

Introducción a Linux

Impresión en Linux

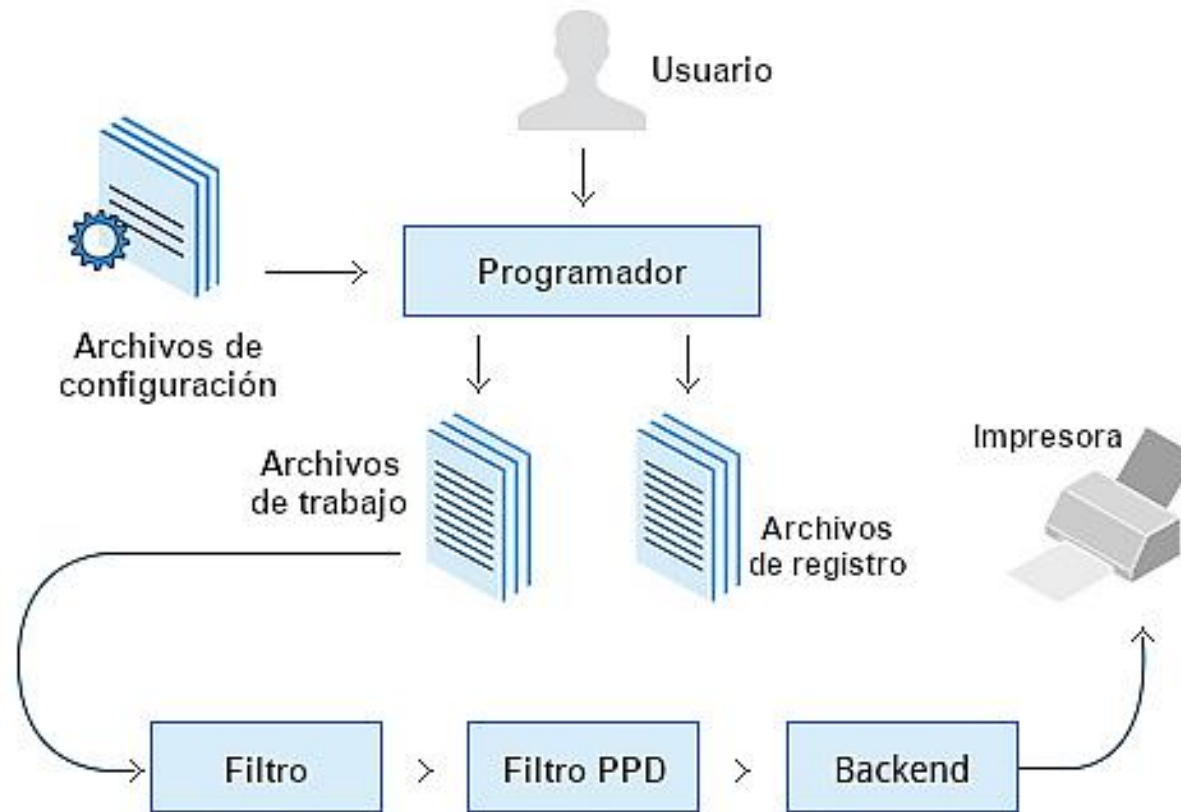
Common Unix Printing System (CUPS)



