

Zen Pr Solutions

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# 1 DHCP Configuration

#### 1.1 PHARMAX.LOCAL

The following section provides a summary of the Dynamic Host Configuration Protocol.

#### 1.1.1 DHCP Servers in Domain

The following table summarises the DHCP servers information within PHARMAX.LOCAL.

DC Name	IP Address	Domain Name	Domain Joined	Authorized	Conflict Detection Attempts
cayey-dc-01v	10.10.33.1	pharmax.local	Yes	Yes	0
server-dc-01v	192.168.5.1	pharmax.local	Yes	Yes	1

Table 1 - DHCP Servers in Domain - PHARMAX.LOCAL

#### 1.1.1.1 Service Database

DC Name	File Path	Backup Path	Backup Interval	Logging Enabled
cayey-dc-01v	C:\Windows\system32\dhc p\dhcp.mdb	C:\Windows\system32\dhc p\backup	60 min	Yes
server-dc-01v	C:\Windows\system32\dhc p\dhcp.mdb	C:\Windows\system32\dhc p\backup	60 min	Yes

Table 2 - DHCP Servers Database - PHARMAX.LOCAL

#### 1.1.1.2 Dynamic DNS credentials

DC Name	User Name	Domain Name
cayey-dc-01v	-	-
server-dc-01v	administrator	PHARMAX.LOCAL

Table 3 - DHCP Servers Dynamic DNS Credentials - PHARMAX.LOCAL

#### **Health Check:**

Best Practice: Credentials for DNS update should be configured if secure dynamic DNS update is enabled and the domain controller is on the same host as the DHCP server.

#### 1.1.2 IPv4 Scope Configuration

The following sections detail the configuration of the ipv4 scopes within domain pharmax.local.

# 1.1.2.1 Service Statistics

DC Name	Total Scopes		Addresses In Use	Addresses Available	Percentage In Use	Percentage Available
cayey-dc-01v	0	0	0	0	0	0
server-dc-01v	10	2118	129	1989	6	94

Table 4 - DHCP Server Statistics - PHARMAX.LOCAL

# 1.1.2.2 SERVER-DC-01V Scopes

The following sections detail the configuration of the ipv4 scope within SERVER-DC-01V.

Scope Id	Scope Name	Scope Range	Lease Duration	State
10.10.32.0/24	ESXi-vMotion-DR	10.10.32.10 - 10.10.32.250	8.00:00:00	Active
10.10.33.0/24	ESX-VM- NETWORK-DR	10.10.33.40 - 10.10.33.253	100.00:00:00	Active
10.10.34.0/24	ESXi-ISCSI-BLOCK- A-DR	10.10.34.10 - 10.10.34.253	8.00:00:00	Active
10.10.35.0/24	ESXi-ISCSI-BLOCK- B-DR	10.10.35.10 - 10.10.35.253	8.00:00:00	Active
192.168.10.0/24	ESX-vSAN-NET	192.168.10.10 - 192.168.10.253	8.00:00:00	Active
192.168.12.0/24	ESXi-ISCSI-BLOCK- B	192.168.12.10 - 192.168.12.240	8.00:00:00	Active
192.168.2.0/24	ESXi-vMotion	192.168.2.10 - 192.168.2.253	8.00:00:00	Active
192.168.4.0/24	ESXi-NFS-File	192.168.4.10 - 192.168.4.20	8.00:00:00	Active
192.168.6.0/24	ESXi-ISCSI-BLOCK- A	192.168.6.10 - 192.168.6.240	8.00:00:00	Active
192.168.7.0/24	ESX-VM-NETWORK	192.168.7.40 - 192.168.7.253	8.00:00:00	Active

Table 5 - Scopes - SERVER-DC-01V

## 1.1.2.2.1 Scope Statistics

Scope Id	Free IP	In Use IP	Percentage In Use	Reserved IP
10.10.32.0	241	0	0	0
10.10.33.0	195	19	9	3
10.10.34.0	242	2	1	0
10.10.35.0	242	2	1	0
192.168.10.0	244	0	0	0
192.168.12.0	226	5	2	3
192.168.2.0	244	0	0	0

Scope Id	Free IP	In Use IP	Percentage In Use	Reserved IP
192.168.4.0	11	0	0	0
192.168.6.0	227	4	2	2
192.168.7.0	117	97	45	17

