

Re: Printing from Windows to a CUPS printer

Source: <http://linux.derkeiler.com/Newsgroups/comp.os.linux.misc/2005-02/1149.html>

kalimojo_at_btinternet.com

Date: 02/12/05

Date: Sat, 12 Feb 2005 15:20:44 +0000

bigbob wrote:

> *kalimojo@btinternet.com* wrote:

>

>> *bigbob* wrote:

>>

>>> *kalimojo@btinternet.com* wrote:

>>>

>>>> *kalimojo@btinternet.com* wrote:

>>>>

>>>>> *Printing from Windows to a CUPS printer*

>>>>>

>>>>> *my printer is on my linux machine using CUPS.*

>>>>>

>>>>> *how do i print from my windows 2000 machine to it ?*

>>>>>

>>>>> *I would be keen to know the CUPS/IPP way rather than using samba.*

>>>>

>>>> *I got it working,*

>>>>

>>>> *I installed Print Services for Unix on the win2k machine (under*

>>>> *networking services in add/remove windows programs)*

>>>>

>>>> *I edited the /etc/cups/cupsd.conf file and made these changes*

>>>>

>>>> *I commented this line out*

>>>> *Listen 127.0.0.1:631*

>>>>

>>>> *and added this line instead*

>>>> *Port 631*

>>>>

>>>> *changed the following*

>>>>

>>>> *## Restrict access to local domain*

>>>> *Order Deny,Allow*

>>>> *Deny From All*

>>>> *Allow From 127.0.0.1*

>>>>

>>>> to
>>>>
>>>> *## Restrict access to local domain*
>>>> *Order Deny,Allow*
>>>> *Allow From All*
>>>> *Allow From 127.0.0.1*
>>>>
>>>> *I then restarted the cups server*
>>>>
>>>> */etc/init.d/cups restart*
>>>>
>>>> *ON the windows PC when I added the printer I chose to add a new port of*
>>>> *type LPR. I then entered the linux PC's IP and the print queue name.*
>>>>
>>>> *and it worked.*
>>>>
>>> *what was the exact url you entered on the windows machine? I'm confused*
>>> *as to what to enter for the queue name.*
>>>
>>> *Bigbob*
>>
>> *hi Bigbob what I got working above was actually lpd printing not*
>> *CUPS/IPP.*
>>
>> *For CUPS I basically used the following as the URL on the windows PC*
>>
>> <http://rita:631/printers/epson>
>>
>> *where rita is the server name and epson is the queue on that server and*
>> *printers is part of the CUPS syntax and 631 is the default TCP port for*
>> *CUPS (nmap localhost will confirm this)*
>>
>> *the queue has to be created using system-config-printer and then shared*
>> *out using that tool also.*
>>
>> *dont use the web management tool (<http://localhost:631>) as it wont work*
>>
>> *any questions please ask as I feel like I have a good grasp of whats*
>> *going on here.*
>
> *OK. got it to connect to the printer, but I can't get past the security*
> *options. No combination of user/pass will work. I changed the cupsd.conf*
> *as described above, but it still won't let me have access to the printer.*
>
here is my CUPS file. ill probably get roasted for posting it as it is
nothing special., but it works. make sure you back up your own b4 you try
it.

```
#  
# "$Id: cupsd.conf.in,v 1.13 2003/04/10 20:14:04 mike Exp $"  
#
```

```
# Sample configuration file for the Common UNIX Printing System (CUPS)
# scheduler.
#
# Copyright 1997–2003 by Easy Software Products, all rights reserved.
#
# These coded instructions, statements, and computer programs are the
# property of Easy Software Products and are protected by Federal
# copyright law. Distribution and use rights are outlined in the file
# "LICENSE.txt" which should have been included with this file. If this
# file is missing or damaged please contact Easy Software Products
# at:
#
# Attn: CUPS Licensing Information
# Easy Software Products
# 44141 Airport View Drive, Suite 204
# Hollywood, Maryland 20636–3111 USA
#
# Voice: (301) 373–9603
# EMail: cups–info@cups.org
# WWW: http://www.cups.org
#

#####
# #
# This is the CUPS configuration file. If you are familiar with #
# Apache or any of the other popular web servers, we've followed the #
# same format. Any configuration variable used here has the same #
# semantics as the corresponding variable in Apache. If we need #
# different functionality then a different name is used to avoid #
# confusion... #
# #
#####

#####
##### Server Identity
#####

#
# ServerName: the hostname of your server, as advertised to the world.
# By default CUPS will use the hostname of the system.
#
# To set the default server used by clients, see the client.conf file.
#

#ServerName myhost.domain.com

#
# ServerAdmin: the email address to send all complaints/problems to.
# By default CUPS will use "root@hostname".
#
```

