



Tiger Store 2.5.1 Release Notes

<i>What's New</i>	2
<i>Fixed Known Issues</i>	3
<i>Upgrading to Version 2.5.1</i>	4
<i>Best Practices</i>	5
<i>New Known Issues</i>	8
<i>Unresolved Known Issues</i>	9

This document provides release information for Tiger Store software version 2.5.1. It discusses new features in this release as well as best practices, fixed and known issues.

What's New

Added Support for Windows® 8/Server 2012/ Server 2012 R2 Storage Servers

You can install Tiger Store 2.5.1 software on computers running Microsoft Windows® 8/Server 2012/Server 2012 R2.

Scheduled LDM Backups

Tiger Store is set up to automatically backup the LDM database of the dynamic disks, to which the storage server is connected each morning at 3 am. The backup of the LDM configuration is performed only if it is healthy. The backed up LDM can be used by the Tiger Technology support team as a safety net in case of problems with the dynamic disks managed by the storage server.

Improved Speed of Metadata Operations on Mac OS X Tiger Clients

Version 2.5.1 greatly improves the speed of metadata operations on Mac OS X Tiger clients allowing them to list folders with thousands of files much faster, for example.

Avid FS Emulation Can Be Enabled Solely in projectStore

Version 2.5.1 removes the option for each Tiger Client to enable emulation for Avid FS on the volumes, when connecting to a storage server. If you want to benefit from Avid FS emulation, you can do so using projectStore 3.5.1, which is bundled together with version 2.5.1 of the Tiger Store software, thus enabling Avid FS emulation per project instead of on the whole volume.

Dropped support for Mac OS X Snow Leopard/Snow Leopard Server (64-bit)

Version 2.5.1 drops the support for Tiger Clients running Mac OS X Snow Leopard/Snow Leopard Server (64-bit).

Fixed Known Issues

Detecting Newly Created Files on the Volume from Mac OS X Mountain Lion and Above

With version 2.5.1, a Tiger Client running Mac OS X Mountain Lion or above no longer needs to relaunch the Finder in order to detect a file or folder created by another Tiger Client on a shared volume.

Newly Created Volumes in the Web UI

Version 2.5.1 resolves a problem that prevented the web interface of Tiger Store to immediately list a newly created volume on the disks seen by the metadata controller. Now, there is no need to log out of the web UI and restart your browser, in order to be able to share the volume or make it Private.

Cleaning Dynamic Disks in DiskPart from Tiger Store or Tiger Client

Version 2.5.1 resolves a system instability when cleaning dynamic disks of their partition formatting using DiskPart utility from Tiger Store or a Tiger Client.

Keeping Modification Time of Files Copied to the Shared Volumes

With version 2.5.1, the modification date of each file copied from a local disk to the shared volumes is preserved.

Copying/Moving Multitude of Files in the Finder

Version 2.5.1 resolves a problem causing a significant delay when attempting to simultaneously move/copy through the Finder of a Tiger Client running Mac OS X multitude of files (more than 1000) out of a folder with thousands of objects. Now this operation is performed without delays.

Memory Leak Fix

Version 2.5.1 fixes a memory leak that could occur when Tiger Clients renamed files/folders on the shared storage.

Getting the Correct Number of Files in a Directory on Mac OS X

Version 2.5.1 ensures that when two or more threads/processes on a Mac OS X Tiger Client request information about the number of files in a directory on the shared storage volumes, each of them receives the correct number.

Setting Volume to Offline

With version 2.5.1 after setting a volume as Offline, it is immediately dismounted from the storage server, without the need to restart the computer.

Enabling Support for projectStore in Active Directory Domain

With version 2.5.1, when your Tiger Store is deployed in an Active Directory domain, you can enable projectStore support on a volume shared by the metadata controller.

Upgrading to Version 2.5.1

You can upgrade both the storage server and the connected Tiger Clients to version 2.5.1 without having to uninstall the previous version from the computers. The setup program preserves the IP configuration settings on the metadata controller, but you will have to activate Tiger Store again after upgrading and also configure anew the password for the web interface, volume status (shared, private, offline), defragmentation setting, volume mount location settings, as well as storage servers list and preferred volume mount location (on Windows) on Tiger Clients.

Note: *There's no need to deactivate Tiger Store before upgrading to version 2.5.1. To activate the product after the upgrade, simply perform the activation procedures described in the Tiger Store Administration Guide.*

To upgrade to version 3.5.1 of projectStore, you need to uninstall the previous one from the storage server and the Tiger Clients. For more information, refer to the projectStore 3.5.1 release notes: <http://www.tiger-technology.com/projectstore-3-5-1-release-notes/>

To upgrade to version 2.5.1:

Simply run the installation of the new Tiger Store/Tiger Client version, following the installation steps described in the Tiger Store Administration Guide.

