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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.

1. **Environment Variables**

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

1. **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 file  
      **Example:** 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.

1. **Run the Script**

Double-click run\_windows.bat to launch the application.

1. **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.

1. **Run the Scheduler**

Double-click schedule\_windows.bat.

1. **Verify Scheduled Task**

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

**RunSftpClientDaily**

1. **Log Locations**

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

**Errors:** Shown in Task Scheduler's History tab

1. **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**

1. **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.