SCREEN ANYTIME v4.7

ADMINISTRATOR MANUAL

Record user session of anyone at anytime.

1. INTRODUCTION

Screen Anytime is a set of software which record computer operations into video log files. Aiming at such requirements in special industry, it provides a continuous, stable and long-term keeping solution. Details of operation in current or past time, on server or on workstation, will be presented to you with clear view sorted by time line, terminals and users. Based on our advanced SSCV2 technology, that is highly-compression, effective and stable during recording, you can record and keep logs of years (Typically, 4G/per month/per workstation). Centralized management and real-time monitor are also supported in Screen Anytime.

2. OVERVIEW

After installation, Screen Anytime will put the shortcut of recorder to the start group of Windows by write registry value in 'HKLM\...\Windows\...\Run'. Once a user session starts, no matter login from local or remote, the recorder will run until the end. During this period, the recorder will continually write the data to the file in specified folder, which Administrators can run Screen Anytime to manage, review and replay.

If power off suddenly, the unclosed log file can be recovered next time opening Screen Anytime.

MAIN FEATURES:

√ **To record, manage, search and playback any visible operations of any user at any time**
The video logs of computers include all screen changes, sounds, mouse movements and application title changing. (Note: It does not record keyboard, mail and so on contents involved the privacy). Managers can look for a log through Screen Anytime main program according to the time, the users and so on. And playback the content needed easily. For the important clips, self-play EXE or AVI format are supported to export it. By searching a substring of the application title, a special moment can be find quickly.

Figure 1: Timeline

√ **Support the multi-user log-in, and log-in through different ways.**

Screen Anytime support multi-user system, video logs can be recorded separately when more than one user log-in at same time.   If the users log-in through RDP/TS, Citrix, VNC or some other remote controlling system, their operations can be recorded as well as log-in from local. This feature is important for recording server's video log.

√ **Support distributed or centralized management of log files**

The video log in default will be saved and managed at the local, but it may also be set as the synchronization to the server to receive centralized management. Each server with the Screen Anytime server edition installed can accept synchronized requests from other 64 terminals at same time. The server is not limited to the same local network.

√ **Support real-time monitoring**

The distribute-able real-time monitoring tool allows the manager to look over the current running status on their own computer for 4 remote terminals. The server will check the authorizations before provide the list of terminal addresses to the tool.And a more easy 'last screens' function can monitoring all clients by web page and delay within 1 minute.

√ **Ability to configure filtration**

Screen Anytime may record the log under specified conditions. These conditions include the time section, range of users and filtering according to the application titles (e.g. only record the assigned application).

√ **The high compressibility and high efficiency**

Do not worry about the file size of log. Based on the second generation of screen video compression technology (SSCV2), the compressed file size may be 2-3 times smaller than the similar technology. For example, to synchronize log files from 50 terminals to 1 server, suppose that those terminals operate for 8 hours a day, then the 1TB disk space may easily save for 3-6 month-long logs at least.

Our codec have been optimized fully, an ordinary due-core server recorded 1024x768 RDP session can only take smaller than 1% CPU resources, and a workstation with 1680x1050 desktop, which CPU takes not exceed 5%. The performance on the other CPU platform is also good, which are not readily noticeable when running background.

√ **Independent web service providing browsing and replaying**

From v4.0, administrators can access the records on server through browser (IE, firefox, etc.). The web version Screen Anytime provides same functions as local,

including browsing, searching and replay the records. The server edition includes a build in http server that can run independently without installation of IIS and SQL.

√ **Performance reports show statistics on how time spend**

The boss always want to know whether their employees are really spend their time on work and for what percent they are focusing. From v4.5, with this new function of Screen Anytime administrators can see a pie-chart showing exactly how their time are used, for local or everyone in remote. The reports can be set to generate weekly, monthly or manually, and easy be viewed as HTML format.

SYSTEM REQUIREMENTS

1. Server Edition: Windows 2003/2008 32/64 bits Server. Workstation Edition: Windows XP/Vista/Windows 7/8.
2. (Recommend)Two or more processor/two core CPU, 512M or more RAM.
3. (Recommend)At least 10GB or more disk space.

3, CONFIGURING

At the first time running Screen Anytime, you need to setup the software with 'File and Directory', 'Record', 'Range' and 'Privacy' pages.

FILE AND DIRECTORY

Figure 2: File and directory setup page

Output folder

In this folder, the file name follows this rule:

Output Folder\Year-Month\UserName.Date-Hour-Minute-Second.slv (.tmp)

This folder structure makes it easy to backup records month by month. The under recording file is end with a '.tmp' extension, which will be closed and rename to a normal '.slv' extension when recorder closes it. The recorder will access the folder and write the files by user 'SCR_ANYTIME_USER'. So if the file system is NTFS, please make sure that the folder and its subfolder can be read and wrote by it.

Size Limits

To avoid your disk out of space, you can limit the maximal disk use and how long the records will be kept. When it exceeds, program will delete the old files. So, remember to backup data if need.

For server edition, you may also want to apply those rules on remote files transferred from workstation to this server. Check 'apply rules on remote files' for that. About remote files, see following paragraph.

Synchronize

By setting the address and port of the server, Screen Anytime can transfer the recorded files to the specified Server to accepting the centralized management while the recorder runs. The recorded files are the closed files with the extension of .svl, while the files under recording with the extension of .tmp can not be transferred temporarily.

Server to Server Synchronizing

If the transferring client is a 'server edition' that already collects remote files from others (sub-network), check on 'synchronize remote files' can transfer those records which coming from other computers to next upper-level server.

This feature is useful to build a 'server-tree' to collect records and centralizing them to 1 server. Because 1 server can only handle limited connect in at same time, for a network with, such as 1000 computers, you may need a server-tree to collect records level by level.

