Parallels™

Parallels Command Line

Reference Guide

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CHAPTER 1

Introduction

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About Parallels Command Line Tools

Parallels Server, Parallels Workstation, and Parallels Desktop come with two command-line utilities: `prlsrvctl` and `prlctl`.

prlsrvctl

The `prlsrvctl` utility is used to administer Parallels Service (the core component of any Parallels hypervisor-based virtualization product). The tasks that can be perform include getting general information about the Parallels Service and its configuration settings, modifying Parallels Service preferences, getting a list of users, obtaining statistics, installing a license, and others.

To launch the utility from the command line, type:

```
prlsrvctl
```

prlctl

The `prlctl` utility is used to perform administration tasks on virtual machines. The utility supports a full range of tasks from creating and administering virtual machines to installing Parallels Tools, getting statistics, and generating problem reports.

To launch the utility from the command line, type:

```
prlctl
```

The rest of this guide provides detailed technical information on commands and options available with each utility.

Organization of This Guide

This guide is organized into the following chapters:

Introduction (you are reading it now).

Parallels Service Management. Provides technical information about the `prlsrvctl` utility, its commands and options.

Virtual Machine Management. Provides technical information about the `prlctl` utility, its commands and options.

Feedback

If you spot a typo in this guide, or if you have thought of a way to make this guide better, we would love to hear from you!

The ideal place for your comments and suggestions is the Parallels documentation feedback page (http://www.parallels.com/en/support/usersdoc/).

CHAPTER 2

Parallels Service Management

Parallels Service is a core component of any Parallels hypervisor-based virtualization product. Essentially, when we say "Parallels Service", we mean one of the Parallels virtualization products, such as Parallels Server, Parallels Desktop, or Parallels Workstation. Parallels Service is managed using the `prlsrvctl` command-line utility, which is supplied with all Parallels virtualization products and is installed on the host machine during the product installation.

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Formatting Legend

Format	Meaning
Bold	Parameters that the user must type exactly as shown.
Italic	Parameter values that the user must supply.
Between square brackets. Example: [**--name** *name*]	Optional parameters.
Between curly brackets and/or separated by pipe (|). Examples: *ID*|*name* {**-o** *name*|**-d** *name*}	Set of choices from which the user must choose only one.
Parameter followed by the same parameter in brackets with ellipses. Example: *name*[,*name*...]	Parameters that can be repeated more than once in the same command line.

General Syntax

The `prlsrvctl` command-line utility is used to perform management tasks on Parallels Service. The tasks include getting the Parallels Service information, modifying Parallels Service preferences, installing a license, obtaining statistics and problem reports, and some others.

Syntax

```
prlsrvctl command [options] [-v, --verbose number]
```

Parameters

Name	Description
`command`	The name of the command to execute.
`options`	Command options. See individual commands for available options.
`-v, --verbose number`	Show verbose output. The greater the *number*, the more verbose output will be produced.

Remarks

To display help, enter `prlsrvctl` on the command line without any parameters.

Links

Legend (p. 6)

prlsrvctl Commands

prlsrvctl info

Displays information about the host computer and the Parallels Server, Desktop, or Workstation installed on it.

Syntax

```
prlsrvctl info
```

Parameters

The command accepts no parameters.

Links

General Syntax (p. 7), Legend (p. 6)

prlsrvctl install-license

Installs Parallels Server, Parallels Desktop, or Parallels Workstation license on the host computer.

Syntax

```
prlsrvctl install-license -k,--key key [-n,--name name] [-c,--company name]
```

Parameters

Name	Description
-k, --key *key*	License key.
-n, name *name*	License user name.
-c,--company *name*	License company name.

Links

General Syntax (p. 7), Legend (p. 6)

prlsrvctl set

Allows to modify Parallels Service preferences.

Syntax

```
prlsrvctl set [--mem-limit auto|size]
              [-s,--min-security-level low|normal|high]
              [--mng-settings allow|deny]
              [{--device device --assignment host|vm}]
```

Parameters

Name	Description
--mem-limit	Sets the upper limit of the memory size that can be reserved for Parallels Service operation. The following options are available: ▪ auto -- if this options is used, the memory size will be calculated automatically. ▪ size -- user-defined memory size, in megabytes.

`-s,--min-security-level`	The lowest allowable security level that can be used to connect to the Parallels Service. The following options are available: ▪ `low` -- Plain TCP/IP (no encryption). ▪ `normal` -- Most important data is sent and received using SSL over TCP/IP (user credentials during login, guest OS clipboard, etc.) Other data is sent and received using plain TCP/IP with no encryption. ▪ `high` -- All of the data is sent and received using SSL.
`--mng-settings`	Allows to grant or deny the permission to new users to modify Parallels Service preferences. By default, only administrators of the host OS can modify Parallels Service preferences. When a new Parallels Service user profile is created (this happens when a user logs on to the Parallels Service for the first time), he/she will be granted or denied this privilege based on the default setting. This parameter allows to set that default setting. Please note that this parameter only affects the new users (the users that will be created in the future). The profiles of the existing users will not be modified.
`---device` *device*	
`--assignment`	

Links

General Syntax (p. 7), Legend (p. 6)

prlsrvctl shutdown

Shuts down the Parallels Service.

