Merge

Address your imaging needs today. Face the future with confidence.

With a transformation partner you can rely on

merative™

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Introduction

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Changing demographics and industry dynamics continue to present new and ongoing challenges in medical imaging. Aging populations are driving growing volumes of imaging studies for increasingly complex diagnoses. Significantly larger studies are causing longer reading times for clinicians and greater costs for data storage and computing capacity. Clinicians, care teams, and patients themselves all expect access to the patient's complete information, at any time, from any location and device, along with tools to collaborate. Government regulations such as the CURES Act add further pressures to the technical, clinical, and administrative leaders of imaging organizations.

To help imaging leaders meet these challenges, technology vendors are making new innovations to current systems – such as PACS for radiology and CVIS for cardiology, hemodynamics reporting tools, and RIS, among others – for improved reliability, accessibility, and speed to diagnosis. Altogether new technologies and tools are emerging as well, such as cloud-based solutions and artificial intelligence and machine learning (AI/ML) applications. The demand for cloud is being fueled by the need for lower costs and more reliable uptime and system security. And while adoption of diagnostic AI applications is slowly picking up, non-clinical uses of AI and ML tools (e.g., chatbots, natural language processing) are helping improve workflow processes and care delivery at scale.

With so many options at their disposal, imaging leaders need help navigating to the right ones that will meet their needs today and set them up for tomorrow—with the least possible disruption to the daily operations or legacy systems they rely on.

That's exactly the role Merative aims to fulfill for the imaging professionals on the front lines, the teams and organizations they support, and the patients they serve. There is no shortage of innovations to help increase capacity, accuracy, efficiency, and scalability. The Merge portfolio is designed to readily leverage them over time so that imaging organizations can ride the wave of their changing business landscapes to continue operating effectively and profitably and provide optimal patient care outcomes.

We are your transformation partner; we're in it for the long haul. From the teams of experts we hire, to the product roadmaps we define, to the business partnerships we form, we are committed to providing practical and innovative medical imaging solutions. With a deep understanding of the industry and technology landscape and its players, gained from over 30 years of experience, we aim to help you chart the best path forward on your technology decisions.

The difference with Merge

At Merge, a Merative company, we put imaging teams--and the physicians and patients they serve--at the center of our innovation to help address the most pressing issues in imaging organizations today: physician burnout and dissatisfaction, disparate and fragmented patient data, inefficient workflows and image delivery, and complex IT infrastructures.

We offer deep expertise and practical imaging solutions that support multifunctional, dispersed care teams with the enterprise imaging capabilities they need--and we ensure they run without fail. Knowing that organizations' imaging needs expand and change over time, we adhere to industry standards and modular product design that ensures interoperability with clients' existing and future systems and protects your investments. With constantly changing healthcare regulations and the rising threat of cyber-attacks, we also help imaging organizations achieve compliance and meet the latest security standards. Above all, we strive for our clients to have complete confidence in Merge systems, tools, training, and support so they can count on being able to care for patients 24/7/365.

Merge imaging solutions are used by approximately 3,000 organizations worldwide, including 1500+ providers across the U.S.. As a transformation partner for more than 30 years, we provide practical solutions that help you to address your imaging needs today, surpass the uncertainties and inconveniences of past systems and technologies, and navigate into the future.

We know the perceived risks of being first to try a new product are high in healthcare. That's why Merge facilitates progress by working creatively with clients to try new innovations through early adopter programs. They are designed to limit risk, optimize results, and generate the proof needed for the benefit of all.

Although the corporate name Merative only dates back to 2022, our heritage as Merge is long and rich in imaging inventions and innovations. We provide clients with the best elements of that history, adding more investment, velocity, and focus to support you at the pace of transformation you define. Our dedication to your success always comes first and with an industry-leading portfolio of solutions based on our vision for imaging, you can have confidence in Merge as a trusted transformation partner.

