



# iQ IMAGE

a PARATUS Medical Imaging Company

iQ-WEB RIS

Version 2.0

# Efficient Workflows thanks to Customized Web-based RIS

Representing the next generation of radiology information systems, iQ-WEB RIS offers advanced configuration options for the optimization and customization of the radiology workflow. It seamlessly integrates with any existing IT infrastructure (HIS/PACS) and is vendor-independent. Due to its web-based design it supports any remote multi-site access.



## Customizable Components to fit your Radiology Needs



### IMAGING CENTERS AND HOSPITALS

- One-stop solution (RIS and PACS from a single source), long-term vendor e.g. viewing, archiving, integration, teleradiology, RIS, VNA and cloud
- Easy, efficient and flexible integration of referring physicians – online access for referrers
- Performance: Low time to first image (TTFI), improved, short, good, quick report turnaround time (RTT) – high throughput, low waiting time for patients
- Local or remote radiologist: Specialty tools to help with daily medical tasks (VR, templates)

### TELERADIOLOGY

- Supports multi-site clinics and hospital group scenarios (share patient files, but keep devices and staff data independent)
- Supports remote scheduling and remote radiologist scenarios
- Flexibility to access and distribute images by utilizing remote access, HL7/DICOM or project specific interfaces (accelerates the health information exchange)



### SCREENING

- Documentation of patient consent within database field and/or via document upload
- Support of double or triple reading scenarios
- Extensive customization of report templates (e.g. ILO, BI-RADS, ...)
- Automatic distribution of reports
- Easy analysis of report findings (via customized fields)
- Easily and fully customizable workflow steps



# Customized Workflow – Tailored to your Specifications

**Adapting iQ-WEB RIS to your needs improves the workflow and the diagnostic process.** Thanks to an unlimited number of site-specific workflow steps, the web-based RIS not only supports common workflows (e.g. for imaging centers and hospitals), but also handles special workflows (e.g. for screening, research) as well as a combination of both. Once the customized workflow steps have been defined, they can be sequenced as needed. For example, the workflow can be linear or parallel, steps can be skipped for individual patients, and multiple people (e.g. technician and billing personnel) can work on the case simultaneously.



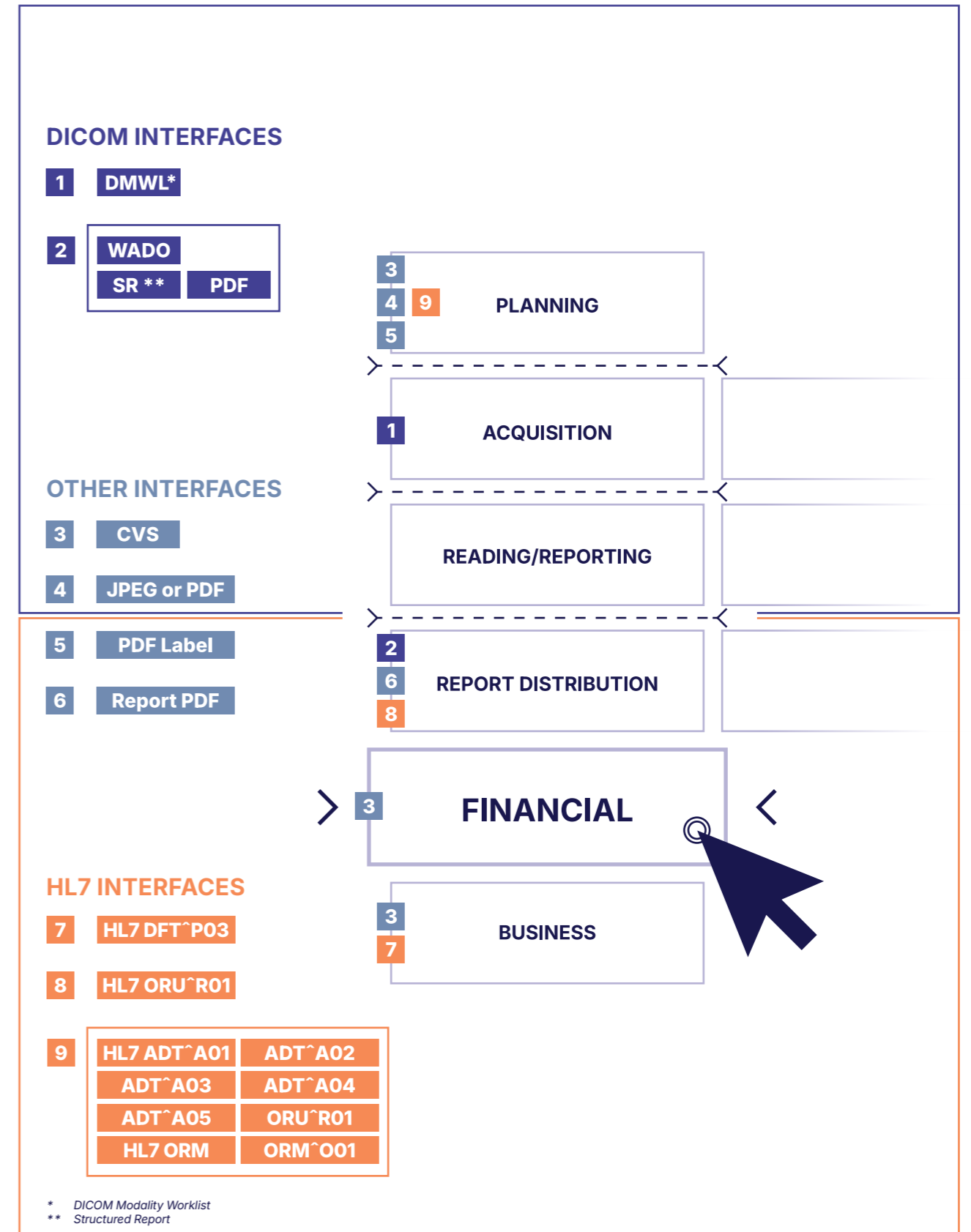
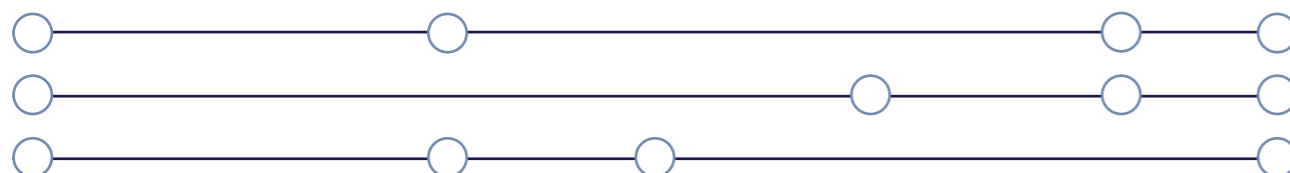
Individual linear workflow steps



