

Mobile Labs

deviceConnect™ CLI User Guide



Contents

1	deviceConnect Command Line Interface (CLI)	1
1.1	Installation	1
1.2	Connecting to deviceConnect	1
1.3	Running a command	1
1.4	Options	2
2	Legal Notices	11

1 deviceConnect Command Line Interface (CLI)

deviceConnect comes with a Command Line Interface (CLI). The CLI can be used to create scripts that automate most of the deviceConnect management functions that can be performed manually using the web user interface. The CLI can be scripted in Continuous Integration systems to deploy apps to the testing devices. It can even be used in automated tests to retain a device, install and launch an application, and then connect to the device to begin automation without user interaction.

1.1 Installation

To install the CLI tool, simply download it from deviceConnect. In deviceConnect, in the user dropdown in the upper right corner, click on the Download deviceConnect CLI option. This will download a zip file. You can extract the zip file anywhere you wish, however, we recommend putting it in the following locations:

- Windows: C:\Program Files (x86)\Mobile Labs\Cli
- Mac: \usr\local\deviceconnect\cli

1.2 Connecting to deviceConnect

Note

If using Mac OSX, use "mono" as the precursor to each call.

The CLI executable requires that you enter in the authentication information into each call that is used.

```
MobileLabs.DeviceConnect.Cli.exe <host> <username> <password> [options]
```

The host is the IP address or DNS entry for the deviceConnect Server, username and password are of a user in deviceConnect. This information must be present in every call.

1.3 Running a command

Running a command is as simple as using the connection items before and adding the options for the commands you want to use. There are options for the various features of deviceConnect. To see a list of features, use the "-help" option or do not specify an option.

Note

All values that contain spaces must be marked within quotations

```
> MobileLabs.DeviceConnect.Cli.exe  
> MobileLabs.DeviceConnect.Cli.exe -help
```

For example, to get a list of devices use the following command:

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵  
    devicelist
```

The result of the command would be:

Online:

```
Blue iPhone (iPhone 5c IOS 7.0.4 FXXXXXXXXXXG Enabled)
iPad 2 iOS 7 (iPad 2 IOS 7.0.2 DXXXXXXXXXXW Enabled)
iPad First Gen (iPad 1G IOS 5.0.1 GXXXXXXXXXX0 Enabled)
iPhone 3GS (iPhone 3GS IOS 6.1.3 QXXXXXXXXXXP Enabled)
iPhone 5s (iPhone 5s IOS 7.0.3 FXXXXXXXXXXV Enabled)
ML Nexus 4 (Nexus 4 Android 4.3 01XXXXXXXXXX1c Enabled)
ML_Nexus 5 (Nexus 5 Android 4.4 03XXXXXXXXXXce Enabled) [Tester Name]
New Nexus 7 (Nexus 7 Android 4.3 01XXXXXXXXXX11 Enabled)
Old Nexus 7 (Nexus 7 Android 4.3 01XXXXXXXXXX02 Enabled)
```

1.4 Options

There are options for the various versions of deviceConnect features. To see a list of features, use the "-help" option or do not specify an option. Remember that the host, username, and password are required for each call.

1.4.1 CLI options

The options for the CLI tool will allow the user to understand how to use the CLI tool or change the way it behaves.

-help

Displays a list of commands and options, this is also called without providing any option

```
> MobileLabs.DeviceConnect.Cli.exe
> MobileLabs.DeviceConnect.Cli.exe -help
```

-host

Allows a user to change the deviceConnect host in a string of options. The following shows how to get two device lists from two different deviceConnect units. The first server is displayed followed by the following server.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword -dl - <-
  host 192.168.1.100 -dl
```

Note

username and password must be the same for both servers.

-username

Allows a user to use a different deviceConnect username than provided in the connection parameters. The following shows how to get a device list from another deviceConnect unit

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword -host <-
  192.168.1.100 -username your.email@example.com -password yourPassword -dl
```

-password

Allows a user to use a different deviceConnect password than provided in the connection parameters. The following shows how to get a device list from another deviceConnect unit

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword -host <-
  192.168.1.100 -username your.email@example.com -password yourPassword -dl
```

-continue

Allows the command to continue processing options after printing an error message from a previous command that has failed.

