

Managing a DHCP Server



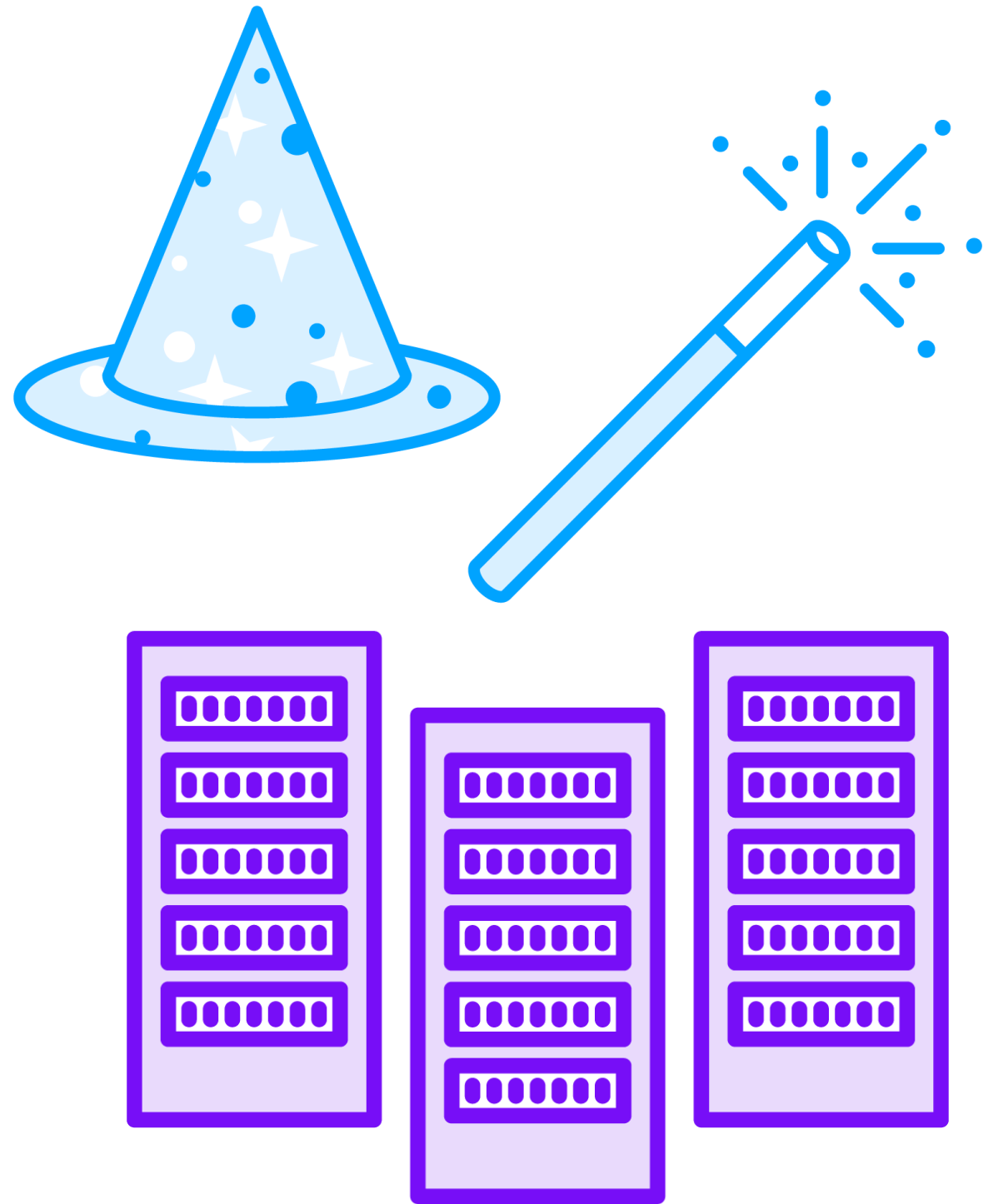
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6x Microsoft MVP

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Benefits of Automating DHCP with PowerShell



