

# Creating a new Pool


In flexVDI a *Pool* is a set of CPUs and a certain amount of RAM provided by one or more *Hosts*. The *Guests* are always assigned to one of these *Pools*, that provides them with necessary resources. Besides its name and the list of *Hosts* from which it takes its resources, the basic information of a *Pool* includes these three important properties:

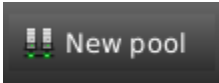
**Priority:** Indicates the preference that a *Pool* has for acquiring resources when there are not enough to fulfill the needs of every *Pool*. This happens when some of the *Hosts* are down, due to a failure or for maintenance. In that situation, when reassigning the remaining resources to *Pools*, those with higher priority (lower value) come first.

**"CPU block size" / "RAM block size":** A **block** is the resource reservation unit used by the *Pool*. For instance, a *Pool* can reserve resources from the *Hosts* in blocks of 1 CPU and 2GB of RAM. The purpose of these values is to ensure that *Pools* reserve *Host* resources for the *Guests* in an adequate proportion. This will prevent, for instance, that a *Pool* reserves a large number of CPUs but a small amount of RAM in a *Host*. The RAM would limit the amount *Guests* that could run in the *Pool*, rendering the rest of the reserved CPUs unusable. These resource reservations are made:

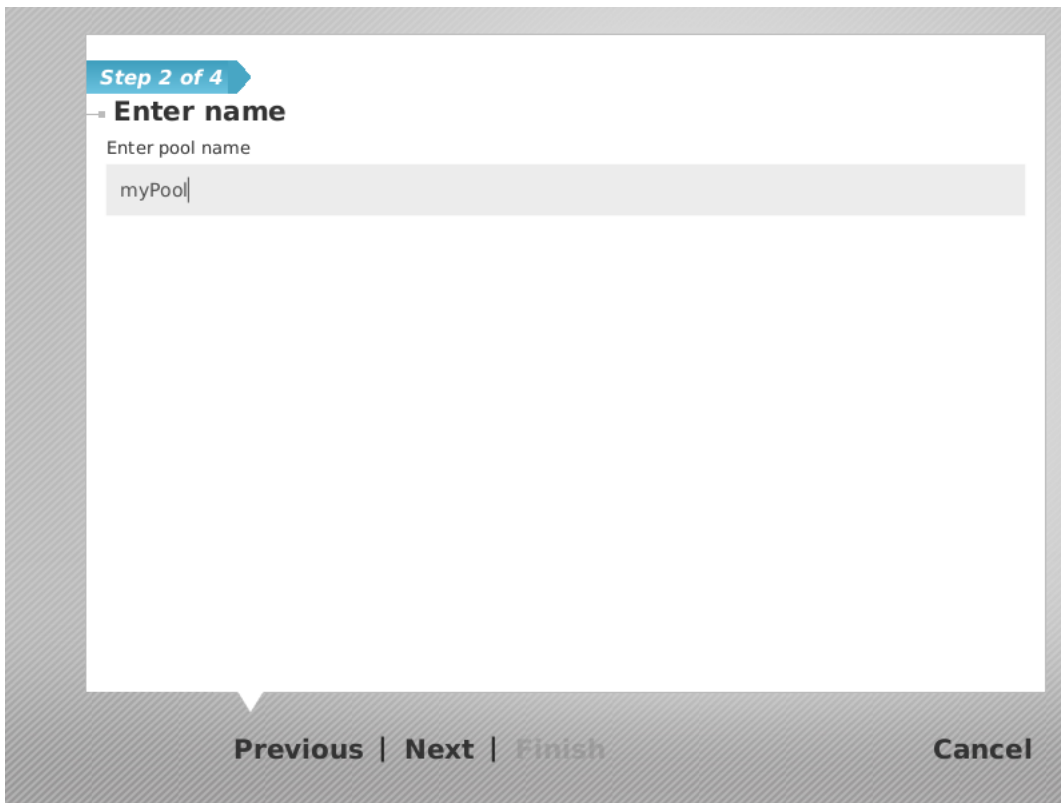
- Initially when the *Pool* is created or the *Manager* starts.
- Automatically when the amount of available resources changes. For instance, on the event of failure or shutdown of one of the *Hosts*. High priority *Pools* may receive resources that are removed from *Pools* with a lower priority.
- By explicit request of an administrator clicking on "Rebalance resources" from the context menu of a *Pool*.

## Creating a Pool

Before you can create a *Guest*, you need to create a *Pool* for it; to do this, click on the icon  of the top bar, or open the "Guest / Host / Pool" section in the left area of the Dashboard and click the right mouse button on "Pools". Then click "New Pool".



A window will open to start the creation of the new Pool.

A dialog box for creating a new pool. It has a grey border and a white background. At the top left, it says "Step 2 of 4" in a blue arrow. Below that, it says "Enter name" in bold. Underneath, it says "Enter pool name" and there is a text input field containing "myPool". At the bottom, there are four buttons: "Previous", "Next", "Finish", and "Cancel".

