

DeviceAnywhere Studio 4.2



DeviceAnywhere[™]

QuickStart Guide

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DeviceAnywhere QuickStart Guide Version 4.2 SP1

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Mobile Complete, Inc.
1730 South Amphlett Blvd., STE. 300
San Mateo, CA 94402 USA

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1 Introduction

1.1 Welcome

Welcome to the *DeviceAnywhere* QuickStart Guide. This guide walks you through the *DeviceAnywhere Studio* set up process and shows you how to test mobile applications on real *DeviceAnywhere* handsets.

1.2 *DeviceAnywhere Studio* System Requirements

DeviceAnywhere Studio is a Java swing application that resides on your computer, allowing you to interact with real handsets over the Internet. While *DeviceAnywhere Studio* can be run on most standard computer configurations, preferred system requirements are as follows:

- 2 GHz Pentium 4 dual core processor
- 1024 MB RAM (1GB RAM), 2GB recommended
- 10 GB Hard Disk Drive available
- Monitor that is capable of at least a 1024x768 screen resolution
- Broadband Internet connection
- Optional: Audio card for sound input/output

2 Log in to *DeviceAnywhere*

To start using *DeviceAnywhere Studio*, first log in to *DeviceAnywhere*.

1. Launch your web browser.
2. Enter the URL <http://www.deviceanywhere.com>.
3. Enter your username and password in the upper right corner of the screen.



Figure 1 DeviceAnywhere Login

Note: Log in by using the username and password provided via email or by your System or Account Admin. If you don't have a username and password, contact your System Admin.

2.1 MyDeviceAnywhere Website

When you log in to *DeviceAnywhere*, the *MyDeviceAnywhere* home page appears on your screen. The *MyDeviceAnywhere* website allows you to install *DeviceAnywhere Studio*, view test results, search available devices, and administer your account as well as providing links to helpful resources and documentation.

Figure 2 illustrates the *MyDeviceAnywhere* home page.

