

Concrete Architecture

Bitcoin Core

Group 36

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<https://youtu.be/ZJHuaK0qnVo>

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What did we learn?



01

Introduction

Why Concrete?

Conceptual

- Essential Dependencies
- Developers View of a System



- Actual System
- Source Code

Concrete



Derivation Process

02

How we Get There?



Conceptual

Looking at our conceptual architecture to help map the concrete version



Source Code

Collecting the systems source code and reading the documentation



Peer to Peer

Comparing to the architecture style used



Understand

Mapping the dependencies using Understand by Scitools

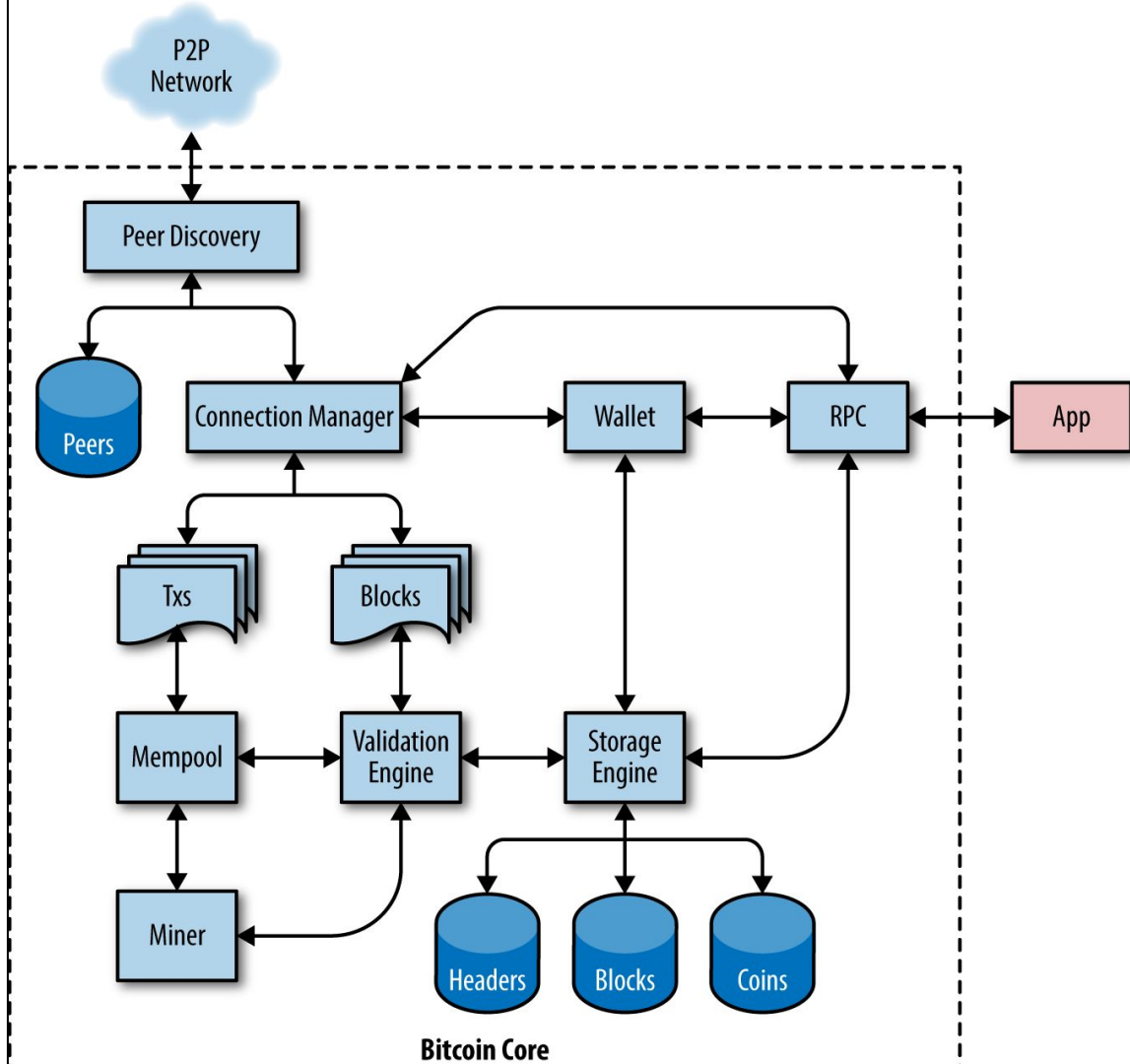


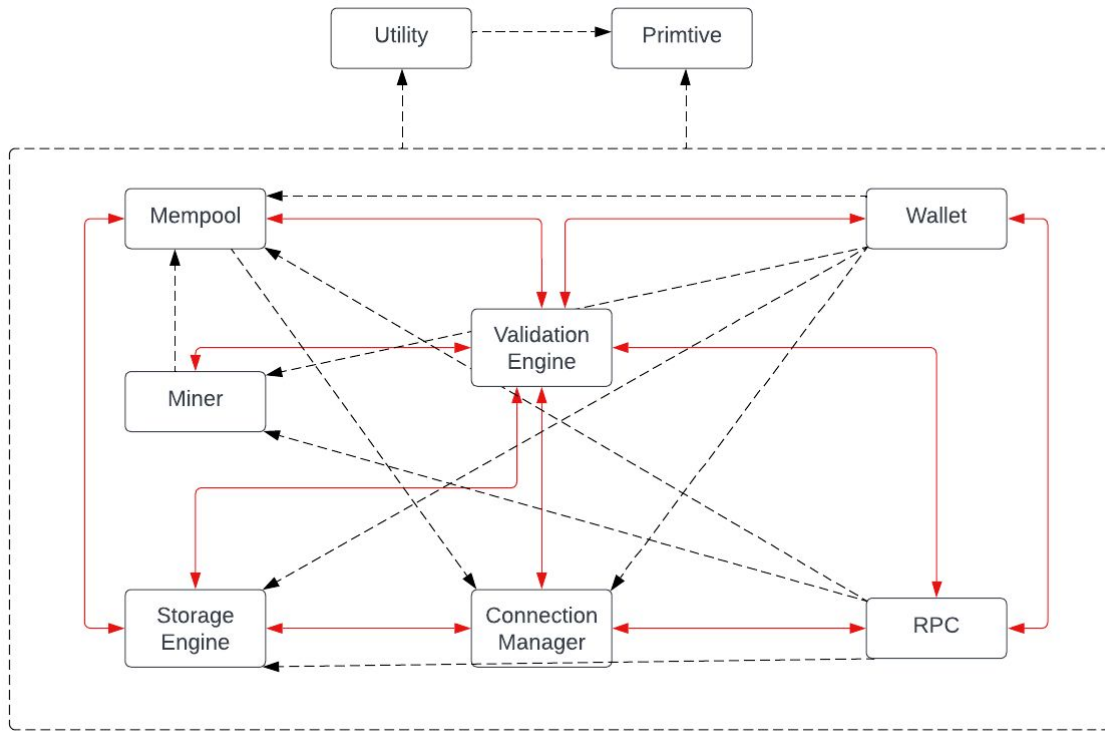


03

Architectures

Conceptual Architecture

