

Neutron Core Releases

Overview

This section provides a comprehensive overview of the significant changes and updates in Neutron, focusing on the upgrades to Cosmos SDK, Wasmd, and Neutron's internal modules.

[v2.0.0](#)

Cosmos SDK Upgrade

Neutron has transitioned from Cosmos SDK v0.45 to the more advanced v0.47, encompassing significant improvements and custom adaptations. The key aspects of this upgrade include:

- Primary Changes:
 - - Reference to the main [Cosmos SDK v0.47 documentation](#)
 - - .
 - - Access to the full changelog [here](#)
 - - .
 - - --broadcast-mode
 - - block was removed. You need to query the result for a TX with neutrnd q tx hash instead.
 - - the SDK version includes some key store migration for the CLI. Make sure you backup your private keys before testing this! You can not switch back to v0.45.
 - - We have created [our own fork](#)
 - - of the Cosmos SDK, introducing unique enhancements tailored to our needs:* Gas Counting Exclusion:
 - Removal of gas counting in the upgrade module's begin blocker for more consistent gas accounting.
 - - - BankHooks Introduction:
 - Implementation of [BankHooks](#)
 - - - , a pivotal feature for the new Tokenfactory.
 - - - [Optimized Slashing Calculation](#)
 - - - :
 - - - Backporting of slashing missed blocks calculation from Cosmos SDK v0.50.
 - - - CometBFT Transition:
 - A significant shift to CometBFT for enhanced consensus reliability.
 - - - ABCI 1.0 Support:

- - - Enabling chains to implement their mempool with ABCI 1.0 compatibility.
- - - Module Parameters Handling:
- - - Deprecation of the [x/params module](#)
- - - . Modules now manage parameters directly.
- - - IBC-Go Upgrade:
- - - Moving to ibc-go v7 for improved inter-blockchain communication.
- - - Technical Enhancements:
- - - Several minor yet impactful technical improvements (see full list [here](#)
- - -).

Wasmd Upgrade

Our custom fork of [wasmd](#) , based on version [0.45](#) , brings forward these key developments:

- Instantiate2 Activation:
- Enabling predictable contract addresses through the [instantiate2 feature](#)
- .
- Smart-Contract Size Limit Increase:
- Expansion of the binary size limit from 800KB to 1.6MB as [explained here](#)
- .
- Legacy REST endpoints for queries and txs are completely removed
- and only gRPC endpoints must be used now; legacy REST endpoints for queries and txs are completely removed and only gRPC endpoints must be used now.
- contracts are able to use floating point operations
- .
- Additional Improvements:
- Various other technical modifications and advancements (see full changelog [here](#)
-).

Neutron Itself

Enhancements within Neutron focus on integrating new modules, refining existing functionalities, and ensuring better alignment with the upgraded Cosmos SDK:

Globalfee Module Integration

- Minimum Gas Price Enforcement:
- A mechanism implemented via the [globalfee module](#)
- to standardize gas prices across validators.

Tokenfactory Module Update

- BankHooks Activation:
- Introduction of BankHooks for smart contracts handling token transfers, as detailed [here](#)
- .
- Fee Removal for Token Creation:
- Elimination of creation fees for Tokenfactory tokens, promoting free token generation on Neutron [source](#)
-).

Interchain Transactions and ContractManager Module Refactor

- ICA Usability Improvements:
- Enhanced Interchain Account (ICA) functionality for a more user-friendly and secure experience for developers.
- Sudo Execution Error Handling:
- Streamlined error message retrieval in the ContractManager module.
- New Fee Structure for ICA Creation:
- [Introduction](#)
- of a fee system for developers creating ICAs on remote chains [Learn more](#)

Adminmodule Rework

- Module and Governance Alignment:
- The admin module has been redesigned to align with the deprecated params module and the new governance proposal handling mechanism in Cosmos SDK v0.47. For more details, visit [Adminmodule Overview](#)
- .

Dex module introduction

- Neutrality:
- Bringing completely new [dex module](#)
- . Users may interact with this module to provide liquidity and execute trades according to commonly-accepted exchange semantics. [Previous Neutron Launch Instructions](#) [Next Overview](#)