Step 2 of 4

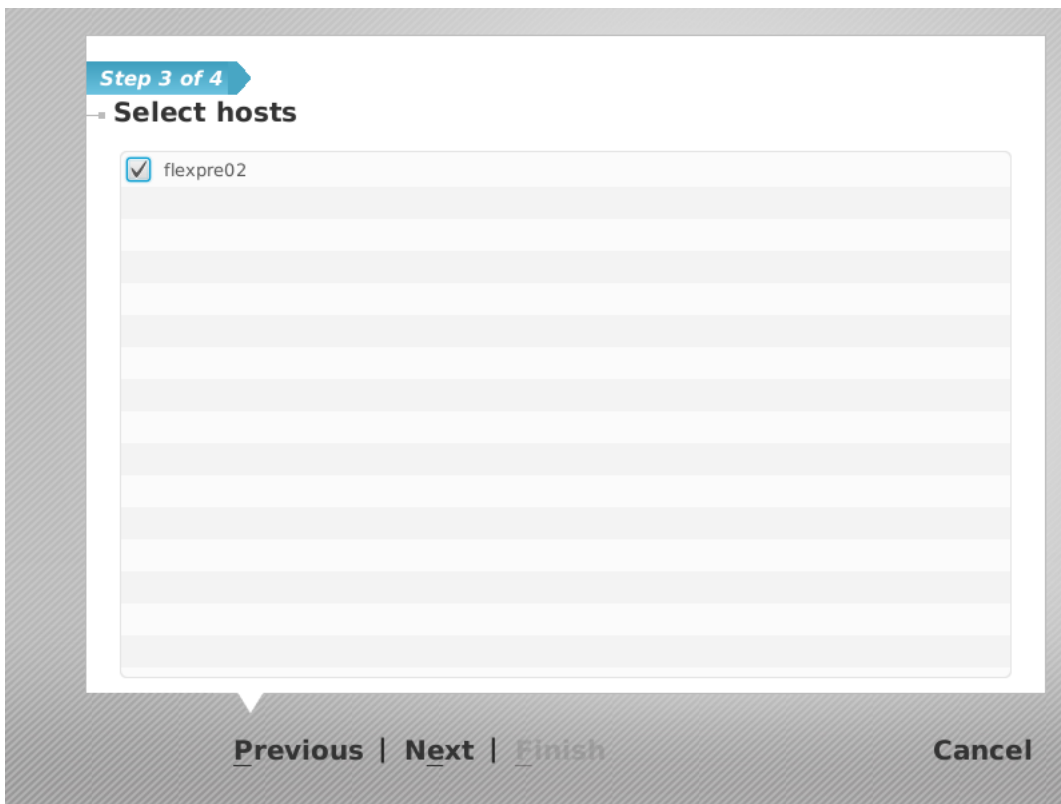
**Enter name**

Enter pool name

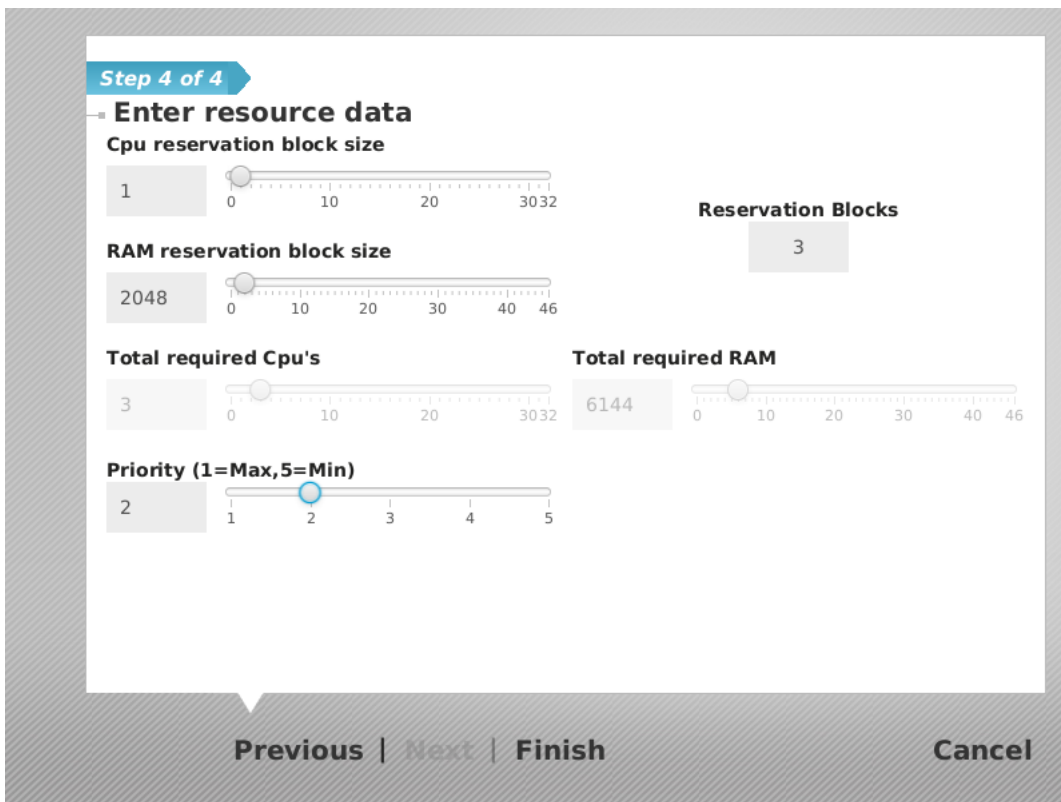
myPool

Previous | Next | Finish | Cancel

Enter the name of the *Pool* and click "Next".



You can select the *Hosts* you want to associate with the new *Pool/Press "Next"*.



In this window you can select the amount of resources that the Pool will reserve from the *Hosts* to run its *Guests*:

- CPU reservation block size, in number of vCPUs.
- RAM reservation block size, in MB (although the slider shows RAM in GB to save space).
- The amount of "reservation blocks" that this Pool will reserve from the *Hosts*.
- Priority.

The resources that are assigned to a *Pool*, can be used by the *Guests* in that *Pool* and are not available to *Guests* in other *Pools*. Plan your *Pools* thoroughly and ahead of time, so that the platform will respond in the best way when a *Host* fails. As with *Hosts*, in order to avoid removing resources needed by running *Guests*, you can always increase the number of reservation blocks of a *Pool*, but you must disable it first to decrease it or to change the reservation block size.