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Chapter 1 – Introduction

Welcome

Thank you for choosing ECG Data Storage from ECG. The fact that you are reading this User Guide shows you already understand how important it is to ensure that your data always remains safe and secure.

ECG is one of the leading providers of online backup service. ECG is also one of the very few online backup service providers with its own proprietary software. ECG Data Storage offers the same security and functionality of backup services used by Fortune 500 companies, but in an easy to use package.

We hope that using ECG Data Storage will give you the peace of mind that your data is truly insured. As we are always striving to improve the ease of use and functionality of our software, please feel free to contact us if you have any questions or comments via email at support@ecg1.com or call us at 1-800-767-5599.
**About ECG Data Storage**

ECG Data Storage is a secure, online backup service that automates the process of backing up your data. ECG Data Storage backs up the files that you have selected to be backed up by first compressing and then encrypting them using your unique Encryption Key. The encrypted files are then transmitted over the Internet via a secure channel to two sets of ECG servers, located in geographically separated locations.

Once you have installed and configured the ECG Data Storage software, selected the folders and/or files that you wish to backup, and set up the backup scheduler, the service runs automatically. During each backup, only new files and files that have changed since your previous backups need to be transmitted, saving you valuable time and bandwidth. You can retrieve your files at any time and as often as you like. Recovering your files can be as easy as a few clicks of the mouse.

**Using ECG Data Storage**

Once the ECG Data Storage software is installed onto your computer, it will always remain in your system background*. This will not affect the performance of your system. A small icon (an arrow on top of a globe) will be in your system tray. The software itself does not need to be open in order for backups to occur. To open the software, Double Click on the icon.

* On Windows 98 and Windows ME, the ECG Data Storage program will need to remain open in order for backups to occur. The software will automatically be opened and minimized upon startup of your computer.

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**Key Features of ECG Data Storage**

Following is a brief list of some of the significant features of ECG Data Storage.

- Unlimited number of versions can be stored
- Sophisticated data encryption and compression
- Multiple computer support
- Automatic email notifications on completed backups
- Supports backup of Microsoft Outlook “.pst” files, Microsoft Exchange databases, and Microsoft SQL databases (requires free ECG Data Storage plugins)
- Advanced file and revision deletion tools that enable storage space management
About Encryption and Security

ECG Data Storage encrypts each file using 256-bit AES encryption technology. This encryption technology, used by the U.S. government and military is even stronger than the 128-bit encryption methods that are typically used for online banking. The file is encrypted before it leaves your system and then remains encrypted on the ECG servers, providing complete privacy for your data. There is no way for even ECG personnel to access your files, because only you have your unique Encryption Key.

In addition, the ECG Data Storage software communicates with the ECG servers using SSL (Secure Socket Layers) technology. This is the same encryption technology used by Internet browsers when you enter a secured site. As a result, your data is encrypted twice. It is encrypted at all times using the 256-bit AES encryption, and it is encrypted again while it is being sent over the Internet.

As an added measure of protection, your encrypted data is stored in two data facilities, located hundreds of miles apart. Each facility has advanced security features such as biometric controlled access and 24/7 monitoring as well as backup generators and redundant connections to the Internet.

Hardware and Software Requirements

In order to use ECG Data Storage, you need the following hardware and software:

**Minimum:**

- 200 MHz Intel Pentium Pro computer (or equivalent)
- 64 MB of RAM
- 100 MB Free Disk Space
- Dialup Internet Connection (56 Kbps)

**Recommended:**

- 400 MHz Intel Pentium II computer (or equivalent)
- 128 MB of RAM
- 300 MB Free Disk Space
- Broadband Internet Connection

**Supported Operating Systems**

ECG Data Storage will work on the following operating systems:

About this User Guide

This User Guide is designed to take you step by step through the installation process and through all of the features of the ECG Data Storage software. Throughout the User Guide, you will see boxes with three different picture icons.

Boxes with the Exclamation Point icon contain important messages. **Please make sure that you read all of the information within these boxes.**

Boxes with the Magnifying Glass icon contain hints, tips and examples. This information may help make using ECG Data Storage easier.

Boxes with the Book icon contain definitions of terms frequently used in the ECG Data Storage software and in this User Guide.

At the end of this User Guide is a glossary of frequently used terms as well as a list of frequently asked questions (FAQ). There is also additional information regarding ECG Data Storage on the ECG website at http://www.ecg1.com.

Chapter 2 – Installing ECG Data Storage

Step 1 - Signing Up and Downloading the ECG Data Storage Software

Before you can install ECG Data Storage, you will first need to create an account. (If your IT administrator has already created an account for you, then please skip to Step 2 – Installing the ECG Data Storage Software on page 14). To create an account, follow these steps:

2. Click **Sign-up** at the top of the screen.
3. Choose the Plan that you want and Click **Buy Now**.
4. Review your choice and Click **Checkout Now**.
5. Fill in your user information and Click **Register Now**.
6. The next screen will allow you to choose a payment method. You can choose to pay by credit card (your credit card will be automatically charged every month) or you can choose to pay by check (you will receive a monthly invoice). Choose **Pay By Credit Card** or **Pay By Check**. If you choose **Pay By Credit Card**, Enter in your credit card information.
7. Once your order is accepted, Click **Download Area**.
8 On the next screen, choose your computer’s operating system and Click Download.

Hint: If you do not know what operating system you are using, Right Click on your My Computer icon and Click Properties. Your operating system should be listed under the tab labeled General.

9 Once you Click Download, you will be prompted to save the file, ecgdatastorage.exe onto your hard drive. Please save (do not Select Open) the file in a location that you remember.

10 Once the software has finished downloading, run the ecgdatastorage.exe file by Double Clicking on the file.

**Step 2 – Installing the ECG Data Storage Software**

**IMPORTANT – PLEASE READ**

Please save and close all other programs as your computer may need to reboot after the installation process. Any unsaved data could be lost.

1 You will be prompted to read and accept the terms of the License and User Agreement.

- Once you have read and accepted the terms of the License and User Agreement, Choose “I accept the terms of the License Agreement.”
- You can also print the License and User Agreement by Clicking Print.
- Click Next.

You may click Back at any time during the setup process to change any of the previously selected options of each wizard.
You will now be prompted to choose the folder where the ECG Data Storage software will be installed. The default folder is \Program Files\ECG\ECG Data Storage.

- If you want to use the default folder, Click Next.
- If you want to change the folder location, Click Change. Choose the folder to which you want to install the ECG Data Storage software or Type in your desired path and Click Next to continue.

Click Install to begin the installation. The installation process may continue for several minutes after the status bar reaches 100%.

The ECG Data Storage installer may need to install certain Microsoft Windows updates onto your computer. If this should happen, a dialog box will appear displaying, “Installing Windows Updates.” WINDOWS MAY NEED TO REBOOT YOUR SYSTEM AFTER THIS PROCESS. The installation will continue automatically after your computer has been rebooted.

When the installation process is completed, Click Finish.

The next window that you will see will be a Welcome Screen. If your computer communicates through a proxy, then Click the box at the bottom of the window. Click Proceed.

- If you had checked the box indicating that your computer communicates through a proxy, then you will see the following screen.
Enter your proxy settings and then Click Test. If the test was successful, then Click OK.

If you are installing on an ISA server, use 127.0.0.1 as the host and 8080 as the port.

Next you need to complete three setup wizards. First you will setup your Encryption Key. Second you will configure the ECG Data Storage software. The final wizard will help you design your first Backup Set.

What is the Encryption Key?

The Encryption Key is used by the ECG Data Storage software to encrypt every file that you backup and then decrypt every file that you restore. In just a minute, you will be asked to provide a 48 character string that will then be converted into a 256 bit Encryption Key. You will not need to re-enter the Encryption Key unless you have a complete system failure and need to reinstall the ECG Data Storage software.

Certain ECG Data Storage pricing plans allow you to backup multiple computers. All computers within one account must utilize the same Encryption Key. This enables the administrator to maintain control of, and access to all backups within the account.

VERY IMPORTANT – PLEASE READ

While you will not need your Encryption Key to perform daily backups or to retrieve selected files, you WILL need your Encryption Key if you have a system failure and need to perform a full recovery. You will not be able to decrypt and use your files without the Encryption Key. Therefore, we highly recommend that you keep printed and electronic copies of your Encryption Key in a secure, offsite location, such as a Safe Deposit Box.
1. This wizard will guide you through the steps necessary to setup your Encryption Key.

   - If this is the first (or only) computer in your account, Choose **Create a New Key** (this is the default option) and Click **Next**.

   - If you are restoring your data after a system failure, Choose **Restore Existing Key** and Click **Next**. Please proceed to Reinstalling ECG Data Storage after a System Failure on page 102.

   - If this is not the first computer in your account, Choose **Skip this Wizard** and Click **Next**. Please proceed to Step 4 – Configuring the ECG Data Storage software on page 26.

2. Enter the **Username** and **Password** that you selected online (and was sent to you via email or given to you by your IT administrator) and click **Next**.

   Your username and password was emailed to you after you created your account on the ECG website. If you did not get this email or do not remember your information, please contact ECG Customer Support.
3. To create your Encryption Key, you will be prompted to enter a string of 48 characters. You may use any combination of numbers and letters but you may not use spaces or punctuation. The key is also case sensitive so upper and lower case letters are different. Alternatively, you may generate a random key by Clicking **Generate Random Key**.

- Enter a 48 character string

  Or

- Click **Generate Random Key**

4. Once you have entered a valid 48 character string, Click **Upload**. When you click upload, the following will occur:

- First, an undecipherable, one-way version of the Encryption Key, known as an MD5 is created and sent to the ECG servers. The MD5 version of your Encryption Key enables the ECG Data Storage software to verify that the Encryption Key on your computer matches the Encryption Key on the ECG servers, without the servers having the actual Encryption Key. The MD5 CANNOT, under any circumstances, be used to decrypt or read your files.

- Second, your Username and Password will be verified.

- When these two steps are completed, you will see **Green Lights** displayed in two locations on your screen. Click **Next**.

- If you see a **Red Light** displayed, it means that your Username and/or Password is wrong or that there is a problem with your Internet connection. Try Entering your Username and Password again. If you are still having difficulty, please contact ECG Customer Support.
Before you can move on and configure your ECG Data Storage software, you must either save or print your Encryption Key. You may save and print the Encryption Key as many times as you wish. You will also be able to save or print your Encryption Key at anytime later using the ECG Data Storage software.

- If you want to save the file, Click **Save to File**. The default filename will be “**youruserid.key**.” You may change the filename, as long as it ends with the file extension “**.key**.” We recommend that you save the file to a floppy disk or CD-R and store it in a secure, offsite location, such as a Safe Deposit Box.

- If you want to print your Encryption Key, Click **Print**. You will be prompted to select a printer and then it will be printed. We recommend that you store this printout in a secure, offsite location, such as a Safe Deposit Box.

**VERY IMPORTANT – PLEASE READ**

Once again, it is ABSOLUTELY ESSENTIAL that you have a copy of your Encryption Key. You WILL NOT be able to retrieve your files in the event that you have a complete system failure unless you have either the 48 character string that you typed in or the version of the Encryption Key that you just saved and/or printed.
Step 4 – Configuring the ECG Data Storage Software

1. The next wizard will configure the ECG Data Storage software. There are four steps involved: entering your Username and Password, loading your Encryption Key, verifying your user information and testing your connection, and finally, setting your default revision rule settings. Click Next to continue.

2. You will be prompted to enter your Username and Password as well as your Computer ID. This information was sent to you via email. The Username and Password is the same as you entered a few minutes ago, unless you automatically skipped the Encryption Key creation process.
   - Enter your Username, Password and Computer ID. If this is your first account, this information will be filled in for you automatically.
   - Click Next.
What is a Computer ID?

A Computer ID is used to keep track of multiple computers within the same account. If this is the first computer to which you are installing ECG Data Storage, your computer ID will be 0000. If you have an ECG Data Storage account with multiple computers, each subsequent computer will have the next sequential Computer ID (i.e. 0001, 0002, etc.)

3 You will next be prompted to Load your Encryption Key from a file or Type it in. **If this is the first computer within your account to which you are installing, you will automatically skip this step.**

- Type or Load your Encryption Key. If you want to type in your Encryption Key, Type in the 48 character string that you chose. If you are loading your Encryption Key from a file, Click **Load From File**.

- If you are loading the Encryption Key from a file, you will be prompted to choose the file location. The Encryption Key file will have the file extension “.key.”

- Click **Next**.

4 The next screen tests your connection to the ECG servers, and ensures that you can compress, encrypt and upload a file to the ECG servers and then download, decrypt and decompress the same file.

- Click **Test Connection**.

- If all of the steps display a **Green Light**, then your account is properly setup. Click **Finished**.

- If any of the boxes display a **Red Light**, then you may have loaded your Encryption Key incorrectly or you may be having difficulty with your Internet connection. Click **Back** and Retype or Reload your Encryption Key.

If you have personal firewall software, make sure that your firewall software allows the ECG Data Storage software to pass through. There are three files that need to be allowed access to the Internet: *monitor.exe*, *keyadmin.exe*, and *srv.exe*. The first two files are in the ECG Data Storage installation folder (normally C:\Program Files\ECG\ECG Data Storage). The srv.exe file is in the “Service” subfolder of the ECG Data Storage installation folder (C:\Program Files\ECG\ECG Data Storage\service). If you are having trouble, please contact ECG Customer Support.

5 Next you will be prompted to set your default revision rule settings.

**What is a revision?**

A revision is an older version of a file. Whenever a file is changed, the previous version of the file is known as a revision. Depending on your configuration settings, ECG Data Storage will store multiple or even unlimited versions of a file.
6 Select the number of revisions that you want ECG Data Storage to use as the default setting. ECG Data Storage can store as few as 0 revisions (Select \textit{Only the Latest} from the dropdown list) which means that only the latest version of each file will be stored on the ECG servers. ECG Data Storage can also store an unlimited versions of each file (Select \textit{Unlimited} from the dropdown list).

- The more revisions that are stored, the more space you will use (and pay for) on the ECG servers.

- You can change this setting at any time if, for example, you find you are using too much storage space. ECG Data Storage also gives you the ability to setup rules for individual or groups of files, folders and backup sets (see Chapter 6 – Revision Rules on page 130).

7 This window also allows you to set up a specific revision rule for Microsoft Outlook. If you use Microsoft Outlook as your email program, then all of your emails, calendar entries, contacts, etc. are saved in a single file. Because, this file can grow very large, often greater than 1 GB, you probably do not want to store many versions of this file on the ECG servers.