Table 6 - IPv4 Scope Statistics - SERVER-DC-01V

#### 1.1.2.2.2 IPv4 Network Interface Binding

Interface Alias	IP Address	Subnet Mask	State
Ethernet0	192.168.5.1	255.255.255.0	Enabled

Table 7 - Network Interface binding - SERVER-DC-01V

# 1.1.2.3 SERVER-DC-01V Scope Server Options

Name	Option Id	Value	Policy Name
Time Server	4	192.168.5.1	-
Name Servers	5	192.168.5.1	-
DNS Servers	6	192.168.5.1	-
NTP Servers	42	192.168.5.1	-
Simple Mail Transport Protocol (SMTP)	69	192.168.7.21	-
Servers			
Post Office Protocol (POP3) Servers	70	192.168.7.21	-
	81	55	-

Table 8 - Scopes Server Options - SERVER-DC-01V

# 1.1.2.3.1 Scope DNS Setting

The following table summarises the dhcp server ipv4 scope dns setting.

Dynamic Updates	Always
Dns Suffix	-
Name Protection	Yes
Update Dns RR For Older Clients	Yes
Disable Dns Ptr RR Update	No
Delete Dns RR On Lease Expiry	Yes

Table 9 - Scopes DNS Setting - server-dc-01v

# 1.1.2.4 Scope Options

The following sections detail the configuration of the ipv4 per scope server option.

#### 10.10.32.0

Name	Option Id	Value	Policy Name
Router	3	10.10.32.254	-
DNS Domain Name	15	pharmax.local	-
Lease	51	691200	-

Table 10 - Scopes Options - 10.10.32.0

#### 10.10.33.0

Name	Option Id	Value	Policy Name
Router	3	10.10.33.254	-
Lease	51	8640000	-
Boot Server Host Name	66	192.168.5.2	-
Bootfile Name	snponly64.efi.vmw		-
		hardwired	
	81	23	-

Table 11 - Scopes Options - 10.10.33.0

#### 10.10.34.0

Name	Option Id	Value	Policy Name
DNS Servers	6	192.168.5.1	-
		192.168.5.1	
DNS Domain Name	15	pharmax.local	-
Lease	51	691200	-

*Table 12 - Scopes Options - 10.10.34.0* 

#### 10.10.35.0

Name	Option Id	Value	Policy Name
DNS Servers	6	192.168.5.1	-
		192.168.5.1	
DNS Domain Name	15	pharmax.local	-
Lease	51	691200	-

*Table 13 - Scopes Options - 10.10.35.0* 

#### 192.168.2.0

Name	Option Id	Value	Policy Name
Router	3	192.168.2.254	-
DNS Domain Name	15	pharmax.local	-

Name	Option Id	Value	Policy Name
Lease	51	691200	-

Table 14 - Scopes Options - 192.168.2.0

#### 192.168.4.0

Name	Option Id	Value	Policy Name
Router	3	192.168.4.254	-
DNS Domain Name	15	pharmax.local	-
Lease	51	691200	-

Table 15 - Scopes Options - 192.168.4.0

#### 192.168.6.0

Name	Option Id	Value	Policy Name
DNS Domain Name	15	pharmax.local	-
Lease	51	691200	-

Table 16 - Scopes Options - 192.168.6.0

#### 192.168.7.0

Name	Option Id	Value	Policy Name
Router	3	192.168.7.254	-
DNS Domain Name	15	pharmax.local	-
Lease	51	691200	-
Boot Server Host Name	66	192.168.5.2	-
Bootfile Name	67	snponly64.efi.vmw-	-
		hardwired	
	81	23	-

Table 17 - Scopes Options - 192.168.7.0

#### 192.168.10.0

Name	Option Id	Value	Policy Name
Router	3	192.168.10.254	-
DNS Servers	6	192.168.5.1	-
		192.168.5.1	
DNS Domain Name	15	pharmax.local	-
Lease	51	691200	-

Table 18 - Scopes Options - 192.168.10.0

#### 192.168.12.0

Name	Option Id	Value	Policy Name
DNS Domain Name	15	pharmax.local	-
Lease	51	691200	-

Table 19 - Scopes Options - 192.168.12.0

# 1.1.3 IPv6 Scope Configuration

The following section provides a IPv6 configuration summary of the Dynamic Host Configuration Protocol.