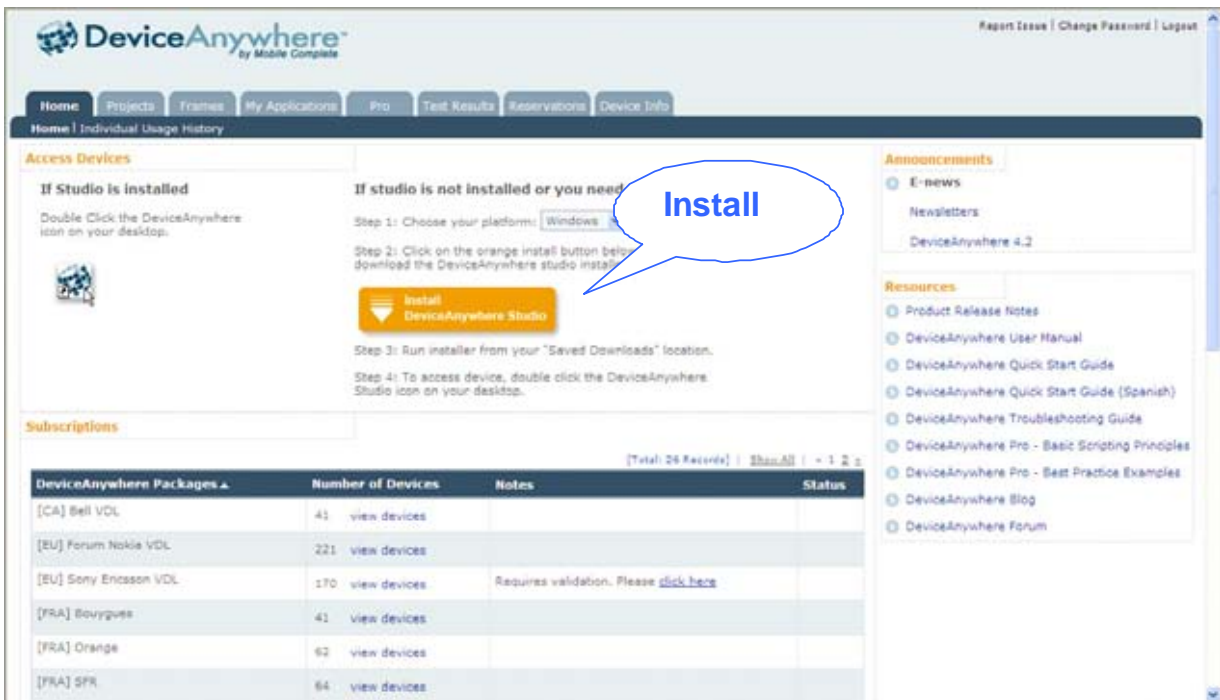


Figure 2 MyDeviceAnywhere Home Page

2.2 Installing *DeviceAnywhere Studio*

DeviceAnywhere Studio has a standalone installer available on the *MyDeviceAnywhere* home page.

The *DeviceAnywhere* installer is available for Windows, Mac OS X, and Linux. The installation procedures for each operating system are listed below.

2.2.1 Installation for the Windows Operating System

The installation and download of *DeviceAnywhere Studio* consists of two steps:

1. Download the DeviceAnywhere Setup.exe onto your computer by clicking Install DeviceAnywhere Studio on the *MyDeviceAnywhere* web page. The Windows installer is the default setting in the drop-down menu.
2. Double click the executable file on your computer. The InstallShield wizard will prompt you through each step of the installation.

2.2.2 Installation for the Mac OS X Operating System

The installation and download of *DeviceAnywhere Studio* consists of four steps:

1. Verify Mac OS X is selected in the drop-down menu.
2. Download the DeviceAnywhereStudio.dmg file onto your computer by clicking Install DeviceAnywhere Studio.
3. Drag the *DeviceAnywhere Studio* icon into your Applications folder.
4. Double click *DeviceAnywhere Studio* in your Applications folder.

2.2.3 Installation for the Linux Operating System

The installation of *DeviceAnywhere Studio* on the Linux operating system enables two types of installations:

- *DeviceAnywhere* core features
- *DeviceAnywhere* core features plus *DeviceAnywhere Pro*™

If you have *DeviceAnywhere Pro*, you must follow the procedure below for installing *DeviceAnywhere* for Pro users.

DeviceAnywhere Studio Installation

Follow the procedure below to install a basic installation of *DeviceAnywhere Studio* that supports *DeviceAnywhere* core functions:

1. Verify Linux in the drop-down menu.
2. Download DeviceAnywhereStudio.tgz by clicking Install DeviceAnywhere Studio.
3. Un-tar the downloaded file (use `tar xzf DeviceAnywhereStudio.tgz`) on your computer.
4. Enter DeviceAnywhereStudio folder (`cd DeviceAnywhereStudio`).
5. To start DeviceAnywhere Studio, run `da_studio.sh` (`sh ./da_studio.sh`).

DeviceAnywhere Studio Installation for DeviceAnywhere Pro Users

DeviceAnywhere Pro users must install a Java Development Kit (JDK).

Follow the procedure below to install *DeviceAnywhere Studio* when you plan to use *DeviceAnywhere Pro*.

1. Install any Java Development Kit (JDK).
2. From the shell, set the CLASSPATH for the tools.jar file. This statement reads the pathname for the tools.jar file. To set the pathname, enter the following statement:

```
set classpath = $classpath$: <foldername>/tools.jar
```
3. Export the CLASSPATH for tools.jar. Exporting the CLASSPATH makes the environment variable available to all programs. To export the CLASSPATH environment variable, enter the following:

```
export classpath
```
4. Make sure to select Linux in the drop-down menu.
5. Download DeviceAnywhereStudio.tgz by clicking Install DeviceAnywhere Studio on the MyDeviceAnywhere home page.
6. Un-tar the downloaded file (use `tar xzf DeviceAnywhereStudio.tgz`) on your computer.
7. Enter DeviceAnywhereStudio folder (`cd DeviceAnywhereStudio`).
8. To start DeviceAnywhere Studio run `da_studio.sh` (`sh ./da_studio.sh`).