- If you want to backup your Outlook data (emails, etc.) and wish to limit the number of old versions of the Outlook file that are stored, then Click the box labeled \textit{Yes, Create Outlook Email Revision Rule}.

- Next select the number of revisions of the Outlook file that you want to store. You can choose 0 revisions (i.e. only the most recent version will be stored) by choosing \textit{Only the latest} or choose 1 or 2 revisions.

8 When you are finished setting your default revision rules, Click \textit{OK}.
Step 5 – Creating Your First Backup Set

You are almost ready to start backing up your data. The third and final wizard will help guide you through the steps necessary to design a Backup Set.

What is a Backup Set?

A Backup Set is a list of files and folders that will be backed up, and a specified schedule of when those files will be backed up. ECG Data Storage allows you to create an unlimited number of Backup Sets.

1 There are two methods for choosing the files that you want to backup for a Backup Set. You can choose to find files By Folder or By File Type.

Choose either By Folder or By File Type and Click Next.

If you choose By Folder, proceed with 2 – Selecting Files by Folder on page 34. If you choose By File Type, skip to 3 – Selecting Files by File Type on page 36.

You will be able to switch methods at any time by Clicking Back.
2 Selecting Files by Folder
You will now select the files that will be included in your first Backup Set. You will see a view of your computer similar to Windows Explorer.

To select an entire folder to backup, Click on the box to the left of the folder. You will see a black checkmark. All files contained within the folder and all subfolders will be automatically selected.

If you do not want a folder backed up, Click the box that is checked and a red “X” will appear. All files contained within this folder and all subfolders will NOT be backed up.

- To expand a folder, Click on the “+” to the left of the box. To contract a folder, Click on the “-.”

- If you want to select individual files to backup, Click on the Show Individual Files checkbox on the left side of the window. You may select individual files to backup by Clicking on the checkbox to the left of the filename.

- After you have selected the files to backup, we recommend that you calculate the amount of data by Clicking Calculate Usage on the bottom left of the window. This will calculate the number of files selected, as well as the aggregate amount of uncompressed data and an estimate of the aggregate amount of compressed data. Please note that the compressed size amount is an estimate and may vary from the actual compressed size.

The ECG Data Storage software does not support backup of removable media devices such as floppy drives and CD-ROM drives. If you wish to backup data on such drives, please first copy the data onto your hard drive, and then select those files or folders to be backed up. ECG Data Storage will let you backup USB devices such as memory keys and removable hard drives.

- Once you have finished selecting the folders and/or files that you want to backup, click Next and proceed to 5 – Scheduling a Backup on page 40.
3 Selecting Files by File Type
You will now select the files that will be included in your first Backup Set. You will be choosing the files by file extension.

What is a file extension?
A file extension is the three letter suffix at the end of a file. Different programs use different file extensions so that your computer recognizes what program to use to open files. For example, Microsoft Word’s default file extension is “.doc.” MP3 audio files have the extension (can you guess?) “.mp3.”

- The ECG Data Storage software has included many common programs and their associated file types that can be chosen. For ease of use, the ECG Data Storage software has divided the categories into Productivity, Programming, Multimedia and Miscellaneous.

If you do not see programs that you use listed here, then you will have to add custom file extensions or you can change methods and select your files By Folder.

Please also let us know by emailing us at support@ecg1.com the names of programs that you use that you would like to see in this list. We update this list with every version of the software.

- You can Click the check box on all of the programs that you commonly use. This will automatically include your saved files from each program type.

- If you do not see programs that you use listed, you can add custom file extensions by Clicking Manage Extensions.

To add a new file extension, first Select the program with which the file is associated. If the program is not listed, Select My Custom Extensions.
Next, in the box labeled Add An Extension, Type the new file extension and Click Add. Note that file extensions are typically three characters in length. You should NOT enter a period in front of the extension.

You may add as many file extensions as you wish. You may also delete both custom and existing file extensions by Selecting them in the box labeled Delete an Extension and Clicking Delete.

When you are finished adding and deleting extensions, Click Done.

In order for the ECG Data Storage software to backup files with the extensions that you just added, you will need to Click the check box of the program to which you added the custom extensions. Or, if you added extensions under My Custom Extensions, make sure this box, located in the Miscellaneous category, is checked.

- You also have an option of including common data files or all data files that are associated with a listed software program by Selecting either Just Data Files (default) or All Associated Files. All Associated Files include less commonly used extensions such as macros, templates and wizards. Please note that if you Select All Associated Files, you will be selecting this option for all program types that you choose.

- When you are finished Choosing file types, Click Next.

4 The next screen allows you to select the folders or drives that you want to be searched. By default, all of your local hard drives, such as “C:\” are selected.

To add a folder, Click Add Folder. You can select an entire drive such as your “C:\” drive or specified folders such as “My Documents.”

The ECG Data Storage software does not support backup of removable media devices such as floppy drives and CD-ROM drives. If you wish to backup data on such drives, please first copy the data onto your hard drive, and then select those files or folders to be backed up. ECG Data Storage will let you backup USB devices such as memory keys and removable hard drives.
To remove a folder, Click on the folder in the folder list window and then Click **Remove Folder**.

After you have selected the files to backup, we recommend that you calculate the amount of data by Clicking **Calculate Usage**. This will calculate the number of files selected, as well as the aggregate amount of uncompressed data and an estimate of the aggregate amount of compressed data. Please note that the compressed size amount is an estimate and may vary from the actual compressed size.

Click **Next** to schedule your backup.

5 **Scheduling a Backup**

Now that you have chosen what files will be included in this Backup Set, you are ready to select times for backups to start.

You have two options for choosing what time to backup. You will note that the default schedule is to backup during the night, five days a week.

The first method of scheduling a backup is to choose the time that the last person leaves the office. The software will automatically schedule backups on Monday through Friday four hours after the time you have chosen.

Please note that if you select that the last person leaves at 8:00 pm or later, the backup will occur early the following morning. For example, Friday’s backup may occur at 1:00 am Saturday morning. In this case, the backup schedule will appear as Tuesday through Saturday rather than Monday through Friday.

You can also manually choose the time each day to backup by setting the hour for each day. Do this by Clicking on the time associated with each day. You may have a different hour for each day. If you do not want a backup scheduled for that day, choose **No Backup**.

Once you are finished scheduling, Click **Next**.

If you would like to perform multiple backups per day on the same files or folders, you can create additional Backup Sets later by choosing the same files with a different backup schedule.
6  Naming your Backup Set
The final step is to choose a name for the Backup Set that you just created. Choose a descriptive name so that you can easily distinguish between multiple Backup Sets.

- Type in a descriptive name or Choose one of the pre-selected names from the dropdown box (e.g. “Office files” or “Music collection.”)

- Click Finish or if you want to enable ECG Data Storage’s advanced backup options, Click the tab labeled Advanced.

7  Advanced Options
ECG Data Storage allows you to further customize your backups by enabling several advanced options.

- If you are not already on the above screen, then Click the tab labeled Advanced. By default, all advanced options are disabled.

- If you only want files to be backed up that have their archive bit set (as opposed to backing up all files that have been modified regardless of the archive bit), then Click the box labeled Only backup files with the Archive bit set.
If you want to backup only files that have changed since a certain date, then Click the box labeled **Only backup files changed since**. Next, set the date and time since which you want files to be backed up.

It is important to note that if enabling either of the two previous options (**Only backup files with the Archive bit set** and **Only backup files changed since**), will prevent files that do not meet these enabled criteria from ever being backed up.

ECG Data Storage also allows you to send events to your Windows Event Viewer. To send an event whenever a backup starts or stops then Click the box labeled **Send Event When Backup Set Starts/Stops**.

To send an event whenever a file contained in your backup set fails on backup, then Click the box labeled **Send Event for Each Failed File**.

If you want to reset all advanced backup settings to their default (disabled) setting, then Click **Reset Advanced Settings** and then click **Click to Reset**.

Finally, Click **Finish**.

---

**Congratulations! You have now finished installing the ECG Data Storage software and setting up your first Backup Set.**

**IMPORTANT – PLEASE READ**

You now have the option of performing a full backup. We strongly recommend that you Click **YES** and perform a backup immediately.

Your initial backup could last hours or even days depending on the amount of files that you are backing up and on the upload speed of your Internet connection. Please keep in mind that subsequent backups will take substantially less time as only newly created files and modified files will need to be transmitted.

- You can continue to use your computer while you backup.
- You must keep your computer on during all backups, however, you may lock your workstation or log off entirely without interrupting the backup.
- You may cancel the backup by Clicking **Cancel**. If you cancel, or if for some other reason your backup is interrupted, the process will continue the next time you manually backup or at your next scheduled backup.
Chapter 3 – Managing Backups

About Backups

IMPORTANT – PLEASE READ

Your computer must be on to run a backup. You may, however, lock your workstation or log off without interrupting the backup. You may also continue to use your computer, including the Internet, while a backup is in progress.

- During the backup process, each file is individually compressed and encrypted and then transmitted to the ECG servers. For additional security, the ECG Data Storage software creates a secure connection to the ECG servers for each file.
- Each file is also added to your file catalog (the master list of all of your backed up files) in order to keep track of the names and original locations of all of your files.
- The time that it takes to perform a backup will vary significantly depending on the amount and types of files being backed up and on the upload speed of your Internet connection.

The My Account Tab

Except for the first time you use ECG Data Storage (i.e. installation), whenever you open the ECG Data Storage software, you will be brought to the My Account tab. On this screen you can view information about your account as well as information about your recent backup and restore activity. This window also contains buttons (in addition to the tabs on the left of the window) that will allow you to backup, restore and delete files.

- The top of the My Account window contains information about your account, including your Username, Computer ID, number of files and revisions that are currently backed up as well as your storage usage on the ECG Servers.
To view the number of files and revisions that are currently backed up, Click **Click to refresh...**, located to the right of **File Count** at the top left of the window.

To view the amount of storage that your account is using (as well as this particular computer if you have an account with multiple computers) on the ECG Servers, Click **Click to refresh...** located to the right of **Account Status** at the top right of the window. Note that this information is only updated once per day so if you have backed up or deleted files in the past 24 hours, this data may not be accurate.

If you are using the Microsoft SQL or Exchange Plugins, the storage space used for your account will include those backed up files.

This window also contains three buttons that will allow you to backup, restore and delete files. The **Backup Sets** button takes you to the **Manage Backups** tab. The **Restore Files** button takes you to the **Restore Files** tab. The **Delete Remote Files** button takes you to the **Delete Files** tab.

The bottom part of the window shows you the last 30 actions (e.g. backups, restores, deletes) that ECG Data Storage has performed. Double Clicking an action will take you to the detailed log for that action.

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**Manually Starting a Backup**

You are not limited to backing up your data only at the scheduled time. You may manually start a backup at any time using either of two methods.

**Method 1**

1. Click **Manage Backups** or if you are currently on the **My Account** tab then you can also Click **Backup Sets**. Your Backup Sets will be listed in the main part of the window.

2. Click on the **Name** of the Backup Set that you wish to backup (it will become highlighted).

3. Click **Backup Now**.

4. The backup will begin.

**Method 2**

1. Click **Active Backups** and then Double Click on the name of the backup set for which you want to run the backup. You can also Click on the name of the backup set and then Click **Backup**.

2. The backup will begin.
Performing a Backup

When a backup begins, the *Active Backups* tab will be brought up on the screen. You can also click *Active Backups* to navigate to this window. There are three sections of the window that help you monitor the progress of the backup.

1. The top section lists all of your backup sets. For each backup set that is currently being run (multiple backup sets can be backed up at the same time), you will see the total number of files in the backup set, the number of the current file that is being backed up, the number of bytes sent for that file (pre-compression) and the number of bytes saved (post-compression) to the ECG servers.

   - Immediately below the list of backup sets towards the right side of the window is a progress bar that shows you the progress of the highlighted backup set that is currently running. Next to the progress bar is a timer that shows you the length of that backup set’s backup so far.

   - The middle section lists the current files that are being backed up (ECG Data Storage can backup up to 5 files at the same time) along with the percent packaged (compressed and encrypted), percent uploaded and status of each of these files.

   - The bottom section shows the last 1000 files that were attempted to be backed up, along with the compressed size of the file, the percent compression and the status of the file.

   - At the very bottom of the screen, you will see your current upload speed and a bar showing the progress of all of the backup sets currently running.

If you open the ECG Data Storage software while an automatic backup is taking place, you will only see the status and statistics for files backed up since the software was opened. However, you will be able to view this information later by viewing your log.
Canceling a Backup in Progress

1. To cancel a backup at any time, first navigate to the Active Backups tab, if you are not already on this window.

2. To cancel a single backup set that is running, click on the backup set to highlight it and then click Cancel located towards the top, right part of the window (note that there are two buttons on the screen labeled cancel – see the picture immediately above).

3. To cancel all backups that are running, click Cancel, located at the very bottom of the window (note that there are two buttons on the screen labeled cancel – see the picture immediately above).

The files that were successfully backed up prior to the cancel will be able to be restored.
About Multiple Backup Sets

ECG Data Storage allows you to set up an unlimited number of Backup Sets. There are a number of reasons why you may want to have more than one Backup Set. For example, you will want to use multiple Backup Sets if you want to automatically backup the same files more than once a day. You will also use multiple Backup Sets if you want to backup certain files everyday and other files only once a week.

Please note that all of your files, regardless of whether they are in different Backup Sets, will be saved to the same file catalog and will be listed together when you restore by files or folders.

Adding a New Backup Set

1. To add a Backup Set, Click Manage Backups.

2. Next, Click New Backup Set on the bottom of the window. There are three main steps necessary to create a new Backup Set. First, you will select the files and folders that you wish to include in the Backup Set. Second, you will select when you want the backups to occur. Finally, you will name the Backup Set.

3. There are two methods for choosing the files that you want to backup for a Backup Set. You can choose to find files By Folder or By File Type.
If you know what folders your important files are in, then choose **By Folder**. Select this method, for example, if you want to backup every file in “*My Documents*.”

If your files are scattered throughout your computer, you can have ECG Data Storage search for them. Select **By File Type**, for example, if you want to backup all of the Microsoft Word documents scattered throughout your “C:" drive.

- Choose either **By Folder** or **By File Type** and Click **Next**.

- If you choose By Folder, proceed with 4 – Selecting Files by Folder on page 56. If you choose By File Type, skip to 5 – Selecting Files by File Type on page 58.

