

Nuts & Bolts

New 3T Data Flow: How to Access Your Data

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

Thomas Fleury

March 28, 2018

New Siemens Prisma 3T Data Flow and How to Access Your MRI Data Files Focusing on Accessing the NEW CBI Server “CBIHOME”

The old method used the CBI server “HIVELOGIN” (hivelogin.mdc.musc.edu).

The new method will use the CBI server “CBIHOME” (cbihome.musc.edu).

CBI System Administrators:

| | | |
|----------------------|----------|--|
| Thomas Fleury | 792-2586 | fleurytw@musc.edu |
|----------------------|----------|--|

| | | |
|--------------------|----------|--|
| David Lewis | 876-2463 | lewidavi@musc.edu |
|--------------------|----------|--|

* When contacting by email, please include both CBI System Administrators to any initial email message: [fleurytw@musc.edu; lewidavi@musc.edu]

Modified from CBI Nuts and Bolts Meeting, Wednesday March 28, 2018 “New 3T Data Flow: How to Access Your Data” By Thomas Fleury

Topics

- I. **New MRI Projects**
- II. **CBI Servers Information**
- III. **CBIHOME Key Information**
- IV. **WinSCP (*Windows Only*)**
- V. **CyberDuck (*for Macs & Windows*)**
- VI. **FileZilla (*for Macs & Windows*)**
- VII. **CBIHOME Directory Tree**
- VIII. **Other Information**

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I. New MRI Projects

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STARTING A NEW MRI PROJECT

STEP 1: Contact the CBI Techs

CBI Techs will email current “New Project” form.

Completed forms are emailed back to the cbitech@musc.edu

STEP 2: CBI Techs contact the researcher about scanning protocols.

STEP 3: Study added into our scheduling application, Calpendo.

User accounts are only created for MUSC Faculty.

STEP 4: Study and Users are added to the data server, CBIHOME.

CBI Techs

James Purl, James Coatsworth & Scott Henderson
cbitech@musc.edu
843-792-2353

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

User accounts are only created for MUSC Faculty.
Studies are linked to specific user accounts.

CBIHOME (cbihome.musc.edu)

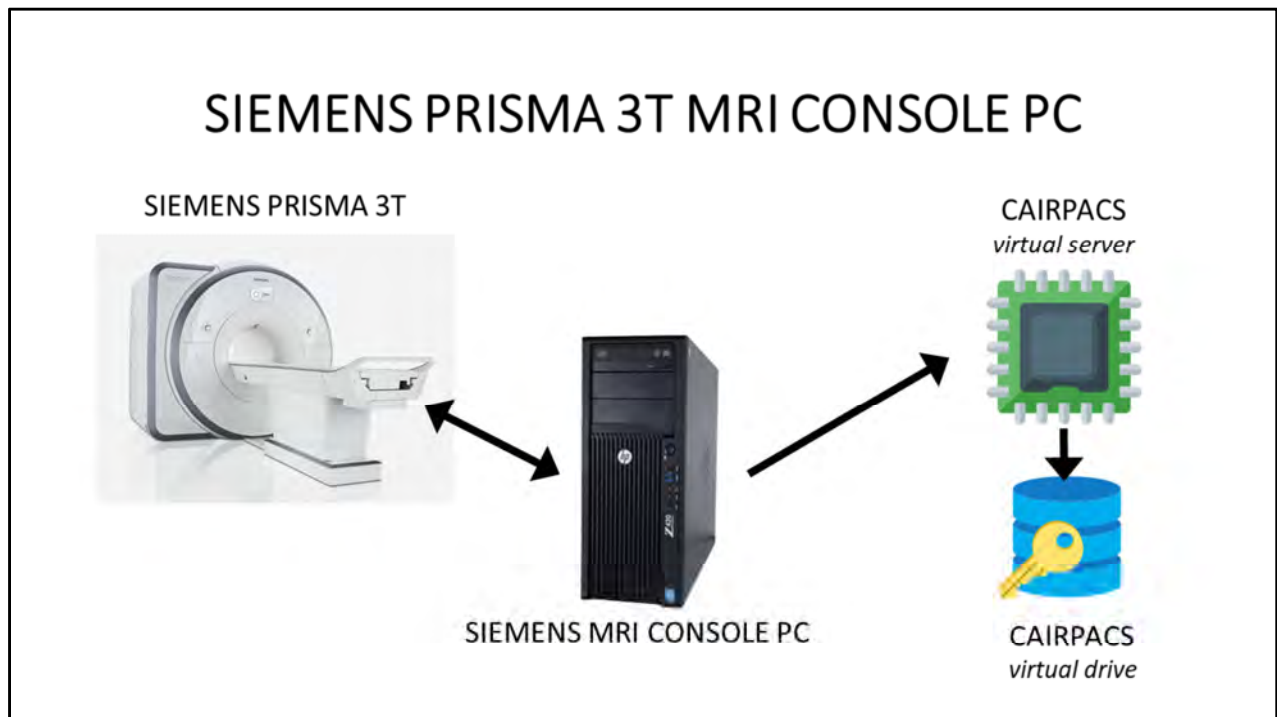
Studies are added only for MUSC Faculty.
Storage space is limited to MUSC Faculty.
User accounts are linked to MUSC Net ID.
Users are given permissions to work in specific MUSC Faculty study folder(s).

II. CBI Servers Information

| Slide # | Description (Topics & Key Points Covered in Presentation) |
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| 6 | Siemens Prisma 3T MRI Console PC and CAIRPACS Server |
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SIEMENS PRISMA 3T MRI CONSOLE PC



Siemens MRI Console PC

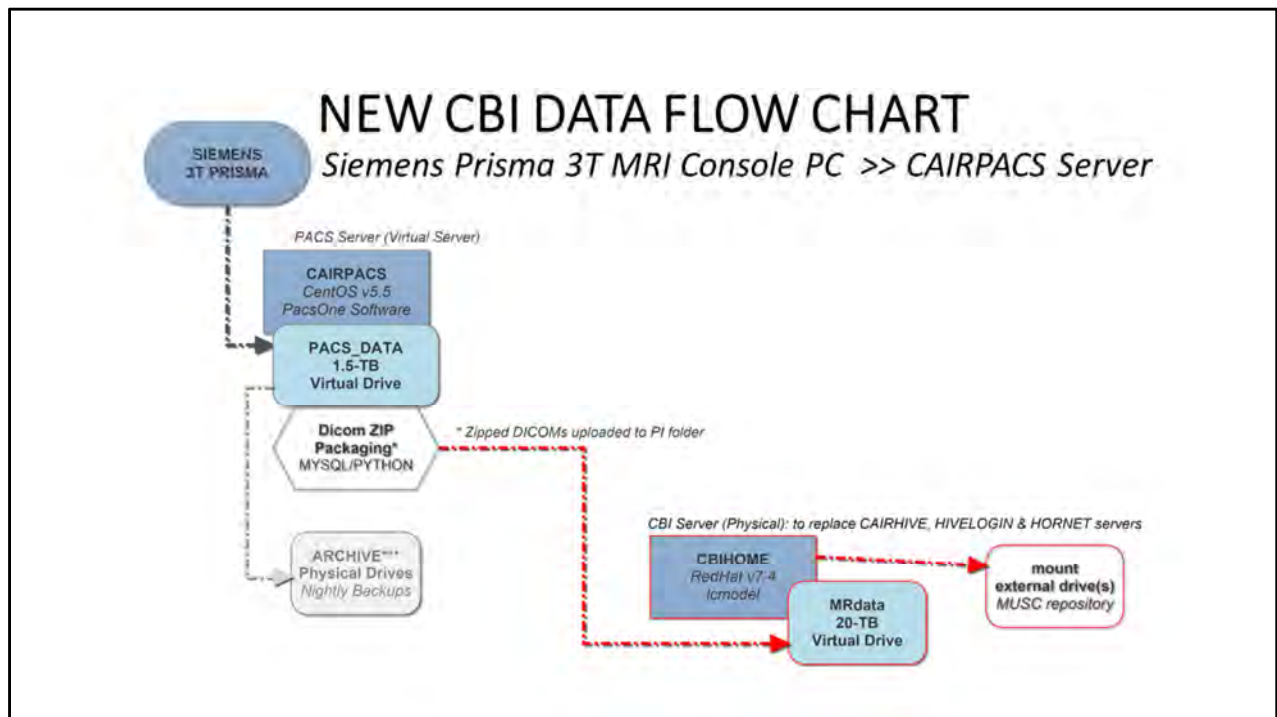
Very Limited Space: Original Scans remain on MRI Console PC for less than 2 weeks. If space is required, they may be removed sooner. Scans are only removed after verification of successful upload to CAIRPACS Virtual Drive.

CAIRPACS Server (MUSC Virtual Server)

CAIRPACS Server access by CBI System Administrators Only (**Tom Fleury** fleurytw@musc.edu 792-2586 or **Dave Lewis** lewidavi@musc.edu 876-2463)
CAIRPACS Server contains programs which package individual scan session DICOMs into a zipped file. Completed 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 drive. CAIRPACS Virtual Drive and the archive drive are backed up nightly through MUSC IT.



Initial MRI Data Flow Chart

Siemens MRI Console PC > CAIRPACS > PACS_DATA

DICOM files are uploaded from the MRI Console PC (shown as SIEMENS 3T PRISMA) to the CAIRPACS server onto the mounted virtual drive PACS_DATA. Once a completed scan has been uploaded, PACSONE application initiates programs that package all the DICOM files for the individual scan session into a compressed zip file with the following filename format: `yyyymmdd_HHMMSS_PtID.zip`

yyyy = year at start of scan session.

mm = month at start of scan session.

dd = day at start of scan session.

