CTS-301

BIG-IP LTM

Virtual Server

HTTP

Step by Step Configuration Guide

Intellectual Property

Table of Contents

1. Version Control

Version	Date	Notes	Created By	Release
1.0	09/03/2019	Student Workbook for LAB	Mazhar Minhas	Draft
1.1	19/05/2019	Topology update	Mazhar Minhas	Initial Release
1.2	08/05/2020	Diagram and document redesign and Formatting	Farooq Zafar	Final Release

2. Reference Document

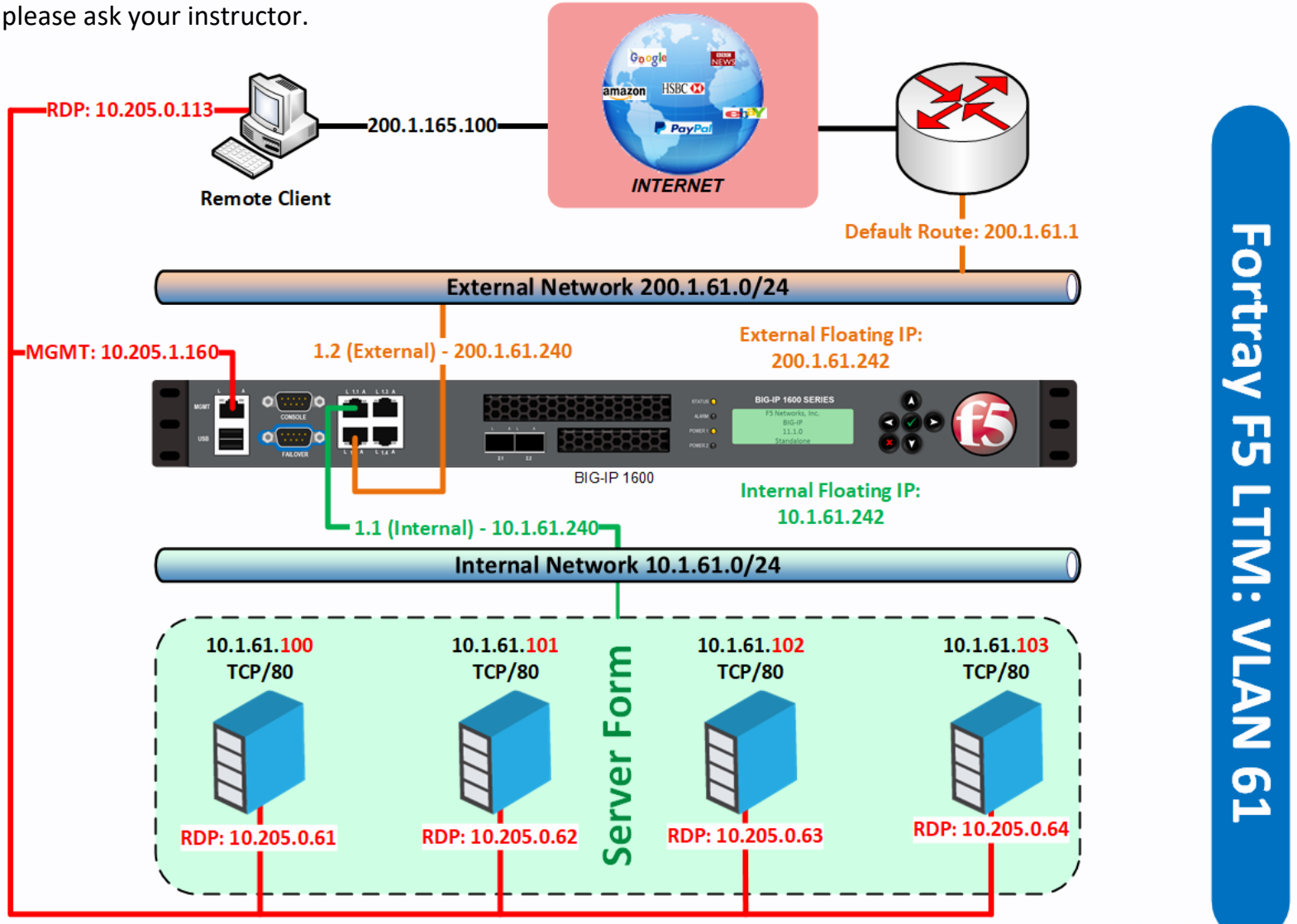
Click for the Reference document

3. Assumption

- ✓ We understand that delegate already understand L2/L3, Routing.
- ✓ The delegate already knows the "***Fortray Networks – Checkpoint Firewall"*** physical and logical connection.
- ✓ The delegate already has basis Troubleshooting skill, such as ping and trace.
- ✓ The delegate already has access to the "***Fortray Networks – Checkpoint Firewall"*** *Spreadsheet encompassing the Basic Layer, 2, 3 and allocated subnet information. For more details refer to the "****Student Folder".***
- ✓ This document is created to show an example for one topology only. The candidate needs to refer to his own topology and follow this step by step guide.
- ✓ We assume that delegate already have installed the VPN software and him/she have VPN user / Password. If any issue, contact our Technical team.
- ✓ Our VPN software is supported by PC, MAC, Android, and IOS devices.
- ✓ It's also assumed that delegate has access to PC/Laptop i5 with 4GB RAM.
- ✓ For optimal connectivity, we recommend at least 10MB Internet connection.
- ✓ We assume that we already have INTERNAL, DMZ, OUTISE interfaces are already configured.

4. Network Topology

The below network topology is just for information purpose only. Please refer to your student folder and your designated topology. If any doubt, please ask your instructor.



5. F5 BIG-IP Task: Creating HTTP Virtual Server

Our company's website is going slow so management decided to add three web servers and asked network team to distribute load to existing four web servers.

We already created server pool, now we will create Virtual Server. The reference spreadsheet is:

No	HTTP VIP		FTP VIP		HTTPS VIP		SMTP VIP		iRule VIP		SNAT IP Address Range		External Test PC	User name	Test PC
	IP Address	FQDN	IP Address	FQDN	IP Address	FQDN	IP Address	FQDN	IP Address	FQDN	First IP	Last IP			
1	200.1.61.100	http100.fortray.com	200.1.61.101	ftp101.fortray.com	200.1.61.102	ssl102.fortray.com	200.1.61.103	smtp103.fortray.com	200.1.61.168	irule168.fortray.com	10.1.61.111	10.1.61.113	10.205.0.113	user1	Cisco@123
2	200.1.61.104	http104.fortray.com	200.1.61.105	ftp105.fortray.com	200.1.61.106	ssl106.fortray.com	200.1.61.107	smtp107.fortray.com	200.1.61.169	irule169.fortray.com	10.1.61.114	10.1.61.116	10.205.0.113	user2	Cisco@123
3	200.1.61.108	http108.fortray.com	200.1.61.109	ftp109.fortray.com	200.1.61.110	ssl110.fortray.com	200.1.61.111	smtp111.fortray.com	200.1.61.170	irule170.fortray.com	10.1.61.117	10.1.61.119	10.205.0.113	user3	Cisco@123
