

CBI MRI Data Flow

How to Access Your Data

*Everything you need to know about accessing
research MRI data generated at 30 Bee Street*

Thomas Fleury

January 12, 2020

CBI MRI DATA FLOW DOCUMENTATION

Focusing on Siemens Prisma 3T Data Flow and How to Access Your MRI Data Files

CBI Webpage

<https://medicine.musc.edu/departments/centers/cbi>

CBI System Administrators

Please use the MUSC Service-Now ticketing system to contact CBI System Administrators.
see CBI Webpage for Help Request links to submit CBI server, data and equipment requests.

Updated: 20210112

Topics

- I. New MRI Projects**
- II. MRI Data Flow**
- III. CBIHOME Key Information**
- IV. Software Applications**
 - 4a. **WinSCP** (*Windows Only*)
 - 4b. **CyberDuck** (*for Macs & Windows*)
 - 4c. **FileZilla** (*for Macs & Windows*)
- V. CBIHOME Directory Structure**
- VI. Other Information**
 - 6a. **CBI Help Request**
 - 6b. **Missing / Incomplete Scan Data**
 - 6c. **Incidental Findings**
 - 6d. **MRI Console Room Computers**
 - 6e. **MUSC Remote Access – Secure VPN**
 - 6f. **MUSC-NetID & Password Reactivation**

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

I. New MRI Projects

Slide #	Description
4	Starting a New MRI Project
5	CBI New Project Request Form – Study Information
6	CBI New Project Request Form – User Information

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

STARTING A NEW MRI PROJECT

Follow All “New Project” Instructions Found on the CBI Website.

- Complete the New Project Request Form.
Access form from CBI webpage link “New Project Request Form”
- Special Projects will require approval first before proceeding.
- New Study added into our scheduling application, Calpendo.
*Additional user information found on CBI website link
“Calpendo Instruction Guide (PDF)”.*
- Study and Users added to the data server, CBIHOME.

CBI System Administrators

MUSC Service-Now Ticketing System (<https://musc.service-now.com/>)
see CBI website for specific Help Request links to submit CBI server, data and equipment requests.

CBI Techs

cbitech@musc.edu
843-792-2353

Calpendo (<http://musc.calpendo.com>)

see CBI website for links containing a detailed instruction guide and information about the scheduling system.

CBIHOME (cbihome.musc.edu)

Studies are added only for MUSC Faculty.
Storage space is limited to MUSC Faculty.
User accounts are linked to MUSC Net ID.
Users are given permissions to work in specific MUSC Faculty study folder(s).

CBI New Project Request Form – Study Info

User Information

- MUSC Faculty Full Name (PI's Full Name)
- Faculty MUSC Email (PI's MUSC Email)
- MUSC Faculty MUSC Net ID (PI's MUSC Net ID)
- MUSC Faculty Contact Phone

Project Information

- Project Name
- Abbreviated Project Name
- Project Code
- Grant #
- Grant Title

CBI New Project Request Form – Study Information

MUSC Faculty Full Name: PI's Full Name used for study project on CBIHOME.

Faculty MUSC Email: PI's MUSC Email address.

MUSC Faculty MUSC Net ID: PI's MUSC Net ID.

Abbreviated Project Name: CBIHOME folder name without spaces or special characters.

Characters allowed: letters (a-z, A-Z), numbers (0-9), dash (-) or underscore (_).

CBI New Project Request Form – User Info

List Staff on Project
(List personnel who will be with subjects at the scanner and/or accessing data files for this study)

Please be aware that anyone working with subjects at the MRI must complete the MRI Safety Course.
Registration for this course is at the CBI website:
<http://academicdepartments.musc.edu/cbi/education/MRI-Safety-Class.html>

User Name 1	<input type="text"/>	User's Full Name
Phone Number	<input type="text"/>	
MUSC Email	<input type="text"/>	User's MUSC Email
MUSC Net ID	<input type="text"/>	User's MUSC Net ID
Access Data on CBI Server?	<input type="radio"/> Yes <input type="radio"/> No	User's Access to CBIHOME
Send email when data has been pushed from scanner?	<input type="radio"/> Yes <input type="radio"/> No	Email Notification when data uploading to CBIHOME

CBI New Project Request Form – User Information

User Name: User's Full Name associated with study project.

MUSC Email: User's MUSC Email address.

MUSC Net ID: User's MUSC Net ID.

Access Data on CBI Server? (Yes/No): User's permitted to access CBIHOME study folder to access scan data.

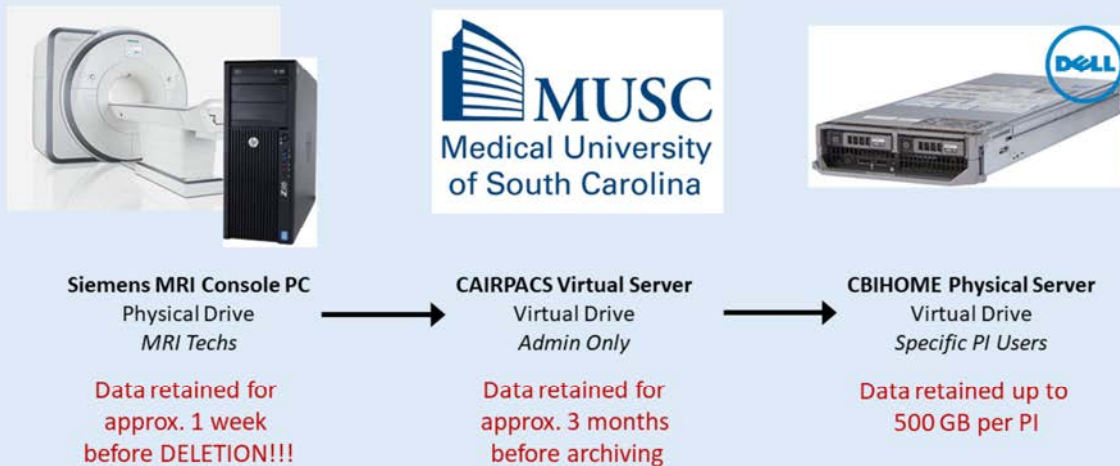
Send email when data has been pushed from scanner? (Yes/No): User's to receive email notification when packaged DICOM scan data file is being uploaded to CBIHOME study folder.

II. MRI Data Flow

Slide #	Description (Topics & Key Points Covered in Presentation)
8	MRI Data Flow and Data Management
9	Siemens Patient Registration Form
10	DICOM Filename Format
11	Packaged MRI Scan Filename Format

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

MRI Data Flow & Data Management



Siemens MRI Console PC (HP Physical Computer): Very limited space, original scans remain on MRI Console PC for less than 2 weeks. If space is required, they may be removed sooner. Scans are only removed after verification of successful upload to CAIRPACS Virtual Drive.

CAIRPACS Server (MUSC Virtual Server): CAIRPACS server access by CBI System Administrators Only. CAIRPACS server contains programs which package individual scan session into a zipped file. Packaged scan files are then uploaded into MUSC faculty study folder directory located on the MRdata virtual drive mounted on CBIHOME server.

CAIRPACS Virtual Drive: Location of DICOMs uploaded from Siemens MRI console PC. Typically up to three months of scans remain on CAIRPACS virtual drive before files are compressed and uploaded to the archive virtual drive. CAIRPACS virtual drive and the archive virtual drive are backed up nightly through MUSC IT.

CBIHOME Server (Dell Physical Server): CBIHOME server access permitted to MUSC faculty and authorized personnel for each study.

CBIHOME Virtual Drive: Location of packaged scan DICOMs uploaded from CAIRPACS virtual server. A maximum of 500-GBytes of data are permitted to each approved MUSC faculty member. CBIHOME virtual drive are backed up nightly through MUSC IT.

Siemens Patient Registration

Three parameters used to package DICOMs:

Patient ID

Date/Time of Scan

Requesting physician

MRI Console PC - Siemens Patient Registration

Three key parameters used to package scan DICOM files, name the final scan ZIP file and to upload the ZIP file into the correct study folder on CBIHOME server.

Patient ID Field: [PatientID]

Enter the patient ID for scan into the field "Patient ID".

* Do NOT use spaces or special characters.

* Only use the following characters: letters (a-z, A-Z), numbers (0-9), dash (-) or underscore (_).

Packaged DICOM ZIP Filename: PI-Lastname_StudyNumber_YYYYMMDD_HHMMSS_PatientID*.zip

Date/Time of Scan: [YYYYMMDD_HHMMSS]

Automatically generated once scan is started.

Packaged DICOM ZIP Filename: PI-Lastname_StudyNumber_YYYYMMDD_HHMMSS_PatientID*.zip

Requesting physician Field: [PI-Lastname_StudyNumber]

Enter the PI's lastname and Study Number separated by an underscore character (_).

This value is used to properly send the packaged scan ZIP file to the correct study folder on CBIHOME.

Packaged DICOM ZIP Filename: **PI-Lastname_StudyNumber**_YYYYMMDD_HHMMSS_PatientID*.zip

See "Packaged MRI Scan File Name Structure" on page 11 for more detailed information about packaged scan filename.

DICOM File Names

Siemens Prisma file naming convention:

Siemens MR	series date	other
v-----v	v-----v	v-----v
1.3.12.2.1107.5.2.43.167021.2021011212305532079694878		
	^-----^	^-----^
	system	series
	serial number	time

Siemens Prisma Magnetom naming convention

DICOM File Naming Structure

Typical file naming structure format for DICOM file:

First 8 sections contains information about the "Siemens MR".

Section 9 is the scanner serial number.

Section 10 is the scan date (yyyymmdd), followed by the time (hhmmss).

Siemens MR	series date	other
v-----v	v-----v	v-----v
1.3.12.2.1107.5.2.43.167021.2021011212305532079694878		
	^-----^	^-----^
	system	series
	serial number	time

Siemens Prisma Magnetom naming convention.

Packaged MRI Scan File Name Structure

DEFAULT: YYYYMMDD_HHMMSS_PatientID.zip
YYYYMMDD_HHMMSS_PatientID*.zip

MANUAL: PI-Lastname_StudyNumber_YYYYMMDD_HHMMSS_PatientID_FULL.zip
PI-Lastname_StudyNumber_YYYYMMDD_HHMMSS_PatientID_MRSONly.zip

PI-Lastname = PI's last name

StudyNumber = Study Number, typically IRB #

YYYYMMDD = Start date of scan session (year-month-day).

HHMMSS = Start time of scan session (hour-minute-second).

PatientID = Patient ID entered at MRI Console PC at time of scan.

* = Alphabetical increase for each additional MRI console re-push.

FULL = Package of all scan DICOM files, including spectroscopy files.

MRSONly = Package of spectroscopy files only.

Packaged MRI Scan File Name Structure

Default File Name Structure:

PI-Lastname_StudyNumber_YYYYMMDD_HHMMSS_PatientID*.zip

Manual Packaging by CBI System Administrators:

PI-Lastname_StudyNumber_YYYYMMDD_HHMMSS_PatientID_FULL.zip

PI-Lastname_StudyNumber_YYYYMMDD_HHMMSS_PatientID_MRSONly.zip

PI-Lastname = PI's last name

StudyNumber = Study Number, typically IRB #

YYYYMMDD = Start date of scan session (year-month-day).

HHMMSS = Start time of scan session (hour-minute-second).

PatientID = Patient ID entered at MRI Console PC at time of scan.

* = Alphabetical increase for each additional MRI console re-push.

FULL = Package of all scan DICOM files, including spectroscopy files.

MRSONly = Package of spectroscopy files only.

III. CBIHOME

Slide #	Description
13	Key Information for CBIHOME Server (cbihome.musc.edu)
14	Adding/Removing Users on CBIHOME Server
15	Accessing CBIHOME through SFTP/SCP Client Application

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

Key Information for CBIHOME Server

Hostname: **cbihome.musc.edu**

IP Address: 128.23.184.41

Domain: clinlan

User: MUSC-NetID

Password: MUSC-NetID-Password

CBI MRI Data is stored on the CBI server "CBIHOME" (cbihome.musc.edu 128.23.184.41).

Accessing the CBI User Server, "CBIHOME" can be done by using the information on this slide (and listed below):

Hostname: cbihome.musc.edu

Windows Users: The above information allows Windows users to access the CBIHOME server through: SSH program (PuTTY) or SFTP programs (WinSCP, Filezilla, CyberDuck, etc.).

MAC Users: The above information allows MAC users to access the CBIHOME server through: SSH from MAC terminal window, or SFTP programs (CyberDuck, Filezilla, etc.).

