

*CYBERNET*

**OpenSkies**

Networking Engine

**Quickstart Server**



[www.openskies.net](http://www.openskies.net)

**MMPG**  
**MASSIVE**  
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## Quick Start - Openskies Server SDK

Before setting up the server SDK, we suggest that your first go through the Quickstart for the Client SDK.

Once you are finished going through the client SDK Quickstart, you are ready to install and test your server machine.

The Openskies Server SDK comes bundled with Cybernet's *Netmax Professional Suite*. The Netmax product includes an operating system (Linux) that will be installed on your machine (PC). In other words, you need a machine dedicated to this installation.

To install the Netmax with Openskies SDK (called NetmaxOS for the remainder of this document), simply follow the "quick install method" described in the Netmax Professional Suite document. This document is included as part of the Openskies Server SDK distribution.

To more fully test and understand the functionality of the Openskies server software, we suggest you make 2 machines available for a NetmaxOS installation. However, if you only have one machine available, simply ignore the parts of the following which refer to the second installation (i.e. *Netmax2*).

We will configure each Netmax machine to use only one Ethernet card and therefore one IP address, so we can say "Netmax2's IP address" without ambiguity. This is for simplification only. The Openskies SDK does allow you to configure for multiple network cards. To learn how to configure for multiple Ethernet cards, see the *NetmaxOS\_Guide*.

### ***Installation***

Install NetmaxOS on the first PC machine. For the sake of this description, we will call it *Netmax1*.

Install NetmaxOS on the second PC machine. For the sake of this description, we will call it *Netmax2*.

### ***Create MySQL Account***

#### ***On Netmax1***

In order to make database functionality available on one of the Netmax machines, it is necessary to set up a special account.

Use your browser (located on some other machine) to bring up the Netmax interface to *Netmax1*.

On *Netmax1* create a user account with the login name “mysql”

On *Netmax1* create a user group, also named “mysql”, and add the user “mysql” to it.

Commit the changes.

## **On *Netmax2***

Nothing

## **Configure FedHost**

### **On *Netmax1***

Logon to the actual *Netmax1* machine through Telnet or by logging directly on the *Netmax1* machine. You can even configure X from the main *Netmax* prompt if you want to. Logon as “netadmin”.

Go to the `/usr/Openskies/FedHost/FedHost0` directory.

Copy `FedHost.ini.example` to `FedHost.ini`

Edit that `FedHost.ini`

- Set the *ConnectorAddress* to be *Netmax1*'s IP address.
- Set the *ConnectorPort* to 3500.
- Set the *ServerAddress* to the same address as *ConnectorAddress*. This will cause the FedHost to access the database on this machine.

### **On *Netmax2***

Logon to the actual *Netmax2* machine through Telnet or by logging directly on the *Netmax2* machine. You can even configure X from the main *Netmax* prompt if you want to. Logon as “netadmin”.

Go to the `/usr/Openskies/FedHost/FedHost0` directory.

Copy `FedHost.ini.example` to `FedHost.ini`

Edit that `FedHost.ini`

- Set the *ConnectorAddress* to be *Netmax2*'s IP address.
- Set the *ConnectorPort* to 3500.

- Set the *ServerAddress* to the same address as *Netmax1's ServerAddress*. This will make it access the database on *Netmax1*.

## **Configure LobbyManager**

### **On Netmax1**

Go to the `/usr/Openskies/ LobbyManager /LobbyManager0` directory.

Copy `LobbyManager.ini.example` to `LobbyManager.ini`.

Edit that `LobbyManager.ini`:

1. Set the *LobbyAddress* to be the IP address of this machine (*Netmax1*)
2. Set the *LobbyPort* to be 2601.
3. Set the `[Repeater] Count` to 1. Initially we will include only one `FedHost` (on *Netmax1*).
4. Set the `Repeater0` address and port (*both pairs*) to be the same as those in the `FedHost.ini` on *Netmax1*. Set the *Port Range* (last two numbers) to be 4000 and 4010.
5. Set the `Repeater1` address and port (*both pairs*) to be the same as those in the `FedHost.ini` on *Netmax2*. Set the *Port Range* (last two numbers) to be 4000 and 4010.
6. Set the *ServerAddress* to also be the address of this machine (*Netmax1*).

### **On Netmax2**

Nothing

## **Configure Database**

### **On Netmax1**

Create a `dbserver.conf` in `/usr/openskies/DBServer/` and set the host name to the local host name. This can be done by running the following at the command prompt:

```
hostname > /usr/openskies/DBServer/dbserver.conf
```

### **On Netmax2**

Nothing

## ***Run and Verify with one FedHost***

For this phase of testing you will need to have access to two windows machines to verify networking functionality. The Opoenskies SDK should have been installed on each of these machines during the Client Quickstart. If not, go back to the Openskies Client SDK Quickstart and complete the steps inside. For the purposes of this document, these two windows machines with Openskies Client SDK installed are called *Win1* and *Win2*.

### **On Netmax1 and Netmax2**

Reboot the *Netmax1* and *Netmax2*. FedHost, LobbyManager, and database service should start automatically.

Once the computer has rebooted, run the Openskies Console by typing 'O' at the opening screen. Verify that the FedHost and LobbyManager are running on *Netmax1* and that the FedHost is running on *Netmax2*.

### **On Win1**

Recompile eoe to function as a host. To do this in VC++, open the Project, Settings for EoE. Go to the *C/C++ tab -> General category -> Preprocessor Definitions*, and add *\_EOEHOST* to the definitions.

Run *eoe* (asteroids).

When EoE comes up, click the Networking button, then specify the *LobbyAddress* and *LobbyPort* of the LobbyManager (*Netmax1*).

Click on Play, the Join.

Enter your username and password (that was e-mailed to you when you registered).

Click ">>" and again to become host.

### **On Win2**

Run *eoe* (asteroids).

When EoE comes up, click the Networking button, then specify the *LobbyAddress* and *LobbyPort* of the LobbyManager (*Netmax1*).

Click on Play, the Join.

Enter your username and password (different from the one used on *Win1* – you need two accounts).

Click ">>" to see the game you created on Win1.

Click ">>" to join it.

Shoot some asteroids, verify that the system (chat, combat, movement) functions correctly.

Leave everything running (do not quit anything yet).

### **On Win1, Win2, or any windows machine with a browser.**

Connect to the query.cgi script in a browser. Do this by typing the IP address of Netmax1 in the address box of your browser. This will bring up the query.cgi which will list the federation that you're running.

### **End First Test**

Quit both the eoe's.

### ***Run and Verify with two FedHosts***

#### **On Netmax1**

Go to the /usr/Openskies/ LobbyManager /LobbyManager0 directory.

Edit that LobbyManager.ini:

Set the [Repeater] Count to 2. This will include the FedHost running on Netmax2.

Do everything in the section: *Run and Verify with one FedHost.*