



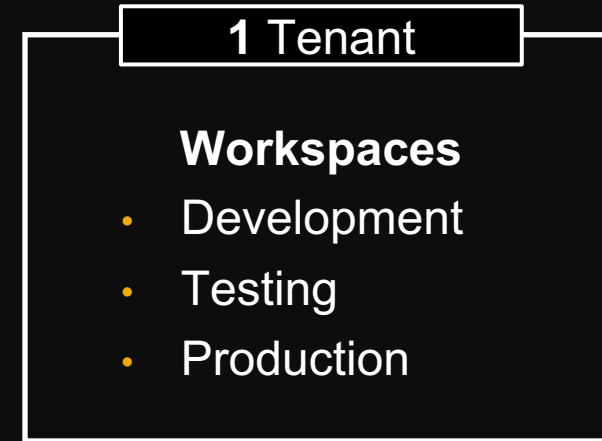
Development Operations *CI/CD

SAP Data Intelligence Cloud

Dr. Thorsten Hapke, SAP
June, 2022



One Tenant or Many Tenants



Strict separation of
user and data sources



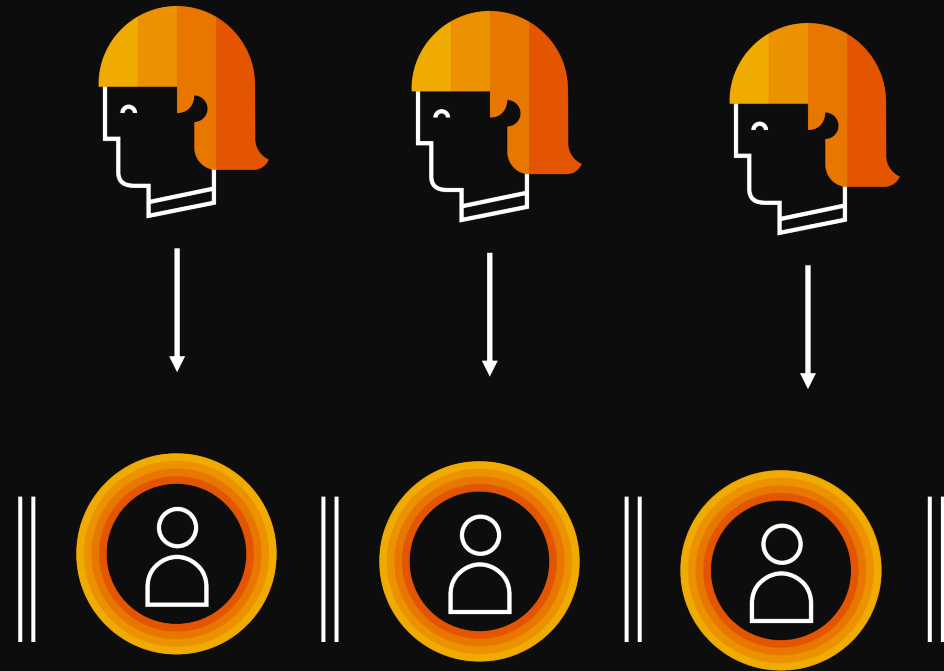
Sophisticated **Policy** and
Connection Management

