



# Blockchain as a Service - Getting Started with Ardor and Ignis

## Overview:

Ardor and Ignis are a scalable 3rd generation blockchain platform developed by Jelurida with built-in smart transactions that minimize the risks of developing on the blockchain. The mainnet launched on 01 January 2018. Its open-source code is written in Java and includes simple APIs for integration with most coding languages, such as Javascript. Building on the 5-year legacy of NXT, this new generation separated the first proof of stake environment into two parts. NXT's proof of stake algorithm was separated into Ardor, while the advanced functions of NXT were implemented into Ignis. This has been termed the "parent and child chain" architecture where Ardor as the parent chain, provides security and consensus for all child chains, such as Ignis. This design provides developers with optimal flexibility. Businesses can work with Jelurida to launch their own blockchain (child chain) by simply reusing select functions from Ignis and plugging into the security of the Ardor parent chain's existing network of nodes. Alternatively, the public Ignis chain allows anyone to launch tokens and build applications on demand using its smart transactions. There are 2 additional child chains currently active – the AEUR (100% backed euro peg) and Bitswift (technology store and services). This document is an informal reference for people, businesses, developers - newcomers and long-time community members - to quickly navigate the wide variety of resources available for the ecosystem. Many Ignis resources are being updated and may make reference to NXT. The functions are the same, but note updated [fee structures](#) and [code repositories](#).

## Ardor Parent Chain



### Functions:

- Proof of Stake: [1](#), [2](#), [3](#)
- [Coin Exchange](#)
- [Multi-Phased Transactions](#)
- [Account](#) & [Asset](#) Control
- [Bundling](#) vs. [Forging](#)

### Useful Links:

- Wallet: [Client](#), [Web](#), [Tour](#)
- [Ardor <-> Euros](#)
- Block Explorer: [1](#), [2](#), [3](#)
- [Account Leasing](#)
- Videos: [1](#), [2](#), [3](#), [4](#)
- [Solar Nodes](#) & [Nodes](#)









### Developers:

- [BitBucket](#), [Guide](#)
- [Github](#) (BB mirror)
- [Roadmap](#), [Whitepaper](#)
- Test: [Net](#), [Faucet](#)
- Developer: [Blog](#), [Videos](#)
- [Lightweight Contracts](#)

## Ignis Child Chain



### Functions:

- |  |   |   |   |
|--|---|---|---|
| <br>Digital Currency<br><a href="#">Info·Uses</a> | <br>Data Cloud<br><a href="#">Info·Uses</a>  | <br>Voting<br><a href="#">Info·Uses</a>    | <br>Shuffling<br><a href="#">Info·Uses</a> |
| <br>Assets & Trading<br><a href="#">Info·Uses</a> | <br>Marketplace<br><a href="#">Info·Uses</a> | <br>Messaging<br><a href="#">Info·Uses</a> | <br>Aliases<br><a href="#">Info·Uses</a>   |

### Further Learning:

- Asset Listings: [1](#), [2](#)
- [Smart Transactions](#) & [Uses](#)
- [Transaction Vouchers - Invoices](#)
- [Dead Man Switch](#)
- [Scaling with Pruning](#)
- [NXT Wiki with Dev Resources](#)
- [Sigbro - Secure Offline Signatures](#)
- Pre-Mainnet Press Archive: [1](#), [2](#), [3](#)

Interested in the history of NXT, Ardor, and Ignis? [NXT Snapshot](#) is a book written by the NXT community covering NXT's 5-year history leading up to Ardor's 01 January 2018 mainnet launch.

