Abstract

The Hash Rush project brings cryptocurrency mining to the world of real-time strategy gaming. Players build their own in-game mining colony with units and structures which correlate with real-world cryptocurrency hashing power. By spending Rush Coins, an ERC-20 standard token, players can improve and expand their colony, increasing their stake of hashing power in the Hash Rush Mining Farm. Players can also participate in single and multiplayer missions for in-game bonuses that further help them to develop and maintain a more profitable mining colony.

The Hash Rush ICO, which starts September 20, 2017, will fund further development of Hash Rush and its supporting mining infrastructure.
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Project Overview

Introduction

Hash Rush is a world-first that brings together gaming and cryptocurrency mining. Gamers can earn cryptocurrencies such as Ethereum (ETH), Ethereum Classic (ETC), ZCash (ZEC) and Monero (XMR) by playing a sci-fi real-time strategy game, using in-game purchases, tradeable items and quest rewards to boost their earnings.

By building a mining colony on a randomly generated planet, players’ units and structures contribute to their overall real-world hashing power. This hashing power directly correlates to a portion of the Hash Rush Mining Farm’s output, earning players a portion of the cryptocurrency their units are mining.

The following table illustrates potential earnings when mining three of the major cryptocurrencies with hashing power equivalent to a single GPU:

<table>
<thead>
<tr>
<th>Cryptocurrency</th>
<th>Hashing Power</th>
<th>Monthly</th>
<th>Yearly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethereum</td>
<td>25.5MH/s</td>
<td>$47.40</td>
<td>$576.67</td>
</tr>
<tr>
<td>Ethereum Classic</td>
<td>25.5MH/s</td>
<td>$46.06</td>
<td>$560.40</td>
</tr>
<tr>
<td>Monero</td>
<td>700H/s</td>
<td>$50.22</td>
<td>$611.04</td>
</tr>
</tbody>
</table>

Example hashing rewards accurate as of September 6, 2017. These figures subject to change as market values fluctuate. ETH, ETC and XMR shown as examples. Cryptocurrencies available for mining may differ.

The Hash Rush Mining Farm & Mining Pool

The Hash Rush Mining Farm will launch with mining power totalling 5GH/s for coins that use the Ethash algorithm. The team will continuously increase this total based on pre-sale and ICO funding milestones as well as live game revenue targets.

The Hash Rush team will also launch its own public Mining Pool which anyone can connect and contribute to, which will also increase the total hash power available. The pool will carry a 1% pool fee, which will be reinvested into the mining farm itself. Miners who use the Hash Rush Mining Pool will enjoy the added bonus of earning a share of Rush Coins from the 3% allocated (see ‘Maximum RC supply and distribution details’ on page 4).

Hash Rush Business Model

Hash Rush will generate revenue in four key methods:

1. From the proceeds of the mining farm
2. From the mining fee paid by users of the public mining pool
3. From the ‘Galaxy Tax’ on RC spent on trade of items/units/cards when players use the in-game market
4. From the value of RC spent purchasing new or unique cards/units that the dev team place for sale on the in-game market

Note that we are planning to bring all future Hash Rush game updates, additional maps, factions and other in-game content will to players free of charge.
Hash Rush: The Game

Summary

Hash Rush is set in the fictional Hermeian solar system where cryptocurrencies are the most valued of commodities, and, for many of its citizens, their primary source of income. The objective of the game is to manage your colony, advance into neighbouring territories and transform your small mining operation into the envy of the solar system.

At the start of the game, players choose from 3 different factions, each with their own look, playing style and storyline, and are tasked with managing their colony on a randomly-generated planet. They will have numerous upgradeable units and structures at their command, and must balance exploration, base-building and mining all while facing threats from local predators and the ever-present risk of natural disasters.

Players in the same faction can benefit from linking their planets’ operations via joint transit zones, as well as unite to compete in regular challenges against the other two factions. Those who prefer to go it alone can also participate in single-player questions and solo challenges, gaining bonuses that benefit both their in-game and real-world mining efforts.

A more detailed overview of the game, including its various game modes, mechanics, factions, units and more will be available on www.hashrush.com in the coming weeks.

Onboarding new players

Hash Rush is designed to appeal to gamers as much as cryptocurrency enthusiasts. As such, the largest barrier to entry has been identified as the steep learning curve encountered when first entering into the cryptocurrency and blockchain space.

With this in mind, the Hash Rush team are building the player onboarding process to be as straightforward and familiar as downloading and playing any other game. Absolutely zero cryptocurrency, blockchain or mining knowledge is required – rather, essential concepts will be revealed to players during tutorial stages (which experienced miners or crypto enthusiasts can skip).

