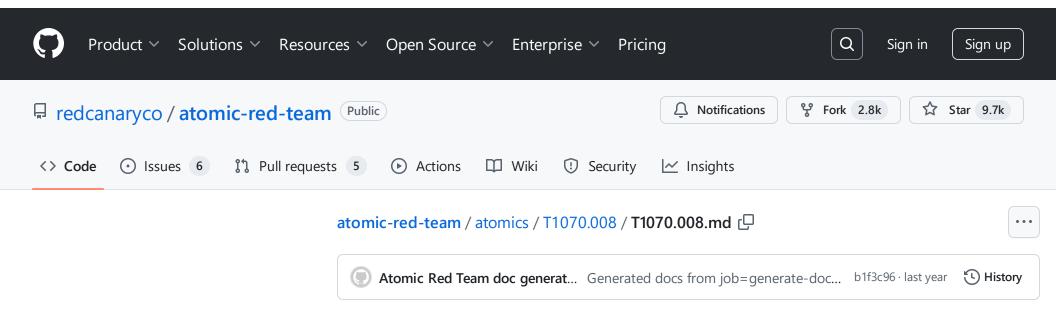
team/blob/58496ee3306e6e42a7054d36a94e6eb561ee3081/atomics/T1070.008/T1070.008.md#atomic-test-4---copy-and-modify-mailbox-data-on-windows



# T1070.008 - Email Collection: Mailbox Manipulation

## **Description from ATT&CK**

Adversaries may modify mail and mail application data to remove evidence of their activity. Email applications allow users and other programs to export and delete mailbox data via command line tools or use of APIs. Mail application data can be emails, email metadata, or logs generated by the application or operating system, such as export requests.

Adversaries may manipulate emails and mailbox data to remove logs, artifacts, and metadata, such as evidence of <a href="Phishing/Internal Spearphishing">Phishing/Internal Spearphishing</a>, <a href="Email Collection">Email Collection</a>, <a href="Mail Mail Protocols">Mail Protocols</a> for command and control, or email-based exfiltration such as <a href="Exfiltration">Exfiltration</a>
<a href="Over Alternative Protocol">Over Alternative Protocol</a>. For example, to remove evidence on Exchange servers adversaries have used the <a href="ExchangePowerShell">ExchangePowerShell</a> module, including
<a href="Memove-MailboxExportRequest">Remove-MailboxExportRequest</a> to remove evidence of mailbox exports. (Citation: Volexity SolarWinds) (Citation: ExchangePowerShell Module) On Linux and macOS, adversaries may also delete emails through a command line utility called <a href="mail">mail</a> or use <a href="AppleScript">AppleScript</a> to interact with APIs on macOS. (Citation: Cybereason Cobalt Kitty 2017) (Citation: mailx man page)

Adversaries may also remove emails and metadata/headers indicative of spam or suspicious activity (for example, through the use of organization-wide transport rules) to reduce the likelihood of malicious emails being detected by security products. (Citation: Microsoft OAuth Spam 2022)

### **Atomic Tests**

- Atomic Test #1 Copy and Delete Mailbox Data on Windows
- Atomic Test #2 Copy and Delete Mailbox Data on Linux
- Atomic Test #3 Copy and Delete Mailbox Data on macOS
- Atomic Test #4 Copy and Modify Mailbox Data on Windows
- Atomic Test #5 Copy and Modify Mailbox Data on Linux
- Atomic Test #6 Copy and Modify Mailbox Data on macOS

Atomic Test #1 - Copy and Delete Mailbox Data on Windows

team/blob/58496ee3306e6e42a7054d36a94e6eb561ee3081/atomics/T1070.008/T1070.008.md#atomic-test-4---copy-and-modify-mailbox-data-on-windows

Copies and deletes mail data on Windows

Supported Platforms: Windows

auto\_generated\_guid: d29f01ea-ac72-4efc-8a15-bea64b77fabf

Attack Commands: Run with powershell! Elevation Required (e.g. root or admin)

```
New-Item -Path "C:\Users\$env:USERNAME\AppData\Local\Comms\Unistore\data └└
Get-ChildItem -Path "C:\Users\$env:USERNAME\AppData\Local\Comms\Unistore
Remove-Item -Path "C:\Users\$env:USERNAME\AppData\Local\Comms\Unistore\d
```