Our vision: based on a core imaging portfolio, we help clients expand into enterprise imaging, then transform to embrace cloud services for more scalability, reliability, security, and support for clinical workflows.

Enterprise imaging solutions that people like to use

Empower care teams and break down data silos between service lines by leveraging a single platform to accommodate multiple -ologies, integrated with the EMR. Give access to patient information and collaboration tools based on the care team member's role and need – including giving access to the patients themselves.

Infused with AI

Enhance the clinical team's experience with AI insights--to streamline processes, improve workflows, enhance clinical outcomes, and increase provider satisfaction.

Enabled for hybrid cloud

With over 10 years of cloud experience, Merge helps you on your cloud journey one step at a time: your applications can be connected from on-premise to cloud and from cloud to on-premise as you prefer. A hybrid-cloud approach enables you to adapt in a measured way that minimizes risk and leverages current investments.

Elastic and scalable

Your solutions will flex, scaling both up and down in storage, computing power, and cost. They will also accommodate system utilization during peak and trough hours. These capabilities are essential as you expand or reduce locations, adapt to changing market needs, and support your organizations' organic and inorganic growth.

Transform imaging workflows

Healthcare organizations invest significant resources in systems to collect and share patient imaging data. Yet, physicians often report difficulty finding what they need to make the most accurate diagnoses. It remains time-consuming to sift through large studies to decipher the real reasons for an ordered exam, and to cross-reference findings with prior exams. Growing daily workloads, shortages of reading professionals, and having to make critical clinical decisions in high-pressure, high-interruption conditions are all driving physician burnout and straining the quality of patient care.

The Merge portfolio of intelligent imaging workflow solutions can help—especially when they are attractive, familiar, intuitive, modern, and don't get in the way of clinical processes. They are modular, interoperable, and designed to work in existing imaging environments. By providing robust image management and real-time collaboration features, powerful data visualizations, and time-saving workflows, Merge imaging solutions can help imaging teams to manage caseloads more smoothly within and across departments.

We firmly believe that a healthcare system works best, and patient outcomes are optimized, when everyone is practicing at the "top of their license." The right tools and technologies can help increase confidence among clinicians and their teams that they have the right information in hand.

Have confidence that the right information is available throughout clinical workflows:

Usability
Access tools that can adapt to your preferred workflows, reduce ambiguity, and enable visibility across clinical teams.

Dependability
Know that these tools will work the way you expect, so that you are better supported to treat patients.

Distribution
Distribute workloads equitably, tailored to the rules of your practice, with minimized "cherry-picking"—powered by AI.

Workflow tools for confidence

Merge PACS™	A flexible radiology solution designed to improve reading workflows anywhere in the enterprise. A high-performance viewer combined with a versatile platform that simplifies physicians' reading activities (including support for mammography). Helps organizations to scale and access AI insights.*
Merge RIS™	Accomplish revenue and productivity goals by building a customized workflow solution that optimizes daily operations – from orders and reports, to billing and analytics. Meet new mandates while streamlining workflows and improving productivity.
Merge Dashboards™	Merge Dashboards is an agile business intelligence solution designed to help produce better outcomes by collecting and analyzing billing, workflow, clinical, and compliance data.
Merge OrthoPACS™	An image management and digital templating solution designed for orthopedics, so that surgeons are enabled to access images at multiple locations, diagnose from anywhere using web-based devices, plan for surgery, and securely archive studies.*
Merge Workflow Orchestrator™	Unifies imaging studies, patient data, and AI results into a single modern interface that gives physicians a personalized experience. Native AI "learns" how to distribute cases across reading teams equitably and for best performance.
Merge Cardio™	A cardiology solution that allows users to access and manage patients' integrated cardiovascular data from a centralized, web-enabled system, from anywhere and at any time.*
Merge Hemo™	Provides real-time, automated documentation for cardiac cath lab data and images, which are incorporated into the patient record at the point of care.

*Not FDA-cleared for diagnostic use on mobile devices.

