# **Package Execution**

Automating package execution





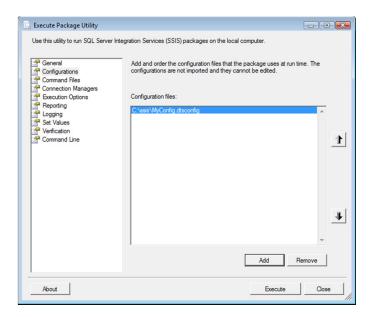
### **Overview**

- Package Execution Utilities
- SQL Server Agent Jobs
- Package Storage vs. Execution Location



## **Package Execution Utilities**

DTExecUI



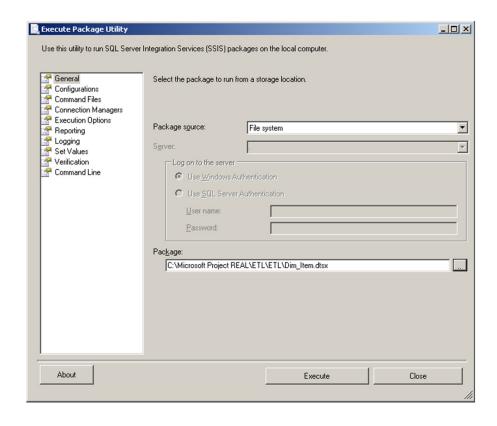
DTExec

```
/FILE "path\package.dtsx"
/CONFIGFILE "C:\ssis\MyConfig.dtsconfig"
/MAXCONCURRENT " -1 " /CHECKPOINTING OFF /REPORTING EW
```



# **DTExecUI – General Settings**

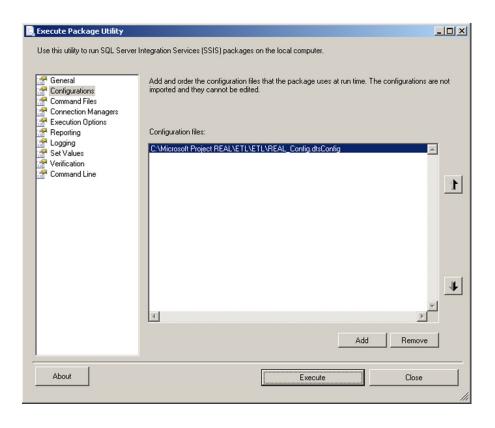
- Select package source
  - File system
  - SQL Server
  - SSIS Package Store
- Select package to execute





# **DTExecUI - Configurations**

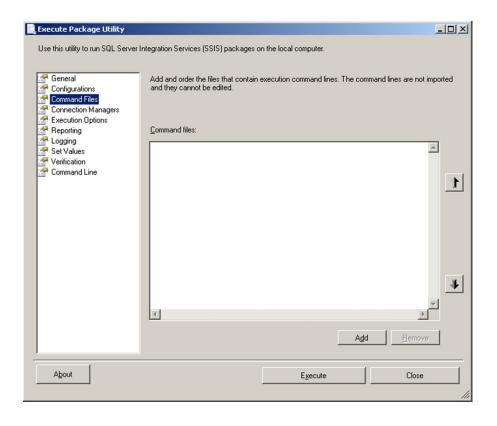
- Edit configuration files in separate tool
- Add configuration files
- Arrange configuration files in sequence (last one wins in case of conflict)





### **DTExecUI – Command Files**

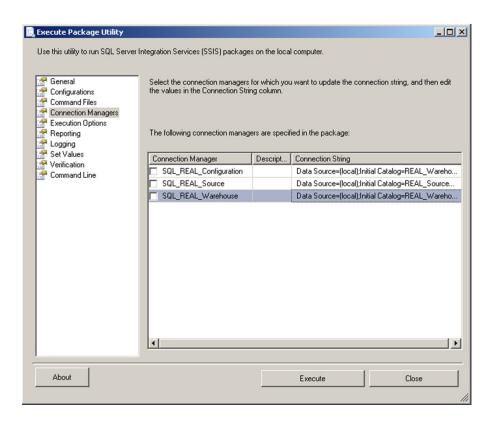
- Store DTExec switches in command file for reuse
- Add command files
- Arrange command files in sequence





