v2.1.0 Upgrade Proposal

Build the New CertiK Binary

Build the New CertiK Binary

Preliminary

Context

Impacted Stakeholders

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Service Providers

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Current Runtime

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Preliminary

This proposal is being submitted to upgrade the Shentu Chain to v2.1.0 in response to a tx malleability bug addressed in the Cosmos SDK v0.44 security release. This is a simple binary replacing upgrade and the chain-id will not be bumped. All node operators should upgrade their software version from v2.0.0 to v2.1.0 at the block height (estimated *Wed Sep 8th, 2021 at 16:00 UTC*).

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UTC, Time Zone	Wed, Sep 8, 2021	16:00
New York, NY, USA*	Wed, Sep 8, 2021	12:00 noon
Los Angeles, CA, USA PDT (UTC -7)	Wed, Sep 8, 2021	9:00 am
Moscow, Russia MSK (UTC +3)	Wed, Sep 8, 2021	7:00 pm
Seoul, South Korea KST (UTC +9)	Thu, Sep 9, 2021	1:00 am
Beijing, China	Thu, Sep 9, 2021	12:00 midn

Context

In Cosmos SDK vo.42.x, which is what Shentu is currently on, if the client submitted a tx and thereafter received a failed response, there exists a non-negligible probability that said tx might've had still gone out to the network with a different hash that's unknown to the client. As the client wouldn't be able to query the tx on-chain and the perception to the user was that the first attempt had failed, the user would be at risk of being maliciously tricked into signing and submitting the same tx twice.

As a mitigation we have decided to plan out a coordinated network upgrade and bump up the chain to v2.1.0 in which the necessary query paths would've been added so tx can be queried by signature or address+sequence. This way a tx response is only returned if it had already been successfully broadcast in the first place. Additionally in this release we will also have a fix for the staking module where unbondings and validator updates are not being properly processed in endblocker.

Impacted Stakeholders

Node Operators

- Validator nodes
- Full nodes

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Service Providers

- Exchanges
- Wallets
- Explorers
- Staking Dashboards

Current & Target Runtime

Current Runtime

CertiK v2.0.0

Target Runtime

CertiK v2.1.0

Upgrade Procedure

- 1. Upgrade the binary from v2.0.0 to v2.1.0 at block height 4421700
- 2. Restart the node

Upgrade Duration and Coordination

Node operators are encouraged to join the <u>validator chat</u> on Discord to ask questions, report upgrade status, raise technical issues, and/or to build social consensus if need be.

Resources

Release Cosmos SDK v0.44.0 Release Notes · cosmos/cosmos-sdk

v0.44 is a security release which contains a consensus breaking change. It doesn't bring any new feature and it's a logical continuation of v0.43. Consequences: v0.43 is discontinued; all chains should upgrade to v0.44.

https://github.com/cosmos/cosmos-sdk/releases/tag/v0.44.0

cosmos/cosmos-

8 A Framework for Building High Value Public 3lockchains *







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