4	200.1.61.112	http112.fortray.com	200.1.61.113	ftp113.fortray.com	200.1.61.114	ssl114.fortray.com	200.1.61.115	smtp115.fortray.com	200.1.61.171	irule171.fortray.com	10.1.61.120	10.1.61.122	10.205.0.113	user4	Cisco@123
5	200.1.61.116	http116.fortray.com	200.1.61.117	ftp117.fortray.com	200.1.61.118	ssl118.fortray.com	200.1.61.119	smtp119.fortray.com	200.1.61.172	irule172.fortray.com	10.1.61.123	10.1.61.125	10.205.0.113	user5	Cisco@123
6	200.1.61.120	http120.fortray.com	200.1.61.121	ftp121.fortray.com	200.1.61.122	ssl122.fortray.com	200.1.61.123	smtp123.fortray.com	200.1.61.173	irule173.fortray.com	10.1.61.126	10.1.61.128	10.205.0.113	user6	Cisco@123
7	200.1.61.124	http124.fortray.com	200.1.61.125	ftp125.fortray.com	200.1.61.126	ssl126.fortray.com	200.1.61.127	smtp127.fortray.com	200.1.61.174	irule174.fortray.com	10.1.61.129	10.1.61.131	10.205.0.113	user7	Cisco@123
8	200.1.61.128	http128.fortray.com	200.1.61.129	ftp129.fortray.com	200.1.61.130	ssl130.fortray.com	200.1.61.131	smtp131.fortray.com	200.1.61.175	irule175.fortray.com	10.1.61.132	10.1.61.134	10.205.0.113	user8	Cisco@123
9	200.1.61.132	http132.fortray.com	200.1.61.133	ftp133.fortray.com	200.1.61.134	ssl134.fortray.com	200.1.61.135	smtp135.fortray.com	200.1.61.176	irule176.fortray.com	10.1.61.135	10.1.61.137	10.205.0.113	user9	Cisco@123
10	200.1.61.136	http136.fortray.com	200.1.61.137	ftp137.fortray.com	200.1.61.138	ssl138.fortray.com	200.1.61.139	smtp139.fortray.com	200.1.61.177	irule177.fortray.com	10.1.61.138	10.1.61.140	10.205.0.113	user10	Cisco@123
11	200.1.61.140	http140.fortray.com	200.1.61.141	ftp141.fortray.com	200.1.61.142	ssl142.fortray.com	200.1.61.143	smtp143.fortray.com	200.1.61.178	irule178.fortray.com	10.1.61.141	10.1.61.143	10.205.0.113	user11	Cisco@123
12	200.1.61.144	http144.fortray.com	200.1.61.145	ftp145.fortray.com	200.1.61.146	ssl146.fortray.com	200.1.61.147	smtp147.fortray.com	200.1.61.179	irule179.fortray.com	10.1.61.144	10.1.61.146	10.205.0.113	user12	Cisco@123
13	200.1.61.148	http148.fortray.com	200.1.61.149	ftp149.fortray.com	200.1.61.150	ssl150.fortray.com	200.1.61.151	smtp151.fortray.com	200.1.61.180	irule180.fortray.com	10.1.61.147	10.1.61.149	10.205.0.113	user13	Cisco@123
14	200.1.61.152	http152.fortray.com	200.1.61.153	ftp153.fortray.com	200.1.61.154	ssl154.fortray.com	200.1.61.155	smtp155.fortray.com	200.1.61.181	irule181.fortray.com	10.1.61.150	10.1.61.152	10.205.0.113	user14	Cisco@123
15	200.1.61.156	http156.fortray.com	200.1.61.157	ftp157.fortray.com	200.1.61.158	ssl158.fortray.com	200.1.61.159	smtp159.fortray.com	200.1.61.182	irule182.fortray.com	10.1.61.153	10.1.61.155	10.205.0.113	user15	Cisco@123
16	200.1.61.160	http160.fortray.com	200.1.61.161	ftp161.fortray.com	200.1.61.162	ssl162.fortray.com	200.1.61.163	smtp163.fortray.com	200.1.61.183	irule183.fortray.com	10.1.61.156	10.1.61.158	10.205.0.113	user16	Cisco@123
17	200.1.61.164	http164.fortray.com	200.1.61.165	ftp165.fortray.com	200.1.61.166	ssl166.fortray.com	200.1.61.167	smtp167.fortray.com	200.1.61.184	irule184.fortray.com	10.1.61.159	10.1.61.161	10.205.0.113	user17	Cisco@123

