

# Faronics DRITRIGLOO"

### **AUTOMATED Data Redirection**

# **User Guide**



www.faronics.com



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# Preface

This user guide explains how to install and use Data Igloo.

### Topics

Important Information Technical Support



This section contains important information about your Faronics Product.

### **About Faronics**

Faronics delivers market-leading solutions that help manage, simplify, and secure complex IT environments. Our products ensure 100% machine availability, and have dramatically impacted the day-to-day lives of thousands of information technology professionals. Fueled by a market-centric focus, Faronics' technology innovations benefit educational institutions, health care facilities, libraries, government organizations, and corporations.

### **Product Documentation**

The following documents form the Data Igloo documentation set:

- Data Igloo User Guide This document guides you how to use the product.
- *Data Igloo Release Notes* This document lists the new features, known issues, and closed issues.

### **Technical Support**

Every effort has been made to design this software for ease of use and to be problem free. If problems are encountered, contact Technical Support.

Technical Support: www.faronics.com/support

Web: www.faronics.com

8 Preface





# Introduction

Data Igloo was created to work with Deep Freeze. Deep Freeze protects a computer and restores it to the original state on reboot. Data Igloo is a utility that allows you to redirect User Profiles, Folders, and Registry Keys to a different location on your computer and retain data even after a reboot when the computer is protected by Deep Freeze.

Data Igloo can also be used independently without installing Deep Freeze. Data Igloo provides an easy way to create NTFS Junction Points and NTFS Symbolic Links using a GUI.

#### Topics

System Requirements

9



### **System Requirements**

The system requirements for Data Igloo are:

- Windows XP, Windows Vista, Windows 7 or Windows 8 (32-bit and 64-bit)
- Microsoft .NET 2.0 (SP1) or higher
- Deep Freeze Enterprise or Deep Freeze Standard (6.3 or higher). This is applicable only if you are using Deep Freeze with Data Igloo. Data Igloo can be used independently without installing Deep Freeze.



# **Installing Data Igloo**

This chapter describes how to install Data Igloo.

Topics

**Installing Data Igloo** 



### **Installing Data Igloo**

To install Data Igloo, complete the following steps:



If .NET is not installed on your computer, the installer will automatically download it from the Internet and install it. Ensure that your computer is connected to the Internet.

1. Double-click Faronics\_IGS.exe. Click Next.

🖟 Faronics Data Igloo Standard - InstallShield Wizard 🛛 🛛 🔀		
	Welcome to the InstallShield Wizard for Faronics Data Igloo Standard	
DATA IGLOO	The InstallShield(R) Wizard will install Faronics Data Igloo Standard on your computer. To continue, click Next.	
www.faronics.com	WARNING: This program is protected by copyright law and international treaties.	
	< Back Next > Cancel	

2. Read and accept the License Agreement. Click Next.

🖟 Faronics Data Igloo Standard - InstallShield Wizard	×
License Agreement	
Please read the following license agreement carefully.	/
Data Igloo Standard - License	Ī
Faronics Corporation © 1999-2010 All Rights Reserved	
Master Software License Agreement	
LICENSE GRANT: Faronics hereby grants the Licensee a limited, non-exclusive license to install, use, access, display, run, or otherwise interact with ("Use") the Product on a computer. All other rights are expressly reserved by Faronics.	
REPRESENTATIONS OF LICENSEE: The Licensee represents that it has obtained all	
I accept the terms in the license agreement      Print	]
O I do not accept the terms in the license agreement	
InstallShield	
<pre></pre>	



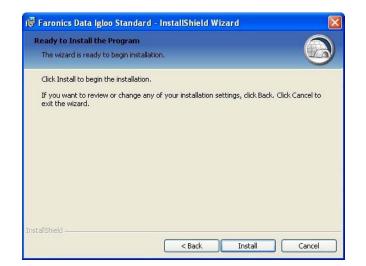
3. Enter the User Name and Organization. Click Next.

ustomer Information	
Please enter your information.	<u>e</u>
User Name:	
Faronics Corporation	
Organization:	
Faronics Corporation	

4. The default location for Data Igloo is *C*:\*Program Files*\*Faronics*\*Data Igloo Standard*. Click *Change*... to change the location where Data Igloo is installed. Click *Next*.



5. Click Install to install Data Igloo.



6. Click *Finish* to complete installation.





While it is possible to install Data Igloo when Deep Freeze status is *Frozen*, redirections created will not remain after a reboot. This is useful for testing redirections. It is not possible to uninstall or repair Data Igloo when Deep Freeze status is *Frozen*.

### Accessing Data Igloo

Data Igloo can be accessed via Start>Programs>Faronics>Data Igloo.



# Using Data Igloo

This chapter explains how to use Data Igloo.

#### Topics

Data Igloo Overview Deep Freeze Status User Profile Redirection Folder Redirection Registry Key Redirection Closing Data Igloo Logging Events in Data Igloo Command Line



### Data Igloo Overview

aronics Data Igloo Standard	
Paronics DATAIGLOO AUTOMATED Data Redirection	🔹 www.farenics.c
Deep Freeze status is Thawed. Learn more ser Profile Redirection Folder Redirection Registry Key Redirection	Email fee
Users (4)	User Profile Location User profile: CLIENT2\Faronics  Custom Location:  User profiles are used by Windows to store user data and settings. User Profile Redirection moves a user profile to any volume or partition on the hard drive.  Learn more
Redirect any newly created user profiles to:     C:\D     Help     Check For Updates     About	

The following screen is displayed when Data Igloo is launched:

- Deep Freeze Status Icon The status of Deep Freeze is displayed.
- *Tabs* Data Igloo provides the User Profile Redirection, Folder Redirection and Registry Key Redirection tabs. All tabs are explained in detail further in the user guide.
- *Help* Launches the Online Help.
- Check for Updates Checks if there is a new version of Data Igloo available.
- *About* Displays information about the Data Igloo version and the End User License Agreement.
- *Status Bar* The status bar at the bottom of the Data Igloo screen displays the following information:
  - User Name The User Name of the user account currently logged in.
  - Operating System The Operating System and service pack (if applicable).



Only users with administrative rights are allowed to use Data Igloo.

Deep Freeze protects a computer and restores it to the original state on reboot. Once Deep Freeze is installed on a computer, any changes made to the computer—regardless of whether they are accidental or malicious—are never permanent. For more information on Deep Freeze visit <a href="http://www.faronics.com/deepfreeze">http://www.faronics.com/deepfreeze</a>

The following Deep Freeze status are displayed on Data Igloo:

Icon	Definition
	Deep Freeze Status is Frozen — Changes made to the computer will be lost when the computer is restarted.
	Deep Freeze Status is Thawed — Changes made to the computer will be retained even after the computer is restarted.
	Deep Freeze not installed — Deep Freeze is not installed on this computer.
6	Deep Freeze Seed installed — Deep Freeze seed is installed on this computer.
	Deep Freeze is Thawed and Locked — Deep Freeze is Thawed and the keyboard and mouse are disabled.
	Deep Freeze is in Maintenance — Deep Freeze maintenance is in progress.



### ThawSpace

ThawSpace is a feature of DeepFreeze Enterprise. ThawSpace is a virtual partition that can be used to store programs, save files, or make permanent changes. All files stored in the ThawSpace are retained after a restart, even if the computer is Frozen.

A ThawSpace must be created in Deep Freeze Enterprise before saving data. Alternatively, you can also save data on *Thawed Drives* if you are using Deep Freeze Standard.