HH = hour at start of scan session.

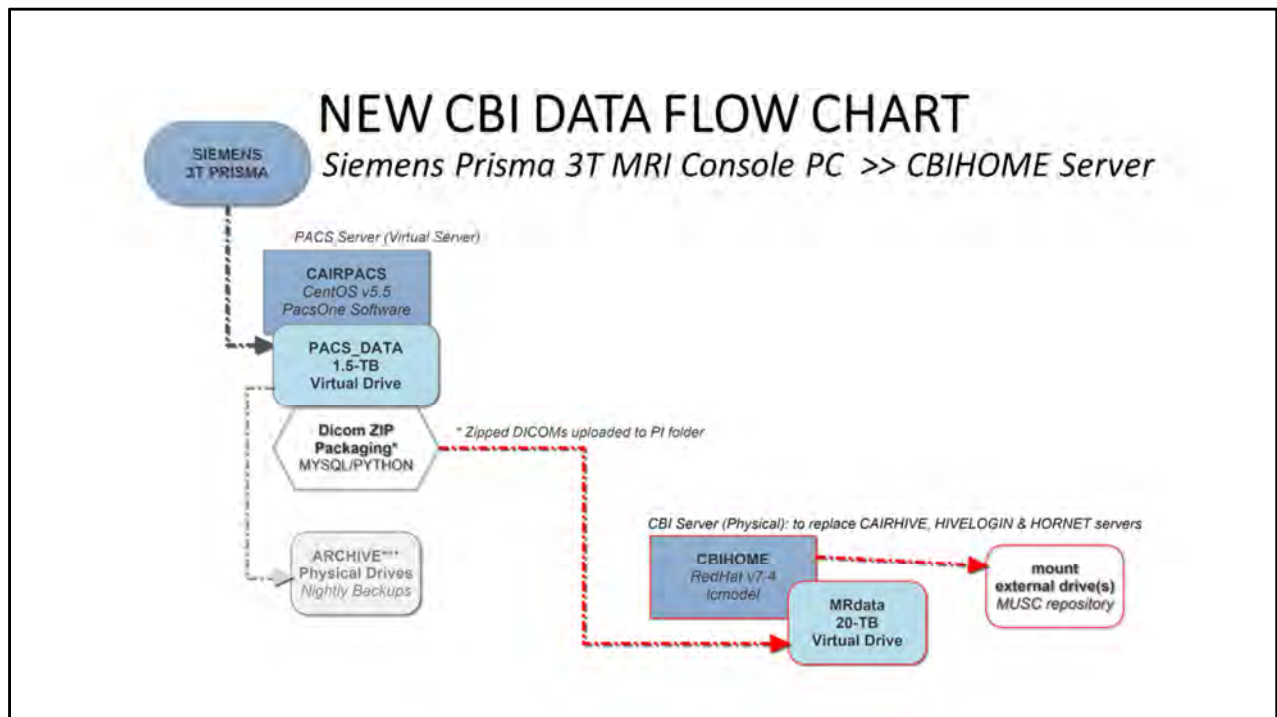
MM = minute at start of scan session.

SS = second at start of scan session.

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

Packaged DICOMs file Path:

`cbihome.musc.edu://MRdata/Faculty_LastName/Study_FolderName/upload/`



Packaged DICOMs (yyyymmdd_HHMMSS_PtID.zip) are uploaded from “CAIRPACS” server into the MUSC faculty study folder on the Virtual Drive “MRdata”.

CBIHOME Server (Physical Server running Linux RHEL v7.4 operating system)
MUSC Faculty, and the users whom they have granted permission, can access the CBIHOME Server. CBIHOME server accesses the virtual drive “MRdata” which is the drive to which the CAIRPACS server uploads zipped MRI DICOM files.

MRdata Virtual Drive

Each MUSC Faculty are given a single primary folder that can contain up to a maximum of 0.5 TB (500GB) of files. Zipped MRI DICOM files, from a study’s MRI scan session, are uploaded from the CAIRPACS server to the MRdata Virtual Drive. Zipped DICOMs file upload path:

`cbihome.musc.edu://MRdata/Faculty_LastName/Study_FolderName/upload/`

IMPORTANT: CBIHOME server and MRdata Virtual Drive are backed up nightly through MUSC IT.

DICOM File Names

Siemens Prisma file naming convention:

| Siemens MR | series | date | other |
|---|---------------|---------|---------|
| V-----V | V-----V | V-----V | V-----V |
| 1.3.12.2.1107.5.2.43.167021.2018040109002142269100778 | | | |
| | ^-----^ | ^-----^ | |
| | system | series | |
| | serial number | time | |

Siemens Prisma Magnetom naming convention:

<http://godzilla.kennedykrieger.org/dicomfiles/dicomuid.html>

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 | V-----V |
| 1.3.12.2.1107.5.2.43.167021.2018040109002142269100778 | | | |
| | ^-----^ | ^-----^ | |
| | system | series | |
| | serial number | time | |

Siemens Prisma Magnetom naming convention:

<http://godzilla.kennedykrieger.org/dicomfiles/dicomuid.html>

III. CBIHOME

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| 12 | Adding/Removing Users on CBIHOME Server |
| 13 | Accessing CBIHOME through SFTP/SCP Client Application |

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Key Information for CBIHOME Server

Hostname: **cbihome.musc.edu**

Domain: clinlan

User: MUSC-NetID

Password: MUSC-NetID-Password

Accessing the NEW CBI User Server, “CBIHOME” can be done using previous methods which were used to access the HIVELOGIN server 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 email a request 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.

IMPORTANT: It is strongly recommended that you update any programs that you have been using to access CBIHOME.

Adding/Removing Users on CBIHOME Server

(1.) MUSC Faculty must email CBI System Administrators

(2.) 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 email CBI System Administrators a request to add or remove users from their CBIHOME study folders.

(2.) To Add a user to the CBIHOME server, MUSC Faculty must email the CBI System Administrators the following information:

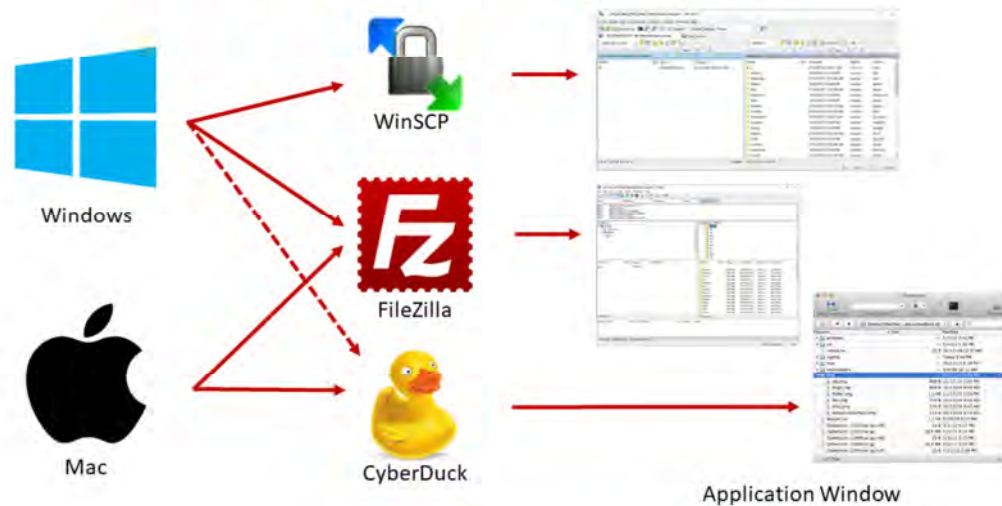
- (A.) Users full name
- (B.) User MUSC-NetID
- (C.) User MUSC Email address
- (D.) Study Number(s) / Study Folder(s)

Sample Email:

Please add the below people to Study # 12345
/MRdata/Faculty_LastName/Study12345_fMRI/
Thomas Fleury, twf123, fleurytw@muscd.edu

IMPORTANT: MUSC Faculty must inform the CBI System Administrators whenever users need to be removed from having access to specific Faculty folders and/or specific study folders.

Accessing MRI Data through CBIHOME Server SFTP/SCP Client Application



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)

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Installation of WinSCP (slide 1 of 3)

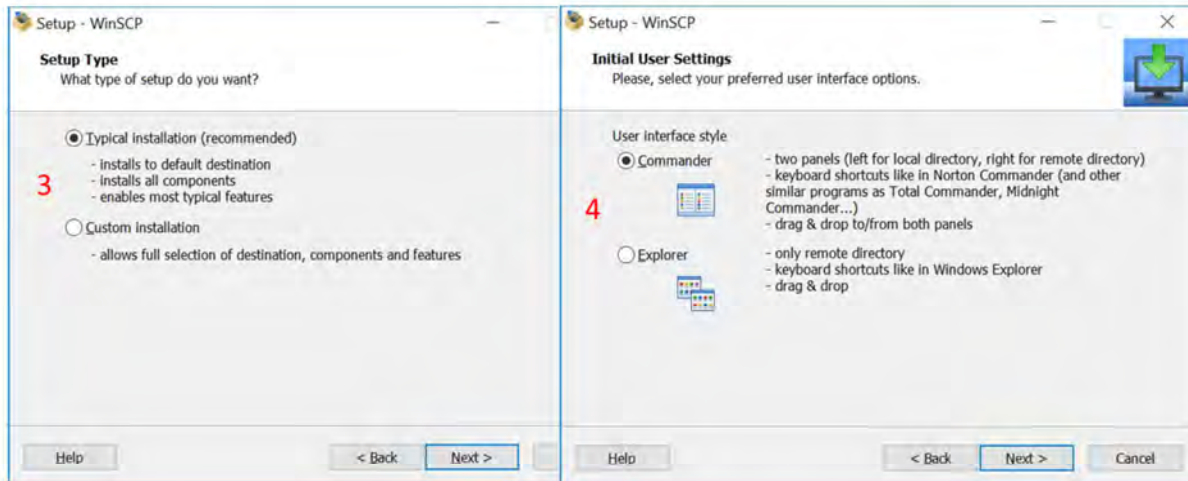
WinSCP <https://winscp.net/eng/index.php>
WinSCP Download <https://winscp.net/eng/download.php>
Current version as of 20180425: 5.13.1
(WinSCP-5.13.1-Setup.exe [9.2 Mbytes])

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.

