



# *Status of Database & Software for Phase-2 Tile Cal Electronics Components*



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# Implementation Phase




## *Progress:*

- ✓ **1. ~~Implementing a database on a specific RDBMS (MySQL) – 2 Months~~**
  - ~~1. Creating physical entities.~~
  - ~~2. Defining entities (adding properties).~~
  - ~~3. Building relationships.~~
  - ~~4. Creating Triggers.~~
  - ~~5. Creating Statements.~~
  - ~~6. Creating plan to save component modification histories.~~
  - ~~7. Setting up backup and recovery plan.~~
  - ~~8. Setting up security.~~
- 2. Prefilling the database with old PMT's spreadsheet – 1 Month**
  - 1. Developing application program to parse old PMT's spreadsheet.
  - 2. Filling new Database with parsed data.
- ✓ **3. Developing application program needed to carry out different activities according to use requirements. – 7 Months**
  - 1. Creating User Interface – 1.5 Months**
    - 1. ~~Drawing/planning UI based on application functionality.~~
    - 2. ~~Creating page layout (Building basic UI structure)~~
    - 3. ~~Creating containers (Creating containers for different components of UI)~~
    - 4. ~~Creating Navigational Components (breadcrumb, search (filter) field, pagination, Tile Cal electronics components structure tree)~~
    - 5. ~~Creating Input Controls (buttons, text fields, checkboxes, radio buttons, dropdown lists, list boxes, toggles, date fields, \_\_\_\_\_ tables for database records, Input forms of disassembly/assembly/update/Reception of components at CERN processes.)~~
    - 6. ~~Creating Informational Components (icons, progress bar, notifications, message boxes, modal windows)~~
    - 7. ...

# Database

## Database on Demand Service


CERN Accelerating science










   **DB On Demand**

Home Help

Announcement


backup changes and more, please read [this](#).

Instances overview Refresh instances 

DB Name	Host	Username	e-Group	Category	Project	DB Type	State	Actions
<a href="#">tile_cal_electr...</a>	dbod-gc009	nudzilau	db-admins-tile-cal	Test	Database for electro...	MySQL	        	

Backup management for instance tile\_cal\_electronics\_phase\_2

Single backup


 Create a single backup now


Backup configuration

Backup database every 24 hours, starting on 14/06/202 17:54:2€

Backup database to tape once a week, starting on 14/06/202 17:54:2€

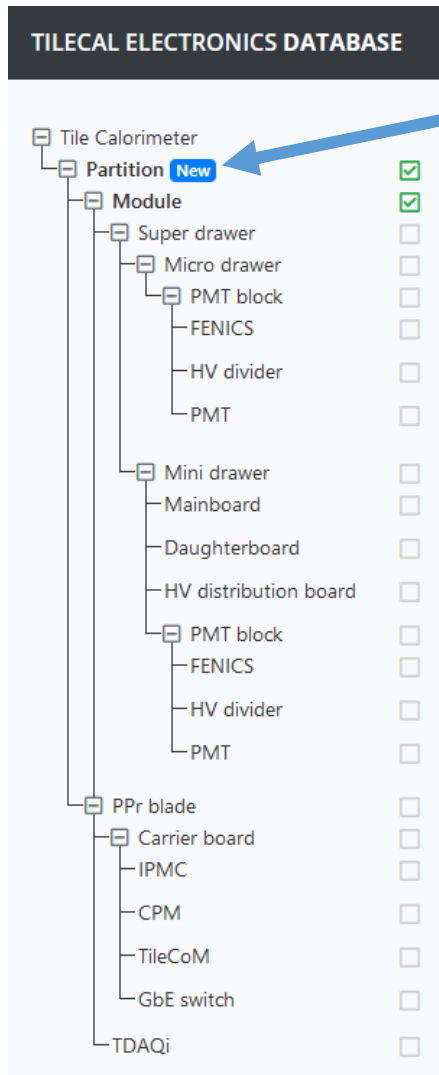
In order to enable tape backups, please [contact us](#)

Apply changes 

 Close

# Application User Interface

Database tree structure:



Badges can represent different Information

Checkboxes to get records from Database for selected component

Component title

Add Records

1. Edit, 2. View Component history, 3. Delete

Partition + Add Record

Filter

Filter

Partition	id_200_hv_bulk_ps	id_hv_bulk_ps	Comment	Actions	
EBA			Example		<input type="checkbox"/>
EBC			Example		<input type="checkbox"/>
LBA			Example		<input type="checkbox"/>
LBC			Example		<input type="checkbox"/>

Online Demo: <https://cadcamge.ch/tilecalelectronicsdatabase/public/>

# Application User Interface

*Insert records form:*

The screenshot shows a modal form titled "Add Partition" with a close button (X) in the top right corner. The form contains four input fields and a text area, each with a placeholder text:

- Partition: Please enter Partition
- 200\_hv\_bulk\_ps: Please enter 200\_hv\_bulk\_ps ID
- id\_hv\_bulk\_ps: Please enter id\_hv\_bulk\_ps ID
- Additional Comments: (empty text area)

At the bottom of the form, there are two buttons: a green "Save" button with a checkmark icon and a white "Cancel" button with a warning triangle icon.

