SSH Key Generation (TeraTerm version)

Last Update: Jan 5, 2022 (verified with Tera Term 4.106)

Introduction

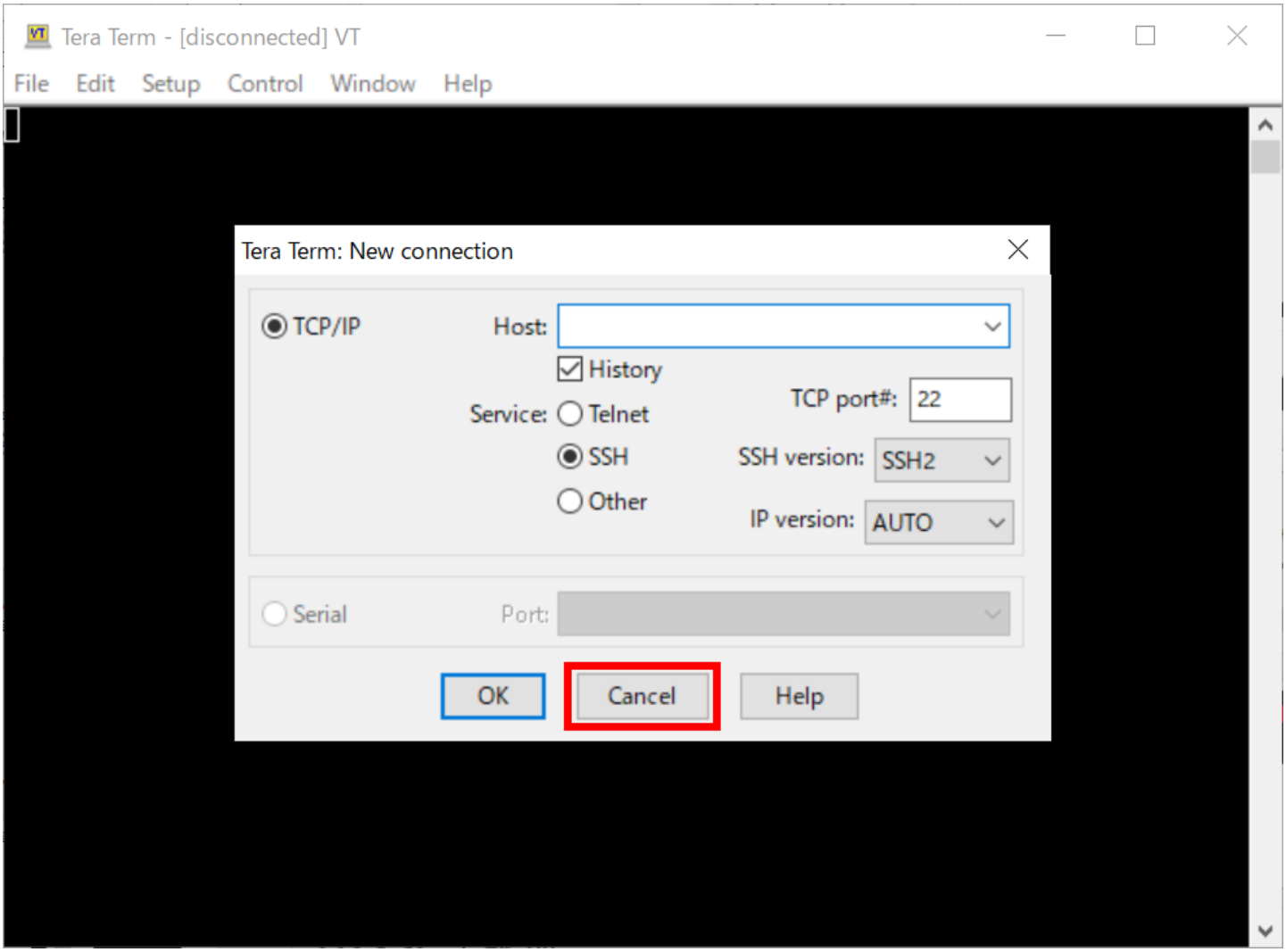
The aim of this page is to explain how to login to RCSS supercomputer using Tera Term.

