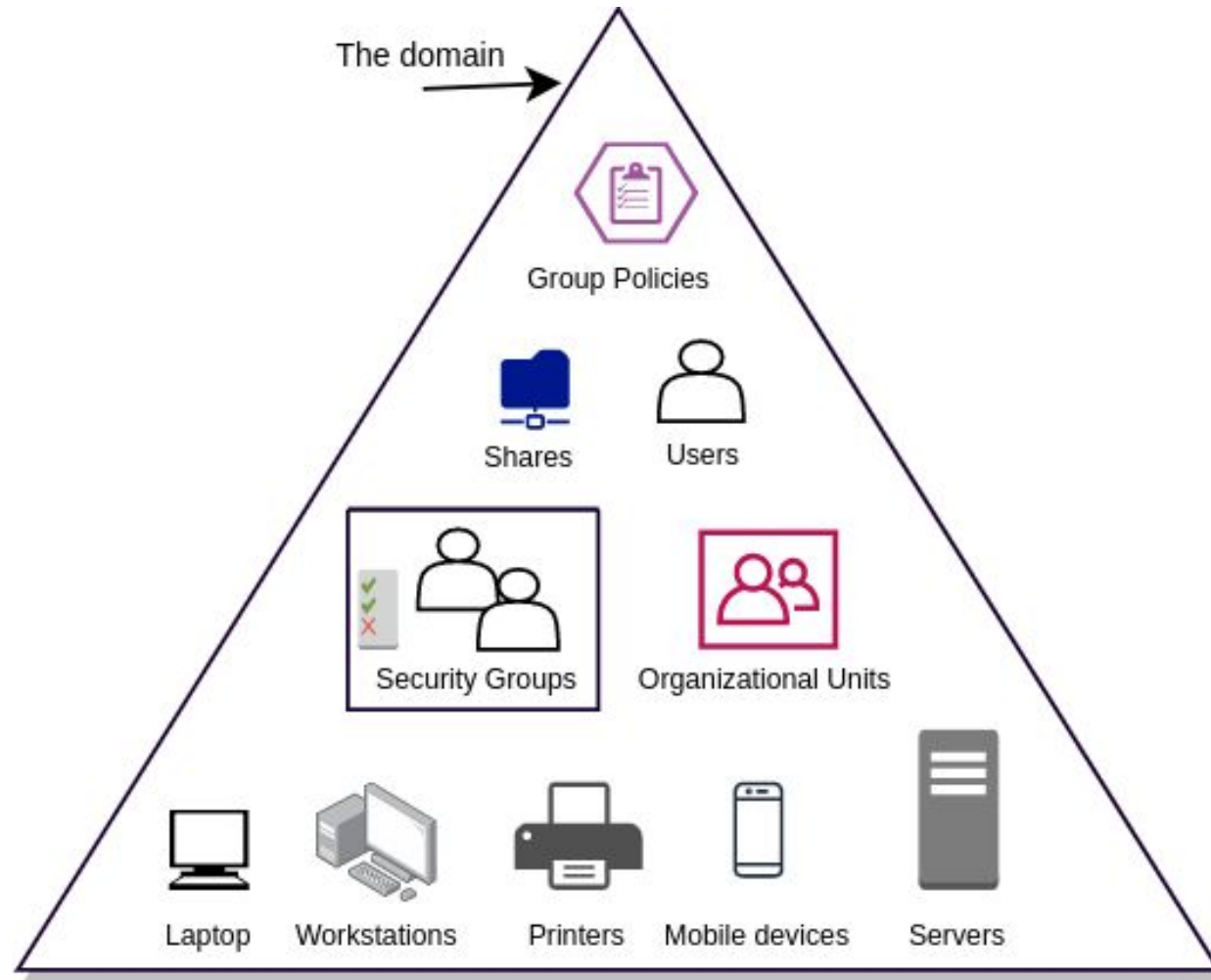


Domain | Tree | Forest

Domain

- A domain is a logical group of network objects (such as users, computers, and devices) that share the same Active Directory database.
- Domains are used to manage access to resources and provide a way to organize and administer large networks. Key features of a domain include:
 - **Security Boundaries:** Domains define security boundaries within which administrative privileges and security policies are applied.
 - **Unique Namespace:** Each domain has a unique name, forming a part of the domain name system (DNS) hierarchy.
 - **Replication:** Information within a domain is replicated to all domain controllers within that domain to ensure consistency.

