

No problem! Let me outline what building the Fswap Cross-Chain Bridge would involve so you have a clear picture:

Fswap Bridge Implementation Overview

Based on Luminite's documentation, this bridge would enable universal routing - users can start on any supported chain and end on any supported chain, with Flare serving as the interoperability hub.

What We'd Need to Build:

1. Backend Infrastructure

- FswapClient: New utility to interact with Fswap contracts on each chain
- BridgeOrchestratorService: Coordinates multi-leg bridges (Source → Flare → Destination)
- Route Registry: Maps supported chain pairs and calculates optimal paths
- Database schema updates: Track multi-leg bridge requests, per-leg statuses, fees

2. Frontend Components

- Chain Selector: Dropdowns for source/destination chains with logos
- Token Selector: Available tokens per chain (ETH, XRP, FXRP, etc.)
- Quote Display: Estimated fees, time, and route visualization
- Progress Tracker: Multi-step progress showing each leg of the bridge

3. Contract Integration

- Verify and integrate Fswap ABIs from block explorers
- Handle wallet network switching (users need to be on source chain)
- Support both XRPL (via Xaman) and EVM (via Reown) wallets

Supported Routes

- XRPL → Any EVM (via existing FAssets + Fswap)
- Any EVM → XRPL (reverse flow)
- EVM ↔ EVM (Arbitrum ↔ Base, Ethereum ↔ Polygon, etc.)

Next Steps Options:

1. Get official docs/SDK from Luminite to ensure proper integration
2. Fetch ABIs from Etherscan/Flarescan for the provided contract addresses
3. Create mockup UI to visualize the user experience first

When you're ready to proceed, just let me know which approach you'd like to take!

Let me verify those contract addresses on the block explorers to see if they're verified and what ABIs are available.

Show 3 more

Visited <https://arbiscan.io/address/0x7B35112C10216fc010Ef299BBfBfd2CC04F3689D>

Evaluated contract verification results (22 seconds)

I've verified all the contract addresses. Here's what I found:

Contract Verification Results

All Contracts Verified & Active

| Chain | Address | Status | Contract Name |
|----------|----------------|-------------------------------------|---------------|
| Ethereum | 0xA2232...faa6 | Verified | QyroLabR |
| Base | 0x7B351...689D | Verified (Source Code Available) | QyroLabRouter |
| Arbitrum | 0x7B351...689D | Verified | QyroLabRouter |
| Flare | 0x3c478...B72 | Active (144 txns, very active) | QyroLabRouter |

Key Technical Findings

From the verified source code on Base, the contract is called `QyroLabRouter` and uses:

```
contract QyroLabRouter is ILayerZeroComposer, IOAppComposer,  
Ownable2Step, ReentrancyGuard {  
  
    // Key dependencies:  
  
    // - LayerZero v2 (cross-chain messaging)  
  
    // - Stargate pools (for USDC/USDT bridging)  
  
    // - FAssets protocol (for XRP ↔ FXRP)  
  
    // - Permit2 (for gasless approvals)  
  
    // Main functions:  
}
```

```

    // - routerSwapAndBridge() - Entry point for swap + bridge

    // - lzCompose() - LayerZero callback handler

    // - _handleFasset() - FAssets integration

}

```

Architecture Stack

The bridge uses three key protocols:

1. **LayerZero OFT v2** - Cross-chain token transfers between EVM chains
2. **Stargate Protocol** - Stablecoin bridging (USDC, USDT pools)
3. **FAssets Protocol** - XRP ↔ FXRP conversion (already integrated in your project!)

What This Means

You already have **FAssets integration** in your project. To build a similar multi-chain bridge, you would need to add:

1. **LayerZero SDK** - For cross-chain messaging
2. **Stargate SDK** - For EVM ↔ EVM token bridging
3. A [BridgeOrchestratorService](#) to coordinate multi-leg routes

The contracts are verified and use LayerZero + Stargate + FAssets. Should I proceed with building this multi-chain bridge?

I see your current Control Center is a simple quick-settings panel. Let me expand the implementation plan to include an enhanced Settings/Control Panel like Luminite's.