Installation of Tera Term

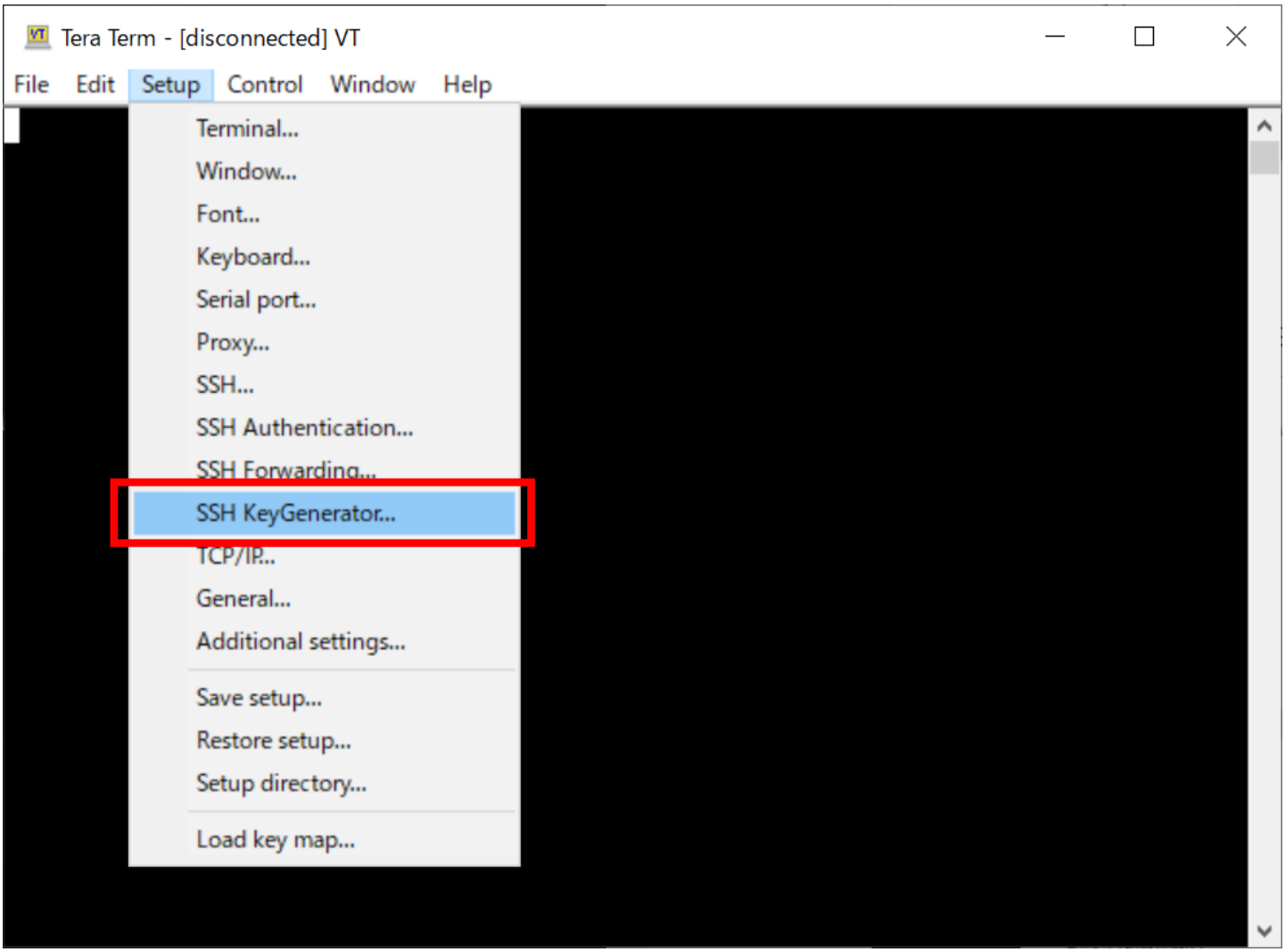
Tera Term can be downloaded from the following site.
https://ja.osdn.net/projects/ttssh2/releases

