



UK Research
and Innovation



DARE UK

TRE-FX Mid-Driver Projects Showcase

Phillip Quinlan and Jillian Beggs

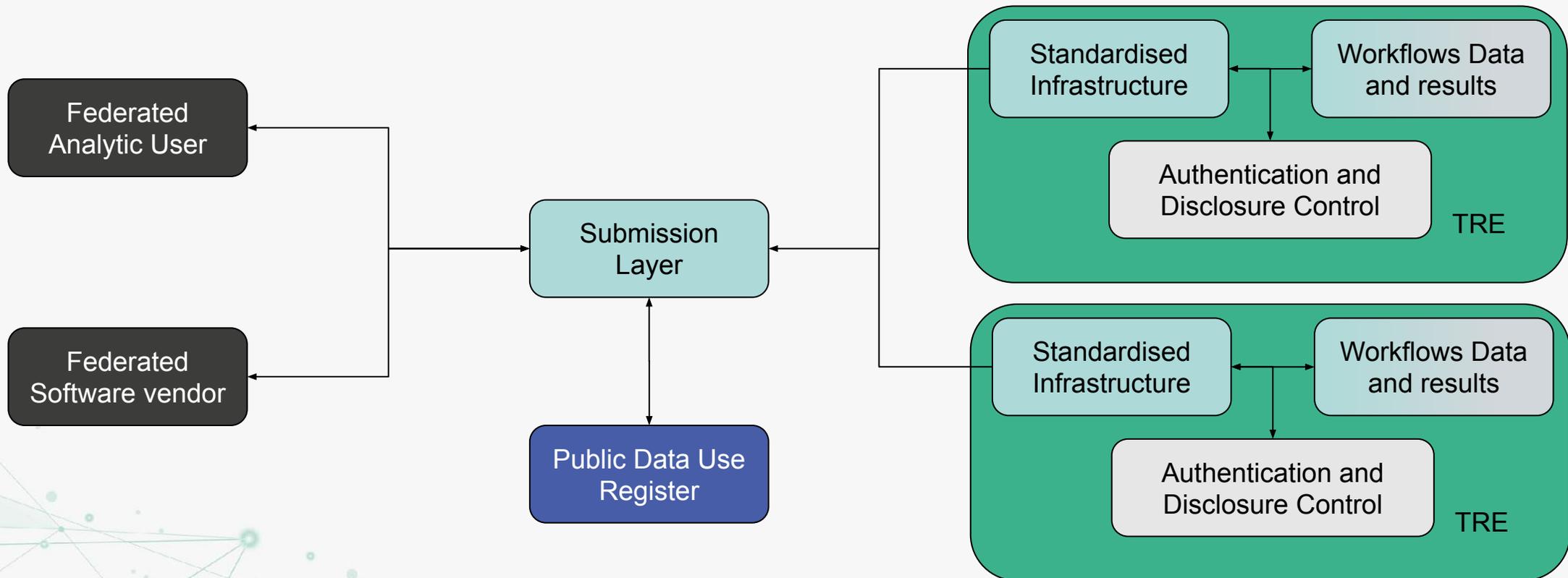
Progress update and next steps



TRE-FX refresh:



TRE-FX seeks to provide a standardised method for information flow for TREs

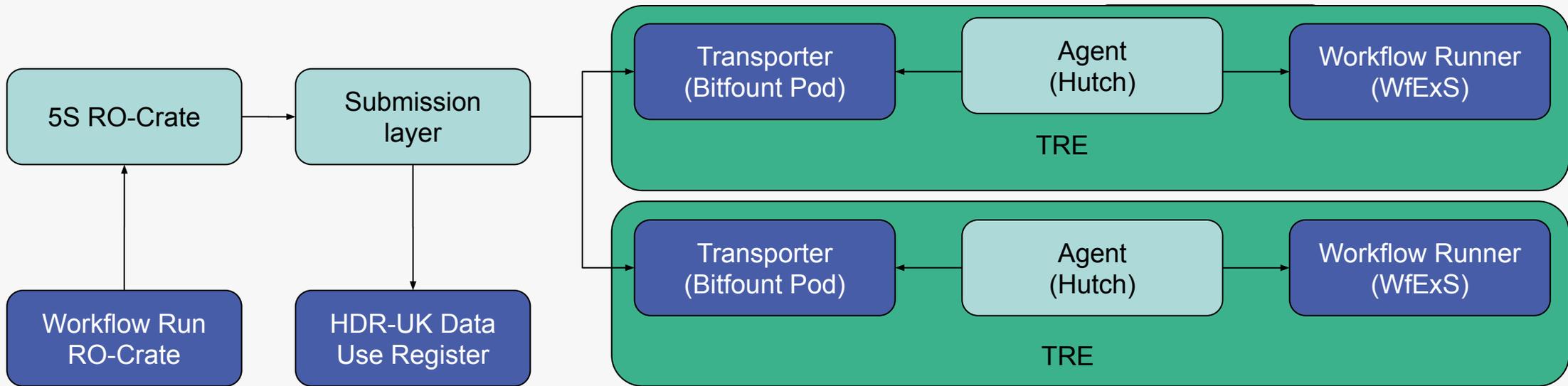


Reusing open technologies:

Existing Tech

Under Development

TRE-FX is re-using technologies to accelerate development



Creating standards:

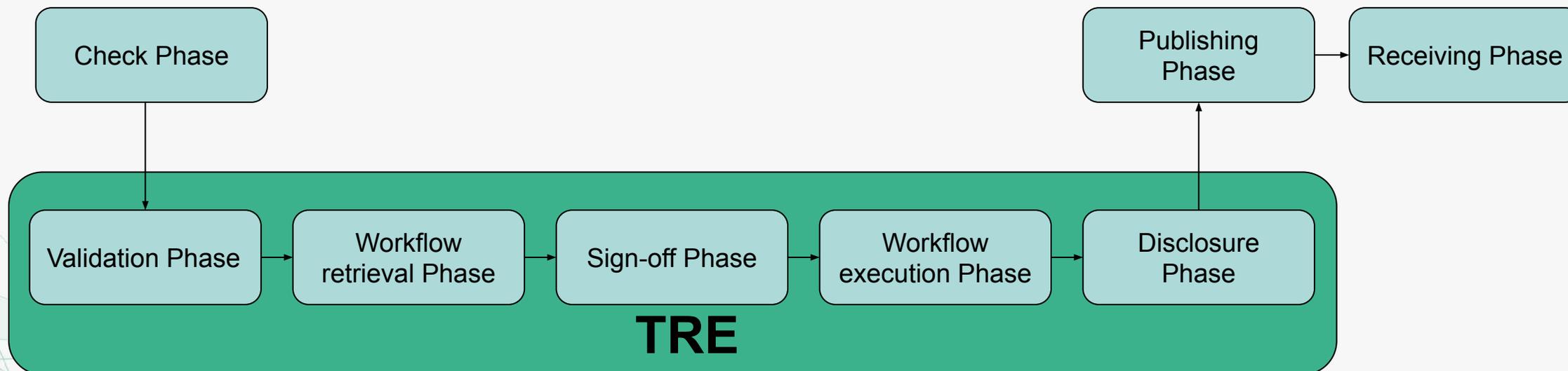
Existing Tech

Under
Development

RO-Crate Profile to allow a workflow to conform to the Five Safes principles.
Undergone several revisions internally, now at version 0.3

