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1. Introduction

This guide covers the installation of a Call of Duty 2 dedicated server on Linux.

This guide is intended for Call of Duty 2 server admins that have never installed a Call of Duty 2 server before. It can also be used by more experienced Call of Duty 2 server admins that need a reference while installing their server.

You may survive this guide without having any basic knowledge about Linux. However, it's assumed that some basic knowledge about Linux is required.

At the time of writing, the current version of the Linux server binaries are 1.0a.

You can find the latest version of this document at http://callofduty2.infinity-shell.net

If you have any questions regarding this guide feel free to contact me at my e-mail: robert@infinity-shell.net. Please note that it might take some time before you get an answer, actually I can't guarantee that you will ever get one.

2. Opening ports in your firewall

Before you start installing your Call of Duty 2 dedicated server, it's strongly recommended to open the correct ports in your firewall. This may save you some time when things don't seem to work afterwards. The Call of Duty 2 dedicated server uses the following ports by default:

SERVICE	PORT(S)	PROTOCOL
Call of Duty 2 server	28960	UDP

Note: if your server is behind a (NAT) router you need to forward the ports on your router to the machine your Call of Duty 2 server is running on. Refer to your manufacturer's documentation to find out how to do so.

In order to open these ports you need to refer to your distro's firewall instructions. Most Linux distributions use IPTables. You can see if IPTables is enabled on your machine by typing (as root):

```
[root@infinity-shell root]# iptables -V iptables v1.2.9
```

Note: If you get an error message (or a command can not be found or something similar), IPTables is probably not configured on your machine. Most probably you will need to recompile your kernel with firewall (IPTables) support if you want to use a firewall on your system. Refer to your distro's documentation if you want to enable firewall support. If you dont have a firewall available at this moment, it means that all your ports are open. This may be a security issue, but you can still proceed with the installation of the Call of Duty server. You can skip the rest of this chapter and continue with 'Creating a new user account'.

This is a very basic firewall script for IPTables to work with a Call of Duty 2 server:

```
#! /bin/bash
$MyIP = "192.168.2.100"
/sbin/iptables -A INPUT -p udp -d $MyIP --dport 28960 -m state --state NEW -j
ACCEPT
```

You can add these lines to your current firewall boot script or create a new file that gets executed once your system boots. To check if your firewall rules are loaded type (as root):

```
[root@infinity-shell root]# iptables -L
```

This will output the currently loaded firewall rules. If the rules for Call of Duty 2 are there, you can proceed to the next chapter.

3. Creating a new user account

Once we are sure that the correct ports are opened in the firewall, we can continue by creating a new user account. Most often, you don't want a service to run as root. Since the Call of Duty 2 dedicated server doesn't need root privileges to run, we create a normal user account. We will use the newly created user account to do (most of) the steps in this manual.

```
[root@infinity-shell root]# useradd cod2server
[root@infinity-shell root]# passwd cod2server
Changing password for user cod2server.
New UNIX password:
Retype new UNIX password:
passwd: all authentication tokens updated successfully.
```

Note: Don't forget to password the account once it is created!

Now that we have a normal user account, we will use this in the next chapters.

Logout of your server and re-login with the account you just created.

4. Installing the Call of Duty 2 dedicated server

Now that we have done the preparing we can start doing the real thing. First thing we need to do is download the dedicated server binary for Linux. There are several places where you can download the dedicated server binary, so you might want to google for a mirror close to you.