### **Cleanup Commands:**

```
Remove-Item -Path "C:\Users\env:USERNAME\AppData\Local\Comms\Unistore\d
```

## Atomic Test #2 - Copy and Delete Mailbox Data on Linux

Copies and deletes mail data on Linux

Supported Platforms: Linux

auto\_generated\_guid: 25e2be0e-96f7-4417-bd16-a4a2500e3802

Attack Commands: Run with bash! Elevation Required (e.g. root or admin)

```
Q
mkdir -p /var/spool/mail/copy
for file in /var/spool/mail/*; do
  if [ "$(basename "$file")" != "copy" ]
    cp -R "$file" /var/spool/mail/copy/
  fi
rm -rf /var/spool/mail/copy/*
```

#### **Cleanup Commands:**

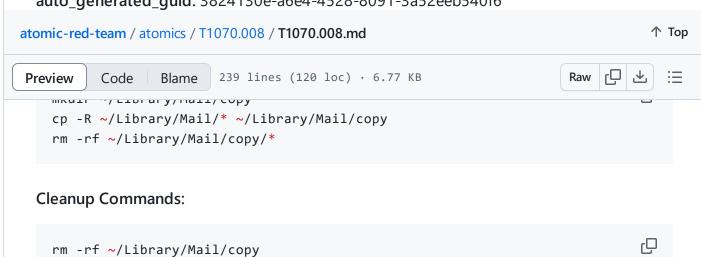
```
Q
rm -rf /var/spool/mail/copy
```

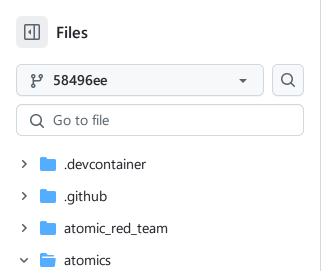
## Atomic Test #3 - Copy and Delete Mailbox Data on macOS

Copies and deletes mail data on macOS

Supported Platforms: macOS

auto\_generated\_guid: 3824130e-a6e4-4528-8091-3a52eeb540f6





team/blob/58496ee3306e6e42a7054d36a94e6eb561ee3081/atomics/T1070.008/T1070.008.md#atomic-test-4---copy-and-modify-mailbox-data-on-windows



T1036.004

T1036.005

T1036.006

## Atomic Test #4 - Copy and Modify Mailbox Data on Windows

Copies and modifies mail data on Windows

**Supported Platforms:** Windows

auto\_generated\_guid: edddff85-fee0-499d-9501-7d4d2892e79b

Attack Commands: Run with powershell! Elevation Required (e.g. root or admin)

```
New-Item -Path "C:\Users\$env:USERNAME\AppData\Local\Comms\Unistore\data Get-ChildItem -Path "C:\Users\$env:USERNAME\AppData\Local\Comms\Unistore Get-ChildItem -Path "C:\Users\$env:USERNAME\AppData\Local\Comms\Unistore
```

#### **Cleanup Commands:**

```
Remove-Item -Path "C:\Users\$env:USERNAME\AppData\Local\Comms\Unistore\d [
```

## Atomic Test #5 - Copy and Modify Mailbox Data on Linux

Copies and modifies mail data on Linux

Supported Platforms: Linux

**auto\_generated\_guid**: 6d99f93c-da56-49e3-b195-163090ace4f6

Attack Commands: Run with bash! Elevation Required (e.g. root or admin)

```
mkdir -p /var/spool/mail/copy
for file in /var/spool/mail/*; do
  if [ "$(basename "$file")" != "copy" ]
  then
    cp -R "$file" /var/spool/mail/copy/
  if [ -f "/var/spool/mail/copy/$(basename "$file")" ]; then
    echo "Modification for Atomic Red Test" >> "/var/spool/mail/copy/$
  fi
  fi
  done
```

### Cleanup Commands:

```
rm -rf /var/spool/mail/copy
```

## Atomic Test #6 - Copy and Modify Mailbox Data on macOS

Copies and modifies mail data on macOS

Supported Platforms: macOS

**auto\_generated\_guid:** 8a0b1579-5a36-483a-9cde-0236983e1665

