USER MANUAL
EASY COMEXT
4.0.0.

HTTP://EPP.EUROSTAT.EC.EUROPA.EU/NEWXTWEB/

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PREFACE

The User Manual

Welcome to EASY COMEXT

EASY COMEXT is an HTML based interface giving to the public at Eurostat’s External Trade database.

The access to Easy Comext interface is done through the Eurostat’s internet site:

http://ec.europa.eu/eurostat

What will you learn from this Manual?

In preparing this manual, we have made every effort to avoid technical terminology and computing jargon. This manual, therefore, explains how to work with EASY COMEXT using easy, non-technical language.

It shows the different steps to follow in order to prepare requests for Foreign Trade data in various formats.

What’s new in Easy Comext 4.0.0?

The latest version of Easy Comext has been improved with a consequent list of new functions, such as:
- Queries Sharing;
- New Post-computations: Minimum, Maximum, Median and Standard Deviation;
- Alignment of Outputs between Analytical Comext and Easy Comext, two new outputs: Generate table and XTTtable.

Prerequisites

To use the system fully, you must have adobe Flash installed for the Dynamic Charts functionality.

Requirements

Architecture

Data stored in the EASY COMEXT database resides at a central site that can be remotely accessed by your PC via Eurostat machines.
Connection

Starting with EASY COMEXT

Login

http://ec.europa.eu/eurostat/home

Fig. 1: Eurostat's site home page

Click on the link 'Complete Database' to reach the following page:
To start Easy Comext, select the «Database» / «External Trade» / «External Trade Detailed data (detail)» to open the following content:

Fig. 2: Eurostat Database Tree

Fig. 3: International Trade content
General information:
Eurostat data is available free of charge and can be explored via the tree below.
If you wish to use enhanced functionalities (EVA Java, HTML, file in csv format, increased number of cells from 10000 to 300000) in order to download the data of interest to you or if you want to save your query for further use, please register.
Registered users and Commission users can access by using their usual login and password.

Legend:
The dataset selection enable users to select the requested level of data (Aggregated or Detailed).

To start Easy COMEXT, click on the following icon:

Note: When the window of Easy COMEXT is open, the user can add the address into “favourites” addresses. This address permitting a direct access to “Easy COMEXT” corresponds to

http://epp.eurostat.ec.europa.eu/newxtweb/
On the top right of the home page, the **main toolbar** displays the available options. This main toolbar is the default one and will be displayed for non registered users. Registered users will have access to an expanded toolbar.

**Language selection:** Enables users to change the language

**International trade metadata:**

Opens the main page for External Trade metadata with the following links:
Fig. 6: International Metadata home page

- Codes
  - Country codes

- Doc
  - ETSEC documentation (pdf)
  - Foreign Trade statistics = Quality report: Quality report on external trade statistics (pdf)

- METHODOLOGY NOTES

International trade Help & FAQ:

The International trade Help and FAQ will enable access to the user guide (PDF-format)

Fig. 7: Help & FAQ page
**Login**: Press to access the system as a registered user.

![Login window](image)

*Fig. 8: Login window*

**Main Page**: will open the home page of Easy COMEXT.

**Analytical Client**: Available for registered users only, this will switch to Comext Analytical client. Analytical client facilities will become available from extractions and extraction’s queries, previously built (extracted) with Easy Comext.

The Analytical client option will only be available from the following page of Easy Comext:
- The main page
- The Saved Query page
- The Extraction page
- The Completed Works page
Note: No re-login will be required for the Analytical Context Client Interface. Current open session’s extractions, saved queries and completed works will be available for the users switching to the Analytical Context interface.

In case you are not a registered user, but you would wish to register, simply click on the register option at main menu. It will directly redirect you to the ECAS registration form where you can create an external account.

