

# ZOLDER

INTUNE | DUTCH MICROSOFT & SECURITY MEETUP

6-9-2022

applied security research



## WHOAMI

- Rik van Duijn
  - Ethical hacker
  - OSCP / OSCE
  - 8+ years of experience
  - Cybercrime / Malware analysis
  - Mede oprichter Zolder



## WHAT ARE WE TALKING ABOUT

- Intro
- Code-exec voorbeelden
  - Script
  - Configuration profile
  - Win32app/lineofbusiness
  - Win32App (Intunewin) check script
- Logging
- Verrijken
- Demo: oauth phish

WORK IN PROGRESS



rootsecdev  
@rootsecdev

...

LockBit ransomware automates Windows domain encryption via group policies



bleepingcomputer.com

LockBit ransomware now encrypts Windows domains using group policies

An new version of the LockBit 2.0 ransomware has been found that automates the encryption of a Windows domain using Active Directory gr

3:03 AM · Jul 28, 2021 · Twitter for iPhone

Voornamelijk PsExec, GPO, SCCM, Software Deployment systems zoals Kaspersky ;-) - Als het om ransomware deployments gaat.

Apr 16, 2022, 7:39 PM

- In another investigation, APT32 compromised the McAfee ePO infrastructure to distribute their malware as a software deployment task in which all systems pulled the payload from the ePO server using the proprietary SPIPE protocol.

IT'S A FEATURE, NOT A BUG

## WHO CAN MANAGE INTUNE?

- AzureAD:
- Global Administrator (Read/Write)
- Intune Service Administrator (Read/Write)
- Builtin:
- **Application Manager:** Manages mobile and managed applications, can read device information and can view device configuration profiles.
- **Endpoint Security Manager:** Manages security and compliance features, such as security baselines, device compliance, conditional access, and Microsoft Defender for Endpoint.
- **Read Only Operator:** Views user, device, enrollment, configuration, and application information. Can't make changes to Intune.
- **School Administrator:** Manages Windows 10 devices in [Intune for Education](#).
- **Policy and Profile Manager:** Manages compliance policy, configuration profiles, Apple enrollment, corporate device identifiers, and security baselines.
- **Help Desk Operator:** Performs remote tasks on users and devices, and can assign applications or policies to users or devices.

## FEATURES DIE CODE-EXEC TOELATEN

- Script execution (duh)
  - Check-scripts
  - Configuration policies
  - App packages
  - Proactive remediations
  - ??
  - Waarschijnlijk meer, heb je tips? Ik hoor ze graag!
- 
- Helemaal zelf bedacht ;)



## VIA SCRIPT

Home > Devices >

### Add Powershell script

...

Basics

**2** Script settings

3 Assignments

4 Review + add

Script location \* ⓘ

Select a file



The script must be signed by a trusted publisher. By default, no warning or prompt displays and the script runs unblocked.

Enforce script signature check ⓘ

Yes

No

Run script in 64 bit PowerShell Host ⓘ

Yes

No



VIA SCRIPT

# DEATH FROM ABOVE: LATERAL MOVEMENT FROM AZURE TO ON-PREM AD.



## PROCESSTREE

- Services.exe
  - Microsoft.Management.Services.Intune.WindowsAgent.exe
    - AgentExecutor.exe
    - Powershell.exe

[4500] AgentExecutor.exe	...	^
[10988] powershell.exe -NoProfile -executionPolic...	...	^
Process ID	10988	
Execution time	Sep 3, 2022 3:12:48 PM	
Command line	"powershell.exe" -NoProfile -executionPolicy bypass -file "C:\Program Files (x86)\Microsoft Intune Management Extension\Policies\Scripts\93ba15ef-7597-4798-9e45-16f06b23ef55_f7d36dbe-a4ce-4f74-a609-725c02c97fc5.ps1"	copy
Image file path	c:\windows\syswow64\windowspowershell\v1.0\powershell.exe	
Image file SHA1	78d990d776f078517696a2415375ac9ebdf5d49a	
Image file SHA256	88e1993beb7b2d9c3a9c3a026dc8d0170159afd3e574825c23a34b917ca61122	
Execution details	Token elevation: Standard, Integrity level: System	
Signer	Microsoft Windows	
Issuer	Microsoft Windows Production PCA 2011	
VirusTotal detection ratio	0/0	

[3528] powershell.exe -Command "Hoi"   Ou...	...	^
Process ID	3528	
Execution time	Sep 3, 2022 3:12:49 PM	
Command line	"PowerShell.exe" -Command "'Hoi'   Out-File -FilePath C:\temp\via_intune_script.txt"	copy



# VIA CONFIGURATION PROFILE

Home > Devices > codeexec >

## Edit profile - codeexec

...

Settings catalog (preview)

① Configuration settings

② Review + save

+ Add settings ⓘ

↖ Administrative Templates

Remove category

System > Logon

Remove subcategory

ⓘ 18 of 20 settings in this subcategory are not configured

Run these programs at user logon ⓘ

Enabled

⊖

Items to run at logon (Device)

+

Add

Delete

⟳

Sort

+

Import

⬇

Export



C:\Windows\System32\WindowsPowerShell\v1.0\PowerShell.exe -Command ""Hoi' | Out-File -FilePath C:\vi...

Run these programs at user logon (User)

