WonderMine Server Docs

Existing Architecture

PlayFab Game Server

- Player database
- Inventory system
- Azure Functions App (connects directly to Azure function)
- Event system (logs player-specific game play events)
- CloudScript functions

Azure Hosting

- Azure CosmosDB database
- CoinCart script

Smart Contracts

- Decentraland wearables contracts
- WearClaimer smart contract for WZ NFTs on Polygon
- WearCrafter smart contract on Ethereum (retired)
- Infura is used for some smart contract access features

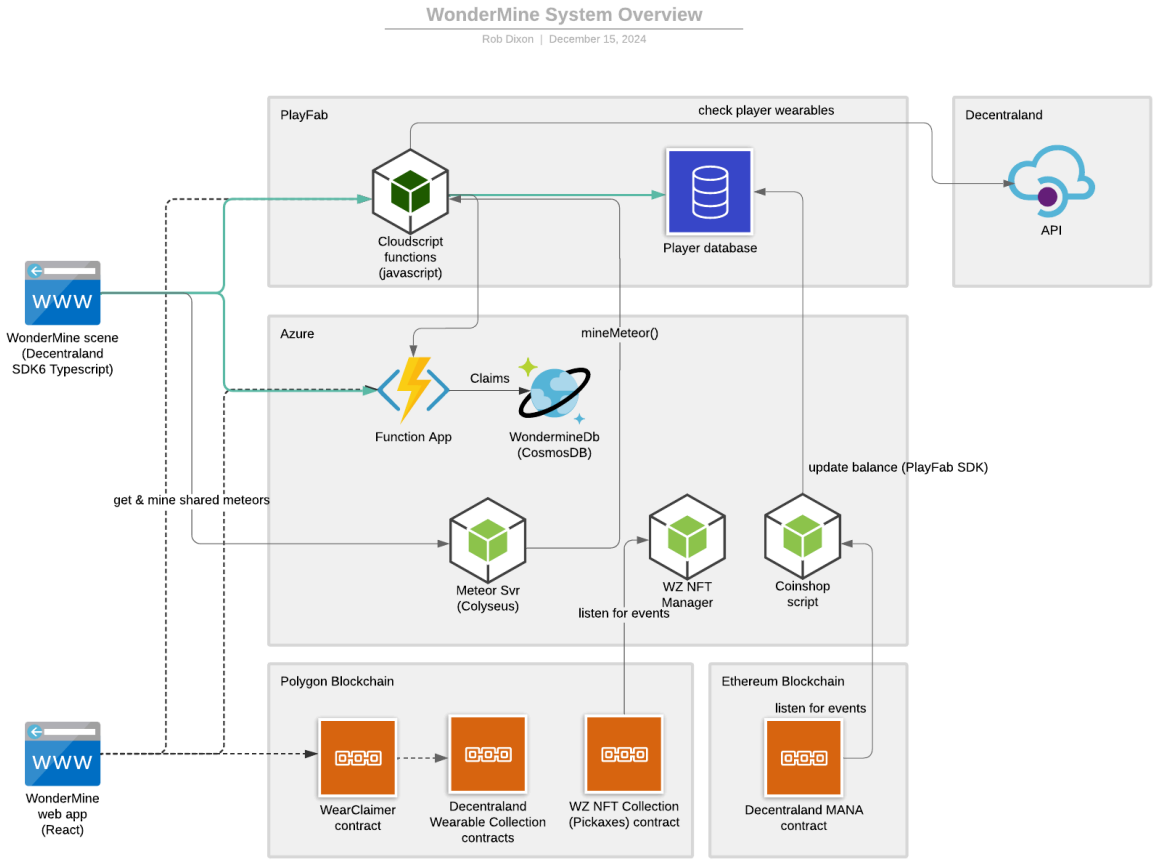
WonderZone website

- ClaimItem page React app lets players see and claim wearables they crafted https://wondermine.wonderzone.io/claimitem

Game Client

- WonderMine scene using Decentraland Typescript SDK
- Other WonderZone Park scenes

System Overview



Current Issues

- The Coin cart only works with Ethereum Mana at the moment. We should offer a Polygon version too since fees are lower.
- Wearables crafting is an awkward process requiring players to go to our external website to mint their wearables. Ideally, we should mint their items for them at crafting time (and eat the transaction fees, since they are small now on Polygon).
- Hackers have learned how to send server-side transactions to PlayFab and “bot” our game servers. We need better ways of detecting and preventing hackers.

New Features

High Priority New Features

- Minting process for Polygon NFT.
- Automating the hacker issues
- Rework Coinshop for Polygon
- Automatically restock the wearables supply in the crafting machine

Nice-to-have Future Features

- Open API specs for other games or developers to use the same inventory & crafting system

New Architecture Ideas

PlayFab hosting costs about $100/month and Azure Hosting costs about $300/month right now. We should look at moving to more cost-effective server solutions. The hardest thing to replace right now would be PlayFab because of all the built-in features we use from there.