* For Windows PC Only

Installation of WinSCP (continued)



Installation of WinSCP (slide 2 of 3)

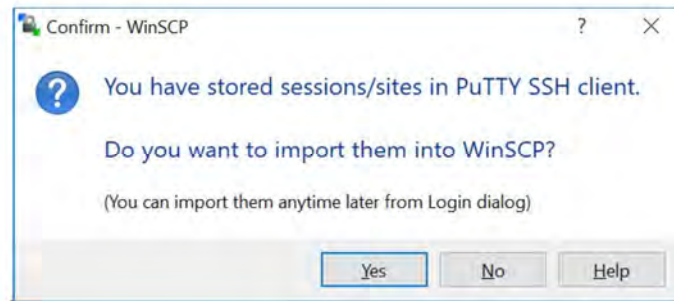
WinSCP <https://winscp.net/eng/index.php>
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Installation of WinSCP (continued)



5

Installation of WinSCP (slide 3 of 3)

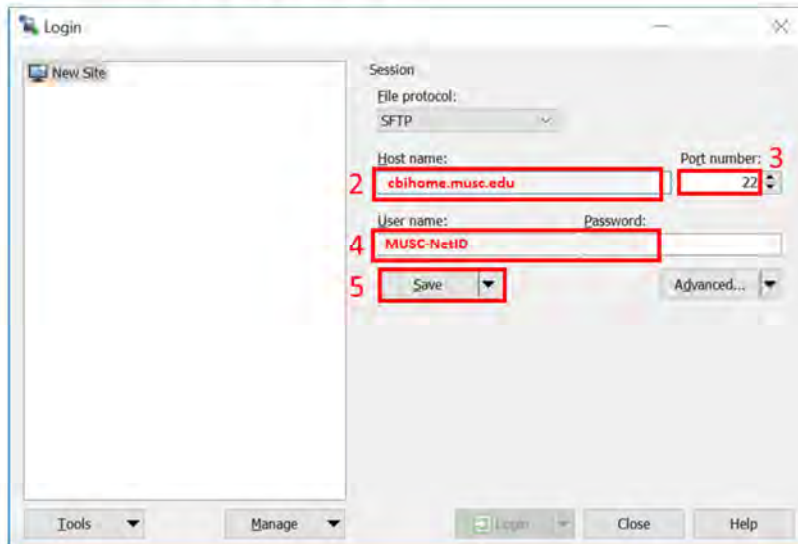
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Configuration of WinSCP



Configuration of WinSCP (slide 1 of 6)

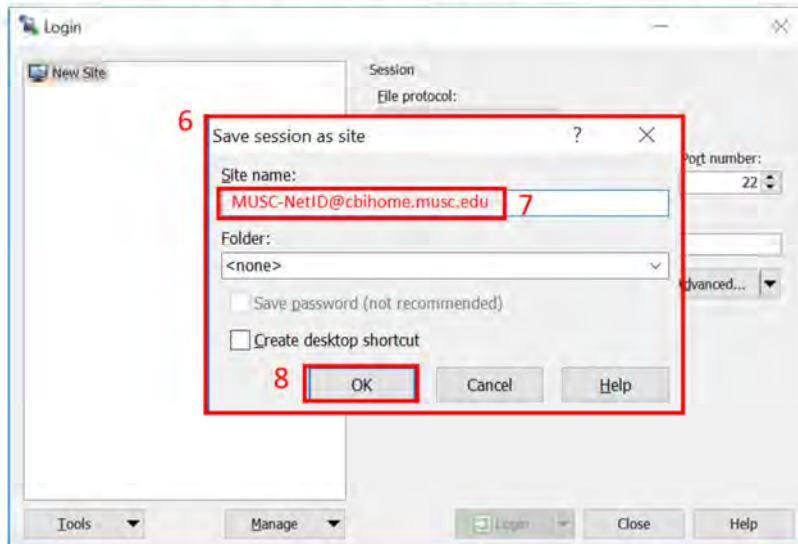
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cbihome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cbihome.musc.edu") 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

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Configuration of WinSCP (continued)



Configuration of WinSCP (slide 2 of 6)

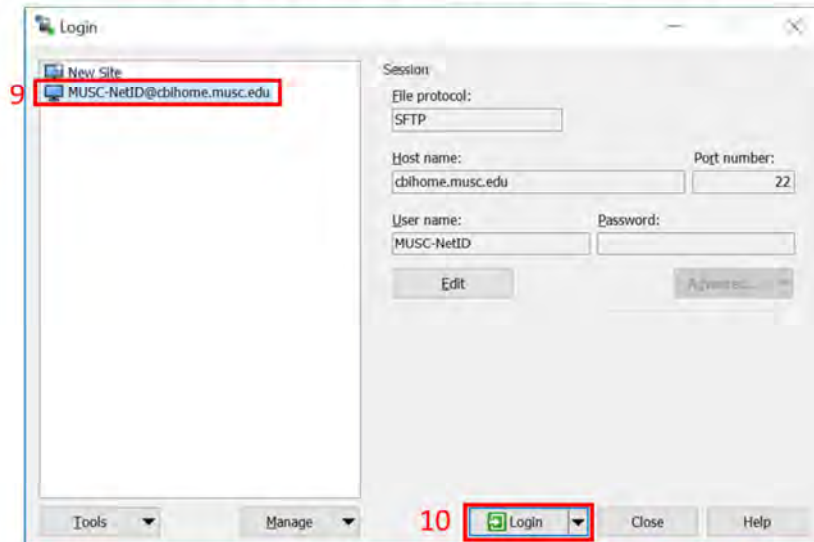
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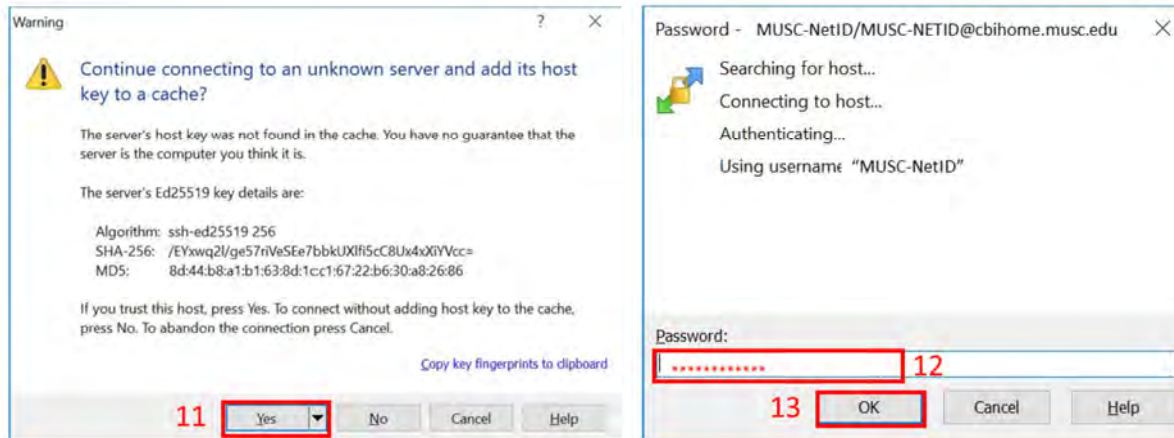
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cblhome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
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Configuration of WinSCP (continued)



Configuration of WinSCP (slide 4 of 6)

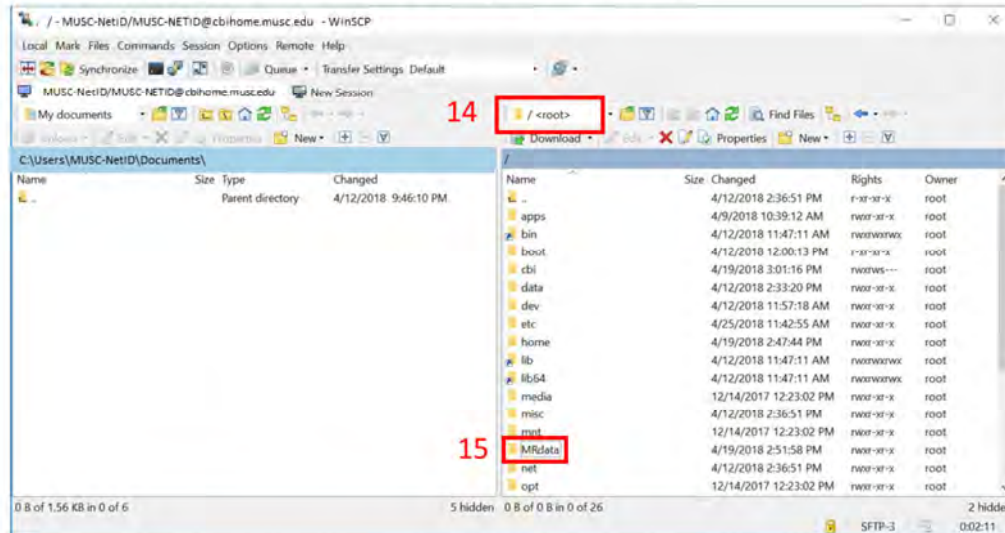
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cbihome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cbihome.musc.edu") 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)