### Stay Updated:



### Exchanges:



### Community:



## **Ardor and Ignis Reference Sheet Hyperlink Listing**

### Overview:

Fee Structures - <https://www.jelurida.com/sites/default/files/ArdorFees.pdf>

Code Repositories - <https://bitbucket.org/Jelurida/ardor/src>

### Ardor Functions:

Proof of Stake 1 - <https://www.ledgerjournal.org/ojs/index.php/ledger/article/view/46>

Proof of Stake 2 - <https://coincentral.com/what-is-ardor-blockchain-as-a-service-explained/>

Proof of Stake 3 - <https://hackernoon.com/nxt-pos-block-skipping-attack-myth-de88cf4b3363>

Coin Exchange - [https://nxtwiki.org/wiki/Coin\\_Exchange](https://nxtwiki.org/wiki/Coin_Exchange)

Multi-Phased Transactions - [https://nxtwiki.org/wiki/Composite\\_Phasing](https://nxtwiki.org/wiki/Composite_Phasing)

Account Control - [https://nxtwiki.org/wiki/Account\\_Control](https://nxtwiki.org/wiki/Account_Control)

Asset Control - [https://nxtwiki.org/wiki/Asset\\_Control](https://nxtwiki.org/wiki/Asset_Control)

Bundling - <https://nxtwiki.org/wiki/Bundling>

Forging - <https://www.jelurida.com/forging-bundling>

### Useful Links:

Full Client Wallet - <https://www.ardorplatform.org/download-ardor-blockchain-platform>

Web Wallet - <https://wallet.ardor.tools/>

Ardor < -> Euros - <https://www.ardorgate.eu/>

Block Explorer 1 - <https://www.ardor.world/en/>

Block Explorer 2 - <https://ardorportal.org/monitor>

Block Explorer 3 - <https://ardor.tools/>

Account Leasing - [https://nxtwiki.org/wiki/Account\\_Leasing](https://nxtwiki.org/wiki/Account_Leasing)

Videos 1 - [https://www.youtube.com/channel/UCYY\\_S0X\\_PokzgVzkGd5Jezg/videos](https://www.youtube.com/channel/UCYY_S0X_PokzgVzkGd5Jezg/videos)

Videos 2 - <https://youtu.be/JGjwES65FvQ>

Videos 3 - [https://www.facebook.com/pg/ardornxtgroup/videos/?ref=page\\_internal](https://www.facebook.com/pg/ardornxtgroup/videos/?ref=page_internal)

Videos 4 - <https://www.youtube.com/channel/UCLOJp40K5yDdHEZ4IdjH3TA/videos>

Solar Nodes – [https://medium.com/@mrv\\_89306/headless-solar-powered-ardor-blockchain-node-with-e-ink-information-screen-8456a7e98f0f](https://medium.com/@mrv_89306/headless-solar-powered-ardor-blockchain-node-with-e-ink-information-screen-8456a7e98f0f)

Nodes - <https://ardornxt.io/bounties/set-ardor-node>

### Developers:

BitBucket - <https://bitbucket.org/Jelurida/ardor/src>

Developers Guide -

<https://bitbucket.org/Jelurida/ardor/src/65dff8f1e782c6db67c66609fc2754546cb61890/DEVELOPERS-GUIDE.md?at=master&fileviewer=file-view-default>

Github (BB mirror) - <https://github.com/mrv777/Ardor>

Roadmap - <https://www.jelurida.com/ardor-roadmap>

Whitepaper - <https://www.jelurida.com/sites/default/files/JeluridaWhitepaper.pdf>

Testnet - <https://testardor.jelurida.com/index.html>

Testnet Faucet - [https://www.ardor.world/en/faucet\\_ardor/](https://www.ardor.world/en/faucet_ardor/)

Developer Blog - <https://medium.com/@lyaffe/latest>

Developer Videos - <https://www.youtube.com/user/lyaffe1/videos>

Lightweight Contracts - <https://medium.com/@lyaffe/lightweight-contracts-articles-49c3032a50da>