Note: If you are an existing Commission User you should already have an EU Login account.
User profile under Easy Comext

It is possible to extract data with Easy COMEXT without being registered. Most of the functions are available but the size of the authorised extraction is smaller than for the registered users. In addition, registered users will have access to the full set of functions.

The registration procedure is easy and free.

Available functions depending on profile (Non Registered / Registered users)

I. Non registered users or registered and not logged in

Dataset selection
➢ Select the appropriate dataset from a hierarchy
➢ Search for a dataset

Query definition
➢ Define an extraction (new query)
➢ Open a default query
➢ Choose from a list of prepared queries
➢ Define aggregates based on groups of elements
➢ Define formulas based on elements (stored in browser session)
➢ Browse through a hierarchy of codes
➢ Search for codes

Layout selection
➢ Choose the dimensions on each axis of the layout
➢ Choose the format of each axis

Extraction operations
➢ Extract interactively data according to an extraction definition
➢ Visualise and download extracted data
➢ Perform post computations on extracted data
➢ Show footnotes attached on extracted data

Metadata
➢ View new information
➢ Visualise and download Metadata (Methodology, classifications etc.)
Access to contextual help

II. Registered users (logged in)

The system allows users carrying out all operations of a not logged in user, plus:

User operations
- Create query in Text Query Editor
- Save and retrieve a query
- Save and retrieved formulas at the extraction plans
- Display a list of terminated work during the last 48 hours
- Display and download extraction results
- Be informed by e-mail when an extraction has finished
- Be able to switch to the Analytical Comext Client interface for more advance functions.
- See notifications generated by Metadata Editor

Extraction operations
- Extract more data than a not registered user
- Extract in batch mode. In this case, the job is submitted to the system for later execution (when system resources are available). Extraction results are stored at the server for 48 hours and the user can display or download them during this period.
- Get information on the status of a batch extraction (waiting, running, finished)
- Enable the auto extract mode when the related dataset is updated

Note: Registration has to be done only once (EU Login). To register, a user must select “login” and then click on the Register link.

On the home page, the toolbar displays the following options:

Fig. 10: Main Toolbar
The centre of the home page displays the list of the available datasets. To start the extraction process, users will have to select a dataset.
Choose an item from the hierarchy below or filter datasets by keywords

Available datasets
- "EB_PARTICIPANTS_DETAILED_CDS (DS-045572)
- ESSPROSS
- "EU27 Trade Since 1988 by HS2, 4, 6 and CN8 (DS-045620)
- "EU TRADE SINCE 1995 BY HS2-HS4 (DS-045527)
- "EU TRADE SINCE 1995 BY HS8 (DS-045539)
- "EU TRADE SINCE 1995 BY SITC (DS-045559)
- "EU TRADE SINCE 1995 BY CN8 (DS-045513)
- FREE EXTERNAL TRADE DOMAIN
- "LOB Dataset Domain
- "MONTHLY EEC SPECIAL TRADE 1997 (DS-045486)
- "MONTHLY EEC SPECIAL TRADE 2003 (DS-045432)
- PRODUCTION
- SIRENE
- Available nomenclatures
- Available relations
- Useful links
  - Eurostat
  - Intrasoftware International

Fig. 11: Available Datasets

The Available links are below the available datasets and available relations.
The user can select the link and the system will navigate to the requested link in the new tab or download the source if it is the case.

On the left of the list of the datasets, all Easy COMEXT news is also displayed:

![Easy Comext News](image)

The news will provide information on topics mentioned under the “Headline” column. In order to get the full information, users will click on the “View details” link.

The “Notifications” menu entry gives access to the list Notifications that are generated by the administrators through the “Metadata Editor” application.
Press icon in the top right corner to filter existing notifications by creation date, last modification date, subject, and status ('unseen' only or all).

The user can check or uncheck the option boxes according to the filter he wants to implement.

In order to display the notification’s content, the user must double click on the notification.
Fig. 14: Notification details

An opened notification is marked as ‘seen’ when user presses to close it.

