

TouchXPRT 2016 installation and automation

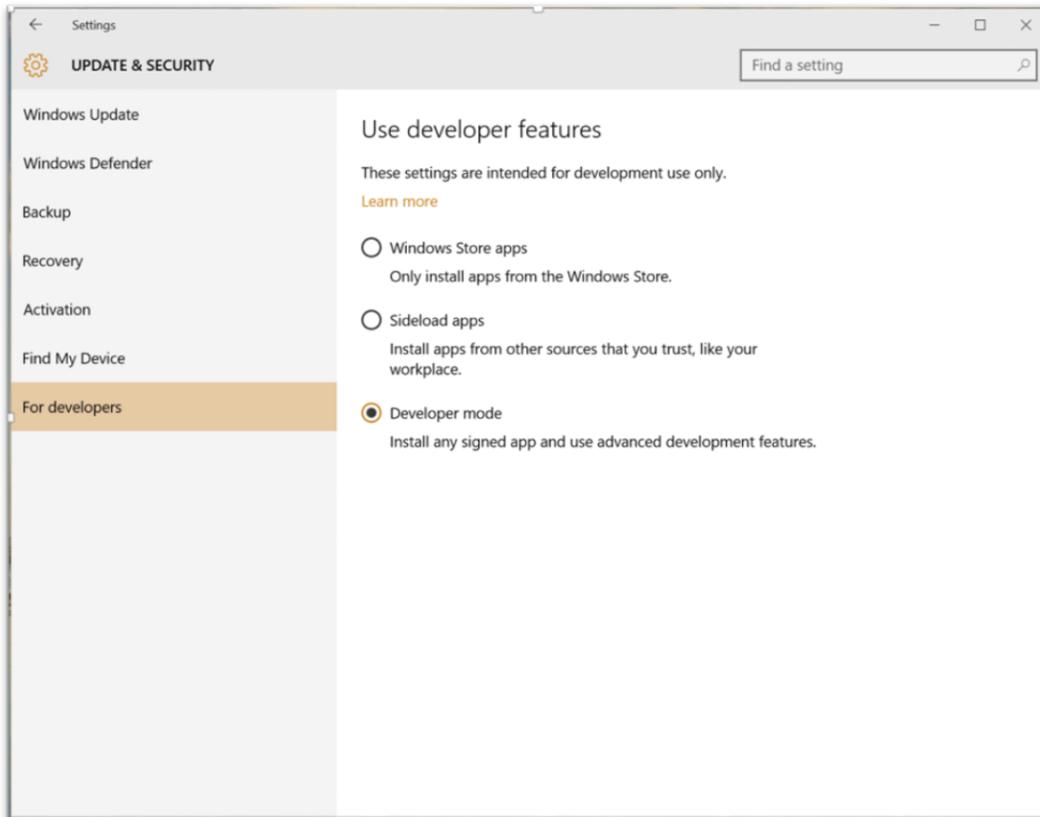
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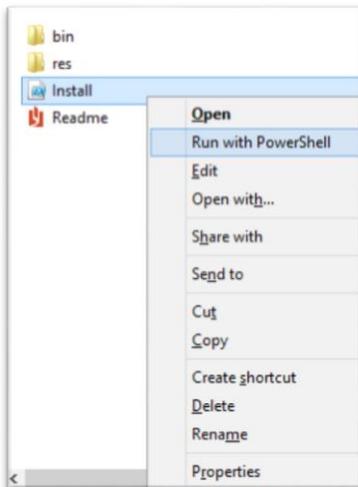
Installing TouchXPRT 2016 manually on tablets and PCs

If you received TouchXPRT 2016 in a zipped folder, **unzip the installation folder** before you begin. If a developer license is not installed on the system, make sure to **connect to the Internet** before installation.

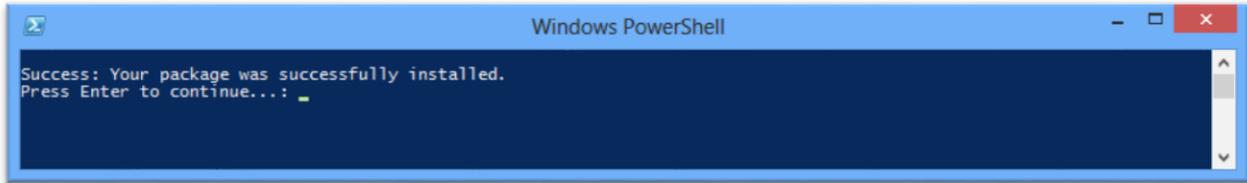
1. Switch to Desktop mode. This step is necessary, as the install script might not run otherwise.
2. The system needs to be in developer mode to install TouchXPRT 2016. The following steps describe how to put the system in developer mode:
 - a. Click Start, then Settings.
 - b. Click Update & security.
 - c. From the left menu, select For developers. In the Use developer features section on the right, select Developer mode.



3. Copy the installation folder locally.
4. In the installation folder, right-click Install.ps1, and select Run with PowerShell.



