

Sessions WG

Topics for 2025

Where Forum is now

- Forum currently steaming towards MPI 5.0 in the June '25 timeframe
- The release cadence of the standard has picked up noticeably since the MPI 3 era
- We should be using this year to decide on areas of focus for a MPI 6

Some Ideas

- Additional PSET query/manipulation functions
- FT – do we need to do anything here?
- Process creation methods supported with Sessions Model
 - Currently standard says MPI_Comm_spawn(_multiple) aren't supported unless using world model.
 - We probably want to fix this in some fashion for MPI 6
- Deprecate MPI_Comm_join (currently section 11.10.5)

Pset query/manipulation functions

- Considerable exploratory work has been done
- Interfaces for methods to –
 - Express operations on psets
 - Publish resultant psets
 - Lookup resultant psets
- Need to explore things like cooperative optimization language (COL)
- Interaction with runtime – new requirements there?

MPI_Comm_spawn

- There had been discussions of deprecating this. Do we want to push this?
- Alternatively, could we define a way to do an MPI_Comm_spawn that doesn't build up an intercomm between parents and children – require an explicit connect/accept or MPI_Group_from_session_pset.
- Maybe leverage new pset manipulation functions?