

First results from the test realization of a system monitoring for seamless auxiliary data

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on behalf of the IVS Task Force for Seamless Auxiliary Data





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Proposal for IVS Task Force for Seamless Auxiliary Data

Foundation of an IVS Task Force for Seamless Auxiliary Data during the IVS General Meeting in Shanghai 2014

Current situation

- Auxiliary data are only available as log file entries (meteorology, time corrections)
- Auxiliary data are only available for the session times
- Additional data are not publicly known (invar, local ties, etc.)
- Additional data are locally in proprietary formats at the observatory
- Often data can just be requested directly from the observatories on demand

Working Group Proposals

- Continuous, auxiliary data are of high interest
- Additional data might be interesting for research
- Centralized data repository
- Real-time overview of the observation network
- Preparations for dynamic observations

Proof of concept

- Example repository
- Upload from FS
- Web GUI
- FTP/SFTP download
- Inject mechanisms

Definition & suggestion

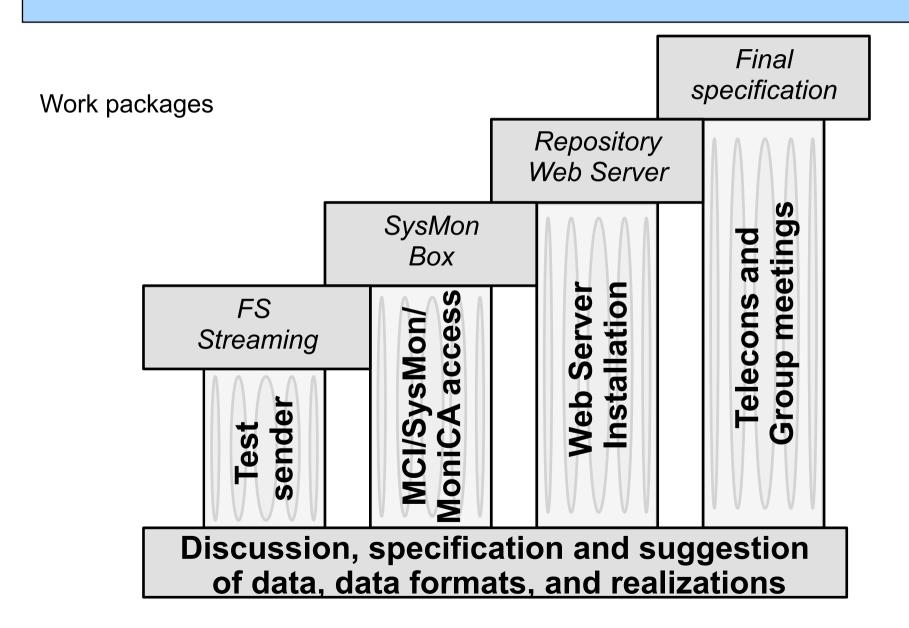
- Discussion with users
- Specifications
- Requirements
- Formats
- Future data

2 years after IVS acceptance

The IVS Task Force on Seamless Auxiliary Data should show possible realizations, make suggestions on what data should be provided and how observatories can contribute to the real-time data stream.



