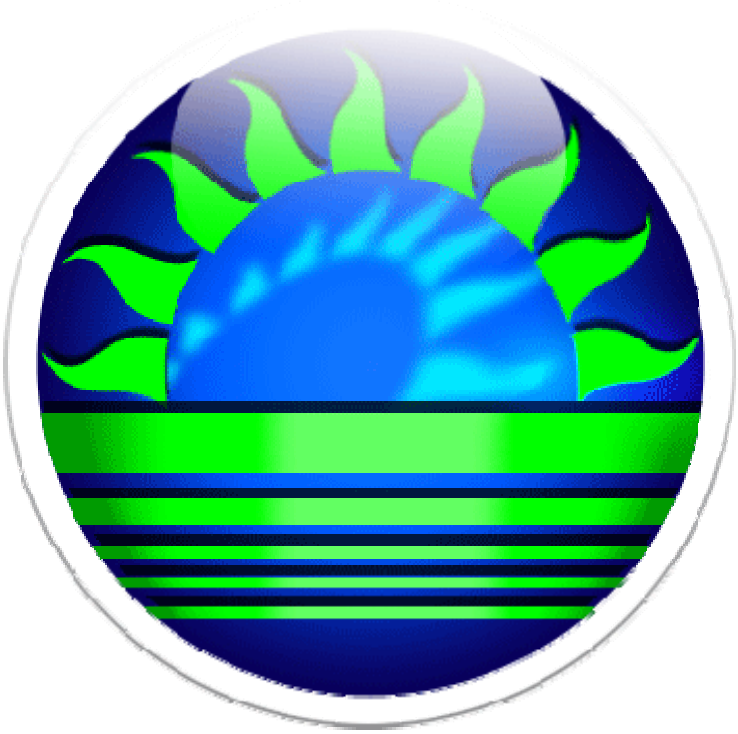


Stellar Phoenix Sun Solaris

User Guide

Version 2.0

Overview

Stellar Phoenix Sun Solaris is a recovery software which recovers data from corrupted or damaged UFS volumes. It actually works on Windows platform. You need to attach the Solaris disk as secondary disk and recover data. This software is compatible with both Solaris Intel and Solaris Sparc platforms.

Stellar Phoenix Sun Solaris mainly provides two types of recovery options - Quick and Advance Recovery, to retrieve data from UFS volumes. You can also recover data from volumes that were deleted to create new volumes. Efficient scanning process will list all UFS volumes that are deleted from disk and data from these volumes can be extracted using recovery options.

You can view status of hard disk and create image of hard disk. Also, image of volumes can also be created by using this software. You can save images and can recover data from them at any time. In addition, you can also create an exact replica of hard disk by using cloning feature of Stellar Phoenix Sun Solaris.

Stellar Phoenix Sun Solaris allows you to resume recovery at any time by using image (.img) files. Two types of image file can be used - scan information file and image of hard disk or volume.

Key Features of Stellar Phoenix Sun Solaris:

- Recovery of data from UFS volumes
- Recovery of deleted volumes
- Recovery of data from deleted volumes
- Restart recovering data by using image files
- Cloning of hard disk
- Image creation of hard disk or volume, in addition, image of selected region of hard disk or volume
- View statistics of hard disk
- Provides disk scanning to check for the bad sectors

- Compatible with Solaris Intel and Solaris Sparc platforms

Installation Procedure

Before installing the software, ensure that your system meets the minimum system requirements.

Minimum System Requirements:

- **Processor:** Pentium Class
- **Operating System:** Windows 2000 / 2003 / XP / Vista/ Windows 7
- **Memory:** Minimum 256 MB of RAM (512 MB recommended)
- **Free space on hard disk:** 30 MB

To install the software:

1. Double-click Stellar Phoenix Sun Solaris **Setup** file **StellarPhoenixSunSolaris.exe** to start the setup process. The Setup - Stellar Phoenix Sun Solaris dialog box opens. Click **Next**.
2. In the License Agreement screen, select **I accept the agreement** option. The Next button will be enabled. Click **Next**.
3. In the Select Additional Tasks screen, check the required check boxes. Click **Next**.
4. In the Select Destination Location screen, provide the path by using Browse button where the setup files will be stored. Click **Next**.
5. In the Start Menu Folder screen, provide the path by using Browse button where the program's shortcuts will be stored. Click **Next**.
6. In the Ready to Install screen, review the settings. Click **Back** to change settings. After confirming the settings click **Install**. The Installing screen shows the installation process.
7. After completing the process, the Completing the Stellar Phoenix Sun Solaris Setup Wizard screen opens. Click **Finish**.

You can clear the Launch Stellar Phoenix Sun Solaris check box to stop the automatic launch of the software.

How to Order?

The software can be purchased by making payments online using a credit card. Please visit www.stellarinfo.com/disk-recovery/unix-solaris-intel/buy-now.php for more information and to place an order.

Alternatively, if the demo version is installed then you can register the demo version. To register the demo version click **About** icon, click **Register** button to start the registration process.

Once the registration is complete, an activation serial number along with activation details is sent through email. This activation serial number is required to register the software.

How to Register?

If the software is downloaded from stellar website (i.e., ESD version), for the full functionality, the product must be registered using Serial Number (received through email after purchasing the product).

If the software is installed using the product installation CD (i.e., BOX version),hardware lock is mandatory for the functioning of the software that is available with the software kit.

After purchasing the software, you will receive the serial number, which is required to register the software. The serial number will be verified during the registration process and if the serial number is valid then the software will be registered.