Note: Users cannot generate notifications. They can only receive them. Notifications are created by the Metadata Editor administrators. Whenever user has ‘unseen’ notifications the Notifications link on the main page has red colour.
A number of metadata regarding International Trade can be found using the link at the top right corner menu.

Fig. 15: International Trade Metadata

The user can select the type of attachments he wants to see (All, Codes, Doc, Methodological notes, Relation). An attachment can be viewed or saved to a local PC.

To see the metadata attachments attached to the specific datasets, the user should press Metadata icon behind the dataset.

Fig. 16: Attachments related to the dataset

**Note:** Users cannot generate or update the attachments in the system. A date/timestamp is available next to each one to depict the date/time last update.

It may happen that for a given Language, metadata files do not appear or do not exist. By default, when metadata files exist, they appear in EN.

To see the short description of a dataset (or nomenclature, relations etc.), the user should select the small icon. The system will show a small tooltip:
MAKE AN EXTRACTION

Introduction

When the user left clicks on the name of a dataset, Easy COMEXT will display a floating menu with a number of available options depending on the user type.

The floating menu contains the links to the several options of Easy COMEXT. The “Query” options will enable users to define query or to use existing query. The menu is extended to support the additional options related to the default query (user or system):

- **Execute Default Query**: Extract the default query and to display results in a predefined structure.
- **Open Default Query**: Open the default query and display the content of the
dimensions.

Open System Default Query

Opens the system’s default query. If the system’s default query is not available, this option will not be displayed.

Execute System Default Query

Executes the system default query. If the system’s default query is not available, this option will not be displayed.

View Default Data

Opens the default data—the MTX extraction data prepared by the Easy administrators.

New Query

Open the query definition window.

New Text Query

Open Text query editor to define the new text query. 

Registered user only

Existing Query

To open a previously defined extraction Query (Query defined by the user). 

Registered user only

Prepared Queries

To open predefined extraction Query (predefined by Eurostat). These Queries contain extraction by “Type” of Products, i.e. TEXTILE, etc.

Download Files

To download files containing information links to the selected dataset.

Batch Jobs

Display the status of extraction launch in Batch mode.

Registered user only

Completed Work

Display the window containing the list of the extractions (and output files) produced in Batch mode extractions.

Registered user only

Metadata

Open the metadata associated to the dataset.

Dataset Default Layout

Enable to define a default layout for the selected dataset.

Registered user only

Preferences

User preferences can be set for Labels, Sort Orders and Indicators on specific datasets.

Registered user only

Selecting one of the “Query” options (Default Query, New Query, Existing Query or Prepared Queries), will bring the user to the first step of the extraction procedure.
Fig. 19: Step 1 (Default query)
Step 1: Extraction query definition: method 1

The windows enabling the query definition is composed of dimension boxes. The number and the name of the dimensions are linked to the dataset selected during the previous phase.

In the example, the dataset “EU27 TRADE SINCE 1995 BY CN8” is composed of the following dimensions:

REPORTER
PARTNER
PRODUCT
FLOW
PERIOD
INDICATORS

During the query definition, you can select, for each dimension a code or a list of codes for the extraction.

To define the content of a specific dimension, you will have to click on the name of the dimension. This action will open the Dimension’s selection window. To add all available elements you can press the plus sign. It is not necessary to open the dimension in this case.
Click on the Dimension names to select codes, groups or aggregates.

**Dimension selection window**

The two options will open the dataset/dimension metadata available.

Addition or removal of selected Codes to the dimension element.

Addition of all Codes to the dimension element

Remove all Codes from the dimension element

The user can either create a new aggregate under a specific directory, or call an existing one from a specific directory and edit it.

Creation or editing of formulas to be applied during the extraction.

Fig. 21: Dimension definition window
**Group details** button allows individual selections of a code or codes from a group of codes.

