

GEC and monitoring

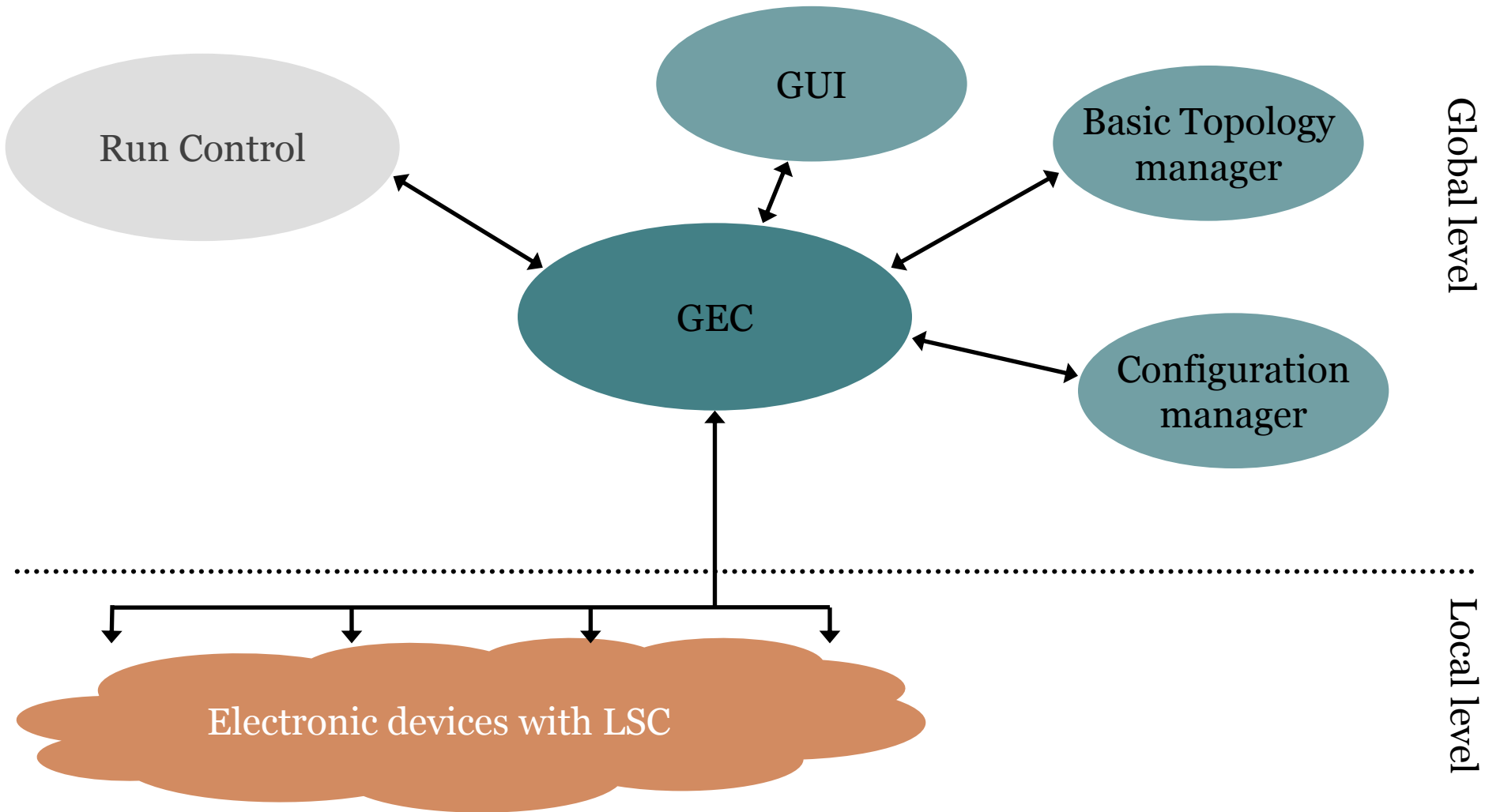
AGATA week – 23/11/2010

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Thanks

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- Vic Pucknell, Thierry Descombes
- And all the forgotten people (sorry)
- To our venerable old white hair ex chief

