

sFTP Implementation Guide

Overview

Recognize provides the ability to bulk update a company's user directory and account information in Recognize via the sFTP (secure File Transfer Protocol) method. Recognize hosts an sFTP server at sftp.recognizeapp.com. When a spreadsheet is uploaded, our system automatically processes the sheet to add, remove, and update users according to the data in the spreadsheet.

This system allows companies to automate their user upload and to upload at a date and time of their choosing. Further, it allows companies to collate data from several sources on their backend and submit a final sheet to Recognize to process.

Once the Recognize system processes the spreadsheet, a report will be emailed to company admins (or others as specified) with information describing if the upload was successful or if there were any errors. Errors are detailed at the row level so you can determine exactly which records failed and why.

Requirements

- Collation of data into a csv or Excel document following the Recognize import template: <https://recognizeapp.com/docs/getting-started/Sample-spreadsheet-for-import.xlsx>
- A public/private SSH key pair in OpenSSH format: <https://www.ssh.com/ssh/keygen/>
- An sFTP client that supports public/private key pair authentication
- Outbound internet connections on port 22
- Static ip address from which company will create sFTP connections

Setup

1. If you do not already have a public/private key, please generate one following these instructions: <https://www.ssh.com/ssh/keygen/>.
 - a. Read more about key pairs here: <https://help.thorntech.com/docs/sftp-gateway-classic/ssh-key-pairs/>
2. Send the following data to Recognize (support@recognizeapp.com) to create a dedicated connection:
 - a. Public key (created from step 1)
 - b. Static ip address
 - c. List of email addresses of users to notify upon completion of processing



- Recognize will create a dedicated connection and white list the ip-address for inbound connections within 2 business days. Once created, Recognize will send the specific connection information which will include the user name with which to connect.

Connection

- Host: sftp.recognizeapp.com
- Port: 22
- Username: provided upon connection setup
- Path: /uploads

Further step by step instructions can be found here: <https://help.thorntech.com/docs/sftp-gateway-classic/connect-as-an-sftp-user/>

Technical Specifications

The Recognize sFTP server uses OpenSSH for the ssh handshake in the sFTP protocol.

Version: OpenSSH_7.4p1, OpenSSL 1.0.2k-fips 26 Jan 2017

Encryption ciphers

3des-cbc	arcfour128	aes256-cbc	aes256-ctr
blowfish-cbc	arcfour256	rijndael-cbc@lysator.liu.se	aes128-gcm@openssh.com
cast128-cbc	aes128-cbc	aes128-ctr	aes256-gcm@openssh.com
arcfour	aes192-cbc	aes192-ctr	chacha20-poly1305@openssh.com

Message integrity codes

hmac-sha1	hmac-md5-96	hmac-sha1-etm@openssh.com	hmac-md5-96-etm@openssh.com
hmac-sha1-96	hmac-ripemd160	hmac-sha1-96-etm@openssh.com	hmac-ripemd160-etm@openssh.com
hmac-sha2-256	hmac-ripemd160@openssh.com	hmac-sha2-256-etm@openssh.com	umac-64-etm@openssh.com
hmac-sha2-512	umac-64@openssh.com	hmac-sha2-512-etm@openssh.com	umac-128-etm@openssh.com
hmac-md5	umac-128@openssh.com	hmac-md5-etm@openssh.com	hmac-md5-96-etm@openssh.com

Key exchange algorithms

diffie-hellman-group1-sha1	diffie-hellman-group18-sha512	ecdh-sha2-nistp384	gss-gex-sha1-
diffie-hellman-group14-sha1	diffie-hellman-group-exchange-sha1	ecdh-sha2-nistp521	gss-group1-sha1-
diffie-hellman-group14-sha256	diffie-hellman-group-exchange-sha256	curve25519-sha256	gss-group14-sha1-
diffie-hellman-group16-sha512	ecdh-sha2-nistp256	curve25519-sha256@libssh.org	

Support key types

ssh-ed25519	ssh-dss	ecdsa-sha2-nistp521	ecdsa-sha2-nistp256-cert-v01@openssh.com
ssh-ed25519-cert-v01@openssh.com	ecdsa-sha2-nistp256	ssh-rsa-cert-v01@openssh.com	ecdsa-sha2-nistp384-cert-v01@openssh.com
ssh-rsa	ecdsa-sha2-nistp384	ssh-dss-cert-v01@openssh.com	ecdsa-sha2-nistp521-cert-v01@openssh.com