Biotechnology

Instrument data integration checklist

From the field note “Your instrument export changed. The parser said everything was fine.”.

The short version

- A parser that finishes without errors has not proved that any value landed in the right well.
- Keep every raw instrument file untouched, with a fingerprint, beside the results made from it.
- Carry well, sample, unit, method, instrument and software version with each value, or two runs cannot be compared.
- Use supported exports, existing standards and the platforms you already license, then build only the gap.

The checklist

- [ ] Name one instrument family, method, destination and scientific owner.
- [ ] Record instrument models, software versions and the exports in use.
- [ ] Check vendor exports, SDKs and platform parsers before writing one.
- [ ] Agree the result model: well, sample, unit, method and run metadata.
- [ ] Keep raw files unchanged with a fingerprint and parser version.
- [ ] Hold unknown layouts and define who approves a new version.
- [ ] Test duplicates, notation changes, missing plate maps and empty wells.
- [ ] Measure preparation time per run and name the operating owner.

Want a second pair of eyes on your answers?

Book a free 30-minute discovery call at www.seriustech.com/contact or email contact@seriustech.com. We reply within 1 business day.

Read the full note with examples and sources at www.seriustech.com/blog/biotech-instrument-data-integration. © SeriusTech.