

T1543.003 - Service Creation

Indicator of Activity (IOA):

- Network:
 - Network connection to services.exe over TCP_IP Port
 - Window Security Event 5156
 - Sysmon Event 3
 - Methods seen over network:
 - ROpenSCManager(A/W)/ROpenSCManager2
 - RCreateService(A/W)/RCreateServiceWOW64(A/W)/RCreateWowService
- Host:
 - Registry Key created / modified within HKLM\SYSTEM\CurrentControlSet\Services subkey
 - Sysmon Event 12/13
 - Window Securty Event 4624:
 - Logon Type 3
 - Account Name isn't a machine account (\$)
 - Source IP / Source Port = Network Source Port/IP
 - Window Security Event 4697
 - Windows System Event 7045

Prevention Opportunities:

Modify permissions for the Services subkey on who can/cannot interact with it.

RPC Filter Example:

```
rpc
filter
add rule layer=um actiontype=permit
add condition field=if_uuid matchtype=equal data=367ABB81-9844-35F1-AD32-98F0380010
add condition field=remote_user_token matchtype=equal data=D:(A;;KA;;;DA)
```

MSRPC-to-ATTACK/documents/MS-SCMR.md at ddd4608fe8684fcf2fcf9b48c5f0b3c28097f8a3 · jsecurity101/MSRPC-to-ATTACK · GitHub - 31/10/2024 09:08 https://github.com/jsecurity101/MSRPC-to-ATTACK/blob/ddd4608fe8684fcf2fcf9b48c5f0b3c28097f8a3/documents/MS-SCMR.md

```
add filter
add rule layer=um actiontype=block
add condition field=if_uuid matchtype=equal data=367ABB81-9844-35F1-AD32-98F0380010
add filter
quit
```

 RPC Filter only allows Domain Administrators to create services remotely. DAs is probably not the group you want in this filter. See Notes.

Notes:

- By default local administrators and above can create services. The RPC filter only allows Domain Admins to have key access. Could create a "services" group and apply that group to the DACL instead. Change DACL to leverage the group SID - like: D:(A;;KA;;;S-1-5-21-3637186843-3378876361-2759896766-2106).
- Have to make sure whatever group you put in the DACL is a local admin on the target host. Still
 need to pass the access checked based on the Service Control Manager's Security Descriptor.

Useful Resources:

- https://posts.specterops.io/utilizing-rpc-telemetry-7af9ea08a1d5
- https://attack.mitre.org/techniques/T1543/003/