Data Igloo allows you to redirect the User Profile and specific Folders to a ThawSpace. Deep Freeze allows you to create Hidden ThawSpaces. For more information on the process to Hide or Display a ThawSpace refer to *Appendix A, Redirecting to Hidden ThawSpaces*.

The User Profile Redirection feature redirects the entire user profile to any NTFS volume or partition on the computer. This is useful if Deep Freeze is installed, in order to retain new or modified user data like Internet Favorites, My Documents and Desktop information even after reboot.



It is not possible to redirect the profile of the user currently logged in.



Both the source and target drives must be NTFS partitions.



If an error occurs during the redirection process, Data Igloo will revert to the original state without any changes to the data or settings.

The User Profile Redirection tab is displayed as follows:

Faronics Data Igloo Standard	
Farchics DATAIGLOO AUTOMATED Data Redirection	🔹 www.faronics.com
User Profile Redirection Folder Redirection Registry Key Redirection	<u>Email feedback</u>
Users (4)	User Profile Location User profile: CLIENT2\Faronics  Custom Location:  Custom Location:  User profiles are used by Windows to store user data and settings. User Profile Redirection moves a user profile to any volume or partition on the hard drive.  Learn more
Redirect any newly created user profiles to:  C:\D  Help Check For Updates About	Close
CLIENT2\Administrator   Microsoft Windows XP Professional Service Pack 3 (build	1 2600)



### Creating a User Profile Redirection (for Existing User Profiles)

Complete the following steps to redirect a user profile from the default location to another drive on your computer:

- 1. Ensure the Deep Freeze status is *Thawed*.
- 2. Select the user from the *Users* pane.
- 3. This step is optional. Select the *Redirect any newly created user profiles to:* check box to redirect newly created user profiles to a ThawSpace. Browse to select the location of the ThawSpace. If a new user profile is created, it will automatically be redirected to the selected location.

Faronics Data Igloo Standard	
	www.faronics.com
Deep Freeze status is Thawed. Learn more User Profile Redirection Folder Redirection Registry Key Redirection Users (4)	Email feedback
CLIENT2/Faronics CLIENT2/Faronics CLIENT2/Administrator (logged on user) C:\Documents and Settings\Administrator UNKNOWN-DOMAIN\UNKNOWN-USER C:\Documents and Settings\Administrator UNKNOWN-DOMAIN\UNKNOWN-USER C:\Documents and Settings\Administrator.FARONICS-DEMO	User profile: CLIENT2\Faronics   Default location (C:\Documents and Settings\Faronics)  Custom Location:  Redirect User Profile  User profiles are used by Windows to store user data and settings. User Profile Redirection moves a user profile to any volume or partition on the hard drive.  Learn more
Redirect any newly created user profiles to:     C:\D     Help     Check For Updates     About	Close
CLIENT2\Administrator   Microsoft Windows XP Professional Service Pack 3 (build	2600)



Selecting the *Redirect any newly created user profiles to:* check box automatically selects the *Redirect registry key changes to:* check box in the *Registry Key Redirection* tab. For more information, refer to *Registry Key Redirection*.

4. In the *User Profile Location* pane select *Custom Location*. Click *Redirect User Profiler* to select the location.

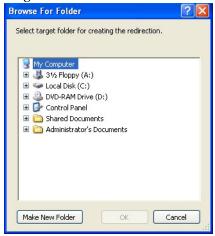
Faronics Data Igloo Standard	
Faronics DATA IGLOO AUTOMATED Data Redirection	www.faronics.com
Deep Freeze status is Thawed. Learn more User Profile Redirection Folder Redirection Registry Key Redirection	Email feedbac
Users (4)  CLIENT2\Faronics CLIENT2\Faronics CLIENT2\Administrator (logged on user) C:\Documents and Settings\Administrator UNKNOWN-DOMAIN\UNKNOWN-USER C:\Documents and Settings\Administrator UNKNOWN-DOMAIN\UNKNOWN-USER C:\Documents and Settings\Administrator.FARONICS-DEMO	User Profile Location User profile: CLIENT2\Faronics
Redirect any newly created user profiles to:     C:\D     Help     Check For Updates     About	Close

5. The *Redirect User Profile* dialog is displayed with the *Source* auto-filled. This is a read-only field and cannot be edited.

edirect User Profile	
Select target folder for redirecting the user profile	
Source:	
:\Documents and Settings\Faronics	Browse
Farget:	
	Browse
Copy NTFS permissions (where applicable)	
Copy Miro permissions (where applicable)	
Copy Share permissions (where applicable)	



6. Click *Browse* to select the Target.



- Select the *Copy NTFS permissions (where applicable)* check box to copy the permissions for NTFS. The security applied to Source folder by the NTFS file system is copied to the Target folder. The security and share permissions are also applied to the files and folders within the Target folder.
- Select the *Copy Share permissions (where applicable)* check box to copy the Share permissions for the user profile folder.
- 7. Select the Target in the *Browse for folder* dialog and click *OK*.
- 8. Data Igloo scans the files and if errors occur, it is displayed in the Error Dialog. For more information about the Error Dialog refer to *Data Igloo Error Dialog*. If no error is displayed, aprogress bar is displayed and the User Profile is redirected to the target location.



S Faronics Data Igloo Standard	
Farodics DATTAIGLOO AUTOMATED Data Redirection	-> www.faronics.com
Deep Freeze status is Thawed. Learn more User Profile Redirection Folder Redirection Registry Key Redirection	Email feedback
Users (4)  CLIENT2\Faronics C:\D\Faronics CLIENT2\Administrator (logged on user) C:\Documents and Settings\Administrator C:\Documents and Settings\Administrator C:\Documents and Settings\Administrator C:\Documents and Settings\Administrator.FARONICS-DEMO	User Profile Location User profile: CLIENT2\Faronics Default location (C:\Documents and Settings\Faronics) C:\D\Faronics Redirect User Profile User profiles are used by Windows to store user data and settings. User Profile Redirection moves a user profile to any volume or partition on the hard drive. Learn more
Redirect any newly created user profiles to:     Help Check For Updates About CLIENT2\Administrator Microsoft Windows XP Professional Service Pack 3 (buil	d 2600)



If Deep Freeze status is *Frozen*, you can still redirect a User Profile. The files and folders related to the User Profile will be successfully moved even when the Deep Freeze status is *Frozen*. However, the User Profile Redirection will not be retained when the computer is restarted.



The User Profile redirected to the target folder inherits permissions from its parent folder. In addition, the owner of the User Profile will be added to the folder with *Full Control* permissions.

#### **Automatically Redirecting Newly Created User Profiles**

Data Igloo provides an option to automatically redirect newly created user profiles. This feature saves time and effort for the administrator by ensuring that all newly created user profiles are redirected to the selected location automatically.

Complete the following steps to automatically redirect newly created user profiles:

- 1. Go to User Profile Redirection tab.
- 2. Select the *Redirect any newly created user profiles to:* check box to redirect newly created user profiles to a ThawSpace.



Faronics Data Igloo Standard	
Registry key redirection must be enabled to redirect Learn more Redirect registry key changes to:	newly created user profiles.
Redirect newly created user profiles to:	Browse
	Browse
	OK Cancel

- *Redirect registry key changes to*: click *Browse* to select the location of the ThawSpace. Changes to the registry are automatically redirected to the selected location.
- *Redirect newly created user profiles to*: click *Browse* to select the location of the ThawSpace. If a new user profile is created, it will automatically be redirected to the selected location.
- 3. Click OK.

