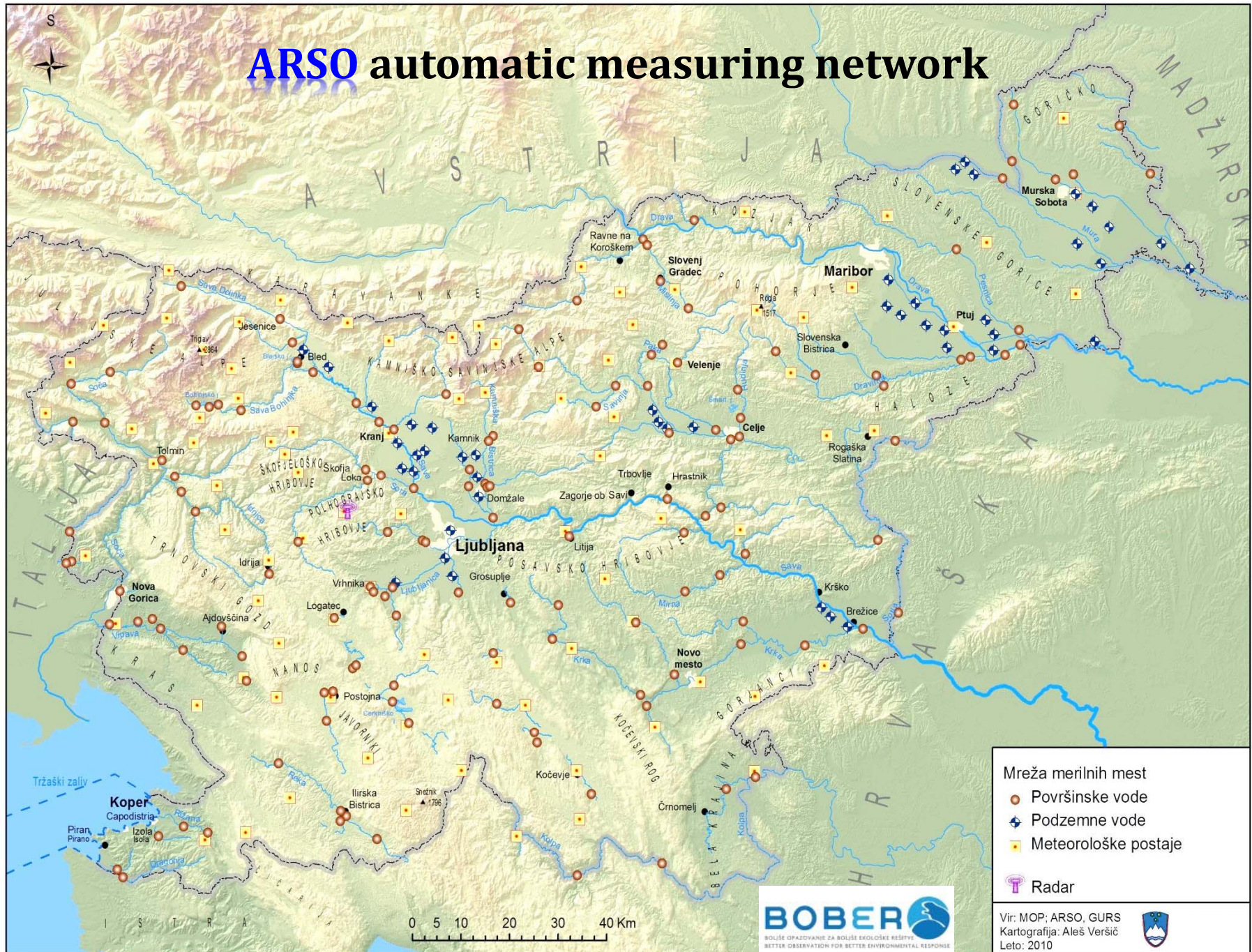


**ARSO**

**new efficient approach  
of code and data management in  
remote measuring networks**

Bojan Černač

# ARSO automatic measuring network



- Mreža merilnih mest
- Površinske vode
  - ◆ Podzemne vode
  - Meteoroške postaje