MUSC Faculty must submit a CBI "Help Request" (see *Help Request section of this document*) **to add or remove users from their CBIHOME study folders. To Add a user to the CBIHOME server, CBI System Administrators require the user's full name, user's MUSC-NetID, user's MUSC Email address, and the study number(s)/study folder(s) to be added to.**

Adding/Removing Users on CBIHOME Server

- (1.) MUSC Faculty must submit CBI Help Request
- (2.) Required Information to add a user:
 - (A.) Users Full Name
 - (B.) User MUSC-NetID
 - (C.) User MUSC Email Address
 - (D.) Study Number(s) / Study Folder(s)

Adding/Removing Users to CBIHOME Server

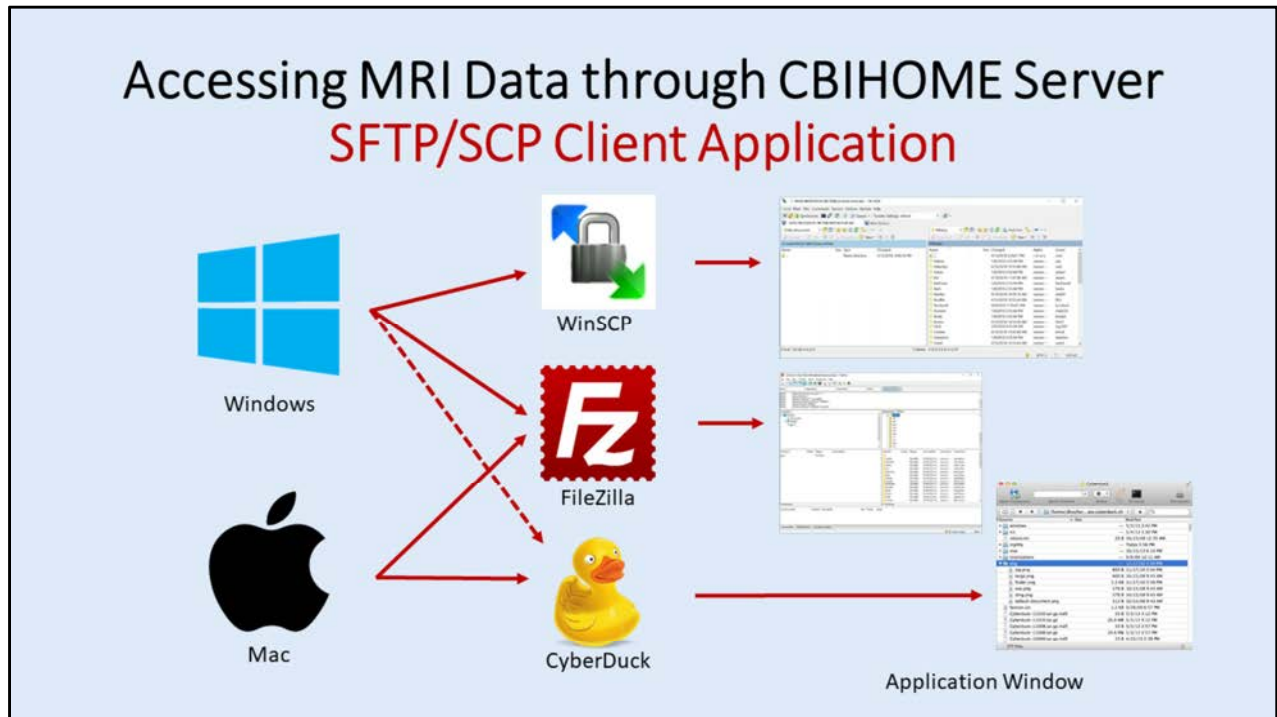
(1.) MUSC Faculty must submit CBI “Help Request” (*see CBI Help Request section of this document*) to add or remove users from their Calpendo and CBIHOME study folders.

- (2.) Required information to Add a user to the CBIHOME server:
- (A.) Users full name
 - (B.) User MUSC-NetID
 - (C.) User MUSC Email address
 - (D.) Study Number(s) / Study Folder(s)

Sample Submission:

Please add the below people to Study # 12345
/MRdata/Faculty_LastName/Study12345_fMRI/
Thomas Fleury, twf123, fleuryw@muscedu

IMPORTANT: MUSC Faculty must submit a CBI “Help Request” to inform the CBI System Administrators whenever users need to be removed from access to specific Faculty folders and/or specific study folders.



Accessing MRI Data through CBIHOME Server

SFTP/SCP Client Application

Graphical User Interface (GUI) programs for transferring files.

WinSCP, CyberDuck, Filezilla, etc.

see section "IV. WinSCP" about WinSCP Installation and Configuration.

see section "V. CyberDuck" about CyberDuck Installation and Configuration.

see section "VI. FileZilla" about FileZilla Installation and Configuration.

Windows Computers

Use WinSCP, FileZilla, CyberDuck to access CBIHOME data files.

Mac Computers

Use CyberDuck, FileZilla to access CBIHOME data files.

*** Must be on MUSC Secure Network to connect to CBIHOME.**

IV. WinSCP (SFTP/SCP Client Application for Windows PC Only)

Slide #	Description
15	WinSCP Downloading
16-17	WinSCP Installation
18-21	WinSCP Configuration
22-23	WinSCP Accessing CBIHOME
24	Using WinSCP to Check Quota Space

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

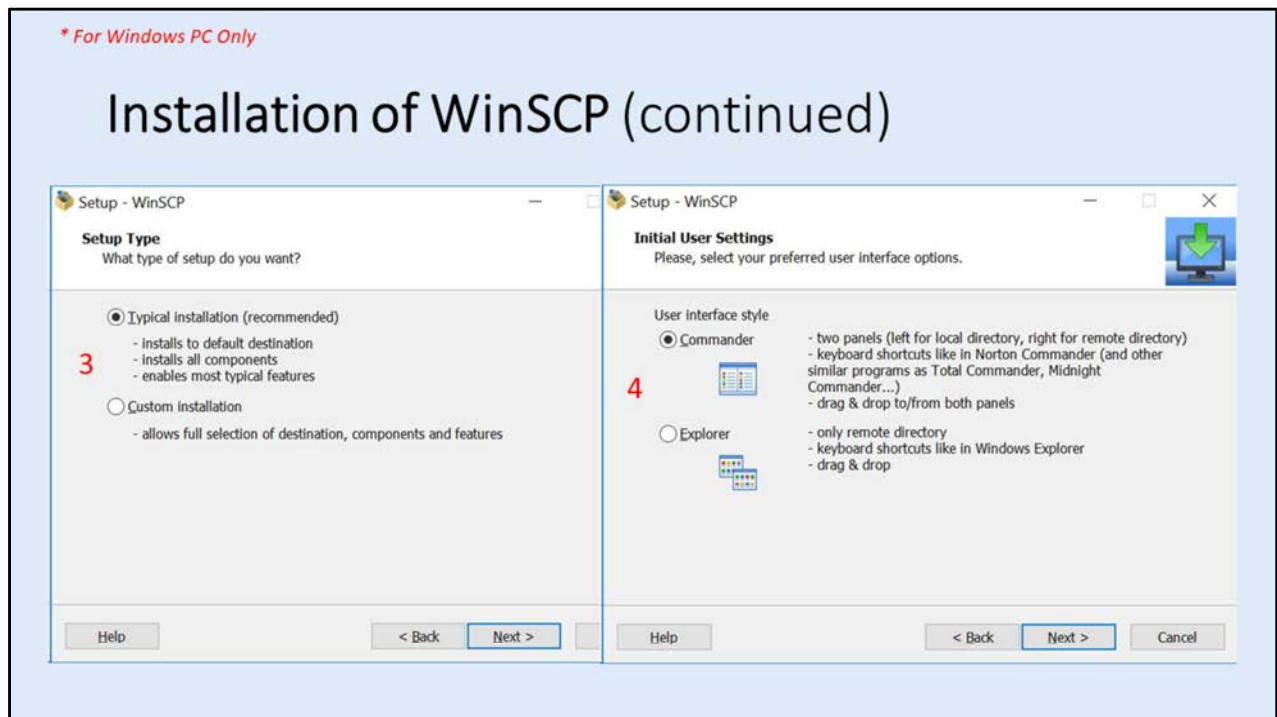


Installation of WinSCP (slide 1 of 3)

WinSCP <https://winscp.net/eng/index.php>
WinSCP Download <https://winscp.net/eng/download.php>
Current version as of 20180425: 5.13.1
(WinSCP-5.13.1-Setup.exe [9.2 Mbytes])

Installation Steps for WinSCP:

- (1.) Run the downloaded file.
- (2.) Accept License Agreement
- (3.) Select "Setup Type" (Typical or Custom Installation).
FYI: Default directory path "C:\Program Files (x86)\WinSCP"
- (4.) Select Initial User Setting
Commander (two panels: left for local directories, right for remote directory)
Explorer (only remote directory)
- (5.) Install.
If asked to import stored PuTTY sessions, select either "Yes" or "No" button.
- (6.) Skip Ads by clicking on "Next" button
- (7.) Finalize installation by clicking on the "Finish" button.



Installation of WinSCP (slide 2 of 3)

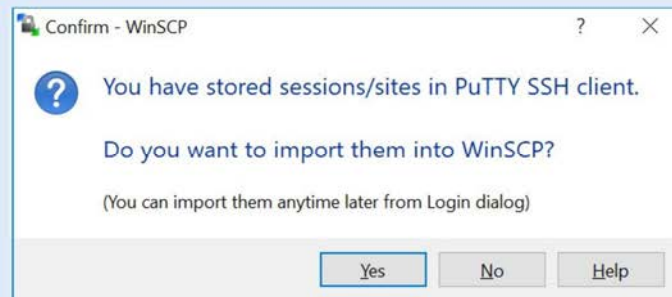
WinSCP <https://winscp.net/eng/index.php>
WinSCP Download <https://winscp.net/eng/download.php>
 Current version as of 20180425: 5.13.1
 (WinSCP-5.13.1-Setup.exe [9.2 Mbytes])

Installation Steps for WinSCP:

- (1.) Run the downloaded file.
- (2.) Accept License Agreement
- (3.) Select "Setup Type" (Typical or Custom Installation).
 FYI: Default directory path "c:\Program Files (x86)\WinSCP"
- (4.) Select Initial User Setting
 Commander (two panels: left for local directories, right for remote directory)
 Explorer (only remote directory)
- (5.) Install.
 If asked to import stored PuTTY sessions, select either "Yes" or "No" button.
- (6.) Skip Ads by clicking on "Next" button
- (7.) Finalize installation by clicking on the "Finish" button.

* For Windows PC Only

Installation of WinSCP (continued)



5

Installation of WinSCP (slide 3 of 3)

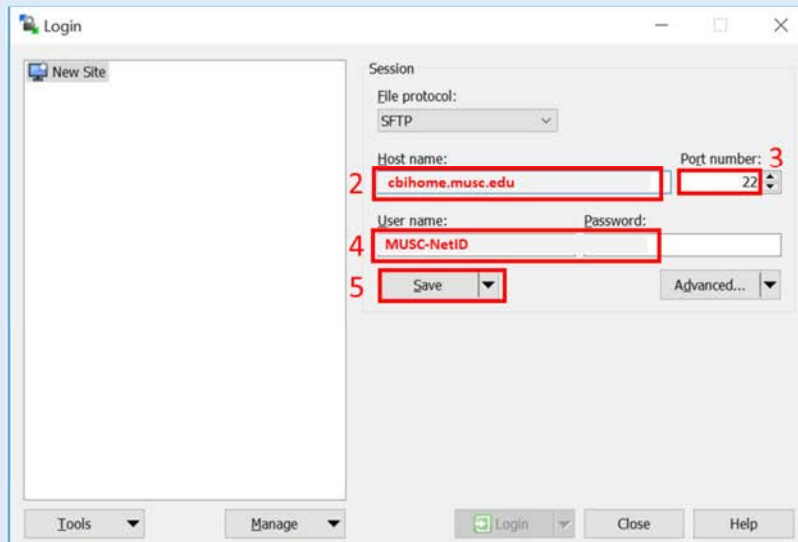
WinSCP <https://winscp.net/eng/index.php>
WinSCP Download <https://winscp.net/eng/download.php>
Current version as of 20180425: 5.13.1
(WinSCP-5.13.1-Setup.exe [9.2 Mbytes])

Installation Steps for WinSCP:

- (1.) Run the downloaded file.
- (2.) Accept License Agreement
- (3.) Select "Setup Type" (Typical or Custom Installation).
FYI: Default directory path "c:\Program Files (x86)\WinSCP"
- (4.) Select Initial User Setting
Commander (two panels: left for local directories, right for remote directory)
Explorer (only remote directory)
- (5.) Install.
If asked to import stored PuTTY sessions, select either "Yes" or "No" button.
- (6.) Skip Ads by clicking on "Next" button
- (7.) Finalize installation by clicking on the "Finish" button.