Syntax

```
prlsrvctl shutdown [-f,--force]
```

Parameters

Name	Description
`-f, --force`	Specifies whether the shutdown operation should be forced. If one or more virtual machines are running, clients are connected, or some tasks are currently in progress, then forcing the shutdown will stop all processes automatically and will shut down the Parallels Service.

Links

General Syntax (p. 7), Legend (p. 6)

prlsrvctl user list

Displays the list of Parallels Service users.

Syntax

```
prlsrvctl user list [-o,--output name[,name...]]
```

Parameters

Name	Description
`-o,--output` *name*	Names of the fields to include in the output. The following fields are available: ▪ `name` -- User name. ▪ `mng_settings` -- Indicates whether the user is allowed to modify Parallels Service preferences. ▪ `def_vm_home` -- The user default virtual machine folder. The fields must be specified using the lower case letters.

See Also

`prlsrvctl user set (p. 10)`

Links

General Syntax (p. 7), Legend (p. 6)

prlsrvctl user set

Allows to modify the profile of a Parallels Service user.

Syntax

```
prlsrvctl user set name|uuid [--def-vm-home path]
                  [--mng-settings allow|deny]
```

Parameters

Name	Description
name	The user name.
uuid	The user UUID (universally unique ID).
`--def-vm-home` *path*	The default virtual machine directory name and path.
`--mng-settings`	Specifies whether the user should be allowed to modify Parallels Service preferences. The available options are: ▪ `allow` ▪ `deny`

See Also

`prlsrvctl user list (p. 10)`

Links

General Syntax (p. 7), Legend (p. 6)

prlsrvctl statistics

Obtains Parallels Service statistics.

Syntax

`prlsrvctl statistics` [**`-a`**, **`--all`**] [**`--loop`**] [**`--filter`** *`name`*]

Parameters

Name	Description
`-a, --all`	*This parameter is not currently used.*
`--loop`	Subscribes to receive statistics on the periodic basis. Once you execute the command with this option, the statistics will be displayed in your console window every time a new set of values is collected. To unsubscribe, press the Enter key or Ctrl-C in your console window.
`--filter` *`name`*	*This parameter is not currently used.*

Links

General Syntax (p. 7), Legend (p. 6)

prlsrvctl problem-report

Obtains the Parallels Service problem report and displays it on the screen.

Syntax

```
prlsrvctl problem-report
```

Parameters

The command accepts no parameters.

Remarks

The command collects technical data about the Parallels Service and displays the report on the screen (the output can also be piped to a file). The report can then be directed to Parallels technical support for analysis.

Links

General Syntax (p. 7), Legend (p. 6)

CHAPTER 3

Virtual Machine Management

Parallels virtual machines can be managed using the `prlctl` command-line utility, which is supplied with all Parallels hypervisor-based virtualization products, such as Parallels Server, Parallels Desktop, and Parallels Workstation. The utility is installed on the host machine during the product installation.

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Formatting Legend

Format	Meaning
Bold	Parameters that the user must type exactly as shown.
Italic	Parameter values that the user must supply.
Between square brackets. Example: [**--name** *name*]	Optional parameters.
Between curly brackets and/or separated by pipe (|). Examples: *ID*|*name* {**-o** *name*|**-d** *name*}	Set of choices from which the user must choose only one.
Parameter followed by the same parameter in brackets with ellipses. Example: *name*[,*name*...]	Parameters that can be repeated more than once in the same command line.

General Syntax

The `prlctl` utility is used to perform administration tasks on virtual machines. The utility supports a full range of tasks from creating and administering virtual machines to installing Parallels Tools, getting statistics, and generating problem reports.

Syntax

prlctl *command ID|name* [*options*] [**-v, --verbose** *number*]

Parameters

Name	Description
`command`	The name of the command to execute (see the table below for the complete list of commands).
ID	The ID of the virtual machine on which to perform the operation. To obtain the list of the available virtual machines, use the `prlctl list` command (p. 19).
name	The name of the virtual machine on which to perform the operation. To obtain the list of the available virtual machines, use the `prlctl list` command (p. 19).
options	Command options. See individual commands for available options.
`-v, --verbose` *number*	Show verbose output. The greater the *number*, the more verbose output will be produced.

Remarks

To display help, enter `prlctl` without any parameters.

Links

Legend (p. 6)

prlctl Commands

prlctl create

Creates a new virtual machine. A virtual machine can be created from scratch or from a virtual machine template. When created from scratch, the target operating system type or version must be specified. To create a virtual machine from a template, the template name must be passed to the command.

Syntax

```
prlctl create name {--ostype name|--distribution name} [--location path]
prlctl create name --ostemplate name [--location path]
```

Parameters

Name	Description
name	User-defined new virtual machine name. If the name consists of two or more words separated by spaces, it must be enclosed in quotes.
`-o, --ostype` *name*	The name of the family of the operating system that will be installed in the virtual machine. Select from one of the following: ▪ `windows` ▪ `linux` ▪ `macos` ▪ `feebsd` ▪ `os2` ▪ `msdos` ▪ `netware` ▪ `solaris` ▪ `other` (specify this option if the operating system you are planning to install is not listed above).