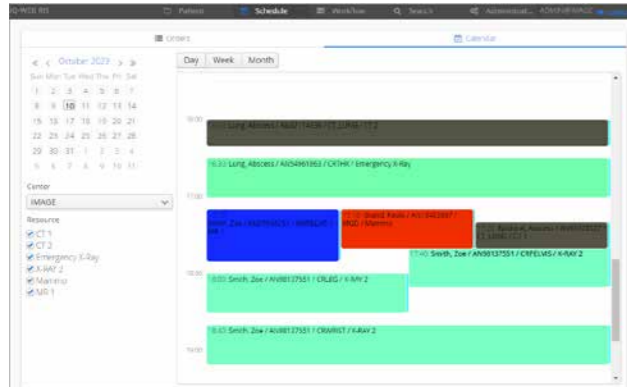
Split workflow with individual steps



Two or more parallel workflows with individual steps

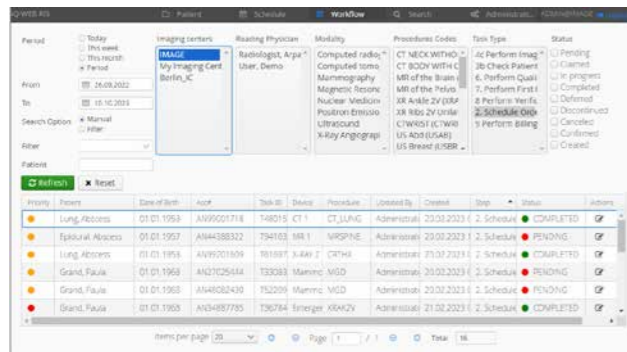


# Your Customizable iQ-WEB RIS – Workflow Steps



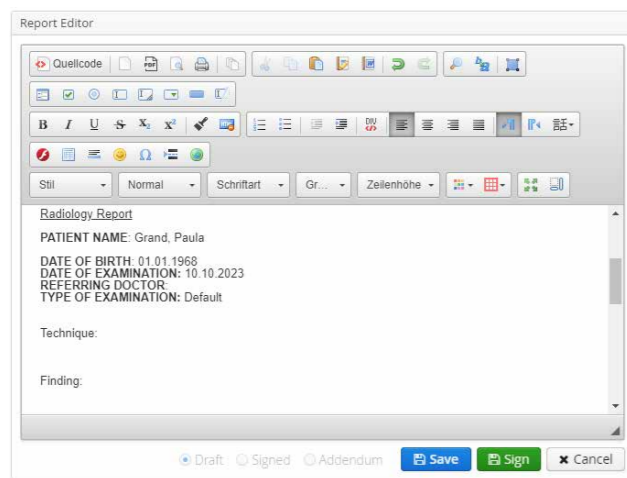
## PROCEDURE PLANNING

- Easy patient registration
- Web-based scheduling and procedure planning
- Manual or automatic document import
- Support of emergency patients (in preparation)
- Label printing



## STUDY ACQUISITION

- Creation of DICOM Modality Worklist (DMWL)
- Support of local or remote devices
- Simple documentation of doses and materials



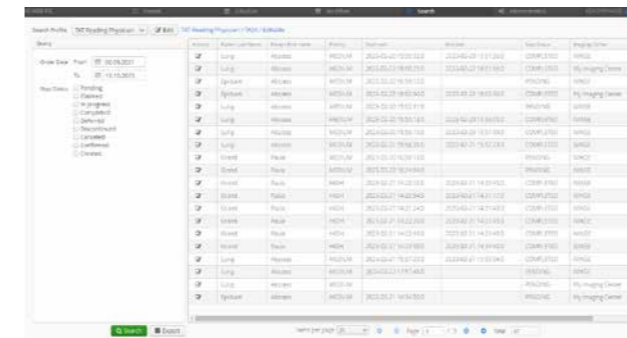
## READING AND REPORTING

- Fully customizable report templates with predefined values
- Extensive report editor templates
- Highly adaptable report export templates
- Support of report drafts, preliminary, final and addendum reports
- Support of single, double or triple reading workflows
- Speedy viewer interface to iQ IMAGE viewers (others by request)
- Preventing accidental double readings



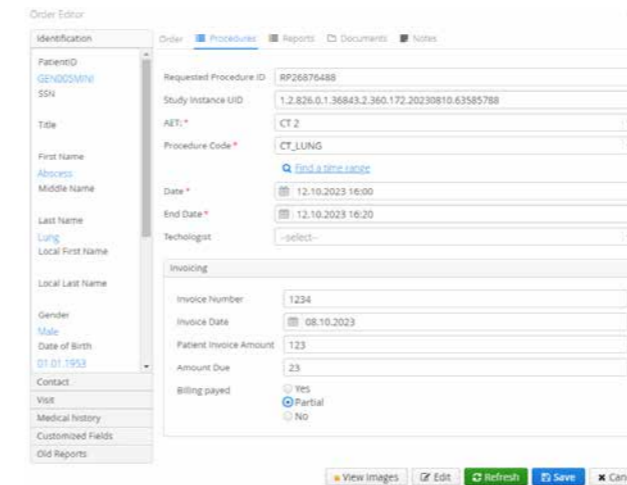
## REPORT DISTRIBUTION

- HL7 ORU and/or WADO to HIS/EMR
- DICOM Structured Report to PACS
- Open report PDF for printing



## BUSINESS MANAGEMENT

- Customizable statistics based on any database field
- Group admin rights (tenant differentiation)
- Export as CSV for authorized staff



## FINANCIAL EVALUATION

- Simple dose and inventory management
- Simple invoice management
- HL7 DFT (Detailed Financial Transaction) interface
- Export as CSV for authorized staff

## Workflow Features

### Build your Ideal Workflow



#### PROCEDURE PLANNING

- Patient registration via:
  1. Manual typing
  2. Automatic from HIS/EMR via HL7 ADT^A01, ADT^A02, ADT^A03, ADT^A04, ADT^A05, ORM^O01, ORU^R01
  3. Semiautomatic via CSV import
- Procedure planning via calendar slots, patient availability view or HL7 ORM
  1. HL7 ORM^O01 from HIS/EMR fills calendar
  2. HL7 ORM^O01 from HIS/EMR fills order list (via vetting list)
- Web-based scheduling for multiple sites (e.g. call center)
- Manual or automatic document import of JPEG or PDF
- Scheduling emergency patients with unknown names and reconcile later with patient file (in preparation)
- Label printing via PDF document creation



#### STUDY ACQUISITION

- Creation of DICOM Modality Worklist including database field mapping
- Support of local and remote devices
- Dose management via creation of customized fields and summary of accumulative dose within search profiles
- Material management via customized fields and summary of materials used within search profiles



