

## **EXAM-PACS® at a glance... (See New EXAM-Essentials on page 3)**

**CoActiv EXAM-PACS®** is a full-featured, state-of-the-art PACS, easily scalable from single-site to enterprise installations. The **EXAM-PACS®** complete solution includes the **EXAM-Vault® Archiving Module, EXAM-Filer® CD Burning Module and EXAM-Sender® Referring Physician Module**, which are also available separately as add-on enhancements to non-CoActiv systems.

**EXAM-PACS®** is hardware independent, designed to work on all Windows platforms and can be implemented as a software-only solution. However, for customer convenience, it is usually provided as a turnkey product including all necessary hardware. *EXAM-PACS* is especially suited for multi-site facilities that require speed, flexibility and accuracy when acquiring exams from one location and reading exams from other locations. A typical *EXAM-PACS* installation is about 1/3 to 1/2 the cost of most other enterprise PACS products.

All software & hardware includes a 7x24 “self monitoring and reporting” support feature and all CoActiv servers are remotely monitored by a CoActiv-developed, real-time monitoring and alerting system that actually “monitors the monitors”. This unique monitoring redundancy assures optimum function and performance and provides a pro-active response by the CoActiv support staff. This monitoring functionality is one of the several exclusive features that allow CoActiv to offer an industry first: *100% Up-Time SLA (Service Level Agreement)*.

### **EXAM VIEWING**

The viewing of exams by diagnostic radiologists, hospital clinicians, consulting physicians and referring physicians is accomplished by using the appropriate version of the CoActiv **EXAM-Viewer™**. This flexible and powerful DICOM application is a newly developed diagnostic viewer that is described by CoActiv clients as being “exceptionally intuitive”, “simple to use” and “easy to learn”. This viewer has all of the features expected of a first-class DICOM viewer, as well as a wealth of unique capabilities exclusive to *EXAM-Viewer*. *EXAM-Viewer* can be installed on all existing PCs within a hospital network, allowing exams to be viewed on virtually any PC that is used to access patient information. A version of this same viewer is installed on every EXAM-CD that is created by the CoActiv *EXAM-Filer* (see below) for patients or referring physicians. Additionally, a completely functional version of the viewer is provided to referring physicians registered with the enterprise as part of the *EXAM-Sender* referring physician system (see below).

### **EXAM DISTRIBUTION**

CoActiv’s patent-pending approach to Internet web distribution of medical images is the innovative, fast, secure and simple-to-use **EXAM-Sender®**. This referring-physician solution operates in a background mode, automatically placing exams on a referring physician’s office computer. A notification that the exam is ready for viewing is also sent to the computer and the doctor can then simply click to view the exam using the CoActiv *EXAM-Viewer*. This system requires no searching, no waiting and no wasted time, resulting in improved referring physician workflow. All 100% HIPAA compliant and 100% secure.

