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\* \* \*

## # Data Pointers¶

In general NCCL will accept any CUDA pointers that are accessible from the CUDA device associated to the communicator object. This includes:

- > \* device memory local to the CUDA device
- > \* host memory registered using CUDA SDK APIs `cudaHostRegister` or `cudaGetDevicePointer`
- > \* managed and unified memory
- >

The only exception is device memory located on another device but accessible from the current device using peer access. NCCL will return an error in that case to avoid programming errors (only when `NCCL_CHECK_POINTERS=1` since 2.2.12).

[Next ]([streams.html "CUDA Stream Semantics"](#)) [ Previous]([collectives.html "Collective Operations"](#))

\* \* \*

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Built with [Sphinx](<http://sphinx-doc.org/>) using a [theme]([https://github.com/rtd/sphinx\\_rtd\\_theme](https://github.com/rtd/sphinx_rtd_theme)) provided by [Read the Docs](<https://readthedocs.org>).

