

## SSH Key Generation and Login (TeraTerm version)

Last Update: Jul 9, 2025 Tested with Tera Term 5.4.0.

### Introduction

The aim of this page is to explain how to login to RCSS supercomputer using Tera Term.

### Installation of Tera Term

Tera Term can be downloaded from the following site.

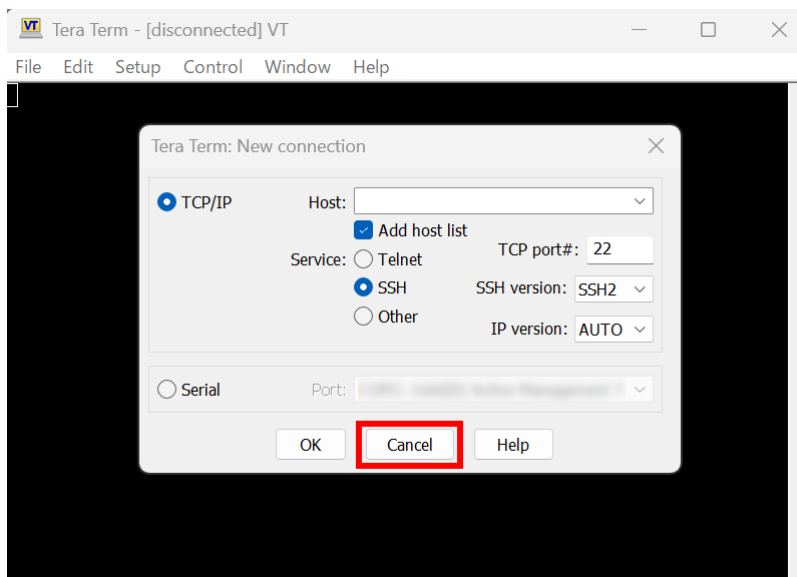
<https://teratermproject.github.io/index-en.html>

### SSH Key Generation

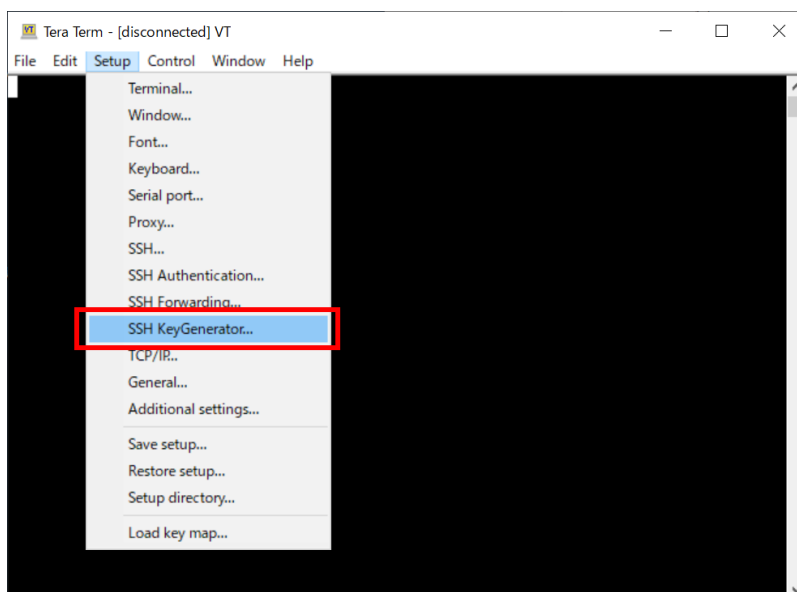
PuTTY type of key (.ppk) is also accepted.

If you already have a key file, [please register your public key](#), or if you have already registered your public key, let's [try to login](#).

### Launch Tera Term



After launching Tera Term, cancel the connection.



Then choose "SSH KeyGenerator" from "Setup" menu to generate your SSH key.

## Key Generation (1) - Key Type

TSSH: Key Generator

Key type

☐ RSA1 ☒ RSA ☐ DSA

☐ ECDSA-256 ☐ ECDSA-384

☐ ECDSA-521 ☐ ED25519

Key Bits: 4096

Generate

Close

Key passphrase:

Confirm passphrase:

Comment:

☒ bcrypt KDF format Number of rounds: 16

Save public key Save private key

You may see SSH key generator window like above.

