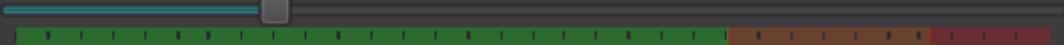

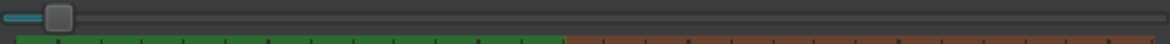



Hardware

You can modify virtual machine's hardware by changing amount of RAM and virtual CPU count. Enabling EFI is also possible.

Base Memory:  4096 MB 

4 MB 16384 MB

Processors:  2 

1 CPU 28 CPUs

☒ Enable EFI (special OSes only)

Help

Back

Next

Cancel



New



Add




Settings





Discard



Start

 **Windows Serve...**

 Powered Off





General

Name: Windows Server DC
Operating System: Windows 10 (64-bit)

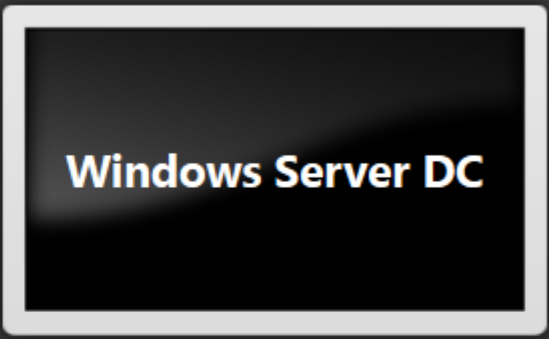


System

Base Memory: 4096 MB
Processors: 2
Boot Order: Optical, Hard Disk
Acceleration: Nested Paging, Hyper-V Paravirtualization



Preview



Display

Video Memory: 128 MB
Graphics Controller: VBoxSVGA
Remote Desktop Server: Disabled
Recording: Disabled



Storage

Controller: SATA
SATA Port 0: Windows Server DC.vdi (Normal, 40.00 GB)
SATA Port 1: [Optical Drive] Empty



Audio

Host Driver: Default
Controller: Intel HD Audio



Network

Adapter 1: Intel PRO/1000 MT Desktop (Bridged Adapter, Realtek 8821CE Wireless LAN 802.11ac)



Tools



Windows Serve...

Powered Off



New



Add



Settings



Discard



Start

**Display**

Video Memory: 128 MB
Graphics Controller: VBoxSVGA
Remote Desktop Server: Disabled
Recording: Disabled

**Storage**

Controller: SATA
SATA Port 0: Windows Server DC.vdi (Normal, 40.00 GB)
SATA Port 1: [Optical Drive] Empty

**Audio**

Host Driver: Default
Controller: Intel HD Audio

**Network**

Adapter 1: Intel PRO/1000 MT Desktop (Bridged Adapter, Realtek 8821CE Wireless LAN 802.11ac PCI-E NIC)

**USB**

USB Controller: xHCI
Device Filters: 0 (0 active)

**Shared folders**

None

**Description**

None

Dashboard

Local Server

All Servers

File and Storage Services ▸

WELCOME TO SERVER MANAGER

QUICK START

WHAT'S NEW

LEARN MORE

- 1 Configure this local server
- 2 Add roles and features
- 3 Add other servers to manage
- 4 Create a server group
- 5 Connect this server to cloud services

Hide

ROLES AND SERVER GROUPS

Roles: 1 | Server groups: 1 | Servers total: 1

File and Storage
Services

1



Manageability

Events

Performance

BPA results



Local Server

1



Manageability

Events



Services

Performance

BPA results

6/13/2025 5:57 AM

Dashboard


Local Server


All Servers

File and Storage Services >

ROLES AND SERVER GROUPS

Roles: 1 | Server groups: 1 | Servers total: 1

 **File and Storage Services** 1


 Manageability

Events


Performance

BPA results

 **Local Server** 1

 Manageability

Events


 3 Services

Performance


BPA results

6/13/2025 5:57 AM

 **All Servers** 1

 Manageability

Events

 3 Services

Performance

BPA results

6/13/2025 5:57 AM

Server Manager Dashboard

- Dashboard
- Local Server
- All Servers
- AD DS
- File and Storage Services


WELCOME TO SERVER MANAGER

QUICK START

WHAT'S NEW


LEARN MORE

- 1
 - 2
 - 3
 - 4
 - 5
- Connect this server to cloud services

 Post-deployment Configura... TASKS | X

Configuration required for Active Directory Domain Services at WIN-IA4DIC092BB

[Promote this server to a domain controller](#)

 Feature installation


Configuration required. Installation succeeded on WIN-IA4DIC092BB.


