Project Ignition Details

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Project Ignition is designed to:

1. Be an excellent place to put the crypto you already own to work,
2. Give you direct exposure to XRD without selling your other crypto,
3. Protect your XRD position from impermanent loss*, and
4. Provide a straightforward way to earn trading fees from putting that crypto to work.

**The extent of the impermanent loss protection received will vary depending on the relative performance of the two assets. Please see below for full details.*

Liquidity mining programs were incredibly popular in 2020. However, these programs often came with a hidden cost: liquidity providers would often experience impermanent loss even when the token of the project they were trying to help performed well.

While token rewards paid out by projects went some way to counter impermanent loss for liquidity providers, most programs did not pay out enough to address the problem.

This was because, when the token was successful, the increase in the value of the project token was the very thing causing deep impermanent loss for the liquidity provider. They would have been better off just holding the token of the project and not providing liquidity at all.

This created a nearly no-win situation for everyone: if you provided liquidity to help the token do well, you made less money than you could have, but if people *don't* provide liquidity and hold the token, the token does less well.

Project Ignition has been built to help solve this issue by allowing the Radix community to help increase the liquidity of the RADIX token (XRD), while still enabling them to hold their XRD.Users get the best of both worlds: they get rewarded for providing liquidity to the RADIX token, and avoid exposure to impermanent loss if the XRD token does very well.

How does it work? Project Ignition lets the liquidity provider contribute *only* the non-XRD side of a paired position, and provides impermanent loss protection for that contribution, so that in negative performance scenarios of the XRD token, the liquidity provider is covered (subject to boundary conditions, which are laid out below). Project Ignition also provides an instant, up-front bonus in XRD for opening the position.

Not only that, the liquidity provider receives all the trading fees from the side of the pool that they provide liquidity to. This means that as the XRD token price increases, the value of the trading fees the liquidity provider receives also increases. To learn more, please read on!

Outline of the Project Ignition Program

Liquidity is at the heart of every DeFi ecosystem. To that end, $10M of XRD will be put into the launch of Project Ignition, a liquidity campaign with three goals:

1. Bootstrap the liquidity of popular crypto assets on the Radix network
2. Reward those that provide liquidity
3. Provide asset loss protection for the liquidity providers

Here's a quick overview of how participation works.

Liquidity providers who want to participate in Project Ignition's rewards and protection will provide liquidity in Radix-wrapped forms of USDC, USDT, wBTC, and ETH to their preferred Radix DEX (Ociswap, CaviarSwap, and DefiPlaza).

For every $1 of USDC, wBTC, ETH or USDT that a Liquidity Provider provides to specific pools on Ociswap, CaviarNine, or DeFi Plaza, Project Ignition will provide $1 worth of XRD to the other side, essentially *doubling* the effective liquidity that the liquidity provider is providing to the target pool.

Providers will *immediately* receive an upfront, unlocked payment of up to 20% of the value of the tokens they provide as liquidity (depending on the lock up period), in XRD.

At the end of the lock up period, liquidity providers claim both the asset they provided liquidity in, and any applicable trading fees. They will also enjoy impermanent loss protection on their liquidity, providing a withdrawal value guarantee in a very wide range of scenarios.

Project Ignition is here to give people an exciting opportunity to come and use the Radix network and ecosystem, and give them their first glimpse at the incredible UX already provided by the Radix platform and its first DeFi dApps.

Even in the first few months after Radix's breakthrough smart contract capability launched, the maturity of projects launched on Radix is very high. As a result, Project Ignition is being powered directly by three of the leading DEXs in the Radix ecosystem: CaviarNine, Ociswap,and DeFi Plaza. To access Project Ignition, all you will need to do is go to their websites and follow the instructions they will provide to contribute liquidity as part of the campaign.

Project Ignition Participation in Detail

The DEXs included in Project Ignition are [CaviarNine](), [Ociswap](), and [DeFi Plaza](). These three DEXs have been created by teams within the Radix ecosystem, and Project Ignition rewards will be accessed via the websites of these DEXs.

