



ARQUITECTURA DE REDES Laboratorio

Práctica 6: Configurar una cuenta de correo para acceder a ella por medio de *OpenSSL*.

1. Configurar una cuenta de correo para acceder a ella por medio de OpenSSL:

a) Crear una cuenta de correo Web con la que trabajar.

- Accederemos a la Web <https://www.zoho.com/mail/> donde crearemos una cuenta de correo seleccionando *Personal Email*.
- No instalar “*Habilite la autenticación en dos fases*”, omita este paso.
- Toda la información sobre la cuenta de correo se encuentra en “*configuración*”, esquina superior derecha. Y en la opción “*cuentas de correo*” encontramos todos los parámetros para poder acceder a las cuentas a través de los protocolos *smtp*, *pop* e *imap*.

b) Configuración de accesos.

Tendremos que habilitar:

- “*Acceso a POP*”
- “*Acceso a IMAP*”
- “*Guardar una copia de los correos electrónicos enviados*”

Para acceder al servidor a través de **POP**, la configuración que se deberá utilizar será:

	Server/ Host	Port	Mode
In	pop.zoho.eu	995	SSL
Out	smtp.zoho.eu	465	SSL

Para acceder al servidor a través de **SMTP e IMAP**, la configuración que se deberá utilizar será

	Server/ Host	Port	Mode
In	imap.zoho.eu	993	SSL
Out	smtp.zoho.eu	465	SSL

c) Proceder a realizar la conexión.

Se debe tener presente que hay conexiones en las que es necesario previamente codificar en Base64 el usuario y la contraseña. Disponemos de dos tipos de codificación en base64:

a) La codificación de nuestro *Login* y *Password* por separado (**auth login**)

```
echo -n "mi_login" | openssl enc -base64  
LW4gImFycXVpdGFyZGUXIiANCg==
```

```
echo -n "mi_clave" | openssl enc -base64  
LW4gIkAxMjM0NTYjIiANCg==
```

b) La codificación de nuestro *Login* y *Password* juntos (**auth plain**)

```
echo -e "\0mi_login\0mi_clave" | base64  
AGFycXVpdGFyZGUXQGdtYWlsLmNvbQBAMTIzNDU2Iwo=
```

Ejemplo:

A continuación, es posible conectarse con el servidor para acceder a los mensajes. Por ejemplo, para hacerlo por IMAP, se pueden usar los comandos:

(COMENTARIO: conexión)

```
openssl s_client -crlf -connect imap.gmail.com:993 -quiet
```

(COMENTARIO: hacer login)

```
a1 login usuario contraseña
```

(COMENTARIO: listado general)

```
a1 list "" "*"
```

(COMENTARIO: información del buzón de entrada)

```
a1 examine inbox
```

(COMENTARIO: obtener el cuerpo del mensaje 1)

```
a1 fetch 1 body[]
```

(COMENTARIO: obtener parte primera del cuerpo del mensaje 1)

```
a1 fetch 1 body.peek[1]
```

etc...

2. Ejemplos de accesos a través de OpenSSL:

a) Enviar correos con IMAP y OpenSSL.

As the port-number normally is 993, an example OpenSSL command would be `openssl s_client -connect imap.example.com:993 -quiet`. (If you would like to see the public key of the server, as well as some other encryption-related information, omit `-quiet`.) The server should then start an IMAP session, displaying a greeting such as the * OK Dovecot ready example below.