`-d, --distribution` *name*	The operating system version that will be installed in the virtual machine. Select from one of the following (grouped by family): **Windows** ▪ `win-311` ▪ `win-95` ▪ `win-98` ▪ `win-me` ▪ `win-nt` ▪ `win-2000` ▪ `win-xp` ▪ `win-2003` ▪ `win-vista` ▪ `win-2008` ▪ `win` (specify this option if the Windows OS version you are using is not listed above). **Linux** ▪ `rhel` ▪ `suse` ▪ `debian` ▪ `fedora-core` (specify this option for all Fedora Core distributions except for Fedora Core 5). ▪ `fc-5` ▪ `ubuntu` ▪ `mandriva` **Mac OS** ▪ `macos-10.4` ▪ `macos-10.5` **FreeBSD** ▪ `freebsd-4` ▪ `freebsd-5` ▪ `freebsd-6` ▪ `freebsd-7` ▪ `freebsd` **MS-DOS** ▪ `msdos-6.22` ▪ `msdos` (specify this option for all MS-DOS operating systems except for MS-DOS 6.22). **OS/2** ▪ `os2-3` ▪ `os2-4` ▪ `os-45` ▪ `ecomstation-1.1` ▪ `ecomstation-1.2` ▪ `os2` (specify this option for all OS/2 operating systems except for the ones listed above).

	▪ `qnx` ▪ `openstep` ▪ `other` (use this option if the operating system version you are using is not listed above).
`--ostemplate` *name*	The name of the virtual machine template from which to create the new virtual machine. Use the `prlctl list --template` command to obtain the list of the available templates.
`--location` *path*	Name and path of the directory where to store the new virtual machine files. If this parameter is omitted, the files will be crated in the default virtual machine directory for this Parallels Service.

Remarks

When creating a virtual machine from scratch, you may specify the operating system family or version. If an operating system version is specified using the `--distribution` parameter, the virtual machine will be configured for that operating system. If an operating system family is specified using the `--ostype` parameter, the virtual machine will be configured for the default version of this OS family. The default versions are determined internally by Parallels and are kept in sync with other Parallels management tools such as Parallels Management Console. The best way to find out the default versions used in your Parallels installation is by creating a sample virtual machine.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl start, prlctl stop, and prlctl reset

Start, stop, and reset a virtual machine.

Syntax

```
prlctl start ID|name
prlctl stop ID|name [--kill]
prlctl reset ID|name
```

Parameters

Name	Description
ID	The ID of the virtual machine to start, stop, or reset.
name	The name of the virtual machine to start, stop, or reset.
`--kill`	Perform a 'hard' virtual machine shutdown. If this option is omitted, an attempt to perform a graceful shutdown will be made.

Remarks

The `stop` command can perform a 'hard' or a graceful virtual machine shutdown. If the `--kill` parameter is included, the 'hard' shutdown will be performed. If the parameter is omitted, the outcome of the graceful shutdown attempt will depend on the following:

- If the Parallels Tools package is installed in a virtual machine, the graceful shutdown will be performed using its facilities.
- If the Parallels Tools package is not installed, the command will try to perform a graceful shutdown using ACPI. Depending on the ACPI support availability in the guest operating system, this may work or not.

The `reset` command stops and then starts a virtual machine. The command first performs a 'hard' virtual machine shutdown and then starts the virtual machine from the stopped state.

The `start` command can be used to start a stopped virtual machine or to resume a paused virtual machine (p. 20).

Links

General Syntax (p. 14), Legend (p. 6)

prlctl delete

Deletes a virtual machine from the host. The command removes a virtual machine from the Parallels Service registry and permanently deletes all its files from the host. Once completed, this operation cannot be reversed.

Syntax

```
prlctl delete ID|name
```

Parameters

Name	Description
ID	The ID of the virtual machine to delete.
name	The name of the virtual machine to delete.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl clone

Creates an exact copy of the specified virtual machine.

Syntax

```
prlctl clone ID|name --name new_name [--template] [--location path]
```

Parameters

Name	Description
ID	The ID of the virtual machine to clone
name	The name of the virtual machine to clone.
--name *new_name*	The name to be assigned to the new virtual machine.
--template	Create a virtual machine template instead of a real virtual machine. Templates are used as a basis for creating new virtual machines.
--location *path*	Name and path of the new virtual machine directory. If this parameter is omitted, the new virtual machine will be created in the default directory for this Parallels Service.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl list

Obtains a list of virtual machines registered with the Parallels Service. The command allow to obtain a summary list containing only the virtual machine ID, name, and status or to obtain a detailed information about a specific or all virtual machines.

Syntax

```
prlctl list [--all] [--template] [--no-header]
            [-o, --output name[,name...]] [-s, --sort name|-name]

prlctl list --info [ID|name]
```

Parameters

Name	Description
-a, --all	List all, running, stopped, suspended, and paused, virtual machines. If this and the rest of the parameters are omitted, only the running virtual machines will be displayed.
-t, --template	List the available virtual machine templates. The real virtual machines will not be included in the output.
--no-header	Do not display column headers.
-i, --info	

ID	The ID of the virtual machine for which to display the detailed information. If none specified, the information will be displayed for all registered virtual machines.
`-o, --output` *name*	Display one (or any combination) of the following fields: ▪ `uuid` -- Virtual machine ID. ▪ `name` -- Virtual machine name. ▪ `status` --Virtual machine status (running, stopped, etc.). The above fields can be combined in a single command using comma separator (e.g. `uuid, name`). The excluded fields will not be displayed. The field names must be typed in lower case.
`-s, --sort` *name*	Sort the virtual machine list by the specified parameter in ascending order.
`-i, --info`	Display detailed information about a virtual machine.
ID	The ID of the virtual machine for which to display the detailed information. If not specified, the information will be displayed for all registered virtual machines.
name	The name of the virtual machine for which to display the detailed information. If not specified, the information will be displayed for all registered virtual machines.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl pause, prlctl suspend, prlctl resume

Pause, suspend, and resume a virtual machine.

