**Stellar** is an open-source protocol for value exchange founded in early 2014 by [Jed McCaleb](https://en.wikipedia.org/wiki/Jed_McCaleb) (creator of [eDonkey](https://en.wikipedia.org/wiki/EDonkey_network)) and Joyce Kim. Its board members and advisory board members include [Keith Rabois](https://en.wikipedia.org/wiki/Keith_Rabois), [Patrick Collison](https://en.wikipedia.org/wiki/Patrick_Collison), [Matt Mullenweg](https://en.wikipedia.org/wiki/Matt_Mullenweg), [Greg Stein](https://en.wikipedia.org/wiki/Greg_Stein), [Joi Ito](https://en.wikipedia.org/wiki/Joi_Ito), [Sam Altman](https://en.wikipedia.org/wiki/Sam_Altman), [Naval Ravikant](https://en.wikipedia.org/wiki/Naval_Ravikant) and others. The Stellar protocol is supported by a nonprofit, the Stellar Development Foundation.

**Desain**

Stellar is an open-source protocol for exchanging money. Servers run a software implementation of the protocol, and use the Internet to connect to and communicate with other Stellar servers, forming a global value exchange network. Each server stores a record of all “accounts” on the network. These records are stored in a database called the “ledger”. Servers propose changes to the ledger by proposing “transactions”, which move accounts from one state to another by spending the account’s balance or changing a property of the account. All of the servers come to agreement on which set of transactions to apply to the current ledger through a process called “consensus”. The consensus process happens at a regular interval, typically every 2 to 4 seconds. This keeps each server’s copy of the ledger in sync and identical.

**Real-word Application**

Several nonprofits and businesses are implementing Stellar as financial infrastructure, particularly in the developing world. One such example is [Praekelt Foundation](https://en.wikipedia.org/wiki/Praekelt_Foundation), which will be integrating Stellar into Vumi, its open-source messaging app, to let young girls in Sub-Saharan Africa save money in airtime credits.

Oradian, a cloud-based banking software company, also plans to use the Stellar network to connect microfinance institutions (MFIs) in Nigeria

In December 2016 more partnerships were announced, including in the Philippines, India and West Africa.

In the month of October 2017 Stellar and IBM created a partnership to increase the speed of global payments.

**History**

At launch, Stellar was based on the [Ripple protocol](https://en.wikipedia.org/wiki/Ripple_(payment_protocol)). After making several changes to critical consensus code, the Stellar network forked. In the aftermath, Stellar co-founder Joyce Kim claimed[[26]](https://en.wikipedia.org/wiki/Stellar_(payment_network)#cite_note-26) this was a flaw in the Ripple protocol but this statement was challenged in a blog post by Ripple Labs [CTO](https://en.wikipedia.org/wiki/Chief_technology_officer), Stefan Thomas.

The Stellar Development Foundation then created an updated version of the protocol with a new consensus algorithm, based on entirely new code. The code and whitepaper for this new algorithm were released in April 2015, and the upgraded network went live in November 2015.

In September 2017, Stellar has announced it will award partners in its new benefits program up to $2 mln each to develop “high-impact projects.”

In October 2017, IBM and payments network KlickEx have announced Stellar as the backbone of its new “cross-border payments solution.

Reference

https://en.wikipedia.org/wiki/Stellar\_(payment\_network)#cite\_note-10