```
#ServerAdmin root@your.domain.com
```

```
#####
```

```
##### Server Options
```

```
#####
```

```
#
```

```
# AccessLog: the access log file; if this does not start with a leading /  
# then it is assumed to be relative to ServerRoot. By default set to  
# "/var/log/cups/access_log"
```

```
#
```

```
# You can also use the special name "syslog" to send the output to the  
# syslog file or daemon.
```

```
#
```

```
#AccessLog /var/log/cups/access_log
```

```
#
```

```
# Classification: the classification level of the server. If set, this  
# classification is displayed on all pages, and raw printing is disabled.  
# The default is the empty string.
```

```
#
```

```
#Classification classified
```

```
#Classification confidential
```

```
#Classification secret
```

```
#Classification topsecret
```

```
#Classification unclassified
```

```
#
```

```
# ClassifyOverride: whether to allow users to override the classification  
# on printouts. If enabled, users can limit banner pages to before or  
# after the job, and can change the classification of a job, but cannot  
# completely eliminate the classification or banners.
```

```
#
```

```
# The default is off.
```

```
#
```

```
#ClassifyOverride off
```

```
#
```

```
# DataDir: the root directory for the CUPS data files.
```

```
# By default "/usr/share/cups".
```

```
#
```

```
#DataDir /usr/share/cups
```

```
#
```

```
# DefaultCharset: the default character set to use. If not specified,  
# defaults to "utf-8". Note that this can also be overridden in  
# HTML documents...
```

```
#  
  
#DefaultCharset utf-8  
  
#  
# DefaultLanguage: the default language if not specified by the browser.  
# If not specified, the current locale is used.  
#  
  
#DefaultLanguage en  
  
#  
# DocumentRoot: the root directory for HTTP documents that are served.  
# By default "/usr/share/doc/cups-1.1.20".  
#  
  
#DocumentRoot /usr/share/doc/cups-1.1.20  
  
#  
# ErrorLog: the error log file; if this does not start with a leading /  
# then it is assumed to be relative to ServerRoot. By default set to  
# "/var/log/cups/error_log"  
#  
# You can also use the special name "syslog" to send the output to the  
# syslog file or daemon.  
#  
  
#ErrorLog /var/log/cups/error_log  
  
#  
# FileDevice: determines whether the scheduler will allow new printers  
# to be added using device URIs of the form "file:/foo/bar". The default  
# is not to allow file devices due to the potential security vulnerability  
# and due to the fact that file devices do not support raw printing.  
#  
  
#FileDevice No  
  
#  
# FontPath: the path to locate all font files (currently only for  
# pstoraster)  
# By default "/usr/share/cups/fonts".  
#  
  
#FontPath /usr/share/cups/fonts  
  
#  
# LogLevel: controls the number of messages logged to the ErrorLog  
# file and can be one of the following:  
#  
# debug2 Log everything.
```

```
# debug Log almost everything.  
# info Log all requests and state changes.  
# warn Log errors and warnings.  
# error Log only errors.  
# none Log nothing.  
#
```

LogLevel info

```
#  
# MaxLogSize: controls the maximum size of each log file before they are  
# rotated. Defaults to 1048576 (1MB). Set to 0 to disable log rotating.  
#
```

MaxLogSize 0

```
#  
# PageLog: the page log file; if this does not start with a leading /  
# then it is assumed to be relative to ServerRoot. By default set to  
# "/var/log/cups/page_log"  
#  
# You can also use the special name "syslog" to send the output to the  
# syslog file or daemon.  
#
```

#PageLog /var/log/cups/page_log

```
#  
# PreserveJobHistory: whether or not to preserve the job history after a  
# job is completed, cancelled, or stopped. Default is Yes.  
#
```

#PreserveJobHistory Yes

```
#  
# PreserveJobFiles: whether or not to preserve the job files after a  
# job is completed, cancelled, or stopped. Default is No.  
#
```

#PreserveJobFiles No

```
#  
# AutoPurgeJobs: automatically purge jobs when not needed for quotas.  
# Default is No.  
#
```

#AutoPurgeJobs No

```
#  
# MaxCopies: maximum number of copies that a user can request. Default is  
# 100.
```

#

#MaxCopies 100

#

MaxJobs: maximum number of jobs to keep in memory (active and completed.)

