

# Connect to a MapR Sandbox or AWS Cluster

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The following steps will guide you through connecting to a MapR Cluster (Sandbox or Amazon Web Services) to complete the hands-on exercises in your course.

Instructor Led Trainings will provide an Amazon Web Services (AWS) Cluster while the On-Demand Trainings at <http://training.mapr.com/> will use the MapR Sandbox. You can also use the Sandbox for ILT courses, this has the advantage that you can continue using the sandbox after the training is finished.

## Starting the Sandbox

If you are using a **MapR Sandbox**, this procedure assumes that you have downloaded and installed the MapR Sandbox on a virtual machine as part of the class prerequisites. If not, please do that before continuing here. You can find the instructions for downloading and installing the Sandbox at <https://www.mapr.com/products/mapr-sandbox-hadoop/download>. **Be sure to open VirtualBox or VMware and start an instance of your Sandbox before proceeding.**

Make a note of the IP address assigned to the Sandbox, as you will need it to log in remotely. The Sandbox is preconfigured with several user accounts. You will be logging in as user01 to complete most of the lab exercises. The password for user01 is mapr.

## Starting the AWS Cluster

If you are using an **AWS MapR Cluster**, there is no need to download or install a virtual machine, unless you would like to have the sandbox to use later. Your instructor will assign you a user name and an IP address. Throughout these instructions and the instructions in your Lab Guide, **replace <ip address> with the IP address assigned to your AWS Cluster** and **replace user01 with your assigned user name**. Each student in your class should have a different user name, such as user18 or user02. The password for all users is mapr.

## Logging in to the Cluster

You will need to use a Secure Shell (ssh) client to log into the Sandbox or AWS Cluster. PuTTY, Cygwin, or a bash shell on a Unix-like OS with OpenSSH installed are all acceptable clients. If you do not have an ssh client, you can log in to the Sandbox using the virtual machine console mode. You must use an ssh client to use an AWS cluster.

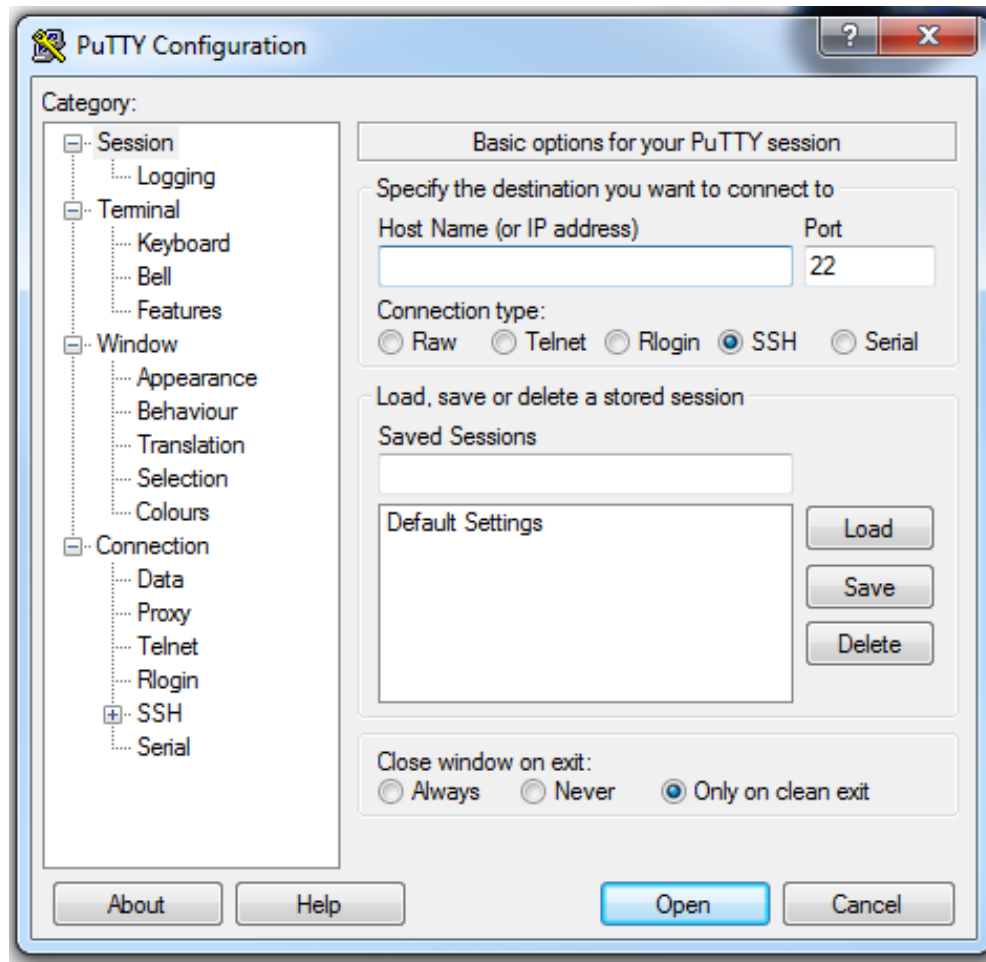
Connect as user01 if you are using Sandbox, or as your assigned username if using AWS.



**NOTE:** The exact method needed to connect may vary based on your machine, your system's host files, and the version of the MapR Sandbox or AWS Cluster you are using. Be sure to use the correct username and IP address. Consult your Lab Guide or your Instructor for more information.

## OPTION 1: Log in using PuTTY

1. Start your PuTTY Client.



2. In the Host Name (or IP address) box, enter the IP address for your Sandbox virtual machine.
3. Click the Open button to open the connection to your node.
4. When the terminal window appears, log into the terminal as `user01`; the password is `mapr`. If you are using an AWS Cluster, be sure to replace `user01` with your own username.