#### **Removing a User Profile Redirection**

Complete the following steps to remove a previously redirected User Profile on your computer:

- 1. Ensure the Deep Freeze status is *Thawed*.
- 2. Select the user profile from the *Users* pane for which the user profile redirection is to be removed.

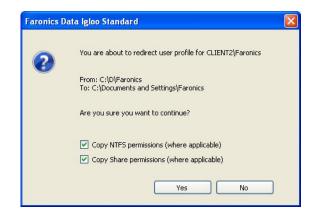
Faronics Data Igloo Standard	
Far DILLS DATAIGLOO AUTOMATED Data Redirection	•> www.faronics.com
Deep Freeze status is Thawed. Learn more User Profile Redirection Folder Redirection Registry Key Redirection Users (4)	Email feedback User Profile Location
Users (4)	User Profile Location User profile: CLIENT2\Faronics Default location (C:\Documents and Settings\Faronics) Custom Location: C:\D\Faronics Redirect User Profile User profiles are used by Windows to store user data and settings. User Profile Redirection moves a user profile to any volume or partition on the hard drive. Learn more
Redirect any newly created user profiles to:      Help      Check For Updates      About  CLIENT2\Administrator      Microsoft Windows XP Professional Service Pack 3 (bui	Close



3. In the User *Profile Location* pane select *Default Location*.

Paronics Data Igloo Standard	
Faronics DETENCELOOD AutoMated Data Redirection	www.faronics.com
Deep Freeze status is Thawed. Learn more User Profile Redirection Folder Redirection Registry Key Redirection	Email feedback
Users (4)           Users (4)           CLIENT2\Faronics           CLIENT2\Administrator (logged on user)           C:\Documents and Settings\Administrator           UNKNOWN-DOMAIN\UNKNOWN-USER           C:\Documents and Settings\Administrator           UNKNOWN-DOMAIN\UNKNOWN-USER           C:\Documents and Settings\Administrator.FARONICS-DEMO	User Profile Location User profile: CLIENT2\Faronics Default location (C:\Documents and Settings\Faronics) Cultor Location: CultorFaronics Redirect User Profile User profiles are used by Windows to store user data and settings. User Profile Redirection moves a user profile to any volume or partition on the hard drive. Learn more
Redirect any newly created user profiles to:      Help     Check For Updates     About	Close

4. A dialog is displayed showing the current and target location for the User Profile. Click Yes.



5. A progress bar is displayed and the User Profile redirection is removed.



The *Folder Redirection* feature moves a folder to any NTFS volume or partition on the computer. This is useful when Deep Freeze is installed. This feature ensures that data in a folder on a *Frozen* drive is always saved on the *Thawed* drive, thereby retaining the data during a reboot.

The Folder Redirection tab is displayed as follows:

aronics Data Igloo Standard		
		www.faronics.co
Deep Freeze status is Thawed.		
Learn more	ction	Email fee
Folders Redirected (0)	clon	
Source	Target	
		2
Redirect Folder		Remove Redirectio
Folder Redirection moves a folder to any volume or partition on	the hard drive. Learn more	
Help Check For Updates About		



Both the source and target drives must be NTFS partitions.



If an error occurs during the redirection process, Data Igloo will revert to the original state without any changes to the data or settings.

#### Example

If you have installed Deep Freeze on your computer running Windows XP and if C: is Frozen, the files saved in the *My Documents* folder are erased on reboot. To avoid such a situation, you can redirect the *My Documents* folder to a Thawed partition using Data Igloo.

Perform the following steps:

1. Reboot the computer in a *Thawed* state.

- 2. Redirect C:\Documents and Settings\<User Name>\My Documents to the ThawSpace T:.
- 3. Reboot the computer in a *Frozen* state.

### **Creating a new Folder Redirection**

Complete the following steps to redirect a folder to another location on your computer:

- 1. Ensure the Deep Freeze status is *Thawed*.
- 2. Go to Folder Redirection tab. Click Redirect Folder....

aronics Data Igloo Standard	
AUTOMATED Data Redirection	www.faronics.c
Deep Freeze status is Thawed. Learn more	
er Profile Redirection Folder Redirection Registry Key Redirection	Email fee
Folders Redirected (0)	
Source	Target
Redirect Folder	Remove Redirectio
Folder Redirection moves a folder to any volume or partition on the har	
Help Check For Updates About	

3. In the *Create Folder Redirection* dialog, click *Browse* to select the source folder.

Redirect Folder	
Select the Source and Target folders for this redirection. Source:	Browse
Target:	Browse
<ul> <li>Copy NTFS permissions (where applicable)</li> <li>Copy Share permissions (where applicable)</li> </ul>	
Redirect Folder	Cancel

• Select the *Copy NTFS permissions (where applicable)* check box to copy the permissions for NTFS. The security applied to Source folder by the NTFS file system is copied to the Target



folder. The security and share permissions are also applied to the files and folders within the Target folder.

• Select the *Copy Share permissions (where applicable)* check box to copy the share permissions for the folder.



The compression and encryption attributes of the folders and the files within the folders are not copied.

4. Select the source folder and click *OK*.

Select source folder for creating the redir	ection.
😼 My Computer	
🗉 🍓 3½ Floppy (A:)	
🖃 🥯 Local Disk (C:)	
🗉 🚞 8aa76cfed5efe823e2fabd	
🖽 🧰 D	
🗉 🚞 Documents and Settings	
🗄 🚞 Faronics	
🗉 🚞 Program Files	
🗄 🧰 Test	
🗄 🧰 Test1	
🗉 🛅 WINDOWS	
🗉 🥝 DVD-RAM Drive (D:)	
🗉 📴 Control Panel	>

5. In the *Create Folder Redirection* dialog, click *Browse* to select the target folder.

Redirect Folder
Select the Source and Target folders for this redirection. Source:
C:\Test Browse
Target:
Browse
Copy NTFS permissions (where applicable)
<ul> <li>Copy Share permissions (where applicable)</li> </ul>
Redirect Folder Cancel

6. Select the target folder and click *OK*.



<ul> <li>Image: Insers</li> <li>Image: Image: Ima</li></ul>	owse For Folder	eating the redirection.	?
31/2 Floppy (A:)     Local Disk (C:)     Bar36Cfed5efe823e2fabd     D    D    D    D    D    D    D		-	
31/2 Floppy (A:)     Local Disk (C:)     Ba76cfed5efe823e2fabd     Documents and Settings     Documents and Settings     Foronics     Program Files     Test     Test	My Computer		
<ul> <li>□ Solution</li> <li>□ Local Disk (C:)</li> <li>□ Solution</li> <li>□ Solution</li> <li>□ Disk (C:)</li> <li>□ Di</li></ul>	-		
<ul> <li>Baa76cfed5efe823e2fabd</li> <li>□</li> <li>□</li></ul>			
<ul> <li>□</li> <li>□</li></ul>		efe823e2fabd	
<ul> <li></li></ul>		516023621808	
<ul> <li>❀ Caraligloo</li> <li>❀ Caraligloo</li> <li>❀ Caraligloo</li> <li>❀ Caranics</li> <li>❀ Caranics</li> <li>᠃ Program Files</li> <li>᠃ Test</li> <li>※ Caraligna Test1</li> </ul>			
<ul> <li>B Cocuments and Settings</li> </ul>			
<ul> <li>Image: Baronics</li> <li>Im</li></ul>			
<ul> <li>Congram Files</li> <li>Congram Files</li> <li>Congram Files</li> <li>Congram Files</li> <li>Congram Files</li> </ul>	-	and becongs	
æ 🗀 Test æ 🦳 Test1			
E Test1		5	
	🗉 🚞 WINDOWS		<u>×</u>
Make New Folder OK Cancel	Make New Folder		Cancel

