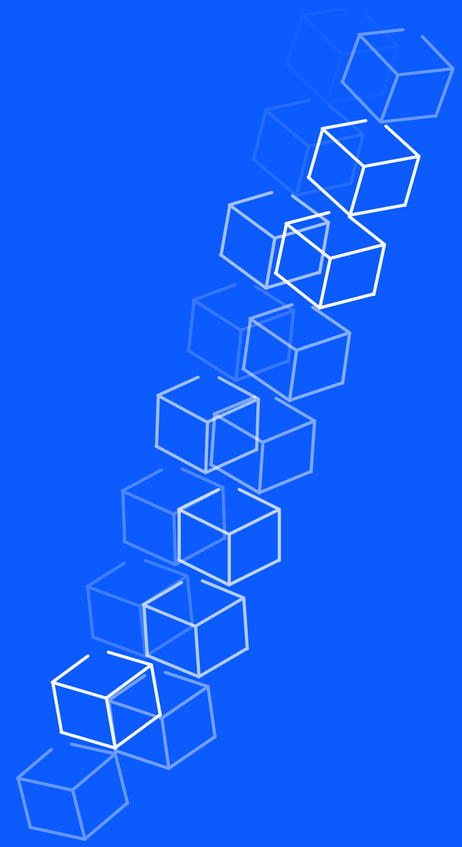
WEB 3

WAVES
NETWORK PROTOCOL



waves

What is Waves Node?

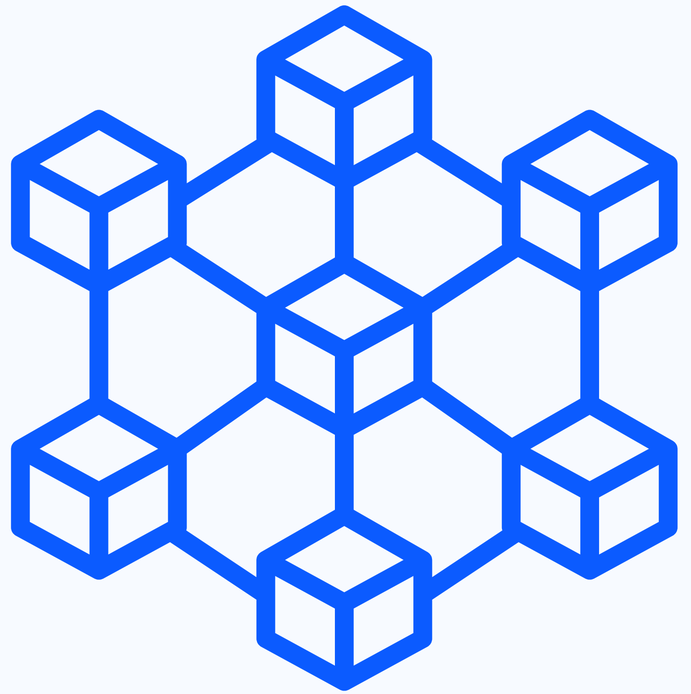
Waves node is a software that is responsible for **receiving transactions**, **creating, validating new blocks**, **synchronizing data between different nodes** and **reaching consensus** between them.

Validation entails:

- ensuring that the format of the block is correct
- ensuring that sll hashes in the new block were computed correctly
- ensuring that the new block contains the hash of the previous block
- ensuring that each transaction in the block is valid and signed by the appropriate parties.

Each network member launches a copy of the node and synchronizes with the others.

Connected Nodes



Versions of Waves Node

1.	Scala
2.	GO

What Waves Node Consists of

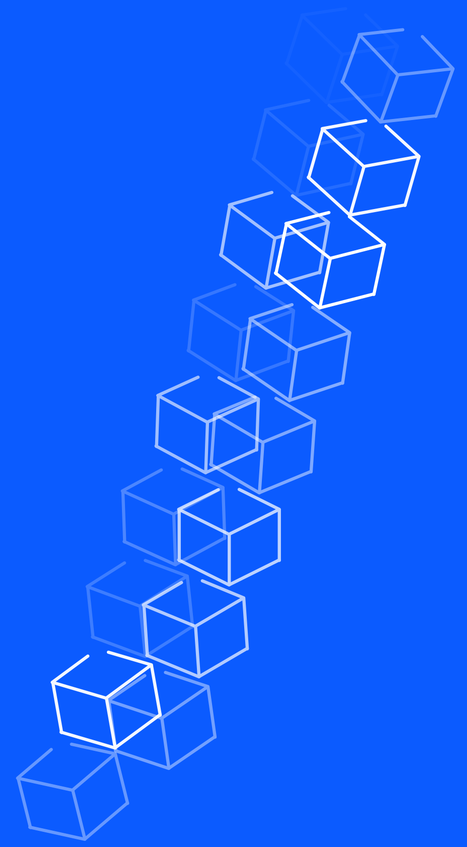
Jar file
Binary

NOTE:

A Waves node is a software.

Starting a Waves Node

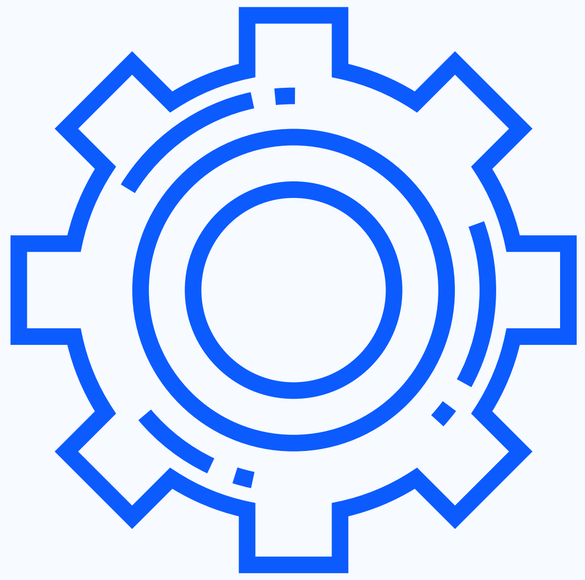
- Launch Jar file
- Run Docker Container
- Install and run from .debfile
- Install from apt-repository



Waves Node Configuration

Configuartion file (application.conf)

The Waves node configuration file is described in the HOCON format (it's like JSON, only with comments, the ability to compose multiple files and, no less important, with fewer quotes)



- waves
- kamon
- metrics
- akka

The file is constantly changing, but the current version can be found in the Waves repository on Github

Configurations Parameters

1.	db
3.	network
4.	wallet
5.	blockchain
6.	miner
7.	rest-api
8.	synchronization
9.	utx
10.	features
11.	rewards
12.	extensions

NOTE:

A Waves node is a software.

Waves-NG solution

A Waves blockchain protocol which makes Waves blockchain fast and responsive.
- Waves-NG got its name from Bitcoin-NG article
- embodied into Waves blockchain in late 2017
- NG here stands for Next Generation

How does it improve Waves blockchain?

1. affects how blocks are generated

2. affects how nodes communicate with each other

NOTE:

A Waves node is a software.

WEB 3

Upcoming NEXT:

Waves NG **How Mining Works**

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