High-Definition Experience & Performance Rating Test

HDXPRT 2014
User Manual

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1   INTRODUCTION

HDXPRT, the High Definition Experience & Performance Ratings Test, is a benchmarking software tool designed to assess PC capabilities for handling real-world media scenarios while using common consumer applications. It presents results that are relevant and easy to understand. HDXPRT 2014 uses mainstream applications to test the performance of the system, and installs trial versions of all required applications during setup. The HDXPRT 2014 setup process takes about 10 minutes on most mainstream systems. The following sections provide information on HDXPRT 2014, its minimum system requirements, installation process, and run instructions.

2   WHAT'S NEW IN HDXPRT 2014

HDXPRT 2014 bases workloads on usages performed with common consumer applications. These applications are required to run a HDXPRT 2014 test. To make it easy for users to test with HDXPRT, trial versions of some of the required applications are included in HDXPRT setup, and are automatically installed when HDXPRT is installed.

2.1   Bundled applications

The following applications are included in HDXPRT 2014 installation. As noted above, some of the applications bundled with HDXPRT are trial versions, and will expire after 30 days. Should the applications expire, you will need to reinstall HDXPRT. In some cases, a fresh OS install may also be necessary.

In order for HDXPRT to install and run properly it must install the applications it uses. If these applications are already installed on your system, you will need to uninstall them before installing HDXPRT. We are investigating ways to remove this restriction in the future.

- Adobe Photoshop® Elements 12
- Apple® iTunes® 11.1.3.8
- Audacity® 2.0.5
- CyberLink MediaEspresso 6.7
- HandBrake 0.9.9

2.2   Test scenarios

HDXPRT 2014 has three test scenarios. They are:

- **Edit Photos:** The usages in this category include editing photos to add watermarks, creating a panorama, and processing HDR photos.
- **Convert Videos:** The usages in this category include converting videos to enjoy on different consumer devices.
- **Edit Music:** The usages in this category include mixing, editing, and sharing music files.

3   MINIMUM SYSTEM REQUIREMENTS

- Intel® dual-core 2.0GHz processor or equivalent
- 4 GB RAM
- 40 GB of free disk space
- Video display settings 1,024 x 768, 24-bit color
- Microsoft® Windows® 8.1 or Windows® 10, 64-bit (Language: US English)

