

# Products Change-tracker

EE Sys includes a system to track ALL changes made to Product records. This is done because Product records include critical data. Customers may demand information about a Product relating to a batch processed in the distant past, after many changes have been made. It is important to be able to refer to the data which was present in the database for that product at that point in time when necessary. To help with this, a "ProductChanges" data-table and mechanism for capturing changes has been added to EE Sys. It is important to note that this is not a full "time-travel" feature (allowing the former state of the Product to be completely recreated) instead it is a log showing all / any changes to a Product right through its history. The user can then review changes which have been made and see whether any are important. The system also prompts the user to add Comments when changes are made to Active products, since this should only be done in exceptional circumstances.

## How the Change-tracker works

Everytime any user edits any of the following data-tables:

- Products
- ProductInputs
- SalesDetails
- SupplyDetails
- ProductionDetails
- ProductionSpecifications
- NutritionalDetails

A text block is created which reads:

A change was made to:

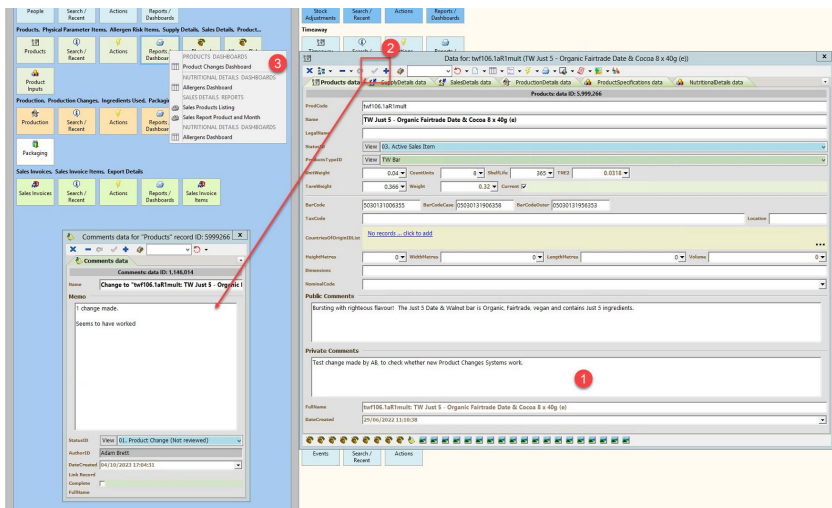
"changed field name" now "new value"

for **every** change made by the user. This data is then inserted into the **ProductChanges** data-table, together with:

- The ID of the Product
- The name of the data-table which was edited (SalesDetails, etc.)
- The ID of the staff member who made the change.
- A short memo, just stating the Full Name of the user who made the edit, with a date and time.
- The current timestamp.

If more than one data-table has been edited, a separate row is added for each set of changes.

## Basic Operation of the Change-tracker



## EESys Product Change-tracker basic operation

1. In the edit window of the Product, the user has updated some field.
2. The user "posts" the data. If the Product is "active" they will be prompted to add a comment giving a reason for the change.
3. On the "System Entities" page a new "Dashboard" has been added. This gives a view of Product Changes. To see details of changes, the user clicks here.

## Viewing the resulting changes in the "Product Changes Dashboard"

The screenshot displays two overlapping windows from the EESys application. The background window shows the 'Products' details for 'TW Just 5 - Organic Fairtrade Date & Cocoa 8 x 40g (a)'. It includes fields for Name, ProductTypeID, and various specifications like Weight and Height. A 'Public Comments' section at the bottom contains the text: 'Switching with righteous favour: The Just 5 Date & Walnut bar is Organic, Fairtrade, vegan and contains just 5 ingredients.' The foreground window is a 'Comments data for "Products" record ID: 5999266'. It shows a 'Change made' field with the text 'Change to "TW Just 5 - Organic Fairtrade Date & Cocoa 8 x 40g (a)'. The 'Status' is set to 'Product Change (Not reviewed)'. Red arrows and numbers 1-4 point to specific elements: 1 points to the product name, 2 points to the public comments, 3 points to the date created, and 4 points to the change made field in the comments window.

## Viewing ProductChanges

Once the Product Changes dashboard has been activated, the user will see a grid of all changes. This can be filtered, and searched just like any Oria grid. It can also be grouped by the product "FullName" or "ID" to show all changes per product.

1. If the user double-clicks any row in the grid, the corresponding Products record will appear.
2. The change that was made should correspond to the "OldRecipe" field, showing the updated value at that point.
3. The memo of the ProductChanges table shows details of who made the change
4. A "Comments" record is created for this change.

**NOTE: When the "Comments" record is created, it is given a Status "Product Change (not reviewed)". Members of the Equal Exchange Quality Team can review Comments and check for those with this status. These Comments will show a list of products with changes which should be reviewed and checked. Once this has been done the Comment's status can be switched the "Product Change (reviewed)".**