Best Practices

Granting Full Control to the System Account

In Windows, the built-in System account, used by the operating system and by services, by default has Full Control to all files on an NTFS volume. To provide for the normal operation of Tiger Store, it is advisable not to change the Full Control permissions of this account on the computer designated as Tiger Store storage server. For details about displaying the System account when setting permissions and granting Full Control to it, refer to your Windows documentation.

Using a DHCP Server on Your Tiger Store Network

A Dynamic Host Configuration Protocol (DHCP) server automatically assigns and leases IP addresses to computers as they are added to a network. While you can allow run-time configuring of IP addresses of both the Tiger Store server and the Tiger Clients, to ensure the proper cross-network communication, there should be a DNS server on the network that resolves the IP address of each connected computer to its domain name. Additionally, each Tiger Client should add the Tiger Store server to its storage servers' list using its domain name instead of the IP address with which it is currently identified.

In case there isn't a DNS server on the network, you should configure your DHCP server to use static allocation of IP addresses to the Tiger Store server and Tiger Clients.

Note: *Non Tiger Client computers can still benefit from dynamic allocation of IP addresses by the DHCP server.*

Setting Up the SAN Policy on Windows Tiger Clients

By default, on computers running Windows Vista and above all shared disks visible to the computer are delivered as offline and read-only. You can bring these disks to online mode in Disk Management, still, there's a possibility on the next boot of the system the disks to be offline again. To change this behaviour, you should make sure that the SAN policy of the operating system is set to "Online All". To view and set the SAN policy of your computer you can use diskpart.exe command-line utility that is stored in the system drive of your computer.

To view the current SAN policy of your computer:

1. Run command prompt as administrator.
2. In command prompt, start diskpart utility by typing:
diskpart
3. To view the current SAN policy, type this followed by return:
SAN
The utility displays one of the following:

Tiger Store 2.5.1 Release Notes

- Offline Shared - all newly discovered disks that do not reside on a shared bus are brought online and made read-write.
 - Offline - all newly discovered disks remain offline and read-only.
 - Online All - all newly discovered disks are brought online and made read-write.
4. Do one of the following:
 - If the SAN policy of your computer is “Online All”, exit diskpart utility and command prompt.
 - If the SAN policy of your computer is not “Online All”, proceed with the steps below.
 5. Run command prompt as administrator.
 6. In command prompt, start diskpart utility by typing:
`diskpart`
 7. Execute the following:
`san policy=OnlineAll`

Using Identical Time and Date Settings

It is advisable to use identical settings for time and date on all computers on your Tiger Store network (the storage server and all client computers). Using different time and date settings may hamper communication with the storage server and the Traffic and Events reports may display incorrect information.

Disabling Mac OS X Time Machine for Shared Volumes

It is highly advisable to exclude all volumes shared by Tiger Store from the list of locations Time Machine is set to back up on your Mac OS X T-Client. Keeping this feature turned on for shared volumes may hamper performance.

To exclude a shared volume from Time Machine's backup:

1. In Time Machine preferences, click the Options button.
2. In the sheet with locations, select a shared Tiger Store volume and click the "-" button.
3. Repeat the above step for each shared Tiger Store volume.
4. Click Save.

Calculating Folder Size (Mac OS X)

Use the Calculate Sizes option, available in List view of the Finder, to calculate sizes per folder and per window. Activate this option only for folders on your local disks. Do not enable it for folders on

the shared storage volumes, as this will temporarily slow down performance. If you enable this option on a shared volume, network workstations that see the volume will be unable to work on it. For details about managing the “Calculate Sizes” option, refer to your Mac OS X® documentation.

File Systems Behaviour and Files Compatibility

The three operating systems (Windows, Mac OS X and Linux) on which you can install the Tiger Client software differ in the way they manage files. On Windows, files can have many streams, in contrast to Mac OS X (only 2 streams - data fork and resource fork), and Linux (only data stream). In addition, files created by Mac OS X also have extended attributes (such as the Finder Info, for example) that are not available on the other two platforms.

These peculiarities of the file systems lead to partial loss of information when transferring a file created on one platform through a machine running on another platform.

For instance, when on Mac OS X you copy a file with 50 streams created by Windows, all file streams' information is lost, except the information of the data stream. The result will be the same when a Linux computer copies a 50-stream Windows file. A Mac OS X file copied by Linux will also lose its resource fork's info.