# **DTExecUI – Connection Managers**

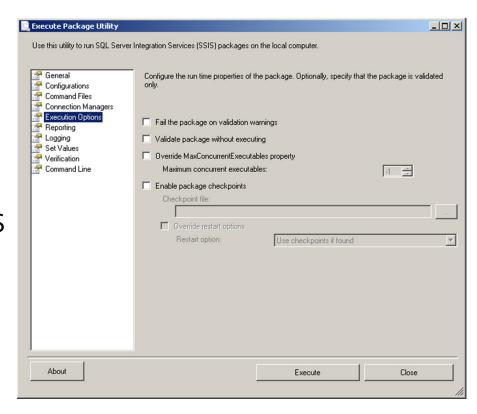
 Override connection strings associated with connection managers in package





### **DTExecUI – Execution Options**

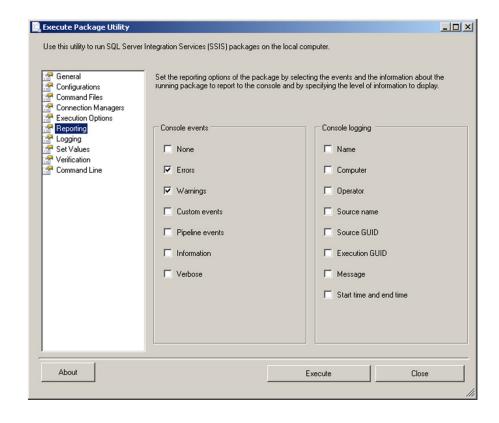
- Fail on validation warnings
- Validate only
- Set MaxConcurrentExecutable property
  - □ Default -1
  - Two tasks plus number of CPUS run concurrently
- Configure checkpoints





# **DTExecUI - Reporting**

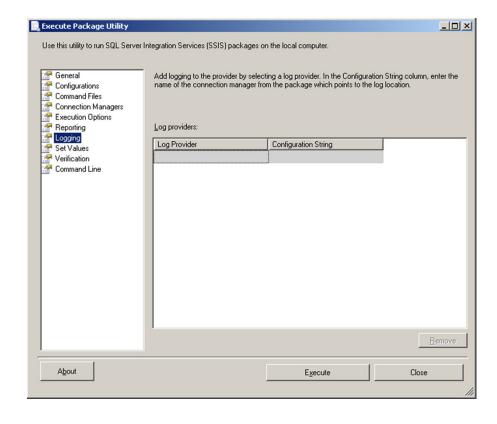
- Configure details to show in console during package execution
- Default = errors, warnings





# **DTExecUI - Logging**

- Configure additional logging options for package
  - Select log provider type
  - Select connection manager already defined in package

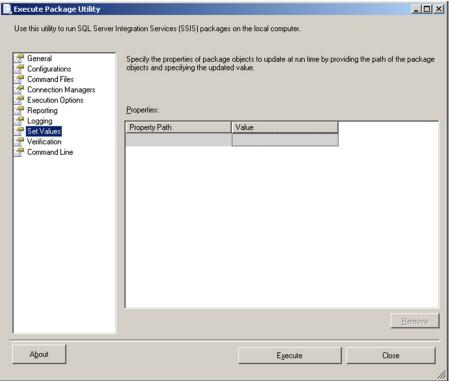




### **DTExecUI – Set Values**

### Set run-time overrides

- Package properties
- Container properties
- Task properties
- Connection managers
- Event handlers
- Log providers
- Variable values



