

# Imatest Quick Start Guide

## Instructions for Installation and Startup

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### Introduction

Imatest invites Aptina DevSuite users to take advantage of DevWare-enabled Imatest.

Imatest is the digital imaging industry's leading software package for measuring key image quality factors such as sharpness, color quality, noise, lens distortion, and much more.

Along with all the features of Imatest Master, DevWare-enabled Imatest also offers the ability to load images directly from DevWare. This eliminates the need to capture images separately and load them individually into Imatest, dramatically improving productivity.

### Download Software

To download Imatest software, go to <http://www.imatest.com/devware>

Create an account, or use your current login.

Download the self-extracting executable. It will install DevWare-enabled Imatest, and the Matlab Component Runtime (MCR), required for Imatest to run. Even if the MCR is already installed check "Matlab Libraries" to ensure you have the version of MCR (7.7) corresponding to the Imatest build (Matlab 7.5). When it installs, check "Modify". This will ensure a complete installation.

Follow the directions for registration.

To download DevSuite software, go to <http://www.aplina.com/support/Devsuite.jsp>

Follow the directions for registration. The registration process will take 1 business day, after which you receive an Email with login instructions.

## Install Software

Follow the directions included in both the Imatest and DevSuite software installation downloads.

## Software Startup Procedure

- Start DevWare. For Imatest to acquire an image, it must connect to an existing instance of DevWare. Errors will occur otherwise.
- Start Imatest. Imatest will install Desktop and Start Menu shortcuts if the corresponding check boxes are selected during installation.
- Imatest defaults to file processing, not image acquisition. To configure it to acquire images from DevWare, go to "Options & Settings II", in "Special user code" enter "dataq" (without quotes). This sets the specific source for image data acquisition, in this case DevWare. Start the Rescharts module. Click on "Settings". A pair of image-source checkboxes is at the bottom of the list. The default selection is "Image from file". Click on "Image from device".
- Now you can go to Imatest Rescharts, click "Acquire image", and perform useful analysis right way. Image acquisition is currently available in Rescharts only; this functionality will be supported in other Imatest modules in a future release.
- Please refer to both the Imatest and DevWare Help files and associated usage guides for additional information.

## Purchase DevWare-enabled Imatest

To purchase, visit: [http://www.imatest.com/product\\_info.php?cPath=32&products\\_id=78](http://www.imatest.com/product_info.php?cPath=32&products_id=78)

To upgrade Imatest Master to DevWare-enabled, go to:  
[http://www.imatest.com/product\\_info.php?cPath=32&products\\_id=79](http://www.imatest.com/product_info.php?cPath=32&products_id=79)

## Known Issues

Very occasionally, an error-out may occur that closes the DOS window. In this case, run Imatest from a new DOS window in the executable directory with the following syntax:

```
imatest > err.txt
```

This will stop the window from closing, allowing you to read, mark, and copy the exact text of the error message, which may include the location of relevant log files. Please provide this text when reporting problems.

1. Some systems require configuration of the Java VM and report an error to a log file that is identified easily using the method above. The text of the message is:

```
Error occurred during initialization of VM  
Could not reserve enough space for object heap
```

“Mathworks” provides a solution to this problem at:

<http://www.mathworks.com/support/solutions/data/1-18I2C.html?solution=1-18I2C>

and more guidance at:

<http://www.mathworks.com/support/bugreports/details.html?rp=398525>

2. Imatest is a Matlab 7.5 compiled application. To operate, it requires that the corresponding MCR Version 7.7 be installed on your system. If another version of Matlab or the MCR is installed on your system, you may see an error:

```
The procedure entry point svDoubleSclarRemW could not be located in  
the dynamic link library libmwservices.dll
```

To correct this, give MCR 7.7 paths priority in the System path variable. Guidance is available at:

[http://www.imatest.com/docs/api\\_exe\\_instructions.html](http://www.imatest.com/docs/api_exe_instructions.html)

3. Imatest module Stepchart may cause the program to crash if the Imatest main window 'Exit' button is clicked after a run under certain conditions. If you wish to use it, run another module to completion and this will clear the condition.

## Support

Support for DevWare-enabled Imatest is available at [devwaresupport@imatest](mailto:devwaresupport@imatest). Please report problems using this mailbox, with complete text of error messages.

## Appendix A

### Requirements

Hardware and Software requirements for Imatest and DevSuite software.

#### Hardware Requirements

- Pentium III 450 MHz or higher (a faster processor will improve the displayed frame rate on the PC).
- 512MB RAM minimum.
- USB 2.0 host controller with an available USB 2.0 port.

#### Software Requirements

- Windows XP with a minimum of Service Pack 2. Vista is not supported at this time.
- The latest USB 2.0 host controller drivers as supplied with the DevWare software.