# Objective:

This document provides as complete of a test plan as conceivable for the FileArchiver application:

# Test Strategy:

The strategy behind the testing of FileArchiver is to exercise the program with all expected and unexpected input values. These include configuration, commandline and app.config input.

Placing expected and unexpected values in these three areas should yield results that the application should correctly handle; no crashing app.

The following tables outline each type of test in the three areas mentioned above.

## Configuration

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Test instructions | | | | | | |  | Pass | Fail |
| Test Description | **CleanupType** | **ServerName** | **SourceFolderPath UNC** | **SourceFilePattern** | **RetentionDays** | **DestinationFolderPath UNC** | **Compress** |  |  |
| moves files from one folder to another. | Archive | SQEWTETRA01V09 | \\SQEWTETRA01V09\DATA\EIM\Interfaces\LoadOffice\MeterIntervalData\PB\_201 | \*.\* | 10 | \\SQEWTETRA01V09\DATA\EIM\Interfaces\LoadOffice\MeterIntervalData\PB\_201\bkup | False |  |  |
| Delete files | Delete | SQEWTETRA01V09 | \\SQEWTETRA01V09\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223 | \*.\* | 15 | Null | False |  |  |
| Compress files in place remove original | Archive | SQEWTETRA01V09 | \\SQEWTETRA01V09\DATA\EIM\Interfaces\LoadOffice\SystemLoad\PB\_250 | \*.\* | 1 | Null | True |  |  |
| Compress files remove original and move to new folder | Archive | SQEWTETRA01V09 | \\SQEWTETRA01V09\DATA\EIM\Interfaces\LoadOffice\SystemLoad\PB\_227 | \*.\* | 1 | \\SQEWTETRA01V09\DATA\EIM\Interfaces\LoadOffice\SystemLoad\PB\_250\bkup | True |  |  |
| Test Source File Pattern with .csv while all files are .xml  ensure no files altered. | Delete | SQEWTETRA01V09 | \\SQEWTETRA01V09\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223 | \*.csv | 5 | Null | False |  |  |
| Move compressed files to another server | Archive | SQEWTETRA01V09 | \\SQEWTETRA01V09\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223 | \*.xml | 1 | \\Etrmsrepomanqa01\data\EIM\CSY | True |  |  |

The following table is a configuration that addresses the Data drive and the Archive Drive. This configuration better describes how normal operations will take place; moving files from the data area to the archive area and compressing or moving along the way. With additional configuration values that will remove the archived files after a specified amount of time.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CleanUpType | ServerName | SourceFolderPath | | SourceFilePattern | RetentionDays | | DestinationFolderPath | Compress | OrderofExecution |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\LoadOffice\BATags\PB\_223 | \*.gz | | 20 | NULL | 0 | 20 |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\LoadOffice\MeterIntervalData\PB\_201 | \*.gz | | 20 | NULL | 0 | 19 |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\LoadOffice\SystemLoad\PB\_250 | \*.gz | | 20 | NULL | 0 | 18 |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\LoadOffice\VERForecast\PB\_227 | \*.gz | | 20 | NULL | 0 | 17 |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\GHGData\PB\_314 | \*.gz | | 20 | NULL | 0 | 16 |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\MeterIntervalData\PB\_201 | \*.gz | | 20 | NULL | 0 | 15 |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\SystemLoad\PB\_251 | \*.gz | | 20 | NULL | 0 | 14 |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\VERForecast\PB\_226 | \*.gz | | 20 | NULL | 0 | 13 |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\WebTraderNetDeals\PB\_249\_252 | \*.gz | | 20 | NULL | 0 | 12 |
| Delete | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\WebTraderUpdate\BP\_224 | \*.gz | | 20 | NULL | 0 | 11 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\LoadOffice\BATags\PB\_223 | 1 | 1 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Data\EIM\Interfaces\LoadOffice\BATags\WorkingFolder | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\LoadOffice\BATags\WorkingFolder | 1 | 10 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\DATA\EIM\Interfaces\LoadOffice\MeterIntervalData\PB\_201 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\LoadOffice\MeterIntervalData\PB\_201 | 1 | 4 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\DATA\EIM\Interfaces\LoadOffice\SystemLoad\PB\_250 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\LoadOffice\SystemLoad\PB\_250 | 1 | 2 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\DATA\EIM\Interfaces\LoadOffice\VERForecast\PB\_227 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\LoadOffice\VERForecast\PB\_227 | 1 | 3 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Data\EIM\Interfaces\Marketing\GHGData\PB\_314 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\GHGData\PB\_314 | 1 | 5 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Data\EIM\Interfaces\Marketing\MeterIntervalData\PB\_201 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\MeterIntervalData\PB\_201 | 1 | 6 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Data\EIM\Interfaces\Marketing\SystemLoad\PB\_251 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\SystemLoad\PB\_251 | 1 | 7 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Data\EIM\Interfaces\Marketing\VERForecast\PB\_226 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\VERForecast\PB\_226 | 1 | 8 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Data\EIM\Interfaces\Marketing\WebTraderNetDeals\PB\_249\_252 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\WebTraderNetDeals\PB\_249\_252 | 1 | 9 |
| Archive | SQEWQETRA01V09 | | \\SQEWQETRA01V09\Data\EIM\Interfaces\Marketing\WebTraderUpdate\BP\_224 | \*.\* | | 0 | \\SQEWQETRA01V09\Archive\EIM\Interfaces\Marketing\WebTraderUpdate\BP\_224 | 1 | 10 |