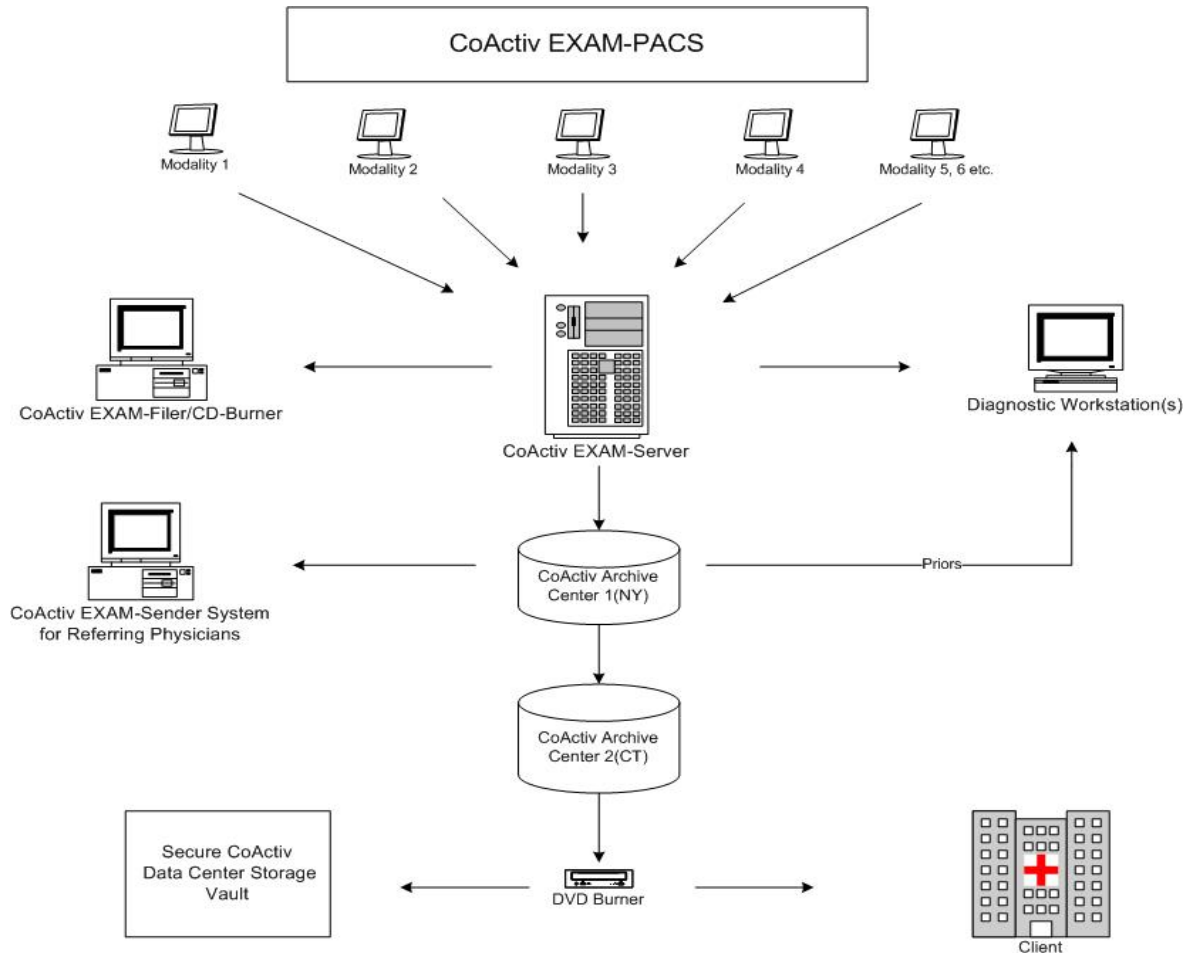
CoActiv **EXAM-Filer®** is an automated CD burning solution that makes EXAM-CDs for distribution to referring physicians, consulting physicians and patients. The EXAM-CDs include a prominently displayed logo of the radiology facility for marketing purposes and a copy of the CoActiv *EXAM-Viewer* software to view the exam images. The EXAM-CD can be viewed from any Windows PC and does *NOT* require software installation, thus eliminating the problems associated with other products. The automatic, robotic CD burner enables unattended use for workflow efficiency and is priced to meet the budget of any imaging center or hospital imaging department.

### **EXAM STORAGE, ARCHIVING & DISASTER RECOVERY**

The CoActiv **EXAM-Vault®** “Quad-Redundant” archiving service guarantees immediate, always-on-line access and includes a **100% Up-Time SLA**. Exams are stored *on-line* at the local *EXAM-Server* for one to two years and also stored *on-line* at two separate off-site Archive Servers—each located in separate data centers, in divergent locations, on different power grids and different Internet peering points. These archive servers store exams for an unlimited time, *on-line*, on huge RAID arrays. Plus, every exam is copied to two DVDs, with one copy securely stored in the data center and the other copy forwarded to the client. All of this redundancy costs only pennies per exam. The CoActiv *EXAM-Vault* service is virtually disaster-proof, eliminating the usual concerns of data recovery inherent in other, less redundant systems.

# EXAM-PACS® Functional Flowchart and Description

- Exams are sent from all DICOM-compliant modalities to the local, on-site EXAM-Server™. This server is sized to store exams locally for a time period requested by the client. Typical periods are from six-months to several years. All exams are acquired and stored locally at lossless compression. This server is also the source of exams that are sent, either automatically or manually, to the CoActiv EXAM-Filer® automatic robotic CD-creation system.
- As soon as an exam is received by the EXAM-Server from a modality, that exam is immediately copied to the CoActiv EXAM-Vault® Archive-Server™ in our prime datacenter in Tarrytown, New York, where it is stored on-line in multi-terabyte RAID servers. This is a Class "A" datacenter, fully redundant and HIPAA audited.



- Upon arriving at the prime datacenter, the exam is immediately copied to our secondary datacenter in Connecticut where it is mirrored, also on-line, onto redundant multi-terabyte RAID Archive-Servers. When enough new exams arrive at this datacenter to fill a DVD disk, two copies of a backup DVD are automatically created. One DVD is securely stored by us, and the other DVD is sent to the client for their local storage.
- The Archive-Server in the primary datacenter serves multiple functions in addition to exam archiving. This server is also the source for all prior exams needed for comparisons that are no longer available from the temporary storage on the local EXAM-Server. Priors are instantly sent to the diagnostic radiologist via one of the redundant OC-48 Internet pipes exiting this datacenter. This server also hosts the CoActiv EXAM-Sender® application that automatically sends exams in a background mode to referring or consulting physicians, anywhere in the world.

# CoActiv EXAM-ESSENTIALS™

**EXAM-Essentials™** is ideal for growing Orthopedic, Chiropractic, or Multi-Physician Practices ... any type of medical practice that has basic needs to quickly, easily and affordably acquire, view and manage any type of medical images.