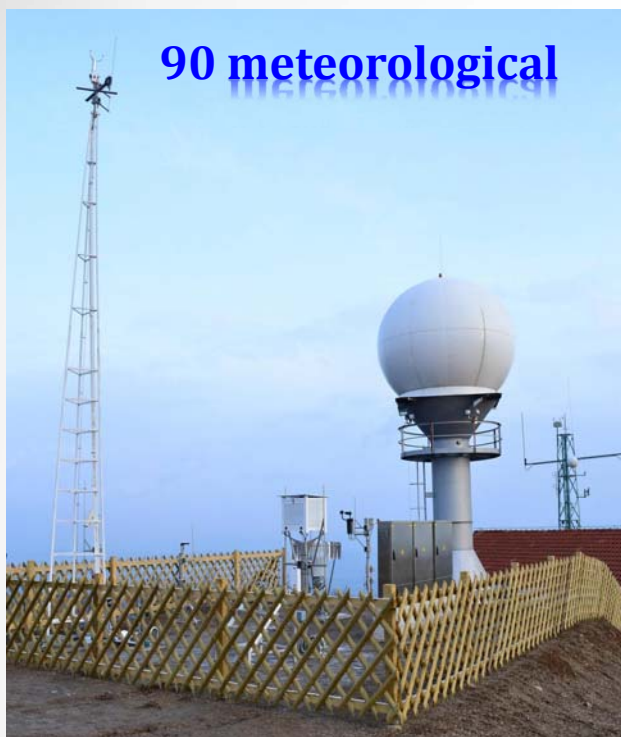
📡 Radar



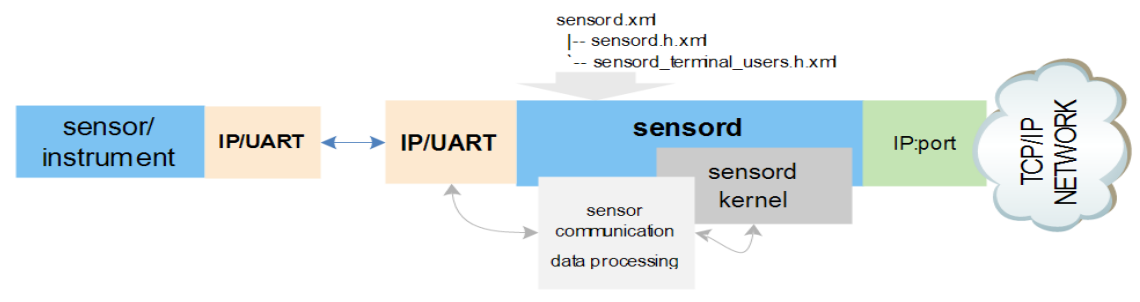