A continuación comenzamos a realizar el acceso tipo:

```
jm@jm-VirtualBox:~$ openssl s_client -crlf -connect imap.zoho.eu:993
CONNECTED(00000005)
depth=2 C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global
Root G2
verify return:1
depth=1 C = US, O = DigiCert Inc, OU = www.digicert.com, CN = Thawte TLS RSA
CA G1
verify return:1
depth=0 CN = *.zoho.eu
verify return:1
---
Certificate chain
0 s:CN = *.zoho.eu
i:C = US, O = DigiCert Inc, OU = www.digicert.com, CN = Thawte TLS RSA CA G1
1 s:C = US, O = DigiCert Inc, OU = www.digicert.com, CN = Thawte TLS RSA CA G1
i:C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root
G2
---
Server certificate
-----BEGIN CERTIFICATE-----
```

```
MIIGCzCCBPogAwIBAgIQAYxE7eDl2Qbi36g6bEs1pDANBgkqhkiG9w0BAQsFADBe
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3
d3cuZGlnaWNlcnQuY29tMR0wGwYDVQQDEXRuUaGF3dGUGVExTIFJTSBDQSBHMTAe
Fw0yMjAyMTQwMDAwMDBaFw0yMzAzMDkyMzU5NTlaMBQxEjAQBGNVBAAMCSouem9o
by5ldTCCASiWdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBALs+Ql8mwUnTFviH
ZaKThRpNhPhbvRKWHlYRd93pAIXVKnvyOBc0Ya2iNxUeV0sPHxDBTnIJ3f16xIc6
6ZR4VW2+Hhtb8gGP7iZq+osRHZol34sw2zeQc4bzULzs24gY6568dLiRTzKaOBuf
LH5ZjBtgAuJWE016UI3MxHbQRsXvyY7WJgkg0MOBH1Fmyvi8VVivbDyUCTU8S3pv
r5igRHaQ+N8v8YZIjkX+12+5kX1CpbYW/1eCaHvc19kQ/1r/qV8T/yf7vBVdJmYp
BAMARzBFAiB2ZHtNsR0fHGww9kVb/0PdunjawQMvZFKhxjnpDS0cGgIhANdXpLve
OedajmrfzVEF0H+clW55RPbs45AMIadvOV3MA0GCSqS Ib3DQEBcWUAA4IBAQCq
6n0sa65MofKfG5T+/CUY+gs86W368+xJoYR+BMs1Ql99ft+MJ8UhpKq118zeIsZL
IE90hsVYcc1QCMylFrzsamETzVLTOTnJeaZSLevk8Lowst7sRL45N7sMBnJ0FnnF
LxgLK5qIcezyyybHfmoAnxCvAfMjEu9vtEcGxNzhWUulIqNJ5SxVhr8QrorG7thZ
HUNjkaOkIhieS2nD/AcqJMZYOOE9AOL33tqR8CfuX1yONIjtqts8lI6bfEcVSVME
oqpG2INH8l17q5BO/QKe/QGtCZeJ1d214BCAePhuuGqQo31ZMNpqZ2xtCsVxFCA/
7TwYbJeR71Kh7nmV7nkK
-----END CERTIFICATE-----
subject=CN = *.zoho.eu

issuer=C = US, O = DigiCert Inc, OU = www.digicert.com, CN = Thawte TLS RSA CA
G1

---
No client certificate CA names sent
Peer signing digest: SHA256
Peer signature type: RSA-PSS
Server Temp Key: X25519, 253 bits
---
SSL handshake has read 3398 bytes and written 435 bytes
Verification: OK
---
New, TLSv1.0, Cipher is ECDHE-RSA-AES256-SHA
Server public key is 2048 bit
Secure Renegotiation IS supported
Compression: NONE
Expansion: NONE
No ALPN negotiated
SSL-Session:
    Protocol : TLSv1.2
    Cipher   : ECDHE-RSA-AES256-SHA
    Session-ID:
58054C7288416FEFF456D6CA1CFDB591B1B69EC133138671D0C911FF6CD9376C
    Session-ID-ctx:
    Master-Key:
7FA468C2BE54B03091029BC8618814A82F37C7476187150CF301EC7D7777DD510F3AF23F91144A
FF60F65FDFC4B7265C
    PSK identity: None
    PSK identity hint: None
    SRP username: None
    TLS session ticket lifetime hint: 14400 (seconds)
    TLS session ticket:
0000 - 7b 69 4e 3f 02 a2 26 1e-09 cd 07 98 1c 49 b5 52 {iN?...&.....I.R
0010 - 88 a9 12 ac 3a 96 48 0a-ed f5 90 64 c3 c5 bb 6b .....H....d...k
0020 - 81 d3 7d 4f c5 41 63 d5-c6 00 4a 51 32 4a ff d9 ..}O.Ac...JQ2J..
0030 - aa 83 30 67 b5 b0 72 dc-70 39 ee 86 0d 09 0f 72 ..0g...r.p9.....r
0040 - 8b fd 70 a7 85 d6 95 33-f2 eb df 88 dd 56 6e 2f ..p....3.....Vn/
0050 - c8 e2 36 6b 88 af 70 60-27 a4 ed d6 65 50 2a 16 ..6k..p`'...eP*.
0060 - b5 39 f8 27 8e 26 26 34-1f 8b 46 13 59 4e a6 b7 .9.'.&&4..F.YN..
0070 - 58 57 05 b7 df 82 e4 11-94 72 dd 7e 85 c1 a5 78 XW.....r.~...x
0080 - 6f 3d 4f 67 e1 7a 86 d8-9d 11 69 71 14 a7 87 62 o=Og.z....iq...b
0090 - 0d fb a8 a2 c3 36 31 06-21 59 d0 c9 8e 07 15 6a .....61.!Y.....j
00a0 - 22 6e c0 37 f0 40 37 fa-5f a7 16 2f 78 b3 7e ef "n.7.@7._../x.~.

Start Time: 1670886010
Timeout : 7200 (sec)
Verify return code: 0 (ok)
Extended master secret: yes
```

```
---
* OK swwall.zoho.com IMAP4 Server (Zoho Mail IMAP4rev1 Server version 1.0)
a login arquitarde ##### (sustituimos ##### por el PW de nuestra cuenta)
* CAPABILITY IMAP4rev1 UNSELECT CHILDREN XLIST NAMESPACE IDLE MOVE ID
AUTH=PLAIN SASL-IR UIDPLUS ESEARCH LIST-EXTENDED LIST-STATUS WITHIN LITERAL-
APPENDLIMIT=20971520 CONDSTORE
a OK Success
a list "" "*"
* LIST (\HasNoChildren) "/" "INBOX"
* LIST (\Noinferiors \Drafts) "/" "Drafts"
* LIST (\Noinferiors) "/" "Templates"
* LIST (\HasNoChildren) "/" "Snoozed"
* LIST (\Noinferiors \Sent) "/" "Sent"
* LIST (\Noinferiors \Junk) "/" "Spam"
* LIST (\HasNoChildren \Trash) "/" "Trash"
* LIST (\HasNoChildren) "/" "Notification"
* LIST (\HasNoChildren) "/" "Newsletter"
a OK Success
a select INBOX
* 4 EXISTS
* 1 RECENT
* OK [UNSEEN 1]
* OK [UIDVALIDITY 1] UIDs valid
* OK [UIDNEXT 5] Predicted next UID
* OK [HIGHESTMODSEQ 1000000000000000001]
* FLAGS (\Answered \Flagged \Deleted \Seen \Draft)
* OK [PERMANENTFLAGS (* \Answered \Flagged \Deleted \Seen \Draft)] Permanent
flags
a OK [READ-WRITE] SELECT completed
a fetch 1 body
* 1 FETCH (BODY ("TEXT" "PLAIN" ("charset" "UTF-8") NIL NIL "QUOTED-
PRINTABLE" 1256 64)("TEXT" "HTML" ("charset" "UTF-8") NIL NIL "QUOTED-
PRINTABLE" 12175 156) "ALTERNATIVE")
a OK Success
a logout
* BYE IMAP4rev1 Server logging out
a OK Success
closed
```

