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Title: Quadchart for ECP OMPI-X milestone STPR17-80

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MTT/Gitlab CI ongoing Open MPI testing - Focus on GPU/OFI and OpenPMIx

ECP WBS	2.3.1.17 /OMPI-X
Epic/Story	STPR17-80
PI	David Bernholdt, ORNL
Milestone Lead	Howard Pritchard, LANL
Members	ORNL, LANL, LLNL, SNL, UTK

Scope and objectives	Effective solution for Community and ECP
<ul style="list-style-type: none"> • ECP OMPI-X develops a production grade MPI library • Leverage ECP Gitlab-based CI testing to improve CI coverage of Open MPI using DOE systems such as ALCF • MTT maintenance and deployment on new systems, e.g. Perlmutter (CUDA/SS10) 	<ul style="list-style-type: none"> • ECP Gitlab-based CI useful for certain testing use cases, in particular nightly runs of spack/E4S testing • ECP Gitlab-based CI useful for testing on resources such as ALCF, OLCF, NERSC
Impact	Project accomplishment
<ul style="list-style-type: none"> • Improved code quality: Code does not enter Open MPI code base without PR-based CI testing. Improve support for testing Open MPI/GPU interoperability • Improved time to release: Better code quality in master means faster time to release 	<ul style="list-style-type: none"> • Further work for this milestone confirmed that using ECP Gitlab CI does not work with PR based work flow used by the Open MPI. • Alternatives uses found for ECP Gitlab CI – nightly testing of Spack builds of Open MPI release and master branches, testing with E4S Open MPI testsuite • Additional PMIX unit tests • MTT limited deployment on Perlmutter (issues with job turnaround time, etc.)
<p>Deliverables Progress report for milestone STPR17-80. Relevant commits and issues in Github repos</p>	