* For Windows PC Only

Configuration of WinSCP



Configuration of WinSCP (slide 1 of 6)

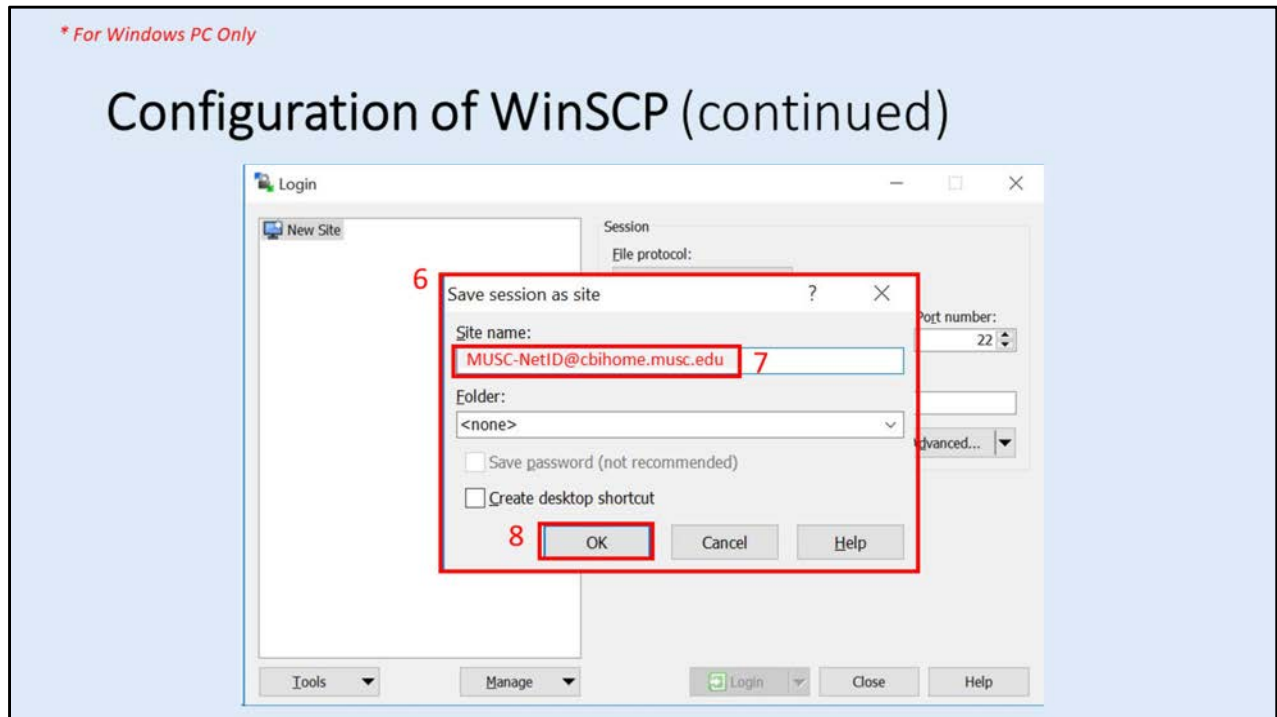
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cbihome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cbihome.musc.edu") or modify ("CBIHOME").
- (8.) Click "OK" button to save name and session site.
- (9.) Select "Site name" on left side.
- (10.) Click the "Login" button.
- (11.) First time a computer accesses CBIHOME, you will get a "warning" window.
If you are on a secure ethernet connection, click the "Yes" button.
- (12.) Enter your MUSC-NetID-Password.
- (13.) Click the "OK" button to finish connecting to the CBIHOME server.

Accessing Files on CBIHOME

- (14.) Select "/" <root>" from dropdown menu. (15.) Click on "MRdata"
- (16.) Step 14 above causes "/" <root>" to become "MRdata".
- (17.) Click on Faculty's Folder to access Study sub-folders and packaged DICOM files.
/MRdata/Faculty_LastName/Study1/upload/20180401_121530_1001v1.zip

* For Windows PC Only

Configuration of WinSCP (continued)



Configuration of WinSCP (slide 2 of 6)

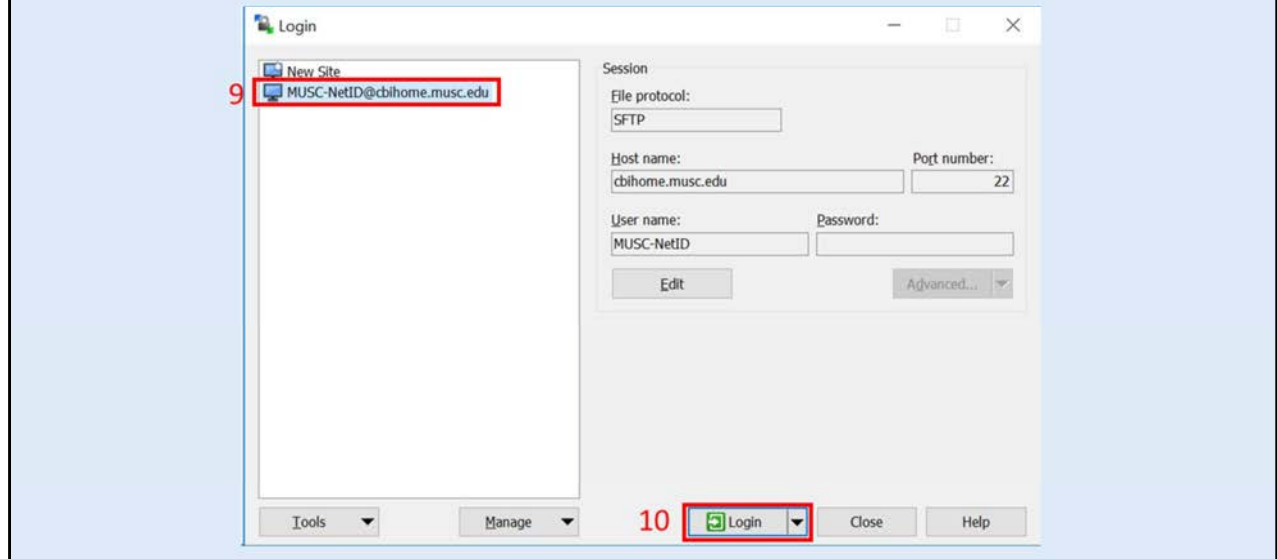
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cbihome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cbihome.musc.edu") or modify ("CBIHOME").
- (8.) Click "OK" button to save name and session site.
- (9.) Select "Site name" on left side.
- (10.) Click the "Login" button.
- (11.) First time a computer accesses CBIHOME, you will get a "warning" window.
If you are on a secure ethernet connection, click the "Yes" button.
- (12.) Enter your MUSC-NetID-Password.
- (13.) Click the "OK" button to finish connecting to the CBIHOME server.

Accessing Files on CBIHOME

- (14.) Select "/" <root>" from dropdown menu. (15.) Click on "MRdata"
- (16.) Step 14 above causes "/" <root>" to become "MRdata".
- (17.) Click on Faculty's Folder to access Study sub-folders and packaged DICOM files.
/MRdata/Faculty_LastName/Study1/upload/20180401_121530_1001v1.zip

* For Windows PC Only

Configuration of WinSCP (continued)



Configuration of WinSCP (slide 3 of 6)

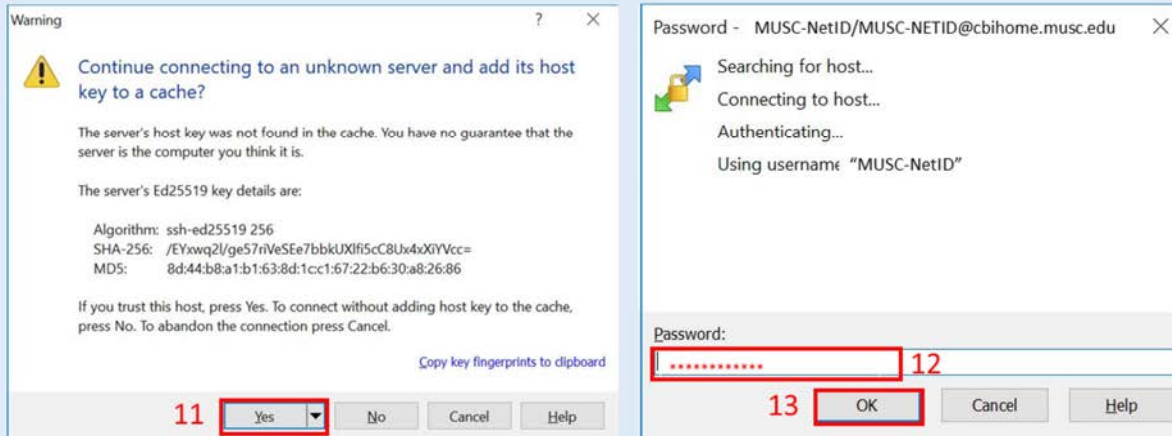
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cblhome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cblhome.musc.edu") or modify ("CBIHOME").
- (8.) Click "OK" button to save name and session site.
- (9.) Select "Site name" on left side.
- (10.) Click the "Login" button.
- (11.) First time a computer accesses CBIHOME, you will get a "warning" window.
If you are on a secure ethernet connection, click the "Yes" button.
- (12.) Enter your MUSC-NetID-Password.
- (13.) Click the "OK" button to finish connecting to the CBIHOME server.

Accessing Files on CBIHOME

- (14.) Select "/" <root>" from dropdown menu. (15.) Click on "MRdata"
- (16.) Step 14 above causes "/" <root>" to become "MRdata".
- (17.) Click on Faculty's Folder to access Study sub-folders and packaged DICOM files.
/MRdata/Faculty_LastName/Study1/upload/20180401_121530_1001v1.zip

* For Windows PC Only

Configuration of WinSCP (continued)



Configuration of WinSCP (slide 4 of 6)

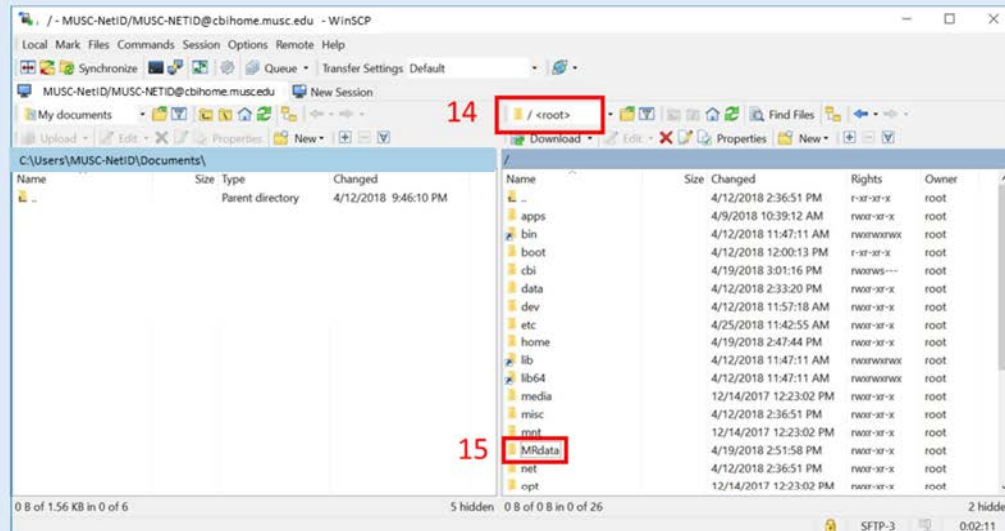
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cbihome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cbihome.musc.edu") or modify ("CBIHOME").
- (8.) Click "OK" button to save name and session site.
- (9.) Select "Site name" on left side.
- (10.) Click the "Login" button.
- (11.) First time a computer accesses CBIHOME, you will get a "warning" window.
If you are on a secure ethernet connection, click the "Yes" button.
- (12.) Enter your MUSC-NetID-Password.
- (13.) Click the "OK" button to finish connecting to the CBIHOME server.

Accessing Files on CBIHOME

- (14.) Select "/" <root>" from dropdown menu. (15.) Click on "MRdata"
- (16.) Step 14 above causes "/" <root>" to become "MRdata".
- (17.) Click on Faculty's Folder to access Study sub-folders and packaged DICOM files.
/MRdata/Faculty_LastName/Study1/upload/20180401_121530_1001v1.zip

* For Windows PC Only

Accessing CBIHOME by WinSCP



Configuration of WinSCP (slide 5 of 6)

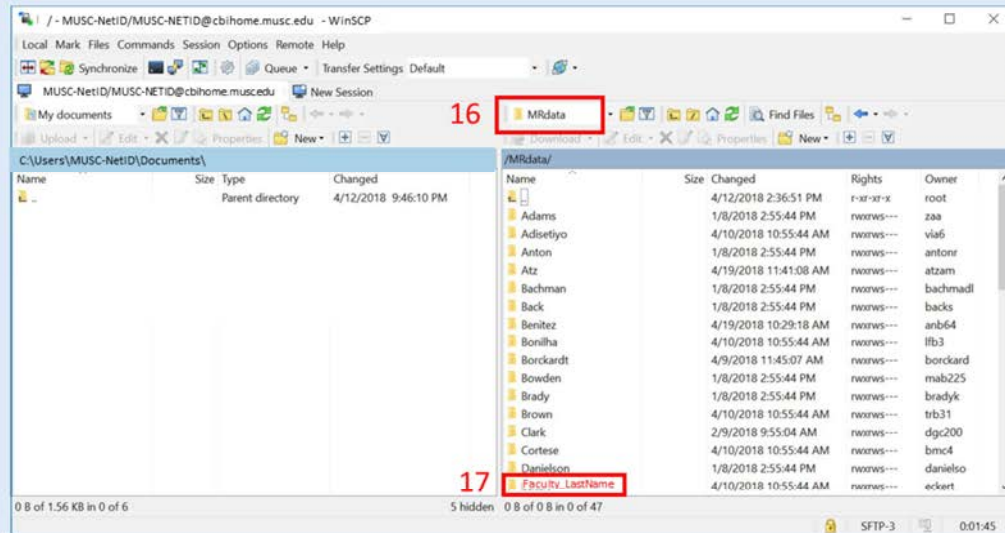
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cbihome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cbihome.musc.edu") or modify ("CBIHOME").
- (8.) Click "OK" button to save name and session site.
- (9.) Select "Site name" on left side.
- (10.) Click the "Login" button.
- (11.) First time a computer accesses CBIHOME, you will get a "warning" window.
If you are on a secure ethernet connection, click the "Yes" button.
- (12.) Enter your MUSC-NetID-Password.
- (13.) Click the "OK" button to finish connecting to the CBIHOME server.