Reduced administrative overhead

Automate repetitive tasks

Streamlined multi-server management

Idempotent configuration scripts

Increased efficiency



Demo: Comparing GUI and PowerShell Management



Creating a DHCP scope in the GUI

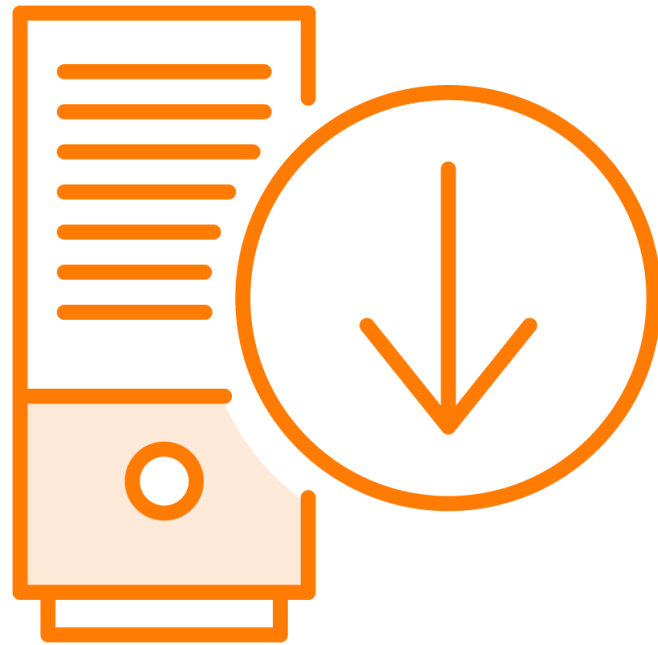
Creating a DHCP scope using PowerShell

Timing both methods for efficiency

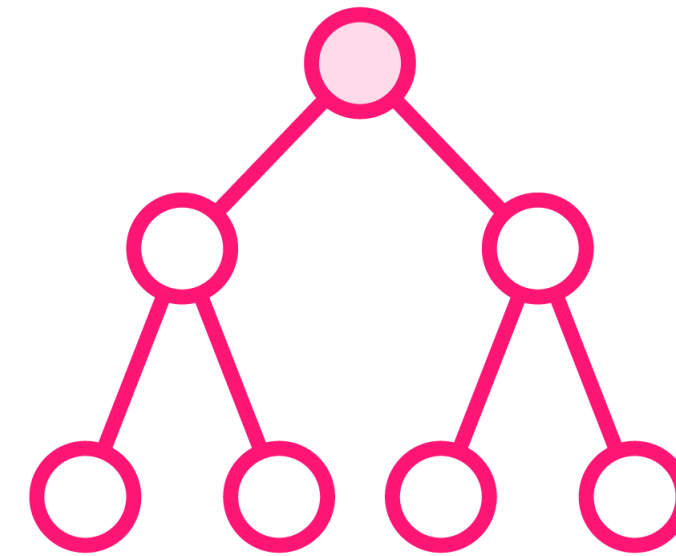
Analyzing the pros and cons



Setting up a New DHCP Server



DHCP Server role



Authorization in AD

Demo: Installing DHCP role via PowerShell



Installing DHCP via PowerShell

