Parts Identifier

Marco Verzocchi
Fermilab
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Parts Identifier

- Unique identifier for detector and facility components
- We are going to have multiple databases recording information on the status / location of detector (and facility and infrastructure) parts
- We want to be able to have a unique identifier for all the parts that follows a precise scheme
- Logistic team could use identifier to decide how to handle / where to send the part
- We want to be able to retrieve the information from the databases by simply scanning a bar code on the part (this may not be possible for all detector parts)
  - During construction, during QC process, during integration and installation
  - Your grandson will need to be able to retrieve the data sheet for a given part when dismantling the detector or the facility in 2078 (long after the people who've built the detector have turned into ashes)
- This was first discussed at the installation meeting at SURF in October 2018

“Requirements”

- Unique alphanumeric identifier
- Follows a reasonable scheme
- Compact (but not necessarily understandable without using an application that reads a label and converts it to human readable form)
- Immutable (once you assign it, it is never changed; yes you could put a new sticker on some of the parts, but this would also require updating the related information in other databases)
- Covers both the near and far detector, the facility, the integration and installation tools
- Is expandable to future detectors (module 2, module 3, module 4)

Status (i)

- Progress with hardware database and other developments (UMinnesota DB interface, Siech) entails that agreement on unique identifier scheme is becoming urgent
- Presentation by George Salukvadze at the DB meeting on July 22 (see slides in Indico) included a proposal that was based on initial discussions at the installation workshop of January, without any further input from detector groups
- Many comments received by George during the presentation
  - Purpose of various fields not clearly explained
  - Insufficient width of certain fields
  - Some fields cannot be fully determined at the time parts are first built (ex: a FEMB, an APA, could end being installed either in detector 1 or detector 2)

Original Proposal

Format

- PBS is not a random uuid, but, rather, a combination of alphanumeric characters, generated from existing data.

D/I/L/P	01-99	01-99	01-99	01-99	001-FFF	001-FFF	AA-ZZ	001-999	01-99	01-99
Project	System ID	Subsystem ID	Item type ID	Detector ID	Total number of items	Number of current item	Country of origin (from participating countries)	ID of participating Institute	Destination 1	Destination 2

Status (ii)

- Marzio and I have had a discussion on the parts identifier on Tuesday, starting from the slides of George and making some modifications
- Marzio plans on discussing updated proposal with technical leads from different consortia (will also check with various groups in the facility)
- Try to come up with updated proposal for the parts identifier by the end of the month
- The DB aspect of it (how to create an identifier starting from the full description of an object and how to decode an identifier to obtain the full description of the object, app to create labels, app to scan labels and retrieve information) is easier ….