## OPTION 2: Log in using terminal SSH client

Start your terminal client. Use the ssh program to connect to the IP address for your Sandbox. Connect as user01 if you are using the **MapR Sandbox**. For example:

```
$ ssh user01@<IP address> -p <port>
```

-p port is the Port to connect to on the remote host, See your unix or putty documentation for more information about ssh. When prompted, enter the password mapr.



**NOTE:** If using the VirtualBox MapR Sandbox, the port is 2222. If using the VMware MapR Sandbox, the port is 22 by default, and can be left blank.



**NOTE:** Make sure to only include the IP address, which is formatted like 123.4.5.6. **The sandbox start screen displays** the URL to connect to the MapR control center browser GUI `http://<IP address>:<port>` with port 8443, as in <http://123.4.5.6:8443>.

If you are using an **AWS Cluster**, be sure to replace user01 with your own username and replace <ip address> with your IP address assigned to you by your instructor. For example:

```
$ ssh <user24>@<IP address>
```

When prompted, enter the password mapr.

If your connection was successful, your screen should look something like this:

```
Welcome to your Mapr Demo virtual machine.  
[user01@maprdemo ~]$
```



**CAUTION:** The above examples are for instructional purposes only. Be sure to substitute the correct usernames and IP addresses for your machine and your cluster. Your results may vary slightly based on the version of the MapR Sandbox or AWS Cluster you are using.



### OPTION 3: Log in using Virtual Machine Console (Sandbox Only)

You can log in directly to the Sandbox console (in VMWare Player or Workstation, or in VirtualBox).

1. Open VirtualBox or VMWare and start your MapR Sandbox. After a few moments, this screen should appear (version number and IP address may vary).

```
=== MapR-Sandbox-For-Hadoop ===  
Version: 5.0.0  
  
MapR-Sandbox-For-Hadoop installation finished successfully.  
Please go to http://127.0.0.1:8443/ to begin your experience.  
  
Open a browser on your host machine  
and enter the URL in the browser's address field.  
  
You can access the host via SSH by ssh mapr@localhost -p 2222  
The following credentials should be used for MCS & HUE - mapr/mapr  
  
Log in to this virtual machine: Linux/Windows <Alt+F2>, Mac OS X <Option+F5>
```

2. Use the appropriate key combination for your host machine (Alt + F2 for Windows or Linux, Option + F5 for Mac OS X) to reach the login prompt.
3. Type in user01. When prompted, enter the password mapr.



## Copying files in to the Cluster

Consult your Lab Guide for a list of files or folders you will need to complete your lab. Use `scp` to copy files from your laptop to a Sandbox or AWS cluster. The general syntax for the `scp` command is:

```
$ scp -P <port> directory/filename <user>@<IP address>:destination
directory2/subdirectory
```

For example, if you are using the **VirtualBox Sandbox**, the command may look something like this:

```
$ scp -P 2222 downloads/labfiles.zip user01@127.0.0.1:/user/user01
```

When prompted, the password is `mapr`.

Alternatively, if you are using an **AWS Cluster**, the command may look something like this:

```
$ scp downloads/labfiles.zip user24@12.345.67.89:/user/user24
```

When prompted, the password is `mapr`.

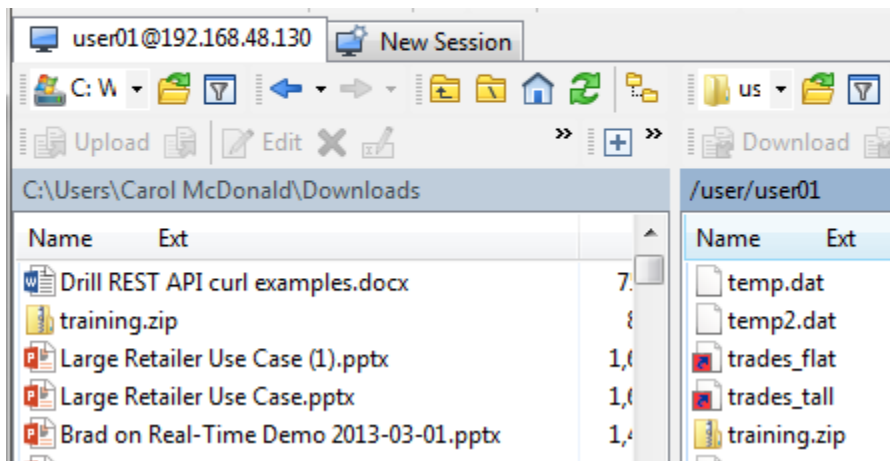


**CAUTION:** The above examples are for instructional purposes only. Be sure to substitute the correct file paths, ports, usernames, and IP addresses for your machine and your cluster.



**TIP:** You may want to verify the file path you wish to copy to by using `pwd` in your Sandbox or AWS Cluster. After you have used `scp`, verify the files were successfully transferred with `ls`.

**Using WinSCP (Windows and Sandbox only):** Find the location of your lab files on your machine as well as the location of the home directory on your Sandbox. Copy the file from your machine to the Sandbox.



## Connect to the MapR Control System with a web browser

Use Firefox or Chrome to open the following URL:

[https:// ip address :8443/](https://ip address :8443/)

Your browser will display a security warning that indicates the Web server is using a self-signed certificate. Different browsers show you this warning differently. Click the equivalent of “proceed despite this security warning” in your browser, and you will see the login page of the MapR Control System. Login with `userid:=mapr ; password= mapr`