The software can be registered in different ways. These are the methods by using which you can register the software:

Over internet

You should have the serial number, which is received after purchase of the software. On entering the serial number it is verified by license server and on verification the software will be registered.

Using Email

If the registration of the software by using Online Registration or Manual Activation is not successful then you can still register the software by using email. An email will be send to online-register@stellarinfo.com either automatically or manually by the Stellar Phoenix - Electronic Software Registration wizard. The software will be registered automatically, when Internet connection is available on your computer.

Manual Activation

You will need to generate a PHX_REG.txt file and mail the .txt file to support@stellarinfo.com. After verifying the serial number and purchase details of the software, the site key will be delivered to you at your email address. This site key is used to register the software manually.

Registration Over Internet

To register the software over Internet:

1. Click **About** icon, click **Register** button. The Stellar Phoenix dialog box opens, check the ' ***I have the registration key***' checkbox and select **Online registration** option. Click **OK**, and then click **Yes**.

2. In the Welcome to Stellar Phoenix - Electronic Software Registration wizard, click **Next**.

3. Type the Serial number (received through email after purchasing the product) in the Serial number text box. Click **Next**.

4. The software would automatically communicate with license server and register the software. Click **Finish** to complete the registration process.

- If you do not have the key, check the ' ***I do not have the registration key*** ' checkbox to purchase the software and receiving the registration key.

- If the software fails to register over Internet then an error message will be shown regarding the Casper default value. Click **OK**. Stellar Phoenix dialog box that opens will provide you the option of sending serial number to license server. In reply, license server will send a site key, which is used to register the software manually. Click **Yes** and follow the steps 3 to 7 of manual activation topic to manually register the software.

- In addition, you can generate the PHX_REG.txt file manually by starting the online activation. View manual activation topic to perform the process of generating PHX_REG.txt file.

Registration by Using Email

To register the software by using email

While activating the product over Internet, if the software could not communicate with the server, an error message will popup.

1. Click **OK**, to register through email. The Stellar Phoenix - Electronic Registration Wizard for sending the authorization request will appear.
2. Leave the checkbox **Manually send email** clear and click **Next** to continue.
3. Type your email address in the textbox. The unlocking code will be sent to this email address. Click **Next**.
4. In the Verify Email Address screen, verify the email address you have entered and click **Yes**.
5. If your email client is blocking the process, the following dialog box appears, it depends on your email client here Microsoft Outlook example is given. Click **Yes**, and then click **Finish**.

The software automatically launches the default email client, and sends an email containing your unique site code with registration request to the registration server.

If the registration wizard could not launch the default email client, message will appear. Click **OK**, to continue the process manually.

1. Open your email client (like Outlook Express, MS outlook, Eudora etc) and create a new message.
2. Place the cursor in the box labeled **To** and press **CTRL+V** to paste address. If it does not work, right click on the **To** box and select **Paste** from the popup menu. The **To** box will contain the address. Click **Next**.

3. Place the cursor in the Subject box in the same message window and paste (method same as above) the text. The Subject box will contain the Registration Request text. Click **Next**, do the same process mentioned above to paste the encrypted text content in the body of the message.

4. Click **Next** to finish the procedure. After clicking Finish, click send button in your email client to send the email.

After processing your email, registration server would send you an email containing unlocking code/site-key.

Manual Activation

To register the software by using manual activation process:

1. Click **About** icon, click **Register** button. The Stellar Phoenix dialog box opens, check the **I have the registration key** checkbox and select **Online registration** option. Click **OK**, and then click **Yes**.

2. In the Welcome to Stellar Phoenix - Electronic Software Registration Wizard, click **Cancel**. In the Stellar Phoenix dialog box, click **Yes**.

3. In the Manual Registration screen, enter the serial number, which is received after the purchase of the software. Click **Next**.

4. A PHX_REG.txt file will be created on desktop. Email the text file to the email support@stellarinfo.com address. You can click the link given in the screen to start to automatically compose the email for the given email address. Click **Finished**.

5. After verifying the purchase details, you will receive the site key that is required to register the software by using manual activation.

6. When you receive the site key, open Stellar Phoenix Sun Solaris, Click **About** icon, click **Register** button. The Stellar Phoenix dialog box opens, check the **I have the registration key** checkbox and select **Manual Registration** option. Click **OK**.

7. In the Manual Registration screen, type the **site key**, which is received after sending the PHX_REG.txt file. Click **Validate** to register the software.

User Interface

Stellar Phoenix Sun Solaris software has a very easy to use rich Graphical User Interface. Both, technical and non-technical users can use the software easily.

Main User Interface of Stellar Phoenix Sun Solaris is shown below:

- **Data Recovery Tab**

  This includes four scanning methods: Quick Recovery, Advance Recovery and Search Lost Volume. You can select any one of the method as per your requirement.

- **Resume Recovery Tab**

  This allows you to resume recovery by using image file, which is created by using create image feature of Stellar Phoenix Sun Solaris. You can use scan information file or an image file to restart recovery.

- **Advance Options Tab**

  This provides you features such as Drive Imaging and Drive Status. You can create image of hard disk or volume and create an exact replica of hard disk by using Drive Imaging feature. You can also view the status of hard disk by using Drive Status feature.

- **Recovery Services Tab**

  Provides information about the data recovery services provided by Stellar Information Systems Ltd.

As soon as you launch the software, main user interface appears along with a message box. You need to choose the appropriate option.