ⓘ

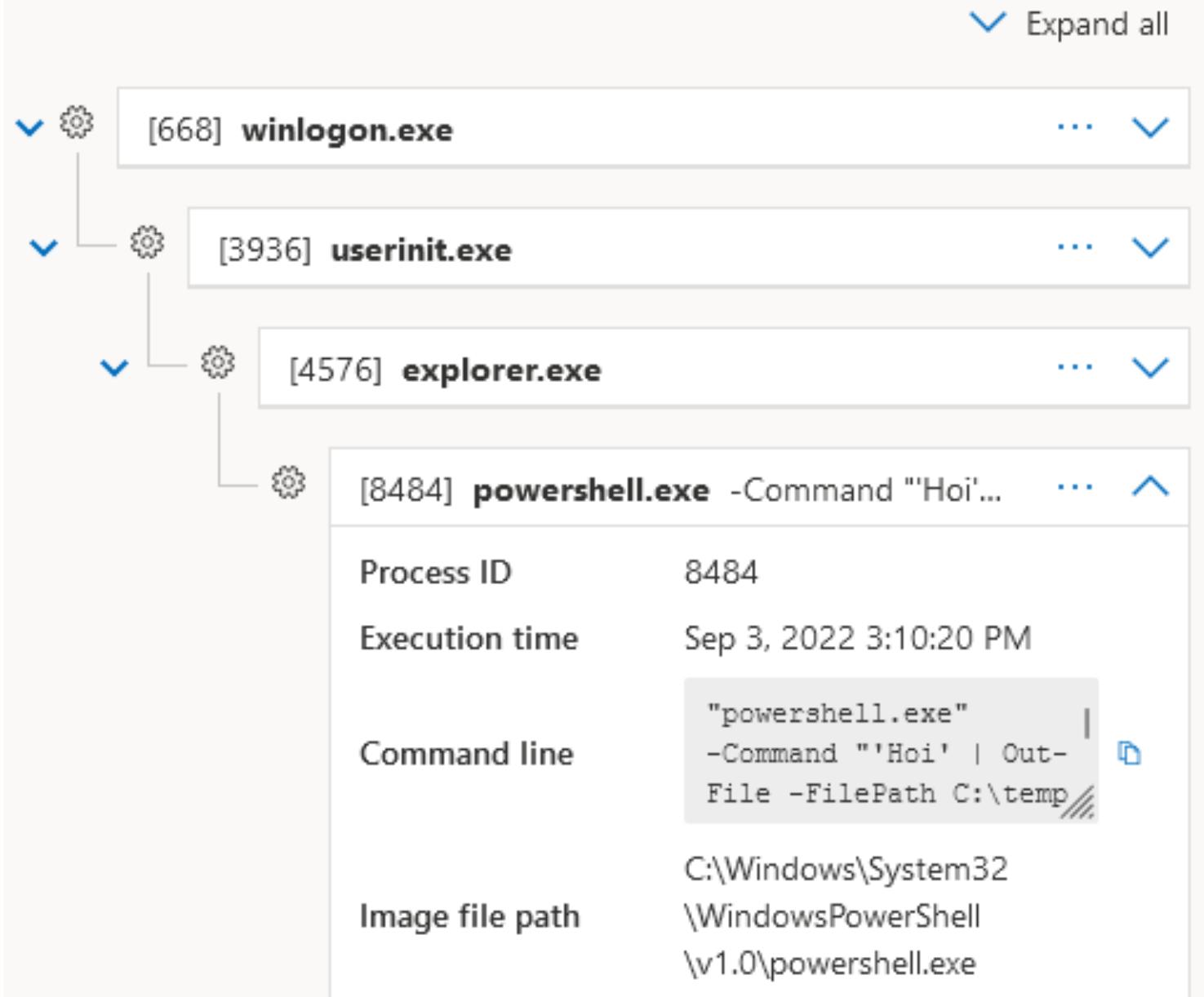
Disabled

⊖

 Expand all

## PROCESSTREE

- Winlogon.exe
  - Userinit.exe
    - Explorer.exe
      - Powershell.exe



## DETECTIE SCRIPT ALS BACKDOOR

### Add App ...

Windows app (Win32)

App information

Program

Requirements

**4**  Detection rules

**5** Dependencies

**6** Supersedence (preview)

Configure app specific rules used to detect the presence of the app.

Rules format \* [\(i\)](#)

Use a custom detection script



Script file [\(i\)](#)

Select a file



Run script as 32-bit process on 64-bit clients [\(i\)](#)

Yes

No

Enforce script signature check and run script silently [\(i\)](#)

Yes

No



## PROCESSTREE

- Services.exe
  - Microsoft.Management.Services.Intune.WindowsAgent.exe
    - AgentExecutor.exe (LOLBIN)
      - Powershell.exe
        - ???
      - Profit!

[9728] AgentExecutor.exe	...	▼
[3564] powershell.exe -NoProfile -executionPolicy ...	...	▲
Process ID	3564	
Execution time	Sep 3, 2022 4:50:35 PM	
Command line	"powershell.exe" -NoProfile -executionPolicy bypass -file "C:\Program Files (x86)\Microsoft Intune Management Extension\Content\DetectionScripts\d91f4904-b212-4950-8e63-ae84e1d0810a_1.ps1"	▶
Image file path	c:\windows\system32\windowspowershell\v1.0\powershell.exe	
Image file SHA1	eee0b7e9fdb295ea97c5f2e7c7ba3ac7f4085204	
Image file SHA256	c7d4e119149a7150b7101a4bd9fffbf659fba76d058f7bf6cc73c99fb36e8221	
Execution details	Token elevation: Standard, Integrity level: System	
Signer	Microsoft Windows	
Issuer	Microsoft Windows Production PCA 2011	
VirusTotal detection ratio	0/0	

[1304] powershell.exe -Command "whoami   ...	...	▲
Process ID	1304	
Execution time	Sep 3, 2022 4:50:36 PM	
Command line	"PowerShell.exe" -Command "whoami   Out-File -FilePath C:\temp\via_custom_check_script.txt"	▶



## VIA APP DEPLOYMENT

Home > Apps > Windows >

### Add App

Line-of-business app

#### 1 App information

2 Assignments    3 Review + create

Select file \* ⓘ

Select app package file

### App package file

App package file \* ⓘ

Select a file

Name:

Platform:

Size:

MAM Enabled:

OK

 Expand all

## VIA APP DEPLOYMENT

- Services.exe
  - Microsoft.Management.Services.IntuneWindowsAgent.exe
  - Malware.exe

[676] <b>services.exe</b>	▼
Microsoft.Management.Services.IntuneWindo...	... ▼
created file	
<b>mimikatz.exe</b>	... ^
SHA1	655979d56e874fbe7561bb1b6e512316c 25cbb19
SHA256	e81a8f8ad804c4d83869d7806a303ff04f3 1cce376c5df8aada2e9db2c1eeb98
Path	C:\Windows\IMECache\bd9a8755-f8b8-4f78-b165-733fd0fb81a3_1 \mimikatz.exe
Signer	Open Source Developer, Benjamin Delpy
Issuer	Certum Code Signing 2021 CA
VirusTotal detection ratio	60/60



## DEFENDER CHECK NOG

### mimikatz.exe

SHA1	655979d56e874fbe7561bb1b6e512316c25ccb19
Path	C:\Windows\IMECache\bd9a8755-f8b8-4f78-b165-733fd0fb81a3_1\mimikatz.exe
Size	1 MB
Is PE	True
Mitre techniques	T1003: OS Credential Dumping, T1550.003: Pass the Ticket
Signer	Open Source Developer, Benjamin Delpy
Issuer	Certum Code Signing 2021 CA
VirusTotal detection ratio	60/60
Blocking details	<p>Defender detected and quarantined active 'HackTool:Win32/LSADump' in file 'mimikatz.exe', during attempted creation by 'Microsoft.ManagementConsole'.</p>

# LOGGING

# CONNECTING INTUNE TO SENTINEL

The screenshot shows the Microsoft Intune portal interface. On the left, there is a navigation sidebar with the following items:

- Home
- Dashboard
- All services
- Devices
- Apps
- Endpoint security
- Reports 1
- Users
- Groups
- Tenant administration
- Troubleshooting + support

The main content area is titled "Reports | Diagnostic settings". It includes a search bar, refresh and feedback buttons, and an overview section. Below that is a "Diagnostic settings" table:

Name	Storage account
Sentinel	-

Below the table is a link "+ Add diagnostic setting" with a red arrow pointing to it. A callout text says: "Click 'Add Diagnostic setting' above to configure the collection of the following data:" followed by a bulleted list:

- AuditLogs
- OperationalLogs
- DeviceComplianceOrg
- Devices

At the bottom of the main content area, there is a button labeled "Diagnostic settings" with a red number "2" next to it.