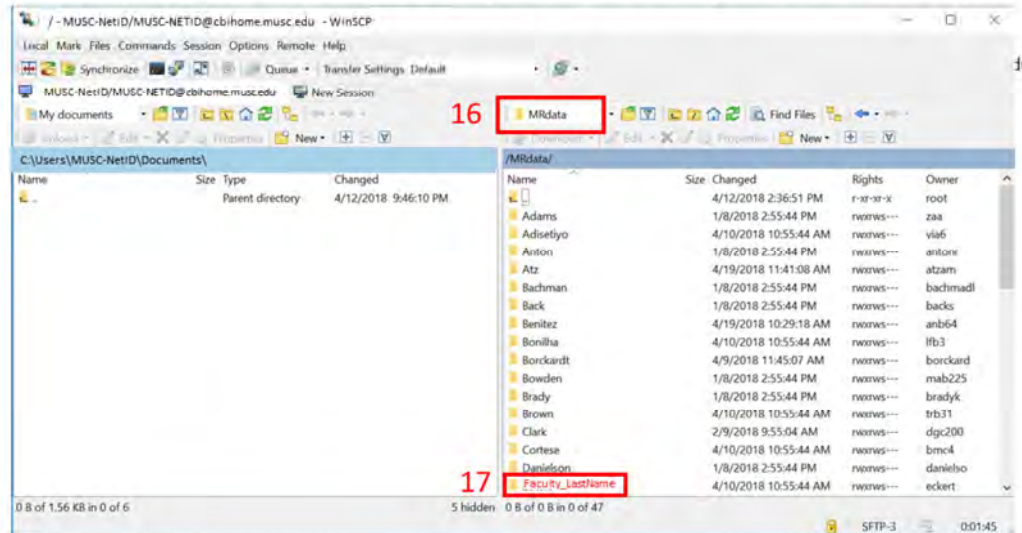
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cbihome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cbihome.musc.edu") 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)

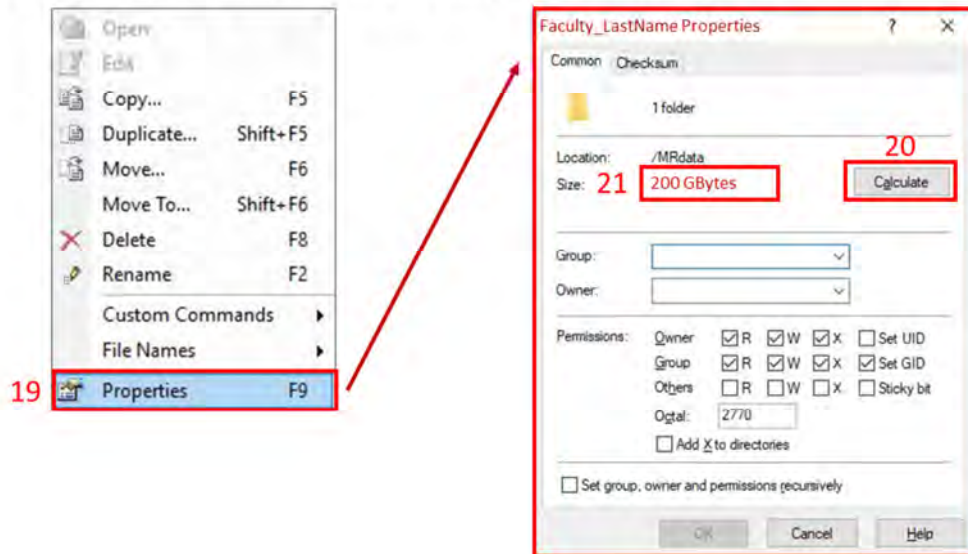
- (1.) Start WinSCP program.
- (2.) Enter "Host name" value of "cbihome.musc.edu".
- (3.) Enter "Port Number" value of "22".
- (4.) Enter MUSC-NetID into the "User name" box.
- (5.) Click the "Save" button.
- (6.) Popup window "Save session as site" appears.
- (7.) Accept "Site name" ("MUSC-NetID@cbihome.musc.edu") 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:

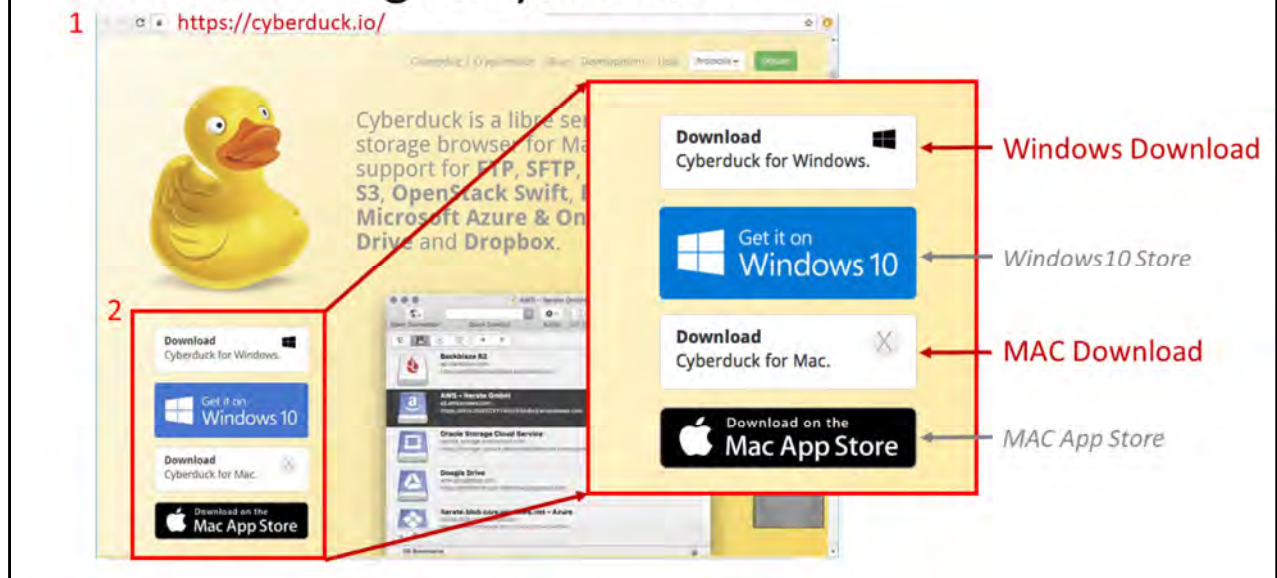
- (18.) Right mouse click on selected Faculty folder "Faculty_LastName" to get to the dropdown menu.
- (19.) Select "Properties" to open a folder properties window.
- (20.) Click the "Calculate" button.
- (21.) After calculation, size of space used will be displayed in the "Size" field.
In this example,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

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| MRI Data Flow from MRI > CBIHOME Server | 7-8 |
| DICOM Filename Format | 9 |
| III: CBIHOME | 10 |
| Key Information for CBIHOME Server (cbihome.musc.edu) | 11 |
| Adding/Removing Users on CBIHOME Server | 12 |
| Accessing CBIHOME through SFTP/SCP Client Application | 13 |
| IV: WinSCP (SFTP/SCP Client Application for Windows PC Only) | 14 |
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| V: CyberDuck (SFTP/SCP Client Application for Macs & Windows) | 25 |
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| VII: CBIHOME Directory Tree | 44 |
| CBIHOME Server - Directory Tree: root, home, MRdata | 45-47 |
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| VIII: Other Information | 50 |
| Missing/Incomplete Scan Data | 51 |
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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):

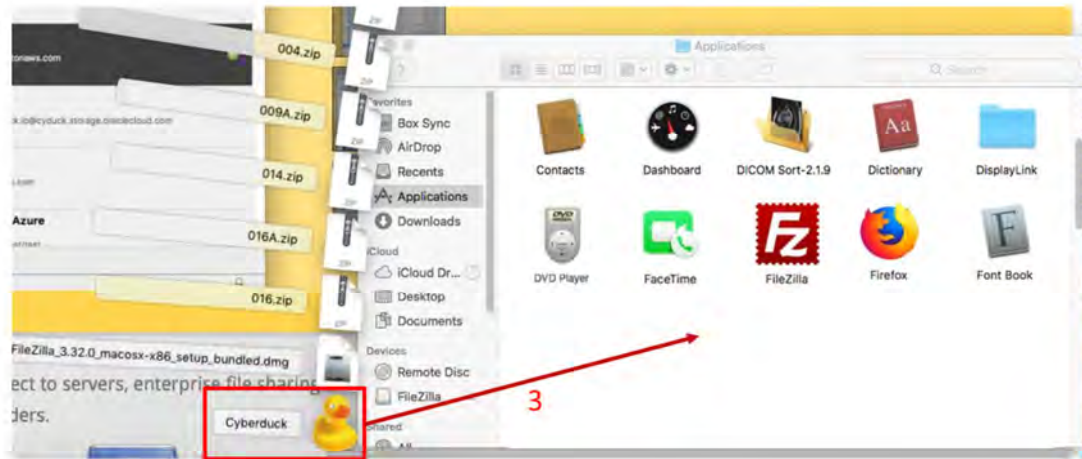
(3.) Drag and Drop the downloaded file into your "Applications" folder.

