

# Outside the Box

Perpetual Platform Integration within Project Darkstar

## What services make an online game server?

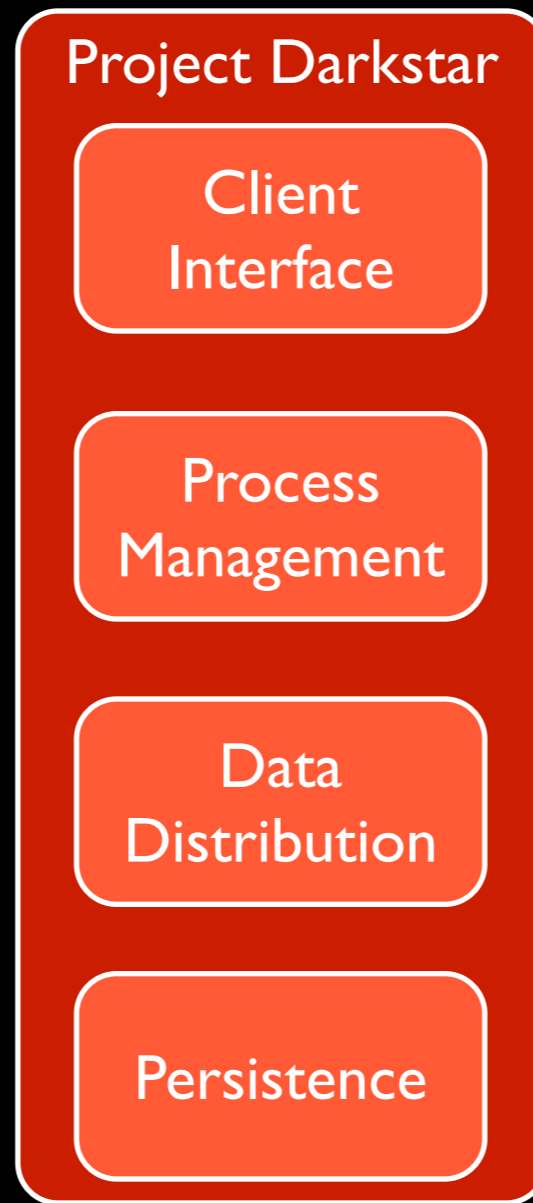
Client  
Interface

Process  
Management

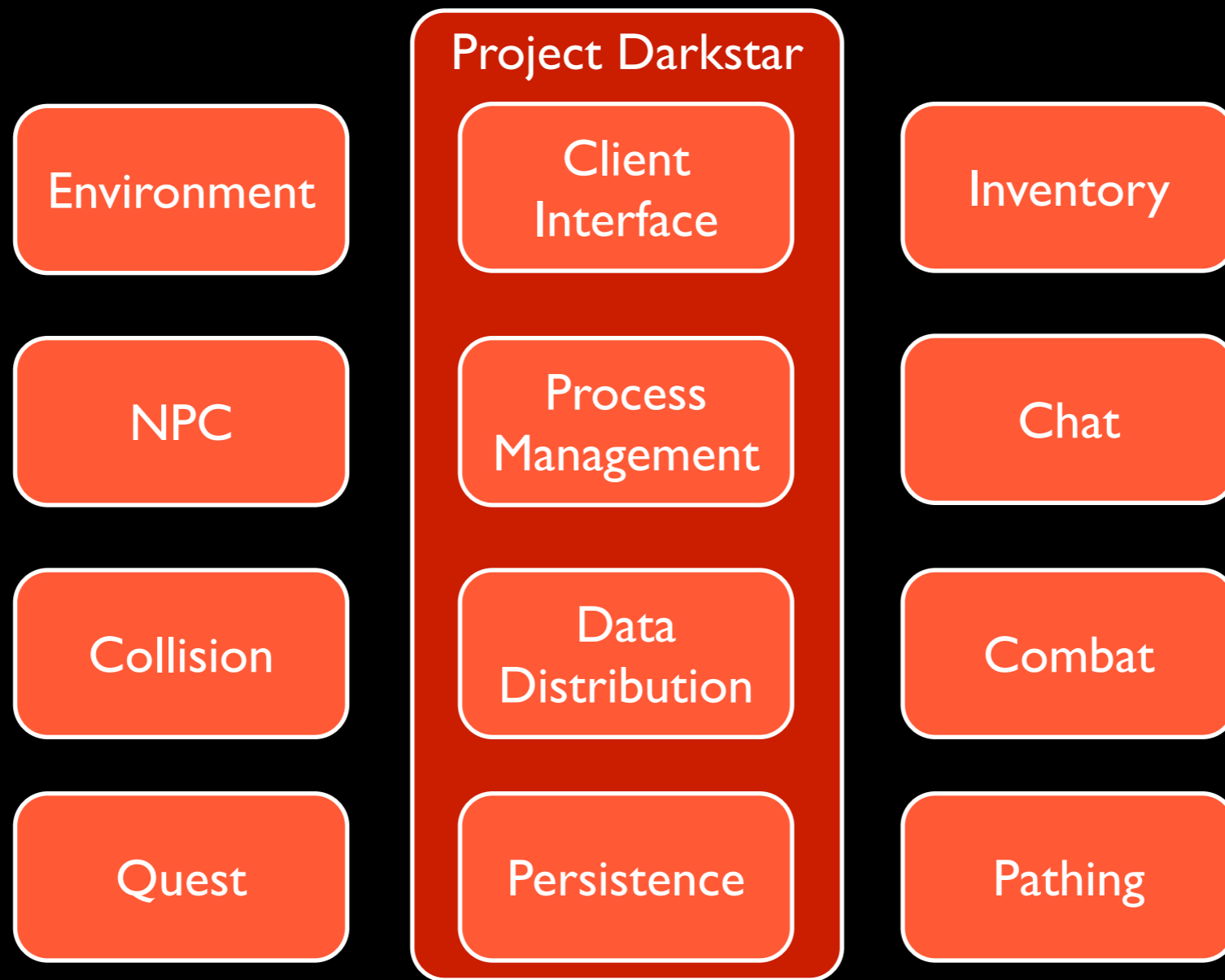
Data  
Distribution

Persistence

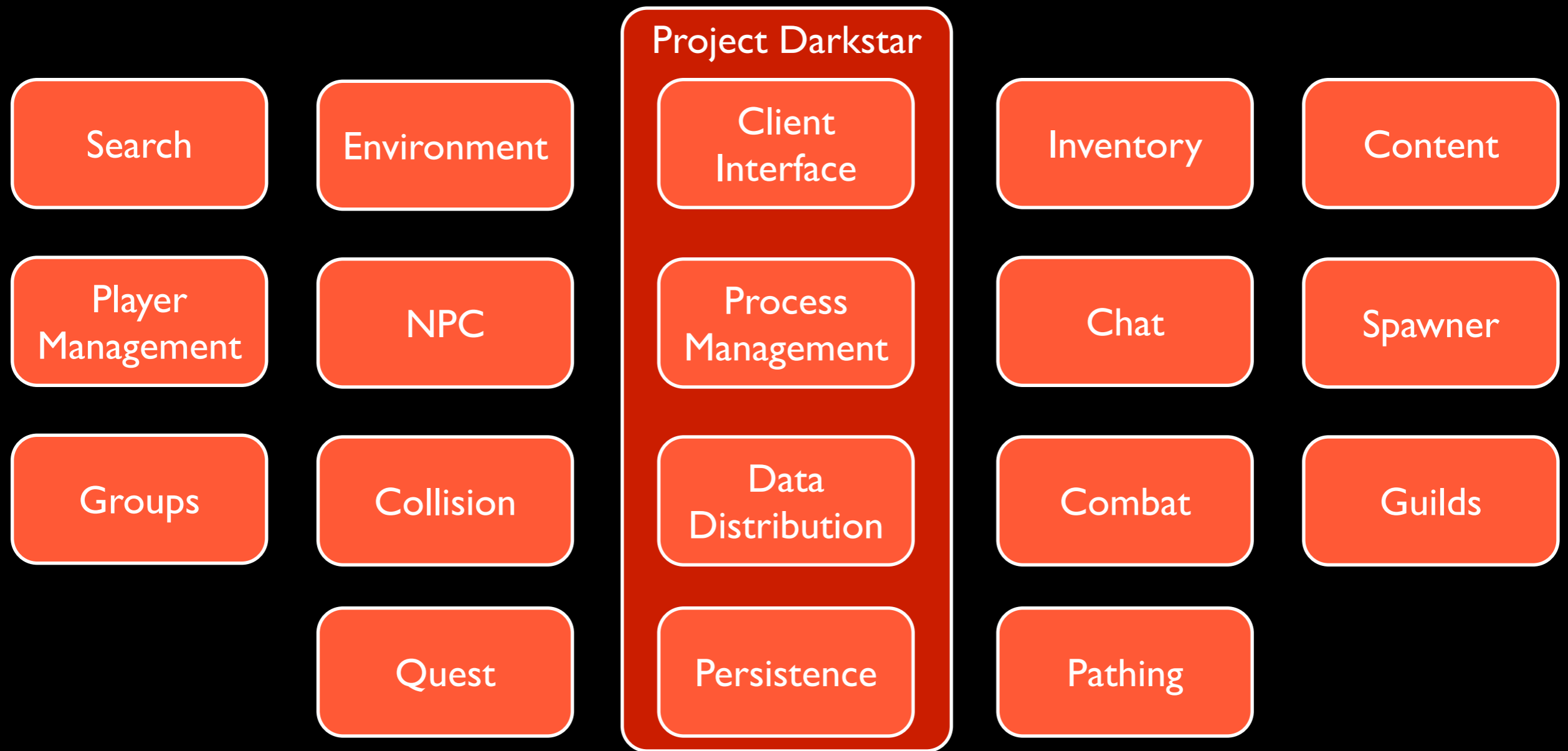
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### Core Game Services

