CryptoAssault: World War 2

White Paper v0.3

Table of Contents

1 Economic Changes

- 1.1 Assault (ASLT) Token
- 1.2 Resource Updates

2 Land Value and Distribution Changes

- 2.1 Land Value Changes
- 2.2 Distribution Changes
- 2.3 Satellite Changes

3 Gameplay Changes

- 3.1 Unit Changes
- 3.2 Clans
- 3.3 Salvage
- 3.4 Equipment
- 3.5 Events
- 3.6 Disasters
- 3.7 Levels
- 3.8 Quests

4 New Islands

- 4.1 Battle Royale Island
- 4.2 1v1 Islands
- 4.3 F2P Island

5 Roadmap

1 Economic Changes

1.1 Assault (ASLT) Token

CryptoAssault will be changed so that a new in-game sustainable economy will be created to replace the original one. The new economy will be centered on resources and a new ERC-20 token the Assault (ASLT) Token. In-game marketplaces and decentralized exchanges will be leveraged such that resources can be exchanged for ASLT token and ASLT token can be exchanged for ETH in a p2p manner.

ASLT will be used to purchase special assets from the in-game store (during periods when they are available for sale) as well for speeding up in-game wait times such as deployment and crafting cooldowns.

Crafting recipes for some recipes and units may also require ASLT tokens.

There will be 10 million ASLT tokens initially which is aimed to be distributed to the economy over the course of a year. After a year, ASLT tokens will be created at a rate of 2% per year distributed directly to players via land/salvage dividends and satellites. It will be initially seeded through promotions, bonuses to crate purchasers, land distribution, and satellites in the following distributions:

- 20% reserved for additional promotions and partnership incentives
- 15% reserved for quest rewards when they are implemented
- 25% allocated across random satellites over the course of a year
- 40% allocated in land distribution over the course of the year with 4/7ths allocated in the first 4 months and 2/7ths allocated in the second 4 months and 1/7th allocated in the final 4 months

ASLT will initially be tradeable through an in-game exchange powered by Uniswap with the aim of being added to additional exchanges over time. Whenever ASLT token is spent for any purpose in game, 90% will be redistributed back in the form of land/salvage dividends, quests, and satellites over the course of the following 30 days. The remaining 10% will be immediately sold on the marketplace as a fee to cover development costs.

This mechanism ensures that there is always an incentive for the developers to continue to create compelling experiences for players to want to purchase ASLT for and it also serves as a balance to the market where if a player attempts to "pay to win" through purchasing and using ASLT tokens, they ultimately provide liquidity for opponents to get ASLT tokens for cheaper to counteract them.

1.2 Resource Updates

The number and utility of resources will be significantly expanded beyond the four that is currently available. In addition, resources will have different rarity tiers. Unlike before when resources only spawned according to the zone they were attributed to, all resources have the potential to be spawned in any zone but rarer resources will spawn more frequently in higher tier zones.

When you mine any particular resource patch, it has the potential to be a higher rarity patch. Visually, all patches of a particular resource type look the same and only someone actively mining will be able to identify which rarity tier the patch is.

New resources with rarity tiering is as follows:

- Oil -> Petroleum -> Fuel Cell
- Iron -> Steel -> Carbon Fiber
- Titanium -> Composite Materials -> Nanomaterials
- Uranium -> Purified Isotope -> Fission Material
- World Essence (No Higher Tier)

Frequency for rarity is the following:

- Tier 1: 89%
- Tier 2: 10%
- Tier 3: 1%

Resources will be used to power up units and fuel special abilities that some units or equipment will have. They can also be crafted into one time use items, equipment, or sold in the in-game marketplace with ASLT tokens. They may be used to craft units as well but this will require significant resource investment and have a long crafting time.

World Essence is a unique resource that is necessary to craft "doomsday weapons". These are a series of extremely powerful single-use items and destructible units that are capable of completely changing the battlefield and course of a war.

World essence is unique in that it cannot be immediately mined. It only appears surrounded by patches of other resources in layers. Only the outermost layer can be mined at a given time and all surrounding resources must be mined before the world essence patch is mineable.

This means that players who wish to mine World Essence will need to hold territory for long periods of time that is likely to be highly sought after.