Accessing Files on CBIHOME

- (14.) Select "/ <root>" from dropdown menu. (15.) Click on "MRdata"
- (16.) Step 14 above causes "/ <root>" to become "MRdata".
- (17.) Click on Faculty's Folder to access Study sub-folders and packaged DICOM files.
/MRdata/Faculty_LastName/Study1/upload/20180401_121530_1001v1.zip

* For Windows PC Only

Accessing CBIHOME by WinSCP (continued)



Configuration of WinSCP (slide 6 of 6)

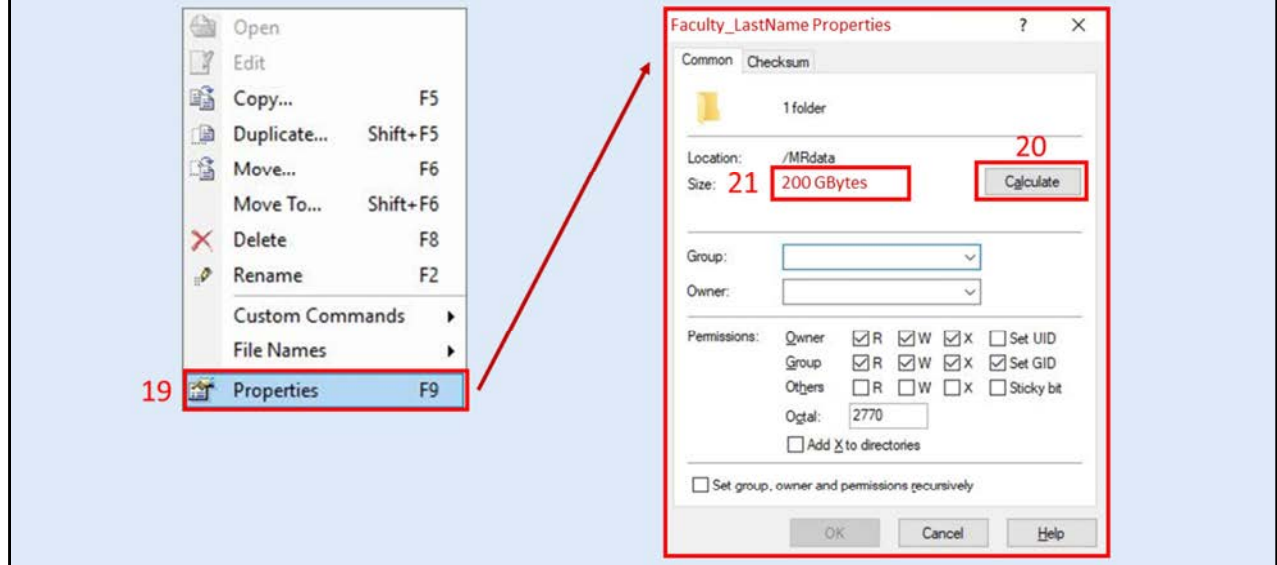
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cbihome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cbihome.musc.edu") or modify ("CBIHOME").
- (8.) Click "OK" button to save name and session site.
- (9.) Select "Site name" on left side.
- (10.) Click the "Login" button.
- (11.) First time a computer accesses CBIHOME, you will get a "warning" window.
If you are on a secure ethernet connection, click the "Yes" button.
- (12.) Enter your MUSC-NetID-Password.
- (13.) Click the "OK" button to finish connecting to the CBIHOME server.

Accessing Files on CBIHOME

- (14.) Select "/" <root>" from dropdown menu. (15.) Click on "MRdata"
- (16.) Step 14 above causes "/" <root>" to become "MRdata".
- (17.) Click on Faculty's Folder to access Study sub-folders and packaged DICOM files.
/MRdata/Faculty_LastName/Study1/upload/20180401_121530_1001v1.zip

* For Windows PC Only

Using WinSCP to Check Quota Space



Checking Quota Space in WinSCP:

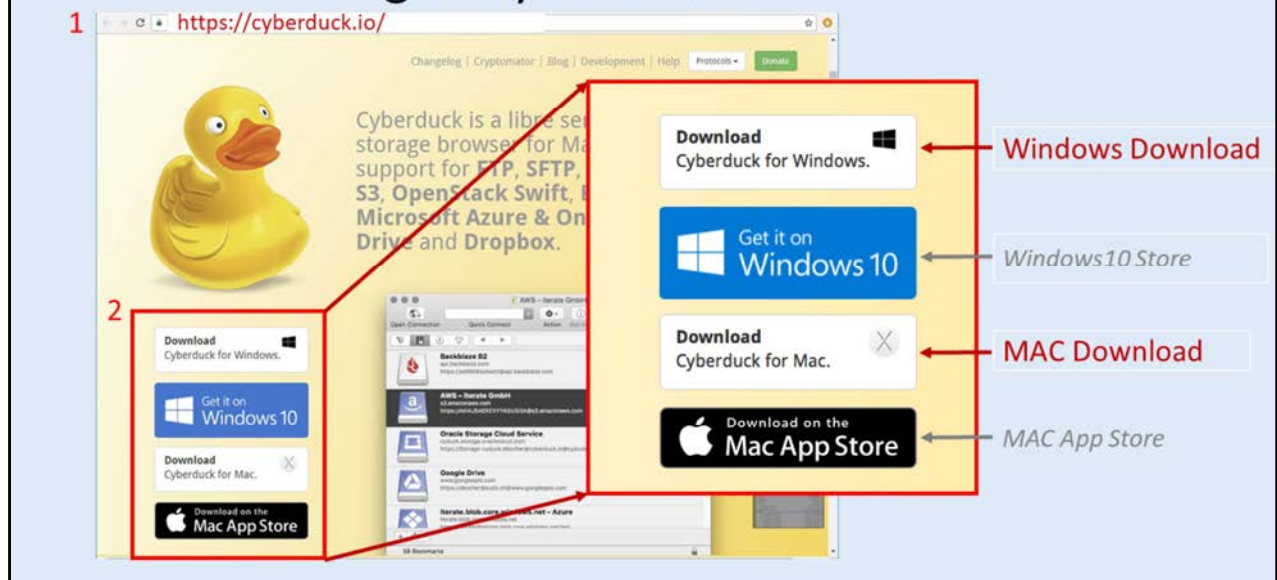
- (18.) Right mouse click on selected Faculty folder "Faculty_LastName" to get to the dropdown menu.
- (19.) Select "Properties" to open a folder properties window.
- (20.) Click the "Calculate" button.
- (21.) After calculation, size of space used will be displayed in the "Size" field.
In this example, 200 Gbytes are used, therefore the "Faculty_LastName" folder has 300 Gbytes that can still be used.

V. CyberDuck (SFTP/SCP Client Application for Windows, Macs)

Slide #	Description
26	CyberDuck Downloading
27-28	CyberDuck Installation
29	CyberDuck Initial Run
30-31	CyberDuck Configuration
32-33	CyberDuck Accessing CBIHOME
34	Using CyberDuck to Check Quota Space

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

Downloading of CyberDuck



Downloading of CyberDuck (slide 1 of 1)

(1.) Go to the CyberDuck website: <https://cyberduck.io/>

(2.) Click on download link for your computer system.

Win: Cyberduck-Installer-6.5.0.27854.exe

Mac: Cyberduck-6.5.0.27854.zip

Current version as of 20180501: 6.5.0.27854

Installation Steps for CyberDuck (for MAC):

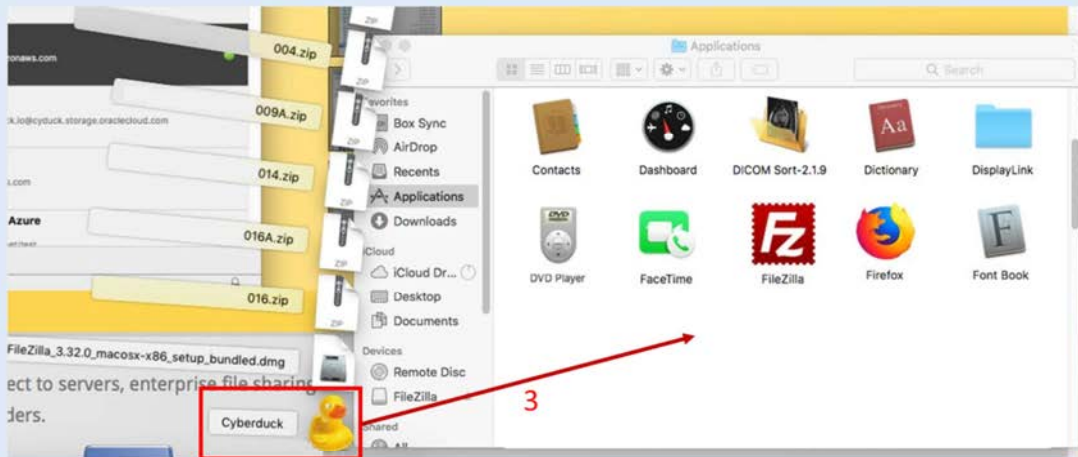
(3.) Drag and Drop the downloaded file into your "Applications" folder.

(4.) Click the "Open" button to start the installation process.

(5.) Click on either "Cancel" or "Change" button for CyberDuck to be default SFTP location.

(6.) Click on either "Don't Check" or "Check Automatically" for CyberDuck updates.

Installation of CyberDuck



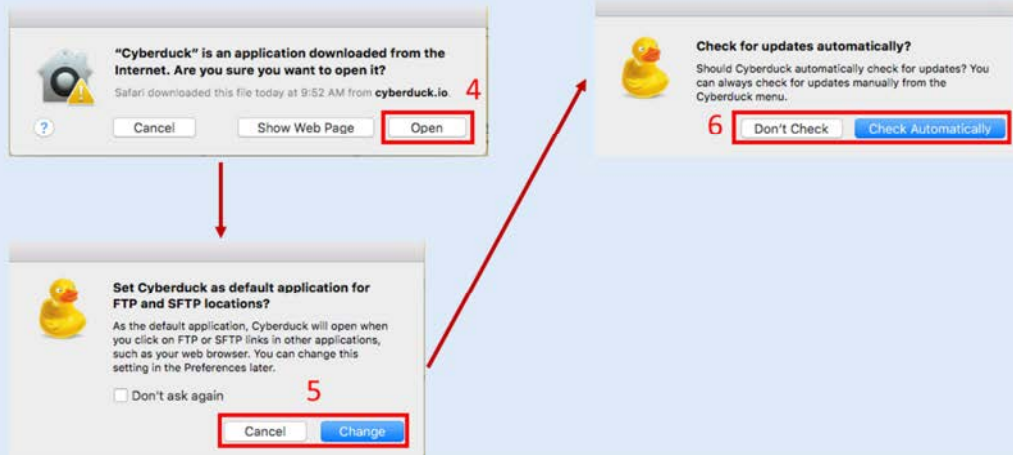
Downloading of CyberDuck (slide 1 of 1)

- (1.) Go to the CyberDuck website: <https://cyberduck.io/>
- (2.) Click on download link for your computer system.
 - Win: Cyberduck-Installer-6.5.0.27854.exe
 - Mac: Cyberduck-6.5.0.27854.zip
 - Current version as of 20180501: 6.5.0.27854

Installation Steps for CyberDuck (for MAC):

- (3.) Drag and Drop the downloaded file into your "Applications" folder.
- (4.) Click the "Open" button to start the installation process.
- (5.) Click on either "Cancel" or "Change" button for CyberDuck to be default SFTP location.
- (6.) Click on either "Don't Check" or "Check Automatically" for CyberDuck updates.

Installation of CyberDuck



Downloading of CyberDuck (slide 1 of 1)

- (1.) Go to the CyberDuck website: <https://cyberduck.io/>
- (2.) Click on download link for your computer system.
 - Win: Cyberduck-Installer-6.5.0.27854.exe
 - Mac: Cyberduck-6.5.0.27854.zip
 - Current version as of 20180501: 6.5.0.27854

Installation Steps for CyberDuck (for MAC):

- (3.) Drag and Drop the downloaded file into your "Applications" folder.
- (4.) Click the "Open" button to start the installation process.
- (5.) Click on either "Cancel" or "Change" button for CyberDuck to be default SFTP location.
- (6.) Click on either "Don't Check" or "Check Automatically" for CyberDuck updates.

Initial Running of CyberDuck

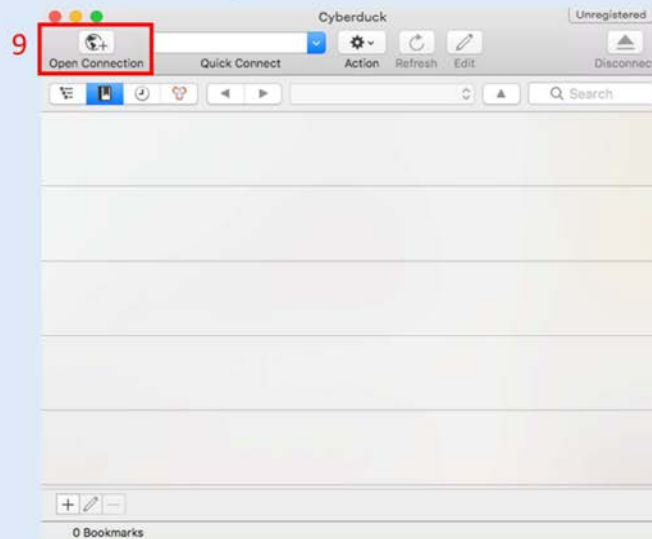


Initial Running of CyberDuck:

(7.) Click on CyberDuck Application.

(8.) Click on the "Later" button unless you want to donate.