#### Project Darkstar

Search

Environment

Client  
Interface

Inventory

Content

Player  
Management

NPC

Process  
Management

Chat

Spawner

Groups

Collision

Data  
Distribution

Combat

Guilds

Quest

Persistence

Pathing

## What services make an online game server?

Core Game Services

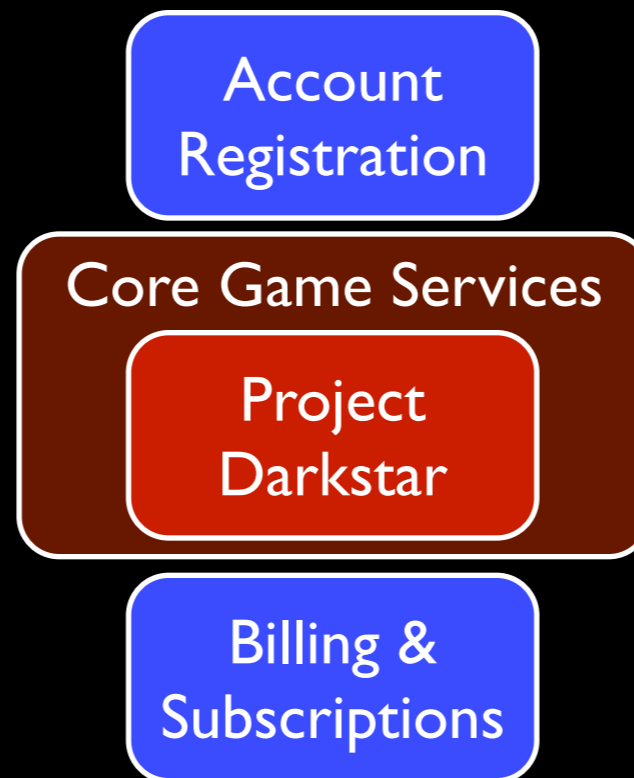
Project  
Darkstar

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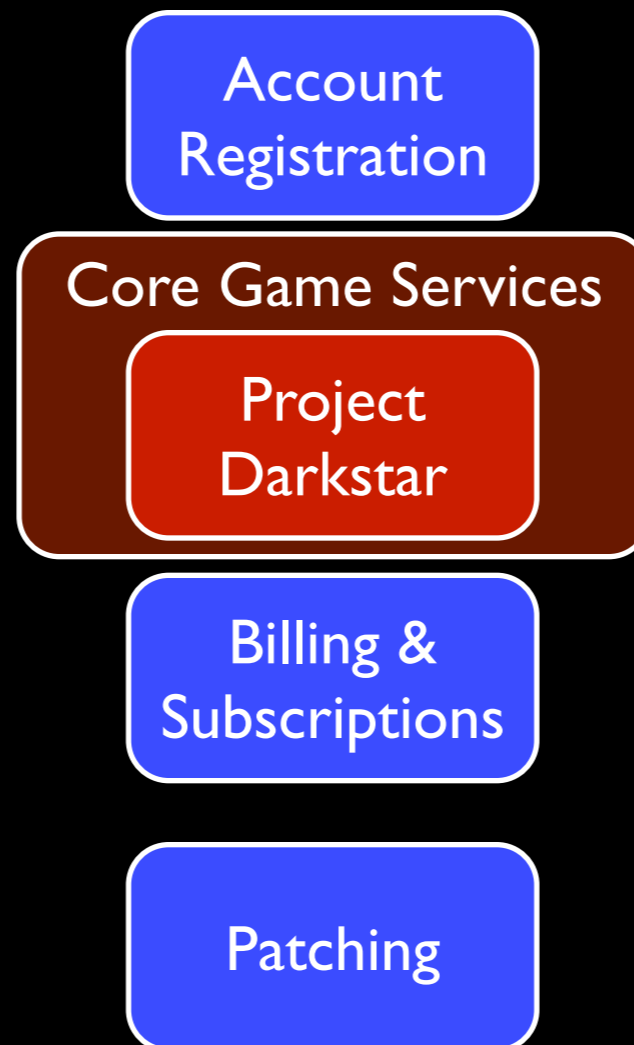