Expand enterprise access to medical imaging

Clinical staff are often located across multiple sites while needing to collaborate on patient care, for example among experts in different locations or consultant specialists and referring physicians from outside organizations. Being able to access and view a diverse range of medical images that are needed in patient care from any location is a gamechanger.

Merge solutions can help. Multiple distributed groups and departments can save time, standardize practices, and efficiently streamline collaboration with a zero-footprint viewer and a highly scalable, feature-rich vendor neutral archive (VNA). Together, they provide a low-maintenance, cost-effective infrastructure to enable access to patient information across sites at scale.

Within this infrastructure, helpful tools can automate steps and capture information to supplement visual assessments. Additionally, data collection capabilities can save significant time by automatically populating reports that care teams need to review.

In a 2022 survey, 96% of patients said they wanted access to imaging data in their electronic health record (for example through a patient portal). Very few (7.5%) were concerned about possibly seeing their data before their physician does*. The CURES Act makes it compulsory for healthcare organizations to deliver on this growing consumer demand, and many still have not complied. Merge imaging solutions can help by image-enabling various systems to support compliance.

Solutions for enterprise imaging

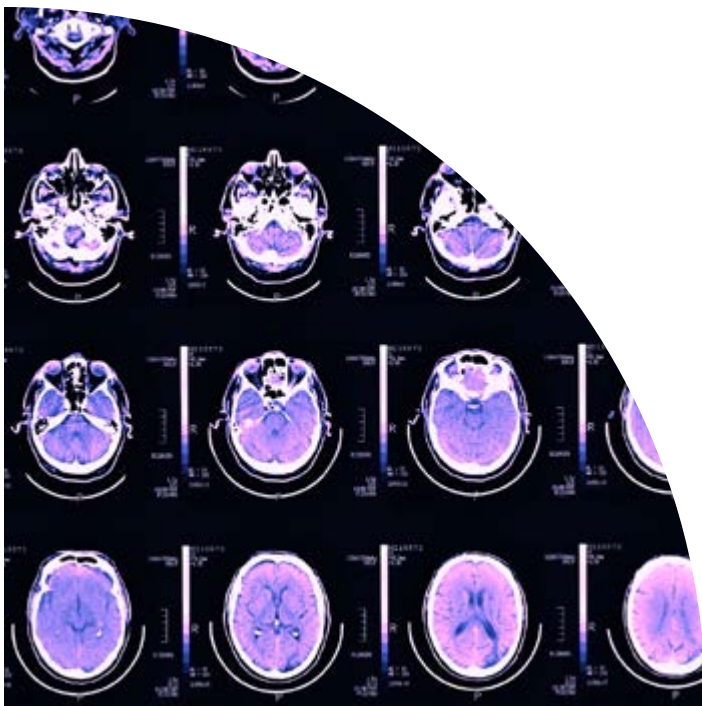|	
Merge Universal Viewer™	A regulatory-cleared, zero-download web-based diagnostic viewer that allows healthcare providers and care teams across the enterprise, and patients themselves, to access images from any healthcare application, anywhere*.
Merge VNA™ (Vendor Neutral Archive)	A highly scalable and reliable vendor-neutral archive that enables users to store, manage, and share images enterprise-wide from disparate storage systems, specialties, service lines, and sites--whatever the source or format.

*Not FDA-cleared for diagnostic use on mobile devices.

*Source: Bryan D. Steitz et al. "Perspectives of Patients About Immediate Access to Test Results Through an Online Patient Portal." JAMA Network Open, March 20, 2023

Simplify workspaces

Rife with multiple vendors and solutions, often with little interoperability among them, imaging environments historically have been a patchwork of technologies and legacy systems. This makes it hard to access and manage imaging data, or to implement upgrades as needed. Unintended ripple effects can occur, especially in hospital systems that inherit multiple disparate legacy systems through mergers, acquisitions, and divestitures. The resulting data silos often impair physicians' access to the patient insights that they need to make confident, accurate, informed diagnoses.

