Architecture of Integration Services

**SQL Server 2008 R2**

As shown in the following diagram, Microsoft SQL Server Integration Services consists of diverse components.

Of the components shown in the previous diagram, here are some important components to using Integration Services succesfully:

**SSIS Designer**

SSIS Designer is a graphical tool that you can use to create and maintain Integration Services packages. SSIS Designer is available in Business Intelligence Development Studio as part of an Integration Services project.

For more information, see [SSIS Designer](https://technet.microsoft.com/en-us/library/ms137973(v=sql.105).aspx) and [Integration Services in Business Intelligence Development Studio](https://technet.microsoft.com/en-us/library/ms174181(v=sql.105).aspx).

**Runtime engine**

The Integration Services runtime saves the layout of packages, runs packages, and provides support for logging, breakpoints, configuration, connections, and transactions.

For more information, see [Integration Services Packages](https://technet.microsoft.com/en-us/library/ms141134(v=sql.105).aspx).

**Tasks and other executables**

The Integration Services run-time executables are the package, containers, tasks, and event handlers that Integration Services includes. Run-time executables also include custom tasks that you develop.

For more information, see [Integration Services Tasks](https://technet.microsoft.com/en-us/library/ms139892(v=sql.105).aspx), [Integration Services Containers](https://technet.microsoft.com/en-us/library/ms137728(v=sql.105).aspx), and [Integration Services Event Handlers](https://technet.microsoft.com/en-us/library/ms140223(v=sql.105).aspx).

**Data Flow engine (also known as the pipeline) and Data Flow components**

The Data Flow task encapsulates the data flow engine. The data flow engine provides the in-memory buffers that move data from source to destination, and calls the sources that extract data from files and relational databases. The data flow engine also manages the transformations that modify data, and the destinations that load data or make data available to other processes. Integration Services data flow components are the sources, transformations, and destinations that Integration Services includes. You can also include custom components in a data flow.

For more information, see [Data Flow Task](https://technet.microsoft.com/en-us/library/ms141122(v=sql.105).aspx) and [Data Flow Elements](https://technet.microsoft.com/en-us/library/ms140080(v=sql.105).aspx).

**API or object model**

The Integration Services object model includes managed application programming interfaces (API) for creating custom components for use in packages, or custom applications that create, load, run, and manage packages. Developer can write custom applications or custom tasks or transformations by using any common language runtime (CLR) compliant language.

For more information, see [Developer's Guide (Integration Services)](https://technet.microsoft.com/en-us/library/ms136025(v=sql.105).aspx).

**Integration Services Service**

The Integration Services service lets you use SQL Server Management Studio to monitor running Integration Services packages and to manage the storage of packages.

For more information, see [Managing Integration Services](https://technet.microsoft.com/en-us/library/ms137731(v=sql.105).aspx) and [Using SQL Server Management Studio](https://technet.microsoft.com/en-us/library/ms174173(v=sql.105).aspx).

**SQL Server Import and Export Wizard**

The SQL Server Import and Export Wizard can copy data to and from any data source for which a managed .NET Framework data provider or a native OLE DB provider is available. This wizard also offers the simplest method to create an Integration Services package that copies data from a source to a destination.

For more information, see [Using the SQL Server Import and Export Wizard to Move Data](https://technet.microsoft.com/en-us/library/ms141209(v=sql.105).aspx).

**Other tools, wizards, and command prompt utilities**

Integration Services includes additional tools, wizards, and command prompt utilities for running and managing Integration Services packages.

For more information, see [Integration Services Wizards](https://technet.microsoft.com/en-us/library/ms141126(v=sql.105).aspx) and [Command Prompt Utilities (Integration Services)](https://technet.microsoft.com/en-us/library/ms140258(v=sql.105).aspx).