



ConfigSafe[®] Technology Overview

An In-Depth Overview of ConfigSafe for Systems Manufacturers

Presented by:



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About the Technology Overview

The ConfigSafe Technology Overview provides in-depth information about using ConfigSafe. It goes hand in hand with the ConfigSafe Implementation Guide, which provides background and market information, along with implementation guidelines. Product evaluators should review the Technology Overview, while the Implementation Guide is very useful for understanding how ConfigSafe can meet your organization's needs.

We hope that you find the overview useful in your evaluation, and we welcome any suggestions that you have for additional information that should be included in the guide.

Contact Information

For more information about ConfigSafe, please contact us at the following:

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What is ConfigSafe?

ConfigSafe is a configuration tracking and recovery tool for Windows® PCs. It tracks changes to configuration files and system information, and enables one-step restoration to working configurations. Some key functions include:

Track Configuration Changes

ConfigSafe tracks changes to a system configuration, tracking all critical information such as file, system, drive, Registry, and system asset information.

Report Configuration Changes

System changes between any two periods of time can be displayed using ConfigSafe. Changes are identified with the use of easy to read symbols and colored text. The reporting capabilities simplify the task of finding out exactly what has changed on a system. In fact, ConfigSafe can show the changed lines only, making troubleshooting problem PCs a breeze.

Restore to Previous Configuration

ConfigSafe allows you to restore a system to a previously working configuration. The Restore capabilities provided by ConfigSafe are particularly useful for systems that "worked yesterday, but don't work today."

ConfigSafe Product Family

The ConfigSafe family of products consists of ConfigSafe Desktop Edition, ConfigSafe Preload Edition and ConfigSafe Network Edition.

ConfigSafe Desktop Edition

ConfigSafe Desktop Edition is designed for use on any system. It provides ConfigSafe capabilities in a standalone fashion, and does not provide the ability to take advantage of network resources. It is ideal for non-networked PCs, such as small or home offices, mobile or field users, and for use in support organizations.

ConfigSafe Preload Edition

ConfigSafe Preload Edition is a special version designed for OEMs and integrators. The Preload Edition provides the same extensive level of configuration tracking as the standard ConfigSafe Desktop Edition, but enables the OEM or integrator to define which items are tracked prior to preload, and disables the ability for the end user to alter these settings. The Preload Edition has some enhancements and limitations from ConfigSafe Desktop Edition. The differences are as follows:

- **EZ Interface.** The EZ interface is a simplified interface provided to OEMs. It provides easy access to the most common ConfigSafe functions. In addition, the advanced (or standard) interface that is the default interface for ConfigSafe Desktop Edition can be accessed from the EZ interface main window.

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- **Profile Limitations.** The Preload Edition has several limitations, as follows:
 - a) **No Profile Editing.** Users will be unable to customize Profiles to track additional files, directories, Registry keys or system assets that are not currently tracked in a Snapshot. Instead, the OEM or integrator defines this information prior to preload.
 - b) **No Multiple Profile Capability.** Users will not be able to create multiple Profiles for tracking different types of information in different Snapshots. (For example, if a user wanted to have an additional profile that tracked changes to their Internet browser or other software programs).
 - **System Asset Limitations.** ConfigSafe Preload Edition currently tracks changes to the Windows desktop only. It does not support the tracking/comparison of additional system assets through the use of directory or wildcard specification (this feature is available in ConfigSafe Desktop Edition).

ConfigSafe Network Edition

ConfigSafe Network Edition is a valuable product for servers and other networking products. ConfigSafe Network Edition is designed to take advantage of network resources, and provides central manageability and administration, which is ideal for corporate IS departments.

The product consists of a Network Manager and LAN Client software. The Network Manager controls the LAN Client license distribution, enables central management of ConfigSafe functions, and provides disk space savings by utilizing network resources. The LAN Client software provides users with the ability to take on-demand or scheduled Snapshots, and to manage, compare, report on and restore Snapshots.

ConfigSafe Network Edition provides all of the capabilities of ConfigSafe Desktop Edition, plus:

- ◆ Shared program, Snapshot and Profile folders
- ◆ Asset tracking and recovery features are expanded to include local and network folder tracking and archiving. This is accomplished by specifying filters or wildcard searches. This feature can also be used to schedule automatic backups of critical files.
- ◆ Tracks licenses and users/systems
- ◆ Automatically adds/deletes users upon client installation/deletion of ConfigSafe.
- ◆ Compare any two snapshots from different systems over a network. This eliminates the need to import/export snapshots from different systems.
- ◆ Provides central management functions, such as:
 - ◆ Delete clients
 - ◆ Manage Profiles, Snapshots and scheduling from central administrator
- ◆ Command line parameter functions enable further customization
- ◆ One-step software updates for all ConfigSafe clients

This guide first addresses ConfigSafe Preload Edition technology. Additional features that are enabled in the ConfigSafe Desktop Edition are denoted within the Preload Edition section. Following the Preload Edition section is some additional content on ConfigSafe Network Edition, to cover differences or extra functionality provided in the product.

System Requirements

ConfigSafe Preload & Desktop Edition Requirements

- Microsoft Windows 95/98 or Windows NT version 3.51 or higher
- VGA color monitor
- 4 MB of system memory
- 5 MB of disk space

ConfigSafe Network Edition Requirements

Requirements for Network Manager

- Windows 95/98 or Windows NT version 3.51 or higher
- VGA color monitor
- 4 MB system memory
- 5 MB of disk space

Requirements for LAN Clients

- Windows 95/98 or Windows NT version 3.51 or higher
- VGA color monitor
- 4 MB system memory
- 5 MB disk space (on the disk designated for Snapshot storage)

Installation and Operation on Windows NT Systems

When installing any version of the ConfigSafe software on Windows NT systems, the following privileges should be enabled:

- Back up files and directories privileges
- Managing and auditing security log
- Restore files and directories

Designed for Windows 2000

A Windows 2000 compatible version of ConfigSafe will be available coincident with the release of Windows 2000.

Common Definitions and Terms

We've provided a "short list" of some of the basic ConfigSafe terms and definitions. This will help to familiarize you with common ConfigSafe terminology before you delve into the more detailed step-by-step usage sections. These are not provided in alphabetical order, but rather in terms of relevance.

Snapshot.



A Snapshot represents the periodic or on-demand capturing of a system's configuration information. ConfigSafe keeps track of system changes by taking and storing system Snapshots, and they are used to generate change comparison reports.

Profile.



A configuration Profile details the specific configuration files, directories, Registry keys, and System Assets to be captured when generating a ConfigSafe Snapshot. The default configuration Profile is called "System Snapshot" and it is generated upon installation of ConfigSafe. The ConfigSafe Preload Edition has a pre-defined Profile that an OEM determines prior to preload. This Profile cannot be changed once it has been installed on a system.

Report.



Report creates a comparison report of the configurations captured in two different Snapshots, or between a Snapshot and the system's current configuration. Reports can be viewed online, printed, and saved as text files.

Restore.



Restore allows you to select a previously taken system Snapshot and return your system to that configuration. The Restore feature is commonly used if a system no longer functions properly. Users can also restore from MS-DOS mode using SOS.EXE on Windows 95/98 and some NT configurations.

