Windows szerver kezelése Ansible programmal

Adminisztrátorként futtatott PowerShell parancssorban adjuk ki az alábbi utasításokat a TerminalServer szolgáltatás engedélyezéséhez:

```
PS C:\Users\Administrator> Set-ItemProperty -Path
'HKLM:\SYSTEM\CurrentControlSet\Control\Terminal Server' -name
'fDenyTSConnections' -Value 0

PS C:\Users\Administrator> Get-ItemProperty -Path
'HKLM:\SYSTEM\CurrentControlSet\Control\Terminal Server' -name
'fDenyTSConnections'

fDenyTSConnections : 0
PSPath             :
Microsoft.PowerShell.Core\Registry::HKEY_LOCAL_MACHINE\SYSTEM\CurrentControl
Set\Control\Terminal S
                     erver
PSParentPath       :
Microsoft.PowerShell.Core\Registry::HKEY_LOCAL_MACHINE\SYSTEM\CurrentControl
Set\Control
PSChildName        : Terminal Server
PSDrive            : HKLM
PSProvider         : Microsoft.PowerShell.Core\Registry
```

```
PS C:\Users\Administrator> Enable-NetFirewallRule -DisplayGroup "Remote
Desktop"
```

```
PS C:\Users\Administrator> Get-Service TermService

Status   Name               DisplayName
------   ----               -----------
Running  TermService        Remote Desktop Services
```

Adminisztrátorként futtatott PowerShell parancssorban adjuk ki az alábbi utasításokat a WinRM szolgáltatás engedélyezéséhez:

Szolgáltatás konfigurálása

```
PS C:\Users\Administrator> winrm quickconfig
```

Szolgáltatás engedélyezése és ellenőrzése

```
PS C:\Users\Administrator> Enable-PSRemoting -Force

PS C:\Users\Administrator> Get-Service WinRM
```

```
Status   Name               DisplayName
------   ----               -----------
Running  WinRM              Windows Remote Management (WS-Manag...

PS C:\Users\Administrator> Get-Service WinRM | Select-Object StartType
StartType
---------
Automatic

PS C:\Users\Administrator> winrm enumerate winrm/config/listener
Listener
    Address = *
    Transport = HTTP
    Port = 5985
    Hostname
    Enabled = true
    URLPrefix = wsman
    CertificateThumbprint
    ListeningOn = 127.0.0.1, 192.168.110.51, ::1,
fe80::317d:e4ae:1de6:e99c%4

PS C:\Users\Administrator> Test-WSMan
wsmid           :
http://schemas.dmtf.org/wbem/wsman/identity/1/wsmanidentity.xsd
ProtocolVersion : http://schemas.dmtf.org/wbem/wsman/1/wsman.xsd
ProductVendor   : Microsoft Corporation
ProductVersion  : OS: 0.0.0 SP: 0.0 Stack: 3.0

PS C:\Users\Administrator> winrm get winrm/config/service
Service
    RootSDDL =
O:NSG:BAD:P(A;;GA;;;BA)(A;;GR;;;IU)S:P(AU;FA;GA;;;WD)(AU;SA;GXGW;;;WD)
    MaxConcurrentOperations = 4294967295
    MaxConcurrentOperationsPerUser = 1500
    EnumerationTimeoutms = 240000
    MaxConnections = 300
    MaxPacketRetrievalTimeSeconds = 120
    AllowUnencrypted = false
    Auth
        Basic = false
        Kerberos = true
        Negotiate = true
        Certificate = false
        CredSSP = false
        CbtHardeningLevel = Relaxed
    DefaultPorts
        HTTP = 5985
        HTTPS = 5986
    IPv4Filter = *
    IPv6Filter = *
    EnableCompatibilityHttpListener = false
```

```
    EnableCompatibilityHttpsListener = false
    CertificateThumbprint
    AllowRemoteAccess = true
```