If you already have *DeviceAnywhere Studio* installed without a JDK and would like to use *DeviceAnywhere Pro*, you may install the JDK on your computer. You will need to exit *DeviceAnywhere* and re-launch it to enable *DeviceAnywhere Pro* functionality.

2.3 Troubleshooting Tips

Although *DeviceAnywhere* has made an effort to make the installation and download of *DeviceAnywhere Studio* as easy as possible, some system settings can impact the download process. If you are experiencing a problem either installing or launching *DeviceAnywhere Studio*, refer to the Troubleshooting Guide.

3 Launch DeviceAnywhere Studio

Windows users have the option to automatically launch *DeviceAnywhere Studio* upon completion of the install. For subsequent launches or for other OS users, simply double click on the *DeviceAnywhere Studio* icon on your computer desktop to launch *DeviceAnywhere Studio*. You will then be prompted to login. Enter your *DeviceAnywhere* username and password to access *DeviceAnywhere Studio*.

4 Device Access

Once DeviceAnywhere Studio has loaded, you are in the Device Access view. Device Access enables you to start interacting with devices that are available to your *DeviceAnywhere* account.

Two tabs are shown in the workspace: 1) Getting Started, and 2) My Devices.

- Getting Started provides directions under the Welcome banner on how to get started in *DeviceAnywhere*. You also find events, news, and special offers that are available.
- My Devices displays the Device window and workspace, where you can interact with live devices. To get started, click on My Devices.

Figure 3 illustrates the Device Access view with major components of the interface.