[Add Roles and Features](#)

Task Details

ROLES AND SERVER GROUPS

Roles: 2 | Server groups: 1 | Servers total: 1

 AD DS 1


 Manageability


Events

Services

Performance

BPA results

 File and Storage Services 1

 Manageability

Events



Performance

BPA results

WELCOME TO SERVER MANAGER

Active Directory Domain Services Configuration Wizard

Prerequisites Check

TARGET SERVER
WIN-IA4DIC092BB All prerequisite checks passed successfully. Click 'Install' to begin installation.[Show more](#) 

Deployment Configuration

Domain Controller Options

DNS Options

Additional Options

Paths




Review Options

Prerequisites Check

Installation

Results

Prerequisites need to be validated before Active Directory Domain Services is installed on this computer

[Rerun prerequisites check](#) View results Windows Server 2022 domain controllers have a default for the security setting named "Allow cryptography algorithms compatible with Windows NT 4.0" that prevents weaker cryptography algorithms when establishing security channel sessions.For more information about this setting, see Knowledge Base article 942564 (<http://go.microsoft.com/fwlink/?LinkId=104751>). This computer has at least one physical network adapter that does not have static IP address(es) assigned to its IP Properties. If both IPv4 and IPv6 are enabled for a network adapter, both IPv4 and IPv6 static IP addresses should be assigned to both IPv4 and IPv6 Properties of the physical network adapter. Such static IP address(es) assignment should be done to all the physical network adapters for reliable Domain Name System If you click Install, the server automatically reboots at the end of the promotion operation.[More about prerequisites](#)

Hide

< Previous

Next >

Install

Cancel

Dashboard

WELCOME TO SERVER MANAGER

Local Server

All Servers

Server Manager

Administrator: Windows PowerShell

Windows PowerShell

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PS C:\Users\Administrator> #check if AD DS is installed

PS C:\Users\Administrator> Get-WindowsFeature AD-Domain-Services | Where-Object Installed

Display Name	Name	Install State
[X] Active Directory Domain Services	AD-Domain-Services	Installed

PS C:\Users\Administrator> Get-ADDomainController | Format-List Name, Domain, Forest

Name : WIN-IA4DIC092BB
Domain : forest.local
Forest : forest.local

PS C:\Users\Administrator> _



Type here to search

7:19 PM
6/16/2025

Right Ctrl



Tools



New



Add



Settings



Discard



Show



Windows Server...

→ Running



General

Name: Windows Server DC
Operating System: Windows 10 (64-bit)



System

Base Memory: 4096 MB
Processors: 2
Boot Order: Optical, Hard Disk
Acceleration: Nested Paging, Hyper-V
Paravirtualization



Display

Video Memory: 128 MB
Graphics Controller: VBoxSVGA
Remote Desktop Server: Disabled
Recording: Disabled



Storage

Controller: SATA
SATA Port 0: Windows Server DC.vdi (Normal, 40.00 GB)
SATA Port 1: [Optical Drive] windows 2022iso.iso (4.70 GB)

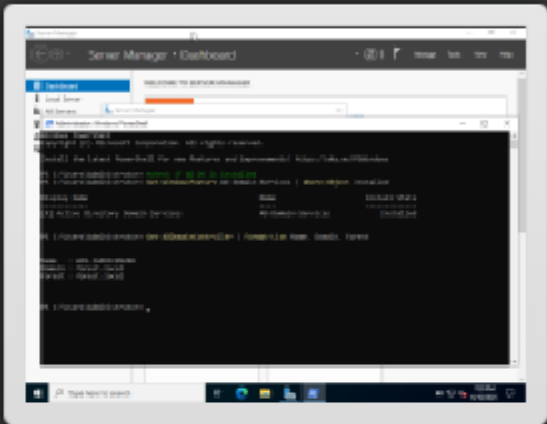


Audio

Host Driver: Default
Controller: Intel HD Audio



Preview





Tools



Windows Server...