Engedélyezzük a megfelelő hitelesítési eljárást

```
PS C:\Users\Administrator> winrm set winrm/config/service/auth
'@{Basic="false";Kerberos="true";Negotiate="true"}'
Auth
    Basic = false
    Kerberos = true
    Negotiate = true
    Certificate = false
    CredSSP = false
    CbtHardeningLevel = Relaxed
```

Ellenőrizzük a tűzfal szabályrendszert

```
PS C:\Users\Administrator> Get-NetFirewallRule -DisplayGroup "Windows Remote
Management"

Name                          : WINRM-HTTP-In-TCP
DisplayName                   : Windows Remote Management (HTTP-In)
Description                   : Inbound rule for Windows Remote Management
via WS-Management. [TCP 5985]
DisplayGroup                  : Windows Remote Management
Group                         : @FirewallAPI.dll,-30267
Enabled                       : False
Profile                       : Domain, Private
Platform                      : {}
Direction                     : Inbound
Action                        : Allow
EdgeTraversalPolicy           : Block
LooseSourceMapping            : False
LocalOnlyMapping              : False
Owner                         :
PrimaryStatus                 : OK
Status                        : The rule was parsed successfully from the
store. (65536)
EnforcementStatus             : NotApplicable
PolicyStoreSource             : PersistentStore
PolicyStoreSourceType         : Local
RemoteDynamicKeywordAddresses : {}

Name                          : WINRM-HTTP-In-TCP-PUBLIC
DisplayName                   : Windows Remote Management (HTTP-In)
Description                   : Inbound rule for Windows Remote Management
via WS-Management. [TCP 5985]
DisplayGroup                  : Windows Remote Management
Group                         : @FirewallAPI.dll,-30267
Enabled                       : False
```

```
Profile                         : Public
Platform                        : {}
Direction                       : Inbound
Action                          : Allow
EdgeTraversalPolicy             : Block
LooseSourceMapping              : False
LocalOnlyMapping                : False
Owner                           :
PrimaryStatus                   : OK
Status                          : The rule was parsed successfully from the
store. (65536)
EnforcementStatus               : NotApplicable
PolicyStoreSource               : PersistentStore
PolicyStoreSourceType           : Local
RemoteDynamicKeywordAddresses : {}
```

Engedélyezzük a hozzáférést

```
PS C:\Users\Administrator> Enable-NetFirewallRule -DisplayGroup "Windows
Remote Management"
```

Ismét ellenőrizzük a tűzfal szabályrendszert

```
PS C:\Users\Administrator> Get-NetFirewallRule -DisplayGroup "Windows Remote
Management"

Name                            : WINRM-HTTP-In-TCP
DisplayName                     : Windows Remote Management (HTTP-In)
Description                     : Inbound rule for Windows Remote Management
via WS-Management. [TCP 5985]
DisplayGroup                    : Windows Remote Management
Group                           : @FirewallAPI.dll,-30267
Enabled                         : True
Profile                         : Domain, Private
Platform                        : {}
Direction                       : Inbound
Action                          : Allow
EdgeTraversalPolicy             : Block
LooseSourceMapping              : False
LocalOnlyMapping                : False
Owner                           :
PrimaryStatus                   : OK
Status                          : The rule was parsed successfully from the
store. (65536)
EnforcementStatus               : NotApplicable
PolicyStoreSource               : PersistentStore
PolicyStoreSourceType           : Local
RemoteDynamicKeywordAddresses : {}

Name                            : WINRM-HTTP-In-TCP-PUBLIC
DisplayName                     : Windows Remote Management (HTTP-In)
```

```
Description                   : Inbound rule for Windows Remote Management
via WS-Management. [TCP 5985]
DisplayGroup                  : Windows Remote Management
Group                         : @FirewallAPI.dll,-30267
Enabled                       : True
Profile                       : Public
Platform                      : {}
Direction                     : Inbound
Action                        : Allow
EdgeTraversalPolicy           : Block
LooseSourceMapping            : False
LocalOnlyMapping              : False
Owner                         :
PrimaryStatus                 : OK
Status                        : The rule was parsed successfully from the
store. (65536)
EnforcementStatus             : NotApplicable
PolicyStoreSource             : PersistentStore
PolicyStoreSourceType         : Local
RemoteDynamicKeywordAddresses : {}
```

