

Wisteria/BDEC-01 (Odyssey) How to login

Information Technology Center The University of Tokyo If you have any questions, please contact Kengo Nakajima at <u>nakajima(at)cc.u-tokyo.ac.jp</u> Please DO NOT contact official support site

Before Accessing Odyssey ...

- Please make sure that:
 - -the OS of your PC is the most updated version
 - proper anti-virus software with the most updated version is installed to your PC

- <u>Supercomputers in ITC/U.Tokyo</u>
 <u>Information Technology Center, The</u>
 <u>University of Tokyo</u>
- Login to Odyssey
- After Login

 Supercomputers in ITC/U.Tokyo

 Information Technology Center, The University of Tokyo

- Login to Odyssey
- After Login

Login to Odyssey

- SSH Public Key Authentication(SSH公開鍵認証, SSH=Secure Shell): <u>Safer than Password Authentication</u>
- Procedures
 - Windows: WSL, Cygwin, Mac · Unix: Terminal
 - ① Creating Keys (Private Key, Public Key) on PC
 - Passphrase: Password for SSH Public Key Authentication
 - "Empty Passphrase" is prohibited
 - If you have already created keys on your PC before, you can skip ①
 (Please make sure it is with "passphrase")
 - (2) Accessing the Portal Site
 - User ID(t18XYZ) and "Initial Password with 8-Characters" (Info-1/Info-2)
 - You are requested to change Password after accessing the portal site
 - Several rules for number of characters, combinations etc.
 - ③ Registration of the Public Key through the Portal Site
 - 2 and 3 are essential, even if you have already had UID's on Odyssey
 - ④ Login to Odyssey by ssh

1) Creating Keys on PC (1/3)

\$ ssh-keygen -t rsa

Generating public/private rsa key pair. Enter file in which to save the key (/home/user/.ssh/id_rsa): <Return↓> Enter passphrase (empty for no presentase): Your Favorite Passphrase <Return↓> Enter same passphrase again: Same Passphrase <<Return↓> Your identification has been saved in /home/user/.ssh/id_rsa. Your public key has been saved in /home/user/.ssh/id_rsa.pub.

The key fingerprint is: SHA256:vt880+PTcscHkOyabvxGjeRsMWLAWds+ENsDcReNwKo nakajima@KNs-NEW-VAIO The key's randomart image is:



Procedures

- ssh-keygen –t rsa <Return↓>
- <Return↓>
- Your Favorite Passphrase <Return↓>
- Same Passphrase <Return↓>
- "Empty Passphrase" is prohibited

1) Creating Keys on PC (1/3)

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Procedures

- ssh-keygen –t rsa <Return↓>
- <Return↓>
- Your Favorite Passphrase <Return↓>
- Same Passphrase <Return↓>
- "Empty Passphrase" is prohibited

1) Creating Keys on PC (2/3)

\$ cd ~/. ssh

\$ Is

id_rsa id_rsa.pub ⇒秘密鍵 (Private Key)⇒公開鍵 (Public Key)

\$ cat id_rsa.pub

ssh-rsa

AAAAB3NzaC1yc2EAAAADAQABAAABAQDa6InmOYYaCrWjQDukjiNEfdW8veUwJyZtEI3oDu0A28 eey6p0wbtI7JB09xnI1707HG4yYv0M81+/nIAHy5tAfJIy0dsPzjTgdTBLdgi3cSf5pWEY6U96 yaEr0Ei8Wge1HkXrhcwUjGDVTzvT0Refe6zLdRziL/KNmmesSQfR5IsZ/ihsjMgFxGaKsHHq/I ErCtHIIIf9V/Ds2yj6vkAaWH6asBn+ZsRiRFvwHPhkYAnp/j3LY6b8Qfqg0p4WZRenh/HgySWT YIGi8x67VzMaUIm9qIK0QFMCaK2rivX1fmbwyWJ/vrWDqiek6YXoxLDu+GPeQ4CPvxJcZnqF9g f3 nakajima@KNs-NEW-VAI0

1 Copying the Public Key (3/3)



(2) Accessing the Portal Site (1/3)

- Please prepare 2 e-mails from me
- Info-1
 - User ID: t18XYZ
- Info-2
 - Initial Password (8-Characters): e.g. Pas#w0rd

