

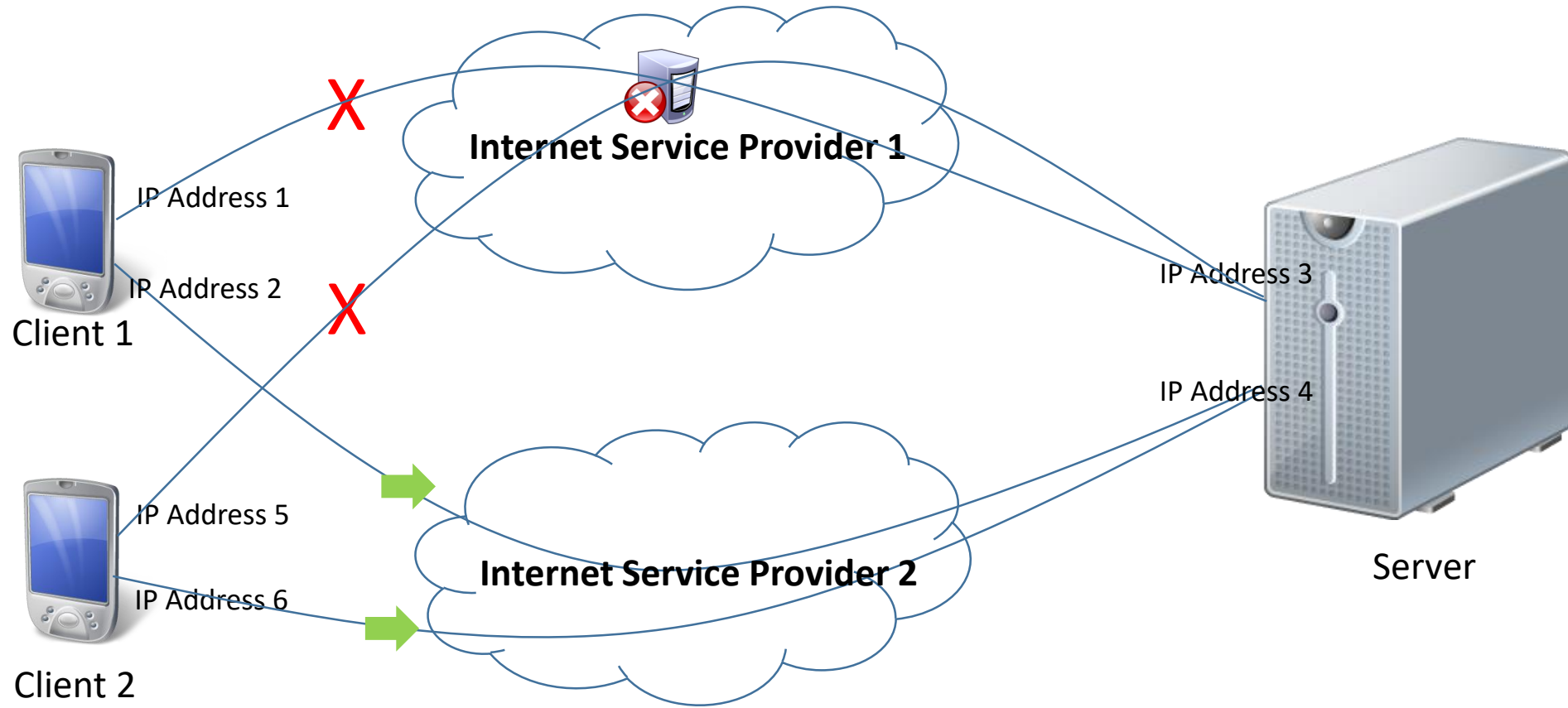
Fault Management Enhancement in MPTCP

draft-kang-tcpm-fault-management-in-mptcp-session-00

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Use Cases for MPTCP Fault Management Enhancement



Info("Path(IP1, IP3) is wrong") can be transferred from client 1 to server on Path(IP2, IP4).

Info("Path(IP5, IP3) is wrong") can be transferred from client 2 to server on Path(IP6, IP4).

