

Redes de Computadoras: Capa de Aplicación II

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¿Cómo se definen los estándares?

- Request for Comment (RFC)
- <https://www.rfc-editor.org/rfc-index.txt>
- Último RFC agregado. 9901 Selective Disclosure for JSON Web Tokens. Nov 2025.

Algunos RFC

- ARP RFC 826 "An Ethernet Address Resolution Protocol"
- DHCP RFC 2131 "Dynamic Host Configuration Protocol"
- ICMP RFC 792 "INTERNET CONTROL MESSAGE PROTOCOL"
- IPv4 RFC 791 "INTERNET PROTOCOL"
- UDP RFC 768 "User Datagram Protocol"

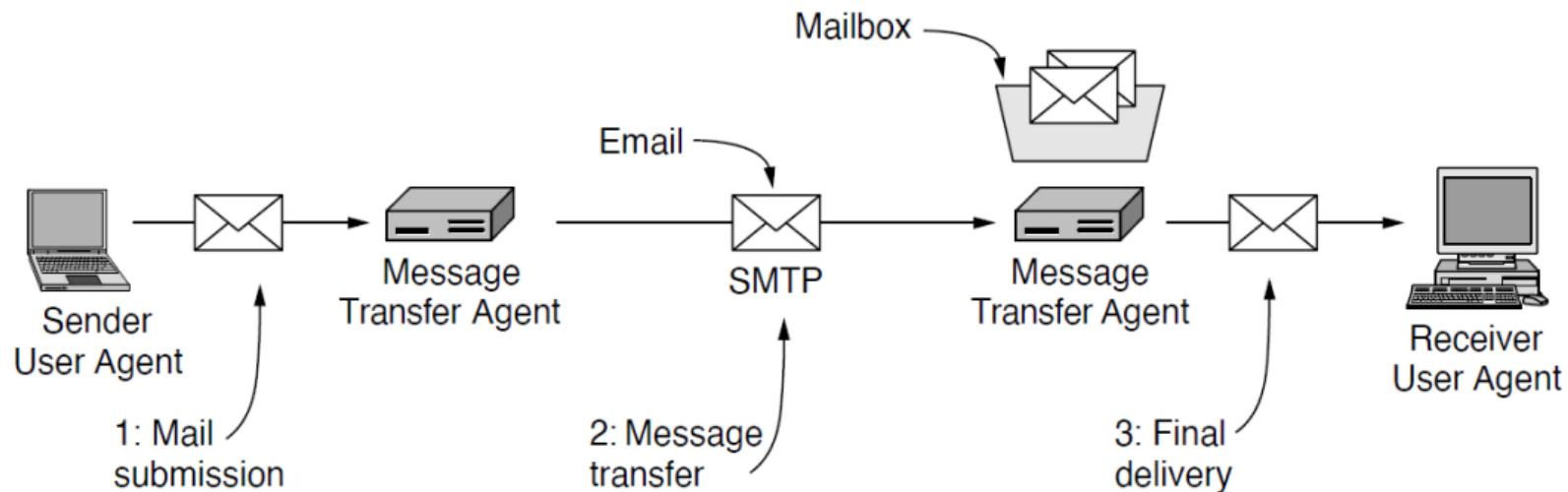
Algunos RFC. Cont

- TCP RFC 793 "TRANSMISSION CONTROL PROTOCOL"
- FTP RFC 959 "FILE TRANSFER PROTOCOL (FTP)"
- HTTP RFC 2068 "Hypertext Transfer Protocol – HTTP/1.1"
- SMTP RFC 821,822 "SIMPLE MAIL TRANSFER PROTOCOL"
- DNS RFC 1034,1035 "DOMAIN NAMES"