### Ignis Functions:

Digital Currency Info - [https://nxtwiki.org/wiki/Monetary\\_System](https://nxtwiki.org/wiki/Monetary_System)  
Digital Currency Uses - <https://ignis.ardorblockchain.info/monetary-system/#>  
Data Cloud Info - <https://www.ardorplatform.org/ardor-child-chain-feature/data-cloud>  
Data Cloud Uses - <https://ignis.ardorblockchain.info/data-cloud/>  
Voting Info - [https://nxtwiki.org/wiki/Voting\\_System](https://nxtwiki.org/wiki/Voting_System)  
Voting Uses - <https://ignis.ardorblockchain.info/voting-system/>  
Shuffling Info - [https://nxtwiki.org/wiki/Coin\\_Shuffling](https://nxtwiki.org/wiki/Coin_Shuffling)  
Shuffling Uses - <https://ignis.ardorblockchain.info/shuffling-2/>  
Assets & Trading Info - [https://nxtwiki.org/wiki/Asset\\_Exchange](https://nxtwiki.org/wiki/Asset_Exchange)  
Assets and Trading Uses - <https://ignis.ardorblockchain.info/asset-exchange/>  
Marketplace Info - <https://nxtwiki.org/wiki/Marketplace>  
Marketplace Uses - <https://ignis.ardorblockchain.info/marketplace-2/>  
Messaging Info - [https://nxtwiki.org/wiki/Arbitrary\\_Messages](https://nxtwiki.org/wiki/Arbitrary_Messages)  
Messaging Uses - <https://ignis.ardorblockchain.info/messages-2/>  
Aliases Info - [https://nxtwiki.org/wiki/Alias\\_System](https://nxtwiki.org/wiki/Alias_System)  
Aliases Uses - <https://ignis.ardorblockchain.info/aliases-2/>

### Further Learning:

Asset Listings 1 - [https://www.ardor.world/en/ignis\\_reporting/](https://www.ardor.world/en/ignis_reporting/)  
Asset Listings 2 - <https://ardor.tools/assets>  
Smart Transactions - <https://ignis.ardorblockchain.info/smarttransactions/>  
Uses - <https://ignis.wiki/tiki-index.php?page=Use%20Cases%20for%20Ignis>  
Transaction Vouchers - <https://hackernoon.com/introduction-to-transaction-vouchers-8e7f42bbd0cb>  
Dead Man Switch - <https://hackernoon.com/dead-man-switch-35c00694eb55>  
Scaling with Pruning - <https://youtu.be/4obcvOLO6tY>  
NXT Wiki with Developer Resources - [https://nxtwiki.org/wiki/Main\\_Page](https://nxtwiki.org/wiki/Main_Page)  
Sigbro – Secure Offline Transactions - <https://github.com/Nxter/ARDOR-SigBro-Offline>  
Pre-Mainnet Press Archives 1 - <https://techcrunch.com/2017/11/23/in-israel-a-blockchain-and-crypto-hyper-cluster-is-just-getting-started/>  
Pre-Mainnet Press Archives 2 - <https://www.investing.com/studios/article-29>  
Pre-Mainnet Press Archives 3 - <https://venturebeat.com/2017/09/21/ardor-could-fix-key-blockchain-weaknesses-if-it-can-get-its-message-out/>

NXT Snapshot Book - <https://www.nxter.org/snapshot-nxt-unsurpassable-blockchain-solutions/>

### Stay Updated:

NXTer Magazine - <https://www.nxter.org/>  
Jelurida Website - <https://www.jelurida.com/>  
Jelurida Twitter - <http://twitter.com/jelurida>  
Jelurida LinkedIn - <https://www.linkedin.com/company/jelurida-b.v./>

### Community:

Slack Invite - <https://nxtplatform.org/slack/>  
Discord - <https://discordapp.com/invite/EnxmDnu>  
Telegram - <https://telegram.me/ardorplatform>  
Ardor Reddit - <https://www.reddit.com/r/Ardor/>  
Ignis Reddit - <https://www.reddit.com/r/Ignis/>  
Ardor NXT Group - <https://ardornxt.io/>