Usage

Before you start, please refer to the [PCMark 8 Technical Guide](#) for a detailed explanation of the operation of the Storage Consistency test and the [PCMark 8 Command Line Guide](#) for details of the options available when running PCMark 8 from the command line.

The PCMark 8 Storage Consistency test can be customized by editing a suitable benchmark definition file. We recommend starting with the Consistency test XML provided by Futuremark and editing only the settings that need to be changed.

Run the program from a command line that was started as an administrator, (right-click on the cmd shortcut, and select Run as Administrator).

Example

```text
PCMark8Cmd.exe --custom=c:\my_consistency_test.xml
--storagepath=\\.\PhysicalDrive0
```

⚠️ [PCMark 8 Professional Edition](#) license required for command line use.
## Options

<table>
<thead>
<tr>
<th>Setting</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>precondition_passes</td>
<td>2</td>
<td>The number of passes in the precondition phase.</td>
</tr>
<tr>
<td>precondition_block_size</td>
<td>131072</td>
<td>The block size (in bytes) used for write operations in the precondition phase.</td>
</tr>
<tr>
<td>post_precondition_idle</td>
<td>0</td>
<td>The time to idle (in ms) between precondition and degrade phases.</td>
</tr>
<tr>
<td>degrade_duration_init</td>
<td>600000</td>
<td>The initial duration (in ms) of a degrade phase pass.</td>
</tr>
<tr>
<td>degrade_duration_increment</td>
<td>300000</td>
<td>The amount of time (in ms) that the duration of the degrade phase pass is (cumulatively) incremented on each pass.</td>
</tr>
<tr>
<td>degrade_passes</td>
<td>8</td>
<td>The number of passes in the degrade phase.</td>
</tr>
<tr>
<td>degrade_min_block_size</td>
<td>4096</td>
<td>The minimum block size (in bytes) used with write operations in degrade phase.</td>
</tr>
<tr>
<td>degrade_max_block_size</td>
<td>1048576</td>
<td>The maximum block size (in bytes) used with write operations in the degrade phase.</td>
</tr>
<tr>
<td>degrade_alignment</td>
<td>4096</td>
<td>Alignment of write operation offsets in the degrade phase.</td>
</tr>
<tr>
<td>steady_passes</td>
<td>5</td>
<td>The number of passes in the steady phase.</td>
</tr>
<tr>
<td>steady_idle</td>
<td>0</td>
<td>The time to idle (in ms) between steady phase passes.</td>
</tr>
<tr>
<td>recovery_duration_init</td>
<td>300000</td>
<td>The initial duration (in ms) of a recovery phase pass.</td>
</tr>
<tr>
<td>recovery_duration_increment</td>
<td>0</td>
<td>The amount of time (in ms) that the duration of the recovery phase pass is (cumulatively) incremented on each pass.</td>
</tr>
<tr>
<td>recovery_passes</td>
<td>5</td>
<td>The number of passes in the recovery phase.</td>
</tr>
<tr>
<td>postcondition_passes</td>
<td>1</td>
<td>The number of passes in the postcondition phase.</td>
</tr>
<tr>
<td>postcondition_block_size</td>
<td>131072</td>
<td>The block size (in bytes) that is used with write operations in postcondition phase.</td>
</tr>
<tr>
<td>short_stroke</td>
<td>0</td>
<td>The size (in bytes) used on the device being tested. A value of 0 or any value larger than the device’s capacity results in the whole capacity being used. Use this setting when only part of the device is used for performance reasons (a practice known as short stoking). The value must a multiple of the device’s sector size (usually 512 or 4096).</td>
</tr>
</tbody>
</table>
Storage Consistency test default XML

```xml
<?xml version="1.0" encoding="utf-8"?>
<benchmark>
  <result_version>10</result_version>
  <sets>
    <set>
      <name>Pcm85StorageConsistency</name>
      <settings>
        <setting>
          <name>window_message_id</name>
          <value>4001</value>
        </setting>
        <setting>
          <name>pre_work_sleep</name>
          <value>0</value>
        </setting>
      </settings>
    </set>
    <workloads>
      <workload>
        <name>Pcm85StorageConsistency</name>
        <settings>
          <setting>
            <name>binary</name>
            <value>StorageTracePlayback.exe</value>
          </setting>
          <setting>
            <name>action</name>
            <value>consistency</value>
          </setting>
          <setting>
            <name>storage_tech</name>
            <value>DiskTarget</value>
          </setting>
          <setting>
            <name>archive</name>
            <value>storage.dat</value>
          </setting>
          <setting>
            <name>trace_file</name>
            <value>storagetraces\wow.xml;storagetraces\bf3.xml;storagetraces\photoshop_light.xml;storagetraces\photoshop_heavy.xml;storagetraces\indesign.xml;storagetraces\aftereffects.xml;storagetraces\illustrator.xml;storagetraces\word.xml;storagetraces\powerpoint.xml;storagetraces\excel.xml</value>
          </setting>
        </settings>
      </workload>
    </workloads>
  </sets>
</benchmark>
```
<setting>
    <name>run_time</name>
    <value>0</value>
</setting>

<setting>
    <name>precondition_passes</name>
    <value>2</value>
</setting>

<setting>
    <name>precondition_block_size</name>
    <value>131072</value>
</setting>

<setting>
    <name>post_precondition_idle</name>
    <value>0</value>
</setting>

<setting>
    <name>degrade_duration_init</name>
    <value>600000</value>
</setting>

<setting>
    <name>degrade_duration_increment</name>
    <value>300000</value>
</setting>

<setting>
    <name>degrade_passes</name>
    <value>8</value>
</setting>

<setting>
    <name>degrade_min_block_size</name>
    <value>4096</value>
</setting>

<setting>
    <name>degrade_max_block_size</name>
    <value>1048576</value>
</setting>

<setting>
    <name>degrade_alignment</name>
    <value>4096</value>
</setting>

<setting>
    <name>steady_passes</name>
    <value>5</value>
</setting>
<name>steady_idle</name>
  <value>0</value>
</setting>
<setting>
  <name>recovery_duration_init</name>
  <value>300000</value>
</setting>
<setting>
  <name>recovery_duration_increment</name>
  <value>0</value>
</setting>
<setting>
  <name>recovery_passes</name>
  <value>5</value>
</setting>
<setting>
  <name>postcondition_passes</name>
  <value>1</value>
</setting>
<setting>
  <name>postcondition_block_size</name>
  <value>131072</value>
</setting>
<setting>
  <name>short_stroke</name>
  <value>0</value>
</setting>
</settings>
</workload>
</workloads>
</set>
</sets>
</benchmark>