Idea for a first test realization





0657+172

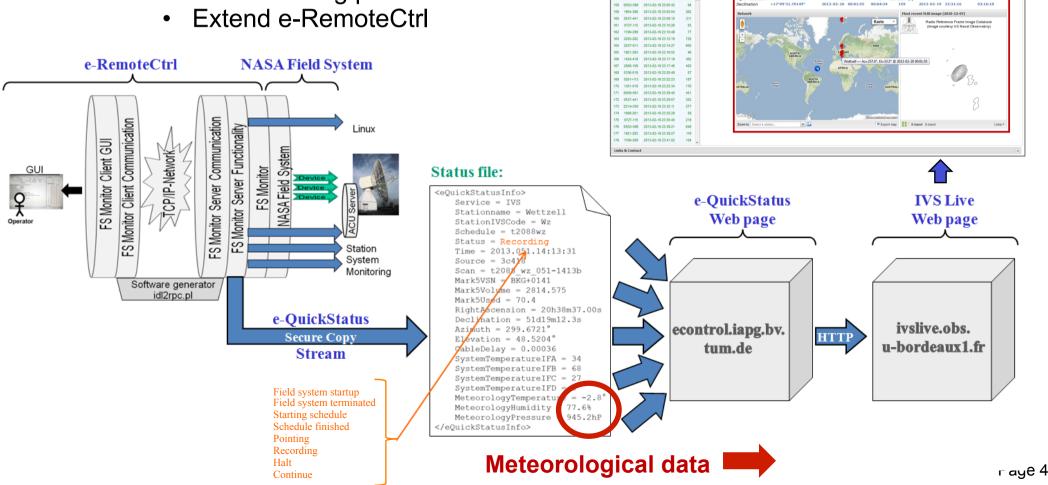
Source

W IVS Live

e-RemoteCtrl extension for real-time streaming

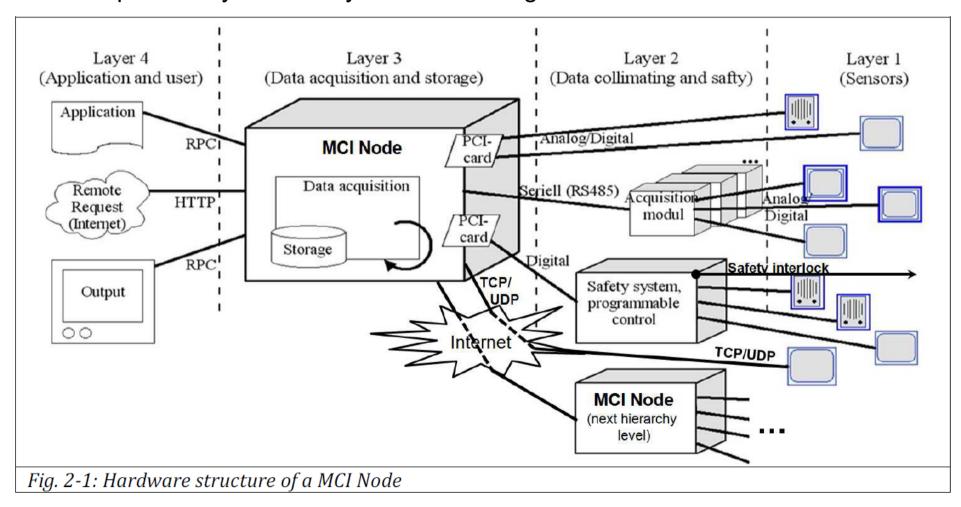
Data sender, comparable to the feedback to the IVS e-QuickStatus

Fix the sending problem





Data acquisition system for system monitoring







System monitoring node SysMon Node



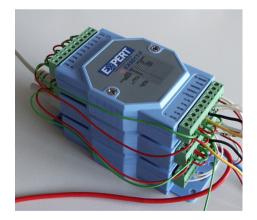




SysMon Sensors



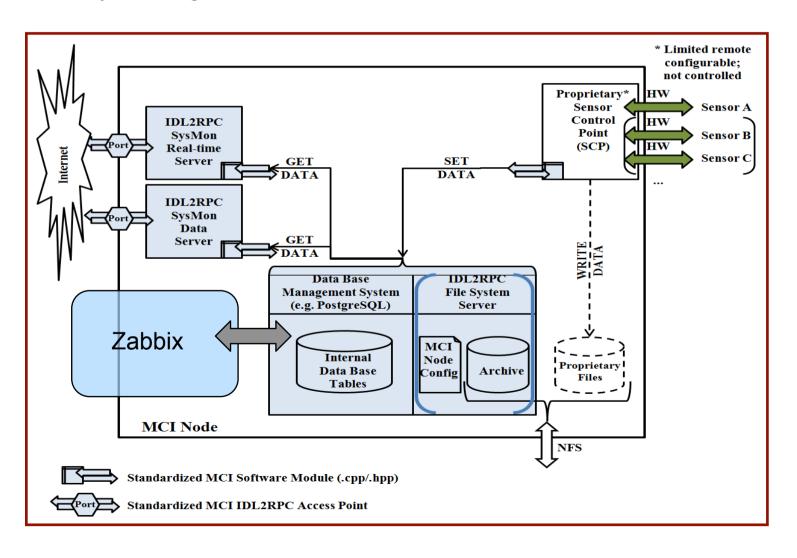
e.g. to measure the monument temp.



e.g. to digitize currents etc.