Summary of the steps:

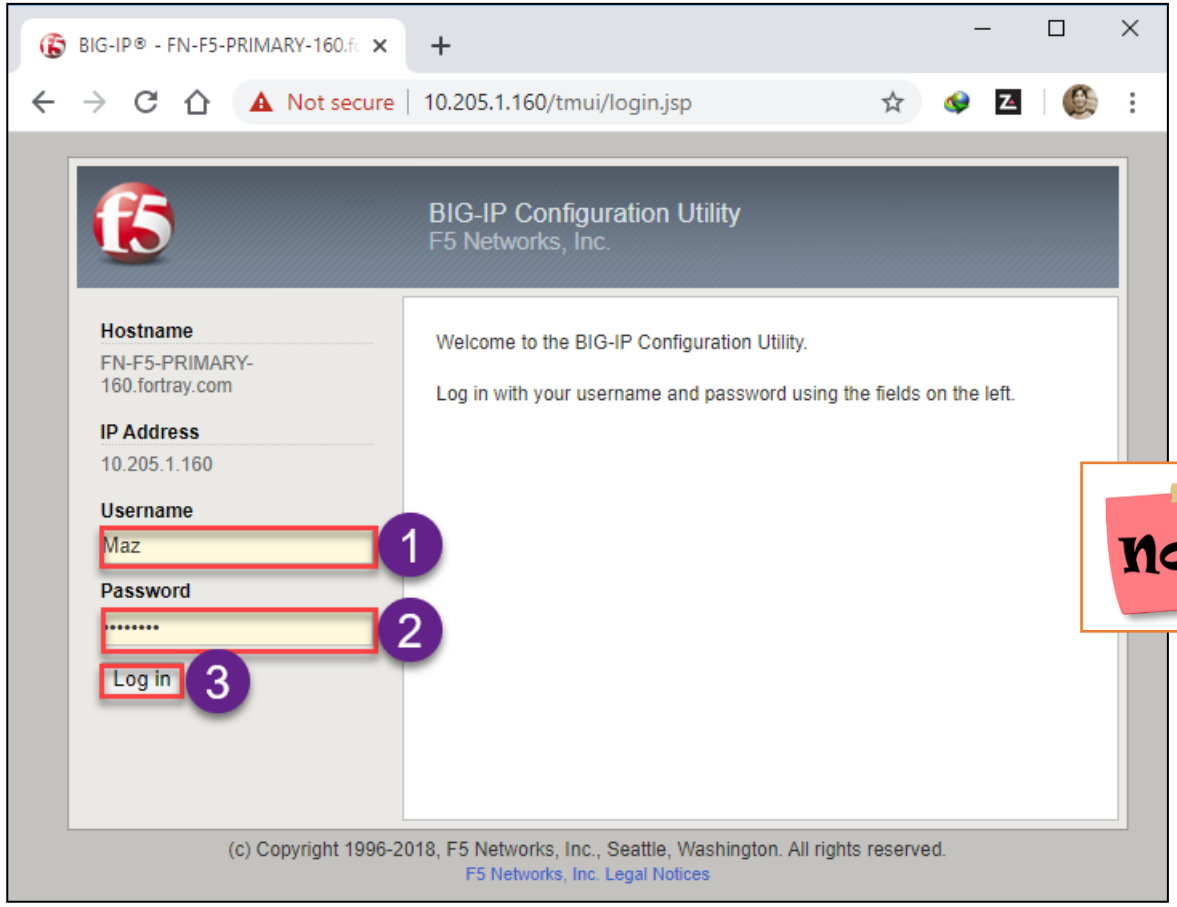
- Login to F5 BIG-IP GUI
- Creating Virtual Server in F5 BIG-IP Device

6. F5 BIG-IP Configuration: Creating HTTP Virtual Server

In this Section, we will create http Virtual Server.

6.1 Step 1: Login in to F5 BIG-IP GUI

Open web browser and type https://10.205.1.160, enter credentials your username/password and click login to continue.