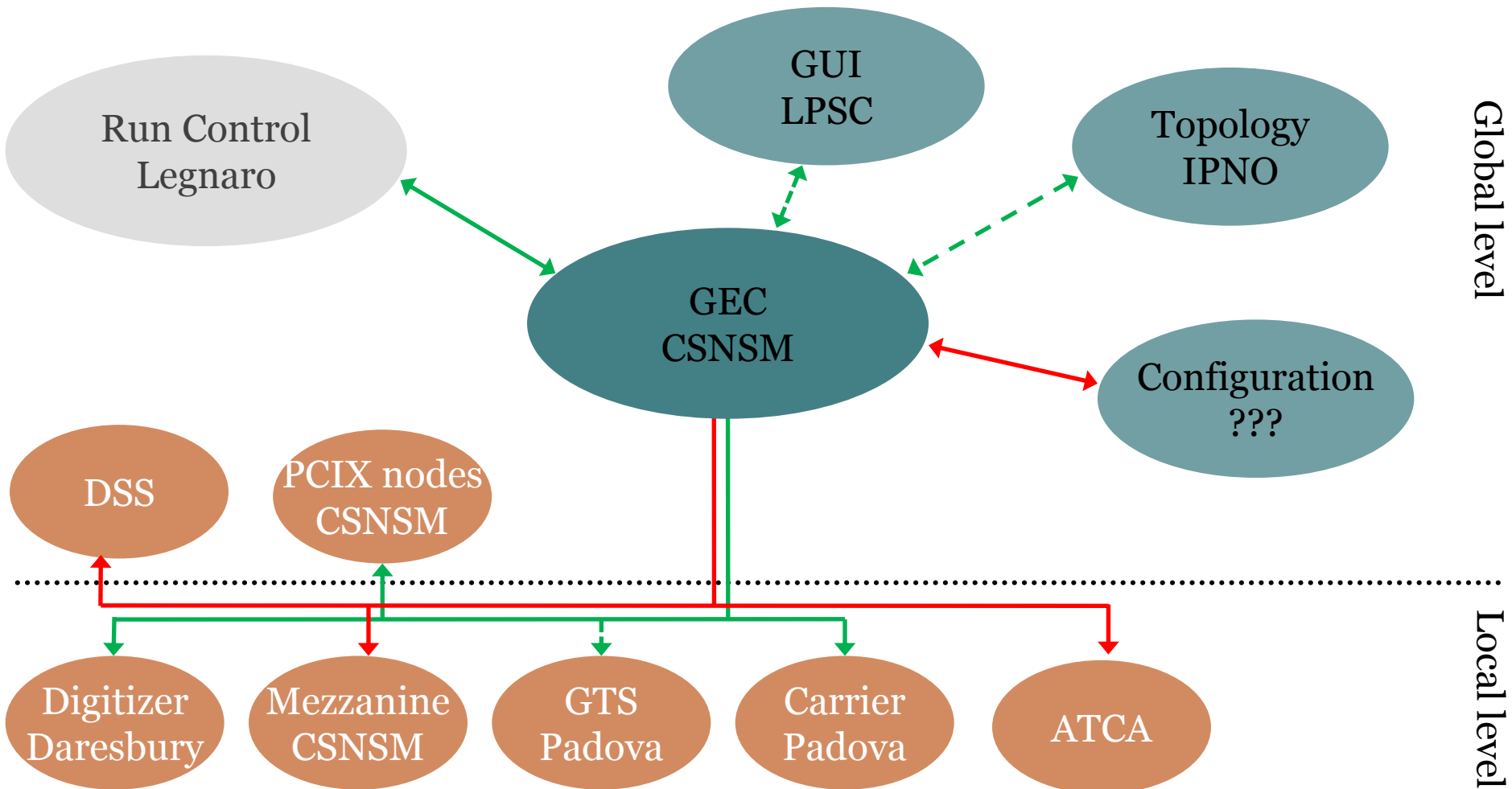
Global Infrastructure



Chief controller



Communication established



Potential nodes to develop

- Narval Nodes
 - Send environment information to NARVAL system
 - Control electronic device
- DSS
 - Help global monitoring
 - Add information in dataflow
 - Stop electronic in case of problems
- ATCA power crate
 - Control finely power on and off
 - But ...
 - No standard
 - Which future ?

Working list 1 / 3

- Topology Manager
 - UI to fill information
 - Living information
 - DB must be updated
 - Connection with others software
 - GEC : on the way
 - LSC : to do, but ...
- Configuration Manager
 - Urgent : as soon as possible