#### 1.1.3.1 Service Statistics

DC Name	Total Scopes		Addresses In Use	Addresses Available		Percentage Available
cayey-dc-01v	0	0	0	0	0	0
server-dc-01v	0	0	0	0	0	0

Table 20 - DHCP Server Statistics - PHARMAX.LOCAL

#### 1.2 ACAD.PHARMAX.LOCAL

The following section provides a summary of the Dynamic Host Configuration Protocol.

#### 1.2.1 DHCP Servers in Domain

The following table summarises the DHCP servers information within ACAD.PHARMAX.LOCAL.

DC Name	IP Address	Domain Name	Domain Joined	Authorized	Conflict Detection Attempts
acad-dhcp-01v	172.23.4.21	acad.pharmax.local	Yes	Yes	0
acade-dc-01v	172.23.4.1	acad.pharmax.local	Yes	No	0

Table 21 - DHCP Servers in Domain - ACAD.PHARMAX.LOCAL

#### 1.2.1.1 Service Database

DC Name	File Path	Backup Path	Backup Interval	Logging Enabled
acad-dhcp-01v	C:\Windows\system32\dhc p\dhcp.mdb	C:\Windows\system32\dhc p\backup	60 min	Yes
acade-dc-01v	C:\Windows\system32\dhc p\dhcp.mdb	C:\Windows\system32\dhc p\backup	60 min	Yes

#### Table 22 - DHCP Servers Database - ACAD.PHARMAX.LOCAL

#### 1.2.1.2 Dynamic DNS credentials

DC Name	User Name	Domain Name
acad-dhcp-01v	-	-
acade-dc-01v	-	-

Table 23 - DHCP Servers Dynamic DNS Credentials - ACAD.PHARMAX.LOCAL

#### **Health Check:**

Best Practice: Credentials for DNS update should be configured if secure dynamic DNS update is enabled and the domain controller is on the same host as the DHCP server.

### 1.2.2 IPv4 Scope Configuration

The following sections detail the configuration of the ipv4 scopes within domain acad.pharmax.local.

#### 1.2.2.1 Service Statistics

DC Name	Total Scopes	Total Addresses	Addresses In Use	Addresses Available	Percentage In Use	Percentage Available
acad-dhcp-01v	1	244	0	244	0	100
acade-dc-01v	2	467	0	467	0	100

Table 24 - DHCP Server Statistics - ACAD.PHARMAX.LOCAL

#### 1.2.2.2 ACAD-DHCP-01V Scopes

The following sections detail the configuration of the ipv4 scope within ACAD-DHCP-01V.

Scope Id	Scope Name	Scope Range	Lease Duration	State
172.23.8.0/24	DATA	172.23.8.10 - 172.23.8.253	8.00:00:00	Active

Table 25 - Scopes - ACAD-DHCP-01V

#### 1.2.2.2.1 Scope Statistics

Scope Id	Free IP	In Use IP	Percentage In Use	Reserved IP
172.23.8.0	244	0	0	0

Table 26 - IPv4 Scope Statistics - ACAD-DHCP-01V

#### 1.2.2.2.2 IPv4 Network Interface Binding

Interface Alias	IP Address	Subnet Mask	State
Ethernet0	172.23.4.21	255.255.255.0	Enabled

Table 27 - Network Interface binding - ACAD-DHCP-01V

#### 1.2.2.3 Scope Options

The following sections detail the configuration of the ipv4 per scope server option.

#### 172.23.8.0

Name	Option Id	Value	Policy Name
Router	3	172.23.8.254	-
DNS Servers	6	172.23.4.1 192.168.5.1	-
DNS Domain Name	15	acad.pharmax.local	-
Lease	51	691200	-

Table 28 - Scopes Options - 172.23.8.0

#### 1.2.2.4 ACADE-DC-01V Scopes

The following sections detail the configuration of the ipv4 scope within ACADE-DC-01V.

