

Images to any Desktop with Synapse

Successful PACS implementations are not just about softcopy interpretation or going filmless just in Radiology. Images and results need to be available to every authorized user no matter where they are in the enterprise. Synapse[®] was designed with this in mind. It works on a wide variety of PC platforms and is truly a PACS for every desktop in the enterprise.

Consistent Desktop User Interface

Synapse uses the familiar Windows[®] desktop environment. It is user-friendly and prevalent in both business and home settings. Fuji took the easy-to-use Microsoft Internet Explorer[®] browser, added innovative and powerful tools and then combined them with industry-standard web-based architecture. The result is that, with Synapse, physicians including radiologists, other clinicians and technologists all use the same powerful, familiar interface regardless of their location. Because the user interface is familiar, users often need little or no training to access important images and results, facilitating a rapid deployment of PACS across your enterprise and lowering training costs.

Thin Client Technology

Synapse is easy on your current infrastructure. It only requires a recent Windows operating system and Microsoft Internet Explorer. In fact, Synapse operates on virtually every Windows computer platform on the market today.

Our innovative licensing models allow every desktop, anywhere to be image enabled. Users simply download a small set of extensions to Internet Explorer and their PC turns into a PACS workstation. As Synapse updates become available, they are automatically loaded to the desktop the next time the user accesses the system. This makes both deployment and ongoing support simple.

Subscription Gives You Real-Time Data

Subscription is an important technology that allows Synapse users to receive important information, as it becomes available.



Fuji's Subscription is an example of how Fuji's unique architecture utilizes a technology



that is already familiar to web users. The process works in the same way as subscribing to a web site. With Synapse, each user may subscribe to one or more folders (worklists) for notification of study availability and, if desired, local caching to that PC. This allows for on-call teleradiology

where radiologists can begin interpretation from exams cached on their home PCs. Another component of Subscription is "stat" notification. A user subscribes to the appropriate folders and receives notification as soon as new exams are acquired.

Innovative Web Portal Integration

Every piece of information on Synapse has a Universal Resource Locator or URL. Once again, Synapse uses common language familiar to all web browsers. The advantage: Synapse is easily integrated into an enterprise web portal application. Other applications can simply open a browser to the web address (URL). Users are then instantly transported to the appropriate piece of information.

This allows image enabling of physician portal applications, clinical information systems and electronic medical record solutions.

Groundbreaking Compression Technology

Imaging data in healthcare can put stress on hospital network bandwidth, due to both the large size of individual images as well as the sheer number of images. Fuji has unique, patent-pending compression technology that addresses these issues while maintaining superb image quality and facilitating an easy implementation of PACS across a diverse enterprise infrastructure.

Fuji's Access Over Networks (AON™) compression stores three versions of each image upon acquisition.

Original – Images are compressed in a lossless industry standard DICOM format (~2:1) for diagnostic interpretation.

Clinical – Images are compressed in a lossy wavelet format using a moderate compression ratio for distribution to LAN based clinical users.

Reference – Images are compressed in a lossy wavelet format using a high compression ratio for distribution to users with a limited network bandwidth or limited monitor resolution.

Image quality is not sacrificed as the compression algorithms are optimized for medical images using



Fuji developed technology. Each Synapse user can request a default image (original, clinical or reference) for initial display while maintaining the ability to access

the remaining image versions. The compression ratios can also be customized by modality to reflect each site's preference. This preserves image quality, manages infrastructure costs and ensures access to a wide range of users, using a wide range of computer platforms.

Teleradiology Built In

Synapse's Web, Compression and Subscription technologies combine to form unsurpassed teleradiology capabilities. The browser interface delivers all the powerful productivity tools that are resident inside the facility to remote users anywhere outside the institution. AON Compression provides high-speed access to the images. Subscription enables users to have new exams automatically delivered to their workstation based on their defined criteria. For example, an on-call radiologist may define that all new CT exams acquired between 5PM and 5AM be pulled to the remote workstation and that an audible as well as a text message alert be sent. All information contained within Synapse is available to the remote user including reports and comparison exams.

A Security Model That's Flexible And Complete

Synapse allows you to leverage your existing departmental or enterprise security model. Logins can be authenticated via Synapse, as well as through your Windows network. Synapse can be configured to automatically authenticate any user who is logged into your domain, or it can be configured to require a username and password each time you connect. This makes system management easy and ensures secure access to all radiology data.