→ Running



New



Add



Settings



Discard



Show



Display

Video Memory: 128 MB
Graphics Controller: VBoxSVGA
Remote Desktop Server: Disabled
Recording: Disabled



Storage

Controller: SATA
SATA Port 0: Windows Server DC.vdi (Normal, 40.00 GB)
SATA Port 1: [Optical Drive] windows 2022iso.iso (4.70 GB)



Audio

Host Driver: Default
Controller: Intel HD Audio



Network

Adapter 1: Intel PRO/1000 MT Desktop (Bridged Adapter, Realtek 8821CE Wireless LAN 802.11ac PCI-E NIC)



USB

USB Controller: xHCI
Device Filters: 0 (0 active)



Shared folders

None



Description

None

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Insta

all the latest PowerShell for new features and improvements! <https://aka.ms/PSWindows>

PS C:\Users\Adm

PS C:\Users\Administ

PS C:\Users\Administrator

Administrator> #Root OUs (Countries)

Administrator> New-ADOrganizationalUnit -Name "INDIA" -Path "DC=forest, DC=local"

> New-ADOrganizationalUnit -Name "FRANCE" -Path "DC=forest, DC=local"

PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "SOUTH_KOREA" -Path "DC=forest, DC=local"

PS C:\Users\Administrator> #Child OUs (Cities or Departments)

PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "PUNE" -Path "OU=INDIA, DC=forest, DC=local"

PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "MARKETING" -Path "OU=PUNE, OU=INDIA, DC=forest, DC=local"

PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "CHENNAI" -Path "OU=INDIA, DC=forest, DC=local"

PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "HR" -Path "OU=CHENNAI, OU=INDIA, DC=forest, DC=local"

PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "PARIS" -Path "OU=FRANCE, DC=forest, DC=local"

PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "DESIGN" -Path "OU=PARIS, OU=FRANCE, DC=forest, DC=local"

PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "SEOUL" -Path "OU=SOUTH_KOREA, DC=forest, DC=local"

PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "MARKETING" -Path "OU=SEOUL, OU=SOUTH_KOREA, DC=forest, DC=local"

PS C:\Users\Administrator> Get-ADOrganizationalUnit -Filter * | Format-Table Name, DistinguishedName