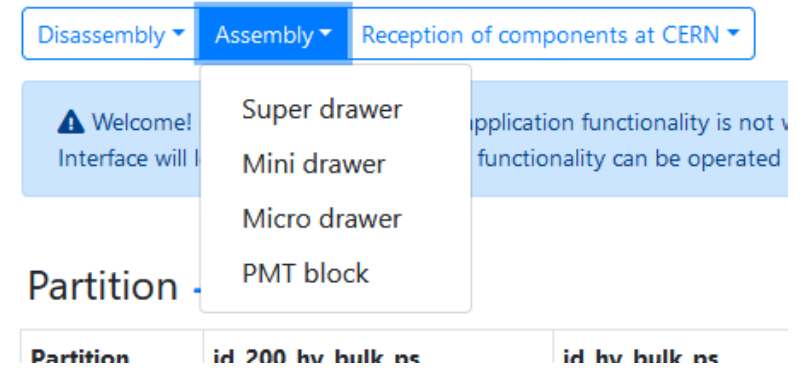
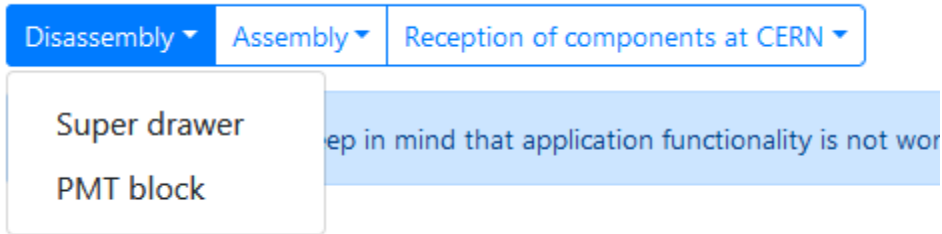
*Delete record warning:*

The screenshot shows a "Delete" warning dialog box overlaid on a table. The dialog has a title "Delete" and a close button (X). The main text of the dialog asks: "Are you sure you want to delete selected record?". At the bottom of the dialog, there are two buttons: a white "Cancel" button and a red "Delete" button.

The background shows a table with the following columns: Partition, id\_200\_hv\_bulk\_ps, id\_hv\_bulk\_ps, Comment, and Actions. The table contains several rows with "example" text in the Comment column. Below the table, there is a "Module + Add Record" section with a "Filter" button and a table with columns: Partition, Module Number, Module, LV Box ID, PPr Blade ID, Auxiliary Board ID, HV Regulation Board ID, Comment, and Act.

# Application User Interface

## *Work phases:*



### Super drawer disassembly:

- Draws appropriate SD structure based on selected PARTITION and MODULE
- Shows unavailable/restricted slots
- Provides functionality to select PMT slots and save PMT block positions

### PMT block disassembly:

- Shows PMT serial number for selected PMT block(based on prefilled data), to modify and save new value in DB if inconsistency is found

### PMT block assembly:

- Shows PMT serial number and ID for selected PMT block
- Provides functionality to add and save components for selected PMT Block in Database

### Micro drawer assembly:

- Provides functionality to specify PMT blocks of selected Micro drawer and save in Database

### Mini drawer assembly:

- Provides functionality to specify PMT blocks, Mainboard, Daughterboard and HV distribution board of selected Mini drawer and save in Database

### Super drawer assembly:

- Provides functionality to specify Mini drawers/Micro drawers for selected Super drawer and save provided info in Database

# Application User Interface

## *Work phases:*

### *Mini drawer assembly example:*

Mini drawer Assembly

Mini Drawer Frame ID

Please scan Mini drawer frame barcode or enter it manually

Please select Mini Drawer Components and enter their barcodes

12	11	10	9	8	7	6	5	4	3	2	1

Status

Enter status

Additional Comments

Save Cancel

### *PMT block assembly example:*

PMT block Assembly

PMT block ID

Please scan PMT block barcode or enter it manually

FENICS

Please scan FENICS barcode or enter it manually

HV Divider

Please scan HV divider barcode or enter it manually

PMT

Please enter PMT Serial Number

*example of messages:*

Module BA01 PMT serial Number for selected PMT block: **1002343**

Module BA16 PMT ID for selected PMT block: **1023443**

Status

Enter status

Additional Comments

Save Cancel

# Next Steps

## Upcoming Steps:

- Prefilling database with old PMT's spreadsheet
  - Parsing old PMT's spreadsheet.
  - Filling new Database with parsed data.
- Update Application User Interface based on feedback/requests
- Development of main Application functionality
  - Creating modules for CRUD (Create, Read, Update, Delete) operations using AJAX. With all sort of form validations and status messages *\*in progress\**
  - ...





Thanks for your attention!

