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'stry to login.



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 | | 3 × |
|--|-------------------------|-------------------|
| Key type ORSA1 ORSA ODS OECDSA-256 OECDSA OECDSA-521 OED255 | A-384 Key Bits: 4096 | Generate Close |
| Key passphrase: Confirm passphrase: | 1 | |
| 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



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 contaning 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 | | | | |
| preparacions | | | | |
| Tera Term - [disconnecte | ed] VT | _ | | \times |
| File Edit Setup Control | Window Help | | | |
| The East Setup Control | window help | | | |
| | | | | 1 |
| Tera Term: I | New connection | > | < | |
| | | | | |
| ● TCP/IP | ▲ Host: ccfep.ims.ac.jp |) v | | |
| | 🗹 Add host lis | t | 1 | |
| | Service: 🔿 Telnet | TCP port#: 22 | | |
| | SSH | SSH version: SSH2 $$ | | |
| | ◯ Other | | | |
| | | IP Version. AUTO ♥ | | |
| Coriol | Dort | | 1 | |
| U Serial | Port; | ~ | | |
| | | | | |
| | 2 OK Cancel | Help | | |

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

| Security Alert upon first Connection | | |
|--|--|--|
| SECURITY WARNING X | | |
| There is no entry for the server "ccfep.ims.ac.jp" in your list of known hosts. The machine you have contacted may be a hostile machine pretending to be the server. | | |
| If you choose to add this machine to the known hosts list and continue, then you will not receive this warning again. | | |
| The server's host key fingerprint is: Fingerprint hash algorithm: MD5 ③ SHA256 1 SHA256:wnEM30z4AxyD39XI/DdGr2PINeoivFRR8v5krXHEmdU | | |
| +[ECDSA 256]+ | | |
| Add this machine and its key to the known hosts list Continue Disconnect | | |

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/kBee1pAuxyKwenEwXjtPxr9ZElolfVqXvbI (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. | | |
| User name: | - | |
| Passphrase: | - | |
| Remember password in memory | 2 | |
| Forward agent 3 | - | |
| Authentication methods | | |
| O Use plain password to log in | | |
| | 1h | |
| Jse RSA/DSA/ECDSA/ED25519 kev to log in | 4b | |
| Jse RSA/DSA/ECDSA/ED25519 kev to log in A Private key file: | 4b Aid_rsa | |
| Jse RSA/DSA/ECDSA/ED25519 kev to log in A Private key file: Use rhosts to log in (SSH1) | 4b ^{kid_rsa} | |
| Jse RSA/DSA/ECDSA/ED25519 kev to log in Sector Algorithms Sector Algorithm | 4b ^{fid_rsa} | |
| Jse RSA/DSA/ECDSA/ED25519 kev to log in See RSA/DSA/ECDSA/ED25519 kev to log in Use rhosts to log in (SSH1) Local user name: Host private key file: | 4b fid_rsa | |
| Jse RSA/DSA/ECDSA/ED25519 kev to log in Jse RSA/DSA/ECDSA/ED25519 kev to log in Use rhosts to log in (SSH1) Local user name: Host private key file: Use keyboard-interactive to log in | 4b fid_rsa | |
| Jse RSA/DSA/ECDSA/ED25519 kev to log in Jse RSA/DSA/ECDSA/ED25519 kev to log in Use rhosts to log in (SSH1) Local user name: Host private key file: Use keyboard-interactive to log in Use Pageant to log in | 4b fid_rsa | |
| Jse RSA/DSA/ECDSA/ED25519 kev to log in Jse RSA/DSA/ECDSA/ED25519 kev to log in Use rhosts to log in (SSH1) Local user name: Host private key file: Use keyboard-interactive to log in Use Pageant to log in | 4b ^{fid_rsa} | |
| Jse RSA/DSA/ECDSA/ED25519 kev to log in Jse RSA/DSA/ECDSA/ED25519 kev to log in Use rhosts to log in (SSH1) Local user name: Host private key file: Use keyboard-interactive to log in Use Pageant to log in | 4b ^{fid_rsa} 5 ок | 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.)

| _ | | |
|--------------------|--|--|
| | | |
| I Login Completed! | | |
| | | |



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