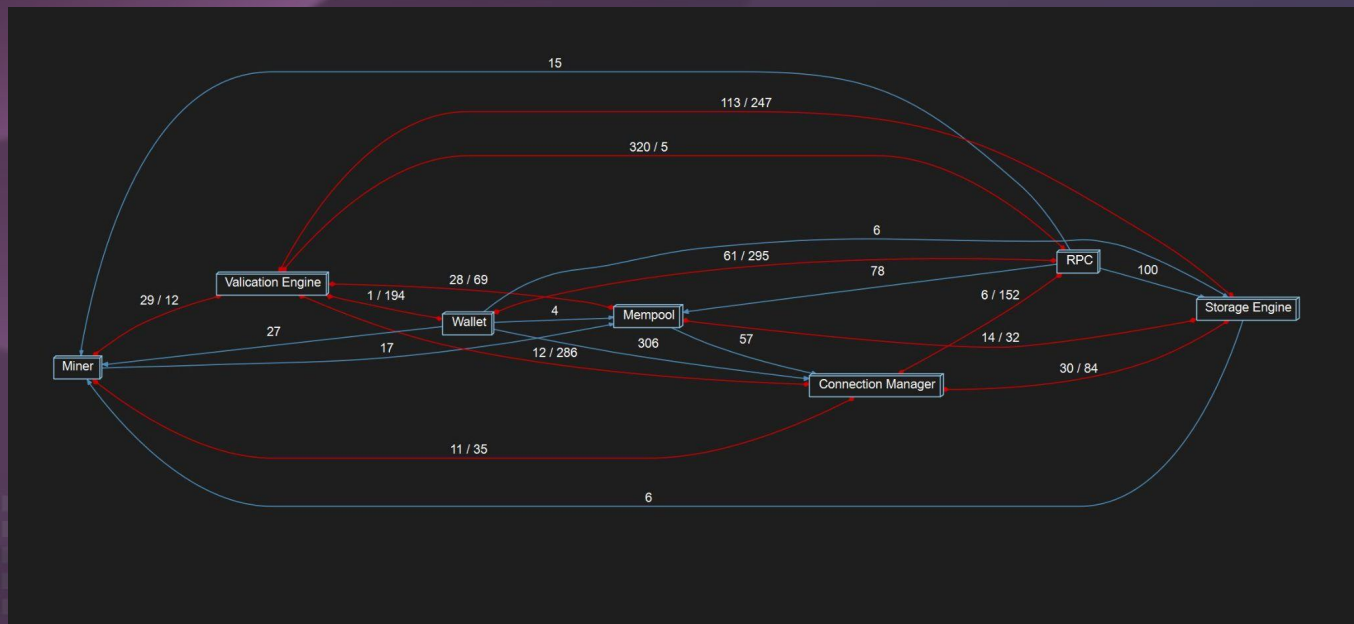




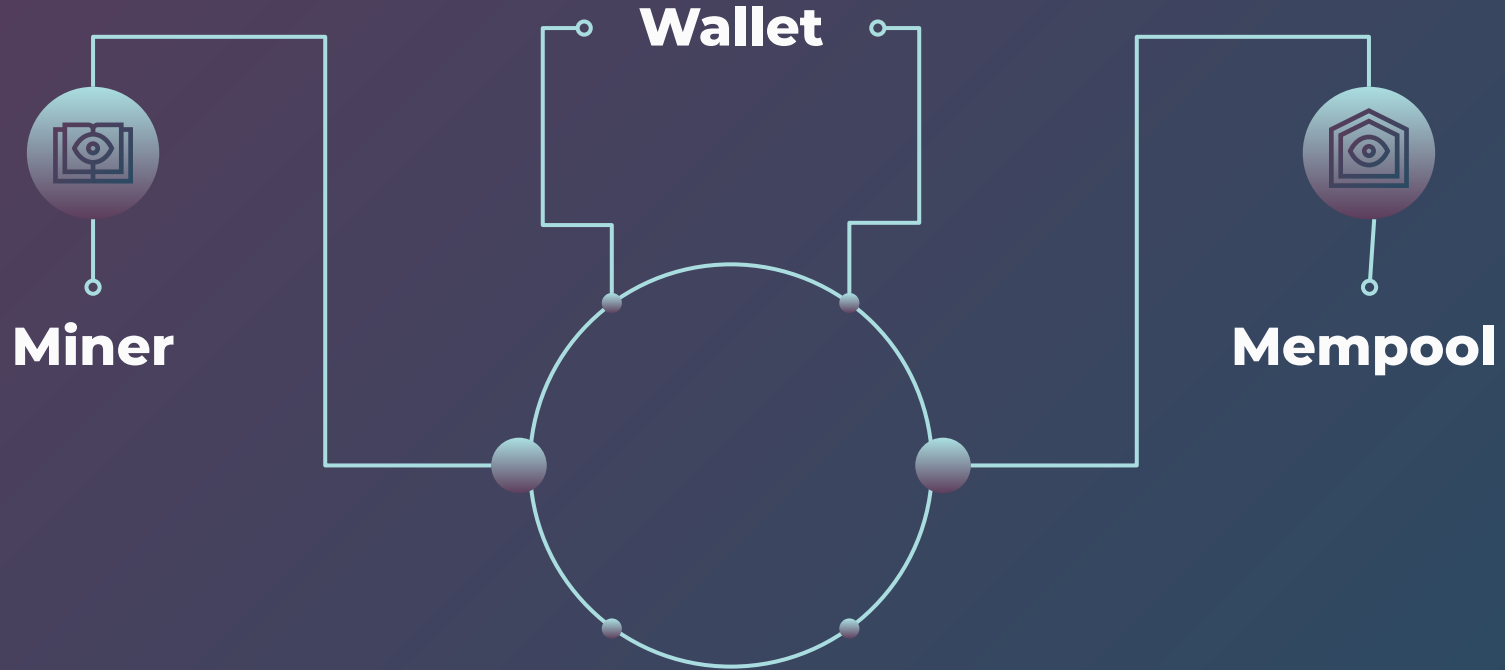
Concrete Architecture



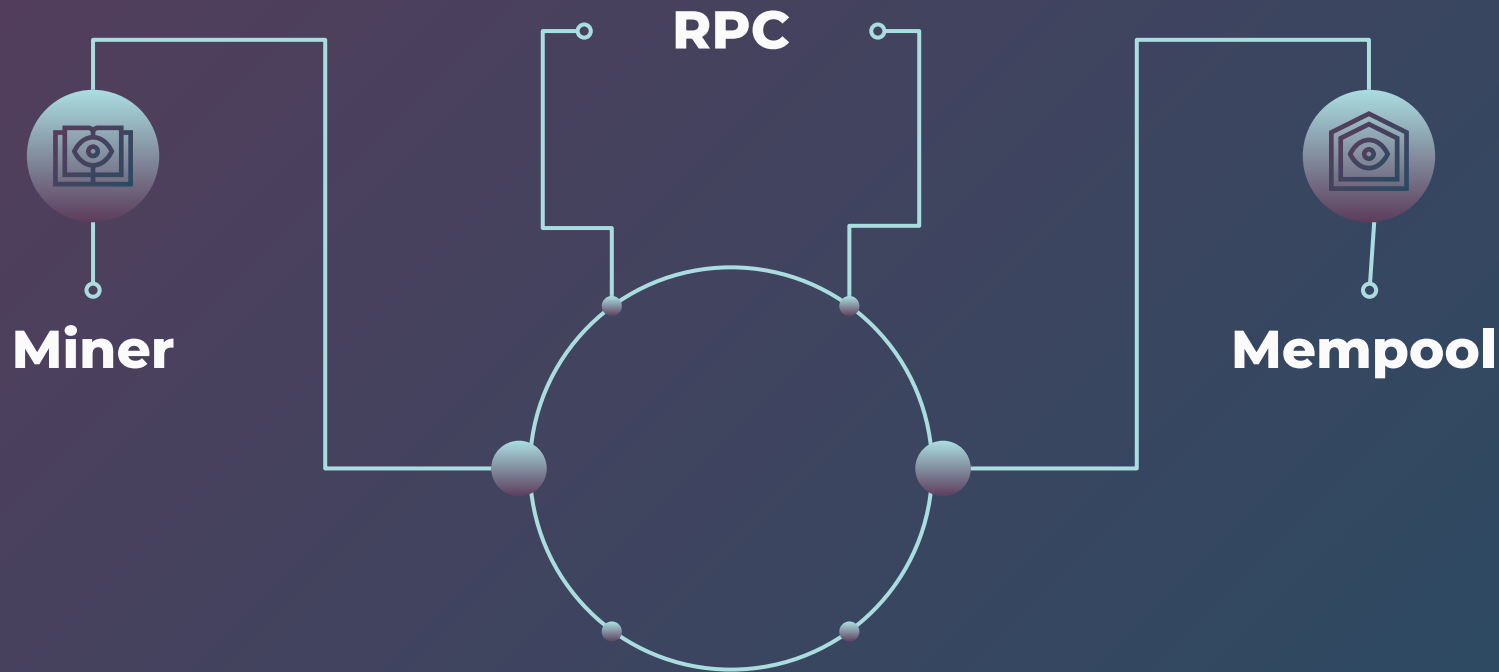
Reflection Analysis



Unexpected Dependencies



Unexpected Dependencies

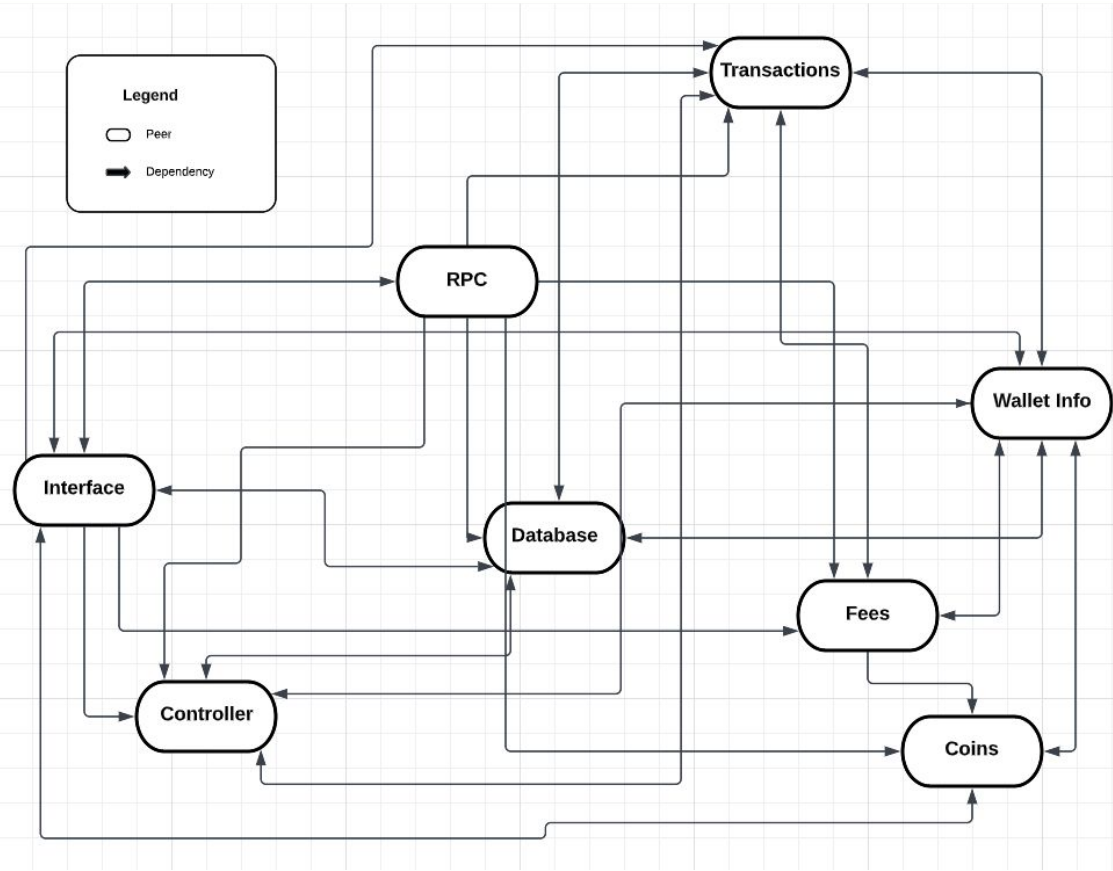


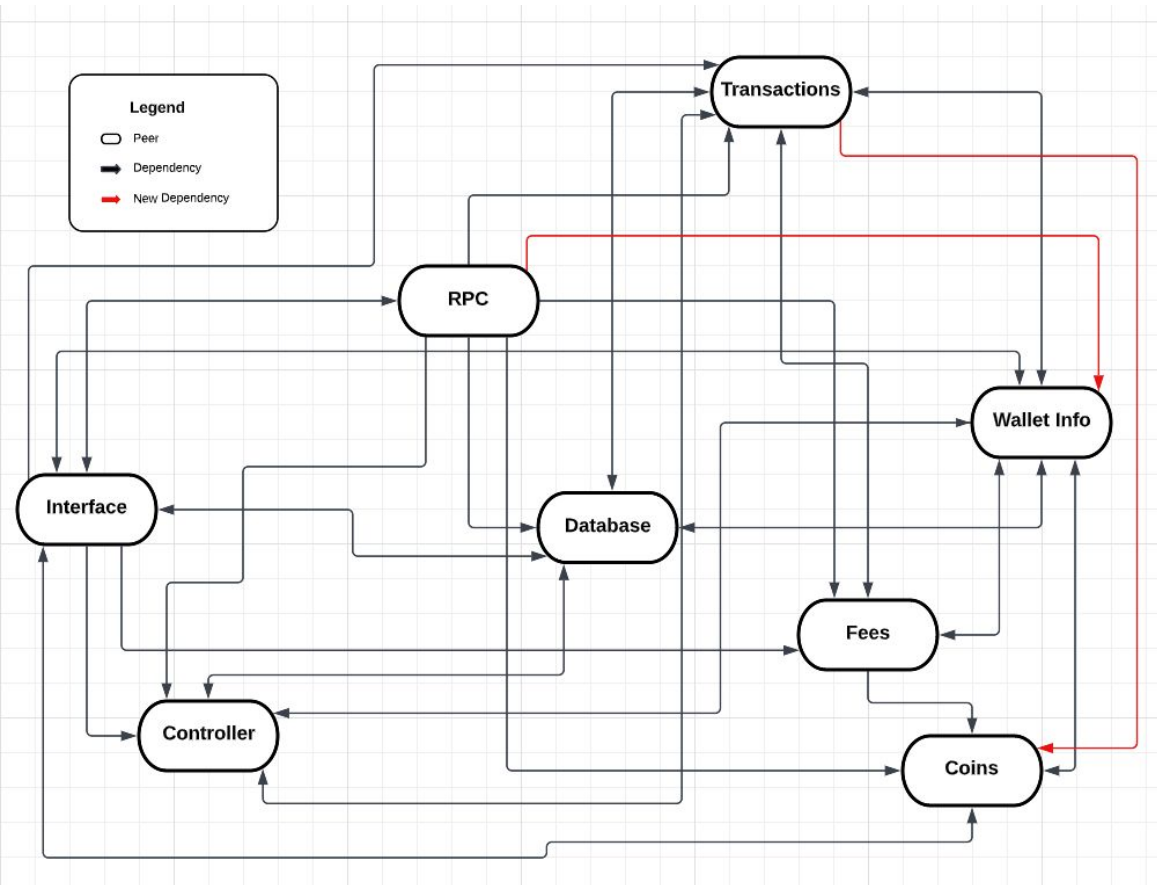


