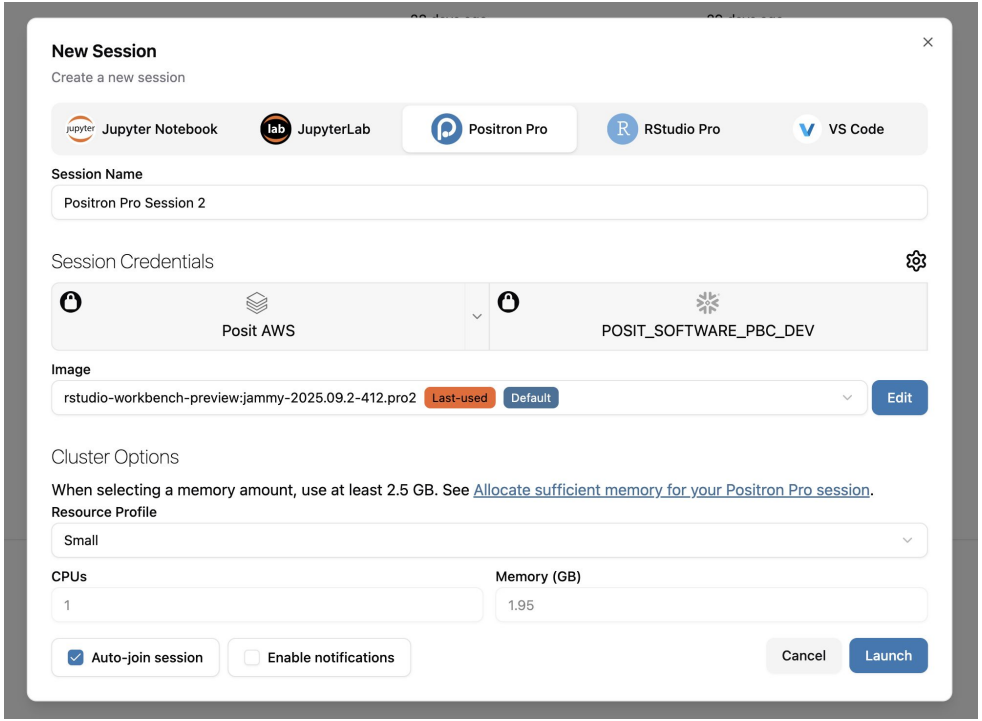
Workbench Audited Jobs

Workbench

Workbench is an on-premise Posit product that gives you remote access to you favorite IDE(s) including:

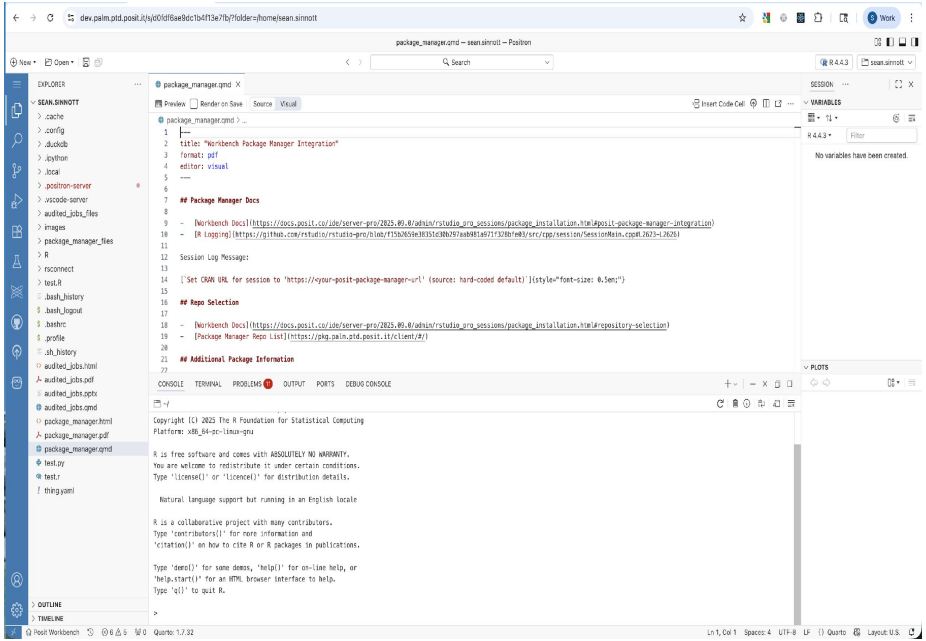
- RStudio
- Jupyter
- VS Code
- Positron.