## CONNECTING INTUNE TO SENTINEL

Save Discard Delete Feedback

---

A diagnostic setting specifies a list of categories of platform logs and/or metrics that you want to collect from a resource, and one or more destinations that you would stream them to. Normal usage charges for the destination will occur. [Learn more about the different log categories and contents of those logs](#)

Diagnostic setting name Sentinel

<b>Logs</b>	<b>Destination details</b>
<b>Categories</b>	
<input checked="" type="checkbox"/> AuditLogs	<input checked="" type="checkbox"/> Send to Log Analytics workspace
<input checked="" type="checkbox"/> OperationalLogs	Subscription
<input checked="" type="checkbox"/> DeviceComplianceOrg	Kelder - Betalen naar gebruik
<input checked="" type="checkbox"/> Devices	Log Analytics workspace
	sentinel ( westeurope )
	<input type="checkbox"/> Archive to a storage account



## SENTINEL LOGS BEPERKT

Run Time range : Last 24 hours Save Share New alert rule Export Pin to Format

1 IntuneAuditLogs  
2  
3 IntuneOperationalLogs  
4  
5 IntuneDeviceComplianceOrg  
6  
7 IntuneDevices  
8

...

Results Chart Add bookmark

TimeGenerated [UTC]	OperationName	Category	ResultType	ResultDescription	C
> 16-4-2022 17:12:28.795	createDeviceManagementScript DeviceManagementScr...	AuditLogs	Success	None	c
> 16-4-2022 17:12:29.398	assignDeviceManagementScript DeviceManagementScr...	AuditLogs	Success	None	3
> 16-4-2022 13:36:23.760	Create DeviceManagementConfigurationPolicy	AuditLogs	Success	None	e
> 16-4-2022 13:36:24.148	Create DeviceManagementConfigurationPolicyAssignm...	AuditLogs	Success	None	7



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# AUDIT LOGS

Audit logs ...

« Columns Filter Refresh Export

Search by initiated by (actor)

Date	Initiated by (actor)	Application name	Activity	Target
9/04/2022, 4:21:18 PM	acid.burn@kelder.io	Microsoft Intune portal extension	Patch MobileApp	mimikatz.exe
9/04/2022, 4:00:45 PM	acid.burn@kelder.io	Microsoft Intune portal extension	assignDeviceManagementScript DeviceManagementSc...	
9/04/2022, 4:00:44 PM	acid.burn@kelder.io	Microsoft Intune portal extension	createDeviceManagementScript DeviceManagementSc...	
9/04/2022, 2:34:42 PM	acid.burn@kelder.io	Microsoft Intune portal extension	Create MobileAppAssignment	mimikatz.exe

Old Value:  
Property: \$Collection.DetectionRules.EnforceSignatureCheck[0]  
New Value: False  
Old Value: False  
Property: \$Collection.DetectionRules.RunAs32Bit[0]  
New Value: False  
Old Value: False  
Property: \$Collection.DetectionRules.ScriptContent[0]  
New  
Value: QzpcV2luZG93c1xTeXN0ZW0zMlxXaW5kb3dzUG93ZXJTaGVsbF  
Old  
Value: QzpcV2luZG93c1xTeXN0ZW0zMlxXaW5kb3dzUG93ZXJTaGVsbF



# ENRICHMENT

<input type="checkbox"/>	4-9-2022 14:00:44.699	createDeviceManagementScript DeviceManagementScript	AuditLogs	Success	None	840d3dcc-b77d-410d-9965-d16e048e1...	acid.burn@kelder.io
TenantId	d75bef37-98a2-4b28-8bf2-2fcfd09c4401						
SourceSystem	Microsoft Intune						
TimeGenerated [UTC]	2022-09-04T14:00:44.699Z						
OperationName	createDeviceManagementScript DeviceManagementScript						
Category	AuditLogs						
ResultType	Success						
ResultDescription	None						
CorrelationId	840d3dcc-b77d-410d-9965-d16e048e1480						
Identity	acid.burn@kelder.io						
Properties	{"ActivityDate": "9/4/2022 2:00:44 PM", "ActivityResultStatus": 1, "ActivityType": 0, "Actor": {"ActorType": 1, "Application": "5926fc8e-304e-4f59-8bed-58ca97cc39a4", "ApplicationName": "Microsoft Intune portal extension"}, "AdditionalDetails": {"AuditEventId": "1df5665d-d5a5-4494-b4bd-938e1d9196c7", "Category": 3, "RelationId": null}, "Targets": [{"ModifiedProperties": [{"Name": "DeviceManagementAPIVersion", "Old": null, "New": "5022-07-27"}], "Name": null}], "Type": "IntuneAuditLogs"}						
ActivityDate	9/4/2022 2:00:44 PM						
ActivityResultStatus	1						
ActivityType	0						
Actor	{"ActorType": 1, "Application": "5926fc8e-304e-4f59-8bed-58ca97cc39a4", "ApplicationName": "Microsoft Intune portal extension", "IsDelegatedAdmin": false, "Name": null, "ObjectId": "93ba15ef-0000-0000-0000-000000000000", "SubjectType": 1}						
AdditionalDetails							
AuditEventId	1df5665d-d5a5-4494-b4bd-938e1d9196c7						
Category	3						
RelationId	null						
TargetDisplayName	["<null>"]						
TargetObjectIds	["3c7f2851-d07e-4d03-b7fc-28687662e9e8"]						
Targets	[{"ModifiedProperties": [{"Name": "DeviceManagementAPIVersion", "Old": null, "New": "5022-07-27"}], "Name": null}]						
C	{"ModifiedProperties": [{"Name": "DeviceManagementAPIVersion", "Old": null, "New": "5022-07-27"}], "Name": null}						
ModifiedProperties	[{"Name": "DeviceManagementAPIVersion", "Old": null, "New": "5022-07-27"}]						
0	{"Name": "DeviceManagementAPIVersion", "Old": null, "New": "5022-07-27"}						
Name	null						
Type	IntuneAuditLogs						



