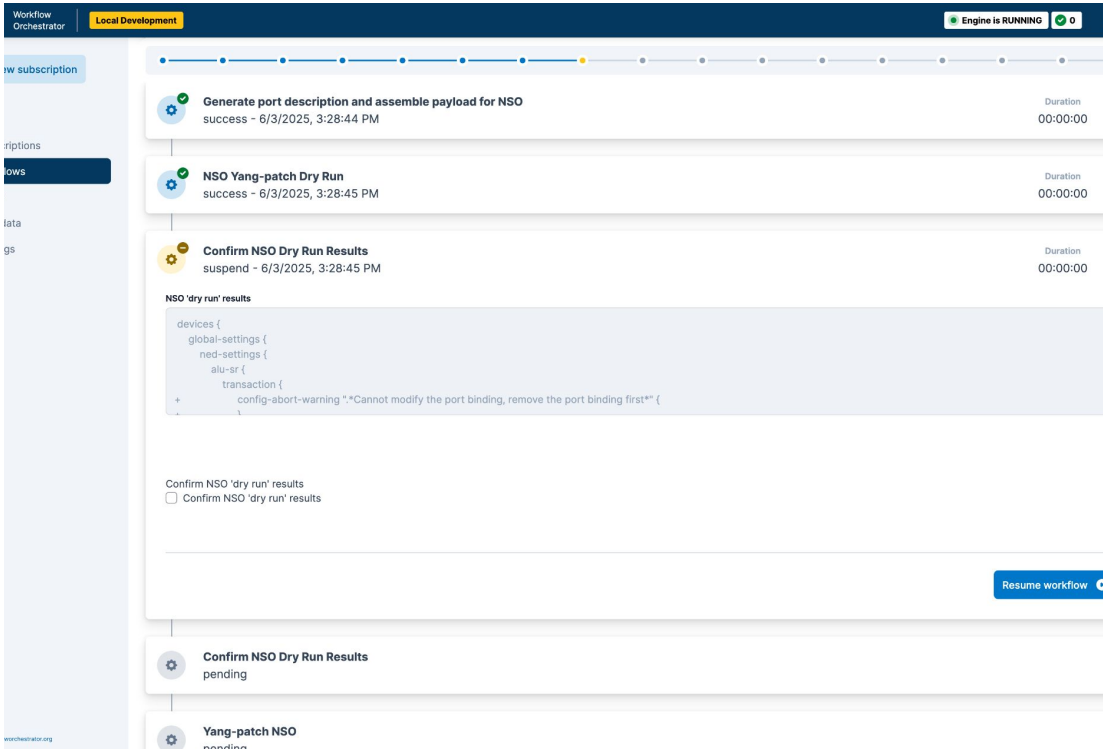
Adapting WFO to Your Business Needs

ESnet's current customizations & implementation

Dry-Run

Challenges and Limitations

- Stuck Workflows
- Self-service issues
- Clicking “abort” button
- Requires manual database fix by dev team
- Network engineers can’t troubleshoot during maintenance windows outside of dev working hours



The Proposed Fix

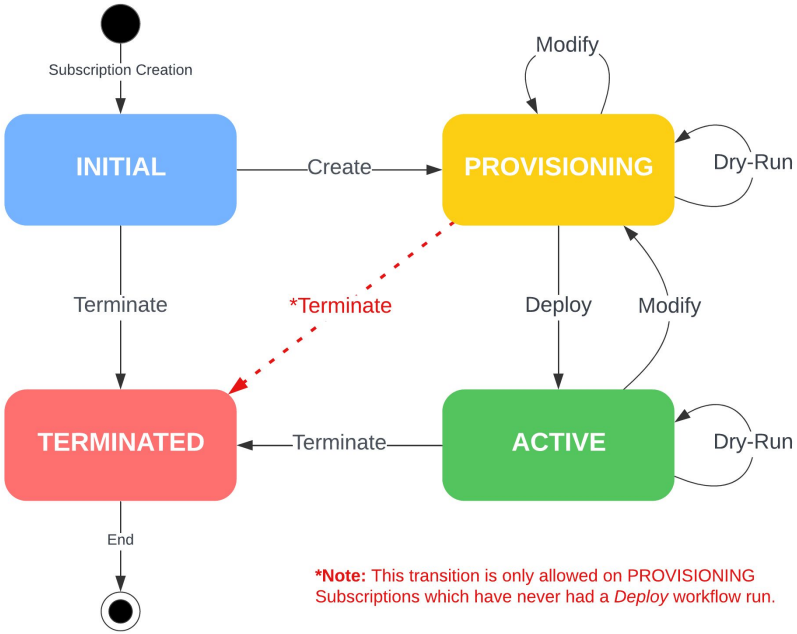
Five workflows

Create, Dry-run, Modify, Deploy, Terminate

(and Validate)