Syntax

```
prlctl pause ID|name
prlctl suspend ID|name
prlctl resume ID|name
```

Parameters

Name	Description
ID	The ID of the virtual machine to pause, suspend, or resume.
name	The name of the virtual machine to pause, suspend, or resume.

Remarks

The `pause` command pauses a virtual machine. To continue the virtual machine operation, use the `prlctl start` command (p. 17).

The `suspend` command suspends the virtual machine operation. When a running virtual machine is suspended, the state of the virtual machine processes is saved to a file on the host. After that, the machine is stopped. To resume the machine, use the `resume` command.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl register and prlctl unregister

The `register` command is used to register a virtual machine with Parallels Service.

The `unregister` command removes a virtual machine from the Parallels Service registry.

Syntax

```
prlctl register path
prlctl unregister ID|name
```

Parameters

Name	Description
path	An absolute path to the virtual machine directory.
ID|name	The ID or the name of the virtual machine to remove from the Parallels Service registry.

Remarks

Use the `register` command when you have a virtual machine on the host that doesn't show up in the list of the virtual machines registered with the Parallels Service. This can be a machine that was previously removed from the registry or a machine that was copied from another location.

The `unregister` command removes a virtual machine from the Parallels Service registry, but does not delete the virtual machine files from the host. You can re-register such a machine with the Parallels Service later using the `register` command.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl installtools

Installs Parallels Tools in the specified virtual machine.

Syntax

```
prlctl installtools ID|name
```

Parameters

Name	Description
ID	The ID of the target virtual machine.
name	The name of the target virtual machine.

Notes

To use this command, the target virtual machine must be running.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl snapshot

Takes a snapshot of a running virtual machine.

Syntax

```
prlctl snapshot ID|name [-n,--name name] [-d,--description desc]
```

Parameters

Name	Description
ID	The virtual machine ID.
name	The virtual machine name.
-n, --name *name*	User-defined snapshot name.
-d, --description desc	User-defined snapshot description.

Links

General Syntax (p. 14), Legend (p. 6)

prlcltl snapshot-delete

Deletes a virtual machine snapshot.

Syntax

```
prlctl snapshot-delete ID|name -i,--id snapshot_id
```

Parameters

Name	Description
ID	The virtual machine ID.
name	The virtual machine name.
-i, --id *snapshot_id*	The ID of the snapshot to delete.

Notes

If the specified snapshot has child snapshots that were derived from it, they will NOT be deleted.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl snapshot-list

Displays a list of snapshots of the specified virtual machine.

Syntax

```
prlctl snapshot-list ID|name [-t,--tree] [-i,--id snapshot_id]
```

Parameters

Name	Description
ID	The virtual machine ID.
name	The virtual machine name.
-t, --tree	Displays the snapshot list as a tree. The default display format is tabular with Parent Snapshot ID and Snapshot ID as columns.
-i, --id *snapshot_id*	The ID of the snapshot to use as a root. If this parameter is omitted, the entire snapshot tree will be displayed.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl snapshot-switch

Reverts the specified virtual machine to the specified snapshot.

Syntax

```
prlctl snapshot-switch ID|name -i,--id snapshot_id
```

Parameters

Name	Description
ID	The virtual machine ID.
name	The virtual machine name.
-i, --id *snapshot_id*	The ID of the snapshot to revert to.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl capture

Captures the screen of a virtual machine desktop and saves it to a file on the client machine. The data is saved in the Portable Network Graphics (PNG) format.

Syntax

```
prlctl capture ID|name --file name
```

Parameters

Name	Description
ID	The virtual machine ID.
name	The virtual machine name.
--file *name*	Name and path of the file to which the image should be saved. You should include the file extension (.png) or the file will be saved without one.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl problem-report

Obtains a problem report for the specified virtual machine and displays it on the screen.

Syntax

```
prlctl problem-report ID|name
```

Parameters

Name	Description
ID	The ID of the virtual machine for which to obtain the problem report.
name	The name of the virtual machine for which to obtain the report. If the name consists of separate words, it must be enclosed in quotes.

Remarks

The command collects technical data about a virtual machine and displays the report on the screen (the output can also be piped to a file). The report can then be directed to Parallels technical support for analysis.

Links

General Syntax (p. 14), Legend (p. 6)

prlctl server

Obtains information about host computer and the Parallels Server, Desktop, or Workstation installed on it. Also, allows to shut down the Parallels Service.

Syntax

```
prlctl server shutdown|info
```

Parameters

Name	Description
info	Displays the Parallels Service information.
shutdown	Shuts down the Parallels Service. If one or more virtual machines are running, clients are connected, or some tasks are currently in progress then the shutdown operation will be aborted.

