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Ark: Survival Evolved Server Cluster Guide

How to set up an Ark: Survival Evolved Server Cluster in 2021

Introduction

This guide will show you how to create a cluster of Ark: Survival Evolved servers. After following the instructions below, you'll have your own cluster of multiple Ark: Survival Evolved servers up and running on one or more computers.



Ark: Survival Evolved

What is an Ark: Survival Evolved cluster? An Ark: Survival Evolved cluster is made up of two or more Ark: Survival Evolved dedicated servers that allow players to transfer survivors, items, and dinos to and from servers that make up the cluster. Transfers can be initiated from obelisks or supply crates.

Sometimes, it can be frustrating to set up your dedicated server. Selecting the right hardware, installing and updating software, and configuring server settings can be difficult. If you're looking for an easy and simple solution, check out [PlayServers](#). PlayServers takes care of picking the best hardware and setting up everything you need to run a cluster of Ark: Survival Evolved dedicated servers. With an easy-to-use control panel, you can manage multiple servers, automatically install mods, schedule automated backups and updates, and more. Visit <https://playservers.io/ark-survival-evolved> for more information.

Table of Contents

- System Requirements
- Start an Ark: Survival Evolved Server
- Create a Cluster of Servers on One Machine
- Create a Cluster of Servers Across Multiple Machines

System Requirements

Before starting a server, make sure you have a computer that meets the following minimum hardware requirements:

- 3 GHz, dual-core CPU
- 8 GB RAM
- 20 GB SSD
- 100 Mbps internet connection

A 3 GHz CPU may work with a small number of players and no mods, but you may

experience stuttering and lag. CPU utilization will increase as more players connect to your server. You'll also want more processing power if you plan to install several mods. A dual-core CPU with a frequency of 4 GHz or higher is ideal.

Different Ark: Survival Evolved maps require varying amounts of RAM (a server running The Island can take up around 6 GB of memory, for example). Your server will need additional RAM for any mods you install as well. Your computer will be running additional programs too, so having more RAM will ensure that your computer will always have enough memory.

Ark: Survival Evolved Dedicated Server utilizes roughly 15 GB of disk space, and mods and updates may utilize additional storage. You'll want to store the Ark: Survival Evolved Dedicated Server files on a solid-state drive instead of a hard disk drive. Data can be read from a solid-state drive 10–20 times more quickly than it can be read from a hard disk drive. To reduce loading times, make sure you use an SSD instead of an HDD.

A high-speed internet connection is required for any kind of dedicated server, as it reduces any lag you might otherwise experience with a low-speed connection. You can download updates and mods for your server in less time as well with faster internet speeds. The amount of bandwidth you'll require will increase as more players connect to your server. If you plan on running your server from your home, players may experience lag; many residential internet connections do not provide high upload speeds. Ideally you should rent a server, as hosting providers typically offer high upload and download speeds.

If you've got the right hardware, you're ready to launch your own Ark: Survival Evolved server. If you're having trouble or aren't quite sure what hardware fits your needs, consider renting a server from [a hosting provider](#).

Start an Ark: Survival Evolved Server

Before you can install Ark: Survival Evolved Dedicated Server, you'll need to [install SteamCMD](#). SteamCMD is an official command-line version of Steam and is made by Valve.

Next, we'll use SteamCMD to install Ark: Survival Evolved Dedicated Server. We'll install Ark: Survival Evolved Dedicated Server in a directory named `~/ark` . Installing Ark: Survival Evolved Dedicated Server will take several minutes.