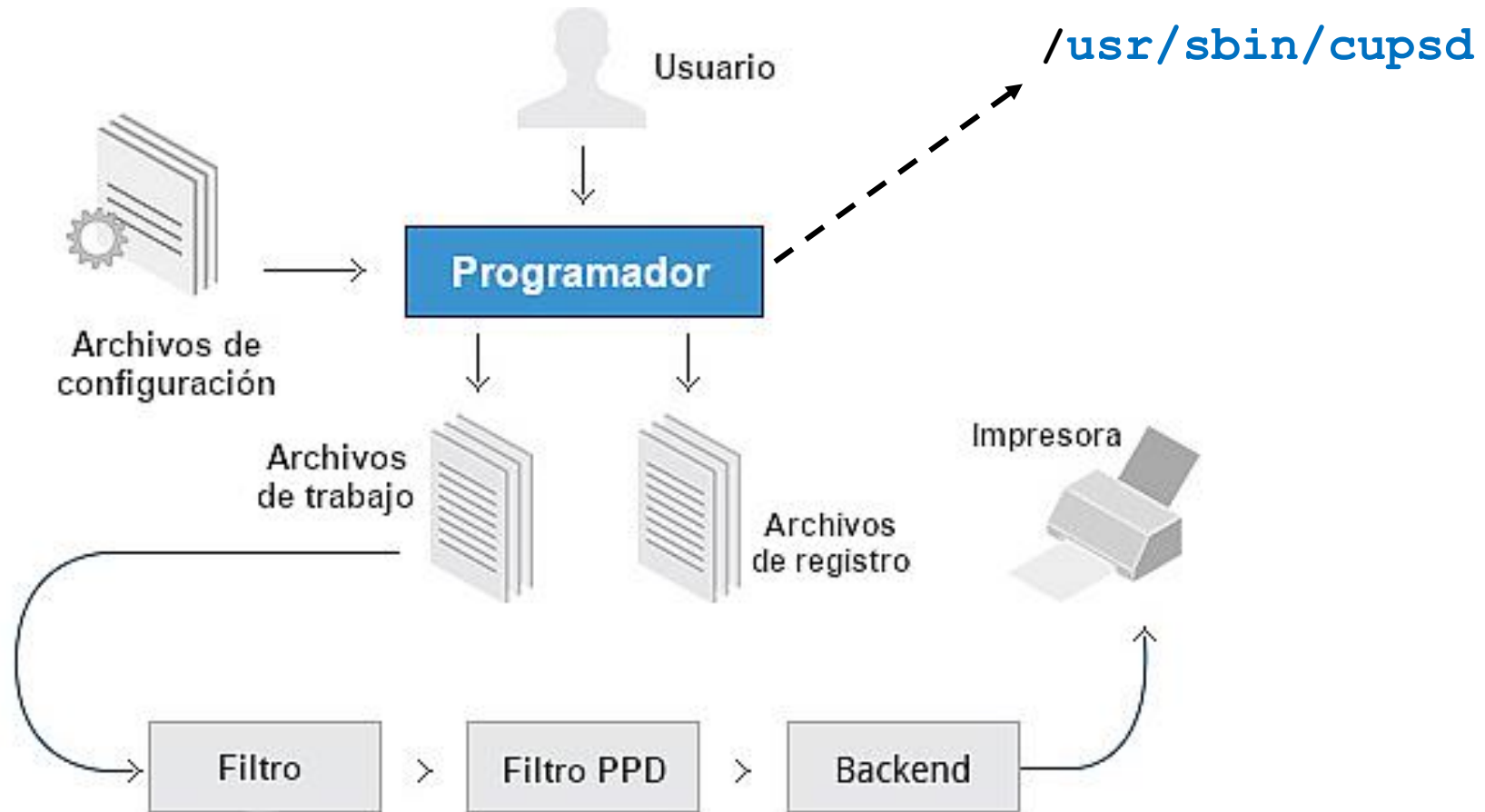
Fundamentos de CUPS



¿Cómo funciona CUPS?



Planificador (Scheduler)

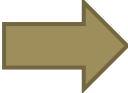
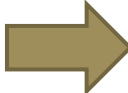
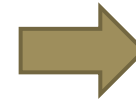