The first targeted tokens that Project Ignition is incentivizing the provision of liquidity are xUSDC, xwBTC, xETH and xUSDT, which are wrapped versions of USDC, wBTC, ETH, and USDT that Instabridge.io has issued on the Radix network.

Liquidity providers can swap their own USDC, wBTC, ETH, or USDT for their wrapped forms using instabridge.io. They can also purchase them with XRD on the various Radix DEXs.

For example, a liquidity provider wishes to put $5000 worth of wBTC into Project Ignition:

- Liquidity provider acquires xwBTC by swapping wBTC for it on Instabridge.io
- Liquidity provider goes to CaviarNine, Ociswap or DeFi Plaza and clicks a “Project Ignition” link there
- Liquidity provider chooses the Project Ignition compatible pool to contribute to, and selects how long they wish to lock their liquidity for (between 9 and 12 months)
- The DEX website creates a transaction to contribute their $5000 of xwBTC liquidity, which Project Ignition automatically matches with $5000 of XRD and makes the final contribution to the chosen DEX pool.
- Liquidity provider receives back their instant XRD reward payment and an Ignition LP Claim token.

The instant payment received will be between 12.5% and 20% of the market value of the liquidity they provided, depending on how long they lock for (between 9 and 12 months)

Assuming that the liquidity provider locked their $5000 of xwBTC for 12 months, they would immediately receive $1000 worth of XRD, plus their Ignition LP Claim token that will allow them to claim back their $5000 of xwBTC (or xwBTC equivalent value) after 12 months (subject to impermanent loss protection limits), along with any trading fees that have resulted on the xwBTC side of the pool.

As Project Ignition has matched the liquidity provider’s liquidity with $5000 of XRD, the liquidity provider has essentially provided the Radix Ecosystem with $10,000 of liquidity for $5000 worth of xwBTC.

What Protections Are Provided?

Crypto is a volatile asset and the Radix ecosystem is still forming. As a result, there is always the risk of impermanent loss to a liquidity provider providing liquidity on DEXs.

To learn more about impermanent loss, please watch [this video by Finematics].

As the liquidity provider in Project Ignition is only providing liquidity on the wBTC/USDC/USDT or ETH side, the liquidity provider is 100% protected from any XRD impermanent loss.

This means, should the price of XRD outperform the asset provided by the liquidity provider at any scale (2x, 20x or 200x) the liquidity provider does not have to worry about impermanent loss at all. In case the liquidity provider still holds the XRD they received for locking up the tokens, they can also benefit from the performance of XRD.

If the asset the liquidity provider has provided out performs the RADIX token, the liquidity provider receives a value guarantee for up to a 4x out-performance (vs XRD) of the asset provided, and then a sliding amount of asset value protection beyond a 4x change.

This means that if a liquidity provider provided wBTC as liquidity in Project Ignition, the Bitcoin price relative to the Radix price could increase by over 400%, or the Radix price fall by over 75% before the liquidity provider’s position would be worth less than if they had just held the assets. Due to how DEX liquidity provision works, a price difference of over 15x would need to occur before the liquidity provider’s position would have an impermanent loss of greater than 50%.

To put this in perspective, if the liquidity provider locked their BTC for 1 year in Project Ignition, and the Radix token (XRD) price stayed flat for 1 year, Bitcoin would need to rise to over $180k per BTC (from $45k per BTC) before the liquidity provider could not withdraw the current market value of tokens out of the position, and $675k per BTC (from $45k per BTC) before the liquidity provider could withdraw less than 50% of the market value of tokens.*

**Note - these calculations do not include discounts for illiquidity, and the actual value received by the liquidity provider may vary depending on slippage/liquidity of the XRD.*

Simulated Ending Liquidity Provision Balances

This section takes some different scenarios that may play out over the next 12 months, and applies a simple Uniswap v2 DEX curve to that. There are three basic scenarios here - actual results may vary.