SSH Key Generation

Launch Tera Term

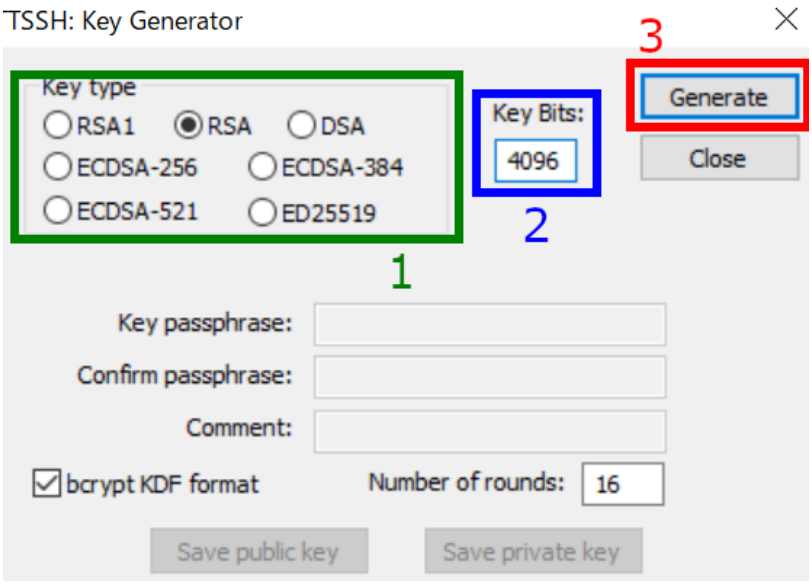


After launching Tera Term, cancel the connection.



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

Key Generation (1) - Key Type



You may see SSH key generator window like above.

1. Choose Key Type

We, RCCS, recommend ED25519, ECDSA-521, ECDSA-384, ECDSA-256, and RSA 4096 bits* types of keys. If you have no preference, plase try ED25519.

*Tera Term 4.105 does not support SHA2 RSA algorithms (rsa-sha2-256/512). If SHA1 algorithm (ssh-rsa) is disabled in the near future, you may have a trouble upon RSA authentication. (Those SHA2 algorithms will be available in Tera Term 4.107, though.) Note: RSA key type itself is not relating with SHA1/SHA2. You usually don't need to regenerate RSA key upon migration from SHA1 to SHA2.

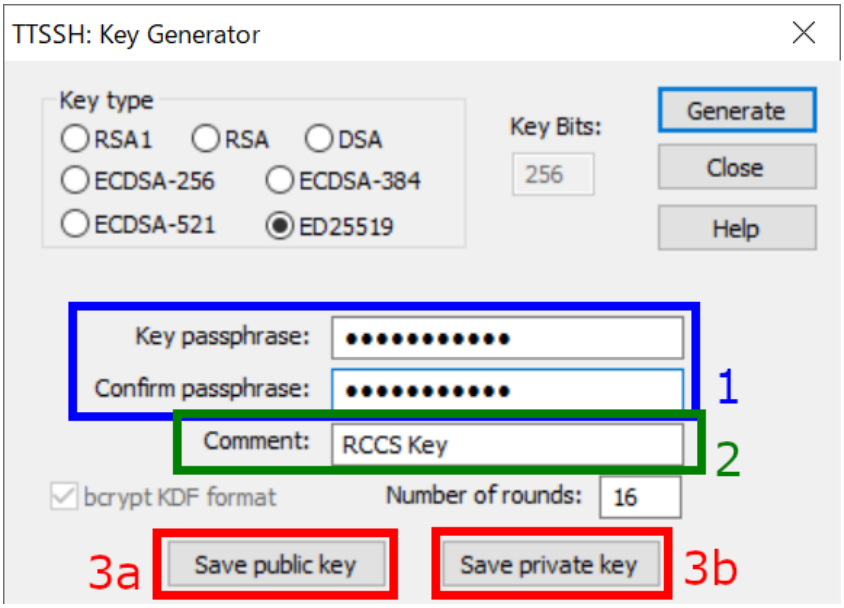
2. Choose Key Bits Length (RSA only)

