

Dark Forest MUD

ddy@DFArchon



Dark Forest Intro



fully onchain game

MMO RTS

ZK => Fog of War

Active community development ecosystem

Dark Forest Ares



Dark Forest Ares is
community-maintained version of Dark Forest
early 2023 - mid 2024 DFAres Round 1 - Round 4

New artifacts: pink bomb, kardashev, stellar shield ..

Union systems

Modified ZK circuit to enable controlled resource allocation

More updates ...

Dark Forest MUD



A new chapter unfolds here !

mid 2024 - now Dark Forest MUD

Oct 2024 Dark Forest MUD v0.1.1

6-days public test events

WHY?

lower the barrier for developers

Highlight Buffs minimize close

Highlights:

Artifacts

Spacetime Rips

Defense

Energy Cap

Speed

Energy Gro

Range

Filters:

Min. level:

Max. level:

Level 2

Level 9

Max. range:

Planet type:

Up to 999,999

All types

Display options:

Ellipse

Pulse Opacity

Line

Pulse Radius

Line Dashed

Pulse Line Width

Sync Pulses

Pulse Fast

Quick Upgrade

minimize close

0 \$ETH)

Connect

silver: 1,167,888,000

No planet selected or cannot upgrade.

All planets:



Perform

Reaction Pull

Level 7 Rank 3 Planet

help minimize

Limit R

unlin

max F

max p

stop

Cache z

max. SN

Clear

832K / 1.3M 66.4K / 300K

8.64 0

50 240 12.9K

832K energy 100%

66.4K silver 100%

Send

Upgrade

Info

Broadcast

a

21:36:52

place player score

1. 0x8410418774d4be9a 1167888000

2. 0x4dd08544495feca0 95435000

3. 0xa0095b4972238f64 38973000

4. 0x1374aa610aaf37fe 0

5. 0xc0306150c22f9e8b 0

6. 0x1ebefcfb6f60f863 0

7. 0x31956d52ce23e814 0

8. 0x3e3aa47614c75d8a 0

9. 0x46662ecc7cab334b 0

10. 0x340c59db773ba025 0

11. 0xb3b25c42be62540 0

refresh

Move



Explore!

