https://technet.microsoft.com/en-us/library/bb522498(v=sql.105).aspx

Integration Services Tasks

**SQL Server 2008 R2**

[Other Versions](javascript:;)

Tasks are control flow elements that define units of work that are performed in a package control flow. An SQL Server Integration Services package is made up of one or more tasks. If the package contains more than one task, they are connected and sequenced in the control flow by precedence constraints.

You can also write custom tasks using a programming language that supports COM, such as Visual Basic, or a .NET programming language, such as C#.

The SSIS Designer, the graphical tool in SQL Server Integration Services for working with packages, provides the design surface for creating package control flow, and provides custom editors for configuring tasks. You can also program the SQL Server Integration Services object model to create packages programmatically.

Integration Services includes the following types of tasks.

[Data Flow Task](javascript:void(0))

The task that runs data flows to extract data, apply column level transformations, and load data.

[Data Flow Task](https://technet.microsoft.com/en-us/library/ms141122(v=sql.105).aspx)

[Data Preparation Tasks](javascript:void(0))

These tasks do the following processes: copy files and directories; download files and data; run Web methods; apply operations to XML documents; and profile data for cleansing.

[File System Task](https://technet.microsoft.com/en-us/library/ms140185(v=sql.105).aspx)

[FTP Task](https://technet.microsoft.com/en-us/library/ms137656(v=sql.105).aspx)

[Web Service Task](https://technet.microsoft.com/en-us/library/ms140114(v=sql.105).aspx)

[XML Task](https://technet.microsoft.com/en-us/library/ms141055(v=sql.105).aspx)

[Data Profiling Task](https://technet.microsoft.com/en-us/library/bb895263(v=sql.105).aspx)

[Workflow Tasks](javascript:void(0))

The tasks that communicate with other processes to run packages, run programs or batch files, send and receive messages between packages, send e-mail messages, read Windows Management Instrumentation (WMI) data, and watch for WMI events.

[Execute Package Task](https://technet.microsoft.com/en-us/library/ms137609(v=sql.105).aspx)

[Execute Process Task](https://technet.microsoft.com/en-us/library/ms141166(v=sql.105).aspx)

[Message Queue Task](https://technet.microsoft.com/en-us/library/ms141227(v=sql.105).aspx)

[Send Mail Task](https://technet.microsoft.com/en-us/library/ms142165(v=sql.105).aspx)

[WMI Data Reader Task](https://technet.microsoft.com/en-us/library/ms141744(v=sql.105).aspx)

[WMI Event Watcher Task](https://technet.microsoft.com/en-us/library/ms141130(v=sql.105).aspx)

[SQL Server Tasks](javascript:void(0))

The tasks that access, copy, insert, delete, and modify SQL Server objects and data.

[Bulk Insert Task](https://technet.microsoft.com/en-us/library/ms141239(v=sql.105).aspx)

[SSIS Execute SQL Task](https://technet.microsoft.com/en-us/library/ms141003(v=sql.105).aspx)

[Transfer Database Task](https://technet.microsoft.com/en-us/library/ms141204(v=sql.105).aspx)

[Transfer Error Messages Task](https://technet.microsoft.com/en-us/library/ms141674(v=sql.105).aspx)

[Transfer Jobs Task](https://technet.microsoft.com/en-us/library/ms137568(v=sql.105).aspx)

[Transfer Logins Task](https://technet.microsoft.com/en-us/library/ms137870(v=sql.105).aspx)

[Transfer Master Stored Procedures Task](https://technet.microsoft.com/en-us/library/ms141256(v=sql.105).aspx)

[Transfer SQL Server Objects Task](https://technet.microsoft.com/en-us/library/ms142159(v=sql.105).aspx)

[Scripting Tasks](javascript:void(0))

The tasks that extend package functionality by using scripts.

[Script Task](https://technet.microsoft.com/en-us/library/ms141752(v=sql.105).aspx)

[Analysis Services Tasks](javascript:void(0))

The tasks that create, modify, delete, and process Analysis Services objects.