<u>Starting Assumptions:</u>

Liquidity Lockup Period: 12 months
Liquidity Lockup Payment: 20%
Liquidity Asset Provided: xwBTC
Price of xwBTC Today: $45,000
Price of XRD Today: $0.05

Liquidity provider provides: 1 xwBTC
Project Ignition provides: 900,000 XRD
Liquidity provider receives: 180,000 XRD ($9k) Upfront Payment for Liquidity Locking

Let's assume that the liquidity provider provides liquidity to Ociswap and CaviarNine, 50% to each. Let's also assume that the pool the liquidity provider has provided liquidity to has earned an average of 20% in trading fees over the 12 months, and that liquidity rewards on the pool have provided the liquidity provider with a further 10% yield over the 12 months.

Disclaimer - these scenarios are rough calculations and do not include a number of factors that must be considered when calculating the exact ending value, especially when modeling a volatile asset. These calculations are not projections and should not be relied upon, they are merely for illustrative purposes - actual results may vary considerably.

<u>12 Month Scenario (A): BTC at $150k, XRD at $0.70 (Bull/Bull)</u>

Scenario (A) assumes that both BTC and XRD perform well in the market, and XRD outperforms BTC.

Assuming liquidity provider sells upfront XRD, ending value is: $315k (vs $150k for BTC HOLD)
Assuming liquidity provider keeps upfront XRD, ending value is: $411k (vs $150k for BTC HOLD)

Scenario A: Bull / Bull **End Price:** xwBTC = $150k XRD = $0.70	**Provide Liquidity via Project Ignition**	
	Assets	Total
LP Starting Value	1 xwBTC	$45k
LP Ending Value With HOLD of XRD bonus*	1 xwBTC ($150k) 180k XRD ($126k)* 0.41 BTC trading fees ($61.5k) DEX Incentive Tokens ($73.8k)	$411k
LP Ending Value With sale of XRD bonus for BTC*	1 xwBTC ($150k) 0.2 xwBTC ($30k)* 0.41 xwBTC trading fees ($61.5k) DEX Incentive Tokens ($73.8k)	$315k

12 Month Scenario B: BTC at $23k, XRD at $0.70 (Bear/Bull)

Scenario (B) assumes that BTC falls by almost 50%, but XRD rallies to $0.70.

Assuming liquidity provider sells upfront XRD, ending value is: $80.6k (vs $23k for BTC HOLD)
Assuming liquidity provider keeps upfront XRD, ending value is: $202k (vs $23k for BTC HOLD)

Scenario B: Bear / Bull **End Price:** xwBTC = $23k XRD = $0.70	**Provide Liquidity via Project Ignition**	
	Assets	Total
Starting Value	1 xwBTC	$45k
Ending Value With HOLD of XRD bonus*	1 xwBTC ($23k) 180k XRD ($126k)* 1.05 xwBTC trading fees ($24k) DEX Incentive Tokens ($29k)	$202k
Ending Value With sale of XRD bonus for BTC*	1 xwBTC ($23k) 0.2 xwBTC ($4.6k)* 1.05 xwBTC fees ($24k) DEX Incentive Tokens ($29k)	$80.6k

12 Month Scenario C: BTC at $150k, XRD at $0.025 (Bull/Bear)

Scenario (C) assumes that BTC rallies to $150k but XRD drops in value by 50%.

Assuming liquidity provider sells upfront XRD, ending value is: $184k (vs $150k for BTC HOLD)
Assuming liquidity provider keeps upfront XRD, ending value is: $159k (vs $150k for BTC HOLD)

Scenario C: Bull / Bear **End Price:** xwBTC = $150k XRD = $0.025	**Provide Liquidity via Project Ignition**	
	Assets	Total
Starting Value	1 xwBTC	$45k
Ending Value With HOLD of XRD bonus* IL = Impermanent Loss	0.465 xwBTC ($69.75k) 180k XRD ($4.5k)	$159k

	2.78m XRD IL** Protection ($69.5k) DEX Incentive Tokens ($14k)	
Ending Value With sale of XRD bonus for BTC* IL = Impermanent Loss	0.465 xwBTC ($69.75k) 0.2 xwBTC ($30k)* 2.78m XRD IL** Protection ($69.5k) DEX Incentive Tokens ($14k)	$184k

In Scenario C the Impermanent Loss Protection has needed to kick in for the system. This means that trading fees are not included in the calculation as there is not enough money in the ending balance to make the liquidity provider whole on their principle.