Supported File Types for Preview

Stellar Phoenix Sun Solaris software supports preview of file types listed below. This helps user to verify file(s) before actual recovery.

Acrobat Files	:	PDF
Archive Files	:	ARJ, LZH, ALZ, TAR, ZIP, RAR, CAB
Audio Video Files	:	RMI, WAV, WMV, MPG, WMV, WMA, MIDI, AU, MP3, AVI, ASF, MPEG, MID
Backup Files	:	BKF
Database Files	:	MDF, DBF, CSV
Image Files	:	BMP, WBMP, WMF, EMF, JPEG, JPG, JPE, J2K, JP2, JBG, J2C, JPC, PNG, MNG, JNG, JFIF, DIB, GIF, TIF, TIFF, TGA, PCX, PGX, PNM, PGM, PPM, RAS, X3F, PEF, NEF, KDC, K25, ERF, DNG
Internet Files	:	HTM, HTML, SHTML, SHTM, MHTML, XHTML, XHT, PLG
Office Documents	:	DOC, DOT, DOCX, DOTX, XLS, XLT, XLW, XLB, XLSX, XLTX, PPT, PPS, POT, PPTX, PPSX, POTX, RTF
Miscellaneous Files	:	C, PRG, TEXT, CXX, HPP, XML, CC, HH, ASM, JS, PHP, ASP, LIC, DEF, CSPROJ, VCPROJ, SLN, CSS, DSP, DSW, CS, JAVA, INF, INI, LOG, CGI,

JSP, REG, FRM, TXT, CPP, H, BAT

- File types that are not supported for preview are shown in the hex viewer.
- Preview of severely corrupted files is shown in the hex viewer.

Features

Stellar Phoenix Sun Solaris is a very easy to use data recovery software with many features. Anyone can use this software without any prior technical knowledge.

Quick Recovery: Fast and efficient recovery process to retrieve data from damaged or corrupt UFS volume. A quick scan is performed on the selected UFS volume, which list all the recoverable data. You can recover all the necessary data from the list and save at desired location.

Advance Recovery: This process performs an extensive search on the selected volume. Advance recovery option is slow but more efficient in searching lost, corrupted or deleted data.

Search Lost Volume: This recovery option helps you to recover data from lost or deleted volumes of a hard disk. If you have deleted volumes from hard disk and want to recover data from those volume then use this option to search for lost volumes. After finding the lost volume you can recover data by any of the above recovery option.

Resume Recovery using Scan Information File: You can resume data recovery using scan information file, the file which is saved after scanning process at the specified location. The scan information file is saved as an image file (.img). You can save scan information file during any completed or uncompleted recovery process. These image files can be used to restart recovery at any time. Using a scan information file saves time, since, scanning process does not take place.

Resume Recovery using Image File: You can resume data recovery using image file, hard disk or volume image is the image of a hard disk or volume, or selected region of the hard disk or volume that is created by using Drive Imaging feature of Stellar Phoenix Sun Solaris. This image is saved as an image file (.img). When you create an image of hard disk or volume scanning process is not performed, instead,

a copy of the selected hard disk or volume is saved as .img file. You can start recovering data either after completion of drive imaging process or at later time by using resume recovery feature.

Drive Imaging: This will help you to create image of hard disk or volume. In addition, you can create an exact replica of a hard disk.

Create Image: You can make an image file containing an exact, block-by-block copy of every single byte on your hard drive, which you can store on an external drive or CD/DVD. You can also create an image file of selected region. These files can be used to recover data by any of the recovery option. If you find yourself in a data-loss situation, having a disk image of your hard drive(s) can be invaluable.

Clone Disk: This helps you to create exact replica of your drive/volume. Disk cloning is the act of copying the contents of a computer's hard drive. The contents are typically saved as a disk image file and transferred to a storage medium, which could be another computer's hard drive or removable media such as a DVD or a USB drive. Purposes of disk cloning includes system recovery (for example to return a hard drive to its original configuration after serious problems), recreating your system configuration on a new computer etc.

Drive status: This provides you drive information, S.M.A.R.T information and volume information. In addition, it allows you to scan the disk to find bad sectors. This feature shows information of the attached hard disk. The Drive Status box displays model number, serial number, size, temperature, status, S.M.A.R.T feature and firmware revision number of attached hard disk. In addition, S.M.A.R.T information are also listed in the S.M.A.R.T information box. The Drive Information box shows information such as total sectors, sectors per track, number of cylinders and number of heads. The volume Information box shows information of existing logical volumes in the hard disk.

Scan Disk: This will scan hard disk to check whether there are any bad sectors in your hard disk or not. The scanning process shows you the bad sectors that has been developed in hard disk. You can use this feature to view status of your hard disk.

Loading an Image File: You can load hard disk or volume image to perform recovery.

Mask: Mask feature allows you to narrow the scan result. A new tree will be created based on the file extensions when you apply mask.

Find: This can be used to search files from the scan result. This will find and locate the specified file type in the scan list. Press F3 to find the next file.

Save Scan: This helps you to save the result of scanning process. You can restart recovery by using this scan information file later.

Add Filter: Filter feature helps you to save only required files from the selected folder or files. All other files selected for recovery will be excluded if extensions are different.

How To...

Stellar Phoenix Sun Solaris software recovers data from corrupted or damaged UFS volumes. It actually works on Windows platform. You need to attach the Solaris disk as secondary disk and data can be recovered it.