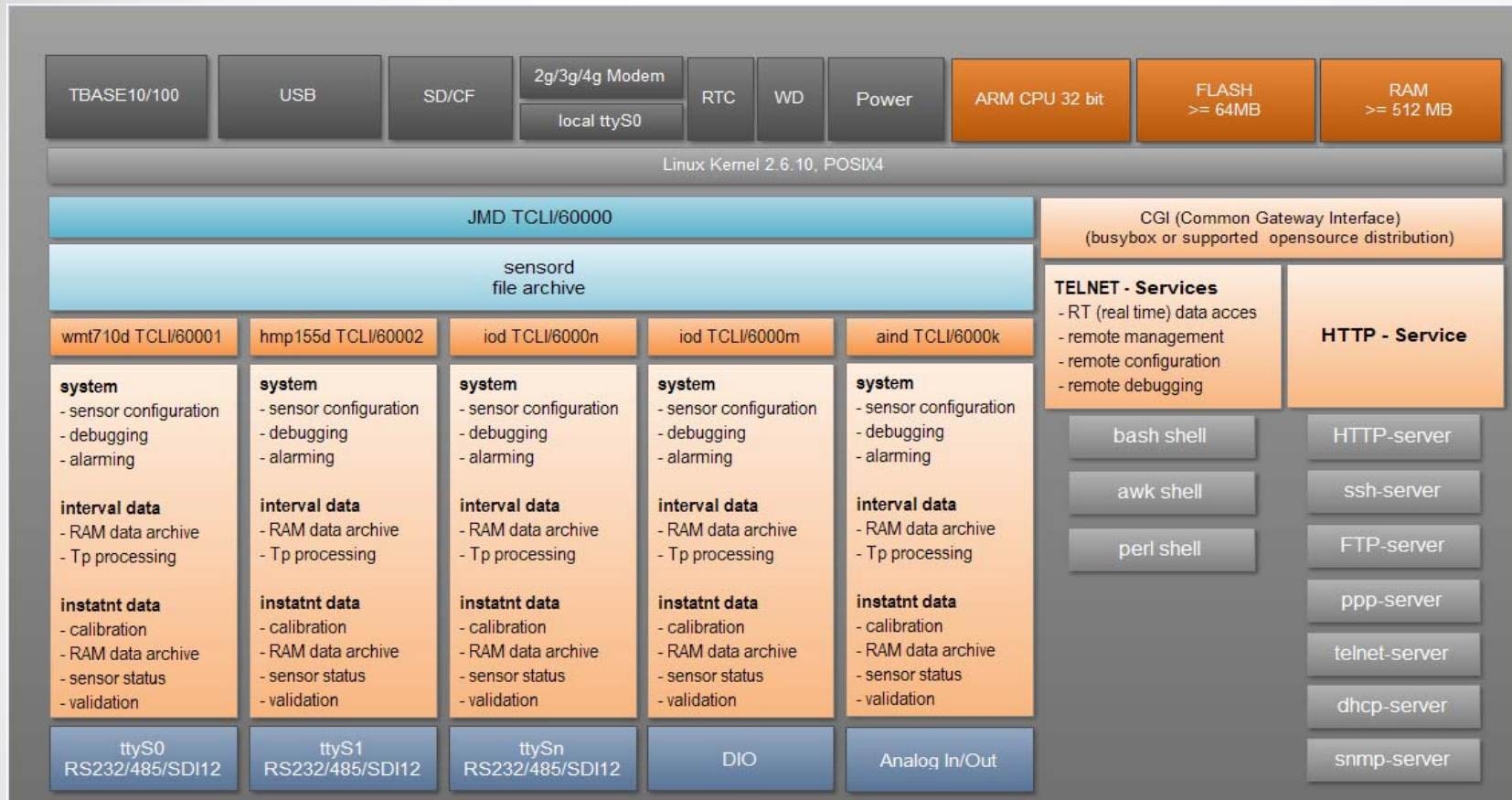
Vir: MOP; ARSO, GURS  
Kartografija: Aleš Veršič  
Leto: 2010