You will be able to switch methods at any time by Clicking **Back**.

### 4 Selecting Files by Folder

You will now select the files that will be included in your Backup Set. You will see a view of your computer similar to Windows Explorer.

- To select an entire folder to backup, Click on the box to the left of the folder. You will see a black checkmark. All files contained within the folder and all subfolders will be automatically selected.

- If you do not want a folder backed up, Click the box that is checked and a red “X” will appear. All files contained within this folder and all subfolders will NOT be backed up.
To expand a folder, Click on the “+” to the left of the box. To contract a folder, Click on the “-.”

If you want to select individual files to backup, Click on the Show Individual Files checkbox on the left side of the window. You may select individual files to backup by Clicking on the checkbox to the left of the filename.

After you have selected the files to backup, we recommend that you calculate the amount of data by Clicking Calculate Usage on the bottom left of the window. This will calculate the number of files selected, as well as the aggregate amount of uncompressed data and an estimate of the aggregate amount of compressed data. Please note that the compressed size amount is an estimate and may vary from the actual compressed size.

The ECG Data Storage software does not support backup of removable media devices such as floppy drives and CD-ROM drives. If you wish to backup data on such drives, please first copy the data onto your hard drive, and then select those files or folders to be backed up. ECG Data Storage will let you backup USB devices such as memory keys and removable hard drives.

Once you have finished selecting the folders and/or files that you want to backup, click Next and proceed to 7 – Scheduling a Backup on page 59.

5 Selecting Files by File Type
You will now select the files that will be included in your Backup Set. You will be choosing the files by file extension.

The ECG Data Storage software has included many common programs and their associated file types that can be chosen. For ease of use, the ECG Data Storage software has divided the categories into Productivity, Programming, Multimedia and Miscellaneous.

If you do not see programs that you use listed here, then you will have to add custom file extensions or you can change methods and select your files By Folder.

Please also let us know by emailing us at support@ecg1.com the names of programs that you use that you would like to see in this list. We update this list with every version of the software.
You can Click the check box on all of the programs that you commonly use. This will automatically include your saved files from each program type.

If you do not see programs that you use listed, you can add custom file extensions by Clicking **Manage Extensions**.

To add a new file extension, first Select the program with which the file is associated. If the program is not listed, Select **My Custom Extensions**.

Next, in the box labeled **Add An Extension**, Type the new file extension and Click **Add**. Note that file extensions are typically three characters in length. You should NOT enter a period in front of the extension.

You may add as many file extensions as you wish. You may also delete both custom and existing file extensions by Selecting them in the box labeled **Delete an Extension** and Clicking **Delete**.

When you are finished adding and deleting extensions, Click **Done**.

In order for the ECG Data Storage software to backup files with the extensions that you just added, you will need to Click the check box of the program to which you added the custom extensions. Or, if you added extensions under **My Custom Extensions**, make sure this box, located in the **Miscellaneous** category, is checked.

You also have an option of including common data files or all data files that are associated with a listed software program by Selecting either **Just Data Files** (default) or **All Associated Files**. **All Associated Files** include less commonly used extensions such as macros, templates and wizards. Please note that if you Select **All Associated Files**, you will be selecting this option for all program types that you choose.

When you are finished Choosing file types, Click **Next**.

The next screen allows you to select the folders or drives that you want to be searched. By default, all of your local hard drives, such as “C:\” are selected.
To add a folder, Click **Add Folder**. You can select an entire drive such as your “C:" drive or specified folders such as “My Documents.”

The ECG Data Storage software does not support backup of removable media devices such as floppy drives and CD-ROM drives. If you wish to backup data on such drives, please first copy the data onto your hard drive, and then select those files or folders to be backed up.

To remove a folder, Click on the folder in the folder list window and then Click **Remove Folder**.

After you have selected the files to backup, we recommend that you calculate the amount of data by Clicking **Calculate Usage**. This will calculate the number of files selected, as well as the aggregate amount of uncompressed data and an estimate of the aggregate amount of compressed data. Please note that the compressed size amount is an estimate and may vary from the actual compressed size.

- Click **Next** to schedule your backup.

### 7 Scheduling a Backup

Now that you have chosen what files will be included in this Backup Set, you are ready to select times for the backup to start.

- You have two options for choosing what time to backup. You will note that the default schedule is to backup during the night, five days a week.
The first method of scheduling a backup is to choose the time that the last person leaves the office. The software will automatically schedule backups on Monday through Friday four hours after the time you have chosen.

Please note that if you select that the last person leaves at 8:00 pm or later, the backup will occur early the following morning. For example, Friday’s backup, may occur at 1:00 am Saturday morning. In that case, the schedule will appear as Tuesday through Saturday rather than Monday through Friday.

You can also manually choose the time each day to backup by setting the hour for each day. Do this by clicking on the time associated with each day. You may have a different hour for each day. If you do not want a backup scheduled for that day, choose No Backup.

Once you are finished scheduling, click Next.

If you would like to perform multiple backups per day on the same files or folders, you can create additional Backup Sets later by choosing the same files with a different backup schedule.

Backups will occur according to your computer’s clock. Please periodically check to ensure that your computer’s clock is accurate.

8 Naming your Backup Set
The final step is to choose a name for the Backup Set that you just created. Choose a descriptive name so that you can easily distinguish between multiple Backup Sets.

- Type in a descriptive name or choose one of the pre-selected names from the dropdown box (e.g. “Office files” or “Music collection.”)
- Click Finish or if you want to enable ECG Data Storage’s advanced backup options, click the tab labeled Advanced.
9 Advanced Options

ECG Data Storage allows you to further customize your backups by enabling several advanced options.

- If you are not already on the above screen, then Click the tab labeled Advanced. By default, all advanced options are disabled.

- If you only want files to be backed up that have their archive bit set (as opposed to backing up all files that have been modified regardless of the archive bit), then Click the box labeled Only backup files with the Archive bit set.

- If you want to backup only files that have changed since a certain date, then Click the box labeled Only backup files changed since.

- If you want to reset all advanced backup settings to their default (disabled) setting, then Click Reset Advanced Settings and then click Click to Reset.

- Finally, Click Finish.

It is important to note that if enabling either of the two previous options (Only backup files with the Archive bit set and Only backup files changed since), will prevent files that do not meet these enabled criteria from ever being backed up.

- ECG Data Storage also allows you to send events to your Windows Event Viewer. To send an event whenever a backup starts or stops then Click the box labeled Send Event When Backup Set Starts/Stops.

- To send an event whenever a file contained in your backup set fails on backup, then Click the box labeled Send Event for Each Failed File.

- If you want to reset all advanced backup settings to their default (disabled) setting, then Click Reset Advanced Settings and then click Click to Reset.

While you will not be prompted to immediately back up the new Backup Set, we recommend that you do so.
**Editing a Backup Set**

1. To edit a Backup Set, first Click on **Manage Backups**.

2. Select a Backup Set by Clicking once on the name of the Backup Set that you want to edit (it will become highlighted).

3. Next, Click **Edit** at the bottom right of the window. Alternatively, you may Double Click on the name of the Backup Set. This will bring up the Backup Set creation wizard.

4. When you first created this Backup Set, you either selected the files By Folder or By File Type.
   - If you had chosen By Folder, proceed with **5 – Selecting Files by Folder** on page 69. If you had chosen By File Type, skip to **6 – Selecting Files by File Type** on page 71.

**Managing Backups**

- If you would like to change the method in which you selected the files to backup, you may do so by Clicking **Back** once.

You can switch back and forth between the methods without losing your previous selected files and folders. However, once you Click **Finish**, you will lose your prior selections. If you Click **Cancel**, your changes will not be saved.

5. **Selecting Files by Folder**
   You can now change the files that will be included in this Backup Set. You will see a view of your computer similar to Windows Explorer.
To select an entire folder to backup, Click on the box to the left of the folder. You will see a black checkmark. All files contained within the folder and all subfolders will be automatically selected.

If you do not want a folder backed up, Click the box that is checked and a red “X” will appear. All files contained within this folder and all subfolders will NOT be backed up.

To expand a folder, Click on the “+” to the left of the box. To contract a folder, Click on the “-”.

If you want to select individual files to backup, Click on the Show Individual Files checkbox on the left side of the window. You may select individual files to backup by Clicking on the checkbox to the left of the filename.

After you have selected the files to backup, we recommend that you calculate the amount of data by Clicking Calculate Usage on the bottom left of the window. This will calculate the number of files selected, as well as the aggregate amount of uncompressed data and an estimate of the aggregate amount of compressed data. Please note that the compressed size amount is an estimate and may vary from the actual compressed size due to the types of files selected.

Once you have finished selecting the folders and/or files that you want to backup, click Next and proceed to Editing the Backup Set Schedule on page 76. If you do not want to change the backup schedule or the name of the Backup Set, then Click Next two more times.

6 Selecting Files by File Type
You may now edit the files that will be included in this Backup Set. You will be choosing the files by file extension.
The ECG Data Storage software has included many common programs and their associated file types that can be chosen. For ease of use, the ECG Data Storage software has divided the categories into Productivity, Programming, Multimedia and Miscellaneous.

If you do not see programs that you use listed here, then you will have to add custom file extensions or you can change methods and select your files By Folder.

Please also let us know by emailing us at support@ecg1.com the names of programs that you use that you would like to see in this list. We update this list with every version of the software.

You can Click the check box on all of the programs that you commonly use. This will automatically include your saved files from each program type.

If you do not see programs that you use listed, you can add custom file extensions by Clicking Manage Extensions.

To add a new file extension, first Select the program with which the file is associated. If the program is not listed, Select My Custom Extensions.

Next, in the box labeled Add An Extension, Type the new file extension and Click Add. Note that file extensions are typically three characters in length. You should NOT enter a period in front of the extension.

You may add as many file extensions as you wish. You may also delete both custom and existing file extensions by Selecting them in the box labeled Delete an Extension and Clicking Delete.

When you are finished adding and deleting extensions, Click Done.
In order for the ECG Data Storage software to backup files with the extensions that you just added, you will need to click the check box of the program to which you added the custom extensions. Or, if you added extensions under My Custom Extensions, make sure this box, located in the Miscellaneous category, is checked.

- You also have an option of including common data files or all data files that are associated with a listed software program by selecting either Just Data Files (default) or All Associated Files. All Associated Files include less commonly used extensions such as macros, templates and wizards. Please note that if you select All Associated Files, you will be selecting this option for all program types that you choose.

- When you are finished choosing file types, click Next.

7 The next screen allows you to select the folders or drives that you want to be searched. By default, all of your local hard drives, such as “C:” are selected.

- To add a folder, click Add Folder. You can select an entire drive such as your “C:" drive or specified folders such as “My Documents.”

The ECG Data Storage software does not support backup of removable media devices such as floppy drives and CD-ROM drives. If you wish to backup data on such drives, please first copy the data onto your hard drive, and then select those files or folders to be backed up. ECG Data Storage will let you backup USB devices such as memory keys and removable hard drives.

- To remove a folder, click on the folder in the folder list window and then click Remove Folder.

- After you have selected the files to backup, we recommend that you calculate the amount of data by
Clicking **Calculate Usage**. This will calculate the number of files selected, as well as the aggregate amount of uncompressed data and an estimate of the aggregate amount of compressed data. Please note that the compressed size amount is an estimate and may vary from the actual compressed size.

- Click **Next** and proceed to **Editing the Backup Set Schedule** on page 76. If you do not want to change the backup schedule or the name of the Backup Set, then Click **Next** two more times.

**Editing the Backup Set Schedule**

1. If you just finished editing and selecting the files contained in your Backup Set then please skip to **Step 3** on page 77. Otherwise, to edit only the schedule of the Backup Set, Click **Manage Backups**.

2. Double Click on the Date and Time of the Backup Set that you want to change. The Date and Time is located under the **Next Backup** column and is in the format: **01/01/04 12:00:00 AM**. This will bring up the backup scheduler.

3. You have two options for choosing what time to backup.

   - The first method of scheduling a backup is to choose the time that the last person leaves the office. The software will automatically schedule backups on Monday through Friday four hours after the time you have chosen. Please note that if you select that the last person leaves at 8:00 pm or later, the backup will occur early the following morning. For example, Friday’s backup may occur at 1:00 am Saturday morning. In this case, the backup schedule will appear as Tuesday through Saturday rather than Monday through Friday.

   - You can also manually choose the time to backup each day by setting the hour for each day. Do this by
Clicking on the time associated with each day. You may have a different hour for each day. If you do not want a backup scheduled for that day, choose No Backup.

- Once you are finished scheduling, Click Next to edit the name of the Backup Set. If you do not want to edit the name, Click Next once more.

- Type in the new name for this Backup Set or Choose one of the pre-selected names from the dropdown box (e.g. “Office files” or “Music collection.”)

4 Click Finish.

If you would like to perform multiple backups per day on the same files or folders, you can create additional Backup Sets later by choosing the same files with a different backup schedule.

Backups will occur according to your computer’s clock. Please periodically check to ensure that your computer’s clock is accurate.

Renaming a Backup Set

1 To rename a Backup Set, first Click Manage Backups.

2 Select a Backup Set by Clicking once on the name of the Backup Set that you want to edit (it will become highlighted).

3 Next, Click Edit at the bottom right of the window. Alternatively, you may Double Click on the name of the Backup Set. This will bring up the Backup Set creation wizard.

4 Click Next which will bring you to the backup scheduler window.

5 Click Next again which will bring you to the backup set naming window.

6 Type in a descriptive name or Choose one of the pre-selected names from the dropdown box (e.g. “Office files” or “Music collection.”)

7 Finally, Click Finish.
Editing the Advanced Features of a Backup Set

1. To edit the advanced features of a Backup Set, first Click **Manage Backups**.

2. Select a Backup Set by Clicking once on the name of the Backup Set that you want to edit (it will become highlighted).

3. Next, Click **Edit** at the bottom right of the window. Alternatively, you may Double Click on the name of the Backup Set. This will bring up the Backup Set creation wizard.

4. Click **Next** which will bring you to the backup scheduler window.

5. Click **Next** again which will bring you to the backup set naming window.

6. Click the tab labeled **Advanced**.

- If you only want files to be backed up that have their archive bit set (as opposed to backing up all files that have been modified regardless of the archive bit), then Click the box labeled **Only backup files with the Archive bit set**.

- If you want to backup only files that have changed since a certain date, then Click the box labeled **Only backup files changed since**. Next, set the date and time since which you want files to be backed up.