4 INSTALLING HDXPRT 2014
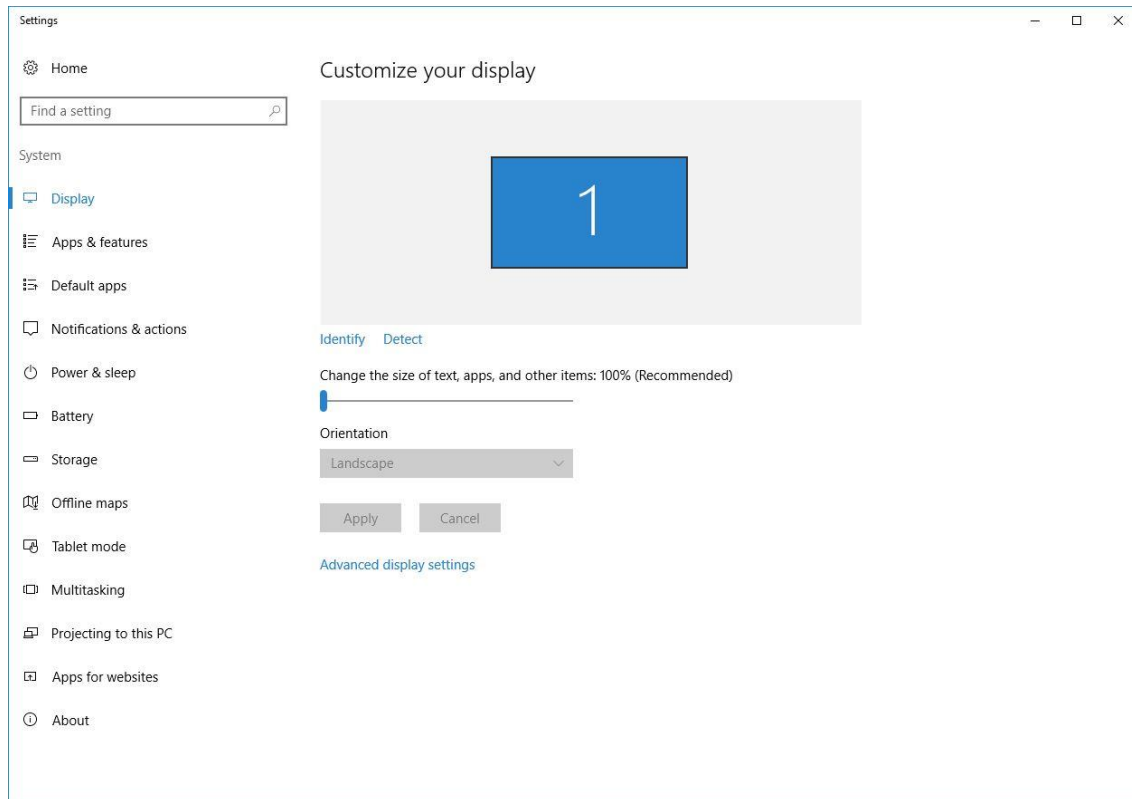
4.1 Prerequisites

NOTE: You must be a user with administrative privileges to run and install HDXPRT 2014. Prior to installation, you should always do a full backup of your system and close all open programs; Microsoft Visual C++ Redistributable Package will be installed, and may not be removed automatically when the user uninstalls HDXPRT 2014.

1. Copy the HDXPRT 2014 build to the "C:\" directory on your local machine.
2. Click on Setup.exe in the build folder to start HDXPRT 2014 setup.
3. Click Next to continue.
4. Review and accept the HDXPRT end-user license agreement.
5. At this point Components screen will show up. In order to install complete HDXPRT, leave all three components selected and click Next.
6. Next it will show you the directory where HDXPRT will be installed. Keep "C:\Program Files (x86) \HDXPRT" there as *you must install it at this location*. Then click next.
7. HDXPRT setup will install the bundled applications listed in Section 2.1. The installer automatically executes the setup of the required applications. Do not click on any intermediate dialogs you see during setup, as this can cause setup to fail.
8. HDXPRT will disable any Internet connections at the beginning of the installation process. This is to ensure installation of the correct versions of the benchmark's bundled 3rd party applications, and to prevent automatic downloads of later versions from Internet. This is to keep the benchmark and scores consistent during different runs.
9. After the setup is complete, we recommend rebooting the system.

5 STARTING AN HDXPRT TEST

5.1 Before starting the test

1. HDXPRT 2014 requires the display size of text and other items on your screen to be set to *Smaller -100%*, which is the default option on many computers. To access this setting on your PC, go to Control Panel, then Display, then Change display settings (See Figure 1).
2. Change the default browser from Microsoft Edge to Internet Explorer:
    a. Open the Windows Settings app and select System/Default apps.
    b. Under Web browser, click the Edge icon, and select Internet Explorer from the list.
    c. At the Before you switch window, click Switch anyway.
    d. Close the Settings app.

Figure 1. The resolution setting required for running HDXPRT 2014.

3. Adjust SmartScreen and security settings:
   a. Open Internet Explorer.
   b. Go to Settings/Internet options/Security, and make the following changes for the Internet and Trusted Sites zones:
      i. Select Custom Level.
      ii. Disable SmartScreen Filter.
      iii. Under Launching applications and unsafe files, click Enable (not Secure).
      iv. Click OK, and click Apply. If a warning message appears, click Yes.
4. Restart the system.
5. Open HDXPRT and run the benchmark normally.