Domain

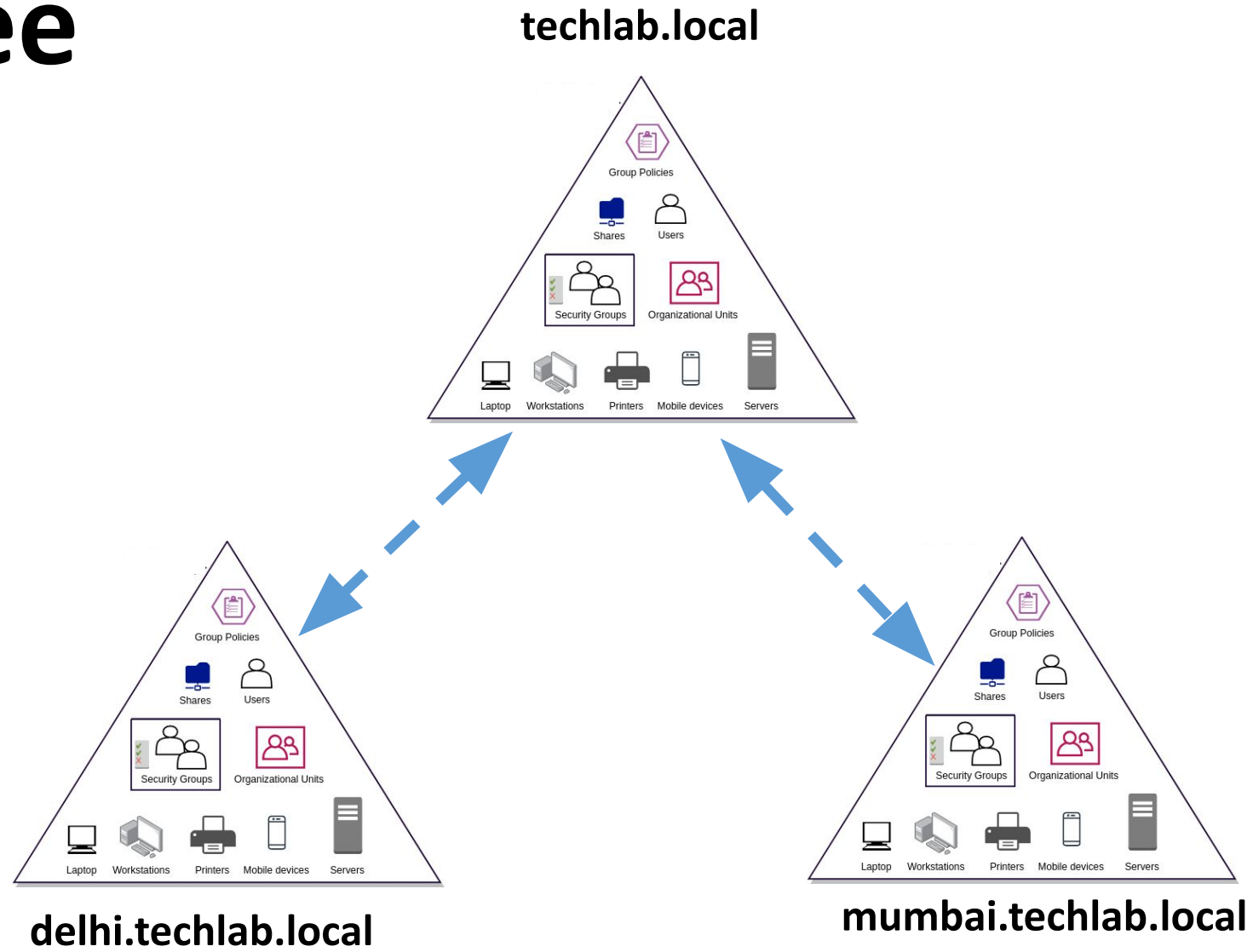


techlab.local

Tree

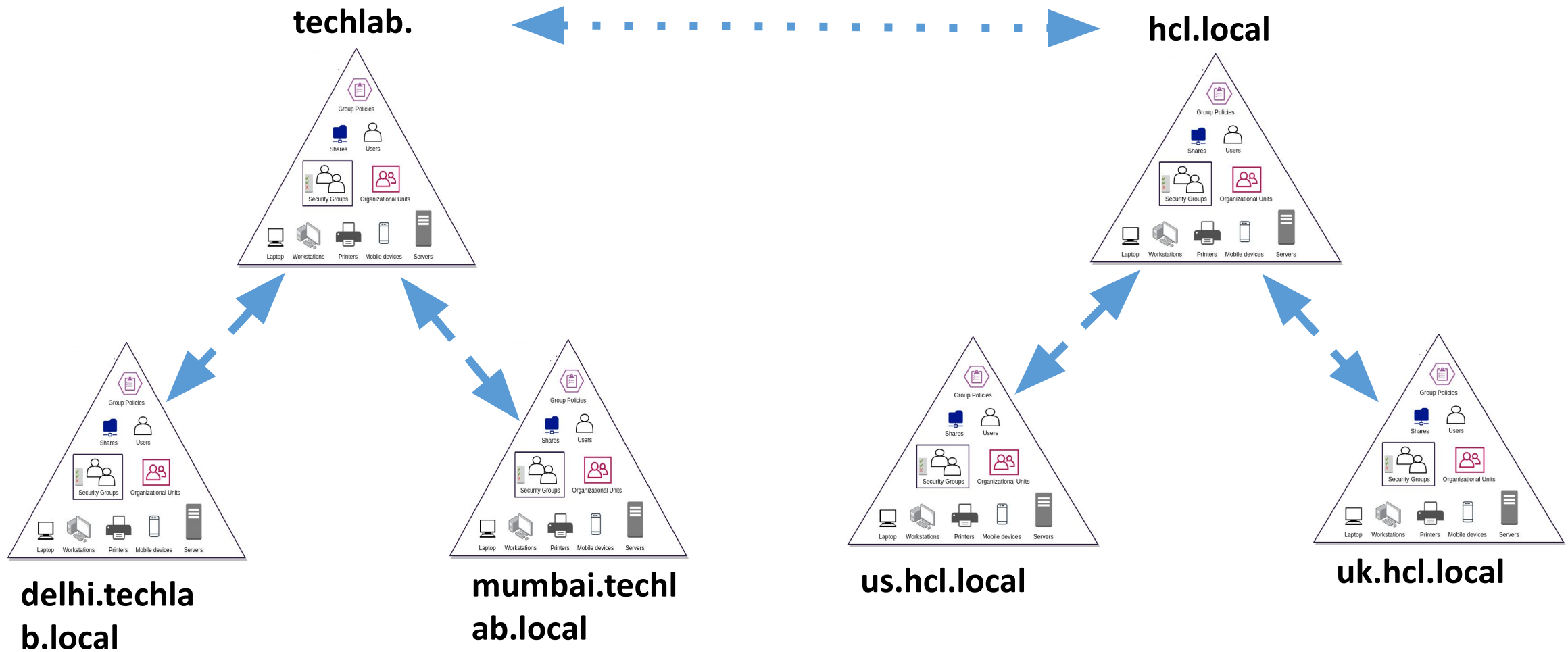
- A tree is a collection of one or more domains that are linked in a hierarchical structure. Domains in a tree share a contiguous namespace, which means they form a parent-child relationship.
- Key points about trees include:
 - **Parent-Child Relationship:** The root domain is the first domain created in the tree, and subsequent domains are child domains.
 - **Shared Namespace:** Child domains inherit the namespace of the parent domain (e.g., if the parent domain is example.com, a child domain might be sales.example.com).
 - **Trust Relationships:** Automatic two-way trust relationships are established between parent and child domains.

Tree



Forest

- A forest is the top-level container in an Active Directory structure that contains one or more domain trees.



Group Policy

- Group Policy is a feature of Microsoft Windows that provides centralized management and configuration of operating systems, applications, and users' settings in an Active Directory environment.
- It allows administrators to define settings for computers and users through Group Policy Objects (GPOs), which are applied to specified Active Directory containers like sites, domains, and organizational units (OUs).

