

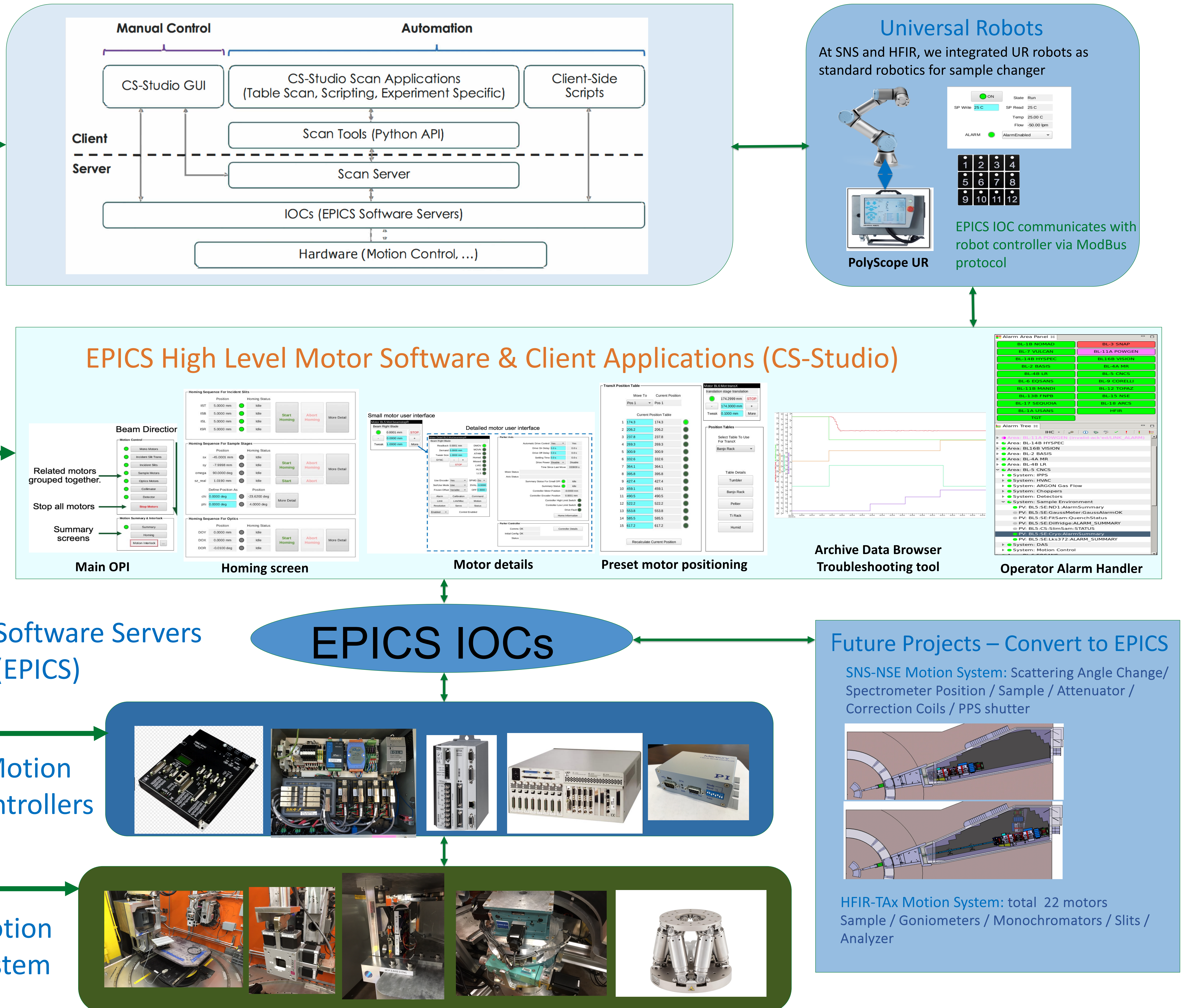
MOTION CONTROL SYSTEMS AT SNS AND HFIR BEAM LINES

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The Spallation Neutron Source (SNS) and the High Flux Isotope Reactor (HFIR) at ORNL have a total of 35 neutron beam lines with numerous motors. The motion system varies in complexity from a linear sample positioning stage to multi-axis end stations. To enhance the capabilities of these motion systems, a concerted effort has been made to establish standardized hardware and flexible software that will not only improve performance but also increase reliability and provide the capability for automated experiments. This paper presents a comprehensive overview of the motion control systems employed at SNS and HFIR, including the various motion controllers used, the EPICS-based IOCs, high-level motion software, and the plans for ongoing upgrades and new projects.



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