Recover Data

- Quick Recovery
- Advance Recovery
- Search Lost Volumes
- Load an Image File

Resume Recovery

- Using Scan Information File
- Using Image File

Advance Options

- Use Drive Imaging
- View Drive Status
- Scan Disk
- Apply Mask
- Find Files
- Apply Filter
- Save Scan Information
- Specify Destination

View Log Report

Configure Settings

Recover Data

Stellar Phoenix Sun Solaris performs recovery in following ways:

Quick Recovery

Advance Recovery

Search Lost Volumes

Load an Image File

Quick Recovery

Quick Recovery option of Stellar Phoenix Sun Solaris software performs a quick scan on the selected UFS volumes. You can select only one volume at a time for quick scan. This scan method is fast and efficient. You will found almost all data by performing a quick recovery on the selected volume. You can also load an image file to perform quick recovery.

To perform quick recovery:

1. In the Stellar Phoenix Sun Solaris screen, under **Data Recovery** tab, click **Quick Recovery**.
2. All logical volumes that exist in hard disk will be listed. Select a volume and click **Start Scan**.
3. A quick scan will be performed on the selected volume and all files that are found in the selected volume is shown in a three pane structure. In the left pane, a tree structure according to folders is created. Top right pane shows preview of files. In bottom-right pane, all files that are stored in folders are listed. Click a folder to view files stored in that folder. Click a file from bottom-right pane to preview the file.
4. You can select required file(s) from the list and recover it to the specified location. Following are the methods:

    - **To select all files**

      Click *Select All*, and then click *Recover*.

    - **To select individual files**

      Click a folder in the left pane to view files stored in it.

      Check check boxes of file names, and then click *Recover*.

    - **To recover selected folders and files included in them**

Check the folder name check box in the left pane, and then click *Recover*.

5. In the Choose Destination screen, select destination to save files. In addition, you can save files in a compressed zip folder by using Compression Option. Click **OK**.

The selected files will be saved at the specified location. Navigate to the destination to view files.

In addition, Stellar Phoenix Sun Solaris provides few advanced features to simplify recovery process like Mask, Find, Save Scan and Add Filter.

Advance Recovery

Advance recovery option performs an extensive search on the selected volume. This process is slow but more efficient in searching lost, corrupted or deleted data. You will find almost all data from the selected source volume.

To perform advance recovery:

1. In the Stellar Phoenix Sun Solaris screen, Under **Data Recovery** tab, click **Advance Recovery**.
2. In the Select Volume screen, select a volume to scan. Click **Start Scan**.
3. Scanning process will start on the selected volume. All files that are found are shown in a three pane structure. In the left pane, a tree structure according to folders is created. Top right pane shows preview of files. In bottom-right pane, all files that are stored in folders are listed. Click a folder to view files stored in that folder. Click a file from bottom-right pane to preview the file.
4. You can select required file(s) from the list and recover it to the specified location. Following are the methods:

   - **To select all files**

     Click *Select All*, and then click *Recover*.

   - **To select individual files**

     Click a folder in the left pane to view files stored in it.
     Check check boxes of file names, and then click *Recover*.

   - **To recover selected folders and files included in them**

     Check the folder name check box in the left pane, and then click *Recover*.

5. In the Choose Destination screen, select destination to save files. In addition, you can save files in a compressed zip folder by using Compression Option. Click **OK**.

The selected files will be saved at the specified location. Navigate to the destination to view files.

In addition, Stellar Phoenix Sun Solaris provides few advanced features to simplify recovery process like Mask, Find, Save Scan and Add Filter.

Search Lost Volume

If you have deleted volumes from your hard disk and want to recover data from that deleted volumes then you should use this option. This option searches and lists all UFS volumes that are deleted from a hard disk.

When all deleted volumes are listed after scanning process, you can recover data from UFS volumes. You will need to select a volume and start scanning for data in the selected volume. You can choose quick or advance recovery option to recover data from the volume.

You can also save the scan result of Search Lost Volume process. You can use this scan result to resume recovery such that you can recover data at any time from any of the volume that is found after the scanning process. This saves time since there is no need of scanning the entire hard disk again. However, the scan result will only show the volumes that are found during the scanning process if a volume is deleted after the scanning process then that volume will not be listed in the Select Volume screen.

To recover data from deleted volumes of a hard disk:

1. In the Stellar Phoenix Sun Solaris, under **Data Recovery** tab, click *Search Lost Volume*.
2. In the Select Drive screen, all hard disks that are attached to computer are listed. Select a hard disk and click *Start Scan*.
3. The Select Volume screen lists all UFS volumes that are found in the selected hard disk. Select a volume and click *Continue*.
4. Select the recovery option - Quick Recovery or Advance Recovery.

Load an Image File

You can load an image file to restart recovery. Remember to load an image file which is created using Drive Imaging option of Stellar Phoenix Sun Solaris software. If you try to load other image files like scan information file, then you get a message '*Invalid Image*'.

To select an image:

1. Click **Load Image**  icon, to open Open dialog box.
2. Browse and select the required image file. Click **Open**.

Resume Recovery

Resume recovery feature allows you to restart recovery from last saved point by using either

- Scan information file
- Image file

Both, the scan information file and image of a drive are saved as an image file (.img). You should save scan information file and image file of a drive at different locations with proper naming such that you can easily retrieve the required file for restarting recovery.