Verifying installation

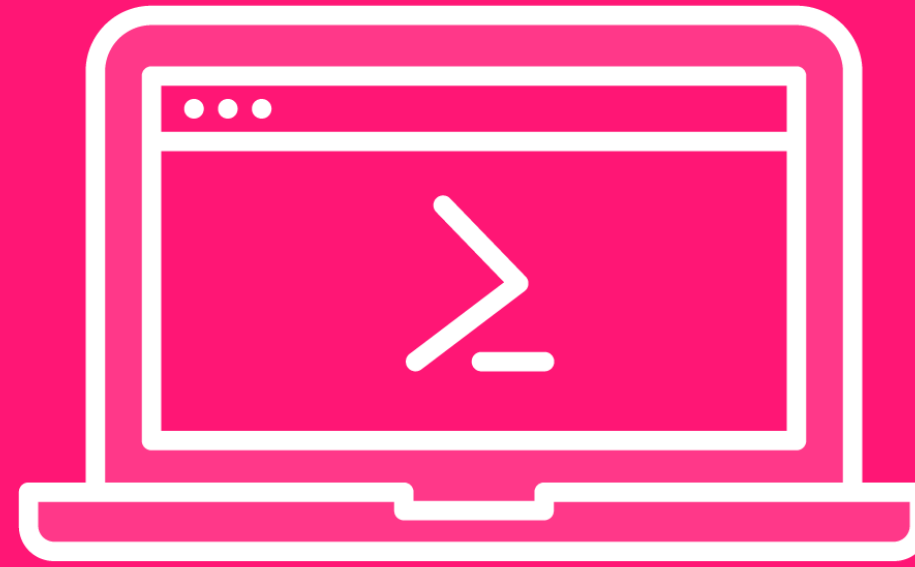


Demo: Authorizing DHCP in Active Directory



Authorizing DHCP in AD
Verifying authorization





Managing DHCP Scopes with PowerShell

Practical benefits
Real-world applications
Efficient management



Demo: Creating and Activating a Scope



Create new scope

Configure exclusions

Activate scope



Demo: Configuring Scope Options



Set router option

Configure DNS servers

Assign default gateway



Managing Leases and Reservations



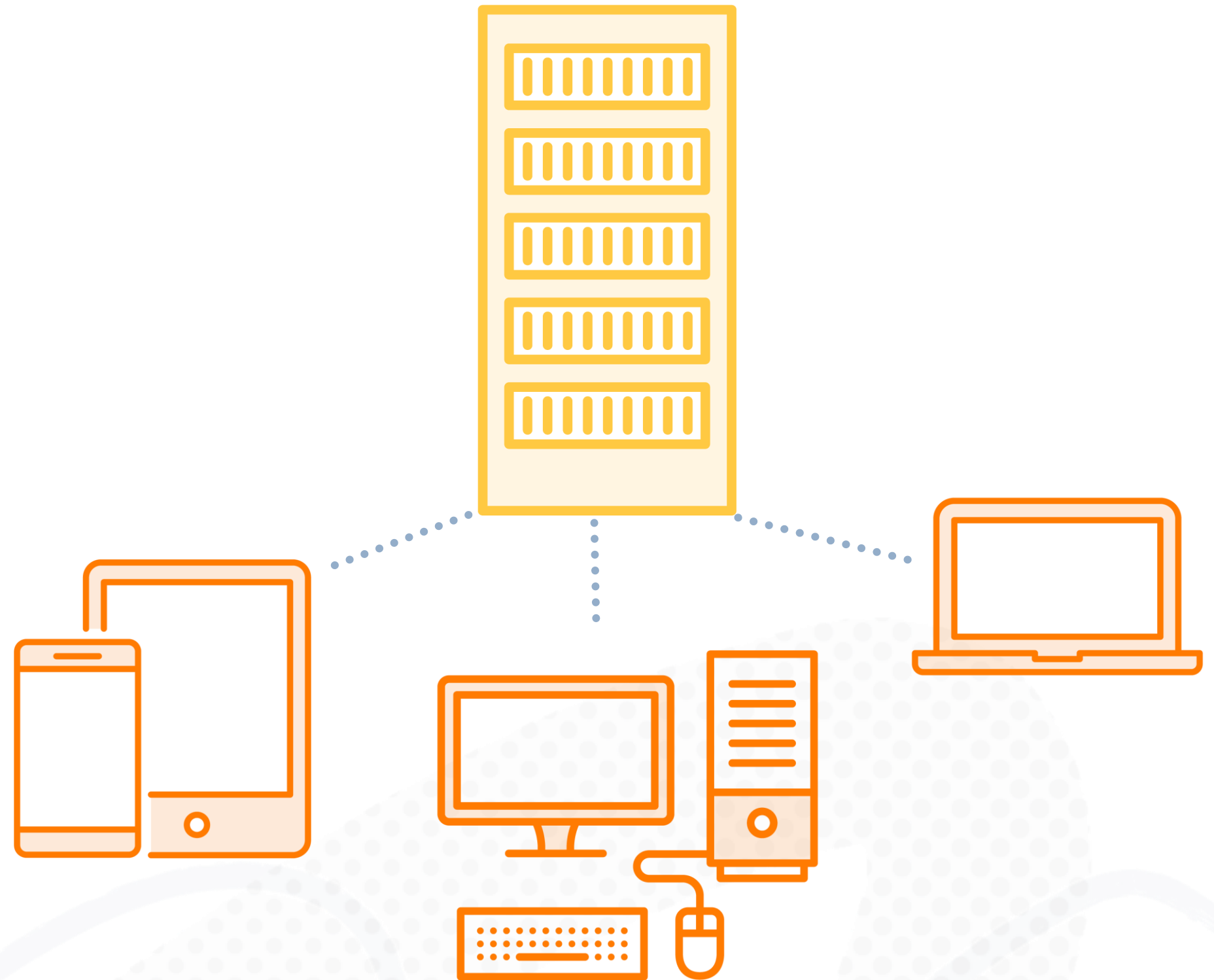
Why manage leases?