2 Land Value and Distribution Changes

2.1 Land Value Changes

The value associated with land will be redistributed to make the various zones in the main island fairer:

- Z1: 20%
- Z2: 20%
- Z3: 25%
- Z4: 35%

All zones will have similar total land value but the inner zones have less area so each block in the inner zones is still worth significantly more than the outer zones.

2.2 Distribution Changes

Distribution will only be 65% dependent on controlled land. It will also be 35% dependent on salvage (see below) which is obtained through destroying units. In addition, there is a clan scaling factor that is dependent on your clan's relative strength to other clans. Members of a totally dominant clan in land value will receive fewer rewards due to this scaling factor in order to incentivize members of the clan to leave and join other clans to keep the game balanced.

The scaling factor is calculated as follows based on ranking:

- Top Ranked Clan by Land: $Scaling = DV * (0.4 \sigma)/0.4$ where DV is the unweighted distribution value and σ is the standard deviation of all five clans
- Rank 2 Clan: Scaling = $DV * (1 (1 (0.4 \sigma)/0.4)/2)$
- Rank 3 Clan: No penalty or bonus
- Rank 4 Clan: Receives bonus equivalent to the penalty of rank 2 clan

• Rank 5 Clan: Receives bonus equivalent to the penalty of rank 1 clan

In the unlikely event of a tie, the penalty or bonuses are averaged and distributed equally across clans that tie.

Because it's based on standard deviation, this scaling factor will always encourage people to join the weakest clan and leave the strongest clan regardless of the actual distribution among the five clans. Clan changes are limited to once per week to prevent excessive hopping and keep land gains meaningful (at least for a period of time)

It also introduces political friction into the system where the structure may encourage people to leave and betray clan-mates which ultimately increases the tension of the game.

2.3 Satellite Changes

Satellites will now require a unit to move to the dropped location to pick it up. This encourages active play and the potential to steal a satellite from the territory of players that are not paying attention.

Satellites will also drop more frequently, three times a day instead of once every 3 days.

Satellites contain one of the following: ETH, ASLT tokens, resources, equipment, consumables, or units.

3 Gameplay Changes

3.1 Unit Changes

Crate sales for current units will be removed prior to the rollout of the new economy. This will be to combat unit inflation on the map. In the future, new seasons of units will be rolled out with special abilities that affect how units interact on the map. Effects include such things as ranged / area of effect attacks, abilities which decrease movement distance or cooldown for targeted units, deploying traps in particular areas, and many more.

Units from the current crates will be known as Season 0 or Genesis units. While future units will have more abilities which add more strategic options, they will never have the same level of base stats as Genesis units.

Additionally, special islands may be implemented which only accept units from particular seasons. These rotational islands will further keep unit inflation in check. However, Genesis units will always be allowed regardless of the current rotation.

Destructible units will also be implemented which can be crafted using resources. Crafting a destructible unit will produce an ERC-721 but in order for it to be used, it must be attached to the in-game contract. You will be allowed to detach it for trading but it must be re-attached in order for it to be re-deployed.

If a destructible unit is destroyed, it will be lost forever similarly to when units are fused to create a higher star unit.

Destructible units can be used to enter tournaments, but similarly to if they are destroyed in the main island they will also be destroyed if they are lost in the tournament. This will allow for a cheaper alternative for players who wish to enter

the tournament but do not want to buy units, especially when the supply is no longer readily available once Genesis crate sales stop.

Units will have the ability to be recalled if they are deployed. The recalling process takes 24 hours during which time the unit can neither attack nor move but can still be attacked and will defend itself if attacked. Players may cancel the recall process before 24 hours is up but would have to start over with the full countdown if they decide to recall again. Successfully recalling the unit removes it from the map and allows it to be redeployed again.

For destructible units, only recalled or un-deployed units may be detached and traded. This is to avoid player exploiting detaching when faced with a tough strategic position.

3.2 Clans

As stated earlier, gameplay will be rebalanced into clans. There will initially be 5 clans but additional ones can be added as the player base grows. Players will be heavily incentivized to join a clan as players not in a clan will take a 50% penalty on land value. Players in a clan are not able to attack one another nor do their units block the path of their clanmate's units though two units still cannot occupy the same location.