Using Scan Information File

Scan information file contains the information of a scanning process, which is saved as an image file (.img). You can save scan information file during any completed or uncompleted recovery process. You can use an image file to restart recovery at any time. For example, you saved image file of a scanning process and recovered only some files from that scan result. Later, you want to recover some more files from the same drive. You can use the saved image file to restart recovery.

Using a scan information file saves time, since, scanning process does not take place. All files and folders that are shown in earlier scanning process will be shown on loading an image file. In addition, if you have performed scanning process but not saved any files then you can use image file to restart recovery at any time.

To resume recovery by using scan information file:

1. Click **Resume Recovery** tab and then click **Browse**.
2. In the Open dialog box, locate and select the scan information file (.img), and then click **Open**.
3. Click **Continue**, all folders and files are listed in the Data Recovery screen. Recover required files.

Using Image File

Hard disk or volume image is the image of a hard disk or volume, or selected region of the hard disk or volume that is created by using Drive Imaging feature of Stellar Phoenix Sun Solaris. This image is saved as an image file (.img). When you create an image of hard disk or volume scanning process is not performed, instead, a copy of the selected hard disk or volume is saved as .img file. You can start recovering data either immediately after completion of drive imaging process or later by using resume recovery feature.

When you select an image of a hard disk than all volumes that exists in that hard disk image are listed in the Select Volume screen. You will need to select a volume from the list and select Quick Recovery or Advanced Recovery.

To resume recovery by using hard disk image:

1. Click **Resume Recovery** tab, and then click **Browse**.
2. In the Open dialog box, locate and select the image file of a hard disk, and then click **Open**.
3. Click **Continue**, In the Select Volume screen, click on a volume name to select the volume and, then click **Start Scan**. Select either - Quick Recovery or Advanced Recovery.
4. All folders and files will be listed in the Data Recovery screen. Recover required files.

To resume recovery by using volume image:

1. Click **Resume Recovery** tab, and then click **Browse**.

2. In the Open dialog box, locate and select the image file of a volume, and then click **Open**.
3. Click **Continue** and then select either - Quick Recovery or Advance Recovery.
4. All folders and files are listed in the Data Recovery screen. Recover required files.

Drive Imaging

Drive Imaging will help you to create image of hard disk or volume, which can be used to recover data at any later point of time. In addition, you can create an exact replica of a hard disk.

To use Drive Imaging option:

In the Stellar Phoenix Sun Solaris screen, Under **Advance Options** tab, click **Drive Imaging**.

Drive Imaging consists of:

Create Image: You can make an image file containing an exact, block-by-block copy of every single byte on your hard drive, which you can store on an external drive or CD/DVD. You can also create an image file of selected region. These files can be used to recover data by any of the recovery option. If you find yourself in a data-loss situation, having a disk image of your hard drive(s) can be invaluable.

Clone Disk: This helps you to create exact replica of your drive/volume. Disk cloning is the act of copying the contents of a computer's hard drive. The contents are typically saved as a disk image file and transferred to a storage medium, which could be another computer's hard drive or removable media such as a DVD or a USB drive. Purposes of disk cloning includes system recovery (for example to return a hard drive to its original configuration after serious problems), recreating your system configuration on a new computer etc.

Create Image

You can create image of a hard disk or volume by using Stellar Phoenix Sun Solaris. You can create image of entire or selected region of hard disk or volume and save them as .img file by using Create Image feature of Stellar Phoenix Sun Solaris. The image of both sources are saved as .img file. This .img file is of same size as of the source. You can use image files to restart recovery later. Ensure that the location where image file needs to be saved has sufficient space to store the image file.

In case of selected region, you need to specify starting and ending sectors of the selected source. You can use this image file for resuming recovering at any time.

To Create Image of entire hard disk or volume:

1. Under **Advance Options** tab, click **Drive Imaging**.
2. In the **Drive Imaging** screen, click **Create Image**.
3. In the Select Drive\Volume screen, select hard disk from Drive List or a volume from Logical Volume list. Click **Continue**.
4. In the Save As dialog box, locate the destination where image file should be saved. In the File Name text box, type a name. Click **Save**.
5. The Disk Image Creation shows the image creation process. When the image is successfully created, a message appears. Click **OK**.

You can click **Continue** to start recovering files from the newly created image or use this image file to start recovery later by using resume recovery option.

If you have created an image of a volume then on clicking Continue you can perform either Quick Recovery or Advance Recovery on the newly created image.

If you have created an image of hard disk than all the volumes that are existing in the selected hard disk will be shown. You will need to select a volume and then start recovery by using Quick Recovery or Advance Recovery on the newly created image

To Create Image of Selected Region of hard disk or volume:

1. Under **Advanced Options** tab, click *Drive Imaging*.
2. In the **Drive Imaging** screen, click **Create Image**.
3. In the Select Drive/Volume screen, select either hard disk from Drive List or a volume from Logical Volume list.
4. Click **Select Region**  icon. In the Select Specified Region screen, drag the sliders to define starting and ending sectors of the image file. Click **OK**, and then click **Continue**.
5. In the Save As dialog box, locate the destination where image file should be saved. In the File Name text box, type name. Click **Save**.
6. The Disk Image Creation shows the image creation process. When the image is successfully created, a message appears. Click **OK**.

You can click **Continue** to start recovering files from the newly created image or start recovery later by using resume recovery option.

If you have created an image of a volume then on clicking Continue you can perform either Quick Recovery or Advance Recovery on the newly created image.