Group Policy Processing Order

- Group Policy processing order determines how Group Policy Objects (GPOs) are applied to computers and users in an Active Directory environment.

Processing Order

- Local GPO
- Site GPOs
- Domain GPOs
- Parent OU GPOs
- Child OU GPOs

Enforcement and Inheritance:

- **Inheritance:** GPOs are typically inherited from parent containers to child containers. If a GPO is linked to a parent OU, its settings are inherited by child OUs unless explicitly blocked.
- **Block Inheritance:** An OU can be configured to block inheritance, preventing GPOs linked to higher-level containers from being applied.
- **Enforced (No Override):** A GPO can be set to "Enforced" to ensure its settings are applied regardless of other GPOs or block inheritance settings.

GPO Lab

1. Block Control Panel

- User Configuration -> Policies -> Administrative Templates -> Control Panel.

2. Firewall Policy ON/OFF

- Computer Configuration -> Policies -> Administrative Templates -> Network -> Network Connections -> Windows Defender Firewall

3. Enable RDP via Group Policy

- Computer Configuration -> Policies -> Administrative Templates -> Windows Components -> Remote Desktop Services -> Remote Desktop Session Host -> Connections.
- Find and double-click "Allow users to connect remotely by using Remote Desktop Services".
- Set the policy to "Enabled" and click OK

4. Remove Recycle bin from Desktop

- User Configuration > Policies > Administrative Templates > Desktop
- Locate the setting "Remove Recycle bin form the desktop".
- Set it to enabled.

GPO Lab

5. Install Software via GPO

- **Computer Configuration > Policies > Software Setting > Software installation** Right click Software installation and select New > Package
- On the **open screen browse to the network share using the UNC path, select the MSI** you want to install, and click open. **DO NOT browse using the local drives or the install will fail.**
- On the deploy software screen, **click Assigned** and then **click Ok**. **Published will be grayed out as that option can only be used when deploying software to users.**
- The software will only install during a reboot and the computer must have its GPO settings updated. **GPO settings will refresh automatically every 90 minutes.**
- To force the GPO settings you can use the **gpupdate /force** command.

Microsoft Windows [Version 10.0.19041.1288]
(c) Microsoft Corporation. All rights reserved.

C:\Users\administrator>gpupdate /force

Updating policy...

Computer Policy update has completed successfully.


The following warnings were encountered during computer policy processing:

The Group Policy Client Side Extension Software Installation was unable to apply one or more settings that must be processed before system startup or user logon. The system will wait for Group Policy processing to complete before the next startup or logon for this user, and this may result in slow startup and boot times. User Policy update has completed successfully.

For more detailed information, review the event log or run GPRESULT /H GPReport.html from the command prompt for more information about Group Policy results.

Certain Computer policies are enabled that can only run during startup.

OK to restart? (Y/N)_



To have this message displayed
see the tips and troubleshooting
section



Applying software installation settings...