(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

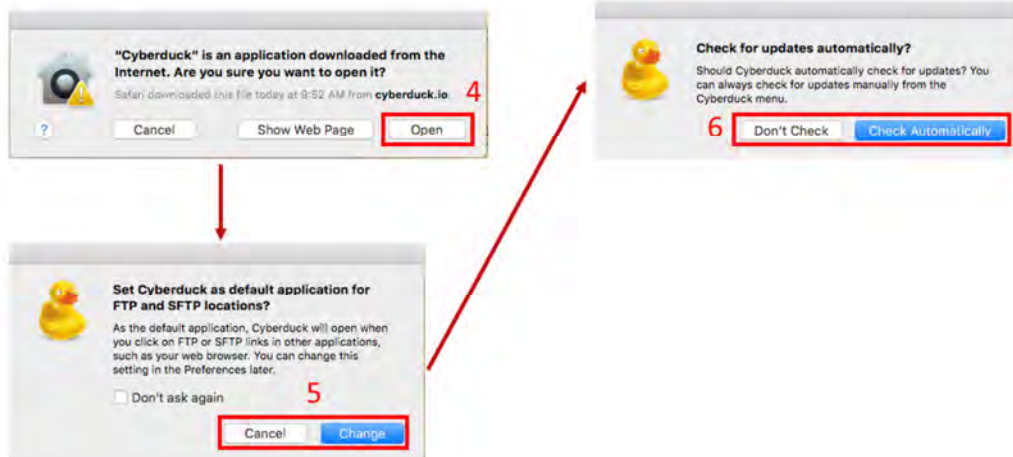
Mac: Cyberduck-6.5.0.27854.zip

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

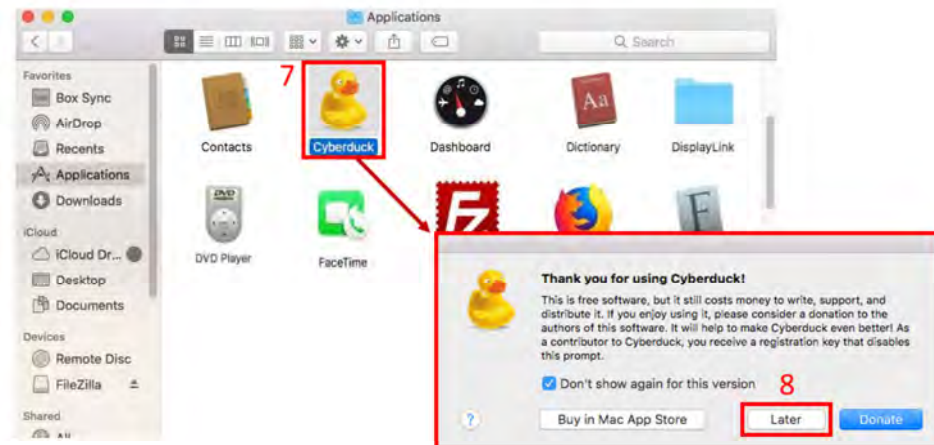
Mac: Cyberduck-6.5.0.27854.zip

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.

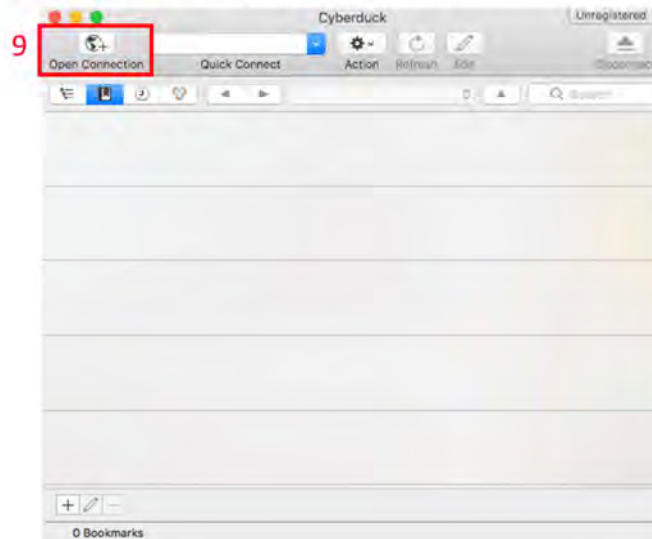
Initial Running of CyberDuck



Initial Running of CyberDuck:

- (7.) Click on CyberDuck Application.
- (8.) Click on the “Later” button unless you want to donate.

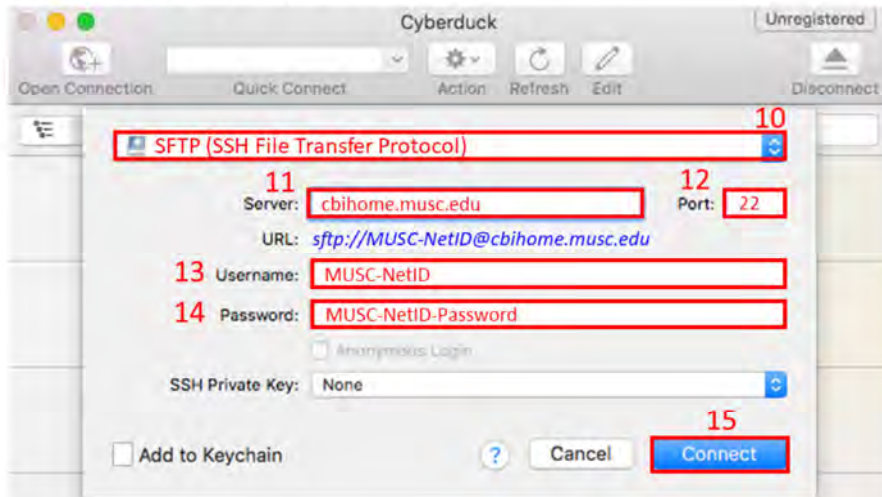
Configuration of CyberDuck



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.

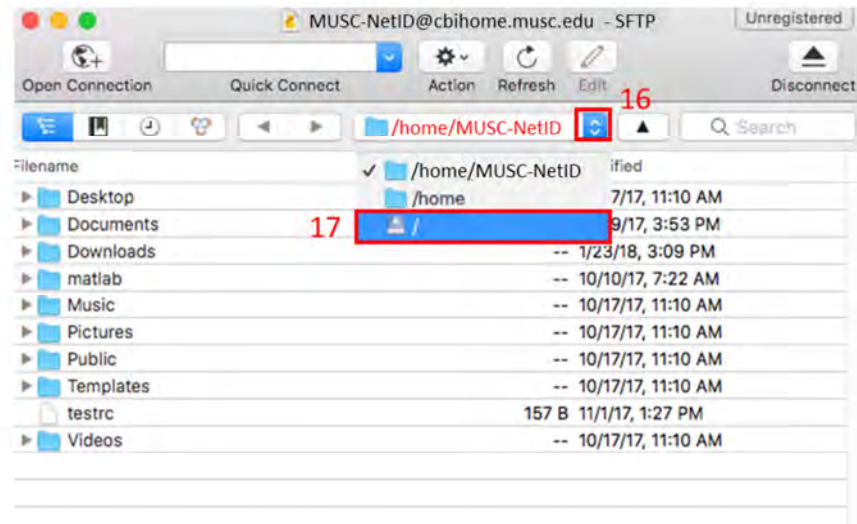
Configuration of CyberDuck



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.

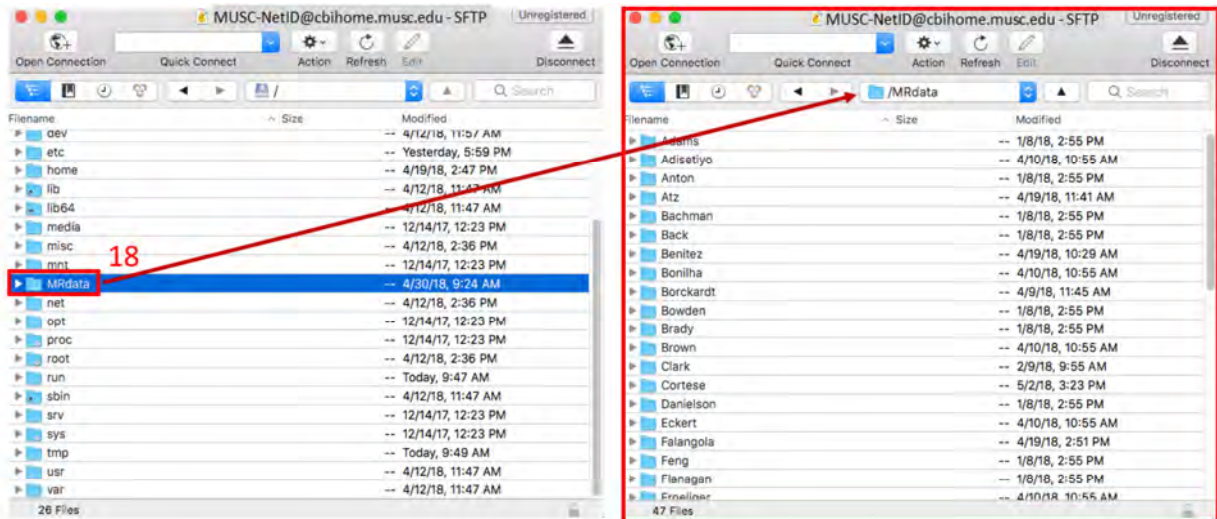
(17.) Select the root directory folder “/”.

(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.