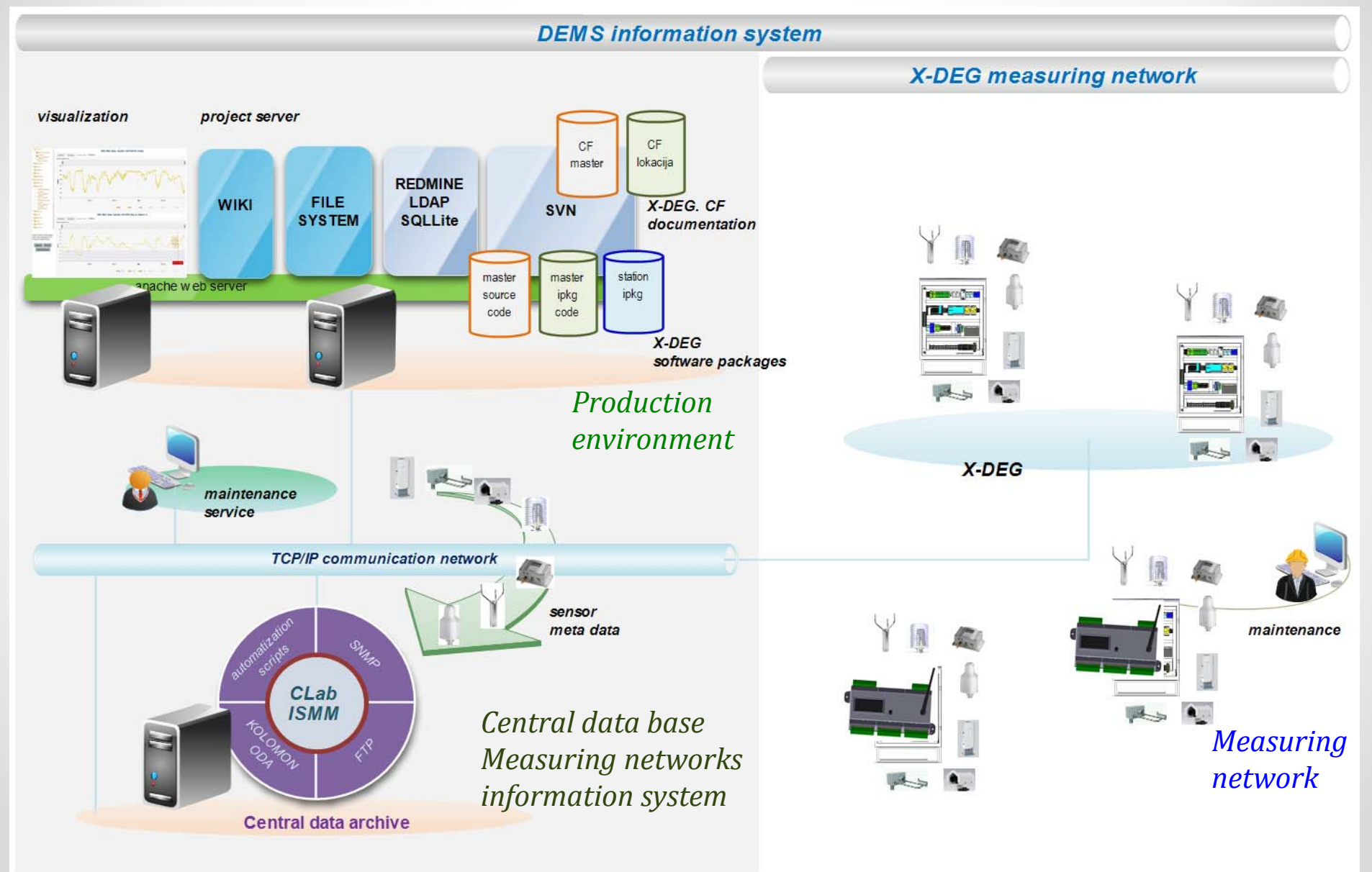
# ARSO automatic measuring network



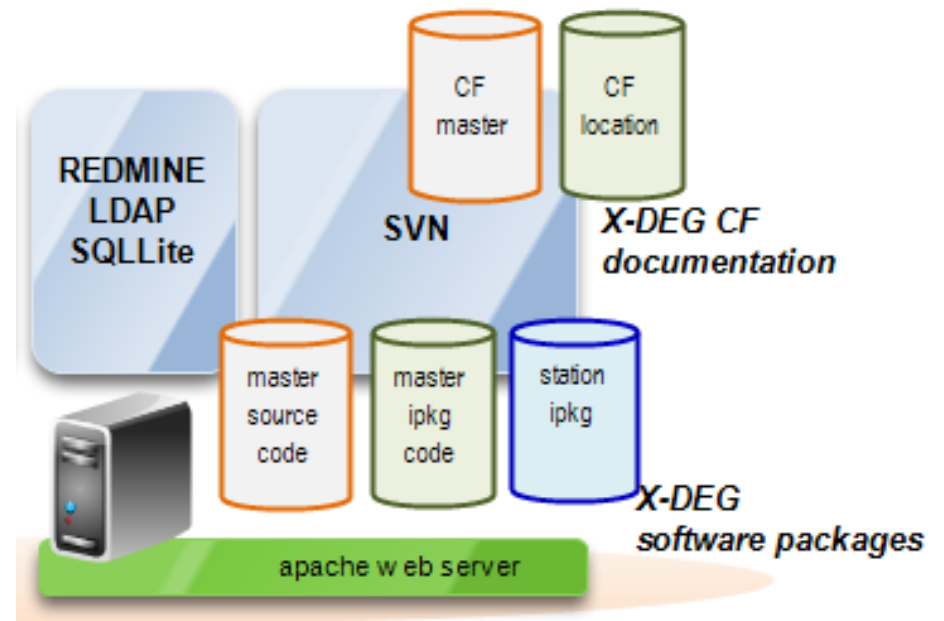
# DEMS / X-DEG Code management concepts



# DEMS / X-DEG