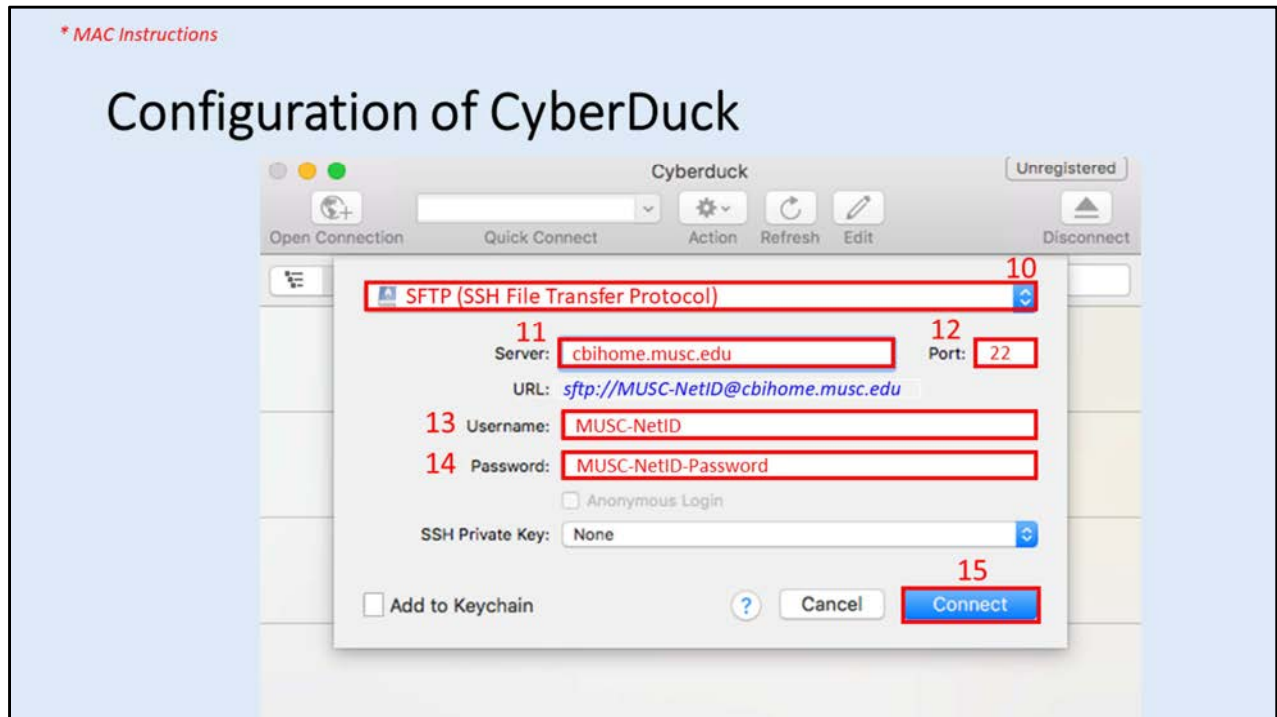
Configuration of CyberDuck



Configuration of "CBIHOME" for CyberDuck:

- (9.) Click on "Open Connection" button to popup settings window.
- (10.) From the dropdown menu select "SFTP (SSH File Transfer Protocol).
- (11.) Enter "cbihome.musc.edu" into the "Server" box.
- (12.) Enter "22" into the "Port" box.
- (13.) Enter your MUSC-NetID into the "Username" box.
- (14.) Enter your MUSC-NetID-Password into the "Password" box.
- (15.) Click on the "Connect" button to establish a connection to CBIHOME.

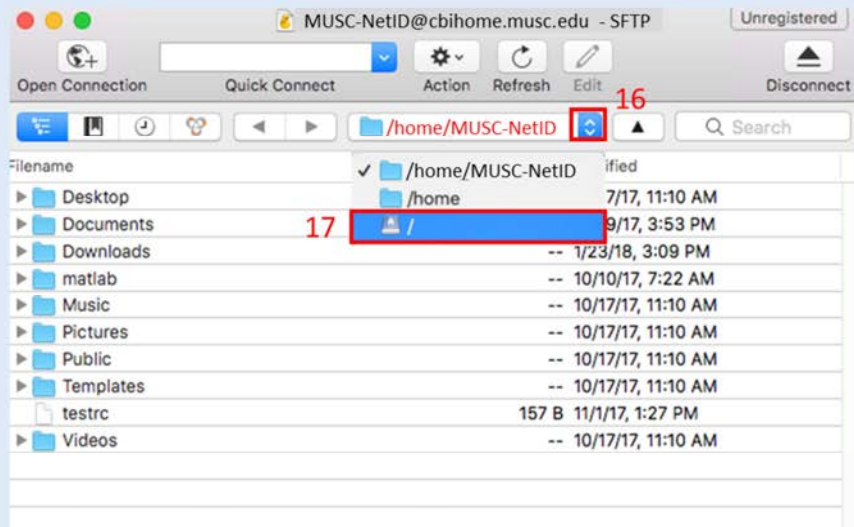
Configuration of CyberDuck



Configuration of "CBIHOME" for CyberDuck:

- (9.) Click on "Open Connection" button to popup settings window.
- (10.) From the dropdown menu select "SFTP (SSH File Transfer Protocol).
- (11.) Enter "cbihome.musc.edu" into the "Server" box.
- (12.) Enter "22" into the "Port" box.
- (13.) Enter your MUSC-NetID into the "Username" box.
- (14.) Enter your MUSC-NetID-Password into the "Password" box.
- (15.) Click on the "Connect" button to establish a connection to CBIHOME.

Using CyberDuck to Access CBIHOME



Accessing “CBIHOME” from CyberDuck:

(16.) Click on the dropdown menu for directory path folders.

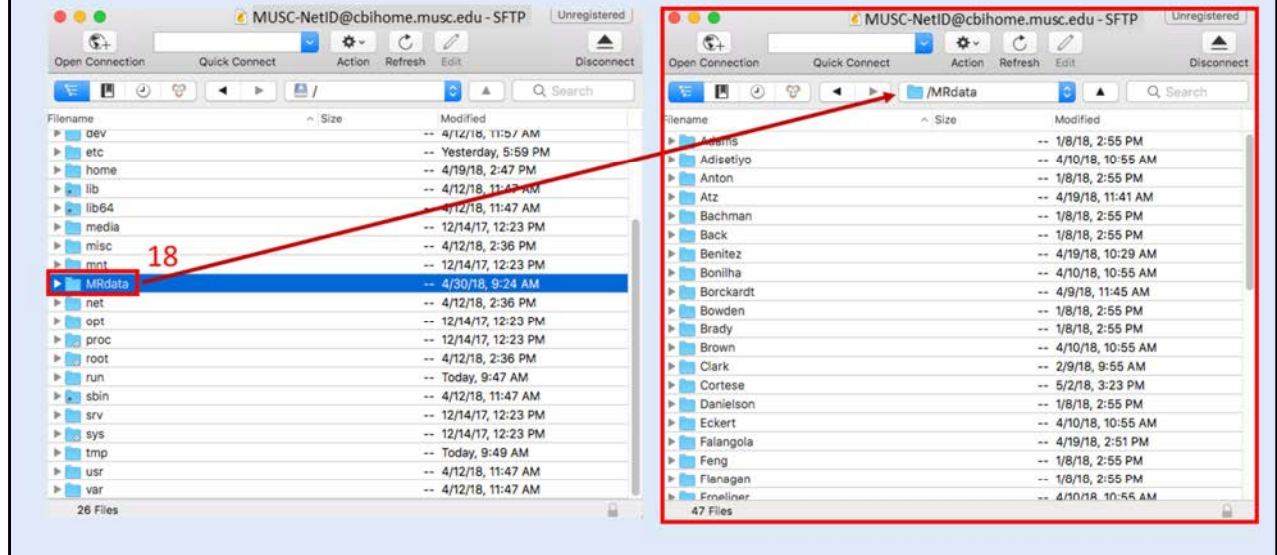
(17.) Select the root directory folder “/”.

(18.) Click on the root path folder “MRdata”.

(19.) Step 18 above opens the MRdata folder.

Locate your Faculty_LastName folder to access study files.

Using CyberDuck to Access CBIHOME



Accessing “CBIHOME” from CyberDuck:

(16.) Click on the dropdown menu for directory path folders.

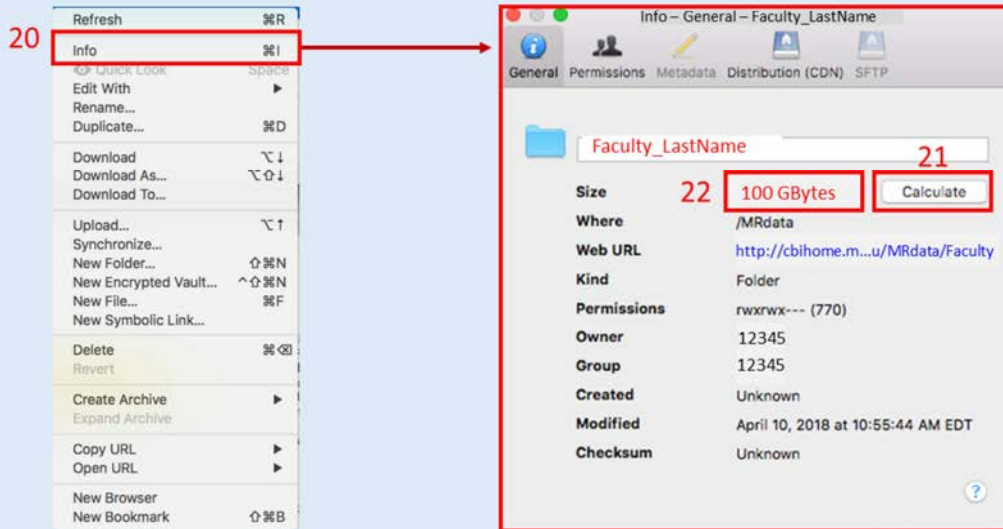
(17.) Select the root directory folder “/”.

(18.) Click on the root path folder “MRdata”.

(19.) Step 18 above opens the MRdata folder.

Locate your Faculty_LastName folder to access study files.

Using CyberDuck to Check Quota Space



Checking Quota Space in CyberDuck:

- (20.) Select Faculty folder "Faculty_LastName" to check and select "Info" from dropdown menu.
- (21.) Click the "Calculate" button.
- (22.) After calculation, size of space used will be displayed in the "Size" field.
In this example, 100 Gbytes are used, therefore the "Faculty_LastName" folder has 400 Gbytes that can still be used.

VI. FileZilla *(SFTP/SCP Client Application for Windows, Macs)*

Slide #	Description
36-37	FileZilla Downloading
38	FileZilla Installation
39-43	FileZilla Configuration

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

FileZilla Downloading



FileZilla Downloading (slide 1 of 2)

- (1.) Go to the FileZilla website: <https://filezilla-project.org/>
- (2.) Click on “Download FileZilla Client” Link
- (3.) If this is not your computer system, click on the appropriate link.
Win: <https://filezilla-project.org/download.php?platform=win64>
Mac: <https://filezilla-project.org/download.php?platform=osx>
- (4.) Click on “Download FileZilla Client” Link.
- (5.) Popup window “Please select your edition of FileZilla Client” will appear.
- (6.) Click on “Download” Link and save installation file.
Win: FileZilla_3.32.0_win64-setup_bundled.exe
Mac: FileZilla_3.32.0_macosx-x86_setup_bundled.dmg
Current version as of 20180401: 3.32.0

FileZilla Downloading (continued)

The screenshot shows the FileZilla website's download page. The main heading is "Download FileZilla Client for Windows (64bit)". Below this, there are several sections and links:

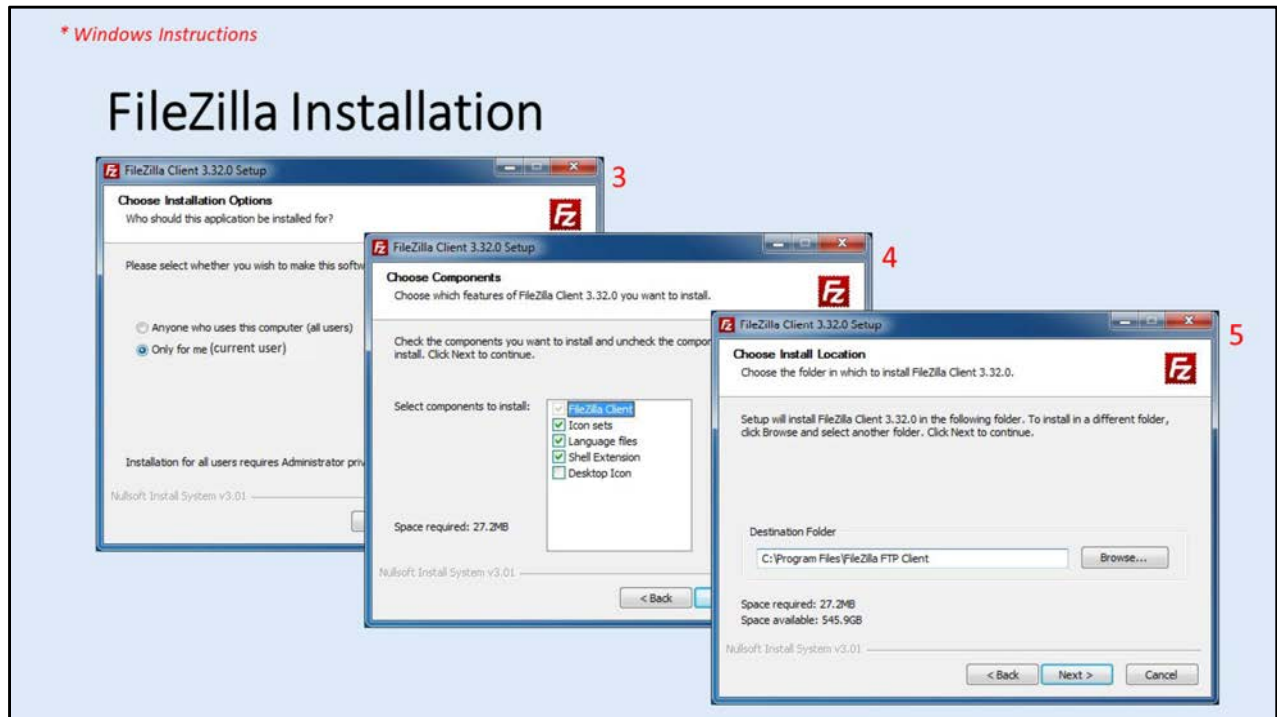
- A "Download FileZilla Client" button is highlighted with a red box and labeled "4".
- A "More download options" link is highlighted with a red box and labeled "3".
- A "Please select your edition of FileZilla Client" popup window is highlighted with a red box and labeled "5".
- A "Download" button in the popup window is highlighted with a red box and labeled "6".
- Red arrows point from the "3" and "4" labels to the "More download options" link and the "Download FileZilla Client" button, respectively.
- Red text labels "MAC Download Link" and "Linux Download Link" are positioned near the "3" label.

