

Command	Parameter	Description
tira nfs-create	<i>-h --help</i>	<p>Creating a local instance of a NSF server</p> <ul style="list-style-type: none"> Checks if NFS is installed, if not → install NFS <ul style="list-style-type: none"> Creates TIRA directory Subdir.: /backup, /conf, /data, /runs, /users, /vms Registers TIRA in /etc/exports and makes it read-only Starts NFS Reloads /etc/exports Installs sshpass and openssh-server <p><i>critical command</i></p>
tira host-create	<p><nfs-server-name></p> <p><eth></p> <p><i>-h --help</i></p> <p><i>-r --remote [host]</i></p> <p><i>E.g.: tira host-create -r webis46 webis48 eth0</i></p>	<p>Creating an instance of a TIRA host (local or via remote control)</p> <p>Connection with NFS server:</p> <ul style="list-style-type: none"> Checks if NFS is installed, if not → install NFS Creates mount point for the TIRA directory Mounts the TIRA root directory from the NFS server Checks if TIRA directory is readable <p>Preparing VM host:</p> <ul style="list-style-type: none"> Downloads and installs <i>VirtualBox</i> and its extension pack Installs <i>rdesktop</i>, <i>sshpass</i>, <i>openssh-server</i>, <i>dnsmasq</i> Imports ova's, configuration files, shared folders, ip tables Creates a log in the /conf/hosts.txt file <p><i>critical command</i></p>
tira host-delete	<p><i>-h --help</i></p> <p><i>-r --remote [host]</i></p> <p><i>E.g.: tira host-delete -r webis46</i></p>	<p>Deleting a specific host (local or via remote control)</p> <ul style="list-style-type: none"> Unmounts TIRA directory, removes mount point Asks if VMs wants to be kept, if not → delete all VMs Deletes its log in the /conf/hosts.txt file <p><i>critical command</i></p>

tira host-list	-r --remote [nfs host]	Listing all hosts <ul style="list-style-type: none"> lists all hosts in the /conf/hosts.txt file
tira vm-backup	<vm-name> <user-name> -h --help -r --remote [host] <i>E.g.: tira vm-backup my_vm123 user123</i>	Creating a backup .ova file of a specific VM
tira vm-create	<os-file> (ubuntu win7) <user-name> -h --help -r --remote [host] <i>E.g.: tira vm-create ubuntu.ova user123</i>	Setting up a VM for a user <ul style="list-style-type: none"> Connects via ssh to the host Executes the TIRA VM configuration script Creates a log in the /conf/vm.txt file
tira vm-delete	<vm-name> -h --help -r --remote [host] <i>E.g.: tira vm-delete my_vm123 -r webis46</i>	Deleting a specific VM on a host and its log in the /conf/vm.txt file <ul style="list-style-type: none"> User gets a prompt if VM is still running
tira vm-list	-h --help -r --remote [nfs host] -A --all -R --running -S --sandbox <host-name> <i>E.g.: tira vm-list -r webis46 -S webis48</i>	Listing all VMs on all or on a specific host -A = all -R = running -S = sandboxed

tira vm-info	<code><vm-name></code> <code>-h --help</code> <code>-r --remote [host]</code> <i>E.g.: tira vm-log my_vm123</i>	Listing informations for a specific VM on a local host
tira vm-restore	<code><vm-name></code> <code><snapshot-name></code> <code>-h --help</code> <code>-r --remote [host]</code> <i>E.g.: tira vm-restore my_vm snap1</i>	Recreating a VM on a host from a snapshot
tira vm-sandbox	<code><vm-name></code> <code>-h --help</code> <code>-r --remote [host]</code> <i>E.g.: tira vm-sandbox my_vm123</i>	Putting a specific VM on a host in sandbox mode and taking a snapshot of this VM
tira vm-snapshot	<code><vm-name></code> <code><snapshot-name></code> <code>-h --help</code> <code>-r --remote [host]</code> <i>E.g.: tira vm-snapshot my_vm123 snap1</i>	Creating a snapshot of a specific VM on a host <ul style="list-style-type: none"> • User gets a prompt where he can choose a name for the snapshot
tira vm-start	<code><vm-name></code> <code>-h --help</code> <code>-r --remote [host]</code> <i>E.g.: tira vm-start my_vm123 -r webis46</i>	Starting a specific VM on a host
tira vm-stop	<code><vm-name></code>	Stopping a specific VM on a host

	<h1>-h --help</h1> <h1>-r --remote [host]</h1> <h2>E.g.: tira vm-stop my_vm123 -r webis46</h2>	
tira vm-unsandbox	<h1><vm-name></h1> <h1>-h --help</h1> <h1>-r --remote [host]</h1> <h2>E.g.: tira vm-unsandbox my_vm123</h2>	Taking a specific VM on a host out of sandbox mode
tira start	<h1>-h --help</h1> <h1>-r --remote [host]</h1>	Starting all VMs on a host (<i>critical command</i>)
tira stop	<h1>-h --help</h1> <h1>-r --remote [host]</h1>	Stops all VMs on a host (<i>critical command</i>)
tira status	<h1>-h --help</h1> <h1>-r --remote [nfs host]</h1>	Displaying information on the hosts and VMs registered on the NFS server
tira run-list	<h1><task></h1> <h1><user-name></h1>	Listing all / specific runs of a user
tira run-execute	<h1><submission-file></h1> <h1><input-directory> (vm shared folder)</h1> <h1><output-directory> (name of output dir)</h1> <h1><connection> (ssh local)</h1> <h1><token> (for 'sr' task)</h1> <h1>-h --help</h1> <h1>-r --remote [host]</h1> <h2>E.g.: tira run-execute ai user123 'pan-dir' 'output-dir' 'ssh'</h2>	Executing a submission for a task with an input dataset and copying output to localhost or executing command local