Workbench - On-premise software

The Workbench environment provides a number of benefits over local development:

- Increased resources
- Standardized environments
- Data never leaves the server environment

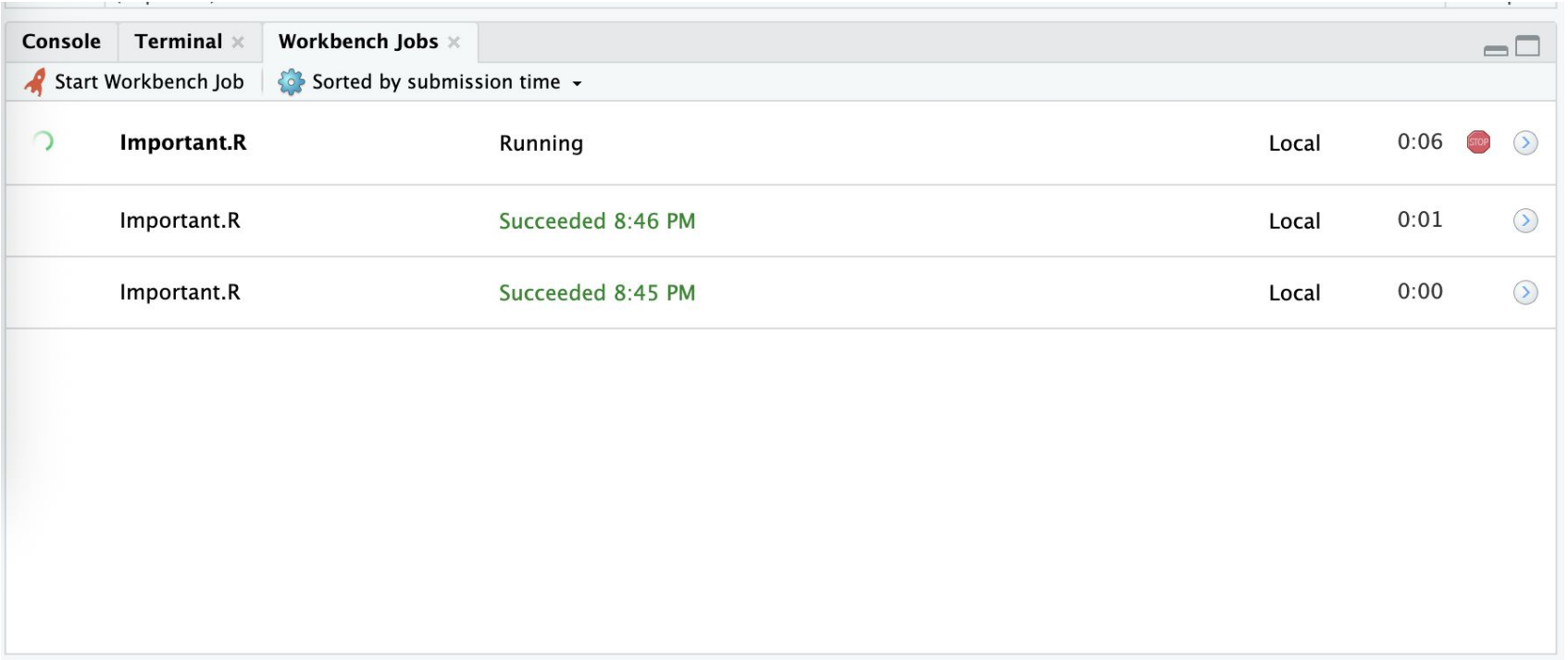


Workbench Jobs - What do they do?

Workbench jobs are asynchronous jobs that can be launched from an IDE:

- Run in the background while user does other work.
- Runs in a variety of languages: R, python, etc.
- Runs in various environments: locally, slurm, kubernetes.

Workbench Jobs - What's running?



Workbench Jobs - What was run?

Important.R FINISHED

CLUSTER	Local
STATUS	FINISHED
EXIT CODE	0
SUBMITTED	5/28/2025, 8:53:24 PM
EXECUTABLE	`/bin/bash`
ARGUMENTS	`-c cd ~ && /opt/R/4.4.3/lib/R/bin/R --no-echo --no-save --no-restore -f ~/Important.R`
TAGS	rstudio-r-script-job:~/Important.R, pwb-audited-job:false