	FileZilla Pro	FileZilla
Standard FTP	Yes	Yes
FTP over TLS	Yes	Yes
SFTP	Yes	Yes
Amazon S3	Yes	-
Microsoft Azure Blob and File Storage	Yes	-
WebDAV	Yes	-

FileZilla Downloading (slide 2 of 2)

- (1.) Go to the FileZilla website: <https://filezilla-project.org/>
- (2.) Click on "Download FileZilla Client" Link
- (3.) If this is not your computer system, click on the appropriate link.
Win: <https://filezilla-project.org/download.php?platform=win64>
Mac: <https://filezilla-project.org/download.php?platform=osx>
- (4.) Click on "Download FileZilla Client" Link.
- (5.) Popup window "Please select your edition of FileZilla Client" will appear.
- (6.) Click on "Download" Link and save installation file.
Win: FileZilla_3.32.0_win64-setup_bundled.exe
Mac: FileZilla_3.32.0_macosx-x86_setup_bundled.dmg
Current version as of 20180401: 3.32.0

FileZilla Installation



Installation of FileZilla (slide 1 of 1)

FileZilla <https://filezilla-project.org/>

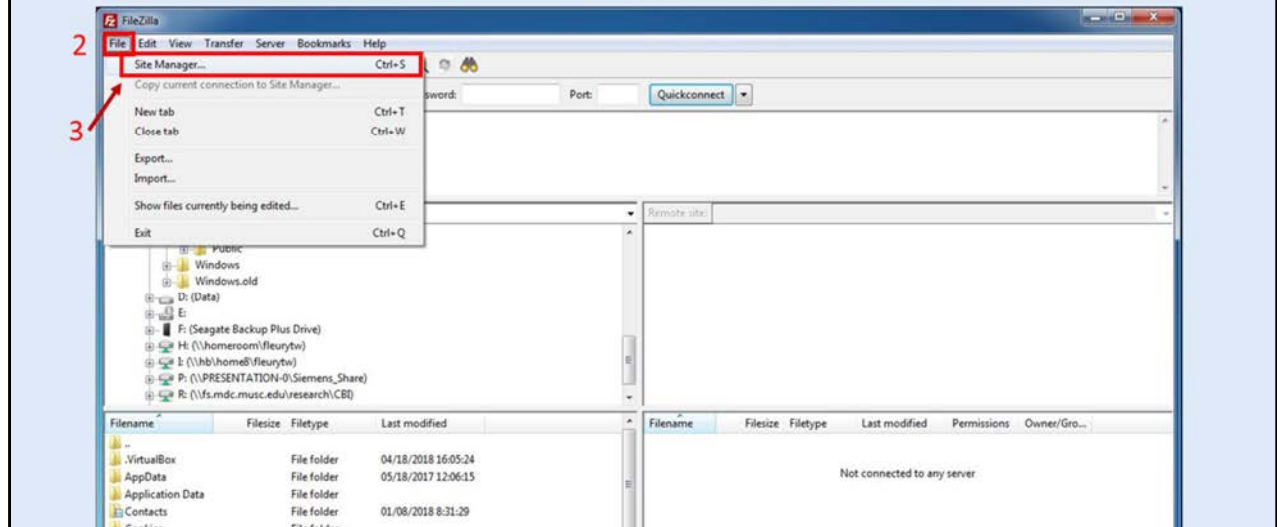
FileZilla Download <https://filezilla-project.org/download.php?type=client>

Current version as of 20180425: 3.32.0

Installation Steps for FileZilla:

- (1.) Run the downloaded file.
- (2.) Accept License Agreement
- (3.) Select installation option (for all users or only current user), click "Next" button to advance.
- (4.) Select components to install, click "Next" button to advance.
The default options are acceptable.
- (5.) Select installation path location, click "Next" button to advance.
- (6.) Click "Finish" button.

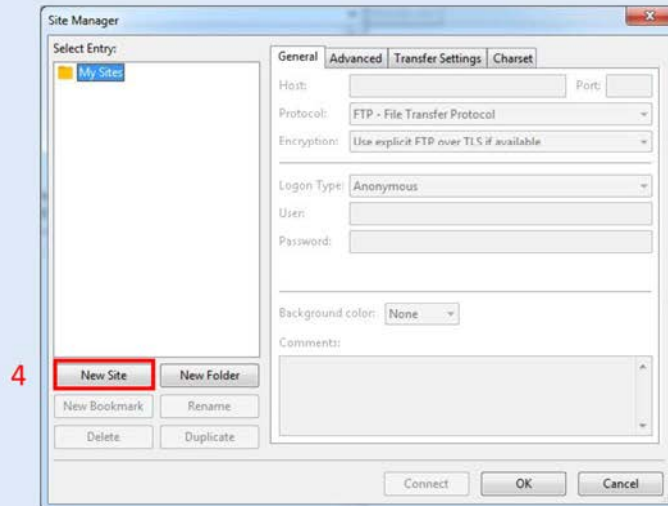
FileZilla Configuration



Configuration Steps for FileZilla (slide 1 of 5)

- (1.) Start FileZilla Client Application.
- (2.) Select "File" from the main menu bar.
- (3.) Select "Site Manager...".
- (4.) Click the "New Site" button.
- (5.) Name the new site "CBIHOME".
- (6.) Select the "General" tab on the right panel.
- (7.) Enter "cbihome.musc.edu" in the "Host" field box.
- (8.) Enter "22" in the "Port" field box.
- (9.) Select the "SFTP – SSH File Transfer Protocol" from the "Protocol" dropdown menu.
- (10.) Select the "Normal" or "Ask for password" from the "Login Type" dropdown menu.
- (11.) Enter your MUSC-NetID in the "user" field box.
- (12.) Optional: Enter your MUSC-NetID-Password into the "Password" field box.
If you don't enter your password here, you will be prompted to enter it each time that you attempt to connect to CBIHOME.
- (13.) Click the "Connect" button to connect to CBIHOME server.
- (14.) Depending on how step # 10 was set, you will receive one of these popup windows before connecting to CBIHOME.
- (15.) Left panel local host drives, right panel CBIHOME directory tree.

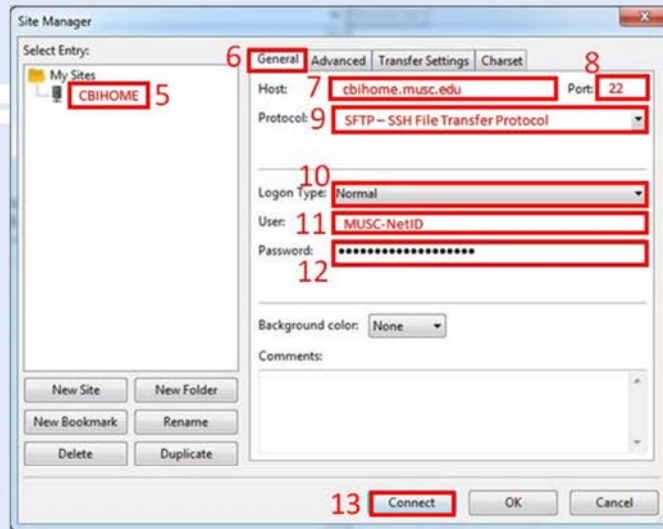
FileZilla Configuration



Configuration Steps for FileZilla (slide 2 of 5)

- (1.) Start FileZilla Client Application.
- (2.) Select “File” from the main menu bar.
- (3.) Select “Site Manager...”.
- (4.) Click the “New Site” button.
- (5.) Name the new site “CBIHOME”.
- (6.) Select the “General” tab on the right panel.
- (7.) Enter “cbihome.musc.edu” in the “Host” field box.
- (8.) Enter “22” in the “Port” field box.
- (9.) Select the “SFTP – SSH File Transfer Protocol” from the “Protocol” dropdown menu.
- (10.) Select the “Normal” or “Ask for password” from the “Login Type” dropdown menu.
- (11.) Enter your MUSC-NetID in the “user” field box.
- (12.) Optional: Enter your MUSC-NetID-Password into the “Password” field box.
If you don’t enter your password here, you will be prompted to enter it each time that you attempt to connect to CBIHOME.
- (13.) Click the “Connect” button to connect to CBIHOME server.
- (14.) Depending on how step # 10 was set, you will receive one of these popup windows before connecting to CBIHOME.
- (15.) Left panel local host drives, right panel CBIHOME directory tree.

FileZilla Configuration



Configuration Steps for FileZilla (slide 3 of 5)

- (1.) Start FileZilla Client Application.
- (2.) Select “File” from the main menu bar.
- (3.) Select “Site Manager...”.
- (4.) Click the “New Site” button.
- (5.) Name the new site “CBIHOME”.
- (6.) Select the “General” tab on the right panel.
- (7.) Enter “cbihome.musc.edu” in the “Host” field box.
- (8.) Enter “22” in the “Port” field box.
- (9.) Select the “SFTP – SSH File Transfer Protocol” from the “Protocol” dropdown menu.
- (10.) Select the “Normal” or “Ask for password” from the “Login Type” dropdown menu.
- (11.) Enter your MUSC-NetID in the “user” field box.
- (12.) Optional: Enter your MUSC-NetID-Password into the “Password” field box.
If you don’t enter your password here, you will be prompted to enter it each time that you attempt to connect to CBIHOME.
- (13.) Click the “Connect” button to connect to CBIHOME server.
- (14.) Depending on how step # 10 was set, you will receive one of these popup windows before connecting to CBIHOME.
- (15.) Left panel local host drives, right panel CBIHOME directory tree.

FileZilla Configuration

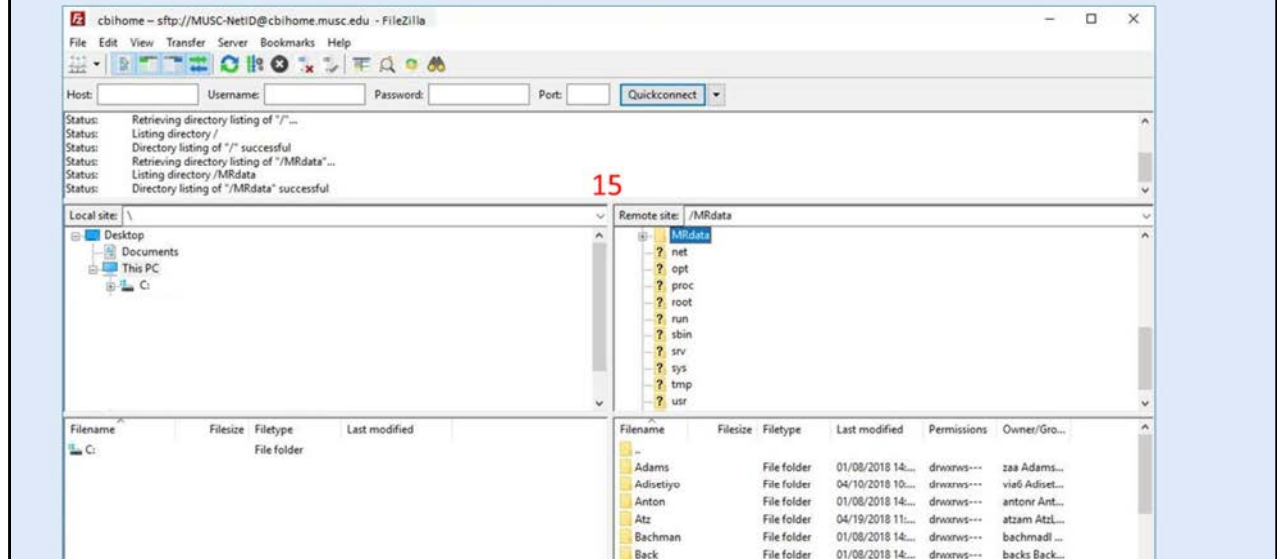
14



Configuration Steps for FileZilla (slide 4 of 5)

- (1.) Start FileZilla Client Application.
- (2.) Select "File" from the main menu bar.
- (3.) Select "Site Manager...".
- (4.) Click the "New Site" button.
- (5.) Name the new site "CBIHOME".
- (6.) Select the "General" tab on the right panel.
- (7.) Enter "cbihome.musc.edu" in the "Host" field box.
- (8.) Enter "22" in the "Port" field box.
- (9.) Select the "SFTP – SSH File Transfer Protocol" from the "Protocol" dropdown menu.
- (10.) Select the "Normal" or "Ask for password" from the "Login Type" dropdown menu.
- (11.) Enter your MUSC-NetID in the "user" field box.
- (12.) Optional: Enter your MUSC-NetID-Password into the "Password" field box.
If you don't enter your password here, you will be prompted to enter it each time that you attempt to connect to CBIHOME.
- (13.) Click the "Connect" button to connect to CBIHOME server.
- (14.) Depending on how step # 10 was set, you will receive one of these popup windows before connecting to CBIHOME.
- (15.) Left panel local host drives, right panel CBIHOME directory tree.