Architecture



# DEMS / X-DEG Repository architecture in IT center



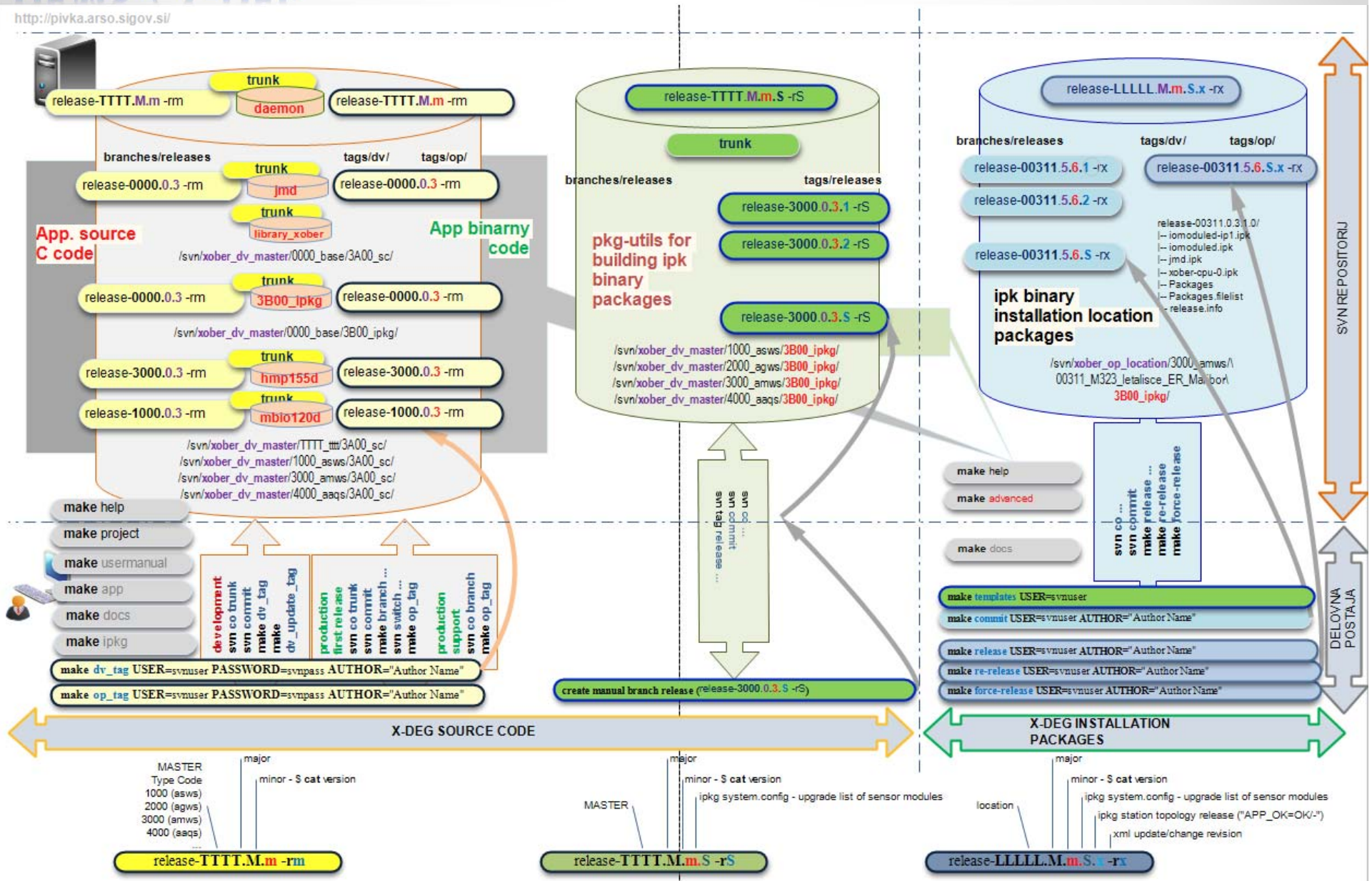
*Redmine software with subversion support and Apache web server provides*