OUTPUT

```
[1] "This is important."
```

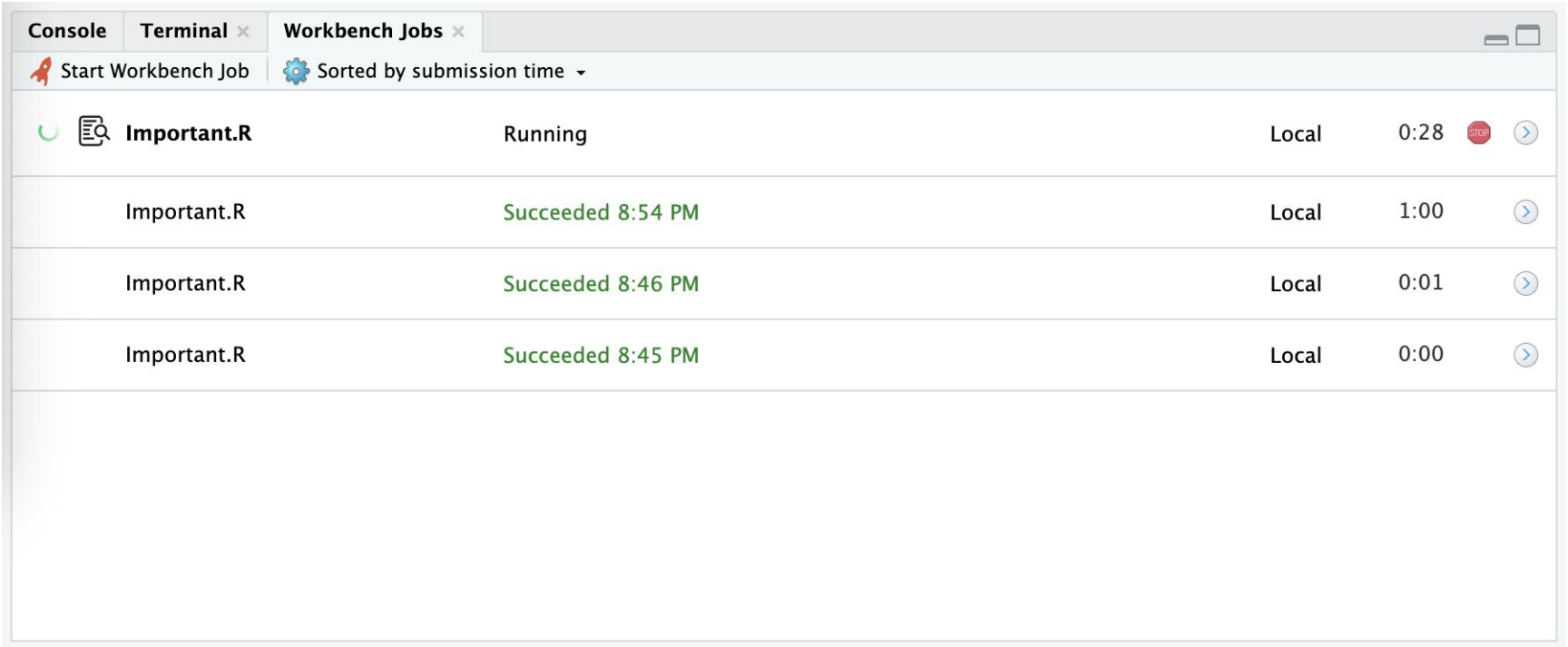
Audited Jobs - Motivation

Regulated industries usually have a concept like a **final run**.

Job Run	Final Run
Iteration	Retention
Never the Same	Reproducible
Disposable	Verifiable

Audited Jobs - Start Audited Job

Audited Jobs - What's running?

