

SQL Package Script Action

 The SQL Package actions in Continua are a wrapper around the SqlPackage command line. If you're having trouble using any of the SQL Package actions, please refer to the [Command Line Reference](#).

The SQL Package Script action is a [premium action](#) that creates a Transact-SQL incremental update script that updates the schema of a target database to match the schema of a source database.

SQL Package Script

SQL Package Script ActionPremium

SQL Package Script

Target

Variables

Properties

Options

Environment

Comments

Required Field

Name

SQL Package Script

☒ Enabled

Source File

SWorkspace\source.dacpac

...

✓

The path to a file to be used as the source. This would generally have the extension .dacpac. [/SourceFile]

Output Path

SWorkspace\output.sql

...

✓

The path for the generated script file. [/OutputPath]

☒ Overwrite existing files. [/OverwriteFiles]

Publish Profile

SWorkspace\publish.xml

...

✓

The file path to a DAC Publish Profile. The profile defines a collection of properties and variables defining the target database connection and deployment settings. [/Profile]

Using

SqlPackage.2019

▼

✓ Validate

Save

Cancel

Help

Name

A friendly name for this action (will be displayed in the [actions workflow area](#)).

Enabled

Determines if this action will be run within the relevant stage.

Source File

The path to a file to be used as the source. This would generally have the extension .dacpac. [/SourceFile]

Output Path

The path for the generated script file. [/OutputPath]

Overwrite Files

Whether the action should overwrite the file it is generating. [/OverwriteFiles]

Publish Profile

The file path to a DAC Publish Profile. The profile defines a collection of properties and variables defining the target database connection and deployment settings. [/Profile]

Using

The Using drop down is populated with any property collector whose namespace matches the pattern defined by the SQL Package Script action. The pattern for this action is `^SqlPackage\.*`

If you create a property collector for this action, make sure you select the **Path Finder Plugin** type and give it a name that will match the pattern above in blue. Example names listed [here](#), search the table's Plugin column for "SQL Package Script".

For more in-depth explanations on property collectors see [Property Collectors](#).

Alternatively, you can select the **Custom** option from the Using drop down list and specify a path in the resulting input field that will be displayed. Please read [Why it's a good idea to use a property collector](#) before using this option.

Target

Connection Type

Whether to use a connection string, a target file or specify each part of the connection separately.

Connection String

The screenshot shows the 'SQL Package Script Action' configuration window with the 'Target' tab selected. The window has a blue header with the title 'SQL Package Script Action' and a 'Premium' badge. Below the header is a tab bar with 'SQL Package Script', 'Target', 'Variables', 'Properties', 'Options', 'Environment', and 'Comments'. The 'Target' tab is active. The main area contains two fields: 'Connection Type' with a dropdown menu showing 'Connection string', and 'Connection String' with a text input field. A 'Required Field' indicator is shown next to the 'Connection String' field. Below the input field is a hint: 'A valid SQL Server/Azure connection string to connect to the target database. [/TargetConnectionString]'. At the bottom of the window are three buttons: 'Validate' (with a checkmark icon), 'Save' (with a floppy disk icon), 'Cancel' (with an 'X' icon), and 'Help' (with a question mark icon).

Connection String

The SQL Server/Azure connection string to connect to the database. [/TargetConnectionString]

An example of a valid connection string is:

```
Provider=SQLNCL11;Password=myPassword;User ID=[username]@[servername];Initial Catalog=databasename;Data Source=tcp:[servername].database.windows.net;
```

Connection Properties

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Required Field

Connection Type

Connection properties

Server Name

SERVER\INSTANCE

The name of the server hosting the target database. [/TargetServerName]

Database Name

Production

The name of the target database. [/TargetDatabaseName]

Authentication Type

Username and password

Username

Password

☐ Use SQL encryption. [/TargetEncryptConnection]
 ☐ Trust server certificate

Tick to bypass SSL certificate validation. [/TargetTrustServerCertificate]

Connection Timeout

The timeout for establishing a connection to the database in seconds. Left blank to use the default of 15 seconds. [/TargetTimeout]

Validate

Save

Cancel

Help

Server Name

The name of the server that hosts the database. The server should be accessible by the agent running the action. [/TargetServerName]

Database Name

The name of the source database. [/TargetDatabaseName]

Authentication Type

The authentication method. Either by using a Username and Password or Windows Authentication.