- *Code and documentation tracking mechanism*
- *Documentation access and management*
- *Bug and issue tracking*

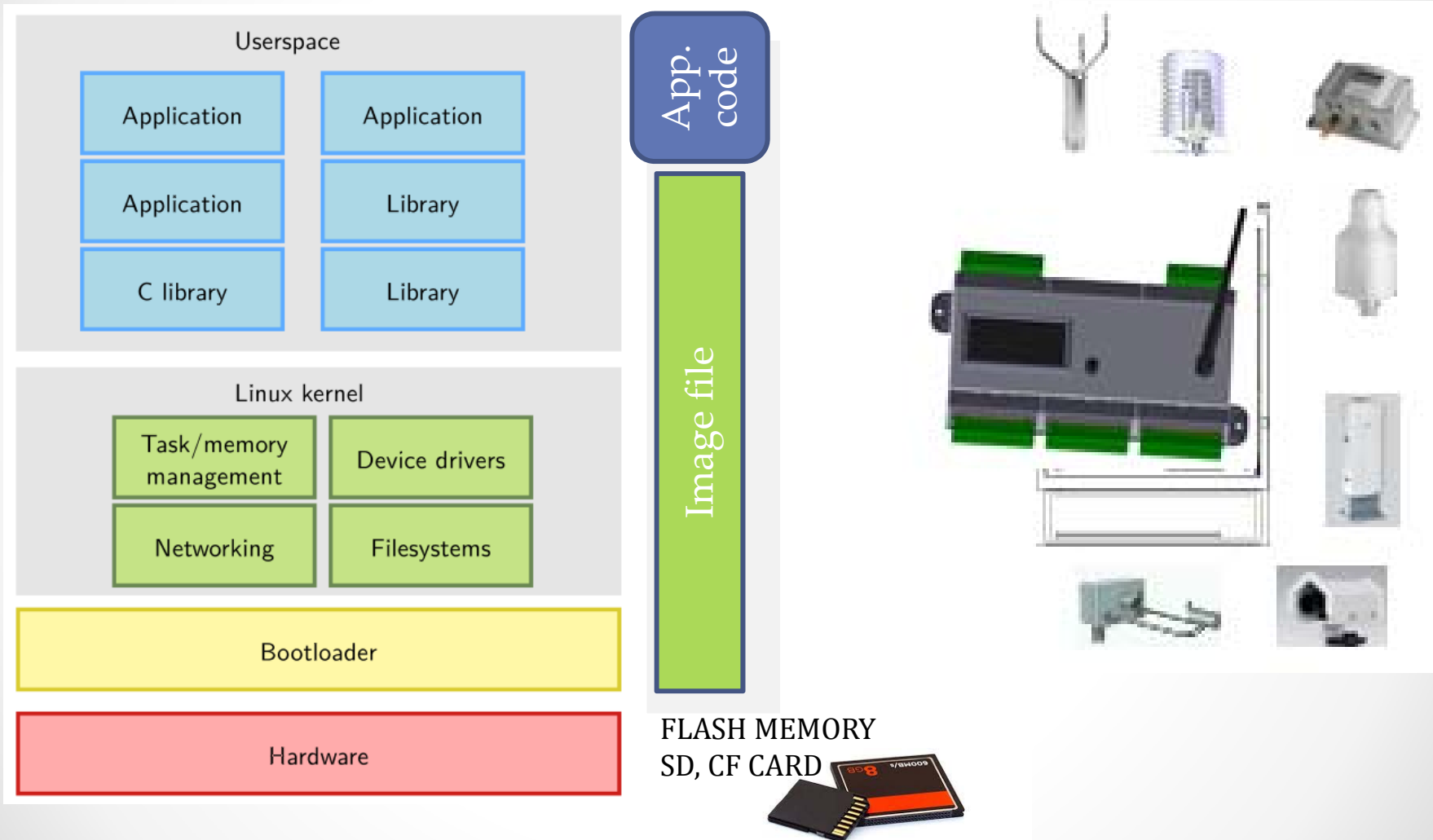
App Development

