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SftpClient Setup and Usage Guide - Windows

This guide explains how to prepare, configure, and run SftpClient.jar on Windows. It also includes instructions for scheduling the application to run daily at 05:00 AM and for removing the scheduled task.

Note: SftpClient is a Java-based application that connects to an SFTP server and uploads files to a specified directory.

Prerequisites

1. Java Runtime Environment (JRE)

Ensure the jre folder is included in the same directory as the SftpClient.jar.

2. Environment Variables

The run_windows.bat script requires several environment variables to be set. Update these to match your environment before execution.

3. Required Folders

The following folders in the root directory of the application (created during the zip packaging) are used by default for file uploads:

- user_indicator: for stock-related indicator files.
- macro_indicator: for macro indicator files.
- portfolio: for portfolio files.

You may create your own folders and update the environment variables in run_windows.bat accordingly.

Environment Variables

Below are key environment variables, their purposes, and usage examples:

SFTP_PORTFOLIO_FILE_MAPPER

- **Purpose**: Maps external IDs to substrings in file names for portfolios, enabling automatic renaming before upload.
- **Example**: PortfolioExternalId1-Portfolio1, PortfolioExternalId2-Portfolio2



 Mock File Name: "Portfolio1_Report.csv" → renamed to "PortfolioExternalId1-[timestamp]-[operation].csv"

(The substring Portfolio1 in the file name matches the mapping PortfolioExternalId1-Portfolio1. The file is renamed to PortfolioExternalId1-[timestamp]-[operation].csv before being uploaded)

SFTP_PORTFOLIO_FILE_MAPPER_DEFAULT_OPERATION

- **Purpose**: Specifies the default operation for portfolio files.
 - F = replace file and delete history
 - M = modify fileExample: M

Files will be uploaded with the "modify" (update) operation unless specified otherwise.

SFTP_USER_INDICATOR_FILE_MAPPER

- **Purpose**: Same logic as for portfolios, but applies to user indicator files.
- Example: UserExternalId1-UserIndicator1, UserExternalId2-UserIndicator2
- Mock File Name: "UserIndicator1_Data.csv" → renamed to "UserExternalId1-[timestamp][operation].csv" and zipped before upload

SFTP_USER_INDICATOR_FILE_MAPPER_DEFAULT_OPERATION

- **Purpose**: Default operation for user indicator files.
- Example: M

Files will be uploaded with the "modify" operation unless specified otherwise.

SFTP_MACRO_INDICATOR_FILE_MAPPER

- Purpose: Same mapping logic, applied to macro indicator files.
- Example: MacroExternalId1-MacroIndicator1, MacroExternalId2-MacroIndicator2
- Mock File Name: "MacroIndicator1_Stats.csv" → renamed to "MacroExternalId1-[timestamp]-[operation].csv"

SFTP_MACRO_INDICATOR_FILE_MAPPER_DEFAULT_OPERATION

- **Purpose**: Default operation for macro indicator files. F means replace the file, and M means modify the file.
- Example: F

Files will be uploaded with the "replace" operation unless specified otherwise.



✓ Ensure all environment variables are correctly set in run_windows.bat before running the application. If you encounter issues, check the log file (log.txt) in the application's directory for details.

Manual Execution Steps

1. Edit the Script

Open run_windows.bat in a text editor (through right click menu) and update environment variables with values specific to your setup.

2. Run the Script

Double-click run_windows.bat to launch the application.

3. Verify Execution

The script checks for the Java runtime and executes SftpClient.jar.

Scheduling the Application (Daily at 05:00 AM)

1. Prepare the Scheduler Script

Confirm that schedule windows.bat is in the same folder as run_windows.bat.

2. Run the Scheduler

Double-click schedule_windows.bat.

3. Verify Scheduled Task

Open Task Scheduler and look under **Task Scheduler Library** for the task:

RunSftpClientDaily

4. Log Locations

Standard Output: C:\Windows\System32\Tasks\RunSftpClientDaily

Errors: Shown in Task Scheduler's History tab

5. Run Task Without User Login

Open Task Scheduler → Right-click RunSftpClientDaily → Properties

In General tab:

- Select Run whether user is logged on or not
- If you don't wish to store a password, check **Do not store password** (may limit functionality)
- Otherwise, leave unchecked and enter credentials when prompted



Removing the Scheduled Task

1. Run the Removal Script

Double-click remove_schedule_windows.bat

2. Verify Removal

Open Task Scheduler and confirm **RunSftpClientDaily** is no longer listed.

Important Notes

- All .bat scripts (run_windows.bat, schedule_windows.bat, remove_schedule_windows.bat) must be in the same directory as SftpClient.jar and the jre folder.
- The folders user_indicator, macro_indicator, and portfolio are created during packaging. You may use custom folders by updating run_windows.bat.
- If you encounter errors, check logs in the Task Scheduler or in log.txt.

Directory Structure

The directory should have the following structure:

/your-directory

--- run_windows.bat

--- schedule_windows.bat

--- remove_schedule_windows.bat

--- SftpClient.jar

--- README_WINDOWS.md

--- README_WINDOWS.pdf

├— jre/

— user_indicator/

— macro_indicator/

--- portfolio/

Troubleshooting

Java Runtime Not Found

Ensure the jre folder is present and correctly populated.



• Task Scheduler Errors

Confirm you have the required permissions. Check the History tab for details.

• Incorrect Environment Variables

Double-check the variables in run_windows.bat for typos or invalid values.