While it will cost a small amount of RC tokens to initiate a mining colony, during the tutorial period, which will take around a week, new players who do not have any RC will be given the equivalent of a loan. This will be automatically repaid from their mining gains during regular playtime. Also, these players are only permitted withdrawals once they have accumulated a sufficient amount of mined ETH/BTC. This saves the company from expending hashpower for players who might not finish the tutorial.

 Tradable and Upgradable Content

Every unit and item that a player buys or receives in missions or faction goals comes with a unique ID card. Holders of the card have the rights to the relevant units or item and its perks, and can receive special bonuses from ‘crafting’ combinations of cards.

Cards, as well as units and items, are tradable through the Hash Rush in-game exchange using RC tokens. This exchange will form a major part of the game’s economy, enticing players both from the perspective of completionists looking to collect them all, as well as hardcore players looking for perfect combinations of cards to maximise their mining output.
Management of the Hash Rush In-Game Economy

We will use market mechanisms to ensure a balanced economy, both in-game and pertaining to the RC available on the market. Therefore, we will use both inflationary and deflationary techniques to ensure an adequate and fair value is ascertained and maintained.

Payments for mined cryptocurrencies

All the mined cryptocurrencies are held in a single smart contract.

Every 24 hours, all the mined cryptocurrencies are divided among each faction's smart contract depending on their total hash power.

Once a week, each factions' smart contracts pay players in proportion to the total hash power of their respective mining colonies.

Localization

Asia-Pacific is the gaming industry’s largest market, and as such we will be launching localized version of Hash Rush in Japanese and Korean. More translations will be announced as we expand into additional regions.
Rush Coin tokens and ICO

The Hash Rush ICO runs from 20:00 UTC on September 20, 2017 to 20:00 UTC on October 20, 2017 unless a cap of 64,050,000 Rush Coin tokens sold is reached earlier.

Rush Coin (RC) is an Ethereum token which complies with the ERC-20 standard. It is the primary in-game currency, and will also be tradeable on cryptocurrency exchanges.

Maximum RC supply and distribution details

The total number of tokens distributed will be capped at 70,000,000.

We set the hard cap for the pre-sale and ICO at 70,000 ETH and valued 1RC = 0.001ETH.

64,050,000 RC, or 91.5%, will be available during the pre-sale and the ICO.

The remaining 5,950,000 RC, or 8.5%, of total coins will be distributed:

- during the marketing and bounty campaign,
- to players for completing missions and for participating in faction goals,
- as in-game bonuses,
- and to private miners who use the Hash Rush Mining Pool.

Players can use RC to:

- build new facilities and upgrade them,
- expand their mining colonies and upgrade them,
- buy more units and upgrade them, participate in some faction and single missions,
- discover new minable cryptocurrencies,
- speed up their in game activities, and more…

Players can obtain RC by:

- participating in the pre-sale and ICO
- participating in faction (multiplayer) goals
- completing singleplayer missions
- using the Hash Rush Mining Pool
- exchanging items and characters with other players
- purchasing on cryptocurrency exchanges

There are bonuses for early participation, as shown below. Investors will receive larger RC bonuses in the form of more tokens, and the bonus rate depends on how early one participates:

- Days 1-3: 20%
- Days 4-6: 15%
- Days 7-9: 10%
- Days 10-12: 5%

RC tokens were available for purchase during the pre-sale which ran from August 16, 2017 to September 1, 2017, at a bonus of 25%. Those who participated in the pre-sale with less than the minimum entry of 50 ETH will receive their tokens during the ICO, with a 20% bonus, as per the Days 1-3 tier.

Note that RC tokens which are not bought during the ICO will be frozen and released to the development team on December 1, 2018. This will allow the Hash Rush team to proceed with developing additional content for the game, as well as building versions for other platforms such as tablets and mobile phones.

Distribution and Rates

- RC tokens can be acquired via transfers made from any BTC, ETH, ETC or QTUM wallet.
- The minimum ICO entry is 0.1 ETH.
- RC tokens will be issued to participants’ Ethereum addresses automatically during the ICO. That means that participants will receive their RC when they send their ETH.
- Note that only wallets that are ERC-20 compliant can receive RC tokens. Sending funds directly from an exchange is not supported, and will result in loss of funds. We recommend using myetherwallet.com or the official Ethereum Wallet.
- Payments made in BTC, ETC and QTUM will be converted to ETH at the rate effective at the time when the rights to RC tokens were reserved. RC coins will be sent to the Ethereum address that will be provided in the contact form or by e-mail.
The Hash Rush Smart Contract

Rush Coin is an ERC-20 standard token. As such, the Hash Rush Smart Contract guarantees:

**Transparency**

1. The number of tokens held by any user is public.
2. All information on transfers is public and can be traced back in time.