Undo.



Undo allows you to reverse the results of a Restore process and return to the configuration in place just prior to using Restore. Undo can also be run from MS-DOS mode in a Windows 95/98 environment.

Now that you have reviewed and understand the basic terms and definitions, you are ready to take a closer look at ConfigSafe.

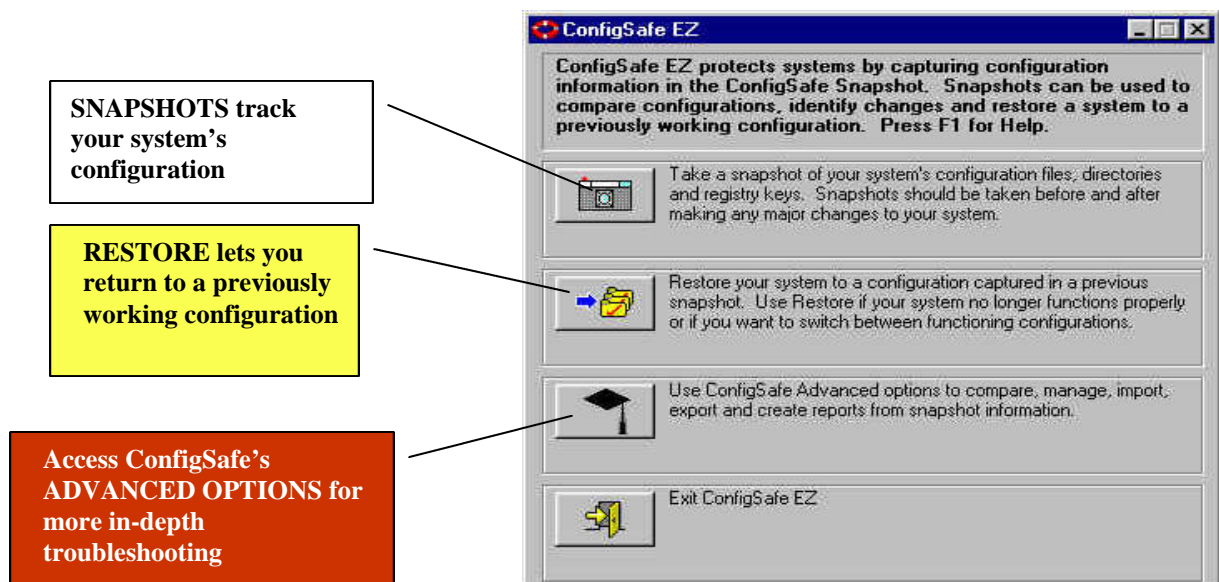
CONFIGSAFE PRELOAD EDITION

User Interface - EZ

As you can see in the screen shot below, the ConfigSafe EZ interface is designed for the novice user: very simplistic and user-friendly.

The two most often used functions are **Snapshot** and **Restore**. Both of these functions can be accessed from the EZ interface. You can also go to the ConfigSafe standard interface by clicking on the **Advanced Options** button, and you can **Exit** ConfigSafe by selecting the Exit button.

In addition, descriptive text next to each button helps users understand what each button does and when to use them.



If you click on the Advanced Options button, you will be brought to the ConfigSafe Standard interface, which is shown next.

User Interface - Standard

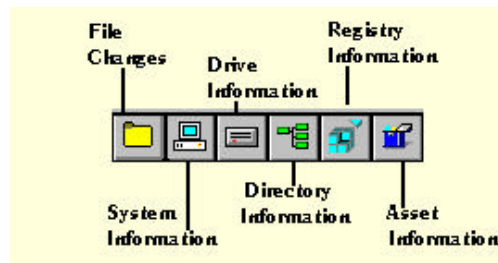
The Standard interface allows you to operate the full set of ConfigSafe features. In addition to the Snapshot and Restore features that can also be accessed through the EZ interface, you can use the Manage and Reporting capabilities, use the Undo feature, and view on-screen configuration comparisons.

The screenshot shows the 'ConfigSafe : Configuration File Changes' window. It features a toolbar with icons for Exit, Snapshot, Manage, Report, Profile, Restore, Undo, and Help. The main area displays 'Changes Starting' and 'Changes Ending' dates, a list of files (C:\WINDOWS\PROTOCOL.INI, C:\WINDOWS\SYSTEM.INI, C:\WINDOWS\WIN.INI, C:\AUTOEXEC.BAT), and a list of changes. Callout boxes provide the following information:

- SNAPSHOTS** track your system's configuration
- MANAGE & REPORT** features let you organize and schedule snapshots, and generate comparison reports
- Define & manage information tracked through **PROFILES**
- RESTORE** lets you return to a previously working configuration
- UNDO** returns a system to its previous configuration prior to a Restore

Information Categories

Because there is so much information tracked, the comparisons cannot be displayed on-screen all at one time. Instead, ConfigSafe provides icons that represent each major piece of system information that ConfigSafe tracks, as shown below.



An icon on the main screen represents each category of system information that ConfigSafe tracks.

Clicking on each icon will display a comparison report for that category of information.

Below is a chart of the information represented in each category.

Information Category	Definition
File Changes	Identifies changes to system, network, multimedia configuration files and more.
System Information	Identifies the installation, upgrade, or removal of key system software components, such as: <ul style="list-style-type: none"> • Coprocessor • Base memory • Windows version • Processor vendor • Processor type
Drive Definitions	Identifies changes to drive information, such as: <ul style="list-style-type: none"> • Drive definitions • Free space • Network connections • CD-ROM or zip drive installations
Network Connections	Identifies changes a user has made to their network connections, e.g. they added or removed a network connection, or redirected a drive to another server.
Directory Structure	Tracks any changes to a user's directory structure.
Registry Information	Tracks changes to important sections of Windows 95/98 or Windows NT Registry. By default, it tracks the entire Registry.
System Assets	Customize items tracked, such as: <ul style="list-style-type: none"> • Windows Desktop • Other items defined by directory or wildcard characters (Desktop Edition only)

Changes Starting/Ending Windows

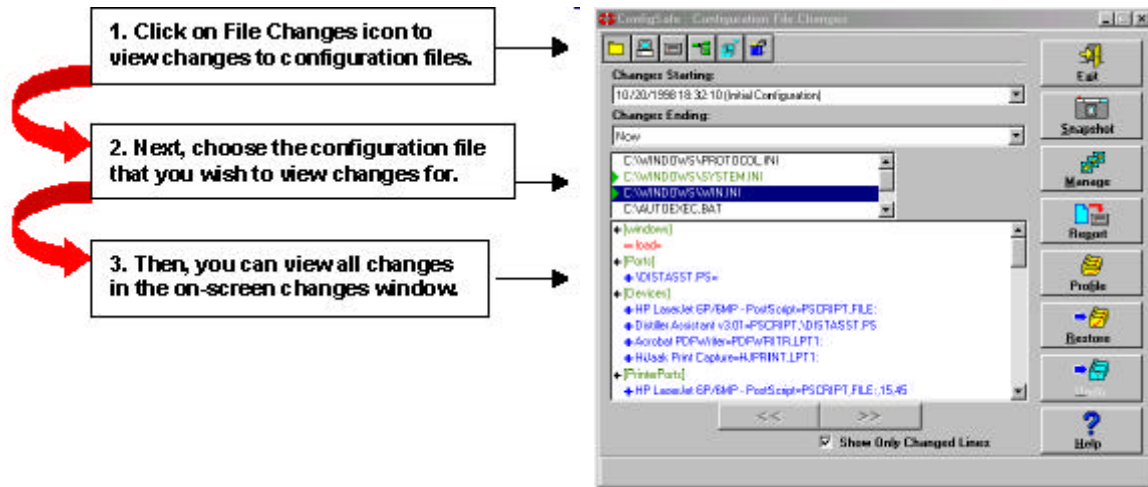
The Changes Starting and Changes Ending windows are used to select the dates for which a comparison will be made. Drop-down lists are provided that let you choose a Snapshot to use for the Changes Starting date, and whether to compare the chosen Snapshot against another Snapshot, or against the current configuration (Now). For example, in the screen below an on-screen comparison will be generated that shows the changes to the system made between October 20, 1998 and the current date/time.