Merge imaging solutions circumvent these issues. The flexibility of a truly vendor-neutral archive thwarts the complexity of multiple imaging data sources. A platform approach to AI adoption lowers cost and streamlines the procurement, deployment, and management of multiple applications. Hybrid cloud deployment can reduce total costs of ownership, while enabling mission-critical standards for business continuity, data security, multi-site access, and operational efficiency.

Understanding that each imaging organization is unique in its people, systems and processes, Merge professionals follow a proven methodology for discovery and solution design, together with a best-practice deployment plan. As your transformation partner, we incorporate your clinical, technical, and business needs into our recommendations, meeting you where you are and helping get to the next step.

Solutions for an interoperable imaging environment

Merge VNA™ (Vendor Neutral Archive)	Stores, manages, and shares images from disparate systems, specialties, service lines and sites – regardless of source or format. Supports diagnostic images (DICOM) and XDS (non-DICOM) information across the enterprise, integrating to Electronic Health Records and Health Information Exchanges.
Merge Universal Viewer™	A regulatory-cleared, zero-download web-based diagnostic viewer that allows healthcare providers and care teams across the enterprise, and patients themselves, to access images from any healthcare application, anywhere.
Merge Cloud Archive™	An industry-leading, HIPAA-ready cloud solution, enabling IT to provide clinicians with the latest version of their applications, while reducing the burden of an on-premises IT stack. Merge Cloud Archive creates a resilient, high-availability environment with easier life-cycle management. Over 10 years of experience providing disaster recovery archiving, universal viewing, and image exchange in the cloud, it offers access to data from anywhere while ensuring security with geo-resiliency.
Merge Workflow Orchestrator™	Built for hybrid environments, this cloud-native SaaS helps IT optimize the flow of studies, safely linking data and tools running on-premises and in the cloud(s) to reading experts anywhere across the enterprise and beyond.

*Not FDA-cleared for diagnostic use on mobile devices.

Have confidence in reliability, predictability, and scale.

Flexibility
Gain choice and control over where to run any or all enterprise imaging capabilities, on-premises or in the cloud, for cross-department and institution interoperability.

Continuity
Be assured of uptime to avoid compromise to patient care. Address issues proactively with active alerts, monitoring, and security. Certified by the Censinet® Certificate of Achievement for Cybersecurity.

Standards-Based
Standards-based AI workflow with adoption of HL7 OMI proposed industry standard.

"We work extremely well with Merge. We have confidence in the technology; replicating content management from the enterprise archive, with the PACS sitting on top and the virtual IP on the front end. If we ever do see issues with the PACS or our radiologists experience any slowdown, we can easily switch over to a Peer 2 PACS in a different data center within minutes, with minimal impact on the clinicians and support staff."

Eric Lehmkul
Director, IT, McFarland Clinic

See the future: AI in medical imaging

The healthcare AI landscape is broadening, with new products entering the market seemingly daily. With over 520 healthcare AI applications having cleared regulatory approvals as of January 2023, (with 400 focused on radiology) and more coming, AI-enabled solutions are finding their way into many imaging organizations for both clinical and operational use cases.[1]

The near-term promise of diagnostic AI is to accelerate and augment clinicians' capabilities, so they can better manage the rising volume and velocity of imaging studies across healthcare systems. It can also offer a safety net by identifying high-value findings that might otherwise have been missed. AI has the potential to revolutionize precision medicine and improve patient care.

So, what should you be thinking about in your AI journey?

– AI solutions that are proven to work clinically, and that meet requirements for regulatory compliance, security, and privacy. Merge has a large (and growing) selection of applications designed for various body parts and modalities. Check out the Merative AI Partners Catalog.

– AI solutions that are vendor-neutral (modality, PACS, etc.) and standards-based: these will integrate most easily into your IT environment. Merge is committed to interoperability in our own systems—and demand the same of our partners'—helping to ensure our clients' investments are protected over the long-term.