5S
RO-Crate

<https://trefx.uk/trusted-wfrun-crate/0.3/>

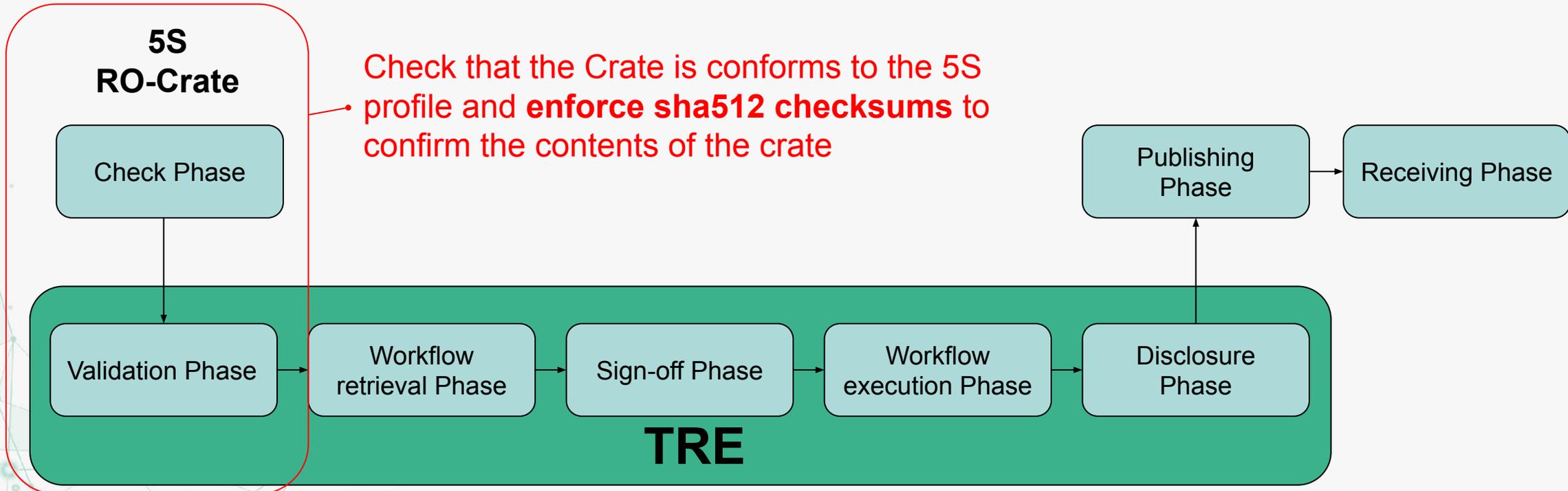


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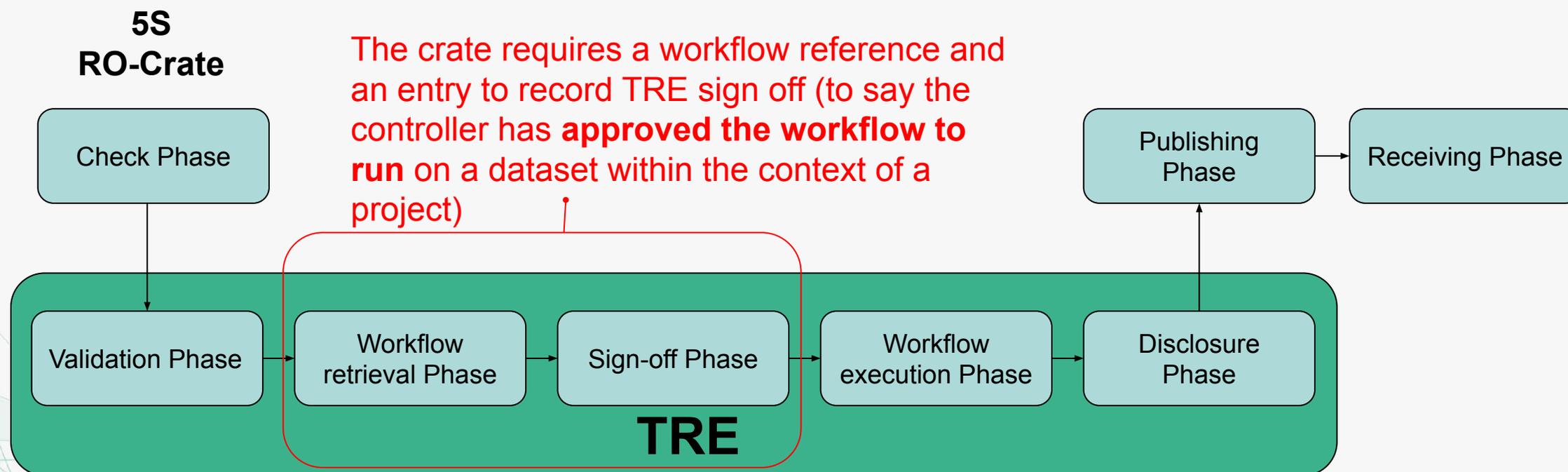


