

Team Pons - JPMorgan Cross-Chain Trading Bridge

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Project Synopsis

JP Morgan requires a bridge between two distinct blockchain tokens using their Quorum blockchain environment. There will be two tokens on separate blockchains: an ERC20 "cash" token, and an ERC721 loan token. In order for this conversion to take place, we will need to develop a "bridge" between these separate blockchain implementations using these two differing smart contract protocols. The bridge that we develop will be developed within a Java environment. The developed bridge will atomically swap tokens, as to adhere to the necessary requirements for ERC721 tokens. The bridge will prompt users to undergo the tokenswap process, and prevent any malicious intent that could be utilized to steal or create false transactions.

The team is expected to explore whether such a bridge is possible to create and implement effectively. Much of the project will include researching blockchain technology while furthering the development of the Quorum private blockchain service. Services for the project implementation will be hosted on a virtual machine created for the team. JP Morgan will be providing existing Quorum solutions for the team to become familiar with the technology. The project should keep scalability in mind, and potentially be able to utilize multiple ERC20 tokens.