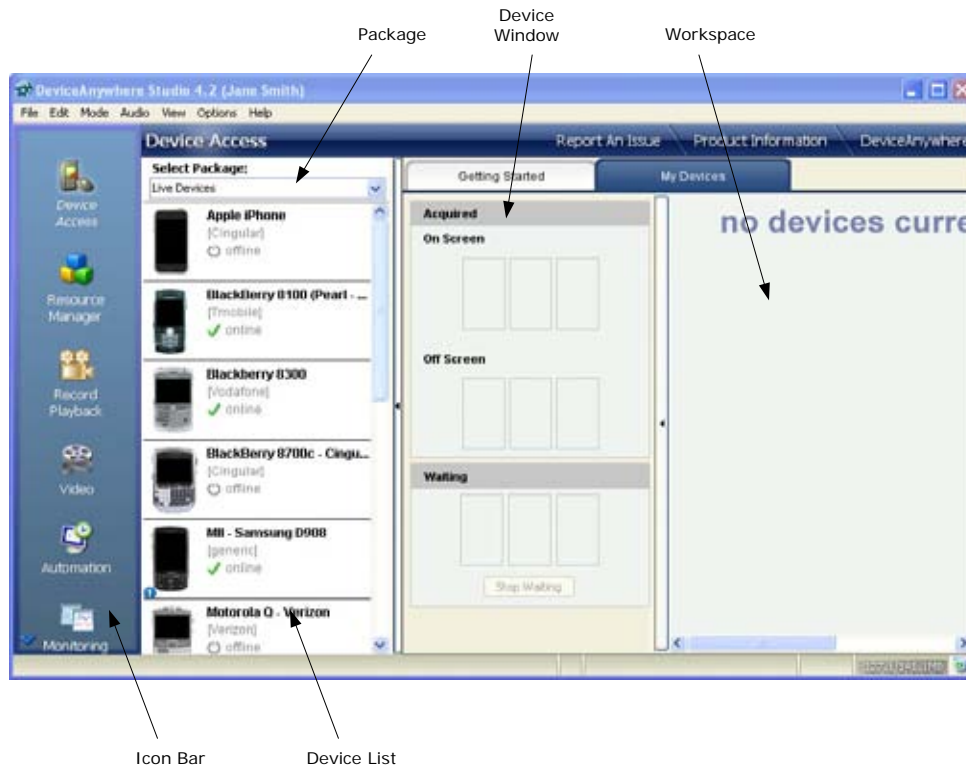


Figure 3 Device Access View

The Icon Bar on the far left allows you to switch views in *DeviceAnywhere Studio*. For example, to navigate to Record & Playback, click on Record & Playback in the Icon Bar.

4.1 Interactive Session

In a live session, you acquire a device and interact with the device functions by using your mouse or keyboard to press keys or touch the screen on the device.

You can execute *DeviceAnywhere* commands by right clicking a device and selecting a command from the Device menu.

The on-screen icons also provide a shortcut to commonly used commands.

Figure 4 shows the on-screen icons to the right of the device in the workspace.



Figure 4 On-Screen Icons

4.1.1 Device Availability

All devices associated to your account are accessible through the Package window and Device list. When you want to test with a device, look for a device with a green check mark, indicating the device is available.

4.2 Access a Device

How to Start an Interactive Session:

1. Right click a device in the Device list. The Device menu appears.
2. Select Access Device.
3. Select Acquire Device.

As soon as you acquire the device, *DeviceAnywhere* goes into interactive mode. Notice that the device is active and appears in the workspace. At this point, press keys on the device to begin testing.

4.3 Send Data to a Device

Three methods are available to send input to a device: 1) use your mouse to press keys or touch screens, 2) use your keyboard to send input to the device, and 3) use the Paste from Clipboard command to send input to the device.

4.3.1 Using Your Mouse

Use your mouse to press keys or perform touchscreen taps on a device.

4.3.2 Using Your Keyboard

Type letters and numbers on the keyboard to send input to the device. *DeviceAnywhere* maps the keyboard keys to the appropriate key presses on the device. When data is entered through the keyboard, you must select the correct key mode through the Mode menu. See [Section 4.3.4](#) for details.

4.3.3 Using Copy and Paste Commands

You can paste into a text or numeric entry form in a device (e.g. messaging text, URL address, and so on) by using Paste from Clipboard in the Device menu.

How to Use Copy and Paste:

1. First, copy the required text by using the keyboard shortcut CTRL+C.
2. Then go to the screen on the device where you want to enter the text.
3. Right click the device. This action displays the Device menu.
4. Select Paste From Clipboard.
5. Make sure to choose the correct Key Mode corresponding to your input data.
6. The text is then entered into the device.

4.3.4 Key Modes

DeviceAnywhere Studio supports three Key Modes for data entry:

Alpha for text—Used when entering text into an alphanumeric field on the device.

Numeric for numbers—Used when the device is expecting numbers only, such as dialing a phone number.

Web for URL entry—Used to enter a URL in the URL screen of the device's browser. Many device browsers have extra symbols only available in the URL screen of the device's browser.

Note: If you do not have the correct key mode selected, the wrong key mapping will be executed on the device.

What happens when you don't use the correct key mode? When you paste a telephone number (numeric) using the text key mode, for example, the number appears garbled on the device screen and expands to a list of useless numbers.

In the example below, the original telephone number is expanded to 30 digits.

Original telephone number: 1-318-262-9022

Pasted telephone number with wrong key mode: 1111 33-331-1118888-22-226-6662222

In text mode on most standard T9 devices, a key must be pressed four times to cycle through the letters and arrive at the desired number. As a result, in this example each number is typed four times when in text mode instead of numeric mode.

4.4 Device Properties

The Device Properties screen displays different property values for the device, including the device telephone number.

To view Properties, right click on the device and select Properties.

4.5 Wake Up a Device

When a device you are working with seems unresponsive and does not allow keyboard input, it might be off, asleep, or locked. For features phones, try pressing the END key two or three times. For most smartphones, you can use the Wake Up option in the Device menu.

