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sdr-server - improving hardware utilization for passive spectrum monitoring

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Sdr-server is a project designed to provide access for multiple users to a single rtl-sdr stick. This allows running several concurrent observations within 2Mhz bandwidth of rtl-sdr. This turned out to be a very useful feature for satellite communications. Many cubesats transmit data on a very close frequencies, which allow communication with several satellites at once. This feature is widely used in r2cloud project: https://github.com/dernasherbrezon/r2cloud/wiki/sdr-server. Sdr-server is an open source software available on GitHub: https://github.com/dernasherbrezon/sdr-server. It has been evolving for the last year, but now mostly stable. However there are several more features planned: support for other sdr hardware, offload DSP algorithms onto GPU.

Key points:
- Share single hardware between multiple users
- Reduce bandwidth for streaming raw I/Q data from remote locations
- Open source project from Github: https://github.com/dernasherbrezon/sdr-server
- Support by a single person
- Future: support more SDR hardware

Primary author: RODIONOV, Andrey

Session Classification: Talks