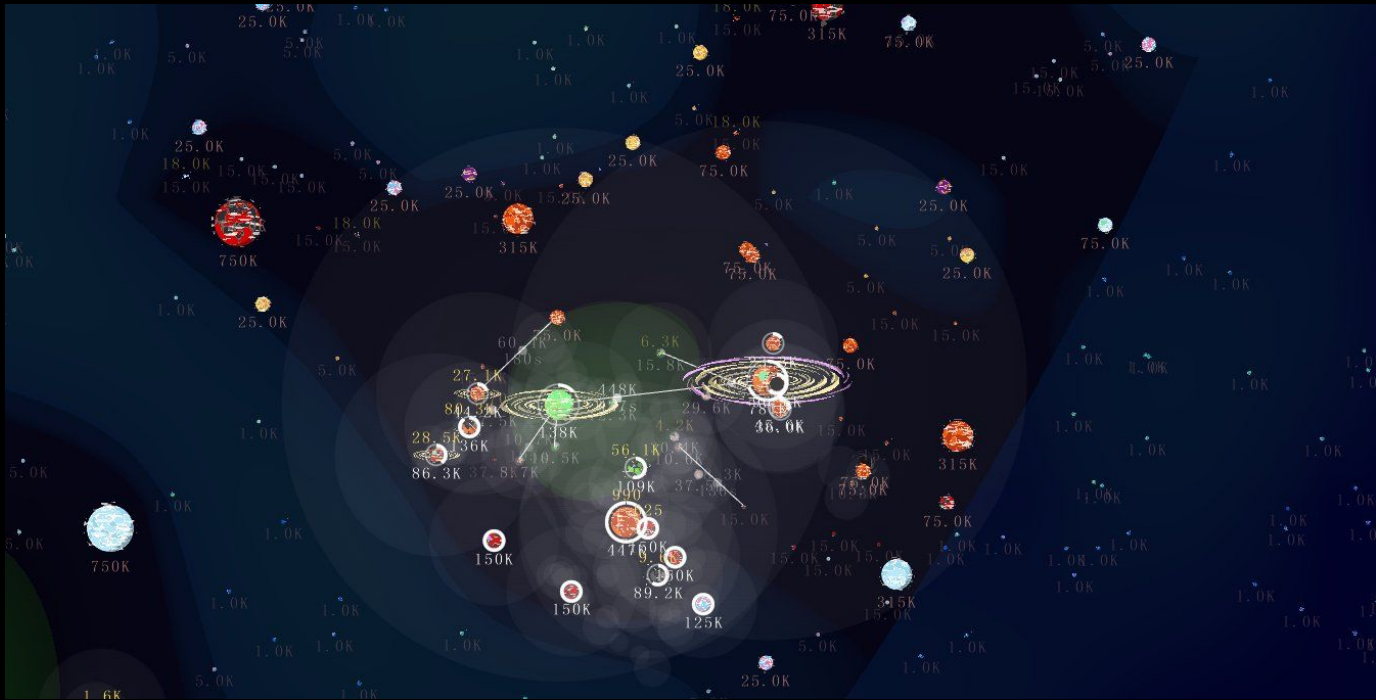


space

(-15970, -79192)