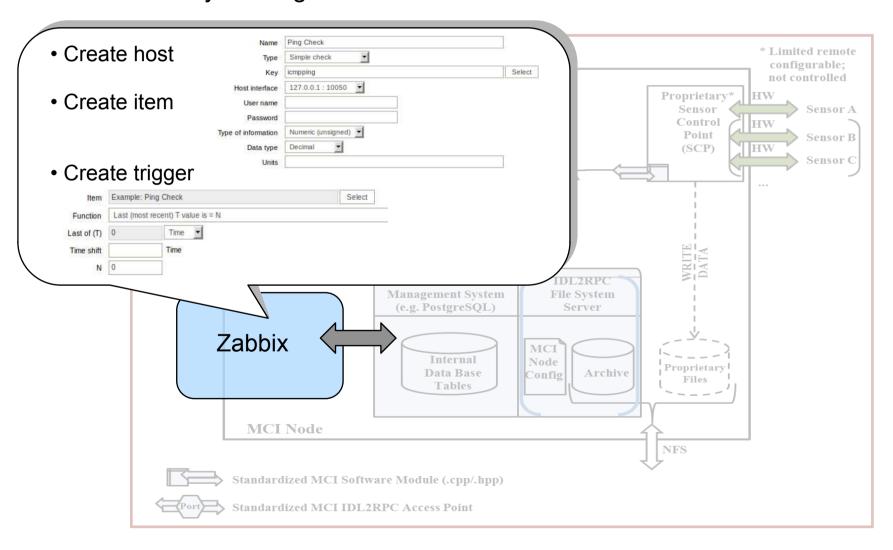


Presentation layer using Zabbix



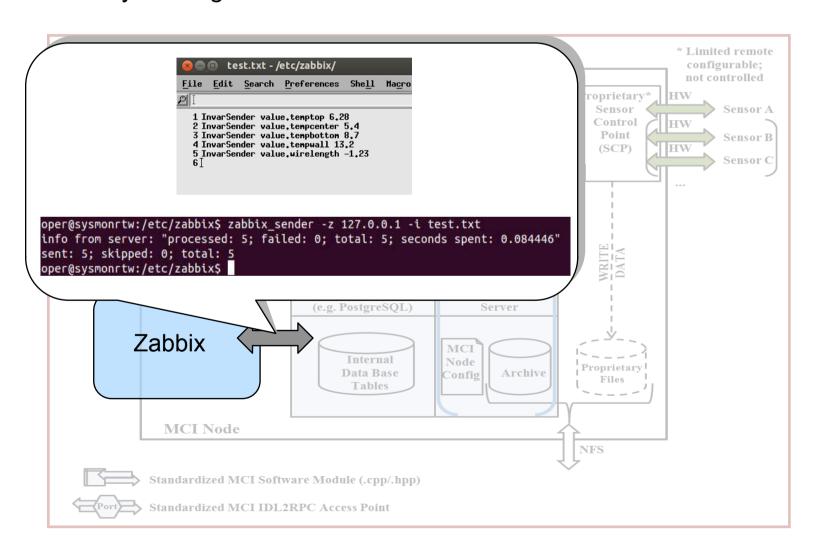


Presentation layer using Zabbix





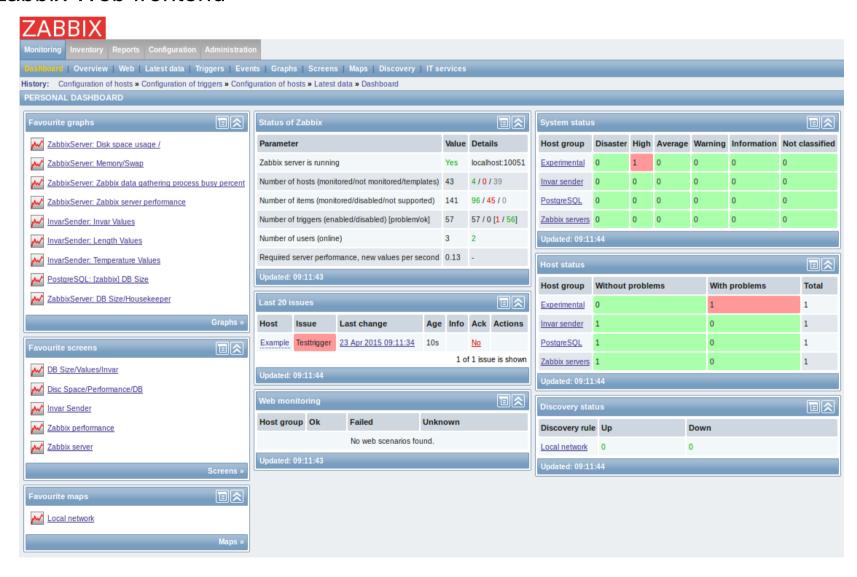
Presentation layer using Zabbix





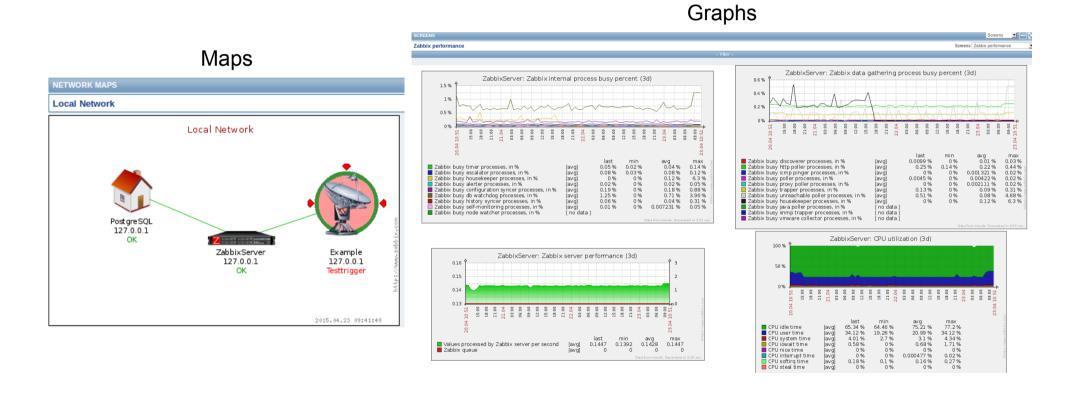


Zabbix Web frontend





Zabbix Web frontend (cont.)





Data Repository at Wettzell

Web screen with networks of all connected systems and the latest data



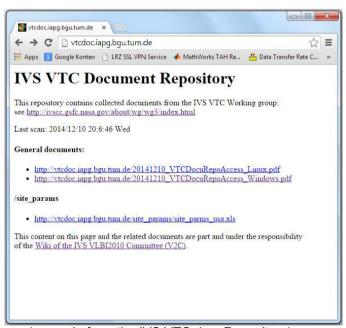




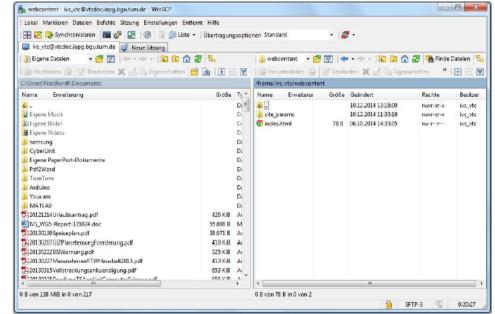
Data Repository at Wettzell

Archive for historic data of all connected systems

HTTP archive download



(FTP)/SFTP archive download



(example from the IVS VTC doc. Repository)

(example from the IVS VTC doc. Repository)

Data archive (with data conversion)

=> Integration into VLBI data centers?!



Thank you for your support and attention!!!

The software will be available on the Web page http://www.econtrol-software.de