FileZilla Configuration



Configuration Steps for FileZilla (slide 5 of 5)

- (1.) Start FileZilla Client Application.
- (2.) Select “File” from the main menu bar.
- (3.) Select “Site Manager...”.
- (4.) Click the “New Site” button.
- (5.) Name the new site “CBIHOME”.
- (6.) Select the “General” tab on the right panel.
- (7.) Enter “cbihome.musc.edu” in the “Host” field box.
- (8.) Enter “22” in the “Port” field box.
- (9.) Select the “SFTP – SSH File Transfer Protocol” from the “Protocol” dropdown menu.
- (10.) Select the “Normal” or “Ask for password” from the “Login Type” dropdown menu.
- (11.) Enter your MUSC-NetID in the “user” field box.
- (12.) Optional: Enter your MUSC-NetID-Password into the “Password” field box.
If you don’t enter your password here, you will be prompted to enter it each time that you attempt to connect to CBIHOME.
- (13.) Click the “Connect” button to connect to CBIHOME server.
- (14.) Depending on how step # 10 was set, you will receive one of these popup windows before connecting to CBIHOME.
- (15.) Left panel local host drives, right panel CBIHOME directory tree.

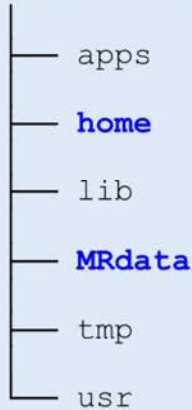
VII. CBIHOME Directory Structure

Slide #	Description
45	CBIHOME Server Directory Tree – “/”
46	CBIHOME Server Directory Tree – “/home”
47	CBIHOME Server Directory – “/MRdata”
48	CBIHOME Server – Faculty Drive Space Quota
49	CBIHOME Server – User Permissions

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

CBIHOME Server – Directory Tree

CBIHOME Server Root Directory



CBIHOME Server – Directory Tree *(slide 1 of 5)*

CBIHOME Server ROOT Directory Tree

User's Home Directory: /home/MUSC-NetID

Home directory folders contains a very limited space for user system settings.

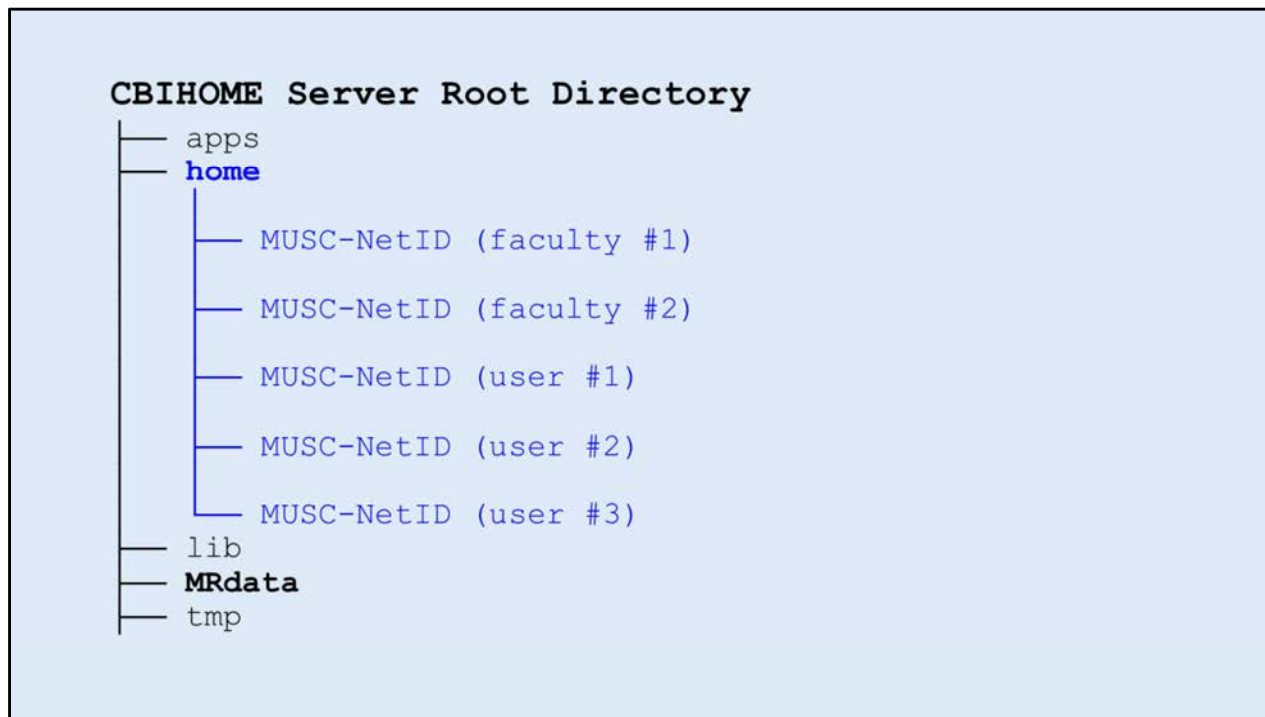
MUSC Faculty Storage Folder: /MRdata/PI_LastName/

MUSC Faculty storage drive folder directory path is named after the faculty's last name.

MUSC Faculty Study Folder(s): /MRdata/PI_LastName/Study_FolderName/upload/

MUSC Faculty study folder directory path is named after their study. This is the location to which zipped DICOM files are uploaded from the CAIRPACS server.

IMPORTANT: Each MUSC Faculty storage folder are limited to contain a maximum of 0.5 TB (500GB) of files.



CBIHOME Server – Directory Tree (slide 2 of 5)

CBIHOME Server HOME Directory Tree

User's Home Directory: /home/MUSC-NetID

Home directory folders contains a very limited space for user system settings.

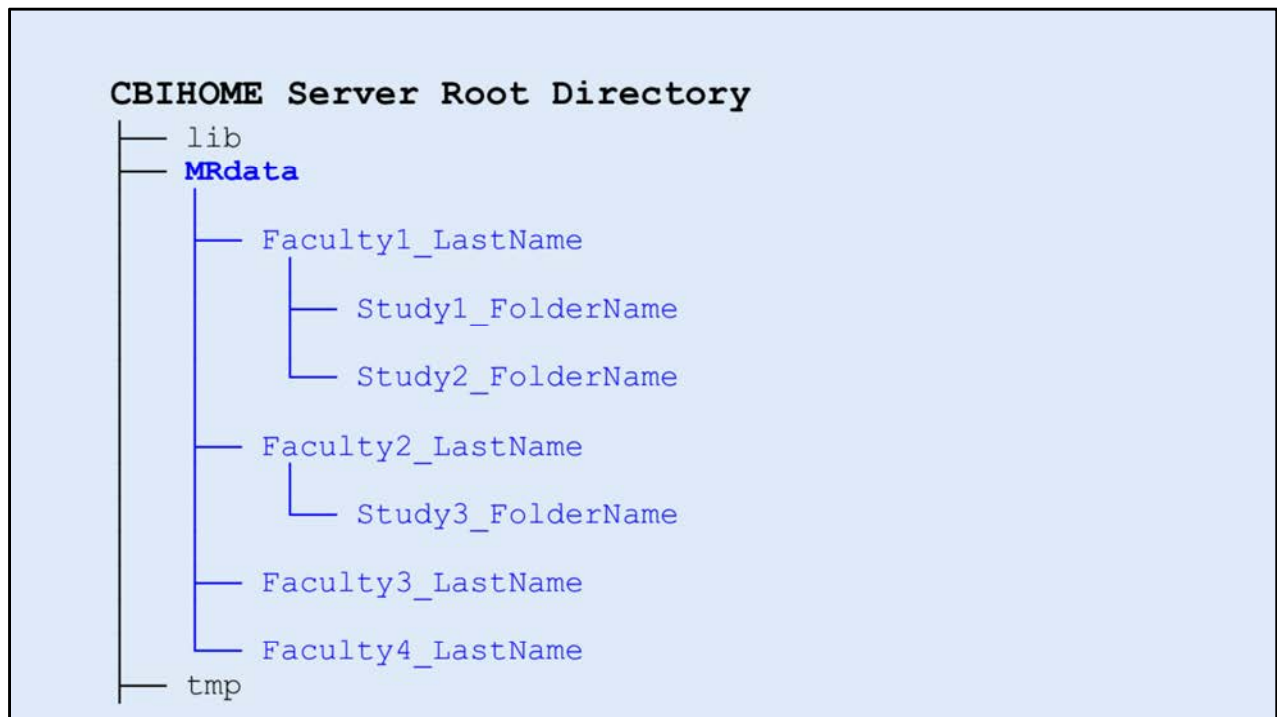
MUSC Faculty Storage Folder: /MRdata/PI_LastName/

MUSC Faculty storage drive folder directory path is named after the faculty's last name.

MUSC Faculty Study Folder(s): /MRdata/PI_LastName/Study_FolderName/upload/

MUSC Faculty study folder directory path is named after their study. This is the location to which zipped DICOM files are uploaded from the CAIRPACS server.

IMPORTANT: Each MUSC Faculty storage folder are limited to contain a maximum of 0.5 TB (500GB) of files.



CBIHOME Server – Directory Tree (slide 3 of 5)

CBIHOME Server MRDATA Directory Tree

User’s Home Directory: /home/MUSC-NetID

Home directory folders contains a very limited space for user system settings.

MUSC Faculty Storage Folder: /MRdata/Faculty_LastName/

MUSC Faculty storage drive folder directory path is named after the faculty’s last name.

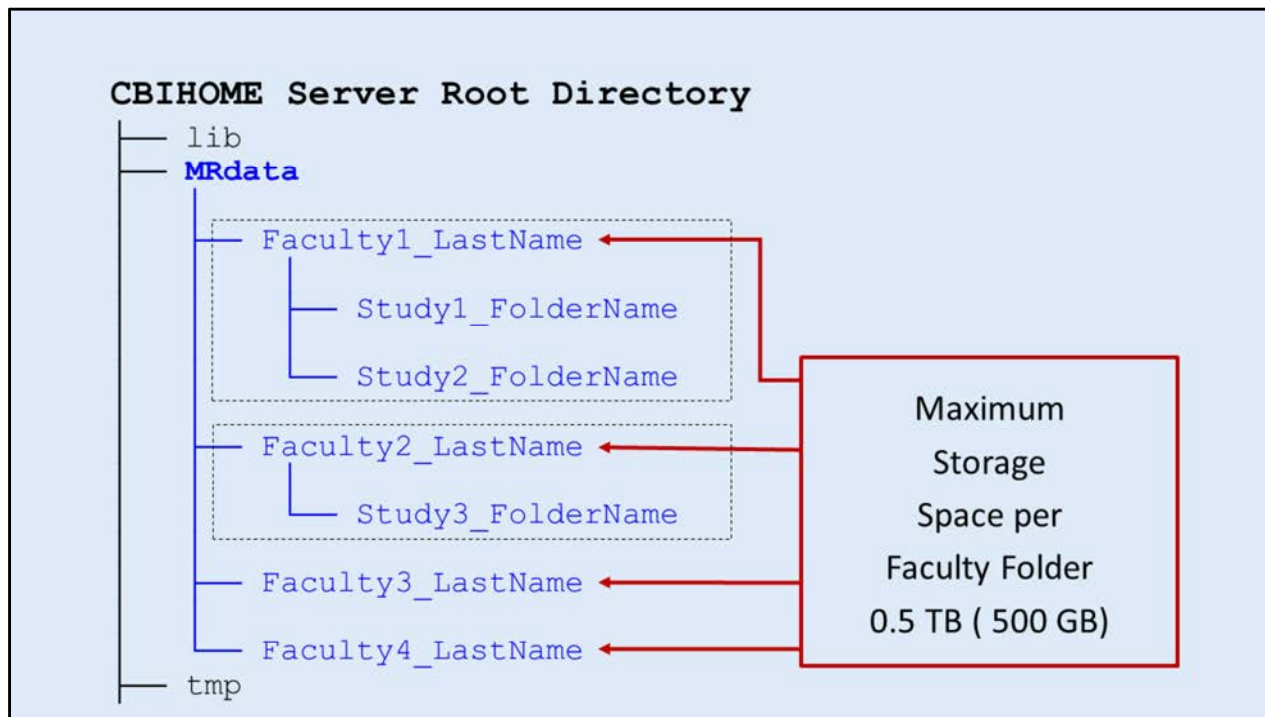
MUSC Faculty Study Folder(s):

/MRdata/Faculty_LastName/Study_FolderName/upload/

MUSC Faculty study folder directory path is named after their study. This is the location to which zipped DICOM files are uploaded from the CAIRPACS server.