RECORD
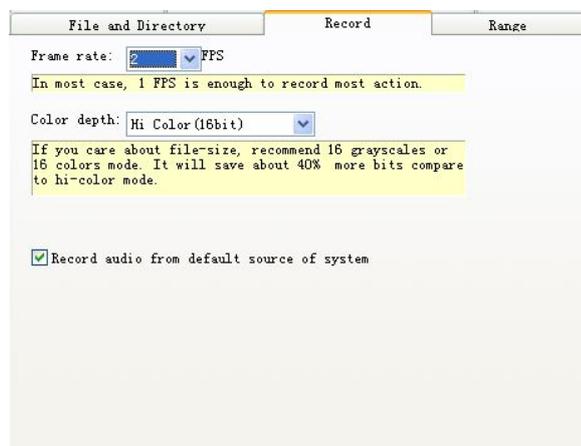
Figure 3: Record setup page

Frame rate

Define how many frames per second the recorder should capture. Although a higher frame rate can capture more screen changes, it brings bigger file and occupies more CPU time. Most of the time, one frame per second is fast enough to know what happened.

A testing result for your reference:
CPU load: %2
1 frame per second
800x600, high color, login with remote desktop
2.8G Pentium D.

Color Depth

In default, Screen Anytime will try to use 16bit high color mode to record. You can choose a lower one to save more disk space, depending on your need. Click 'Demo' button to see the difference of quality.

Record Audio

Check to record audio from default source with 11,025Hz mono quality. The source of sound input can be set in 'Sound Property' in 'Control Panel' of the system. In default, it is microphone.

RANGE

*Figure 4: Range setup page **[Server Edition Only]***

Users

Screen Anytime can be set to record certain users and specified time range. After installation, a local user group will be created with the name 'ScrAnytime_List'. Any users in this list can be set as 'record' or 'not record'. In default, Screen Anytime will record all users. You can use user account management tool of Windows to set the group.

Time

By check the 'except' option and input the time in 24hrs format, you can set Screen Anytime to record a specified time range.

APPLICATION

Figure 5: Application filter page

Screen Anytime supports to record the specified application. You are required to input all or part of window titles of the application to lists where the program will compare with. The video will keep black in order to save the image size when recording is not required, but maintain continuous timeline. The black can be alternatively skipped by the density indication of player when playback.

PRIVACY
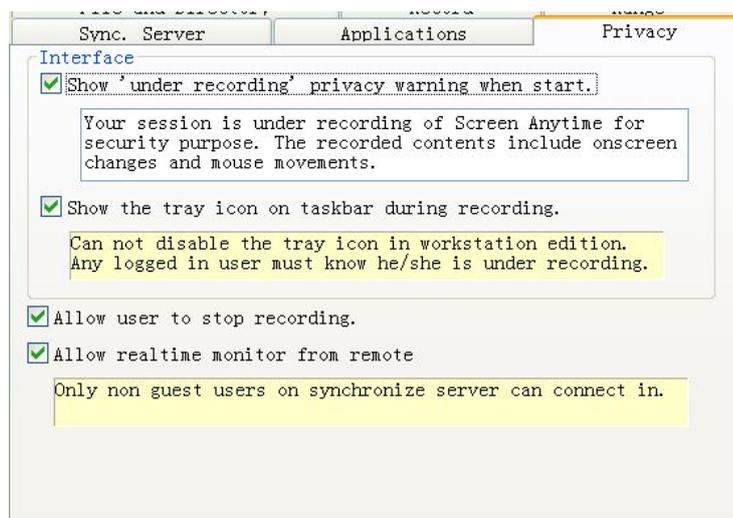
Figure 6: Privacy setup page

As an application runs behind, the user may not notice that his/her behavior has been monitored and recorded. To protect the privacy of the user, Administrator can set Screen Anytime to give a warning, show a tray icon, or allow the user to stop and close the recorder.

Sometimes on the contrary to above, Administrators do not wish the users to know there is a recording process behind, preventing them from terminating the process by force before they do some thing harmful to the server. If so, uncheck the option.

After setup, restating system is recommended.

SERVER
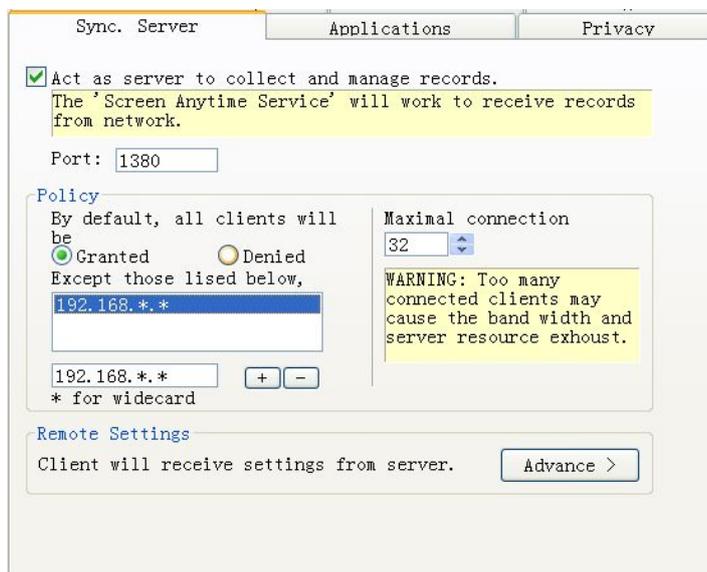
Figure 7: Server page

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You may set the Server Edition of Screen Anytime which acts as the central server of video files. And then achieve the centralized management of remote video files by configuring the synchronize page on client, the workstation edition.