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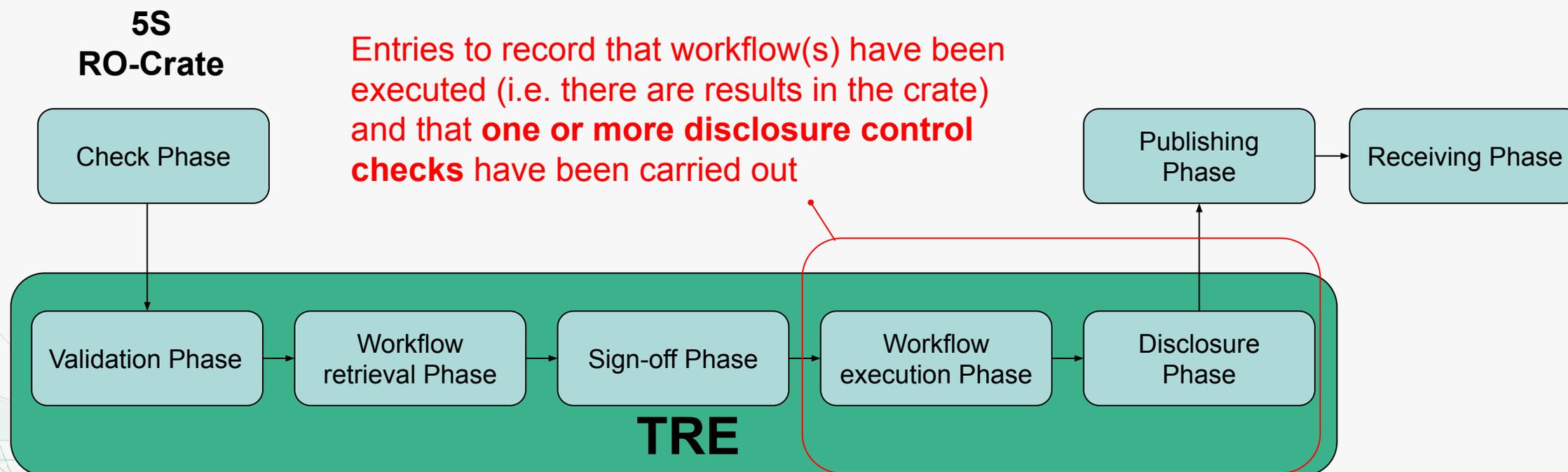


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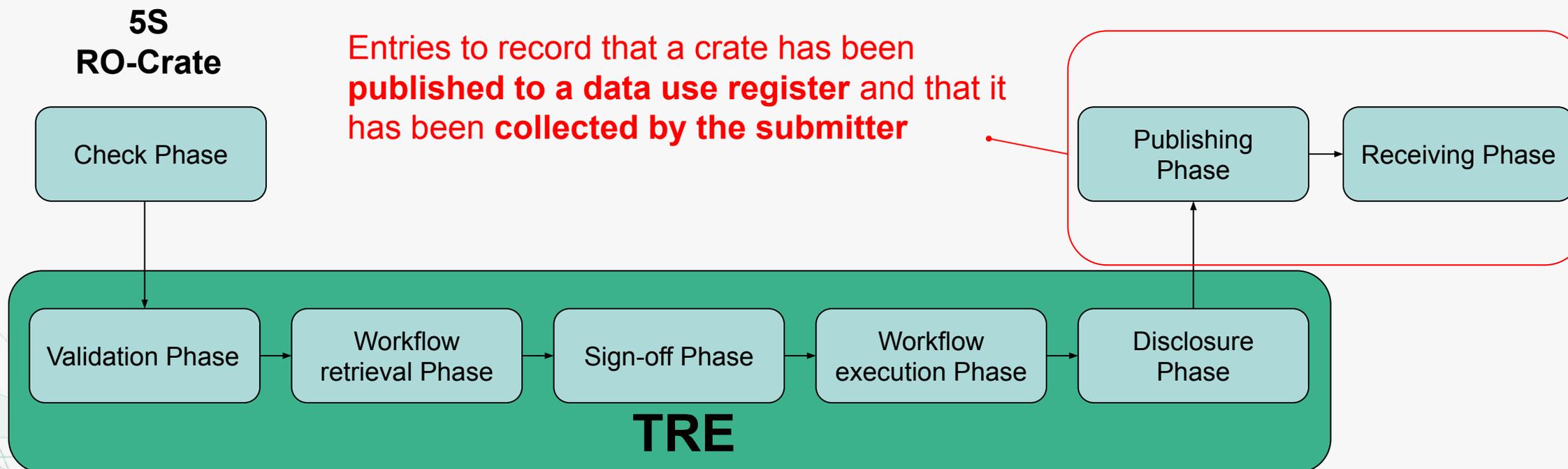


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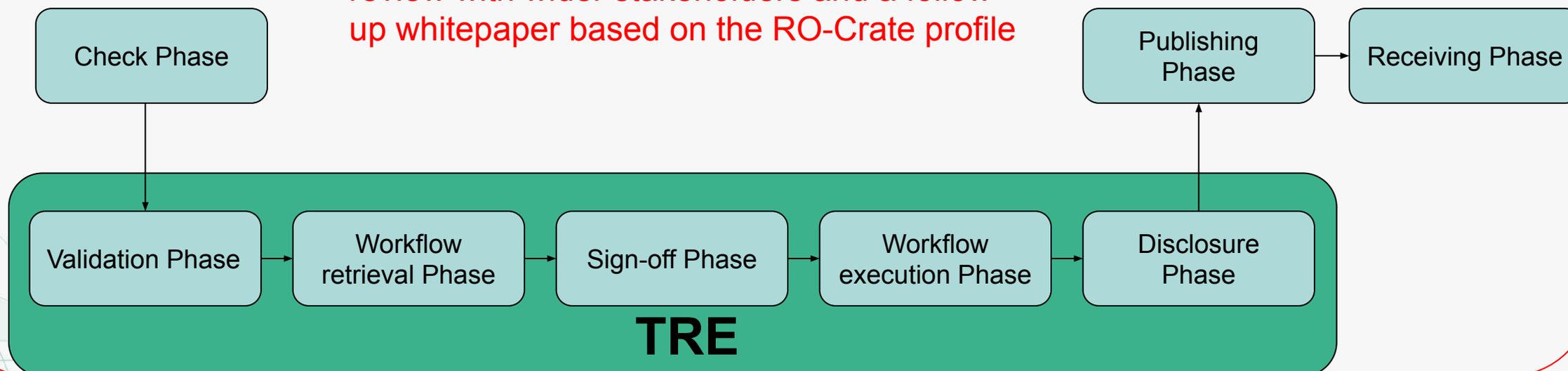
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5S RO-Crate

Next steps are a **Workshop on 11th July** to review with wider stakeholders and a follow up whitepaper based on the RO-Crate profile