## LOGGING

- Scriptexec
  - createDeviceManagementScript DevicemanagementScript
  - patchDeviceManagementScript DeviceManagementScript
- Policy
  - Create DeviceManagementConfigurationPolicy
  - Patch DeviceManagementConfigurationPolicy
- App check Script
  - Patch MobileApp
  - Create MobileApp
- App
  - Create MobileApp
  - Patch MobileApp

>	4-9-2022 14:00:45.379	assignDeviceManagementScript DeviceManagementScript	AuditLogs
>	4-9-2022 14:00:44.699	createDeviceManagementScript DeviceManagementScript	AuditLogs

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# VERRIJKING



# SCRIPT BASE64

- /beta/deviceManagement/deviceManagementScripts/245638dc-714e-4df2-bb98-210aa71bf7a1?\$expand=assignments

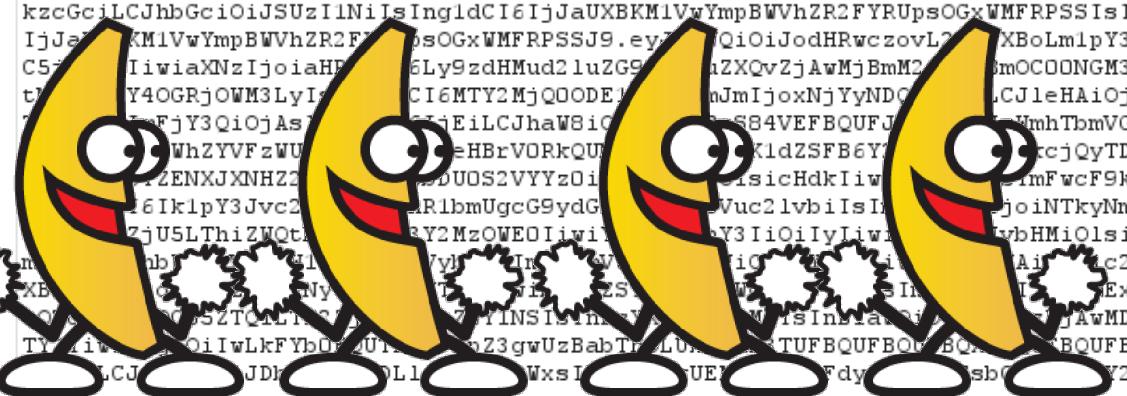
```
8 Access-Control-Allow-Origin: *
9 Access-Control-Expose-Headers: ETag, Location,
10 Preference-Applied, Content-Range, request-id,
11 client-request-id, ReadWriteConsistencyToken, SdkVersion,
12 WWW-Authenticate, x-ms-client-gcc-tenant
13 OData-Version: 4.0
14 Date: Sun, 17 Apr 2022 09:36:40 GMT
15 Connection: close
16 Content-Length: 1060
17
18 {
19     "@odata.context":
20         "https://graph.microsoft.com/beta/$metadata#deviceManagement/
21             deviceManagementScripts(assignments())/$entity",
22     "enforceSignatureCheck":false,
23     "runAs32Bit":true,
24     "id":"245638dc-714e-4df2-bb98-210aa71bf7a1",
25     "displayName":"script",
26     "description":"",
27     "scriptContent":
28         "QzpcV2luZG93c1xTeXN0ZW0zMlxXaW5kb3dzUG93ZXJTaGVsbFx2MS4wXF
29         vd2VyU2h1bGwuZXh1lIC1Db21tYW5kICInSG9pJyB8IE91dC1GaWxlIC1GaWx
30         lUGF0aCBD0lx0ZW1wXHZpYV9pbnR1bmVfc2NyaXB0LnR4dCI=",
31     "createdDateTime":"2022-04-17T07:07:33.4738867Z",
32     "lastModifiedDateTime":"2022-04-17T07:07:33.4738867Z",
33     "runAsAccount":"system",
34     "fileName":"nla.ps1",
```



## GRAPHCALL CONFIG POLICY

- /beta/deviceManagement/configurationPolicies('1b63eceb-2f29-477e-ba26-894a0b7ddaa0')/settings?\$expand=settingDefinitions&top=1000

```
1 GET  
/beta/deviceManagement/configurationPolicies('ba16dad-87dd-4ae5-8f07-099fb5c0c394  
' )/settings?$expand=settingDefinitions&top=1000 HTTP/1.1  
2 Host: graph.microsoft.com  
3 X-Ms-Client-Session-Id: a9fa7d2f3fd14d00a30dd889a3c02475  
4 X-Content-Type-Options: nosniff  
5 X-Ms-Command-Name: PolicyGraphProxy_getSettingsForPolicy  
6 Accept-Language: en  
7 Authorization: Bearer  
eyJOeXAiOiJKV1QiLCJub25jZSI6I1I0UwdBcEsyUGt2TWdfSFYycGQ3NGIt  
dEVz21BtbVpoWjFVTWJS  
M3kzcGciLCJhbGciOiJSUzI1NiIsIngldCI6IjJaUXBK  
M1VwYmpBWVhZR2FYRUp  
sOGxWMFRPSS1sImtpZC16IjJaK  
M1VwYmpBWVhZR2F  
sOGxWMFRPSSJ9.eyJ  
QiOjodHRwczo  
vL21XBoLm1pY3Jvc29md  
C5i  
IiwiaXnzIjoiaH  
6Ly9zdHMud21uZG9  
zXQvZjAwMjBmM2  
mOC00NGM3LW  
IONjY  
tkaY4OGRjOWM3LyI  
CI6MTY2MjQ0ODE1  
JmJi  
oxNjYyNDQ  
JCJleHAiOjE2NjI  
ON  
J-FjY3QiOjAsI  
JiEiLCJhaW8iG  
S84VEFBQUFJ  
UmhTbmVGZzdQbEN  
WhZYVFzWU  
eHBrV0RkQU  
K1dZSFB6Y  
ccjQyTDdHU  
JXb  
ZENXJXNHZ  
DUOS2VYYzO  
sicHdkIi  
simFwcF9kaXN  
wbGF  
6Ik1pY3Jvc2  
R1bmUgcG9ydG  
Vuc2lvbiI  
joiNTkyNmZjOG  
UtM  
ZjU5LThiZ  
Qti  
Y2MzOWE0I  
iwi  
Y3IiOjIyI  
iwia  
VbHMiOl  
siY2FfZ  
WS  
m  
nb  
yj  
In  
W  
iO  
Ai  
c2V  
iwi  
XB  
nY  
T  
fi  
ES  
W  
i  
ExNWVm  
Ltc  
Q  
S2TQ  
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7  
INS  
h  
M  
is  
la  
j  
AwMDgx  
QTk  
ON  
TY  
i  
Q  
i  
LkF  
D  
UT  
n  
Z  
gwU  
Bab  
Tr  
L  
TUFB  
QUFB  
QUFB  
QUFC  
NKF  
CJ  
JD  
DL  
W  
xsI  
UE  
Fdy  
Isb  
Y2VNYW5hZ
```



```
"device_vendor_msft_policy_config_admx_logon_run_2",  
"settingInstanceTemplateReference":null,  
"choiceSettingValue":{  
"settingValueTemplateReference":null,  
"value":"device_vendor_msft_policy_config_admx_logon_run_2_1",  
"children": [  
{  
"@odata.type":  
"#microsoft.graph.deviceManagementConfigurationSimpleSettingCollectionInstance",  
"settingDefinitionId":  
"device_vendor_msft_policy_config_admx_logon_run_2_runlistbox2",  
"settingInstanceTemplateReference":null,  
"simpleSettingCollectionValue": [  
{  
"@odata.type":  
"#microsoft.graph.deviceManagementConfigurationStringSettingValue",  
"settingValueTemplateReference":null,  
"value":  
"C:\\Windows\\System32\\WindowsPowerShell\\v1.0\\PowerShell.exe -Command \"'Hoi' | Out-File -FilePath C:\\temp\\via_run_at_logon.txt\""}]
```