The below example will continue to upload the application if the -deleteapp option failed because the application is not present in deviceConnect.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - continue -deleteapp MobileLabsApp -upload "C:\applications\MobileLabsApp.ipa"
```

-os [android,ios]

Adds an iOS or Android OS filter to application and device options.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword -os ios -dl -al
```

Online:

```
Blue iPhone (iPhone 5c IOS 7.0.4 FXXXXXXXXXXG Enabled)
iPad 2 iOS 7 (iPad 2 IOS 7.0.2 DXXXXXXXXXXW Enabled)
iPad First Gen (iPad 1G IOS 5.0.1 GXXXXXXXXXX0 Enabled)
iPhone 3GS (iPhone 3GS IOS 6.1.3 QXXXXXXXXXXP Enabled)
iPhone 5s (iPhone 5s IOS 7.0.3 FXXXXXXXXXXV Enabled)
```

IOS:

```
deviceControl 4.5/43 (min 6.0, uploaded 05/05/15 1:23:45 PM) 3eacd9ed-5d98-4855-9a06 -f6b56fedffbf
deviceControl iOS5 4.5/43 (min 5.0, uploaded 05/05/15 1:23:45 PM) 80e403f4-a92c-4eeb -87b2-f5ba9eb5bb8d
PhoneLookup 4.0/1 (min 6.0, uploaded 05/05/15 1:23:45 PM) c0d26509-a00a-413e-8906-30 d263993209
Trust Browser 1.3.4/8 (min 5.0, uploaded 05/05/15 1:23:45 PM) c3d87f35-4c66-43da-85 a1-75cd7f3ad510
```

1.4.2 Application Options

-al or -applist [android,ios]

This will return a list of all applications and the builds uploaded to deviceConnect. Passing "android" or "ios" will filter the list to those particular operating systems. The default is without parameters. The output is a list of the applications along with version, build, unique ID, and minimum operating system. The output is also grouped by operating system.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - applist
```

IOS:

```
deviceControl 4.5/43 (min 6.0, uploaded 05/05/15 1:23:45 PM) 3eacd9ed-5d98-4855-9a06 -f6b56fedffbf
deviceControl iOS5 4.5/43 (min 5.0, uploaded 05/05/15 1:23:45 PM) 80e403f4-a92c-4eeb -87b2-f5ba9eb5bb8d
PhoneLookup 4.0/1 (min 6.0, uploaded 05/05/15 1:23:45 PM) c0d26509-a00a-413e-8906-30 d263993209
Trust Browser 1.3.4/8 (min 5.0, uploaded 05/05/15 1:23:45 PM) c3d87f35-4c66-43da-85 a1-75cd7f3ad510
```

Android:

```
deviceControl 1.0/1 (min 2.3.1, uploaded 05/05/15 1:23:45 PM) cce59724-1369-48d7 -8197-5ba8e4943002
Phone Lookup 1.0/1 (min 2.3.1, uploaded 05/05/15 1:23:45 PM) 0b6643c7-c318-4d05-ad88 -clc302b1a251
Trust Browser 123/270 #2 of 2 (min 2.2, uploaded 05/05/15 1:23:45 PM) a6a191a5 -1955-4051-8309-83d3655aa670
```

-deleteapp <application>

This will delete an application from deviceConnect by passing in the name of the application or the ID. If there are multiple uploads of the application with that name, you can use the unique ID of the Application to delete the single instance. If a unique ID or version is not specified, then the latest upload will be deleted. Use the "-version" option to delete a particular version of the Application. If more than one application is found using the version option then a message of "# applications start with that name." will appear and the application will not be deleted.

Note

When using the version option for deleteapp the build number cannot be specified alone and must include the version number.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣
deleteapp MobileLabsApp
```

-version <version>

This will allow the version to be specified for an application. This option must be placed before the other options that use an application. The information can be specified by the version, build, or upload # that can come from an Application.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣
version 1.0 -deleteapp MobileLabsApp
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣
version "#2" -deleteapp MobileLabsApp
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣
version "1.0/3#2" -deleteapp MobileLabsApp
```

-upload <filename>

This will upload an Application to deviceConnect

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣
upload "C:\applications\MobileLabsApp.ipa"
```

1.4.3 Device Options

-devicelist [online|offline|all],[android|ios|all],[simple|delimited]

This will list the devices that are in deviceConnect. The optional parameters are for filtering the list of online or offline devices, android or iOS devices. Using the simple parameter will output the list with only a device name per line. Using the delimited parameter will print out a tab separated list of all of the device details per line making it easy to export to a file and parsed for scripting. The default is to display only online devices. The output displays: Name, Model, Platform, Operating System, Serial Number, and Username if the device is retained. Do not put spaces between the options