TEMP: 24° (SPAC

Dark Forest MUD



we love classic client style

Dark Forest MUD



game interface remains unchanged

pluginsAPI remains unchanged

refactor the implementation of upper-level API

refactor ALL state management modules

refactor ALL test scripts

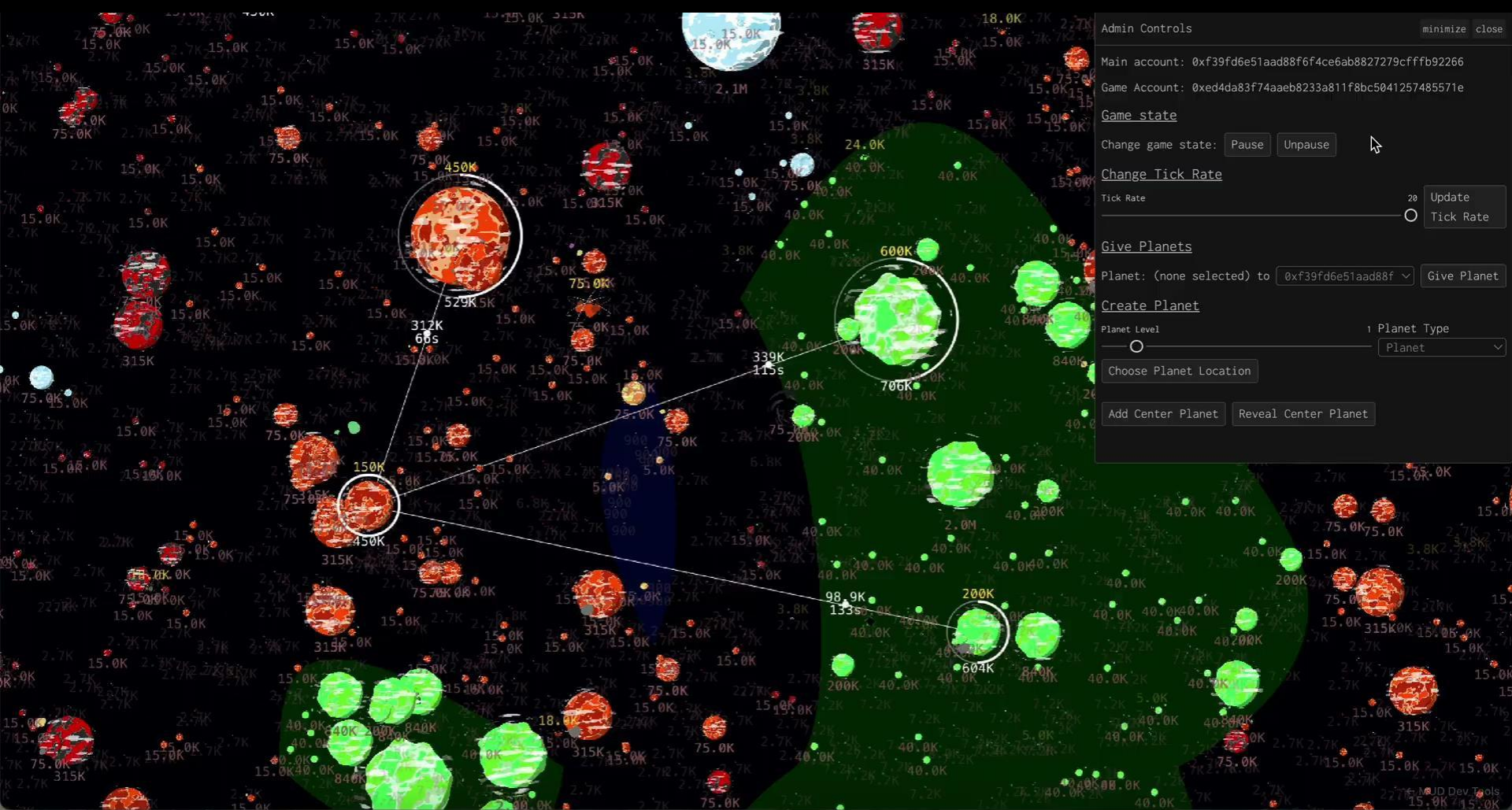
refactor ALL contracts using MUD

Variable-rate tick system

All game logic is updated based on ticks,
instead of block time.

- ✓ Game pause & resume
- ✓ Dynamic adjustment of game state update speed

It provides the possibility to build feedback regulation mechanisms.



think in protocols

How can we build a set of protocols to support
richer game content while fully leveraging
scalability and composability?



Dark Forest MUD



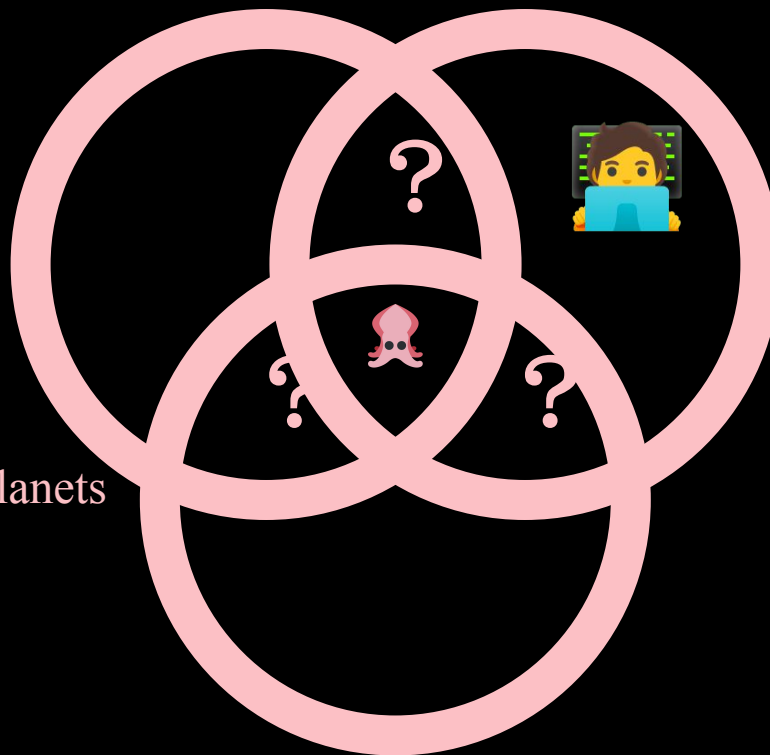
Planet

planet types
range
speed
defense
energy growth rules
send energy between planets



Players

address
homePlanetId
score
whitelist
union system



Artifacts

Function as Entity

Artifact

The artifact carries state transition functions

External composability

Artifact = NFT (ERC721)

utilize all base services built on the ERC721 standard

Function as Entity

Internal composability

Artifacts can serve as highly flexible bridges connecting all entities within the game.

Different functions can be added to the creation, activation, and disappearance of artifacts.

open source contracts & client

github.com/dfarchon/darkforest_mud

[twitter@darkforest_mud](https://twitter.com/darkforest_mud)