

Optimizely Opal Solution - Instructions to Run

1. Prerequisites

- Optimizely CMS & Commerce: Install CMS 12 and Commerce 14 (built on .NET 6/8).
- Optimizely CLI: Required to create a Commerce Connect starter project.
- Opal Instance: Provision an Opal account with Admin role enabled.
- Ngrok: To expose your local Commerce API endpoints publicly for Opal discovery.
- Optimizely Opal SDK for C#: Install via NuGet for tool development.

2. Environment Setup

1. Create a Commerce Starter Project:

```
dotnet new commerce --name CommercePromotionManager
```

(Optionally install Foundation for sample data.)

2. Configure CMS/Commerce:

- Ensure promotions and campaigns work in the local environment.
- Validate EPiServer Commerce Marketing API availability.

3. Expose Local Instance:

```
ngrok http 5000
```

Use the generated public URL for Opal tool discovery.

3. Implement Promotion Management Tools

- Use Optimizely Opal C# SDK to define tools:
 - Create Promotion
 - Update Promotion
 - Delete Promotion
 - Retrieve Promotion
 - Enable/Disable Promotion

4. Configure Opal Discovery Endpoint

- Add /opal/discovery in your Commerce app to expose tool metadata.
- Ensure JSON schema includes:
 - Tool IDs
 - Input/Output parameters
 - Authentication details (Bearer token).

5. Set Up Opal Specialized Agent

- Agent Type: Specialized Agent.
- Purpose: Interpret natural language and call promotion tools.
- Definition:
 - Declare allowed tools and variables (market, currency, campaign).
 - Add confirmation patterns and validation hints.
- Use examples from opal-agent-examples for JSON/YAML structure.

6. Register Tools in Opal

- Go to Opal Admin → Tools → Registries.
- Add your Commerce app's discovery endpoint.
- Sync metadata (refresh after schema changes).

7. Run the Workflow

- Start Commerce app locally.
- Start ngrok tunnel.
- Register tools in Opal.
- Use Opal Chat to trigger commands like:
 - @promotions create a promotion with name "10% discount on order amount above 80000"
- Verify promotion creation in Commerce Marketing UI.