IJS Protocol Specification

Version 0.34 — 22 Feb 2002

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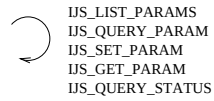
This document contains a specification for the IJS protocol, which is intended to make it easier to deploy raster-based printer drivers in a wide variety of environments, including Unix desktops.



2.1. IJS_CMD_ACK

This command is sent from server to the client in response to a command from the client, to indicate successful completion. There are no arguments specific to this command. However, for commands (such as IJS_CMD_GET_PARAM) which request a value, this value is returned as the argument in an ACK command.

2.2. IJS_CMD_NAK

This command is sent from server to the client in response to a command from the client, to indicate an error. There is one integer argument, which is the error code. A list of error codes is given in Section 6.

2.3. IJS_CMD_PING

The PING command is sent from the client to the server as part of the connection setup. It contains one integer argument, which is the 100 times the real-valued version number of the largest IJS protocol understood by the

2.6. IJS_CMD_CLOSE

The client should send a CLOSE command to the server to indicate that printing is complete for now. The server can free any allocated resources at this time.

2.18. IJS_CMD_EXIT

In the case where the server is able to identify the device, for example by retrieving the IEEE 1284 Device ID string, or through the GET_DEVICE_ID request of the USB Printer Class[USBPrint], getting the value of the parameter will retrieve this identification string. In general, the server should perform the device ID query at the time of the GET_PARAM command.

In the case where the device identification is configured by the client, the client may set this parameter, then set the DeviceModel parameter.

Finally, enumerating this parameter returns a list of manufacturers known by the server. This may be helpful for installing a new printer in cases where automatic device identification is not available.

There may be cases where the server is able to automatically identify the device, and the client attempts to override this identification. The server should allow this override to occur, particularly when the device ID is not one known to the server. However, the server can reject such attempts by returning an IJS_ERANGE error.

4.4. DeviceModel

This parameter is the model name of the printer, and together with DeviceManufacturer, identifies the device. In general it should match the "MODEL" (or "MDL") field of the IEEE 1284 Device ID string.

Usage scenarios are similar to DeviceManufacturer. This parameter is subsidiary to DeviceManufacturer.

Setting the device manufacturer and model may have profound effects on the list of other parameters available.

Servers should not provide additional color spaces which are merely transforms of the standard color spaces. Examples of such discouraged color spaces are HSV, XYZ, Luv, Yuv, YCC, and colorimetric RGB spaces other than sRGB (TODO: unless we decide to accept scRGB/sRGB64).

4.12. NumChan

This parameter is the number of channels in the chosen color space. In general, it c50(u250(color)-250(50(chann(r)-25mineimetri)f

IJS imports the namespace of PostScript page device parameters, prefixing it with the string "PS:". The client can assume that any parameters returned by a LIST_PARAMS command matching this prefix are in fact PostScript page device parameters. Values are straightforward ASCII encodings. For example, arrays are

The current draft contains the following error codes:

Table 4. Draft IJS Error Codes