It is important to note that if enabling either of the two previous options (**Only backup files with the Archive bit set** and **Only backup files changed since**), will prevent files that do not meet these enabled criteria from ever being backed up.
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- ECG Data Storage also allows you to send events to your Windows Event Viewer. To send an event whenever a backup starts or stops then Click the box labeled **Send Event When Backup Set Starts/Stops**.

- To send an event whenever a file contained in your backup set fails on backup, then Click the box labeled **Send Event for Each Failed File**.

- If you want to reset all advanced backup settings to their default (disabled) setting, then Click **Reset Advanced Settings** and then click **Click to Reset**.

7 Finally, Click **Finish**.

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**Copying a Backup Set**

Copying a Backup Set will create a new Backup Set with the identical list of files to be backed up and backup schedule.

1 To copy a Backup Set, Click **Manage Backups**.

2 Select the Backup Set that you want to copy by Clicking once on the name of the Backup Set (it will become highlighted).

3 Next, Click **Copy** at the bottom right of the window. The new Backup Set will appear in the list at the top of the window.
Disabling a Backup Set

Disabling a backup set does not delete the Backup Set, but stops it from automatically running until it is enabled again.

1. To disable a Backup Set, Click Manage Backups. Your list of Backup Sets will be listed in the large box on the right of the window.

2. Click on the checkbox to the left of the name of the Backup Set that you wish to disable. You may re-enable the Backup Set at any time by Clicking again on the checkbox.

Deleting a Backup Set

Deleting a Backup Set will delete the Backup Set (list of files and backup schedule) but will not delete any files from either your computer or from the ECG servers.

1. If you want to delete a Backup Set, Click Manage Backups.

2. Select a Backup Set by Clicking once to highlight the name of the Backup Set that you want to delete.

3. Next, Click Delete at the bottom right of the window.

4. You will then be asked to confirm that you want to delete the Backup Set. Click Yes to delete the Backup Set.

If you want to delete the files contained in the backup set from the ECG servers then please go to Deleting All Files of a Backup Set on page 120.
Chapter 4 – Restoring Folders, Files and Revisions

There are several ways that you can restore files that have been backed up. You can restore folders, individual files, revisions of files and entire Backup Sets. This chapter also explains how to reinstall the ECG Data Storage software and recover your files after a system failure.

**Restoring Selected Folders**

1. To restore a folder, Click **Restore Files**.

2. This will bring up the **Restore Files** window. Next, Click on the **File** tab at the top of the window.

3. In the left box of the window, you will see a view (similar to Windows Explorer) of all of the folders that you have backed up. To expand the folder, click on the “+” to the left of the folder and to collapse the folder click “-.”

4. Click on the folder that you want to restore (it will become highlighted).
   - You can view information about a folder by Right Clicking on the folder and then **Clicking Folder Properties**… A popup window will give you the folder location, compressed and uncompressed size of the folder as well as the number of subfolders, file and revisions contained in the folder.

   ![Folder Properties]

   - To restore an entire folder and all of its subfolders, Click on **Restore Folder** at the bottom right of the window. You can also Right Click on the folder and then Select **Restore Files and Subfolders**.

   - To restore only the files in the folder that you selected (no subfolders), Right Click on the folder and Select **Restore Files Only**.
To restore multiple folders, Right Click on each folder that you want to restore and then Click Add Folder to Pending List. A green plus sign will be added to the icon to the left of each folder in the pending list. When you are finished selecting folders, Click on Restore Folders at the bottom right of the window.

If you have added a folder to the pending list that you do not want to restore, you can remove it from the pending list. To remove folders from the pending list, Right Click on the folder(s) that you do not want to restore and then Click Remove Folder From Pending List.

To remove all of the selected folders from the pending list, Right Click on any folder and then Click Reset Pending Restore List.

For security reasons, you may be prompted for your password.

Next, you will be prompted to choose the location to which you want the files restored. The default option is to save the files within the same folder from which it was backed up. You can expand a folder by Clicking “+” and collapse a folder by Clicking “-.” Select the folder and Click OK.

If you want to create a new folder, Click Make New Folder in the location to which you want to restore the files and Type in a name for the new folder. Click OK.

If a file that you are restoring already exists in the location to which you are restoring it, you will be asked if you want to overwrite the file.

- Select Yes to overwrite the file.
- Select Yes To All to overwrite all such files so you will not be prompted for each file.
- Select No if you do not want overwrite the file. If you select No, the file will not be restored. To restore this file, you will need to choose a different destination for it.
- Select No To All if you do not want to overwrite any such files. If you select No To All, these files will not be restored. To restore these files, you will need to choose a different destination for them.

Click OK to continue. The files in the folder you selected will now be restored.
Restoring Individual Files and Revisions

1. To restore individual files or revisions, Click on Restore Files.

What is a revision?
A revision is an older version of a file. Whenever a file is changed, the previous version of the file is known as a revision. Depending on your configuration settings, ECG Data Storage will store multiple or even unlimited versions of a file.

2. This will bring up the Restore Files window. Next, Click on the tab at the top of the screen labeled File.

3. In the left window, you will see a view (similar to Windows Explorer) of all of the folders that you have backed up. To expand the folder, click on the “+” to the left of the folder and to collapse the folder click “-.”

4. In the upper right box, Click on the file or files that you wish to restore. Selected files will be highlighted. You can select more than one file by Clicking while holding the shift key (consecutive files) or the control key (non-consecutive files).

5. You will notice a box to the right of the filename that has a combination of up to four colored squares in it.
   - A red square in the upper left means that there are multiple revisions of the file that have been backed up.
   - A green square in the lower left means that the file on your computer has changed since the last backup.
   - A blue square in the upper right means that the file has been previously successfully backed up.
   - A yellow square in the lower right means that the file exists on your computer.

You may view a file or a revision without restoring it by highlighting the file or revision and then Clicking View or by Right-Clicking on the file or revision and Selecting View. This will download a temporary copy of the file and open it using its associated program.

6. Next, to restore the file(s), Click Restore File on the bottom right of the window. You can also restore the file by Right Clicking on the file and then Clicking Restore.
If you want to restore the file under a different name, Right Click on the file and then Click **Restore As**. Type in the file location and new name and then Click **Save**.

If you restore a file that has multiple revisions, the latest version of the file will be restored.

7 If you want to restore a revision of the file, you will see the file’s revisions listed in the bottom right box of the window. If you want to restore a specific revision, Select the revision and then Click **Restore Revision**.

8 For security reasons, you may be prompted for your password.

9 Next, you will be prompted to choose the location to which you want the files restored. The default option is to save the files within the same folder from which it was backed up. You can expand a folder by Clicking “+” and collapse a folder by Clicking “-.” Select the folder and Click **OK**.

- If you want to create a new folder, Click **New Folder** in the location to which you want to restore the files and Type in a name for the new folder. Click **OK**.

10 If a file that you are restoring already exists in the location to which you are restoring it, you will be asked if you want to overwrite the file.

- Select **Yes** to overwrite the file.
- Select **Yes To All** to overwrite all such files so you will not be prompted for each file.

Select **No** if you do not want to overwrite the file. If you select **No**, the file will not be restored. To restore this file, you will need to choose a different destination for it.

Select **No To All** if you do not want to overwrite any such files. If you select **No To All**, these files will not be restored. To restore these files, you will need to choose a different destination for them.

Click **OK** to continue. The files or revision that you selected will now be restored.

**Searching for Files to Restore**

1 To search for a file or files that you want to restore, first Click on **Restore Files**. Keep in mind that you can search filenames and file paths but because all files are encrypted, you cannot search for text within the files themselves.
2 This will bring up the *Restore Files* window. Next, Click *Search* on the bottom of the window. This will bring up the *Search* window.

3 Type in the text string for which you want to search. You can also use one or more wildcards. For example, to search for all Microsoft Word documents, Type “*.doc.” To search for all types of documents containing the word, “letter,” Type either “letter” or “*letter*.”

4 Once you have entered the string to search for, Click *Search* or Press Enter. The ECG Data Storage software will search your file catalog for any filenames that match the search text.

5 To restore one or more files, click the box next to those files and Click *Restore*. You can restore as many files at one time as you want. To restore all of the files that were found, first Click *Select All*.

6 For security reasons, you may be prompted for your password.

7 Selected files will now be restored with their original file paths. Folders that no longer exist on your drives will be automatically created. Please note that only the most recent version of files will be restored.

**Restoring a Backup Set**

1 To restore an entire Backup Set, Click on *Restore Files*.

2 Next, Click on the tab labeled *Backup Set* at the top of the window.
3 Select the Backup Sets that you wish to restore by Clicking on the checkboxes to the left of the names of the Backup Sets. You may select multiple Backups Sets.

- To see information about the selected backup sets, Click Refresh Info at the bottom right of the window. You will now see the date of your last backup, the number of backed up files contained in the backup set as well as the compressed and uncompressed size of the backup set.

4 Click the button labeled Restore Files Within Selected Backup Sets at the bottom right corner of the window.

5 For security reasons, you may be prompted for your password.

6 You will be prompted to select whether or not you wish to restore the files to their original locations. To do so, Click Yes. If you want to choose a different location, Click No.

7 If a file that you are restoring already exists in the location to which you are restoring it, you will be asked if you want to overwrite the file.

- Select Yes to overwrite the file.
- Select Yes To All to overwrite all such files so you will not be prompted for each file.
- Select No if you do not want to overwrite the file. If you select No, the file will not be restored. To restore this file, you will need to choose a different destination for it.
- Select No To All if you do not want to overwrite any such files. If you select No To All, these files will not be restored. To restore these files, you will need to choose a different destination for them.

Click OK to continue. The Backup Sets you selected will now be restored.
Advanced Restore Settings

ECG Data Storage contains several advanced features that allow you to customize restores.

1. To go to the advanced restore options first Click the tab labeled Restore Files if you are not already on this window and then Click Advanced Settings at the top right of the window.

- The first advanced restore setting allows you to choose if and when you want to overwrite a file that exists on your local computer. In the dropdown box to the right of Overwrite Local Files: you can select to: always overwrite the file (Always), never overwrite the file (Never), overwrite the file only if the version backed up is newer than the version on your local computer (Only If Newer), overwrite the file only if the version backed up is a different file size than the version on your local computer (Only If Size Is Different), or to always be prompted (Prompt…). To always be prompted is the default setting. Note that this restore setting will NOT be saved when you close the current ECG Data Storage session.

- The next advanced restore setting allows you to select to restore files only if they currently exist on your local computer. To do so, Click the box to the left of Only
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**Restore Files That Already Exist.** Note that this restore setting will NOT be saved when you close the current ECG Data Storage session.

- The third advanced restore setting allows you to select to restore files only if they do not currently exist on your local computer. To do so, Click the box to the left of **Only Restore Files That Don’t Exist.** Note that this restore setting will NOT be saved when you close the current ECG Data Storage session.

- The next setting allows you to preserve the last modified date timestamp when you restore a file. To enable this setting, Check the box to the left of **Preserve The Last Modified Date Timestamp.** If the checkbox is not checked, then when you restore a file the timestamp of the file will be the date and time that the file was restored. Note that this restore setting WILL be saved when you close the current ECG Data Storage session.

- The fifth setting allows you to restore a file’s NTFS Security Information. Click the box to the left of **Restore NTFS Security Information If Present** to enable or disable the setting. Note that this restore setting WILL be saved when you close the current ECG Data Storage session.

- The next advanced restore setting allows you to restore a file’s attributes (e.g. read-only, hidden, etc.). Click the box to the left of **Restore File Attributes** to enable or disable the setting. Note that this restore setting WILL be saved when you close the current ECG Data Storage session.

- The last setting allows you to restore files newer than, older than or of a certain date. To enable this option, choose either **Files Older Than**, **Files Newer Than** or **Exact Date…** from the dropdown box to the right of **Restore By Date:.** Next, select the date that you want to use from the dropdown box to the right of **Date to Use:.** Note that this restore setting will NOT be saved when you close the current ECG Data Storage session.

- To reset the advanced restore options to their default settings, Click **Reset To Default** towards the bottom right of the window.

2 When you are finished editing the advanced restore options, Click **OK**.
Reinstalling ECG Data Storage after a System Failure

If you have had a system failure and need to reinstall the ECG Data Storage software as well as all of your files, please follow these steps:

2. Log in to your account.
3. Click Download, which is located on the left side of the screen under My Account.
4. On the next screen, choose your computer’s operating system and Click Download.

Hint: If you do not know what operating system you are using, Right Click on your My Computer icon and Click Properties. Your computer’s operating system should be listed under the tab labeled General.

5. Once you Click Download, you will be prompted to save the file (Do not Select Open), ecgdatastorage.exe on your hard drive. Please save the file in a location that you remember.

6. Once the software has finished downloading, run the ecgdatastorage.exe file by Double Clicking on the file.

7. You will be prompted to read and accept the terms of the License and User Agreement.
   - Once you have read and accepted the terms of the License and User Agreement, Choose “I accept the terms of the License Agreement.”
   - You can also print the License and User Agreement by Clicking Print.
   - Click Next.

8. You will now be prompted to choose the folder where the ECG Data Storage software will be installed. The default folder is C:\Program Files\ECG\ECG Data Storage.
   - If you want to use the default folder, Click Next.
   - If you want to change the folder location, Click Change. Choose the folder to which you want to
install the ECG Data Storage software or Type in your desired path and Click **Next** to continue.

9 Click **Install** to begin the installation. **The installation process may continue for several minutes after the status bar reaches 100%.**

The ECG Data Storage installer may need to install certain Microsoft Windows updates onto your computer. If this should happen, a dialog box will appear displaying, “Installing Windows Updates.” **WINDOWS MAY NEED TO REBOOT YOUR SYSTEM AFTER THIS PROCESS.** The installation will continue automatically after your computer has been rebooted.

10 When the installation process is completed, Click **Finish**.

11 The next window that you will see will be a Welcome Screen. If your computer communicates through a proxy, then Click the box at the bottom of the window. Click **Proceed**.

- If you had checked the box indicating that your computer communicates through a proxy, then you will see the following screen.

- Enter your proxy settings and then Click **Test**. If the test was successful, then Click **OK**.

- If you are installing on an ISA server, use 127.0.0.1 as the host and 8080 as the port.
On the next window, Choose **Restore Existing Key** and Click **Next**.

Next, Enter your Username and Password and Click **Next**. This is the same Username and Password that you entered online.

