

**Windows Server 2016**

**Practical Assignment**

**Part B**

**DHCP Options, DNS, and GPO**

**Version 1.0 (April 16, 2020)**

Kevin and Terry, senior partners of Smith and Greening Widget Company, are unhappy with the work done by the IT consulting company that they contracted to do some work for them. The consulting company, Then They Were Gone (TTWG) Consultants, started several of the work items they were hired for, but did not complete any of them. Fortunately, you have been now been hired on and can complete the work that TTWG was unable to.

One task was to setup a centralized DHCP server. They did start the work by creating the DHCP scopes for all the branch offices. However, they failed to set some options such as DNS server and DNS domain name. They were also asked to create DHCP reservations for the security cameras in each of the offices, as Kevin and Terry wanted to standardize on a specific address for the cameras in the offices. **You will need to set the DHCP options, and create the reservation for the office that you are responsible for.** The details are described in the following pages. For assistance, you can consult the document entitled “CNA PPD – Windows Server 2016 – Practical Assignment – Appendix B – DHCP Configuration.pdf.”

TTWG was also hired to create a website for each branch office. Like the other tasks, they started to create the websites. It was another disappointment. Not only did they not even create an “Under Construction” page for each office, they failed to create the DNS entries that were requested of them for each office. **You will set up a DNS entry to point to the web server which they did manage to get up and running, so when the web server is fully up and running, the site will be visible.** The details are also described in the following pages. For assistance, you can consult the document entitled “CNA PPD – Windows Server 2016 – Practical Assignment – Appendix C – DNS Configuration.pdf.”

The final task that you will need to complete is to create a Group Policy Object and link it to the OU for your office. Details are at the end of this document.

First, the DHCP Configuration details:

For each scope, you will need to set the DNS Server to the private address for dc01.smithgreening.net server (172.31.18.152), and the DNS domain name to smithgreening.net.

You will also need to create the DHCP reservation for the security camera in your office. Kevin and Terry have provided the table below which lists the MAC address and corresponding IP address that they wish assigned.

Office	Security MAC	Security IP
Corner Brook	3C2AF41CB441	192.168.1.151
Mount Pearl	3C2AF41BB442	192.168.2.151
Anchor Point	3C2AF41CB443	192.168.3.151
Badger	3C2AF422B444	192.168.4.151
Bay Bulls	3C2AF41CB445	192.168.5.151
Bay Roberts	3C2AF420B446	192.168.6.151
Botwood	3C2AF41CB447	192.168.7.151
Clarenville	3C2AF41EB448	192.168.8.151
Colinet	3C2AF424B449	192.168.9.151

Elliston	3C2AF41FB44A	192.168.10.151
Eastport	3C2AF41DB44B	192.168.11.151
Fermeuse	3C2AF41BB44C	192.168.12.151
Ferryland	3C2AF41CB44D	192.168.13.151
Cow Head	3C2AF41FB44E	192.168.14.151
Fortune	3C2AF41DB44F	192.168.15.151
Duntara	3C2AF41CB450	192.168.16.151
Flatrock	3C2AF419B451	192.168.17.151
Fogo Island	3C2AF41EB452	192.168.18.151
Gambo	3C2AF41EB453	192.168.19.151
Gander	3C2AF41DB454	192.168.20.151
Gaultois	3C2AF41BB455	192.168.21.151
Garnish	3C2AF41EB456	192.168.22.151
Glenwood	3C2AF41DB457	192.168.23.151
Fox Harbour	3C2AF420B458	192.168.24.151
Glovertown	3C2AF41EB459	192.168.25.151
Grand Bank	3C2AF41AB45A	192.168.26.151
Hampden	3C2AF420B45B	192.168.27.151
Happy Adventure	3C2AF41DB45C	192.168.28.151
Harbour Breton	3C2AF41BB45D	192.168.29.151
Harbour Grace	3C2AF41DB45E	192.168.30.151
Hare Bay	3C2AF41DB45F	192.168.31.151
Holyrood	3C2AF41DB460	192.168.32.151
Keels	3C2AF420B461	192.168.33.151
Kippens	3C2AF41FB462	192.168.34.151
Labrador City	3C2AF421B463	192.168.35.151
King's Cove	3C2AF41FB464	192.168.36.151
Lamaline	3C2AF41CB465	192.168.37.151
Lark Harbour	3C2AF424B466	192.168.38.151
Lawn	3C2AF41FB467	192.168.39.151
Leading Ticks	3C2AF41BB468	192.168.40.151
Little Bay Islands	3C2AF41CB469	192.168.41.151
Lumsden	3C2AF41DB46A	192.168.42.151
Lourdes	3C2AF41CB46B	192.168.43.151
Main Brook	3C2AF41EB46C	192.168.44.151
Marystown	3C2AF41CB46D	192.168.45.151
Middle Arm	3C2AF41EB46E	192.168.46.151
Millertown	3C2AF41CB46F	192.168.47.151
Mount Moriah	3C2AF41DB470	192.168.48.151
Musgravetown	3C2AF41EB471	192.168.49.151
New Perlican	3C2AF41CB472	192.168.50.151