Practical use cases



PowerShell's role



Demo: Viewing and Managing Leases

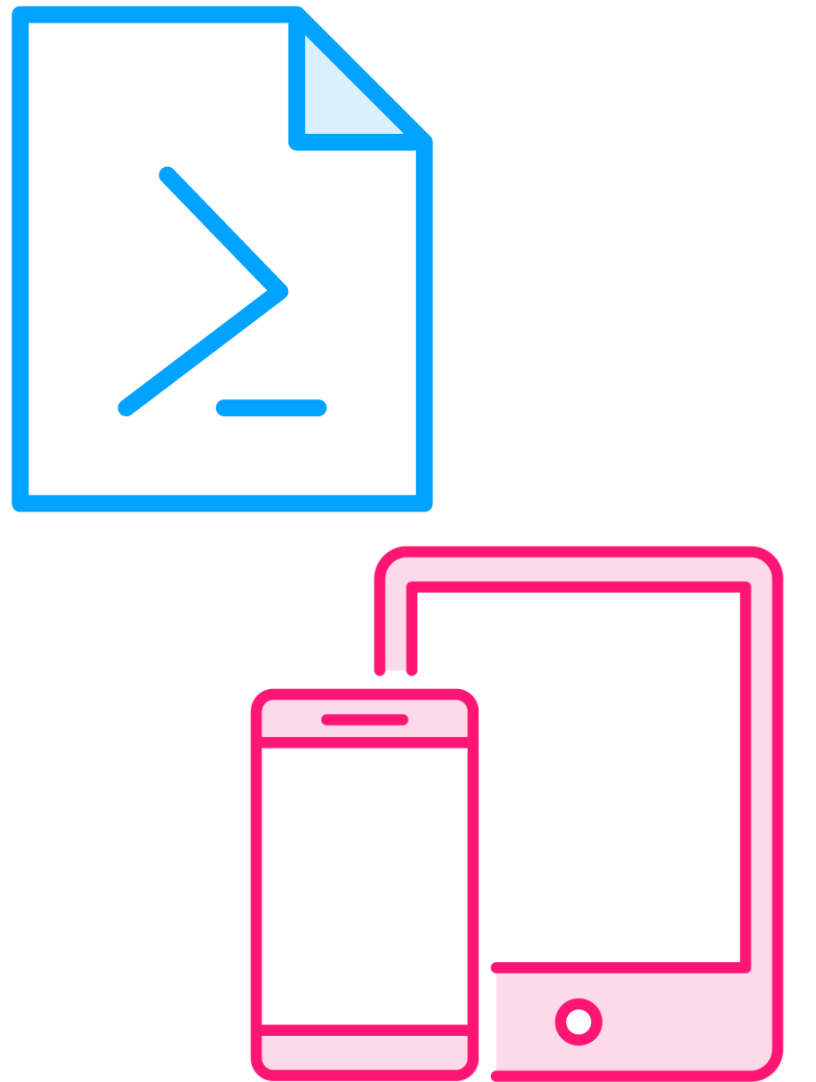


Uncover current lease statuses

Refresh or release leases



Managing DHCP Reservations with PowerShell



Automate static IP assignments

Consistency for critical devices

Real-time reservation management



Demo: Implementing Reservations with PowerShell



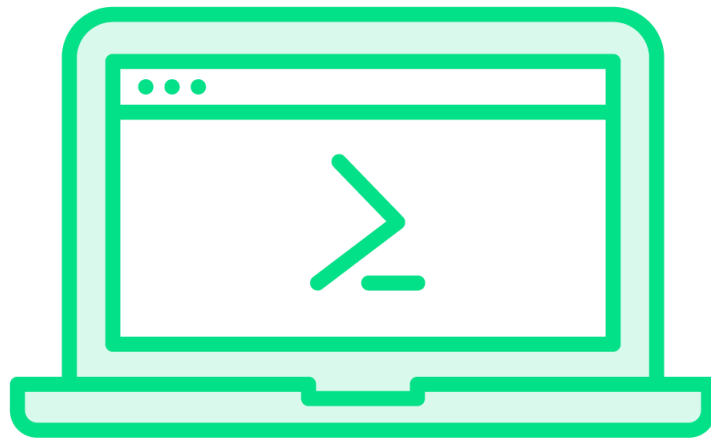
Create reservations

Modify existing ones

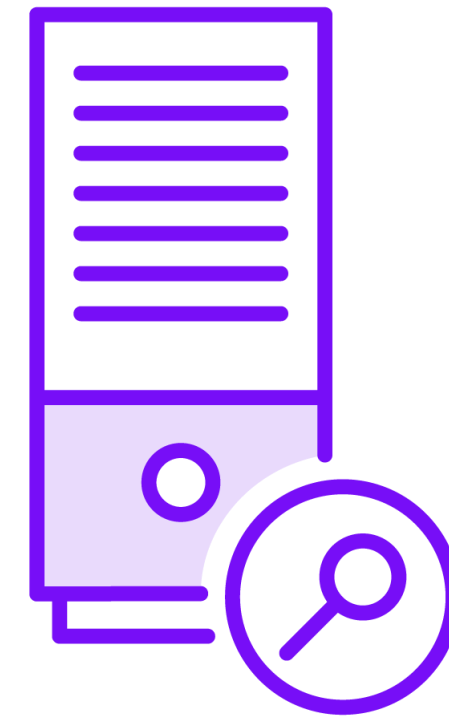
Remove when needed



Mastering DHCP Options with PowerShell



Why PowerShell for DHCP Options?