7. Click Redirect Folder.

Select the Source	and Target fol	ders for this re	direction.	
Source:				
C:\Test				Browse
Target:				
C:\Test1\Test				Browse
Copy NTFS pe	ermissions (whe	re applicable)		
Copy Share p				

8. A progress bar is displayed and the folder is redirected.



aronics Data Igloo Standard		
AUTOMATED Data Redirection		🔹 www.faronics.co
Deep Freeze status is Thawed.		
er Profile Redirection Folder Redirection Registry Key Redirectio	n	Email feedb
olders Redirected (1)		
Source	Target	
C:\Test	C:\D\Test	
Redirect Folder		Remove Redirection
older Redirection moves a folder to any volume or partition on the	hard drive. Learn more	
Help Check For Updates About		Close



The folder redirected to the target drive will inherit the permissions from its parent folder.



### **Removing a Folder Redirection**

Complete the following steps to remove a previously redirected folder on your computer:

- 1. Ensure that Deep Freeze is *Thawed*.
- 2. Go to Folder Redirection tab.
- 3. The list of folders currently redirected is displayed. Select the Folder Redirection to be removed and click *Remove*.

aronics Data Igloo Standard	
Far DILICS DATA ISLOO AUTOMATED Data Redirection	
$\smile$	www.faronics.co
Deep Freeze status is Thawed. Learn more	
ser Profile Redirection Folder Redirection Registry Key Redirection	Email feedb
Folders Redirected (1)	
Source	Target
C:\Test	C:\D\Test
Redirect Folder	Remove Redirection
Folder Redirection moves a folder to any volume or partition on the har	d drive. <u>Learn more</u>
Help Check For Updates About	Close
JT2\Administrator   Microsoft Windows XP Professional Service Pack 3 (b	

4. A configuration dialog is displayed displaying the current and target location of the folder. Click *Yes* to continue.

2	You are about to remove the selected folder redirection
~	From: C:\Test To: C:\D\Test
	Are you sure you want to continue?

5. The folder redirection is removed.



## **Registry Key Redirection**

The Registry Key Redirection tab allows you to redirect changes occurring in selected registry keys to a ThawSpace. This ensures that the changes to the registry key are retained even when the Deep Freeze status is Frozen. When Deep Freeze status is Thawed, the changes to the registry keys saved on the ThawSpace are automatically restored to the registry.

The Registry Key Redirection tab is displayed as follows:

	Data Redirection	onics.co
Deep Freeze status is Thawed. Learn more		Email feedb
ser Profile Redirection Folder Redirection	Registry Key Redirection	Learn mo
Thanges made to redirected registry keys ar	nd their sub keys when the computer is in Frozen state will persist after the computer restarts	Leanning
Redirect registry key changes to:		Browse
Redirected Registry Keys (0)		
٢		>
[		> ove from List
Select Key from Registry Cha		



Only the HKEY\_LOCAL\_MACHINE registry keys can be redirected using Data Igloo.

### **Creating a Registry Key Redirection**

Complete the following steps to create a Registry Key Redirection:

- 1. Ensure the Deep Freeze status is *Thawed*.
- 2. Go to Registry Key Redirection tab. Select Redirect registry key changes to: check box.

Faronics Data Igloo Standard		
	ED Dats Redirection	onics.cor
Deep Freeze status is Thawed. Learn more		
ser Profile Redirection Folder Redirectio	n Registry Key Redirection	Email feedba
Changes made to redirected registry key	s and their sub keys when the computer is in Frozen state will persist after the computer restarts	<u>Learn mor</u>
Redirect registry key changes to:		Browse
Redirected Registry Keys (0)		
<		>
	Thanges to configuration settings will be in effect when the computer is restarted.	
Select Key from Registry		ove from List
Help Check For Updates	About	ove from List

3. Click *Browse* to select a location on a Thawed drive.

will b	S o Minopp)	(A:)	ected regi	stry key ch	anges
•	DVD-RAM D	rive (D:) el uments	nents		

4. Click Select Key from registry....



Faronics Data Igloo Standard		
	0	
	Data Redirection 😽 WWW.far	onics.con
Deep Freeze status is Thawed.		
Jser Profile Redirection Folder Redirection	Registry Key Redirection	Email feedba
" Changes made to redirected registry keys a	and their sub keys when the computer is in Frozen state will persist after the computer restarts	Learn more
Redirect registry key changes to:	C:\D	Browse
Redirected Registry Keys (0)		
<		>
Select Key from Registry Ch	anges to configuration settings will be in effect when the computer is restarted.	ove from List
Help Check For Updates	About	Close
	Professional Service Pack 3 (build 2600)	

5. In the Browse For Registry Key dialog, select the registry key and click Redirect.

SAM			
SOFTWARE			
EY_CURRENT_C	ONFIG		
	EY_CURRENT_U EY_LOCAL_MAC HARDWARE SAM SECURITY SOFTWARE SYSTEM EY_USERS	SAM SECURITY SOFTWARE SYSTEM	EY_CURRENT_USER EY_LOCAL_MACHINE HARDWARE SAM SECURITY SOFTWARE SYSTEM EY_USERS

6. The registry key is redirected to the Thawed drive.

1		0	١
Ē	2	h	J
4	-	3	ð
	1		

Faronics Data Igloo Standard		
AUTOMATE	Data Redirection 😽 www.far	onics.com
Deep Freeze status is Thawed.		
User Profile Redirection Folder Redirection	Registry Key Redirection	Email feedback
Changes made to redirected registry keys	and their sub keys when the computer is in Frozen state will persist after the computer restarts	<u>Learn more</u>
📝 Redirect registry key changes to:	C:\D	Browse
Redirected Registry Keys (1)		
<		>
Select Key from Registry Ch	anges to configuration settings will be in effect when the computer is restarted.	ove from List
Help Check For Updates	About	Close
IENT2\Administrator   Microsoft Windows XP	Professional Service Pack 3 (build 2600)	

7. Reboot the computer Frozen.



Changes made to the configuration are applied only when the computer restarted. Registry key redirection takes effect only when the computer is rebooted *Frozen*.



Select the specific registry key to be redirected. Selecting the parent registry key removes the child registry key from the list.



Deep Freeze status must be Thawed to change the settings in the Registry Key Redirection tab. Registry key redirection can also be enabled when the Deep Freeze status is Frozen. However, registry key redirection will not take effect when the computer is rebooted.



The registry keys that are grayed out cannot be redirected.



Some Registry Keys might automatically appear in the Registry Key Redirection tab. These Registry Keys are used by Data Igloo and cannot be removed manually.