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword ␣
-devicelist
```

Online:

```
Blue iPhone (iPhone 5c IOS 7.0.4 FXXXXXXXXXXG Enabled)
iPad 2 iOS 7 (iPad 2 IOS 7.0.2 DXXXXXXXXXXW Enabled)
iPad First Gen (iPad 1G IOS 5.0.1 GXXXXXXXXXX0 Enabled)
iPhone 3GS (iPhone 3GS IOS 6.1.3 QXXXXXXXXXXP Enabled)
```

```

iPhone 5s (iPhone 5s iOS 7.0.3 FXXXXXXXXXXV Enabled)
ML Nexus 4 (Nexus 4 Android 4.3 01XXXXXXXXXX1c Enabled)
ML_Nexus 5 (Nexus 5 Android 4.4 03XXXXXXXXXXce Enabled) [Test User]
New Nexus 7 (Nexus 7 Android 4.3 01XXXXXXXXXX11 Enabled)
Old Nexus 7 (Nexus 7 Android 4.3 01XXXXXXXXXX02 Enabled)

```

```

> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    devicelist online,ios,simple

```

```

Blue iPhone
iPad 2 iOS 7
iPad First Gen
iPhone 3GS
iPhone 5s

```

-d or -device [name]

This will allow you to specify a device for items such as install, launch, retain, release, reboot, log, forward. The name parameter can be the device name or serial number including prefixes. If the name of the device is not specified, then the first online device will be used. If more than one device has the same name, the first match against the database will be used. The CLI will search in the following manner: exact match by serial number, name, and then it'll try prefix matches

```

> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -log

> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device Blue -log

> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "XXXXXXXXXXG" -log

```

-install <application>

This will install an application to a particular device when used with the device command. The name or unique ID of the application can be used.

```

> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -install MobileLabsApp

```

-launch <application>

This will launch an application on a particular device when used with the device command. The name or unique ID of the application can be used. The application must be installed and the device must be retained before running this command.

```

> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -retain -launch MobileLabsApp

```

-uninstall <application>

This will uninstall an application from a particular device when used with the device command. The name or unique id of the application is required.

```

> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -uninstall MobileLabsApp

```

-preserve

This will flag to allow data to be preserved if an application is uninstalled with the uninstall command. This command will come before the uninstall command.

Note

This option is only available for Android devices

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣  
device "ML Nexus 4" -preserve -uninstall MobileLabsApp
```

-retain

This will retain the device and show as in use for the user passed in the connection command.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣  
device "Blue iPhone" -retain
```

-release

This will release the device from the user and show as Available.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣  
device "Blue iPhone" -release
```

-reboot

This will reboot the device if needed, or if the device is not responding.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣  
device "Blue iPhone" -reboot
```

-renamedevice <new name>

This will rename a particular device giving it a new alias. The new name is required.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣  
device "Blue iPhone" -renamedevice "Red iPhone"
```

-log

This will return the log for a particular device. You can save this to a file for reporting within a script or to send to a developer

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣  
device "Blue iPhone" -log  
  
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ␣  
device "Blue iPhone" -log > C:\DeviceLogs\BlueiPhoneLog.txt
```


-forward <local port> <remote port>

This will forward a local port to the device specified at the remote port. If only one port is specified then it will be used for both the local and remote ports. This is useful when using third party testing frameworks that will allow you to run a test against the real device giving you the benefits of device management with deviceConnect. The port parameter is required.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - <↵
    device "Blue iPhone" -forward 88 80
```

-enable <device name>

This option will enable a device bringing it into the pool of licensed devices. The Device name is required.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - <↵
    enable "Blue iPhone"
```

-disable

This option will remove a device from the license pool freeing up a license for another device to be used.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - <↵
    device "Blue iPhone" -disable
```

1.4.4 Viewer Options

Note

only available on Windows machines in which deviceViewer is installed

-connect <application>

This option when called will launch the Trust deviceViewer application, retain the device as well as launch the application on the device. The deviceViewer will be ready to accept scale and rotation and the user can then click the Connect button to connect. The parameter for application is required and the name or unique ID of the application can be used.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - <↵
    device "Blue iPhone" -retain -install "MobileLabsApp" -connect "MobileLabsApp"
```

-autoconnect <application>

This option when called will launch the Trust deviceViewer application, reserve the device as well as the application and be. The deviceViewer will connect immediately without any user prompts. The parameter for application is required and the name or unique ID of the application can be used.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - <↵
    device "Blue iPhone" -retain -install "MobileLabsApp" -autoconnect "MobileLabsApp" <↵
    "
```

