

Enhancing M*Modal Fluency Reporting Workflow

Ultrasound is just one of many imaging modalities that include quantitative measurements that are performed during the examination. Automatically incorporating this measurement data into the radiologist's report can improve clinical quality and productivity.

Problem

- The need for technologists and radiologists to manually enter measurement data into a Fluency Direct™ medical imaging report template to support the dictation process.
- Inconsistent data presentation caused by varying modality vendor data formats.

Solution

Compass™ Routing Workflow Manager w/Fluency Direct™ Dictation Integration Option
PowerTools™ - Suite of Standalone DICOM & HL7 Utilities

Benefits

- Increases the value of the clinical report with the inclusion and normalization of quantitative measurement data, e.g., unit conversions such as cm to mm.
- Saves time by automating the inclusion of report data in a standardized format.
- Eliminates data entry and treatment errors that can be introduced by manual processes.
- Improves the efficiency of workflows that impact the clinical process.

Features

- Works with any modality that supports DICOM® Structured Reporting (SR).
- Provides flexible parsing, mapping, editing, and transformation of DICOM SR data into the appropriate Fluency report template fields.
- Leverages the power of Compass Router to solve complex imaging workflow challenges that benefit from DICOM SR data management and DICOM tag morphing/coercion.
- Eases the identification and extraction of relevant SR report data fields by use of PowerTools utilities.

The Compass Fluency Dictation Integration Option enables parsing and mapping of DICOM SR data fields into Fluency report templates. Post-processing can be performed to modify, add, or remove fields presented to Fluency.

Supports many DICOM SR exam types, including:

- OB-GYN
- Vascular (Doppler Carotid, Renal, Abdomen)
- Thyroid
- Testicular
- BMD/DEXA

The flexibility and configurability of Laurel Bridge Software's enterprise imaging workflow solutions also provides support for custom or private DICOM SR formats and fields.

Compass Versions:	Portal	Basic	Direct	Standard	Enterprise
Descriptions:	Store & Forward to Central Compass (Hub & Spoke)	Store & Forward (Limited nodes)	Direct Message Router	Store & Forward (Unlimited nodes)	Compass Direct + Standard
Configurations					
Maximum # of sources	1: promiscuous	6 combined	Unlimited	Unlimited	Unlimited
Maximum # of destinations	1	6 combined	Unlimited	Unlimited	Unlimited
Number of failover destinations	1	6 combined	N/A	Unlimited	Unlimited
Number of routing rules	1	Unlimited	Unlimited	Unlimited	Unlimited
Included Features					
Secure transport (TLS 1.0, 1.1., 1.2)	✓	✓	✓	✓	✓
Compression (transfer syntax) conversion	✓	✓	✓	✓	✓
DICOM image routing priority	✓	✓	✓	✓	✓
Destination heartbeat sensing	✓	✓	✓	✓	✓
Windows service for automatic start on boot	✓	✓	✓	✓	✓
Web access	✓	✓	✓	✓	✓
Tag-morphing and filtering		✓	✓	✓	✓
Study anonymization (includes pixel overlay)		✓	✓	✓	✓
Hold queue – manual review & routing		✓		✓	✓
Automatic Order Generation (AOG) – from in-bound exam		✓		✓	✓
Trigger fetching of prior exams		✓		✓	✓
Multiplexed storage destinations		✓		✓	✓
Load balancing—DICOM-aware, may use study identifier			✓	✓	✓
All DICOM Message types (direct routing)			✓		✓
Federated Query (std. query spanning/C-Find multiplexing only)			✓		✓
Optional – Features/Functions/Filters					
HL7 message routing	✓	✓	✓	✓	✓
Non- DICOM file transport	✓	✓		✓	✓
Queryable study cache – temporary/transient			✓		✓
Custom – filters, job actions, queries, lookups, mappings, etc.			✓	✓	✓
DICOM SR data extraction				✓	✓
Dictation system integration – M*Modal Fluency Direct				✓	✓
Generate thumbnail images				✓	✓
Downtime order entry				✓	✓
Protocol / File-type translations, e.g., HL7 report to DICOM SC or encapsulated PDF, or to standalone PDF, etc.				✓	✓
Recommended System Requirements – Minimums (virtual or physical)*					
Windows operating system version (Standard/Server)*	7.0/2012	7.0/2012	7.0/2012	7.0/2012	7.0/2012
MS SQL Server version*	Express	Express	Express	Express*	Express*
Memory (RAM)*	8GB	8GB	8GB	16GB	16GB
Processor*	i5	i5	i5	i7	i7
Hard Drive (store ~2x the transient image cache)*	250GB	500GB	250GB	500GB	500GB
# of network (NIC) cards (Gigabit)*	1	1	1*	1*	1*
Supports high-availability (HA) configurations	Yes	Yes	Yes	Yes	Yes

* Optional features, functions, and/or study volume may dictate server upgrades. MS SQL Standard and/or multiple NICs may be preferred for higher performance.