The synchronized video files are saved to Output Folder\ Remote\ Pc name \Year-Month \. If the remote video files are synchronized, you can browse the local video or remote video via switch button on the left of the interface.
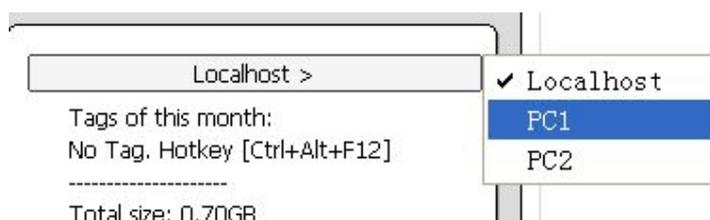
Figure 8: Switch between local and remotes.

REMOTE SETTINGS

The server edition of Screen Anytime allows you to configuring the settings of remote connected-in clients. To do it, click 'Remote settings-Advance' button on server page.

The remote settings function allows you set different connected-in clients by grouping them.

One group of settings includes options on clients which you can reference the previous introductions, plus on an additional option 'Enable Recording' controls recording or not. Each group can set to apply on every client or none of them, excepting the clients on a list of 'PC name' (See File Page).
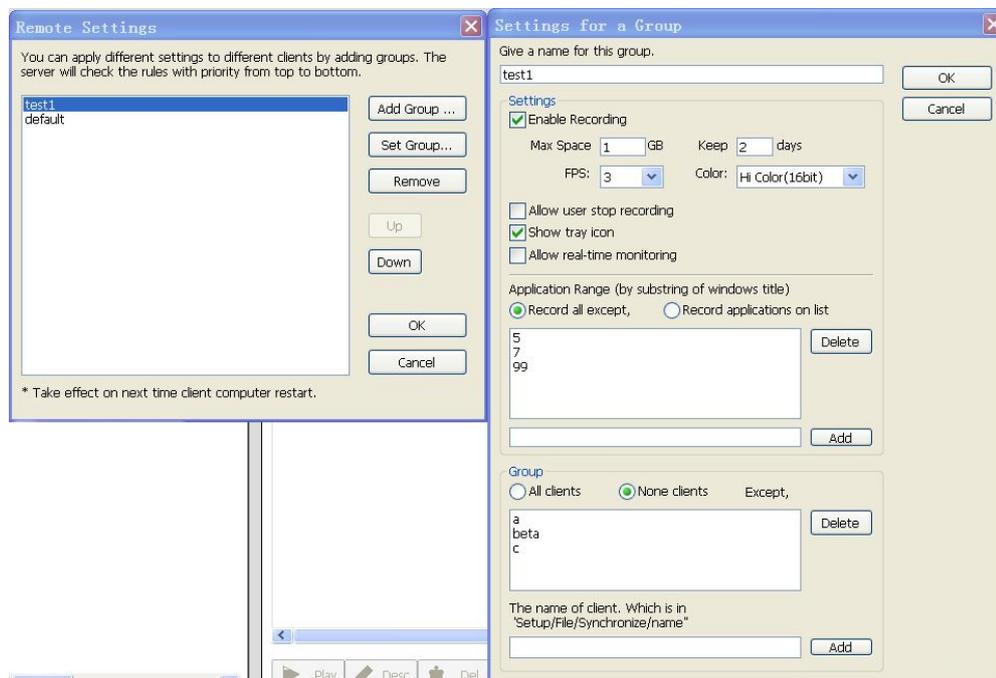
Figure 9: Remote settings.

The client, which has been configured to synchronize their records to the server, will check the remote settings groups on the server on startup. The server will find and return the first group of settings (priority from top to bottom), and then replace the local settings. So the remote settings will not take effect immediately. Normally it will wait for next day to get work.

HTTP SERVICE

This is a function of server edition. Enabling the build in HTTP server allows user visit records from internet with browsers like IE, Firefox, and so on.
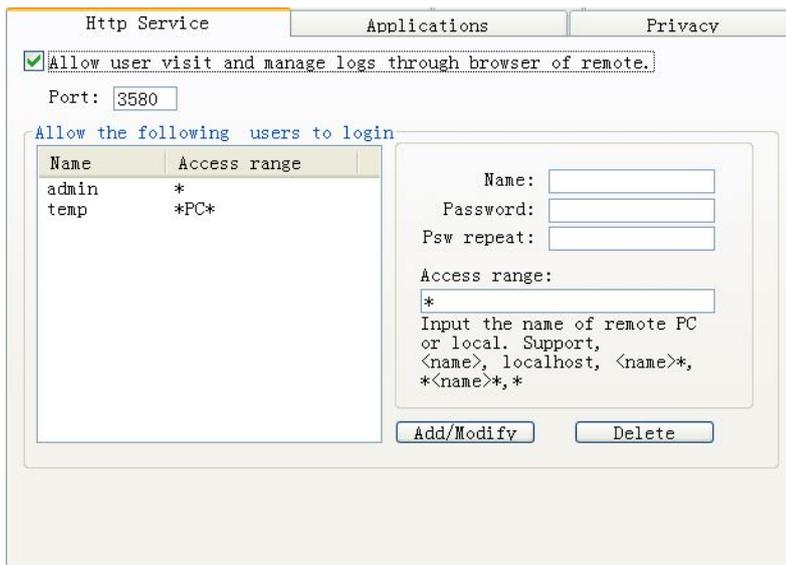
Figure 10, HTTP Service

The default port of Screen Anytime http service is 3850, you can visit the server with URL like this,

http://<screen anytime server address>:3850

And you have to add at least 1 user for login. The access range is useful to restrict the range of access, defines where he/she can visits. The synchronizing function allows server to collect records from other workstations/servers. Records from different computer will store in different folder. And the computer name that is also used as folder name, which is set in 'File' page of setup, will be compared with the '**Access range**' parameter here.