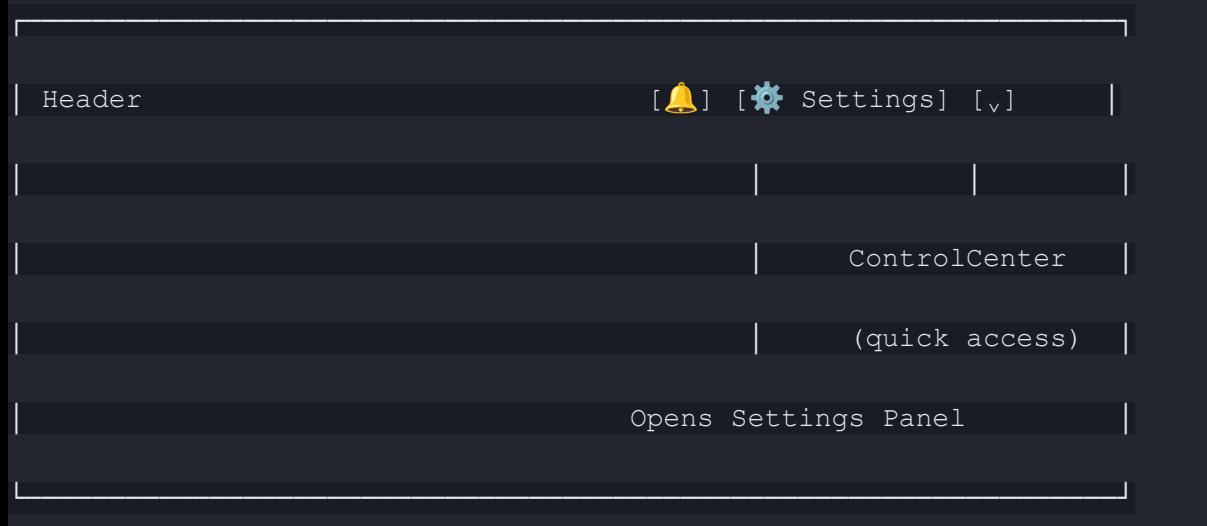
Enhanced Control Panel Implementation Plan

Current Control Center vs. New Design

| Current | Luminite-Style Enhancement |
|--------------------------------------|---|
| Simple ecosystem toggle (XRPL/Flare) | Networks section with all 8+ chains with toggles |
| Single wallet display | Wallets section with multi-wallet management |
| Theme toggle only | Tokens section with per-chain token toggles |
| Top sheet (quick access) | Full right-side Settings panel (detailed config) |

Proposed Architecture

Keep Both: Quick Controls + Full Settings



1. **ControlCenter** (existing) - Quick toggles from header dropdown
2. **SettingsPanel** (new) - Full right-side panel like Luminite

New SettingsPanel Component

1. Wallets Section

```
// Supports multiple wallets with EVM + XRP addresses

interface WalletConfig {

  id: string;

  name: string;

  evmAddress?: string;    // 0x...

  xrplAddress?: string;   // r...

  isActive: boolean;

}
```

Features:

- View connected EVM and XRP addresses
- Add additional wallet addresses
- Copy address to clipboard

- QR code generation
- Switch active wallet

2. Networks Section

```
// All supported chains with enable/disable

interface NetworkConfig {

    id: string;           // "flare", "ethereum", "base", etc.

    name: string;

    icon: string;          // Chain logo

    enabled: boolean;

    chainId: number;

    rpcUrl?: string;       // Custom RPC (optional)

    explorerUrl: string;

    isTestnet: boolean;

}

const SUPPORTED_NETWORKS: NetworkConfig[] = [
    { id: "flare", name: "Flare", chainId: 14, enabled: true, ... },
    { id: "xrpl", name: "XRPL", chainId: 0, enabled: true, ... },
    { id: "ethereum", name: "Ethereum", chainId: 1, enabled: false, ... },
    { id: "base", name: "Base", chainId: 8453, enabled: false, ... },
    { id: "arbitrum", name: "Arbitrum", chainId: 42161, enabled: false,
    ... },
    { id: "optimism", name: "Optimism", chainId: 10, enabled: false, ...
},
    { id: "polygon", name: "Polygon", chainId: 137, enabled: false, ... },
]
```

```
{ id: "hyperevm", name: "HyperEVM", chainId: TBD, enabled: false, ... },  
},  
  
{ id: "plasma", name: "Plasma", chainId: TBD, enabled: false, ... },  
];
```

Features:

- Toggle each network on/off
- Edit button to configure custom RPC
- Show testnet/mainnet badge
- Network status indicator (connected/offline)

