Deep Freeze Basics

Purpose of this Guide:

This is by no means an all-inclusive guide to deep-freeze, but rather, a general overview of Deep Freeze, what it does, and how to perform basic functions such as freezing and unfreezing machines.

Deep Freeze Overview:

Deep freeze is a program used to 'freeze' or 'lock' a PC or a Mac. Here in Biology, we typically install Deep Freeze on machines that are in common lab areas that are accessible by many students at any given time, i.e. the labs down in the sub-basement, the laptop cart machines, and the common-use computers at the Biology Helpdesk.

Once Deep Freeze is installed and a machine is 'Frozen,' it reverts to the same state that it was in at the time it was initially 'frozen' upon any restart. This means that no files or settings changed when the computer is in the 'frozen' state are saved, except for items that exist in the local virtual hard drive called 'Thawspace.' In other words, a snapshot of the machine is made when it is 'Frozen,' and it reverts to that snapshot every time the PC restarts.

This means that no files or folders whatsoever can be *permanently* modified outside of the reserved 'Thawspace' drive when a machine is frozen. Every time changes need made to the system, we must unfreeze the machine, restart the machine, make the changes, and restart again to verify the machine is frozen.

Icon Quick Reference									
0	Menu Bar Icon: Machine is 'Frozen'	Macintosh HD	The Macintosh HD Icon will display a polar bear when machine is 'Frozen'						
×	Menu Bar Icon: Machine is 'Unfrozen'	THAWSPACE	'THAWSPACE' is the virtual disk drive where documents and files may be saved on a frozen machine.						

Deep Freeze Procedures / References

Note: Instructions are for Mac, PC instructions are very similar.

Freezing / Unfreezing a Machine

1. Click on the Deep Freeze icon on the menu bar, and 'Login'



2. Log in to Deep Freeze using that machine's normal 'bioadmin' account and password. <u>Note: The Deep Freeze 'bioadmin' password *should* always be the same as the password used to log in to the machine.</u>

Logir	1
Deep Freeze re Freeze user nar DE User Name:	Version 6.10.220.1106 quires that you type your Deep ne and password.
Password:	Cancel OK

3. Check the appropriate box and 'restart' the machine.

			Deep Freeze			
					Versio	n 6.10.220.11
Boot Control	Drives	ThawSpace	Maintenance	Mapping	DF Users	Uninstall
Set Deep Freeze to Desktop. Changes Boot Frozen Boot Thaweo Boot Thaweo Restart	b boot Froze will take effi d on next d	n or Thawed, spe ect after restart.	arts	tings, and disp	Curi	ople Remote rent Status OZEN
Hide Frozen Hide Thaweo Don't badge	lcon in me d lcon in m Frozen pa	nu bar enu bar rtitions				
Restart inste	ad of Log	Out				
Show Status Use Informat	in Apple R tion Field:	emote Deskto	₽ ©			
)				Export	Import	Apply

4. Always make sure the machine has been 'Frozen' again after completing your work!

Tips / Best Practices

- Remember that *everything* on the system, even miscellaneous documents saved to the desktop, will be frozen when you freeze the machine. Make sure that everything has been set the way you want it before your final reboot. Forgetting to delete / add / rename a small file or forgetting to change a simple setting can lead to multiple reboots / restarts and significant delays.
- There is a specific desktop background for frozen machines on <u>Athena</u>. For the sake of lab users, it is a good idea to make sure it's the current background. Background posted below.



Warning...

Do Not save files on this computer. All non-systemfiles will be deleted upon reboot



Summary of Screens / Options



0			Deep Freeze			
					Versio	n 6.10.220.110
Boot Cont	rol Drives	ThawSpace	Maintenance	Mapping	DF Users	Uninstall
Set one or me	ore drives to be F	rozen or Thawed.	Changes will take (effect after rest	tart.	
Drive			Name		^	Frozen
	Macintosh HD					
				Export	Import	Apply
ſ				Export	mport	Apply

Boot Control: This specific screen is where you freeze and
unfreeze the machine in question

Boot Frozen: Restart Machine in a frozen state.

Boot Thawed on next [] restarts: Good to use if you know the specific number of restarts required for whatever you're modifying/installing.

Boot Thawed: Restart machine in a thawed state indefinitely. Make sure to change back to 'Boot Frozen' after your task is complete.

Note: This screen also shows the 'Current Status.' The other options are self-explanatory.

Drives: Self-explanatory, controls which drives are frozen by Deep Freeze.

			Deep Freeze			
					Versio	n 6.10.220.1
Boot Contro	Drives	ThawSpace	Maintenance	Mapping	DF Users	Uninstall
Allocate Thaws	spaces where d	ata is retained pe	rsistently on this Fre	ozen computer		
Type ^		Thaw	Space Name			Size
.122	THAWSPACE				50	0.00 GB
+ - Res	ize					
				Evport	Import	Apple

ThawSpace: This tab shows you the name and size of the Thawspace virtual drive. You can change the size of this to fit the needs of the lab machine. This should be no less than 5GB or so, but typically, 10% of the drive is a good rule of thumb. Users can save files and folders in the 'Thawspace' drive, and they will be retained even after a system restart.

0 0			Deep Freeze			
					Versio	n 6.10.220.11
Boot Con	trol Drives	ThawSpac	e Maintenance	Mapping	DF Users	Uninstall
Schedule a other chang	period when the es to be perman	computer will be nently applied. Cl	e automatically Thawe hanges will take effect	d to allow Appl after restart.	e Software Upo	lates and
Enabled	Name	 Frequency 	Day	Start En	d Summa	ry
	Maintenance	Repeating	Mon, Tue, Wed, T	1:00 AM 4:0	о ам 🐚 🗅	AUA
/						
?				Export	Import	Apply

• • •			Deep Freeze			
					Versio	n 6.10.220.1106
Boot Control	Drives	ThawSpace	Maintenance	Mapping	DF Users	Uninstall
Map the user's fold	ders to a Tha	awSpace or partit	ion when Thawed.			
User Acc	ounts	User L	ocation: 📃 Bo	oot Volume	٥	
biouser				Not Ma	pped	0
			ocuments	Not Ma	pped	0
			Pictures		pped	\$
			Movies		pped	٢
			Music		pped	0
			ibrary	Not Ma	pped	\$
			Safari Bookmar	ks Not M	apped	\$
			Firefox Bookma	rks Not M	apped	٥
				Evport	Import	Apply
Y				Export	mport	Apply

•				Deep Freeze				
						Version	n 6.10.220.1	106
_	Boot Control	Drives	ThawSpace	Maintenance	Mapping	DF Users	Uninstall	Ъ
	Create up to four i	users to mar	age Deep Freeze	on the computer. C	Only the Admin	user has full pr	ivileges.	
				DF User Name				
	bioadmin (Adm	iin)						
	+ - /							
					- Europet		Annh	
?					Export	import	Appiy	

Maintenance: This tab displays the 'maintenance' window. During this time, the machine is automatically unfrozen so that system updates / etc. can be pushed automatically. By default, we set this to 1:00AM-4:00AM daily. It can be changed if necessary on a case-by-case basis.

Mapping: We generally don't mess with these settings at all.

DF Users: If the 'bioadmin' password is out of date or incorrect, we can change it on this screen. Typically, this will happen if the OS is upgraded, but the deep freeze password hasn't yet been changed.