#### SPECapc<sup>®</sup> for 3ds Max<sup>®</sup> 2020 Benchmark

SPECapc for 3ds Max 2020 is a port of the SPECapc for 3ds Max 2015 benchmark. It contains 48 tests for comprehensive measurement of CPU and GPU performance with modeling, interactive graphics, and visual effects. Features in this benchmark have been migrated for use in 3ds Max 2020, including shaders and vector maps, viewport enhancements, and dynamic and visual effects. Further enhancements to this version of the benchmark include improved run-to-run consistency and better results reporting/submission.

## **System Requirements**

- Microsoft Windows 10 64-bit OS (should include all current Windows Updates).
- 16 GB or more of system RAM is required for official submissions.
- Vertical Sync must be disabled. Refer to the graphics card manufacturer's instructions for information on changing the vertical sync settings.
- The system's primary display resolution must be set to at least 1920x1080. For official submissions, the resolution must be either 1080p or 4K with an aspect ratio of either 16:9 or 16:10. Interface scaling must also be set to 100%.
- The benchmark must be run using Autodesk 3ds Max 2020. Do not install the 3ds Max Subscription Advantage Pack, as it will interfere with the operation and results of the benchmark.

# **Setup Requirements**

The Autodesk 3ds Max 2020 application window must be fully visible and not be occluded by any other windows, including the benchmark GUI.

A fully licensed copy of Autodesk 3ds Max 2020 with the latest Service Pack should be installed and have been started at least once prior to running the benchmark.

### **Benchmark Execution**

Launch the benchmark:

- 1. From the Windows Start menu, select "SPECapc" then "SPECapc for 3ds Max 2020". The benchmark User Interface (UI) will be displayed.
- 2. Select desired settings and click the Run button.

All benchmark sub-tests will be run once for each iteration selected in the benchmark UI. Once all tests have completed, the benchmark results will be displayed; this indicates the test is complete.

# **Benchmark Results**

Results from previous iterations of the benchmark are stored in individual sub-directories within the directory: %APPDATA%\SPECapc\3dsmax\2020\TestResults\

This directory can also be found by selecting "Manage Results" within the benchmark UI and then clicking the folder icon next to a listed result.

SPECa ©2022 Standard	pc for 3ds Max	2020 on gwpg.spec.	org	
System Configuration (More Details)		Benchmark Options		
Manufacturer Model CPU		Iterations: 1 Anti-aliasing: None 8x AA		
System Memory GPU	32.00 GB			
Display Driver	30.0.14.7242			
Screen Resolution	2560x1440			
Screen Scaling	100%			
Operating System OS Build Number	Microsoft Windows 10 Pro 64-bit 22000	Run Stop		
Status	Ready to run	Manage Results		

## **Results Submission**

Benchmark results can be submitted for review and publication on the SPEC website. When submitting results for review, they should be packaged in a specific format. Properly formatted packages can be automatically generated by selecting "Manager Results" within the benchmark UI, checking the box next to the desired results, and selecting "Package Selected Results". Please note that the "Submission Details" section should be completed before generating a submission package.

Submission Details  Company Name Enter your company name			
Submitter Name			
Enter your name			
	S	spec <sup>®</sup>	
Submitter Email Enter your email address			
Save Details	<u>Vie</u>	ew Online Results	
Available Benchmark Results			0
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Wed Jul 21 2021 15:50:32 GMT-0500 (Central Daylight Time)           Wed Jul 21 2021 16:12:22 GMT-0500 (Central Daylight Time)	Candidate Yes Yes	C • •	
Wed Jul 21 2021 15:50:32 GMT-0500 (Central Daylight Time)           Wed Jul 21 2021 16:12:22 GMT-0500 (Central Daylight Time)           Wed Jul 21 2021 16:44:30 GMT-0500 (Central Daylight Time)	Candidate Yes Yes Yes		

If manually creating a submission package, please ZIP the results directories in the following directory structure:

```
./company-name/system-1/3dsmax2020/results-directory/
```

```
./company-name/system-2/3dsmax2020/results-directory/
```

```
./company-name/system-3/3dsmax2020/results-directory/
```

The ZIP file should be named as *company-name\_*apc3dsmax2020\_v0.zip, where *company-name* is the name of the member company or organization.