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## OR14 - Enhancing complex automations: Operators empower efficiency with 'Sequencers' tool

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"Elettra Synchrotron Trieste is a multidisciplinary research center that welcomes the global research community. It specializes in producing high-quality synchrotron and free-electron laser light and applying them in the fields of materials and life sciences. The research center boasts two advanced light sources: the electron storage ring Elettra (2.0–2.4GeV) and the free-electron laser (seeded FEL) FERMI. These facilities operate around the clock, providing light to over 30 experimental stations.

To carry out intricate tasks involving particle accelerators, physicists and operators must follow a specific sequence of actions typically displayed through numerous graphical panels. The automation logic embedded in the graphical user interfaces (GUIs) often lacks reusability by other programs, which limits the potential level of automation achievable by a control system. To overcome this limitation, we have introduced a new automation framework that shifts the logic from GUIs to the server-side. This approach allows for easy organization, inspection, and stacking of simple tasks, ultimately enabling the construction of more complex actions.

In this instance, we show how this tool, known as "Sequencers," has allowed the operations group to implement complex automations such as recovering the storage ring after a beam dump and the subsequent reinjection, thereby greatly reducing the number of mouse clicks necessary for restoring all devices."

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**Session Classification:** Operator Made Tools