

# NEM (XEM)

## About:

NEM is a peer-to-peer cryptocurrency and blockchain platform launched on March 31, 2015. Written in Java with a C++ version in the works, NEM has a stated goal of a wide distribution model and has introduced new features to blockchain technology. The NEM blockchain software is used in a commercial blockchain called Mijin, which is being tested by financial institutions and private companies in Japan and internationally.

## Technology :

- Each NEM node works with other nodes to build the **peer-to-peer blockchain network**.
- NEM's consensus is built on a unique **Proof of Importance algorithm**, using a technique similar to Google's PageRank to prevent a variety of attacks on the trustworthiness of blockchain transactions.
- NEM implements a modified version of the **Eigentrust++ algorithm** that allows nodes to intelligently judge the "reputation" of other nodes and reject bad actors, as well as optimally balance loading across the network.

- This may either be the open, decentralized, **self-supporting NEM public blockchain**, or it may be a **permissioned private NEM blockchain** running on your own servers.

## **Advantages:**

1. **Performance:** NEM's blockchain platform was designed and coded from the ground up for scale and speed. NEM's permissioned private blockchain delivers industry-leading transaction rates for internal ledgers. And its revolutionary consensus mechanism and the Supernode program ensure that NEM's open, public blockchain can grow without ever compromising throughput or stability.
2. **Ease of Development :** NEM's blockchain exposes its functionality through a powerful API interface that can be used with any programming language, not a specific "smart contract" language. Existing business logic code can easily mate up and use blockchain where it's strongest: secure transactions and ledger keeping. In short, configure NEM for your business, and then deploy blockchain incrementally and without forced retooling of existing infrastructure.
3. **Deep Customization :** Unlike other blockchain technologies, NEM is built from the ground up with powerful modular customization for virtually any application. We call it our Smart Asset system. With it, NEM lets you focus on building exactly what you need, whether that's a fintech system, tracking

logistics, an ICO, document notarization, decentralized authentication, or much more.

- 4. Security** : NEM's architecture provides an incredibly secure and stable platform through its use of Eigentrust++ and an incentivized public node network based on its two-tier architecture. The significant risks inherent in on-blockchain "smart contracts" are eliminated by providing building block customization to NEM functionality that keeps application security in your hands, not on the blockchain. And NEM's private blockchain option allows complete control over internal data privacy when a public blockchain isn't the right solution.

**Purpose of the NEM Foundation** : NEM Blockchain for Every Industry , NEM Blockchain for Governments , NEM Blockchain in Academia.