### 1. Choose Key Type

We, RCCS, recommend ED25519, ECDSA-384, ECDSA-256, and RSA 4096 bits\* types of keys. If you have no preference, please try ED25519.

- If you want to use RSA keys, please use Tera Term 5.0, 4.107, or later version.
- ECDSA-521 keys are disabled due to the issue on PuTTY 0.68-0.80.

### 2. Choose Key Bits Length (RSA only)

You can choose length of key here in case of RSA. 4096 or more is recommended.

### 3. Begin Key Generation

After the specification of key type (and length), click this to generate key.

## Key Generation (2) - set private key passphrase and save keys

TTSSH: Key Generator

Key type

☐ RSA1 ☐ RSA ☐ DSA

☐ ECDSA-256 ☐ ECDSA-384

☐ ECDSA-521 ☒ ED25519

Key Bits: 256

Generate

Close

Help

Key passphrase: .....

Confirm passphrase: .....

Comment: RCCS Key

☒ bcrypt KDF format Number of rounds: 16

3a Save public key 3b Save private key

After the generation of keys, you can set passphrase and comment that key.

### 1. Private key passphrase

You can set passphrase for private key here. We, RCCS, recommend passphrase of 10 or more characters containing 4 types of characters - "lower-case", "upper-case", "number", and "symbol".

## 2. Set a comment (optional)

If you are using (or planning to use) more than one key, adding appropriate comment maybe helpful to you.

## 3. Save public and private keys

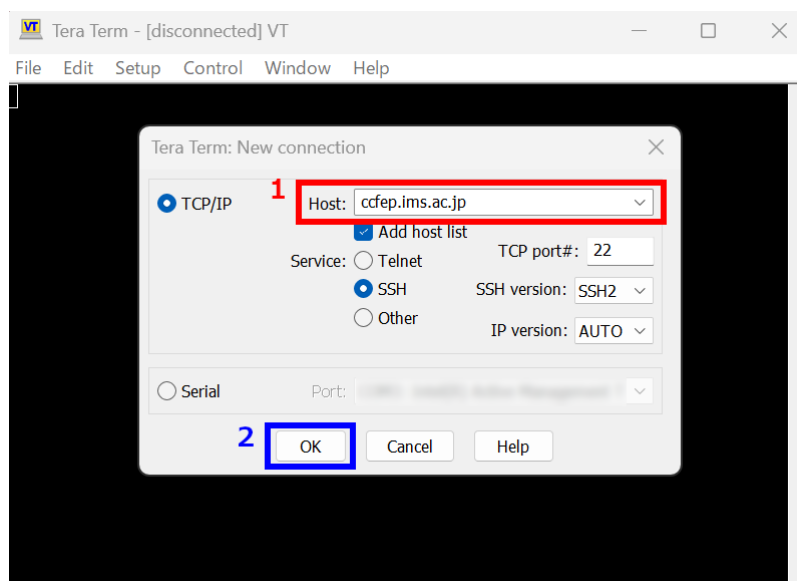
Click buttons 3a and 3b to save public and private keys respectively.

### Register Public Key (Common)

You need to register the public key before login. Please register your public key according to the instructions in <https://ccportal.ims.ac.jp/en/account>.

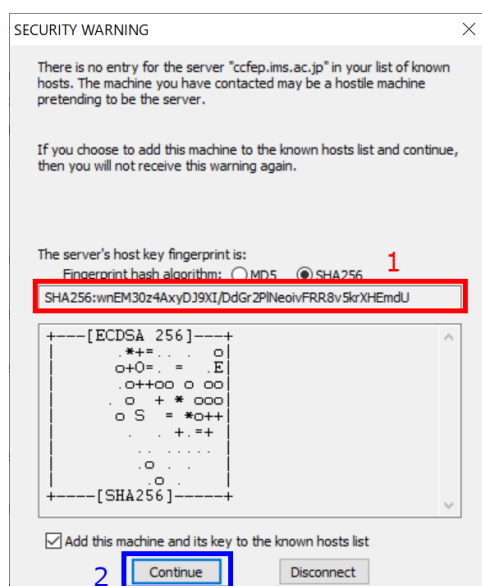
### Login

#### preparations



Restart Tera Term or select "New connection" from "File" menu to go back to first window. Type **ccfep.ims.ac.jp** in Host: textbox and then click OK to proceed.