The Wake Up option performs the unlock function. To select Wake Up, right click on the device and select Access, Acquire, then the Wake up option.

4.6 Run Cleanup Scripts

When you have finished working with a device and release it, *DeviceAnywhere* automatically enters a device cleanup cycle. Device cleanup is implemented by running test scripts that execute commands on the device to restore the device to the default settings and wipe the device clean by clearing the cache, deleting the Inbox, and so on.

These clean up scripts have been made available to users, so you may execute them during your session, if you want to clean a device mid-session. Right click the device and select Clean up scripts from the Device menu.

Note: If you are loading proprietary applications on a *DeviceAnywhere* handset, best practice is to make sure that the application is deleted from the device before you release it.

4.7 Release a Device

If you already have acquired a device, right clicking on the device displays the Device menu. Select the Release Device option to release the current device.

5 Downloading Applications to DeviceAnywhere Handsets

Now that you are familiar with how to interact with a device through *DeviceAnywhere Studio*, this section describes how to download an application to a device. You can download applications to *DeviceAnywhere* handsets over-the-air from your server or the My Applications page in *MyDeviceAnywhere*.

BREW applications, which must be normally downloaded through a data cable, can be downloaded through the BREW option in the Device menu.

5.1 Over-the-Air Download to a DeviceAnywhere Handset

Java applications can be downloaded over-the-air to most *DeviceAnywhere* handsets. However, the process for downloading applications can be carrier specific or dependent on your server. Contact DASupport@deviceanywhere.com if you have any questions about downloading applications for specific carriers.

To download a Java application over-the-air, follow the procedure given:

1. Copy the Java application onto the web server from where you will be downloading.
2. Launch *DeviceAnywhere Studio*.
3. Access and Acquire the target device.
4. Navigate to the URL entry field on the device.
5. Place the cursor in the URL entry field.
6. Enter the URL where the application is stored.
7. Click OK.

Verify that the application was downloaded by viewing the Applications on the device. Your application should now appear in the list.