# APP PACKAGE TOEGEVOEGD

- /beta/deviceAppManagement/mobileApps/59d4753a-8e77-4655-a1ed-2efafdb6e759/microsoft.graph.windowsMobileMSI/contentVersions/1/files/d1c2ebdc-64f0-4d1e-a99a-7ec7833067e8

```
1 GET  
/beta/deviceAppManagement/mobileApps/59d4753a-8e77-4655-a1ed-2  
efafdb6e759/microsoft.graph.windowsMobileMSI/contentVersions/1  
/files/d1c2ebdc-64f0-4d1e-a99a-7ec7833067e8 HTTP/1.1  
2 Host: graph.microsoft.com  
3 X-Ms-Client-Session-Id: ced6977f43324de5bb0dd7b8ccece1f5  
4 X-Content-Type-Options: nosniff  
5 X-Ms-Command-Name: _retrySaveLobAppContentFileRequest  
6 Accept-Language: en  
7 Authorization: Bearer
```

```
1 HTTP/1.1 200 OK
2 Content-Type: application/json;odata.metadata=minimal;odata.streaming=true;IEEE754Compatible=false;charset=utf-8
3 Vary: Accept-Encoding
4 Strict-Transport-Security: max-age=31536000
5 request-id: 9332722f-ea18-476c-92d5-6912c31a8145
6 client-request-id: 5d3a61ae-8b9c-4782-9d3d-8e1f7795f7f8
7 x-ms-ags-diagnostic: {"ServerInfo": {"DataCenter": "West Europe", "Slice": "E", "Ring": "5", "ScaleUnit": "002", "RoleInstance": "AM2PEPF0000C5F4"}}
8 Access-Control-Allow-Origin: *
9 Access-Control-Expose-Headers: ETag, Location, Preference-Applied, Content-Range, request-id, client-request-id, ReadWriteConsistencyToken, SdkVersion, WWW-Authenticate, x-ms-client-gcc-tenant
10 OData-Version: 4.0
11 Date: Sun, 17 Apr 2022 09:50:03 GMT
12 Connection: close
13 Content-Length: 1095
14
15 {
    "@odata.context": "https://graph.microsoft.com/beta/$metadata#deviceAppManagement/mobileApps('59d4753a-8e77-4655-a1ed-2efafdb6e759')/microsoft.graph.windowsMobileMSI/contentVersions('1')/files/$entity",
    "azureStorageUri": "https://mmscwdb01.blob.core.windows.net/ff080809-457e-461b-9bd6-7f08147853ed/4f7e00d2-17eb-4a1c-afde-f94c40c2bee8/d1c2ebdc-64f0-4d1e-a99a-7ec7833067e8.msi.bin",
    "isCommitted": true,
```



# CHECKSCRIPT

- /beta/deviceAppManagement/mobileApps/bd9a8755-f8b8-4f78-b165-733fd0fb81a3/?\$expand=categories,assignments