5. The installation process begins automatically, and the installer displays the following message at the end of a successful installation:



6. Press Enter to exit the installer screen.
7. The TouchXPRT 2016 app is added to the Start Menu.

After installing TouchXPRT, you can launch the app and click Start Test to start a benchmark run. You can use the settings charm to specify the number of iterations to be run.

Installing TouchXPRT 2016 manually on phones

If you received TouchXPRT 2016 in a zipped folder, **unzip the installation folder** before you begin. If the test system does not already have a developer license installed, make sure to **connect to the Internet** before you begin installation.

The device needs to be in developer mode to install TouchXPRT 2016. The following steps describe how to put the system in developer mode:

1. Scroll down to the Settings tile, and tap to open.
2. Select Update and security.
3. Select For developers.
4. Select Developer mode.



5. Connect the device to a PC via USB cable.

6. On the PC, navigate to the bin\TouchXPRT folder of the installer package.
7. Copy the TouchXPRT_2015.6.40.0_x86_x64_ARM.appxbundle file to any location on the Windows Phone.
8. On the phone, use the File Explorer app to navigate to the TouchXPRT_2015.6.40.0_x86_x64_ARM.appxbundle.
9. Tap the TouchXPRT_2015.6.40.0_x86_x64_ARM.appxbundle.
10. At the Install app? prompt, tap Install.
11. Navigate to All apps. TouchXPRT should now appear in the list of apps installed on the phone.
12. Tap the TouchXPRT icon. The app now notifies you that it needs to download test content. Tap Download to proceed. The content download takes approximately 15 minutes.
13. Once the content download finishes, the installation process is complete.

Installing TouchXPRT 2016 automatically on tablets and PCs

If you received TouchXPRT 2016 in a zipped folder, **unzip the installation folder** before you begin. If the test system does not already have a developer license installed, make sure to **connect to the Internet** before you begin installation.

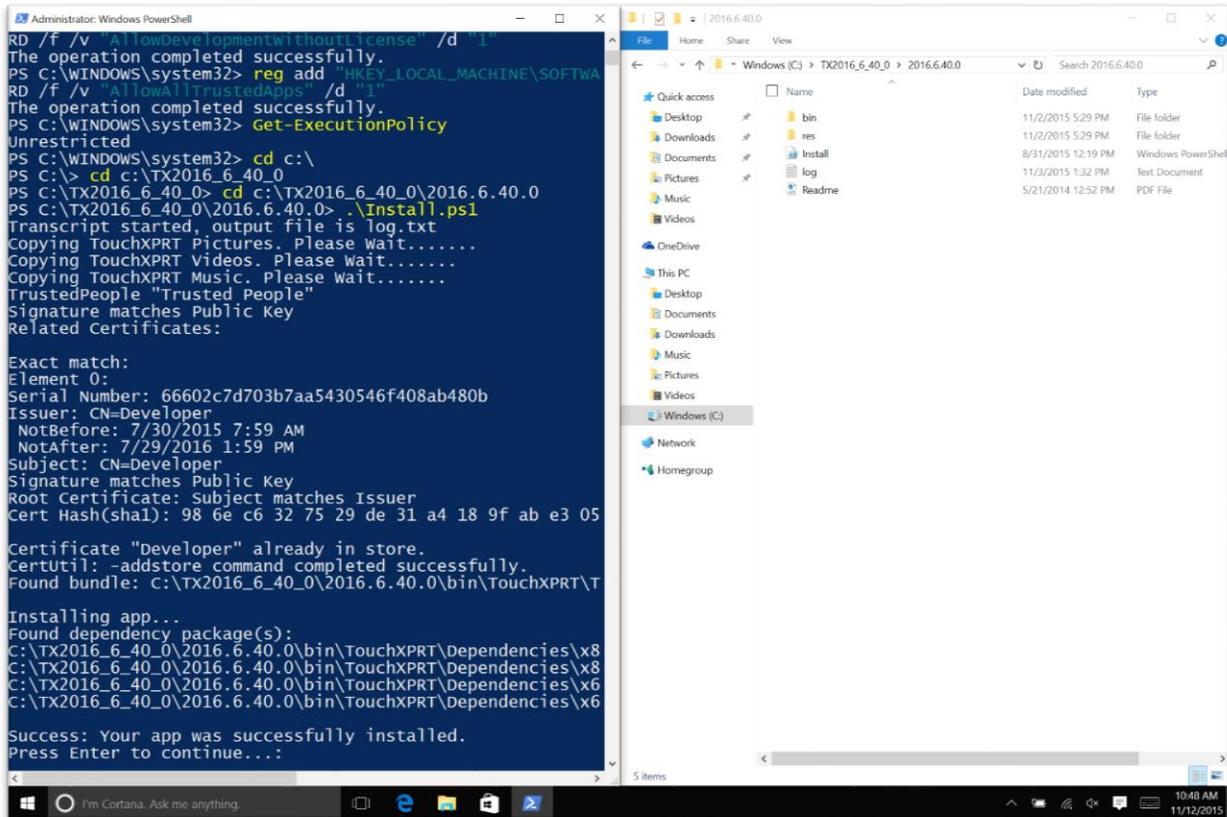
1. Switch to Desktop mode. This step is necessary, as the install script might not run otherwise.
2. Copy the installation folder locally.
3. Launch PowerShell with administrator privileges:
 - a. Click Start, then search for PowerShell.
 - b. Right-click PowerShell, and select Run as administrator.
4. To switch the system to developer mode in PowerShell, run the following commands:

```
reg add
"HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\AppModelUnlock" /t
REG_DWORD /f /v "AllowDevelopmentWithoutDevLicense" /d "1"
reg add
"HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\AppModelUnlock" /t
REG_DWORD /f /v "AllowAllTrustedApps" /d "1"
```