System Information/Portal Site

- 日本語
 - https://wisteria-www.cc.u-tokyo.ac.jp/cgi-bin/hpcportal.ja/index.cgi
 - https://www.cc.u-tokyo.ac.jp/supercomputer/wisteria/service/
- English
 - https://wisteria-www.cc.u-tokyo.ac.jp/cgi-bin/hpcportal.en/index.cgi

2 Accessing the Portal Site (2/3)

https://wisteria-www.cc.u-tokyo.ac.jp/cgi-bin/hpcportal.en/index.cgi

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[English/Japanese] ■ Login Pleas - Su - Su - Mic - Su - Su - Su - Su - Su - Su - Su - Su	user 10 and password then click 1 opin button ser ID Login User ID Com User ID and password then click 1 opin button I opin	Password: Reset		
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(2) Changing Initial Password (2/3)

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		Wisteria User Portal		🗵 Logout
Information	Change Password			
SSH Public Key	Only Oakbridge-CX User Portal pass	word is supported by this function		
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Password			<u> </u>	<mark>3 Chars)</mark>
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EDisk usage	New password(re-enter)	•••••		
Prepost reservation		Change		
Document			Type New P	assword
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Deseword	Policy		(IWICE)	

- ✓ at least eight characters in length
- should not contain three or more characters from current password
- should not be the same as the past 2 times.
- should contain all character types of lower case letters, upper case letters, arabic numbers, and special characters
- ✓ special characters can be used are as follow:
 - blank, !, ", #, \$, %, &, ', (,), *, +, ,, -, ., /, :, ;, <, =, >, ?, @, [, ¥,], ^, _, `, {, |, }, ~,
- not a name or linux dictionary word
- do not contain multi-byte characters

15 3 Registration of the Public Key (id rsa.pub) no Oakbridge-CX スーパーコンピュータ 🗙 Oakbridge-CX User Portal X Ē ... 🖂 🏠 https://obcx-www.cc.u-tokyo.ac.jp/cgi-bin/hpcportal u.en/index.cgi G E Wisteria User Portal 🛛 Logout 🖻 Information SSH Public Key 1. Select "SSH Public Key" Menu SSH Public Key E-mail Registered Public-keys Kengon@Kengon-VAIO Paste the "id rsa.pub" 2. Password Token usage Direct Input **Click** "Register 3. **Registration Method** Disk usage ○ File Upload Prepost reservation Document ssh-rsa - OSS AAAAB3NzaC1yc2EAAAADAQABAAABAQDa6InmOYYaCrWjQDukjiNEfdW8veUwJ vZtEI3oDu0A28eev6p0wbtI7JB09xnI1707HG4vYv0M81+/nIAHv5tAfJIv0d sPz iTgdTBLdgi3cSf5pWEY6U96vaEr0Ei8Wge1HkXrhcwUiGDVTzvT0Refe6z LdRziL/KNmmesSQfR5lsZ/ihsiMgFxGaKsHHq/IErCtHIIIf9V/Ds2vi6vkAa WH6asBn+ZsRiRFvwHPhkYAnp/j3LY6b8Qfgg0p4WZRenh/HgySWTYIGi8x67V zMaU1m9g1K0QFMCaK2rivX1fmbwyWJ/vrWDgiek6YXoxLDu+GPeQ4CPvxJcZn aF9gf3 Regist Notice for registering public-key. Copyright 2019 FUJITSU LIMITED d 😣 🔨 ₹4

③ Registration of the Public Key (id_rsa.pub): Direct Upload (1/4)

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- 035	RSA O DSA O ECDSA256 「ファイルが選択されていません。」 Ed25519		
	Register		
	Notice for registering public-key.		
	*Select appropriate method of encrypt		
	*DSA Public-key should be encrypted w		<
	*ECDSA Public-key should be encrypted with 256 bit.		< 1 7
	*Invalid code such as full-length codes should not be included.		d)s
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(3) Registration of the Public Key (id rsa.pub): Direct Upload (2/4)

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Group Manage

Information	SSH Public Key		
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Register

Notice for registering public-key.

*Select appropriate method of encryption (RSA or DSA or ECDSA or Ed25519.)

