Glossary

An index of commonly used technical terms

Chain ID

The Chain IDs in the Wormhole context areu16 integers that map to chains. Note these Chain IDs arenot the same as other Chain IDs used for things like wallets.

Each Chain ID is documented on its page in the Blockchain Environments.

Consistency Level

The level of finality (consistency) a transaction should meet before being signed by a Guardian. Se<u>Consistency</u> section of constants page for details.

Delivery Provider

A Delivery Provider performs the service of watching for Wormhole Relayer delivery requests and performing the delivery to the intended target chain as instructed

Emitter

The contract that calls the Wormhole Core contract. It's address is included in the message published and a sequence number for the message is tracked to provide a unique id.

Finality

The Finality of a transaction is dependant on the blockchain properties. After a transaction is considered final, it can be assumed the state changes it caused won't be rolled back.

Gateway

The Gateway is Cosmos-SDK chain used by Wormhole to facilitate communication with the Cosmos ecosystem.

Guardian

AGuardian is one of the 19 parties running validators in the Guardian Network that contributes to the VAA multisig.

Guardian Network

Validators that exist in their own P2P network that serve as Wormhole's oracle by observing activity on-chain and generating signed messages attesting to that activity.

Guardian Set

The Guardian Set is a set of guardians that are responsible for validating a message emitted from the core contracts. Occasionally the members in the set will change through a governance action.

Heartbeat

Each Guardian will issue aHeartbeat on a 15s interval to signal that it is still running and to convey details about its identity, uptime, version, and status of the connected nodes.

The heartbeats are shown on the dashboard.

Observation

An Observation is the data structure that describes a message that was emitted by the Core Contract and noticed by the Guardian node.

Relayer

A Relayer is any process which delivers VAAs to a destination.

Sequence

A nonce, strictly increasing, tracked by the wormhole core contract and unique to emitter chain and address

Spy

A Spy is a daemon that eavesdrops on the messages passed between Guardians, typically to track VAAs as they get signed.

VAA

<u>Verifiable Action Approvals</u> (VAAs) are the base data structure in the Wormhole ecosystem, containing the messages emitted by xDapps along with information such as what contract emitted the message.

Validator

A daemon that is configured to monitor a blockchain node and observe messages emitted by the wormhole contracts.

Wormchain

The original name of the Gateway.

xChain

Term that refers to the full range of cross-blockchain interoperability.

xAssets

Chain-and-path agnostic token that exists on a layer outside the blockchain ecosystem, which can be used to conduct transactions on any blockchain.

xDapp

Decentralized application that enables users to create and/or use xData.

xData

Data that exists in a layer outside of Layer 1 blockchains, which is accessible by all chains.

Last updated1 month ago

On this page * Chain ID * Consistency Level * Delivery Provider * Emitter * Finality * Gateway * Guardian * Guardian Network * Guardian Set * Heartbeat * Observation * Relayer * Sequence * Spy * VAA * Validator * Wormchain * xChain * xAssets * xDapp * xData

Was this helpful? Edit on GitHub