Default is 500; the value 0 is used for no limit.

#

#MaxJobs 500

#

MaxJobsPerPrinter: maximum number of active jobs per printer. The default

is 0 for no limit.

#

#MaxJobsPerPrinter 0

#

MaxJobsPerUser: maximum number of active jobs per user. The default

is 0 for no limit.

#

#MaxJobsPerUser 0

#

MaxPrinterHistory: controls the maximum number of history collections

in the printer-state-history attribute. Set to 0 to disable history

data.

#

#MaxPrinterHistory 10

#

Printcap: the name of the printcap file. Default is /etc/printcap.

Leave blank to disable printcap file generation.

#

Printcap /etc/printcap

#

PrintcapFormat: the format of the printcap file, currently either

BSD or Solaris. The default is "BSD".

#

#PrintcapFormat BSD

#PrintcapFormat Solaris

#

PrintcapGUI: the name of the GUI options panel program to associate

with print queues under IRIX. The default is "/usr/bin/glpoptions"

```
# from ESP Print Pro.
#
# This option is only used under IRIX; the options panel program
# must accept the "-d printer" and "-o options" options and write
# the selected printer options back to stdout on completion.
#

#PrintcapGUI /usr/bin/glpoptions

#
# RequestRoot: the directory where request files are stored.
# By default "/var/spool/cups".
#

#RequestRoot /var/spool/cups

#
# RemoteRoot: the name of the user assigned to unauthenticated accesses
# from remote systems. By default "remroot".
#

#RemoteRoot remroot

#
# ServerBin: the root directory for the scheduler executables.
# By default "/usr/lib/cups".
#

#ServerBin /usr/lib/cups

#
# ServerRoot: the root directory for the scheduler.
# By default "/etc/cups".
#

#ServerRoot /etc/cups

#####
##### Fax Support
#####

#
# FaxRetryLimit: the number of times a fax job is retried.
# The default is 5 times.
#

#FaxRetryLimit 5

#
# FaxRetryInterval: the number of seconds between fax job retries.
# The default is 300 seconds/5 minutes.
```

```
#  
  
#FaxRetryInterval 300  
  
#####  
##### Encryption Support  
#####  
  
#  
# ServerCertificate: the file to read containing the server's certificate.  
# Defaults to "/etc/cups/ssl/server.crt".  
#  
  
#ServerCertificate /etc/cups/ssl/server.crt  
  
#  
# ServerKey: the file to read containing the server's key.  
# Defaults to "/etc/cups/ssl/server.key".  
#  
  
#ServerKey /etc/cups/ssl/server.key  
  
#####  
##### Filter Options  
#####  
  
#  
# User/Group: the user and group the server runs under. Normally this  
# must be lp and sys, however you can configure things for another  
# user or group as needed.  
#  
# Note: the server must be run initially as root to support the  
# default IPP port of 631. It changes users whenever an external  
# program is run, or if the RunAsUser directive is specified...  
#  
  
#User lp  
#Group sys  
  
#  
# RIPCache: the amount of memory that each RIP should use to cache  
# bitmaps. The value can be any real number followed by "k" for  
# kilobytes, "m" for megabytes, "g" for gigabytes, or "t" for tiles  
# (1 tile = 256x256 pixels.) Defaults to "8m" (8 megabytes).  
#  
  
#RIPCache 8m  
  
#  
# TempDir: the directory to put temporary files in. This directory must be  
# writable by the user defined above! Defaults to "/var/spool/cups/tmp" or
```

```
# the value of the TMPDIR environment variable.
#
#TempDir /var/spool/cups/tmp
#
# FilterLimit: sets the maximum cost of all job filters that can be run
# at the same time. A limit of 0 means no limit. A typical job may need
# a filter limit of at least 200; limits less than the minimum required
# by a job force a single job to be printed at any time.
#
# The default limit is 0 (unlimited).
#
#FilterLimit 0