The next screen prompts you to enter your Encryption Key, via any one of three options. You can load your Encryption Key from a file. You can Type in the Encryption Key from the printed copy of your Encryption Key. Third, you can Type in the 48 character string that you entered when you first created your Encryption Key.

- To load the **Encryption Key** from a file, Click the circle to the left of the words **By File** and either Enter the path of the file that contains the Encryption Key or Click Browse to find the file. The file that contains the Encryption Key has the file extension “.key,” and unless you changed the default filename, is “youruserid.key.” Click **Next**.

- If you choose to restore your Encryption Key from the printout, Click the circle to the left of the words **By Printed Copy** and enter both lines of your Encryption
Key as well as the Checksum exactly as they appear on the Printout. Click Next.

- If you choose to enter the 48 character string that you selected when you first set up your Encryption Key, Click the circle to the left of the words By Memory and enter the 48 character string exactly as you first selected it and Click Next.

15 The next screen will verify that the Encryption Key that you Loaded or Typed is correct. Click Verify. If your screen displays a Green Light three times, then your Encryption Key was verified. Click Done.

- If the first box (Contact ECG) displays a Red Light then there is likely a problem with your Internet connection.

- If the second box (Verify Account Identity) displays a Red Light then you have likely entered your Username and/or Password incorrectly. Click Back twice and Re-Enter your Username and Password.

- If the third box (Compare Encryption Key) displays a Red Light then you have loaded your Encryption Key from the incorrect file or typed it in incorrectly. Click Back once and Reload or Retype your Encryption key.

- If you are still having trouble, contact ECG Customer Support. Please remember, that for security purposes, ECG does not keep a copy of your Encryption Key. You will not be able to recover your files unless you have the Encryption Key.

If you have personal firewall software, make sure that your firewall software allows the ECG Data Storage software to pass through. There are three files that need to be allowed access to the Internet: monitor.exe, keyadmin.exe and srv.exe. The srv.exe file is in the “Service” subfolder of the ECG Data Storage installation folder. If you are having trouble, please contact ECG Customer Support.

16 The next wizard will configure the ECG Data Storage software. There are four steps involved: entering your Username and Password, loading your Encryption Key, verifying your user information and testing your connection, and finally, setting your default revision rule settings. Click Next to continue.
You will be prompted to again enter your **Username** and **Password** as well as your **Computer ID**. If you had completed Steps 11 – 15 above, then the Username and Password will be filled in for you.

Enter this information and Click **Next**.

**17** If you had completed Steps 11 – 15 above, then skip to Step 18. Otherwise, you will be prompt to enter your Encryption Key. Enter your Encryption Key and Click **Next**.

**18** The final screen tests your connection to the ECG servers.

- Click **Test Connection**.

**19** You will now see a message box stating that you are ready to recover your files. Click **OK** to continue.

You have now successfully reinstalled the ECG Data Storage software.

The ECG Data Storage software will now open and take you to the **Recover Catalog** window. Please proceed with the steps of **Recovering Your System**.

- If all of the steps display a **Green Light**, then your account is properly setup. Click **Finished**.

- If any of the boxes display a **Red Light**, then you may be having difficulty with your Internet connection.
Recovering Your System

If you are recovering your system and have already installed the ECG Data Storage software, or if your ECG Data Storage software is operational but you need to recover your files due to a problem or corruption with your file catalog, then please follow these steps.

What is a File Catalog?

A file catalog is a list of all of the files, folders and revisions contained in a Backup Set. The file catalog also stores the last modified date of each file, as well as the uncompressed and compressed file size. The file catalog is transmitted to the ECG servers every time a backup occurs.

1 If you are not already on the Recover Catalog window, Click the Restore Files tab on the left of the window and then Click Recover Catalog at the top of the window.

2 The first step is to restore the file catalog that is saved on the ECG servers.
   - If you want to restore your backup sets when you restore your file catalog, then Click the box to the left of Restore Backup Set Entries. Typically, you will want this setting disabled (no check box) when you are restoring your files to a new computer or if your computer was reformatted and enabled if you are recovering your file catalog on a computer that still contains your existing files and folders.
   - If you want to restore your files’ NTFS file permissions when you restore your files, then Click the box to the left of Restore NTFS Permission (Advanced Users Only). Typically, you will want this setting disabled if you are restoring your files to a new computer or if your computer was reformatted and enabled if you are recovering your file catalog on a computer that still contains your existing files and folders. Note that this setting should be enabled only by advanced users.

3 Next, Click Restore File Catalog. You will be prompted for your password.
The next step is to reload the file catalog. Click **Reload File Catalog**. Please be patient as this process can take up to several minutes.

If the catalog does not reload, the problem is likely caused by an incorrect encryption key.

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5 You will now be able to restore your files. You can restore individual files and folders or entire Backup Sets.

- Click **Restore Individual Files** to restore selected folders or files.
- Click **Restore Backup Set** to restore an entire Backup Set. (This option will only work if you had checked the box to restore your backup sets in step 2 or if you already have a Backup Set created).

6 To restore your files, please go to the previous sections of this chapter to restore folders, files or Backup Sets.

Once you recover your files, you must create a new Backup Set in order to continue to properly use ECG Data Storage. If you did check the box to restore your backup sets in step 2 or have not already created a new Backup Set, the next time you open the ECG Data Storage software, the Backup Set creation wizard will open.
Chapter 5 – Deleting Folders, Files and Revisions

You may want to delete files from the ECG servers if you have files backed up that you no longer use or if you are using more space than you wish to pay for. Keep in mind that if you delete files that are in any of your active Backup Sets, they will be restored the next time a backup is performed.

Deleting files will also delete all associated revisions.

When you delete files, you will delete them only from the ECG servers but not from your computer.

Deleting Folders
The following steps will show you how to delete an entire folder.

1. Click Delete Files.
2. Next, Click the tab on the top of the window labeled Files and Folders.

3. Select the folder that you want to delete. Click on the “+” to expand a folder. Click on the “-” to collapse a folder. The folder you have selected will become highlighted.

4. Click the Delete Folder button on the bottom right of the window to delete the selected folder and all subfolders and files contained within.

5. For security reasons, you may be prompted for your password.

6. Next, you will be prompted to confirm that you want to delete the folders. If you are sure, Click Yes.

7. All of the files and subfolders contained in the folder that you selected will be deleted from the ECG servers.
Deleting Individual Files
The following steps will let you select individual files to delete.

1. First, Click **Delete Files and Folders**.

2. Next, Click the tab on the top of the window labeled **File**.

3. Select the folder that contains the file(s) that you want to delete. You can Click on the “+” to expand a folder. Click on the “-” to collapse a folder.

4. All of the files contained in the folder that you selected will be displayed in the right box of the window. Select the files that you wish to delete. You may select more than one file by Clicking while holding down the **shift key** (for consecutive files) or the **control key** (for non-consecutive files).

5. Click the **Delete Files** button on the bottom right of the window to delete the files (and ALL corresponding revisions) that you have selected.

6. For security reasons, you may be prompted for your password.

7. Next, you will be prompted to confirm that you want to delete the selected files and all of their corresponding revisions. If you are sure, Click **Yes**.

8. All of the files that you selected and their corresponding revisions will be deleted from the ECG Data Storage servers.

Deleting Selected Revisions
The following steps will let you select individual revisions to delete.

1. Start by Clicking **Delete Files and Folders**.

2. Next, Click the tab on the top of the screen labeled **File**.

3. Select the folder that contains the file(s) from which you want to delete revisions. You can Click on the “+” to expand a folder. Click on the “-” to collapse a folder.

4. All of the files contained in the folder that you selected will be displayed in the right box of the window. Select the files from which you wish to delete revisions.

5. All of the revisions associated with that file will be listed in reverse chronological order (the latest version of the file will be first and will be labeled “**latest**”) on the bottom
right box of the window. You may select more than one revision to delete by Clicking while holding down the shift key (for consecutive files) or the control key (for non-consecutive files).

6 Click the Delete Revision button on the bottom right of the window to delete the revisions that you have selected.

7 For security reasons, you may be prompted for your password.

8 Next, you will be prompted to confirm that you want to delete the selected revisions. If you are sure, Click Yes.

9 All of the selected revisions will be deleted from the ECG servers.

Deleting all revisions of a file has the same effect as deleting the file.

Deleting All Files of a Backup Set

The following steps will show you how to delete all of the files contained in a Backup Set.

1 First, Click Delete Files.

2 Now, Click the tab on the top of the screen labeled Backup Sets.

3 Click on the checkbox to the left of the names of the Backup Sets from which you want to delete all files. You may Select multiple Backup Sets.

- You can also Select all Backup Sets by Clicking Select All.

- Click Unselect All to remove all selections.

4 Click the tab labeled All Files.

5 If you want to find out how many backed up files and revisions are contained in the backup set and how much storage space these files and revisions are using on the ECG servers, Click View Stats.

6 Click the Delete button that is located at the bottom right of the window.

7 For security reasons, you may be prompted for your password.
8 You will be prompted to confirm that you want to delete the files. If you are sure, Click Yes.

9 After a pause (this may take up to several minutes, depending on the number of files within the Backup Sets), all files of the Backup Set(s) and corresponding revisions will be deleted from the ECG servers.

Deleting Revisions of a Backup Set By Number of Revisions
The following steps will enable you to delete revisions of a Backup Set by letting you select how many revisions to keep. The rest of the revisions will be deleted.

1 To begin the process of deleting revisions, Click Delete Files.

2 Now, Click the tab on the top of the screen labeled Backup Set.

3 Click on the checkbox to the left of the names of the Backup Sets from which you want to delete revisions. You may Select multiple Backup Sets.
   - You can also Select all Backup Sets by Clicking Select All.
   - Click Unselect All to remove all selections.

4 Click the tab labeled By Revision.

5 To the right of the words, “Delete revisions, starting at: ” set the number of revisions from which to delete by Clicking the up and down arrows or Typing a number.

   For example, if you want to delete all revisions, Select 1. If you want to keep the first 5 revisions, and delete the rest, Select 6.

6 If you want to find out how many backed up revisions are contained in the backup set that meet the revision number criteria that you have chosen and how much storage space these revisions are using on the ECG servers, Click View Stats.

7 Click the Delete button that is located at the bottom right of the window.
Deleting Files or Revisions of a Backup Set by Date

The following steps will enable you to delete all the files or revisions of a Backup Set that were backed up earlier than a specified date.

1. To begin the process, Click **Delete Files**.

2. Now, Click the tab on the top of the screen labeled **Backup Set**.

3. Click on the checkbox to the left of the names of the Backup Sets from which you want to delete all files (or revisions). You may Select multiple Backup Sets.
   - You can also Select all Backup Sets by Clicking **Select All**.
   - Click **Unselect All** to remove all selections.

4. Click the tab labeled **By Date**.

5. To the right of the words, “Delete files older than:“ Click on the Date and a calendar will appear. (You may have to Click twice).

6. Select the Date from the calendar from which you want older files and/or revisions to be deleted.

7. To delete all files and revisions of the Backup Set, make sure that the checkbox labeled **Only Delete Revisions** is NOT checked.
   - If you only want to delete the revisions of the Backup Set, the checkbox labeled **Only Delete Revisions** should be checked.

8. If you want to find out how many backed up files/revisions are contained in the backup set that meet the date criteria that you have chosen and how much storage space these files/revisions are using on the ECG servers, Click **View Stats**.

For security reasons, you may be prompted for your password.

You will be prompted to confirm that you want to delete the revisions. If you are sure, Click **Yes**.

After a pause (this may take up to several minutes, depending on the number of files of the Backup Set), all revisions meeting the parameter you selected will be deleted from the ECG servers.
9 Click the **Delete** button that is located at the bottom right of the window.

10 For security reasons, you may be prompted for your password.

11 You will be prompted to confirm that you want to delete the files. If you are sure, Click **Yes**.

12 After a pause (this may take up to several minutes, depending on the number of files of the Backup Set), all files and corresponding revisions (or just revisions) of the Backup Set(s) that are older than the date you selected will be deleted from the ECG servers.

### Deleting Stray Files

The following steps will enable you to delete files that are not contained in your backup sets or no longer exist on your local computer.

1 To begin the process, Click **Delete Files**.

2 Now, Click the tab on the top of the screen labeled **Backup Set**.

3 Click the tab labeled **Stray Files**.

4 The options for deleting stray files are as follows:

   - To be prompted each time a file meets the criteria to be deleted, Click the box to the left of **Prompt For Each File** (this is a default setting).

   - To delete files from the ECG Servers that are no longer included in any of your backup sets, Click the box to the left of **Delete If Not Linked To Any Backup Set**.

   - To delete files from the ECG Servers that match any global excludes, Click the box to the left of **Delete If File Matches Any Global Excludes**. For information on setting global excludes, please go to **Excluding Files and Folders from All Backup Sets** on Page 159.

   - To delete files from the ECG Servers that no longer exist on your local computer, Click the box to the left of **Delete If File Doesn’t Exist Locally** (this is a default setting).
To delete files from the ECG Servers that were backed up from a drive that no longer exists on your local computer, Click the box to the left of **Force Delete If Drive Is No Longer Present**. Please note that in order to run this type of delete, you will also need to enable the preceding setting (**Delete If File Doesn’t Exist Locally**).

You can run multiple delete methods (i.e. you can check off multiple boxes) at the same time. A file that meets any of the enabled criteria will be deleted from the ECG servers.

5 Once you have chosen the method(s) for which to delete files, you also have the option of choosing to delete file and revisions or just revisions. To choose files and revisions, Select **Entire Files and All Revisions** from the dropdown box to the right of **Delete From Remote Servers**. To choose just revisions, Select **Just Revisions**.

6 Next, Click the **Remove Stray Files** button that is located at the bottom right of the window.

7 You will be prompted to confirm the delete criteria that you selected.

8 For security reasons, you may be prompted for your password.

9 If you had selected the option to receive a prompt for each file, you will see the above window. If you are sure, Click **Yes** to delete the file or **Yes To All** to delete all files that meet your delete criteria.

10 After a pause (this may take up to several minutes, depending on the number of files you have backed up), all files and corresponding revisions (or just revisions) that meet the criteria selected will be deleted from the ECG servers.
Chapter 6 – Revision Rules

About Revisions
ECG Data Storage can save an unlimited number of versions of the same file. Each version, other than the latest version is known as a revision. By default, the last 10 revisions (unless you had chosen a different number during installation) of all of your files will be stored on the ECG servers. However, ECG Data Storage contains a sophisticated wizard that allows you to create rules that govern how revisions are managed.