Ellenőrizzük a szolgáltatást az ansible oldalon

```
[ansible@ansible ~]$ curl -v http://192.168.110.51:5985/wsman
*   Trying 192.168.110.51:5985...
* Connected to 192.168.110.51 (192.168.110.51) port 5985
* using HTTP/1.x
> GET /wsman HTTP/1.1
> Host: 192.168.110.51:5985
> User-Agent: curl/8.12.1
> Accept: */*
>
* Request completely sent off
< HTTP/1.1 405
< Allow: POST
< Server: Microsoft-HTTPAPI/2.0
< Date: Tue, 26 May 2026 07:27:53 GMT
< Connection: close
< Content-Length: 0
<
* shutting down connection #0
```

Rendszerinformációk

Ansible "tények" lekérdezése

Hozzunk létre egyszerű, ansible tényeket lekérdező ansible playbook állományt

01-facts.yaml

```
- hosts: windows
  gather_facts: true
  tasks:
    - debug:
        var: ansible_facts
```

Futtassuk a playbook-ot

```
[ansible@ansible ~]$ ansible-playbook 01-facts.yaml

PLAY [windows]
*************************************************************

TASK [Gathering Facts]
*************************************************************
ok: [win2022]

TASK [debug]
*************************************************************
ok: [win2022] => {
    "ansible_facts": {
        "architecture": "64-bit",
        "architecture2": "x86_64",
        "bios_date": "11. 17. 2024",
        "bios_version": "edk2-20241117-4.el9_7.3",
        "date_time": {
            "date": "2026-05-25",
            "day": "25",
            "epoch": "1779775803,95348",
            "epoch_int": 1779775804,
            "epoch_local": "1779750603,95348",
            "hour": "23",
            "iso8601": "2026-05-26T06:10:03Z",
            "iso8601_basic": "20260525T231003953480",
            "iso8601_basic_short": "20260525T231003",
            "iso8601_micro": "2026-05-26T06:10:03.953480Z",
            "minute": "10",
            "month": "05",
            "second": "03",
            "time": "23:10:03",
            "tz": "Pacific Standard Time",
            "tz_offset": "-07:00",
            "weekday": "Monday",
            "weekday_number": "1",
            "weeknumber": "20",
            "year": "2026"
        },
        "distribution": "Microsoft Windows Server 2022 Standard Evaluation",
```

```
        "distribution_major_version": "10",
        "distribution_version": "10.0.20348.0",
        "domain": "",
        "env": {
            "ALLUSERSPROFILE": "C:\\ProgramData",
            "APPDATA": "C:\\Users\\Administrator\\AppData\\Roaming",
            "COMPUTERNAME": "WIN-T9R338V1CCC",
            "ComSpec": "C:\\Windows\\system32\\cmd.exe",
            "CommonProgramFiles": "C:\\Program Files\\Common Files",
            "CommonProgramFiles(x86)": "C:\\Program Files (x86)\\Common
Files",
            "CommonProgramW6432": "C:\\Program Files\\Common Files",
            "DriverData": "C:\\Windows\\System32\\Drivers\\DriverData",
            "HOMEDRIVE": "C:",
            "HOMEPATH": "\\Users\\Administrator",
            "LOCALAPPDATA": "C:\\Users\\Administrator\\AppData\\Local",
            "LOGONSERVER": "\\\\WIN-T9R338V1CCC",
            "NUMBER_OF_PROCESSORS": "2",
            "OS": "Windows_NT",
            "PATHEXT":
".COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC;.CPL",
            "PROCESSOR_ARCHITECTURE": "AMD64",
            "PROCESSOR_IDENTIFIER": "AMD64 Family 23 Model 17 Stepping 0,
AuthenticAMD",
            "PROCESSOR_LEVEL": "23",
            "PROCESSOR_REVISION": "1100",
            "PROMPT": "$P$G",
            "PSExecutionPolicyPreference": "Unrestricted",
            "PSModulePath":
"C:\\Users\\Administrator\\Documents\\WindowsPowerShell\\Modules;C:\\Program
Files\\WindowsPowerShell\\Modules;C:\\Windows\\system32\\WindowsPowerShell\\
v1.0\\Modules",
            "PUBLIC": "C:\\Users\\Public",
            "Path":
"C:\\Windows\\system32;C:\\Windows;C:\\Windows\\System32\\Wbem;C:\\Windows\\