See Also

`prlsrvctl info` (p. 7)

`prlsrvctl shutdown` (p. 9)

Links

General Syntax (p. 14), Legend (p. 6)

prlctl set

The `prlctl set` command is used to modify the configuration of a virtual machine and manage virtual machine devices and shared folders. The following subsections provide technical information on how to use the command to perform these tasks.

Modifying Virtual Machine Configuration

The `prlctl set` command can be used to modify some of the virtual machine configuration parameters, including virtual CPU availability, RAM and video memory size, startup and shutdown options, and some others.

Syntax

```
prlctl set ID|name [--cpus number] [--memsize number]
           [--videosize number] [--description description]
           [--autostart on|off|auto] [--autostart-delay number]
           [--autostop stop|suspend]
           [--start-as-user administrator|owner|user:passwd]
```

Parameters

Name	Description
ID	Target virtual machine ID.
name	Target virtual machine name.
`--cpus` *number*	Number of virtual CPUs in the virtual machine. If the host has more than one CPU, this option allows to set the number of virtual CPUs to be available in the virtual machine.
`--memsize` *number*	The amount of memory (RAM) available to the virtual machine, in megabytes.
`--videosize` *number*	The amount of video memory available to the virtual machine graphics card.
`--description` *VM_description*	Short description of the virtual machine.

`--autostart on|off|auto`	Defines the virtual machine start-up options: ▪ `on` -- the virtual machine is started automatically on the Parallels Service startup. ▪ `off` -- the autostart is off. This is the default VM start-up mode. ▪ `auto` -- resume the virtual machine state prior to the Parallels Service shutdown. If you set this option to `on` or `auto`, you must additionally specify the `--start-as-user` option (see below).
`--autostart-delay` *`number`*	Sets the time delay used during the virtual machine automatic startup.
`--autostop stop|suspend`	Sets the automatic shutdown mode for the specified virtual machine: ▪ `stop` -- the virtual machine is stopped when you shut down the Parallels Service. ▪ `suspend` -- the virtual machine is suspended when the Parallels Service is shut down.
`--start-as-user administrator|owner|`*`user`*`:`*`passwd`*	Specifies the account to use to autostart the virtual machine: ▪ `administrator` -- start the virtual machine as the administrator of the host operating system. ▪ `owner` -- start the virtual machine as the virtual machine owner. ▪ *`user:passwd`* -- start the virtual machine as the specified user.

Links

General Syntax (p. 14), Legend (p. 6)

Managing Virtual Devices

The `prlctl set` command allows to add virtual devices to a virtual machine and to modify and delete existing virtual devices.

General Syntax

```
prlctl set ID|VM_name --device-add dev_type options
prlctl set ID|VM_name --device-set name options
prlctl set ID|VM_name --device-del name
```

Parameters

Name	Description
`ID`	The virtual machine ID.

VM_name	The virtual machine name.
--device-add *dev_type options*	Adds a virtual device to the specified virtual machine. The *dev_type* parameter specifies the virtual device type (hdd, cdrom, fdd, net, etc.). The *options* parameters specifies device-type specific options.
--device-set *name options*	Modifies the configuration of an existing virtual device in the specified virtual machine. The *name* parameter specifies the virtual device name. The *options* parameters specifies device-type specific options.
--device-del *name*	Deletes a virtual device from the virtual machine. The *name* parameter specifies the name of the virtual device to delete.

Remarks

All device-related parameters can be subdivided into the following categories:

- Hard disk drives (p. 29)
- Optical disk drives (p. 31)
- Network cards (p. 33)
- Floppy disk drives (p. 32)
- USB devices (p. 36)
- Serial ports (p. 34)
- Parallel ports (p. 35)
- Sound cards (p. 37)

Each group of parameters is explained in the following subsections in detail.

Notes

All operations on virtual machine devices (adding, modifying, or removing a device) must be performed on a stopped virtual machine. An attempt to perform any of these operations on a running virtual machine will result in error.

Links

Legend (p. 6)

Hard Disk Drive Management Parameters

This group of parameters is used to add and configure virtual hard disks in a virtual machine.

Syntax

```
prlctl set ID|VM_name --device-add hdd [--image name]
           [--type expand|plain][--size number][--split]
           [--iface ide|scsi][--position number]
           [--enable|--disable]

prlctl set ID|VM_name --device-add hdd --device name
           [--iface ide|scsi][--position number]
           [--enable|--disable]

prlctl set ID|VM_name --device-set hddN [--image name]
           [--type expand|plain][--size number][--split]
           [--iface ide|scsi][--position number]
           [--enable|--disable]

prlctl set ID|VM_name --device-set hddN --device name
           [--iface ide|scsi][--position number]
           [--enable|--disable]
```

Parameters

Name	Description
ID	The virtual machine ID.
VM_name	The virtual machine name.
`--device-add`	Adds a virtual hard disk drive to the virtual machine. You can connect up to four IDE devices and up to seven SCSI devices to a virtual machine. This includes hard disks and optical disk drives.
`--device-set`	Modifies the parameters of an existing virtual hard disk.
`hdd`	Specifies the type of the virtual device to add to the virtual machine (in this instance, a virtual hard disk).
`hdd`*N*	The name of the virtual hard disk to modify. Virtual hard disks are named using the `hdd`*N* format where *N* is the drive index number starting from 0 (e.g. `hdd0`, `hdd1`). To obtain the list of disk names, use the `prlctl list` command with the `--info` option.
`--image` *name*	This options is used to create a virtual hard disk using an image file. You have an option of creating a new image file or to use an existing image. ▪ To use an existing image file, specify its name and path using the *name* parameter. ▪ To create a new image file, omit the `--image` parameter. New image files are created in the virtual machine directory and are automatically named using the `harddisk`*N*`.hdd` format, where *N* is the disk index number (e.g. `harddisk0.hdd`, `harddisk1.hdd`).
`--device` *name*	This option is used to create a virtual hard disk based on a boot camp partition (Mac hosts). The *name* parameter must contain the boot camp partition name.