**Note:** The advanced options for Codes selection of: **By Search**, **By Function**, are explained further in this section.

Each time the user clicks on a dimension, the system opens a form that enables the selection of codes, groups or aggregates (groups and aggregates are not available for all dimension). The user can select dimension elements with the mouse (more facilities with mouse and shift and or ctrl).

By pressing on key the selection moves to the next code beginning with this letter.

**Example:** With the Partner dimension, United States is selected by pressing four times “U”.

When a button group detail is clicked, all the codes that are included in the selected group are displayed for individual selection.

The user may select a group as a whole or he can open the group and select individual items.

Groups are used by the system to facilitate the access to large classifications and the selection of classification items. When a group is selected as a whole, it appears in red colour. However, in the extraction only the contents of the group are shown.

**Example:** If a group contains 200 items, the user will dispose in the extraction all the 200 items and no indication of the group.

Groups may also be added as aggregates to the query. In this case, the aggregation of all elements that belong to the group is shown in the extraction.

**Example:** If a group contains 200 items and is added as aggregate to the query, the user will dispose only one item in the extraction.

Simple dimension elements can be selected from a list, from the results of a dimension search or from a hierarchy (hierarchies are not available for all dimensions). It is possible to define a query containing for one or more dimensions, groups, parts of groups, aggregates based on groups, formulas and simple dimension elements.

**Note:** An estimated number of cells is displayed at the bottom left of the screen. If you select a group, your extraction will contain one row for each code member of the group. Be aware that some groups may contain many codes and therefore drastically increase the size of your extraction. Unless you really need details for all codes inside a group, it is recommended not to use groups, and rather select individual codes (visible by clicking on the 'Group Details' button).
Specific codes selection panel

With this function, the user will be able to mark for extraction an individual or a specific number of codes from a group of products.

To better understand the Specific Codes Panel an example is fitting.

For instance, if you require extracting in dimension PRODUCT only the yogurt codes and since the yogurt is only part of the G: G_04: DAIRY PRODUCE group, adding the whole group will not accomplish your goal.

Having pressed the Group Details you will open all the Code details of the dairy products. From the following panel you will have all available options as per the previous screen at the Group level with the addition of the Add/Edit Formula.

Add/Edit Aggregate: to create a new aggregate or edit an existing one.

Add as Aggregate: only available when the codes are organised in groups.

The use of Aggregate permits the inclusion of aggregation of codes or groups of codes in the extraction. As displayed above, two options can be available, depending on the content of the dimension (having groups or not).
When the dimension will display groups, the `Add as aggregate` will enable the creation of an aggregate containing the sum of the group contents.

When the dimension will display codes, the `Add/Edit aggregate` will enable the creation of aggregates which will contain the codes (and or users/system existing aggregates).

**Add as Aggregate Process:**
Activate Add/Edit Formula will select the group in the ‘Selected’ area. The group will be displayed in blue:

- **Selected**
  - 2 group(s), 0 aggregate(s), 0 formula(s), 0 implicit user list(s), 0 individual(s)

**Add/Edit Aggregate Process:**
Activating this option will open a new dialog for the aggregate generation.
If some codes have been selected prior to the activation of the button, the new dialog will contain the selected codes as definition of the aggregate.
If no codes have been selected, a dialog will be opened with the list of existing aggregates (user and system) which will be available for selection, edition and deletion.

This dialog will enable the new aggregates.

![Fig. 23: List of Aggregates](image-url)
Add Aggregate: Select the aggregate from the list and press the button.
Delete Aggregate: Select the aggregate from the list and press the delete button.
Edit Aggregate: Select the aggregate from the list and press the edit button.
Add New Aggregate: Press the add button.

Note: The options “Edit Aggregate” and “Add New Aggregate” will open a new dialog enabling the definition of the aggregate to be created / Edited.