Protocolo SMTP

- Transferencia de correo electrónico
- Puerto 25
- Protocolo TCP

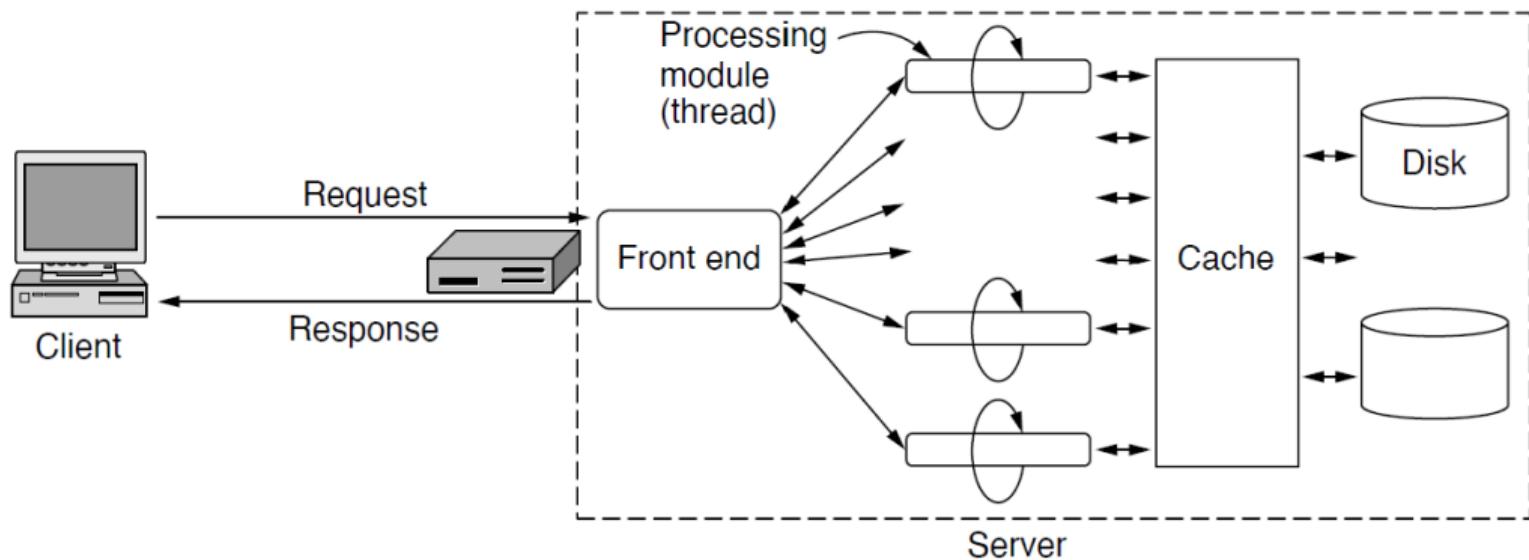
Estructura SMTP



Protocolo HTTP

- Transferencia de hipermedia
- Puertos 80, 443
- Protocolo TCP

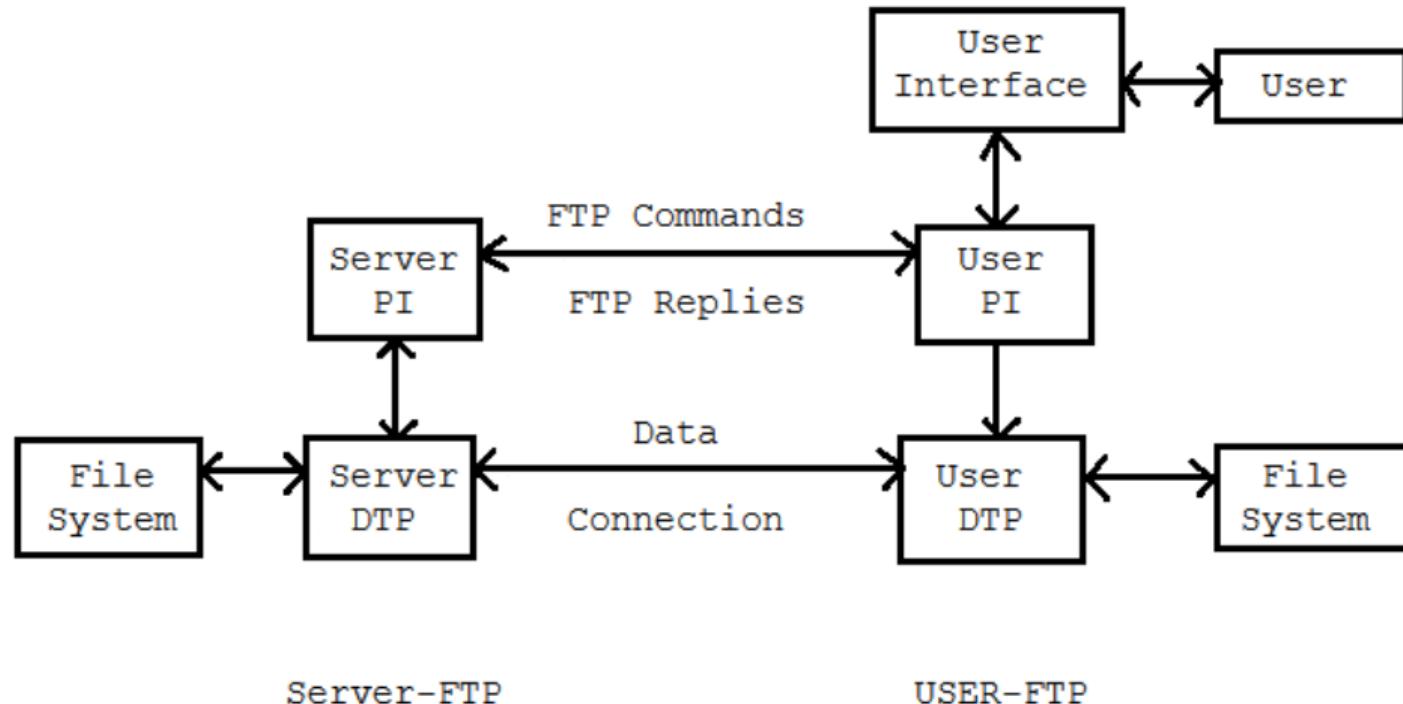
Comunicación HTTP



Protocolo FTP

- Transferencia de archivos
- Puertos 20, 21
- Protocolo TCP

Comunicacion FTP



Server-FTP

USER-FTP

Protocolo IRC

- Mensajería basada en texto
- Puerto 6667
- Protocolo TCP

Ejemplo ui IRC

Vulphere @ Libera.Chat / #archlinux - HexChat

HexChat View Server Settings Window Help

#Libera.Chat #archlinux #wikipedia

a.org/show_bug.cgi?id=1749908 | Help out testing the AUR https://lists.archlinux.org/pipermail/aur-general/2021-September/036567.html

1ops,1398 total

again.
[11:11:13] Namarrgon sanchez: are you running iwd and nm at the same time?
[11:12:14] sanchez I am running nm, I don't know if iwd is also running
[11:12:35] Namarrgon did you configure nm to use iwd as the backend instead of wpa_supplicant?
[11:13:07] sanchez No
[11:13:11] Namarrgon then why is iwd running?
[11:13:36] * julia (~quassel@user/julia) has joined
[11:15:58] * DeepDayze has quit (Quit: Leaving)
[11:17:02] sanchez good question
[11:17:45] Namarrgon how did you install arch?
[11:18:08] Namarrgon you're the third one with this issue today
[11:18:23] * gehidore is curious too
[11:18:54] * cab040 (-cab040@189.217.81.59) has joined
[11:19:36] sanchez Using the Arch installer, this was months ago tho