Changing the Default Number of Revisions

1. To change the default number of revisions that will be stored for ALL files, Click Preferences.

2. Next, under the list labeled Revision Rule Settings, Select the number of revisions that you want to store as your default rule from the dropdown box labeled Default Number of Revisions Per File. You may need to expand the list by Clicking anywhere on the Revision Rule Settings viewbar.

   If you select 0 revisions, only the latest version of each file will be stored. If you select Unlimited, all revisions will be stored.

Creating and Editing Revision Rules

1. To create or edit a revision rule, Click Manage Backups.
2 On the bottom of the window, under **Installed Plugins**, Double Click on the **Revision Rules** icon.

![Revision Rules Window](image1)

3 The **Revision Rules** window will appear. In this box you will see the revision rules that you have created. The rule at the bottom of the list (this will be the only rule if you have never created a revision rule) will be named **BASE**. As its default, the BASE rule instructs the software to keep 10 revisions of all files (unless you had chosen a different number during installation).

4 The ECG Data Storage software applies the rules from the top to the bottom of the rule list. The first rule that a file matches will be used.

   - To change the order of a rule, Click on the rule that you want to change (it will be highlighted).

![Creating a New Revision Rule](image2)

2 Next, Click the up or down arrow to the right of the list box. Note that the BASE rule will always remain at the bottom of the list.

**Creating a New Revision Rule**

1 In the **Revisions Rule** window, Click **New Rule**.

![New Rule Wizard](image3)

2 There are five methods of creating a revision rule. You can create a rule based on specific backup sets, files, folders or drives, programs or wildcards.

   - Click on your selection and then Click **Next**.
   - You can change the method at any time by Clicking **Back**.
**Method 1 – Backup Sets**

- If you selected *Backup Set*, the next screen will show you a list of all of your backup sets. Select the backup set for which you want to create a revision rule.

- Once you have selected the backup set, click *Next*. Note that you can only select one backup set per rule.

**Method 2 – Specific Files**

- If you selected *File*, the next screen will show you a view of your folders and files. You can expand a folder by clicking “+” or collapse a folder by clicking “-.”

- Once you have found the file that you want to select, click *Next*. Note that you can only select one file per rule.

**Method 3 – Folders or Drives**

- If you selected *Folder*, the next screen will show you a view of your folders. You can expand a folder by clicking “+” or collapse a folder by clicking “-.”

- Once you have found the folder that you want to select, click *Next*. Note that you can only select one folder per rule. This rule will apply to all subfolders as well.

**Method 4 – Programs**

- If you selected *Program*, the next screen will show you a list of many common programs. Click the program that you want the revision rule to apply to. Note, if you do not see your program listed, you will need to select the fourth option: *Wildcard*. You may need to expand the program headers by clicking on them.

- Once you have found the program that you want to select, click the checkbox to the left of the program and click *Next*. Note that you can only select one program.

**Method 5 – Wildcard**

- If you selected *Wildcard*, the next screen will prompt you to type in a wildcard. A wildcard must contain the “*” character and may contain the “*” character more than once. You may enter a global wildcard (e.g. “*.doc”) which will apply to all folders and drives or include a filepath in your wildcard (e.g. “C:\windows\*.ini”).

- When you are finished entering a wildcard, click *Next*. 
3 The third screen allows you to select how the rule will run. You can choose it to run by **Space Usage**, by **Number of Revisions** or by **Age of Revision**. You can also create a custom template to mimic tape backup schemes.

**Method A – Space Usage**

- The first option is to select by total space usage. Here you decide how much space all revisions for each file matching the rule can use.

- First, Click the circle to the left of **Total Space Usage**.

- Next, Select from the left dropdown box the amount of storage and Select from the right dropdown box whether that storage is measured in kilobytes (KB), megabytes (MB) or gigabytes (GB). The default is 4 megabytes.

- The software will save revisions until the aggregate compressed space taken up by the revisions exceeds the storage space you entered. Revisions will be deleted on an oldest basis first until the aggregate compressed amount is below the storage space rule.

**Method B – Number of Revisions**

- The second option is to select by number of revisions. This method lets you decide how many revisions of each file to keep.

- Click the circle to the left of **Number of Revisions**.

- Next, Select from the dropdown box or Type in the maximum number of revisions that you want the software to store for each file matching the rule. You can also select **Unlimited** revisions. If you select 0 revisions, only the latest version of each file will be stored.

**Method C – Age of Revision**

- The third option is to select by Age of Revisions. This method allows you to automatically delete revisions older than a certain time period.

- Click the circle to the left of **Age of Revisions**.

- Next, Select from the dropdown box the amount of time that the software will keep revisions. All revisions for each file matching the rule will be deleted after they are older than the timeframe you selected.
Method D – Custom Template

- The fourth option is to create a custom template. This method allows you to automatically delete revisions that meet certain time period criteria (similar to a tape backup scheme).

- Click the circle to the left of **Custom Template**.

The next window allows you to select one of two common backup schemes or design your own. Click the circle to the left of **Common Scheme #1**, **Common Scheme #2**, or **Or Design Your Own**. Then Click **Next**.

- The next window will allow you to modify or create the custom revision rule. A custom rule allows you to choose to keep or not to keep revisions for different time periods. For example, Common Scheme 1 will keep all revisions for the most recent 7 day period, 1 revision per week for the next most recent 8 week period, 1 revision per month for the next most recent 10 months and then 1 revision per year thereafter.

- To create a new range, Click **New Range**. You will see a new range listed as **0 Days to 0 Days**.

- The next step is to fill in the range properties. Choose the beginning of the range by Typing a number and then Selecting **Days, Weeks, Months** or **Years** from the Dropdown box to the right of **From**.
Choose the end of the range of typing a number and then selecting **Days, Weeks, Months** or **Years** from the Dropdown box to the right of **To:**.

Next you will choose the time period type by selecting **Days, Weeks, Months** or **Years** from the Dropdown box located under **Retention Type:**

Please note that Weeks are based on a 7 day period, Months are based on a 28 day period and Years are based on a 336 day period.

Finally, Select the Retention Level by making a selection in the dropdown box under **Retention Level.** For a Retention Type of **Days,** you can Select **All revisions per given day** or **At most one revision per day.** For Retention Types of Weeks, Months, or Years, you can Select the **Oldest Revision** or **No Revisions.**

To delete a range, Click on the range to highlight it and then Click **Delete.**

You can create as many ranges as you want, however, each range that you create must begin after the previous range ends. When you are finished creating the ranges for this rule, Click **Next** and then skip to Step 6 below.

You also have the option of creating exceptions to the rule. You can type in a minimum number of revisions to store. This will override the revision rule.

Select the number of minimum revisions to store. The default is one (1).

When you have finished making your selections, Click **Next.**

The fourth and final step is to name your revision rule and Type in a description of the rule. You must provide both a name and a description. When you have named and typed a description, Click **Finish.**

**Other Revision Rule Functions**

1. **To Edit a rule,** Click on the rule (it will become highlighted) and then Click **Edit.** This will bring up the same wizards as for creating a new rule. Please go to **Creating a New Revision Rule** on page 133.
2 To **Copy a rule**, Click on the rule (it will become highlighted) and then Click **Copy**. The software will create an identical rule with the name “Copy of …” To rename the rule, Click **Rename**. You can now Type in a new name.

3 To **Rename a rule**, Click on the rule (it will become highlighted) and Click **Rename**. You can now Type in a new name.

4 To **Delete a rule**, Click on the rule (it will become highlighted) and Click **Delete**. You will be prompted to make sure you want to delete the rule. Click **Yes** to delete the rule.

5 To **Test a rule**, Click on the rule (it will become highlighted) and Click **Test**. Testing a rule allows you to select a file and then see which rule applies to that file.

   - Select the file that you wish to test and Click **Open**. A message box will appear on the screen displaying the file that you selected and the rule that will be applied.

6 To restore your revision rules to their default settings, Click **Restore To Default**. You will be prompted to confirm your selection. Restoring default revision rules will delete all rules that you have defined and reset the Base rule to store 10 revisions.

   If you select Restore To Default, the Outlook .PST rule that you may have created when you first installed ECG Data Storage will be deleted.

7 When you have finished creating and editing rules, Click **Done**. This will close the Revision Rules window.

---

**Running Revision Rules**

Revision rules will always automatically run at the end of each successful backup.

1 If you manually cancel a backup (by Clicking **Cancel**), the revision rules will not run and the revisions will not be deleted. If you want revision rules to run on a canceled backup, follow these steps:

   - Click **Preferences**.

   - Next, Click the checkbox to the left of **“Run Revision Rules on Cancelled Backup.”** If you do not see this option, expand the **Revision Settings** list by Clicking anywhere on the viewbar.

2 You also have the option of running revision rules manually.

   - To run revision rules, Click **Preferences**.
Next, under **Revision Rule Settings**, Click **Run Revision Rules**. You may need to expand the **Revision Rules Settings** list. To do this, Click anywhere on the **Revision Rules Settings** viewbar. The Revision Rule window will open.

- Click **Run Stats** to calculate the amount of storage you will save by running revision rules. This step will not delete any files yet.

- To delete revisions, based on your rules, check the box labeled **Delete Revisions From Server**, which can be found at the top of the window.

- Next, Click **Run Rules**. You will be prompted to confirm that you want to delete the revisions. The revisions will not be deleted permanently from the ECG Servers.

- Finally, Click **Done**.
Chapter 7 – Additional Features

Viewing the Log

The ECG Data Storage software keeps a log of all key events, including all file transmissions (backup and restore), connections to the ECG servers and file deletions. The log is designed to help you and Customer Support diagnose any problems that may occur during a backup or other action. There are four types of events that can be displayed: Actions, Information Messages, Warning Messages and Error Messages.

- **Actions** are displayed, for example, when a backup, restore, or delete is run.

- **Information messages** are displayed, for example, when a backup is started or ended, for each file backed up or restored and when a connection is tested. Information messages differ from Actions as they contain more information and are triggered on more specific events.

- **Warning messages** are displayed, for example, when a file is open during a backup or when during a restore, a new folder needs to be created.

- **Error messages** are displayed, for example, when a file cannot be backed up. This occurs when there are files that are open and locked by Windows, if Windows does not allow a file to be copied or if there is a problem with your Internet connection.

1. To view your log, Click View Log.

   - The default date will be today’s date (which will be circled in red). You can change the log’s date by Clicking any date on the calendar. To change the month, Click on the arrow keys to the left and right of the month and year.

   - By default, all Actions for the selected date are displayed.

   - Clicking on an Action will give you more detailed information on that Action below.
2 To view the more detailed Errors, Warnings and Information messages, Click on the tab labeled All Entries at the top of the window.

- Errors, Warnings and Information messages are displayed for the date selected.

- The default date will be today’s date (which will be circled in red). You can change the log’s date by Clicking any date on the calendar. To change the month, Click on the arrow keys to the left and right of the month and year.

- You can also select a time period for that date by Clicking one of the circles to the left of a time period. To select the entire day, Click the circle to the left of All Hours.

- You may display only one message type or two message types by Clicking on the checkboxes under View Event Type. Clicking on a checkbox will automatically update the event list.

- You can Click anywhere on a specific message to view a popup box with an extended explanation of the message.

3 You can also search the log. Searches can be done by the ECG Data Storage component that logged the event, by message type, by keyword and by date. To search the log, Click Search Logs.

- Select the ECG Data Storage components that you want to search by Clicking Component. Components are parts of the ECG Data Storage software such as the wizards to create a Backup Set, Plugins, etc. The default is All components.

- Select the message types that you want to search by Clicking the checkboxes to the left of the message type.
To search by keyword, Click **Keyword**, Type in a keyword and Click **OK**.

You can search by date by Clicking **Start** (the start date) and **End** (the end date). This will bring up calendars that will allow you to select the dates to search. The default date is today.

When you are finished selecting search parameters, Click **Search**.

Clicking **Upload Logs** uploads your log file to the ECG servers so that Customer Support can diagnose any problems that you may be having.

### Changing Log Options

By default, ECG Data Storage logs all Error, Warning and Information messages. You can change your settings so that ECG Data Storage does not log all types of messages.

1. To change your log settings, Click **Preferences**.

2. Under **Log Options**, click on the checkboxes to turn on and off each type of message (**Errors**, **Warnings**, **Standard Information**). If you do not see these options, Click anywhere on the **Log Options** viewbar to expand the list. The newly selected options will take effect from that point forward but will not delete your old logs.

3. There is one additional log option which allows you to upload information about your system (such as your CPU status, memory, active programs, etc.) to the ECG Customer Support team. This helps Customer Support diagnose problems that you may be having. This upload will only occur when you upload your log. To enable this feature, Click the checkbox to the left of “**Upload System State With Error Logs**.”

### Deleting Old Log Entries

Over time, your log file may become large, especially if you are backing up many files. You have the ability to delete old log entries.

1. To delete old log entries, Click **Preferences**.

2. Next, under the **Log Options** menu, Click **Delete Old Entries**. If you do not see this option under the Log Options list, expand the list by Clicking anywhere on the **Log Options** viewbar.
3 You can delete any combination of the three types of entries (Errors, Warnings and Information) by Clicking the checkbox to the left of the message type.

4 Next, Click on the menu to the right of the text that says, “Older Than,” and select a timeframe from which older logs will be deleted (31 days, 60 days or 120 days).

5 Click **Clean** to delete old logs.

### Testing your Connection

You can test your computer’s connection to the ECG servers. This will create a test file, encrypt it, send the file to the ECG servers and then retrieve the file and decrypt the file.

1 To test your connection, Click **Test Connection**.

2 Next Click **Perform Test**.

3 You should see **Green Lights** displayed seven times in your window. If you fail any test (you will see a **Red Light**), an error message will be shown at the top of the window indicating the reason for the failure. If you are still having difficulties, please contact Customer Support.

### Viewing your Storage Usage

1 To view the amount of disk space on the ECG servers that your account is using, Click **My Account**.

2 Towards the upper right of the window, under the label **Online Information**, Click **Click to refresh**... Your storage usage will then be downloaded from the ECG Servers (this process may take several minutes). You will also see the amount of server usage that your account is allotted. If you have an account with multiple computers and are the administrator, you will see a second bar that
3 To view the number of files and revisions that are stored on the ECG servers, Click **Click to refresh**..., located under the label **Account Information**.

**Viewing your Storage Usage and Information about your Recent Backups Online**

You can view a chart of the last seven (7) days of backups and the amount of disk space on the ECG servers that your account is using online on the ECG website.