Name	DistinguishedName
------	-------------------

Domain Controllers	{}
--------------------	----

INDIA	{}
-------	----

FRANCE	{}
--------	----

SOUTH_KOREA	{}
-------------	----

PUNE	{}
------	----

MARKETING	{}
-----------	----

CHENNAI	{}
---------	----

HR	{}
----	----

PARIS	{}
-------	----

DESIGN	{}
--------	----

SEOUL	{}
-------	----

MARKETING	{}
-----------	----

PS C:\Users\Administrator>



Type here to search



9:32 PM

6/17/2025



```
Administrator: Windows PowerShell
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Administrator> #India/Pune/Marketing
PS C:\Users\Administrator> New-ADUser -Name "Ravi" -GivenName "Ravi" -Surname "Sharma" -SamAccountName "ravi" -Path "OU=MARKETING, OU=PUNE, OU=INDIA, DC=forest, DC=local" -AccountPassword (ConvertTo-SecureString "P@ssw0rd10$" -AsPlainText -Force) -Enabled $true
PS C:\Users\Administrator> New-ADUser -Name "Hari" -GivenName "Hari" -Surname "Chandra" -SamAccountName "hari" -Path "OU=HR, OU=CHENNAI, OU=INDIA, DC=forest, DC=local" -AccountPassword (ConvertTo-SecureString "P@ssw0rd10$" -AsPlainText -Force) -Enabled $true
PS C:\Users\Administrator> #India/Chennai/HR(implemented above)
PS C:\Users\Administrator> #France/Paris/Design
PS C:\Users\Administrator> New-ADUser -Name "Adrien" -GivenName "Adrien" -Surname "Agreste" -SamAccountName "adrien" -Path "OU=DESIGN, OU=PARIS, OU=FRANCE, DC=forest, DC=local" -AccountPassword (ConvertTo-SecureString "P@ssw0rd10$" -AsPlainText -Force) -Enabled $true
PS C:\Users\Administrator> #South Korea/Seoul/Marketing
PS C:\Users\Administrator> New-ADUser -Name "Kim Yoo Jung" -GivenName "Yoo Jung" -Surname "Kim" -SamAccountName "yoojung" -Path "OU=MARKETING, OU=SEOUL, OU=SOUTH_KOREA, DC=forest, DC=local" -AccountPassword (ConvertTo-SecureString "P@ssw0rd10$" -AsPlainText -Force) -Enabled $true
PS C:\Users\Administrator> Get-ADUser -Filter * | Format-Table Name, SamAccountName, DistinguishedName

Name                SamAccountName DistinguishedName
-----
Administrator      Administrator  CN=Administrator,CN=Users,DC=forest,DC=local
Guest               Guest         CN=Guest,CN=Users,DC=forest,DC=local
krbtgt              krbtgt       CN=krbtgt,CN=Users,DC=forest,DC=local
Ravi                ravi         CN=Ravi,OU=MARKETING,OU=PUNE,OU=INDIA,DC=forest,DC=local
Hari                hari         CN=Hari,OU=HR,OU=CHENNAI,OU=INDIA,DC=forest,DC=local
Adrien              adrien       CN=Adrien,OU=DESIGN,OU=PARIS,OU=FRANCE,DC=forest,DC=local
Kim Yoo Jung        yoojung      CN=Kim Yoo Jung,OU=MARKETING,OU=SEOUL,OU=SOUTH_KOREA,DC=forest,DC=local

PS C:\Users\Administrator>
```

```
PS C:\Users\Administrator> New-ADOrganizationalUnit -Name "GROUPS" -Path "DC=forest, DC=local"
PS C:\Users\Administrator> Get-ADOrganizationalUnit -Filter 'Name -eq "GROUPS"'
```

```
City           :
Country        :
DistinguishedName : OU=GROUPS,DC=forest,DC=local
LinkedGroupPolicyObjects : {}
ManagedBy     :
Name           : GROUPS
ObjectClass     : organizationalUnit
ObjectGUID      : cdafe17a-28c5-4705-8266-bbc95779a6b7
PostalCode      :
State          :
StreetAddress    :
```

```
PS C:\Users\Administrator> #creating "GROUPS" OU helps to keep things organized
```

```
PS C:\Users\Administrator> #
```

```
PS C:\Users\Administrator> #Role-Based Security Group
PS C:\Users\Administrator> New-ADGroup -Name "Finance_Team" -GroupScope Global -Path "OU=GROUPS, DC=forest, DC=local" -Description "Accounting access"
PS C:\Users\Administrator> New-ADGroup -Name "IT_Admins" -GroupScope Global -Path "OU=GROUPS, DC=forest, DC=local" -Description "Admin rights"
PS C:\Users\Administrator> #Departmental Security groups
PS C:\Users\Administrator> New-ADGroup -Name "Design_Team" -GroupScope Global -Path "OU=GROUPS, DC=forest, DC=local"
PS C:\Users\Administrator> New-ADGroup -Name "Engineering" -GroupScope Global -Path "OU=GROUPS, DC=forest, DC=local"
PS C:\Users\Administrator> #Resource Access based Security Group
PS C:\Users\Administrator> New-ADGroup -Name "Printer_Accounting" -GroupScope DomainLocal -Path "OU=GROUPS, DC=forest, DC=local"
PS C:\Users\Administrator> New-ADGroup -Name "SharePoint_Read" -GroupScope DomainLocal -Path "OU=GROUPS, DC=forest, DC=local"
```

```
PS C:\Users\Administrator> Get-ADGroup -Filter * -SearchBase "OU=GROUPS, DC=forest, DC=local" | Where-Object{ ($_.Name -like "*Team*") -or ($_.Name -like "*_*")} | Format-Table Name, GroupScope
```

Name	GroupScope
-----	-----
Finance_Team	Global
IT_Admins	Global
Design_Team	Global
Printer_Accounting	DomainLocal
SharePoint_Read	DomainLocal

Windows PowerShell

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PS C:\Users\Administrator> #Security

PS C:\Users\Administrator> New-ADGroup -Name "MFA_required" -GroupScope Universal -Path "OU=GROUPS, DC=forest, DC=local" -Description "MFA-enabled users"

PS C:\Users\Administrator> New-ADGroup -Name "No_PW_Expiry" -GroupScope Global -Path "OU=GROUPS, DC=forest, DC=local"