– Technology vendors that collaborate well throughout contracting, deployment, maintenance, support, and renewals. Merge invests in strong business partner relationships so that you experience a cohesive ecosystem oriented around your AI journey success.

Merge has both theoretical and practical understanding of what is involved in building, commercializing, and deploying imaging AI applications in imaging workflows, and have cultivated an ecosystem of AI partners and applications who reflect this.
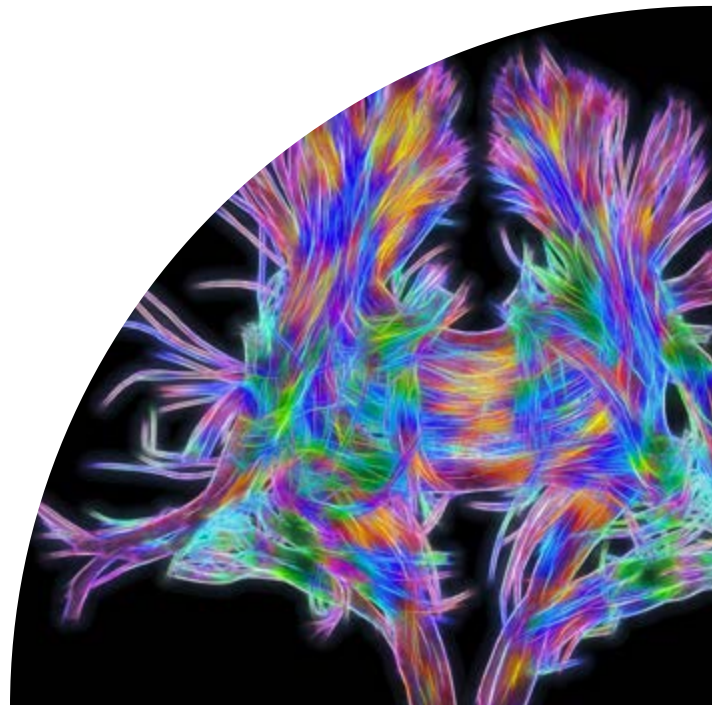
Choice and control in AI adoption

Merge CADstream™	This solution uses complex mathematical algorithms to deliver insightful data visualization and segmentation that helps radiologists characterize abnormalities, access priors, streamline reporting, and ease interventional planning for breast, pelvic, and abdominal MRI studies.
Merative AI Partner Ecosystem	Get leading AI applications developed from proven vendors. See the Merative AI Partners catalog.

[1]American Hospital Association https://www.aha.org/aha-center-health-innovation-market-scan/2023-03-14-3-factors-driving-ai-surge-health-care