1 Go to http://www.ecg1.com.

2 Sign in to your account.

3 Click **Manage**. You will see information on the last seven days of backups.

4 To see a graph showing this information, Click **Show Graph**.

5 The chart you see contains data transferred during backups for the last seven days. Please note that if you have a multiple computer account and you are the administrator (Computer ID 0000), the chart will contain information on all computers in the account.

**Changing your Password**

In order to change your password, you must first change it online and then change it on the ECG Data Storage software. Note that if you have a multiple computer account, only the administrator will be able to change your password.

1 First, to change your password online:

Sign in to your account.

Click **Passwords**.

Enter your old password and then enter your new password (you will need to enter your new password twice for confirmation).

Click **Update Password**.

Next, you will need to update your password with the ECG Data Storage software.

On the ECG Data Storage software, click **Preferences**.

Under **Account Settings**, you will see your Username, Computer ID and Password. If you do not see these, click anywhere on the **Account Settings** viewbar to expand the list.

Your old password will look like “********.” Type in your new password (the same password that you entered online).

Your password is now changed.

To make sure that the password you entered matched the password you entered online, we recommend that you test your connection to the ECG servers.

To test your connection, click **Test Connection**.

Then click **Perform Test**.

If all of the tests display **Green Lights**, then the passwords that you entered online and in the ECG Data Storage software match. If the third box labeled “Send File to Server” displays a **Red Light**, then your passwords do not match. Please click **Back** and enter your password again.

### Changing your Email Notifications

By default, you will receive notifications via email after completion of backups.

1. To change your email notification setting, click **Preferences**.

2. Next, under **Backup Settings**, click the checkbox labeled **Email Notification On Successful Backup**. You may
change this setting at any time. If you do not see this setting expand the Backup Settings list by clicking anywhere on the viewbar.

3 You may also change this, and other email notification settings online. To do this:

- Sign in to your account.
- Click Manage.
- The email notification option is listed under Manage User.

**Printing or Saving your Encryption Key**

1 To print or save your Encryption Key, first, Click Preferences.

2 Next, under General Settings, Click Export Encryption Key. If you do not see Export Encryption Key under General Settings, then you need to expand the list. Click anywhere on the General Settings viewbar to expand the list.

3 You will see a small menu that gives you the option of Printing the Encryption Key or Saving it to a file.

- To print your Encryption Key, Click To Printer. You will be prompted to select a printer.

- To save your Encryption Key, Click To Disk. You will be prompted to choose a location to which to save the Encryption Key and a filename. The default filename is “youruserid.key.” When you are finished selecting a file destination and a filename, Click Save.

**VERY IMPORTANT – PLEASE READ**

We highly recommend that you keep copies of your Encryption Key (paper and electronic) in a secure, offsite location, such as a Safe Deposit Box.

**Excluding Files and Folders from All Backup Sets**

You have the ability to exclude selected files and folders from all Backup Sets. This will override all of your Backup Sets and will not backup certain files and/or folders.
To exclude files and folders, Click **Preferences**.

Next, Click **Exclude Folders and Files** which is located under **General Settings**. You may need to expand the **General Settings** list by Clicking anywhere on the **General Settings** viewbar.

You may choose files to exclude by Clicking on the checkbox to the left of the desired folder. Click “+” to expand a folder and “-” to collapse a folder.

- Click the checkbox once and you will see a check. A check means that all files in the selected folder will be excluded. However, files in subfolders will not be excluded.
- If you want to exclude files in the selected folder AND all subfolders, Click the checkbox again and a red “X” will appear. If you expand the selected folder, you will notice that all subfolders also have a red “X.”

You may also select files to exclude by typing in a wildcard or selecting one of the listed wildcards. A wildcard is a part of a file name for which the system will search.

- For example, to exclude all executable files, Type in “*\.exe”) in the **Wildcard** box and Click **Add**. Note that a wildcard must contain a “*” and may contain more than one “*.”
- To choose one of the prelisted wildcards, Select it and Click **Add**.
- To remove a wildcard from the list, Select it from the box on the bottom right of the window and Click **Remove**.
5 By default, some files are excluded. These include temporary files, certain Windows systems files and selected files used only for ECG Data Storage.

6 To test if a certain file will be excluded based on the criteria you selected, Click Test File.

   - Select the file that you wish to test and Click Open. A message box will appear on the screen displaying the file that you selected and the rule that will be applied.

7 When you are finished selecting folders and/or file types to exclude from all Backup Sets, Click OK.

Additional Backup Settings

There are several advanced backup settings that can be toggled on and off by Clicking Preferences. These settings are located under Backup Settings. You may need to expand this list by clicking anywhere on the Backup Settings viewbar.

- **Backup File Permissions on NTFS Drives.** If this setting is enabled, then whenever a file is backed up, its Windows file permissions will also be saved. The default setting is enabled.

- **Retry Open Files at End of Backup.** If this setting is enabled, any open files that were not able to be transmitted during a backup will be tried again at the end of the backup. The default setting is enabled.

- **Retry Failed Files at End of Backup.** If this setting is enabled, any files that failed to be transmitted during a backup will be tried again at the end of the backup. The default setting is enabled.

- **Send Email Notification Upon Completion Of Backups.** Please see Changing Your Email Notifications on Page 157.

- **Unset File’s Archive Bit After Backup.** If this setting is enabled, when a file is successfully backed up, the file’s Windows archive attribute is set to false. The default setting is enabled.

- **Max Upload Speed.** ECG Data Storage gives you the ability to throttle your bandwidth usage during backups. This is useful if you find that your Internet connection is slow during backups.
1. To throttle your bandwidth first Click on the dropdown box to the right of **Max Upload Speed**. This will bring up the following window.

2. Next, select the type and upload speed of your Internet connection in the dropdown box to the right of **My Internet Connection Upload Speed**.

3. Select the percentage by which to throttle bandwidth usage from the dropdown box to the right of **Max Percentage**. Choosing 100% (the default setting) effectively disables bandwidth throttling (**Maximum** will be displayed on the **Preferences** window). You may need to try different percentages when you run backups to achieve the best combination of backup speed and Internet usability.

   - Towards the bottom of the window, you will see the approximate time it will take to transmit different amounts of data based on the bandwidth settings you have selected.

4. When you are finished selecting your bandwidth throttling settings, Click **OK**.

   - **Backup Process Priority**. In addition to bandwidth throttling, ECG Data Storage allows you to lower its CPU process priority to help other programs run faster. This is useful if you find that your computer is slow during backups. To change the process priority setting, Select **Normal**, **Below Normal** or **Low** from the dropdown box to the right of **Backup Process Priority**. Note that these are Windows settings that allow processes being run by other programs to have priority over processes.
being run by ECG Data Storage (such as compressing and encrypting your files).

- **Max Concurrent Uploads.** During backups, ECG Data Storage can backup multiple files at the same time (“multithreading”). This feature can make backups significantly faster as, for example, one file can be compressing while another file is encrypting, and a third file is transmitting. By default, ECG Data Storage will backup 3 files at the same time. You can change this setting to between 1 and 5 files by choosing from the dropdown box to the right of **Max Concurrent Uploads**.

  If you find your computer is slow during backups, try lowering this setting to 1 or 2. If the speed of your computer is not an issue and you want faster backups, try raising this setting to 4 or 5.

- **Temp Folder.** In order to compress and backup your files, ECG Data Storage requires the use of temporary storage space on your hard drive. You can change the location of this temporary storage space by typing a new file location to the right of **Temp Folder:**. You can use a mapped network drive for your temporary folder (for more information see Appendix 3).

ECG Data Storage requires temporary space of up to 2 times the largest file that you backup times the number of concurrent uploads. Please ensure that the location you choose for your temporary folder has sufficient storage space, otherwise large files may not successfully backup.

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**Backup Agent Settings**

By default, ECG Data Storage’s backup agent runs as the local system. However, there are scenarios (e.g. to use mapped network drives or because of restricted permissions on files) where you might want to have the backup agent run as a different account. The ECG Data Storage backup agent requires the appropriate permissions to write to the remote folder if you are using mapped drives (for more information on mapped drives, please go to Appendix 3). You can change these options by Clicking **Preferences.** These settings are located under **Backup Agent Settings.** You may need to expand this list by clicking anywhere on the **Backup Agent Settings** viewbar.

1. To enable the backup agent to run as an account, first Click to disable the checkbox to the left of **Run as Local System.**
2. In the box to the right of **Account To Run As:** enter the local account name for which you want the backup agent to run.
Next, in the box to the right of **Account Password:** enter the local account password.

Finally, Click **Click Here to Restart The Backup Agent** to restart the backup agent. If the account name and password are invalid, you will get an error message.

Instead of entering the name and password of an existing account, you can also create a new account. Enter the new account name in the box to the right of **Account To Run as:** and enter a new password in the box to then right of **Local Account Password:** and then Clicking **Create a New Computer User**.

If you are on a peer-to-peer network, please ensure that the same user account exists on the server and has administrative rights. If you are part of a domain, please ensure that the user account has administrative rights on the local computer.

**Additional Restore Settings**

There are several advanced restore settings that can be toggled on and off by Clicking **Preferences**. These settings are located under **Restore Settings**. You may need to expand this list by clicking anywhere on the **Restore Settings** viewbar.

- **Restore NTFS Permissions if Present.** If this setting is enabled, when files are restored they will keep their Windows NTFS Permissions (file ownership, read/write access, etc.) If this setting is disabled, the Windows NTFS Permissions will be removed. The default setting is disabled.

- **Restore File Last Modified Date.** If this setting is enabled, when files are restored, each file’s date stamp will revert to the last time the file was actually changed and saved. If this setting is disabled, each file’s date stamp will be the date the file was restored. The default setting is enabled.

- **Restore File Attributes.** If this setting is enabled, when files are restored they will keep their file attributes (e.g. read-only, hidden, system, etc.) If this setting is disabled, the file attributes will be removed. The default setting is enabled.
Additional Revision Rule Settings

There are several revision rule settings that can be toggled on and off by Clicking Preferences. These settings are located under Revision Rule Settings. You may need to expand this list by clicking anywhere on the Revision Rule Settings viewbar.

- **Run Revision Rules on Cancelled Backup.** If this setting is enabled, revision rules will be run in the event that a backup is cancelled manually. The default setting is disabled.

- **Default Number of Revisions Per File.** This setting allows you to change the default number of revisions that will be stored per file.

Proxy Settings

If your computer communicates through a proxy then you can enter or change your proxy settings by Clicking Preferences. These settings are located under Proxy Settings. You may need to expand this list by clicking anywhere on the Proxy Settings viewbar.

- To enable proxy settings, Click the box to the left of Use Proxy Settings.

- Next, Enter your proxy settings.

- After entering your proxy settings, it is recommended that you Test your connection to ensure that the proxy settings have been entered properly. For information on testing your connection, please go to Testing your Connection on Page 152.

If you are installing on an ISA server, use 127.0.0.1 as the host and 8080 as the port.
General Settings

In addition to Exporting your Encryption Key and Excluding Folders and Files, both discussed earlier in this chapter, there is a setting that will allow you to compact your File Catalog. This can be useful if your backups are taking a long time because your file catalog has grown very large. This setting is located under General Settings. You may need to expand this list by clicking anywhere on the General Settings viewbar.

1 To compact your file catalog, Click Compact File Catalog (Advanced Users). You will be prompted to make sure you want to compact the file catalog. If you are sure Click Yes.

Compacting your file catalog is recommended for advanced users only and at the direction of ECG technical support. Compacting the file catalog may cause it to become corrupt, while could preclude you from restoring your files.

Getting Help

You can Click Help on any ECG Data Storage window to access help files. There is also additional information about ECG Data Storage and its features as well as Frequently Asked Questions (FAQ) on the ECG website: http://www.ecg1.com.

If you have additional questions or comments about ECG Data Storage, please do not hesitate to contact Customer Support.

About Plugins

There are several plugins available that add features and functionality to the ECG Data Storage software.

1 You can view the plugins that are installed with your software by Clicking Manage Backups. The installed plugins will be shown at the bottom of the window.
To change the settings of a plugin Click once on the plugin icon to highlight it and then Click Plugin Settings or Double Click on the plugin icon.

download new plugins

2. Sign in to your account.
3. Click Manage.
4. Click the Download tab on the left side of the screen.
5. You will see a list of plugins available for download. Select the plugin you wish to install and Click Download.
6. Next, you will be prompted to save the file “ECG Data StoragePlugins.exe.” Save the file and then Run the file to begin the installation process.
7. Once you run the file, the installer will open. Click Next on the welcome screen.
8. You will be prompted to read and accept the terms of the License and User Agreement.
   - Once you have read and accepted the terms of the License and User Agreement, Choose “I accept the terms of the License Agreement.”
   - You can also print the License and User Agreement by Clicking Print.
9. Select the plugins that you wish to install by Clicking the checkboxes to the left of the plugin names. Click Next.
10. The plugins will be installed. When the installation is complete, Click Finish.
11. The new plugins will be activated the next time that you open the ECG Data Storage software.

currently available plugins

Revision Rules

The Revision Rules plugin contains a wizard that allows you to manage and delete old versions of backed up files. For more information on revisions and on the revision rule wizard, please turn to the Chapter 6 - Revision Rules on page 130. This plugin is included with all versions of the ECG Data Storage software.

Microsoft Outlook

The Microsoft Outlook plugin allows you to backup your emails, contact list, calendar, etc. if you are using Microsoft Outlook. All of this information is saved in a single file that has the extension “.pst.” The plugin is required, because Microsoft Windows does not allow a “.pst” file to be copied if it is open. Therefore, ECG Data Storage cannot access and backup the file. If the Microsoft Outlook plugin is enabled, at the beginning of all of your backups, the ECG Data Storage software will automatically close Microsoft Outlook. Please note that you will have to reopen Microsoft Outlook after each backup.
In order to backup a “.pst” file, the plugin must be enabled AND your “.pst” file(s) must be contained within your Backup Set.

If you selected to create your Backup Set By Folder, make sure that the folder that contains your “.pst” files are included in the Backup Sets. If you created your Backup Set By File Type, make sure that Microsoft Outlook is selected as one of the programs that you use.

Because the “.pst” file contains all of your emails, contacts and other information, the file may be very large. If you are backing up your “.pst” file, your backups may take considerable time as the entire “.pst” file must be encrypted and transmitted to the ECG servers.

We recommend that you set up a revision rule that will delete old versions of your “.pst” files. Otherwise, you may wind up using more storage space than you would like if you are storing many old versions of a “.pst” file.

