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See your chain in action

**From Code to MVP to Production and Migrations**

After having developed your chain, now you will take the next step to move your chain to a proof-of-concept and into production.



[#Copy link](https://ida.interchain.io/ida-course/LPs/week-7/#in-this-chapter) In this chapter



In this chapter, you will learn:

* About the different considerations that need to be covered before you can get your blockchain into production.
* How to compile your blockchain for distribution to interested parties.
* How to prepare, use, and protect the private cryptographic keys that you need.
* How to prepare a genesis and coordinate its creation between stakeholders.
* How to prepare your network topology and configuration to be part of your blockchain.
* How to prepare your server for convenience and reliability.
* How to apply this knowledge to simulate a small production for your checkers application with the help of Docker Compose.
* How to prepare and program a blockchain state migration (a.k.a. "a breaking change"), using the example of the introduction of a leaderboard to the checkers application.
* How to prepare your server when an upgrade is upcoming.
* How to apply this knowledge to simulate a small production upgrade for your checkers application with the help of Docker Compose.

[#Copy link](https://ida.interchain.io/ida-course/LPs/week-7/#next-up) Next up

It is time to move your checkers blockchain into production. In the [next section](https://ida.interchain.io/tutorials/9-path-to-prod/1-overview.html), you can find an overview of the different aspects one needs to address to move a Cosmos blockchain into production. Afterwards, you can dive right into preparing [your software to run](https://ida.interchain.io/tutorials/9-path-to-prod/2-software.html), [a validator and keys](https://ida.interchain.io/tutorials/9-path-to-prod/3-keys.html), [the node starting point (the genesis)](https://ida.interchain.io/tutorials/9-path-to-prod/4-genesis.html), [the nodes and their connections to other nodes](https://ida.interchain.io/tutorials/9-path-to-prod/5-network.html), [how to configure, Run, and Set Up a Service](https://ida.interchain.io/tutorials/9-path-to-prod/6-run.html), and [migrations](https://ida.interchain.io/tutorials/9-path-to-prod/7-migration.html). Then you can explore [simulating production in Docker](https://ida.interchain.io/hands-on-exercise/4-run-in-prod/1-run-prod-docker.html).

After, you will [tally player info after production](https://ida.interchain.io/hands-on-exercise/4-run-in-prod/2-migration-info.html) into your checkers blockchain. Upgrading your chain in production and dealing with data migrations and logic upgrades will become easier to understand after this guided coding section.

Next, you will [add a leaderboard module](https://ida.interchain.io/hands-on-exercise/4-run-in-prod/3-add-leaderboard.html) and have it work elegantly with checkers, first without any migration complications.

After that, you will add another migration, this time for the introduction of the [leaderboard module in production](https://ida.interchain.io/hands-on-exercise/4-run-in-prod/4-migration-leaderboard.html).

You finish by [simulating upgrades in production](https://ida.interchain.io/hands-on-exercise/4-run-in-prod/5-migration-prod.html) with the use of Docker Compose.

[#Copy link](https://ida.interchain.io/ida-course/LPs/week-7/#developer-resources) Developer Resources

Cosmos SDK

**Cosmos SDK**

A framework to build application-specific blockchains

[Documentation↗](https://docs.cosmos.network/)

CometBFT

**CometBFT**

Blockchain consensus engine and application interface

[Documentation↗](https://docs.cometbft.com/)

Cosmos Hub

**Cosmos Hub**

First interconnected public blockchain in the Interchain network

[Documentation↗](https://hub.cosmos.network/)

IBC

**IBC**

Industry standard protocol for inter-blockchain communication

[Documentation↗](https://ibc.cosmos.network/)

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**[Create a Leaderboard Chain](https://ida.interchain.io/hands-on-exercise/5-ibc-adv/7-ibc-app-leaderboard.html)**

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