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

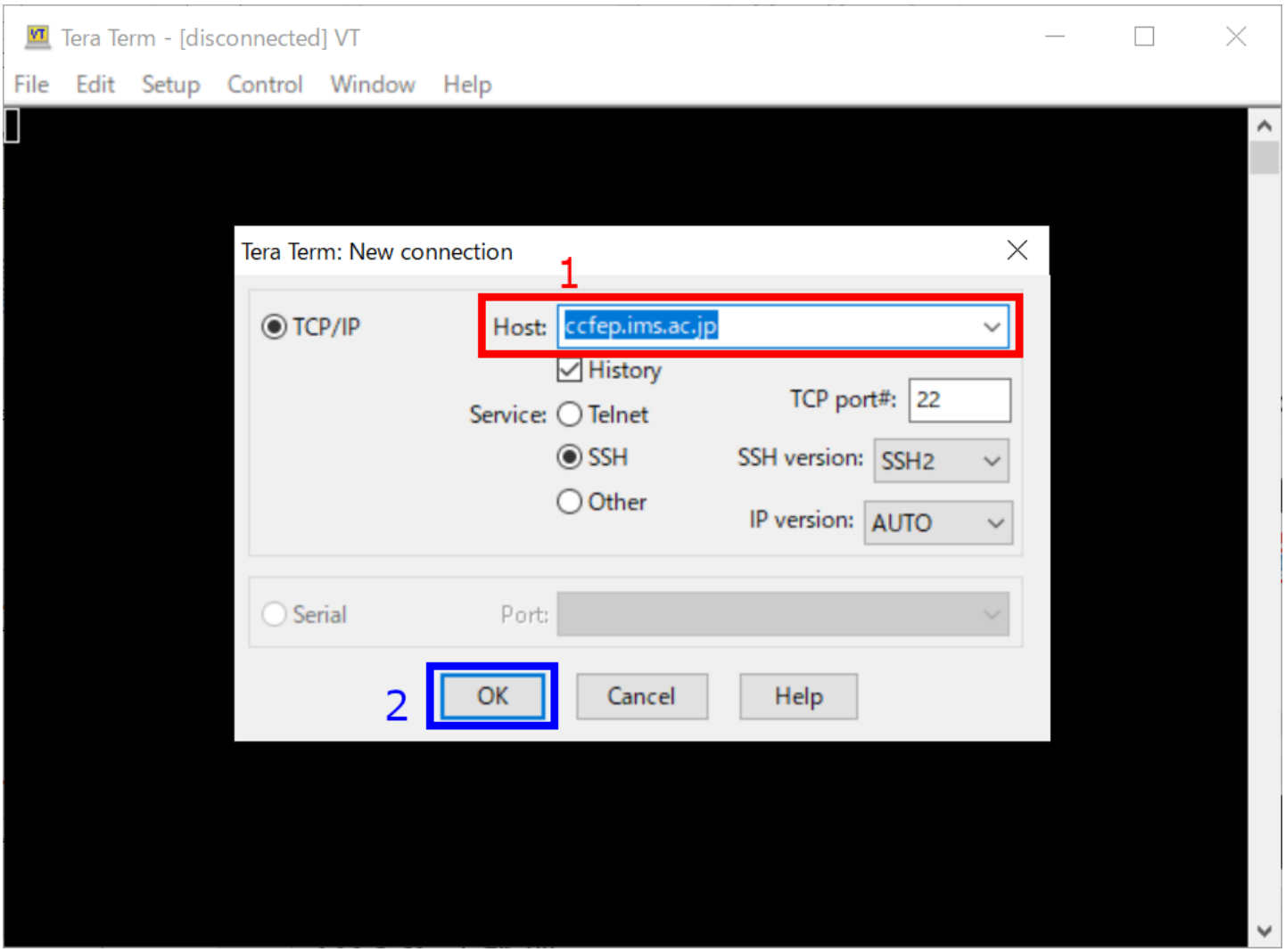
Click buttons 3a and 3b to save public and private keys , respectively.

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.