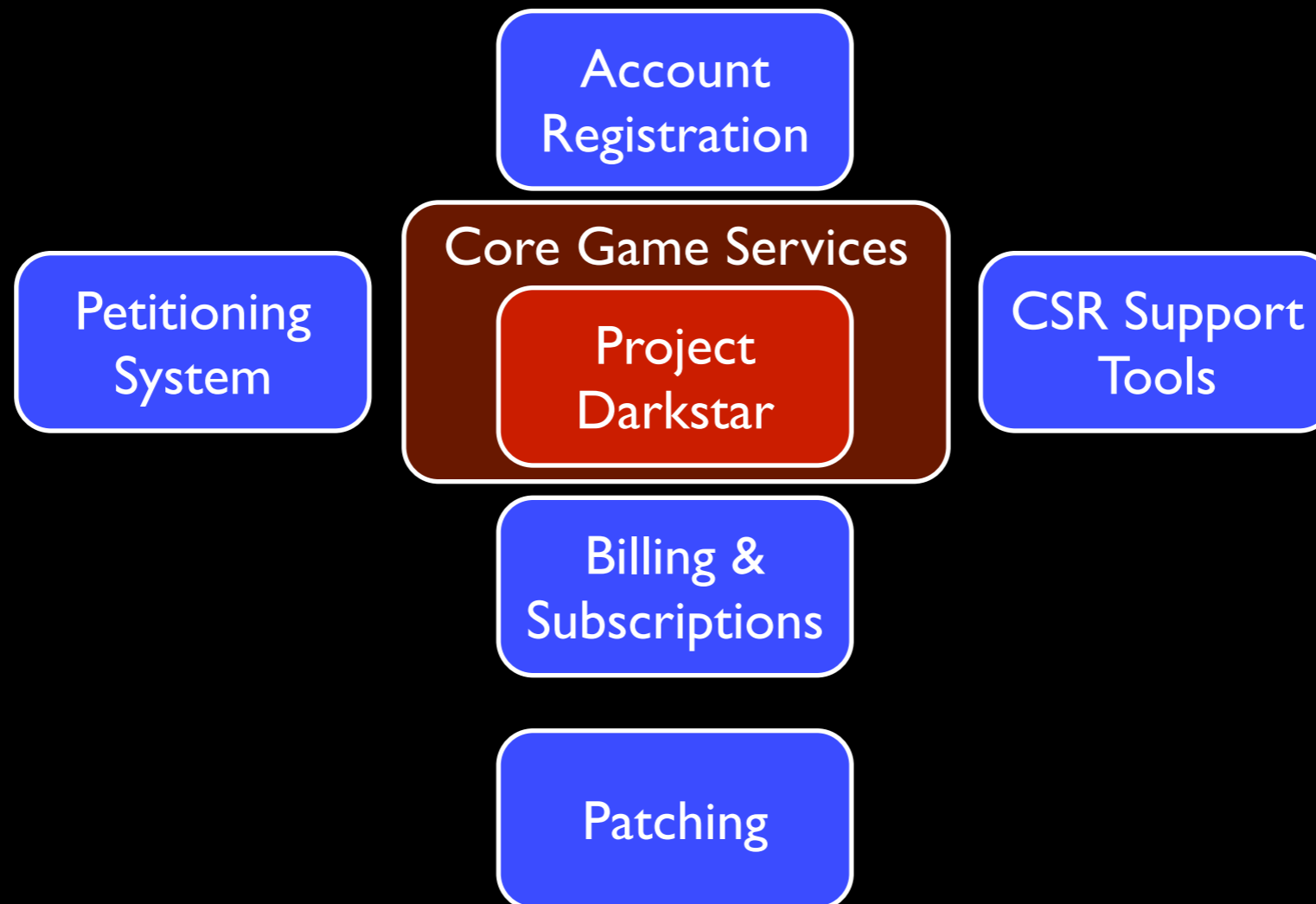
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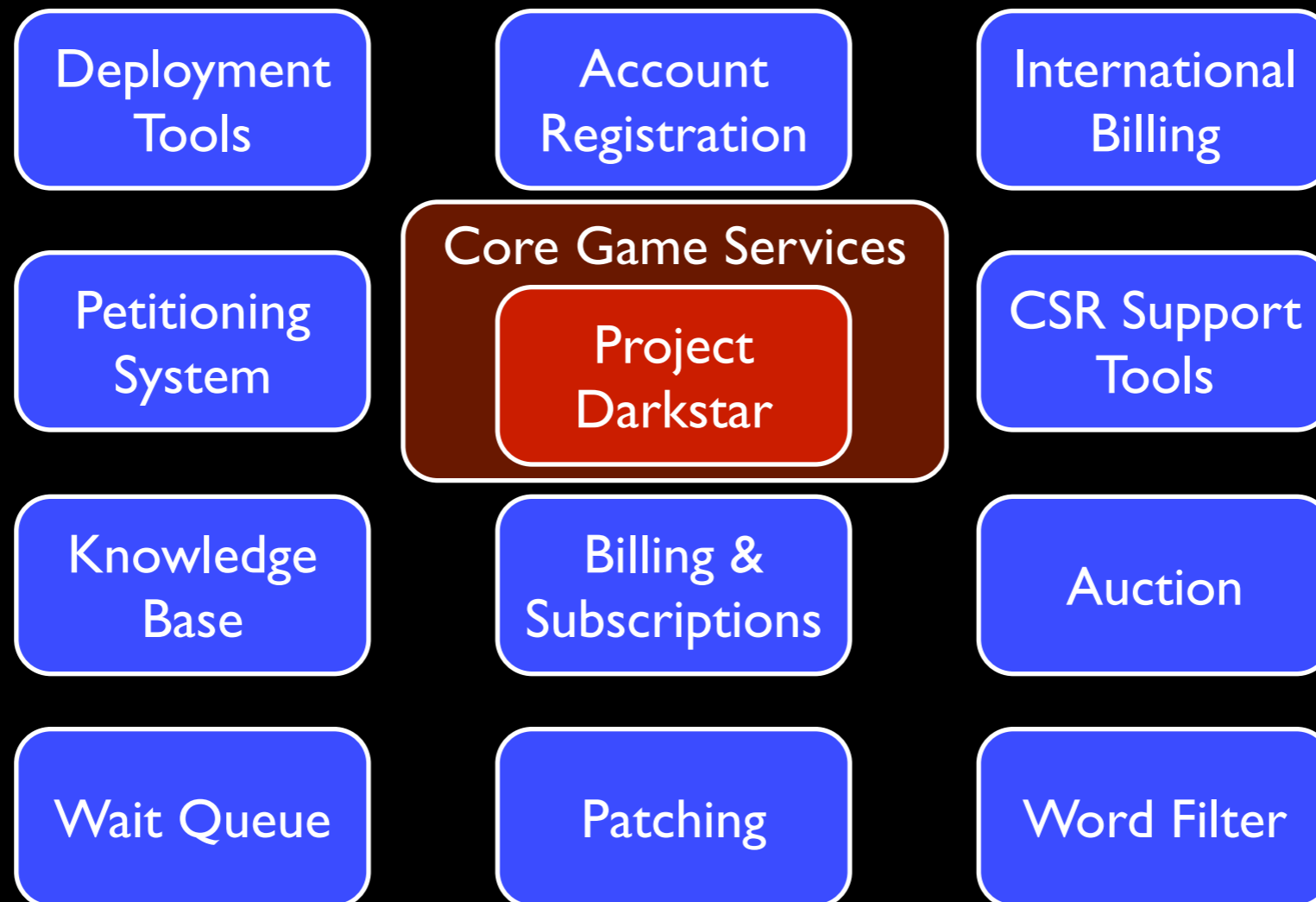
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