5 May 2017 Study · Privacy & Crypto

# State of the Art Services for Direct Communication

The full text is currently only available in the Deutsch version. A translation will follow.

**Archived.** This content is no longer updated. It remains available for reference.

**Source** https://technology2.a-sit.at/en/publications/state-of-the-art-services-for-direct-communication/

Direct data transfer and direct communication services are becoming increasingly relevant due to widespread availability of high bandwidth Internet connections. At the same time, some properties of today's Internet infrastructure over-complicate the act of establishing direct end-to-end connections. This is mostly due to legacy technologies still dominating some key components of the TCP/IP stack. To make matters worse, this is unlikely to change significantly for the foreseeable future.

IPv6 is expected to be a game changer in this context. However, IPv4 is only slowly being superseded by IPv6. This project deals with these and many other issues of direct, Internet-based communication. Furthermore, additional technological fundamentals relevant to direct communication are presented. Ways to directly communicate and exchange information are categorised based on the properties of their underlying technologies. Finally, security aspects specifically relevant to direct information exchange like end-to-end encryption are discussed.