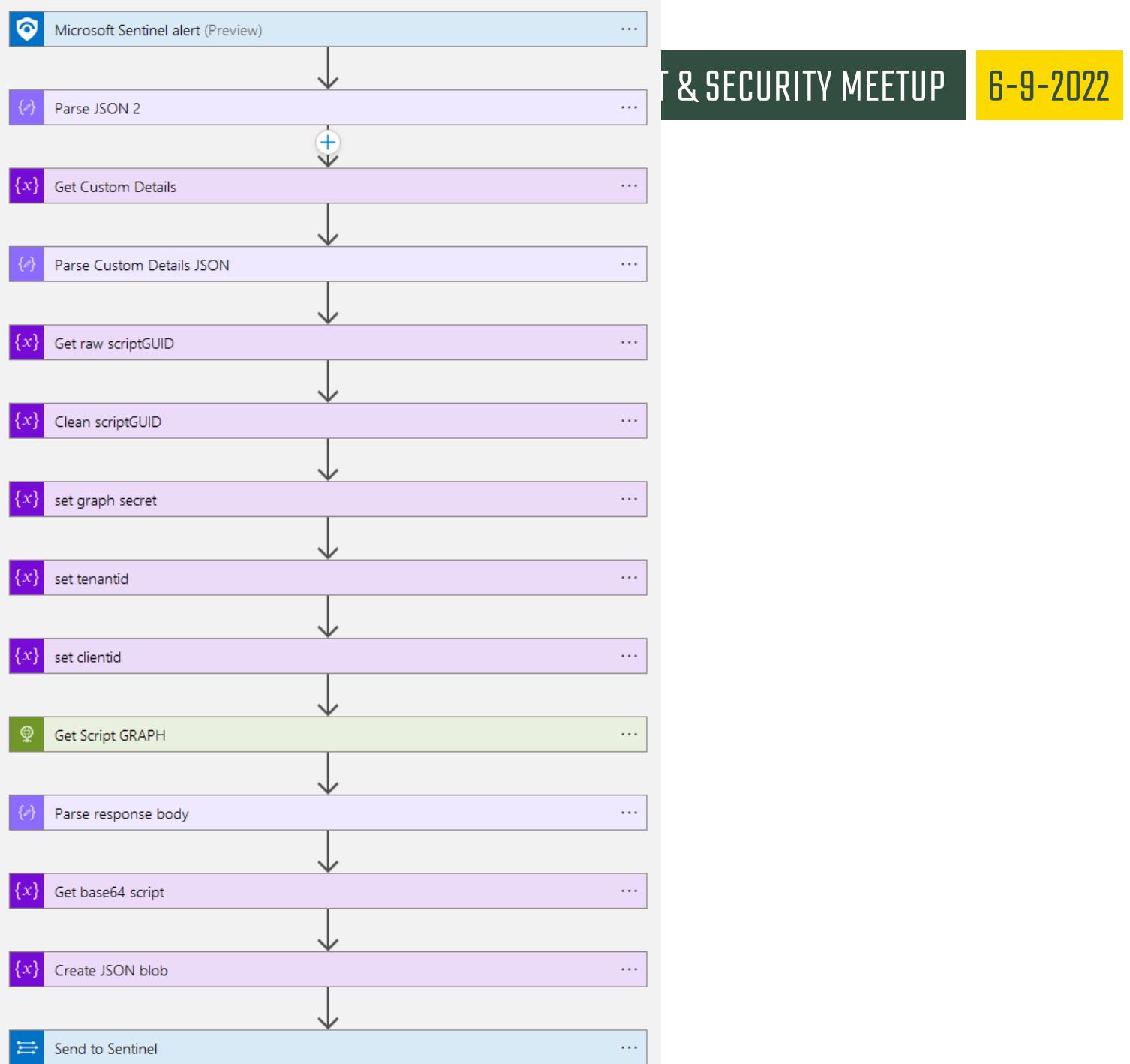
```
1 GET  
/beta/deviceAppManagement/mobileApps/bd9a8755-f8b8-  
4f78-b165-733fd0fb81a3/?$expand=  
categories,assignments HTTP/1.1  
2 Host: graph.microsoft.com  
3 X-Ms-Client-Session-Id:  
a9fa7d2f3fd14d00a30dd889a3c02475  
4 X-Content-Type-Options: nosniff  
5 X-Ms-Command-Name: fetchApplication  
6 Accept-Language: en  
7 Authorization: Bearer  
eyJ0eXAiOiJKV1QiLCJhbGciOiJSU2  
5R3lveHJJbFdSVlhMMDdfOFIzY3JVcGVnNHMiLCJhbGciOiJSU2  
I1NiIiNglCI6IjJBKM1VwYmpBVR2FYRUpsoMFRPS  
SISiZCI6IjJaU1VwYmpBWVFYRUpsoGvPSSJ9  
.eOijodH2dyYXBvJvc29mJvIi  
wiHROd2dHMud2y5uZXvBmM  
2QDCOONGM3jYtNmYw2rjOWM3LyndCI6  
NTDNzX2MCWijoxNjYv1YwLGeI2N  
34FWEENjQWfHNGtT2jL2mDQ2Znln13  
WOIt5k1SWLamHGTt2jL2mDQ2Znln13  
MEAxbszdwAVKjsarIPYspkFimzeicUss6pjkVURcaj2ywIu
```



```
        "v10_1703":false,
        "v10_1709":false,
        "v10_1803":false,
        "v10_1809":false,
        "v10_1903":false,
        "v10_1909":false,
        "v10_2004":false,
        "v10_2H20":false,
        "v10_21H1":false
    },
    "detectionRules": [
        {
            "@odata.type":
                "#microsoft.graph.win32LobAppPowerShellScriptDetection",
            "enforceSignatureCheck":false,
            "runAs32Bit":false,
            "scriptContent":
                "QzpcV2luZG93c1xTeXNOZW0zMlxXaW5kb3dzUG93ZXJT
aGVsbFx2MS4wXFbvd2VyU2hlbGwuZXh1IC1Db21tYW5kI
CJ3aG9hbWkgfCBPdXQtRmlsZSAtRmlsZVBhdGggQzpcdG
VtcFx2aWFfY3VzdG9tX2NoZWNrX3Njcm1wdC50eHQi"
        }
    ]
}
```



# AUTOMATISCH VERRIJKEN





6-9-2022

# AUTOMATISCH VERRIJKEN

**OUTPUTS**

Show raw outputs >

Status code  
200

Headers

Key	Value
Transfer-Encoding	chunked
Vary	Accept-Encoding
Strict-Transport-Security	max-aqe=31536000

Body

```
description . ,
"scriptContent": "QzpcV2luZG93c1xTeXN0ZW0zMlxXaW5kb3dzUG93ZXJTa
"createdDateTime": "2022-09-06T08:25:39.3669843Z",
"lastModifiedDateTime": "2022-09-06T08:25:39.3669843Z",
"runAsAccount": "system",
"fileName": "asd.ps1",
"roleScopeTagIds": [
  "0"
]
```





```
1 intune_scripts_cl_CL  
2 | limit 10  
3
```

Results    Chart

TimeGenerated [UTC]	_odata_context_s	enforceSignatureCheck_b	runAs32Bit_b	displayName_s	scriptContent_s
6-9-2022 09:24:19....	<a href="https://graph.microsoft.com/beta/\$metadata#deviceManagement/deviceManagementScripts(assignments())/\$entity">https://graph.microsoft.com/beta/\$metadata#deviceManagement/deviceManagementScripts(assignments())/\$entity</a>	false	true	zxczxczxc	QzpcV2luZG93c1xTeXN0ZW0zMlxXaW5kb3dzUG93ZXJTaGVsbFx2MS4wXFvd2VyU2hlbGwuZXhIC1Db21tYW5kICJ3aG9hbWkgfCBPdXQtRmlsZSAtRmlsZVt
TenantId	d75bef37-98a2-4b28-8bf2-2fcfd09c4401				
SourceSystem	RestAPI				
TimeGenerated [UTC]	2022-09-06T09:24:19.474Z				
_odata_context_s	<a href="https://graph.microsoft.com/beta/\$metadata#deviceManagement/deviceManagementScripts(assignments())/\$entity">https://graph.microsoft.com/beta/\$metadata#deviceManagement/deviceManagementScripts(assignments())/\$entity</a>				
enforceSignatureCheck_b	false				
runAs32Bit_b	true				
displayName_s	zxczxczxc				
scriptContent_s	QzpcV2luZG93c1xTeXN0ZW0zMlxXaW5kb3dzUG93ZXJTaGVsbFx2MS4wXFvd2VyU2hlbGwuZXhIC1Db21tYW5kICJ3aG9hbWkgfCBPdXQtRmlsZSAtRmlsZVt				
createdDateTime_t [UTC]	2022-09-06T09:16:05.244Z				
lastModifiedDateTime_t [UTC]	2022-09-06T09:16:05.244Z				
runAsAccount_s	system				
roleScopeTagIds_s	[ "0" ]				
assignments_odata_context_s	<a href="https://graph.microsoft.com/beta/\$metadata#deviceManagement/deviceManagementScripts('fbfbba0ce-ac32-481a-b7fe-6dfbce0cf15')/assignments/\$entity">https://graph.microsoft.com/beta/\$metadata#deviceManagement/deviceManagementScripts('fbfbba0ce-ac32-481a-b7fe-6dfbce0cf15')/assignments/\$entity</a>				
assignments_s	[]				
fileName_s	asd.ps1				
id_q	fbfbba0ce-ac32-481a-b7fe-6dfbce0cf15				
Type	intune_scripts_cl_CL				



```
1 intune_scripts_c1_CL
2 | extend a = base64_decode_tostring(scriptContent_s)
3 | project a
4
```