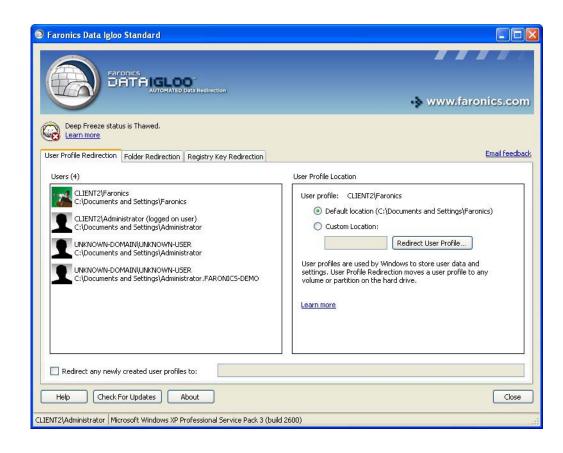
### **Removing a Registry Key Redirection**

Complete the following steps to remove Thawed registry keys:

- 1. Ensure that Deep Freeze is *Thawed*.
- 2. Go to *Registry Key Redirection* tab.
- 3. Select the registry key from the list and click *Remove from list*.

aronics Data Igloo	Standard		
		Data Redirection	
	AUTOMATES	www.far	onics.co
Deep Freeze statu	ıs is Thawed.		
er Profile Redirection	Folder Redirection	Registry Key Redirection	Email feed
		and their sub keys when the computer is in Frozen state will persist after the computer restarts	<u>Learn m</u>
🗹 Redirect registry k	ey changes to:	C:\D	Browse
Redirected Registry K	(		
<			
Select Key from Rev	gistry Ch		ove from List
Select Key from Re			

## **Closing Data Igloo**



Click *Close* icon on the title bar to close Data Igloo. Alternatively, click the *Close* button.



## Logging Events in Data Igloo

Data Igloo provides two ways to log and view the events. The Data Igloo error dialog and the Log File. The Log File logs events for actions performed by Data Igloo.

### **Data Igloo Error Dialog**

The Data Igloo error dialog is displayed whenever there is an exception. The dialog displays the following options:

- Click *View Log File* to view the log file.
- Click *Copy to clipboard* to copy the contents displayed in the error dialog to the clipboard. The contents can then be pasted in a word processor or E-mail.
- Click *Rescan* to scan the action again and refresh the error dialog.
- Click *Cancel* to cancel the dialog.

Filename or Folder	Error
C:\Documents and Settings\Administrator\NTUSER.DAT C:\Documents and Settings\Administrator\NTUSER.DAT.LOG C:\Documents and Settings\Administrator\Local Settings\Applicatio C:\Documents and Settings\Administrator\Local Settings\Applicatio C:\Documents and Settings\Administrator\Local Settings\Applicatio C:\Documents and Settings\Administrator\Local Settings\Applicatio C:\Documents and Settings\Administrator\Local Settings\History\Hi C:\Documents and Settings\Administrator\Local Settings\History\Hi C:\Documents and Settings\Administrator\Local Settings\History\Hi C:\Documents and Settings\Administrator\Local Settings\History\Hi C:\Documents and Settings\Administrator\Local Settings\Temporar	File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th File or folder is used by another process. Close any application th
lick Rescan to rescan the files and folders after fixing the errors. Click C	Cancel to cancel redirection.

### Data Igloo Log File

To view the events logged in the log file, complete the following steps:

- 1. Go to C:\Program Files\Faronics\Data Igloo Standard.
- 2. Double-click *Data Igloo.txt*.
- 3. The events are displayed in the log file.

## **Command Line**

Data Igloo has the following command line options.

#### Syntax:

IGC.exe/[Command]

#### Argument/Switch:

<username> the username on the computer for the specified user.

<hostname> the Domain name/Host name.

</loc:> the name of the drive or volume. For example, it may be D: (drive) or volume name.

<source> the name of the source folder that is to be redirected.

<target > the target name of the folder.

<location> location in the registry.

<RegKeyPath> the path of the registry key in the registry.

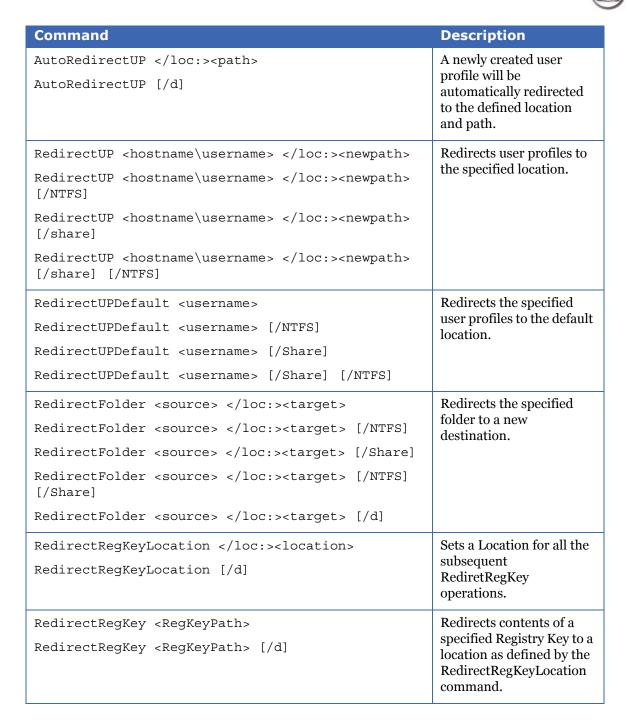
[NTFS] copies the folder permissions to target.

[Share] copies the sharing permissions and properties of the folder to the target.

[d] reverse the action when used with the particular command.

List of commands available in Data Igloo:

Command	Description
Setup.exe /s/v/qn	Silent Install.
Setup.exe /s/x /v/qn	Silent Uninstall.
h help	Displays the Help about all the supported commands.
ver version	Displays the version of Data Igloo Command Line tool.
GetDFStatus	Displays the current status of Deep Freeze (Frozen or Thawed).
CheckForUpdate	Checks if a new version of Data Igloo is available.



#### Examples

To redirect the user profile for John to E: drive, you can use the following syntax:

IGC.exe /RedirectUP FARONICS\john /loc:E:\user

To redirect the folder C:\Documents to E: drive, you can use the following syntax:

IGC.exe /RedirectFolder C:\Documents /loc:E:\



# **Uninstalling Data Igloo**

This chapter describes how to uninstall Data Igloo.

Topics

Uninstalling Data Igloo with the Installer Uninstalling Data Igloo via Add or Remove Programs in Windows



Complete the following steps to uninstall Data Igloo:

1. Double-click Faronics\_IGS.exe. Click Next.



2. Select Remove. Click Next.





3. Click Remove.

emove the Program				
You have chosen to ren	nove the progra	m from your sys	tem.	6
Click Remove to remove this program will no long			rom your compute	er. After removal,
If you want to review o	r change any se	ttings, click Bacl	k.	

4. Data Igloo is removed from your computer. Click *Finish* to complete uninstallation.





## Uninstalling Data Igloo via Add or Remove Programs in Windows

Complete the following steps to uninstall Data Igloo via *Add or Remove Programs* in Windows:

- 1. Click Start>Control Panel>Add or Remove Programs.
- 2. Select Data Igloo.
- 3. Click *Remove*.

# Appendix A Redirecting to Hidden ThawSpaces

ThawSpace is a virtual partition that can be used to store programs, save files, or make permanent changes. All files stored in the ThawSpace are retained after a restart, even if the computer is Frozen.

Deep Freeze allows you to create Hidden ThawSpaces. Hidden ThawSpaces are not visible in Windows Explorer. However, Hidden ThawSpaces can be accessed via *Start>Run>[Drive Letter]*.