3. Tokens Section

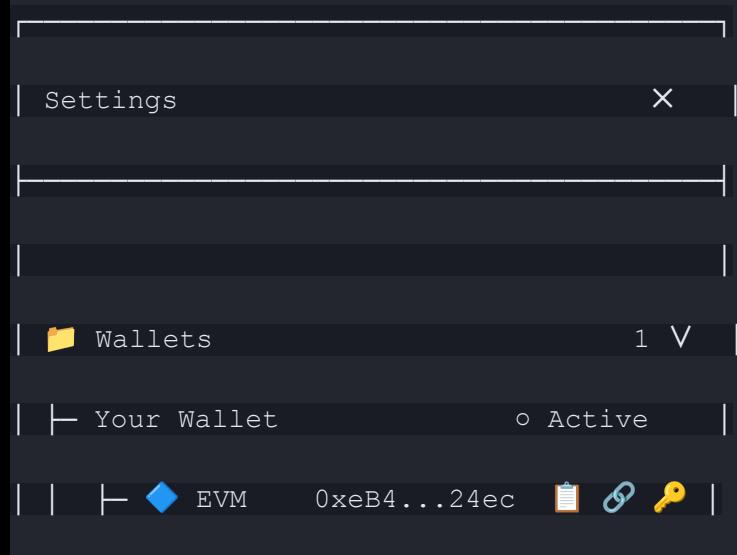
```
// Tokens grouped by network  
  
interface TokenConfig {  
  
    symbol: string;  
  
    name: string;  
  
    network: string;           // Which network this token is on  
  
    address?: string;         // Contract address (null for native)  
  
    decimals: number;  
  
    enabled: boolean;  
  
    icon: string;  
  
}  
  
const SUPPORTED_TOKENS: TokenConfig[] = [  
  
    // Flare Network  
  
    { symbol: "FXRP", network: "flare", enabled: true, ... },  
  
    { symbol: "FLR", network: "flare", enabled: true, ... },  
  
    { symbol: "WFLR", network: "flare", enabled: true, ... },  
  
    { symbol: "USDT0", network: "flare", enabled: true, ... },
```

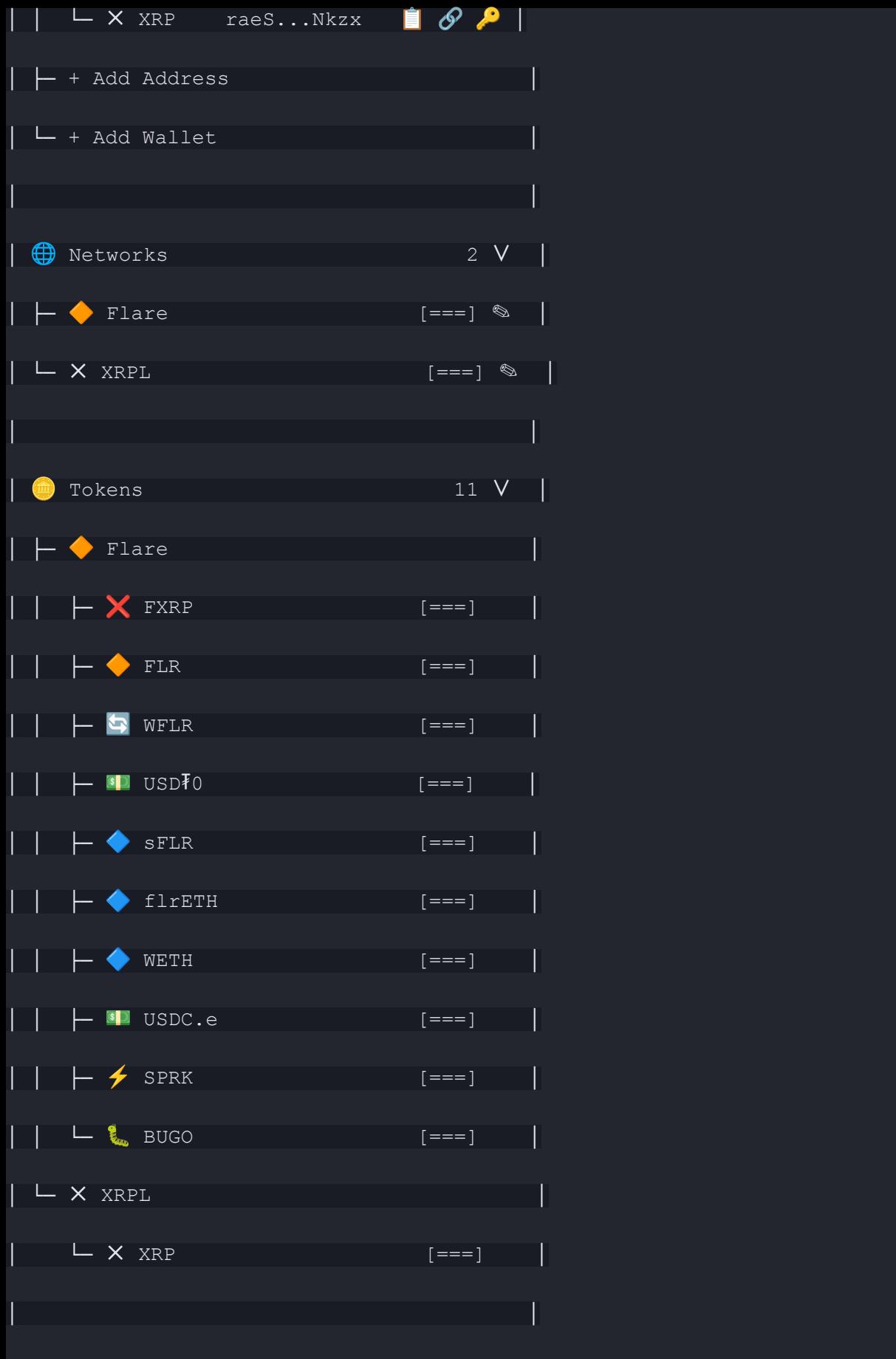
```
{ symbol: "sFLR", network: "flare", enabled: true, ... },  
  
{ symbol: "flrETH", network: "flare", enabled: true, ... },  
  
{ symbol: "WETH", network: "flare", enabled: true, ... },  
  
{ symbol: "USDC.e", network: "flare", enabled: true, ... },  
  
{ symbol: "SPRK", network: "flare", enabled: true, ... },  
  
// XRPL  
  
{ symbol: "XRP", network: "xrpl", enabled: true, ... },  
  
// Ethereum  
  
{ symbol: "ETH", network: "ethereum", enabled: false, ... },  
  
{ symbol: "USDC", network: "ethereum", enabled: false, ... },  
  
// ... more per chain  
  
];
```