5. Make sure the Windows PowerShell execution policy is set to Unrestricted.¹ To check the current execution policy, use the following command:
`Get-ExecutionPolicy`
If the execution policy is not set to Unrestricted, use the following command to set it to unrestricted:
`Set-ExecutionPolicy unrestricted`
An Execution Policy Change warning appears. Type **A** to select Yes to All and change the execution policy.
6. Navigate to the folder where you copied the TouchXPRT installation package (the folder that contains Install.ps1).

¹ See <https://technet.microsoft.com/library/hh847748.aspx> for more details on Windows PowerShell execution policies

7. To execute the installation script, use the following command:
`.\Install.ps1`
8. The installation process begins automatically, and the installer displays the following message at the end of a successful installation:



9. Press Enter to exit the installer screen.
 The TouchXPRT 2016 app is added to the Start Menu.

Installation will fail if the system is not in developer mode and/or the Execution Policy is set to restricted. After installing TouchXPRT, you can launch the app and click Start Test to start a benchmark run.

Performing automated testing

Several commands are available to help automate TouchXPRT testing.

Options for automatically launching the app include the following:

- To launch the app from the command prompt:
`start touchxpert2016://`
- To launch the app from the Run window (Start + R keys):
`touchxpert2016://`

Options for test configuration after automatic launch include the following:

- To run all tests and store the results in the results browser:
`touchxpert2016://options/scenario=all`

- To run any particular scenario (1-5):
`touchxpvt2016://options/scenario=1`
- To run multiple iterations, specify the number of iterations:
`touchxpvt2016://options/iterations=2`
- By default, there is a 5-second delay before the app starts running after launch to allow time for the app to load and the system to stabilize. To change the start delay, enter the time in milliseconds:
`touchxpvt2016://options/scenario=all/startdelay=6000`
- By default, the app saves results in Pictures\TouchXPRT2016\Docs. You can change the name of the output file to note system names, etc. To change the output filename:
`touchxpvt2016://options/filename="results.xml"`
- All of these command options can be combined as in the following example:
`touchxpvt2016://options/scenario=all/iterations=3`

Reviewing results

The TouchXPRT 2016 Community Preview UI displays results only from runs that have just finished. It does not display results from previous runs. This is due to considerations involving the Windows 10 Mobile side of development. We will reintegrate the results viewer in the general release version.

Until the general release, there are a couple of methods for viewing results outside of the UI. Windows 10 Mobile users can view results only from the most recent run, but users running full versions of Windows 10 can view results from all of their test runs on the device.

The **first method**, which works For Windows 10 and Windows 10 Mobile, is accessing the TouchXPRTResult.xml file. This file is located in Pictures\TouchXPRT2016\Docs, and is overwritten after each run.

The **second method**, which does not work on Windows 10 Mobile, is to use a file-parsing script posted on the TouchXPRT tab in the [Members' Area](#) (login required). This PowerShell script converts a locally-stored JSON file into an easily-to-read text file showing the results from each run.

To run the parsing script from PowerShell, use the following steps:

1. Copy the parseresults.ps1 file to the folder that contains the ResultsBenchMarkMode.json file you want to summarize. By default, the JSON file is located at
`~/AppData/Local/Packages/TouchXPRTxxxxxx/LocalState/ResultsBenchMarkMode.json`.
2. Open Windows PowerShell and run as administrator.
3. Type `get-executionPolicy -scope Currentuser` and press enter.
4. Make a note of the setting it displays (e.g., Restricted) so you can return the policy to its original settings later on.
5. Type `set-executionpolicy -scope CurrentUser -executionPolicy Undefined`
6. At the Execution Policy Change notice, type A (Yes to All) and press enter.

7. Type `./parseresults.ps1`.
8. At the Security warning, type R (Run once) and press enter.
9. The script creates a text file, called `touchxpresults.txt`, in the same folder.

If the execution policy is already set to Unrestricted or Undefined, you can run the parsing script in Windows Explorer:

1. Copy the `parseresults.ps1` file to the folder that contains the `ResultsBenchmarkMode.json` file you want to summarize. By default, the JSON file is located at `~/AppData/Local/Packages/TouchXPRTxxxxxx/LocalState/ResultsBenchmarkMode.json`.
2. Right-click `parseresults.ps1`, and select run with PowerShell.
3. At the Open File – Security Warning dialog, click Open.
4. The script will create a text file in the same folder called `touchxpresults.txt`.