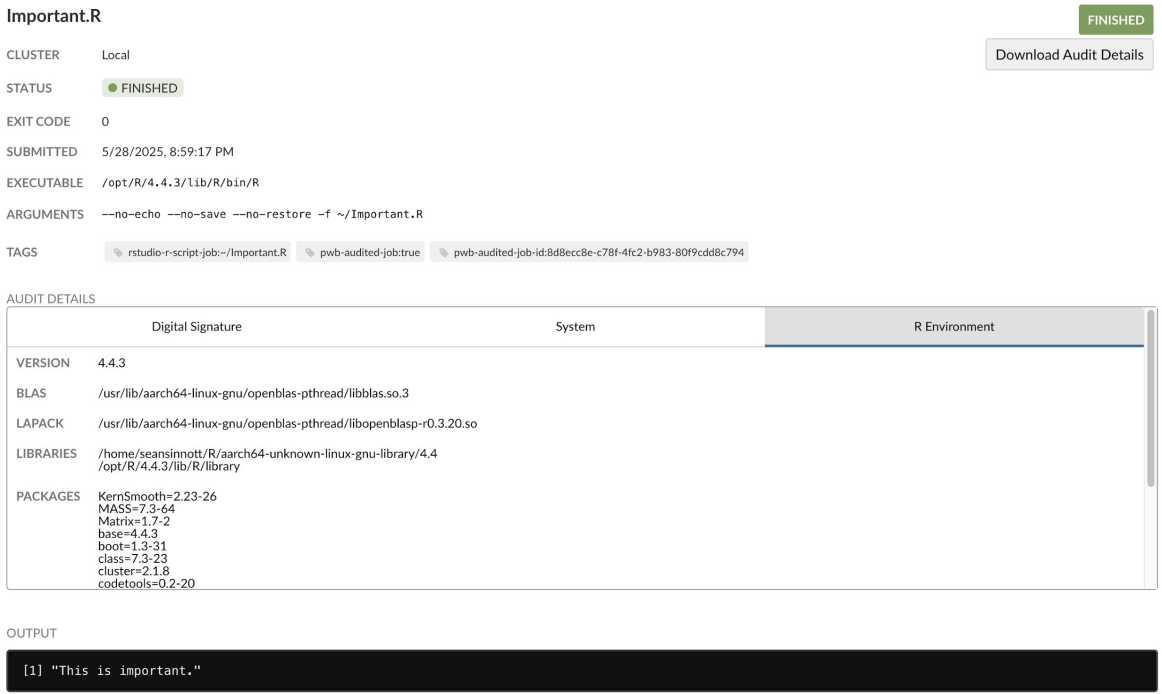


Audited Jobs - Enhancements

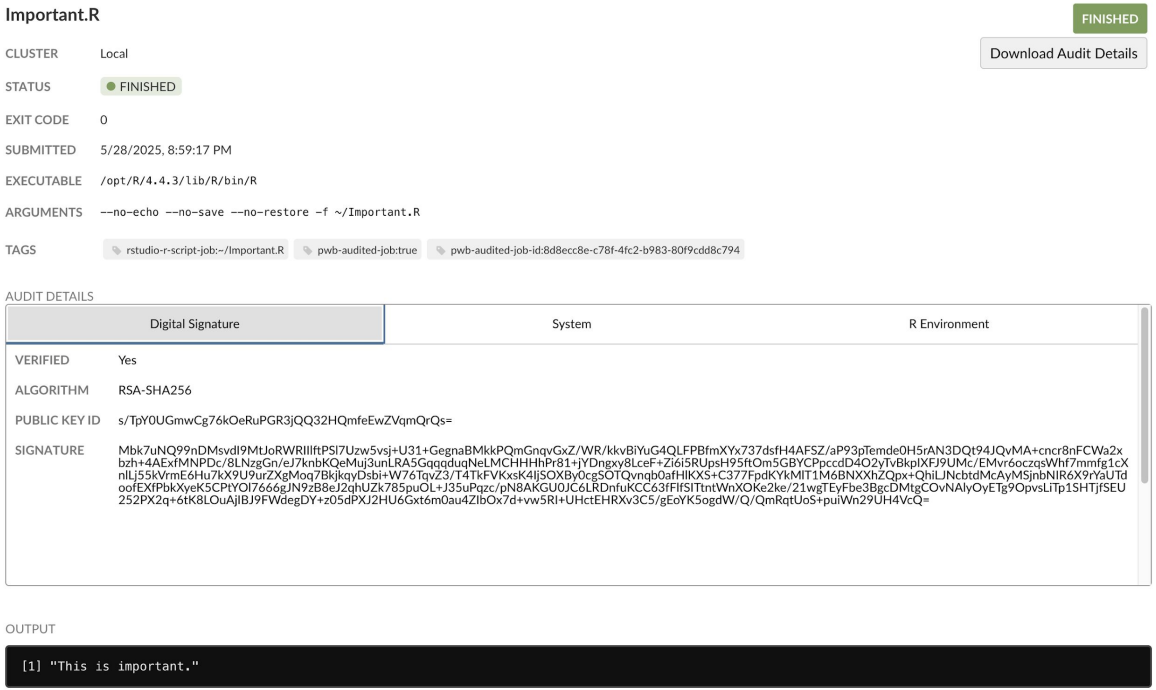
We build on workbench jobs by having:

- Long(er) retention policy.
- Environment capture.
- Output digital signature.

Audited Jobs - Environment Capture



Audited Jobs - Digital signature.



Audited Jobs - Bespoke Metadata

AUDIT DETAILS

Digital Signature	System	R Environment	User Defined Data

ASSAY SUMMARY

Assay Data Summary for Compound XDR-47892
Compound Information
Name: XDR-47892 (Azafenoxapril)
Formula: C23H27N3O5S
Class: Small molecule kinase inhibitor