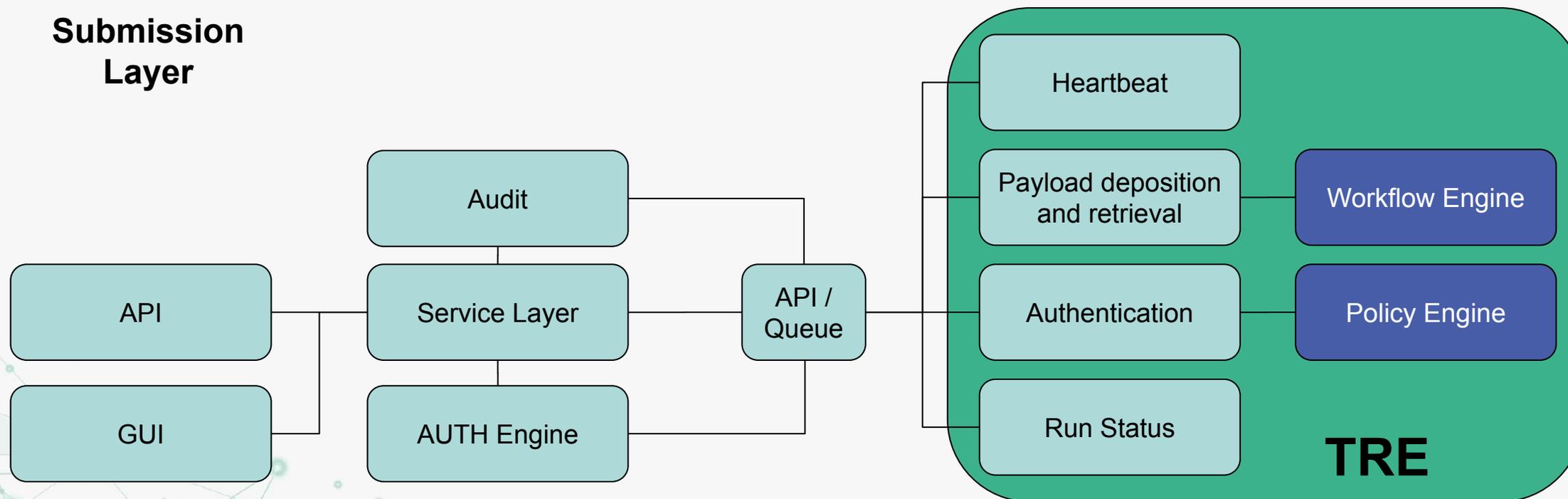
Driving usability:

Existing Tech

Under
Development

A new API based submission layer that sits outside of the TREs is now in development

Submission Layer

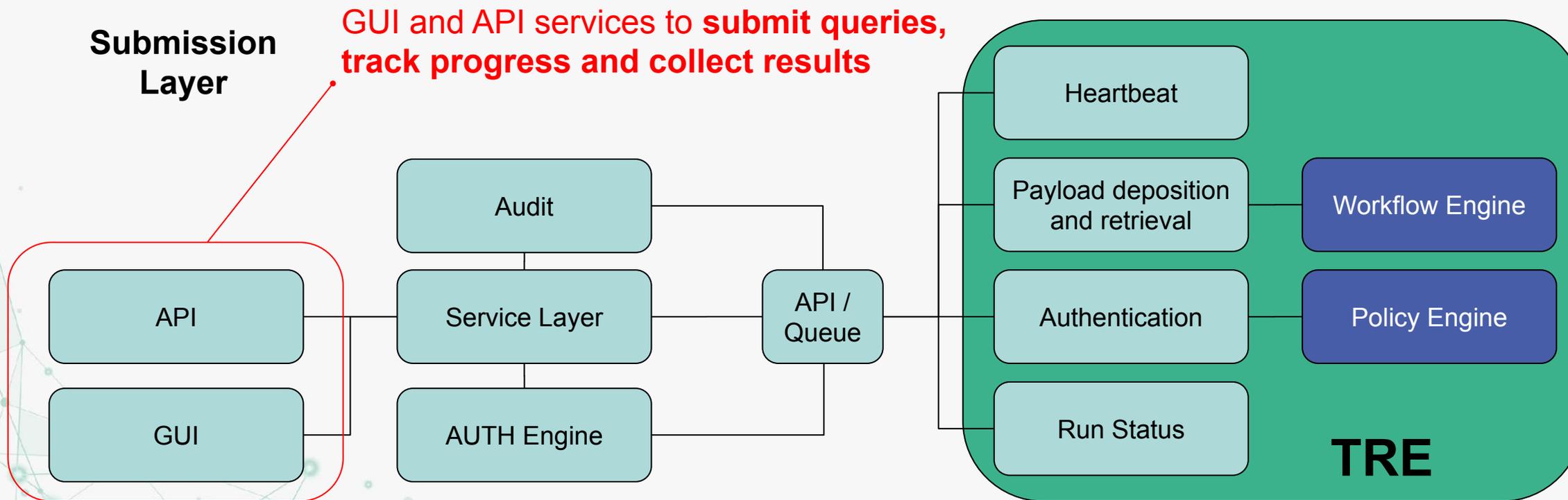


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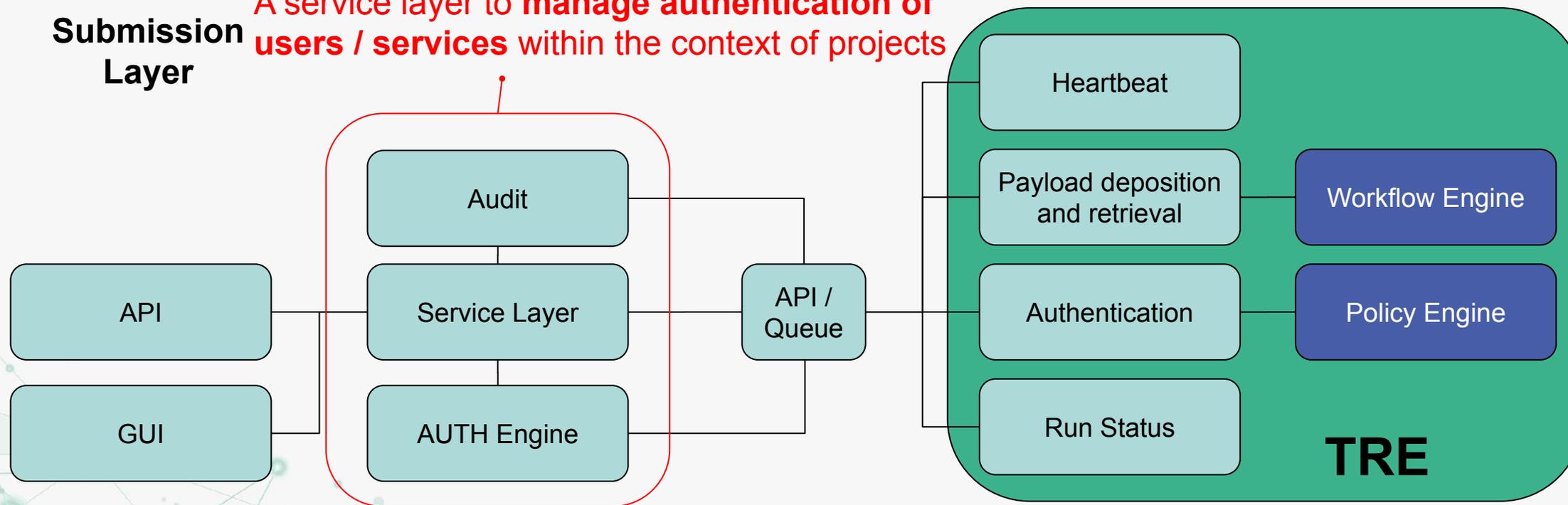
Existing Tech