`--type expand|plain`	For image file based virtual disk drives, specified the disk type: ▪ `expand` -- expanding disk. The image file is small initially and grows in size as you add data to it. This is the default virtual disk type. ▪ `plain` -- plain disk. The image file has a fixed size from the moment it is created (i.e the space is allocated for the drive fully). Plain disks perform faster than expanding disks.
`--size` *`number`*	The size of the virtual hard disk, in megabytes. The default size is 32,000 MB.
`--split`	Splits the hard disk image file into 2 GB pieces. You should split a virtual disk if it is stored on a file system that cannot support files larger than 2 GB (e.g. FAT16).
`--iface ide|scsi`	Interface type: ▪ `ide` -- IDE drive. ▪ `scsi` - SCSI drive (default).
`--position` *`number`*	The SCSI or IDE device identifier to be used for the virtual disk. The allowed ID ranges are the following: ▪ for IDE devices: `0:0`, `0:1`, `1:0`, `1:1`; ▪ for SCSI device: `0:0`, `1:0`, `2:0`, `3:0`, `4:0`, `5:0`, `6:0`. You can use one of the following formats for specifying IDs: *`ID:bus`*, *`ID-bus`*, *`ID`*. For example, if you specify 3:0 (or 3-0 or 3) as *`number`* for a SCSI drive, the guest OS will see the drive as having ID 3 on SCSI bus 0.
`--enable`	Enables the specified virtual disk drive. All newly added disk drives are enabled by default (provided the `--disable` option is omitted).
`--disable`	Disables the specified virtual disk drive. The disk drive itself is not removed from the virtual machine configuration.

Links

General Syntax (p. 14), Virtual Device Management (p. 27), Legend (p. 6)

Optical Disk Drive Management Parameters

This group of parameters is used to add and configure virtual optical disk drives, such as DVD or CD drives.

Syntax

```
prlctl set ID|VM_name --device-add cdrom --image image_name
           [--iface ide|scsi] [--position number]
           [--enable|--disable] [--connect|--disconnect]

prlctl set ID|VM_name --device-add cdrom --device device_name
           [--iface ide|scsi] [--position number]
           [--enable|--disable] [--connect|--disconnect]

prlctl set ID|VM_name --device-set cdromN
           {--device name|--image name} [--iface ide|scsi]
           [--position number][--enable|--disable]
           [--connect|--disconnect]
```

Parameters

Name	Description
ID	The virtual machine ID.
name	The virtual machine name.
`--device-add`	Adds a DVD/CD drive to the virtual machine. You can connect up to four IDE devices and up to seven SCSI devices to a virtual machine. This includes virtual hard disks and DVD/CD drives.
`--device-set`	Modifies the parameters of an existing virtual optical disk.
`cdrom`	Specifies the virtual device type (in this instance, a CD or DVD drive).
`cdrom`*N*	The name of the DVD/CD drive to modify. The *N* postfix indicates the drive index number. To obtain the list of the available drives, use the `prlctl list` command with the `--info` option.
`--device` *name*	The name of the physical optical disk to connect to the virtual machine.
`--image` *name*	The name of an existing disk image file to mount in the virtual machine. Currently, the following image file formats are supported: `.iso`, `.cue`, `.ccd`, and `.dmg`. The image must not be compressed and/or encrypted.
`--iface ide|scsi`	Interface type: ▪ `ide` -- IDE disk. ▪ `scsi` -- SCSI disk (default).

`--position` *number*	The SCSI or IDE device identifier to be used for the DVD/CD drive. The allowed ID ranges are the following: ▪ for IDE devices: `0:0`, `0:1`, `1:0`, `1:1`; ▪ for SCSI device: `0:0`, `1:0`, `2:0`, `3:0`, `4:0`, `5:0`, `6:0`. You can use one of the following formats for specifying IDs: *`ID`*`:`*`bus`*, *`ID`*`-`*`bus`*, *`ID`*. For example, if you specify 3:0 (or 3-0 or 3) as *`number`* for a SCSI drive, the guest OS will see the drive as having ID 3 on SCSI bus 0.
`--enable`	Enables the specified DVD/CD drive. All newly added drives are enabled by default (provided the `--disable` option is omitted).
`--disable`	Disables the specified optical disk drive. The disk drive itself is not removed from the virtual machine configuration.
`--connect`	Automatically connect the specified optical disk drive during the virtual machine startup process.
`--disconnect`	Do not automatically connect the specified optical disk drive during the virtual machine startup process.

Links

General Syntax (p. 14), Virtual Device Management (p. 27), Legend (p. 6)

Floppy Disk Drive Management Parameters

This group of parameters is used to add floppy disk drives to a virtual machine and to modify existing virtual floppy disk drives.