**CoActiv EXAM-Essentials** is the ideal complete, yet *affordable* solution for the facility that requires PACS functionality that can be implemented instantly within any IT infrastructure requiring no special or expensive Internet connectivity.

**EXAM-Essentials** is a complete solution, including all required hardware and software... no hidden charges or surprises!

And with **CoActiv EXAM-Essentials** you always have a clear and easy upgrade path to the complete **CoActiv EXAM-PACS®** Suite of products that provide complete medical image management solutions for the acquisition, viewing, distribution and HIPAA compliant archiving for 100% of even the largest and most diversified facilities. **CoActiv EXAM-PACS** includes the ability to efficiently handle all medical images and associated DICOM data, including information from Radiology, Cardiology, Orthopedics, Surgery, Oncology and Radiation Therapy.

*All CoActiv PACS Versions are FDA Listed, 100% HIPAA Compliant and IT-Smart!*

Includes:

**EXAM-Essentials Server/Workstation Hardware:**

Dell Workstation/Server  
Duo Core Pentium Processor  
2-GB RAM  
Large Internal RAID Storage  
CD/DVD Reader/Burner  
Dell 20" Wide LCD Flat Panel Display  
Keyboard/Mouse  
10/100/1000 NIC

**EXAM-Essentials** Software which includes:

**EXAM-Server™ Basic** which will simultaneously acquire and store exams from TWO DICOM compliant modalities. Also allows **Sending** to off-site locations for remote over-reads or remote off-site archiving (available via *Optional CoActiv EXAM-VAULT*).

**EXAM-Console™ Basic** which includes **Exam Worklist** and **Search Windows**, **Exam-Print** to any attached DICOM film printer or Windows laser/inkjet printer with many flexible printing options.

**EXAM-Filer® Basic** which provides for the local burning of a CD/DVD's containing patient exams **complete with included full-featured exam viewing software.**

**EXAM-Viewer™ Basic** which provides the ability to **review** and **mark an exam as Read** on the **Combined Server/Workstation**. Includes **all standard DICOM Viewer capabilities** including:

- View *unlimited* number of exams simultaneously (limited only by PC resources).
- View *multiple series* simultaneously in a variety of screen layouts.
- Easily scroll through images using *keyboard* or *mouse* controls.

# CoActiv EXAM-ESSENTIALS™

## EXAM-Viewer Basic (continued)

- **Option to *continuously wrap* when scrolling** (i.e. automatically return to first image after scrolling to last image).
- **Easily adjust window/level using mouse** (*standard and fine mode* available).
- **Unlimited custom window/level presets** by modality and user.
- **Manually enter window/level parameters** using direct keyboard input.
- **Unlimited custom window/level presets** by modality and user.
- **Manually enter window/level parameters** using direct keyboard input.
- **Multiple zoom options** including *6 preset zoom levels* and ability to temporarily zoom a series to full-screen then return to multiple series layout with a *single click*.
- **One Button Zoom to Actual Size** – with monitor calibration feature.
- **Pan image, Invert image, Flip image** (horizontal/vertical) or *rotate image* (clockwise/counterclockwise).
- **One button Reset Image** to original state.
- **Easily auto-apply image display parameters** (zoom factor, win/lvl, flip state, etc.) to all images in a series or to all series.
- **Image enhancement capabilities** (i.e. *interpolation, edge enhancement, etc.*)
- **Multiple / Customizable image-overlay options**, by Modality, including demographics, anatomical side markers, rulers, etc.
- **Easy ability to Automatically Display any Field contained in the DICOM Header of an Image on the Image Display Overlay**, customizable by *Modality, Exam Type, Overlay Position*, and by *Diagnostic Workstation*.
- **Instantly view all information contained in the DICOM header** with 1 keystroke.
- **Measurement tools allowing multiple measurements** on a single image (multiple *color option* for color monitors).
- **Region of Interest tools** (ellipse, rectangle, freehand, etc.) allowing multiple ROIs on a single image. (multiple *color options* for color monitors).
- **Annotation tools** (multiple text labels, arrow, etc.).
- **Select label text font, size, attributes and colors** (on color displays).
- **Save multiple MOD files** to keep W/L, annotations, measurements, etc.
- **Permits technologist to pre-W/L, annotate, etc.** to prepare images for radiologist.
- **Multi-Frame Image masking control.**
- **Speed controllable Cine function** for *multi-frame* or *multi-image animation*, with *loop* or *bounce* option.
- **Instantly re-arrange series layouts and positions.**
- **Hide series listings to maximize viewing area.**
- **Easily copy images to Windows Clipboard or export images to BMP, JPG or DICOM files** for use in other applications or for *training or demonstration*.
- **Easily print series to any Windows or DICOM printer(s)** with selectable layouts.
- **Most functions & features are available via the mouse, or easy to remember keyboard shortcuts.**
- **Complete built-in Training & Help Files.**

**CoActiv EXAM-Essentials... Less Than \$15,000... Complete!**