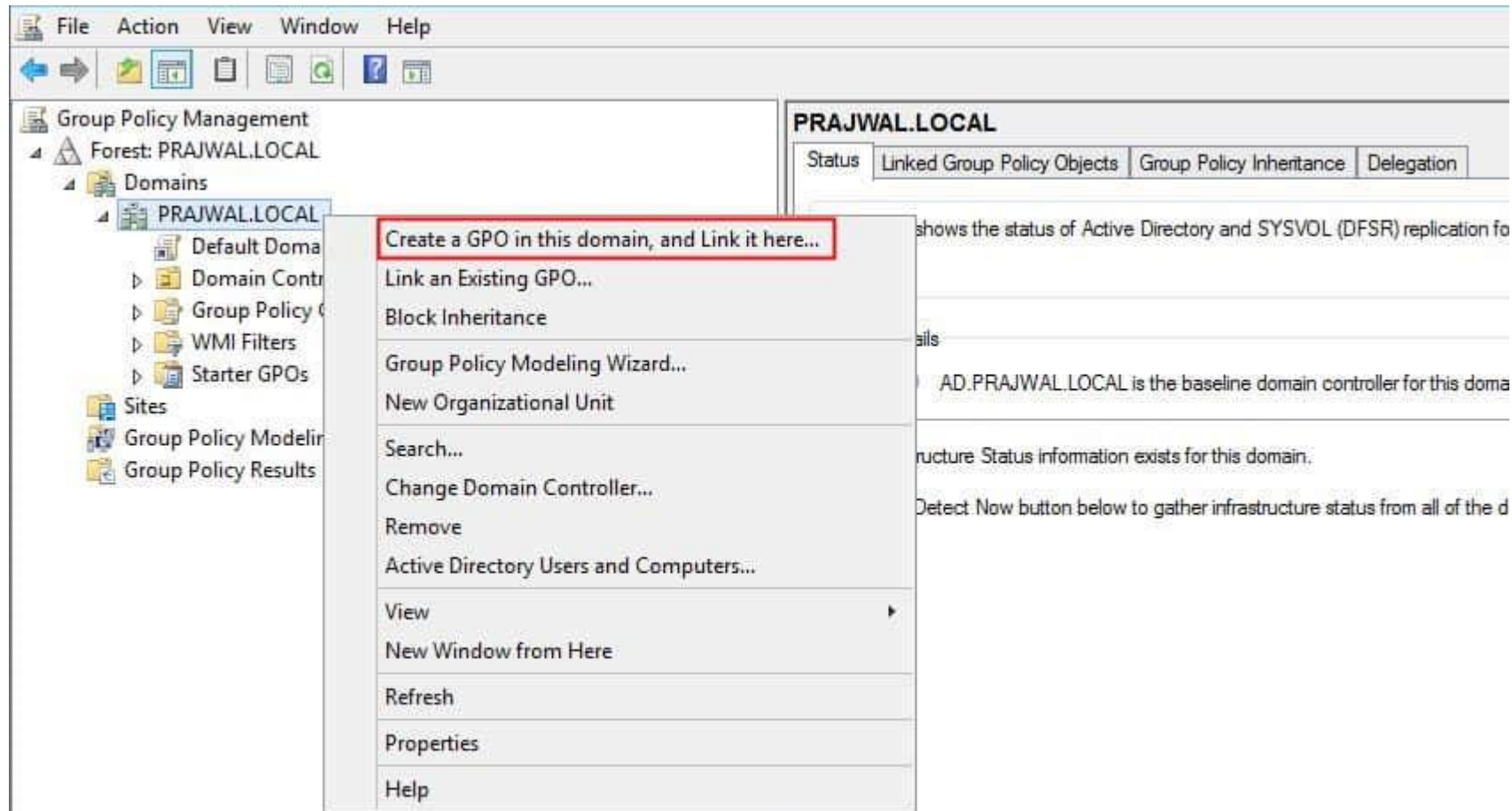
GPO Lab

6. **BLOCK All USB Storage access**

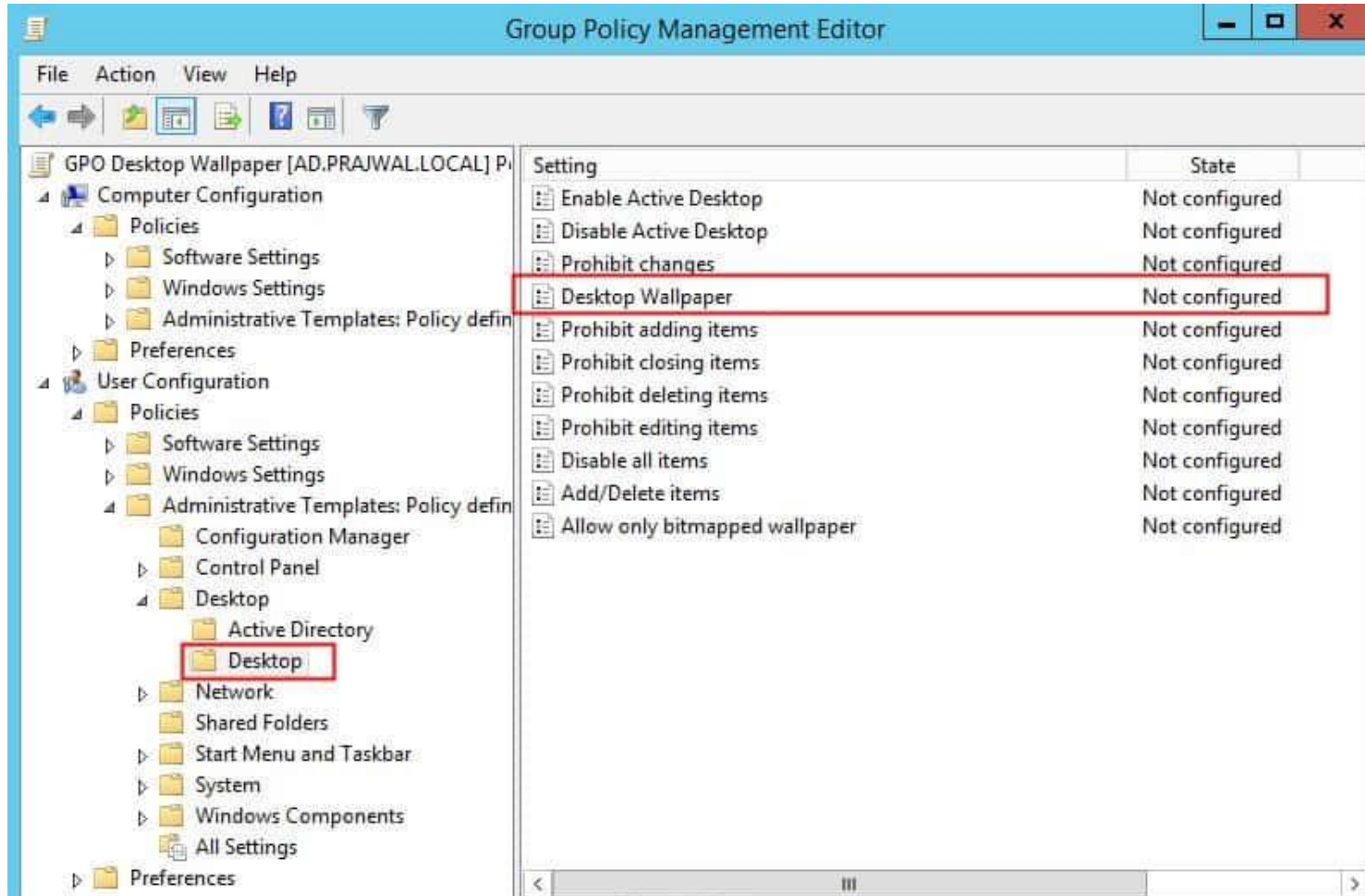
- Group Policy Management Editor, navigate to Computer Configuration\Policies\Administrative Templates\System\Removable Storage Access.
- Out of all the Removable Storage Access policies, we will configure a setting “All Removable Storage classes: Deny all access”.

GPO Lab

7. Deploy Desktop Background Wallpaper using Group Policy



GPO Lab



User Configuration > Administrative Templates > Desktop > double-click Desktop Wallpaper.

Desktop Wallpaper

Desktop Wallpaper

Previous Setting

Next Setting

☐ Not Configured

☒ Enabled

☐ Disabled

Comment:

Supported on:

At least Windows 2000

Options:

Help:

Wallpaper Name:

\\sccm\Sources\wallpaper\wall.jpg

Example: Using a local path:
C:\windows\web\wallpaper\home.jpg

Example: Using a UNC path:
\\Server\Share\Corp.jpg

Wallpaper Style:

Fill

Specifies the desktop background ("wallpaper") displayed on all users' desktops.

This setting lets you specify the wallpaper on users' desktops and prevents users from changing the image or its presentation. The wallpaper you specify can be stored in a bitmap (*.bmp) or JPEG (*.jpg) file.

To use this setting, type the fully qualified path and name of the file that stores the wallpaper image. You can type a local path, such as C:\Windows\web\wallpaper\home.jpg or a UNC path, such as \\Server\Share\Corp.jpg. If the specified file is not available when the user logs on, no wallpaper is displayed. Users cannot specify alternative wallpaper. You can also use this setting to specify that the wallpaper image be centered, tiled, or stretched. Users cannot change this specification.

If you disable this setting or do not configure it, no wallpaper is displayed. However, users can select the wallpaper of their choice.

OK

Cancel

Apply