# Universal Print Driver (UPD) Meeting: May 15, 1997

# Attendees:

Scott Isaacson Tom Hastings Harry Lewis Jeff Copeland Robert Kline Lee Farrel Bob Herroit Bill Wagner **Bob Pentecost** Sylvan Butler Mike Mathews Jay Martin David Kellerman Keith Carter Don Wright Steven Holmstead Ron Bergman

This activity resulted from an IPP teleconference discussion. The purpose of the meeting is to see if there is any interest in starting a PWG project to develop a Universal Print Driver.

### HP Presentation (Steve Holmstead):

HP believes that the "Information utility" is the next technology step after "Client/Server". Previous steps were "Main frame" -> "Mini-Computer" -> "PC" -> "Client/Server"

The "Information Utility" will require a "device independent" mechanism for any-to-any device interaction. HP has defined a "Connection Independent" session layer protocol for this application.:

- Protocol is peer-to-peer and device independent.
- Data formats include the ability to exchange capabilities between devices.

#### **Questions from Jay Martin's meeting announcement:**

What is a Universal Printer Driver?

Why important? (problems)

What are the goals?

How would we model it?

What is the relationship to IPP?

Acceptance issues?

Issues surrounding the environment?

Backward compatibility issues?

Standardization issues?

## **Discussion:**

The evolution of drivers from Microsoft is more towards a product with more universal functionality.

Presently product features are communicated to the driver via a PPD file.

A Universal Printer Driver must be able to be self configuring for multiple products.

Should a UPD use only one PDL or support multiple PDLs or ignore?

Harry Lewis proposed that the UPD be limited to those parameters that can be used by PWG standards. (i.e. IPP for job submission and the Printer MIB to obtain additional information regarding the printer.)

The Printer MIB only describes the current state of the printer, not its potential capabilities.

Drivers are one item that printer vendors can use to differentiate their products.

Two views:

The logical printer informs the driver of what it will do. The user tells the driver how it wants the output presented.

Five key features applicable to the discussion of a UPD:

- 1. User interface The UI should display only those features present in the printer.
- 2. Interactions Features that cannot be used together should not be allowed to both be selected.
- 3. Control code -
- 4. Extensions -
- 5. Localization -

	PPD	IPP	Printer MIB
Content	Х	1/4	7/8
User Interface	1/2	1/8	-
Interactions	Х	1/16	-
Control Codes	Х	Х	-
Extensions	?	?	?
Localization	1/2	Х	Х

# **Conclusions:**

- 1. Keep the mailing list open.
- 2. No PWG project is recommended at this time.
- 3. The activity might best be directed towards the definition of a more universal PPD file.