-r or -run <application>

This option is a shortcut to a few commands -retain -install -autoconnect within the viewer. The parameter for application is required and the name or unique ID of the application can be used.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -r "MobileLabsApp"
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -run "MobileLabsApp"
```

-scale < % >

This option is used with the -run, -connect, and -autoconnect options to scale the viewer window of the device to a particular percentage. The values are entered in integers and must be placed before the -run, -connect, and -autoconnect options. For example, 25 for 25%. This cannot be used to scale the viewer window after the viewer is launched, use the viewer menu to scale the screen.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -scale 50 -r "MobileLabsApp"
```

-orientation

This option is used with the -run, -connect, and -autoconnect options to put the device in a particular orientation. The default is portrait orientation if no parameter is entered. The valid options are: Portrait, LandscapeLeft, LandscapeRight, UpsideDown and must be placed before the -run, -connect, and -autoconnect options. If an invalid option is used, then it will default back to portrait. This cannot be used to orient the application after the viewer is launched, use the viewer menu to change the orientation.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -orientation LandscapeLeft -r "MobileLabsApp"
```

-client [web,desktop,https]

This option specifies which client will be used to connect to the device. The default client is the desktop version on Windows, or the web client every where else. If the web argument is used, it will open within the default browser selected on the computer. The scale option is not used when launching with the web viewer. If https is used as the argument, then the link to the server is generated using HTTPS. The https option can only be used if the server has been set up to use HTTPS.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -orientation LandscapeLeft -client web -r "MobileLabsApp"
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    device "Blue iPhone" -orientation LandscapeLeft -client desktop -r "MobileLabsApp" ↵
    "
```

1.4.5 User Options

With the Command Line Interface an administrator can import and export a list of users from deviceconnect.

-userimport </path/to/csv/file.csv>

This option allows an administrator to import users into the system with a CSV file. By using the user template, the users will be added within the system. The user password will be set to what text is contained in the Password field, otherwise the PasswordHash and PasswordSalt columns will be used.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵  
userimport "C:\DeviceConnect\Users\import.csv"
```

Tip

It is useful to use the "-userexport" option to get a template for the user import .CSV file.

-userexport </path/to/csv/file.csv>

This option allows an administrator to export the deviceConnect users into a CSV file. The file will be created when saved.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵  
userexport "C:\DeviceConnect\Users\export.csv"
```

1.4.6 Report Options

History and Usage data can be retrieved via the CLI so that it can be saved into a file or just viewed.

-history [arguments]

This option can be run by itself to return the whole history for every device. This option returns the data in a comma separated format. When used in conjunction with the -device or -d options (which will come before using the -history option) then only the history for this device is returned. The arguments passed to history can narrow down the criteria of the history data or even specify a file to save the data to. All arguments are optional.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵  
history
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵  
device "Blue iPhone" -history
```

-usage [arguments]

This option can be run by itself to return the whole usage data for every device. This option returns the data in a comma separated format. When used in conjunction with the -device or -d options (which will come before using the -usage option) then only the usage for this device is returned. The arguments passed to usage can narrow down the criteria of the usage data or even specify a file to save the data to. All arguments are optional.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵  
usage
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵  
device "Blue iPhone" -usage
```

Report Arguments:

-from <YYYY-MM-DD>

This argument is used to specify the date for the report to start from. This does not have to be used with the "-to" argument.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    history -from 2015-01-01
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    usage -from 2015-01-01
```

-to <YYYY-MM-DD>

This argument specifies the date for with the report to end on. This does not have to be used with the "-from" argument

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    history -from 2015-01-01 -to 2015-05-01
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    usage -from 2015-01-01 -to 2015-05-01
```

-days <N>

This argument specifies the number of previous days the report should include.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    history -days 7
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    usage -days 7
```

-o <filename>

This argument specifies the output file (including path) to save the data to. The data is returned in a CSV format. Without this option, the default behavior is to output the data to the console.

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    history -days 7 -o "C:\DeviceConnect\History\Previous7Days.csv"
```

```
> MobileLabs.DeviceConnect.Cli.exe 192.168.1.50 my.email@example.com myPassword - ↵
    usage -days 7 -o "C:\DeviceConnect\Usage\Previous7Days.csv"
```

2 Legal Notices

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