Archivos de configuración

/etc/cups

/etc/cups/cupsd.conf

/etc/cups/printers.conf



```
$  
$ ls -l /etc/cups  
total 76  
-rw-r--r-- 1 root root 26954 May  9  2019 cups-browsed.conf  
-rw-r--r-- 1 root root  6403 Aug  5  2019 cupsd.conf  
-rw-r--r-- 1 root root  2923 May 30  2019 cups-files.conf  
drwxr-xr-x 2 root root  4096 May 30  2019 interfaces  
drwxr-xr-x 2 root lp   4096 Jan 30 11:05 ppd  
-rw----- 1 root lp    454 Jan 30 11:06 printers.conf  
-rw-r--r-- 1 root root   240 Aug  5  2019 raw.convs  
-rw-r--r-- 1 root root   211 Aug  5  2019 raw.types  
-rw-r--r-- 1 root root   142 May 30  2019 snmp.conf  
drwx----- 2 root lp   4096 May 30  2019 ssl  
-rw-r----- 1 root lp   1194 Jan 30 11:06 subscriptions.conf  
-rw-r----- 1 root lp    681 Jan 30 10:49 subscriptions.conf.0  
$
```

```
$  
$ sudo cat /etc/cups/printers.conf  
# Printer configuration file for CUPS  
# Written by cupsd  
# DO NOT EDIT THIS FILE WHEN CUPSD IS  
<Printer CUPS-BRF-Printer>  
UUID urn:uuid:3c3430e4-5d84-3abf-7385  
Info CUPS-BRF  
MakeModel Generic Text-Only Printer  
DeviceURI cups-brf:/  
State Idle  
StateTime 1643569553  
ConfigTime 1643569553  
Type 12292  
Accepting Yes  
Shared Yes  
JobSheets none none  
QuotaPeriod 0  
PageLimit 0  
KLimit 0  
OpPolicy default  
ErrorPolicy retry-job  
</Printer>  
$
```

`/var/spool/cups`

Archivos de trabajo

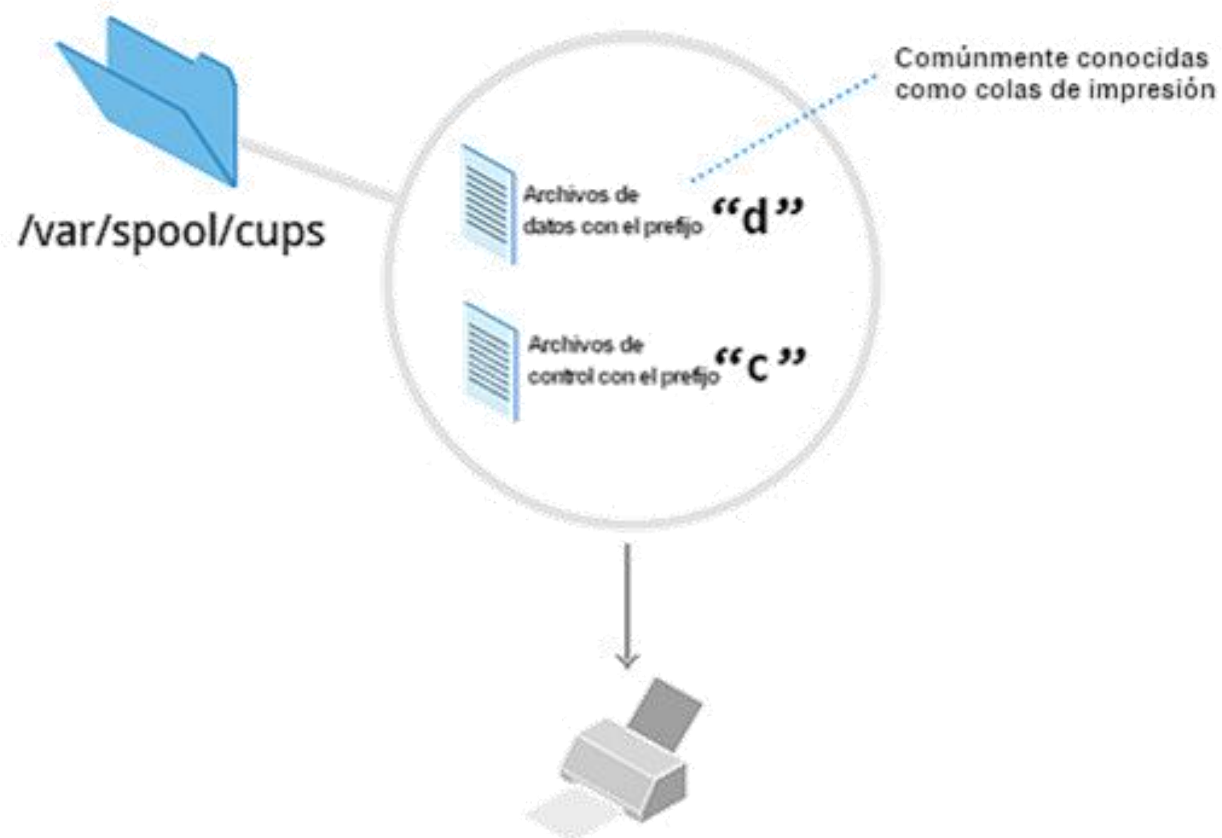
“cola de impresión”