System32\\WindowsPowerShell\\v1.0\\;C:\\Windows\\System32\\OpenSSH\\;C:\\Use
rs\\Administrator\\AppData\\Local\\Microsoft\\WindowsApps",
            "ProgramData": "C:\\ProgramData",
            "ProgramFiles": "C:\\Program Files",
            "ProgramFiles(x86)": "C:\\Program Files (x86)",
            "ProgramW6432": "C:\\Program Files",
            "SystemDrive": "C:",
            "SystemRoot": "C:\\Windows",
            "TEMP": "C:\\Users\\ADMINI~1\\AppData\\Local\\Temp",
            "TMP": "C:\\Users\\ADMINI~1\\AppData\\Local\\Temp",
            "USERDOMAIN": "WIN-T9R338V1CCC",
            "USERDOMAIN_ROAMINGPROFILE": "WIN-T9R338V1CCC",
            "USERNAME": "Administrator",
            "USERPROFILE": "C:\\Users\\Administrator",
            "windir": "C:\\Windows"
        },
```

```
        "fqdn": "WIN-T9R338V1CCC",
        "gather_subset": [
            "all"
        ],
        "hostname": "WIN-T9R338V1CCC",
        "interfaces": [
            {
                "connection_name": "Ethernet Instance 0",
                "default_gateway": "192.168.110.1",
                "dns_domain": null,
                "interface_index": 4,
                "interface_name": "Intel(R) 82574L Gigabit Network
Connection",
                "ipv4": {
                    "address": "192.168.110.51",
                    "prefix": "24"
                },
                "ipv6": {
                    "address": "fe80::317d:e4ae:1de6:e99c%4",
                    "prefix": "64"
                },
                "macaddress": "52:54:00:8E:F9:1E",
                "mtu": 1500,
                "speed": 1000
            }
        ],
        "ip_addresses": [
            "fe80::317d:e4ae:1de6:e99c%4",
            "192.168.110.51"
        ],
        "kernel": "10.0.20348.0",
        "lastboot": "2026-05-21 00:04:04Z",
        "machine_id": "S-1-5-21-3572516673-4086879683-2416554126",
        "memfree_mb": 4399,
        "memtotal_mb": 8173,
        "module_setup": true,
        "netbios_name": "WIN-T9R338V1CCC",
        "nodename": "WIN-T9R338V1CCC",
        "os_family": "Windows",
        "os_install_date": "2026-05-09T02:53:01Z",
        "os_installation_type": "Server",
        "os_name": "Microsoft Windows Server 2022 Standard Evaluation",
        "os_product_type": "server",
        "owner_contact": "",
        "owner_name": "Windows User",
        "pagefilefree_mb": 1061,
        "pagefiletotal_mb": 1280,
        "powershell_version": 5,
        "processor": [
            "0",
            "AuthenticAMD",
```

```
            "AMD Ryzen 3 PRO 2200GE w/ Radeon Vega Graphics ",
            "1",
            "AuthenticAMD",
            "AMD Ryzen 3 PRO 2200GE w/ Radeon Vega Graphics "
        ],
        "processor_cores": 2,
        "processor_count": 1,
        "processor_threads_per_core": 1,
        "processor_vcpus": 2,
        "product_name": "KVM",
        "product_serial": null,
        "product_uuid": "5EF55895-6169-4C7E-9E28-23CD198B8D5F",
        "reboot_pending": true,
        "swaptotal_mb": 0,
        "system": "Win32NT",
        "system_description": "",
        "system_vendor": "Red Hat",
        "uptime_seconds": 428761,
        "user_dir": "C:\\Users\\Administrator",
        "user_gecos": "",
        "user_id": "Administrator",
        "user_sid": "S-1-5-21-3572516673-4086879683-2416554126-500",
        "virtualization_role": "guest",
        "virtualization_type": "kvm",
        "windows_domain": "WORKGROUP",
        "windows_domain_member": false,
        "windows_domain_role": "Stand-alone server"
    }
}

PLAY RECAP
*********************************************************************
win2022                    : ok=2    changed=0    unreachable=0    failed=0
skipped=0    rescued=0    ignored=0
```

