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**Status of TRANSP Parallel Services** K. INDIRESHKUMAR, ROBERT ANDRE, DOUGLAS MCCUNE, LEWIS RANDERSON, Princeton Plasma Physics Laboratory, Princeton University, Princeton, NJ 08543 — The PPPL TRANSP code suite has been used successfully over many years to carry out time dependent simulations of tokamak plasmas. However, accurately modeling certain phenomena such as RF heating and fast ion behavior using TRANSP requires extensive computational power and will benefit from parallelization. Parallelizing all of TRANSP is not required and parts will run sequentially while other parts run parallelized. To efficiently use a site's parallel services, the parallelized TRANSP modules are deployed to a shared "parallel service" on a separate cluster. The PPPL Monte Carlo fast ion module NUBEAM and the MIT RF module TORIC are the first TRANSP modules to be so deployed. This poster will show the performance scaling of these modules within the parallel server. Communications between the serial client and the parallel server will be described in detail, and measurements of startup and communications overhead will be shown. Physics modeling benefits for TRANSP users will be assessed.

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