**Ownership**

3. Each token belongs to one user-owner.
4. Only Ethereum users and contracts can be token holders.
5. A token can be transferred to another user only by the direct command of its owner, or by the command of the receiver directly authorized by the owner. No token transfers may be initiated by another user.

**Issuing**

6. Only one user, the contract owner, can issue tokens.

**Contract Management**

7. The contract owner can transfer the ownership to any other

**Ethereum user or contract.**

8. The contract owner can stop or resume token transfers at any time.

**More**

10. Any call to the contract which results in an error does not change the user’s tokens or Ether balance, except for the gas spent on the transaction.

11. The maximum tokens allowed in circulation is set at 70,000,000 RC.
The Team

On top of the founders’ almost 5 years in the cryptocurrency space, the Hash Rush team brings together decades of collective experience in game design and development, business and project management, marketing and brand management, public relations, web development, as well as a duo of talented concept artists and illustrators.

Project leads Kristaps Vaivods and Maris Ziedonis are responsible for maintaining the mining farm at our facility in Riga, Latvia. We keep a close eye on the machinery and the produced hash power. Our main job is to extend our mining farm power and introduce new minable cryptocurrencies, which increases retail demand and Hash Rush player count.

Rafal Nowocien from the original Witcher series is the Senior Game Producer for Hash Rush and will be working with a team of game developers from TractorSetGO. Their studio is responsible for all stages of Hash Rush’s development, from the MVP to the core game.

Because of the chemistry, professionalism and the creativity of the Hash Rush team, we plan on creating an ongoing stream of new content that will be available for players free of charge.

Kristaps Vaivods
Project Lead & Co-Founder
Back in 2013, I built my first Bitcoin mining rig and now I am running my own mining farm. It has been great journey being a part of the crypto community and seeing how it has grown in the past few years, but we all know that this is just the beginning. It is important to introduce this technological revolution to new people and bigger crowds. I can definitely say that Hash Rush project is aiming to do just that.

Maris ‘Nathan’ Ziedonis
Creative Director & Co-Founder
Ever since I can remember I have had a fascination about video games and their stories. After lengthy playing sessions I used to imagine myself inside the many fictional worlds that I saw on my computer screen. A few years later I started making my own characters and stories. During my time at the university I studied Japanese culture which widened my horizons in literature and storytelling. I have respect for many game developers and their game worlds and I hope that someday people will respect mine.
Rafal Nowocien  
**Senior Game Producer**

As a producer/games designer, I am very enthusiastic and hard-working. As I am naturally a very positive and outgoing person, I do not find it hard to inspire and encourage other team members to work to the best of their abilities. I am an experienced and creative manager with a strong game design and production management background that I developed in over 14 years in the business of online games (over 25 in games including RPG and tabletop ones). I was responsible for script and level design, cutscenes directions and dialogues design for the highly awarded AAA title “The Witcher”. I’ve worked very closely with game designers and motions artists to prepare the most realistic cutscenes.

Portfolio

Jethro Naude  
**Chief Game Economist**

Guided by the school of Economics, my key areas of expertise are problem solving, understanding the Human Decision Matrix, raising energy productivity and improving operational efficiency in all its forms. I have extensive experience working in the field of investment banking, corporate finance and various economic think tanks from New York to California. I also bring a deep understanding of finance and in-game marketplaces gleaned from years of playing MMOs. I am a lifelong gamer, a cryptocurrency enthusiast and a dedicated electric vehicle driver. My love for Microsoft Excel is second only to my love for my firstborn son.

LinkedIn

Craig Ritchie  
**Director of Marketing**

I have spent the last 6 years in videogames and tech marketing and brand management. My previous position was as Live Marketing Manager on CCP Games’ virtual reality launch title EVE: Valkyrie. Before this I was Customer Lifecycle Management Lead for long-standing massively multiplayer epic EVE: Online and was Brand Specialist and email marketing lead on their PS3 free-to-play shooter DUST 514. I also spent over 18 years’ as a freelance writer including many years as a videogames journalist. I have been playing games every generation of hardware since my dad brought home an Atari 2600 back in the mid 80’s – what a ride that has been.