The screenshot shows a window with two dropdown menus. The first is labeled 'Changes Starting:' and has a dropdown arrow next to the text '10/20/1998 18:32:10 (Initial Configuration)'. The second is labeled 'Changes Ending:' and has a dropdown arrow next to the text 'Now'.

On-screen Comparison Reports

To view changes between two Snapshots or a Snapshot and the current configuration, simply select the parameters in the Changes Starting and Changes Ending windows, then click on each of the ConfigSafe icons. Changes for that category will be displayed in the on-screen changes window.

In the example below, we've selected the File Changes icon. To view changes for this information category, you must first select the file you wish to compare. As you can see, we've chosen the WIN.INI file. All changes to the WIN.INI file since October 20th are displayed in the on-screen changes window.



Easy to understand colored text is used to help point out the changes. Changes are shown in **GREEN**, additions in **BLUE**, and deletions in **RED**.

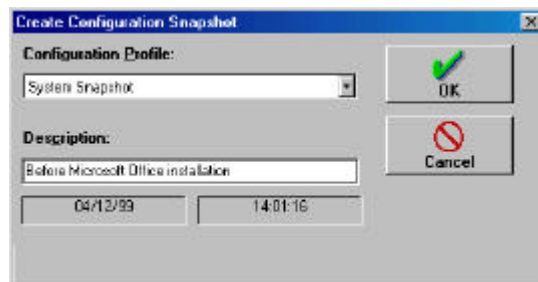
In addition, ConfigSafe provides the option to show only the changed lines (by clicking on the Show Only Changed Lines checkbox), which lets you view all of the changes in a condensed format.

By clicking on the other ConfigSafe icons (drive, system, directory, Registry, and Assets), you can view changes that have occurred to those categories for the dates you selected in the Changes Starting and Changes Ending windows.

Taking Snapshots

Snapshots represent the periodic or on-demand capturing of a system's configuration information. This information is captured and saved, enabling a comparison of changes over time, or to restore a system to a specific configuration that has been previously captured in a Snapshot. You can take Snapshots by clicking on the Snapshot button. Snapshots should be taken prior to and after making any changes to a system. Snapshots can also be taken automatically, either through the Install Guard feature or through Snapshot Management options. Scheduled Snapshots are set up through the Manage screen, which is discussed in a subsequent section.

When you press on the Snapshot button, you are taken to the *Create Configuration Snapshot* screen.



Take Snapshots before installing new hardware or software. These Snapshots help to protect systems from problems that occur from faulty installations.

On this screen, you will see the following pieces of information:

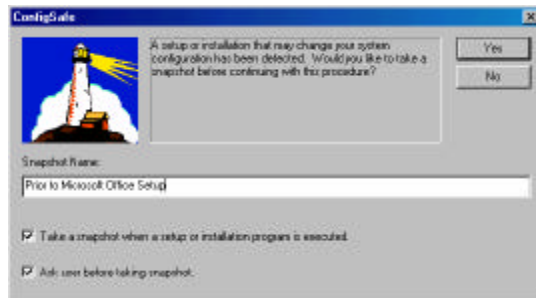
- ◆ **Configuration Profile Name:** For Preload Edition, this field will always say *System Snapshot*, because this information is pre-defined prior to preload. In ConfigSafe Desktop Edition, this field lets you select which Profile to use when capturing a Snapshot. All defined Profiles are available via a drop-down list.
- ◆ **Description:** This field will be blank. A detailed description should be typed in this field, as it helps to identify the Snapshot in the event that you need to Restore or compare this configuration Snapshot. In the example above, the Snapshot captures the configuration in place prior to MS-Office installation.
- ◆ **Date/Time:** The date and time of the Snapshot will be recorded in order to identify when each Snapshot was taken.

Selecting OK will initiate a ConfigSafe Snapshot. An information screen will be displayed to keep you informed of the Snapshot's progress.

This information will change as ConfigSafe polls the system and stores the different pieces of information that make up a System Snapshot. When the Snapshot is complete, the wait screen will disappear and you will be brought back to the ConfigSafe interface.

Install Guard

Install Guard automatically protects systems from potential conflicts that may result from faulty hardware and software installations. When installing a new piece of hardware or software, Install Guard detects the installation and automatically prompts the user to take a Snapshot, as demonstrated in the screen below.



As a result, users maintain a record of their precise system configuration just prior to the installation. ConfigSafe's Install Guard feature can even be set up to take a Snapshot without prompting the user. That way users never have to remember to take a Snapshot before making a change--ConfigSafe does it for them. With Install Guard protection, if the newly installed program or hardware creates a conflict with other programs or causes the system to function improperly, users can instantly return to the configuration in place previously.

Setting Install Guard Options

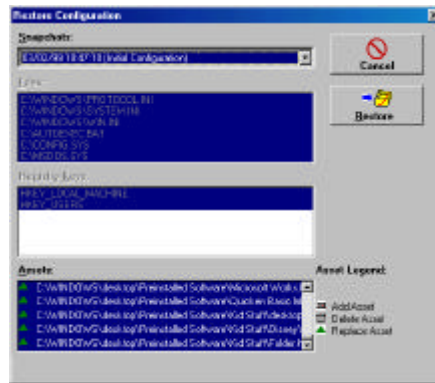
There are two user-definable options for the Install Guard feature. First, you can determine whether or not to prompt the user first before taking a Snapshot. And second, you can turn the Install Guard feature on/off. These settings can be determined through the Install Guard screen. However, if you modify the default settings and you wish to change them back, you can accomplish this through the ConfigSafe CSHOOK.INI file. To modify settings, simply:

- Go to the ConfigSafe installation directory (default C:\CFGSAFE)
- Open the CSHOOK.INI file
- To change option for "Prompt User Before Taking a Snapshot"
 - SilentHook=0 This setting will prompt the user before taking a Snapshot
 - SilentHook=1 This setting will automatically take a Snapshot without prompting the user.
- To turn Install Guard feature on or off
 - EnableHook=0 This setting will turn off the Install Guard feature and disable the automatic Snapshot
 - EnableHook=1 This setting will turn on the Install Guard feature, enabling it to detect an installation and take a Snapshot

Restoring to Saved Snapshots

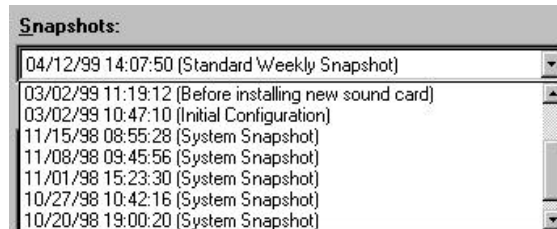
You can Restore a system to any available saved Snapshot (see additional notes in *Maximum Snapshots to Save* under Snapshot Management). Another useful application for the Restore feature is to return the system to the Initial Configuration (or Factory Configuration). If a user has altered their system configuration beyond repair, and just wants to return to their original system settings, you can Restore to this Snapshot. You can perform either a full or partial Restore. For example, if only a specific file or files need to be restored, then you can de-select all other components of the Restore.