Dataset: EU TRADE SINCE 1995 BY CN
Dimension: PRODUCT
Aggregate Name: Data_Products

From the Aggregate definition panel, you can select Codes, or Aggregates to be included, using the radio button. System aggregates are on the yellow line.

Once define, click on Save Aggregate to create (or Edit) the aggregate.

Add/Edit Formula: In addition to the previous available options for the User to add codes to the extraction plan, a newly introduced option has been added at the Code level, the formula addition.

With this option the User can invoke predefined system formulas for selected Codes or create new ones for each specific Dimension element.
The user can select the radio button Formulas and all available formulas for the selected dimension will be displayed.

**Add/Edit Formula Process**

The use of Formulas allows to insert calculated fields in the extraction, much in the same way as spreadsheet programs, like Excel.

Because of this our dependency on spreadsheets can be reduced, allowing us to easily obtain answers to familiar problems like:

1. What is the growth rate of trade between years 1998 and 1999 for a given country? Using the formula; 
   \[
   \text{rate} = \frac{\text{total}_{1999} - \text{total}_{1998}}{\text{total}_{1998}} \text{in the “period” dimension}
   \]

2. For a given product and a given declarant country, what is the percentage of exports to partner country x in comparison with the total of exports? Using the formula; 
   \[
   \text{XW} = \left( \frac{x}{\text{world}} \right) \times 100 \text{in the “partner” dimension}
   \]

3. For a given product, what is the price of the Ton? Using the formula; 
   \[
   \text{UnitPrice} = \left( \frac{\text{val}}{\text{quantity}} \right).
   \]

Activate **Add/Edit Formula**: The formula selection panel is open. All existing/saved formulas can be selected and/or edited.

![Fig. 25: Formula selection panel](image)

To add the desired formula to the plan select this formula and press the button **Select**. 
To add the new formula press the button **Add new**. 
To edit an existing formula select the formula and click on **Edit**. 
To delete an existing formula press the button **Delete**.
Numeric and String formulas

These types of formulas are available only for Indicators. String formula allows the user to define a text formula.
For Numeric type of formula the user can select the Precision (number of decimal digits) and the Scale.

When defining a formula the following Formula panel definition will appear:

A formula can be composed of:
- Codes from the Nomenclature
- Aggregates Formulas

Templates can be used:
- IF – THEN
- IF – THEN – ELSE
- IF – THEN – ELSEIF
Note: The syntax of the formula will be checked against the system expected values. If the syntax is incorrect a message will appear to avoid syntax errors. Additionally, the system checks the formula text for embedded aggregates or formulas. If found, the system does an extra check that the embedded aggregates/formulas exist. The system will not check for mathematical errors. For common mathematical issues (division by 0) the system will not fetch any information at the extraction (Step 3) for the dimension/formula affected.

Show Code history:

Show Code History button, found in Group Details screen, will be available when changes occur over the time in the classification of codes. This button will display the code history in the following dialog:

The code history dialog will display the list of all codes involved in the evolution of the selected code as well as its property (Successor or Predecessor) and the validity period of the codes. The selection buttons remains available.

The Successors / Predecessors codes are hyperlinks, clicking on them the system will scroll and highlight the code at the first column.
Hovering the mouse over a Successor / Predecessor code will display the code label as a tool tip:

![Successor/Predecessor dialog](image)

Fig. 28: Successor/Predecessor dialog

'Show Code History' can be used as an alternative for code selection, adding or removing them; window presents all the selection tools as the Dimension selection window.

The check box on the first row allows selecting or deselecting all the available codes from the Available Codes List.

In addition all the displayed information can be printed using the **Print** button.

The visualisation of the successor-predecessors referring to the dimension element is extended to allow graphical representation with the options to add all as a list or as the aggregate.

Clicking the button “Show Graphical View” allows you to see the same information, but in a graphical view and for the successor-predecessor information.

