Pre-Post Scripting Guide

Overview

FileReplicationPro now supports running custom scripts prior to or after execution of a replication job. This functionality is especially relevant for customers looking to perform an action before replication, such as creating an offsite backup of a database, or after replication, such as enabling a hot standby of the database.

Configuration

Pre & Post Replication Job Execution scripts are platform independent and can be written in any valid command line executable supported by the host server, including: Perl, Python, Windows batch, Shell, Bash etc.

To configure a custom command:
1. Login to the FileReplicationPro Management Console (http://<host>:9100)
2. Select the job you would like to add the custom command to, and choose edit
3. Select the Advanced Job Properties button
4. Fill in the following fields:
    a. Pre-Execution Source Script
    b. Post-Execution Source Script
    c. Pre-Execution Destination Script
    d. Post-Execution Destination Script

The value of these fields must be an absolute path to an executable file, for example /home/runme.sh or on Windows c:/runme.exe (Note: on Windows you must use the forward slash '/')

You can add additional command line arguments after the path e.g. /home/runme.sh arg1 arg2

Additionally, a Pre Execution Script can halt operation of the replication job by returning an error exit status. (See example below)

Example 1 – Halt Replication Job

In the following example, the replication job will only proceed if the file 'test_file' exists in c:\development.

```
if exist c:\development\test_file exit /b -1
```

This uses the Windows 'if exist' command to test for a file and the 'exit /b -1' command to return an error status.

Example 2 – MS SQL Database Backup

In the following example we show how to replicate an MS SQL database to an offsite location:

1. Set up a "Move" replication job from <Onsite Server A> to <Offsite Server B>
2. Create a directory to store the MS SQL database backup script on <Onsite Server A> and another directory to store the snapshot both on <Onsite Server A> and <Offsite Server B> – for example: 'c:\db-backup'
3. Create the following two files: 'run-backup.bat' and 'run_backup.sql'. The first file calls MS SQL to create a snapshot by using the SQL statement contained in the second file.
4. Content of "run-backup.bat":

```
"C:\Program Files\Microsoft SQL
Server\90\Tools\Binn\sqlcmd.exe" -S win--
dev\sqlexpress -i "C:\db-backup\run-backup.sql"
```

This file uses command line utility sqlcmd.exe supplied with MS SQL server.
Note: for this example FileReplicationPro must be installed on the same server as MS SQL server.

5. Content of the file "run-backup.sql":

```
BACKUP DATABASE SampleDatabase
TO DISK = "c:\db-backup\db.bak"
```

This is an SQL script creating a backup of SampleDatabase in to db.bak file.
Once the batch script has finished to run and returned a successful status to FileReplicationPro, the replication job will begin and will move file db.bak from 'c:\db-backup\' directory at the replication source to a remote machine.

On script error, an error status will be returned and FileReplicationPro will not continue.

Example 3 – MS SQL Database Restore

In the following example we show how to restore a replicated MS SQL backup file on a separate instance of the database that is running on the offsite server (Offsite Server B). This can be used in conjunction with the example 2 to create a hot standby MS SQL database:

1. Use the same setup as in example 2, but this time set 'run-restore.bat' as the Post Replication Job Execution script on <Offsite Server B>
2. Create the following two files: 'run-restore.bat' and 'run-restore.sql'. The first file calls MS SQL to restore a snapshot by using the SQL statement contained in the second file.
3. Content of "run-restore.bat":

```
"C:\Program Files\Microsoft SQL
Server\90\Tools\Binn\sqlcmd.exe" -S win--
dev\sqlexpress -i "C:\db-backup\run-restore.sql"
```

This file uses command line utility sqlcmd.exe supplied with MS SQL server.
Note: for this example FileReplicationPro must be installed on the same server as MS SQL server.

4. Content of the file "run-restore.sql":

```
RESTORE DATABASE SampleDatabase
FROM DISK = "c:\db-backup\db.bak"
```

This is an SQL script restoring from db.bak file in to `SampleDatabase.`

The above script will be run after FileReplicationPro has completed the replication job which moves the file db.bak from 'c:\db-backup\' directory at the replication source to a remote machine.