Avoid **performance**
interdependency



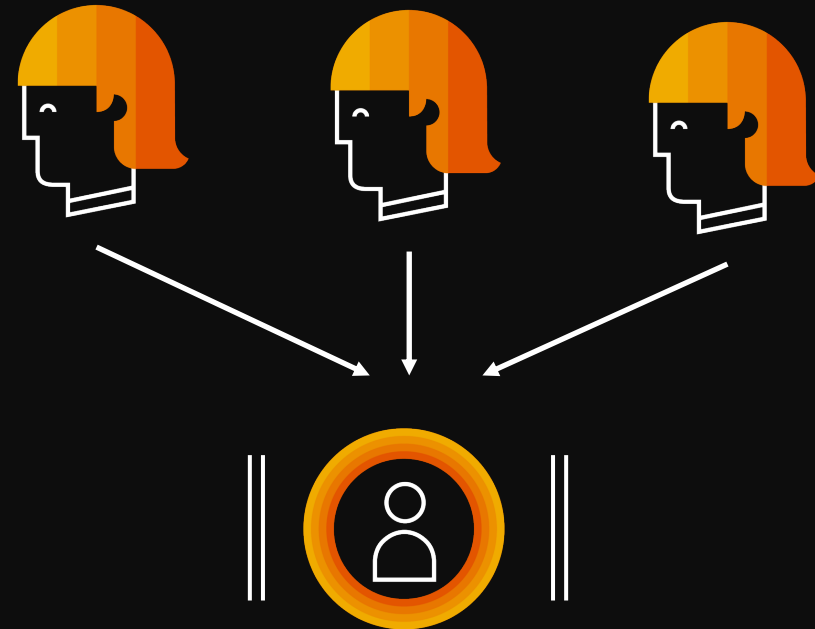
Resource quota for user

User and Roles



User

Developer
Business User



**“Technical”
User**

Test Environment
Productive Environment

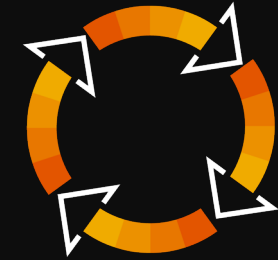
Development Objects

Packages	Dockerfiles	Custom Operators	Pipelines	Virtual Types
<ul style="list-style-type: none">• n developer• Consumed by developers• regularly done• Weeks - Years	<ul style="list-style-type: none">• 1 developer but many consuming developers• Rarely created• Quickly adjusted• Due to system resources creation should be well maintained	<ul style="list-style-type: none">• 1 developer and many consuming developers• Maybe regularly done• development time: Hours up to a few days (Code length: < 200 LoC)	<ul style="list-style-type: none">• 1 developer• Consumed by data engineers• Maybe regularly done• development time: Hours	<ul style="list-style-type: none">• 1 developer• Consumed by data engineers• regularly done• development time: Minutes
External		User workspace (vflow)		

CI/CD and Version Control (git) Terminology

CI/CD*:

Defines process from **development**, **testing** to **deployment** of applications



Version Control:

Manages the changes of the development objects, e.g. git



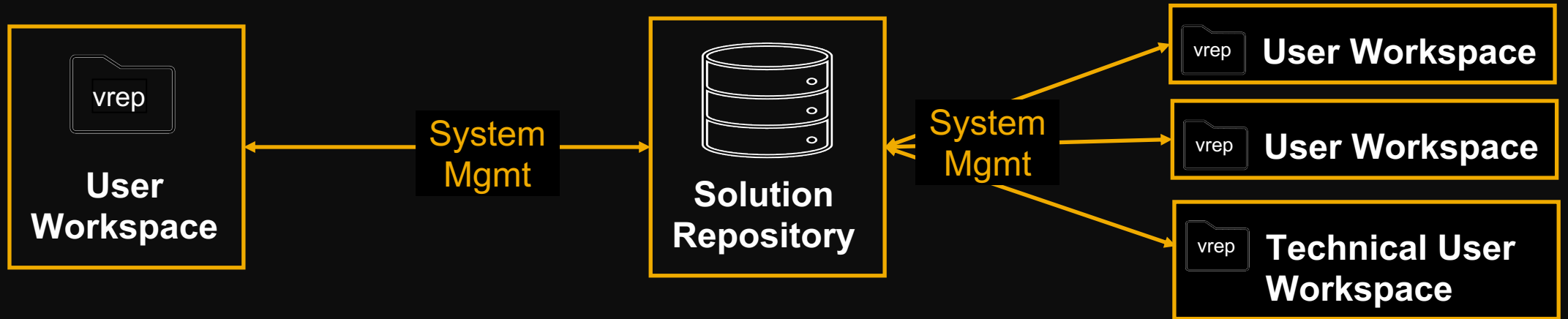
Git:

Git can be setup to support Version Control and CI/CD, but the latter in a basic generic way