If you have created an image of hard disk than all the volumes that are existing in the selected hard disk will be shown. You will need to select a volume and then start recovery by any of the recovery option. However, if there is no volume is shown than still you can search lost or deleted volumes by using **Search Lost Volume** feature. Click on Search Lost Volume icon to start scanning for lost or deleted volume. After scanning process volumes, if found, will be shown in the Select Volume screen. Select a volume and start recovering data from that volume.

Clone Disk

Cloning option of Stellar Phoenix Sun Solaris allows you to create an exact replica of a hard disk. You will need to attach another hard disk for cloning a hard disk. The size of the destination hard disk should be same or greater than the source hard disk.

To clone a hard disk:

1. Under **Advance Options** tab, click **Drive Imaging**.
2. In the Drive Imaging screen, click **Clone Disk**.
3. In the Disk Cloning screen, click ***Source Disk*** list box to select source disk drive. Click **Target Disk** list box to select destination disk drive.
4. Click **Start Cloning**.

Destination drive should be equal or greater than the source drive.

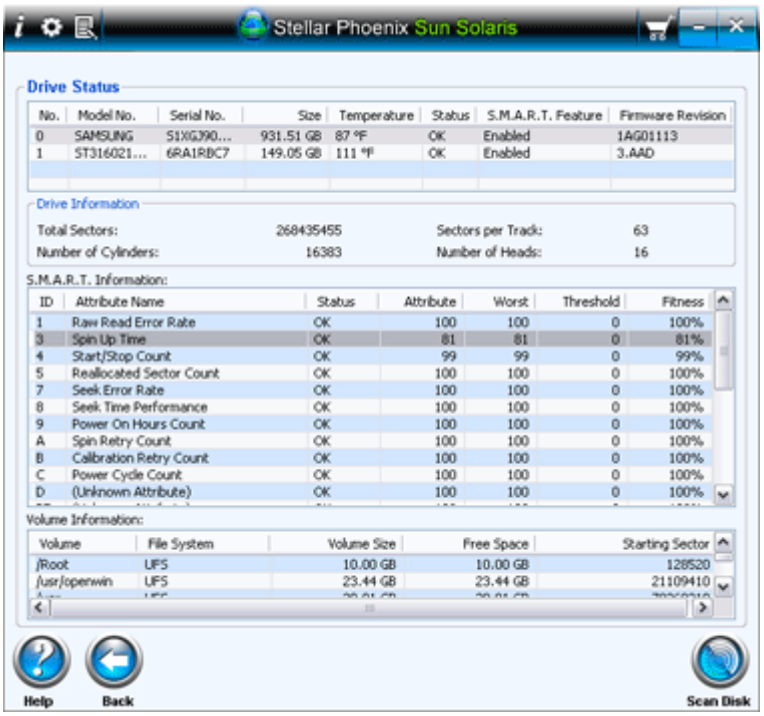
View Drive Status

The drive status feature of Stellar Phoenix Sun Solaris shows information of the attached hard disk. The Drive Status box displays model number, serial number, size, temperature, status, S.M.A.R.T feature and firmware revision number of attached hard disk. In addition, S.M.A.R.T information are also listed in the S.M.A.R.T information box.

The Drive Information box shows information such as total sectors, sectors per track, number of cylinders and number of heads. The volume Information box shows information of existing logical volumes in the hard disk.

To view hard disk status:

1. Under **Advance Options** tab, click **Drive Status**.
2. The Drive Status screen shows all information related to selected hard disk.


Stellar Phoenix Sun Solaris
Drive Status
No. Model No. Serial No. Size Temperature Status S.M.A.R.T. Feature Firmware Revision
0 SAMSUNG S1XGJ90... 931.51 GB 87 °F OK Enabled 1AG01113
1 ST316021... 6RA1RBC7 149.05 GB 111 °F OK Enabled 3.AAD
Drive Information
Total Sectors: 268435455
Sectors per Track: 63
Number of Cylinders: 16383
Number of Heads: 16
S.M.A.R.T. Information:
ID Attribute Name Status Attribute Worst Threshold Fitness
1 Raw Read Error Rate OK 100 100 0 100%
3 Spin Up Time OK 81 81 0 81%
4 Start/Stop Count OK 99 99 0 99%
5 Reallocated Sector Count OK 100 100 0 100%
7 Seek Error Rate OK 100 100 0 100%
8 Seek Time Performance OK 100 100 0 100%
9 Power On Hours Count OK 100 100 0 100%
A Spin Retry Count OK 100 100 0 100%
B Calibration Retry Count OK 100 100 0 100%
C Power Cycle Count OK 100 100 0 100%
D (Unknown Attribute) OK 100 100 0 100%
Volume Information:
Volume File System Volume Size Free Space Starting Sector
/Root UFS 10.00 GB 10.00 GB 128520
/usr/openwin UFS 23.44 GB 23.44 GB 21109410
Help
Back
Scan Disk

Scan Disk

You can scan hard disk to view that whether there are bad sectors exist in your hard disk or not. The scanning process shows you the bad sectors that has been developed in hard disk. You can use this feature to view status of your hard disk.

To scan hard disk:

1. Under **Advance Options** tab, click **Drive Status**.
2. In the Drive Status screen, click **Scan Disk**. Bad blocks are shown in red color, if any, found in hard disk.

Apply Mask

Mask allows you to narrow the scan result. After completion of scanning process, all scanned files are listed in a tree structure. You can apply mask to create a new tree structure from the existing tree structure according to file types. The new tree structure will only contain the specified file types. For example, you want to view and recover only Word documents. Scanning process shows you all created files in a tree structure. You can apply mask to create a new tree structure that will contain only Word documents.

