

How to login to Oakleaf-FX

Information Technology Center
The University of Tokyo

How to Login

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- Login to Oakleaf-FX
 - ▣ Oakleaf-FX has 6 login nodes
 - oakleaf-fx-1.cc.u-tokyo.ac.jp
 - ...
 - oakleaf-fx-6.cc.u-tokyo.ac.jp
 - ▣ “oakleaf-fx.cc.u-tokyo.ac.jp” is also accepted
 - ▣ SSH version 2

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- Public Key Certificate

- Public Key Certificate
- Password provided by ITC
with 8 characters is not
used for “login”

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- Password with 8 characters by ITC
 - ▣ for registration of keys
 - ▣ browsing manuals
 - Only users can access manuals
 - SSH Port Forwarding is possible by keys

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- Procedures
 - ▣ Creating Keys
 - ▣ Registration of Public Key
 - ▣ Login

Creating Keys on Unix

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- OpenSSH for UNIX/Mac/Cygwin

Creating Keys on Unix

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- Command for creating keys

```
$ ssh-keygen -t rsa
```

- RETURN
- Passphrase
- Passphrase again

Creating Keys on Unix

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```
>$ ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/home/guestx/.ssh/id_rsa):
Enter passphrase (empty for no passphrase): (your favorite passphrase)
Enter same passphrase again:
Your identification has been saved in /home/guestx/.ssh/id_rsa.
Your public key has been saved in /home/guestx/.ssh/id_rsa.pub.
The key fingerprint is:
```

```
>$ cd ~/.ssh
>$ ls -l
total 12
-rw----- 1 guestx guestx 1743 Aug 23 15:14 id_rsa
-rw-r--r-- 1 guestx guestx 413 Aug 23 15:14 id_rsa.pub

>$ cat id_rsa.pub

(cut & paste)
```

Registration of Public Key

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- Through User Portal (WEB)
 - ▣ <https://oakleaf-www.cc.u-tokyo.ac.jp/cgi-bin/hpcportal.en/index.cgi>
 - <http://www.cc.u-tokyo.ac.jp/system/fx10/fx10-login.html>
 - <http://www.cc.u-tokyo.ac.jp/system/fx10/fx10-tebiki/>

Login

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- Login