To Restore to a saved Snapshot, simply press the Restore button. You will be brought into the *Restore Configuration* screen, as follows.



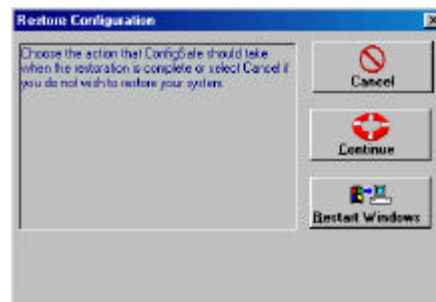
Restore Configuration screen shows you the files, Registry keys and System Assets that will be restored for the selected saved Snapshot.

From this screen, choose the saved Snapshot you wish to Restore from the list of available Snapshots.



ConfigSafe provides a list of available Snapshots to choose from.

Once you have chosen the desired Snapshot, click OK. ConfigSafe will confirm this action with an additional screen that prompts you to either Cancel the operation, or to choose the desired action you wish to occur after the Restore - Continue or Restart Windows.



Special Notes Regarding System Restores:

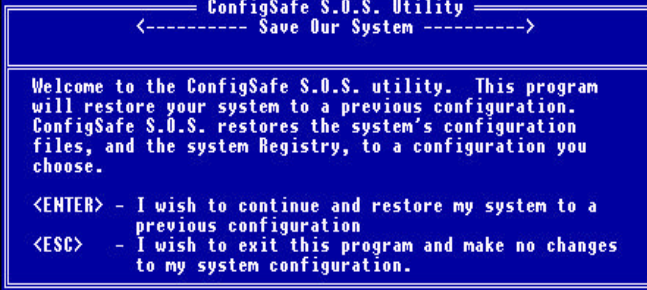
- 1) On Windows 95/98 systems:
 - a) ConfigSafe restores the live Registry, so a reboot is not necessary, but is recommended.
- 2) On Windows NT systems:
 - a) A reboot is required for the Restore to take effect.
 - b) Registry hives, complete with ACL (access control list) information, are restored. However, ACL information is not compared during a ConfigSafe comparison.
- 3) If ConfigSafe encounters an error accessing the Registry it will write an error to the regerror.log file in the ConfigSafe directory. The error code numbers are those returned by the Windows functions. As a result, this file can be extremely useful in identifying specific portions of the Registry that have become corrupted.

Using SOS to Restore Systems that Won't Boot into Windows

ConfigSafe also provides a powerful DOS utility called SOS. SOS will let you restore a system to a saved Snapshot configuration when it won't even boot into Windows.

SOS works on all Windows 95/98 systems and on Windows NT FAT systems. In addition, on Windows NTFS systems that have two partitions, SOS can be used to restore the primary NT partition.

To use SOS, switch to the ConfigSafe installation directory (C:\CFGSAFE). Type SOS. You will see the SOS utility main screen, as shown below.



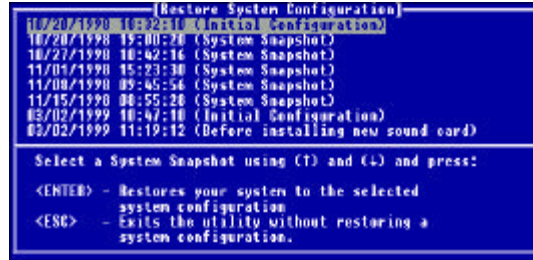
```
ConfigSafe S.O.S. Utility
<----- Save Our System ----->

Welcome to the ConfigSafe S.O.S. utility. This program
will restore your system to a previous configuration.
ConfigSafe S.O.S. restores the system's configuration
files, and the system Registry, to a configuration you
choose.

<ENTER> - I wish to continue and restore my system to a
previous configuration
<ESC> - I wish to exit this program and make no changes
to my system configuration.
```

Press <Enter> to access the available Snapshot list, as follows.

SOS lets you restore to a configuration Snapshot from DOS.

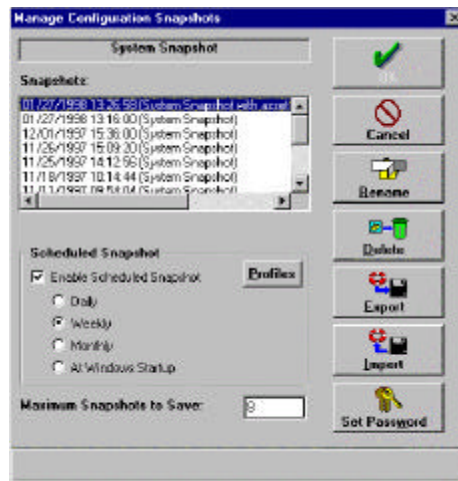


From this screen, select the configuration to be restored and press <Enter>. ConfigSafe will always ask you to confirm the Restore before taking action.

Manage Features

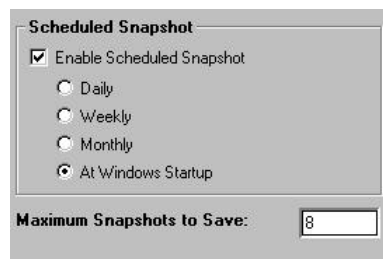
By clicking on the Manage button, you can access ConfigSafe options for managing and scheduling system Snapshots.

Management features let you schedule, rename, delete, import and export saved Snapshots.



Scheduled Snapshot Options

This section lets you set up and define automatic, or scheduled, Snapshots. If you select the "Enable Scheduled Snapshots" checkbox, ConfigSafe will automatically take Snapshots at the intervals you select - Daily, Weekly, Monthly, or At Windows Startup.



It's a good idea to enable scheduled Snapshots. They keep track of system changes in the event that you run into problems and you need to return to a time when you know the PC functioned properly.

Maximum Snapshots to Save

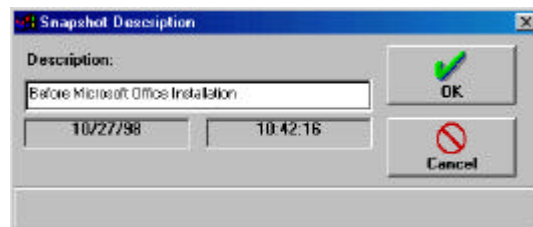
In addition, ConfigSafe enables you to define the maximum number of Snapshots to be saved on a system (this information can be pre-set prior to preload). The default number of Snapshots saved is 8. Each Snapshot takes up approximately 3-5 MB of hard disk space, although the actual size will vary with each system. ConfigSafe will delete the least recent file when the maximum number is reached. However, the Initial Configuration Snapshot will always remain on the system, and will not count towards the maximum number of Snapshots saved.

