading dimension and fact tables. We have a wide range of transformations available, such as Expression, Data Quality Rules, Data Cleanse, Filter, Record Level Log, and several others.

❖ Security

a. Does the tool secure data so only authorized developers and users can see it?

The tool allows you to create different levels of users and assign roles to authorize them what they can do and what is restricted. It supports bearer-token authentication that keeps tracks of all the communication between Client and Server by a particular user. The communication is further secured through TCP/IP and HTTP protocols that encrypt the transmission of information.

b. Does the tool integrate with our company's security platform?

No, the tool doesn't directly integrate with any third-party security platform. But you can integrate via the OData service. The limitation here is that only deployed data models would be eligible as they can be exposed to third-party tools via OData.

❖ Change Management

a. Does the tool check and validate changes against predefined and default rules before deploying them?

Yes, the product features a robust data model verification module. Prior to deployment, every data warehouse goes through several rounds of testing and troubleshooting. Our tool performs thorough data verification checks to cut down these repetitive tasks by highlighting any errors in your data model before moving to the next stage of production. From incomplete fields to referential errors, catch and correct potential issues at the first pass using this single-click validator.

b. Does the tool provide impact analysis and data lineage information?

Users can create lineage and impact analysis diagrams that can provide document, object, and field level information. You can find the details of this process here: <https://docs.astera.com/projects/centerprise/en/7/meta-data-management/lineage-and-impact-analysis.html>

c. Does the tool alert developers to potential errors and conflicts when the design changes?

The product has a workflow component that allows you to create a flow for sending notification emails whenever potential errors and conflicts arise. You can set up any type of notification via workflow, allowing you to have better control and visibility of the process.

❖ Job Scheduling and Orchestration

a. Does the tool come with a scheduler or work with third-party schedulers?

The product comes with built-in job scheduler that allows you to use time-based and event-based triggers to specify when and how frequently the data warehouse is updated with new data. You can decide between full load and incremental load to set how your data warehouse refreshed and updated with incoming data.

b. Does the tool issue warnings and error messages when jobs fail to complete?

With Astera DW Builder, you can monitor the progress of ongoing and completed jobs in Job Monitor and inspect errors that occurred in terminated jobs. It maintains a complete log of errors and warnings and provides granular details as to which job encountered what type of errors and warnings at runtime.

c. Can administrators configure jobs and processes to optimize performance?

Yes, the built-in workflow component allows you to configure how and when certain jobs will run. It allows you to create a process that is orchestrated to run a sequence of tasks such as running a program, sending an e-mail, executing some SQL query, initiating or terminating a flow, creating a decision node, and many others. The tasks are executed according to a pre-de-fined sequence, following a custom logic which decides what path must be activated under what conditions. You can set trigger-based or time-based conditions to specify when a workflow is executed.

You can orchestrate all your data warehousing tasks, such as running data loading processes, creating analytics and BI reports, sending notification emails, and much more.

❖ Support for Visualization Tools

a. Which BI & data visualization tools are supported with your tool?

Astera DW Builder comes with a built-in OData module that makes data available to any BI tool that supports OData queries. In addition, the product offers native connectivity to Power BI and Tableau.

b. How does your tool provide connectivity to the supported platforms?

We provide connectivity in two ways:

- Through direct integration via native connectors to BI tools, like Tableau and Power BI.
- By making deployed dimensional models available for consumption through the built-in OData module, allowing users to connect and make data available to any BI tool that supports this technology.

❖ Pricing

a. Do you charge by named user, target database, number of sources, or volume of data?

The price of licensing the product depends on the number of users, server cores, and jobs that are scheduled and run on the server in parallel.

b. What are your annual maintenance charges?

Maintenance charges are included in the annual subscription amount and will not be charged separately.

❖ Support and Services

a. What training classes do you provide and at what cost?

16 hours live online training with an instructor, split over 4 half days. The cost is additional to the annual subscription amount.

b. What level of support do you provide and at what price?

The cost for ongoing support is included in the annual subscription fee and is not charged separately. We pride ourselves in providing stellar round-the-clock email and call support. Astera Software recently bagged recognition from TrustRadius for the Best Support in the category.

c. Will you design and manage our entire DW environment?

We take professional services projects where we work with our customers to design and develop a solution based on their business requirements. Most of our customers manage their own projects past implementation. However, if you need us to manage your project, it can be worked out on a case-by-case basis.



Want to See Astera DW Builder in Action?

Request a personalized demo today with our technical team to see for yourself how Astera DW Builder can dramatically speed up and simplify your data warehouse development and create a well-established data ecosystem for your business. Contact us today for information.

[Request Demo](#)



www.asteria.com Contact us for more information or to request a free trial
sales@asteria.com | 888-77-ASTERIA

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