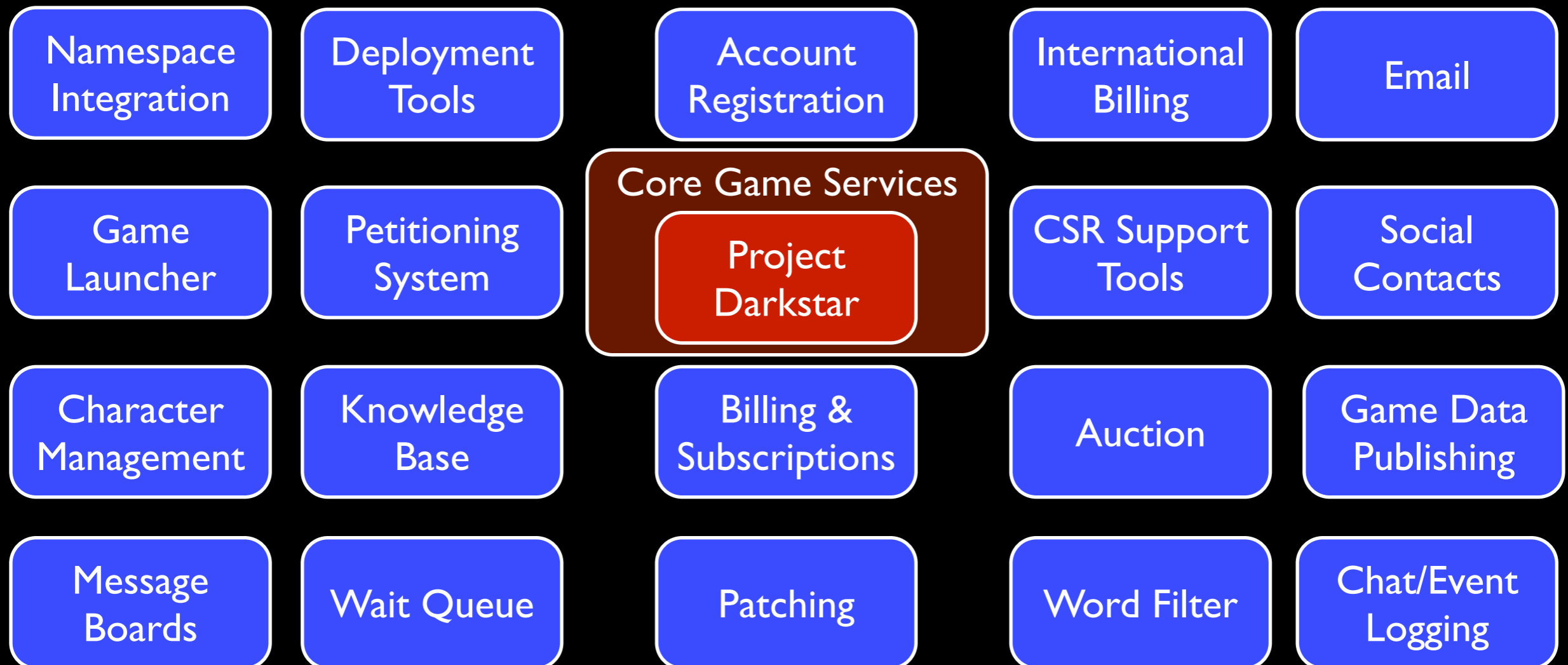
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There is a lot more to making an online game than just making the game.