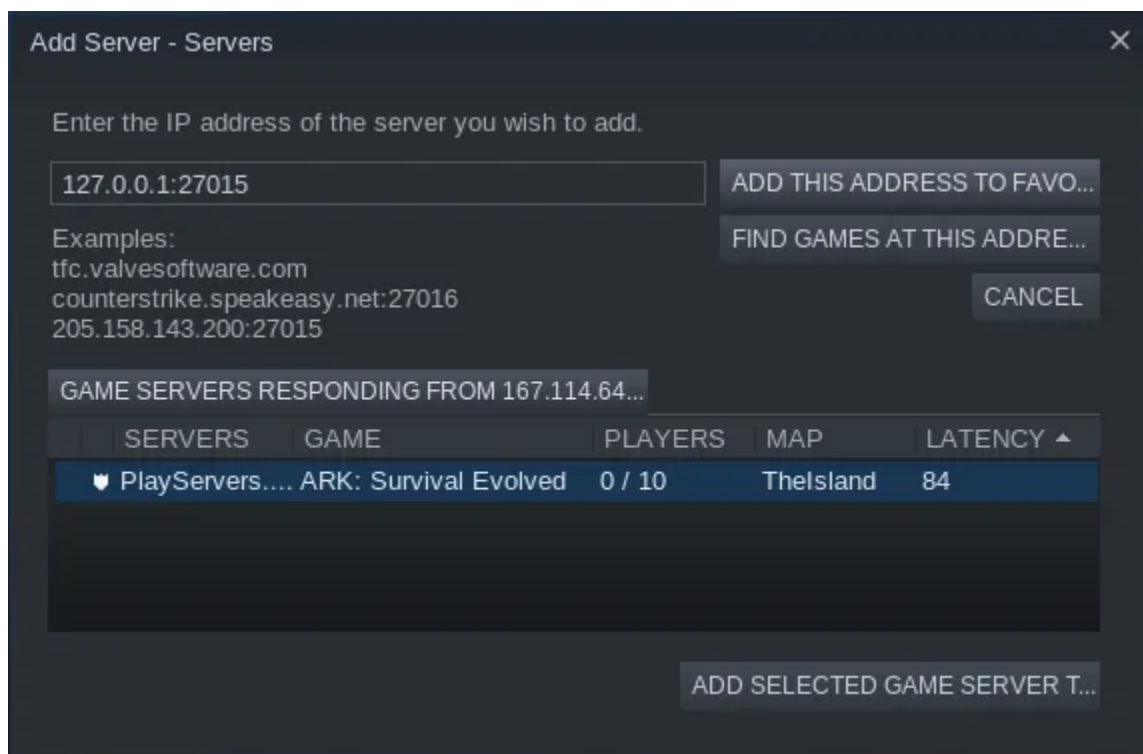
```
steamcmd +login anonymous +force_install_dir ~/ark +app_update  
376030 validate +quit
```

Finally, change the working directory and start the server:

```
cd ~/ark/ShooterGame/Binaries/Linux  
./ShooterGameServer  
TheIsland?listen?MaxPlayers=10?Port=7777?QueryPort=27015?SessionName  
=PlayServers
```

The above command will start a basic Ark: Survival Evolved server. You can find more server customization options at the [ARK: Survival Evolved Wiki](#).

You'll now be able to find your server from Steam's Add Server window:



Enter the IP address and the query port of your server in the input field, click **Add This Address To Favorites**, then click **Add Selected Game Server To Favorites**. You'll now be able to connect to your server from the Steam server browser or from the Ark: Survival Evolved in-game server browser.

Congratulations! You now have your own Ark: Survival Evolved server up and running. Now that we're able to start a server, we're ready to create a cluster.

Create a Cluster of Servers on One Machine

We can run two Ark: Survival Evolved servers on one machine. We'll launch multiple servers using the same Ark: Survival Evolved Dedicated Server files in the `~/ark` directory, but each server will need to have a unique configuration.

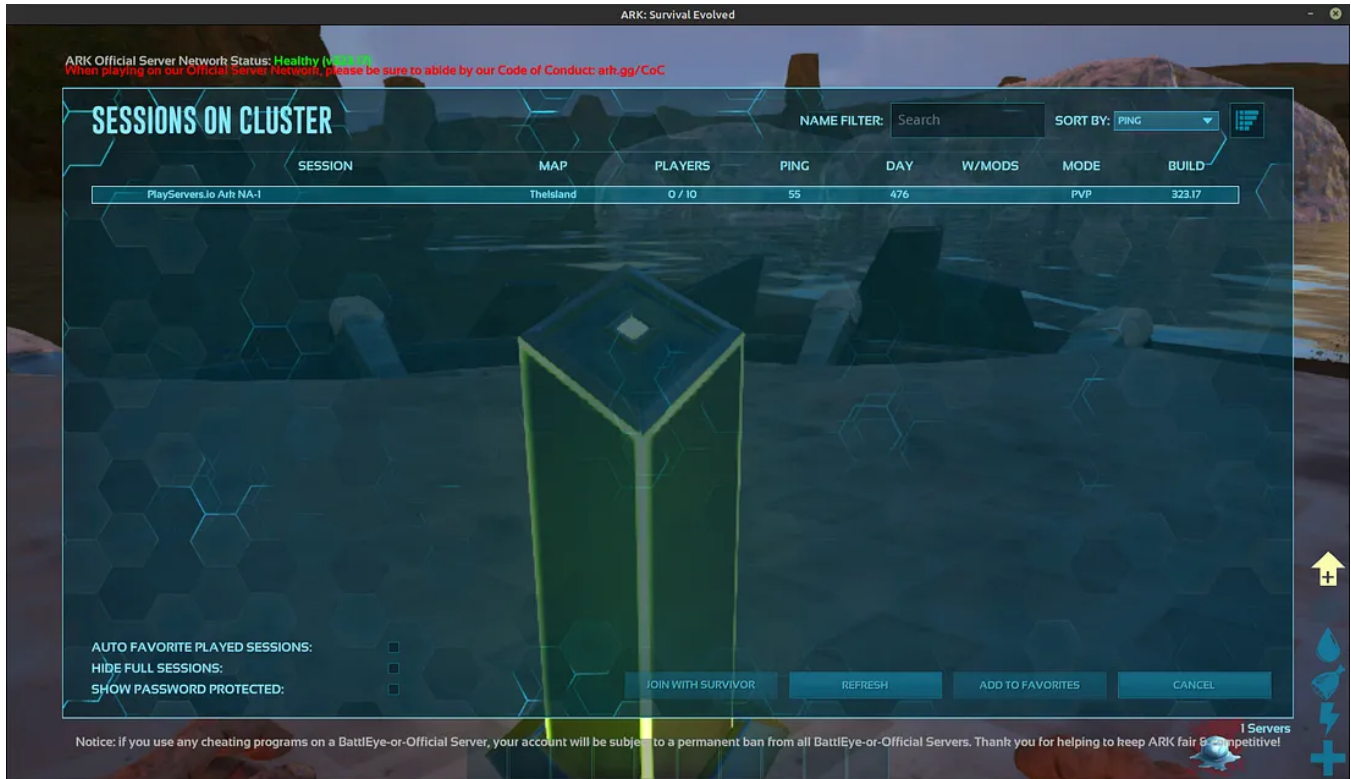
We'll need each server to bind to different game ports and query ports. Each server will need their own save data directories as well. All servers will be launched with the same `clusterid` argument.