#### Security Alert upon first Connection



You may see warning dialog like above upon first connection. Please check the fingerprint of the server (1). It must match with either of the fingerprint in the list below.

- ad:de:79:30:81:b0:b1:6a:17:f5:6f:ea:f4:b4:3b:de (MD5)
- e3:a9:bb:6f:e4:a9:37:fd:98:14:54:16:3c:81:2d:aa (MD5)
- 07:7e:df:7b:16:47:a8:f5:7c:48:b0:a3:d3:86:71:6a (MD5)
- wnEM30z4AxyDJ9XI/DdGr2PINeoivFRR8v5krXHEmdU (SHA256)
- 0KL38Yn/kBee1pAuxyKwenEwXjtPxr9ZElolFvqXvbl (SHA256)
- Nhg+9Lgj3XeuW//A/j7jqgUJllxWehryCtStlp1Dir (SHA256)

Click "Continue" (2) if the fingerprint is valid.

Input Login Information

SSH Authentication

Logging in to ccfep.ims.ac.jp

Authentication required.

1

User name:

2

Passphrase:

••••••••

3

☒ Remember password in memory

☐ Forward agent

Authentication methods

☐ Use plain password to log in

4a

☒ Use RSA/DSA/ECDSA/ED25519 key to log in

4b

Private key file:

id\_rsa

☐ Use rhosts to log in (SSH1)

Local user name:

Host private key file:

☐ Use keyboard-interactive to log in

☐ Use Pageant to log in

5

OK

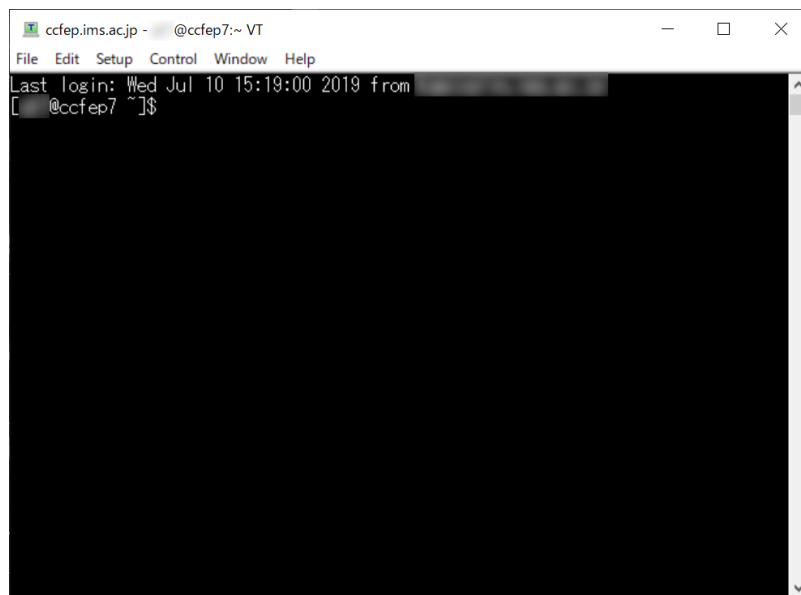
Disconnect

You need to input username, private key file path etc. in this window.

1. Your user account name given by RCCS (three-letter ID)
2. Input the passphrase of the private key.
3. (optional) Uncheck to improve security.
4. Check that item (4a) and then input private key file location.
5. Finally, click OK to proceed.

(You can set default user name and authentication method including private key location in "Setup" -> "SSH Authentication". Please don't to forget to run "Setup" -> "Save setup" after the SSH authentication setup.)

Login Completed!



The image shows a terminal window titled "ccfep.ims.ac.jp - @ccfep7:~ VT". The window has a menu bar with "File", "Edit", "Setup", "Control", "Window", and "Help". The terminal output shows a login message: "Last login: Wed Jul 10 15:19:00 2019 from [REDACTED]". Below this, the prompt is "[ @ccfep7 ~]\$". The rest of the terminal area is black.

```
ccfep.ims.ac.jp - @ccfep7:~ VT
File Edit Setup Control Window Help
Last login: Wed Jul 10 15:19:00 2019 from [REDACTED]
[ @ccfep7 ~]$
```

If everything works fine, you will successfully login to the login server.