See the future: Cloud in medical imaging

Until recently, imaging organizations accumulated technology as on-premises investments, selected to meet individual departmental needs. Over time, this resulted in siloed environments that become notoriously hard to manage--highly fragmented, not interoperable, and difficult to implement necessary patches, upgrades, and integrations. Given the costs of staff, maintenance, and facilities requirements, the need for change is clear.
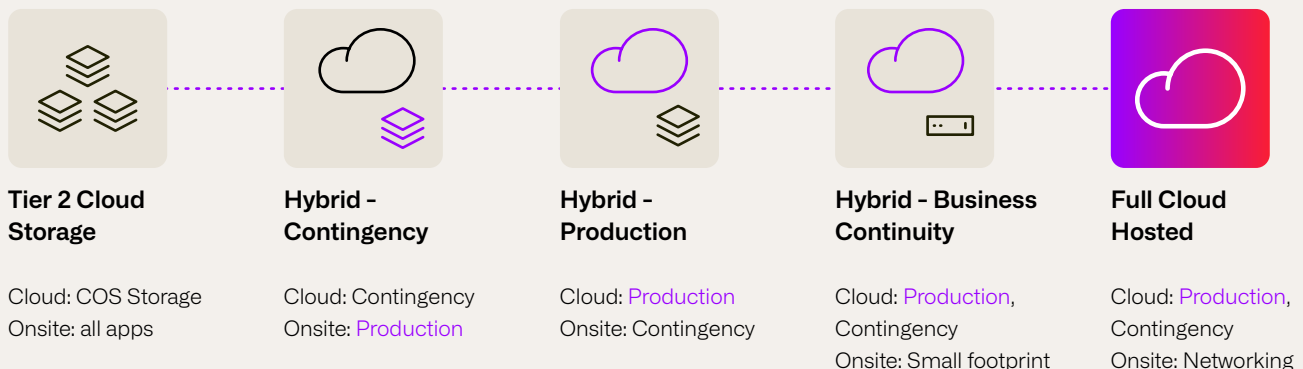
Adopting a cloud strategy offers a variety of antidotes to these problems. However, transitioning from on-premises to cloud-based infrastructure all at once can be hopelessly disruptive. Phased approaches that combine on-premises with public cloud (i.e., hybrid cloud) are proven to offer a productive path forward for most healthcare organizations. The journey is different for each organization depending on their current system footprint, available resources, time horizons, and budget.

The Merge team is highly experienced and skilled in such initiatives, having worked successfully with imaging organizations of varying sizes and complexity (independent imaging providers, ambulatory facilities, and ultra-large health systems) to embark on their cloud journeys. Foremost in our philosophy is to understand each client's specific situation and "meet them where they are" to anticipate their next steps.

The benefits of a cloud strategy with Merge include:

– Industrial-grade facilities, services, and support, backed by service level agreements.

– Storage for housing massive amounts of historical imaging data, which can be tiered for authorized access.

– Built-in security best practices that include password protection, multi-factor authentication, access control, authentication, encryption, monitoring, and response plans for cyber-attacks and data breaches.

– Patches, upgrades, and other maintenance costs and efforts are outsourced, helping to avoid downtime caused by unplanned system outages, potential power outages, or facilities issues.

– Easy remote access. Wherever there is an internet connection, physicians, care teams and patients can access imaging data and collaborate between internal and external members.

– Secure, distributed access to imaging data for patients, ensuring patients can view their information at any time, helping providers meet regulatory requirements and increasing patient satisfaction.

– A pay-as-you-go model for what you use, where large capital expenditures of on-premise environments (and associated budgeting and procurement processes) are replaced by operating expense business models.

– Identify, train, and retain your expensive, dedicated IT resources knowing that Merge effectively provides staff augmentation.

Cloud Journey On Ramp

Tier 2 Cloud Storage	Hybrid – Contingency	Hybrid – Production	Hybrid – Business Continuity	Full Cloud Hosted
Cloud: COS Storage	Cloud: Contingency	Cloud: Production	Cloud: Production, Contingency	Cloud: Production, Contingency
Onsite: all apps	Onsite: Production	Onsite: Contingency	Onsite: Small footprint	Onsite: Networking

A path to modernization: Merge Imaging Suite

Introducing Merge Imaging Suite: a comprehensive portfolio of solutions to empower healthcare organizations with a strategic approach to modernize their imaging environments.

Merge Imaging Suite provides a broad array of intuitive features thoughtfully designed for imaging clinicians to enjoy a seamless and frictionless workflow experience. It is personalized for them to focus on the velocity and quality of patient care, while enabling tighter collaboration with extended care teams. The intended result: enhanced clinician satisfaction and retention, helping to drive better patient outcomes.

Merge Imaging Suite also benefits technical functions such as IT and imaging informatics teams. As a modular, integrated, cloud-native medical imaging platform, it maximizes availability, security, performance, ease of administration, and remote access, while reducing complexity and cost.