Snapshot window

This window displays a list of all saved Snapshots. Use this window to select the Snapshot for which you will perform management features such as Rename, Delete, Export and Import.

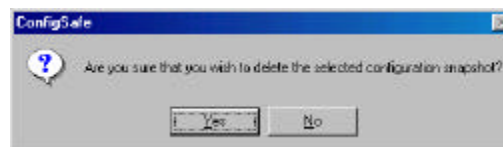
Rename

The Rename feature allows you to rename Snapshots. This is very useful if you took a manual system Snapshot before installing new software but forgot to provide a description, such as *Before Microsoft Office Installation*.



Delete

The Delete button allows you to delete Snapshots. This is useful if you wish to remove specific Snapshots. ConfigSafe will always confirm this action, giving you a second chance to keep the Snapshot.



Exporting Snapshots

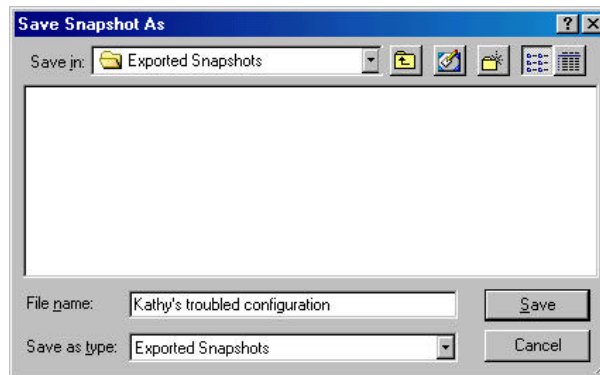
The Export feature allows you to save Snapshot information outside of the ConfigSafe application. This feature is very useful if a user is having trouble with their system. It enables them to easily export the Snapshot and e-mail it to your technical support center for problem replication or more detailed troubleshooting.

To export a Snapshot, simply choose the Snapshot you wish to export from the Snapshot window and click on the Export button. You will be brought into the Export Options screen. From this screen, you can choose the specific information to be exported from this Snapshot.



Exporting Snapshots is easy. Determine which information to export using the checkboxes on this screen.

After you've provided a description and selected the information to be exported, you need to save the Snapshot, as follows.

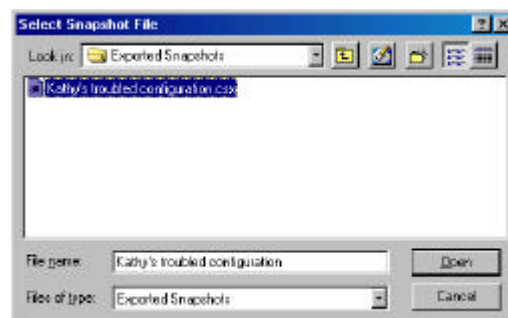


When you have finished exporting the Snapshot, it can be sent as a standard e-mail file attachment.

Importing Snapshots

Snapshots can also be imported into ConfigSafe when you wish to retrieve the Snapshot information from outside of the ConfigSafe application. For example, in the scenario above, a user who is having trouble with their system can take a Snapshot, export it and email it to the technical support center.

Snapshots can be imported onto other systems in order to replicate the configuration of the troubled system. This helps to pinpoint the exact source of system problems.



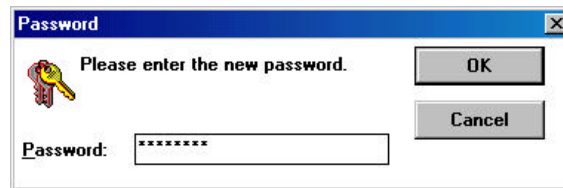
Once received, the Snapshot can be imported onto another system that has ConfigSafe by selecting the Import button. Importing a Snapshot will allow for comparison of the configuration differences and further troubleshooting. This is very helpful if you import the Snapshot to a system with the same configuration.

Using ConfigSafe, you can analyze any potential problems. You can even make corrections to the system, take a Snapshot of the corrected configuration, and export the Snapshot for the user to import and restore. Distribute fixes to common problems to many users via e-mail or post corrected configuration Snapshots on your web site for users to download, import and restore.

Password Protecting the Restore Function

The Set Password button on the Manage screen allows you to define password access to the Restore function. This feature is very useful if you want to make sure that users do not unintentionally or erroneously restore a system to another configuration Snapshot. For example, many home PC users implement password protection to keep their young children from accidentally restoring a Snapshot.

To enable password protection, click on the Set Password button. You will be brought into the Password screen, where you can enter a password.



Password protection keeps users from accidentally restoring to saved Snapshot configurations.

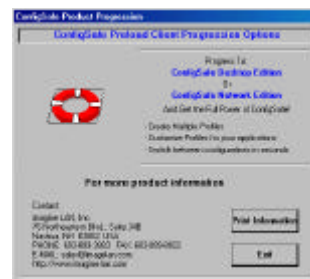
Click the OK button. You will be asked to confirm the password. Then click OK again.

Profiles

A configuration Profile details the specific configuration files, directories, Registry keys, and assets to be captured when generating a Snapshot. The default configuration Profile is called "System Snapshot" and is generated upon installation of ConfigSafe.

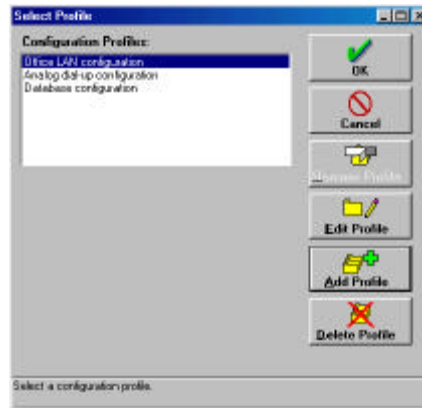
The ConfigSafe Preload Edition does not allow you to access any of the Profile features. If you click on the Profile button, you will see the following screen:

ConfigSafe Preload Edition does not provide access to Profile features. Upgrade information is displayed if you click on the Profile button.



It is handled this way so that the OEM can pre-define the default Profile prior to preload. In addition, the user can print the Profile information screen for future reference, or Exit the screen.

The Desktop Edition enables access to the full range of Profile features. ConfigSafe Desktop Edition provides the capability to define multiple configuration Profiles. A list of Profiles is displayed in the Select Profile window.



The default configuration Profiles can be customized to obtain the maximum product benefit, or new Profiles can be created for greater flexibility in configuration tracking and management.