Results    Chart    Add bookmark

- a
- >
- > C:\Windows\System32\WindowsPowerShell\v1.0\PowerShell.exe -Command "whoami | Out-File -FilePath C:\temp\via\_script\_exec.txt"
- > C:\Windows\System32\WindowsPowerShell\v1.0\PowerShell.exe -Command "whoami | Out-File -FilePath C:\temp\via\_script\_exec.txt"
- > C:\Windows\System32\WindowsPowerShell\v1.0\PowerShell.exe -Command "whoami | Out-File -FilePath C:\temp\via\_graph\_api\_demovideo.txt"
- > C:\Windows\System32\WindowsPowerShell\v1.0\PowerShell.exe -Command "whoami | Out-File -FilePath C:\temp\via\_graph\_api.txt"
- > C:\Windows\System32\WindowsPowerShell\v1.0\PowerShell.exe -Command "whoami | Out-File -FilePath C:\temp\via\_script\_exec.txt"

## AUTOMATISCH VERRIJKEN

- Automatisch verwerken is lastig in sommige gevallen
- Opties voor vervolgstappen
  - Opslaan in Sentinel
  - Opslaan in blobstorage
  - Sigma webservice bouwen

```
4   "value": [
5   {
6     "id": "0",
7     "settingInstance": {
8       "@odata.type": "#microsoft.graph.deviceManagementConfigurationChoiceSettingInstance",
9       "settingDefinitionId": "device_vendor_msft_policy_config_admx_logon_run_2",
10      "settingInstanceTemplateReference": null,
11      "choiceSettingValue": {
12        "settingValueTemplateReference": null,
13        "value": "device_vendor_msft_policy_config_admx_logon_run_2_1",
14        "children": [
15          {
16            "@odata.type": "#microsoft.graph.deviceManagementConfigurationSimpleSettingCollectionInstance",
17            "settingDefinitionId": "device_vendor_msft_policy_config_admx_logon_run_2_runlistbox2",
18            "settingInstanceTemplateReference": null,
19            "simpleSettingCollectionValue": [
20              {
21                "@odata.type": "#microsoft.graph.deviceManagementConfigurationStringSettingValue",
22                "settingValueTemplateReference": null,
23                "value": "C:\\Windows\\System32\\WindowsPowerShell\\v1.0\\PowerShell.exe -Command \"'Hoi' | Out-File -FilePath C:\\temp\\via_ru"
24              }
25            ]
26          }
27        ]
28      },
29    }
```



## APP PACKAGES

- Submitten naar sandbox?
- Msi packages zijn anoniem te downloaden
  - <https://mmcsfdb01.blob.core.windows.net/ff080809-457e-461b-9b6d-7f08147853ed/4f7e00d2-17eb-4a1c-afde-f94c40c2bee8/d1c2ebdc-64f0-4d1e-a99a-7ec7833067e8.msi.bin>
- Encrypted packages, lastig verrijken.
- Als we die kunnen decrypten is het een interessante host voor backdoors 😊

# OAUTH PHISH



## OAuth Phish

 Microsoft

acid.burn@kelder.io

### Machtigingen aangevraagd

 TotallyNotShady  
**niet-geverifieerd**

**Deze app kan riskant zijn. Ga alleen door als u deze app vertrouwt.** Meer informatie

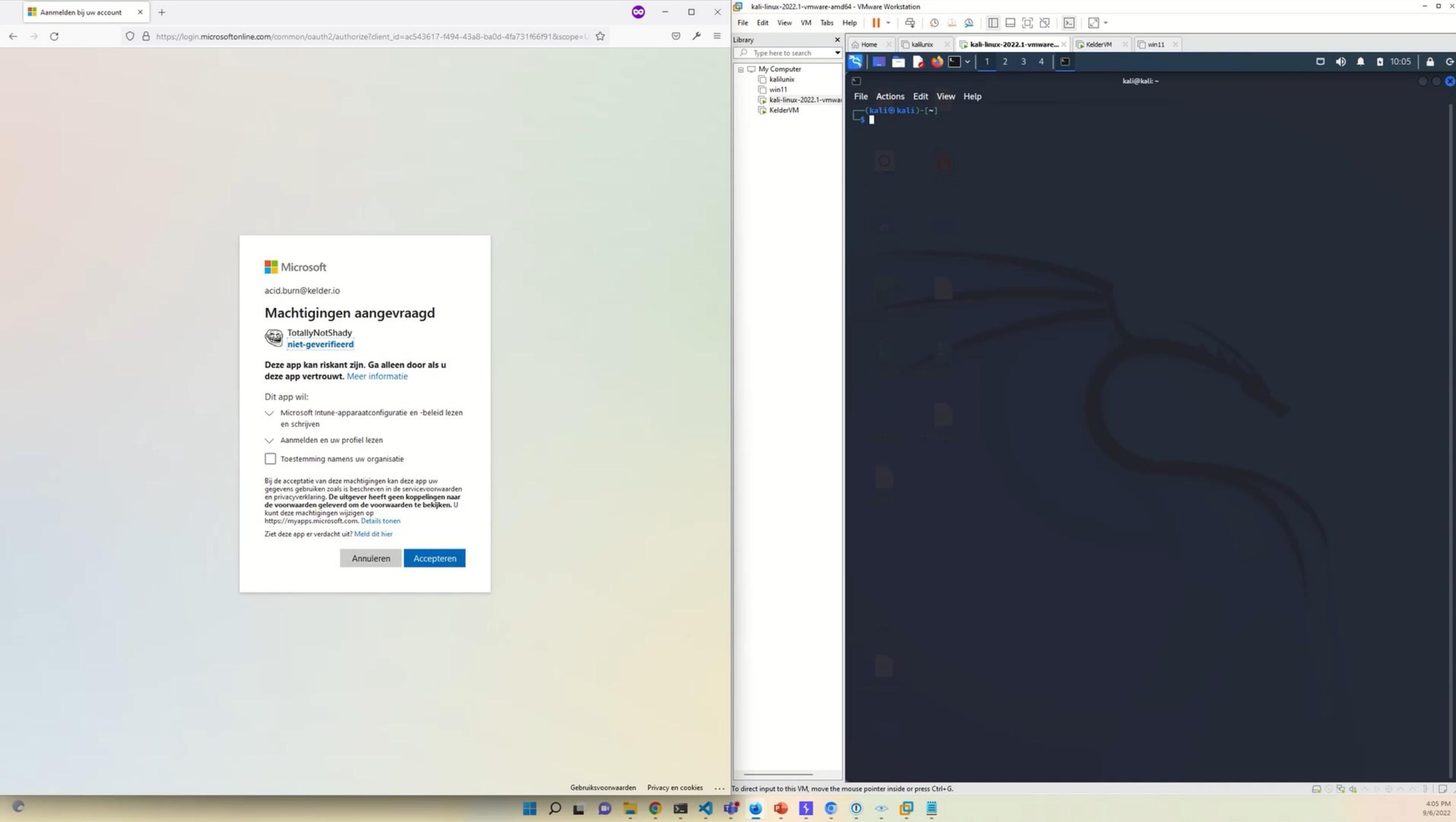
Dit app wil:

