

Control Flow Tasks






Exploring control flow tasks by category










Overview

- Data Preparation Tasks
- Process Communication Tasks
- SQL Server Tasks
- Analysis Services Tasks
- Database Maintenance Tasks









Data Preparation Tasks

Task	ETL Example
 File System Task	Move processed data files to an archive folder
 FTP Task	Download source data files from an FTP server
 Web Service Task	Retrieve current exchange rate from Web service
 XML Task	Validate and query an XML document
 Data Profiling Task	Produce report assessing data quality, data patterns, and dependencies




Process Communication Tasks

Task	ETL Example
 Execute Package Task	Run packages
 Execute DTS 2000 Package Task	
 Message Queue Task	Send and receive messages between packages
 WMI Data Reader Task	Read WMI data (memory, disk space, etc.)
 WMI Event Watcher Task	Watch for WMI events
 Execute Process Task	Run programs or batch files
 Send Mail Task	Send e-mail message when a task fails










SQL Server Tasks

Task	ETL Example	
 Bulk Insert Task	Fast load of data into SQL Server table with limited transformations (only members of the sysadmin fixed server role can execute)	
 Execute SQL Task	Execute queries, optionally with parameters and store results in variable <i>Can use Excel, OLE DB, ODBC, ADO, ADO.NET, or SQLMOBILE connection managers</i>	
Not applicable to ETL		
 Transfer Error Messages Task	 Transfer Master Stored Procedures Task	 Transfer Database Task
 Transfer Jobs Task	 Transfer SQL Server Objects Task	 Transfer Logins Task

Analysis Services Tasks

Task	ETL Example
 Analysis Services Processing Task	After DW ETL process completes, process affected SSAS objects
 Analysis Services Execute DDL Task	Automate dynamic partition processing
 Data Mining Query Task	Score clients according to latest sales transactions

Database Maintenance Tasks

Task	ETL Example
 Rebuild Index Task	After DW ETL process completes, rebuild and reorganize indexes and update statistics
 Update Statistics Task	
 Reorganize Index Task	
 Back Up Database Task	Miscellaneous tasks unrelated to ETL
 Check Database Integrity Task	
 Execute SQL Server Agent Job Task	
 History Cleanup Task	
 Notify Operator Task	
 Shrink Database Task	

Summary

- **Data Preparation Tasks**
 - Move files to different locations, validate data, analyze data
- **Process Communication Tasks**
 - Interact with services, processes, or other Integration Services packages
- **SQL Server Tasks**
 - Execute bulk inserts, SQL statements, transfers of database objects
- **Analysis Services Tasks**
 - Process Analysis Services database objects, execute data mining queries
- **Database Maintenance Tasks**
 - Perform backups, maintain indexes, and other miscellaneous tasks

References

- **Integration Services Tasks**
 - <http://msdn.microsoft.com/en-us/library/ms139892.aspx>
- **WQL (SQL for WMI)**
 - [http://msdn.microsoft.com/en-us/library/aa394606\(v=VS.85\).aspx](http://msdn.microsoft.com/en-us/library/aa394606(v=VS.85).aspx)
- **Receiving Event Notifications (WMI Event Watcher)**
 - [http://msdn.microsoft.com/en-us/library/aa393017\(v=VS.85\).aspx](http://msdn.microsoft.com/en-us/library/aa393017(v=VS.85).aspx)
- **Creating DMX Prediction Queries**
 - <http://technet.microsoft.com/en-us/library/ms175376.aspx>