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## Perpetual Entertainment Platform

Namespace  
Integration

Deployment  
Tools

Account  
Registration

International  
Billing

Email

Game  
Launcher

Petitioning  
System

### Core Game Services

Project  
Darkstar

CSR Support  
Tools

Social  
Contacts

Character  
Management

Knowledge  
Base

Billing &  
Subscriptions

Auction

Game Data  
Publishing

Message  
Boards

Wait Queue

Patching

Word Filter

Chat/Event  
Logging

There is a lot more to making an online game than just making the game.



## Research

- Research Goals
  - Explore Project Darkstar plugin architecture
  - Test various Platform services imbedded inside a Project Darkstar Server
  - Create a useable demo
  - Extend demo app outside of the server



## Research

- Project Darkstar Plugin Architecture
  - Requires support for two phased commits: prepare, commit/rollback.
  - Services exist outside of the regular services framework.
  - Two major components: Service & Manager

## Research

- Project Darkstar Plugin Architecture
  - Major Components:
    - Service - application-based service that works within a transactional context.
    - Manager - user-facing interface to the service.

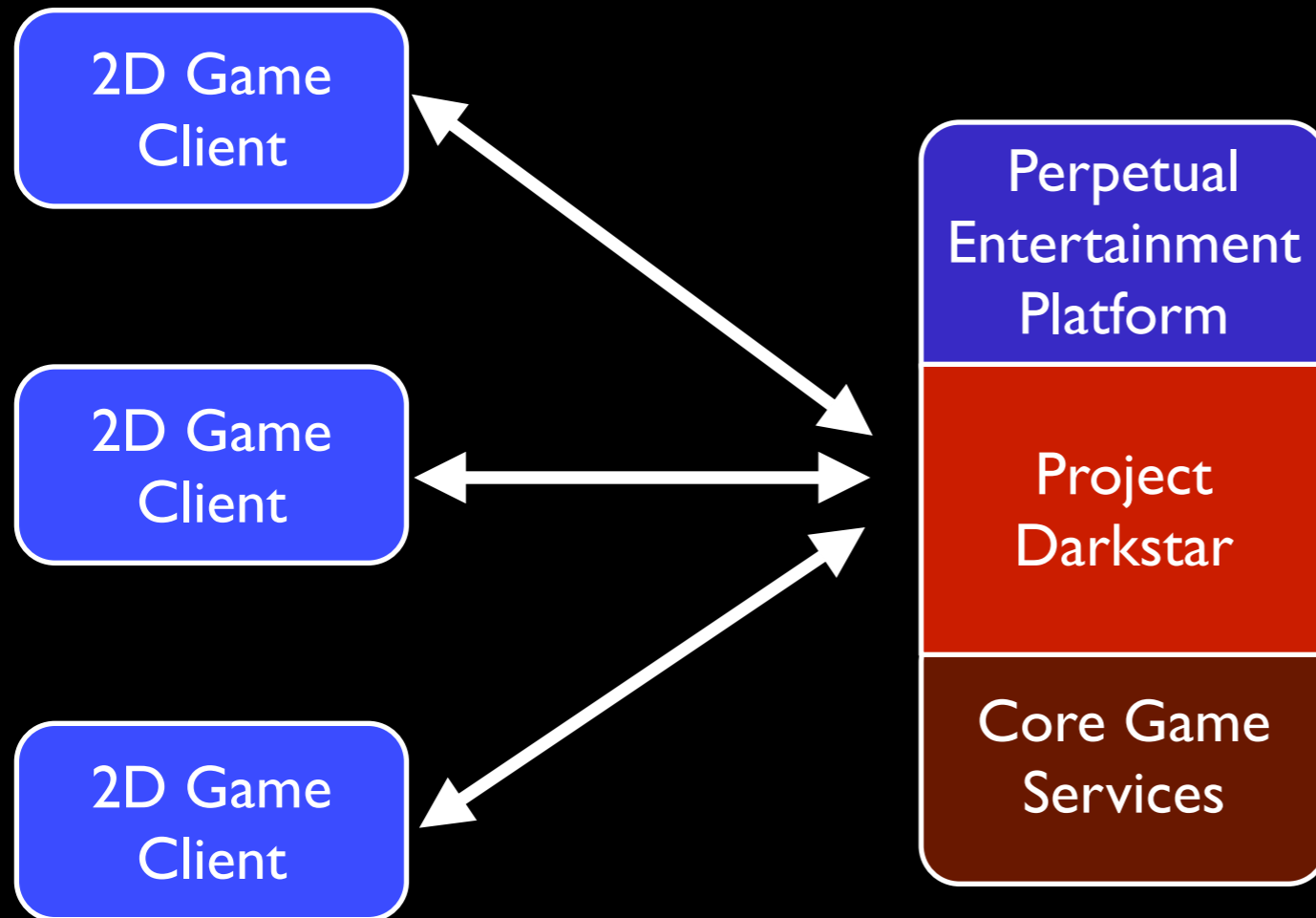
## Tech Demo

- Platform exists within Project Darkstar Server
- Exposed to Core Game as a Project Darkstar Component