The following picture taking user 'temp', who can only visit computer name with substring 'PC', as sample, shows how it works,
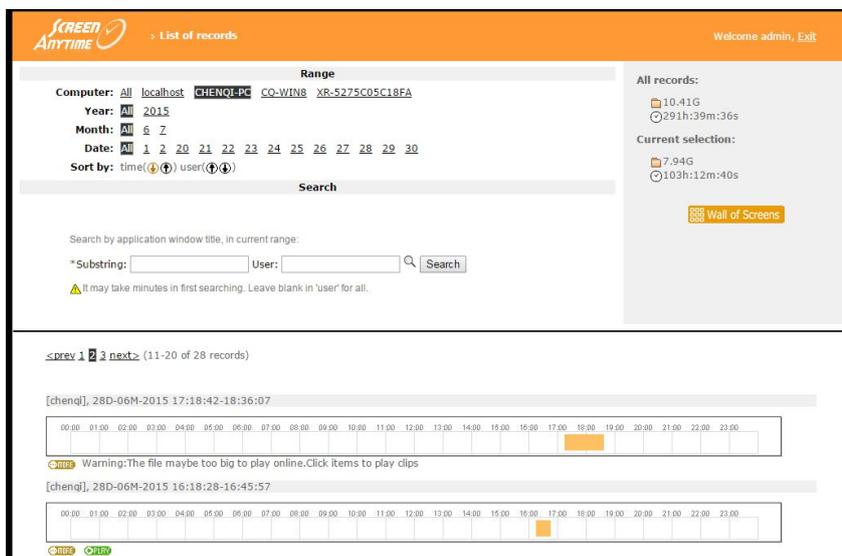
Figure 11, Sample of web version

As the picture, the user 'temp' can only see records of 3 computers, 'PC1', 'Sub_PC1' and 'PC'. They all have substring 'PC' inside, just as what we set in 'access range'.

A typical usage of 'access range' is, administrator can give it a rule when name a computer, such as 'groupname_username', for example, 'devgroup_jack'; Then apply different 'access range' for different group leader, for example, leader of development department may have a account 'dev' that have a range of 'devgroup*', so he can only visit the records from his group.

PERFORMANCE REPORT

This setting is valid for server edition after v4.5. From where the administrator can set the server to generate performance reports with fixed time-span for specified users.About 'performance report', see **'Tips' - 'Performance report'.**

Check '**Weekly**', '**Monthly**' or '**Quarterly**' for when the server will make the report. The server will start statistics last span at the first day of a new span.

User range: You can set the range of concern. From 'local' to 'Remote' or a group with a name keyword. Here the name means the 'PC name' set on client's 'File' page.

4, MANAGEMENT RECORDS

RECORDS IN FOLDER

The files of localare saved with the name.
Output Folder\Year-Month\UserName.Date-Hour-Minute-Second.slv (.tmp)

The files of remote are saved with the name
*Output   Folder\   Remote\   Pc   name   \Year-Month   \
UserName.Date-Hour-Minute-Second.slv*

The under recording file and unclosed file are ended with '.tmp' extension.
Screen Anytime will scan the folder for all files when it starts, indexes them and
tries to repair old unclosed file.

*VERY IMPORTANT: Administrator can simply remove the old records by deleting
the files. To prevent other users deleting or modifying the records, Administrator can
remove their 'read' and 'write' right on the output folder and its sub folder (need
NTFS). At the same time, make sure Screen Anytime user 'SCR_ANYTIME_USER'
has full access on this folder. The recorder program will write data to this folder with
user 'SCR_ANYTIME_USER'.*

RECORDS IN SCREEN ANYTIME

Start Screen Anytime and you will see an interface like this,
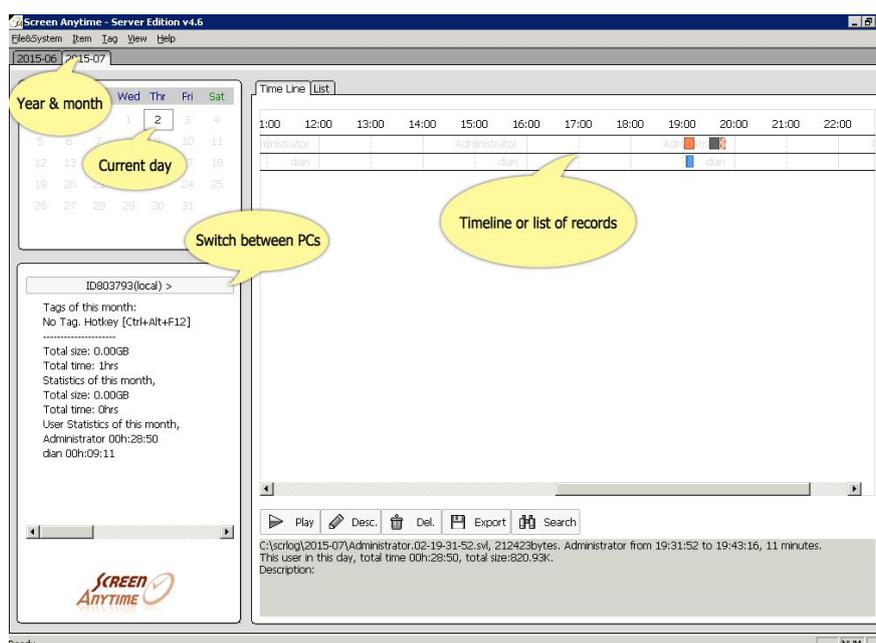
Figure 12: Interface of Screen Anytime

The month with records will be listed on top of the window. Select a month then you will see the calendar of it. In this calendar, date with records will be shown in black, the others in gray.

