Data-Driven Printer Configuration

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Abstract

This whitepaper describes an effort to engineer a one-stop printer configuration system for free Unix.

2.2.1 CUPS

The Common Unix Printing System, from Mike Sweet, is an IPP-based spooler. It supports both a standard set of IPP options and printer-specific options as defined in PPD files. All printer queues are declared in

As is, CGI scripts provide a number of useful web-based interfaces to this data[4]. Users can easily:

1. Find a printer number from IEEE 1284 probe data.
2. Get a list of drivers, with comments on each, from a printer number.

```
  'spot' => 'A',
  'order' => 100
},
'ProcessColorModel' => {
  'vals_byname' => {
    'RGB' => {
```

```
  'idx' => 162,
  'driverval' => 'CoatedPaper'
},
'transparency' => {
```

```
$VAR1->{'args_byname'}{'BitsPerPixel'}{'vals'}[3]
     = $VAR1->{'args_byname'}{'BitsPerPixel'}{'vals_byname'}{1};
$VAR1->{'args_byname'}{'Resolution'}{'vals'}[0]
     = $VAR1->{'args_byname'}{'Resolution'}{'vals_byname'}{180};
$VAR1->{'args_byname'}{'Resolution'}{'vals'}[1]
     = $VAR1->{'args_byname'}{'Resolution'}{'vals_byname'}{360};
$VAR1->{'args_byname'}{'PrintQuality'}{'vals'}[0]
     = $VAR1->{'args_byname'}{'PrintQuality'}{'vals_byname'}{'Draft'};
$VAR1->{'args_byname'}{'PrintQuality'}{'vals'}[1]
     = $VAR1->{'args_byname'}{'PrintQuality'}{'vals_byname'}{'Normal'};
$VAR1->{'args_byname'}{'PrintQuality'}{'vals'}[2]
     = $VAR1->{'args_byname'}{'PrintQuality'}{'vals_byname'}{'High'};
$VAR1->{'args_byname'}{'ProcessColorModel'}{'vals'}[0]
     = $VAR1->{'args_byname'}{'ProcessColorModel'}{'vals_byname'}{'CMYK'};
$VAR1->{'args_byname'}{'ProcessColorModel'}{'vals'}[1]
     = $VAR1->{'args_byname'}{'ProcessColorModel'}{'vals_byname'}{'RGB'};
$VAR1->{'args_byname'}{'ProcessColorModel'}{'vals'}[2]
     = $VAR1->{'args_byname'}{'ProcessColorModel'}{'vals_byname'}{'Greyscale'};
$VAR1->{'args'}[0] = $VAR1->{'args_byname'}{'Resolution'};
$VAR1->{'args'}[1] = $VAR1->{'args_byname'}{'ProcessColorModel'};
$VAR1->{'args'}[2] = $VAR1->{'args_byname'}{'BitsPerPixel'};
$VAR1->{'args'}[3]{'vals'}[0]
     = $VAR1->{'args'}[3]{'vals_byname'}{'plain'};
$VAR1->{'args'}[3]{'vals'}[1]
     = $VAR1->{'args'}[3]{'vals_byname'}{'coated'};
$VAR1->{'args'}[3]{'vals'}[2]
     = $VAR1->{'args'}[3]{'vals_byname'}{'transparency'};
$VAR1->{'args'}[4] = $VAR1->{'args_byname'}{'MediaType'};
$VAR1->{'args'}[5] = $VAR1->{'args_byname'}{'PrintQuality'};
$VAR1->{'args'}[6] = $VAR1->{'args_byname'}{'Ma8ualFeed'};
```