#####
##### Network Options
#####
#
# Ports/addresses that we listen to. The default port 631 is reserved
# for the Internet Printing Protocol (IPP) and is what we use here.
#
# You can have multiple Port/Listen lines to listen to more than one
# port or address, or to restrict access:
#
# Port 80
# Port 631
# Listen hostname
# Listen hostname:80
# Listen hostname:631
# Listen 1.2.3.4
# Listen 1.2.3.4:631
#
# NOTE: Unfortunately, most web browsers don't support TLS or HTTP Upgrades
# for encryption. If you want to support web-based encryption you'll
# probably need to listen on port 443 (the "https" port...)
#
#Port 80
#Port 443
#
# HostNameLookups: whether or not to do lookups on IP addresses to get a
# fully-qualified hostname. This defaults to Off for performance reasons...
#
#HostNameLookups On
```

```
#
# KeepAlive: whether or not to support the Keep-Alive connection
# option. Default is on.
#

#KeepAlive On

#
# KeepAliveTimeout: the timeout before Keep-Alive connections are
# automatically closed. Default is 60 seconds.
#

#KeepAliveTimeout 60

#
# MaxClients: controls the maximum number of simultaneous clients that
# will be handled. Defaults to 100.
#

#MaxClients 100

#
# MaxClientsPerHost: controls the maximum number of simultaneous clients
that
# will be handled from a specific host. Defaults to 10 or 1/10th of the
# MaxClients setting, whichever is larger. A value of 0 specifies the
# automatic (10 or 1/10th) setting.
#

#MaxClientsPerHost 0

#
# MaxRequestSize: controls the maximum size of HTTP requests and print
files.
# Set to 0 to disable this feature (defaults to 0.)
#

#MaxRequestSize 0

#
# Timeout: the timeout before requests time out. Default is 300 seconds.
#

#Timeout 300

#####
##### Browsing Options
#####

#
# Browsing: whether or not to broadcast and/or listen for CUPS printer
```

```
# information on the network. Enabled by default.
#
#Browsing On
#
# BrowseProtocols: which protocols to use for browsing. Can be
# any of the following separated by whitespace and/or commas:
#
# all – Use all supported protocols.
# cups – Use the CUPS browse protocol.
# slp – Use the SLPv2 protocol.
#
# The default is "cups".
#
# NOTE: If you choose to use SLPv2, it is *strongly* recommended that
# you have at least one SLP Directory Agent (DA) on your
# network. Otherwise, browse updates can take several seconds,
# during which the scheduler will not respond to client
# requests.
#
#BrowseProtocols cups
#
# BrowseAddress: specifies a broadcast address to be used. By
# default browsing information is not sent!
#
# Note: HP-UX does not properly handle broadcast unless you have a
# Class A, B, C, or D netmask (i.e. no CIDR support).
#
# Note: Using the "global" broadcast address (255.255.255.255) will
# activate a Linux demand-dial link with the default configuration.
# If you have a LAN as well as the dial-up link, use the LAN's
# broadcast address.
#
# The @LOCAL address broadcasts to all non point-to-point interfaces.
# For example, if you have a LAN and a dial-up link, @LOCAL would
# send printer updates to the LAN but not to the dial-up link.
# Similarly, the @IF(name) address sends to the named network
# interface, e.g. @IF(eth0) under Linux. Interfaces are refreshed
# automatically (no more than once every 60 seconds), so they can
# be used on dynamically-configured interfaces, e.g. PPP, 802.11, etc.
#
#BrowseAddress x.y.z.255
#BrowseAddress x.y.255.255
#BrowseAddress x.255.255.255
#BrowseAddress 255.255.255.255
#BrowseAddress @LOCAL
#BrowseAddress @IF(name)
```

```
#
# BrowseShortNames: whether or not to use "short" names for remote printers
# when possible (e.g. "printer" instead of "printer@host".) Enabled by
# default.
#

#BrowseShortNames Yes

#
# BrowseAllow: specifies an address mask to allow for incoming browser
# packets. The default is to allow packets from all addresses.
#
# BrowseDeny: specifies an address mask to deny for incoming browser
# packets. The default is to deny packets from no addresses.
#
# Both "BrowseAllow" and "BrowseDeny" accept the following notations for
# addresses:
#
# All
# None
# *.domain.com
# .domain.com
# host.domain.com
# nnn.*
# nnn.nnn.*
# nnn.nnn.nnn.*
# nnn.nnn.nnn.nnn
# nnn.nnn.nnn.nnn/mm
# nnn.nnn.nnn.nnn/mmm.mmm.mmm.mmm
# @LOCAL
# @IF(name)
#
# The hostname/domainname restrictions only work if you have turned hostname
# lookups on!
#

#BrowseAllow address