IMPORTANT: Each MUSC Faculty storage folder are limited to contain a maximum of 0.5 TB (500GB) of files.

Note: This slide indicates that “Faculty1” has 2 different studies and “Faculty2” has 1 study.



CBIHOME Server – Directory Tree *(slide 4 of 5)*

CBIHOME Server MRDATA Directory Tree

MUSC Faculty Storage Folder: /MRdata/Faculty_LastName/

MUSC Faculty storage drive folder directory path is named after the faculty's last name.

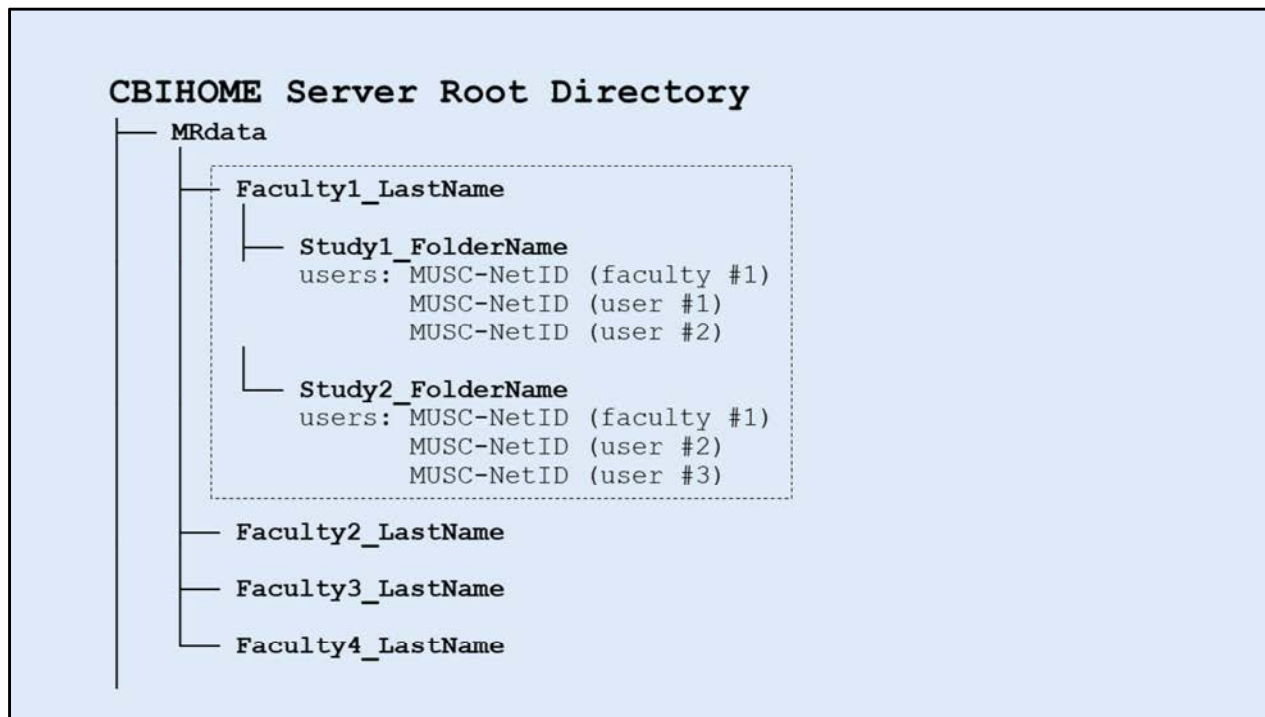
MUSC Faculty Study Folder(s):

/MRdata/Faculty_LastName/Study_FolderName/upload/

MUSC Faculty study folder directory path is named after their study. This is the location to which zipped DICOM files are uploaded from the CAIRPACS server.

IMPORTANT: Each MUSC Faculty storage folder are limited to contain a maximum of 0.5 TB (500GB) of files.

Note: All files contained in either folder "Faculty1_LastName" or "Faculty2_LastName" can not exceed 0.5 TB (500GB).



CBIHOME Server – Directory Tree (slide 5 of 5)

CBIHOME Server MRDATA Directory Tree

MUSC Faculty Storage Folder: /MRdata/Faculty_LastName/

MUSC Faculty storage drive folder directory path is named after the faculty’s last name.

MUSC Faculty Study Folder(s):

/MRdata/Faculty_LastName/Study_FolderName/upload/

MUSC Faculty study folder directory path is named after their study. This is the location to which zipped DICOM files are uploaded from the CAIRPACS server.

IMPORTANT: Each MUSC Faculty storage folder are limited to contain a maximum of 0.5 TB (500GB) of files.

Note: This slide shows that “Faculty1” has 2 different studies and that “MUSC_NetID (faculty #1)” & “MUSC_NetID (user #2)” have access permissions to both study folders but “MUSC_NetID (user #1)” only has access to “Study1_FolderName” and “MUSC_NetID (user #3)” only has access to “Study2_FolderName”.

VIII. Other Information

Slide #	Description
53-55	CBI Help Request
56	Missing/Incomplete Scan Data
57	Incidental Findings
58	MRI Console Room Computers
59	MUSC Remote Access – Secure VPN
60	MUSC Net ID and Password Reactivation

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

CBI Help Request

Slide # Description (Topics & Key Points Covered in Presentation)

54	CBI Help Request CBI Website Screenshot Link: Help Request- CBI Server, Data, and Equipment Help Request
55	CBI Help Request Form, Required Fields MUSC Service-Now Ticket System Required fields: Caller, On behalf of, Preferred Contact Type, Short description, Additional comments, and Assignment group.

Topics and Key Points Covered in Presentation	Slide #
I: New MRI Projects	3
Starting a New MRI Project	4
CBI New Project Request Form – Study and User Information	5-6
II: MRI Data Flow	7
MRI Data Flow and Data Management	8
Siemens Patient Registration Form	9
DICOM Filename Format and Packaged MRI Scan Filename Format	10-11
III: CBIHOME	12
Key Information for CBIHOME Server (cbihome.musc.edu)	13
Adding/Removing Users on CBIHOME Server	14
Accessing CBIHOME through SFTP/SCP Client Application	15
IV: WinSCP (SFTP/SCP Client Application for Windows PC Only)	16
WinSCP Downloading, Installation and Configuration	17-23
WinSCP Accessing Study Folder on CBIHOME and Checking Space	24-26
V: CyberDuck (SFTP/SCP Client Application for Macs & Windows)	27
CyberDuck Download, Installation and Configuration	28-33
CyberDuck Accessing Study Folder on CBIHOME and Checking Space	34-36
VI: FileZilla (SFTP/SCP Client Application for Macs & Windows)	37
FileZilla Downloading, Installation and Configuration	38-45
VII: CBIHOME Directory Structure	46
CBIHOME Server Directory Tree, Faculty Space Quota and User Permissions	47-51
VIII: Other Information	52
CBI Help Request	53-55
Missing/Incomplete Scan Data	56
Incidental Findings	57
MRI Computers, MUSC Remote VPN Access and Net ID Password Reactivation	60

CBI Help Request

CBI Website Home Page



CBI Quicklinks

- [CBI COVID-19 Certification Form](#)
- [New Project Request Form](#)
- [Submitted Grant Information Form](#)
- [Calpendo Scheduling System](#)
- [Calpendo Instruction Guide \(PDF\)](#)
- [MRI Safety Training Class](#)
- [Volunteer for Research Studies](#)
- [Help Request- CBI Server, Data and Equipment Help Request](#)

CBI Help Request

To access the CBI Help Request form, use CBI website link “Help Request”.

CBI Website:

<https://medicine.musc.edu/departments/centers/cbi>

CBI Help Request Form

Required Fields

The screenshot shows a web form for an incident titled "Incident - INC0190328 [Default view view*]". The form is divided into two columns. The left column contains fields for "Number" (INC0190328), "Caller" (highlighted), "On behalf of" (highlighted), "Net ID", "MUSC Caller" (checked), "Preferred Contact Type" (None --, highlighted), "Business service", "Configuration item" (cbihome), "Hostname", "Location", "Short description" (CBI CBIhome, highlighted), and "Description" (CBI CBIhome, highlighted). The right column contains fields for "State" (New), "Submission Method" (Phone), "Priority" (4 - Low), "Major Incident" (unchecked), "Assignment group" (Center for Biomedical Imaging, highlighted), "Assigned to" (Thomas Fleury), "Category" (None --), and "Subcategory" (None --). At the bottom, there is an "Additional comments" field (highlighted). The form has buttons for "Submit", "Save", "Resolve", and "Submit and New".

CBI Help Request Form: To access form, use CBI website link “Help Request”.

FIELD DESCRIPTIONS

Number: Unique automatically generated identification number.

Caller: Person submitting request.

On behalf of: Person to be contacted by CBI.

Net ID: Automatically generated with the MUSC Net ID.

Preferred Contact Type: Select None, Email, Desk Phone or Cell Phone.

Short description: Quick reference of key information about help requested.

Description: Brief information about help requested, no more than a few sentences.

Assignment group: To be directly sent to CBI, enter “Center for Biomedical Imaging”.

Additional comments: Full description of request including all key information.

** Other fields are controlled by CBI System Administrators and CBI Techs.*

** The “Short description” field is part of the email notification but only a limited number of characters, so please make sure only key information are entered into this field.*

Examples:

Study Number, add/remove user twf123 from study

Study Number, Patient ID, scan date/time, missing file

Study Number, E-prime problem with audio output

Missing/Incomplete Scan Data File

Submit a CBI Help Request with at least the following 3 required pieces of information, used on the MRI Console PC Patient Registration at time of scan:

Study Number

Study Date

Patient ID

DICOM Filename: 1.3.12.2.1107.5.2.43.167021.2021011212305532079694878

Missing/Incomplete Scan Data File

If you notice something wrong with your MRI Data File(s), contact the CBI System Administrators with the below key information plus any other pertinent information about the issue.

Requires 3 Key pieces of information to locate scan from archive database:

Study Number

Study Date

Patient ID

Other important information to identify the issue:

Study Time

Scan Series Name

Number of Images in Scan Series

Number of Scan Series for Scan Session

Reporting Incidental Findings

- 1.) Immediately notify the Principal Investigator (PI) of the study.
- 2.) Request that the MRI technologist on duty to transfer the study images to the clinical PACS system and notify the designated CBI radiologist. This does not require PI approval and may be initiated prior to PI acknowledging receipt of incidental findings notification.

Required Scan Information:

Study Number
Study Date
Patient ID
Gender
Age
Statement of concern, include Region of Interest or questionable finding.

Following review, the radiologist will contact the PI to discuss the clinical significance of the findings. Based on this consultation, the PI will decide whether follow-up contact with the subject is necessary.

Incidental Findings

Email the CBI System Administrators ALL of the below information:

Require Email from Study PI

- Authorization to push key scan series to the Hospital PACS server (IMPAX) to be read by a local radiologist.
- Statement of concern.
- Include Region of Interest or questionable finding.

Required Scan Information:

- Study Number
- Study Date
- Patient ID
- Gender
- Age

MRI Console Room Computers

Presentation-0 PC

Windows10 / Ubuntu 12

User Accounts: PI-Lab

Data – D Drive: D:/Current Experiments/PI-Lab/

* D-drive backed up nightly.

* User account and desktop NOT backed up.

Presentation-2 PC

Windows10

Mac laptop

*special

E-Prime Dev PC

Windows10

User Account: CBIUser

MRI Console Room Computers

Presentation-0 PC

Windows10 / Ubuntu 12

User Accounts: PI-Lab

Data – D Drive: D:/Current Experiments/PI-Lab/

* D-drive backed up nightly.

* User account and desktop NOT backed up.

Presentation-2 PC

Windows10

Mac laptop

* special

E-Prime Dev PC

Windows10

User Account: CBIUser

MUSC Remote Access – Secure VPN

MUSC IT Website for Remote Access

<https://portal.musc.edu/ocio-is/infrastructure/Network-Systems-Team/Pages/Remote%20Access.aspx>

VPN Registration – Register MUSC NetID for use with VPN

VPN Download – Cisco AnyConnect or Citrix workspace

MUSC Remote Access – Secure VPN

To access the MUSC network from a remote location which is not part of MUSC, one must first register their MUSC NetID then install a current Cisco AnyConnect software package.

MUSC IT Website for Remote Access Link:

<https://portal.musc.edu/ocio-is/infrastructure/Network-Systems-Team/Pages/Remote%20Access.aspx>

VPN Registration – Register MUSC NetID for use with VPN

VPN Download – Cisco AnyConnect or Citrix workspace

MUSC Net ID and Password Reactivation

For people losing access to the CBIHOME server after:

Lapse in MUSC-NetID account / Re-actiation of MUSC-NetID

Go to MUSC Identity Management System website: <https://netid.musc.edu>

Select the link “Change My Password” and create a new password for your MUSC-NetID.

MUSC Net ID and Password Reactivation

For people who lose access to the CBIHOME server after

a lapse in their MUSC-NetID account or Re-actiation of MUSC-NetID account:

Go to MUSC Identity Management System website: <https://netid.musc.edu> and reset your password.

Select the link “Change My Password” and create a new password for your MUSC-NetID.