Select a day and the records will be shown on right view with timeline or list. In time line, each file will be presented as a segment which starts from the corresponded x position on timeline. The files of different users are expanded on y axis.A normal session file will be shown as a solid rectangle filled with color, and surrounded with a frame ( ). When the file is not properly closed, it will be a dot-line frame instead ( ). And for files under recording, the color is lighter than normal ( ). Moving the cursor over the item will show the details in the pop-up tips.

In list view, as follows,

Figure 13: List view

You can see details about these files. There are some items that need to be explained.

End Reason: there are 6 kinds of reasons that a recorder will close a file,

1. User session end, log off or shutdown the computer.
2. *Every 3 hours. To prevent the large file which is hard to replay, the recorder will close the file after 3 hours recording, and start a new one. * From v4.6 the limits of 3 hours been removed.*
3. After midnight 0:00, recorder will close the current file and start a new one.
4. During excepted time. See range setup page.
5. Abort recording. Users close the recorder by normal way or Administrator stops and

closes all files under recording.

6. Unexpected reason. The possible reason could be unexpected error, unexpected power off, or force terminated by users.

You should pay more attention to reason 6. If the user closes the recorder by force, he/she may not want Administrator to know what he/she is doing. Screen Anytime has some ways to prevent process being terminated but it is still possible to kill the process of recorder in lower system driver level. If this case does happen, you can review the movie to make sure and look up other system logs for more information. Screen Anytime will help you know who and when.

REPLAY, ADD DESCRIPTION, DELETE AND EXPORT

Select a file in list or time line, then you can do something, including:

Replay
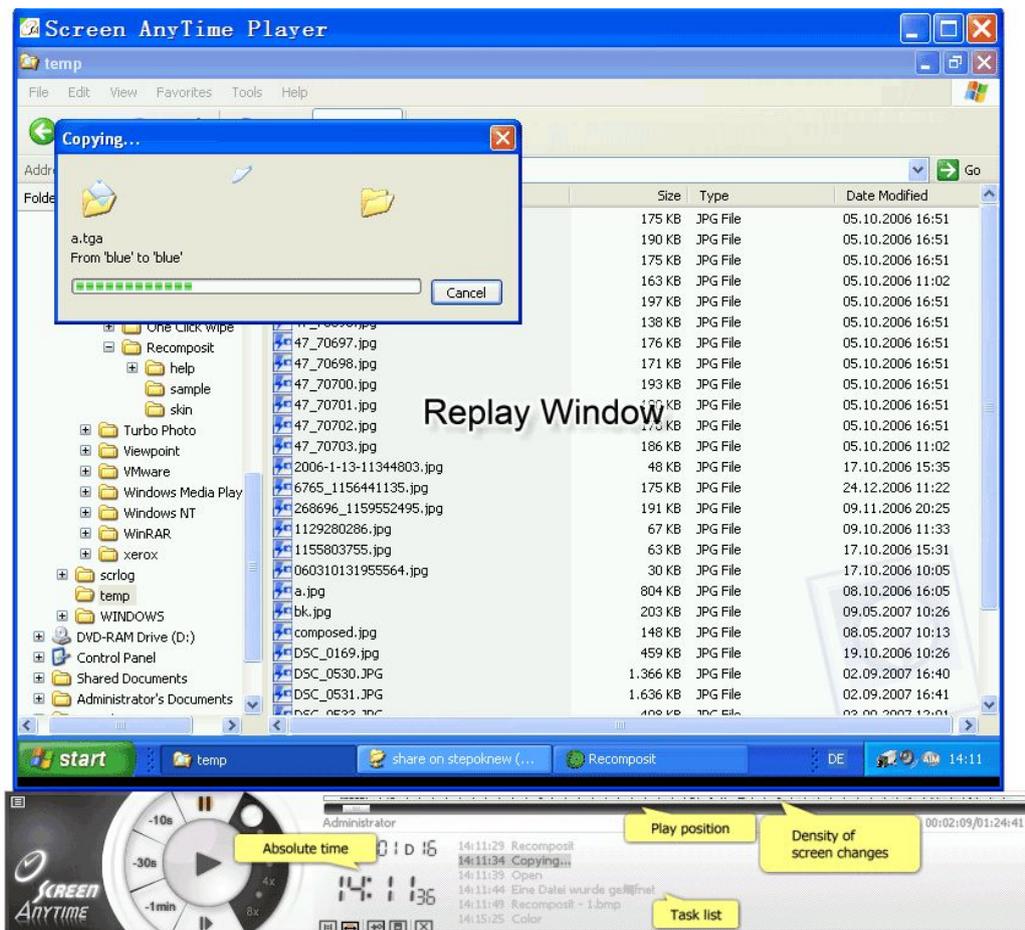
Figure 14: The player

In player, you can play, pause or play frame by frame. Click or drag the slider bar to jump to any time.

Fast playing:

Dragging and holding the control-ball to reach 1-8x speedy replay. Release it to reset 1x speed.

Jumping:

Click the task list to jump to next title or click the jump button for a list of all. See below for where 'jump' button is.

Buttons:

'menu', button on top-left; 'real-size show', 'stretch', 'jump', 'export', 'exit', buttons below 'Absolute time', from left to right.

Jump over idle time:

Look at the 'Density of screen changes' shows upon the progress bar, drag the slider to next position with black dots.

Add Description

You can add some descriptions into a file for future look up.

Delete

Delete a file from disk.

Export

Export segment to a self-play exe movie or an '.avi' file.

Notice, the size of AVI file for a same segment could be much larger than a self-play exe file. For big image like screen, some video codec may not work, after our testing, Xvid maybe a good choice on many computers.