North West River	3C2AF420B473	192.168.51.151
Old Perlican	3C2AF422B474	192.168.52.151
Paradise	3C2AF41BB475	192.168.53.151
Pasadena	3C2AF41AB476	192.168.54.151
Placentia	3C2AF41CB477	192.168.55.151
Point Leamington	3C2AF41CB478	192.168.56.151
Port au Choix	3C2AF41DB479	192.168.57.151
Port Blandford	3C2AF41BB47A	192.168.58.151
Port Rexton	3C2AF41EB47B	192.168.59.151
Port Saunders	3C2AF41EB47C	192.168.60.151
Portugal Cove	3C2AF419B47D	192.168.61.151
Pouch Cove	3C2AF41AB47E	192.168.62.151
Red Bay	3C2AF41BB47F	192.168.63.151
Riverhead	3C2AF41BB480	192.168.64.151
Salmon Cove	3C2AF41BB481	192.168.65.151
Sandy Cove	3C2AF410B482	192.168.66.151
Stephenville	3C2AF410B483	192.168.67.151
Terra Nova	3C2AF410B484	192.168.68.151

For the DNS configuration you need to perform 2 tasks:

1. You need to create a CNAME record with your office name for the subdomain office.smithgreening.net to point to the web server, *web1.smithgreening.net*. For example, for Terra Nova there would be an entry terranova.office.smithgreening.net which will be an alias (CNAME) for web1.smithgreening.net

Some communities have special characters and spaces which would not work properly in DNS, so please refer to the chart below for the CNAME entry you need to create and which subdomain to use.

Office	CNAME entry
Corner Brook	cornerbrook.office.smithgreening.net
Mount Pearl	mountpearl.office.smithgreening.net
Anchor Point	anchorpoint.office.smithgreening.net
Badger	badger.office.smithgreening.net
Bay Bulls	baybulls.office.smithgreening.net
Bay Roberts	bayroberts.office.smithgreening.net
Botwood	botwood.office.smithgreening.net
Clarenville	clarenville.office.smithgreening.net
Colinet	colinet.office.smithgreening.net
Elliston	elliston.office.smithgreening.net
Eastport	eastport.office.smithgreening.net
Fermeuse	fermeuse.office.smithgreening.net

Ferryland	ferryland.office.smithgreening.net
Cow Head	cowhead.office.smithgreening.net
Fortune	fortune.office.smithgreening.net
Duntara	duntara.office.smithgreening.net
Flatrock	flatrock.office.smithgreening.net
Fogo Island	fogoisland.office.smithgreening.net
Gambo	gambo.office.smithgreening.net
Gander	gander.office.smithgreening.net
Gaultois	gaultois.office.smithgreening.net
Garnish	garnish.office.smithgreening.net
Glenwood	glenwood.office.smithgreening.net
Fox Harbour	foxharbour.office.smithgreening.net
Glovertown	glovertown.office.smithgreening.net
Grand Bank	grandbank.office.smithgreening.net
Hampden	hampden.office.smithgreening.net
Happy Adventure	happyadventure.office.smithgreening.net
Harbour Breton	harbourbreton.office.smithgreening.net
Harbour Grace	harbourgrace.office.smithgreening.net
Hare Bay	harebay.office.smithgreening.net
Holyrood	holyrood.office.smithgreening.net
Keels	keels.office.smithgreening.net
Kippens	kippens.office.smithgreening.net
Labrador City	labradorcity.office.smithgreening.net
King's Cove	kingscove.office.smithgreening.net
Lamaline	lamaline.office.smithgreening.net
Lark Harbour	larkharbour.office.smithgreening.net
Lawn	lawn.office.smithgreening.net
Leading Tickles	leadingtickles.office.smithgreening.net
Little Bay Islands	littlebayislands.office.smithgreening.net
Lumsden	lumsden.office.smithgreening.net
Lourdes	lourdes.office.smithgreening.net
Main Brook	mainbrook.office.smithgreening.net
Marystown	marystown.office.smithgreening.net
Middle Arm	middlearm.office.smithgreening.net
Millertown	millertown.office.smithgreening.net
Mount Moriah	mountmoriah.office.smithgreening.net
Musgravetown	musgravetown.office.smithgreening.net
New Perlican	newperlican.office.smithgreening.net
North West River	northwestriver.office.smithgreening.net

Old Perlican	oldperlican.office.smithgreening.net
Paradise	paradise.office.smithgreening.net
Pasadena	pasadena.office.smithgreening.net
Placentia	placentia.office.smithgreening.net
Point Leamington	pointleamington.office.smithgreening.net
Port au Choix	portauchoix.office.smithgreening.net
Port Blandford	portblandford.office.smithgreening.net
Port Rexton	portrexton.office.smithgreening.net
Port Saunders	portsaunders.office.smithgreening.net
Portugal Cove	portugalcove.office.smithgreening.net
Pouch Cove	pouchcove.office.smithgreening.net
Red Bay	redbay.office.smithgreening.net
Riverhead	riverhead.office.smithgreening.net
Salmon Cove	salmoncove.office.smithgreening.net
Sandy Cove	sandycove.office.smithgreening.net
Stephenville	stephenville.office.smithgreening.net
Terra Nova	terranova.office.smithgreening.net

2. You need to create an A record to point to the security camera in your office. The name of the A record will be community-securitycam.office.smithgreening.net, and point to the IP address for the security camera, which is specified above. For more assistance, you can consult the document "CNA PPD – Windows Server 2016 – Practical Assignment – Appendix C – DNS Configuration.pdf.

#### Group Policy Object Details

**You will create a Group Policy Object called YourCommunity Group Profile, and link it to your community OU.** From Server Manager, use the Tools menu and choose Group Policy Management. Then you will navigate to the OU for your office, right click on it, and choose the option Create a GPO in this domain and link it here. The GPO must do the following:

- Prohibit access to Control Panel and PC Settings.
- Remove Run menu from Start Menu.
- Deny all access to all removable storage devices.

That completes Part B of the Windows Server 2016, which is the final part. You are finished!