Streams' information is not lost when copying Mac OS X or Linux files by a Windows computer, but in this case a Mac OS X file will lose the extended attributes information.

There is another problem with files sharing common file format. For example, a movie file created with Final Cut Pro on Mac OS X is playable by QuickTime. If a Windows workstation copies this file, it will not recognize it as QuickTime-playable until adding the *.mov extension to it.

See also “Final Cut Pro Project Names on the Shared Volumes” on page 7.

Final Cut Pro Project Names on the Shared Volumes

It is advisable that the Final Cut Pro projects you create on the shared volumes have names that do not exceed 31 symbols.

Using Antivirus on the SAN

It is advisable to use an antivirus software (like ESET NOD32, for example) on your shared storage only when needed or if inevitable for your workflow. Additionally, to avoid decreased performance, it is advisable to run the checks only from the computer set as Tiger Store server.

New Known Issues

Mac OS X Tiger Clients Mounting NTFS Stripe Partitions over the LAN

Currently, Mac OS X Tiger Clients can mount just the first partition of a striped NTFS volume over the Fibre Channel and all other partitions are mounted over the Ethernet.

Volume Disappears from Web UI during Check and Repair Procedure

While you perform the check & repair procedure on a Tiger Box volume, it is not listed in the web UI. Once the procedure finishes, you can manage the volume in the web interface again.

Only Automatic Defragmentation of Volumes Available

Currently, you cannot perform manual defragmentation of your volumes. To keep your volumes defragmented it is advisable to enable the automatic defragmentation.

Manually Setting the Folder for projectStore PRO Proxy Media

To benefit from projectStore PRO's automatic proxy media generation, you should manually specify the folder in which proxy media to be stored. You can do this by creating a new string value in the Tiger Technology registry on the Tiger Store metadata controller. If the value doesn't exist or contains invalid path, you will not be able to preview proxy media in the web interface of projectStore PRO.

To specify the folder for projectStore PRO proxy media:

1. On the Tiger Store computer, start the Registry Editor.

Tip: To start Registry Editor, on the Start menu click Run and in the dialog type `regedit`.

2. Navigate to:
`HKEY_LOCAL_MACHINE\SOFTWARE\TigerTechnology\projectStore\projectstore\settings`
3. Right-click in the right pane and select New | String Value.
4. Rename the new REG_SZ value to:
`previews_path`
5. Right-click `previews_path` value and select Modify.

6. Enter the full path to the folder in which proxy media should be stored.

For example, to store proxy media in folder “projectStore_PRO_proxies” on volume mounted on the metadata controller as drive letter S, enter the following:

S:\projectStore_PRO_proxies

7. Click OK and restart the Tiger Store computer.

Unresolved Known Issues

Incorrect Connection Status on Tiger Clients Running Mac OS X

The Tiger Client software on Mac OS X may sometimes fail to correctly display the connection status to the Tiger Store appliance. For example, the Settings dialog of the Tiger Client menulet may display that the Tiger Store is online, when it is actually offline. Another example is when the Tiger Client loses its Fibre Channel connection to the appliance and mounts the volume(s) over the LAN, while the volume icons in the Finder and on the desktop are not of volumes mounted over the Ethernet. Additionally, in this case Tiger Clients that run Mac OS X may fail to disconnect from the volume(s).

Allowing tbox.app and vpd During Tiger Client Installation on Mac OS

During installation of Tiger Client on Mac OS X, even if you specify that tbox.app and the vpd daemon must be added as firewall exceptions, you should manually allow them in the firewall database of your computer. Note that as long as the firewall of your computer is turned on, you will have to add them to the firewall database after each reboot of the computer.

Connect to Tiger Store from Mac OS X Without DNS Server

If there isn't a DNS server on the network through which a Mac OS X Tiger Client communicates with Tiger Store, the Tiger Client computer will fail to connect to the storage server and mount its volumes.

A workaround to the problem is to add an entry about each storage server you want to connect to in the hosts file on the Mac OS X Tiger Client:

1. In Terminal, type this followed by return:
`sudo nano /etc/hosts`
2. At the end of the hosts file, add a new line for each storage server you want to connect to, which contains the following:
`[IP address of the storage server] [name of the storage server]`
For example, if your Tiger Store server has IP address 172.16.1.1 and the name in the web UI is TStoreServer, in the hosts file enter the following line:
`172.16.1.1 TStoreServer`
3. Press CTRL+X, then Y and then Enter to exit the nano editor and save the changes.
4. Restart the Tiger Client.

Errors When Entering/Exiting Maintenance Mode

When entering/exiting Maintenance mode, the web UI of Tiger Store may display errors, when in fact the operation has succeeded. To verify that you have entered/exited Maintenance mode, refresh the browser. If on exiting Maintenance mode the error persists, restart the storage server.