To redirect folders that are Hidden ThawSpaces, complete the following steps before creating a Folder Redirection via Data Igloo:

- 1. Open Deep Freeze Enterprise on the workstation.
- 2. Go to *ThawSpace* tab.
- 3. Select the *Visible* check box for the *Drive Letter* that is not currently visible in Windows Explorer.

wailable TI	hawSpaces			
Visibility V	Drive Letter T Z	Size (MB) 1024 1024	Host Drive C C E	A ThawSpace is a virtual partition where data can be stored and retained across restarts on a Frozen computer
.60.220.42				

- 4. Click OK.
- 5. Log off from the computer and log on.

Now, you can perform a Folder Redirection in Data Igloo. After Folder Redirection, you can again set the ThawSpace as *Hidden*. Complete the following steps to set the ThawSpace as *Hidden*.

- 1. Open Deep Freeze Enterprise on the workstation.
- 2. Go to *ThawSpace* tab.
- 3. Clear the *Visible* check box for the *Drive Letter* that is not currently visible in Windows Explorer.



Visibility	Drive Letter	Size (MB)	Host Drive	A ThawSpace is a virtual partition where data can be stored and retained across
	Т	1024	С	restarts on a Frozen computer
	Z	1024	E	

- 4. Click OK.
- 5. Log off from the computer and log on.

Prequisites: You must know about imaging using Sysprep before running this example. For more information, refer to http://technet.microsoft.com/en-ca/library/cc766049(v=ws.10).aspx.

Imaging workstations is one of the quickest ways to deploy workstation software and operating system settings to multiple workstations. Creating specialized image for single computer and reimaging it is a straightforward process, since it does not require any steps to re-configure the system. However, in enterprise environments, the master image is intended for deployment on multiple computers and has to be configured or generalized in order to remove system specific information, such as computer name, user SID etc. The master image is usually customized with certain system configuration and installed software. Below is the recommended way of creating customized master image with Deep Freeze and Data Igloo installed.

- 1. Using Windows System manager in *WindowsAIK*, customize the .xml answer file for unattended Windows installation.
- 2. Install fresh Windows system on reference computer.
- 3. Press *Ctrl-Shift-F3* to reboot the system into Audit mode before creating user name on freshly installed system. Alternatively, to create users on master image, finalize Windows installation, create all required users and reboot system into Audit mode using Windows SysPrep utility. This will reboot the system into Audit mode, where the system can be further customized.
- 4. In the Audit mode, perform all required customizations and software installations. This includes Deep Freeze workstation and Data Igloo. At this point, do not configure Data Igloo to redirect users, folders and registry.
- 5. This step is only to configure all the required scripts. Create all required scripting solutions and configure Windows SysPrep which will runthe unattended installation. Configure scripts to automatically run on first reboot after deploying the image. The scripts can be configured to perform drive letter re-assignment as well as scripting using the Data Igloo command line tool *IGC.exe*. The scripts can be configured to perform user, folder, and registry redirections. This will ensure the newly imaged system will automatically perform all required customizations, which were not possible to make within master image.
- 6. Set the *Clone flag* in Deep Freeze workstation configuration. This will ensure Deep Freeze will startup in Thawed mode on newly imaged system. Therefore, all the customizations will be permanently retained.



Status on Next Boot		Clone (Imaging) Options
<ul> <li>Boot <u>Frozen</u></li> <li>Boot Thawed on</li> <li>Boot <u>Thawed</u></li> </ul>	Next 1 Restarts	Set Clone Flag
License License Key:		Edit
License Key Type: Expiry Date:	i None (30-day Trial) Sunday, April 14, 2013	Update License

- 7. Run the Sysprep utility with *Out of the Box experience, Generalize* and *Shutdown* option. This will generalize the system on reference computer and automatically shut itdown.
- 8. Capture the image of the reference computer using any disk imaging tool. This will create a generalized master image, which can be further deployed on multiple computers.



Do not configure Data Igloo before generalizing the reference image since the Thawed Users and Folders may become inaccessible and it might lead to incorrect monitoring of Thawed Registries. Redirecting Folders or Registry Keys before imaging may lead to broken junction links during imaging.



# Appendix C Example User Profile Redirection to a Real Partition

This example explains how to redirect the user John Smith to a real partition using Data Igloo.

If the C: drive is in a Frozen state, the user data is lost on reboot. To ensure that the user data is not lost, we can use Data Igloo to redirect the user profile to a real partition (say E: drive) that always remains Thawed.

Complete the following steps to redirect the user profile from C: drive to E: drive:

- 1. Install Deep Freeze on the computer. Deep Freeze Standard and Deep Freeze Enterprise (workstation) are both applicable for this example. Ensure that only C: drive stays Frozen.
- 2. Reboot Thawed.
- 3. Install Data Igloo.
- 4. Launch Data Igloo.

In the User Profile Redirection tab, select John Smith. Click *Custom Location* and *Redirect User Profile*.

Faronics Data Igloo Standard	
Far DRICS DATAIGLOO AUTOMATED Data Redirection	www.faronics.com
Deep Freeze status is Thawed.           Learn more           User Profile Redirection           Folder Redirection	Email feedback
Users (3)	User Profile Location
WIN-O6A1942RTQJ\John Smith C:\Users\John Smith         WIN-O6A1942RTQJ\TAdmininstrator (logged on user) C:\Users\TAdmininstrator         WIN-O6A1942RTQJ\Guest C:\Users\Guest         WIN-O6A1942RTQJ\Guest C:\Users\Guest	User profile: WIN-O6AI942RTQJ\John Smith  Default location (C:\Users\John Smith)  Custom Location:  Redirect User Profile  User profiles are used by Windows to store user data and settings. User Profile Redirection moves a user profile to any volume or partition on the hard drive.  Learn more
Redirect any newly created user profiles to:	
Help Check For Updates About	Close
WIN-O6AI942RTQJ\ITAdmininstrator   Microsoft Windows 7 Service Pac	k1 (build 7601)

5. The Source is selected automatically (C:\Users\John Smith). Click *Browse* for the target. *Copy NTFS permissions* and *Copy Share permissions* are selected by default.



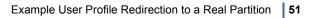
Select target folder for redirectin	ng the user profile	
Source:		
C:\Users\John Smith		Browse
Target:		
		Browse
	vra applicable)	
Copy NTFS permissions (whe	re applicable)	
Copy NTFS permissions (whe     Copy Share permissions (whe		

6. Select the E: drive and click OK.

elect target folder for c	reating the redirect	tion.
🖳 Computer		
🖻 📑 Floppy Disk Dr	ive (A:)	
🛛 🏭 Local Disk (C:)		
DVD Drive (D:)		
👝 New Volume (I	E:)	

7. The location of the user profile is now selected. Click Redirect User Profile.

Source:	
C:\Users\John Smith	Browse
Target:	
E:\John Smith	Browse



8. The user profile John Smith is now redirected to E: drive.

Faronics Data Igloo Standard	
Far onics DATA I GLOOD AUTOMATED Data Redirection	www.faronics.com
User Profile Redirection Folder Redirection Registry Key Redirection	Email feedback
Users (3) WIN-O6A1942RTQJ\John Smith ELJohn Smith WIN-O6A1942RTQJ\ITAdmininstrator (logged on user) C:\Users\ITAdmininstrator WIN-O6A1942RTQJ\Suest C:\Users\Guest	User Profile Location User profile: WIN-O6AI942RTQJ\John Smith  Default location (C:\Users\John Smith) Custom Location: E:\John Smith Redirect User Profile User profiles are used by Windows to store user data and settings. User Profile Redirection moves a user profile to any volume or partition on the hard drive. Learn more
Redirect any newly created user profiles to:  Help Check For Updates About	Close
MIN-O6AI942RTQJ\ITAdmininstrator   Microsoft Windows 7 Service P	ack 1 (build 7601)