Under Development

A new API based submission layer that sits outside of the TREs is now in development

Submission Layer

A service layer to **manage authentication of users / services** within the context of projects



Driving usability:

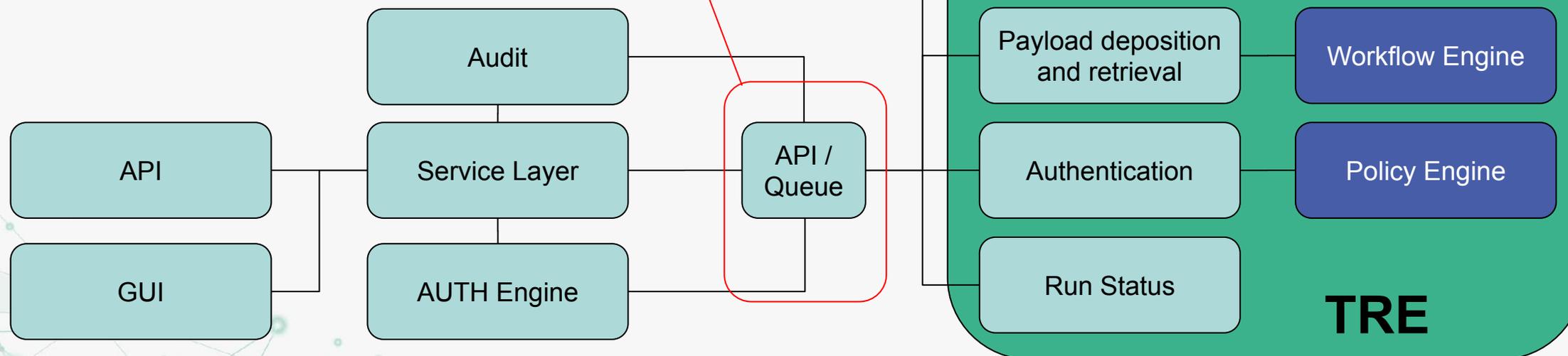
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Submission Layer

API services and a queue system for queries, enabling **outbound only communication** from the TREs

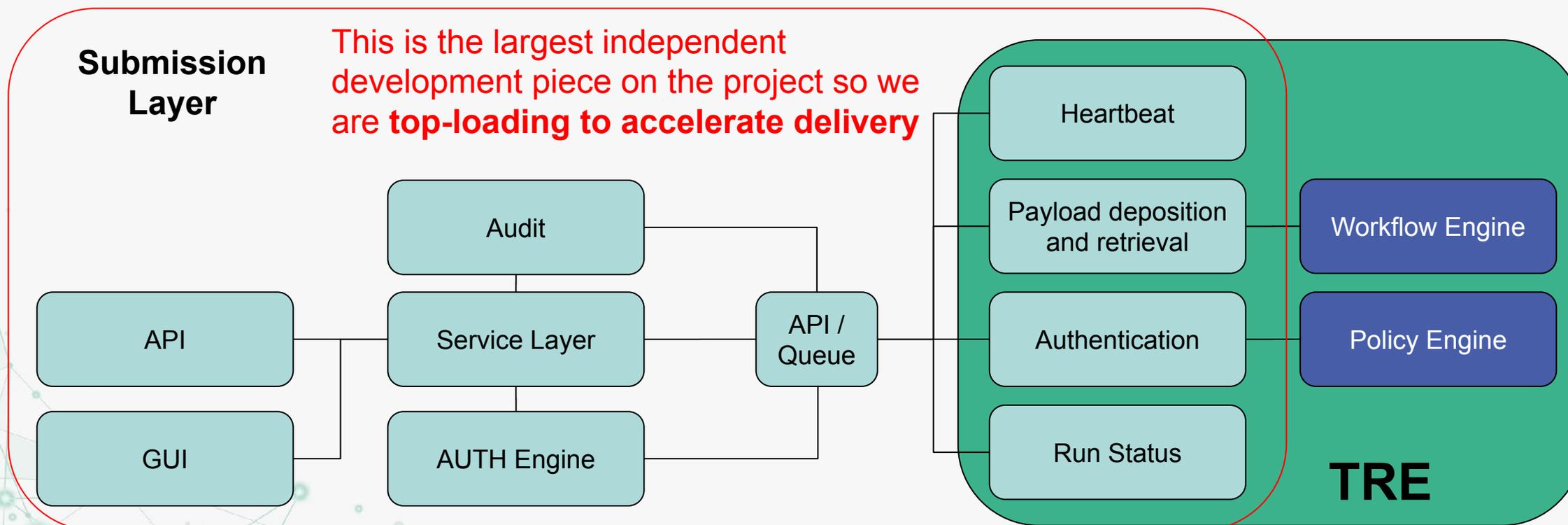


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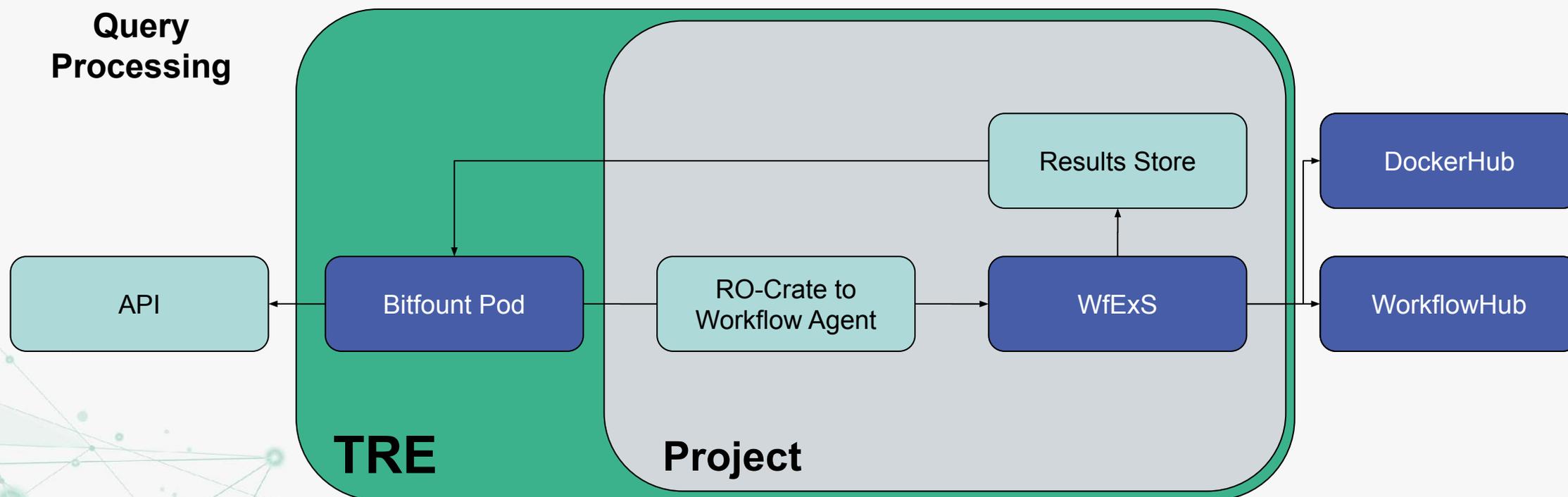


