



## Glossary of Terms

**Academic Folder** – Academic folders are *manual* folders. Images need to be manually placed and removed from these folders by privileged users.

**Active Region** - The display containing images and that is currently in use.

**Algorithm** – A set of rules applied to an input (data), to generate an output (how the data displays). If the input satisfies the condition of the output the rules (algorithm) are applied. (i.e.: Window / Level presets)

**Analogue** – An input signal that can be of any value within a defined range. Analogue signals have volume, frequency and phase and therefore can be easily distorted by other electrical signals (interference). A computer cannot process an Analogue output, so it must be converted into digital format (digitized).

**Archive** - The DICOM entity used for storing and retrieving data files. These are usually created for long-term storage, software distribution or backup. By transferring files to a slower/less expensive media the hard disk space they once occupied is now available to store new information.

**Bookmark** – A saved location within a particular exam that will allow the user to close the exam and at a later time reopen the exam and automatically redisplay the images in the exact manner.

**Cache** - A computer memory with very short access time used for storage of frequently used instructions or data.

**Centricity Web** – Product name for the GE Healthcare PACS product that accesses image data through a separate server using a web browser tool.

**Configuration** – Refers to hardware, software or the combination of both. Hardware configuration usually lists a description of device specifications that are required so that multiple devices can work in tandem. Software products will require that hardware be of a minimal design to allow the software to be loaded and function.

**Context-sensitive help** – Displays the appropriate Help topic when the user presses F1 or clicks the?.

**Cross Reference** – Allows the user to find the corresponding location of one image to another image that was acquired in an opposing plane.

**Data compression** - Techniques for reducing the amount of storage needed for a given amount of data. Compressed files take up less storage space and can be transmitted much faster.

**Dialog Box** - A small on-screen window displaying information and may require user input in order to proceed.

**DICOM** - The Digital Imaging and Communications in Medicine, standard was created by the National Electrical Manufacturers Association (NEMA) to aid the distribution and viewing of medical images, such as CT scans, MRIs, and ultrasound.

**Digitizer** – A device that converts an analogue signal into digital format so that analogue images can be input, stored, displayed, and manipulated by a computer.

**DDP** – Default Display Protocol, an automatic way the images are displayed when the exam opens.

**Drag and Drop** – A tool that allows users to select an image or icon and move it using a mouse.

**Edge Filter** – Highlights intensity gradients along edges of an image.

**Exam Manager** – Database tool used for resolving exams that did not properly profile with the order, to edit exam or patient information or merge duplicate patient records.

**FTP – File Transfer Protocol** - rules for transferring files between computers on the Internet. The use of FTP avoids incompatibility between individual computers.

**GIF** – Graphics Interchange format. Supports color and various resolutions and includes compression. Because it is limited to 256 colors, it is more effective for scanned images rather than pictures. This format takes up a relatively small amount of space.

**Hard Copy** – A printed copy (on paper or film).

**HIS** – Hospital Information System.

**Hot Key** - A keystroke, or sequence of keystrokes that triggers a memory-resident program.

**Image Compression** - One of a number of methods used to reduce the amount of information required to represent an image, so that it takes up less computer memory and can be transmitted more rapidly and economically via telecommunications systems.

**Image Overlay** – Additional information for a particular exam, such as slice thickness, table location, patient demographics, etc.

**Interface** - The point of contact between two programs or pieces of equipment. The term is most often used for the physical connection between the computer and a peripheral device, which is used to compensate for differences in such operating characteristics as speed, data coding, voltage, and power consumption.

**IP Address** – A numbered address assigned to uniquely identify a device on a network.

**JPEG** – Joint Photographic Experts Group. JPEG is a lossy compression technique designed to compress color and grayscale images. JPEG supports 16 million colors and is best suited for photographs and complex graphics.

**Layout Manager** – Virtual view of the workstation configuration, the series that comprise the exam and the series displayed on each monitor. It can be used to drag / drop images or a series of images into different monitor regions, display two different modality exams for the same patient or display and compare two different patients.

**Linking Series** – Connecting two series that were acquired in the same anatomical plane so the images move in synch with one another.

**Lossless Compression** - The original file is retrieved and will display unchanged after decompression.

**Lossy Compression** - Allows a greater level of compression. Some types of data (sound and pictures) can be stored by lossy compression where some detail is lost during compression, but the loss is not noticeable.

**Lung Filter** – A filter that used pixel information to enhance image intensities.

**LUT** – Look Up Tables. These tables apply algorithms to certain exams such as Nuclear Medicine, PET, Mammography to apply various display values.

**Macro** – A function, symbol, name, or key that represents a list of commands, actions or keystrokes.

**Monitor Region** – Refers to a display or virtual subdivision on a computer monitor.

**Network computer** - A computer designed to function as part of a network and is connected to a central server.

**Overlay Graphics** – A display of any information that was saved as a graphic file when the exam was acquired for an image.

**PACS** – Picture Archive and Communication System. An image and information management system that will allow Imaging facilities to store, retrieve, review, diagnose, and distribute large volumes of medical images and information.

**PNG** - Portable Network Graphics. Not supported by all web browsers but can compress 5-25% more than GIF. Saving, restoring and resaving a PNG image will not degrade the quality.

**Queue** – A sequence of stored data or programs waiting to be processed.

**RAID** – Redundant Array of Independent (or Inexpensive) Disks. Data storage is broken down into blocks and each block is written to a separate disk drive.

**RIS** – Radiology Information System.

**Router** – A device that forwards data packets through a network.

**Server** – A computer or device on a network that manages network resources. (i.e: print server manages one or more printers, database server processes database queries and a file server is dedicated to storing files)

**Sheet Mode** – Images within a series or examination displayed in a format that mimics printing to film.

**Significant Image** – An image identified as having clinical importance and can be saved within a separate series of images.

**Smooth Filters** – Removes artifacts from images.

**Soft Copy** – Computer output for monitor viewing.

**Stack Mode** – All images connected together in a stacked fashion that can be viewed individually. Changing the characteristics of a single image in stack will result in all images changing.

**System Administrator** - Someone responsible for the management of a computer system. Responsibilities typically include supervising system security, fixing faults, and organizing training.

**Taskbar** – The strip at the bottom of a screen containing icons of all programs launched in the current session.

**Thumbnail** – A reduced image used in order to view multiple images on a screen simultaneously or to facilitate download of such images more rapidly.

**Toggle** – To quickly alternate between two or more computer related options.

**User ID** – Identification that corresponds with a specific individual user of a computer system or network.

**Utilities** - Designed to perform a specific task related to the operation of the computer when requested to do so by the computer user.

**Verification** - The process of validating that data being input to a computer have been accurately copied from a source.

**Workflow** – A step-by-step process for accomplishing a series of tasks efficiently.

**Worklist** – Worklists are different ways to filter the exams that are in PACS. Worklists can group patients or exams together that have something in common. By design worklists can filter on various items (i.e.: status, modality, etc)

**Workstation** - A terminal or personal computer connected through a network and used to access programs and perform required functions within a prescribed application.