# Progressive File Transfer (PFT) Protocol

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#### Abstract

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#### 1 Framing

The frames are encoded on the wire in a framing format as specified in figure 1. A PFT frame consists of a fixed 7 octet header and a variable length payload. The first two octets specify the length of the entire frame, that is of the header and the variable length payload. The next octet specifies the type of the frame. The last four octets of the header specify an identifier, which uniquely identifies a connection. The identifier is a pseudo-random non-zero byte sequence that must be chosen by the server. A server and client is free to drop any frame with an illegal identifier i.e. zero or unknown. The variable length payload contains the data of the specific packet type.

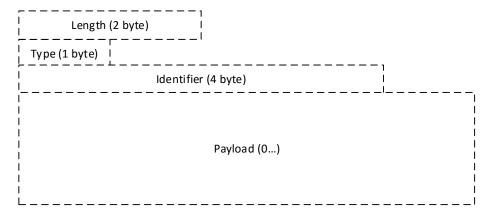


Figure 1: Framing

## 2 Frame Types

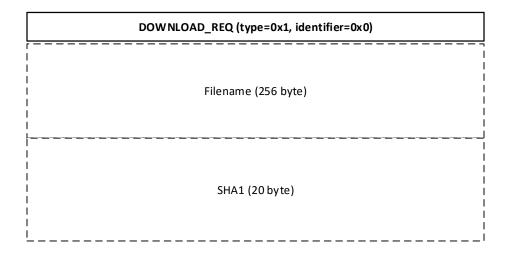


Figure 2: DOWNLOAD\_REQ

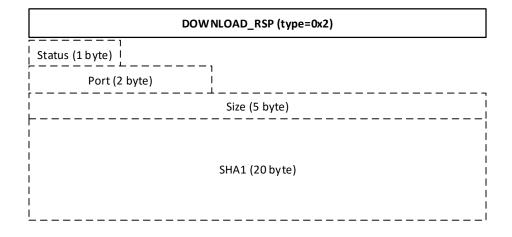


Figure 3: DOWNLOAD\_RSP

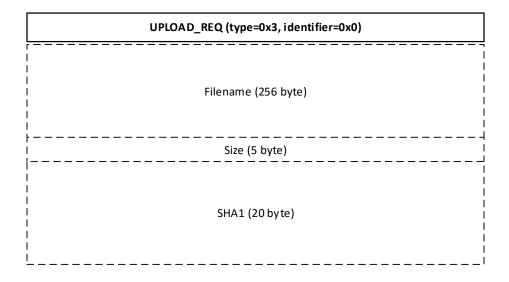


Figure 4: UPLOAD\_REQ

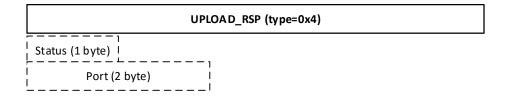


Figure 5: UPLOAD\_RSP

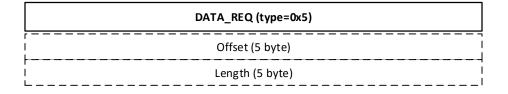


Figure 6: DATA\_REQ

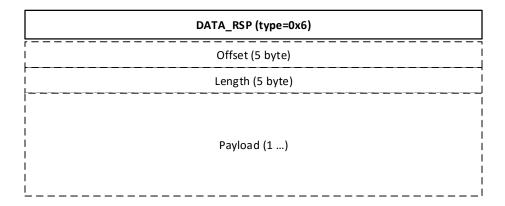


Figure 7: DATA\_RSP

CHECKSUM_REQ (type=0x7)
Offset (5 byte)
Length (5 byte)

Figure 8: CHECKSUM\_REQ

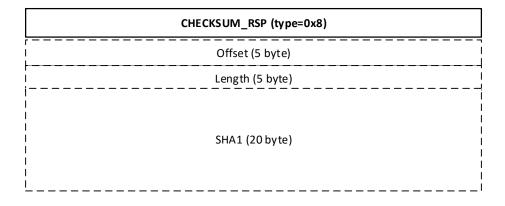


Figure 9: CHECKSUM\_RSP

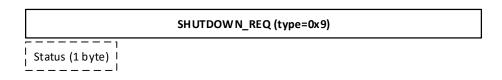


Figure 10: SHUTDOWN\_REQ