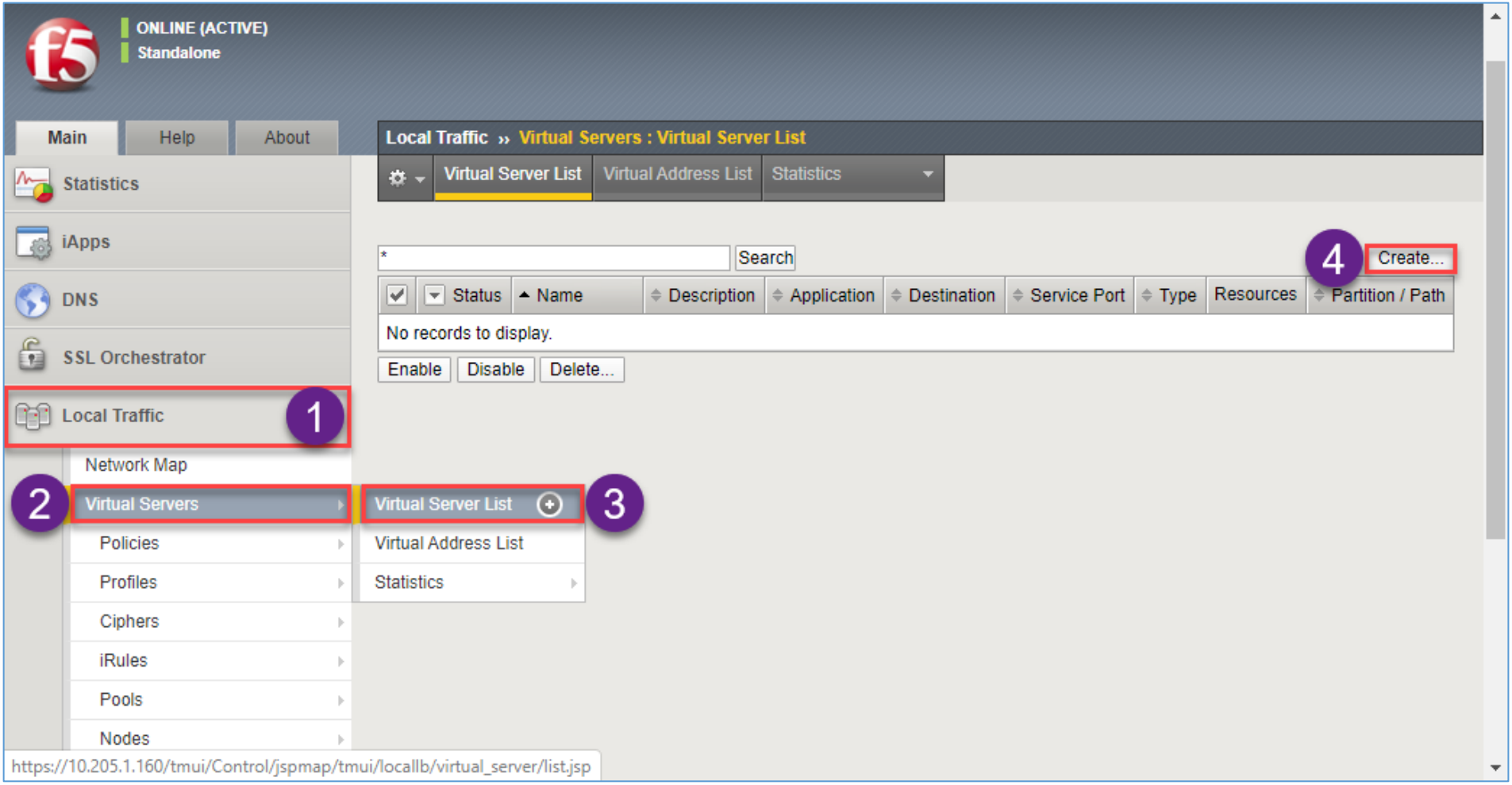


Note:

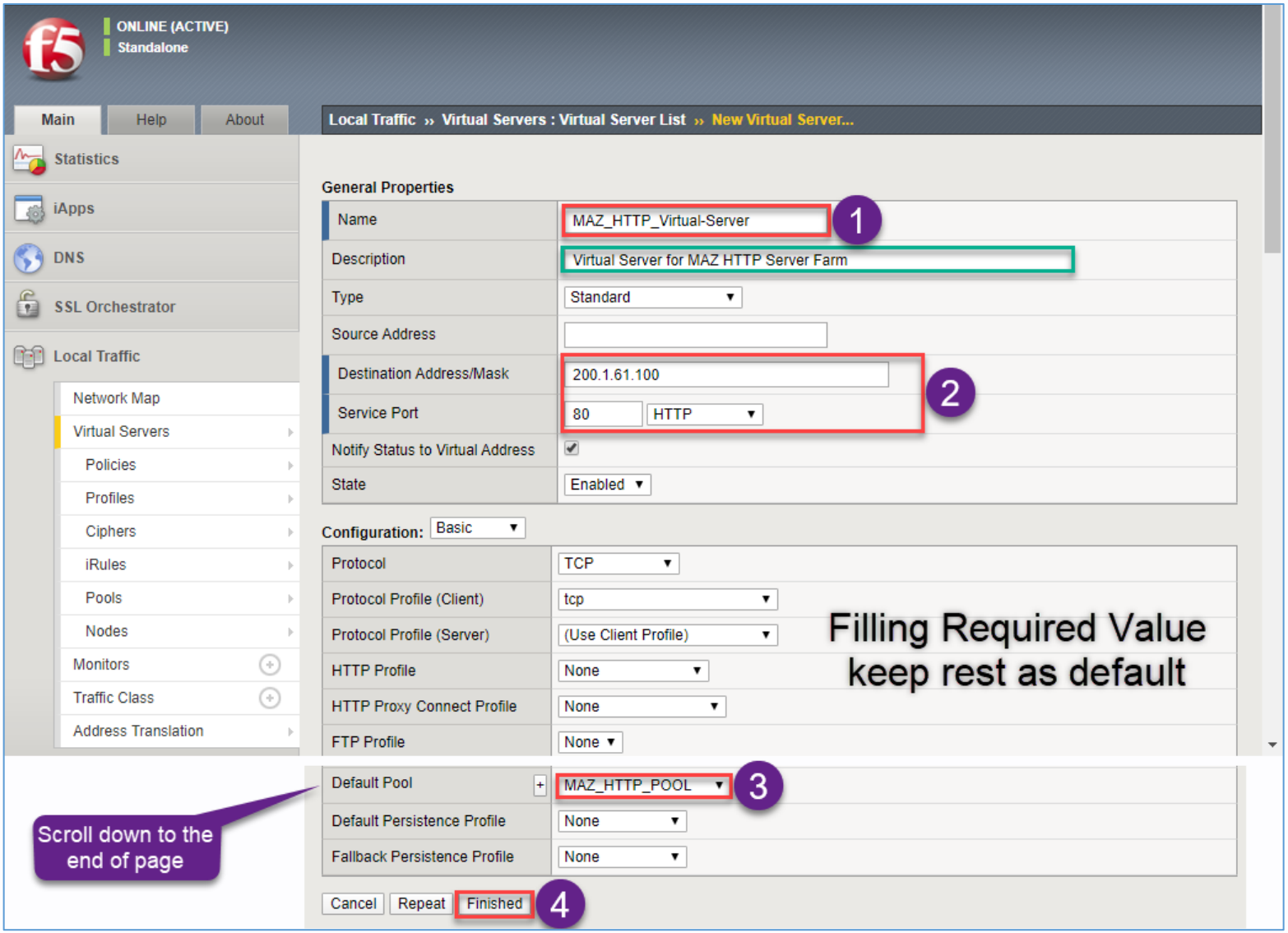
We are assuming that you have already created F5 BIP-IP user for your own work.
If you haven't created, create now by following instructions in workbook # 6.