LinkedIn
Jochem Gerritsen  
Public Relations Specialist

After completing my two master degrees in Political Economy (at Sciences Po Paris and the London School of Economics), I quickly realised I couldn't contain my inner entrepreneur and started an online marketing business. Since then, I have worked with a variety of companies and startups, including ENGEO, FreeConferenceCall.com, and GoWorkaBit. Over the last year, I (co-)founded two companies called Lowland Living and TrueUX, but I still try to make enough time for games like Team Fortress 2 or Zelda: Breath of the Wild. So both as a cryptocurrency and a gaming enthusiast, I love Hash Rush and enjoy helping to make it into a global success.

LinkedIn

Kaan Dagkilic  
Graphic & Web Designer

I'm a Graphic & Web Designer. I believe that gaming is universal and Hash Rush is an amazing example of it. Great minds from all over the world, gathered around HashRush's innovative concept and formed a skilled, ambitious team. I'm glad to be a part of this unique squad.

LinkedIn

Dendy Dhamier  
Lead Concept Artist & Illustrator

I'm a full-time freelance concept artist/illustrator from Indonesia who's experienced in doing game and film projects. I previously worked as a lead concept artist and graduated from FZD School of Design.

LinkedIn

Nicholas Ng Hanyang  
Concept Artist & Illustrator

I'm a freelance Concept Artist & Illustrator for games and movies currently based in Malaysia. I graduated from FZD School of Design, and have been addicted to games since 1999. Not a competitive gamer, I prefer single player games with deep stories like the Fallout series, Yakuza series, Witcher series and even indie titles like Life is Strange and Gone Home.

Portfolio
Jefferson Davis  
**Smart Contract Developer**  
I am an accomplished project manager and automation specialist. Have worked as a field technician, process design and commissioning specialist, and technical manager, responsible for the development and maintenance of critical operations technology, including instrumentation and control systems, data acquisition applications, and automated controls of heavy machinery used in upstream oilfield completions processes. I work as a freelancer consultant and developer for distributed applications and smart contracts in the private and NGO sectors worldwide.

Cristian Cristea  
**Lead Developer**  
As an early computer enthusiast, he started programming at the age of 12. In college he dived in the world of game development, building his own 3D engine. Since then he contributed to a few dozen games, on numerous technologies, developing for desktop, mobile and VR. Alongside game development he also worked on serious business to business applications for various clients.

[LinkedIn](#)

Adrian Bugnar  
**Art Director and Game Designer**  
Adrian has a Master’s Degree in Video Arts and he has been working in the CG industry for more than 10 years, leading our art department to reaching cornerstone achievements and competition prizes. Adrian’s key competencies include character animation, mechanical animation, cinematography, art direction and project management.

[LinkedIn](#)

Andreea Cristea  
**Business Manager and QA**  
With more than 10 years of hands-on running her business, Andreea is a great addition to our team having in-depth knowledge on topics such as business development, management, marketing, PR. With a Bachelor’s degree in Computer Science and a Master’s degree in Economics, her main purpose is to ensure the team delivers on time top-notch quality, while enjoying the process.

[LinkedIn](#)
Horea Trinca  
**Game Designer and Graphic Designer**  
With one of his feet in a boat called ‘Computer Science’ and the other in a boat called ‘Computer Graphics’, Horea has been sailing the waters of game making for a long time. He has a Master’s degree in Computer Science and has been working in the field of computer graphics for over 10 years. Man, this boy is getting old. His vast expertise covers 3D sculpting, rigging and animation, 2D compositing and green screen keying, C# scripting and shader programming.  
[LinkedIn](#)  

Razvan Suciu  
**Game Programmer and Level Designer**  
Razvan is a hardworking and dedicated game developing enthusiast. Besides working as a game programmer and level designer, he enjoys creating art assets, being a very imaginative person and always feeling like sharing his ideas. Technically, he’s a skilled C# and Unity 3D programmer. Artistically, he’s a proficient 3D Studio Max and Maya modeler and a Mudbox painter.  

Radu Corbu  
**Gameplay Developer**  
Radu is a passionate gameplay programmer and strong new addition to the Tractor Set GO! team. Deeply interested in learning about the inner workings of the virtual world of video games and in using that knowledge to develop believable and intricate game worlds. His professional skillset includes knowledge of: Unity3D, Unreal Engine, OpenGL. Radu worked on several personal games and a therapeutic research project at an University in Cluj-Napoca.  
[LinkedIn](#)  

Sebastian Damian  
**Sound Designer and Music Composer**  
Sebastian is a talented and tech-savvy sound engineer with a great passion for film and game score composing. Over the years he worked on numerous indie films and games, tackling audio assets from sound effects and voiceovers to ambient scapes and music.  

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