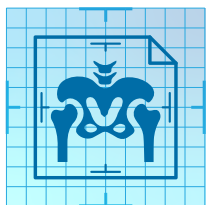# SYNAPSE® PACS

A new standard of enterprise imaging management for veterans, active military, and their dependents.

Holistic patient record. On-demand imaging access. Secure architecture.

SYNAPSE®
Enterprise Imaging

FUJIFILM
Value from Innovation

SIX CHALLENGES. ONE SOLUTION.

Millions of Americans have and continue to serve the United States Armed Forces, where they put their lives on the line to ensure our security and freedom. In return, the ability to deliver superior healthcare services to veterans, active military, and their dependents is paramount. However, as departments such as Veterans Affairs (VA) and the Department of Defense (DoD) continue to grow, the technologies they rely on to bring state-of-the-art imaging solutions to their patient population must evolve in tandem. That includes PACS technology.

Today's government sector faces many of the same challenges experienced in the civilian healthcare market:

1   INFRASTRUCTURE CONSOLIDATION
To reduce costs and simplify IT architecture, care facilities covet a dependable, unified product from a vendor they trust.

2   INTEROPERABILITY
Seamless connectivity to sites' peripheral systems is imperative when making comprehensive, collaborative care decisions.

3   DEMAND FOR ANYWHERE ACCESS
Unhindered retrieval of the complete patient imaging record, whether the user is at a local Veterans Affairs hospital or in a combat zone, is critical for well-informed, high-quality care delivery.

4   SECURITY
Care facilities continuously manage an ever-growing volume of protected health information (PHI) while combatting the risk of a data breach, virus, or ransomware attack.

5   DYNAMIC IT CONSIDERATIONS
As data sets continue to grow, imaging sites are under pressure to make data secure and readily available, both within the organization and on the go.

6   INNOVATION
To meet the demands of today's rapidly evolving healthcare environment, facilities need solutions that support their decision making today while preparing them for a future driven by artificial intelligence (AI).

Synapse PACS is the solution to these challenges. As the foundation of Fujifilm's unified enterprise imaging system, its secure server-based design enables quick access to the entire patient imaging record, including radiology, cardiology, mammography, and non-DICOM data sets. The award-winning platform also provides extensive integrations with third-party systems and unrestricted remote reading capabilities to help bring the complete patient health picture to providers, wherever and whenever they may be.

SYSTEM AND VENDOR CONSOLIDATION

To see the complete patient picture, providers need a single, all-encompassing PACS solution that brings unlimited enterprise imaging possibilities to their organization. Fujifilm's Synapse PACS introduces a first-of-its-kind technology that unites 2022's Best in KLAS Synapse Radiology PACS, Cardiology PACS, and VNA in one universal viewer, with dozens of native 3D and AI applications at the user's fingertips to further enhance diagnostic confidence.

The robust solution also supports cloud-based implementations to provide a centralized archive and data management system that can immediately and securely be accessed from any location.

Healthcare's government sector needs a single solution that unifies enterprise-wide imaging content both in and outside the care facility – one that eliminates departmental silos, centralizes cross-departmental data, provides unobstructed imaging access through a common viewer, and supports cloud-based or on-premise initiatives. **Synapse 7x** is that solution.

- **Unified, zero-download viewer:** Supports cross-departmental image data access, standardized workflows, and a simplified deployment model.

- **Interoperable vendor-neutral archive:** Delivers unlimited access, control, and management of clinical content from across the enterprise, regardless of the generating source, file format, or siloed storage system.

- **Advanced visualization tools:** Specialized, native 3D applications assist with interpretation, reporting, and treatment planning, while supporting clinical collaboration across the enterprise.

- **AI-enabled:** Extensive Fujifilm and third-party AI algorithms bring revolutionary diagnostic insights directly within the Synapse 7x workflow.

- **On-premise or cloud-based implementations:** Versatile choices provide a system that accommodates enterprise-wide logistics requirements.

EXTENSIVE INTEGRATIONS

Given the vast array of technologies used by the government, system connectivity and powerful integrations are critical. Synapse PACS enables seamless information sharing within the Synapse Enterprise Imaging portfolio, including Cardiology PACS, VNA, Enterprise Viewer, EIS, 3D, and Fujifilm's AI platform REiLI®, and integrates with third-party and image exchange applications to promote the free and secure flow of imaging information.

Integrations and advanced interoperability supported by Synapse PACS include:

- **Cerner MHS Genesis:** Provides EHR access directly from Synapse PACS.

- **Inherent 3D tool sets:** Offers a comprehensive suite of applications, including general-use and specialty options, that seamlessly perform advanced image visualization and analyses.

- **Fujifilm's Synapse AI Platform REiLI:** Seamlessly brings the user's preferred imaging AI algorithms directly into the Synapse PACS workflows and viewer ports.

- **Analytics Data Mining Extraction Engine:** Uses the product database for simple, complex, and calculated metrics.

- **Peer-review applications:** Supports a continuous, systematic, and critical evaluation of physician performance using structured procedures.

ON-DEMAND REMOTE READING

It's imperative that providers have on-demand access to the entire patient imaging record, wherever and whenever that may be. However, as the sheer volume of patient and study information continues to grow, as well as the need to read diagnostically all over the world, a robust and reliable system architecture is vital. Synapse PACS high-caliber server-side design powers the seamless control and transfer of the most substantial imaging data sets, with broad bandwidth that fluidly moves large data sets across servers to distribute on-demand or subscribed content directly to the workstation.

Synapse PACS also supports unrestricted remote reading to support the most comprehensive care delivery for U.S. service members stationed around the world.

- **Consistent user interface:** Rely on the same functionality and application appearance for all users in any location. The experience may vary slightly depending on site-assigned roles and user privileges.