# DEMS / X-DEG Repository architecture in IT center

<http://pivka.arso.sigov.si/>



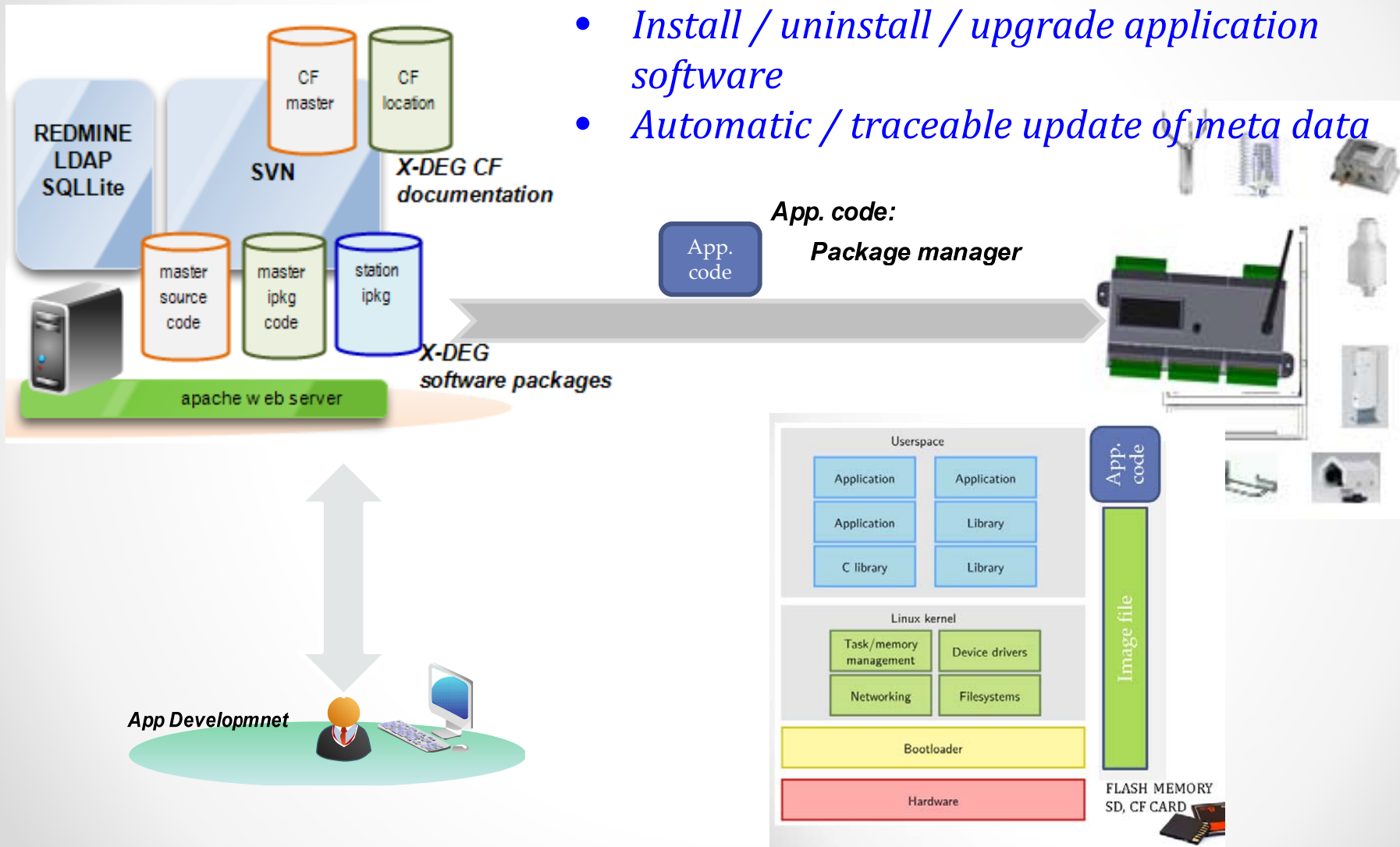
# DEMS / X-DEG Code architecture – target platform