Microsoft Exchange 2000+

The Microsoft Exchange 2000+ plugin allows you to back-up a Microsoft Exchange 2000/2003 database. For more information about this plugin, please visit the ECG website at http://www.ecg1.com.

SQL Server

The SQL Server plugin allows you to backup a Microsoft SQL 2000 and 2005 database. For more information about this plugin and about the versions of SQL that are supported, please visit the ECG website at http://www.ecg1.com.

Before and After

The Before and After Plugin allows you to start and stop services or processes before and after backups run. For more information about this plugin, please visit the ECG website at http://www.ecg1.com.

Upgrading the ECG Data Storage software

From time to time, new versions of ECG Data Storage will be released. These new versions will contain new functionality and exciting new features. New versions will also continue to strive to make the process of backing up your files as simple as possible.

You will receive an email notification when a new version of ECG Data Storage is released that will describe new features and other important information. The new version will be installed onto your computer automatically during the next backup following the release of the software.

If, however, a new version is available and you want to manually install it before your next backup, follow these steps:
1 Click Preferences.

2 Click Download Latest Version (this button will only be enabled if a new version of ECG Data Storage is available). This setting is located under Check For Updates. You may need to expand this list by clicking anywhere on the Check For Updates viewbar.

3 A new window will open letting you know that the new version is available. Click Download.

4 The new version will now be downloaded. Click Finished.

5 Next, the upgraded software will be automatically installed. (You may be prompted to reboot your system after the installation).

6 You are now ready to begin using the upgraded version of ECG Data Storage.

Appendix 1 – Glossary

Backup Set A Backup Set is a list of files and folders that will be backed up, and a specified schedule of when those files will be backed up. ECG Data Storage allows you to create an unlimited number of Backup Sets.

Computer ID A Computer ID is used to keep track of multiple computers within the same account. The first computer to which you are installing ECG Data Storage, has the computer ID 0000. If you have an ECG Data Storage account with multiple computers, each subsequent computer will have the next sequential Computer ID (i.e. 0001, 0002, etc.)

Encryption Key The Encryption Key is used by the ECG Data Storage software to encrypt every file that you backup and then decrypt every file that you restore. The 48 character string that you selected is converted into a 256 bit Encryption Key that is all but impossible to break.

File Catalog A file catalog is a list of all of the files, folders and revisions contained in a Backup Set. The file catalog also stores the last modified date of each file, as well as the uncompressed and compressed file size.
The file catalog is transmitted to the ECG servers every time a backup occurs.

**File Extension**

A file extension is the three letter suffix at the end of a file. Different programs use different file extensions so that your computer recognizes what program to use to open files. For example, Microsoft Word’s default file extension is “.doc.” MP3 audio files have the extension “.mp3.”

**Revision**

A revision is an old version of a file. Whenever a file is changed, the previous version of the file is known as a revision. Depending on your configuration settings, ECG Data Storage will store multiple or even unlimited versions of a file.

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**Appendix 2 – FAQ**

**General Questions**

**Do I need a high speed Internet connection?**

No. ECG Data Storage supports both dial-up and broadband connections.

**What kind of encryption is used?**

ECG Data Storage encrypts each file using 256-bit AES encryption technology. This encryption technology, used by the U.S. government and military is even more secure than the 128-bit encryption methods that are typically used for online banking. The file is encrypted before it leaves your system and then remains encrypted on the ECG servers, providing complete privacy for your data. There is no way for even ECG personnel to access your files, because only you have your unique Encryption Key.

In addition, the ECG Data Storage software communicates with the ECG servers using SSL (Secure Socket Layers) technology. This is the same encryption technology used by Internet browsers when a user enters a secured site. As a result, your data is encrypted twice. It is encrypted at all times using the 256-bit AES encryption, and it is encrypted again while it’s being sent over the Internet.

**Can anybody else have access to or read my files?**

No. Your data is encrypted before it leaves your computer and is sent to the ECG servers, where they remain encrypted. Because only you have your Encryption Key, only you can access your files.
FAQ

**What happens if I lose my username and password?**
Email or call ECG customer support and our customer support team will help you with your user information.

**What happens if I lose by Encryption Key?**
If you lose your Encryption Key and the ECG Data Storage software is still installed on your computer, then you can Print your Encryption Key or Save it to a file at any time. Click Preferences and then Click Export Encryption Key.

If you have had a system failure and your ECG Data Storage software is not installed, unfortunately, you will not be able to retrieve your data without your Encryption Key. This is because in order to ensure that your data is completely secure, ECG does not store a copy of your Encryption Key.

**Can my data get a virus while it is backed up and stored on your servers?**
No. Viruses cannot spread to files that are backed up and stored on the ECG servers. If one of your files contains a virus and that file is backed up, the virus will be contained to that one file.

**Why can’t my files be scanned for viruses during the backup process?**
ECG cannot scan your files for viruses because the files are encrypted. Once the files are encrypted a virus scanner cannot read the file in order to detect a virus. However, a virus cannot spread while on the ECG servers (see previous question). We recommend that you use a virus scanner and run frequent virus scans on all of your data.

**What happens if I go over the amount of storage space that I have purchased?**
If the amount of data that you back up (after compression) exceeds the amount of storage that you have paid for, you will receive a notification via email. You will be able to continue to backup and use the service uninterrupted. If you are still over the purchased amount at the time of your next billing cycle, you will be billed for additional storage space (please go to http://www.ecg1.com for pricing information). You can also choose to add more space on a permanent basis by visiting the ECG website.

In addition, you may want to delete old files that are no longer needed and/or old versions of file. Please see Chapter 5 – Deleting Folders, File and Revisions on page 116 for more information.

**Can multiple computers be backed up?**
Yes. You may also purchase a multi-computer account which allows multiple computers to each run a copy of ECG Data Storage. Please go to http://www.ecg1.com for more information.

**Can two computers share the same Computer ID?**
No. If two computers have the ECG Data Storage software installed with the same Computer ID, every time one of the computers starts a backup, it will overwrite all of the information from the other computer.

**What if I have personal firewall software?**
If you have personal firewall software, make sure that your firewall software allows the ECG Data Storage software to pass through. There are three files that need to be allowed access to the Internet: monitor.exe, keyadmin.exe, and srv.exe. The first two files are located in the ECG Data Storage installation folder (normally C:\Program Files\ECG\ECG Data Storage). The srv.exe file is in the “Service” subfolder of the ECG Data Storage installation folder (C:\Program Files\ECG\ECG Data Storage\service). If you are having trouble, please contact ECG Customer Support.
**Back up**

**How do I manually start a backup?**
To manually begin a backup, click **Manage Backups**. Highlight the Backup Set that you want to backup and click **Backup Now**.

**What happens if a backup is interrupted while it is in progress?**
If a backup is interrupted because it was cancelled or because the Internet connection was lost, all of the files that had been successfully backed up before the backup ended will be available to be restored. The backup will continue where it left off during your next scheduled backup or, if you manually begin a backup.

**Can I use my computer while a backup is in progress?**
Yes. You can use your computer normally, including accessing the Internet while a backup is in progress. Backups should not significantly affect your system’s performance.

**Will a backup occur if my computer is not on?**
No. Your computer must be on in order for a backup to occur. In addition, certain systems, especially laptop computers have varied sleep, hibernate and power save modes. Depending on the configuration of your system, ECG Data Storage may or may not work properly if your computer goes into sleep, hibernate or power-save modes. Please check to make sure that automated backups occur if your computer enters such a mode. If automated backups do not occur, you may have to change the mode settings or turn the feature off.

**Will a backup occur if my computer is in sleep, hibernate or power save mode?**
Depending on the configuration of your system, ECG Data Storage may or may not work properly if your computer goes into sleep, hibernate or power-save modes. Please check to make sure that

**Will a backup occur if my screen is locked or if I am not logged in?**
Yes. You do not need to be logged into your account for a backup to occur. You may also lock your screen.

**How long will my backups take?**
The time it takes to perform a backup will depend on the number of files you are backing up, the size of those files and on the upload speed of your Internet connection. Please keep in mind that for most broadband connections, upload speed is considerably slower than download speed.

Your first backup may take hours or even days as all of the files contained in your Backup Set will be transmitted to the ECG servers. Subsequent backups will take a substantially shorter amount of time as only files created and/or modified since the previous backup need to be transmitted.

**Why does my backup take so long?**
The length of time it takes to backup, is dependent on the number of files being backed up, the size of those files and the upload speed of your Internet connection. Please keep in mind that for most broadband connections, upload speed is considerably slower than download speed.

Please also check to see what types of files are included in your Backup Sets. Make sure you are not backing up large or unnecessary files such as temporary Internet files. If you are backing up your Microsoft Outlook “.pst” files, keep in mind that these files can be very large and will change every time you send or receive a new email. Therefore, you may be transmitting these large files on every backup.
**What types of files should I backup?**
We recommend that you back up important data files such as Microsoft Word and Excel documents, financial information such as QuickBooks databases as well as important multimedia files such as personal pictures. If you are using Microsoft Outlook, you may also want to backup your emails, contacts and calendar by including your “.pst” file in one of your Backup Sets.

**What types of files should I not backup?**
We do not recommend that you backup Microsoft Windows system files, applications, and temporary files (including temporary Internet files). To exclude certain files from all of your Backup Sets, please turn to *Excluding Files and Folders from all Backup Sets* on page 159.

**What is a backup set?**
A Backup Set is a list of files and folders that will be backed up, and a specified schedule of when those files will be backed up. ECG Data Storage allows you to create an unlimited number of Backup Sets.

**How many Backup Sets can I have?**
ECG Data Storage allows you to set up an unlimited number of Backup Sets.

**Why would I want to set up multiple Backup Sets?**
There are a number of reasons why you may want to have more than one Backup Set. For example, you will want to use multiple Backup Sets if you want to backup the same files more than once a day. You may also want to use multiple Backup Sets if you want to backup certain files everyday and other files only once a week.

**Can I backup my data more than once a day?**
Yes. There are two ways to backup the same files more than once a day. You can manually initiate a backup as often as you like.

**Can I schedule multiple backups for the same time?**
Yes. Multiple backup sets can run at the same time.

**How many versions of the same file can I store?**
ECG Data Storage lets you save an unlimited number of versions of the same file. By default, the software will save 10 versions. If you want to change the number of versions that will be stored, please turn to *Chapter 6 – Revision Rules* on page 130.

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**Retrieving Files**

**Are there any charges for restoring files?**
No, there are never charges for restoring files. You can restore files whenever and as often as you like.

**How do I reinstall the ECG Data Storage software after a system failure?**
If you have had a system failure, and ECG Data Storage is no longer installed on your computer, please turn to *Reinstalling ECG Data Storage after a System Failure* on page 102 for detailed instructions.

**How do I restore my file catalog?**
Please turn to *Recovering your System* on page 112 for detailed instructions on restoring your file catalog.
Multiple User/Computer Accounts

How do I add new users/computers to my account?
You can add new users/computers to your account by first logging in to your account at http://www.ecg1.com. In the Manage section, you will be able to purchase additional users/computers, if you currently have a single computer account or add additional users/computers if you have a multi-user account.

How do I install the new computers to my multi-user account?
Once you have purchased or added a new computer to your account, you will download the software to that computer and follow the installation instructions contained in this User Guide. Instead of selecting a new Encryption Key, you will Load or Type in the Encryption Key that you selected for the first computer of your account (Computer ID 0000). All other aspects of the installation and configuration are the same.

Do all of the computers of my account need the same Encryption Key?
Yes. All of the computers of your account do need the same Encryption Key. This enables the account administrator to ensure that the data for all computers is properly secured.

Do all of the computers of my account need the Username and Password?
All of the computers require the same Username. Each computer will have a different Computer ID and may have a unique Password.

Do all of the computers of my account have different file catalogs?
Yes. Each computer that you are backing up has different file catalogs so that backups are specific to each computer.

System Administration

Can I change my Encryption Key?
For security purposes, you cannot change your Encryption Key within the ECG Data Storage software. The only way to change your Encryption Key is to reinstall the ECG Data Storage software and then select a new Encryption Key. However, you will have to recreate your Backup Sets and backup all of your files again.

Can ECG store a copy of my Encryption Key?
In order to maintain the highest level of security for your data, ECG cannot store a copy of your Encryption Key. Please make sure that you keep printed and electronic copies of your Encryption Key in a secure, offsite location, such as a Safe Deposit Box.

Can I receive hard copies of my data?
Yes. ECG does offer a service that will save your encrypted files on CD-ROM or DVD. Please contact Customer Support for more information regarding this service.

For additional frequently asked questions, please visit http://www.ecg1.com.
Appendix 3 – Using Mapped Network Drives

ECG Data Storage supports Mapped Network Drives so that you can backup files that are on a network drive. We do not recommend using "Network Places." Please make sure that you map a drive letter to your server first if necessary. In addition, since the ECG Data Storage backup agent needs to run as a local system service, windows permissions will not allow ECG Data Storage to connect to your mapped network drives without configuring the ECG Data Storage software first. We recommend using a separate backup set to backup files that are ONLY using mapped drives.

Please follow the steps below to configure the ECG Data Storage software to work with mapped network drives:

1. Click Preferences

2. Click on the Backup Agent Settings viewbar to expand this list of backup agent settings.

3. Uncheck the box labeled Run as Local System.

4. Enter the Username and Password of the user currently logged into the computer or the local administrator username. Make sure the user is a member of 'The Administrators group' and 'Domain Admins Group' (if on a domain). This will permit the username access to all of the files for backup purposes.

5. Next, Click Click Here to Restart the Backup Agent. If you receive an error messages, it is because the username and password combination is incorrect. Delete the contents of the Username and Password fields and try again.

- You also have the option to create a user solely for ECG Data Storage backups. This method can be effective so that you do not have to change the password in ECG Data Storage every time you change your administrator’s password. You can also create a username and password for this “backup” user locally on the computer containing the ECG Data Storage software AND on the computer for which you want to connect to via mapped drives. Make sure the username AND password is synced. In addition, if you do create a new user, make sure Password Never Expires is checked.

- If the remote computer is a Samba share or a Buffalo Linkstation, you will need to uncheck the Unset Archive Bit option under Backup Settings.

- If you are using Windows 2003, you will need to make a new user on both the local computer running ECG Data Storage and the computer containing the mapped drives that have the same username and password (that never expires) and then make the accounts a member of the Domain Admin Group. You will then need to set the backup agent to run as this new user (but do not include the domain when setting the username field, just enter in the username).