Syntax

```
prlctl set ID|VM_name --device-add fdd [--device name]
           [--enable|--disable][--connect|--disconnect]

prlctl set ID|VM_name --device-set fdd [--device name]
           [--enable|--disable][--connect|--disconnect]
```

Parameters

Name	Description
`ID`	The virtual machine ID.
`VM_name`	The virtual machine name.
`fdd`	Specifies the type of the virtual device to add or modify (in this instance, a floppy disk drive).
`--device-add`	Adds a new floppy disk drive to the virtual machine. You can connect only one floppy disk drive to a virtual machine.
`--device-set`	Modifies the parameters of an existing virtual floppy disk drive.
`--device` *name*	The name of the physical floppy disk drive to connect to the virtual machine. If this parameter is omitted, a floppy drive image emulating the floppy disk drive will be created.

`--enable`	Enables the specified floppy disk drive. All newly added floppy drives are enabled by default (provided the `--disable` option was omitted during the drive creation).
`--disable`	Disables the specified floppy disk drive. The drive itself is not removed from the virtual machine configuration.
`--connect`	Connect the specified floppy disk drive automatically during the virtual machine startup process.
`--disconnect`	Use this option if you don't want the specified floppy disk drive automatically connected to the virtual machine on its start.
`--image` *`path`*	The name and path of an existing floppy disk image file (usually `floppy.fdd`) to mount in the virtual machine.

Links

General Syntax (p. 14), Virtual Device Management (p. 27), Legend (p. 6)

Network Adapter Management Parameters

This group of parameters is used to manage virtual network adapters in a virtual machine.

Syntax

```
prlctl set ID|VM_name --device-add net --type shared|host
           [--mac addr][--enable|--disable][--connect|--disconnect]

prlctl set ID|VM_name --device-add net --type bridged --iface name
           [--mac addr][--enable|--disable] [--connect|--disconnect]

prlctl set ID|VM_name --device-set netN --type shared|host
           [--mac addr][--enable|--disable][--connect|--disconnect]

prlctl set ID|VM_name --device-set netN --type bridged
           --iface name [--mac addr|auto][--enable|--disable]
           [--connect|--disconnect]
```

Parameters

Name	Description
`ID`	The virtual machine ID.
`VM_name`	The virtual machine name.
`--device-add`	Adds a new virtual network adapter to the virtual machine.
`--device-set`	Used to configure an existing virtual network adapter.
`net`	Specifies the virtual device type to add (in this instance, a virtual network adapter).
`net`*`N`*	The name of the virtual network adapter to modify. To obtain the list of the available adapters, use the `prlctl list` command with the `--info` option.

`--type shared|host|bridged`	Sets the networking mode for the virtual network adapter: ▪ `shared` -- Shared networking. Select this option if you wish to enable Network Address Translation (NAT) for the adapter. The adapter will share the IP address with the Parallels Service when communicating with external networks. ▪ `host` -- Host-only networking. Select this option if you wish the virtual machine to communicate only with the Parallels Service and other virtual machines residing on the same host. Access to external networks is not allowed. ▪ `bridged` -- Bridged networking. The adapter is bound to the specified physical network adapter. The virtual machine will appear as a standalone computer on the network.
`--iface` *`name`*	Used with the bridged networking mode (see above). Specifies the name of the physical network adapter to which the virtual adapter should be bound.
`--mac` *`addr`*	The MAC address to be assigned to the virtual network adapter. If this option is omitted, the MAC address will be generated automatically.
`--mac` *`addr`*`|auto`	Specifies the MAC address to assign to an existing network adapter. Specify a desired MAC address using the *`addr`* parameter value or use the `auto` option to re-generate the existing address automatically.
`--enable`	Enables the virtual network card. All newly created network adapters are enabled by default (provided the `--disable` option is omitted).
`--disable`	Disables virtual network adapter. The adapter itself is not removed from the virtual machine configuration. Please note that a disabled virtual network adapter can only be enabled in a stopped virtual machine.
`--connect`	Automatically connect the virtual network adapter during the virtual machine startup process.
`--disconnect`	Do not automatically connect the virtual network adapter during the virtual machine startup process.

Links

General Syntax (p. 14), Virtual Device Management (p. 27), Legend (p. 6)

Serial Port Management Parameters

This group of parameters is used to manage serial ports in a virtual machine.

Syntax

```
prlctl set ID|VM_name --device-add serial
           {--device name|--output file|--socket name}
           [--enable|--disable][--connect|--disconnect]

prlctl set ID|VM_name --device-set serialN
           {--device name|--output file|--socket name}
           [--enable|--disable][--connect|--disconnect]
```

Parameters

Name	Description
`ID`	The virtual machine ID.

VM_name	The virtual machine name.
--device-add	Adds a new serial port to the virtual machine. You can connect up to four serial ports to a virtual machine.
--device-set	Modifies the parameters of an existing serial port.
serial	Specifies the type of the virtual device to add (in this instance, a serial port).
--device *name*	The name of the physical serial port to which to connect the virtual machine.
--output *file*	The name and path of the output file to which to connect the virtual serial port.
--socket *name*	The name of the physical socket to which to connect the virtual serial port.
--enable	Enables the virtual serial port. All newly added serial ports are enabled by default (provided the --disable option is omitted).
--disable	Disables the virtual serial port.
--connect	Automatically connect the virtual serial port during the virtual machine startup process.
--disconnect	Do not automatically connect the virtual serial port during the virtual machine startup process.

