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[](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 0 - Getting Started](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Getting Started](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Blockchain 101](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Blockchain History](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Public and Managed Blockchains](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Consensus in Distributed Networks](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Cryptography](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Self-Assessment Quiz](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Go Introduction - First Steps](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Go Basics](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Go Interfaces](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Control Structures in Go](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Arrays and Slices in Go](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Standard Packages in Go](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Concurrency in Go](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Good-To-Know Dev Terms](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Docker Introduction](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 1 - Introduction to the Interchain](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Introduction to the Interchain](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Blockchain Technology and the Interchain](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[The Interchain Ecosystem](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Getting ATOM and Staking It](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[A Blockchain App Architecture](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Accounts](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Transactions](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Messages](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Modules](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Protobuf](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Multistore and Keepers](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[BaseApp](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Queries](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Events](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Context](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Testing](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Relaying with IBC](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Interchain Security](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Bridges](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Migrations](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 1 Quiz](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 2 - First Steps](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[First Steps](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Setup Your Work Environment](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Run a Node, API, and CLI](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Ignite CLI](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Exercise - Make a Checkers Blockchain](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Store Object](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Create Custom Messages](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Create and Save a Game Properly](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Add a Way to Make a Move](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Emit Game Information](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Record the Game Winner](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 2 Exercise](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 3 - Introduction to IBC and CosmJS](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Introduction to IBC and CosmJS](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[What is IBC?](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[IBC/TAO - Connections (OPTIONAL)](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[IBC/TAO - Channels (OPTIONAL)](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[IBC/TAO - Clients (OPTIONAL)](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[IBC Token Transfer](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Interchain Accounts (OPTIONAL)](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[IBC Middleware (OPTIONAL)](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Create a Custom IBC Middleware (OPTIONAL)](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Integrate IBC Middleware Into a Chain (OPTIONAL)](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[IBC Tooling](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[What is CosmJS?](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Your First CosmJS Actions](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Compose Complex Transactions](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Learn to Integrate Keplr](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Create Custom CosmJS Interfaces](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 4 - Ignite CLI and IBC Advanced](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Ignite CLI and IBC Advanced](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Keep an Up-To-Date Game Deadline](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Keep Track Of How Many Moves Have Been Played](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Put Your Games in Order](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Auto-Expiring Games](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Let Players Set a Wager](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Handle wager payments](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Integration tests](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Incentivize Players](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Help Find a Correct Move](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Play With Cross-Chain Tokens](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Understand IBC Denoms](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Go Relayer](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Hermes Relayer](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 5 - CosmJS Advanced](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[CosmJS Advanced](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Create Custom Objects](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Create Custom Messages](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Get an External GUI](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Integrate CosmJS and Keplr](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Backend Script for Game Indexing](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 6 - IBC Deep Dive](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[IBC Deep Dive](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[IBC Application Developer Introduction](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Make a Module IBC-Enabled](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Adding Packet and Acknowledgment Data](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Extend the Checkers Game With a Leaderboard](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Create a Leaderboard Chain](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Week 7 - From Code to MVP to Production and Migrations](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[From Code to MVP to Production and Migrations](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Run in Production](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Prepare the Software to Run](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Prepare a Validator and Keys](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Prepare Where the Node Starts](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Prepare and Connect to Other Nodes](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Configure, Run, and Set Up a Service](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Prepare and Do Migrations](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Simulate Production in Docker](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Tally Player Info After Production](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Add a Leaderboard as a Module](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Migrate the Leaderboard Module After Production](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Simulate a Migration in Docker](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Final Exam](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[What's Next?](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

[Continue Your Interchain Journey](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html)

Docs Version Switcher

On this page

[Configuration](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#configuration)

[Run user](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#run-user)

[Commands](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#commands)

[As a service](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#as-a-service)

[When to start](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#when-to-start)

[Further concerns](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#further-concerns)

[#Copy link](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#configure-run-and-set-up-a-service) **Configure, Run, and Set Up a Service**

You have prepared your machine to be part of the upcoming network. Now it is time to:

1. Configure the rest of the software.
2. Start the software and have it establish a peer-to-peer (P2P) network with others.

[#Copy link](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#configuration) Configuration

Start by putting myprojectd into /usr/local/bin, or into whichever path you put your executables. Confirm it works with:



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$ myprojectd version

In the previous section, you configured some parameters of your node when it comes to CometBFT, in ~/.myprojectd/config/config.toml.

In config/app.toml, you will find other parameters to configure. Take special note of halt-height which assists you in gracefully stopping the node, such as when applying a migration.

As for the database(s), classic considerations apply. With the db\_dir flag, consider storing its files in a dedicated and redundant volume. On Linux, you could mount the data folder to that separate drive.

Events are also stored in a database, and here too you can choose to store them separately. Note that events are purely a node concern, not a consensus or network one.