Designed for strategic, phased adoption at the pace you determine, Merge Imaging Suite is purpose built for your journey to a modernized, cloud-based enterprise imaging platform. It can help your organization to:

– Consolidate patient imaging information into a centralized point of access for clinicians and their teams, eliminating data silos and establishing a single source of truth.

– Integrate clinical insights from AI tools, all within current workflows to help clinicians accelerate productivity and improve satisfaction.

– Personalize the reading experience for clinicians so that they can review imaging studies the way they like to and do so more efficiently.

– Utilize multiple real-time collaboration options for better communications between care team members.

– Facilitate the distribution of imaging studies across reading teams, using an engine driven by native AI that learns over time, so that caseloads can be managed and distributed effectively.

– Simplify IT infrastructure with a vendor-neutral, hybrid cloud-native platform.

– Integrate seamlessly with an organization's existing solutions in a scalable hybrid-cloud infrastructure, to protect investments, ensure continuity, and eliminate downtime.

– Provide robust protection from data breaches, ransomware attacks, and other cyber threats that can result in costly downtime, reputational damage, and even legal action.

With Merge Imaging Suite, we continue our commitment to providing leading imaging solutions that clients can both confidently rely on and like to use. As a transformation partner, we will help you stay ahead of technology trends to address your imaging needs today, while positioning for the future.

Merge Imaging Suite
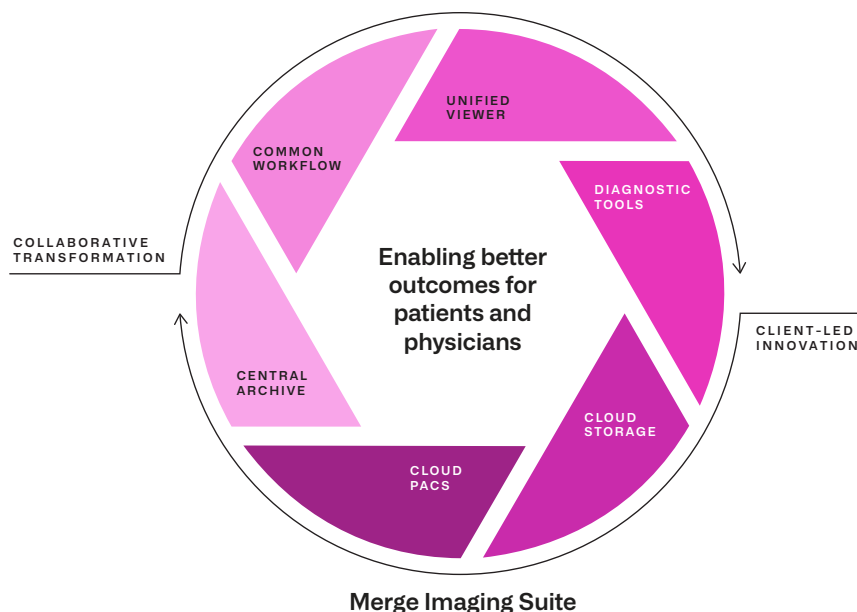
Next steps

Learn how you can benefit

Merative provides award-winning enterprise imaging solutions for radiology, cardiology and orthopedics, using vendor neutral cloud and AI technologies to reimagine workspaces and create seamless workflows.

Visit our website or talk to an enterprise imaging solutions expert to learn more about how the Merge team at Merative can help you.

About Merge

Merge medical imaging solutions, offered by Merative, combine intelligent, scalable imaging workflow tools with deep and broad expertise to help healthcare organizations improve their confidence in patient outcomes and optimize care delivery.

Learn more at merative.com/merge-imaging.

About Merative

Merative is a data, analytics and technology partner for the health industry, including providers, health plans, employers, life sciences companies and governments. With trusted technology and human expertise, Merative works with clients to drive real progress. Merative helps clients orient information and insights around the people they serve to improve decision-making and performance. Merative, formerly IBM Watson Health, became a new standalone company as part of Francisco Partners in 2022.

Learn more at www.merative.com