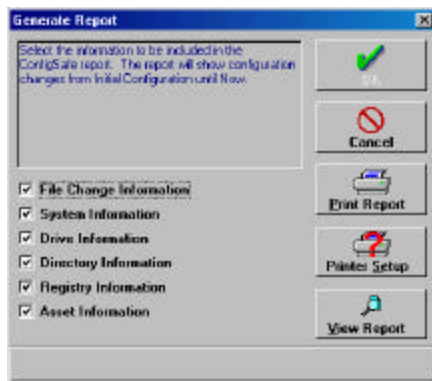
Creation of custom Profiles prior to preload is particularly useful for tracking specific configurations for different system models. For example, you may wish to track any changes to the directories on systems that contain specific preload applications or device drivers, etc.

Generating Snapshot Reports

The next button on the ConfigSafe main screen is Report. The Report feature lets you generate detailed comparison reports between two Snapshots or a Snapshot and the current configuration.

The Report capability is similar to the on-screen comparison reports, but it lets you create a printed or saved file of the comparison report. If users encounter problems, a report can be generated and sent to the technical support center for in-depth review and analysis.

To generate a Report, you must first select the Snapshots in the Changes Starting and Changes Ending windows on the main screen. Once you have selected these parameters for comparison, click on the Report button. You should now see the Report main screen, as shown below.



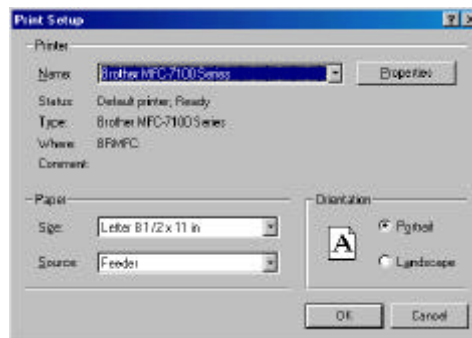
At the Report main screen, you will see some descriptive text. This text will tell you to select the information to include in the report, which you can do by selecting or de-selecting the checkboxes for each information category that ConfigSafe tracks in a Snapshot. In addition, it reminds you of the parameters selected in the Changes Starting and Ending Windows, for confirmation that you selected the correct dates/Snapshots.

You can now choose to either Print or View the report.

Printing Comparison Reports

If you choose to Print the report, you can first access Printer Setup to make sure that printer properties are set correctly, as shown below.

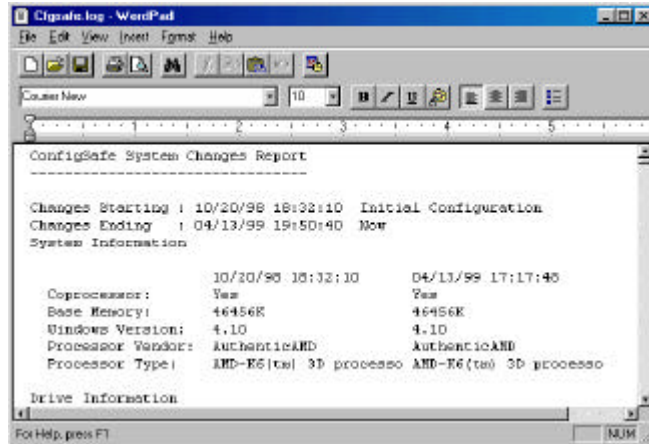
ConfigSafe lets you easily access Printer Setup properties before printing change reports.



Once you set up print properties, you can print the comparison report by clicking on the Print Report button. ConfigSafe generates the report to send to the printer. This may take a few moments, and ConfigSafe provides information progress screens as it compiles the report.

Viewing Comparison Reports

To View a report (that can also be saved as a text file), select the View Report button. ConfigSafe will take a few moments to generate the report, informing you with progress screens as it gathers the information to display. Once ConfigSafe has generated the report, it will display the information in Notepad or WordPad, depending upon the size of the file. A sample report is shown below.



You can save this as a text file, or print it to a printer.

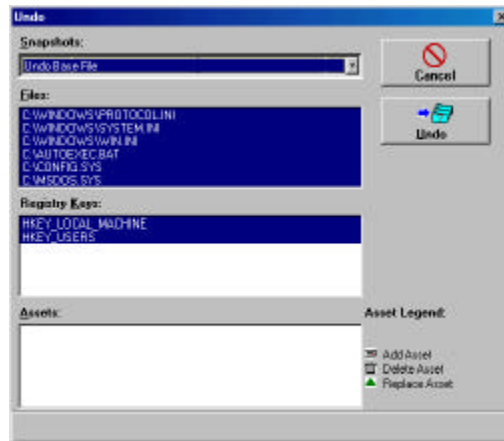
To exit the Report screen, select Cancel.

Undoing a Restore

ConfigSafe provides a safety mechanism that lets you reverse the Restore process. This is very useful if you have restored the system to a previous saved Snapshot, and find that it did not fix the problem.

In the event that this occurs, you will most likely wish to return to the configuration in place just prior to the Restore, and perhaps Restore to a different Snapshot.

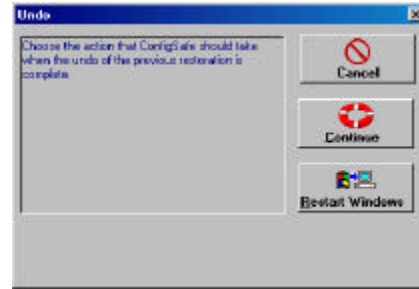
To "undo" a Restore, simply click on the Undo button. This will take you into the Undo screen, which shows you the files that will be restored, as shown below.



You can reverse a Restore and return to the current configuration using the Undo button.

ConfigSafe will always confirm the Undo process, and asks you to determine the action you want performed after the Undo - Continue or Restart Windows.

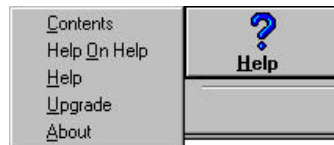
ConfigSafe will always confirm an Undo process.



Accessing Online Help

ConfigSafe provides extensive online help to assist you as you use the product. To access help, simply click on the Help button on the Standard interface, or press F1 from any location within the EZ or Standard interfaces.

ConfigSafe provides several options for help, as shown below.



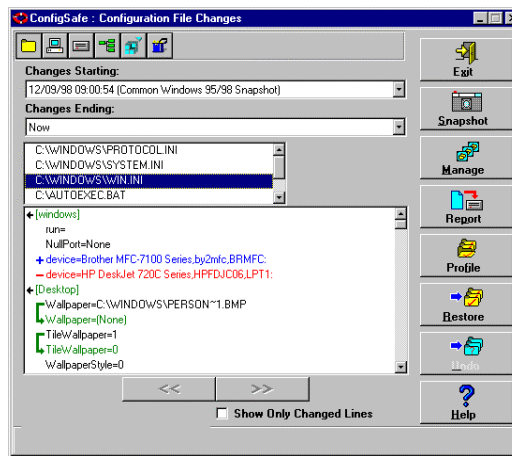
CONFIGSAFE NETWORK EDITION

The ConfigSafe Network Edition is comprised of two software programs, the LAN Client software and the Network Manager. The LAN Client software has a similar interface to the ConfigSafe Preload and Desktop Editions, and provides the same basic feature set, with some differences that are described in this section.

The Network Manager is the software program that is used for the central administration of LAN Clients, and allows for the network resource sharing. This section will also provide an overview of the Network Manager software.