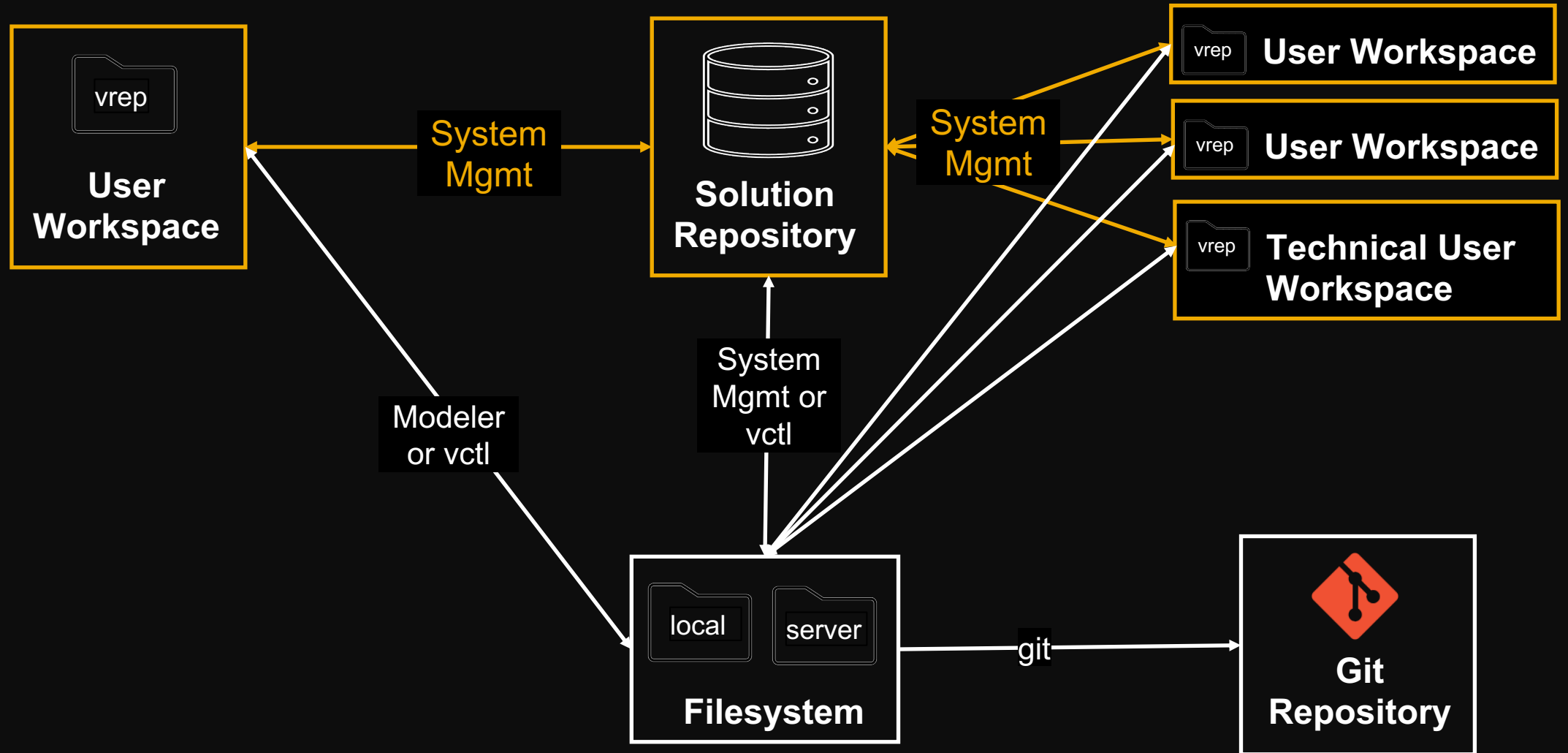


*Continuous Innovation/ Continuous Deployment

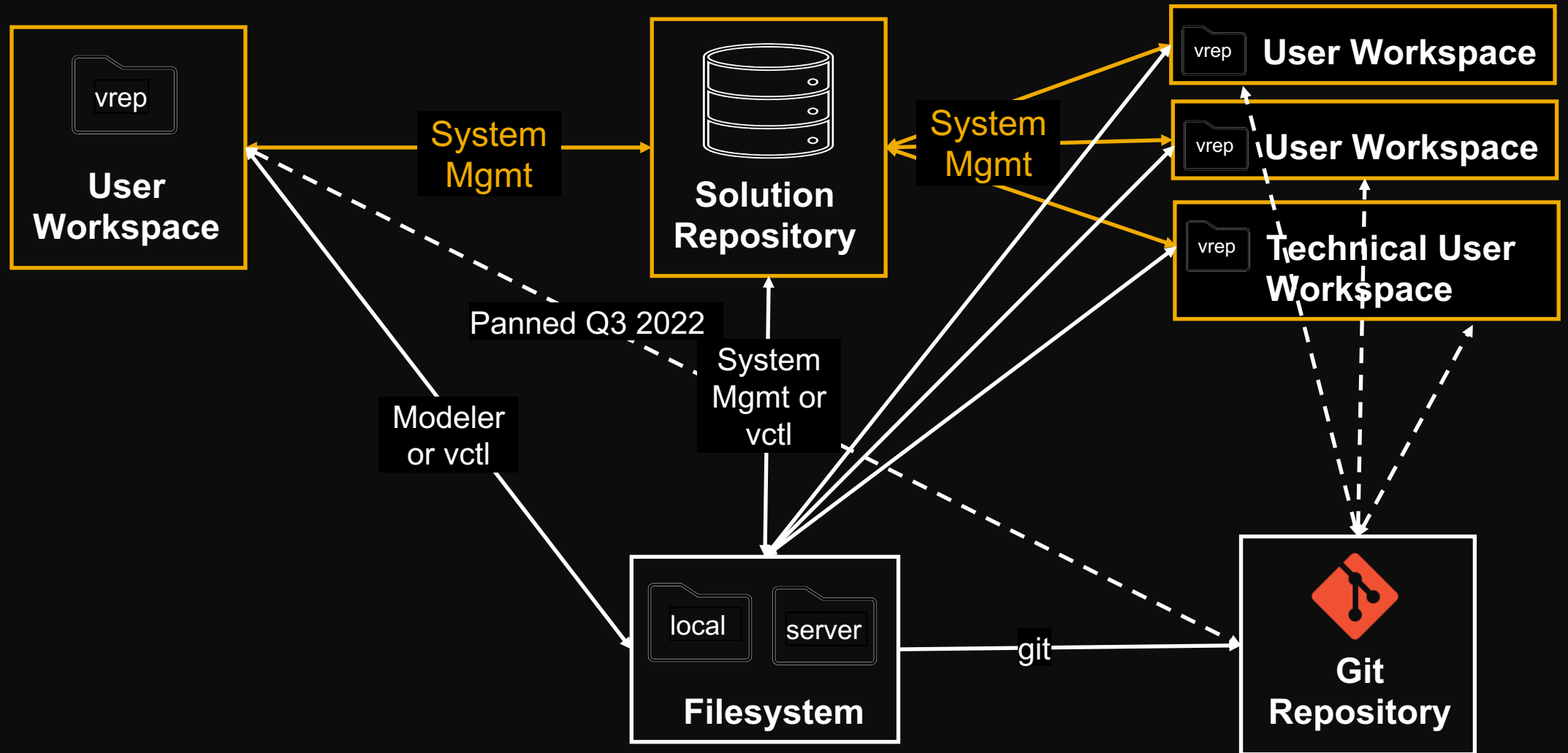
Transport Options Overview



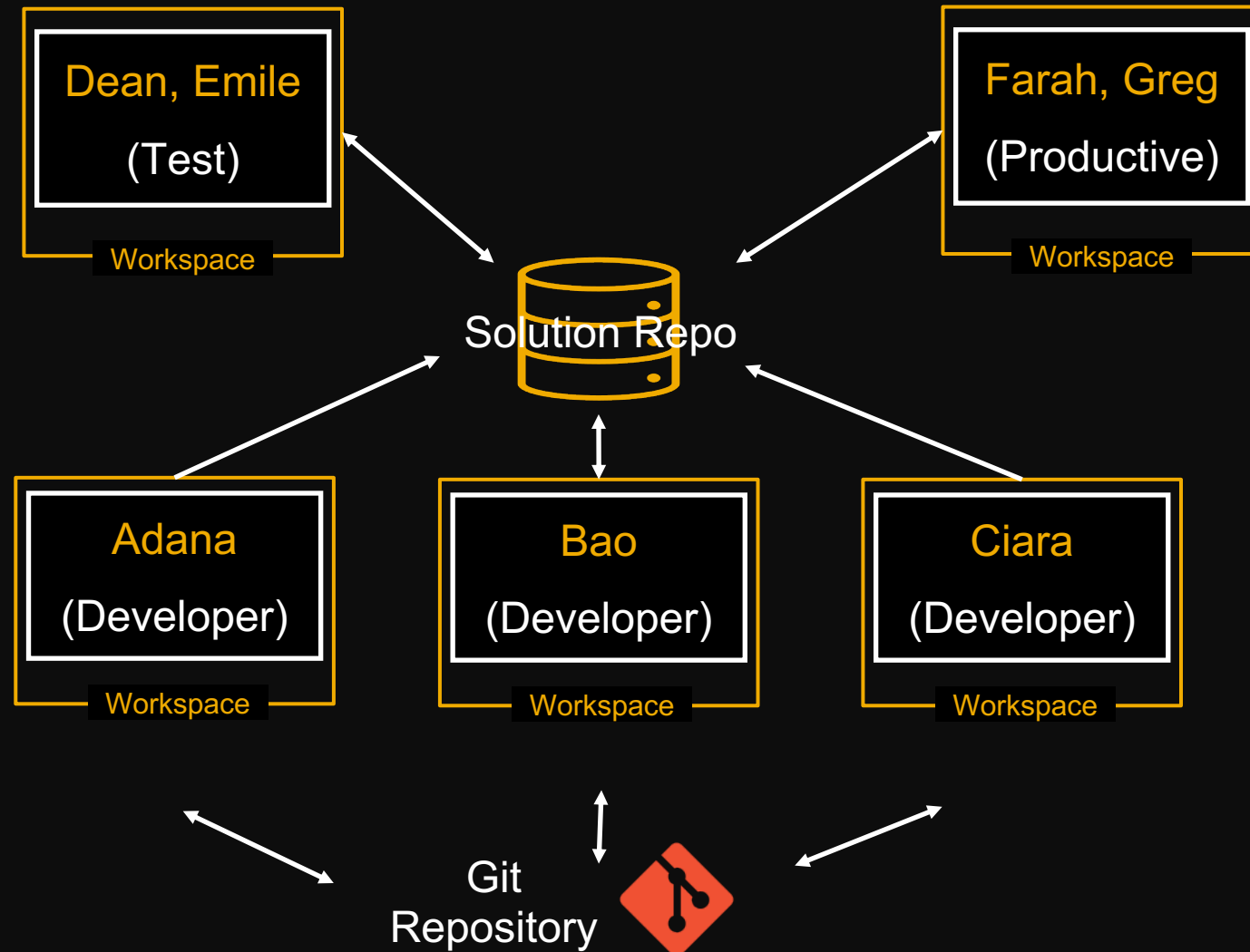
Transport Options Overview



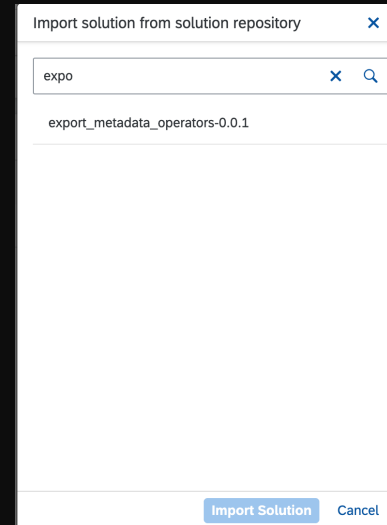
Transport Options Overview



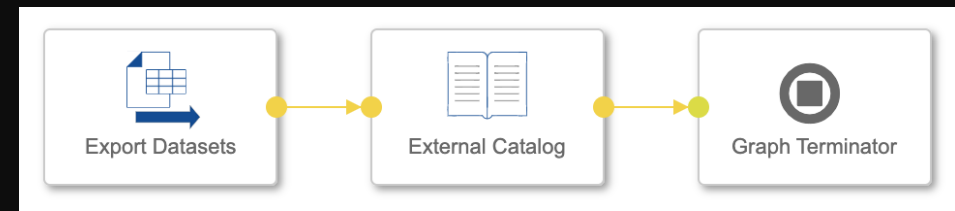