As previously indicated, highly dominant clans will receive a penalty which is distributed to weaker clans in order to encourage switching.

Players may leave their clan and rejoin a new one once per week without penalty. They may do so more frequently by using ASLT tokens.

3.3 Salvage

Salvage is given every time a player attacks regardless of whether they win or lose. If they win, they gain salvage equal to the defender's power. If they lose they will gain salvage equal to half the power of the unit that they attacked with. The amount of salvage an account holds drops by 0.1% every minute. The proportion of salvage drained per player relative to the total amount drained

across all players determines the share of the salvage dividends that this player is eligible for.

This is to encourage combat and discourage excessive camping as 35% of the distribution will be provided to players based on destroyed units.

3.4 Equipment

Equipment will be items that are (with rare exceptions) destructible but can be attached to units. Units will have a certain number of equipment slots and players can attach useable equipment at any time regardless of whether the unit is deployed, repairing, or able to be deployed. When a unit is destroyed, regardless of whether the unit is destructible or not, any equipment attached to it will be destroyed.

Equipment can give units boosts to base abilities, or give them special abilities. Some equipment provide one-time use abilities and when they are used the equipment is destroyed.

3.5 Events

Periodically, special events will occur on the island such as an invasion by NPC units or a boss event where players need to work together to bring down a big enemy.

Players can choose to engage in the event in order to gain potentially valuable drops or take advantage of the chaos in order to gain the upper hand on the map.

3.6 Disasters

High value regions such as the center will be subject to periodic disasters. Disasters occur randomly and during disasters each unit within a specified area will have a negative effect incurred upon them (e.g., temporary inability to move or attack) or be destroyed. Disasters will occur in both Z3 and Z4 with a higher frequency in Z4. The size of the disaster region will be variable with more frequent disasters occurring on a smaller region but rarely a large region (potentially an entire zone) will experience a disaster.

Players will receive a 4 hour warning that a disaster is imminent in a particular region. After the warning period, the disaster will occur in that region at a random time within the next 2 hours.

This will provide players with some time to prepare for the disaster and opposing clans to strategize a response as well.

3.7 Levels

Players will be able to gain experience for levels by performing actions in the game and completing quests. Levels will unlock harder quests that have the potential to provide better resources.

In addition, levels are necessary to advance in the F2P Island.

3.8 Quests

Players will have daily, weekly, and monthly quests which they can perform in order to obtain resources and ASLT tokens. As they level up, the quests that are available to them will be more challenging but they will be more rewarding as well.

Quests include tasks such as destroying units, deploying/moving units, holding a particular piece of territory for a period of time, gathering a certain amount of resources, etc. During events, special additional quests can appear as well.

4 New Islands

4.1 Battle Royale Island

A new Battle Royale mode will be implemented on a separate island and will be held once every two weeks. Players purchase Command Points in order to enter the event. Command Points can then be used to deploy units on the tournament island once the deployment period begins. Players are also able to purchase Resource Points which would allow them to transfer resources from the main island to the tournament island to be used in tournaments. All purchases will go towards a pool which will be awarded in the following way:

- 20% of total prize pool will go to the account with the final unit(s) on the battlefield
- 10% of the total prize pool will go to the second to last account with active units on the battlefield
- 20% of the prize pool will go to accounts with the final unit in each of the unit types (4% for each of the five types)
- 15% of the prize pool will be distributed based on the amount of the tournament-only Crystal Shard resource that players collect over the course of the tournament
- 20% will be allocated to the player with the most land value at a random points during the tournament (four random time points will distribute 5% each, two during Engagement Phase 1 and two during Engagement Phase 2)
- 5% will be allocated to satellites in the main island

 10% will be collected for development fees and to pay for costs of tournament hosting

The map will include all four zones initially but will shrink during the later phases of the tournament. All land values are the same regardless of which zone units are in (e.g, every block across the map has the same land value). In addition, spawn frequency for resources are the same across all the zones as well. However, the same rules apply with only four star units able to go into zone 4 and so on for the other star values. This allows higher star units to have access to any resources that spawn towards the center as well as gain protection against lower star units, at least in the initial portion of the tournament, in exchange for a higher cost of Command Points to deploy.

