

Performing Upgrades

Managing Upgrades

Validators can choose how to run a validator and manage software upgrades according to their preferred option:

1. Using [Cosmovisor](#)
2. Manual

Voting for Upgrade Proposals

See [Governance -> Voting](#)

Upgrades

Releases for the dYdX chain will use [semantic versioning \(opens in a new tab\)](#). See [here](#) for details.

🔗 Cosmovisor Users

Upgrading to a new Major/Minor Version (e.g. v0.1.0)

1. Download the [binary \(opens in a new tab\)](#)
2. for the new release, rename the binary `todydxprotocold`
3. .

```
mv dydxprotocold. < versio n
```

```
- < platfor m
```

`dydxprotocold 1.` Make sure that the new binary is executable.

```
chmod 755
```

`dydxprotocold 1.` Create a new directory `DAEMON_HOME/cosmovisor/upgrades//bin 2.` where 3. is the URI-encoded name of the upgrade as specified in the Software Upgrade Plan.

```
mkdir -p DAEMON_HOME /cosmovisor/upgrades/ < nam e
```

```
/bin 1. Place the new binary under DAEMON_HOME/cosmovisor/upgrades//bin 2. before the upgrade height.
```

```
mv < path_to_major_versio n
```

```
DAEMON_HOME /cosmovisor/upgrades/ < nam e
```

```
/bin  
IMPORTANT : Do this before the upgrade height, so thatcosmovisor can make the  
switch.
```

That's it! The old binary will stop itself at the upgrade height, and `cosmovisor` will switch to the new binary automatically. For a Plan with name `v0.1.0`, your `cosmovisor/` directory should look like this:

```
cosmovisor/ |—— current/ # either genesis or upgrades/ |—— genesis | |—— bin | |—— dydxprotocold |——  
upgrades |—— v0.1.0 |—— bin |—— dydxprotocold
```

Upgrading to a Patch Version (e.g. v0.0.2)

1. Download the [binary \(opens in a new tab\)](#)
2. for the new patch release, rename the binary `todydxprotocold`
3. .

```
mv dydxprotocold. < versio n
```

```
- < platfor m
```

`dydxprotocold 1.` Make sure that the new binary is executable.

```
chmod 755
```

`dydxprotocold 1.` Replace the binary under `DAEMON_HOME/cosmovisor/current/bin 2.` with the new binary.

```
mv < path_to_patch_version
```

DAEMON_HOME /cosmovisor/current/bin 1. Stop the current binary (e.g. Ctrl+C) 2. Restartcosmovisor

```
cosmovisor run
```

```
start
```

```
--p2p.seeds= "[seed_node_id]@[seed_node_ip_addr]:26656"
```

```
--bridge-daemon-eth-rpc-endpoint= ""
```

Manual Users

Upgrading to a Major/Minor Version (e.g. v0.1.0)

1. Download the [binary\(opens in a new tab\)](#)
2. for the new release.1. Ideally also before the upgrade height to minimize downtime
3. Make sure that the new binary is executable.

```
chmod 755
```

dydxprotocold 1. Wait for the old binary to stop at the upgrade height (this should happen automatically). 2. Restart the application using thenew binary from step 1 3. .

```
./dydxprotocold start
```

```
--p2p.seeds= "[seed_node_id]@[seed_node_ip_addr]:26656"
```

```
--bridge-daemon-eth-rpc-endpoint= ""
```

Upgrading to a Patch Version (e.g. v0.0.2)

1. Download the [binary\(opens in a new tab\)](#)
2. for the new release.
3. Make sure that the new binary is executable.

```
chmod 755
```

dydxprotocold 1. Stop the current binary (e.g. Ctrl+C) 2. Restart the application using the new binary from step 1.

```
./dydxprotocold start
```

```
--p2p.seeds= "[seed_node_id]@[seed_node_ip_addr]:26656"
```

```
--bridge-daemon-eth-rpc-endpoint= ""
```

Rollback

In the case of an unsuccessful chain upgrade, an incorrectAppHash might get persisted by Tendermint. To move forward, validators will need to rollback to the previous state so that upon restart, Tendermint can replay the last block to get the correctAppHash .Please note: validators should never rollback further than the last invalid block. In extreme edge cases, transactions could be reverted / re-applied for the last black and cause issues.

✂ Cosmovisor Users

Cosmovisor backs up thedata directory before attempting an upgrade. To restore to a previous version:

1. Stop the node (e.g. Ctrl+C)
2. Then, copy the contents of your backup data directory back to ~/.dydxprotocol

```
rm -rf
```

```
~/dydxprotocol/data mv ~/dydxprotocol/data-backup-YYYY-MM-DD
```

```
~/dydxprotocol/data 1. Restart your node.
```

```
cosmovisor run
```

```
start
```

```
--p2p.seeds= "[seed_node_id]@[seed_node_ip_addr]:26656"
```

```
--bridge-daemon-eth-rpc-endpoint= ""
```

Manual Users

If you don't have a data backup:

1. Stop the node (e.g. Ctrl+C)
2. Rollback the application and Tendermint state by one block height.

```
. /dydxprotocold rollback 1. Restart your node.
```

```
. /dydxprotocold start
```

```
--p2p.seeds= "[seed_node_id]@[seed_node_ip_addr]:26656"
```

```
--bridge-daemon-eth-rpc-endpoint= ""
```

[Types of Upgrades Cosmovisor](#)