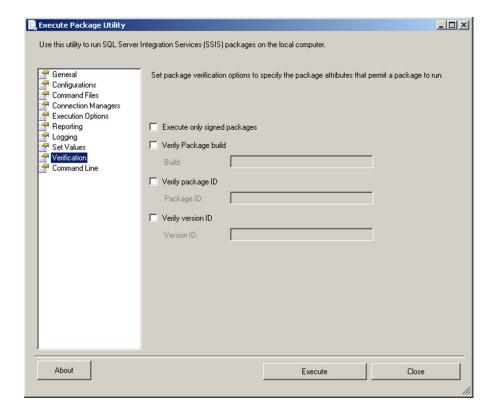
Example path: \Package.Variables[VariableName].Value



### **DTExecUI - Verification**

### Control conditions of execution

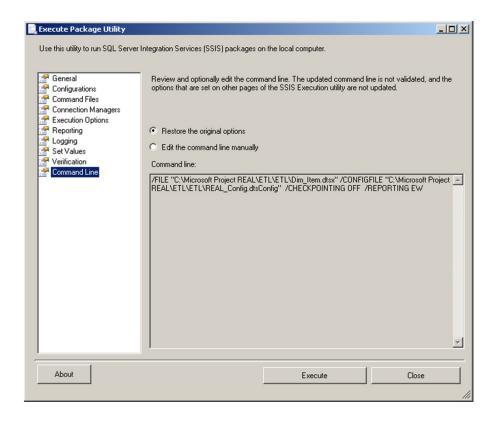
- Require digital signature
- Require specific build or version





### **DTExecUI – Command Line**

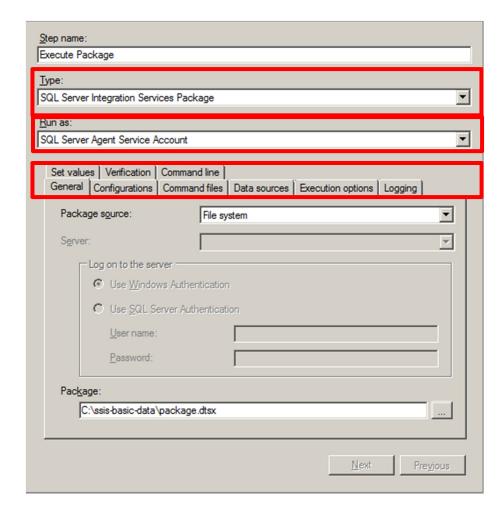
- Copy command line switches for use with DTExec utility
- Manually modify command line before execution in DTExecUI