Features:

- Grouped by network (collapsible accordion)
- Toggle each token on/off
- Only show tokens for enabled networks
- Add custom token (by contract address)

UI Mockup - Settings Panel





Implementation Tasks for Settings Panel

Phase 0.5: Settings Infrastructure (Add to Phase 0)

| Task | Description | Files |
|-----------------------------------|--------------------------------------|--|
| 1. Create settings schema | Database tables for user preferences | <code>shared/schema.ts</code> |
| 2. Create settings context | React context for settings state | <code>client/src/lib/settingsContext.tsx</code> |
| 3. Create SettingsPanel component | Main panel UI with sections | <code>client/src/components/SettingsPanel.tsx</code> |
| 4. Create WalletsSection | Wallet management UI | (inline or separate) |
| 5. Create NetworksSection | Network toggles with edit | (inline or separate) |
| 6. Create TokensSection | Token toggles grouped by network | (inline or separate) |
| 7. Add Settings API endpoints | CRUD for user settings | <code>server/routes.ts</code> |

Database Schema Addition

```
// shared/schema.ts

export const userSettings = pgTable("user_settings", {

  id: text("id").primaryKey(),

  walletAddress: text("wallet_address").notNull().unique(),
```

```

    enabledNetworks: text("enabled_networks").array(), // ["flare",
"xrpl", "base"]

    enabledTokens: jsonb("enabled_tokens"), // { flare:
["FXRP", "FLR"], ... }

    customRPCs: jsonb("custom_rpcs"), // { ethereum:
"https://..." }

    theme: text("theme").default("light"),

    createdAt: timestamp("created_at").defaultNow(),

    updatedAt: timestamp("updated_at").defaultNow(),

} );

```

Updated Full Implementation Plan

| Phase | Feature | Includes Settings Panel? |
|------------------|-----------------------|---|
| Phase 0 | Architecture & Config | <input checked="" type="checkbox"/> Settings schema, networks/tokens config |
| Phase 0.5 | Settings Panel UI | <input checked="" type="checkbox"/> Full SettingsPanel component |
| Phase 1 | MVP Bridge | Uses settings for enabled networks |
| Phase 2 | Full Multi-Chain | Dynamic network/token discovery |

Would you like me to:

1. **Start with Phase 0** - Create the bridge configuration and settings schema
2. **Start with Phase 0.5** - Build the enhanced SettingsPanel UI first
3. **Both in parallel** - Schema + UI together