#BrowseDeny address

#
# BrowseInterval: the time between browsing updates in seconds. Default
# is 30 seconds.
#
# Note that browsing information is sent whenever a printer's state changes
# as well, so this represents the maximum time between updates.
#
# Set this to 0 to disable outgoing broadcasts so your local printers are
# not advertised but you can still see printers on other hosts.
#

#BrowseInterval 30
```

```
#
# BrowseOrder: specifies the order of BrowseAllow/BrowseDeny comparisons.
#

#BrowseOrder allow,deny
#BrowseOrder deny,allow

#
# BrowsePoll: poll the named server(s) for printers
#

#BrowsePoll address:port

#
# BrowsePort: the port used for UDP broadcasts. By default this is
# the IPP port; if you change this you need to do it on all servers.
# Only one BrowsePort is recognized.
#

#BrowsePort 631

#
# BrowseRelay: relay browser packets from one address/network to another.
#

#BrowseRelay source-address destination-address
#BrowseRelay @IF(src) @IF(dst)

#
# BrowseTimeout: the timeout for network printers – if we don't
# get an update within this time the printer will be removed
# from the printer list. This number definitely should not be
# less the BrowseInterval value for obvious reasons. Defaults
# to 300 seconds.
#

#BrowseTimeout 300

#
# ImplicitClasses: whether or not to use implicit classes.
#
# Printer classes can be specified explicitly in the classes.conf
# file, implicitly based upon the printers available on the LAN, or
# both.
#
# When ImplicitClasses is On, printers on the LAN with the same name
# (e.g. Acme-LaserPrint-1000) will be put into a class with the same
# name. This allows you to setup multiple redundant queues on a LAN
# without a lot of administrative difficulties. If a user sends a
# job to Acme-LaserPrint-1000, the job will go to the first available
# queue.
```

```
#
# Enabled by default.
#

#ImplicitClasses On

#
# ImplicitAnyClasses: whether or not to create "AnyPrinter" implicit
# classes.
#
# When ImplicitAnyClasses is On and a local queue of the same name
# exists, e.g. "printer", "printer@server1", "printer@server1", then
# an implicit class called "Anyprinter" is created instead.
#
# When ImplicitAnyClasses is Off, implicit classes are not created
# when there is a local queue of the same name.
#
# Disabled by default.
#

#ImplicitAnyClasses Off

#
# HideImplicitMembers: whether or not to show the members of an
# implicit class.
#
# When HideImplicitMembers is On, any remote printers that are
# part of an implicit class are hidden from the user, who will
# then only see a single queue even though many queues will be
# supporting the implicit class.
#
# Enabled by default.
#

#HideImplicitMembers On

#####
##### Security Options
#####

#
# SystemGroup: the group name for "System" (printer administration)
# access. The default varies depending on the operating system, but
# will be "sys", "system", or "root" (checked for in that order.)
#

#SystemGroup sys

#
# RootCertDuration: How frequently the root certificate is regenerated.
# Defaults to 300 seconds.
```

```
#  
  
#RootCertDuration 300  
  
#  
# Access permissions for each directory served by the scheduler.  
# Locations are relative to DocumentRoot...  
#  
# AuthType: the authorization to use:  
#  
# None – Perform no authentication  
# Basic – Perform authentication using the HTTP Basic method.  
# Digest – Perform authentication using the HTTP Digest method.  
#  
# (Note: local certificate authentication can be substituted by  
# the client for Basic or Digest when connecting to the  
# localhost interface)  
#  
# AuthClass: the authorization class; currently only "Anonymous", "User",  
# "System" (valid user belonging to group SystemGroup), and "Group"  
# (valid user belonging to the specified group) are supported.  
