



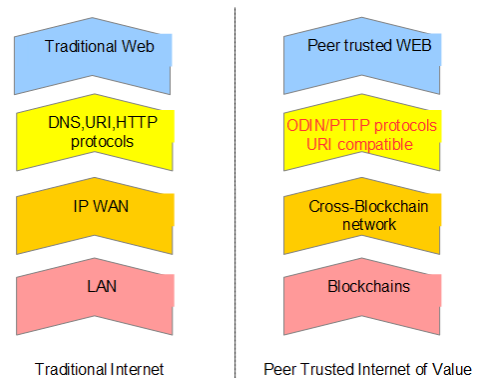
Integrate Blockchain with Communication Network technology

PPk is an open technology community.

PPk stands for Peer-to-Peer Network. PPkPub is not an entrepreneurial team, but an interest-driven, creative focused, open-tech geek community. It relies on the abundant research resources of the National Network Management Research Center of BUPT(Beijing University of Posts and Telecommunications). Community members have deep backgrounds in the R&D of communications and Internet industry technologies, who have independent judgments and unique concepts for the development trend of the Internet industry. Compared to the price volatility of digital cryptocurrency, we are more concerned with the potential value of innovative technologies brought by blockchains, we try to use it to change even revolution the typical network technologies and do some interesting things!

PPkPub focus

1. **Defining** peer-to-peer trusted naming and communication open protocols
2. **Connect** blockchain-based multi-tier architecture
3. **Convergence** Peer Trusted Internet of Value



PPkPub Unique Positioning

Based on blockchain technology, define an autonomous, unique, secure and permanent naming solution, which can be integrated into the ICN/NDN future Internet architecture to develop a peer-to-peer, trusted information exchange open protocol. So that in the multi-tier architecture that uses blockchain as a foundation and integrates trusted applications for peer-to-peer applications, PPk nameing and transfer protocols plays as a link similar to the DNS and HTTP protocols.

PPkPub Vision

Inspired by the case of digital cryptocurrency represented by Bitcoin, the innovative features of blockchain technology are gradually tapped, improved, and applied, and the prospects of peer-reliable next-generation Internet of Value are increasingly evident. In response to this trend, the network needs to be upgraded from the traditional “transmission pipeline” to “network-as-platform, network-as-data,” and “neutral” to meet and guarantee individual “independent” production, consumption, and value-added information content. PPkPub hope to incorporate innovative technologies such as Blockchain, IPFS, and ICN/NDN to make some interesting things and make the future of “Peer” individuals better. We believe:

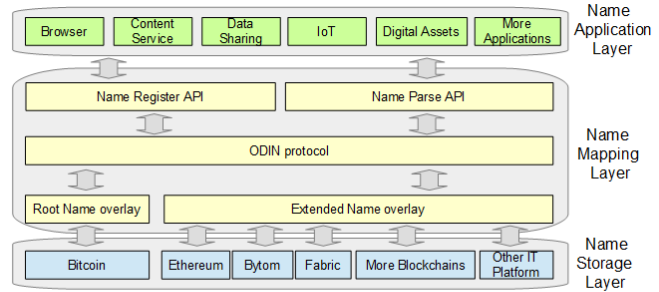
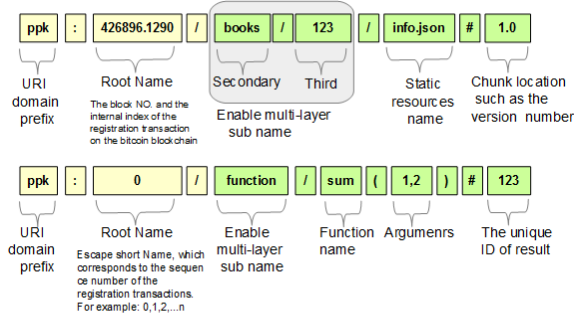
PPk drive the future of Peer



PPk Open Source Projects

ODIN (Open Data Index Name)

ODIN naming protocol is an autonomous, unique, secure, and persistent naming protocol based on blockchain, and is a "peer-to-peer trusted new DNS protocol."

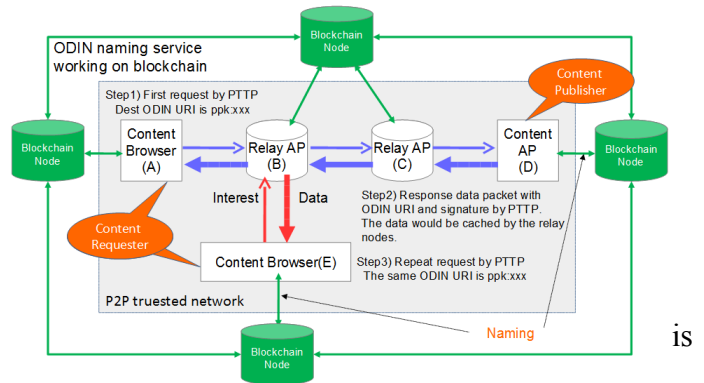


PPk ODIN schemes

PPk ODIN architecture

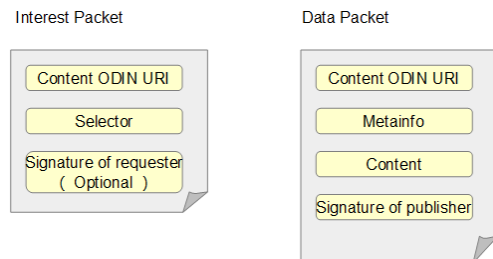
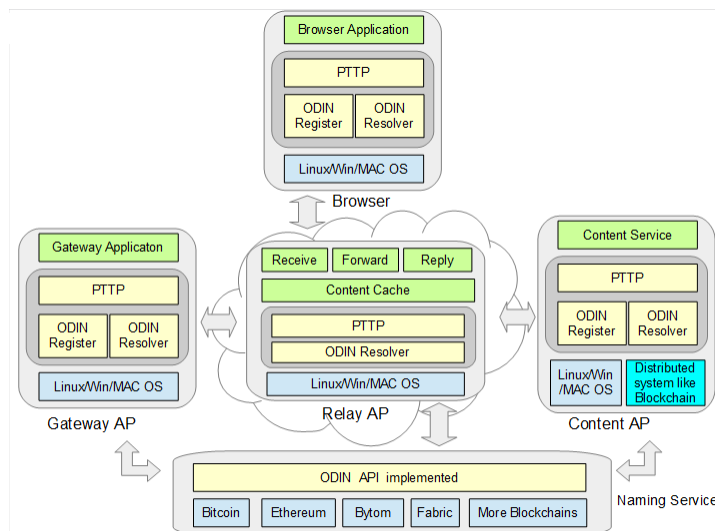
PTTP (Peer Trusted Transfer Protocol)

PTTP transmission protocol is a peer-to-peer trusted network transmission protocol defined by the convergence of ODIN name system, Blockchain and ICN/NDN future network architecture design, and is a new type of HTTP protocol that integrates blockchain technology.



Each content resource URI with ODIN name resolved and mapped to one or more APs (Access Point). The AP node is responsible for relaying or providing specific content services according to the PTTP protocol. The AP can be understood as a "router" and "web server" in a peer-to-peer, trusted PPK network. The PTTP protocol is an access interface standard protocol for the AP to provide data content.

PPk PTTP protocol network architecture



PPk Interest and Data Packets in PTTP

PPk Software structure