b) Enviar correos con SMTP y OpenSSL.

Disponemos de dos tipos de codificación en base64:

1º) La codificación de nuestro *Login* y *Password* por separado

```
echo -n "milogin" | openssl enc -base64
```

```
echo -n "arquitarde" | openssl enc -base64
LW4gImFycXWpdGFyZGUxIiANCg==
```

```
echo -n "miclave" | openssl enc -base64
```

```
echo -n "#####" | openssl enc -base64
LW4gIkAxMjM0ETYjIiANCg==
```

2º) La codificación de nuestro *Login* y *Password* juntos

```
echo -e "\0arquitarde\0#####" | base64
AGFycXVpdGFyZGUxQGdtYWVsLmNvbQBEMTIzNDU2Iwo=
```

O bien.

```
echo -ne "\0arquitarde\0#####" | base64  
AGFycXVpdGFyZGUxQGdtYWIsLmNvbQBEMTIzNDU2lwo=
```

A continuación comenzamos a realizar el acceso del tipo:

```
jm@jm-VirtualBox:~$ openssl s_client -crlf -connect smtp.zoho.eu:465  
CONNECTED(00000005)  
depth=2 C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global  
Root G2  
verify return:1  
depth=1 C = US, O = DigiCert Inc, OU = www.digicert.com, CN = Thawte TLS RSA  
CA G1  
verify return:1  
depth=0 CN = *.zoho.eu  
verify return:1  
---  
Certificate chain  
 0 s:CN = *.zoho.eu  
  i:C = US, O = DigiCert Inc, OU = www.digicert.com, CN = Thawte TLS RSA CA  
G1  
 1 s:C = US, O = DigiCert Inc, OU = www.digicert.com, CN = Thawte TLS RSA CA  
G1  
  i:C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global  
Root G2  
---  
Server certificate  
-----BEGIN CERTIFICATE-----  
MIIGCzCCBPQAwIBAgIQAYxE7edl2Qbi36g6bEs1pDANBgkqhkiG9w0BAQsFADBe  
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3  
d3cuZGlnaWNlcnQuY29tMR0wGwYDVQQDEExRUaGF3dGUgVExTIFJTSBDQSBHMTAe  
Fw0yMjAyMTQwMDAwMDBaFw0yMzAzMDkyMzU5NTlaMBQxEjAQBGNVBAAMC Souem9o  
by5ldTCCASIWdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBALs+Ql8mwUnTFviH  
ZaKThRpNhPhbvRKWH1yRd93pAIXVKnvyOBc0Ya2iNxUeV0sPHxDBTnIJ3f16xIc6  
6ZR4VW2+Hhtb8gGP7iZq+osRHZol34sw2zeQc4bzULzs24gY6568dLiRTzKaOBuF  
LH5ZjBtgAuJWE016UI3MxHbQRsXvyY7WJgkg0MOBH1Fmyvi8VViVbDyUCTU8S3pv  
r5igrHaQ+N8v8YZIjKX+12+5kX1CpbYW/1eCaHvc19kQ/1r/qV8T/yf7vBVdJmYp  
Ltvng1dexrDwkJ2W32bboXDCs5iEFqS56ZHuRn09OaU+4eDkAVxQGk7J0uF233E8  
ejWoyT8CAwEAAwOAwggMjMB8GA1UdIwQYMBaAFKWM/jLM6w8s1BnGCLgAJIhd  
w8W3MB0GA1UdDgQWBRTa7zpYrUhLEv7Los9CQIb3GGkrjAdBgNVHREEFjAUGgkq  
LnpvaG8uZXWCB3pvaG8uZXUwDgYDVR0PAQH/BAQDAgWgMB0GA1UdJQQWMBQGCCsG  
AQUFBwMBBggrBgEFBQcDAjA7BgNVHR8ENDAYMDCCgQGAshipodHRwOi8vY2RwLnRo  
YXd0ZS5jb20vVGHhd3R1VExTU1NBQ0FHMS5jcmwwPgYDVR0gBDcWNTAZBgZngQwB  
AgEwKTAhBggrBgEFBQcCARYbaHR0cDovL3d3dy5kaWdpY2VydC5jb20vQ1BTMHAG  
CCsGAQUFBwEBBGQwYjAkBggrBgEFBQcwAAYYYaHR0cDovL3N0YXR1cy50aGF3dGUu  
Y29tMD0GCCsGAQUFBzAChi5odHRwOi8vY2FjZXJ0cy50aGF3dGUuY29tL1RoYXd0  
ZVRMU1JtQUNBRzEuY3JOMakGA1UdEwQCAAwggF9BgorBgEEAdZ5AgQCBIIBBQSC  
AWkBWzB2Aog+0No+9QY1MudXKLyJa8kD08vREWvs62nhd31tBr1uAAABfvYRE3MA  
AAQDAEewRQIgdYR02yXprwKi6hnpYwN63I52YUFDd0eQ2hSZZtzg2ECIQDeDXy  
l8NRAqU8pFXNDQAmBh4cq6XTEdR6SLzZ2RbqvgB1ADXPGRu/sWxXvw+ttG1Cy7u2  
JyAmUeo/4SrvqAPDO9ZMAAABfvYRE60AAAQDAEYwRAIgpXGvBMD+/gV7uSfW5fkj  
Xcm9MoFutMKjmmCeqYk8LMACIALrBw1XdxNB1XYvxLrexxObn9hZTmMRZBn9BjK  
+V7tAHYAs3N3B+GEUPhjtYFqdwRCUp5LbFnDAuH3PADDnk2pZoAAAF+9hET0gAA  
BAMARzBFAiB2ZhtnsR0FHGww9kVb/0PdunjawQMVZFkxhjnpsDS0cGgIhANdxpLve  
OedajmrfzVEF0H+c1W55RPbS45AMIadvOV3MA0GCSqGSIb3DQEBCwUAA4IBAQCq  
6n0sa65MofKfG5T+/CUY+gs86W368+xJoYR+BMSlQl99ft+MJ8UhpKq118zeIsZL  
IE90hsVYcC1QCMy1FrzsamETzVLTOTnJeaZSLevk8L0wst7sRL45N7sMBnJ0FnnF  
LxgLK5qIeczyyybHfmOAnxCvAfMjEu9vtEcqXnzHwUulIqNJ5SxVhr8QrorG7thZ  
HUNjkaOkIhieS2nD/AcqJMZY0oE9AOL33tqR8CfuX1yONIJtqts81I6bfEcVSVME  
oqpG2INH8117q5BO/QKe/QGtCZeJ1d214BCAePhuuGgQo31ZMNpqZ2xtCsVxFCA/  
7TwYbJeR71Kh7nMV7nkK  
-----END CERTIFICATE-----  
subject=CN = *.zoho.eu
```