Example Development Process



Import Solutions



Create Pipeline

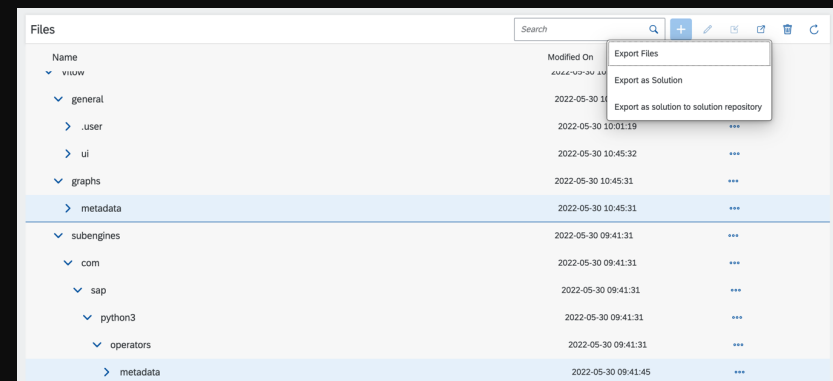


Upload to Git Repository



```
1 #!/bin/sh
2
3 # login
4 vctl login https://vsystem.ingress[REDACTED].dhaas-live.shoot.live.k8s-hana.ondemand.com\
5   default baow -p b[REDACTED]
6
7 # export
8 TARGET="solutions/$2.tar.gz"
9 echo "vctl cmd: vctl vcrep user export $2 $1"
10 vctl vrep user export $TARGET $1
11
12 # push gi
13 git add -f $TARGET
14 git commit -m "diupdate"
15 git push origin main
```

Upload to **Solution Repository**



Thank you.

Contact information:

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Transcript and shell-script:

<https://github.com/thhapke/diadmin/tree/main/presentations/cicd>