

PeerStream Protocol

Enhanced Private and Secure Data Streaming and Communications Transport

PeerStream Protocol (PSP) is a decentralized binary routing and transport protocol that is designed to provide real-time data streaming and messaging, for applications that require the transmission of sensitive data or multi-point communications with enhanced privacy, security features and control.

PSP is designed to provide applications with configurable degrees of anonymity, privacy and security, with features including end-to-end encryption (E2EE), user-to-user authentication while maintaining the added benefit of being totally ephemeral.

PSP will route live data streams leveraging inherently decentralized or distributed network architectures, offering scalability, security and privacy to the enterprise.

PSP CAPABILITIES WILL SERVE MULTIPLE TYPES OF INDUSTRY APPLICATIONS

Government:

- Agency and interagency network channels
- Intelligence / military ops / foreign ops
- Securing critical utility infrastructure
- Emergency management communications

Enterprise:

- Legal / financial / medical / telco
- Trade secrets / intellectual property
- Internet of Things (IoT)
- Blockchain

PSP OFFERS COMBINES END-TO-END ENRYPTION (E2EE) WITH ONION ROUTING

PSP provides anonymity for point-to-point data and messaging communications. This layer uses a modified version of The Onion Routing (TOR) protocol, utilizing a hidden services design which eliminates the need for **exit nodes**, a known security limitation of TOR. PeerStream enabled network nodes responsible for streaming are not able to access metadata such as IP addresses or the identity of senders or recipients. This methodology is ideal for use cases that require the communication of classified or sensitive but unclassified (SBU) data.

PEERSTREAM PROTOCOL TECHNICAL FEATURES:

- **Virtual Routing:** Unique routing employed to hide user/client identity and IP
- **Rendezvous Points:** Disassociating links and metadata between user identities and their IP addresses in all communication and streaming sessions.
- **Architecture:** Designed for decentralized and distributed environments with multiple layers of encryption, including E2EE and perfect forward secrecy
- **Flexibility:** Configurable to unlock value for highly sensitive real-time communications and data transmission applications



backchannel

Powered by
PEERSTREAM
PROTOCOL

SUITE OF CROSS PLATFORM MIDDLEWARE AND SDKS

*Securing the Mobilization of Information for a
Range of Applications, Devices and Use-Cases*

CASE STUDY: BACKCHANNEL SECURE MOBILE COMMUNICATION SOLUTION POWERED BY PSP

Backchannel is a our branded framework designed for ease-of-use and integration of PeerStream Protocol's capabilities, and also the foundation of a best-of-breed secure video-enabled mobile messaging app. Backchannel operates without the use of personally identifiable information (PII) and is able to interoperate with blockchain technologies to provide decentralized multimedia messaging with exceptional privacy control.

The **Backchannel branded mobile solution** accesses PSP's distributed security model, which uses a variation of The Onion Routing (TOR) protocol implemented so that network nodes can neither trace the origin or destination of messages, nor determine the participating device IP addresses.



Secure communication starts with verified identification of the counterparties, though these parties must be in control of how their identities are used. Backchannel requires **no PII** and can utilize blockchain crypto addresses as user identities. In addition, it will utilize hardware level encryption from the Trusted Execution Environment (TEE) found within most smartphones, providing a level of security and account protection beyond that of leading secure messaging applications available today.

<https://www.peerstream.com>

About PEERSTREAM (OTCQB: PEER) PeerStream is a communications software innovator developing enhanced security and privacy solutions for video, voice, and text applications and data transmission. Our offerings target consumer, government and enterprise clients. Using multi-layered encryption, blockchain technology and other recent innovations, we are developing our proprietary PeerStream Protocol ("PSP") to offer clients maximal data security and confidentiality over distributed or decentralized networks. We also recently launched our Backchannel product suite in private beta, which includes cross platform applications, middleware and software development kits designed to offer a highly secure end user communication experience when coupled with PSP. For 20 years, we have built and continue to operate innovative consumer applications, including Paltalk and Camfrog, two of the largest live video social communities. The Company has a long history of technology innovation and holds 26 patents.

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