LAN Client Software

The LAN Client software is installed on all client systems that will be managed by ConfigSafe Network Edition. The LAN Client main user interface looks identical to the Desktop Edition interface, as shown below.



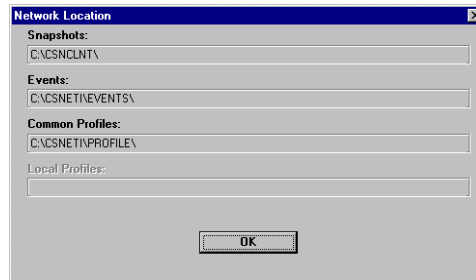
There are a few differences in the way that the LAN Client software functions in comparison to the ConfigSafe Preload and Desktop Editions. The feature differences are described in the following sections.

Snapshot Management Features

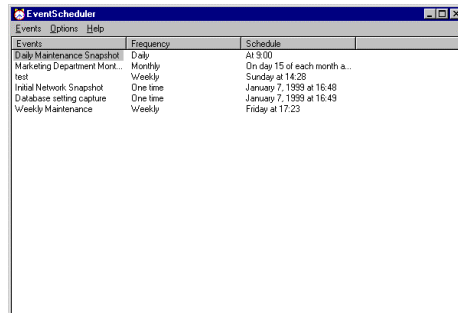
The Manage screen for ConfigSafe Network Edition provides some additional capabilities, as shown below.



Network Locations. This feature enables you to view the locations for storage of Snapshots, common Profiles and Events. If you click on "View Locations," you will be brought to a screen that displays those locations, as shown.



Scheduled Snapshot. From this section, you can access ConfigSafe local Events scheduler and Profiles, if this option was enabled during installation of the Network Manager. If the option was enabled, local events can be scheduled through this scheduler (See Network Manager section for additional details). To access the local Events scheduler, simply click on the Scheduling button, as follows:



To access local Profiles, click on the Profiles button. This brings you into a screen that allows you to select which Profile to use when creating local scheduled Snapshots.

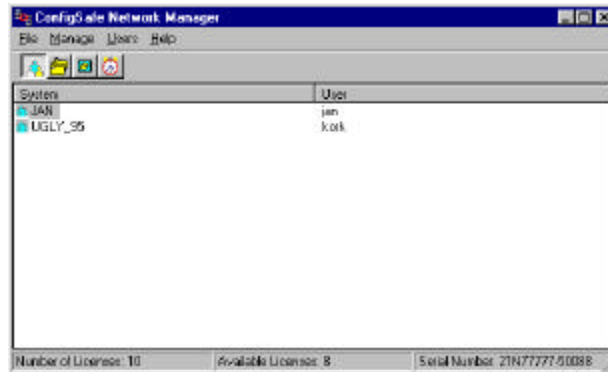
LAN Client Profile Features

Profiles can be customized/managed by the user with the ConfigSafe LAN Client or by the ConfigSafe Network Manager. Standard features include the ability to **edit**, **add**, **rename** and **delete** Profiles.

LAN Clients are also able to choose which Profile will be used for Scheduled Snapshots, if the ConfigSafe Network Manager enables this option.

Network Manager Software


The ConfigSafe Network Edition Network Manager main screen provides access to all central administration and user data.



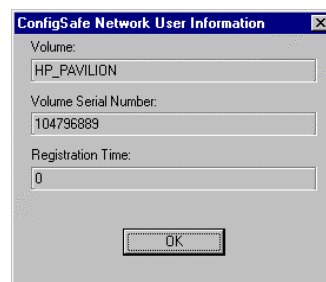
On the main screen, ConfigSafe Network Manager displays the serial number and total number of licenses, along with the number of available licenses remaining.

In addition, this screen gives access to manage Users, Profiles, Snapshots, and Snapshot scheduling.

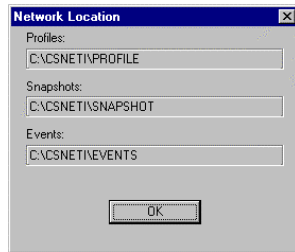
User Management Features

The Network Manager provides administration capabilities and serves as a central source for all ConfigSafe LAN Client information. If you select Manage/Users from the main screen drop-down list, the drop down list dynamically changes to show you the User drop-down list (in addition, you can also click on the User Management icon ). On the User drop-down menu, you will be presented with information about ConfigSafe LAN Client users, such as:

User Information. This screen displays individual user information, such as the user's volume, volume serial number and registration time.




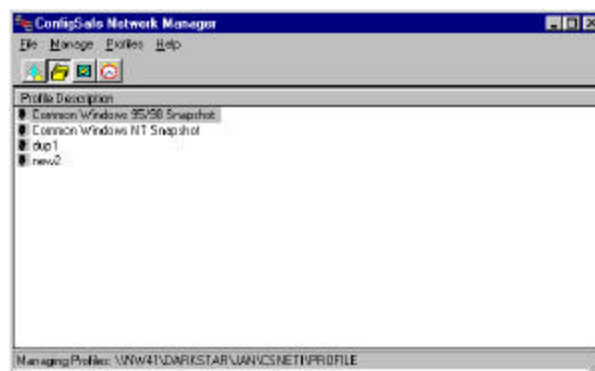
User Location. This option provides the location for storage of all user Snapshots, Profiles and Events.



Delete. This feature enables the administrator to delete ConfigSafe LAN Client users, freeing up additional licenses. If a user is deleted from the Network Manager, the LAN Client software will automatically be uninstalled and all Snapshots will be deleted for that particular user.

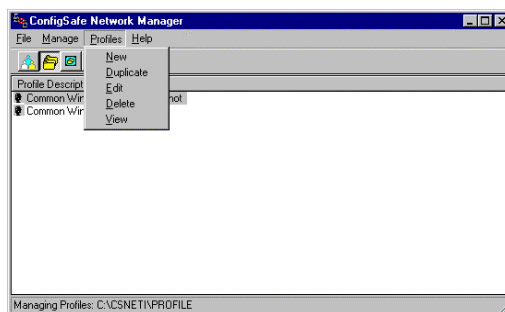
Profile Management Features

All Profile management functions can be centrally accessed from this screen by selecting Manage/Profiles from the drop-down menu or by clicking on the Profile Management icon .




This screen displays all currently defined Profiles. Administrators can perform the following functions:

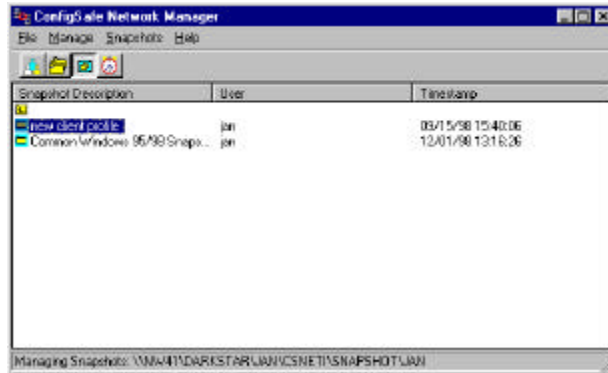
- Create new Profiles
- Duplicate existing Profiles
- Edit existing Profiles
- Delete
- View



All Profile Management functions are used in the same manner as described for the Desktop Edition.