If, after installing HDXPRT, you encounter an error related to administrative permissions when trying to open Microsoft Edge, return User Account Controls to the default setting, and restart the system. The default User Account Control setting is the third notch from the bottom: "Notify me only when apps try to makes changes to my computer."
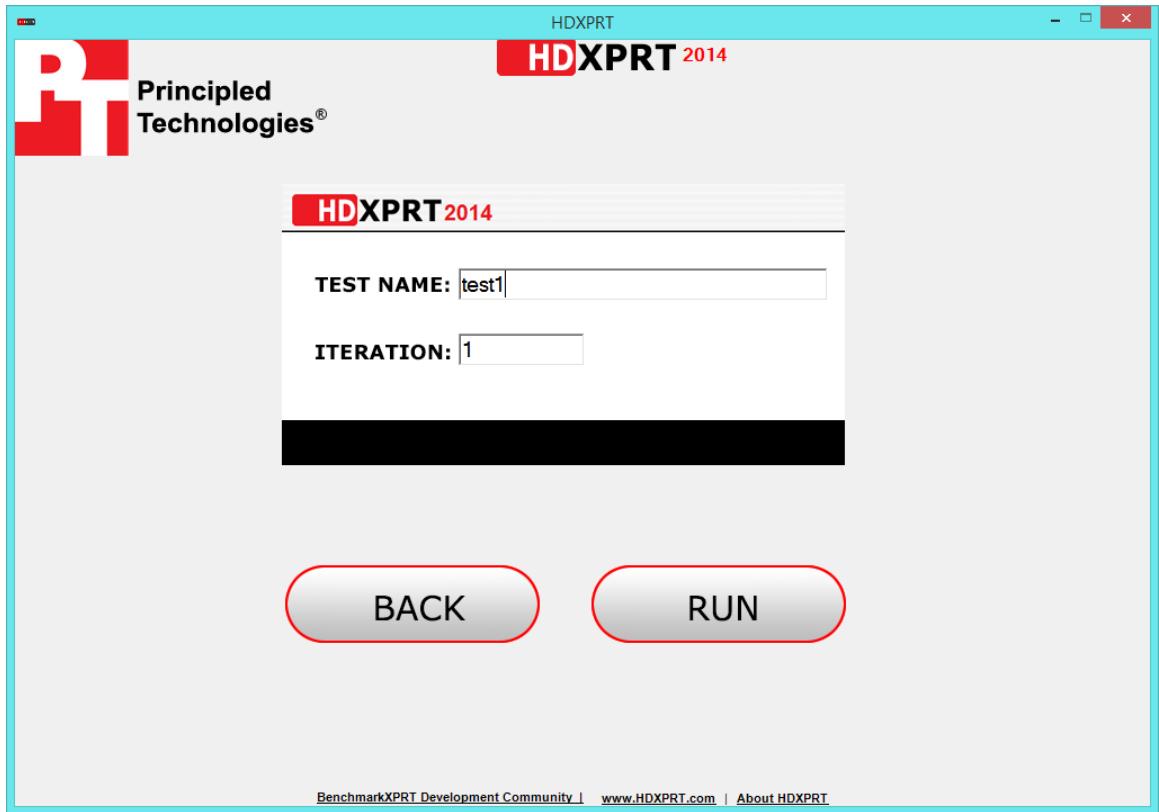
5.2   Running an HDXPRT test

1. To launch HDXPRT 2014, right click the HDXPRT 2014 shortcut on the desktop and then select "Run as Administrator". You can also launch HDXPRT 2014 from the Start menu. But be sure to run it as administrator.

2. At this point HDXPRT 2014 will disable all internet connections to prevent any of the bundled applications from connecting to their home page to check and offer updates. This is to run same versions of the applications on all systems for proper functioning and score consistency. Please do not manually enable any internet connections at this point. HDXPRT will enable all internet connections after finish running the benchmark.

   This launches the HDXPRT home screen (See Figure 2).

Figure 2. The HDXPRT home screen.

3. Click Run HDXPRT.
4. Enter a test name and the number of times you want to run the test (see Figure 3). HDXPRT produces only one set of results for a test with multiple runs. For a publishable result, use three iterations.

Figure 3. Entering a test name and number of iterations in HDXPRT.

5. To start the test, click Run.

6. HDXPRT will reboot the system before running the tests. If the test encounters an error, the error information is displayed on the screen, and an error report is automatically created on the desktop.

7. Do not attempt to initiate any other system activity while HDXPRT is running. Using the keyboard or mouse can cause the scripts to fail.