[11:19:46] Namarrgon 'archinstall'?
[11:19:52] sanchez Right, the official one.
[11:20:06] sanchez I do not have a config file for NetworkManager instructing it to use iwd as the backend.
[11:20:14] Namarrgon disable iwd and reboot
[11:20:15] sanchez as described here: <https://wiki.archlinux.org/title/NetworkManager#Configuration>
[11:20:16] phrik Title: NetworkManager - ArchWiki (at wiki.archlinux.org)
[11:20:29] sanchez ok
[11:20:51] * sanchez has quit (Remote host closed the connection)
[11:21:17] * masoudd_ suspiciously does a systemctl status iwd
[11:21:36] * igemnace (~ian@user/igemnace) has joined
[11:24:01] * masoudd_ is now known as masoudd
[11:25:31] * beta_ has quit (Remote host closed the connection)
[11:26:06] * soapsudsxx has quit (Remote host closed the connection)
[11:27:04] * ChromaCat248 has quit (Remote host closed the connection)
[11:27:22] * beta (~beta@75.164.26.95) has joined
[11:27:35] * beta is now known as beta_
[11:28:37] jayache80 Namarrgon: Thanks. Using asp, I got the wpa_supplicant package, modified wpa_supplicant_config to have CONFIG_MESH=n and built/installed the package but no joy there
[11:29:07] * indux (~Thunderbi@95.168.153.128) has joined
[11:29:16] * Nix has quit (Quit: Leaving)
[11:30:08] * sanchez (~sanchez@45.189.60.4) has joined
[11:30:22] sanchez Namarrgon, that fixed it, thanks.
[11:31:57] * Nix (~Nix@user/Nix/x-0321943) has joined
[11:32:36] * soapsudsxx (~soapsudsxx@209.221.40.152) has joined
[11:33:20] * beta_ has quit (Remote host closed the connection)