[#Copy link](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#run-user) Run user

Another standard security concern is that you want to avoid running your application as root. So, create a new user and prepare it:



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$ sudo adduser chainuser

With this done, move the configuration folder to the home folder of the new user:



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$ sudo mv ~/.myprojectd /home/chainuser

$ sudo chown -R chainuser:chainuser /home/chainuser/.myprojectd

[#Copy link](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#commands) Commands

To finally launch your software, you could simply run:



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$ ./myprojectd start

The larger your genesis file, the longer this step takes. Do not worry if it seems like nothing is happening.

[#Copy link](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#as-a-service) As a service

Instead of relaunching your software every time, it is a good idea to set it up as a service. You can use your preferred method, but if you are on Linux it may be with systemd. Here is an example of a service file, [modeled on Gaia's (opens new window)↗](https://hub.cosmos.network/main/hub-tutorials/join-mainnet.html#running-via-background-process), to save in /etc/systemd/system/myprojectd.service:



Copy

[Unit]

Description=My Project Chain Daemon

After=network-online.target

[Service]

User=chainuser

ExecStart=$(which myprojectd) start

Restart=always

RestartSec=3

LimitNOFILE=4096

[Install]

WantedBy=multi-user.target

Check the [section on migrations](https://ida.interchain.io/tutorials/9-path-to-prod/7-migration.html) to see how you may add parameters to this file if you want to use Cosmovisor.

Enable it once:



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$ sudo systemctl daemon-reload

$ sudo systemctl enable myprojectd

Now, if you do not want to try a computer restart, you can start the process immediately with:



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$ sudo systemctl start myprojectd

[#Copy link](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#when-to-start) When to start

You have launched your blockchain software, and the other validators have done the same, so when is the first block minted? This happens when validators representing at least [two-thirds (opens new window)↗](https://hub.cosmos.network/main/resources/genesis.html#genesis-transactions) (67%) of the total staked amount are online.

This means that, although you should coordinate with your peers for a convenient date and time to start, you need not narrow it down to the second. You can collectively agree to all start *on Tuesday* and it will therefore start safely at some point on Tuesday.

However, this is another reason why, when adding staking transactions in the genesis, you need to be sure about the reliability of the other validators, otherwise your start could be delayed.

[#Copy link](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#further-concerns) Further concerns

Now that you have a running network, you may consider coming back to it and try to:

* Make your life easier with [shell command completion (opens new window)↗](https://hub.cosmos.network/main/hub-tutorials/gaiad.html#shells-completion-scripts).
* Add a node that [checks invariants (opens new window)↗](https://hub.cosmos.network/main/hub-tutorials/join-mainnet.html#verify-mainnet).
* Add [telemetry (opens new window)↗](https://docs.cosmos.network/main/core/telemetry.html) so as to keep an eye on your node(s).
* See what [other projects (opens new window)↗](https://github.com/cosmos/awesome-cosmos) can benefit you.

This is just an extract of the different customizations that are available to you. For more ideas, peruse [this documentation (opens new window)↗](https://hub.cosmos.network/main/hub-tutorials/join-mainnet.html).

When your network has been running sufficiently to be considered "established", your next steps are to advertise it and facilitate its eventual integration within the ecosystem. A good way to achieve this is to open a pull request on the [chain registry repository (opens new window)↗](https://github.com/cosmos/chain-registry) with chain.json and assetlist.json files that describe your chain in a systematic way. Make sure that your JSON files follow the given schemas, for instance by checking with this [online validator (opens new window)↗](https://www.jsonschemavalidator.net/).



If you would like to see how to apply what you've learned, you can go straight to the exercise in [Simulate production in Docker](https://ida.interchain.io/hands-on-exercise/4-run-in-prod/1-run-prod-docker.html) to start from scratch.

More specifically, you can jump to:

* [Executables that run](https://ida.interchain.io/hands-on-exercise/4-run-in-prod/1-run-prod-docker.html#the-executables-that-run), to see how to prepare (Docker) nodes to run.

synopsis

To summarize, this section has explored:

* How to configure other software necessary to be part of a network.
* How to start the software and establish a P2P network with other nodes.
* The importance of avoiding running your application as a user (rather than as root) for security reasons.
* How to set up your software as a service, to avoid the need to repeatedly relaunch it.
* How to coordinate with your peers regarding when to start your network to ensure timely behaviour.

previous

[](https://ida.interchain.io/tutorials/9-path-to-prod/5-network.html)

**[Prepare and Connect to Other Nodes](https://ida.interchain.io/tutorials/9-path-to-prod/5-network.html)**

up next

**[Prepare and Do Migrations](https://ida.interchain.io/tutorials/9-path-to-prod/7-migration.html)**

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On this page

[Configuration](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#configuration)

[Run user](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#run-user)

[Commands](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#commands)

[As a service](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#as-a-service)

[When to start](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#when-to-start)

[Further concerns](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html#further-concerns)

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     Next

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