Implementation and Interoperability

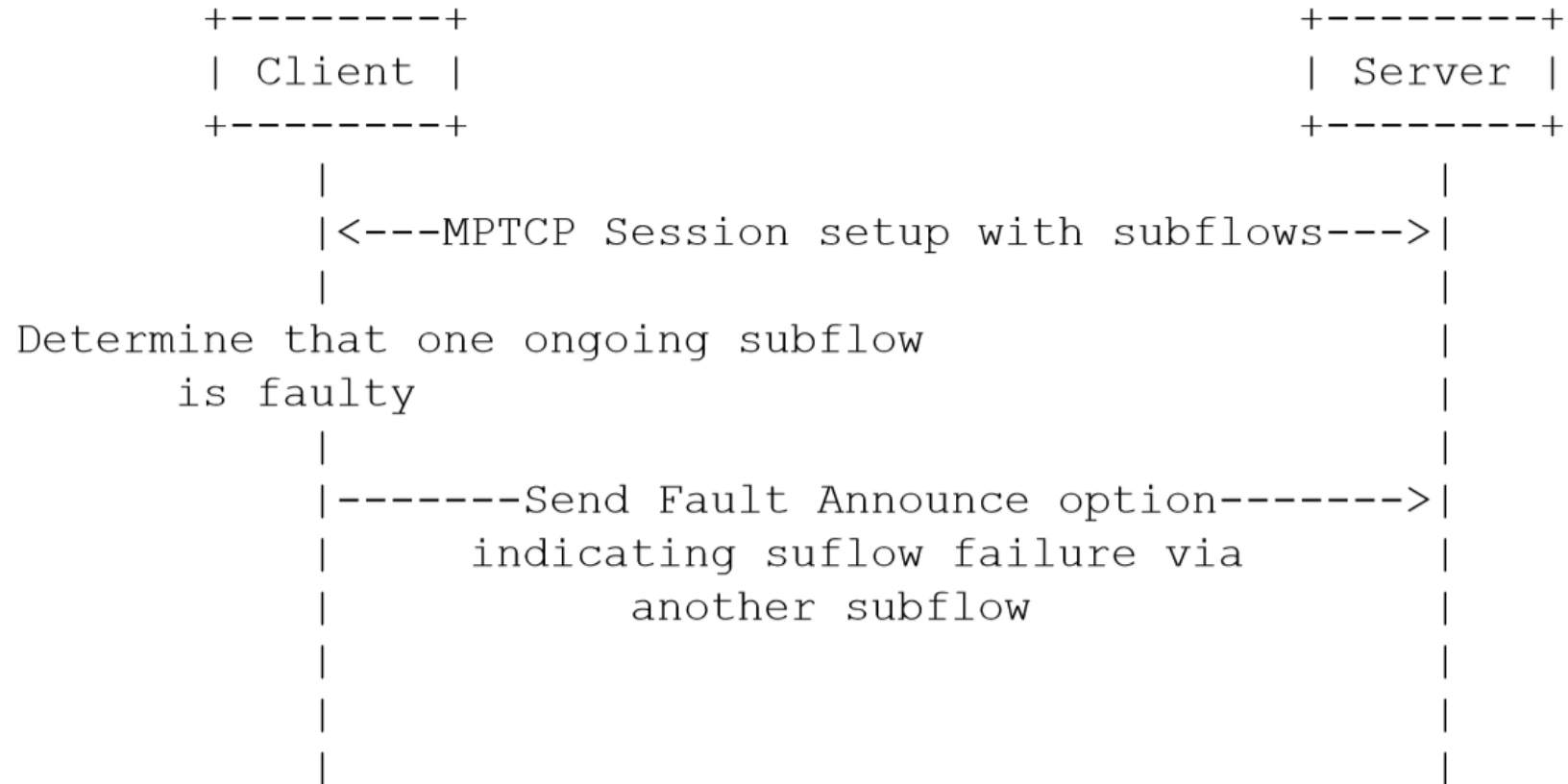


Figure 1: Client sends Fault Announce to server during a MPTCP Session

MPTCP FAULT_ANNOUNCE Option

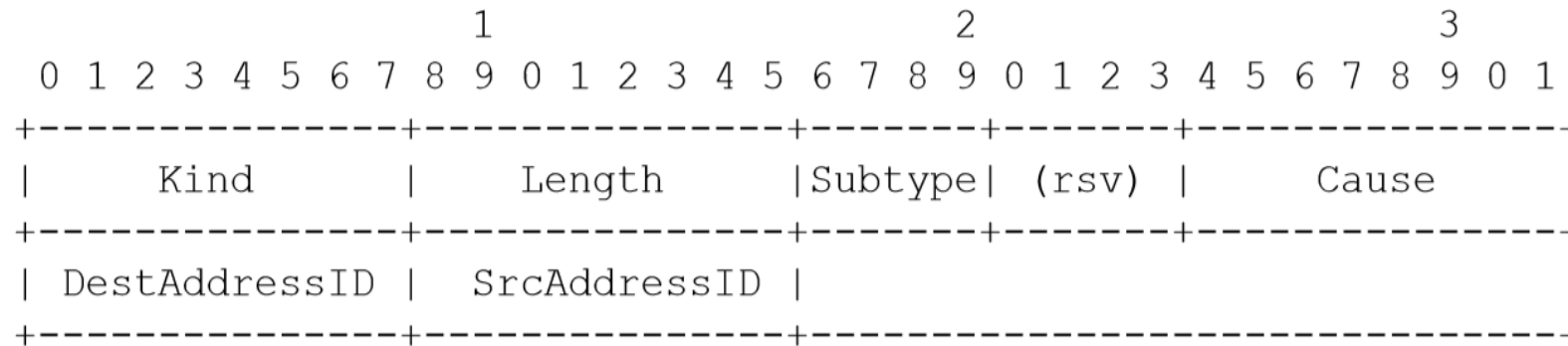


Figure 2: Fault Announce (FAULT_ANNOUNCE) Option

A new subtype should be allocated to indicate Fault Announce option.

“Cause” is an 8-bit field to describe the reason code for which causes the subflow to malfunction. Following values (partially mapped to the Exception Code in ICMP error report) are defined in this document:

- * 0x00~0x09 is reserved. It is compatible with “Reason” defined in RFC8684.
- * Network is unreachable (code 0x0A).
- * Host is unreachable (code 0x0B).
- * Routing is failed (code 0x0C).
- * Server Suppression (code 0x0D).
- * TTL equals zero (IP loops may occur) (code 0x0E).

“SrcAddressID” is used to identify source address ID for the faulty subflow.

“DestAddressID” is used to identify destination address ID for the faulty subflow.

Next Steps

1. Will be considered in MPTCP protocol?
2. Any comments welcome