Wallet Subsystem

04

Conceptual Architecture



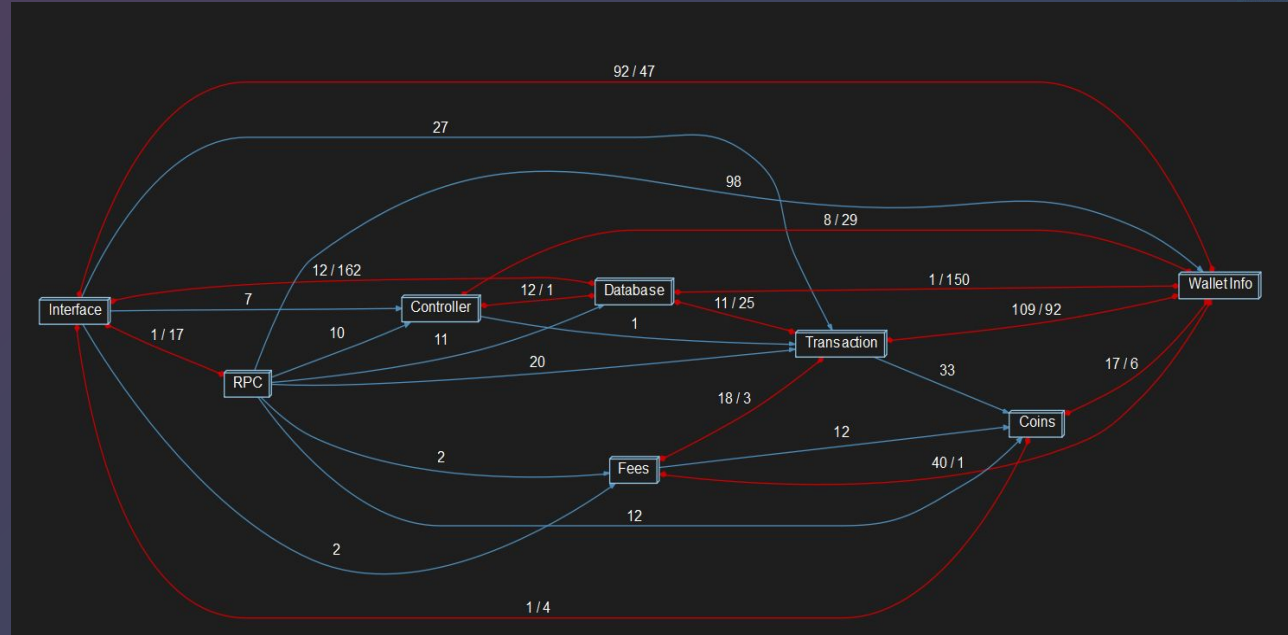


Concrete Architecture



Reflexion Analysis

- RPC → Wallet Info
- Transactions → Coins

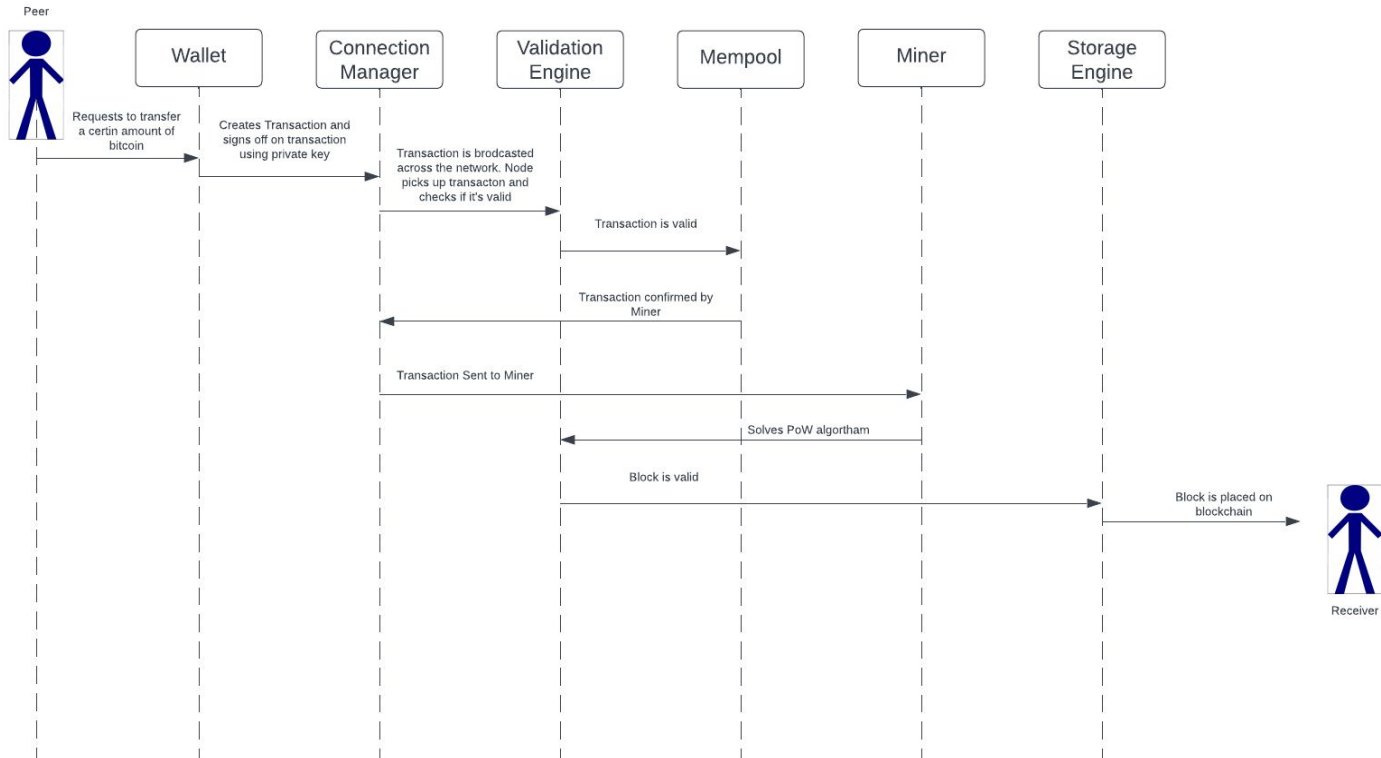




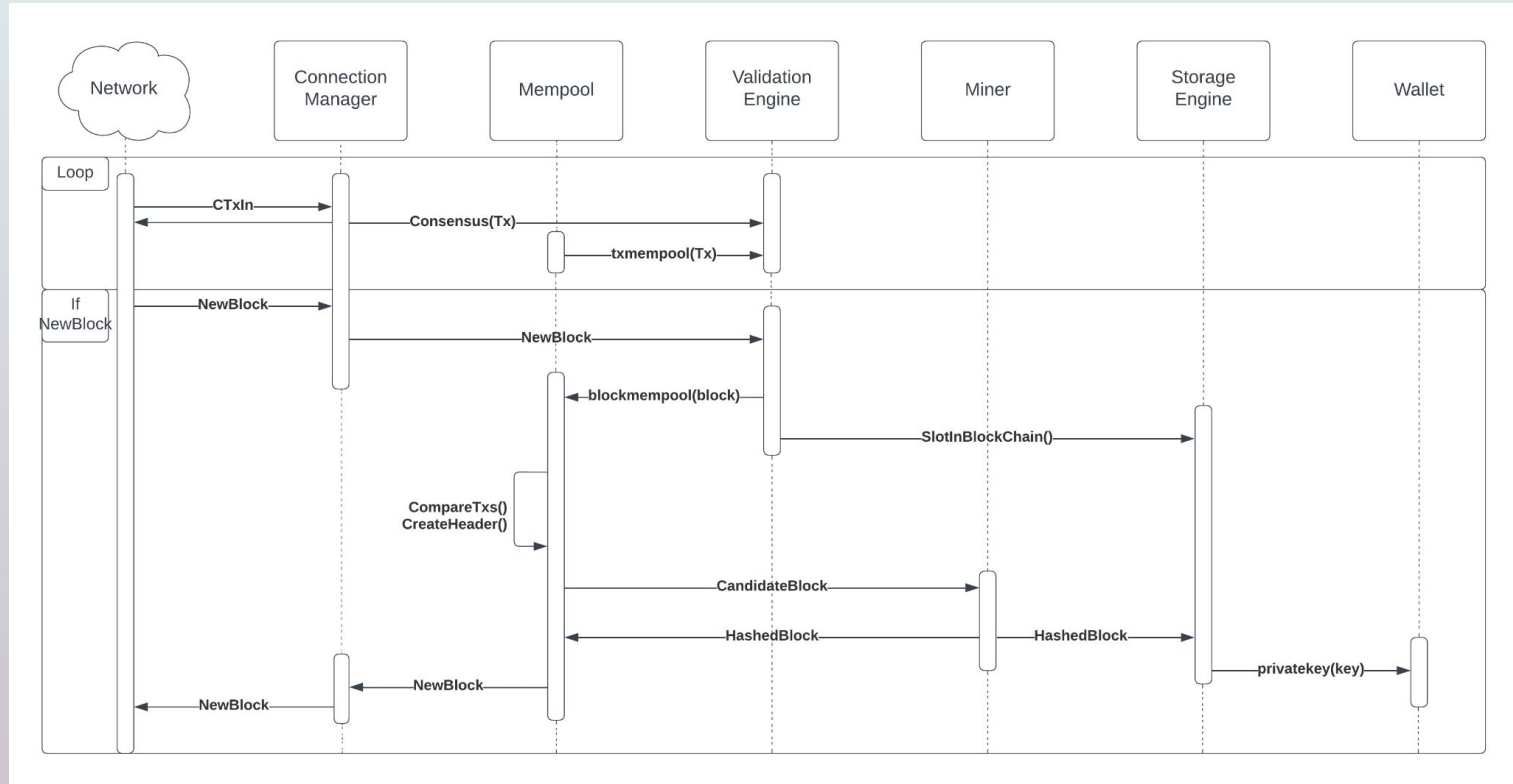
05

Use Cases

Bitcoin Transaction



Bitcoin Miner





Reflection

06

The background is a deep purple gradient. In the top left, there are thin, concentric white circles. A large, light blue circle is partially visible at the top center. In the top right, there is a grid of small white squares. In the bottom left, there is another grid of small white squares. In the bottom right, there is a pattern of white hexagons. A horizontal white line with small circles at each end is positioned below the title.

Lessons Learned

The background is a deep purple gradient. On the left, there are white wireframe spheres of varying sizes and a grid of small white squares. On the right, there are faint white hexagonal patterns. The text "Thanks For Listening" is centered in a bold, white, sans-serif font.

**Thanks For
Listening**