To check if the redirection was successful, navigate to E:/John Smith. The contents of the folder are displayed:

Name	<ul> <li>Date modified</li> </ul>	Туре	Size	
E Contacts	2/19/2013 1:47 PM	File folder		
Desktop	2/19/2013 1:47 PM	File folder		
🚺 Downloads	2/19/2013 1:47 PM	File folder		
Favorites	2/19/2013 1:47 PM	File folder		
🗽 Links	2/19/2013 1:47 PM	File folder		
My Documents	2/19/2013 1:47 PM	File folder		
👪 My Music	2/19/2013 1:47 PM	File folder		
My Pictures	2/19/2013 1:47 PM	File folder		
📓 My Videos	2/19/2013 1:47 PM	File folder		
B Saved Games	2/19/2013 1:47 PM	File folder		
Searches	2/19/2013 1:47 PM	File folder		
	Name  Contacts  Desktop  Desktop  Favorites  Municat  My Documents  My Music  My Videos  My Videos  Source Games	Name         Date modified           Contacts         2/19/2013.147 PM           Desktop         2/19/2013.147 PM           Desktop         2/19/2013.147 PM           Desktop         2/19/2013.147 PM           Favorites         2/19/2013.147 PM           Mark         Prevorites           2/19/2013.147 PM         2/19/2013.147 PM           My Documents         2/19/2013.147 PM           My Music         2/19/2013.147 PM           My Visice         2/19/2013.147 PM           My Visice         2/19/2013.147 PM           My Visices         2/19/2013.147 PM           My Seve Games         2/19/2013.147 PM	Name      Date modified     Type       Contacts     2/19/2013 147 PM     File folder       Desitop     2/19/2013 147 PM     File folder       Particle     Pavnloads     2/19/2013 147 PM     File folder       Favorites     2/19/2013 147 PM     File folder       Inite     Contacts     2/19/2013 147 PM     File folder       My Documents     2/19/2013 147 PM     File folder       My Music     2/19/2013 147 PM     File folder       My Pictures     2/19/2013 147 PM     File folder       My Videos     2/19/2013 147 PM     File folder	Name     Date modified     Type     Size       Ib Contacts     2/19/2013 1/47 PM     File folder       Ib Desktop     2/19/2013 1/47 PM     File folder       Ib Desktop     2/19/2013 1/47 PM     File folder       Ib Downloads     2/19/2013 1/47 PM     File folder       Ib Apownloads     2/19/2013 1/47 PM     File folder       Ib My Documents     2/19/2013 1/47 PM     File folder       Ib My Documents     2/19/2013 1/47 PM     File folder       Ib My Viscic     2/19/2013 1/47 PM     File folder       Ib My Videos     2/19/2013 1/47 PM     File folder       Ib Sveed Games     2/19/2013 1/47 PM     File folder





### Appendix D

# lix D Example Program Redirection to a Real Partition

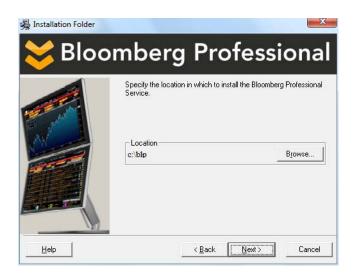
Bloomberg Professional is installed on C: drive by default. Bloomberg also saves data on the C: drive. For computers using Deep Freeze where C: drive is in a *Frozen* state by default, the data is lost on a reboot. Bloomberg can be installed on a drive other than C: drive (for example, Thawed drives like D: or E:). If there is a software update, the system files may be retained upon a reboot since they are installed on a Thawed drive. However, some software updates also update the registry keys. Since the registry keys are on C: drive, the updates are lost on reboot.

The solution to this problem is to migrate a program to a Thawed partition. Migrating a program consists of two parts:

- Folder Redirection to redirect the files for the program to a Thawed drive.
- Registry Key Redirection to redirect the registry key for the particular program to a non-Frozen drive.

Complete the following steps to redirect a program (Folder and Registry Key) to a Thawed drive.

- 1. Install Deep Freeze on the computer. Deep Freeze Standard and Deep Freeze Enterprise (workstation) are both applicable for this example. Ensure that only C: drive stays Frozen.
- 2. Reboot Thawed.
- 3. Install Data Igloo.
- 4. Install the program that will save data on C: drive. For this example, we have chosen Bloomberg, a desktop application. Install Bloomberg in its default location. By default it is installed on *c*:\*blp*.





5. Launch Data Igloo and click the Folder Redirection tab.

aronics Data Igloo Standard		
AUTOMATED Data Redirection	🔹 www.f	aronics.co
Deep Freeze status is Thawed.		
ser Profile Redirection Folder Redirection Registry Key Redir	ction	Email feedb
Folders Redirected (0)		
Source	Target	
Redirect Folder	Re	emove Redirection
Folder Redirection moves a folder to any volume or partition on	the hard drive. Learn more	
Help Check For Updates About		Close
-O6AI942RTQJ\admin Microsoft Windows 7 Service Pack		

6. Click Redirect Folder.

Delect ale bo	urce and Targ	et folders for	this redirec	tion.	
Source:					
					Browse
Target:					
					Browse
Copy NTF	S permissions	(where applic	able)		
Copy Sha	re permissions	s (where appli	cable)		



7. Browse to select *C*:\*blp* and click *OK*.

Select source folder for creating the redire	ction.
📜 Computer	
E Floppy Disk Drive (A:)	
🛯 🏭 Local Disk (C:)	=
4 퉲 blp	
D 🌆 API	
🍌 en-US	
🍌 tsapi5	
Wintry	
Perflogs	

8. The source path is select. Click *Browse* for target.

Select the Source a	ind Target folders	for this redirection	•
Source:			
C:\blp			Browse
Target:			
			Browse
Copy NTFS perm	nissions (where ap	plicable)	
Copy Share per	missions (where a	pplicable)	

9. Browse to select E: drive and click *OK*.

🖳 Computer	
📑 Floppy Disk Drive (A:)	
🏭 Local Disk (C:)	
🔮 DVD Drive (D:)	
New Volume (E:)	
DataIgloo	
John Smith	

10. The Target drive is now selected. *Copy NTFS permissions* and *Copy Share permissions* are selected by default. Click *Redirect Folder*.



	rce and Target f	Indiacia for alla	reurection.	
Source:				
C:\blp				Browse
Target:				
E:\blp				Browse
Copy NTFS	permissions (w	nere applicable	)	
Conv Share	permissions (w	horo applicable		

11. The folder redirection is completed.

Faronics Data Igloo St	andard			
		Data Redirection		
				www.faronics.com
Deep Freeze statu	s is Thawed.			
User Profile Redirection	Folder Redirection	Registry Key Redirection		Email feedback
Folders Redirected (1)				
Source			Target	
C:\blp			E:\blp	
Redirect Folder				Remove Redirection
Folder Redirection mov	es a folder to any v	olume or partition on the hard	drive. Learn more	
Help Check F	or Updates	bout		Close
N-06AI942RTOJ\admir	Microsoft Wind	ows 7 Service Pack 1 (build	7601)	
			,	



12. Click the *Registry Key Redirection* tab. Select *Redirect registry key changes to* and browse to select E: drive. Click *Select Key from Registry*.