`/var/spool/cups/d*`

`/var/spool/cups/c*`

Por cada trabajo, datos y control

```
File Edit View Search Terminal Help
c7:/tmp>sudo ls -l /var/spool/cups
total 380
-rw----- 1 root lp 900 Apr 28 10:42 c00388
-rw----- 1 root lp 932 Apr 30 19:46 c00389
-rw----- 1 root lp 869 May 1 17:06 c00390
-rw----- 1 root lp 825 May 4 09:34 c00391
-rw----- 1 root lp 774 May 6 09:45 c00392
-rw----- 1 root lp 789 May 6 09:46 c00393
-rw-r----- 1 root lp 85657 Apr 28 10:41 d00388-001
-rw-r----- 1 root lp 35705 Apr 30 19:46 d00389-001
-rw-r----- 1 root lp 64465 May 1 17:05 d00390-001
-rw-r----- 1 root lp 93137 May 4 09:34 d00391-001
-rw-r----- 1 root lp 39084 May 6 09:44 d00392-001
-rw-r----- 1 root lp 39078 May 6 09:45 d00393-001
c7:/tmp>
```



Archivos de registro

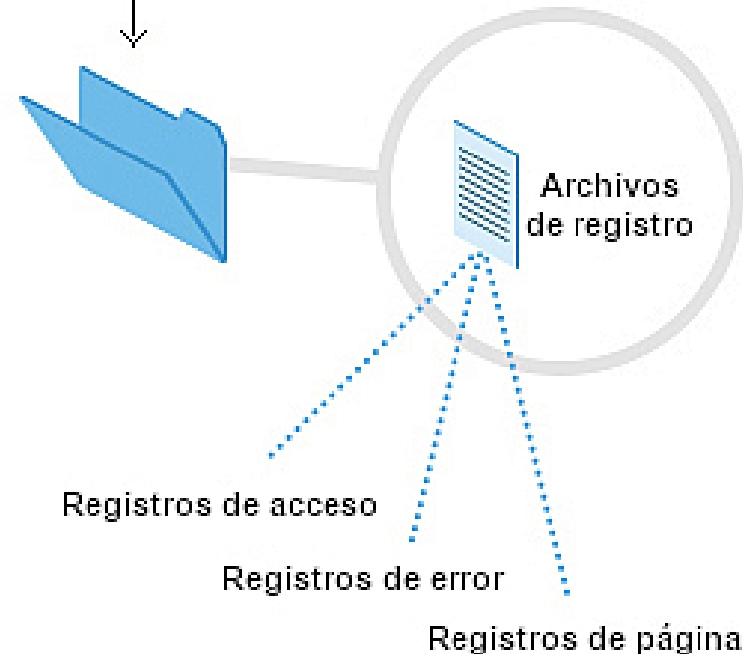
`/var/log/cups`

`/var/log/cups/access_log`
`/var/log/cups/error_log`
`/var/log/cups/page_log`
`/var/log/cups/*.gz`