- ✓ Microsoft Intune-apparaatconfiguratie en -beleid lezen en schrijven
- ✓ Aanmelden en uw profiel lezen
- Toestemming namens uw organisatie

Bij de acceptatie van deze machtigingen kan deze app uw gegevens gebruiken zoals is beschreven in de servicevoorwaarden en privacyverklaring. De uitgever heeft geen koppelingen naar de voorwaarden geleverd om de voorwaarden te bekijken. U kunt deze machtigingen wijzigen op <https://myapps.microsoft.com>. Details tonen

Ziet deze app er verdacht uit? Meld dit hier

[Annuleren](#) [Accepteren](#)





via\_graph\_api\_demo | Properties ...

Windows 10 and later

«

i Overview      Basics [Edit](#)

m Manage      Name via\_graph\_api\_demo

p Properties      Description --

m Monitor      Script settings [Edit](#)

d Device status      PowerShell script asd.ps1

u User status      Run this script using the logged on credentials No

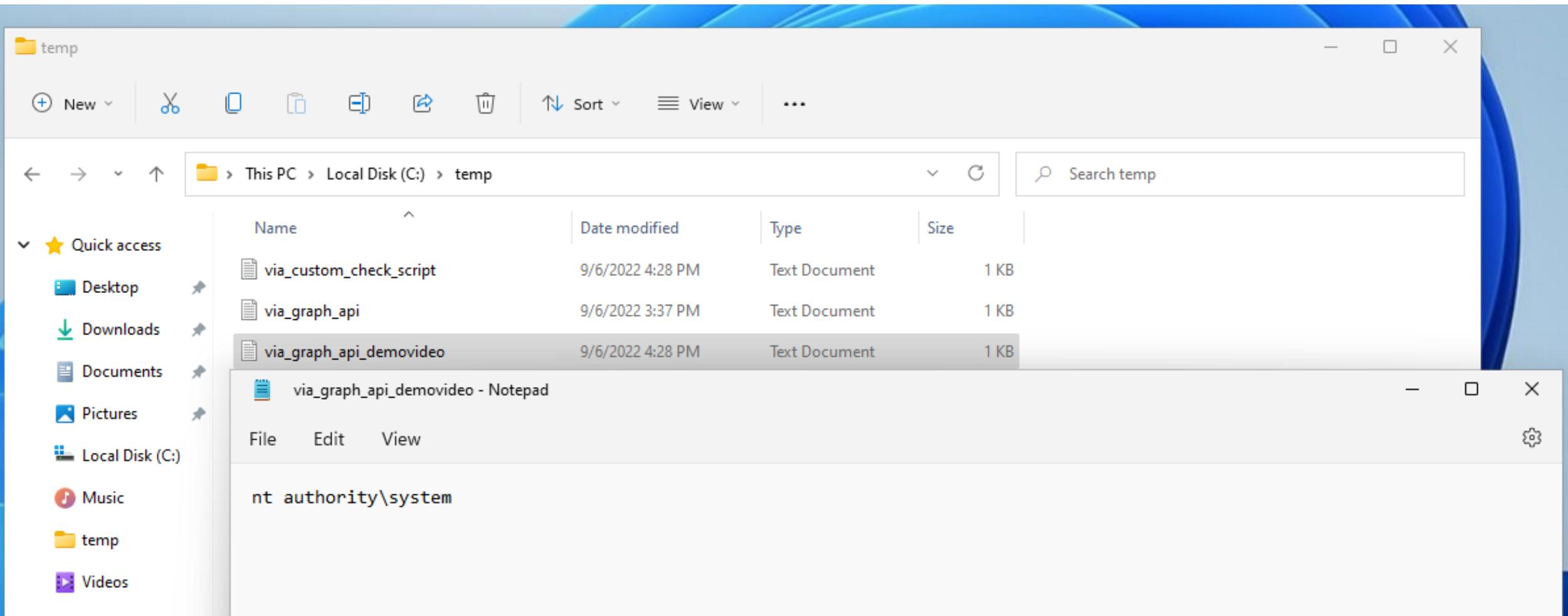
Enforce script signature check No

Run script in 64 bit PowerShell Host No

a Assignments [Edit](#)

Included groups --

Excluded groups --





Home > Apps | All apps > mimikatz.exe | Properties >

## Edit application ...

Windows app (Win32)

App information

Program

Requirements

Detection rules

Review + save

Configure app specific rules used to detect the presence of the app.

Rules format \* ⓘ

Use a custom detection script



Script file ⓘ

Select a file



Run script as 32-bit process on 64-bit clients ⓘ

Yes

No

Enforce script signature check and run script silently ⓘ

Yes

No



## DEFENCE

- User risk detectie lijkt te helpen
- Monitor logs het toevoegen van scripts en packages zou gekoppeld moeten zijn aan een change process?
- Verrijk je logs
  - -> Logic apps zal ik publiceren als ze af zijn
- Let op AV detecties uit:
  - C:\Windows\IMECache\\*
  - C:\Program Files (x86)\Microsoft Intune Management Extension\\*



## VRAGEN?