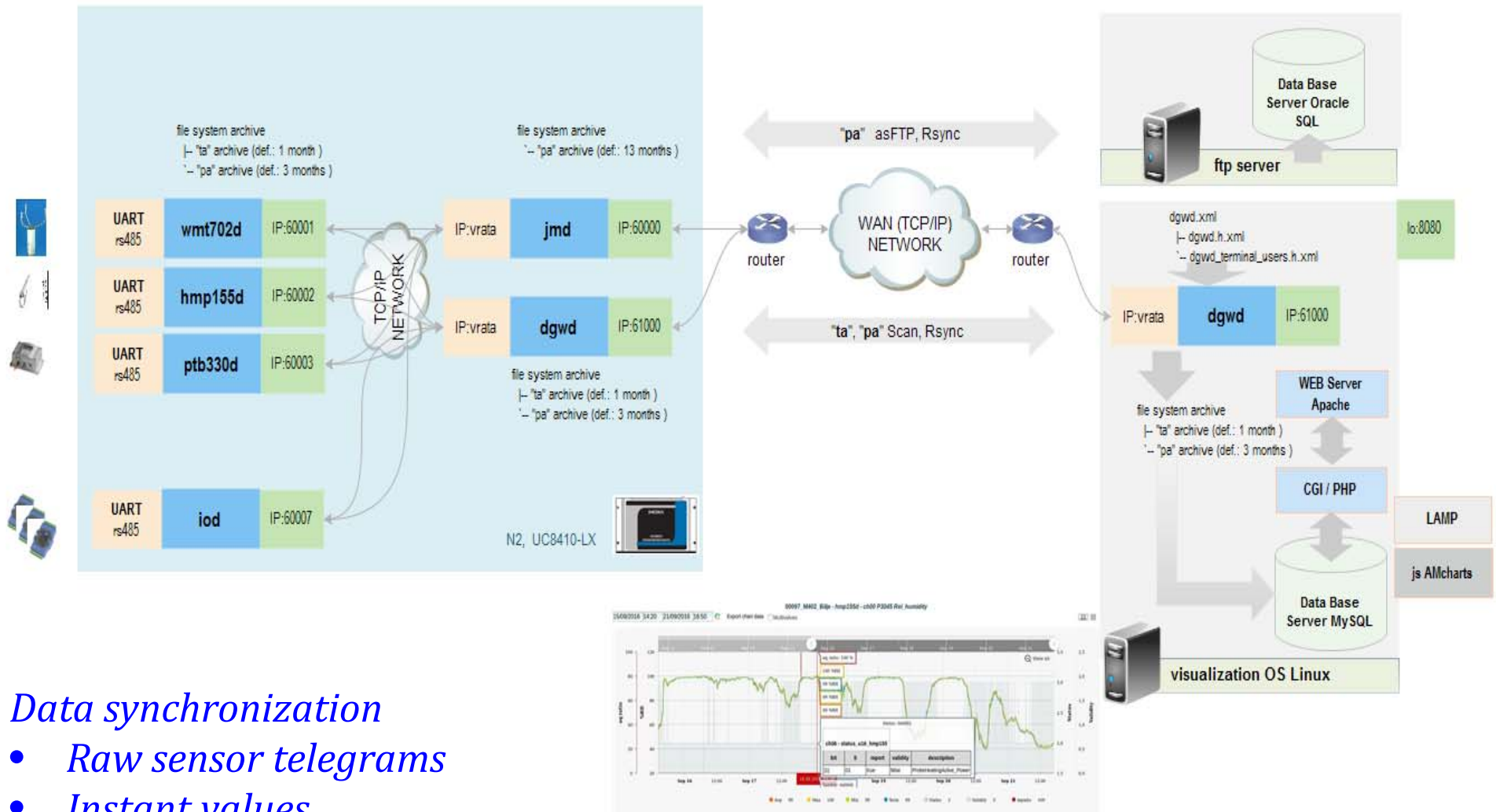


# DEMS / X-DEG Code target installation procedure

- Set link to repository at target
- Install / uninstall / upgrade application software
- Automatic / traceable update of meta data



# DEMS / X-DEG data transfer and visualization



## Data synchronization

- Raw sensor telegrams
- Instant values
- Processed values (default 10 min interval)
- Meta data

# Conclusions

- Procedures, documentation and code publishing **automation**,
- **Tractable** software maintenance and upgrading,
- Transparent **bug** and **issue-tracking** ,
- Automation of **meta data integration**,
- **Reliable, time efficient** remote application installation.

**THANKS FOR YOUR ATTENTION!**