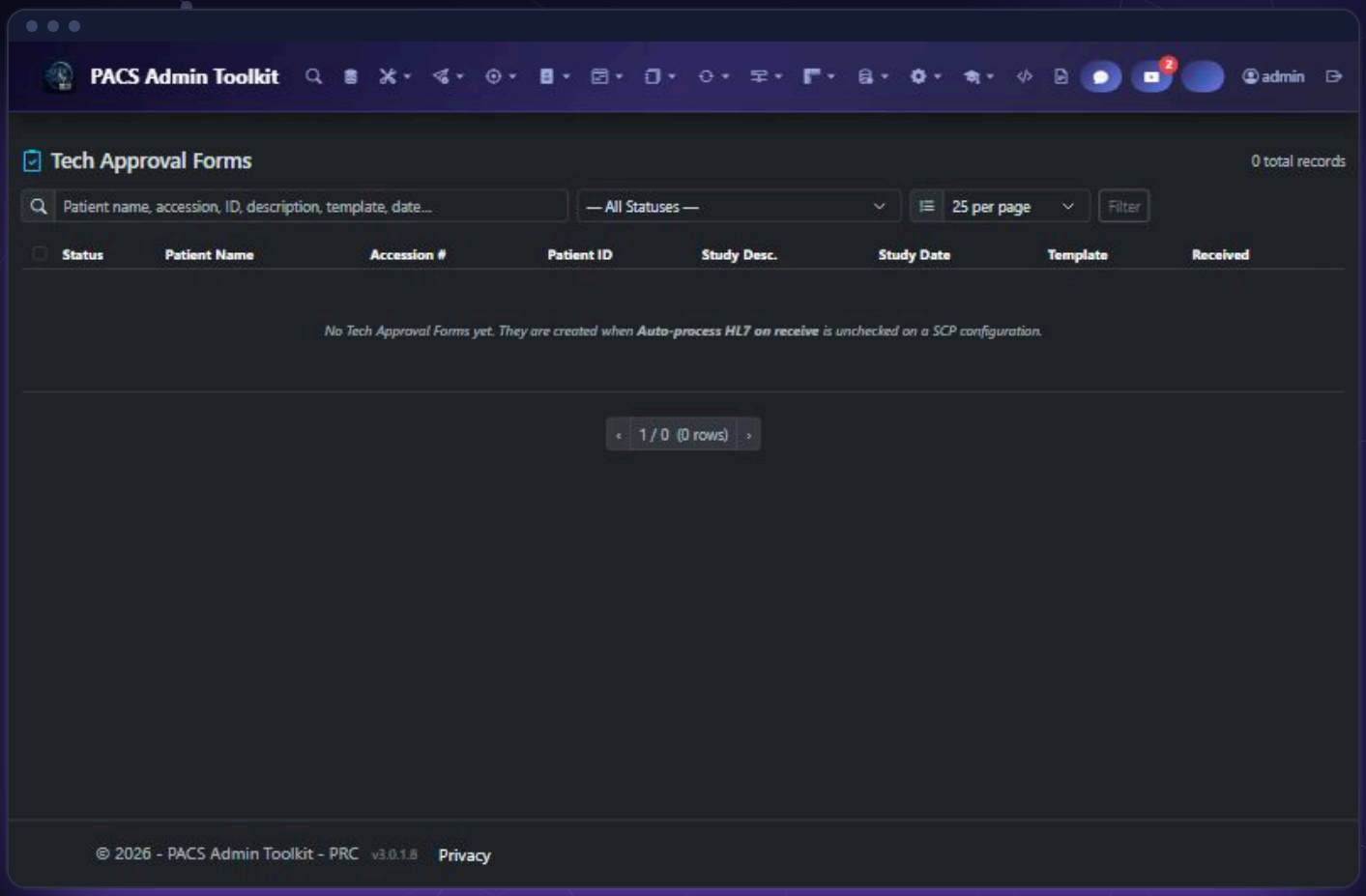
Reports & Results | Leads with Transform

SR Measurements to HL7

Ultrasound, echo and DEXA measurements flow into results, PowerScribe and PDFs, not retyped.



Receives the measurement SRs that ultrasound, echo, DEXA and other modalities produce and turns them into HL7 results, PowerScribe order custom fields and PDF worksheets. Templates match each machine automatically, and a Tech Approval Form catches anything that needs a human check.

0
measurements retyped for auto-processed studies

Never dropped
unmatched SRs become a form, or the modality retries

3 outputs
HL7, PowerScribe custom fields and PDF from one SR

Replaces: **Measurement integration middleware**

License module `SR_TO_HL7`

THE CHALLENGE

Why it matters

A sonographer measures twenty values on an echo, and then someone types them again: into a worksheet, into the reporting system, into the result. Every retyped number is staff time, and every one is a chance for a digit to land in the wrong field.

The modality already wrote those measurements into a DICOM Structured Report. The hard part is that every machine, model and software version encodes them differently, and a vendor upgrade can silently break an integration that worked yesterday.