```
$ ssh oakleaf-fx.cc.u-tokyo.ac.jp -l t820**
```

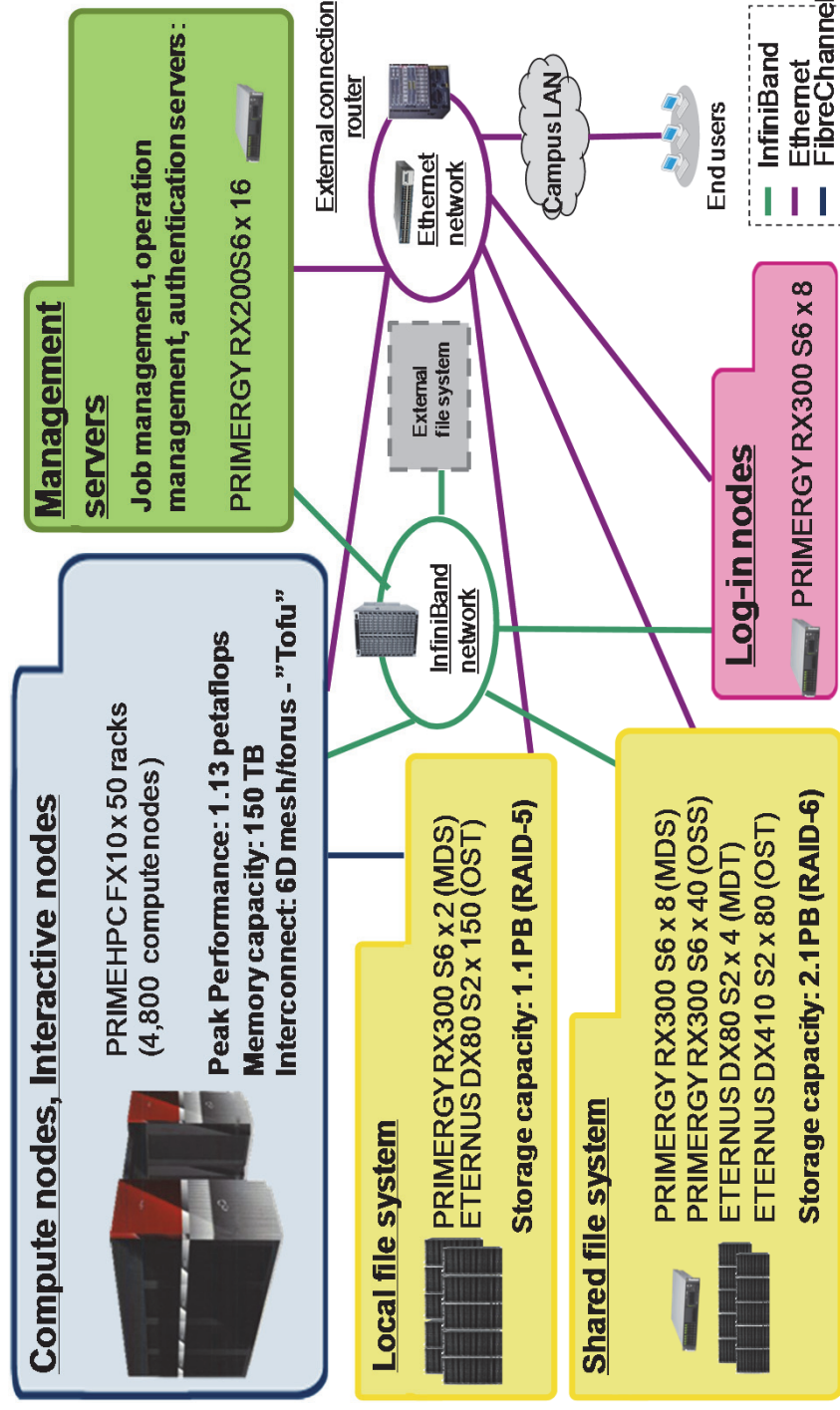
```
$ ssh t820**@oakleaf-fx.cc.u-tokyo.ac.jp
```

- Copying Files

```
$ scp file t820**@oakleaf-fx.cc.u-tokyo.ac.jp:~/.
```

- Public/Private Keys are used

- ▣ “Passphrase”, not “Password”



- Aggregate memory bandwidth: 398 TB/sec.
- Local file system for staging with 1.1 PB of capacity and 131 GB/sec of aggregate I/O performance (for staging)
- Shared file system for storing data with 2.1 PB and 136 GB/sec.
- External file system: 3.6 PB

Compilers

- Fujitsu (default)
- GNU
- Fujitsu Compilers are used in this course

Running Jobs

- How to run
 - batch-submission only
 - NO interactive mode
 - Normal users can use interactive nodes
- Procedures for running
 - preparing job-script
 - submitting jobs
 - checking job status
 - checking results
- Etc.
 - 16 cores of each node is occupied by each job
 - Other jobs cannot use cores of nodes occupied by other jobs

If you want to login to Oakleaf-FX from your PC

- Login to ECCS 2012
 - <https://ras.ecc.u-tokyo.ac.jp/guacamole/>
- If you put your “private key” on your PC, you can directly login to Oakleaf-FX.

Manual etc.

- User Portal
 - <https://oakleaf-www.cc.u-tokyo.ac.jp/cgi-bin/hpcportal.en/index.cgi>

Please check schedule of maintenance

- Last Friday of each month
 - other non-regular shutdown
- <http://www.cc.u-tokyo.ac.jp/>
- <http://www.cc.u-tokyo.ac.jp/system/fx10/>

**If you have any questions,
please contact KN (Kengo
Nakajima)**

Do not contact ITC support directly.