

COMMUNICATION WORKFLOW ENGINE

Workflow orchestration for the modern enterprise.

A rule-based engine that routes, normalizes, and reconciles your imaging data automatically — so the right study reaches the right place at the right time, without manual work.

Imaging data moves — but too often by hand.

Across a healthcare enterprise, studies have to reach the right destination in the right format, matched to the right patient. When that work is manual, it slows care and invites error.

The Mach7 Communication Workflow Engine (CWE) is part of the broader Mach7 Enterprise Imaging Solution — the layer that drives and supports workflows to capture, index, manage, store, distribute, view, exchange, and analyze clinical imaging across your enterprise.

It can also run **stand-alone**, delivering DICOM routing and data normalization on its own — a focused tool that drops into the environment you already have.

At its core, CWE uses a **rule-based engine** to define how DICOM studies move through the system. A graphical interface represents each workflow clearly, so routing to any destination is easy to see and easy to manage.

Normalization keeps data clean and standards-based — communicated to every destination exactly as that destination needs it.

CWE optimizes efficiency and clinical workflows while giving IT the flexibility and power to distribute imaging data anywhere in the organization.

Granular control, fully in your hands.

CWE gives administrators the depth to handle real-world routing and the simplicity to manage it themselves — as the organization changes.



Rule-based routing

Individual DICOM header elements trigger the workflow. Nested Boolean logic lets you build very granular rules tailored to your specific requirements.



Normalization & tag morphing

Both public and private tags are supported. Apply processing rules at input or output to satisfy a destination's required transfer syntax or other constraints.



Administrator-managed

Fully managed by your local system administrator — build new workflows as your organization evolves, or adopt new capabilities like on-prem or cloud-based AI.

THE PRINCIPLE

Define the rule once. CWE applies it consistently, automatically, every time — freeing your people from repetitive, error-prone manual steps.

Real workflows, automated.

Customers use CWE in many ways to streamline workflows, lift productivity, and ultimately enhance patient care. A few examples drawn from the field.



DATA ACCURACY & TIME SAVINGS

Auto-match and merge across joint-venture sites

For partner locations — community hospitals, health systems, imaging centers — CWE automatically matches MRI images to the correct patient record and merges studies into the enterprise VNA, replacing a manual merge and removing identifier reconciliation across two different systems.



CONTINUITY OF CARE

Auto-send prior studies to PACS for immediate review

When a patient arrives, relevant priors stored on the VNA are automatically pulled into the PACS — no manual export request from a technologist. Radiologists get the complete imaging history before dictating, raising diagnostic confidence.



TECHNOLOGIST EFFICIENCY

Remove the manual matching step

Technologists once matched patient and exam information between systems by hand. CWE removes that step, cutting exam QA time so teams focus on room readiness and patient care instead of administrative work.



DATA RECONCILIATION

Reconcile identifiers across distinct EMRs and PACS

When partners use distinct systems with unique patient and exam identifiers, CWE provides enterprise workflow tools to update and reconcile that information accurately and on time — including accession-number changes.

Measured results, in the customer's own words.

3-5

minutes saved per technologist exam

22K

MRI studies in the Q1 2024 time study

98%

of Mach7 customers stay with us

In the first quarter of 2024, one customer analyzed roughly 22,000 MRI studies running on Mach7 automation. The study showed an average saving of three to five minutes per technologist exam versus the prior manual process — with greater savings expected as more sites adopt the workflow.

We have received glowing feedback from our Technologists and clinicians stating that by removing a manual merge process, the imaging workflow has been improved and that they have been able to focus on more patient-focused responsibilities.

Mach7 customer

Imaging operations leadership

With the introduction of Mach7's solution into our workflows, we can automate the time-consuming but important process of patient and exam identifier reconciliation. This creates efficiencies and improves the ability for clinicians to have timely access to a patient's imaging information, which in turn delivers better patient care.

Director of Transformation

Mach7 customer site



LET'S TALK

Let's orchestrate your workflows.

Whether you need to route images to specific locations or providers, or reconcile, normalize, anonymize, update, and edit data, CWE gives administrators immense capability and flexibility. Let's map it to your environment.

TALK TO US

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FROM PIXEL TO POINT OF CARE.

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