8. The Results Screen automatically appears at the end of a successful run (see Figure 4). The results files of a test are archived in the <ProgramFiles (x86)>\HDXPRT\Reports\<TestName> folder. To move the results of a test from one system to the other, simply move the <ProgramFiles (x86)>\HDXPRT\Reports\<TestName> folder to the new system.
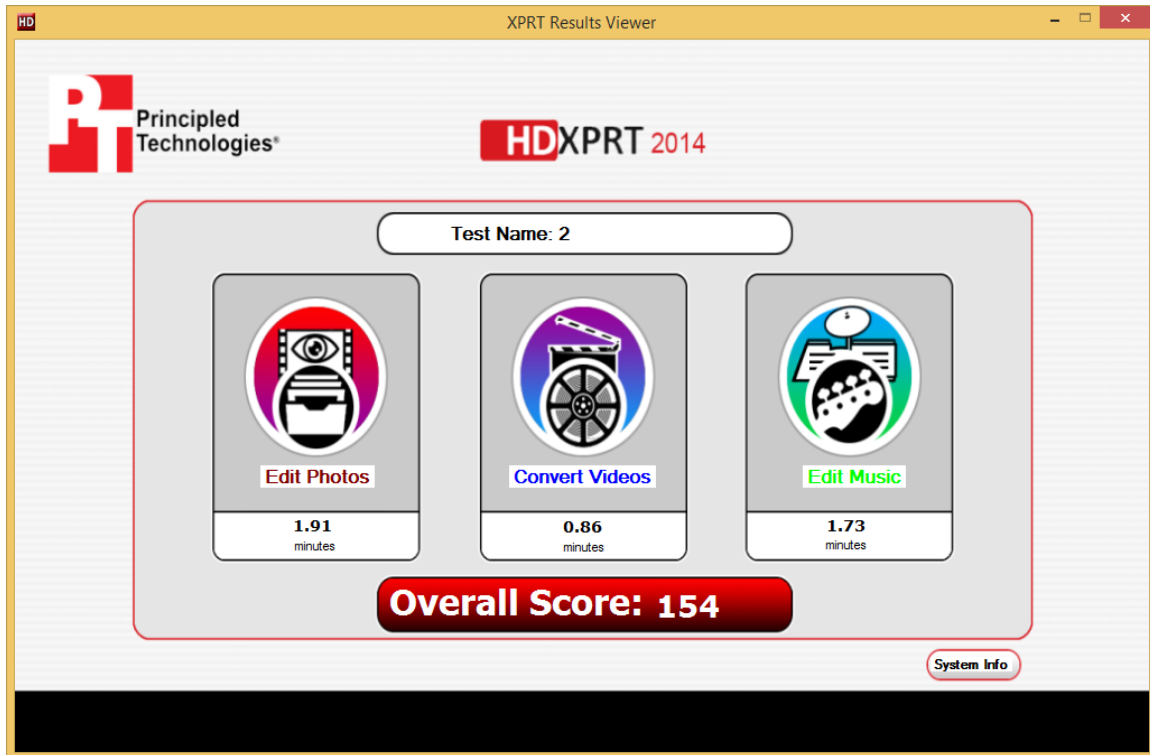
Figure 4. The HDXPRT results screen.

6   RESULTS VIEWER

Use the HDXPRT 2014 Results Viewer to view previous test runs on the machine or view results copied from another machine. You can also launch the Results Viewer from the HDXPRT home screen (see Figure 2).

Detailed system information for the test machine is also archived as part of the HDXPRT results report, and can be viewed by clicking on the System Info button.

7   UNINSTALLING HDXPRT 2014

To remove HDXPRT 2014, uninstall it through the Control Panel→Add/Remove software utility. Uninstalling HDXPRT 2014 will not remove certain items, such as the results folders, from the system.

8   GUIDELINES FOR RELIABLE TESTING

When comparing your results to published results, remember that additional software installed on the system can affect results. Testing labs typically report results from "clean" systems to ensure accurate and consistent evaluation of the test systems' capabilities.

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The following recommendations represent good practices for consistent and reliable testing with HDXPRT 2014. However, these practices are not necessary to run HDXPRT.

- Disable any networking connections and file sharing. Network activity may affect the test system and its performance.
- Close and disable any open applications and background programs, such as automatic disk defragmentation or virus scanners with automatic update features.
- Disable Windows Update and Windows Action Center notifications. NOTE: This may no longer be possible on newer versions of Windows 10.
- Set the system's power settings to never go to sleep while plugged in.
- Restart the computer before running the benchmark and after making any driver or hardware changes.
- Run the test using at least three iterations. Running HDXPRT with multiple iterations produces only one set of results. This result is an average of the test system's performance in multiple iterations.

9 TECHNICAL SUPPORT

To provide feedback or report any issues, please send all correspondence to the following email address: BenchmarkXPRTsupport@principledtechnologies.com.

You'll find the latest information on HDXPRT at www.hdxprt.com.