



## ZDATA File Data

The server ZDATA File Data packet transfers a 1024-byte block of file data to the client receiver. The packets are sent in a continuous stream to the client with no client acknowledgement of individual packets. A client that detects a non-recoverable data packet error is expected to abort the transmission by sending the server five consecutive <CAN> characters.

										1										2										3									
0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1								
PadChar									StartofPacket									HeaderFormatType									PacketType												
FileOffset0									FileOffset1									FileOffset2									FileOffset3												
FileDataBlock (variable)																																							
...																																							
CRCCheckBytes																																							

PadChar (1 byte): Pad character

**PadChar (1 byte):** Pad character.

Value	Meaning
0x2A	Single pad character.

**StartofPacket (1 byte):** Packet start character.

Value	Meaning
0x18	ZDLE: Packet start.

**HeaderFormatType (1 byte):** Type of header format.

Value	Meaning
0x41	ASCII A: Packet has binary header with 16-bit CRC. This format is used only by a sender when the following data block is binary coded.

**PacketType (1 byte):** Type of packet.

Value	Meaning
0x0A	ZDATA: Data packet(s) follow.

**FileOffset0 (1 byte):** Least-significant 8 bits of the offset of **FileDataBlock[]** in the transferring file.

**FileOffset1 (1 byte):** Offset of **FileDataBlock[]** in the transferring file.

**FileOffset2 (1 byte):** Offset of **FileDataBlock[]** in the transferring file.

**FileOffset3 (1 byte):** Most-significant 8 bits of the offset of **FileDataBlock[]** in the transferring file.

**FileDataBlock (variable):** Transferred file data.

**CRCCheckBytes (2 bytes):** A 16-bit CRC check field. For information on the polynomial used for 16-bit CRC calculation, see ITU-T Recommendation V.41, "Code-independent error-control system," November 1989.

Receipt of five successive CAN characters (0x18) aborts a file transfer session.

For more information about CRC, see [http://www2.rad.com/networks/1994/err\\_con/crc.htm](http://www2.rad.com/networks/1994/err_con/crc.htm)  
[ [http://www2.rad.com/networks/1994/err\\_con/crc.htm](http://www2.rad.com/networks/1994/err_con/crc.htm) ] .

### Line Control and Escape Sequences

Both a line control sequence and an escape sequence consist of the ZDLE character (0x18) followed by a single character. A line control sequence is a command sent as a character outside the regular packet structure. An escape sequence allows the receiver to ignore the character following the ZDLE character.

Value	Description
0x180D	Ignored by receiver.
0x1810	Ignored by receiver.
0x1811	Ignored by receiver.
0x1813	Ignored by receiver.
0x1868 (ZDLE + ASCII h)	ZCRCE : CRC next, packet ends, header packet follows.
0x1869 (ZDLE + ASCII i)	ZCRCG: CRC next, packet continues nonstop.
0x186A (ZDLE + ASCII j)	ZCRCQ: CRC next, packet continues, ZACK expected.
0x186B (ZDLE + ASCII k)	ZCRCW: CRC next, ZACK expected, end of packet.
0x186C (ZDLE + ASCII l)	ZRUB0: Translate to rubout 0177.
0x186D (ZDLE + ASCII m)	ZRUB1: Translate to rubout 0377.
0x187F	Ignored by receiver.
0x188D	Ignored by receiver.
0x1890	Ignored by receiver.
0x1891	Ignored by receiver.
0x1893	Ignored by receiver.
0x18FF	Ignored by receiver.