# **SQL Server Agent Jobs**

Security context – use proxy account as alternative



Identical to DTEXECUL



# **Package Storage & Execution Location**

Package Execution

BIDS

DTExecUI

DTExec

SQL Server Agent

Custom Application

Storage Location



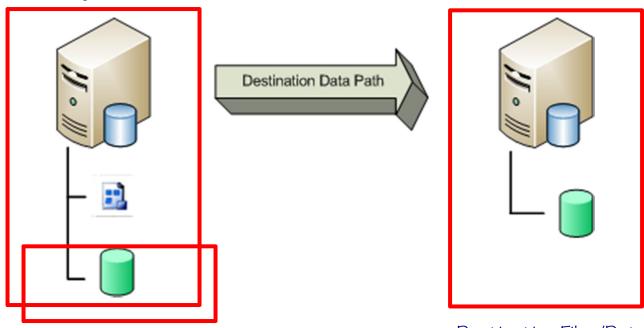
#### Execution Location





### **Execution on Source Server**

Execution Location Storage Location



Source Files/Data

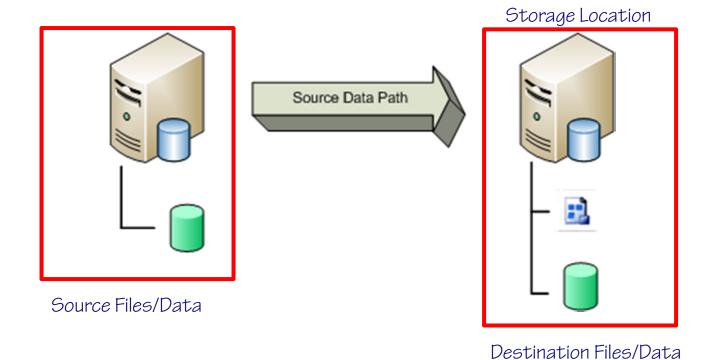
Execution Impact Extraction Impact

Destination Files/Data

Load Impact



### **Execution on Destination Server**



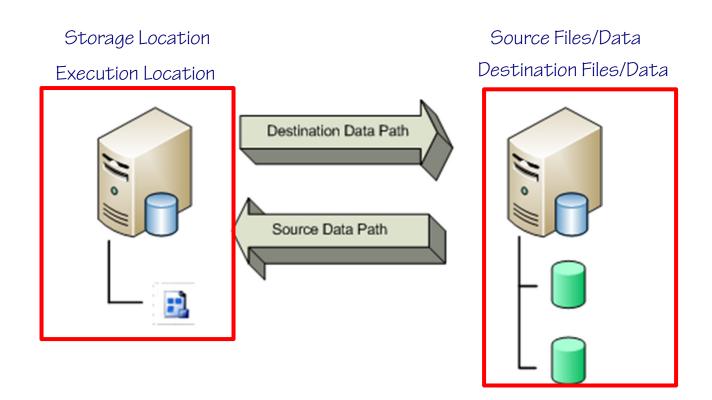
Extraction Impact

Execution Impact Load Impact

**Execution Location** 



# **Execution on Secondary Server**

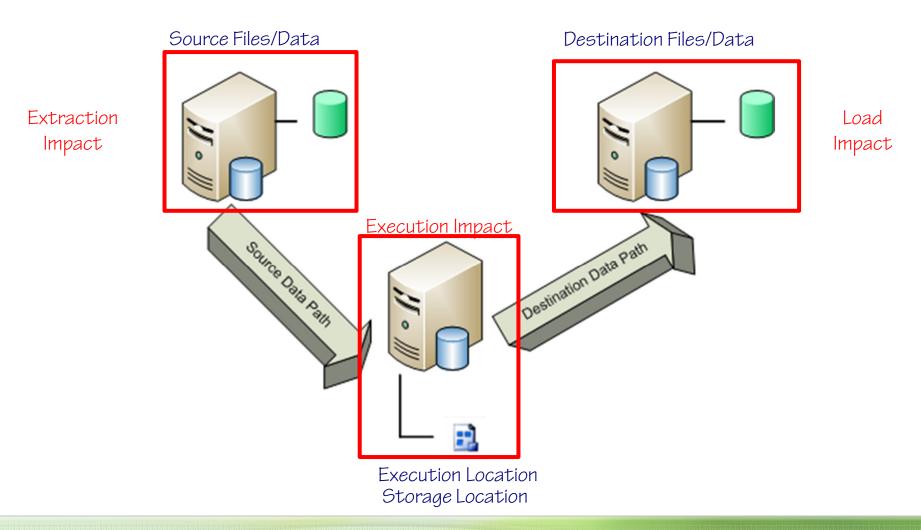


Execution Impact

Extraction Impact Load Impact



# **Execution on Intermediary Server**





### **Summary**

- Package Execution Utilities
  - DTExecUI, DTExec
- SQL Server Agent Jobs
  - Scheduled execution, security context considerations
- Package Storage vs. Execution Location
  - Execution server, source data server, destination data server, network



### References

- Execute Package Utility (DTEXECUI)
  - http://msdn.microsoft.com/en-us/library/ms180378.aspx
- DTEXEC Utility
  - http://msdn.microsoft.com/en-us/library/ms162810.aspx
- Scheduling SSIS Package Execution in SQL Server Agent
  - http://msdn.microsoft.com/en-us/library/ms141701.aspx
- Creating SQL Server Agent Proxies
  - http://msdn.microsoft.com/en-us/library/ms189064.aspx