You can view the original tree structure that is created after scanning process by removing mask. Removing mask will automatically shows the original tree structure that was shown after scanning process.

To apply mask:

1. When the scanning process is completed, click **Mas**k.
2. In the Set File Mask screen, define values
    - **Files of type:** Type the extension of required files such as .doc, .avi in the textbox. The new tree will only contain files that are specified in this box.
    - Check the required checkboxes:
        - **Match Case:** to search according to the typed text
        - **Deleted File:** to search the typed text in deleted files' name
        - **Existing Files:** to search the typed text in existing files' name
    - **Size from (KB):** to search files according to file size. Type the limits in textboxes.
    - **Date:** To search files according to date
        - *Date list box:* select any of the three option from date list box - Created Date, Last Access Date, Modified Date

- *in the last months:* specify number of months in this box
- *in the last days:* specify number of days in this box
- *between:* specify time period

3. Click **OK**. A new tree structure will be shown according to the values defined in mask screen.

You can define one or all values in Mask screen.

To remove mask:

- Click **Unmask** icon. This will automatically show the original tree structure.

Find Files

You can search files in the list of files shown after scanning process. If you want to recover specific files from the list of scan result you can use Find feature. This feature provides you various options for searching required files.

To search files:

1. In the Data Recovery screen, click **Find**.
2. In the Find screen, type text in the *Enter file type(s) delimited by semi-colon*s textbox. Check/Clear the *Deleted File*, *Match Case* and *Existing Files* checkboxes such that typed text should be searched in these file names. Click **Search Now**.
3. File that contains the typed string will be highlighted in the Data Recovery screen. Press F3 to highlight the next file that contains the same or relative text.

Advanced Options

Advanced option of Find feature enables you to search files according to the date criteria and size of file. You can define size of file in KB textbox such that, search should be performed on the basis of defined size. You have two option for size, either the file should not exceed the defined size or at least of the defined size.

Date search provides you three options- *Last Access Date*, *Last Modified Date* or *Created Date* for searching required file. Select Last Access Date to search file according to the date when file is accessed last time. Select Last Modified Date to search file according to the date when file is modified last time. Select Created Date to search file according to the creation date of file. In addition, you can specify number of days, number of months or time interval for any of the selected date option.

To search files by using advanced options:

1. In the **Find** screen, click **Advanced**.

2. Check either

   - **Size Checkbox**

     Select this checkbox to search required file according to its size. Click **Size** listbox and select either at least or at most option. Type numeral number in the KB textbox.

   - **Date Checkbox**

     Select this checkbox to search required file according to date. In the **Date** listbox, you can select any of the option - *Created Date*, *Last Access Date* and *Modified Date* from date listbox. After selecting the required option, select any of the option - in the last month to specify number of months, in the last days to specify number of days and between to specify a time interval. Use up and down button to increase or decrease numbers or type in boxes.

3. Click **Search Now**. The file, if found, will be highlighted in the Data Recovery screen.

- You should specify text in the **Enter file type(s) delimited by semi-colons** textbox to enable the **Search Now** button.

- You can also apply **Size** and **Date** options in a single search.

Apply Filter

Filter allows you to select files on the basis of extensions. You can include and exclude files by applying filter. Scanning process shows every file that is found during the process. You can apply filter to save only required files.

For example, in the Data Recovery screen, you have selected a folder that have different file types such as doc, avi, mp3. Click **Recover**. In the choose Destination box, click **Add Filter**. In the *Enter File Basis* box, type an extension such as .doc. Click **Add**, and then click **Include**. Specify the destination and click **OK**. Files that are having the .doc extension will only be saved. All other files that exists in the folder for recovery will be excluded.

Filter feature saves only files that has matching extension as added in the Add File Filter box. All other files selected for recovery will be excluded if extensions are different.

To apply filter:

1. When scanning process is completed, select folders or files that need to be recovered. Click **Recover** icon, and in the Choose Destination box, click **Filter**.
2. A list of extensions categorized according to file types is available in drop-down box.
3. Select a group from **Enter Filter basis** listbox. Click **Add**. All extensions under that group will be listed in bottom box.

    - **Remove:**

      This option removes the selected extension from the left pane. Select an extension and click Remove. Files that are having the same extension will not be included when you save recovered files.

    - **Include:**

      This option includes the selected file extension. Select an extension from left-pane and click Include. Files that are having the same extension will only be included when you save recovered files. All files with extension other than the selected extension will not be included when you save recovered files.

- **Exclude:**

  This option excludes the selected file extension. Select an extension from left-pane and click Exclude. Files that are having the same extension will excluded when you save recovered files. All files with extension other than the selected extension will be included when you save recovered files.

You can also add a file extension other than the available extensions. Type in the **Enter File Basis** listbox and click **Add**.

Files that are selected for recovery will be filtered on applying filter. Only those files will be saved that has matching extension as added in the Enter File Basis box. All other files that are selected for recovery will be excluded if their extension is different from extensions added in the Enter File Basis box.

Save Scan Information

You can save scan result of any scanning process as an image (.img) file. You can save scan result of a complete or incomplete recovery process. If you stopped a scanning process, you can save scan information up to that point. However, you should perform complete scan, and then save scan result.

Saving scan information saves your time. Since, you will not need to scan the same drive again. You can resume recovery by selecting the image file.