**Server-level and
Scope-level Options**

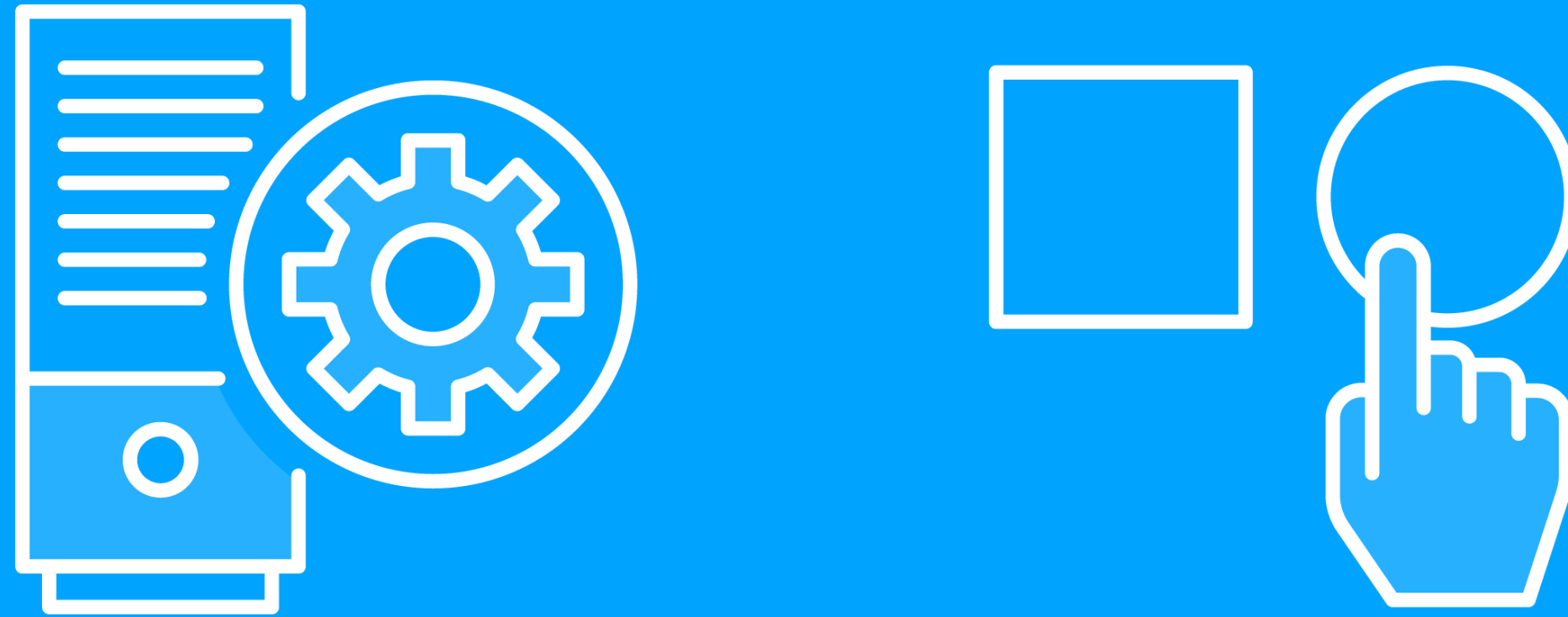


Demo: Configuring Server Options



Configuring DNS and router for clients



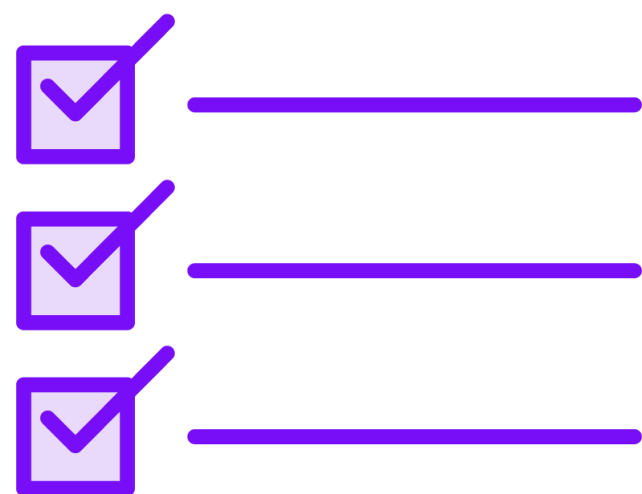


Tailoring Scope Options with PowerShell

