**Instructions for login to Karolina**

**Whole process in video tutorials**

[TUTORIAL: Accessing to IT4I clusters - Windows training user - YouTube](https://www.youtube.com/watch?v=Ryz8LRR1krc&list=PLo0alAq_baXVfImuezMX99Zncig_dSa65&index=2&t=4s)

[TUTORIAL: Accessing to IT4I clusters - Linux training user - YouTube](https://www.youtube.com/watch?v=i139HIaVfQU&list=PLo0alAq_baXVfImuezMX99Zncig_dSa65&index=3&t=2s)

**Documentation of IT4I infrastructure, written instructions:**

<https://docs.it4i.cz/>

1. Generating Private key and Public key

<https://docs.it4i.cz/general/accessing-the-clusters/shell-access-and-data-transfer/ssh-key-management/#public-key>

1a) Unix user

Creating Your Own Key:

<https://docs.it4i.cz/general/accessing-the-clusters/shell-access-and-data-transfer/ssh-keys/#creating-your-own-key>

1b) Windows user

Download PUTTYgen:

<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

PUTTYgen generator totorial:

<https://docs.it4i.cz/general/accessing-the-clusters/shell-access-and-data-transfer/putty/#putty-key-generator>

1c) Mac users

PuTTY for Mac process

<https://www.siteground.com/kb/how_to_generate_an_ssh_key_pair_in_mac_os/>

Video tutorial:

<https://www.youtube.com/watch?v=XoASOMU8lNk&ab_channel=PeopleCanCode>

Tutorial PUTTYgen:

<https://www.puttygen.com/#Download_PuTTYgen_for_Mac>

2. Upload private-public keys(ssh-rsa)

Documentation:

<https://docs.it4i.cz/general/management/it4i-profile/>

2a) Upload public key

Link to upload SSH Key via it4i portal:

<https://extranet.it4i.cz/ssp/index.php?action=changesshkey>

2b) Upload Private key

Private Key Authentication:

<https://docs.it4i.cz/general/shell-and-data-access/#private-key-authentication>

3. Access to cluster:

Karolina can only be accessed by SSH protocol.

You will need an SSH client, private SSH key and its passphrase to log on to Karolina.

IT4I documentation:

<https://docs.it4i.cz/general/shell-and-data-access/>

Login to cluster:

Host: karolina.it4i.cz

3a) Verification of SSH fingerprints

Please verify SSH fingerprints during the first logon.

You can find them at <https://docs.it4i.cz/general/shell-and-data-access/>.

3b)Connect using SSH

SSH client applications are widely available on Linux and Mac operating systems.

Login Windows user

PuTTY is a free implementation of SSH for Windows.

PuTTY - download:

<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

1. Start PuTTY.

2. Type your\_login@karolina.it4i.cz into the Session -> Host Name field.

3. Browse for your private SSH key file in Connection -> SSH -> Auth.

4. Click Open.

PuTTY - How to Connect to the IT4Innovations Cluster:

<https://docs.it4i.cz/general/accessing-the-clusters/shell-access-and-data-transfer/putty/#putty---how-to-connect-to-the-it4innovations-cluster>

Login Unix/MAC user

1. Set up file permissions # chmod 0600 your\_private\_ssh\_key\_file

2. Login to server # ssh -i your\_private\_ssh\_key\_file  your\_login@karolina.it4i.cz

\* File transfers

File transfers are available via SFTP protocol.

We recommend using scp/sftp/sshfs tools for Linux or Mac.

There is WinSCP client for Windows.

WinSCP download:

<https://winscp.net/eng/download.php>