Username and Password

Username

The name of the user who has permissions to perform the operation on the database. [/TargetUser]

Password

The password for the user connecting to the database. [/TargetPassword]

Windows Authentication

If this is selected, windows authentication is used to gain permission to perform the operation on the database.

Use SQL encryption

If this is ticked, SQL encryption is used. [/TargetEncryptConnection]

Trust server certificate

If this is ticked, SSL certificate validation is bypassed. [/TargetTrustServerCertificate]

Connection Timeout

The timeout for establishing a connection to the database in seconds. Leave blank to use the default of 15 seconds. [/TargetTimeout]

File

SQL Package Script ActionPremium

SQL Package ScriptTargetVariablesPropertiesOptionsEnvironmentComments

Required Field

Connection TypeFile

Target FileSWorkspace\target.dacpac
A target file (that is, a .dacpac file) to be used as the target of action instead of a database. [/TargetFile]

Database NameProduction
The name of the target database. [/TargetDatabaseName]

Validate

SaveCancelHelp

Target File

A target file (that is, a .dacpac file) to be used as the target of action instead of a database. [/TargetFile]

Database Name

The name of the target database. [/TargetDatabaseName]

Variables

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Comments

Required Field

Variables

variable_name=variable_value

Specify one variable per line. [/Variables]

Validate

Save

Cancel

Help

Variables

Specify one variable per line in the format of **variable_name=variable_value**. [/Variables:]

Properties

SQL Package Script ActionPremium

SQL Package ScriptTargetVariablesPropertiesOptionsEnvironmentComments

Required Field

Properties

property_name=property_value

Specify one property per line. [/p]

Validate

Save

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Properties

Specify one property per line in the format of **property_name=property_value**. The full list of properties can be found at [SqlPackage.exe](#). [/p:]

Options

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Required Field

Logging VerbosityNormal

Specifies the amount of information to display in the build log. [/Quiet|/Diagnostics]

Command Timeout

The command timeout in seconds when executing queries against SQL Server. Leave blank to use the default of 30 seconds. [/p:CommandTimeout]

Max Parallelism8

Degree of parallelism for concurrent operations running against a database. [/MaxParallelism]

Additional Arguments

Any extra command-line parameters for SQLPackage.exe.

Timeout (in seconds)0

How long to wait for the action to finish running before timing out. Leaving this blank (or zero) will default to 86400 seconds (24 hours).

☐ Treat failure as warning

Tick to continue build on failure marking the action with a warning status.

☐ Ignore warnings

ValidateSaveCancelHelp

Logging Verbosity

Specifies the amount of information to display in the build log. [/Quiet | /Diagnostics]

Command Timeout

The command timeout in seconds when executing queries against SQL Server. Leave blank to use the default of 30 seconds. [/p:CommandTimeout=]

Max Parallelism

Degree of parallelism for concurrent operations running against a database. [/MaxParallelism]

Additional Arguments

Any extra command-line parameters for SQLPackage.exe. The full list of extra arguments can be found at [SqlPackage.exe](#).

Timeout (in seconds)

How many seconds to wait for the action to finish before timing out. The default is 86400 seconds (24 hours).

Treat failure as warning

Tick to continue build on failure marking the action with a warning status.

Ignore warnings

If this is ticked, any warnings logged will not mark the action with a warning status.

Environment

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Environment Variables

Required Field

variable_name=variable_value

Specify one name & value pair per line.

☒ Log environment variables

☐ Generate system environment variables

Tick this to set new environment variables prefixed with 'ContinuaCI.' for system objects and variables.

Validate

Save

Cancel

Help

Environment Variables

Multiple environment variables can be defined - one per line. These are set before the command line is run.

Log environment variables

If this is ticked, environment variable values are written to the build log.

Generate system environment variables

Tick this checkbox to set up a list of new environment variables prefixed with 'ContinuaCI.' for all current system expression objects and variables.

Mask sensitive variable values in system environment variables

This checkbox is visible only if the 'Generate system environment variables' checkbox is ticked.

If this is ticked, the values of any variables marked as sensitive will be masked with **** when setting system environment variables. Clear this to expose the values.