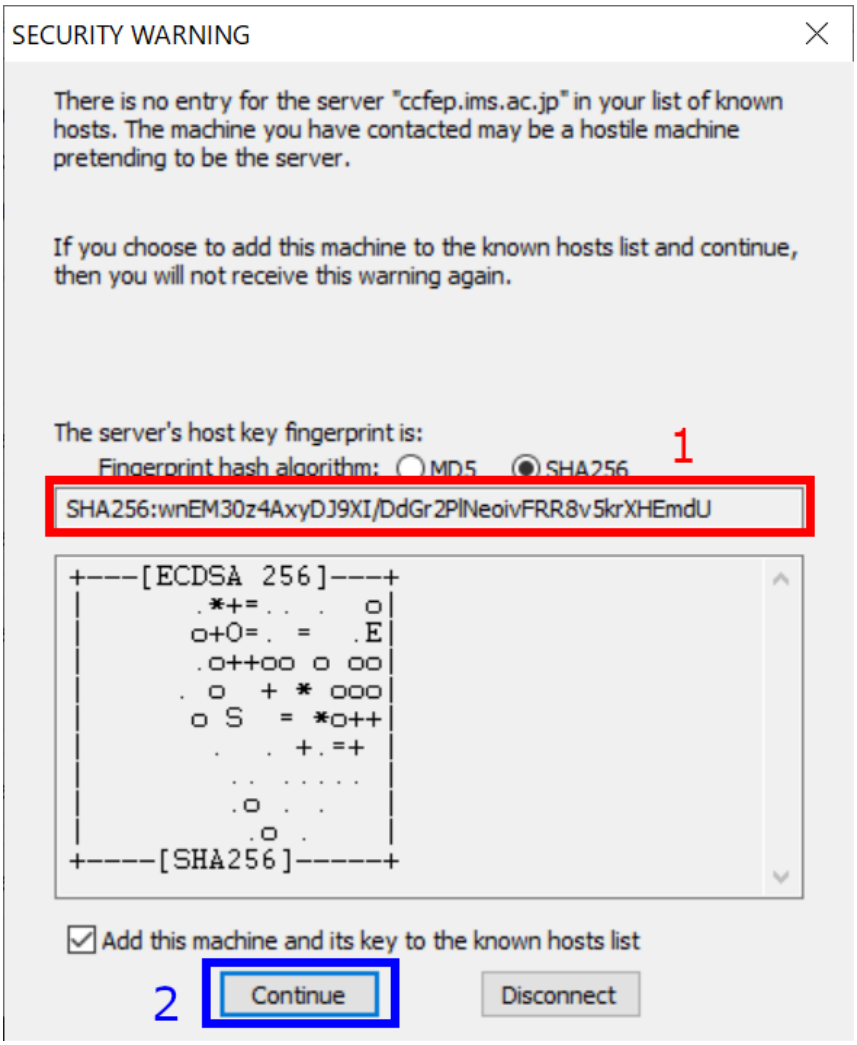
Login

preparations



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

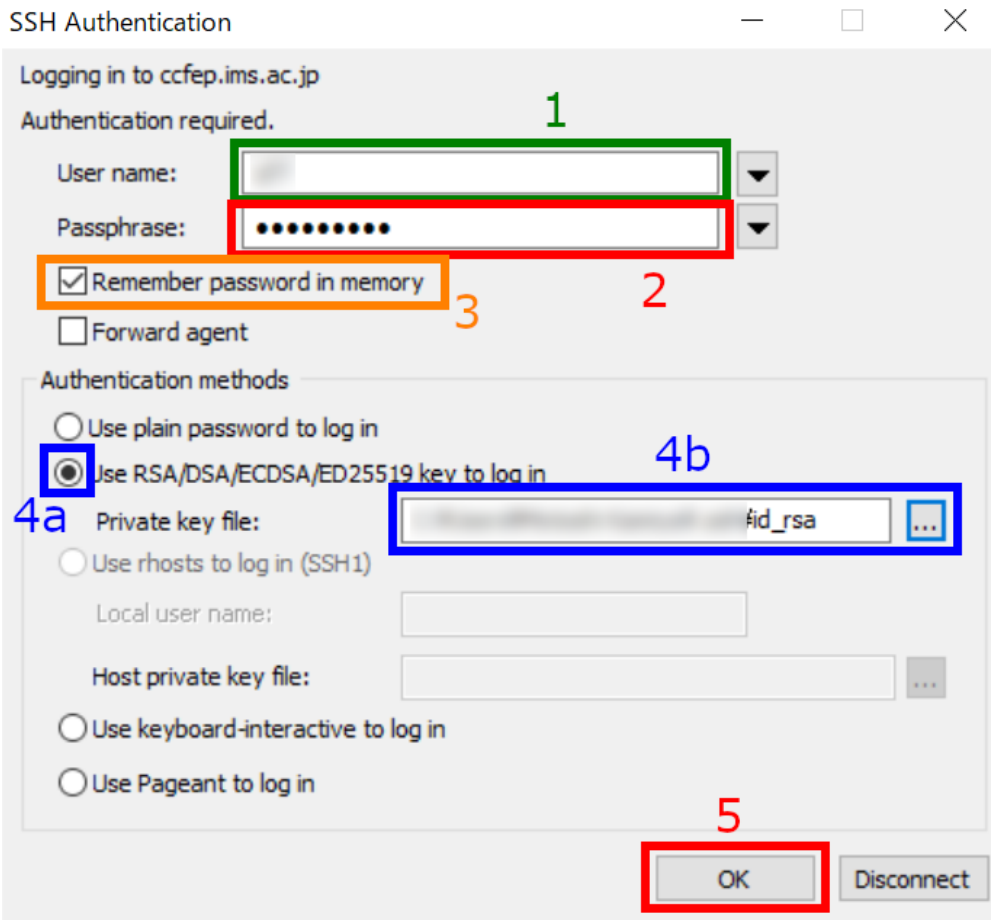


You may see warning dialog like above upon first connection. Please check the fingerprint of the server (1). It must match with either of the fingerprint in the list below.