State Transitions

Represent current operational state of Subscriptions



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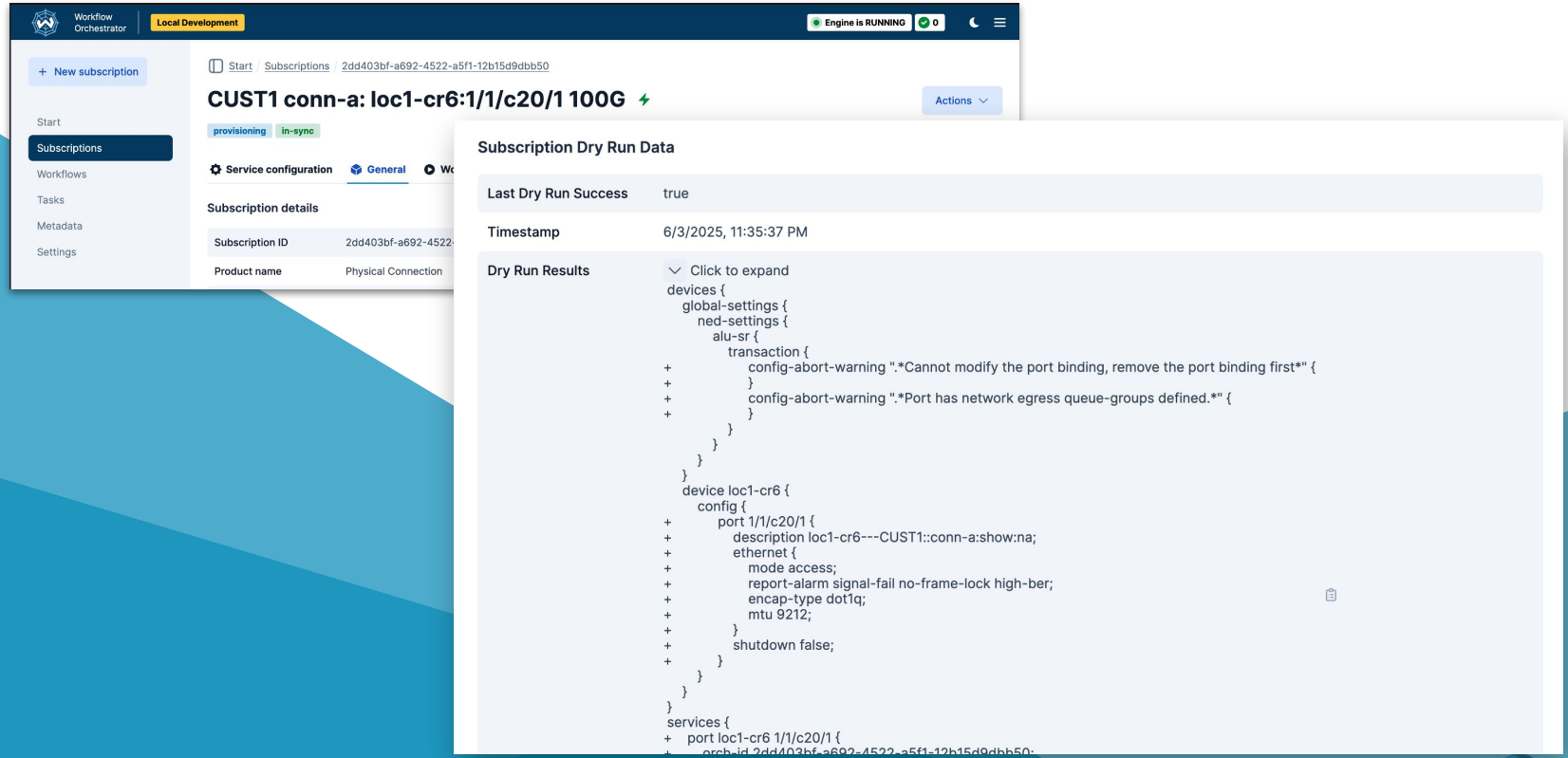
Build a Custom Database Table

- DryRunResults table (SQLAlchemy `Mapped`)
  - `@classmethod`s for convenient saving/converting models
- Accompanying Pydantic model
  - Validate column data coming from database
  - Convert to custom `Result` type

Display the Results in the WFO UI



Looking Ahead

Future work & design considerations

- Non-traditional workflows like “Bulk Deploy”
- Customer self-service
- Cross-organizational service configuration (NSI/SENSE, IRI)

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Questions?

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