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MPI Sessions WG Update

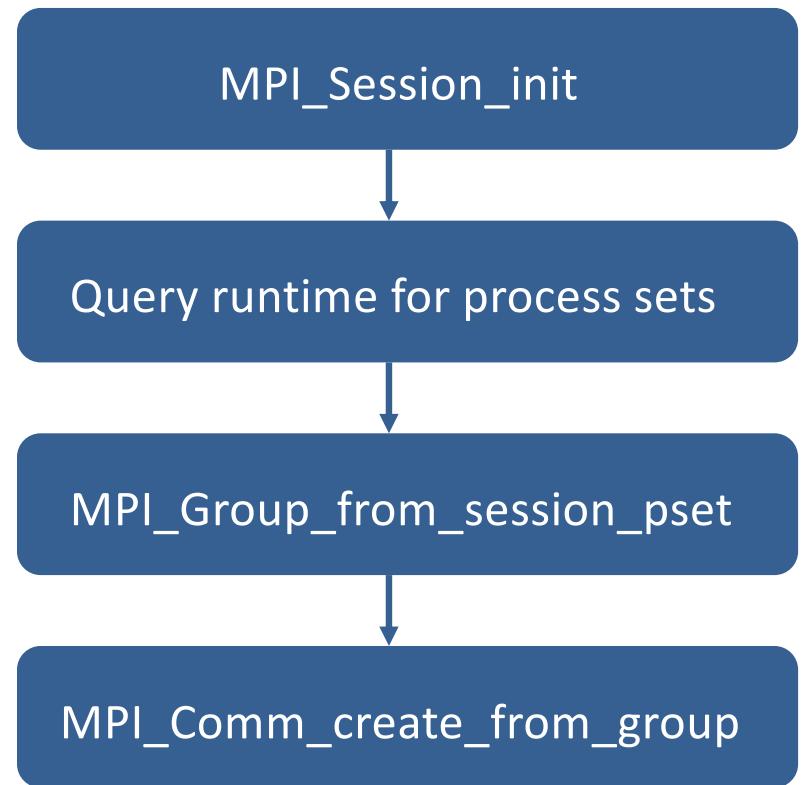
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MPI Sessions – current state

- In the MPI 4.0 standard
- Consider this as first step for Sessions



MPI Sessions – current state in MPI implementations

- Available in MPICH 4.0 release stream
- Prototype based on Open MPI is available at
https://github.com/hpc/ompi/tree/sessions_pr
(this branch is subject to rebasing!)
- Set of simple tests are available at
<https://github.com/open-mpi/ompi-tests-public>

MPI WG Sessions – current activities

- For MPI 4.1 standard - clarifications of Sessions related text
- For MPI 5.0 - investigating requirements for more dynamic use of Sessions:
 - Presentation of available process sets in a manner more suitable for dynamic environments
 - Mechanisms for runtime notifying application of resource changes
 - Mechanisms for application to notify runtime about changing resource requirements
 - Adding/removing MPI processes (beyond `MPI_Comm_spawn`)
 - Working with FT WG to develop FT approaches that leverage Sessions functionality