#  
# AuthGroupName: the group name for "Group" authorization.  
#  
# Order: the order of Allow/Deny processing.  
#  
# Allow: allows access from the specified hostname, domain, IP address,  
# network, or interface.  
#  
# Deny: denies access from the specified hostname, domain, IP address,  
# network, or interface.  
#  
# Both "Allow" and "Deny" accept the following notations for addresses:  
#  
# All  
# None  
# *.domain.com  
# .domain.com  
# host.domain.com  
# nnn.*  
# nnn.nnn.*  
# nnn.nnn.nnn.*  
# nnn.nnn.nnn.nnn  
# nnn.nnn.nnn.nnn/mm  
# nnn.nnn.nnn.nnn/mmm.mmm.mmm.mmm  
# @LOCAL  
# @IF(name)  
#  
# The host and domain address require that you enable hostname lookups  
# with "HostNameLookups On" above.  
#
```

```
# The @LOCAL address allows or denies from all non point-to-point
# interfaces. For example, if you have a LAN and a dial-up link,
# @LOCAL could allow connections from the LAN but not from the dial-up
# link. Similarly, the @IF(name) address allows or denies from the
# named network interface, e.g. @IF(eth0) under Linux. Interfaces are
# refreshed automatically (no more than once every 60 seconds), so
# they can be used on dynamically-configured interfaces, e.g. PPP,
# 802.11, etc.
#
# Encryption: whether or not to use encryption; this depends on having
# the OpenSSL library linked into the CUPS library and scheduler.
#
# Possible values:
#
# Always – Always use encryption (SSL)
# Never – Never use encryption
# Required – Use TLS encryption upgrade
# IfRequested – Use encryption if the server requests it
#
# The default value is "IfRequested".
#

#<Location /classes>
#
# You may wish to limit access to printers and classes, either with Allow
# and Deny lines, or by requiring a username and password.
#
#</Location>

#<Location /classes/name>
#
# You may wish to limit access to printers and classes, either with Allow
# and Deny lines, or by requiring a username and password.
#
#</Location>

#<Location /jobs>
#
# You may wish to limit access to job operations, either with Allow
# and Deny lines, or by requiring a username and password.
#
#</Location>

#<Location /printers>
#
# You may wish to limit access to printers and classes, either with Allow
# and Deny lines, or by requiring a username and password.
#
#</Location>
```

```
#<Location /printers/name>
#
# You may wish to limit access to printers and classes, either with Allow
# and Deny lines, or by requiring a username and password.
#

## Anonymous access (default)
#AuthType None

## Require a username and password (Basic authentication)
#AuthType Basic
#AuthClass User

## Require a username and password (Digest/MD5 authentication)
#AuthType Digest
#AuthClass User

## Restrict access to local domain
#Order Deny,Allow
#Deny From All
#Allow From .mydomain.com
#</Location>

<Location /admin>
#
# You definitely will want to limit access to the administration functions.
# The default configuration requires a local connection from a user who
# is a member of the system group to do any admin tasks. You can change
# the group name using the SystemGroup directive.
#

AuthType Basic
AuthClass System

## Restrict access to local domain
Order Deny,Allow
Deny From All
Allow From 127.0.0.1

#Encryption Required
</Location>

#
# End of "$Id: cupsd.conf.in,v 1.13 2003/04/10 20:14:04 mike Exp $".
#
# Lines below are automatically generated – DO NOT EDIT
<Location /printers/epson>
Order Deny,Allow
Deny From All
Allow From 127.0.0.1
AuthType None
```

```
Allow from All
</Location>
<Location /printers/ipp>
Order Deny,Allow
Deny From All
Allow From 127.0.0.1
AuthType None
</Location>
<Location />
Order Deny,Allow
Deny From All
Allow From 127.0.0.1
</Location>
Browsing On
BrowseProtocols cups
BrowseOrder Deny,Allow
BrowseAllow from @LOCAL
BrowseAddress 255.255.255.255
Listen *:631
```