5.2 Download from My Applications

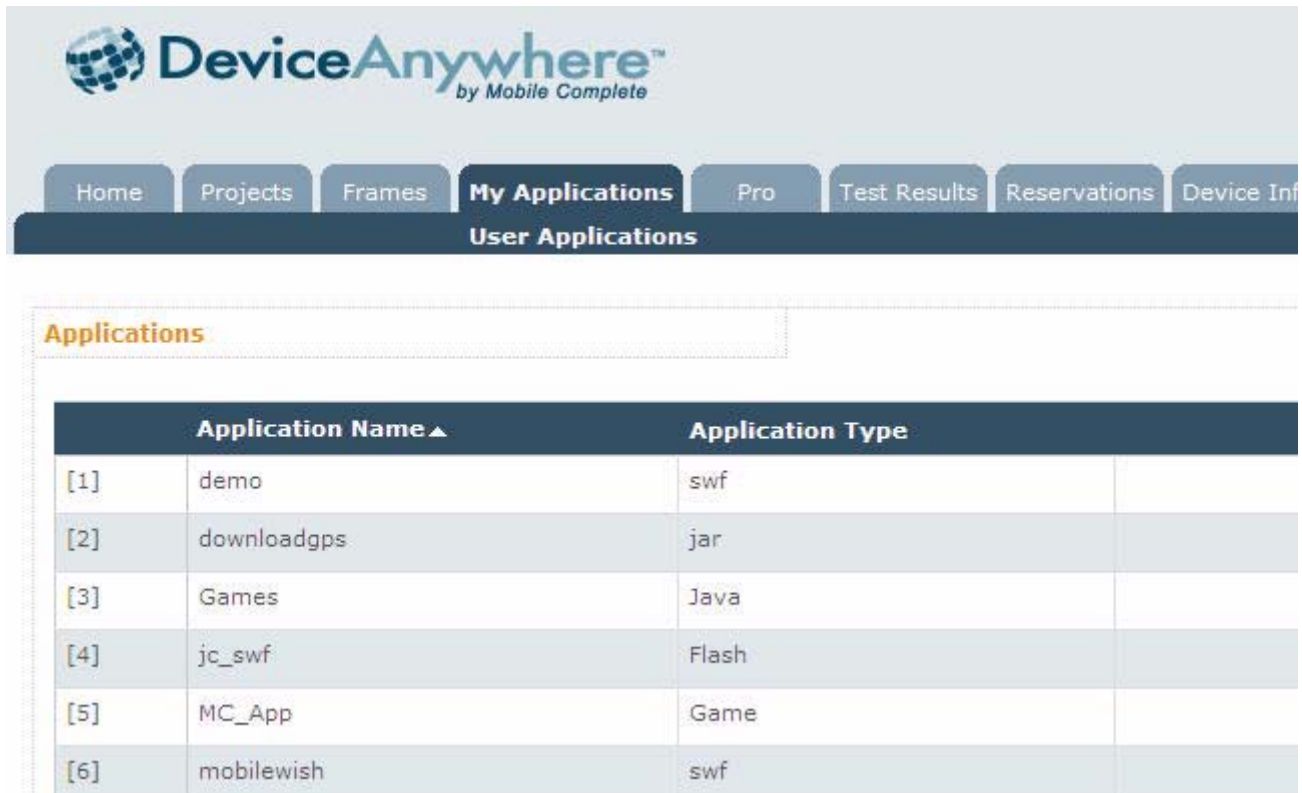
MyDeviceAnywhere provides a web server for storing applications that you want to test on *DeviceAnywhere* handsets. Downloading to a DeviceAnywhere handset is a two-step operation:

- Upload your application to the My Applications.
- Download to a DeviceAnywhere handset.

5.2.1 Uploading an Application to My Applications

The mobile applications that you upload to *MyDeviceAnywhere* are accessible on the My Applications tab.

Figure 5 illustrates the My Applications view. The following commands are available to manage applications in your account: 1) View, 2) Edit, 3) Delete, and 4) Add/Remove files.



	Application Name ▲	Application Type
[1]	demo	swf
[2]	downloadgps	jar
[3]	Games	Java
[4]	jc_swf	Flash
[5]	MC_App	Game
[6]	mobilewish	swf

Figure 5 My Applications View

Upload mobile applications to your My Applications tab by following this procedure:

In a browser, log into *MyDeviceAnywhere*.

1. Click the My Applications tab.
2. Click the Add Application icon at the top right of the page.
3. Enter the application name and type.
4. Click Save.
5. Click Add/Remove files.
6. Click Add File. A browser opens that allows you to navigate to the folder where the application is located on your computer.
7. Select the application for upload.
8. Click Save to upload your file.

Make sure that you upload all of the required files for your application. For example, for a Java application, you should upload jar and jad files.

5.2.2 Downloading an Application to a Handset

In the following procedure, you download an application that was previously stored in My Applications.

You can download applications to *DeviceAnywhere* handsets over-the-air by doing the following:

1. Launch *DeviceAnywhere Studio*.
2. Access and Acquire the target device to download the application.
3. Navigate to the URL entry field on the device.
4. Place the cursor in the URL entry field.
5. Click My Applications (bottom icon) of the On-Screen Icons next to the device. This feature automatically enters the My Applications URL into the field.
6. Click the Navigate to Application button.
7. Click OK or Yes to navigate to the URL.
8. Follow any prompts that redirect the browser to the My Applications page.
9. Log in to your account by entering your username and password in the appropriate entry fields.
10. Click OK to continue. The list of applications on the device is displayed in the WAP browser.
11. Scroll down the list to highlight the application to download. (Use the up, down, left and right arrow keys on the device.)
12. Click OK or Yes to select a download operation and confirm it.
13. Follow any prompts to complete the download operation.