Driving interoperability in TREs:

Existing Tech

Under Development

At a recent hackathon we tested our end to end pipeline for the HUTCH TRE toolkit



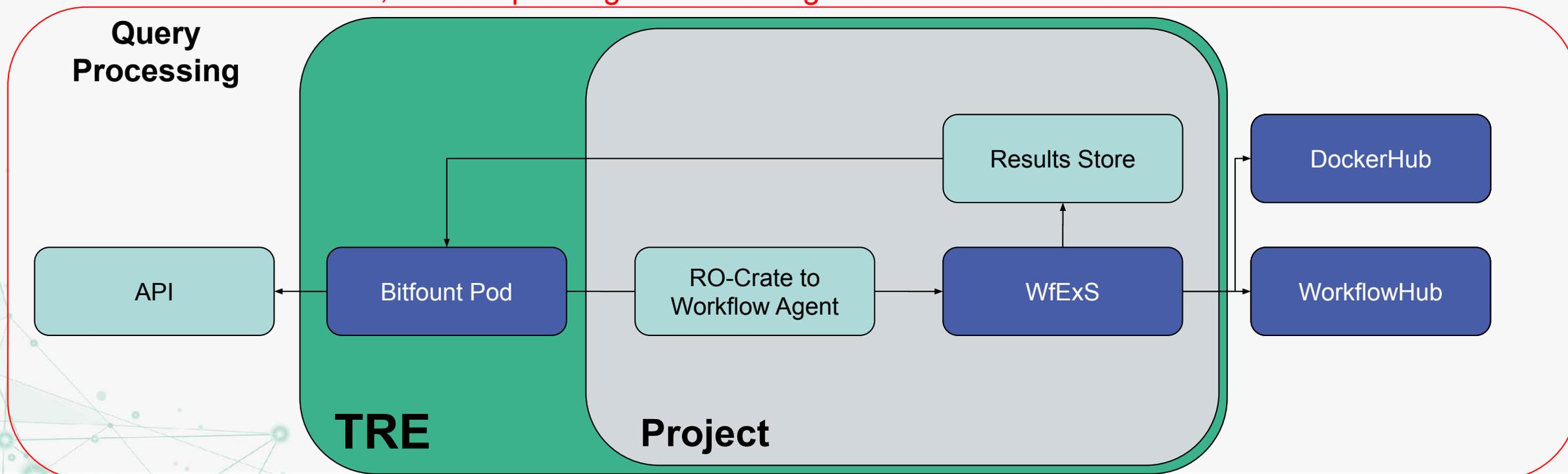
Driving interoperability in TREs:

Existing Tech

Under
Development

At a recent hackathon we tested our end to end pipeline for the HUTCH TRE toolkit

We now have the pipeline **running on multiple VMs, end to end**, outside of a TRE, Next step is to get this working within the four TRE environments



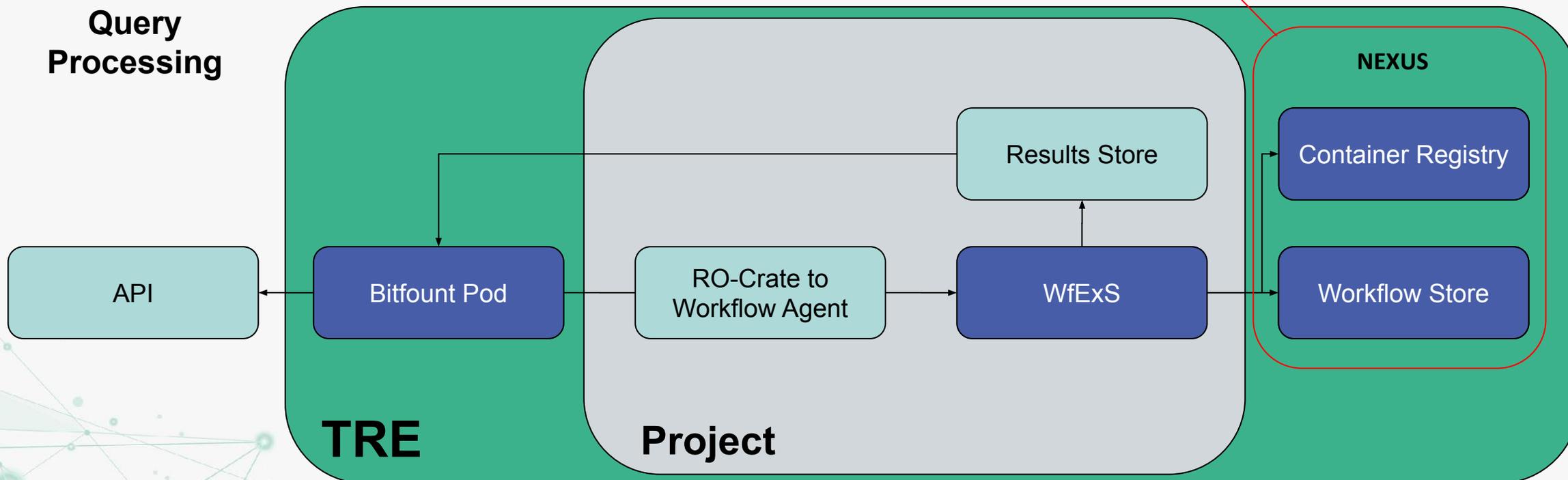
Driving interoperability in TREs:

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All TREs have agreed to use **Nexus** for local workflow and container management