issuer=C = US, O = DigiCert Inc, OU = www.digicert.com, CN = Thawte TLS RSA CA G1

No client certificate CA names sent
Peer signing digest: SHA256
Peer signature type: RSA-PSS
Server Temp Key: X25519, 253 bits

SSL handshake has read 3398 bytes and written 435 bytes
Verification: OK

New, TLSv1.0, Cipher is ECDHE-RSA-AES256-SHA
Server public key is 2048 bit
Secure Renegotiation IS supported
Compression: NONE
Expansion: NONE
No ALPN negotiated

SSL-Session:

Protocol : TLSv1.2
Cipher : ECDHE-RSA-AES256-SHA
Session-ID:

E393B134D2E98F9544A99123B2B60EB28FBE24366BE1F312DEA7CD143F348F1A

Session-ID-ctx:

Master-Key:

A5B60378EF3BC687A740ADF7DB916548B82DBCCBE621D2040803053472C0B9AC2DD9CBBEEB5D5E
83459008A389D056DE

PSK identity: None

PSK identity hint: None

SRP username: None

TLS session ticket lifetime hint: 14400 (seconds)

TLS session ticket:

0000	-	7b	69	4e	3f	02	a2	26	1e-09	cd	07	98	1c	49	b5	52	{iN?..&.....I.R
0010	-	92	6c	5a	84	7a	0b	91	11-98	d9	0d	75	a6	96	3a	3c	.lZ.z.....u..:<
0020	-	6c	44	c1	5d	da	64	f2	ee-6b	c3	57	b5	fb	a5	2a	a1	lD.]d..k.W...*.
0030	-	31	0a	59	78	c4	06	16	53-80	78	64	96	39	c9	b4	c6	l.Yx...S.xd.9...
0040	-	91	a3	0c	fe	5f	18	f0	72-63	10	05	cb	a6	d7	f7	efrc.....
0050	-	4f	0d	9c	6a	33	50	bc	6a-25	86	2f	7b	89	20	b7	a5	O..j3P.j%./{. .
0060	-	fc	66	56	2e	9e	e1	50	df-f8	bc	41	99	e8	23	42	20	.fV...P...A..#B
0070	-	a6	3f	ab	8e	aa	3a	d9	49-60	8b	e8	34	d7	ea	05	59	.?....I`..4...Y
0080	-	1e	34	32	e1	07	27	5c	27-33	5a	dd	6c	78	ef	48	dd	.42..'\`3Z.lx.H.
0090	-	f6	41	0c	e4	ae	5e	c7	45-00	de	70	6e	60	e3	1c	ca	.A...^E..pn`...
00a0	-	52	b5	d5	7b	69	5e	14	c4-72	cd	2c	06	63	17	97	c9	R..{i^..r.,.c...