Emptying the Trash of a Mac OS X Client

When Tiger Store is deployed in an Active Directory domain and a Mac OS X domain user moves a file from the Tiger Store storage to the Trash of the client computer, that user may fail to permanently delete the file.

You can permanently delete this file either in Terminal on the Mac OS X computer, or from a Windows client.

To permanently delete the file from Terminal on Mac OS X:

1. On the Mac OS X client computer, log on as a user with Full Control on the Tiger Store volume.
2. Start Terminal and navigate to the Tiger Store volume.

Important: *In the volume, navigate to the `.Trashes` folder and in it find the folder that has the same name as the ID of the Mac OS X user whose Trash you want to empty.*

3. **Important:** It is important to double check that you are in the correct directory. You can use the `pwd` command to view the full path and verify the correct directory.
4. In Terminal type this followed by return:

Important: *This command deletes the whole content of the directory you have navigated to in Terminal.*

```
rm -rf *
```

The whole contents of the Trash of the user is permanently deleted.

To permanently delete the file from Windows:

1. On a Windows client computer, log on as a user with Full Control on the Tiger Store volume.
2. On the Tiger Store volume, browse to the **.Trashes** folder.

Note: You may have to unhide the hidden folders on the Tiger Store volume to display the *“.Trashes”* folder.

3. In the **.Trashes** folder, find the folder that has the same name as the ID of the Mac OS X user whose Trash you want to empty.
4. Delete the file from the folder.

Executing Operation on the Tiger Store Volume from Terminal

When Tiger Store is deployed in an Active Directory domain, you won't be able to execute certain operations on the Tiger Store volume(s) from the Terminal of a Mac OS X Tiger Client even if you have logged on as a user that has Full Control. These security mapping issues are not valid for operations performed in the file browser.

Disconnecting from a Shared Volume While Browsing it in Terminal on Mac OS X/Linux

On Mac OS X and Linux, if you attempt to disconnect from a Tiger Store server while browsing its volume(s) in the Terminal, the volume(s) might remain mounted on the Desktop and in the Finder. To be able to disconnect the Tiger Client, in Terminal change the currently browsed directory to one that is not on the shared storage.

No Support for Sparse Files

Tiger Store does not provide support for sparse files on SAN volumes.

Mirrored/Spanned Volumes Mounted Over LAN on Mac OS X and Linux

Currently mirrored/spanned SAN volumes can be mounted on Mac OS X/Linux SAN Tiger Clients only over the LAN. Such volumes are mounted normally on Windows SAN Tiger Clients.

Manually Refreshing the Contents of a Directory

The contents of a directory may not be automatically refreshed on Tiger Clients and some file operations may fail. For instance if a Linux Tiger Client tries to copy a directory that is deleted by a Windows Tiger Client, the Linux computer may not be notified about this, and the copy operation will result in error.

To overcome such problems you may have to manually refresh the contents of the disks/directories you are working with.

NTFS Striped Volumes and Mac OS X

Mac OS X Tiger Clients cannot mount NTFS striped volumes that do not start from the beginning of the disk.

No Support for Spotlight Indexing

Currently, Spotlight Indexing is not supported on Mac OS X Tiger Clients. To index and search through shared volumes from Tiger Clients running Mac OS X, use Spotlight alternatives.

Changing Volume's Icon on Mac OS X

You can change the appearance of a shared volume's icon on a Mac OS X Tiger Client, but the original icon of the volume will be restored immediately after restarting the storage server and your personal icon will be deleted.

Saving FCP Projects on the Shared Volumes

Sometimes Mac OS X Tiger Clients may receive errors when trying to save projects on the shared volumes directly through Final Cut Pro. A workaround for this problem is to save the project on a local disk and then copy it to the shared Tiger Store volume.

Label of SAN Disks Missing in Windows Explorer of Windows 7/Server 2008 R2 Tiger Clients

On some Windows 7/Server 2008 R2 Tiger Clients and on all Windows 8/Server 2012 Tiger Clients, the label of shared volumes mounted over the Fibre Channel is missing in Windows Explorer.

A workaround to this problem is to disconnect and reconnect to the Tiger Store server from the Windows Tiger Client.

Compressing or Encrypting Folders on Shared Volumes

You will not be able to compress or encrypt any folder on a shared volume. If you try to complete any of these operations, the system displays an error message.

No Support for Indexing Service on Shared Volumes

Currently, Tiger Store does not support the Windows indexing service on shared volumes mounted on Tiger Clients.