6.2 Step 2: Creating http Virtual Server

Click on Local Traffic > Virtual Servers > Virtual Server List. Click on Create on new page to create Virtual Server.



On this page we are creating Virtual Server. Enter name description, and other fielsds and hit Finished to creat virtual server.

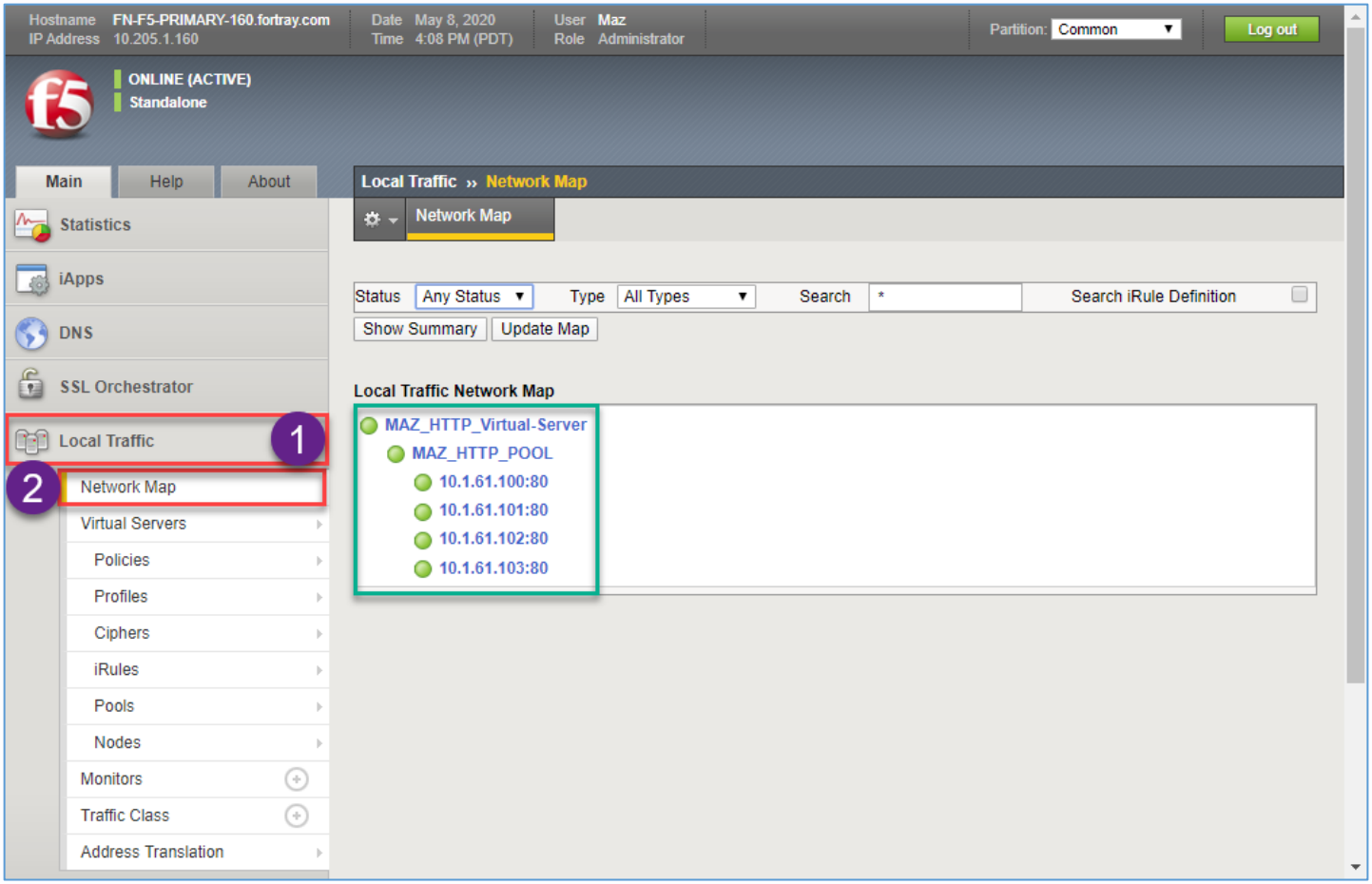


7. Verification

To verify above created Virtual Server, we need to do following steps

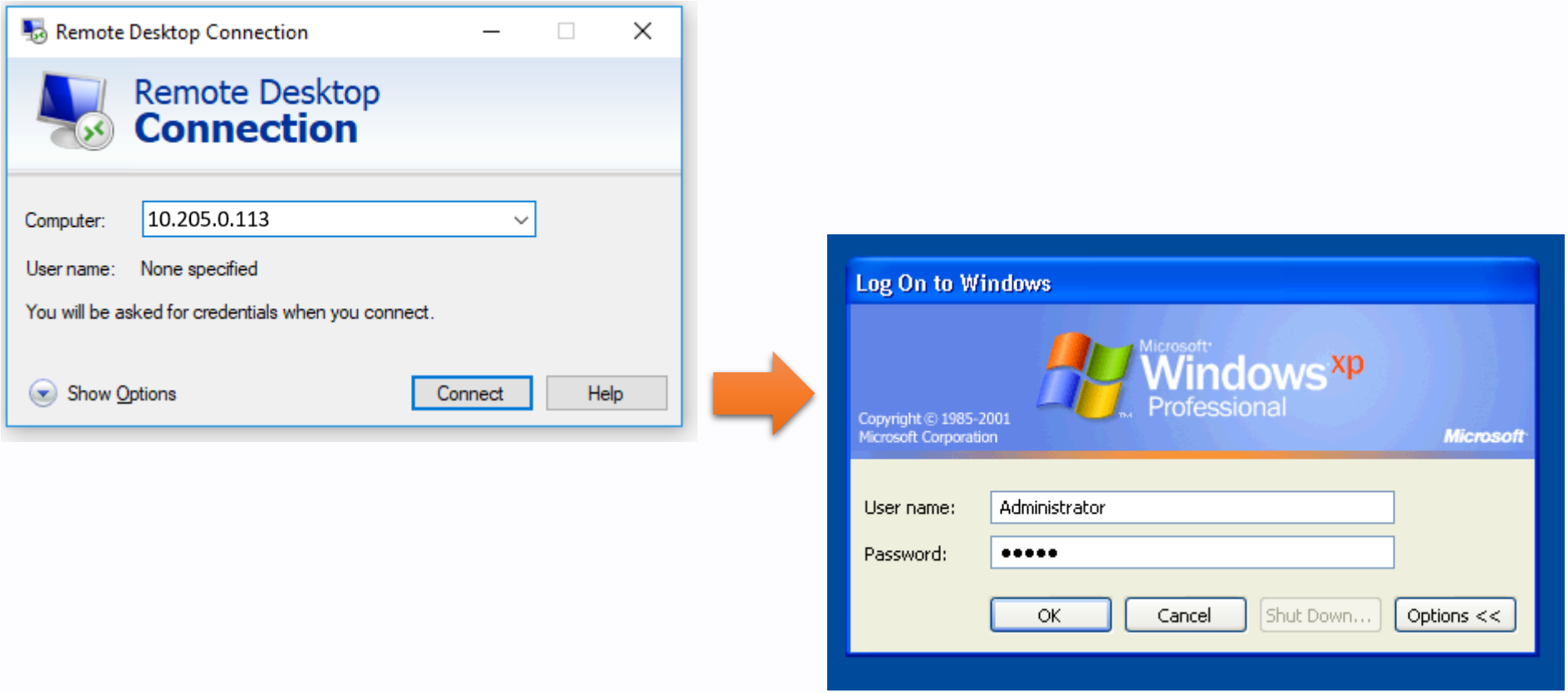
7.1 Step 1: Verification by Network Map

Click on Local Traffic > Network Map. Here we can see complete network Map.



