

Installing MMCTP

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Layout

- 1 Install files
- 2 Configurations
 - MMCTP Preferences
 - MMCTP Shells
 - CT to Density



Install MMCTP

- Future updates from <http://www.medphys.mcgill.ca/~mmctp/MMCTP/MMCTPDis>
- Latest version on USB key
- Move MMCTP folder to local drive



Files

	Mac	Windows	Linux
Package	mpkg	msi	no
App Dir	Applications	Program Files	/usr/lib/
MMCTP Setting	user:Library: Application Support:	user\AppData\ Roaming\ 	/home/user
Quesa	Library: Frameworks: Quesa.framework	\\Windows\ Quesa.dll	no

- App Directory : MMCTP program file, Configuration folder, DICOM library text file
- MMCTP settings directory : Stores MMCTP user files
- Quesa (Open Source, 3D graphics library) : Required for 3D viewer



Windows and Linux

- 1 Windows users move plink.exe and pscp.exe from application configurations folder to C:\
- 2 Linux users move linux MMCTP folder to /usr/lib



User files and folders

- 1 Specify a MMCTP home directory on your computer (USB MMCTPData folder), this directory houses:
 - McGill-RT directory
 - BEAMnrc directory (input files and dosxyznrc_material.txt file)
 - Create a Commissioning directory
- 2 Move STT files to MMCTP settings directory



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MMCTP Settings and files

These files are unique to each user and are edited within MMCTP

- 1 Login file
- 2 Preference file
- 3 MLC file
- 4 Linac file
- 5 MC control file



MMCTP Preferences

- Specify folder locations
 - ① McGill RT folder (stores imported McGill RT patients)
 - ② DICOM folder (dynamic)
 - ③ BEAMnrc folder (stores BEAMnrc and DOSXYZnrc input files, and preferences)
 - ④ Commissioning folder (stores beam data, profiles, PDDs, output tables)
 - ⑤ McGill Cutout (for electron cutouts)
- Export options
- DVH calculation options



MMCTP Preferences

MMCTP Configurations

Beam Configurations MLC CT to Density Monte Carlo Settings Shell Refresh Shell Run Shell Download Shell Login Preferences Dose Stats

McGill RT Folder /Users/andrew/Documents/MMCTP\--Programming/McGillRT Change

BEAMnrc input Folder /Users/andrew/Dropbox/MMCTP/BEAMnrc Change

DICOM Folder /Users/andrew/Library/Application\ Support/MMCTP/MMCTP\--Settings Change

RTOG Folder /Users/andrew/Dropbox/MMCTP/Main Change

CADPLAN Folder /Users/andrew/Dropbox/MMCTP/Main Change

Commissioning Data folder /Users/andrew/Dropbox/MMCTP/Commission\--Data Change

VMC Folder /Users/andrew/Dropbox/MMCTP/VMC Change

McGill Cutout folder /Users/andrew/Dropbox/MMCTP/Cutout Change

Export Dose Plane

Interpolate Export in DICOM format

Do not Interpolate Export in text format

DVH Calculation

Use Graphics Use Graphics and Is Within Routine Use Only Is Within Routine



MMCTP Shells

MMCTP Configurations

Beam Configurations MLC CT to Density Monte Carlo Settings Shell Refresh Shell Run Shell Download **Shell Login** Preferences Dose Stats

Shell: MPU-New Delete Shell

Properties

Title: MPU-New Machine IP: 192.168.0.202 Mac Linux PC

User: andrew Password: ***** Online

Line Feed Prompt: andrew\$ Bash: Connection Test

List Files:

Command: ls -l Column number for file size: 5 Column number for date: 6 0

Column number for file name: 8 Column number for time: 7

Tail:

Command: tail After file name:

Cluster:

File transfer protocol

FTP FTP line feed prompt: ftp>

SCP Connection Test

Batch: keg

Queue: Number of Queues: 0

Name:

MC:

Max # of running jobs: 4 BEAMnrc release:

EGSnrc folder path for all user codes: /m2home/andrew/egsnrc/

VMC folder path:

VMC exe path:

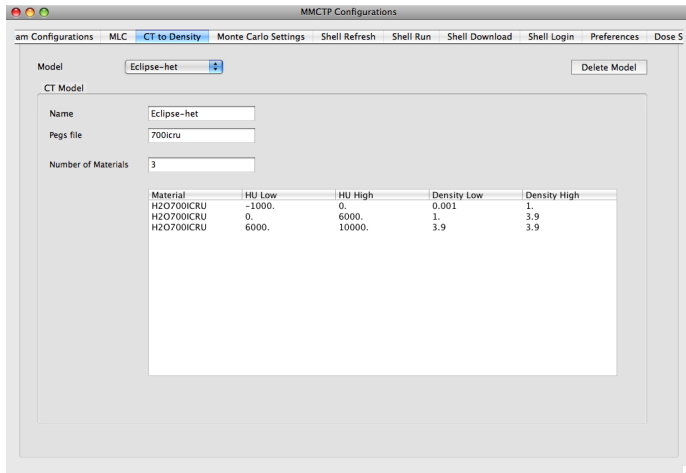
Windows Only:

plink folder path: C:\

pscp folder path: C:\



CT to Density Curves



The screenshot shows the MMCTP Configurations window with the 'CT to Density' tab selected. The window title is 'MMCTP Configurations'. The menu bar includes 'am Configurations', 'MLC', 'CT to Density', 'Monte Carlo Settings', 'Shell Refresh', 'Shell Run', 'Shell Download', 'Shell Login', 'Preferences', and 'Dose S'. The 'Model' dropdown is set to 'Eclipse-het' and there is a 'Delete Model' button. The 'CT Model' section contains the following fields:

- Name: Eclipse-het
- Pegs file: 700icru
- Number of Materials: 3

Below these fields is a table with the following data:

Material	HU Low	HU High	Density Low	Density High
H2O700ICRU	-1000.	0.	0.001	1.
H2O700ICRU	0.	6000.	1.	3.9
H2O700ICRU	6000.	10000.	3.9	3.9

