

EDSAC Database Project

The EDSAC Replica Project is currently being developed at The National Museum of Computing at Bletchley Park. This website is currently being developed to form a repository of information about the replica machine.

The system is a work in progress and will evolve as we find a need for additional facilities, but it currently provides information about racks, panels and wiring. The pages provide two views: a public view, which is read-only, and a project view, which provides facilities for team members to add and change information about their parts of the replica. The public are invited to view the information contained here but with the proviso that it is under development and things should not be considered to be definitive!

The first page, after the entry page which contains some introductory text, is the Floor Plan page.

The Floor Plan

This is not very exciting, just a series of simple blocks indicating the layout. Each block is a rack and contains a link to a page which will display up to three racks. We hope to produce a better view when time permits.

The Rack Plans

This page can display up to three racks, listing the panels in each. Initially, if you got here by clicking on a rack in the *Floor Plan* you get a list of rack ids, and the rack that you selected. If you click on one of the rack ids down the left hand edge of the page, then that rack gets added to those already there. If there are already three racks show, then the left hand one gets discarded and they all move left one column.

In each rack the panels are named and these are links which can be used to access the *Panel Details* page.

The Panel Details

This page is the most interesting one. It can show one or two panels side by side. On entry there will just be the one that you selected from the *Rack Plan*. At the top are two pull-down menus and a *Select* button. You can change the panel displayed in each column by selecting a different panel from the menu, then clicking the *Select* button.

Below the basic information we can add a list of connections to the panel. These are assumed to be the tag strips across the back of the panel. Currently the tags are identified by a number (1 to n, counting from the left end) and a suitable name.

The tags will be added by the panel designer when the initial design is completed. In addition, each tag will have a list of the tags to which it is to be wired. These tags are identified by the panel identifier (*rackname-position*) followed by the tag number and type: *I* for input, *O* for output.

Below the tags, you should see a grey rectangle. This represents the front of

the panel, and when defined, indicates approximately the layout of the test points. If you are the designer of this panel, you should define test points as follows:

The rectangle is divided up into two rows of squares. If you are logged in, then each square acts as an invisible link. Click on the position of each test point and you will get a page to define the name of the test point, its colour, and the expected or current reading you would get from that point. When you return to the panel, the test point will be coloured in, and positioning the mouse cursor over it will pop up a tooltip with the latest reading. Click on existing test points takes you to the editing page. You can then update the reading if it has changed (improved?). All readings are kept, but only the most recent appears in the tooltip.

Below the panel and testpoints is a list of documents associated with the panel. Initially, this will just be headings. Below the list is a link to associate documents (and photo images) with the panel. Note that documents have an authorisation status - unauthorised documents can only be viewed by logged-in team members, they are invisible if you are not logged in. This is so that draft documents can be shared among team members. When a document has been approved by Chris or Andrew, the status can be changed to authorised, and they then become visible to the general public. Unauthorised documents will have the text (*Draft*) appended to the name in the panel display.

In order to associate a document with a panel, click on the link. The page that comes up has a selection box which initially show *photograph*. A list of photographs will be shown below. You can use the selection box to change the document types - the list will be updated whenever you change the selection.

If the document you wish to associate with the current panel is in the list, the checkbox at the end of the line indicates whether the document is associated with the current panel or panel type. If you wish to make or break the association simply click on this box and then on the *Update* button. If no further changes are needed click on the *Return to Panel* button and on returning to the panel display the item should be listed under the appropriate heading.

If the document is not in the list shown, then it needs to be uploaded to the database. To do this, click on the *Add Unlisted Document* button and a pop-up dialogue should appear. Use the *Browse* button to locate the file from your system, add a *caption* for photographs, then click on *Upload*. You can upload multiple documents at this stage. Also, you can upload newer versions of existing documents in the same way. Previous versions will be retained, but only the latest version will be shown on the panel display.

When you have uploaded the document(s), click on the *Close* button to return to the Associate Document page, and click on the *Update* button to refresh the list to include the newly uploaded documents.

Documents already uploaded can be viewed using a link at the top of the Panel page: *Show Documents*. Here again, the document type can be selected and will refresh the list when changed.

Future Plans

A further enhancement planned, but not yet implemented is a docket system for each panel, which will be used to keep records of faults and changes. It is hoped that when this becomes available, any person making changes to repair or modify panels will make use of this to provide an ongoing record of each panel.

I welcome suggestions for other items, and will attempt to provide these.

Maintenance

As stated above, the website is under development. If you find the information of interest we recommend that you return at intervals to see how the work is progressing. We welcome constructive feedback

[Bill Purvis](#)

20th March, 2015