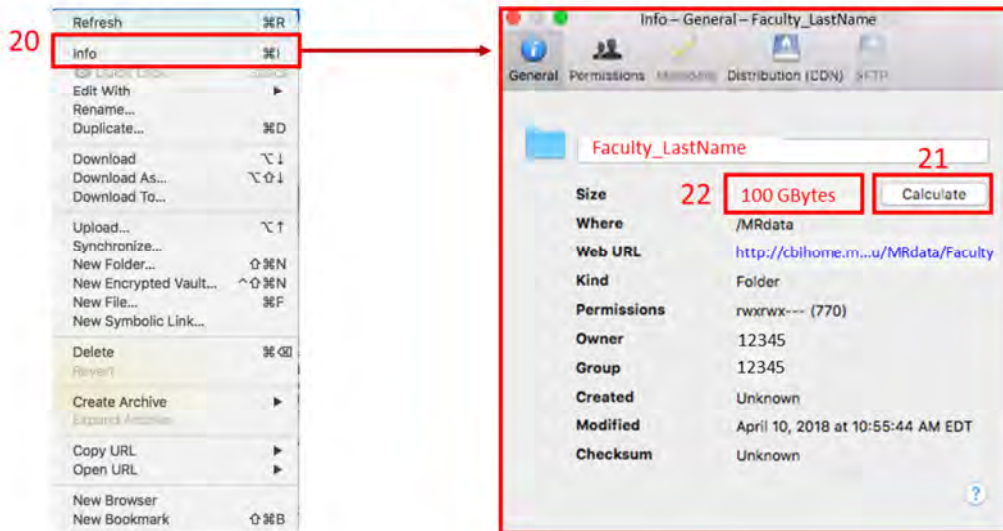
(17.) Select the root directory folder “/”.

(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:

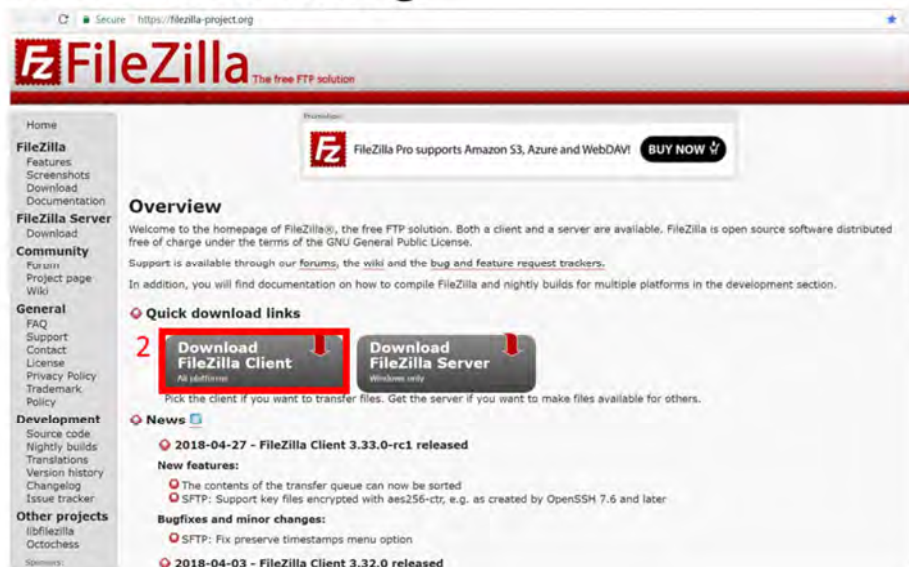
- (20.) Select Faculty folder "Faculty_LastName" to check and select "Info" from dropdown menu.
- (21.) Click the "Calculate" button.
- (22.) After calculation, size of space used will be displayed in the "Size" field.
In this example, 100 Gbytes are used, therefore the "Faculty_LastName" folder has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

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| CBIHOME Server - Directory Tree: root, home, MRdata | 45-47 |
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| VIII: Other Information | 50 |
| Missing/Incomplete Scan Data | 51 |
| Incidental Findings | 52 |

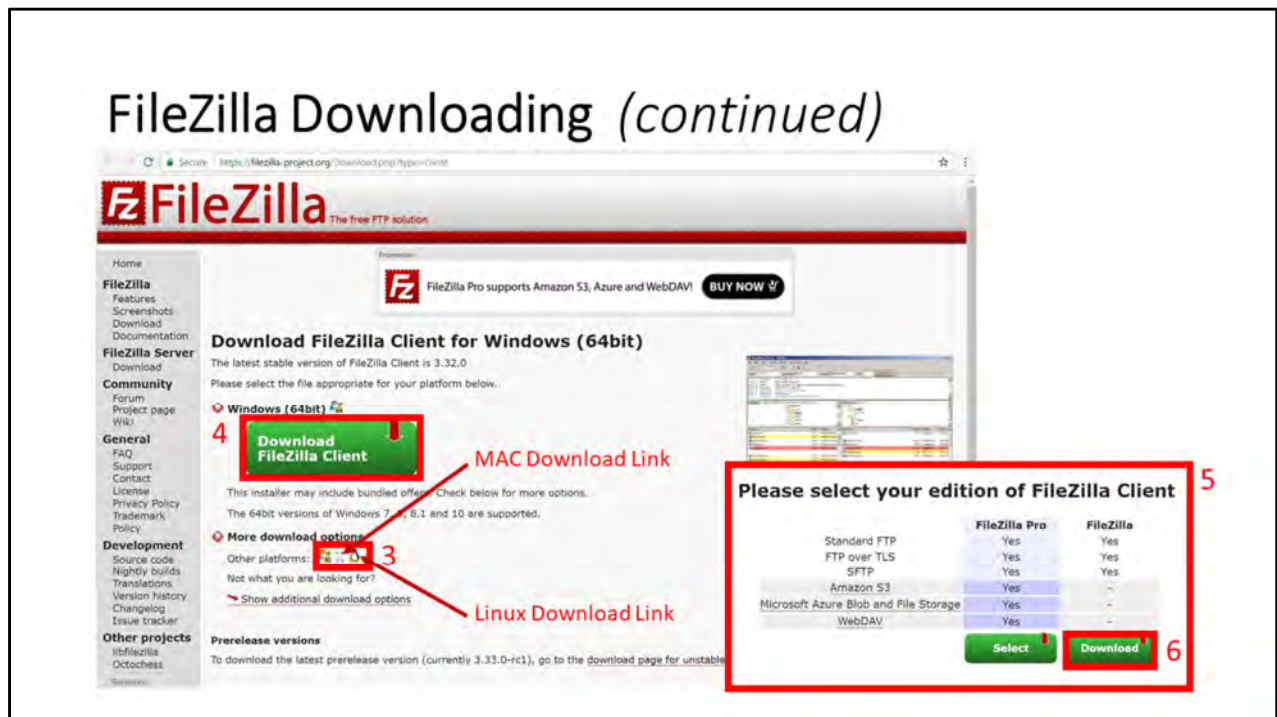
FileZilla Downloading



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

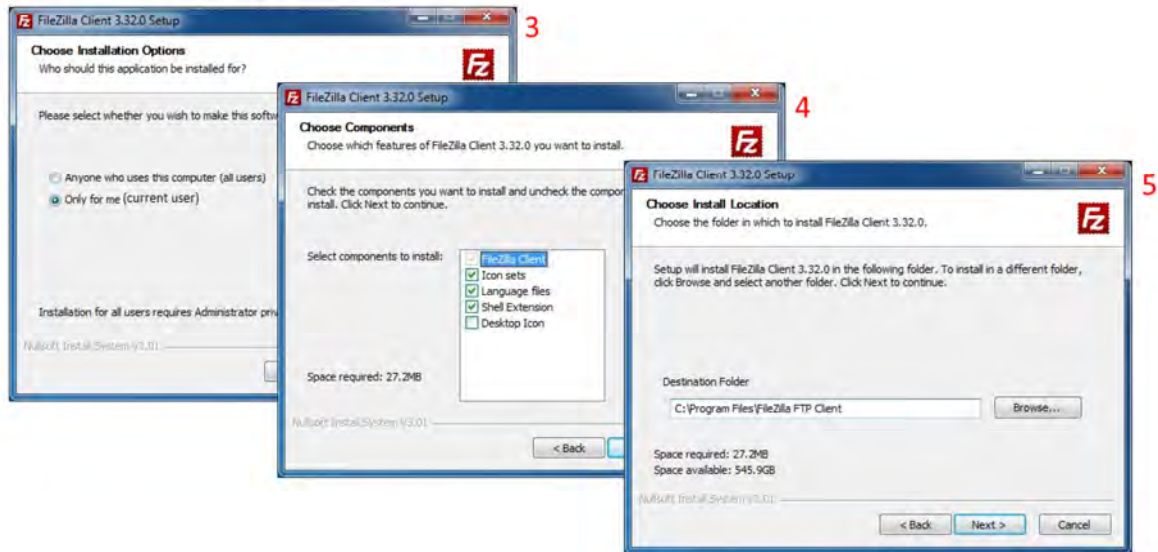
FileZilla Downloading (continued)



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/>

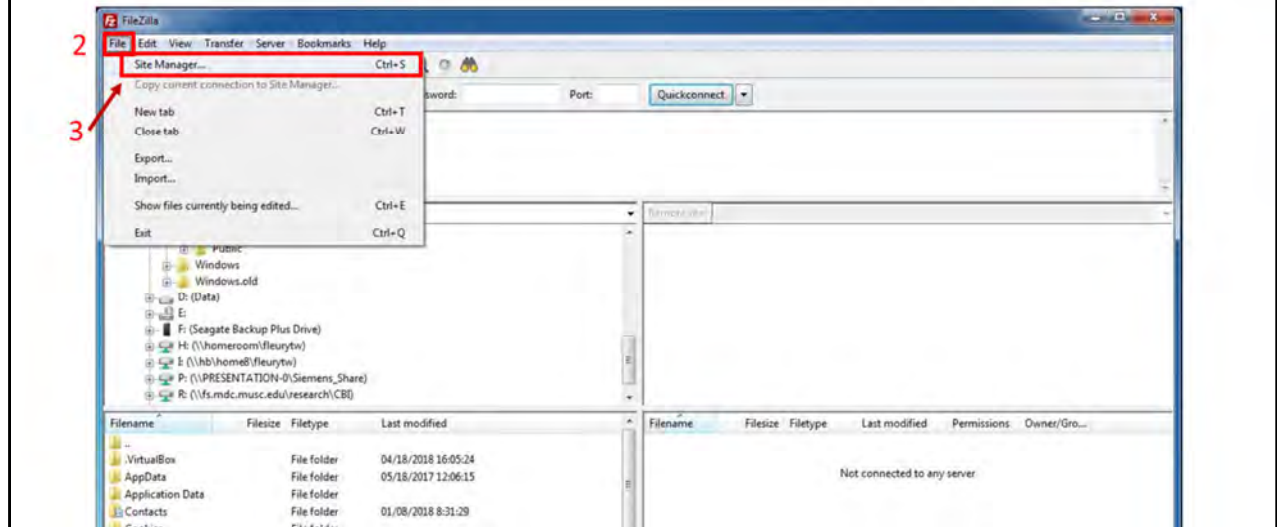
FileZilla Download <https://filezilla-project.org/download.php?type=client>

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.