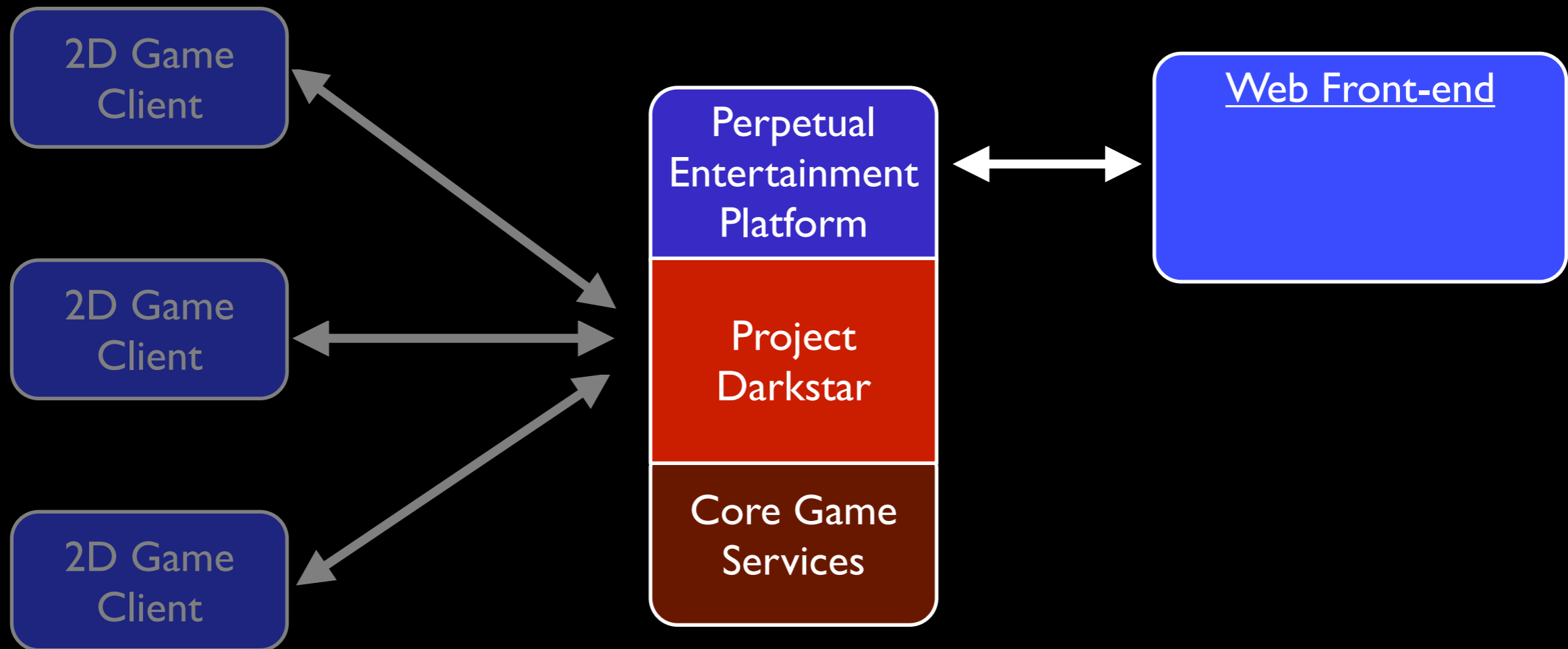


- Utilizes Project Darkstar Transactional Framework
- Communicates outside of the Server using it's own framework.

