2.2.2.1 Network View

The Network View looks at the DIDO as a single entity. Even though the network is comprised of a collection of individual nodes, individual nodes work as one because they:

- Interact as a peer in community of peers (i.e., Peer-to-Peer (P2P))
- Use a single Data Object (i.e., base coinage)
- Process transactions according to the rules of the community

For example, there is a system of nodes involved in the lifecycle of Bitcoins. However, it makes no sense for public records such as births, deaths, marriages, and divorces to be in the Bitcoin system of nodes. Thus, the public records could form their own system of nodes using the Bitcoin software but restrict this network to storage of pubic records.

Obviously, Bitcoin's main purpose is to transfer assets around the world at high speed and with low overhead. However, these are not the capabilities motivating the use of DIDO networks for low volatility public records such as those which reflect the natural rates of births, deaths, marriages, and divorces. Such applications are usually under the jurisdiction of a single country or countries that have reciprocity agreements or treaties.

Similarly, the need to establish a private system of nodes might exist for internal use only users (e.g., government enclaves, large corporations) that have enough distributed resources to support the network. Although the current cryptographic protocols provide "security" to a DIDO, with the advent of quantum computing [1], a reliance on these algorithms in the future for highly classified or private data may not be acceptable. These risks provide even more justification for the development of private DIDO networks.

As a general rule, the larger the system of nodes, the more secure and tamper-proof the data held within the network becomes, which means that for networks to be viable from a security perspective, the number of nodes in the collection might have a minimum.

- 2.2.2.1.1 Secure Messaging
- 2.2.2.1.2 Transport
- 2.2.2.1.3 Security
- 2.2.2.1.4 Protocol
- 2.2.2.1.5 Distribution Software

[1]
MIT Technology Review, "Quantum Computers Pose Imminent Threat to Bitcoin Security," 8 November 2017.
https://www.technologyreview.com/s/609408/quantum-computers-pose-imminent-threat-to-bitcoin-security/

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