## Command Line

Testing the command line arguments is a relatively rote process. We want to exercise all possible combination of input. The File Server can be left out of the command line when the FileArchiver resides on the File Server and the FileCleanupConfiguration table in the Database Server is configured with UNC paths for the File Server.

When executing the FileArchiver the typical output will be a description of the various options available to the user. Also displayed will be the current command line settings. Note the file server will show the current server from which the application was launched.

Current Command line settings:

DB server:, FileServer:*FileServerName*, Test Flag:False, Run Flag:False, DIR Flag:False

App - FileArchiver

Definition - deletes, moves and/or archives files on Servers to reduce the need for storage.

Arguments:

-D: followed by the Database server name is where the configurations are stored for all.

-F: followed by the FileServer name where files to be managed are located.

-R this flag enables the application to run normally; without it the app won't run.

-T this flag tests the commandline arguments and configuration values.

The R and T flag are mutually exclusive, if both are used the T flag shall take precedent.

-B this directory flag (DIR flag) in conjunction with the -T flag will build the directory if it does not exist.

Press any key to exit

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DATABASE SERVER | FILE SERVER | TEST FLAG | RUN FLAG | Build Flag | RESULTS |
| -D:ETRMSNONSOXTESTSQL01 | -F:ETRMSREPOMANTEST01 | -T |  |  | Displays actions to be performed without actually performing them |
| -D:ETRMSNONSOXTESTSQL01 | -F:ETRMSREPOMANTEST01 |  | -R |  | Displays actions that are taking place. |
| -D:ETRMSNONSOXTESTSQL01 | -F:ETRMSREPOMANTEST01 | -T |  | -B | Displays actions to be performed without actually performing them. Builds any folders that are not present on the File server. |
| -D:ETRMSNONSOXTESTSQL01 | -F:ETRMSREPOMANTEST01 |  | -R | -B | You can't create directories with the -B flag while the -R flag is set. |
|  |  |  |  |  |  |

Typical output in Test Mode:

Current Command line settings:

-D:ETRMSNONSOXTESTSQL01 -F:ETRMSREPOMANTEST01 -T

DB server:ETRMSNONSOXTESTSQL01, FileServer:ETRMSREPOMANTEST01, Test Flag:True, Run Flag:False

11/20/2018 11:45:15.727 INFO - Application Version (Major, Minor, Build, Revision): 1.0.0.20158 thread:1

11/20/2018 11:45:15.899 INFO - Start processing 0 out 146 files matching config settings and will be archived. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\MeterIntervalData\PB\_201\

11/20/2018 11:45:15.904 INFO - Stop processing 0 out 146 files matching config settings and will be archived. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\MeterIntervalData\PB\_201\

11/20/2018 11:45:15.916 INFO - Start processing 19 out 120 files matching config settings and will be archived. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\SystemLoad\PB\_250\

11/20/2018 11:45:15.959 INFO - Stop processing 19 out 120 files matching config settings and will be archived. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\SystemLoad\PB\_250\

11/20/2018 11:45:16.377 INFO - Start processing 468 out 3192 files matching config settings and will be archived. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\VERForecast\PB\_227\

11/20/2018 11:45:17.338 INFO - Stop processing 468 out 3192 files matching config settings and will be archived. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\VERForecast\PB\_227\11/20/2018

11:45:25.234 INFO - Start processing 0 out 72525 files matching config settings and will be deleted.

thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223\

11/20/2018 11:45:25.243 INFO - Stop processing 0 out 72525 files matching config settings and will be deleted. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223\

11/20/2018 11:45:25.300 INFO - Start processing 0 out 0 files matching config settings and will be deleted. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223\

11/20/2018 11:45:25.309 INFO - Stop processing 0 out 0 files matching config settings and will be deleted. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223\

11/20/2018 11:45:34.763 INFO - Start processing 4999 out 72012 files matching config settings and will be archived. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223\

11/20/2018 11:45:46.291 INFO - Stop processing 4999 out 72012 files matching config settings and will be archived. thread:\\ETRMSREPOMANTEST01\DATA\EIM\Interfaces\LoadOffice\BATags\PB\_223\

Press anykey to exit

## App.Config

The App config file is mostly for the log4net reporting system but also for defining the database name that will be used to retrieve configuration values. As of the writing of this document the db name was ETRM\_SUPPORT.

When the FileArchiver is compiled and deployed the app config file is renamed to FileArchiver.exe.config.