> IN SHORT
>
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CAPABILITIES

What it does

- **An SR listener per workflow**
  Modalities send measurement SRs to an AE title and port; the modality gets its success at once and delivery happens in the background.
- **Templates that find themselves**
  Match rules (manufacturer, model, study description, software version) pick the template; a new software version or a close partial match is queued for approval instead of failing.
- **Nothing silently lost**
  SRs no template matches land on the built-in UNMAPPED template for a tech to review; if even that fails, the modality is told to retry.
- **Measurements to named fields**
  Map SR measurements, calculations and static or dynamic values to named HL7 Custom Fields, with unit conversion and transforms, or auto-map every numeric measurement to OBX.
- **Auto-process or tech approval**
  Global or per-template conditions decide which studies send automatically; the rest become a Tech Approval Form to check, fix and approve, one at a time or up to 500 at once.
- **Into PowerScribe**
  The HL7 creates the order, then each result becomes an order custom field through the PowerScribe API, with a dry run and a send log.
- **Reason for exam kept**
  A lookup from your own API or from orders PATK receives writes the reason into the result, so it never blanks the reason on the order.
- **PDF worksheets and document exports**
  Design PDF templates from ready-made layouts (dark, print, compact, branded and more) with your logo and your own page and table colours, then write the PDF and a metadata file to a folder, SFTP or FTPS when a study is auto-processed or approved.

One master template per machine
Template Consolidation merges many per-study templates, with a dry run and an undo.

WORKFLOW

How it works

1
SR arrives
The modality sends its measurement SR to an SR listener.

2
Template matched
Listener templates, then other templates, software variants, partial matches and finally UNMAPPED.

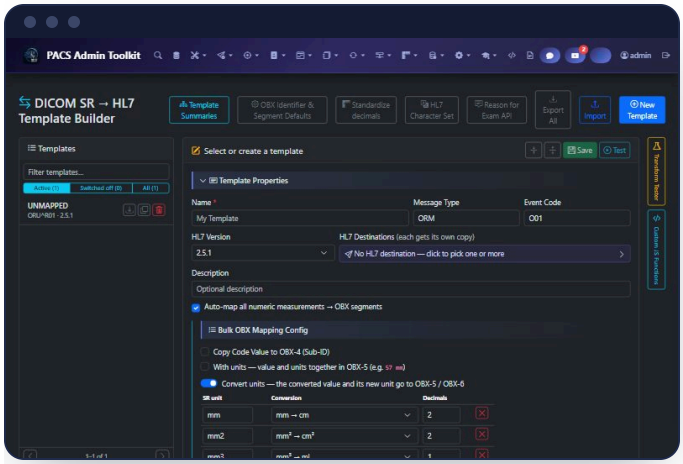
3
Gate or review
Auto-process conditions pass, or a Tech Approval Form waits for a tech.

4
Results built
Measurements fill the HL7 Custom Fields, plus the reason for exam.

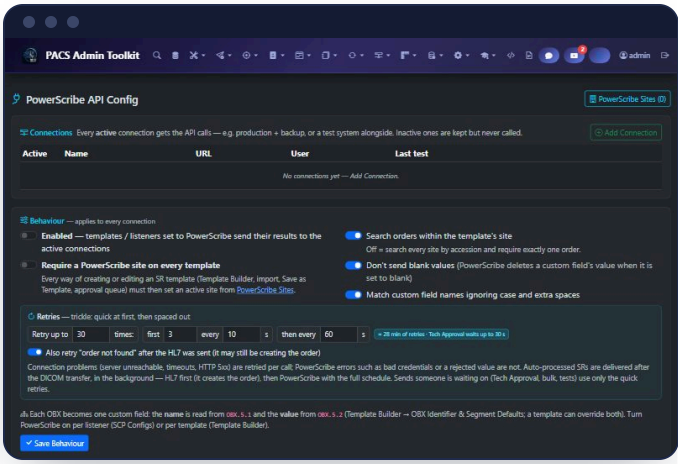
5
Delivered
HL7 over MLLP, PowerScribe custom fields and the PDF worksheet export.