[Analysis Services Execute DDL Task](https://technet.microsoft.com/en-us/library/ms139988(v=sql.105).aspx)

[Analysis Services Processing Task](https://technet.microsoft.com/en-us/library/ms141779(v=sql.105).aspx)

[Data Mining Query Task](https://technet.microsoft.com/en-us/library/ms141728(v=sql.105).aspx)

[Maintenance Tasks](javascript:void(0))

The tasks that perform administrative functions such as backing up and shrinking SQL Server databases, rebuilding and reorganizing indexes, and running SQL Server Agent jobs.

[Back Up Database Task](https://technet.microsoft.com/en-us/library/ms141164(v=sql.105).aspx)

[Check Database Integrity Task](https://technet.microsoft.com/en-us/library/ms139858(v=sql.105).aspx)

[Execute SQL Server Agent Job Task](https://technet.microsoft.com/en-us/library/ms137858(v=sql.105).aspx)

[Execute T-SQL Statement Task](https://technet.microsoft.com/en-us/library/ms139753(v=sql.105).aspx)

[History Cleanup Task](https://technet.microsoft.com/en-us/library/ms139794(v=sql.105).aspx)

[Maintenance Cleanup Task](https://technet.microsoft.com/en-us/library/ms345177(v=sql.105).aspx)

[Notify Operator Task](https://technet.microsoft.com/en-us/library/ms140060(v=sql.105).aspx)

[Rebuild Index Task](https://technet.microsoft.com/en-us/library/ms137718(v=sql.105).aspx)

[Reorganize Index Task](https://technet.microsoft.com/en-us/library/ms141243(v=sql.105).aspx)

[Shrink Database Task](https://technet.microsoft.com/en-us/library/ms141819(v=sql.105).aspx)

[Update Statistics Task](https://technet.microsoft.com/en-us/library/ms137599(v=sql.105).aspx)

[Backward Compatibility Tasks](javascript:void(0))

The tasks that Integration Services provides for backward compatibility with SQL Server Data Transformation Services (DTS).

[ActiveX Script Task](https://technet.microsoft.com/en-us/library/ms137525(v=sql.105).aspx)

[Execute DTS 2000 Package Task](https://technet.microsoft.com/en-us/library/ms137907(v=sql.105).aspx)

[Custom Tasks](javascript:void(0))

Additionally, you can write custom tasks using a programming language that supports COM, such as Visual Basic, or a .NET programming language, such as C#. If you want to access your custom task in the SSIS Designer, you can create and register a user interface for the task. For more information, see [Developing a Custom Task](https://technet.microsoft.com/en-us/library/ms135965(v=sql.105).aspx).

[Adding and Configuring Tasks](javascript:void(0))

An Integration Services package can contain a single task, such as an Execute SQL task that deletes records in a database table when the package runs. However, packages typically contain several tasks, and each task is set to run within the context of the package control flow. Event handlers, which are workflows that run in response to run-time events, can also have tasks.

For more information about adding a task to a package using SSIS Designer, see [How to: Add or Delete a Task or a Container in a Control Flow](https://technet.microsoft.com/en-us/library/ms139950(v=sql.105).aspx).

For more information about adding a task to a package programmatically, see [Adding Tasks Programmatically](https://technet.microsoft.com/en-us/library/ms135956(v=sql.105).aspx).

Each task can be configured individually using the custom dialog boxes for each task that SSIS Designer provides, or the Properties window included in Business Intelligence Development Studio. A package can include multiple tasks of the same type—for example, six Execute SQL tasks—and each task can be configured differently. For more information, see [How to: Set the Properties of a Task or Container](https://technet.microsoft.com/en-us/library/ms139733(v=sql.105).aspx).

[Connecting and Grouping Tasks](javascript:void(0))

If the task contains more than one task, they are connected and sequenced in the control flow by precedence constraints. For more information, see [Precedence Constraints](https://technet.microsoft.com/en-us/library/ms141261(v=sql.105).aspx).

Tasks can be grouped together and performed as a single unit of work, or repeated in a loop. For more information, see [Foreach Loop Container](https://technet.microsoft.com/en-us/library/ms141724(v=sql.105).aspx), [For Loop Container](https://technet.microsoft.com/en-us/library/ms139956(v=sql.105).aspx), and [Sequence Container](https://technet.microsoft.com/en-us/library/ms139855(v=sql.105).aspx).