To generate an NVIDIA Nsight report from a notebook, you can use the following steps:

1. **Install NVIDIA Nsight Compute.**
2. **Start NVIDIA Nsight Compute.**
3. **Create a new project.**
4. **Select the target for profiling.** This can be a local application, a remote application, or a containerized application.
5. **Select the data to be collected.** For example, you may want to collect CUDA trace data, OpenGL data, or MPI data.
6. **Specify the program options.** This may include the command line arguments to pass to the application or the environment variables to set.
7. **Start the profiling.**
8. **Once the profiling is complete, open the report file.**

To open the report file from a notebook, you can use the following Python code:

Python

import nsight  
  
# Open the report file  
report = nsight.Report("path/to/report.nsreport")  
  
# Print the report to the console  
print(report)  
  
# Or, save the report to a different file  
report.save("new\_report.nsreport")

The Nsight report will contain detailed information about the performance of your application, including:

* GPU utilization
* Memory usage
* Kernel execution times
* API call durations
* Performance recommendations

You can use this information to identify and address performance bottlenecks in your application.

Here is an example of a simple notebook that generates an Nsight report:

Python

import nsight  
  
# Create a new project  
project = nsight.Project("My Project")  
  
# Select the target for profiling  
project.target = nsight.Target.LocalApplication()  
  
# Select the data to be collected  
project.data = nsight.Data.CUDA()  
  
# Specify the program options  
project.program\_options = ["-n", "1000"]  
  
# Start the profiling  
project.start()  
  
# Wait for the profiling to complete  
project.wait()  
  
# Open the report file  
report = nsight.Report(project.report\_file)  
  
# Print the report to the console  
print(report)

This notebook will generate an Nsight report for the current application, collecting CUDA trace data for 1000 iterations. You can modify the notebook to collect different data or to profile a different application.