Start Time: 1670885339

Timeout : 7200 (sec)

Verify return code: 0 (ok)

Extended master secret: yes

220 mx.zoho.eu SMTP Server ready December 12, 2022 11:48:59 PM CET

auth plain

503 Must issue a EHLO/HELO command first.

ehlo arquitarde

250-mx.zoho.eu Hello arquitarde (208.red-80-29-37.staticip.rima-tde.net
(80.29.37.208))

250-AUTH LOGIN PLAIN

250 SIZE 53477376

auth plain

334

AGFycXVpdGFyZGUxQGdtYVlsLmNvbQBAETIzNDU2Iwo=

235 Authentication Successful

mail from:<arquitarde@zohomail.eu>

250 Sender <arquitarde@zohomail.eu> OK

rcpt to:<jmruiz@gmail.com>

250 Recipient <jmruiz@gmail.com> OK

data

354 Ok Send data ending with <CRLF>.<CRLF>


```
HUNjkaOkIhieS2nD/AcqJMZYOoE9AOL33tqR8CfuXlyONIJtqts81I6bfEcVSVME
oqpG2INH8l17q5BO/QKe/QGtCZeJld2l4BCAePhuuGgQo3lZMNpqZ2xtCsVxFCA/
7TwYbJeR7lKh7nMV7nkK
-----END CERTIFICATE-----
subject=CN = *.zoho.eu

issuer=C = US, O = DigiCert Inc, OU = www.digicert.com, CN = Thawte TLS RSA CA
G1

---
No client certificate CA names sent
Peer signing digest: SHA256
Peer signature type: RSA-PSS
Server Temp Key: X25519, 253 bits
---
SSL handshake has read 3398 bytes and written 434 bytes
Verification: OK
---
New, TLSv1.0, Cipher is ECDHE-RSA-AES256-SHA
Server public key is 2048 bit
Secure Renegotiation IS supported
Compression: NONE
Expansion: NONE
No ALPN negotiated
SSL-Session:
    Protocol   : TLSv1.2
    Cipher     : ECDHE-RSA-AES256-SHA
    Session-ID:
4A009052B2B304481339F13C02681BF77E9B897A77D858064A81BD4722A9E255
    Session-ID-ctx:
    Master-Key:
14334F49368C60981595AFD9F3A7E1CF22FE78FBDE31C65991F3AC7F1EBD9BBE4336511F941796
CF09C62700587BAEE1
    PSK identity: None
    PSK identity hint: None
    SRP username: None
    TLS session ticket lifetime hint: 14400 (seconds)
    TLS session ticket:
0000 - 7a 7b 8a 21 dd ed e6 92-20 af ac 6b 73 b3 f9 7c   z{!. .... ..ks..|
0010 - 9a 4f 28 de 9c e4 e6 ba-95 45 f5 5c a8 e3 d3 3f   .O(.....E.\...?
0020 - cf a0 9c 32 f2 d0 38 17-75 99 30 8e 4f d2 48 4c   ...2...8.u.0.O.HL
0030 - 4d d9 33 c4 83 c4 c9 00-83 9f 12 b4 4f cc 69 f5   M.3.....O.i.
0040 - d1 e2 4d a0 74 a0 6a 25-17 48 37 56 c1 5e 94 46   ..M.t.j%.H7V.^.F
0050 - 79 03 53 78 9a a2 b2 f1-8e 88 9d 32 2b e9 ab 4d   y.Sx.....2+..M
0060 - 91 d1 f0 7c f4 75 f3 51-ca 9f 6e 25 4e 3f 56 a3   ...|.u.Q..n%N?V.
0070 - 05 c5 85 f5 93 a3 16 72-25 c4 74 15 61 7f 51 ec   .....r%.t.a.Q.
0080 - 83 5f 2d 8b ac ae ae 14-42 78 82 04 56 00 97 da   ._-.....Bx..V...
0090 - 75 1a 16 77 4a a5 81 8e-2c 38 0d 2b 13 f5 1d 77   u..wJ...,8.+...w

    Start Time: 1670886219
    Timeout    : 7200 (sec)
    Verify return code: 0 (ok)
    Extended master secret: yes
---
+OK POP3 mx.zoho.eu v1.0 server ready 17073290.1670886219639@mx.zoho.eu
user arquitarde
+OK
pass #####
+OK
list
+OK 5 messages (31412 octets)
1 13751
2 13395
3 878
4 1123
5 2265
.
```