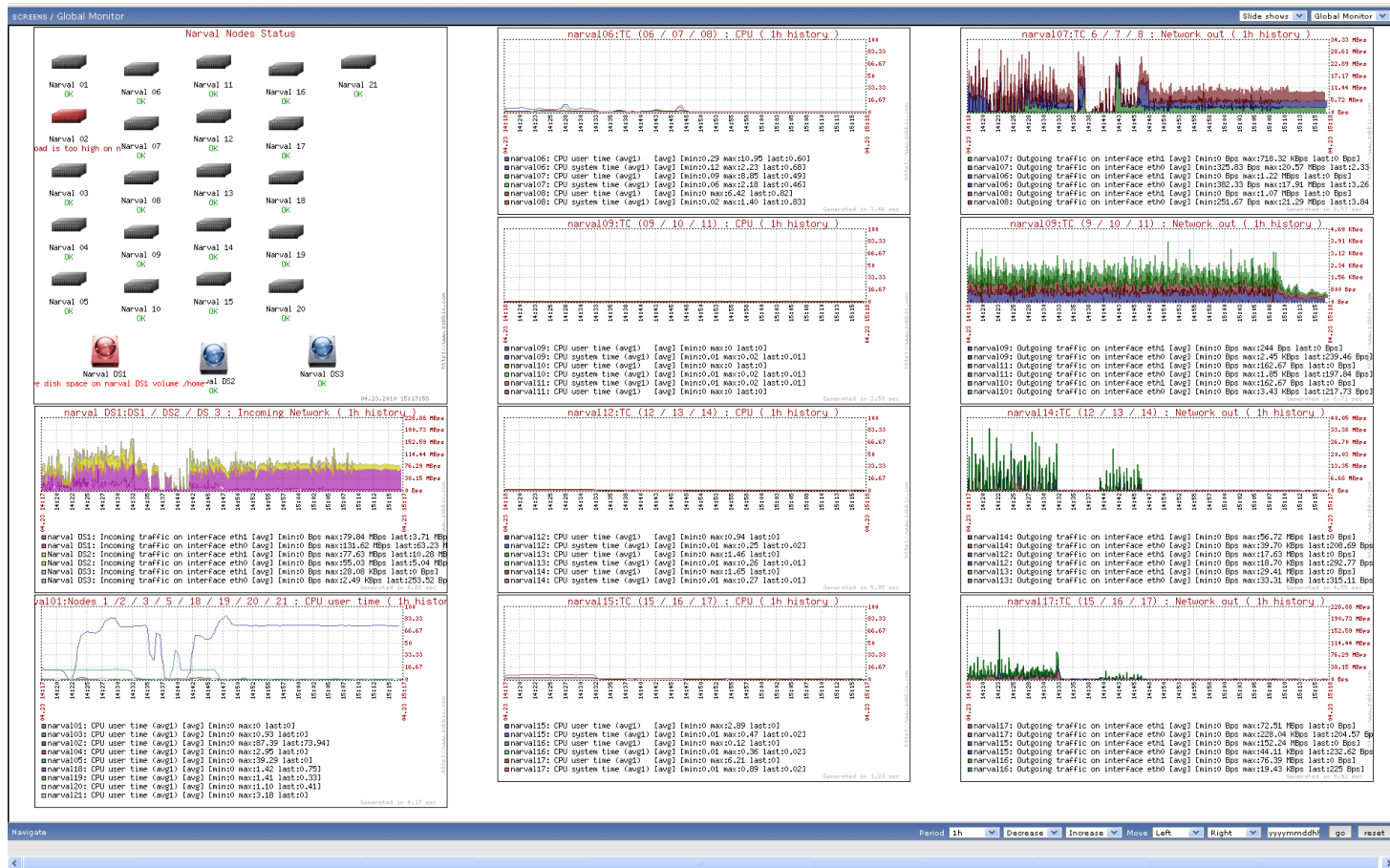
Working list 2/3

- GUI for GEC
 - A way to monitor system
 - Work in progress since one month
- GEC
 - Stabilize existing connection with LSC
 - Improve communication with external system
 - Narval
 - DSS
 - Collaboration with electronic development

Working list 3/3

- **RTFM**
 - Not possible now
 - Needs of technical documentation for each subsystem
 - Needs of high level documentation
 - For each subsystem
 - For global system

Hardware Monitoring



Deeply involved leader




Wishlist

- Hardware
 - Only one electronic running ☺
 - Way to auto discover electronics
 - IP broadcast
 - USB / RS232 / PCI initialization device
 - Taking care about network
 - Problem of IP addresses
 - Problem of MAC address
- Software
 - Using interface already defined
 - Using state machine already defined
 - Adding empty state if needed
 - Discussion is always open

Time Line

- Summer 2010 : First installation
 - Controlling carrier and digitizer.....OK
 - Tutorial for user.....KO
 - Stable system.....OK
- Q1 2011 :
 - First GEC GUI
 - First topology test
- Unknown
 - New electronic integration
 - VHDL 1
 - New development
 - Configuration management

Now, coding time !!!



```
csngwinfo.in2p3.fr - PuTTY
File Edit Options Buffers Tools Ada Help
with Ada.Text_IO;
with Ada.Strings.Unbounded; use Ada.Strings.Unbounded;

with Log4ada.Loggers; use Log4ada.Loggers;
pragma Elaborate_All (Log4ada.Loggers);
with Appenders; use Appenders;

-- ID;
Server Xml_Service.Client;
-- Output; use Common.Output;
-- Exceptions; use Common.Exceptions;

-- e is
-- D.T_ID_Key;
-- ct;
-- ect is
-- Result_Access;

-- it :=
-- om_XML (Server_Xml_Service.Client.Control (0,
-- "<control><name>CONNECT</name></control>",
-- "http://localhost:7777/DataAcquisitionControlServer"));

-- result.Result_Name is
-- CONNECTION_ID =>
-- Console_ID := Result.Connection_ID;
-- Debug_Out (Logger'Access, "ID found : " & Console_ID'Img);
-- when ERROR =>
-- Fatal_Out (Logger'Access, "No ID found. Problem with the ID Handler. Contact your support tea
-- raise ID_FATAL_ERROR;
-- when NO_RESULT =>
-- Fatal_Out (Logger'Access, "No ID found. Contact your development team.");
-- raise ID_FATAL_ERROR;
-- when others =>
-- Fatal_Out (Logger'Access, "Stupid ID return : " & Result.Result_Name'Img

--uu-:---F1 console.adb Top (1,0) SVN-315 (Ada)--[22]
Loading vc...done
```

