

## Instructions for login to Karolina

### Whole process in video tutorials

[TUTORIAL: Accessing to IT4I clusters - Windows training user - YouTube](#)

[TUTORIAL: Accessing to IT4I clusters - Linux training user - YouTube](#)

### 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 tutorial:

<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/](https://www.siteground.com/kb/how_to_generate_an_ssh_key_pair_in_mac_os/)

Video tutorial:

[https://www.youtube.com/watch?v=XoASOMU8INk&ab\\_channel=PeopleCanCode](https://www.youtube.com/watch?v=XoASOMU8INk&ab_channel=PeopleCanCode)

Tutorial PuTTYgen:

[https://www.puttygen.com/#Download\\_PuTTYgen\\_for\\_Mac](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](https://docs.it4i.cz/general/shell-and-data-access/) 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>