TAGS FOR SPECIAL MOMENTS

Screen Anytime, over v1.5, have a feature that supports tags for special moments. Any user can mark a moment by added a tag by pressing hotkey 'Ctrl-Alt-F12' in recording.
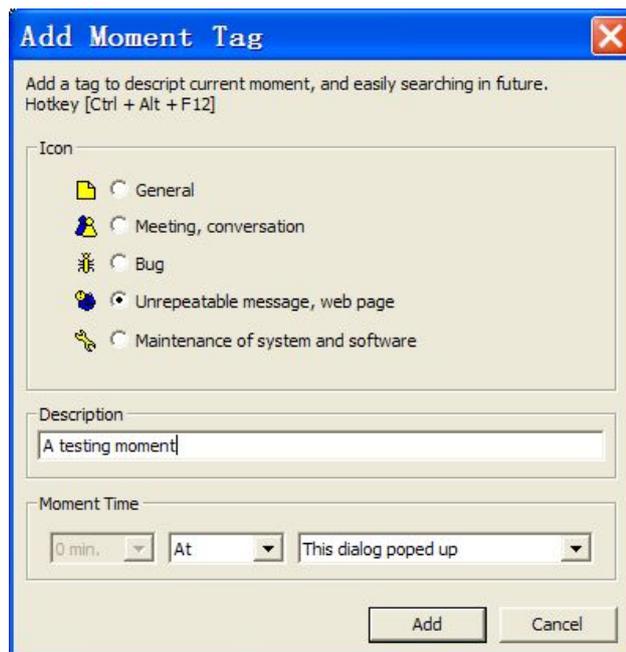
Figure 15, Add moment tag

In this pop-up dialog, you can give this moment a short description which can be searched and viewed later in Screen Anytime. In the 'moment time' section, you can adjust the tag time to/before/after the time dialog pop-up or the time dialog closed.

This tag is listed at the left of Screen Anytime window after a month is selected. Double click the item, you can go to and replay the moment. It can also be searched in 'searching a moment' function besides the general keyword searching of title.
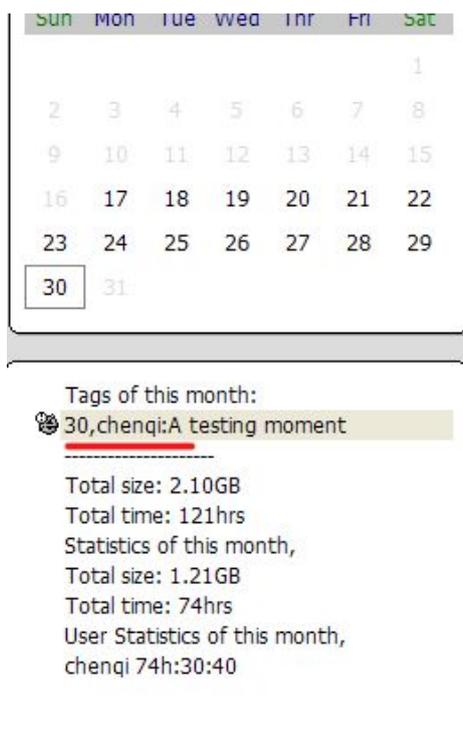
Figure 16, Show moment tag on left

5, TIPS

FILE PROTECTING

To protect the records from deleting, modification and reading by non-administrator users, you can,

1. Use NTFS file system instead of FAT/FAT32.
2. Never give common users the privilege of Administrator.
3. Based on 1 and 2, set the output folder's security property. Disable access right of everyone except 'Administrator', 'SCR_ANYTIME_USER' and other necessary accounts. The very important thing is to make sure 'SCR_ANYTIME_USER' can read, write and create folder in the output folder and its subfolders.

With above settings, common users can not read/write files in this folder, so they can not delete, modify or copy them.

SAVE DISK SPACE

The following settings can help saving disk space,

1. Set maximal limits of total size and time. Refer to 'Configuring-File setup page'.
2. Use lower frame rate and color depth. Refer to 'Configuring-Record setup page'.
3. Set your screen-saver to a simple one or just disable it. Avoid using complex

screen-saver like 'Aquarium'.

4. Disable wallpaper, and use classic Windows theme.

The statistics of total disk usage can be found at the left side of the main interface.

Figure 17, Statistics

BACKUP AND REOPEN

[Server Edition Only]

It is easy to back up the records that just burn the files you need into disc. Warning, the files on disc have no protection, and therefore anyone can replay them on any computer installed Screen Anytime.

In Screen Anytime, you can reopen the backup records. Just use menu item 'File-From another place' and select a folder. For example, the path of DVD-ROM. Screen Anytime will browse and search in this folder and update view based on the result.

SEARCH A MOMENT

The search function is very useful in filtering out special user actions from the big files.   The recorder will catch every change in foreground window, and write down their titles. When user do something, the always have a foreground window. By searching text in titles or program exe file of these windows, Screen Anytime can bring you back to the moment they open it.
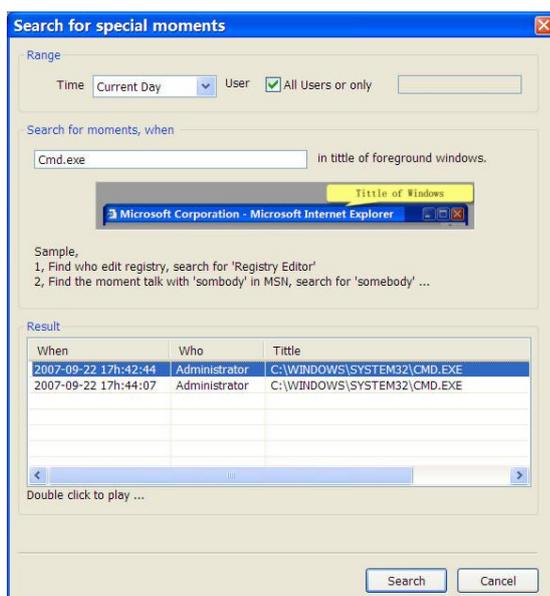
Figure 18, search dialog

Here are some examples, (these could be varied in different system)

To Find, Who and When	Search Term	Original Window's Title
Changed registry	'Registry'	'Registry Editor'
Conversation with Tom on MSN	'Tom'	'Tom - Conversation
Visited google	'Google'	'Google – Microsoft Internet Explore' or some other navigators.
Use text editor	'notepad'	The exe name is 'notepad.exe'

Table 1, Typical samples of search function

CLOSE CURRENT RECORDING AND REPLAY

In default, the recorder of Screen Anytime will recording to the end of session. Until then the file will not been closed and keep getting larger. If you need to stop recording, or close the file, you can call menu 'Item - End current recording' to close them manually. In this function, you can set the recorder to stop or resume after the file is closed.