#### READING AND REPORTING

- Fast access to prior reports from different sites
- Blocking of tasks opened by somebody else at another station to prevent double readings
- Extensive report editor templates incl. single selection/multi selection or number fields and others
- Highly adaptable report export templates include signature, letterhead, background pictures, macros and tables
- Support of report drafts, preliminary, final and addendum reports
- Support of single, double or triple reading workflows
- Viewer interfaces to iQ-4VIEW, iQ-FUSION or iQ-VIEW
- Third-party viewer integration (by request)



#### REPORT DISTRIBUTION

- HL7 ORU^R01 of drafts, preliminary, final and addendum reports
- WADO (option) to HIS/EMR of drafts, preliminary, final and addendum reports
- DICOM Structured Report or DICOM PDF to PACS
- Open report PDF for printing



#### BUSINESS MANAGEMENT

- Customizable statistics based on any database field, e.g. on
  1. Staff/device activity
  2. Review of number of referrals
  3. Time-stamped tasks
- Adjustable group admin rights, e.g. to manage users of different institutions (tenant differentiation)
- Export as CSV for authorized staff



#### FINANCIAL EVALUATION

- Basic inventory management using customized fields
- Simple dose documentation via creation of customized fields and summary of accumulative dose within search profiles
- Inventory management via customized fields and summary of materials used within search profiles
- Simple invoice management using customized fields
- HL7 DFT^P03 (Detailed Financial Transaction) interface
- Export as CSV for authorized staff

## Technical Features of iQ-WEB RIS



### SERVER AND DATABASE

- MySQL version 5.7 (version 8.0 in preparation (others by request))
- Windows server version 2016 or newer (others by request)
- Server instance monitoring
- Complete 64-bit architecture for high-performance scalability
- Stores up to 100 million patients/orders/procedures (depending on hardware and database version)
- Min. bandwidth: 4 MB upload/download for 5 users
- 2 to 8 CPU cores depending on size of installation
- 8 GB to 32 GB RAM depending on size of installation (8 to 15 MB RAM required per user session)



### WEB

- Support of Chrome, Safari, MS Edge, Firefox (with version released in the last 5 years)
- Attach files and notes to patient file
- Character sets ISO 8859-1, ISO\_IR100, Unicode (other characters sets by request)
- On displays with resolution of 1280 × 800 pixels or more



### DATA AND USER MANAGEMENT

- Privilege settings for each user/group
- Easy user access control via user profiles
- Enhanced user rights management (e.g. user access filter and search profiles)
- Password required min. 10 characters
- User blocking after more than 3 failed login attempts (default: 2 hours)
- Group admin rights, e.g. to manage users of certain institutions (tenant differentiation)



### INTERFACES AND INTEGRATION

- Receives HL7 ORM and ADT messages
- Sends HL7 ORU^R01 to any HL7 compatible information system
- Sends HL7 ACK messages to acknowledge the report has been received
- DICOM Modality Worklist SCP
- WADO (option) (web access to DICOM objects), share WADO links directly from web interface
- Sends DICOM Structured Report to PACS
- Opens report PDF for printing
- Label printing
- Other privacy and security options by request



### SECURITY (CYBER-SECURITY)

- Configurable auto logoff after inactivity
- Restricted access to patient health information (PHI) to authorized personal using user specific access rights (user profiles)
- Only dedicated user accounts with specific profiles can change or delete PHI
- Password length between 10 and 250 characters
- Passwords are encrypted when stored or transmitted (never as clear text)
- Time-stamped activity log for any changes made to the database files or tables



### OPTIONAL (WEB ACCESS TO DICOM OBJECTS) WADO INTERFACE VIA iQ-INTERFACE AND iQ-WEB

- High security by optional AES encrypted WADO IDs
- Compliant with US and European data protection laws and regulations
- HIPAA/GDPR compliant log information of shared WADO links (user, recipient, patient(s), studies, date/time)
- Dual authentication (suggested for email-based sharing of WADO links)
- Many other security and privacy measures by request



### LICENSING

- Per reading physician, i.e. one license supports one reading physician and max. 5 modalities; two licenses support two reading physicians and max. 10 modalities, etc.

### IN PREPARATION

- Scheduling emergency patients with unknown names and reconcile later with patient file
- Direct voice recognition integration
- Support of user interface for tablets

### LIMITATIONS

- By intention not a medical device
- Max. 20 customized fields per database level recommended (patient, order, procedure, report, task)
- No HL7 BAR (Billing Account Record) interface

*Stamp of Sales Partner*