EMIYA
020AADBD
_One

_dp
_mikey
_schrött
_var
__
A_Dragon
Aardwolf
aaro
Abdullah
Abrax
abyss
acetech
achillea
adnidor
adomas
Adran
Aelius
aeris
af
agnem
aibo
AiO

Protocolo SSH

- Ejecución de una consola remota
- Puerto 22
- Protocolo TCP

Ejemplo SSH

192.168.1.1 - PuTTY

```
login as: root
root@192.168.1.1's password:

BusyBox v1.4.2 (2007-08-27 09:18:59 CDT) Built-in shell (ash)
Enter 'help' for a list of built-in commands.

[ _ - ] | .-----| -----| .-----| [ _ | _ | _ ] | .-----| [ _ | _ ]
[ _ | _ ] | _ | W I R E L E S S   F R E E D O M
WHITE RUSSIAN (0.9) -----
* 2 oz Vodka   Mix the Vodka and Kahlua together
* 1 oz Kahlua  over ice, then float the cream or
* 1/2oz cream  milk on the top.
-----
root@00c1260b04c8:~$
```

Protocolo NTP

- Sincronizacion de hora
- Puerto 123
- Protocolo UDP

Ejemplo NTP

Checking current status of NTP service with ntpq -p									
remote	refid	st	t	when	poll	reach	delay	offset	jitter
-ntp.nmi.nl	.PPS.	1	u	47	64	377	12.065	0.206	0.165
+ntp0.nl.uu.net	.PPS.	1	u	19	64	377	10.083	0.105	0.462
-ntp1.nl.uu.net	.PPS.	1	u	3	64	377	10.114	0.141	8.548
-chime2.surfnet.	.GPS.	1	u	54	64	377	11.905	-0.293	0.319
+chime5.surfnet.	.PPS.	1	u	40	64	377	12.508	-0.115	0.298
*metronoom.dmz.c	.PPS.	1	u	54	64	377	11.281	-0.037	0.174
+ntp4.bit.nl	.PPS.	1	u	48	64	377	9.915	-0.020	0.139
-ntp1.oma.be	.MRS.	1	u	34	64	377	13.661	0.220	0.281
+ntp2.oma.be	.PPS.	1	u	31	64	377	14.064	-0.006	0.226
#ntp-p1.obspm.fr	.TS-4.	1	u	19	64	377	21.457	-1.277	0.434
#metasntp11.admi	.PPS.	1	u	6	64	377	27.033	0.959	0.649
-ptbtime1.ptb.de	.PTB.	1	u	45	64	377	28.312	-0.250	0.225
#139.143.5.30	139.143.45.11	2	u	59	64	377	17.301	0.339	1.936
#91.148.192.49 <	193.67.79.202	2	u	40	64	377	8.725	0.154	0.374
#antongleuf.giga	193.67.79.202	2	u	58	64	377	9.019	0.302	0.220
#intimideer.iafa	5.200.6.34	3	u	28	64	377	10.155	-0.490	0.415