7.2 Step 2: Login to Remote Test PC

Login to your assigned Remote Test PC using **Remote Desktop Connection** Application, Use Administrator/Cisco as username/password to connect.



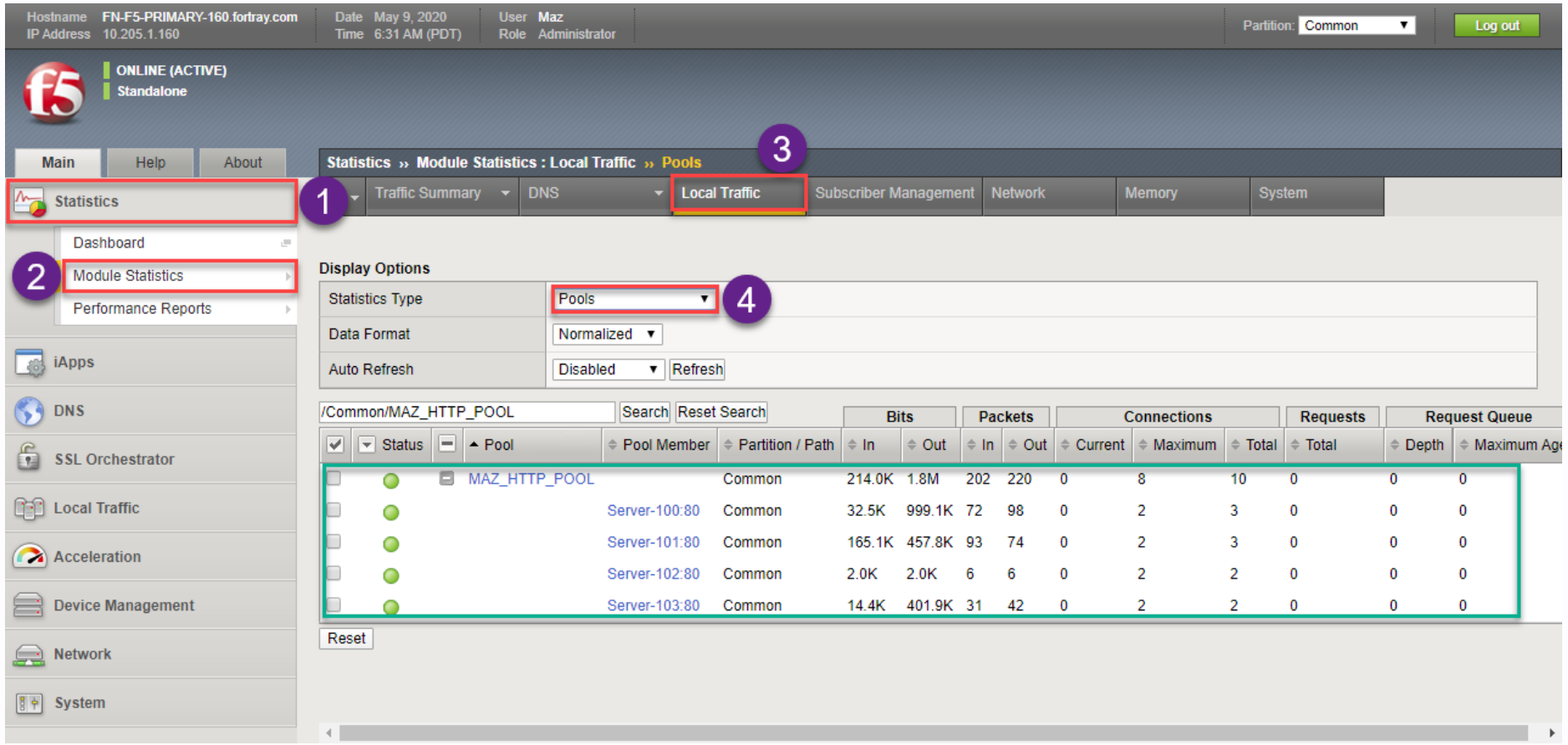
7.3 Step 3: Verification from Web Browser

Enter virtual server address in remote PC and Press enter.

If we refresh page, we can see that request is being sent to different servers.

7.4 Step 4: Verification by Pool Statics

Click Statistics > Module Statistics > Local Traffic. Select Pools from Statistics drop down menu.



Thanks, and Good Luck