*RSA Public-key should be encrypted with over 2048 bit.

*DSA Public-key should be encrypted with over 1024 bit.

*ECDSA Public-key should be encrypted with 256 or 384 or 521 bit.

*Ed25519 Public-key should be encrypted with 256 bit.

*Invalid code such as full-length codes should not be included.

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Logout

③ Registration of the Public Key (id_rsa.pub): Direct Upload (3/4)

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③ Registration of the Public Key (id_rsa.pub): Direct Upload (4/4)

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(4) Login to Odyssey from PC (1/2) Initial

\$ ssh t18XYZ@wisteria.cc.u-tokyo.ac.jp Return
The authenticity of host 'wisteria.cc.u-tokyo.ac.jp' can't be established.
ECDSA key fingerprint is SHA256:/XXXXX ...
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes Return
Warning: Permanently added 'wisteria.cc.u-tokyo.ac.jp' to the list of known hosts.
Enter passphrase for key '/home/nakajima/.ssh/id_rsa': Your Passphrase Return

1. ssh t18XYZ@wisteria.cc.u-tokyo.ac.jp <Return>

- 2. yes <Return>
- 3. Your Passphrase <Return>

④ Login to Odyssey from PC (1/2) after 2nd Login

\$ ssh t18XYZ@wisteria.cc.u-tokyo.ac.jp Return

Enter passphrase for key '/home/nakajima/.ssh/id_rsa': <mark>Your Passphrase</mark>

ssh t18XYZ@wisteria.cc.u-tokyo.ac.jp <Return>
 Your Passphrase <Return>

Return

4 Login to Odyssey from PC (2/2)

Wisteria/BDEC-01 Information

Date: May. 14, 2021

Welcome to Wisteria/BDEC-01 system * Operation Schedule 05/14(Fri) 10:00 - 05/28(Fri) 09:00 Not 05/24(Mon) 09:00 - 05/24(Mon) 17:00 HPC 05/28(Fri) 09:00 - 05/28(Fri) 22:00 System 05/28(Fri) 22:00 - Not

Normal Operation HPC Challenge (Odyssey System Maintenance Normal Operation

Schedule of future maintenance etc. will be displayed

For more information about this service, see https://www.cc.u-tokyo.ac.jp/supercomputer/schedule.php

* How to use

Users Guide can be found at the User Portal (https://wisteria-www.cc.u-tokyo.ac.jp/).

If you have any questions, please refer to the following URL and contact us:

https://www.cc.u-tokyo.ac.jp/supports/contact/

Last login: Mon May 17 10:04:54 2021 from 133.11.59.131

[t00XYZ@wisteria06 ~]\$

Please DO NOT contact this URL if you have questions

SSH Public Key Authentication (1/4) (1) Creating Keys on PC







SSH Public Key Authentication (2/4) ② Accessing the Portal Site



SSH Public Key Authentication (3/4) (3) Registration of the Public Key Each Public Key can be installed to multiple systems



SSH Public Key Authentication (3/4) ③ Registration of the Public Key Each Public Key can be installed to multiple systems



SSH Public Key Authentication (4/4) ④ Login to Odyssey etc. from PC Private Key (id_rsa) + Passphrase

\$> ssh t	XYZZZ@obcx.cc.u-	tokyo.ac.jp	id_rsa.pub 公開鍵/Public Key
	id_rsa 秘密鍵/Private Key		OBCX
	+ Passphrase		ODOA
\$> s	ssh tABCCC@ofp.jc	ahpc.jp	id_rsa.pub 公開鍵/Public Key
	id_rsa 秘密鍵/Private Key		
	+ Passphrase		Odyssey

SSH= Secure Shell

id_rsa

- Private Key(秘密鍵) on Your PC
- Keep it confidential ! (e.g. do not give it to others, do not copy, do not move etc.)

id_rsa.pub

- Public Key(公開鍵) on Supercomputers
- You can copy, can send it to others via e-mail etc.
- If the info of the Private Key on your PC and Public Key on the supercomputer matches, you can login.
- If you have multiple PC's, please create individual set of (Private/Public) keys on each PC

- You can register multiple Public Key's on Supercomputer

SSH Public Key Authentication (4/4) (4) Login to Odyssey etc. from PC Private Key (id rsa) + Passphrase



If you use multiple PC's, you need to create a pair of keys (private/public) on EACH PC !!





