Practical Automation with MIM Workflows™ and MIM Assistant®

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- Scripts that walk clinicians through a clinical task
- Highly customizable
  - Many MIM Workflows are available “out of the box,” but all can be customized to fit the needs of the individual clinic

MIM Workflows
Clinician-Assisted Automation

- Easily created using our graphical user interface
  - No coding!

- Expansive automation capabilities
  - Nearly every manual command in the software can be used in a MIM Workflow
**MIM Workflows**

**Clinician-Assisted Automation**

- **Benefits:**
  - Time savings - quicker processing, fewer clicks, faster learning curve
  - Consistency - all clinicians use the same workflow. Cases are done the same way each time
  - QA is built into the process.
    - The clinician is asked to perform QA every time when appropriate

- **Drawbacks:**
  - Must be manually initiated by clinician

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**Example MIM Workflow**

**PET/CT Deformation with TG-132 Report**

- Fusion process is automated except for two pauses where the clinician performs QA on the registration
- QA is built into the automated process

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**Example MIM Workflow**

**PET/CT Deformation with TG-132 Report**

- Automation goes beyond the registration process, but also creates a summary report following the TG-132 guidelines
  - Summary of Registered Images
Automation goes beyond the registration process, but also creates a summary report following the TG-132 guidelines.

○ Summary of Registered Images
○ Intended Use

Example MIM Workflow
PET/CT Deformation with TG-132 Report

○ Summary of Registered Images
○ Intended Use
○ Accuracy Level

MIM Assistant
Headless Automation

● Automated workflows can be run with no user interaction on the MIM server
● Robust, rule-based platform to initiate the automated workflows on the server
Types of automation rules on the MIM Server:

- **Time** - Periodic maintenance or cleanup
- **Event** - Act on data when it arrives
- **Message** - HL7
- **File System** - Monitor folders

Same level of customization as user-initiated MIM Workflows

Benefits:

- Same as MIM Workflows, plus automatically initiated on the server
- Even more time savings
- QA steps are still requested by the clinician where appropriate

Drawbacks:

- Automation rules used to initiate must be customized to match all data scenarios
- Requires thoughtful planning to accommodate “one off” scenarios
Example MIM Assistant Rule
Atlas Auto-Contouring

- No user intervention needed
- Completely automated
- Results saved and ready for review when the clinician sits down at a workstation

Example MIM Assistant Rule
Rigid MR Fusion

- No user intervention needed to kick off the process
- Upon receipt of the planning CT, the MIM Assistant finds all previous MR series
- Initiates CT-MR fusion workflow

Example MIM Assistant Rule
Rigid MR Fusion

- No user intervention needed to kick off the process
- Fusions created automatically
- Session saved for clinician to review the fusions
- Continuation workflow runs after the QA process is completed by the clinician to finish up the process and setup for contouring as well as generate an AAPM TG-132 summary report
Summary:

- Automation with MIM Workflows can substantially reduce the time needed for routine tasks
- Scripted workflows increase consistency
- QA tasks can be built into the process
- Easy to create and implement using a unique graphical user interface
- Automation with MIM Assistant can be headless and initiated on the server