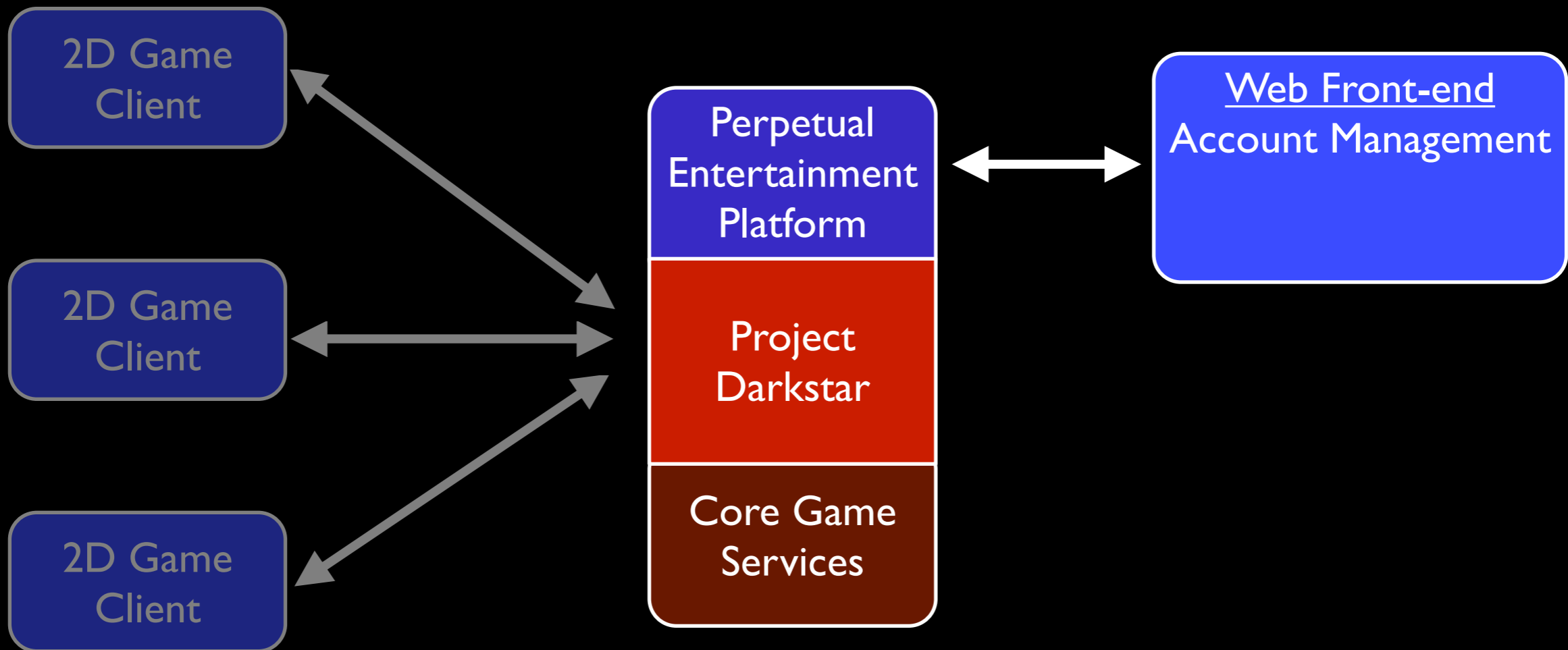
## Tech Demo



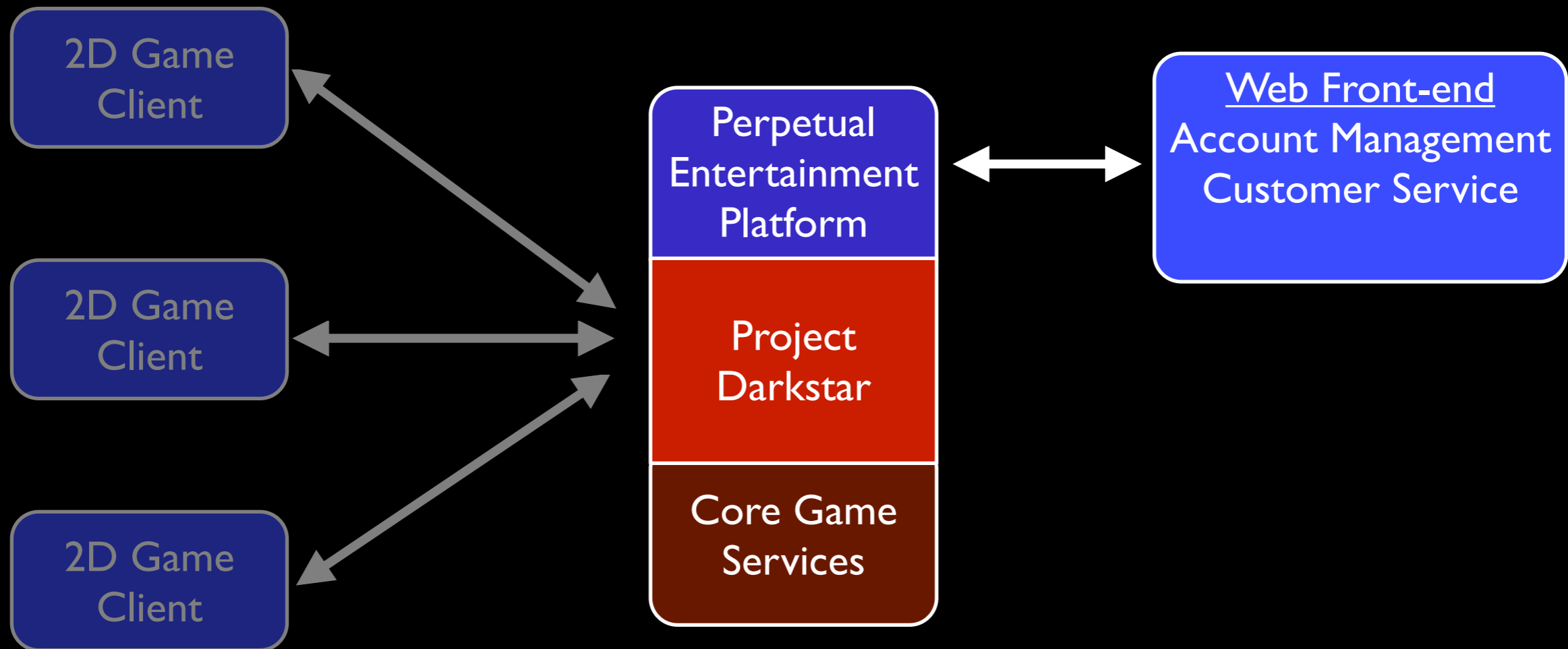
## Tech Demo



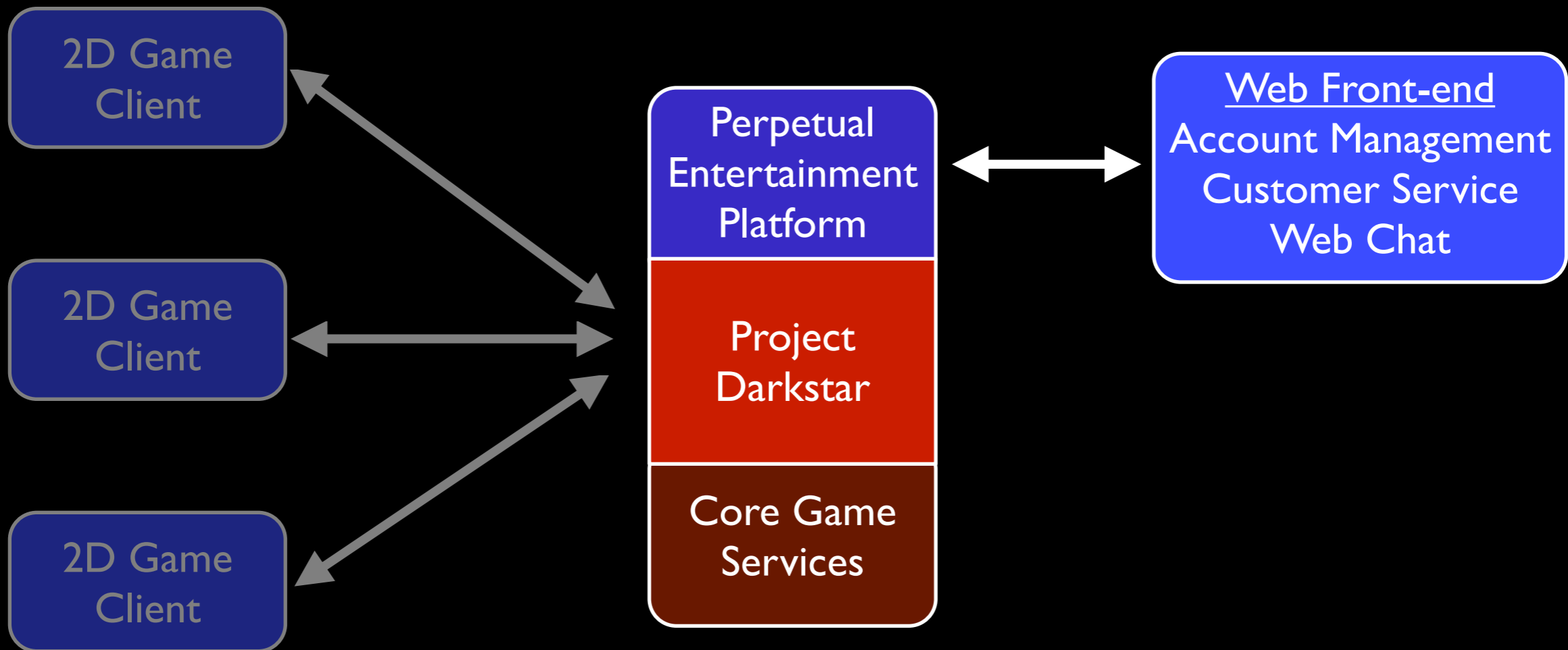
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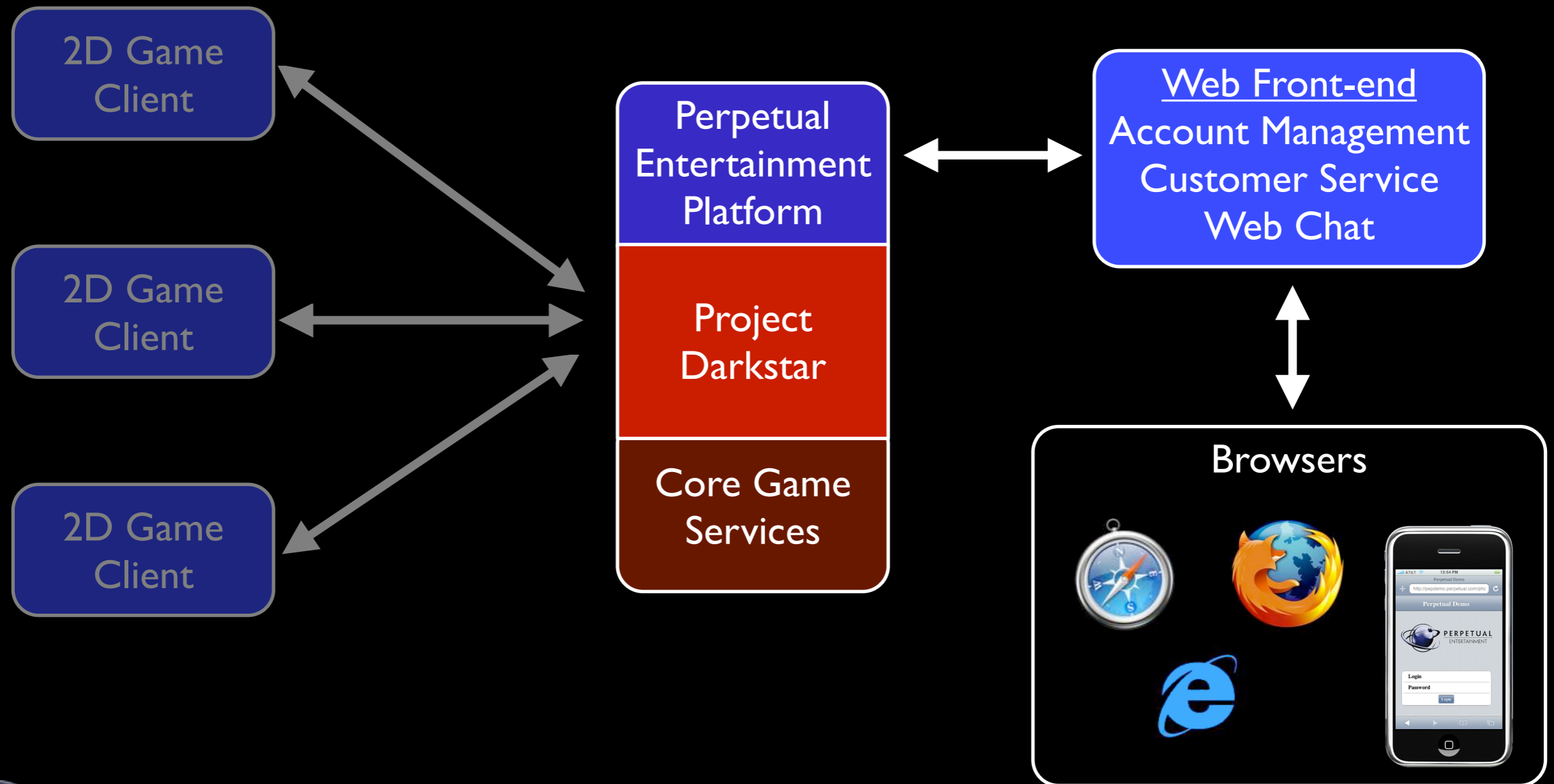


## Tech Demo





## Tech Demo



## Improvements

- Future Improvements:
  - Utility classes for transitioning work between transactional and non-transactional contexts.
  - More Platform services - currently only supports: authentication, character, entitlement, shard, social contacts, and chat services.

## Other Extensions

- Online Game Data Explorer
  - Live Web access to DataManager
  - Browse all named objects
  - Drill down into ManagedReferences

## Project Darkstar

- Stable, scalable, and easy to use
- Plugin Architecture opens up the door for third party extensions
- Open source

Project  
Darkstar

Perpetual  
Entertainment  
Platform

Core Game  
Services



PERPETUAL  
ENTERTAINMENT

## Perpetual Entertainment Platform

- Simple to integrate into Darkstar.
- Extend your game presence out of the box: web and mobile devices
- Scalable and Secure

Project  
Darkstar

Perpetual  
Entertainment  
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PERPETUAL  
ENTERTAINMENT

## Your Game

- Shorter Development Time
- Lower Cost
- Actually spend your time writing a game
- Write and Share your own extensions

Project  
Darkstar

Perpetual  
Entertainment  
Platform

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ENTERTAINMENT

# Contact and Info

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