Command Points and Resource Points are spent in the following way:

- Base Command Points requirements are 1 point to deploy a one-star, 3 points to deploy a two-star, 8 points to deploy a three-star, and 22 points to deploy a four-star
- A rarity multiplier is applied on top of that base value with commons being 1x, rares being 3x, epics being 9x, and legendaries being 27x
- Examples: A four-star rare will cost 66 Command Points to deploy and a two-star legendary will cost 81 Command Points to deploy
- One resource point will allow players to carry over 108,000 oil, 36,000 iron, 12,000 titanium, or 4000 uranium

Tournaments will occur in the following phases:

- Purchase Phase: Players may buy Command points and Resource Points for the current week's tournament or receive a discount when buying for multiple tournaments
- Deployment Phase: Players will have 24 hours to deploy their units and decide which resources to transfer using their Resource Points. During this phase, players may deploy units but not attack any units or move units that have been deployed. Units on resources during this period will not be

able to mine them. Command Points and Resource Points are purchasable at the regular price.

- Engagement Phase 1 (48 hours following Deployment Phase): Players are able to attack, move, and mine resources. Units that are destroyed may be redeployed using additional command points. Command Points and Resource Points are purchasable at 150% of the price. Note: Players who win the land value drops during this period of time will only be awarded their prize after the period ends. Winners will be identified but the amount won will depend on the final prize pool amount which won't be known until after the purchasing period ends. They will at minimum win the amount that is displayed at the time of the drop but it may be greater.
- Engagement Phase 2 (96 hours following Engagement Phase 1): The map will begin to shrink and any units that are outside the bounds of the map as it shrinks will be destroyed. The inner zones will shrink most rapidly as the island becomes smaller. Over time, all the zones will disappear except zone 1. Destroyed units will no longer be deployable. This will continue until there is only one account remaining which controls deployed units.

Command Points and Resources Points will be sold at a base price of 0.01 ETH each. However, players may purchase points for the current tournament and the next tournament for a 10% discount. So 100 Command Points for the current tournament will cost 1 ETH to purchase. However, 50 command points for this tournament and 50 for the next will cost 0.9 ETH to purchase. The same goes for resource points.

Units that are used for tournaments will be removed from their position in the main island. They enter the tournament with none of their resource bonuses and must be refueled with tournament resources. They will be re-deployable (assuming they are not destructible) in their original state following the end of the tournament.

Units that are under repair can be used for tournaments. However, during the period they are deployed for a tournament, their repair timer is paused. When the

tournament ends they will continue repairing from the point they were used in the tournament.

When new mechanics are implemented (Equipment, etc.) the tournament rules will be updated accordingly to account for new features.

4.2 1v1 Islands

Players will be provided the opportunity to challenge and set up their own 1v1 tournaments. Have a beef with someone on the main island? Challenge them to a duel! Duels will be similar to the Battle Royale tournament system but have additional game modes such as king of the hill, capture the flag, etc. which the players can choose from.

Players will select how many command points / resource points to purchase (must be the same for both players). The winning player will obtain 85% of the prize pool and 5% of the prize pool will be distributed to the main island. 10% will pay for hosting and development fees.

4.3 F2P Island

All players will be provided a set of units that can only be deployed on the F2P island. These will not be tokens on the blockchain. As they level up, they will unlock more and new units that can be used in this island. Units players own on the blockchain will not be eligible to be deployed on this island.

Players playing on this island will be able to fight for a limited pool of resources that they can carry over to the main island. This provides players with the opportunity to spend time playing for free to begin collecting resources that they can either sell or craft into destructible units which can be deployed in the main island, albeit very slowly.

5 Roadmap

The order of development will be as follows:

- Battle Royale Tournament
- 1v1 Island Deployment
- Stopping of Genesis Crate Sales
- Balancing Changes to Main Island (Clan and Land Value Changes)
- Implementation of Salvage Mechanic
- Economic Changes / Introduction of ASLT Coin and New Resources
- Gameplay Changes (Events, Disasters, Quests, etc.)
- New Seasons of Units / Features (Crafting, Abilities, etc.)
- F2P Island Deployment

All of this may be changed as development progresses with community feedback heavily influencing development priorities and decisions.