Support for Technical Infrastructure operations

P. Sollander, AB/OP/TI

AB/OP/TI - Technical Infrastructure

- TS/CSE/TCR → AB/OP/TI since Jan 2005
- Operation 365 days per year, 24 hours per day
- Providing a <u>service</u> to different CERN users such as TS, AB, AT
- Infrastructure supervision including
  - Electricity: 400kV → 48V, consumption, …
  - Cooling: raw water, demi water, chilled water, mixed water, reject water, …
  - Ventilation: Tunnel ventilation, smoke extraction, heating, air-conditioning, …
  - Safety (installations): Fire, gas detection systems, access, …
  - Communication and control systems: Front-ends, servers, hardware and software
  - Others
    - Vacuum
    - Cryogenics (limited set of alarms)
    - …
- Monitoring service provided with the help of different tools
- Remote monitoring tools must be available 24 * 365 !!

TI operation tools

- ## Alarm screens
  - – LASER: Main tool for alarms
  - – ENS, ElecAlarm: Detailed electricity alarms
  - – Xcluc: host monitoring

TI operation tools

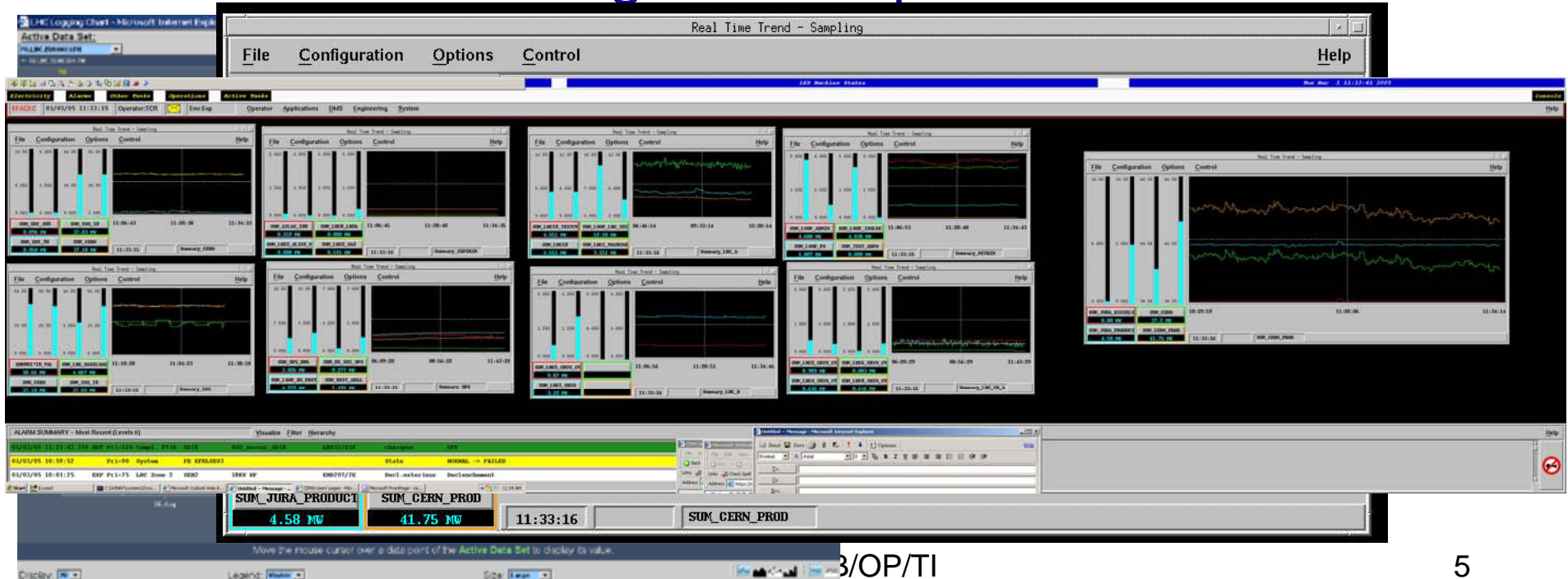- Mimic (synoptic) diagrams
  - GTPM: SPS, CPS, soon Cryo
  - TIM views: process details
  - Eq. Group views (ENS, Wizcon, vacuum, …)
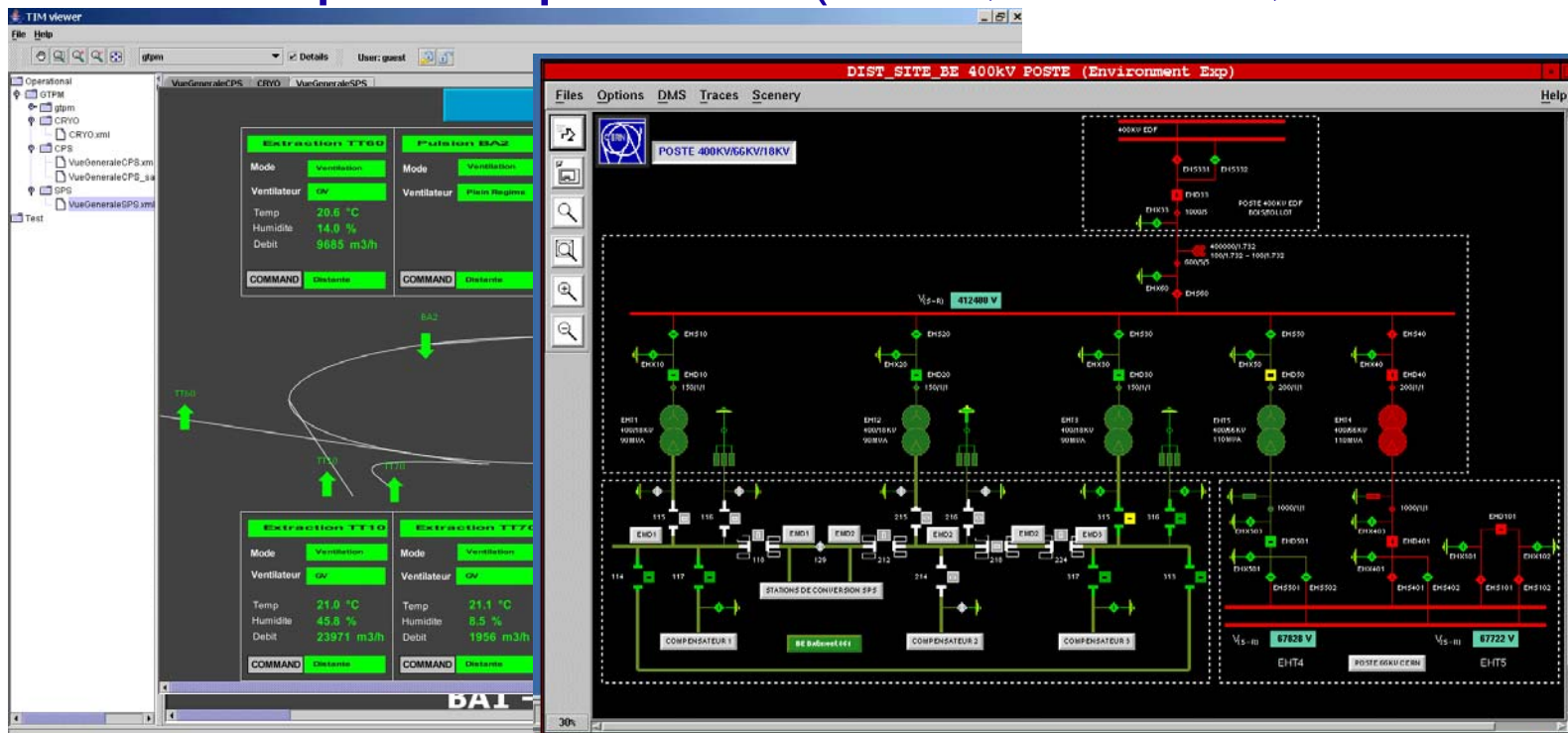
TI operation tools