The 'End reason' of a manually closed file is 'User stop recording'.

MONITORING AND REAL TIME MONITORING

Screen Anytime server edition provides two ways to monitor all computers from which the recorded files are uploaded to the server. In real-time or with limited delay.

The first way, also a real-time way is by function 'Realtime monitor' under menu

'File&system'. You can use it on server or copy the tool to your local to use.There is a distribute-able tool ProjSvr.exe under the setup folder of server edition. This is a tool for real-time monitoring. To monitor a workstation, you need check the box 'allow monitoring' on the 'setup-privacy' page of the workstation/client*(Figure 6)*. Then, the manager can run ProjSvr.exe on his own computer, log-in server to get a list of workstation, then click for connection.

After connection established, screen on client workstation will be transferred to the manager's computer. The manager can monitor 4 workstations at same time with delaying under 1 seconds.

While, this function requires the monitored computer and the manager's computer under same network so they can see each other by their IPs. It is not possible to use this way to monitor computers behind firewall or NAT. It also highly depended on the network settings so sometime it may not work well.

Then, there is a alternate way provided by Screen Anytime, that is 'Last screen' function, also called 'the Wall of screens' of the web page version.

This monitoring function will decode the latest frame from the uploaded files. So what you see is the last frame of the last file, sort by time, and for each client. It is obviously more reliable than the first way. No matter the client behind or not behind any firewall, once the files been uploaded to the server, you can see it.

Another advantage of this method is, you don't need a special client to run it. On any computer, by visit the website of Screen Anytime (HTTP service need be on), you can see all recent screens. Just click on the 'Wall of screens' button on the web page after log-in.

Here is a sample of this method on web page,
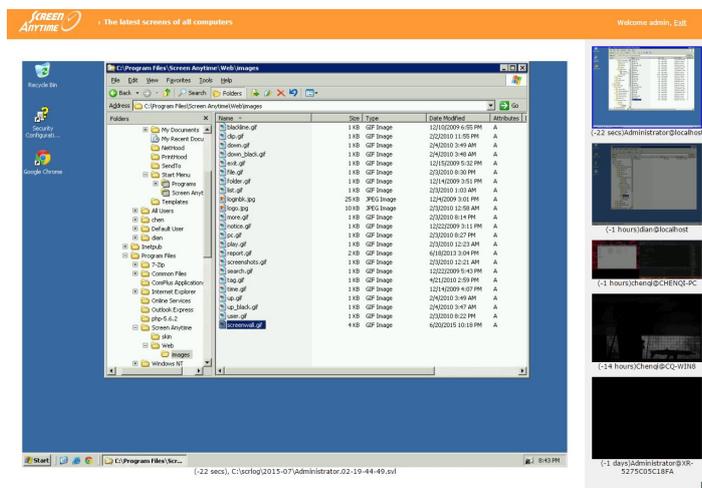
Figure 19, wall of screens

The thumbnails on right are all users of all computers (include local and remote) on this server. If the thumbnail is black, it means the session is closed.Otherwise, you can select to view its latest frame. The list of thumbnails will refresh every minute. The big image on left is the image of current selected user, it will refresh every 5 seconds. And you can see the delay on the text. Pages are provide to support more users and clients.

The bad part is, the 'last screen' method has longer delay than the first method. The delays varied from case to case and depends on the following facts. If the uploading progress is fast enough, the delay depends on the network speed and the refresh speed of the server, which typically under 1 minute. If the uploading is not fast enough , you have to wait for the uploading catch up with the recording to see the latest screens.Therefore, the delay will be longer.

PERFORMANCE REPORT

As the new function since v4.5, the performance report can let the administrator know on a specified computer, how the time are spend on different application.

The applications are classified by their exe file name. The program will statistic the total time for each exe within a user pointed time-span. The idle time will be excluded from the statistics. If there is no mouse movement in 5 minutes, the program will treat the status as idle.

Administrators can make a instant report in Screen Anytime (**File** menu-**Performance Statistics**) for any period they want or make it a automatically repeat rule.in '**Setup'**-'**Performance Statistics**' page (Server edition only).

The following figure is a sample of a typical report.
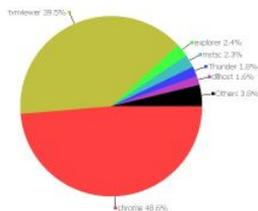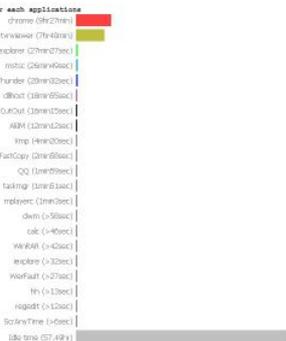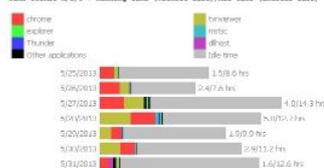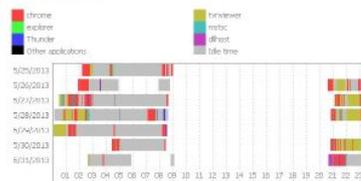
Figure 20, Performance report

There are 2 ways to read those automatically generated reports. You can open it at Screen Anytime program, the menu '**File-Manage Performance Reports**" or from the webpage, accessed remotely by HTTP services (server edition), Click on the link on top-right of the list page.