Windows rendszerinformációk

02-osinfo.yaml

```
[ansible@ansible ~]$ cat 02-osinfo.yaml
- hosts: windows
  gather_facts: false
  tasks:
    - name: OS info
      ansible.windows.win_powershell:
        script: |
          Get-CimInstance Win32_OperatingSystem |
            Select-Object Caption, Version, BuildNumber, OSArchitecture
|
```

```
            ConvertTo-Json -Depth 3
      register: osinfo

    - debug:
        msg: "{{ osinfo.output[0] }}"
```

```
[ansible@ansible ~]$ ansible-playbook 02-osinfo.yaml

PLAY [windows]
*********************************************************************

TASK [OS info]
*********************************************************************
changed: [win2022]

TASK [debug]
*********************************************************************
ok: [win2022] => {
    "msg": {
        "BuildNumber": "20348",
        "Caption": "Microsoft Windows Server 2022 Standard Evaluation",
        "OSArchitecture": "64-bit",
        "Version": "10.0.20348"
    }
}

PLAY RECAP
*********************************************************************
win2022                    : ok=2    changed=1    unreachable=0    failed=0
skipped=0    rescued=0    ignored=0
```

Felhasználók kezelése

Helyi felhasználó létrehozása

03-create-local-user.yaml

```
- hosts: windows
  tasks:
    - name: Create local user
      ansible.windows.win_user:
        name: "user1"
        password: "Linux2026%"
        state: present
        password_never_expires: true
        user_cannot_change_password: true
        groups:
```

```
          - Users
```

```
[ansible@ansible ~]$ ansible-playbook 03-create-local-user.yaml

PLAY [windows]
*************************************************************

TASK [Gathering Facts]
*********************************************************
ok: [win2022]

TASK [Create local user]
*********************************************************
changed: [win2022]

PLAY RECAP
*************************************************************************
win2022                    : ok=2    changed=1    unreachable=0    failed=0
skipped=0    rescued=0    ignored=0
```

Helyi felhasználó módosítása

03-modify-local-user.yaml

```
- hosts: windows
  tasks:
    - name: Add user1 to local Administrators
      ansible.windows.win_group_membership:
        name: Administrators
        members:
          - user1
        state: present
```

```
[ansible@ansible ~]$ ansible-playbook 03-modify-local-user.yaml

PLAY [windows]
*************************************************************

TASK [Gathering Facts]
*********************************************************
ok: [win2022]

TASK [Add user1 to local Administrators]
***************************************
changed: [win2022]

PLAY RECAP
```

```
*****************************************************************
win2022                    : ok=2    changed=1    unreachable=0    failed=0
skipped=0    rescued=0    ignored=0
```

Helyi felhasználó törlése

03-delete-local-user.yaml

```
- hosts: windows
  tasks:
    - name: Delete user profile
      ansible.windows.win_user_profile:
        username: user1
        state: absent

    - name: Delete local Windows user
      ansible.windows.win_user:
        name: user1
        state: absent
```

```
[ansible@ansible ~]$ ansible-playbook 03-delete-local-user.yaml

PLAY [windows]
*****************************************************************

TASK [Gathering Facts]
*********************************************************
ok: [win2022]

TASK [Delete user profile]
*****************************************************
ok: [win2022]

TASK [Delete local Windows user]
*********************************************
changed: [win2022]

PLAY RECAP
*****************************************************************
win2022                    : ok=3    changed=1    unreachable=0    failed=0
skipped=0    rescued=0    ignored=0
```