	D Data Redirection 🔹 www.far	onics.com
Deep Freeze status is Thawed.		
Jser Profile Redirection Folder Redirection	Registry Key Redirection	Email feedba
Changes made to redirected registry keys	and their sub keys when the computer is in Frozen state will persist after the computer restarts	Learn mor
Redirect registry key changes to:	E:\	Browse
Redirected Registry Keys (0)		
Redirected Registry Keys (0)	nanges to configuration settings will be in effect when the computer is restarted.	ove from List

13. Browse to select HKEY\_LOCAL\_MACHINE\SOFTWARE\Bloomberg L.P. Click *Redirect*.

	be automatically selected
SOFTWARE	
🚊 🖓 👔 ATI Technologies	
🛱 🐌 Bloomberg L.P.	
😟 🌗 CBSTEST	
🕀 🦢 Classes	
🕀 🦢 Clients	
🕀 🧀 Faronics	
🕀 🦢 Intel	
😟 🎍 Microsoft	=
🕀 🖓 ODBC	
😟 🤚 Policies	
🕀 🤚 Registered Applications	
🕀 🎍 Sonic	
🕀 🖗 ThinPrint	-
🕀 🤚 VMware, Inc.	
😟 🎍 WOW6432Node	-



14. The registry keys for Bloomberg is now redirected to E: drive.

Faronics Data Igloo Standard		
	D Data Redirection	onics.com
Deep Freeze status is Thawed.		
User Profile Redirection Folder Redirection	Registry Key Redirection	Email feedbac
	and their sub keys when the computer is in Frozen state will persist after the computer restarts	Learn more
Redirect registry key changes to:	E:\	Browse
Redirected Registry Keys (1)		
•	III	•
Select Key from Registry Cl	hanges to configuration settings will be in effect when the computer is restarted.	ove from List
Help Check For Updates	About	Close

Now, Bloomberg is not only able to save data on E: (Thawed drive), but also able to retain program updates across reboots even when C: drive is Frozen.



## Appendix E

# IX E Using Data Igloo with Microsoft Security Essentials

When using an Antivirus or an Anti-Malware program, it is necessary to save the virus definitions on the computer. When the computer is protected by Deep Freeze, the definitions may be lost during a reboot. In addition to the virus definitions, it is necessary to save the configuration, scan history and other data relevant to the user. Some Antivirus programs may not allow changing the folders from C: drive due to their own self-protection mechanisms.

The solution is to create the folders first, redirect them using Data Igloo and then install the Antivirus program.

The following example provides steps for redirecting the folder and registry keys for Microsoft Security Essentials using Data Igloo:

- 1. Reboot workstation into *Thawed* state.
- 2. On the computer where MSE is not installed create following new folders, which will be used by Microsoft Security Essentials:

On all Windows Operating Systems:

C:\Program Files\Microsoft Security Client

On XP systems:

C:\Documents & Settings\All users\Application data\Microsoft\Microsoft Security Client

C:\Documents & Settings\All users\Application data\Microsoft\Microsoft Antimalware

On Vista and Windows 7 systems:

C:\Programdata\Microsoft\Microsoft Security Client

C:\Programdata\Microsoft\Microsoft Antimalware

3. Using Data Igloo folder redirection feature, redirect newly created folders to a Thawed location. For this example, we are redirecting to E:

For this example, we are using Windows 7 and the following folders need to be redirected to E:

C:\Program Files\Microsoft Security Client

C:\Programdata\Microsoft\Microsoft Security Client

C:\Programdata\Microsoft\Microsoft Antimalware



Faronics Data Igloo Standard	
AUTOMATED Data Redirection	www.faronics.co
Deep Freeze status is Thawed.	
Jser Profile Redirection Folder Redirection Registry Key Red	direction Email feed
Folders Redirected (3)	
Source	Target
C:\Program Files\Microsoft Security Client	E: Wicrosoft Security Client
C:\ProgramData\Microsoft\Microsoft Antimalware	E: \ProgramData\Microsoft Antimalware
C:\ProgramData\Microsoft\Microsoft Security Client	E: \ProgramData\Microsoft Security Client
Redirect Folder	Remove Redirection
Folder Redirection moves a folder to any volume or partition	on the hard drive. Learn more
Help Check For Updates About	Close
I-O6AI942RTQJ\admin   Microsoft Windows 7 Service Pa	ock 1 (build 7601)
-ounderziti gradmin   wilcrosoft windows / Service Pa	ick I (build 7001)

4. Download and install Microsoft Security Essentials. Update the Antivirus and Spyware definitions.

5. Using Data Igloo registry redirection feature redirect following registry keys onto a Thawed location. For this example, we have choosen E: drive.

Faronics Data Igloo Standard		
	D Data Redirection	
	🔹 www.far	onics.con
Deep Freeze status is Thawed.		
User Profile Redirection Folder Redirection	Registry Key Redirection	Email feedba
Changes made to redirected registry keys	and their sub keys when the computer is in Frozen state will persist after the computer restarts	Learn more
Redirect registry key changes to:	E:\	Browse
Redirected Registry Keys (3)		
HKEY_LOCAL_MACHINE\SOFTWARE\Mi	crosoft\Microsoft Antimalware	
HKEY_LOCAL_MACHINE\SOFTWARE\Min		
HKEY_LOCAL_MACHINE\SOFTWARE\Mi	crosoft'Microsoft Security Client	
•		F
Select Key from Registry Ch	nanges to configuration settings will be in effect when the computer is restarted.	ove from List
Help Check For Updates	About	Close
/IN-O6AI942RTQJ\admin Microsoft Wind	dows 7 Service Pack 1 (build 7601)	

6. Reboot the workstation into *Frozen* state.

All new virus and spyware definitions, history of detected items, as well as Microsoft Security Essentials settings will be retained across reboots. This setup will also allow to retain new version updates of the Microsoft Security Essentials.



This example is only applicable to Windows XP, Vista and Windows 7. On Windows 8, Microsoft Security Essentials is built-in as part of Microsoft Defender.





# Appendix F Redirecting Event Logs using Data Igloo

When using Deep Freeze to protect computers, the Windows Event Logs are lost on reboot. The Event Logs provide valuable information to IT administrators and may need to be retained.

The solution to this problem is to redirect the registry for Event Logs to a Thawed location using Data Igloo.

The following example provides steps for redirecting the registry keys for Event Logs using Data Igloo:

- 1. Reboot workstation into *Thawed* state.
- 2. Using Data Igloo registry redirection feature redirect HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\Eventlog onto a Thawed location. For this example, we have selected E: drive.

	10	
	Data Redirection 😽 www.far	onics.co
Deep Freeze status is Thawed.		
Jser Profile Redirection Folder Redirection	Registry Key Redirection	Email feedb
Changes made to redirected registry keys	and their sub keys when the computer is in Frozen state will persist after the computer restarts	Learn mo
Redirect registry key changes to:	E:\	Browse
Redirected Registry Keys (1)		
•	III	•
		► ove from List
Select Key from Registry Ch		

3. Reboot the workstation into Frozen state.

All new Event Logs will now be retained across reboots even when Deep Freeze is in a Frozen state.



To forward Event Logs to a central server if you are running Vista or higher, refer to http://technet.microsoft.com/en-ca/library/cc748890.aspx.