Use the commands below to start two servers. We'll store save data for the first server in a new `~/island` directory, and we'll store save data for the second server in a new `~/center` directory. We'll also use the same `clusterid` for each server, which will configure both servers to read and write cluster data files from the `~/ark/ShooterGame/Saved/clusters/$CLUSTERID` directory.

```
./ShooterGameServer  
TheIsland?listen?Port=7777?QueryPort=27015?MultiHome=$IP_ADDRESS?SessionName=PlayServersIsland?AltSaveDirectoryName=island  
-clusterid=123456  
  
./ShooterGameServer  
TheCenter?listen?Port=7787?QueryPort=27025?MultiHome=$IP_ADDRESS?SessionName=PlayServersCenter?AltSaveDirectoryName=center  
-clusterid=123456
```

You'll now be able to transfer survivors between the two servers. Join either server and travel to a beacon or obelisk. Open the menu of the beacon or obelisk, click **Travel To Another Server**, select the server you want to transfer to, then click **Join**

With Survivor.



Create a Cluster of Servers Across Multiple Machines

We'll now show you how to create a cluster on multiple computers. We will run The Island server on Computer A, and The Center server on Computer B.

Each Ark: Survival Evolved Dedicated Server will store its save files on its respective machine, but we'll have to choose one computer to store the cluster data files. We'll have Computer A store the cluster data files, and we'll enable Computer B to remotely read and write these files using SSHFS (SSHFS is a secure method of mounting remote directories. You can check out Digital Ocean's guide, [How To Use SSHFS to Mount Remote File Systems Over SSH](#), to learn more).

Each Ark: Survival Evolved server, configured with the same `clusterid` argument, will look to their local `~/ark/ShooterGame/Saved/clusters/$CLUSTERID` directory. Before starting a server on Computer B, we'll mount Computer A's cluster data file directory on Computer B's filesystem.

```
sudo sshfs -o allow_other,default_permissions  
$USER@$COMPUTER_A:/home/$USER/ark/ShooterGame/Saved/clusters  
/$CLUSTERID
```

Computer B will now read and write files in Computer A's cluster data file directory as if the files were on Computer B itself.

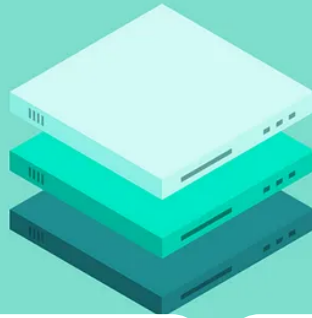
We're now ready to start both servers. Run the following commands on either server:

```
./ShooterGameServer  
TheIsland?listen?Port=7777?QueryPort=27015?MultiHome=$IP_ADDRESS?SessionName=PlayServersIsland -clusterid=123456  
  
./ShooterGameServer  
TheCenter?listen?Port=7777?QueryPort=27015?MultiHome=$IP_ADDRESS?SessionName=PlayServersCenter -clusterid=123456
```

You'll now be able to transfer survivors between the two Ark: Survival Evolved servers in your cluster. When you initiate a transfer from the server on Computer A, your survivor will be uploaded to the server on Computer B, and your game client will then automatically connect to the server on Computer B.

Congratulations! You now have your own Ark: Survival Evolved server cluster running on multiple machines. You can repeat the steps above to add even more servers to your cluster.

Sometimes, setting up your own dedicated server can be difficult. [PlayServers](#) makes creating your own Ark: Survival Evolved cluster simple and easy. We offer an easy-to-use control panel and automated cluster management. Get started with your own Ark: Survival Evolved server cluster with PlayServers today! playservers.io



Ark Survival Evolved

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