Multiple public-keys can be registered !

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Multiple public-keys can be registered !





 Supercomputers in ITC/U.Tokyo

 Information Technology Center, The University of Tokyo

- Login to Odyssey
- After Login

Login to Wisteria from PC

\$ ssh t18XYZ@wisteria.cc.u-tokyo.ac.jp Enter passphrase for key '/home/nakajima/.ssh/id_rsa: Your Passphrase <Return↓>

ssh t18XYZ@wisteria.cc.u-tokyo.ac.jp <Return↓> Your Passphrase <Return↓>



After Login ...

\$ pwd <Return↓>

/home/t18XYZ

- \$ cd /work/gt18/t18XYZ <Return↓>
 \$ pwd <Return↓>
- /work/gt18/t18XYZ



/home/t18XYZ

- 1. "/home/t18XYZ" is the default login directory
- 2. Because capacity of /home is very small, please move to "/work/gt18/t18XYZ"
- 3. You can go back to /home/t18XYZ by typing "cd"

Copy: PC to Wisteria-Odyssey (W-O)

\$ scp ./a. dat t18XYZ@wisteria.cc.u-tokyo.ac.jp: <Return_>
"a. dat" in the Current Directory of PC is copied to /home/t18XYZ on W-O

\$ scp ./a. dat t18XYZ@wisteria.cc.u-tokyo.ac.jp:/work/gt18/t18XYZ/test/ "a. dat" in the Current Directory of PC is copied to /work/gt18/t18XYZ/test on W-0

\$ scp -r ./testL t18XYZ@wisteria.cc.u-tokyo.ac.jp:/work/gt18/t18XYZ/test "testL" directory in the Current Directory of PC and its contents are copied to /work/gt18/t18XYZ/test on W-0

Copy: W-O to PC

\$ scp t18XYZ@wisteria.cc.u-tokyo.ac.jp:~/a.dat ./ "a.dat" on /home/t18XYZ on W-O is copied to the Current Directory of PC

\$ scp t18XYZ@wisteria.cc.u-tokyo.ac.jp:/work/gt18/t18XYZ/test/a.dat ./ "a.dat" on /work/gt18/t18XYZ/test on W-O is copied to the Current Directory of PC

\$ scp -r t18XYZ@wisteria.cc.u-tokyo.ac.jp:~/L1 ./

"L1" directory in /home/t18XYZ on W-O and its contents are copied to "L1" directory in the Current Directory on PC

\$ scp -r t18XYZ@wisteria.cc.u-tokyo.ac.jp:/work/gt18/t18XYZ/test/L1 ./ "L1" directory in /work/gt18/t18XYZ/test on W-O and its contents are copied to "L1" directory in the Current Directory on PC

Manuals on the Portal Site

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 Information SSH Public Key E-mail Password Token usage 	Usage of documents hen using the Wistera/BDEC- ers must strictly obey the fol This system shall not be used for pu	Wisteria User Portal O1 User's Manual Web Browsing Service, lowing rules:	or use of weapons	Logout
 Disk usage Prepost reservation Document OSS 	This system shall not be used for pur for mass destruction, including nucl delivery of such weapons. Use of this service shall be limited to The information in this manual (incl to persons other than the person will The Center has the right to immedia who violate the above rules, or who manner.	proses of the development, design, manufacture, storage, ear weapons, chemical or biological weapons, or missiles, e o the person who obtained permission to use the supercom uding printed or photocopied copies) shall not be transmitt ho have obtained permission to use the supercomputer. Ately terminate use of the Web Browsing Service previously have been found to have used the supercomputer in an un	or use of weapons atc. for the puter. ted or presented granted to those nauthorized	
In	addition, the user shall not be allowe	ed to make any protest against this decision.		
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If you have any questions, please contact KN (Kengo Nakajima)

nakajima(at)cc.u-tokyo.ac.jp

Do not contact ITC support directly.

It is strictly prohibited to use the Wisteria/BDEC-01 system for purposes other than this class. You cannot use Aquarius (GPU part).