PS C:\Users\Administrator> #Geographic

PS C:\Users\Administrator> New-ADGroup -Name "WFH_Employees" -GroupScope Global -Path "OU=GROUPS, DC=forest, DC=local"

PS C:\Users\Administrator> New-ADGroup -Name "Hybrid_Workers" -GroupScope Universal -Path "OU=GROUPS, DC=forest, DC=local"

PS C:\Users\Administrator> Get-ADGroup -Filter * -SearchBase "OU=GROUPS, DC=forest, DC=local" | Where-Object{ (\$_.Name -like "*Team*") -or (\$_.Name -like "*_*")} | Format-Table Name, GroupScope

Name	GroupScope
Finance_Team	Global
IT_Admins	Global
Design_Team	Global
Printer_Accounting	DomainLocal
SharePoint_Read	DomainLocal
MFA_required	Universal
No_PW_Expiry	Global
WFH_Employees	Global
Hybrid_Workers	Universal

PS C:\Users\Administrator>


```
PS C:\Users\Administrator> #Project
PS C:\Users\Administrator> New-ADGroup -Name "Project_Ashoka" -GroupScope Global -Path "OU=GROUPS, DC=forest, DC=local"
PS C:\Users\Administrator> #device
PS C:\Users\Administrator> New-ADGroup -Name "Laptop_Users" -GroupScope Global -Path "OU=GROUPS, DC=forest, DC=local"
PS C:\Users\Administrator> #Cloud
PS C:\Users\Administrator> New-ADGroup -Name "Azure" -GroupScope Universal -Path "OU=GROUPS, DC=forest, DC=local"
PS C:\Users\Administrator> Get-ADGroup -Filter * -SearchBase "OU=GROUPS, DC=forest, DC=local" | Where-Object{ ($_.Name -
match "Project|Laptop|Azure"))} | Format-Table Name, GroupScope
```

Name	GroupScope
Project_Ashoka	Global
Laptop_Users	Global
Azure	Universal

```
PS C:\Users\Administrator> #Finance team
PS C:\Users\Administrator> Add-ADGroupMember -Identity "Finance_Team" -Members "hari"
PS C:\Users\Administrator> #Design team
PS C:\Users\Administrator> Add-ADGroupMember -Identity "Design_Team" -Members "adrien"
PS C:\Users\Administrator> #IT Admins
PS C:\Users\Administrator> Add-ADGroupMember -Identity "IT_Admins" -Members "ravi", "yoojung"
PS C:\Users\Administrator> Get-ADGroupMember -Identity "Finance_Team" | Select-Object Name
```

Name

Hari

```
PS C:\Users\Administrator> Get-ADGroupMember -Identity "Design_Team" | Select-Object Name
```

Name

Adrien

```
PS C:\Users\Administrator> Get-ADGroupMember -Identity "IT_Admins" | Select-Object Name
```

Name

Ravi

Kim Yoo Jung

```
PS C:\Users\Administrator> New-GPO -Name "Enforce_Strong_Passwords" | Set-GPRegistryValue -Key "HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\Network" -ValueName "MinPasswordLength" -Type DWord -Value 12
```

```
DisplayName      : Enforce_Strong_Passwords
DomainName       : forest.local
Owner            : FOREST\Domain Admins
Id               : acd558c6-a879-4957-be81-98763339ed76
GpoStatus        : AllSettingsEnabled
Description      :
CreationTime     : 6/18/2025 5:50:47 PM
ModificationTime : 6/18/2025 5:50:48 PM
UserVersion      : AD Version: 0, SysVol Version: 0
ComputerVersion  : AD Version: 1, SysVol Version: 1
WmiFilter        :
```

```
PS C:\Users\Administrator> Set-GPRegistryValue -Name "Enforce_Strong_Passwords" -Key "HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\System" -ValueName "PasswordComplexity" -Type DWord -Value 1
```

```
DisplayName      : Enforce_Strong_Passwords
DomainName       : forest.local
Owner            : FOREST\Domain Admins
Id               : acd558c6-a879-4957-be81-98763339ed76
GpoStatus        : AllSettingsEnabled
Description      :
CreationTime     : 6/18/2025 5:50:47 PM
ModificationTime : 6/18/2025 5:55:46 PM
UserVersion      : AD Version: 0, SysVol Version: 0
ComputerVersion  : AD Version: 2, SysVol Version: 2
WmiFilter        :
```