[Figure 6](#) shows the My Application URL entered into the entry field on the device.



Figure 6 My Applications URL Entered into Device

5.3 Uploading Applications to BREW Devices

DeviceAnywhere enables you to upload BREW applications to a BREW device. In this procedure, you must connect the data cable first, and then select the BREW command to execute the upload.

How to Upload a BREW Application:

1. Right click on the device. The Device menu is displayed.
2. Select Hardware Control.
3. Select Connect Data Cable. This action initiates the data cable of the device.
4. Right click on the device. The Device menu is displayed.
5. Select BREW.
6. Select Upload Application. The Upload BREW application dialog box appears.
7. Enter the name of the application to be uploaded (case-sensitive).
8. Select the local directory for all the application files when prompted.
9. When the Uploading BREW application screen shows the BREW file has uploaded successfully, click close to dismiss the screen.

Note: Ensure that the name of your application corresponds to your .mif file.

Use the View Applications command in the BREW menu to verify that the BREW file was uploaded.

6 Saving Device Interaction

This section describes how to save results from your interactive session. *DeviceAnywhere Studio* records up to 15 minutes of device activity by default. Any frame presented on the device screen is recorded as a part of the device session.

You can review device activity by using the Video Control Bar displayed below the device.

[Figure 7](#) shows an acquired device with the Video Control Bar below the device.



[Figure 7](#) Acquired Device with Video Control Bar

6.1 Exporting Frames and Video Media

The Export command enables you to export the screen output of your past device activity in image or video format. You can export the following: 1) Current Frame, 2) Frame from History, 3) Video from History, and 4) Upload Frames.

Two examples of the Export command are described in the sections that follow.

6.1.1 Export the Current Frame to Your Desktop

The following procedure outlines how to export the current frame to your desktop with the file Save dialog.

How to Export the Current Frame:

1. Navigate to the frame you want to export by using the Device Video Controls below the device.
1. Right click the device in the workspace. The Device menu appears.
2. Select Export.
3. Select Current Frame. The Save File dialog box is displayed.
4. Select the folder where to save the frame on your computer.
5. Enter the name of the frame.
6. Click the Save button.

6.1.2 Upload Frames

Use the Upload Frames option to upload a set of frames (in the DVR memory) to your *MyDeviceAnywhere* website. This action is useful to save test data and share it with team members. To upload frames to your account, you'll need to become familiar with the Frame Viewer.

[Figure 8](#) shows the Frame Viewer. The Frame Viewer is used to export a Frame or Video from History. In this mode, you select the frames to upload by highlighting them with the cursor.