In this scenario, the liquidity provider's deficit is made up in XRD up to the total amount of XRD in the ending balance of the pool - in this case, the pool is $10k short, providing $70k worth of Radix tokens to the liquidity provider, leaving the liquidity provider at a balance of $70k BTC and $70k XRD, rather than $150k BTC.

A projected combination of the upfront bonus payment and projected DEX Incentive Tokens makes up the difference as to why the liquidity provider's ending balance is still higher than just holding BTC.

Risks

In Scenario C, the liquidity provider has only outperformed BTC hold as a result of the assumed incentives provided by CaviarNine, Ociswap and DeFiPlaza. Once the value of the token the liquidity provider has provided for liquidity has diverged sufficiently from the value of the Radix token, then the system cannot make the liquidity provider whole, either in the token the liquidity provider provided, or in XRD equivalent value.

Therefore, the value of the guarantee provided by the system is bounded by the total number of tokens left in both sides of the pool at the end of the liquidity period.

In addition, all of these models assume that there is a liquid enough secondary market to realize a fair market value for the impermanent loss protection XRD that is paid for the liquidity provider, as well as assuming a liquid market for the DEX incentive tokens transferred to the liquidity provider.

These assumptions are not always valid and the system makes no guarantees about the liquidity of the various tokens at the end of the Liquidity Locking Period. Illiquidity risk is a risk that the liquidity provider must be comfortable with before participating in Project Ignition.

This system also makes no guarantees about the security of the DEXs that the liquidity providers provide liquidity to on the Radix network (CaviarNine, Ociswap, DeFi Plaza), and explicitly disclaims all liability for any smart contract failures that may arise within Project Ignition or the connected DEX platforms.

It is important for the liquidity provider to fully understand the risks associated with liquidity provision into this system before they provide liquidity and take professional advice if unsure. These risks include but are not limited to:

- **Bridging risk:** xwBTC, xETH, xUSDC, xUSDT are bridged assets and are inherently subject to more risk than their native counterparts.
- **Illiquidity risk:** any and all tokens on the Radix network may be illiquid and have no secondary market.
- **Smart contract risk:** smart contracts may fail, have bugs or be exploited by hackers.
- **Infrastructure risk:** The Radix network may fail, have bugs, or be exploited by hackers.
- **Interface risk:** the Radix Wallet or other wallets for the Radix network may fail and prevent a liquidity provider from being able to move or access their funds.
- **Regulatory risk:** any and all parts of the system may be subject to regulatory oversight or subject to cease and desist notices or other regulatory action.

In all cases, the system is provided as is and all risks to tokens that may arise from participation in the system are borne by the liquidity provider.

How the Impermanent Loss Protection Works

As no one likes nasty surprises, Project Ignition is designed to do its best to make sure that at the end of the liquidity lock period, the liquidity provider is returned the same number of xUSDC/xUSDT/xwBTC/xETH that were provided at the start. Or if it cannot do that, as much XRD as it has available to help repurchase any deficit of supplied liquidity tokens, at the current market price.

In the scenarios that XRD meets or exceeds the market performance of the asset that it has been paired with by the liquidity provider, Project Ignition can return the exact number of xUSDC/xUSDT/xETH or xwBTC assets that the liquidity provider provided as liquidity at the start of the term.

Here, Project Ignition will end up with less XRD tokens than it started with (XRD impermanent loss), but more of the other asset. As a result, it can return the correct number of USDC/USDT/ETH/BTC to the liquidity provider.

Therefore, liquidity provider impermanent loss protection is only required in scenarios where XRD underperforms against the asset it has been paired with.

If the XRD underperforms compared to the asset it has been paired with, the liquidity pool will have less of the liquidity provider-supplied asset (impermanent loss) but more XRD than it started with.

Here, at withdrawal, Project Ignition calculates the difference between the number of tokens the liquidity provider provided vs the number left in the liquidity provider side of the liquidity pool (including all trading fees), and pays the liquidity provider the difference in XRD, up to the total balance available in the XRD side of the liquidity pool.