- ## Trends

  - – Timber: Main tool to view logged data

  - – ENS trends: e.g. consumption

TI operation tools

- **Network supervision**
  - Spectrum
- **Work order management**
  - D7i
- **Console Hardware**
  - NICE Windows XP
  - NICE For Controls?
- **Console Software**
  - Yacoma console Manager

Strong support needed for

- Alarm tools
  - LASER (AB/CO)   *Netbeans/sonic/oc4j*
  - ENS (TS/EL)   *ScateX EFACEC*
  - xcluc (AB/CO)   *sonic?*
- Synoptic view tools
  - TIM (TS/CSE)   *JViews/sonic/oc4j*
  - ENS (TS/EL)   *ScateX EFACEC*
  - Vacuum (AT/VAC)   *PVSS*
- Trending
  - Timber (AB/CO)   *JViews/oracle*
  - ENS (TS/EL)   *ScateX EFACEC*

Normal working hours support for

- Data
  - TI monitoring tools use & display AB/CO data
  - GTPM views
    - clogger states, CPS working set data, TZ data, ROCS data, …
    - Transmitted through TIM (TS/CSE), but acquired on AB/CO equipment
  - AB/OP needs support for data definition, entry and extraction
- Console
  - NICE Windows XP PCs
- Desktop and administration
  - Purchasing, installation, repair
  - User administration, account creation, backups,
  - NICE FC support

In summary

- AB/OP/TI provides a 24*365 service to many CERN users

- This service relies on AB/CO support directly or indirectly

- AB/CO support has been available for these services in the past and…

- AB/CO support is absolutely necessary for TI operation now and in the future