

RF configuration management

Dmitry Teytelman

LLRF07 workshop

System Configuration Issues

- Complete station configuration can be divided into subsets
 - Module specific
 - Station specific
 - RF configuration specific
- When the total ring RF voltage is changed we change:
 - Station voltages, possibly cavity voltage balance;
 - Klystron operating points;
 - Feedback loop gains;
 - Comb filter configuration to track the new synchrotron frequency.
- Just restoring a full older configuration does not work
 - Overwriting calibrations, module configs.

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A Possible Split

- Module specific information is stored in the module (NVRAM). Control system reads out the parameters on boot.
 - Do you allow overriding the stored parameters?
- Station configuration includes in-situ calibration results, trip limits. Saved and restored on a station-by-station basis.
- Voltage configuration includes cavity voltages, klystron operating points, feedback settings. Saved and restored per ring.
- How do other people handle these issues?

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