For this impermanent loss protection to return less equivalent-value-assets to the liquidity provider, the asset provided would need to increase in value by at least 4x vs the value of XRD.

Assuming a price of $0.05 per XRD and $45k per BTC, this would mean that either XRD would need to drop from $0.05 below $0.0125 (with BTC staying at $45,000); or BTC would need to rise above $180,000 (with XRD staying at $0.05).

If the price of XRD doubled to $0.10, then BTC would need to rise above $360k before the impermanent loss protection started returning less than asset-equivalent value.

The XRD would need to lose 98% of its market value vs the asset that the liquidity provider provided for the liquidity provider to hit only a 50% loss on their asset equivalent value that they withdraw (not including any incentives the liquidity provider might receive directly from the Radix DEX platforms).

Here are some different scenarios with the amount of xBTC/xETH/xUSDC/xUSDT and XRD the liquidity provider can expect to get back, as well as the total value the liquidity provider would be withdrawing vs the value of their assets if they had not provided the liquidity.

The following table assumes the following:

- XRD entry price = $0.05
- BTC entry price = $45,000
- ETH entry price = $2,500
- Duration of liquidity provision = 12 months (20% upfront reward)

Liquidity Value	$ 45,000	**Hold Period**	12 Month:	**Bonus Value**	$ 9,000	**DEX Fees**	20%

	XRD	**BTC**	**ETH**	**USDC**	**USDT**
Current Prices	$ 0.050	$ 45,000	$ 2,500	$ 1.00	$ 1.00
Starting Balances	900,000	1.00	18.00	45,000	45,000

			Ending Pool Balances				**Ending LP Withdrawl**			**Plus Bonus**		
End BTC Price	**End XRD Price**	**XRD Bonus**	**BTC**	**XRD**	**BTC DEX Fees**	**BTC Deficit**	**BTC**	**XRD (IL Protection)**	**LP Value**	**HODL**	**Sell**	**VS BTC HODL**
$ 150,000	$ 0.700	180,000	2.46	526,986	0.41	-	1.41	0.00	$211,482	$ 337,482	$241,482	$ 150,000
$ 23,000	$ 0.700	180,000	6.28	206,356	1.05	-	2.05	0.00	$ 47,075	$ 173,075	$ 51,675	$ 23,000
$ 150,000	$ 0.025	180,000	0.46	2,788,548	0.08	0.54	0.465	2,788,548.01	$139,427	$ 143,927	$169,427	$ 150,000
$ 45,000	$ 0.001	180,000	0.19	6,830,520	0.03	0.81	0.190	6,830,519.75	$ 17,076	$ 17,301	$ 26,076	$ 45,000

			Ending Pool Balances				**Ending LP Withdrawl**			**Plus Bonus**		
End ETH Price	**End XRD Price**	**XRD Bonus**	**ETH**	**XRD**	**ETH DEX Fees**	**ETH Deficit**	**ETH**	**XRD (IL Protection)**	**LP Value**	**HODL**	**Sell**	**VS ETH HODL**
$ 8,333	$ 0.700	180,000	44.27	526,975	7.38	-	25.38	0.00	$211,474	$ 337,474	$241,473	$ 149,994
$ 1,300	$ 0.700	180,000	112.08	208,143	18.68	-	36.68	0.00	$ 47,683	$ 173,683	$ 52,363	$ 23,400
$ 8,333	$ 0.025	180,000	8.37	2,788,492	1.39	9.63	8.37	2,788,492.24	$139,425	$ 143,925	$169,423	$ 149,994
$ 2,500	$ 0.001	180,000	3.05	7,636,753	0.51	14.95	3.05	7,636,753.24	$ 15,274	$ 15,454	$ 24,274	$ 45,000

Above simulations do not include DEX Incentive Tokens

To play with the model directly yourself, you can download it from here.

Radix Publishing does not make any representations regarding the reliability of the model. It has not been audited and it may have errors. The model is intended purely for illustrative and educational purposes.