Scope Id	Scope Name	Scope Range	Lease Duration	State
172.23.4.0/24	Dept-A Clients	172.23.4.20 - 172.23.4.253	8.00:00:00	Active
172.23.5.0/24	Dept-B Clients	172.23.5.10 - 172.23.5.253	1.00:00:00	Active

Table 29 - Scopes - ACADE-DC-01V

#### 1.2.2.4.1 Scope Statistics

Scope Id	Free IP	In Use IP	Percentage In Use	Reserved IP
172.23.4.0	234	0	0	0
172.23.5.0	233	0	0	0

Table 30 - IPv4 Scope Statistics - ACADE-DC-01V

#### 1.2.2.4.2 IPv4 Network Interface Binding

Interface Alias	IP Address	Subnet Mask	State
Ethernet0	172.23.4.1	255.255.255.0	Enabled

*Table 31 - Network Interface binding - ACADE-DC-01V* 

#### 1.2.2.5 ACADE-DC-01V Scope Server Options

Name	Option Id	Value	Policy Name
DNS Servers	6	172.23.4.1	-
		192.168.5.1	
		10.10.33.1	
DNS Domain Name	15	acad.pharmax.local	-

Table 32 - Scopes Server Options - ACADE-DC-01V

#### 1.2.2.5.1 Scope DNS Setting

The following table summarises the dhcp server ipv4 scope dns setting.

Dynamic Updates	OnClientRequest
Dns Suffix	-
Name Protection	No
Update Dns RR For Older Clients	No
Disable Dns Ptr RR Update	No
Delete Dns RR On Lease Expiry	Yes

Table 33 - Scopes DNS Setting - acade-dc-01v

#### **Health Check:**

Best Practice: 'Always dynamically update dns records' should be configured if secure dynamic DNS update is enabled and the domain controller is on the same host as the DHCP server.

#### 1.2.2.6 Scope Options

The following sections detail the configuration of the ipv4 per scope server option.

#### 172.23.4.0

Name	Option Id	Value	Policy Name
Router	3	172.23.4.254	-
DNS Servers	6	172.23.4.1	-
		10.10.33.1	
		192.168.5.1	
DNS Domain Name	15	acad.pharmax.local	-
Lease	51	691200	-

Table 34 - Scopes Options - 172.23.4.0

#### 172.23.5.0

Name	Option Id	Value	Policy Name
Router	3	172.23.5.254	-
Lease	51	86400	-

Table 35 - Scopes Options - 172.23.5.0

# 1.2.3 IPv6 Scope Configuration

The following section provides a IPv6 configuration summary of the Dynamic Host Configuration Protocol.

#### 1.2.3.1 Service Statistics

DC Name	Total Scopes		Addresses In Use	Addresses Available	Percentage In Use	Percentage Available
acad-dhcp-01v	0	0	0	0	0	0
acade-dc-01v	1	1844674407	0	1844674407	0	100
		3709551614		3709551614		

Table 36 - DHCP Server Statistics - ACAD.PHARMAX.LOCAL

#### 1.2.3.2 ACADE-DC-01V Scopes

The following sections detail the configuration of the ipv4 scope within ACADE-DC-01V.

Scope Id	Scope Name	Lease Duration	State
fd99:9971::/64	Dept-C Clients	8.00:00:00	Active

Table 37 - Scopes - ACADE-DC-01V

#### 1.2.3.2.1 Scope Statistics

Scope Id	Free IP	In Use IP	Percentage In Use	Reserved IP
fd99:9971::	1844674407370955	0	0	0
	1614			

Table 38 - Scope Statistics - ACADE-DC-01V

#### 1.2.3.3 ACADE-DC-01V Scope Server Options

The following table summarises the dhcp server ipv4 scope dns setting.

Name	Option Id	Type	Value
Domain Search List	24	String	fd99:9971::1

Table 39 - Scopes Server Options - ACADE-DC-01V

# 1.2.3.3.1 Scope DNS Settings

Dynamic Updates	OnClientRequest
Name Protection	No
Delete Dns RR On Lease Expiry	Yes

Table 40 - Scopes DNS Setting - acade-dc-01v

## 1.2.3.4 Scope Options

The following section provides a summary 6 Scope Server Options information.

#### fd99:9971::

Name	Option Id	Туре	Value
DNS Recursive Name Server IPv6	23	IPv6Address	fd99:9971::1
Address List			

Table 41 - Scopes Options - fd99:9971::