Archivos históricos comprimidos

```
$ sudo ls -l /var/log/cups
```

```
File Edit View Search Terminal Help
c7:/tmp>ls -l /var/log/cups
total 32
-rw----- 1 root lp 2405 May  7 11:57 access_log
-rw----- 1 root lp  477 Apr 29 07:31 access_log-20180429.gz
-rw----- 1 root lp  722 May  6 08:27 access_log-20180506.gz
-rw----- 1 root lp  129 May  7 06:07 error_log
-rw----- 1 root lp  199 Apr 29 07:31 error_log-20180429.gz
-rw----- 1 root lp  240 May  6 07:28 error_log-20180506.gz
-rw----- 1 root lp    0 Apr  9 06:17 page_log
-rw----- 1 root lp  200 Feb 26 09:18 page_log-20180227.gz
-rw----- 1 root lp  120 Apr  8 10:50 page_log-20180409.gz
c7:/tmp>
```

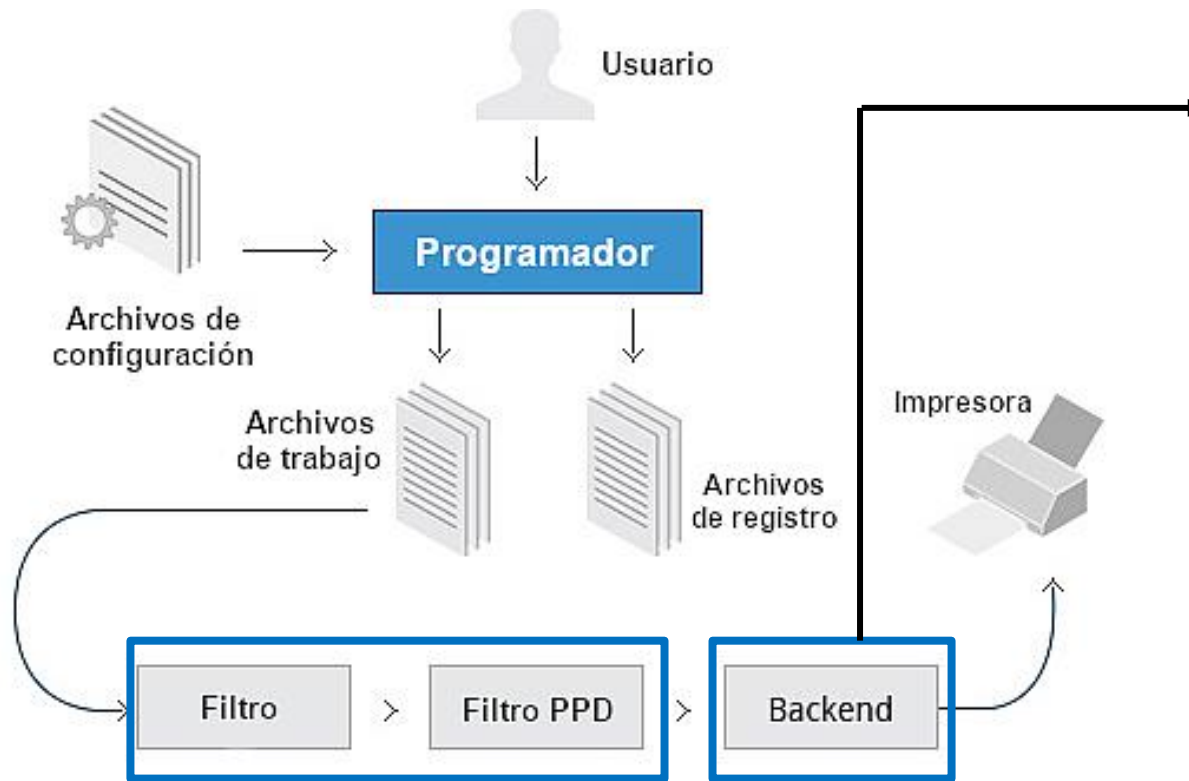


Filtros, controladores de impresora y backends

`/etc/cups/ppd`

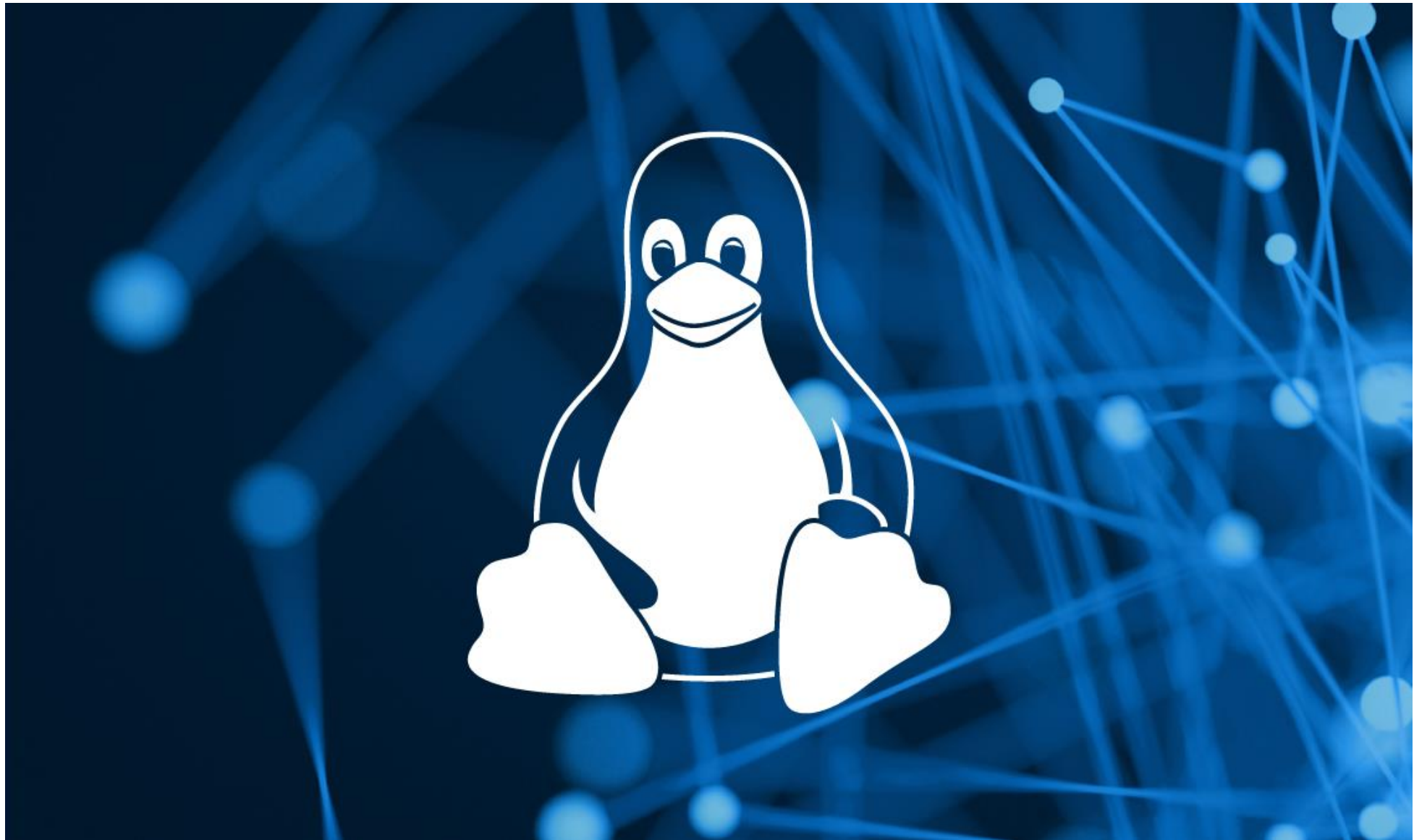
`/etc/cups/ppd/*.ppd`

Controladores de dispositivos
para cada impresora instalada
(*PostScript Printer Description*)



Envía la información a la impresora
(puerto serie, USB, red, ...)

