💻 Mail Client | 🔍 DNS Resolver | 📧 Mail Server

📁 **pop3_list_retr.pcapng**

🔍 DNS Query — Frame 1 | 2021-01-20T15:20:10.596413Z

🔍 Name	mail.njrusmc.net
🏷️ Type	A (1) (Host Address)

✅ DNS Response — Frame 2 | 2021-01-20T15:20:10.621435Z

🔍 Name	mail.njrusmc.net
🏷️ Type	A (1) (Host Address)
⏱️ TTL	10 (10 seconds)
🌐 Address	52.91.199.108
⏱️ Response Time	25.022000 milliseconds

🔗 TCP (SYN) — Frame 3 | 2021-01-20T15:20:10.633556Z

📤 Source Port	58708
📥 Destination Port	110

🔗 TCP (SYN, ACK) — Frame 4 | 2021-01-20T15:20:10.646581Z

📤 Source Port	110
📥 Destination Port	58708

🔗 TCP (ACK) — Frame 5 | 2021-01-20T15:20:10.646694Z

📤 Source Port	58708
📥 Destination Port	110

✅ POP3 +OK — Frame 6 | 2021-01-20T15:20:10.661237Z

💬 Hello there.	

🔗 TCP (ACK) — Frame 7 | 2021-01-20T15:20:10.661352Z

📤 Source Port	58708
📥 Destination Port	110

👤 POP3 USER — 💡 POP3 authentication step 1: client sends username

👤 Username	ubuntu

🔗 TCP (ACK) — Frame 9 | 2021-01-20T15:20:10.674817Z

📤 Source Port	110
📥 Destination Port	58708

✅ POP3 +OK — Frame 10 | 2021-01-20T15:20:10.675643Z

💬 Password required.	

🔗 TCP (ACK) — Frame 11 | 2021-01-20T15:20:10.675785Z

📤 Source Port	58708
📥 Destination Port	110

🔐 POP3 PASS — 💡 POP3 authentication step 2: client sends password (sent in cleartext!)

🔗 TCP (ACK) — Frame 13 | 2021-01-20T15:20:10.687235Z

📤 Source Port	110
📥 Destination Port	58708

✅ POP3 +OK — Frame 14 | 2021-01-20T15:20:10.699869Z

💬 logged in.	

🔗 TCP (ACK) — Frame 15 | 2021-01-20T15:20:10.700008Z

📤 Source Port	58708
📥 Destination Port	110

📋 POP3 LIST — 💡 List messages in the mailbox with their sizes (message-number octets)

🔗 TCP (ACK) — Frame 17 | 2021-01-20T15:20:10.712216Z

📤 Source Port	110
📥 Destination Port	58708

✅ POP3 +OK — Frame 18 | 2021-01-20T15:20:10.712658Z

💬 POP3 clients that break here, they violate STD53.	

💻 Mail Client	🔍 DNS Resolver	📧 Mail Server

📋 1 447\r\n	
📋 .\r\n	

🔗 TCP (ACK)

Frame 19 | 2021-01-20T15:20:10.712788Z

📤 Source Port	58708
📥 Destination Port	110

📬 POP3 RETR

💡 Download the full message from the server (headers + body)

🔢 Message	1

✅ POP3 +OK

Frame 21 | 2021-01-20T15:20:10.727897Z

💬 447 octets follow.	
📋 Return-Path	<nick@njrusmc.net>\r\n
📋 X-Original-To	admin@njrusmc.net\r\n
📋 Delivered-To	ubuntu@njrusmc.net\r\n
📋 Received	from nicholass-mbp.fios-router.home (pool-100-16-207-80.bltmmd.fios.verizon.net [100.16.207.80])\r\n
📋 \tby ip-172-31-91-117.ec2.internal (Postfix) with ESMTP id E5D923EA07\r\n	
📋 \tfor <admin@njrusmc.net>; Wed, 20 Jan 2021 13:43:44 +0000 (UTC)\r\n	
📋 From	nick@njrusmc.net\r\n
📋 To	admin@njrusmc.net\r\n
📋 Subject	Python email test\r\n
📋 \r\n	
📋 Hello world!\r\n	
📋 .\r\n	

🔗 TCP (ACK)

Frame 22 | 2021-01-20T15:20:10.728003Z

📤 Source Port	58708
📥 Destination Port	110

🔗 TCP (FIN, ACK)

Frame 23 | 2021-01-20T15:20:10.730629Z

📤 Source Port	58708
📥 Destination Port	110

🔗 TCP (FIN, ACK)

Frame 24 | 2021-01-20T15:20:10.745791Z

📤 Source Port	110
📥 Destination Port	58708

🔗 TCP (ACK)

Frame 25 | 2021-01-20T15:20:10.745922Z

📤 Source Port	58708
📥 Destination Port	110