list 1

+OK 1 13751

retr 1

From: welcome@zoho.eu
Subject: Welcome to Zoho Mail
MIME-Version: 1.0
Content-Type: multipart/alternative;
 boundary="-----_Part_565525_675833552.1665384326498"
Importance: Medium
User-Agent: Zoho Mail
X-Mailer: Zoho Mail
To: arquitarde@zohomail.eu
Date: Mon, 12 Dec 2022 19:41:21 +0100
Message-ID: <1076708326.9706.1670870481380@[172.26.15.214]>
X-ZohoMail-Sender: welcome@zoho.eu
X-ZM-MESSAGEID: 167087048142500001

-----= Part_565525_675833552.1665384326498
Content-Type: text/plain; charset="UTF-8"
Content-Transfer-Encoding: quoted-printable

Hello Arqui,

We are happy to have you onboard!

Join our webinar sessions to discover the power of Zoho Mail.

<https://www.zoho.com/mail/webinars/?src=3Dzmwelcome> <https://www.zoho.com/mail/webinars/recorded-webinars.html?src=3Dzmwelcome>

These are some additional resources you can use to help kick start your journey with Zoho Mail.

<https://www.zoho.com/mail/complete-guide-to-setup-zohomail.html?src=3Dzmwelcome>
<https://www.zoho.com/mail/deployment/?src=3Dzmwelcome>
<https://www.zoho.com/mail/migration/?src=3Dzmwelcome>

We roll out feature enhancements every day.

You can catch up with all our latest updates here.

<https://www.zoho.com/mail/whats-new.html?src=3Dzmwelcome>

In case you need further assistance, write to us on <mailto:support@zohomail.com>

Thank you, Zoho Mail Team

Follow us on <https://www.facebook.com/zoho/> <https://twitter.com/zohomail?lang=3Den> <https://www.linkedin.com/company/zoho-mail/?originalSubdomain=3Din> <https://www.instagram.com/zoho/> <https://www.youtube.com/c/ZohoMailofficial>
=20

You have received this email because you have signed up for Zoho Mail.

=C2=A9 2022. Zoho Corporation Pvt. Ltd. All rights reserved.

-----= Part_565525_675833552.1665384326498
Content-Type: text/html; charset="UTF-8"
Content-Transfer-Encoding: quoted-printable

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ttps://www.zohowebstatic.com/sites/default/files/workplace/zmail/welcome-ba=
use to help kick start your journey with Zoho Mail.<br></td></tr><tr><td a=
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center; padding-bottom: 5px; color: #000; font-weight: 500;">Deployment gu=
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e-block; max-width:170px; min-width:170px; vertical-align:top; border: 1px =
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Cantarell,Noto Sans,sans-serif; font-size: 12px; color: #7C7B7B; margin:=
0;">=C2=A9 2022. Zoho Corporation Pvt. Ltd. All rights reserved.<br></p></=
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quit

+OK mx.zoho.eu Service closing transmission channel
closed