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Database with web interface for collecting  
the requirements from PANDA subdetectors

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# Agenda

- Introduction
- Concept
- Preliminary design
- Entity relation diagram (ERD)
- Missing elements
- Status
- Used software
- Installation

# Introduction

- On EMC meeting in Groningen (1.02.2008), we asked for list of signals to monitor or control from the DCS for the EMC.
- EMC group asked us to prepare the forms to fill, to point-out the signals' parameters that we would like to know

# Concept

- Distributing forms as a “MS Word”-like documents require re-typing (when received back) – number of signals can be large
- Web page can accessed from anywhere, users may place data there by themselves (no re-typing needed)
- No Wikipedia – on custom designed web forms we can control the entered data
- Designed solution can be used by other subdetector groups (not only EMC)

# Preliminary design

Database tables:

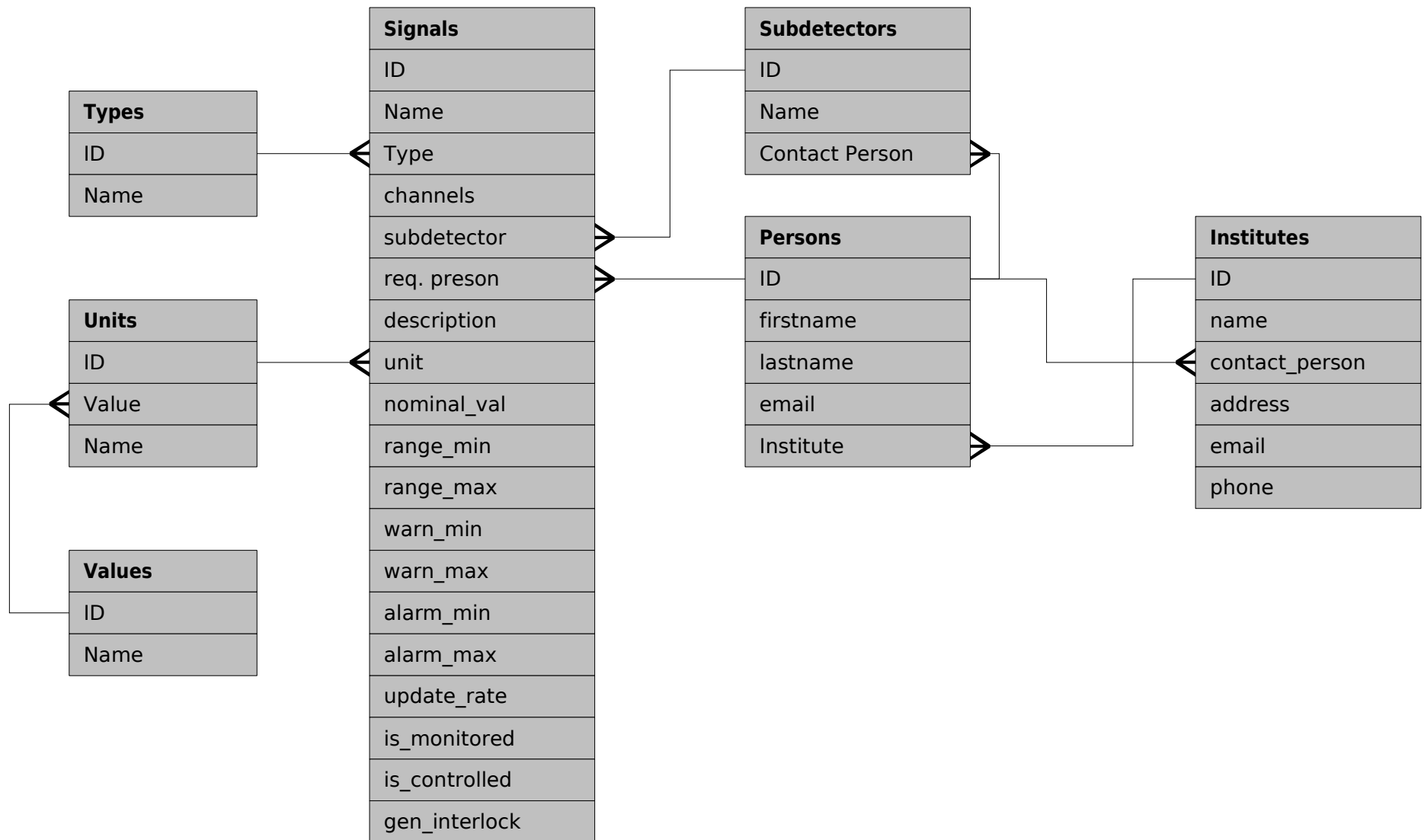
- Signals
- Types (boolean, discrete, continuous)
- Units (V, mA, pF, C, K, etc.)
- Values (voltage, current, cap., temp., etc)
- Subdetectors
- Persons
- Institutes

# Preliminary design

## Signal parameters:

- Name
- Description
- Type
- Unit
- No. of channels
- Subdetector
- Requesting person
- Nominal value
- Range (min, max)
- Warning range
- Alert range
- Update rate
- Should be monitored?
- Should be controlled?
- Should be archived?
- Should raise interlock on alert?

# Entity relation diagram (ERD)



# Missing information

- MCUs/FPGAs diagnostics
  - Testing
  - Remote access
  - Power on/off, reset, reboot
  - Software/firmware update
- Calibration



# Status

- Implementation started
- Not ready for presentation yet
- Expecting comments – so most likely rework will be done anyway.

# Used Software

- MySQL database
- Apache web server
- PHP hypertext processor
- Linux OS

# Installation

- If project is approved after discussion inside the DCS group – the final installation place can be chosen (SINS website, GSI website, etc.)

# Thank You for your attention

Any questions ?