To save scan information:

1. Click **Save Scan**.
2. In the Save scan information dialog box, browse to the location where image file should be saved. Type the name of the image file in the File name textbox. Click **Save**.

You will also be prompted to save scan information when you click Back button or close Stellar Phoenix Sun Solaris after a scanning process.

Specify Destination

You can save recovered files either to local hard disk or to a File Transfer Protocol (FTP) server. You can also apply compression option to recovered files.

- **To save recovered files to local hard disk**

  1. Select **Recover to local drive** option.
  2. Click ***Browse*** to specify the location where files should be saved. Click **OK** twice.

- **To save recovered files to FTP server**

  1. Select **Recover to FTP server** option. Click **FTP** Option.
  2. Provide the required values such as Server Name/ IP Address, Port No., Username and Password.
  3. Click **Browse**, select a folder and click **OK** three times.

Applying Compression

You can save recovered files in compressed zip folders. However, you can only apply compression if recovered files are saving to local disk drive.

To apply compression option:

Check the **Create compressed file** checkbox. Select:

Compress each file individually - This option saves all selected file in their corresponding zip folder.

Compress to a single file - This option saves all recovered files in a single zip folder.

View Log Report

You can view, save and clear log report of Stellar Phoenix Sun Solaris processes. Log file is saved as .txt file.

To view log report

Click  , to open log viewer. All details of Stellar Phoenix Sun Solaris process are listed in this window.

To save log report

- Click  , to open log viewer.
- Click **Save Log**. In the Save As dialog box, type a name for the text file in File name textbox. Locate the destination where .txt file should be saved. Click **Save**.

To clear Log

Click  , to open log viewer. Click **Clear Log**.

Configure Settings

General Settings

To configure general settings of Stellar Phoenix Sun Solaris:

In the Stellar Phoenix Sun Solaris screen, click **Settings**  icon. Under **General Settings** tab, configure general options:

- **Disk Temperature:** select either Fahrenheit or Celsius. The disk temperature will be shown in the selected unit when you view the Drive Status.
- **Show 'Tip of the Day' checkbox:** check this checkbox to view tip at software startup
- **Check for 'Latest Updates' at startup:** check this checkbox to receive latest updates for the software
- **Log Settings:** check the Save log before closing application checkbox to automatically save log of processes. Click Browse to specify the destination where log files should be saved.
- **Scan Settings:** Use arrows to increase or decrease the number of read attempts. Scanning process will try to scan the hard disk up to the number of attempts specified in this box.

Manual Activation

You can register the software by clicking **Manual Activation** tab under Settings box. In the Stellar Phoenix Sun Solaris screen, click **Settings**  icon, in the Settings screen, click **Manual Activation** tab. Type the site key, received after successful purchase of the software, in the Enter Site Key textbox and click **Validate**. For more information view manual activation topic.

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Stellar Phoenix Sun Solaris

Technical Support

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Support Help line

Monday to Friday [24 Hrs. a day]

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- Chat Live with an Online technician
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- Submit Enquiry (If our Knowledge Base does not answer your question)

About Stellar

Stellar Information Systems Ltd. is a trusted name in the field of Data Recovery and Data Protection Software for more than a decade.

We provide the widest range of Data Recovery Products. Our range includes Data Recovery Software for almost all Operating Systems and File Systems.

Product line:

Data Recovery

A widest range of data recovery software that helps you recover your valued data lost after accidental format, virus problems, software malfunction, file/directory deletion, or even sabotage!. More Info >>

File Recovery

The most comprehensive range of file undelete and unerase software for Windows and MS office repair tools. More Info >>

E-mail Recovery

A wide range of mail recovery, mail repair and mail conversion applications for MS Outlook, MS Outlook Express and MS Exchange useful in instances of data loss due to damages and corruption of E-mail. More Info >>

Data Protection

A wide range of Prevent Data Loss, Data backup and Hard Drive Monitoring Applications to ensure complete data protection against hard drive crash. More Info >>

Data Sanitization

Data cleanup and file eraser utility can delete selected folders, groups of files, entire logical drives, System Traces & Internet traces. Once the data have been removed using Stellar Wipe - Data File eraser utility, it is beyond recovery limits of any Data Recovery Software or utility. More Info >>

For more information about us, please visit www.stellarinfo.com

FAQs

1. How do I recover data from drive having BAD sectors?

   The best way to recover data from drives having bad sector, is to clone the drive or to create disk image of the drive and then process cloned drive or created image, this eventually helps in ignoring the bad sectors and avoids continuous read attempts directly on the disk in real-time situation. The less number of read attempts ensures no further increase in bad sectors and no further loss of data.

2. What all precautions should I follow before and during restoring data?

   When you delete any file, Operating System considers deleted files as just unused space on the drive. When any writing request is sent to the operating system, there is always a high probability of losing these files forever by overwriting them. Therefore :

   1. Do not write anything to the drive containing deleted files.
   2. Do not run any disk utilities such as chkdsk or any defrag utility.
   3. First do not try to reboot the system, even in case system has rebooted, try not to initiate the chkdsk process and ignore it.
   4. Do not download or install any software, download and install them to another drive or healthy partition.
   5. Do not recover files or create disk images into the drive that contains deleted files.

   You should rather create a disk image of the drive containing deleted files and then recover data from this disk image.

3. *Where can we save recovered files?*

   The recovered data can be saved to any drive which is accessible by your operating system.
   - To any attached local hard drive having valid partition.
   - To any mapped network drive.

- To a FTP server.
- To any USB or removable storage media.