You can also grab it from my website: http://callofduty2.infinity-shell.net/downloads/cod2 lnxded 1[1].0a 11072005.tar

Create a directory in the home directory of the user you created in the previous chapter. Make sure that you download the latest version (see the introduction of this document to see what version that is). Download the files to your system. Extract the archive to the directory you just created. For example:

```
[cod2server@infinity-shell cod2server]$ cd ~
[cod2server@infinity-shell cod2server]$ mkdir -p cod2
[cod2server@infinity-shell cod2server]$ cd cod2
[cod2server@infinity-shell cod2server]$ wget http://callofduty2.infinity-shell.net/downloads/cod2_lnxded_1[1].0a_11072005.tar
[cod2server@infinity-shell cod2server]$ tar -xvf cod2_lnxded_1[1].0a_11072005.tar
```

Now we need to copy the contents of the 'main' directory from the retail Call of Duty 2 DVD or CD to the Linux server. Grab your original Call of Duty 2 CD or DVD and upload all the .iwd files to your dedicated server.

Now go get some runts. Go help your mom with the dishes, assist your wife in cleaning the house and have some coffee at your neighbours. There's about 3,5GB to upload which took me almost the whole day when I uploaded it to my server at the datacentre.

When you are done the contents of your cod2 directory should look like this (you may have some extra files but make sure that at least these files exist:

```
|- cod2_lnxded
|- main
      |- iw_00.iwd
      |- iw_01.iwd
      |- iw_02.iwd
      |- iw_03.iwd
      |- iw_04.iwd
      |- iw_05.iwd
      - iw_06.iwd
      |- iw_07.iwd
      |- iw_08.iwd
      |- iw_09.iwd
      |- iw_10.iwd
      |- iw_11.iwd
      |-iw_12.iwd
      |- iw_13.iwd
      |- iw_14.iwd
      |- localized_english_iw00.iwd
      |- localized_english_iw01.iwd
      |- localized_english_iw02.iwd
      |- localized_english_iw03.iwd
      |- localized_english_iw04.iwd
      |- localized_english_iw05.iwd
      |- localized_english_iw06.iwd
      |- localized_english_iw07.iwd
      |- localized_english_iw08.iwd
      |- localized_english_iw09.iwd
      |- localized_english_iw10.iwd
```

4. Getting a config file for your server

The next step is getting yourself a config file. I've made a little script that generates Call of Duty 2 config files. You can find it here:

http://callofduty2.infinity-shell.net/cod2config

Once you have completed the script, your config file will be generated. Create a file called 'dedicated.cfg' and paste the generated config in there. Upload the config file to your server. Place it in the 'main' directory.

Now we are almost there. The next chapter will tell you how to start your server.

5. Starting your server

If everything is in place, we can start the server. Go to the root of your Call of Duty 2 installation (if you used the variables in this guide that will be /home/cod2server/cod2).

Your startup line (issued from the command line) may look like this (in the most simple form):

```
[cod2server@infinity-shell cod2server]$ cd ~/cod2
[cod2server@infinity-shell cod2server]$ ./cod2_lnxded +set +exec dedicated.cfg
```

There's many optional parameters you can add to this startup line. Below are some examples:

- +set net_ip [yourip] Use this if your server has multiple IP's
- +set net_port [yourport] Use this if you want to use a custom port
- +set dedicated [0/1/2] Set this to '2' to send a heartbeat to the master servers
- +set fs homepath Set to the home directory (/home/cod2server/cod2)
- +set fs_basepath
- +set fs userpath
- +set fs_outputpath

Probably the first should be suitable for your server. If you have multiple IP's your startup line should look like this:

```
./cod2_lnxded +set net_ip 192.168.2.100 +set dedicated 2 +exec dedicated.cfg
```

If you want the server to be running in the background you can redirect all output from the server to /dev/null. This will leave the server running in the background when you close your SSH client.

```
./cod2_lnxded +set net_ip 192.168.2.100 +set dedicated 2 +exec dedicated.cfg >/{\rm dev/null} 2>&1 &
```

6. Troubleshooting

Didn't it work? Is there something you don't understand? Don't worry! There's a lot of server admins out there that are willing to help you. A good place to ask for help is on the codboards:

http://www.codboards.com

You can reach me on those forums (my nickname is Robertje) if you have any questions regarding this guide. I will try to keep updating this guide when there's patches released or when I receive usefull feedback from fellow Call of Duty 2 admins.