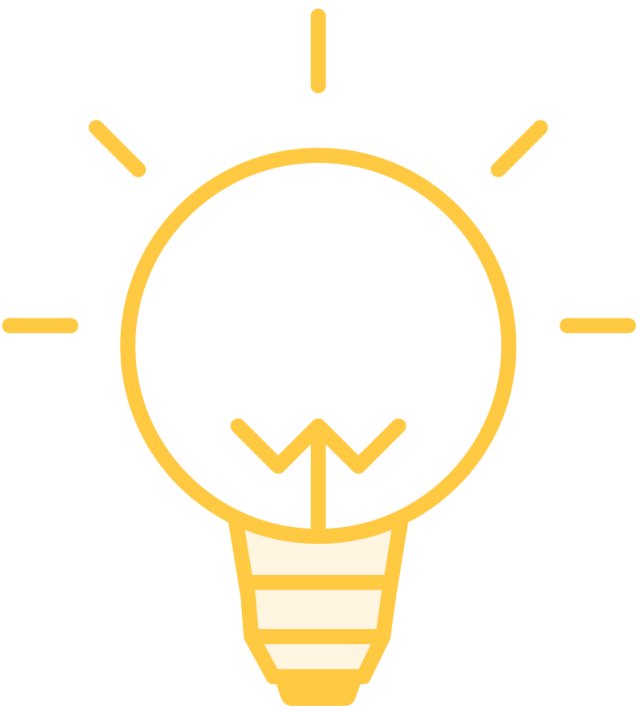
Override Server Options
Custom Settings for
Specific Scopes



Module Recap



What We Covered



What You Can Do Now



Summary: Key PowerShell Tasks



Installing roles

Managing scopes

Reservations

DHCP options