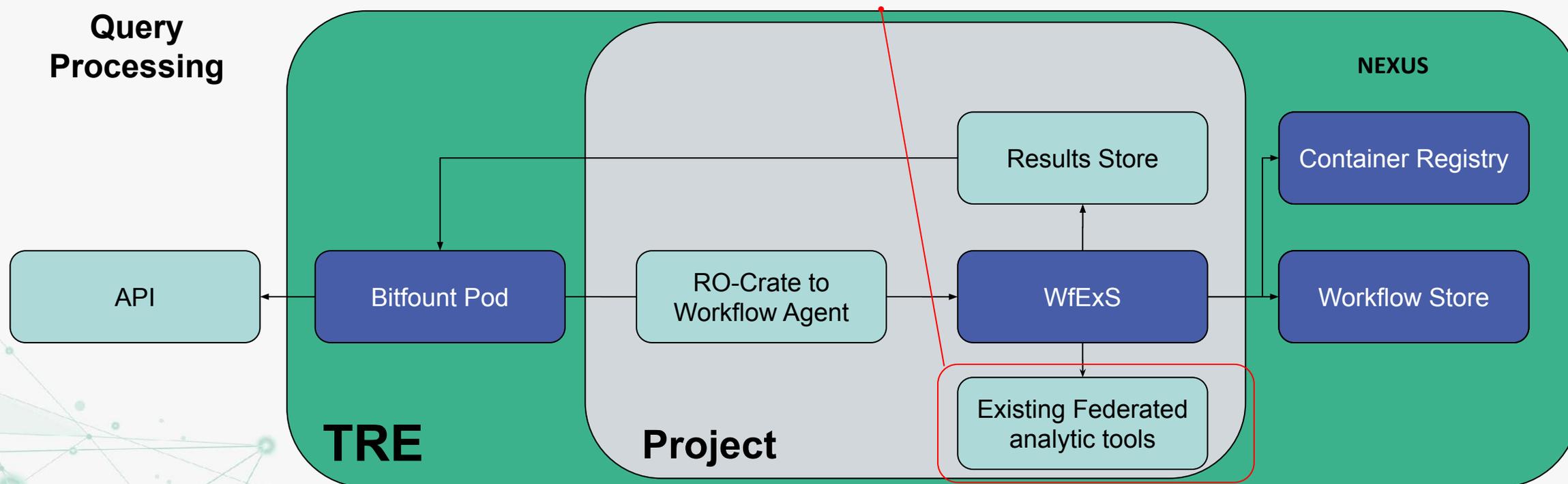
Driving interoperability in TREs:

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We need to **test the implementation of the workflows** that interact with the existing federated analytic tools (Datashield and Bitfount)



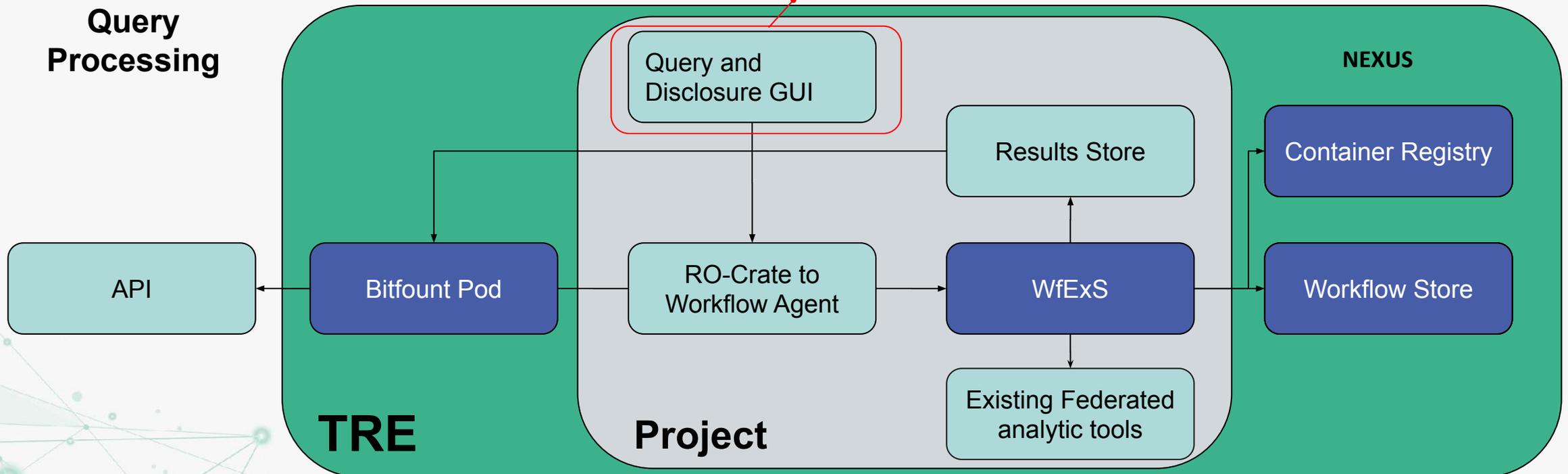
Driving interoperability in TREs:

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At a recent hackathon we tested our end to end pipeline for the HUTCH TRE toolkit

We need to **re-develop the hutch GUI** to view the RO-Crates and allow TRE data controllers to **authorise queries and results disclosure**



PPIE plans and current activities



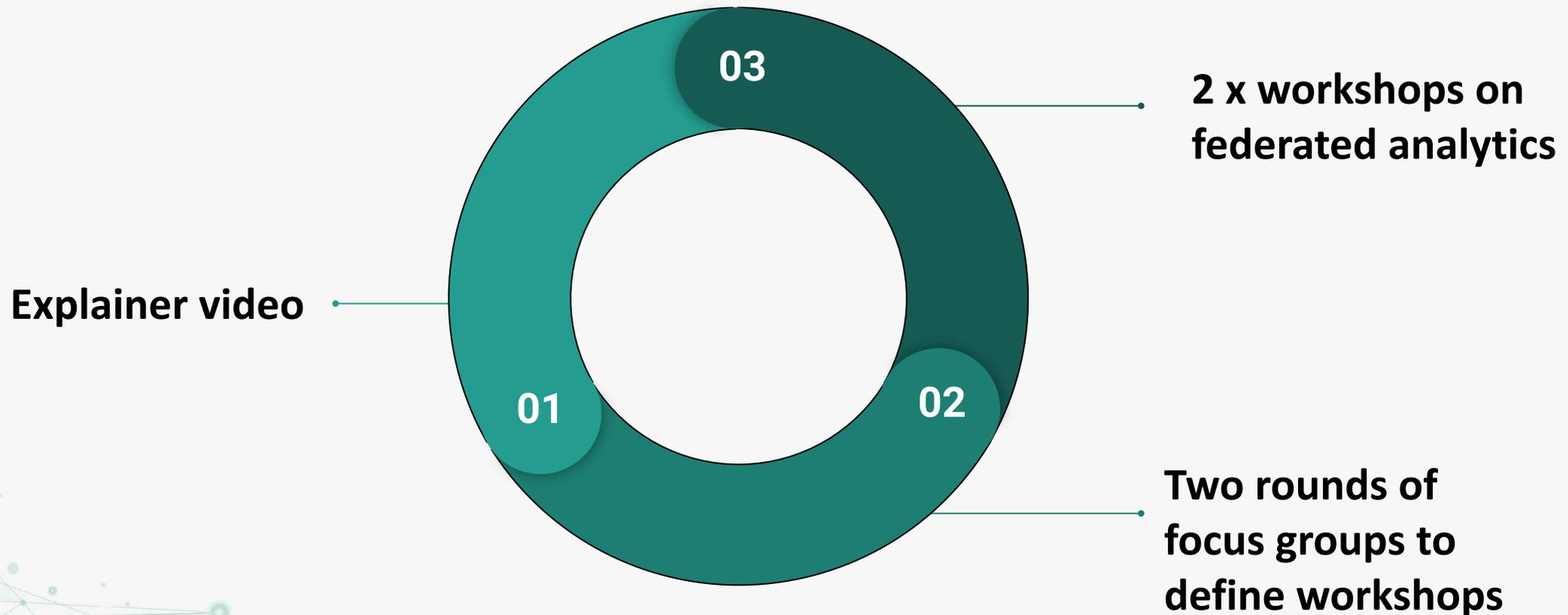
Realising the importance of Public trust in TRE-FX:

PPIE is embedded as a primary objective of the project

**Team meetings
chaired and led
by PPI Lead**

**Alignment with
other PPIE
programmes**

Planned activities to engage the public:



Current progress:

Explainer
brochure for PPIE
workshop
participants in
final review

Transcript for a
federated
analytics
explainer video
now in final
review

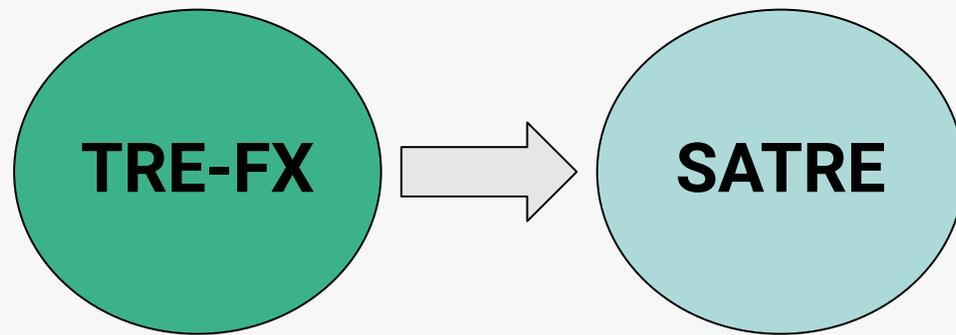
Cross project
Glossary of
Terms - draft in
review for
TRE-FX

In discussion
with other
project teams to
coordinate
activities

Collaborations, questions and challenges

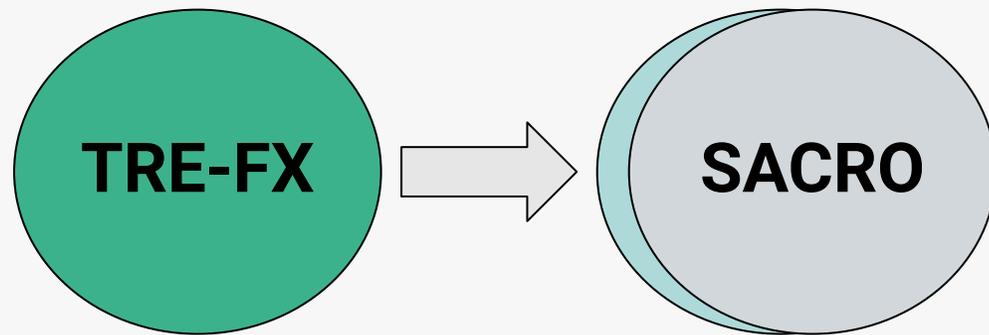


Collaborations between TRE-FX and other driver projects:



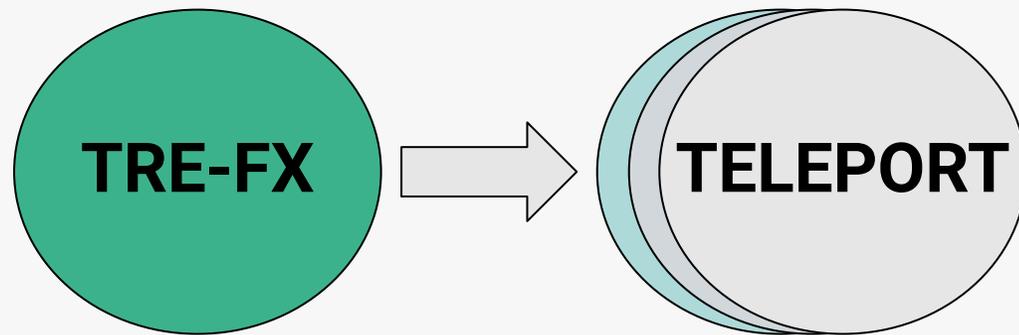
- TRE-FX Fed back directly to the SATRE reference architecture draft
- TRE-FX and SATRE to share a common glossary of terms
- TRE-FX team attendance at the SATRE workshops and collaboration cafes

Collaborations between TRE-FX and other driver projects:



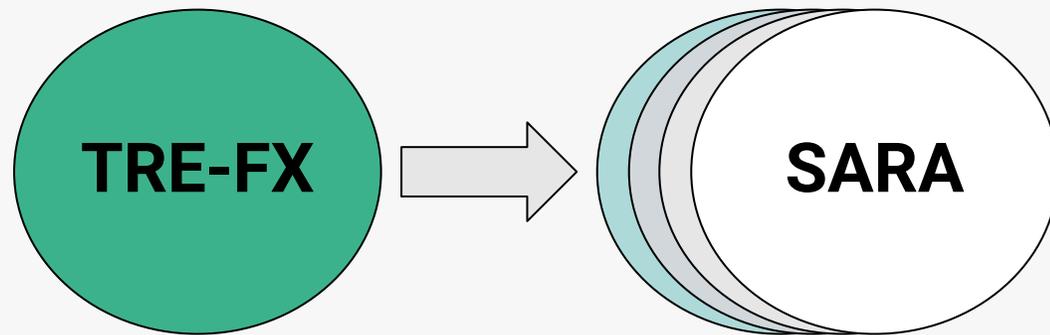
- TRE-FX are aiming to include SACRO checking of research output as a component within the reference architecture

Collaborations between TRE-FX and other driver projects:



- PI and CO for the Teleport project are part of the TRE-FX team
- The projects are exploring alternative approaches to Federated analytics so little space for collaboration

Collaborations between TRE-FX and other driver projects:



- **TRE-FX works architecturally independent from the SARA disclosure control toolkit**
- **We would like to include in our 5S Crate the capacity to include workflow level records of disclosure control processes that have been actioned on data**

Main Challenges:

Architecture

Differences in supported infrastructure and tools

Adoption

Everyone's current implementation of the five safes is different

Standards

Different governance models and processes

What we need from you:

Engagement and promotion of the
5S RO-Crate workshop on the 11th
July

<https://www.eventbrite.com/e/approaching-five-safes-with-tre-fx-trusted-workflow-run-crate-tickets-652679852007>



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Thank you for listening