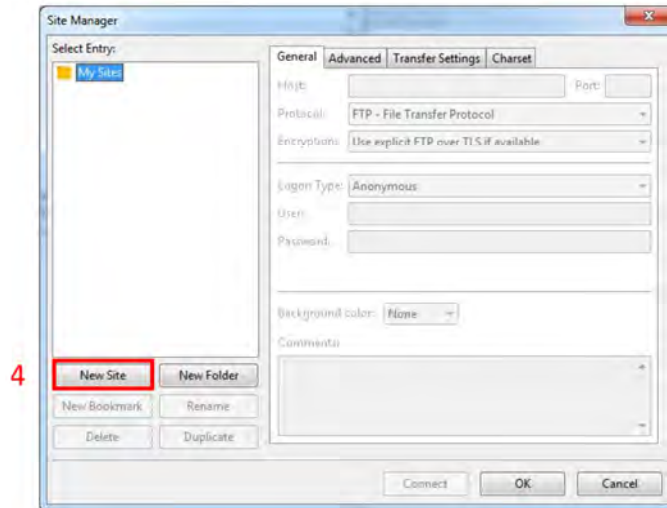
FileZilla Configuration



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.

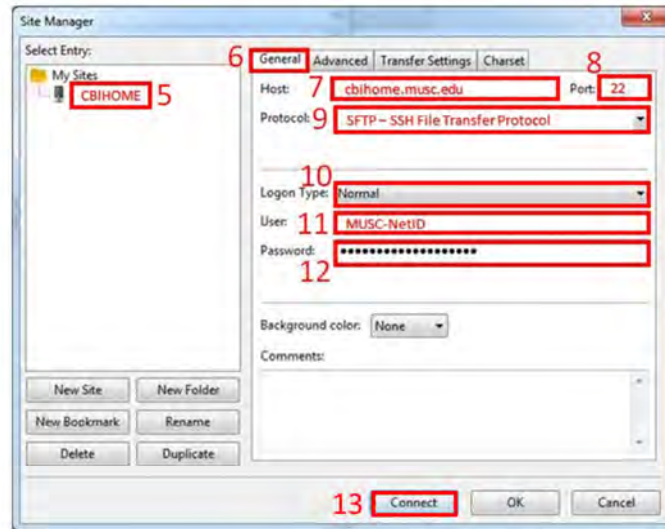
FileZilla Configuration



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

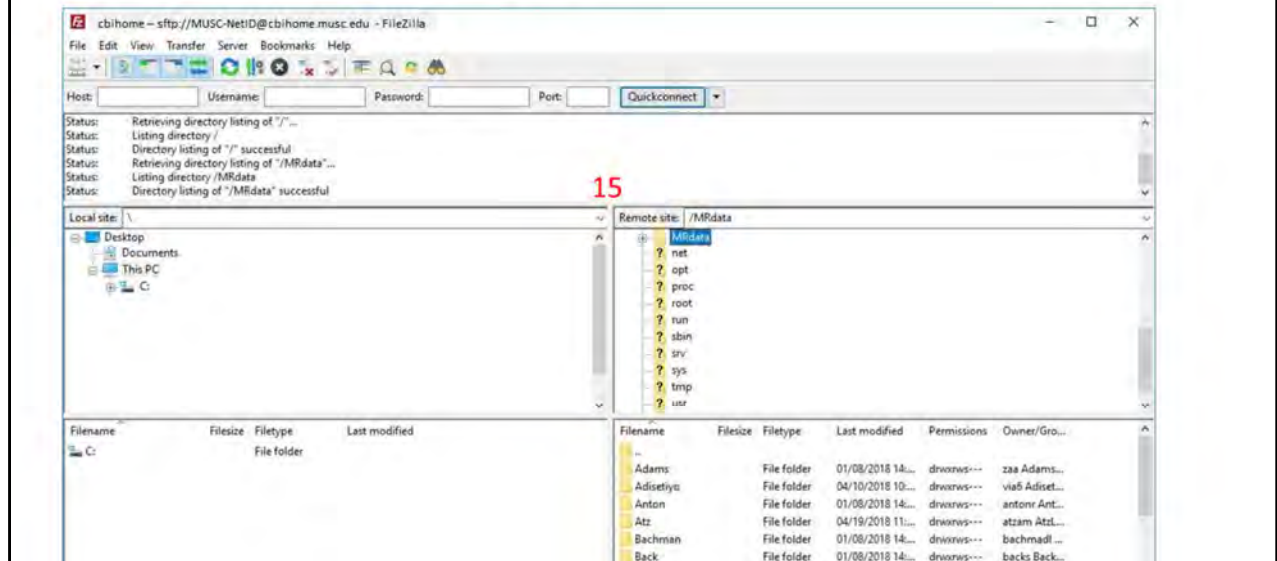
14



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.
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- (15.) Left panel local host drives, right panel CBIHOME directory tree.

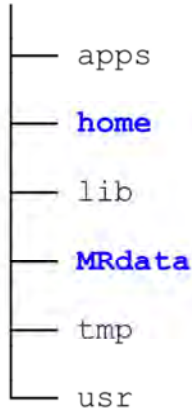
VII. CBIHOME Directory Structure

| 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 |

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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.

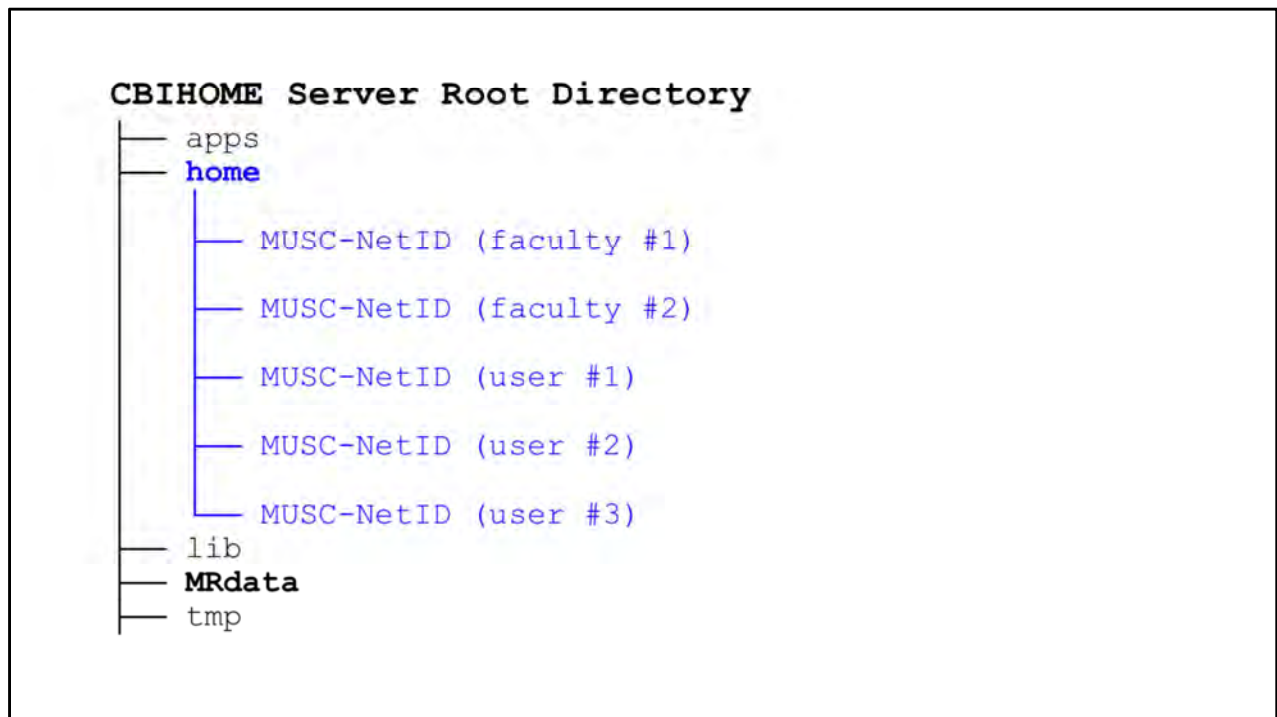
MUSC Faculty Storage Folder: /MRdata/PI_LastName/

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.