IN THE PRODUCT

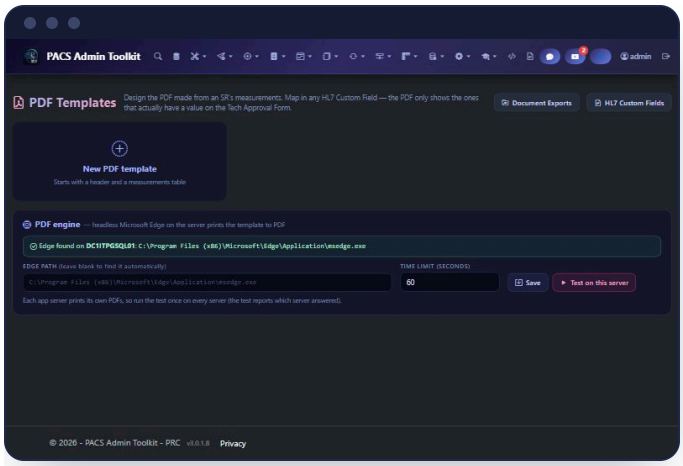
See it in action



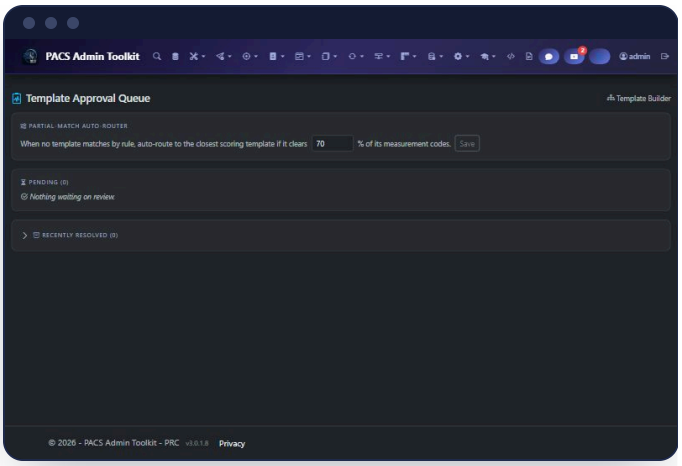
Template Builder: match rules and measurement mappings, tested on a real SR



PowerScribe connections, permission checks and a send log



PDF worksheet templates with formatted measurement fields



New machines and software versions wait for an Admin's approval

USE CASES

Where it pays off

Multi-site radiology group, a dedicated measurement server

CHALLENGE	Ultrasound and echo rooms across several sites each produce measurement SRs, and the reporting system needs them as HL7 results.
WITH PATK	A PATK instance rebranded for this one job receives every room's SRs, matches each machine's template and sends the results to the reporting system; techs approve only the exceptions.
OUTCOME	**Measurements reach the report without retyping, from one server the group runs and monitors itself.**

Measurements into PowerScribe

CHALLENGE	Radiologists want the echo measurements already in their report as PowerScribe custom fields.
WITH PATK	A PowerScribe connection is tested and its sites assigned to templates; custom field names match PowerScribe's, and a dry run shows current and new values before anything is written.
OUTCOME	**Values arrive as order custom fields, ready in the report template, with every send logged.**

Vendor software upgrade on a fleet of ultrasound carts

CHALLENGE	An upgrade changes the software version in every SR, which usually breaks integrations overnight.
WITH PATK	When the new SRs still carry every mapped measurement, a template copy for the new version is created automatically; otherwise a variant request waits in the approval queue while forms hold the studies.
OUTCOME	**No silent gaps: studies either keep flowing or wait visibly for one approval.**

Worksheets for the document system

CHALLENGE	Each approved DEXA or echo study needs a PDF worksheet that the document-imaging system imports from a share.
WITH PATK	A document export profile writes the PDF and a six-column metadata line on approval, renaming files only when complete so the importer never sees half a file.
OUTCOME	**The worksheet appears in the document system without anyone printing or scanning.**

3T

Trust · Truth · Transform

Trust

SRs are never acknowledged and dropped; ACKs are checked per destination; a re-sent SR with changed data puts its form back to Pending; template changes from non-Admins wait for approval.

Truth

The Processed UID Audit Log records every SR with its template and status, beside PowerScribe and export logs and Template Summaries that show overlaps and gaps.

Transform

Measurement entry disappears for auto-processed studies, and a new machine becomes a template from one approved form.

VALUE MODEL

What it can be worth

An example multi-site group with ultrasound, echo and DEXA studies that today have measurements retyped.

Measurement studies per year	20,000
Staff time saved per study (no retyping)	3 minutes
Transcription corrections avoided per year (1% of studies)	200
Time to find and correct one wrong value	15 minutes
Blended staff cost per hour	$50

$52,500

Estimated yearly value

Illustrative example. Your volumes, staffing and costs will differ; we will build this model with your own numbers.

DIFFERENTIATORS

Why it stands out

Handles real fleets
Software-version variants, partial matches and UNMAPPED fallbacks keep working through upgrades that break fixed mappings in middleware.

People stay in control
Tech Approval Forms and the approval queue put a human check exactly where the data is uncertain.

Three outputs from one source
HL7, PowerScribe fields and PDF worksheets share the same named fields, configured once.

Same platform
Uses the HL7 destinations, logging and access controls of the rest of PATK.

SPECIFICATIONS

At a glance

Standards	DICOM SR storage (C-STORE), C-ECHO; HL7 v2 over MLLP with ACK checking; PowerScribe API (compatible integration target)
Inputs	SR listeners (AE title, port, allowed SOP classes, skip rules), HL7 order feed for reason for exam
Controls	Match rules, auto-process conditions, template approval queue, partial-match threshold
Tools	Template Builder, Tech Approval Forms, Template Consolidation, Template Summaries, PDF templates, document exports
Housekeeping	Retention windows for forms, audit trail and PowerScribe logs (off by default)

See SR Measurements to HL7 with your own data

Ask for a guided demo or a trial license. PACS Admin Toolkit installs on your own Windows server in under an hour, and every module comes with step-by-step guides and in-app guided tours.

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