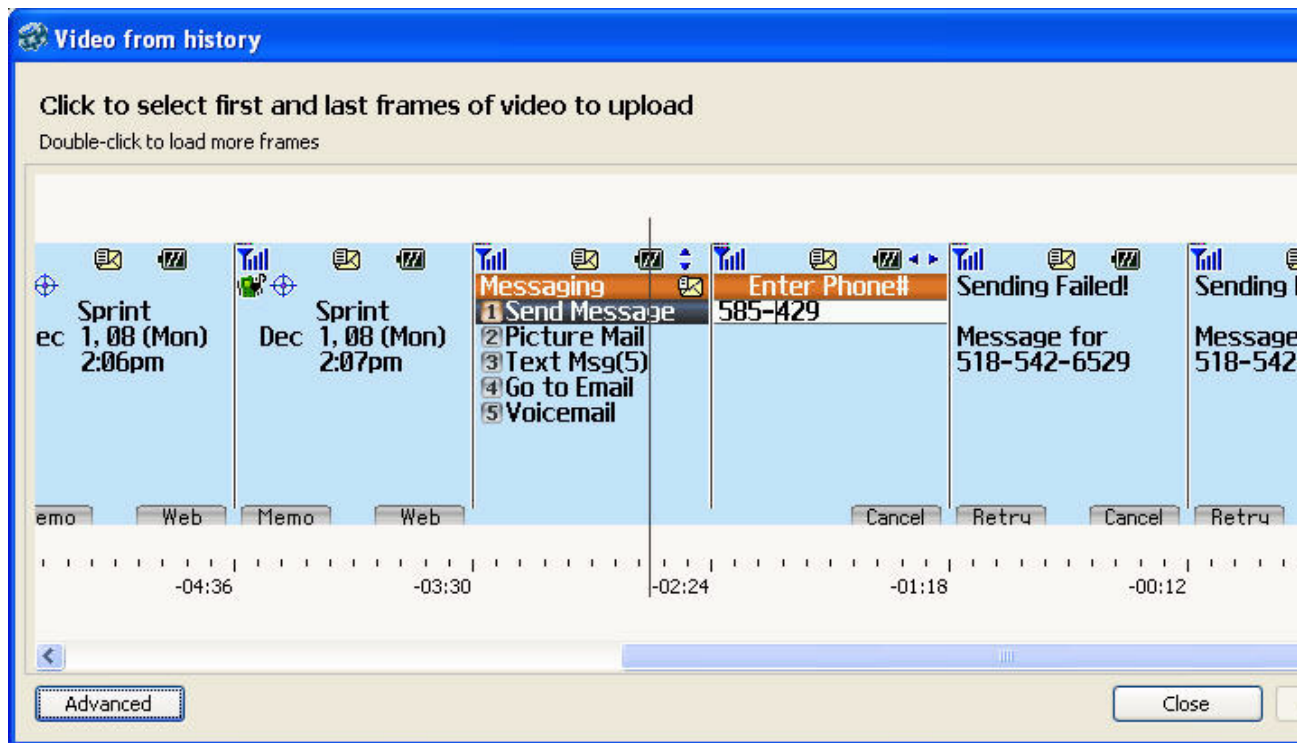


Figure 8 Frame Viewer

Notice the timeline below the frames in the Frame Viewer. When you pass the Time Marker over a specific frame and double click with the cursor, all the frames generated during the time interval are displayed in the timeline.

How to Select and Upload Frames:

1. After entering key presses on the device, right click the device. The Device menu is displayed.
2. Select Export.
3. Select Upload frames. The device activity is displayed in the Frame Viewer.
4. Review the top level frames.
5. Double click a frame to mark the start frames.
6. Review the bottom level frames by passing the Time Marker over each top level frame.
7. When you want to promote bottom level frames to the top level, double click the frame. A loading bar is displayed.
8. Double click the frames to mark the stop frames.
9. Click Upload.
10. Enter the Recording name for this frameset.
11. Click OK.

After the frames are uploaded, a prompt appears requesting if you would like to view the frames. When you select yes, you will be directed to *MyDeviceAnywhere*, where all uploaded frame results are stored under the Uploaded Frames tab.

7 What Else Can I Do with *DeviceAnywhere*?

With *DeviceAnywhere* you can also do the following activities:

- Share device screens with team members in real-time and communicate via messaging.
- Create movie clips of past device activity.
- Record a series of steps on a device with the Record & Playback script feature. These scripts can be edited, saved, and/or replayed at any time.

The *MyDeviceAnywhere* website enables you to administer your *DeviceAnywhere* account. You can install *DeviceAnywhere Studio* from this interface, as well as perform the following functions:

- Create new users, update your account, view usage, and so on.
- View test results or saved screens.
- Search for devices.

For further details on *DeviceAnywhere* and additional features and functionality, refer to the *DeviceAnywhere* User Manual, which is also accessible from the Help menu in *DeviceAnywhere Studio*.

7.1 Contact Information

If you have any questions about how to use any of the *DeviceAnywhere* features or have an issue to report, please contact us at DASupport@deviceanywhere.com.

For questions about additional products, invoices, or pricing, please contact DASales@deviceanywhere.com.