Snapshot Management Features

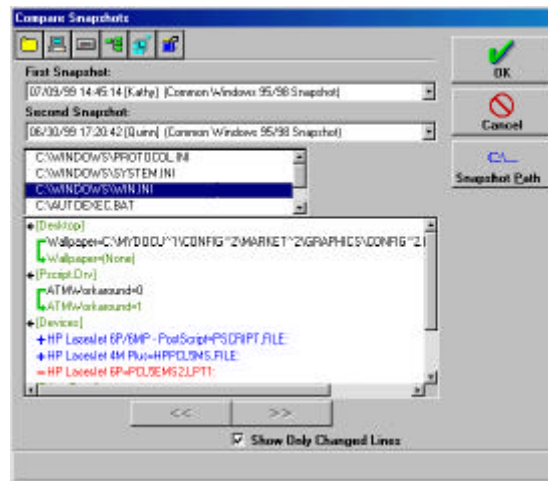
Clicking on the Snapshot Management icon  or selecting Manage/Snapshots from the drop-down menu brings you to the Snapshot management screen. This displays a list of user Snapshot folders. By clicking on a user folder, all individual Snapshots are displayed for that user.




Other Snapshot management features include:

Delete. Snapshots can be deleted using this feature.

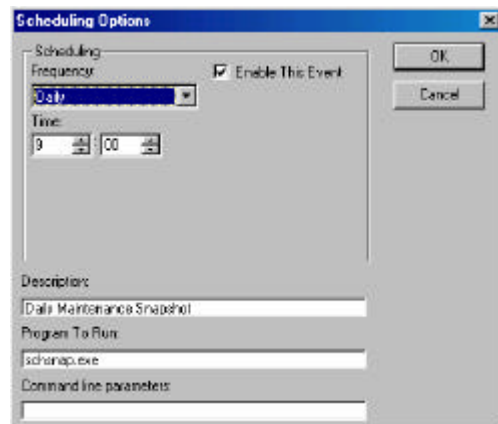
Compare. The Compare function enables a comparison of any two Snapshots on the network. This is performed by simply selecting a Snapshot from the "First Snapshot" drop-down list, and then choosing another Snapshot from the "Second Snapshot" drop-down list.



Scheduling Features

The Scheduling function within the Network Manager enables administrators to define "Events" that will occur for all ConfigSafe LAN Clients, such as a system Snapshot. To access Scheduling features, select Manage/Scheduling from the drop-down menu or click on the Scheduling Management icon .

Events are created, listed and managed through this screen. A default Event template is presented when you select Add, Edit or Copy Event.



This template specifies the frequency and execution time for Snapshots to be taken on all ConfigSafe LAN Clients on the network. Other options are as follows:

Frequency. Determine the intervals at which Snapshots will be taken. Frequency options are:

- One time
- Daily
- Weekdays
- Weekly
- Monthly
- Yearly

Time. The Event execution time is input in hours and minutes. This indicates the time that the Event will occur on each ConfigSafe Client.

Description. The description field can be used to provide details about the Event.

Program to Run. The file name of the program that will be run is provided in this field. To perform a ConfigSafe Snapshot, the program name is SCHSNAP.EXE. In addition, the ConfigSafe Event Scheduler can be used to run other programs. To do so, simply provide the executable file name in this field.

Command Line Parameters. Additional command line parameters can be detailed in this field to further customize Events.

Enable This Event. The Event is enabled when this box is checked.

Upon startup of ConfigSafe LAN Client systems, a local Events Scheduler is initiated and it minimizes to the system tray. The local Event scheduler must remain open in order to enable scheduled Events to occur.

Feature Checklist

Consider the following ConfigSafe feature set for comparison purposes.

Technical Merits/Features

Configuration Tracking List:	ConfigSafe	Other
Standard tracking list: config.sys, autoexec.bat, win.ini, system.ini, System Registry	✓	
Network Drive connection	✓	
Local/Network Drive Directory/Folder Structure	✓	
Any local/network files	✓	
Any local/network directories/folders	✓	
Configuration Snapshots Taken:		
On Demand - at any time	✓	
Scheduled regularly between Windows reboots	✓	
Scheduled within the same Windows session	✓	
Automatically takes Snapshot before new hardware or software installation	✓	
API Driven	✓	
Configuration Snapshots Examined:		
Right after being taken without exiting the program and/or windows	✓	
Within the context of a full Registry, not just Registry changes	✓	
Configuration Snapshots Compared:		
Between any two instances of time in the past	✓	
Between one instance from the past and one from the present	✓	
Between two Snapshots taken from another computer	✓	
Between one Snapshot from a local computer and one from a remote computer	✓	
Configuration Snapshots Imported/Exported (for analysis or backup) Using:		
Diskettes or removable media	✓	
LAN	✓	
Dial-in	✓	
System Restoration/Recovery/Backup:		
Restoration to a previous configuration in full or in part	✓	
Restoration including replaced/deleted DLLs	✓	
Restoration including directory/folder structure	✓	
Restoration including user Profiles	✓	
Restoration in Windows NT NTFS environment including Access Control List	✓	
Restoration from Windows 95/98 MS-DOS mode	✓	
UNDO feature to reverse the restoration	✓	
API Driven Restoration	✓	

Deployment

Training:	ConfigSafe	Other
Minimal time required in learning to use the support tool correctly	✓	
Minimal time required to learn the collateral functions of the support tool not directly linked to the task	✓	
Support Operation:		
One support tool for all Windows platforms (i.e. Win 95/98/NT)	✓	
Minimal time spent to "support" the support tool	✓	
Minimal time needed to validate results reported by tool are accurate/usable	✓	
Minimal maintenance effort required to update the support tool without disrupting usage or producing erroneous results	✓	
Minimal or no impact on the support tool when upgrading Windows Operating System or Service Packs	✓	
Software Installation Process:		
Installed from local hard disk or from network server	✓	
Installed to local hard disk or to network server	✓	
PUSH and PULL installation available	✓	
Centrally managed and controlled user Profiles/tracking lists	✓	

Configuration Management Accessibility/Management

Remote Control:	ConfigSafe	Other
Support tool works with remote control for dial-in diagnostics	✓	
Configuration Snapshot Retrieval/Delivery:		
Problem PC configuration can be retrieved electronically to the support center for analysis (instead of the problem PC itself)	✓	
Configuration fix can be delivered electronically to problem PC for restoration and confirmation	✓	
Standard PC configuration for a particular model can be stored at support center for reference comparison with the problem PC configuration, or for the customer to download when needed	✓	
Configuration Snapshot Management:		
Standard factory and customer PC configuration Snapshots can be operated/backed up/ stored in a LAN environment	✓	

Sources for More Information

More detailed information about using ConfigSafe can be obtained through the ConfigSafe User Manuals, which are installed by ConfigSafe. They can be accessed directly from the Start Menu by choosing Start/Programs/ConfigSafe or ConfigSafe Network Manager.

Evaluation software and additional resource materials such as product brochures, whitepapers and multimedia demonstrations are available on the imagine LAN web site, which can be accessed through the following URLs:

www.configsafe.com

www.imagine-lan.com