<?xml version="1.0" encoding="utf-8"?>

<configuration>

<configSections>

<section name="log4net" type="log4net.Config.log4netconfigurationSectionHandler,log4net" />

</configSections>

<appSettings>

<!--<add key="log4net.Internal.Debug" value="true"/>-->

<add key="DBName" value="ETRM\_Support" />

<add key="ClientSettingsProvider.ServiceUri" value="" />

</appSettings>

<log4net>

<appender name="RollingFileAppender" type="log4net.Appender.RollingFileAppender">

<file value="Log.txt"/>

<appendToFile value="true"/>

<rollingStyle value="Size"/>

<maxSizeRollBackups value="5"/>

<!-- This setting specifies that only the newest X number of log files will be kept. All others will be deleted-->

<maximumFileSize value="50MB"/>

<staticLogFileName value="true"/>

<!-- Use the setting below to turn off file logging -->

<!-- <filter type="log4net.Filter.DenyAllFilter"/> -->

<layout type="log4net.Layout.PatternLayout">

<conversionPattern value="%date{MM/dd/yyyy hh:mm:ss.fff} %level %logger - thread:%thread%message%newline%exception"/>

</layout>

</appender>

<appender name="ConsoleAppender" type="log4net.Appender.ConsoleAppender">

<layout type="log4net.layout.PatternLayout">

<conversionPattern value="%date{MM/dd/yyyy HH:mm:ss.fff} %level - %message thread:%thread%newline%exception" />

</layout>

<filter type="log4net.Filter.LevelRangeFilter">

<levelmin value="info" />

<levelmax value="error" />

</filter>

</appender>

<appender name="SqlServer" type="log4net.Appender.AdoNetAppender">

<bufferSize value="10" />

<filter type="log4net.Filter.LevelRangeFilter">

<levelmin value="info" />

<levelmax value="error" />

</filter>

<connectionType value="System.Data.SqlClient.SqlConnection" />

<connectionString value="Data Source=ETRMSNONSOXTESTSQL01;initial catalog=ETRM\_Support;integrated security=TRUE" />

<commandText value="dbo.spErrorLoggingInterface" />

<commandType value="StoredProcedure" />

<parameter>

<parameterName value="@ApplicationName" />

<dbType value="String" />

<size value="200" />

<layout type="log4net.Layout.PatternLayout">

<conversionPattern value="%appdomain" />

</layout>

</parameter>

<parameter>

<parameterName value="@PackageName" />

<dbType value="String" />

<size value="200" />

<layout type="log4net.Layout.PatternLayout">

<conversionPattern value="%file" />

</layout>

</parameter>

<parameter>

<parameterName value="@ExecutableName" />

<dbType value="String" />

<size value="200" />

<layout type="log4net.Layout.PatternLayout">

<conversionPattern value="%type" />

</layout>

</parameter>

<parameter>

<parameterName value="@EventHandlerName" />

<dbType value="String" />

<size value="200" />

<layout type="log4net.Layout.PatternLayout">

<conversionPattern value="'thread:'%thread '; method:'%method" />

</layout>

</parameter>

<parameter>

<parameterName value="@ErrorName" />

<dbType value="String" />

<size value="200" />

<layout type="log4net.Layout.PatternLayout">

<conversionPattern value="%level" />

</layout>

</parameter>

<parameter>

<parameterName value="@ErrorNbr" />

<dbType value="Int32" />

<layout type="log4net.Layout.PatternLayout">

<conversionPattern value="%line" />

</layout>

</parameter>

<parameter>

<parameterName value="@ErrorDateTime" />

<dbType value="Datetime" />

<layout type="log4net.Layout.PatternLayout">

<conversionPattern value="%date{yyyy-MM-dd HH:mm:ss}" />

</layout>

</parameter>

<parameter>

<parameterName value="@ErrorMessage" />

<dbType value="String" />

<size value="3000" />

<layout type="log4net.Layout.PatternLayout">

<conversionPattern value="%message" />

</layout>

</parameter>

</appender>

<root>

<level value="ALL" />

<appender-ref ref="ConsoleAppender" />

<appender-ref ref="SqlServer" />

<appender-ref ref="RollingFileAppender"/>

</root>

</log4net>

<startup>

<supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.6.1" />

</startup>

<system.web>

<membership defaultProvider="ClientAuthenticationMembershipProvider">

<providers>

<add name="ClientAuthenticationMembershipProvider" type="System.Web.ClientServices.Providers.ClientFormsAuthenticationMembershipProvider, System.Web.Extensions, Version=4.0.0.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35" serviceUri="" />

</providers>

</membership>

<roleManager defaultProvider="ClientRoleProvider" enabled="true">

<providers>

<add name="ClientRoleProvider" type="System.Web.ClientServices.Providers.ClientRoleProvider, System.Web.Extensions, Version=4.0.0.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35" serviceUri="" cacheTimeout="86400" />

</providers>

</roleManager>

</system.web>

</configuration>