

IOCP (ver 1.1) Protocol Specifications

By Xavier Bofill and Manuel Vélez (11/2003). Translate by Jose Olliver (11/2005)

The IOCP protocol is based on the generation of plots according to events. Being sent the plots from the server to the clients or vice versa, in function to the alteration of some variables of the system.

The variables will be of the INTEGER type, using a conversion of decimals by means of multiplication factor agreed for a number of decimals (for 1.56, it is sent 156 and the reception remembers the divided by 100)

The variables map will be a chart whose index will be an integer and it will be used to identify the corresponding variable.

The protocol used will be TCP/IP for any port defaulted by the server.

Messages of the data:

Each line of data will conclude with the codes \$0D, \$0A (CR+LF).

"Arn.Inicio:" It indicates to the system the beginning of the communications, followed by this message and separated by two dots (:), the communication variables will be introduced that will be those, those which when changing, the server will notify to the proper client. Those will be the only variables whose changes will be notified and only in the event of change of the same ones.

Example: "Arn.Inicio:0:12:324:875: "

"Arn.Vivo:" It will indicate to the system that It continue "alive". This message will take place periodically after a beginning and it will be bidirectional, to a requirement of "Arn.Vivo: " the other system will respond with other "Arn.Vivo: "

If one of those "Arn.Vivo: " doesn't obtain answer, the following message it should be a "Arn.Inicio: ". Also in a periodic way.

An "Arn.Vivo: " will be sent as answer to a message "Arn.Inicio: " just as It has received and expect the beginning message.

The server will canceled the exit messages to the “non answer” of a "Arn.Vivo: "

Client and server will implement a variable of “Timeout” defined by the user. This variable will correspond to the miliseconds among the sent of a "Arn.Vivo: " and the answer. If exceeds of this time it will be considered a disconnect.

"Arn.Fin:" Bidirectional message that indicated to the systems their closing for what the emission of messages will cease.

"Arn.Resp:" it will be the one headed for the answer messages. The variables will go separated by two points (:), being indicated the identification of the variable, the sign" = and the value that he/she took the variable.

Example "Arn.Resp:140=0:142=3456:890=1: "