- **Accessible datasources:** Synapse PACS Multiple Datasources (MDS) provides access to a single point of entry to patients and studies residing in two or more disparate Synapse datasources (databases).

- **Simple deployment:** Authorized users need only a web browser for unencumbered access to relevant patient imaging records.

MULTIPLE DATASOURCES (MDS)

Gain **unified access to patients and studies that reside in two or more datasources (or databases)** using MDS, which consists of Global Worklists (GWL) and CommonView. GWL enables interpretation of studies from different sites using a single worklist. CommonView consolidates studies (for a patient) from varied datasources into a single PowerJacket. Studies from any of these datasources can be referenced as pertinent comparisons.

UNYIELDING SECURITY

Synapse was one of the first radiology PACS granted an RMF-based authority to operate (ATO) on networks in U.S. DoD facilities. Its server-based design keeps protected health information (PHI) secure and reduces the risk of data loss and security breaches by eradicating the need to store data on the workstation.

- **Zero-download viewer:** Eliminate the need to download software to display images.
- **Zero-footprint:** Keep PHI storage off the workstation to reinforce security and support HIPAA compliance.
- **DICOM TLS support:** Trust in the most common method of protecting Web browser traffic from the modality to PACS.
- **Oracle TDE:** Transparently encrypts data at rest in Oracle databases.
- **Flexibility at scale:** Run Synapse PACS on the Synapse Cloud Services infrastructure or through a third-party cloud, hardware system, or virtual environment to allow for scalable deployment without vulnerability.
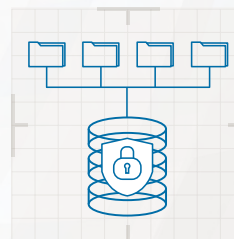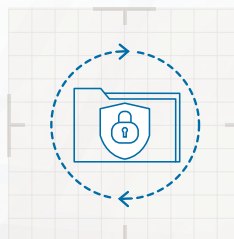
EFFICIENT MANAGEMENT OF LARGE DATA SETS, SOFTWARE DEPLOYMENTS, AND UPDATES

Experience the IT benefits of a server-based image-rendering architecture and intrinsic computing power of Synapse Radiology PACS.

- **Server capacity:** Prepare images for display using server power instead of workstation resources.

- **Server-side bandwidth:** Move large data sets fluidly across servers to prepare images for display and provide on-demand or subscribed content delivery directly to workstations.

- **Mitigation of network limitations:** Use optional caching tools to overcome bandwidth and latency constraints experienced with sizable datasets.

- **Decreased workstation support needs:** Synapse Radiology PACS has few-to-no requirements to download the software to workstations.

- **Simplified deployment:** Grant users access to the PACS application, enabling them to open the tool directly from a web browser.

- **Automatic workstation updates:** Following a PACS upgrade on the server, workstations instantly apply the software revision.

AI-READY FOR WHAT LIES AHEAD

Fujifilm is dedicated to continuous innovation and advancing imaging technology now and in the future. With the introduction of the AI-enabled platform **REiLI**, Fujifilm is merging its world-renowned imaging legacy with today's cutting-edge AI innovations.

Some of the AI research-and-development activities underway include:

Computer-aided detection.
Reduces time of image interpretation and supports radiologists' clinical decision-making.
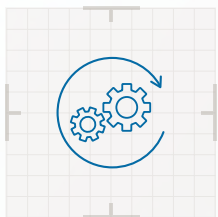
Workflow support.
Provides optimal study prioritization based on findings, notifies care teams of critical results, and automates report population. Through these functionalities, care teams can take the consequential actions needed to help save lives.
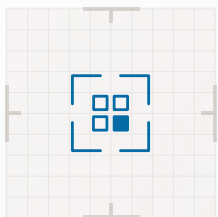
Region recognition.
Accurately recognizes and consistently extracts organ regions, regardless of deviations in shape, presence or absence of disease, and imaging conditions.

Advancing healthcare is a collaborative effort. Fujifilm's AI-enabled platform **REiLI** is being developed alongside vendor and academic research partners to support an ever-growing arsenal of algorithms addressing decision support, workflow prioritization, critical care notifications, and much more. Through these budding partnerships, the use cases and promise of AI-enabled platforms to revolutionize the way we approach patient care are infinite.

BRING A NEW STANDARD OF ENTERPRISE IMAGING MANAGEMENT TO VETERANS, ACTIVE MILITARY, AND THEIR DEPENDENTS.

Providing exceptional care to the millions of Americans and their families who have or continue to serve in the armed forces is more than important – it's imperative. To achieve this goal, PACS solutions must evolve to function as a comprehensive enterprise imaging system. Healthcare providers need a resource that unifies today's diverse and disparate imaging data through a single diagnostic viewer and offers extensive integration capabilities to connect the complete patient picture. They also need a technology that supports anytime, anywhere access through a scalable and secure architecture. Synapse PACS is that solution.

SYNAPSE®
Enterprise Imaging

For additional information, please contact:
Wade Davis | National Director Government Sales
Email: wdavis@fujifilm.com
Phone: (502) 439-5651

©2022 FUJIFILM Healthcare Americas Corporation

In 1936, we launched our healthcare business with x-ray film, and we haven't stopped innovating since.

For more than 80 years, we've continued to transform ourselves so we can help healthcare organizations like yours make the world a healthier place. As the industry advances, we'll continue adapting — finding new ways to apply our unique technologies to solve preeminent healthcare challenges.

We'll never stop iterating and developing digital solutions that progress radiography, endoscopy, ultrasound systems, healthcare IT, pharmaceuticals, and regenerative medicine — and the Synapse® Enterprise Imaging portfolio represents this commitment to continuous innovation.

For more information, visit

www.Fujimed.com

FUJIFILM
Value from Innovation