SERVICES

Screen Anytime server edition have 2 services installed on the server, the 'Screen Anytime Service' and 'Screen Anytime HTTP Service'. You can find them on services list (Control Panel/Administration Tools/Services).

Screen Anytime Service will create a TCP port to receive uploading records from clients. This port can be set in 'Server' page of setup. It also creates a UDP ports for responding to the request of a local real-time monitor process. This service is installed as 'auto-start' with system. So it always runs. The corresponding exe file is 'SASyncService.exe' under the program file folder. If anything wrong with this service, for example, you can use command line to fix problems manually with parameters in following,

- '-i' , Install service.
- '-u', Uninstall service

The http service will be launched by 'Screen Anytime Service' if the service is

enabled in 'Http service' page of setup. It will create a TCP port, allowing web browser visit records on server remotely. It is a all-in-one HTTP service that does not depended on IIS, so you need do nothing in your IIS. This service also support '-I', '-u' parameters in command line to install/uninstall.

The workstation edition include only 'Screen Anytime Service' compare to server edition.

DELAYING

The video you can see in Screen Anytime is not in real time.There is a delay from the event to the time you can play in Screen Anytime.For local recording, the minimal delaying time depends in buffer inside the program. It normally will be under 10 seconds if keeping refreshing. For remote uploaded file, it could be more longer depended on network bandwidth. 1-5 minutes for most of the time.

6, TROUBLESHOTS

Recorder says: "Due to user account changes. Current user can not access destination folder."
Check local user accounts, and make sure 'SCR_ANYTIME_USER' exist. Check registry value 'HLM\Software\Stepok\ScreenAnytime\File\UserIDRef' in existence. If not, reinstall Screen Anytime under Administrator account.

Recorder Says: "The folder of screen records has not been set. Please run Screen Anytime"
Run Screen Anytime, and run 'File-Setup' function to set the folder.

Recorder Says: "Can not write files, and please check the user \'SCR_ANYTIME_USER\' to have right of access ……"
Make sure the folder exist, and check the security property of the folder. Make sure user 'SCR_ANYTIME_USER' can read and writes in this folder and its subfolder.

Can not record contents in media player
It is not a bug. The capture function of recorder is based on GDI, which can not capture some movie scene in media player, rendered by overlap way.

Can not terminate 'ScreenLog.exe' process in 'Task manager'
The recording process is protected by Screen Anytime. You can not terminate it unless Administrator allows users to close it by setting option in 'Screen Anytime-Setup-Privacy'. Administrator can terminate it with function 'Screen

Anytime-Item-Stop current recording'.

Can not play movie on web page
The web page version of Screen Anytime uses SWF format to show movie clip. Because the recorded video files are normally huge, it will take time to be converted to SWF format, and more time in downloading. For big files, playing clips is recommended than playing all.

Can not start Screen Anytime
Only Administrator can use this program to configurate and replay.

CPU cost too much
Set FPS in 'Screen Anytime-Setup-Record' page to a lower number if your processor is not powerful enough.

Windows Vista UAC warning
Since running Screen Anytime need Administrator privilege, in Windows Vista, it is marked with a UAC shield, which will show warning every time launching. This is normal.

Any other questions, please visit our forum at:
http://www.stepok.net/ScrecForum

7, LICENSING

TRIAL VERSION AND FULL VERSION

The trial version for public evaluation has a trail period of 60 days. To continue using this product after trial days, you need purchase a license key.
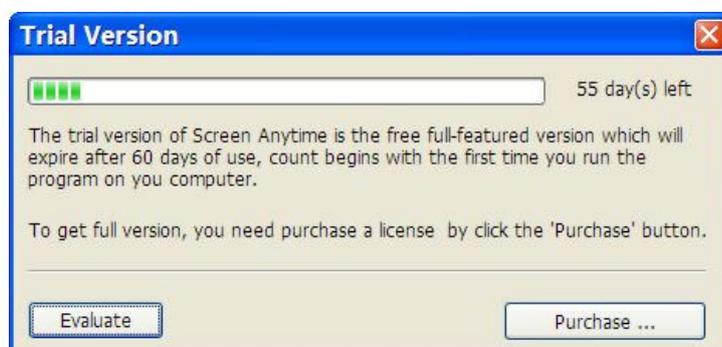
Figure 21: Trial version

If you have purchased a license key, we will send you a link of full version. You

need to download and install it, then enter the key you have purchased to activate the product.

SERVER EDITION AND WORKSTATION EDITION

The following table compares the differences between two editions,

Features	Server Edition	Workstation Edition	Simple Wk Edition
System	Windows or Windows server		
Licensing	Per server	Per PC	Per PC must work with server edition
Record&replay	Yes	Yes	Record only
Settings	All	Most	Most
Backup& reopen	Yes	No	No
Centralized server	Yes	No	No
Http server	Yes	No	No
Statistics	Yes	No	No
Monitoring	Yes	No	No
Price	Contact us		
Purpose	Monitor server Act as server	Local 24x7 record and replay	Monitor whole company, include servers and everyone

Table 2, Comparison between server edition and workstation edition

8, LINKS

Website
http://www.screen-record.com
A stepok sub-site of screen recording related products.

Purchase
Server Edition
https://secure.avangate.com/order/cart.php?PRODS=1435926&QTY=1
Workstation Edition
https://secure.avangate.com/order/cart.php?PRODS=1435959&QTY=1
Server Edition + Simple Wk Editions
Please contact us.