- 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/DdGr2PlNeoivFRR8v5krXHEmdU (SHA256)
- 0KL38Yn/kBee1pAuxyKwenEwXjtPxr9ZEloIfVqXvbI (SHA256)
- Nhg+9Lgj3XeuW//A/j7jqgUJIlxWehryCtStIp1Dir (SHA256)

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

Input Login Information

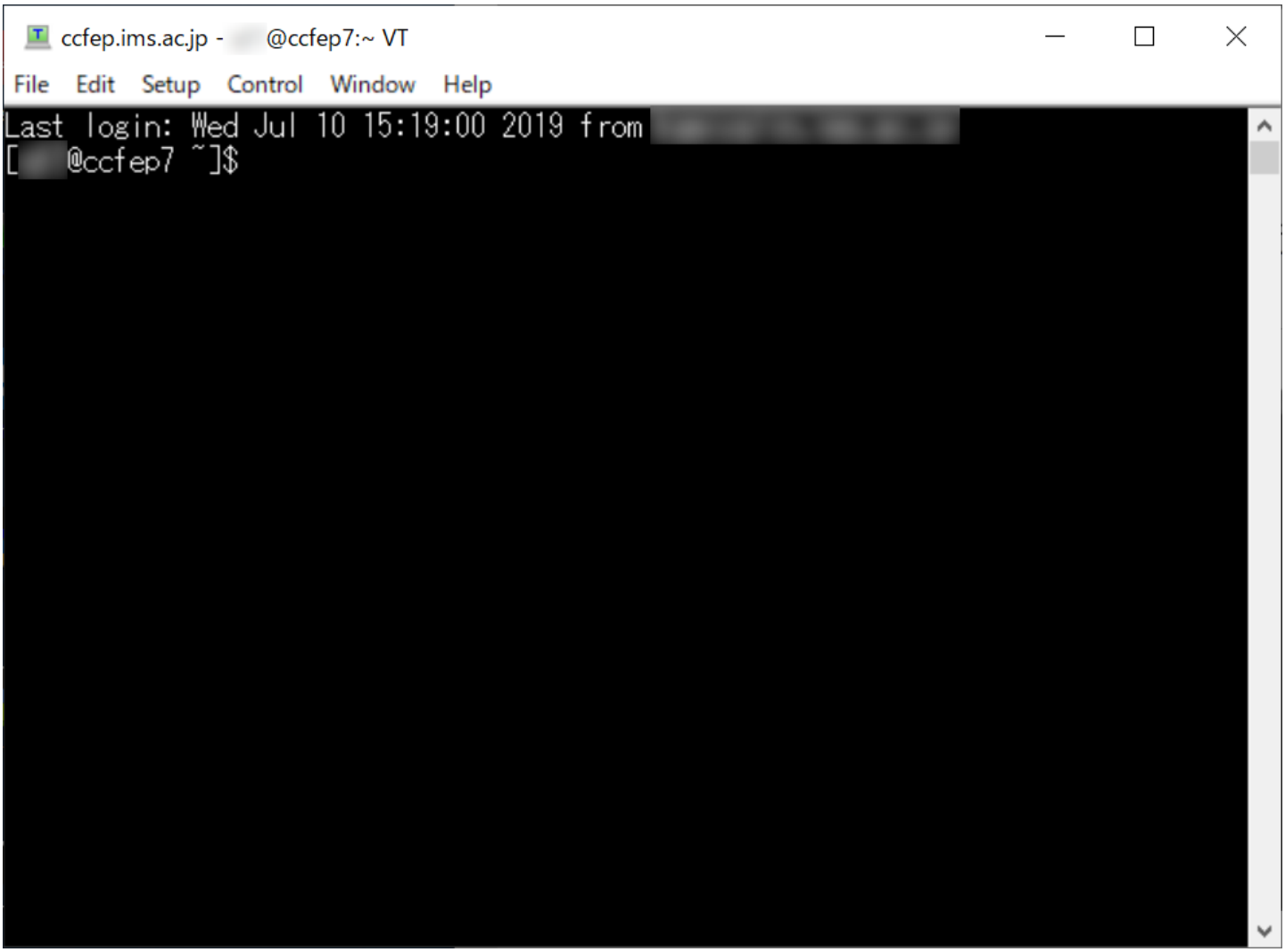


You need to input username, private key file path etc. in this window.

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".)

Login Completed!



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