

Merge OrthoPACS[™]

Complete imaging solution for the orthopedic clinic

Solution Upgrade Document | OfficePACS to Merge OrthoPACS Suite

End to End Workflow

Merge OrthoPACS offers reliable image viewing and management for orthopedics, an orthopedic-specific zero-download remote viewer, digital templating and preoperative planning tools.

PACS Workstation

- **Improved Image Import**

Users can confidently import images from CDs or other storage devices. With one click, patient lists are retrieved and displayed within the user friendly import wizard, allowing users to search for matches based on the patient information found on the disk. If there is no existing patient, a new account can quickly be created by editing the available demographics such as MRN for long term storage. For those users not interested in archiving outside studies, the Merge viewer provides for viewing consistency.

- **Improved Image Export: CD Burning**

CD burning is available from the PACS worklist and now includes the ability to burn anonymized studies which can be useful for conferences or teaching opportunities. The PACS viewer is also burned to the disk for DICOM imaging viewing.

- **Improved Briefcase**

The briefcase is a user specific filing structure for any study that should be tagged for future reference. Users can add studies to their briefcase and can create additional folders to further organize studies according to surgery location, conferences or educational cases. Studies within these worklists can be anonymized and referenced within the remote viewer. The feature provides quick remote access to alleviate time consuming efforts behind burning CDs, printing or saving cases to a USB.

- **Improved Saved Searches- New Worklists**

Users can quickly create custom worklists by saving their common queries as they navigate to patient studies. To further automate common workflows, users can choose a

saved search as their default view, eliminating additional upfront clicks. Users can preserve their current view by searching for studies in a new window. For practice wide settings, administrative users can set search criteria, results columns, custom statuses and much more.

- **Improved Real Time Updates**

Newly acquired studies are added to applicable worklists to notify users when a study has arrived, eliminating unnecessary wait time between patients.

- **Improved Study Status Tracking**

Users now have the option to leverage additional study tagging with customized status or take advantage of automatic read/unread for quick reference to new studies. Such status tracking can populate specific user's worklists (such as "show only new studies") and/or drive communication with staff and other physicians in a practice.

- **Improved Modality Worklist / Order Results**

Built in HL7 allows x-ray users to take advantage of demographic order information already entered by clinical staff. Orders are also now available within the PACS itself. X-Ray techs can reference the PACS directly to see new orders and also confirm results, making any QC edits directly into the PACS (rights permitting).

- **New and Improved Viewer Toolsets**

The PACS provides a thin client viewer that includes orthopedic tools used in OfficePACS today with additional features such as spine labeling, region of interest annotations and even instant messaging capabilities for on-the-fly real-time communication needs. In addition to configurable viewer layouts per modality, users can save hanging protocols specific to their particular studies right from the viewer. Images are cached to the local workstation to maximize speed and performance.

Remote Viewing

Merge OrthoPACS includes a zero-download web based viewer which allows access to images from any device including iPads and iPhones. The viewer connects into

OfficePACS 3.4, 4.1, and 4.2 to allow users to search across multiple archives from one application.

- **Improved 3 in 1 Mouse**

The default all-in-one tool allows users to quickly zoom, window level, and pan. Users can further define actions according to their hardware and personal preference. This favored feature allows for quick and easy image manipulation.

- **Improved Patient History Access**

For quick study comparison, users can reference historical studies within the viewer. Display preferences in the history tab can include thumb nails and additional patient/study information. The viewer automatically adjusts, allowing users to conveniently open multiple studies side-by-side.

- **Improved Viewer Toolsets**

The Merge OrthoPACS viewer includes toolsets used in OfficePACS today with the added benefit of displaying tools according to user preference, and even modality of study to minimize clicks and optimize screen real-estate. Toolsets and features designed to support touch screen are also available on iPads and iPhones with the ability to quickly show/hide icons allowing full functionality regardless of location or hardware. Share images with patients or referrals right from the viewer with pin protected email to avoid CD burning and printing when possible.

- **Improved Save Searches**

Users can quickly reference saved queries created in the PACS workstation or create additional queries from the remote viewer. This feature is also available on an iPad or iPhone through “My Search” for quick and easy navigation.

Digital Templating

Merge OrthoPACS includes an orthopedic planning solution that supports multi-disciplinary orthopedic areas such as total joint, spine, and trauma.

- **Templating**

Users have access to a large implant database with templates from major implant manufacturers. To quickly navigate available options, users can tag implants as “favorites” and create saved plans using implants specific to common procedures and preference. Users will benefit from regularly scheduled updates, and can make custom requests directly to Merge support.

- **Automatic Templating**

Following the selection of a feature enabled template family, the solution can automatically select the optimal implant

size and placement in relation to the image selected for planning. Users can further modify this initial approximation as needed and also create plans for various cups and stem combinations using this feature.

- **Automatic Hip Measurements**

Users can further automate pre-surgical planning through automated hip measurements. The solution detects applicable anatomical landmarks and performs measurements tailored especially to planning for total hip replacements.

- **Advanced Measurements**

Basic orthopedic measurement and image manipulation tools are also available with the added benefit of additional advanced tools such as:

- Twist angle (post-operative anteversion /retroversion of acetabular cup)
- Reflex angle
- Outline tool (Circumference and surface area)
- Cut/Displace/Copy region of interest
- Perpendicular line based on existing line
- Parallel lines
- Midline (midpoint between two lines)
- Intersection point
- Mid point (line with midpoint marked in center)
- Distance comparisons
- Angle comparisons

- **Custom Measurements**

Leverage step by step sequential measurements that mimic planning methodology today (Merge offers the option to add any additional measurements customized by your surgeon). Step by step instructions appear in the status bar to guide users through the appropriate placements.

- **Image stitching**

For a full view of patient anatomy, users can stitch multiple images together, creating a new image within the study. Users can then plan and save the study to the archive for long term viewing.

- **DICOM Print**

Users have the option to DICOM print true to size images, allowing users the option to manually template or print films for viewing with questionable internet/hardware access.

