

Manual: FDO91 Manual

Chapter 27: P3 Protocol defines P3 protocol atoms and provides information for handling P3 communication.

Last updated: January 1994

CHAPTER 27

P3 Protocol

The P3 communications protocol (protocol ID 35) consists of atoms that are to ensure error-free transmission between the host and the client computer. The data is formed into packets with an 8-byte header and a terminating carriage return. The minimum length of a packet is the header plus the carriage return, the nominal length is 128 bytes, and the current maximum length is 1024 bytes.

There are two classes of packets - numbered and unnumbered. Data packets are numbered; all other packets are not. The data packets are numbered consecutively and must be delivered in order.

A packet is considered invalid if it is received out of order, with an incorrect length, or a bad cyclic redundancy check (CRC). If a data packet is detected as invalid by the P3 Tool, a retransmission of all data packets, beginning with the number of the bad packet, is requested. This ensures that the sequence of the packets is maintained.

P3 Protocol Atoms

The P3 protocol atoms are described in alphabetical order in the rest of this chapter.

atom\$p3_interleaved_mode

4 (\$04)

Description

atom\$p3_interleaved_mode allows the processing of Windows messages between packets of data incoming from the host. Normally, incoming data is processed before any pending Windows messages. This atom is necessary in situations like a chat room, where incoming data is almost continuous and would cause delays in the processing of Windows messages.

Syntax

```
atom$p3_interleaved_mode <boolean_arg>
```

<boolean_arg> Specifies True to enable interleaved mode, False to disable it.

Return Value

Unchanged

Example

```
atom$p3_interleaved_mode true
```

atom\$p3_start

1 (\$01)

Description

atom\$p3_start activates the p3 protocol. Upon activation, the P3 Tool retrieves the init packet from the database and sends it to the host. Once the init packet is acknowledged, the P3 Tool notifies the application that connection has been established with the host.

Syntax

```
atom$p3_start
```

Return Value

Unchanged

Example

```
atom$p3_start
```

atom\$p3_stop

3 (\$03)

Description

atom\$p3_stop shuts down the P3 protocol.

Syntax

```
atom$p3_stop
```

Return Value

Unchanged

Example

```
atom$p3_stop
```

atom\$p3_write

2 (\$02)

Description

atom\$p3_write sends data to the host. The data must fit into one packet or it is not sent.

Syntax

```
atom$p3_write <data>
```

<data> Specifies binary or string data.

Return Value

Unchanged

Example

```
atom$p3_write "This is some data to send to the host"
```