Convierte formatos



Introducción a Linux

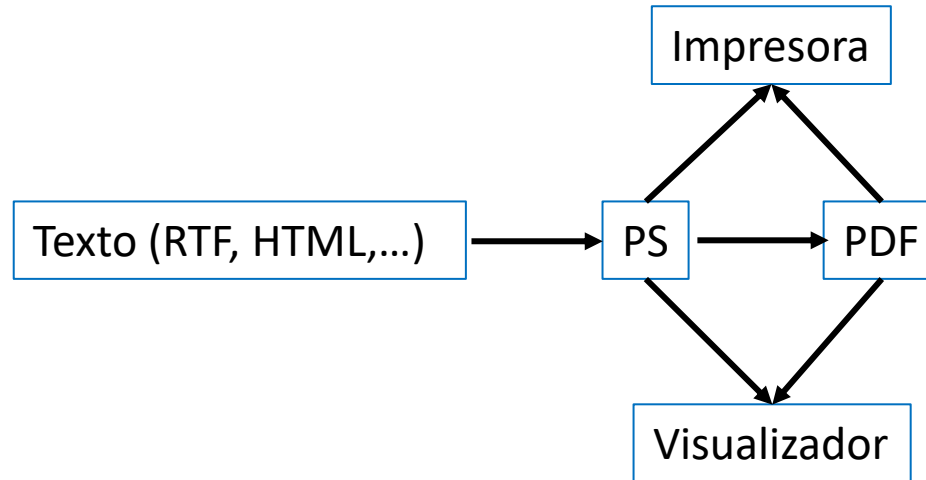
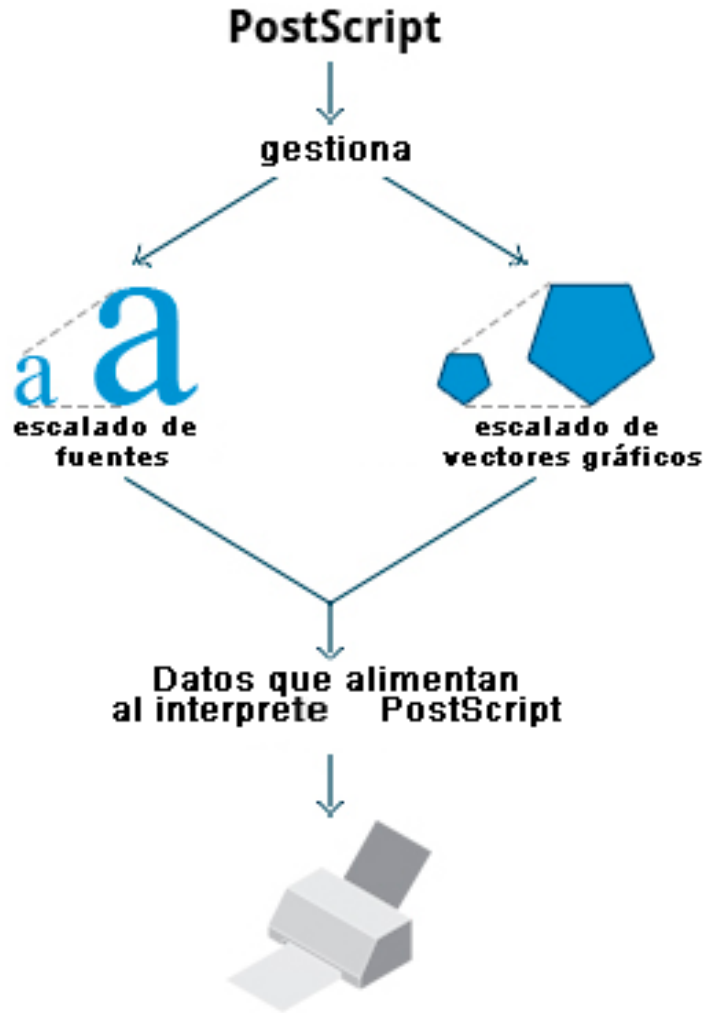
Impresión en Linux



Introducción a Linux

Trabajando con PostScript y PDF

Trabajando con PostScript y PDF



Herramientas

enscript
ps2pdf (ghostscript)
pdf2ps (ghostscript)
convert (ImageMagick)
evince (viewer)
okular (viewer)



Introducción a Linux

Trabajando con PostScript y PDF