Links

General Syntax (p. 14), Virtual Device Management (p. 27), Legend (p. 6)

Parallel Port Management Parameters

This group of parameters is used to manage parallel port in a virtual machine.

Syntax

```
prlctl set ID|VM_name --device-add parallel
           {--device name|--output file_name}
           [--enable|--disable][--connect|--disconnect]

prlctl set ID|VM_name --device-set parallelN
           {--device name|--output file_name}
           [--enable|--disable][--connect|--disconnect]
```

Parameters

Name	Description
ID	The virtual machine ID.
name	The virtual machine name.
--device-add	Adds a new parallel port to the virtual machine. You can connect up to three parallel ports to a virtual machine.
--device-set	Modifies the parameters of an existing virtual parallel port.
parallel	Specified the type of the virtual device to add (in this instance, a virtual parallel port).

`parallel`*`N`*	The name of the parallel port to modify. To obtain the list of ports, use the `prlctl list` command with the `--info` option.
`--device` *`name`*	The name of the physical parallel port to which to connect the virtual parallel port.
`--output` *`file_name`*	The name of the output file to which to connect the virtual parallel port.
`--enable`	Enables the specified parallel port. All newly added parallel ports are enabled by default (provided the `--disable` option was omitted during the port creation).
`--disable`	Disable the specified virtual parallel port. The port itself is not removed from the virtual machine configuration.
`--connect`	Automatically connect the specified virtual parallel port during the virtual machine startup process.
`--disconnect`	Do not automatically connect the specified virtual parallel port during the virtual machine startup process.

Links

General Syntax (p. 14), Virtual Device Management (p. 27), Legend (p. 6)

USB Controller Management Parameters

This group of parameters is used to manage the USB controller in a virtual machine.

Syntax

```
prlctl set ID|VM_name --device-add usb [--enable|--disable]
```

Parameters

Name	Description
`ID`	The virtual machine ID.
`VM_name`	The virtual machine name.
`usb`	The type of the virtual device to add to the virtual machine (in this instance, a USB device).
`--enable`	Enables the USB controller. This is the default option.
`--disable`	Disables the USB controller.

Links

General Syntax (p. 14), Virtual Device Management (p. 27), Legend (p. 6)

Sound Device Management Parameters

This group of parameters is used to manage sound devices in a virtual machine.

Syntax

```
prlctl set ID|VM_name --device-add sound --output name
           [--enable|--disable][--connect|--disconnect]

prlctl set ID|VM_name --device-set sound --output name
           [--enable|--disable][--connect|--disconnect]
```

Parameters

Name	Description
ID	The virtual machine ID.
VM_name	The virtual machine name.
sound	The type of the virtual device to add to the virtual machine (in this instance, a sound device).
--output *name*	The name of a physical output device to which to connect the virtual sound device.
--input *name*	The name of the physical input device to which to connect the virtual sound device.
--enable	Enables the specified sound device. All newly added sound devices are enabled by default (provided the --disable option is omitted).
--disable	Disables the specified virtual sound device.
--connect	Automatically connect the sound device during the virtual machine startup process.
--disconnect	Do not automatically connect the sound device during the virtual machine startup process.

Links

General Syntax (p. 14), Virtual Device Management (p. 27), Legend (p. 6)

Removing Devices from Virtual Machine

The --device-del option is used to remove virtual devices from a virtual machine.

Syntax

```
prlctl set ID|name --device-del name
```

Parameters

Name	Description
--device-del *name*	The name of the virtual device to delete from the virtual machine. To obtain the list of virtual devices, use the prlctl list command with the --info option.

Links

General Syntax (p. 14), Virtual Device Management (p. 27), Legend (p. 6)

Managing Shared Folders

The `prlctl set` command can be used to add shared folders to a virtual machine and to modify and delete existing shared folders.

Syntax

```
prlctl set ID|VM_name --sharedfolder-add name --path path
                                          [--mode ro|rw]
                                          [--description txt]
                                          [--enable|--disable]

prlctl set ID|VM_name --sharedfolder-set name [--mode ro|rw]
                                          [--path path]
                                          [--description txt]
                                          [--enable|--disable]

prlctl set ID|VM_name --sharedfolder on|off

prlctl set ID|VM_name --sharedfolder-del name
```

Parameters

Name	Description
ID	The virtual machine ID.
VM_name	The virtual machine name.
`--sharedfolder-add`	Adds a shared folder to the virtual machine.
`--sharedfolder-set`	Modifies the settings of an existing shared folder.
`--sharedfolder on|off`	Turns folder sharing on or off.
`--sharedfolder-del`	Removes the shared folder specified by *name* from the shared folder list.
name	User-defined shared folder name.
`--path`	Name and path of a folder on the host machine to share with the specified virtual machine.
`--mode`	Sharing mode: ▪ `ro` -- read-only. ▪ `rw` -- read and write.
`--description`	User-defined shared folder description.
`--enable`	Enable the shared folder.
`--disable`	Disable the shared folder.

Links

General Syntax (p. 14), Legend (p. 6)

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