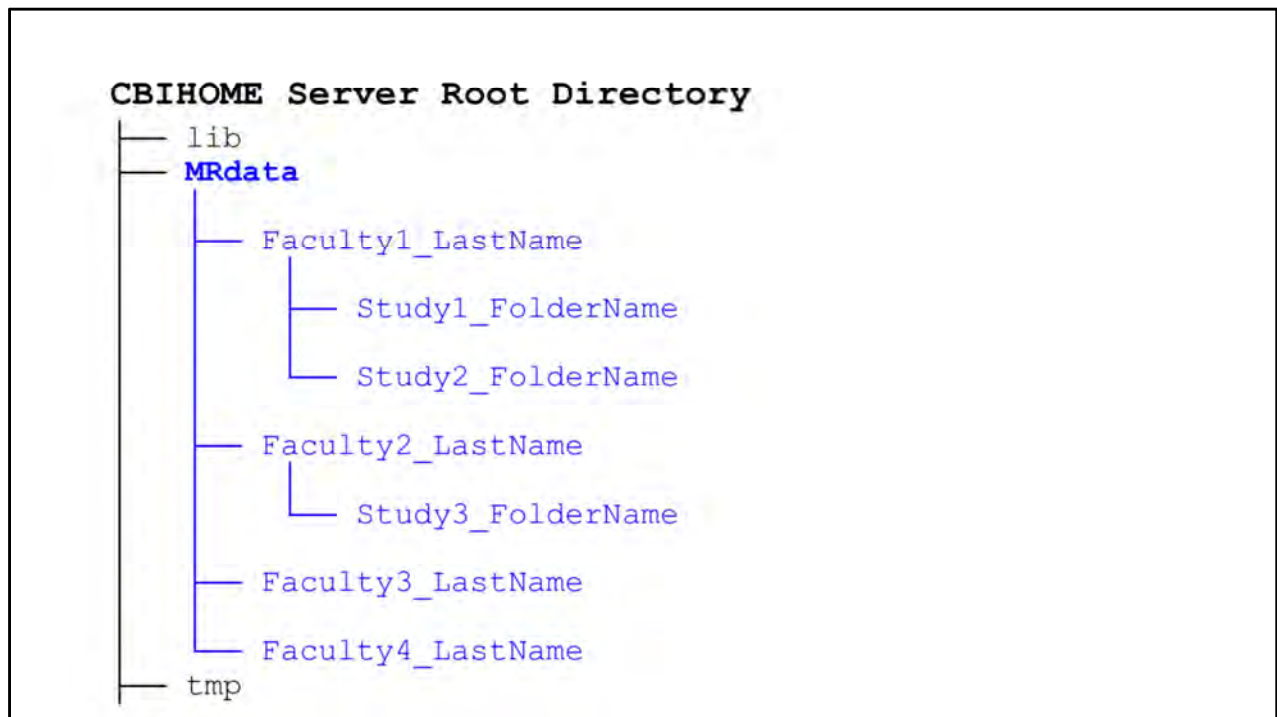
MUSC Faculty Storage Folder: /MRdata/PI_LastName/

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.

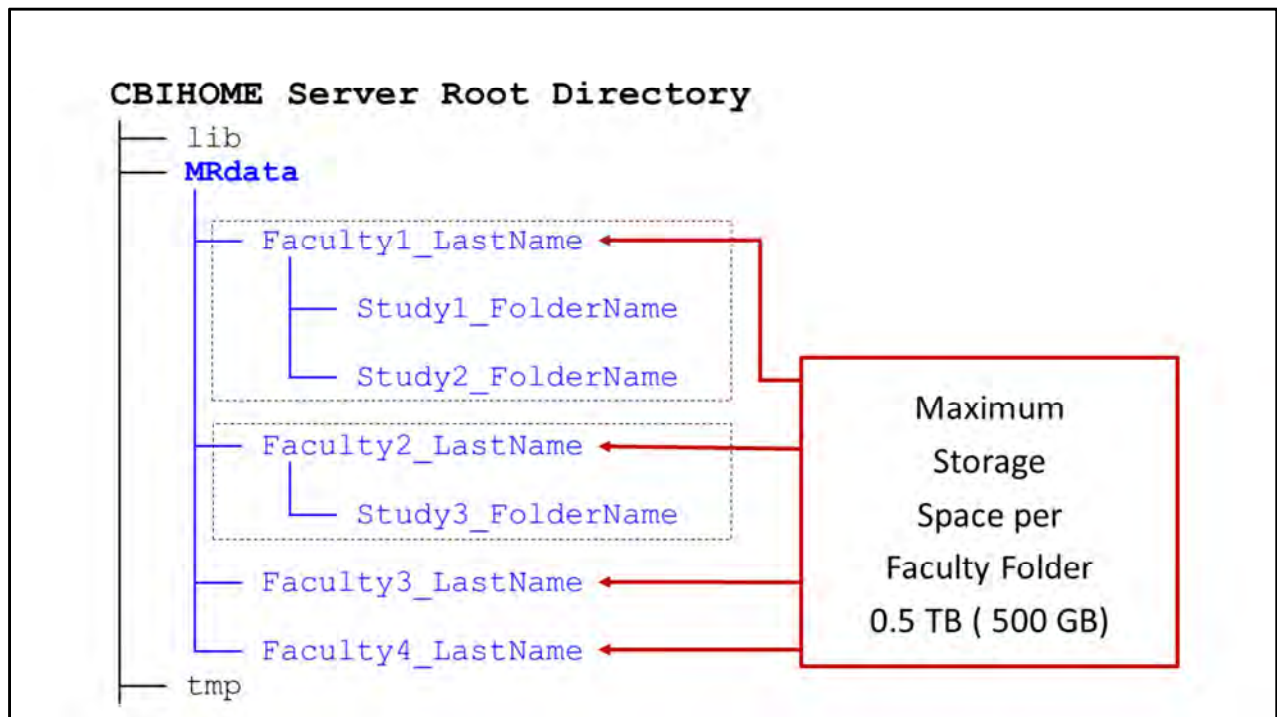
MUSC Faculty Study Folder(s):

/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.

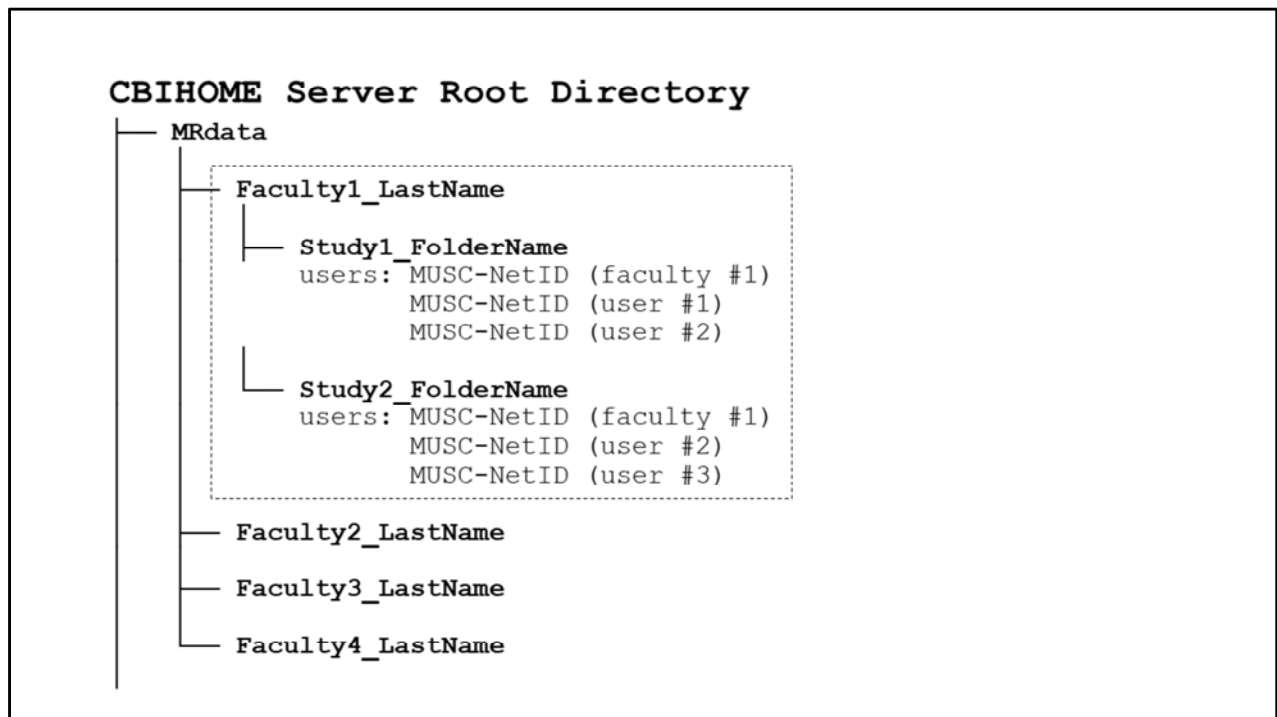
MUSC Faculty Study Folder(s):

/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 |
|---------|------------------------------|
| 51 | Missing/Incomplete Scan Data |
| 52 | Incidental Findings |

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Missing/Incomplete Scan Data File

CBI System Administrators require at least the following 3 Key pieces of information:

Study Number

Study Date

Patient ID

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

Incidental Findings

- **Email the CBI System Administrators ALL of the below information:**
- **Require Email from Study PI**
 - Authorization to push scan to Hospital PACS server for radiologist.
 - Statement of concern.
 - Include Region of Interest or questionable finding.
- **Required Scan Information:**
 - Study Number
 - Study Date
 - Patient ID
 - Gender
 - Age

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