Windows oldalon a profil és a felhasználó törlése adminisztrátorként futtatott PS utasítások segítségével elvégezhető:

```
PS C:\Users\Administrator> Get-CimInstance Win32_UserProfile | Where
LocalPath -eq "C:\Users\USERNAME" | Remove-CimInstance
```

```
PS C:\Users\Administrator> Remove-LocalUser USERNAME
```

Ugyanez megoldható szkript segítségével

delete-local-user.ps1

```
$user = "USERNAME"

Get-CimInstance Win32_UserProfile |
Where-Object {
    $_.LocalPath -eq "C:\Users\$USERNAME"
} |
ForEach-Object {

    if (-not $_.Loaded) {
        Remove-CimInstance $_
    }
}
```

Több felhasználó létrehozása

03-create-local-users.yaml

```
- hosts: windows
  vars:
    local_users:
      - { name: "user2", pass: "Linux2026%" }
      - { name: "user3", pass: "Linux2026%" }
      - { name: "user4", pass: "Linux2026%" }
  tasks:
    - ansible.windows.win_user:
        name: "{{ item.name }}"
        password: "{{ item.pass }}"
        state: present
      loop: "{{ local_users }}"
```

```
[ansible@ansible ~]$ ansible-playbook 03-create-local-users.yaml

PLAY [windows]
*************************************************************

TASK [Gathering Facts]
*********************************************************
ok: [win2022]

TASK [ansible.windows.win_user]
***********************************************
```

```
changed: [win2022] => (item={'name': 'user2', 'pass': 'Linux2026%'})
changed: [win2022] => (item={'name': 'user3', 'pass': 'Linux2026%'})
changed: [win2022] => (item={'name': 'user4', 'pass': 'Linux2026%'})

PLAY RECAP
*********************************************************************
win2022                    : ok=2    changed=1    unreachable=0    failed=0
skipped=0    rescued=0    ignored=0
```

A felhasználók lekérdezhetők PowerShell segítségével.

```
PS C:\Users\Administrator> Get-LocalUser | Select-Object Name | Select-
String 'user'

@{Name=user2}
@{Name=user3}
@{Name=user4}
```

Több felhasználó törlése

03-delete-local-users.yaml

```
- hosts: windows
  vars:
    local_users:
      - user2
      - user3
      - user4

  tasks:
    - name: Delete user profiles first
      ansible.windows.win_user_profile:
        username: "{{ item }}"
        state: absent
      loop: "{{ local_users }}"

    - name: Delete local Windows users
      ansible.windows.win_user:
        name: "{{ item }}"
        state: absent
      loop: "{{ local_users }}"
```

```
[ansible@ansible ~]$ ansible-playbook 03-delete-local-users.yaml

PLAY [windows]
*********************************************************************

TASK [Gathering Facts]
```

```
*********************************************************
ok: [win2022]

TASK [Delete user profiles first]
*****************************************
ok: [win2022] => (item=user2)
ok: [win2022] => (item=user3)
ok: [win2022] => (item=user4)

TASK [Delete local Windows users]
*****************************************
changed: [win2022] => (item=user2)
changed: [win2022] => (item=user3)
changed: [win2022] => (item=user4)

PLAY RECAP
*********************************************************************
win2022                    : ok=3    changed=1    unreachable=0    failed=0
skipped=0    rescued=0    ignored=0
```

Windows frissítés, ütemezett feladatok

Windows frissítés (kritikus és biztonsági javítások)

99-windows-update.yaml

```
- hosts: windows
  tasks:
    - name: Install critical/security updates
      ansible.windows.win_updates:
        category_names:
          - CriticalUpdates
          - SecurityUpdates
        reboot: true
      register: upd

    - debug:
        var: upd
```

<node important> A frissítés hosszú ideig is eltarthat és a gép újraindul! </note>

```
[ansible@ansible ~]$ ansible-playbook 99-windows-update.yaml

PLAY [windows]
*********************************************************************

TASK [Gathering Facts]
```

```
*************************************************************
ok: [win2022]

TASK [Install critical/security updates]
*************************************
```

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