It is possible to select one or more codes by clicking (CTRL + Left mouse click) for multiple selections on the corresponding codes.
Clicking the button “Add All” allows you to add all selected codes to the selected codes list and it closes the graphical view screen.

Clicking the button “Add selected codes” allows you to add the selected codes to the selected codes that are on the list and closes the graphical view screen.

Clicking the button “Add/Edit aggregate” enables the display of the standard Add/Edit aggregate screen allowing you to define a new aggregate from the selected codes.

Clicking the button “Save” enables you to save locally the graphical representation of the successor - predecessor in a PNG format file.

Clicking the “Cancel” button enables you to close the screen.

**Browsing the Hierarchy:**

When the button “By hierarchy” is clicked, a hierarchy of single codes is displayed.

![Fig. 29: Browsing the Hierarchy](image)

The Show Code History, accessed from “Advance Selection: By Hierarchy”, has the same functionality as the one accessed through Group Details button.

**Note:** The hierarchy option will be available only if the dimension contains multiple levels of codes and if there is a relation available for browsing the hierarchy from one level of the classification to another. When not available the button will be greyed out.
Add successors or predecessors or MSA (minimal stable aggregate)
When the user selects the element and press the right mouse button the contextual menu will appear.

**Add Successors**: will add all successors of the selected code to the selected elements area.
**Add Predecessors**: will add all predecessors of the selected code to the selected elements area.
**Add Predecessors/Successors**: will add all predecessors and successors of the selected code to the selected elements area.

**Add MSA** will add Minimum stable aggregate to the selected elements area.

The user can also select the option Add as new aggregate using
- Successors,
- Predecessors,
- Successors/Predecessors or
- MSA.
In this case the aggregate definition panel will be opened and system will suggest the name for the new aggregate.
By Search facilities

**By Search**: When this button is clicked, the Advanced Selection option will be expanded and allows searching for codes according to the following criteria's:

**Search by Labels**: User can search according to the Label. 3 options are available:
- Finding a code by the exact label
- Finding a code containing all the word entered by the user
- Finding a code having in the Label, any of the word entered by the user

![Advanced Selection](image)

Fig. 30: Selection by search
**Free Text:** User can type free text.

**Search by Codes:** User can search according to the code. The user will have to enter a pattern with the following wild characters:

- `?`: representing any characters at the given position
  - For example, `01??` will select of the 4 digits codes of chapter 01
- `*`: Representing any number of characters at the given position
  - For example, `01*` will select codes of chapter 01 (without any distinction of the number of digits)

Once the selection has been done, the Confirm selection button will confirm the selection in the adequate dimension of the query.

**By Code facilities**

When the button “By Code” is clicked, the Advanced Selection section will be expanded and allows the users to enter the code. Only individual codes are accepted. Group codes cannot be added with this function. The sub window is located under the “Search Buttons”.

**By Function facilities**

When the button “By Function” is clicked, the Advanced Selection section will be expanded and allows users to enter a function (last code, from to codes, containing a specified string, all codes). The selected function will then be considered as an Implicit User list.
When the advanced searching function has been used, the “Select” Button will confirm the selection.

Re-ordering the selected elements list:

The system provides the option to the user to re-order the selected elements of your plan by moving within the selection panel. The change applies either to single or to multiple selections (continuous or not).

The following options are available:

- Order ascending or descending
- Move up or move down one position
- Move to Top
- Move to Bottom

Fig 33: Rearrange the order of selected dimension elements in query definition screen buttons

- Clicking on the image button \[\text{\(\uparrow\)}\] or \[\text{\(\downarrow\)}\], will sort elements with ascending or descending order respectively.
- Clicking on the image button \[\text{\(\uparrow\)}\], will move the selection up by one element
- Clicking on the image button \[\text{\(\downarrow\)}\], will move the selection down by one element
- Clicking on the image button \[\text{\(\uparrow\)}\], will move the selection to the top.
- Clicking on the image button \[\text{\(\uparrow\)}\], will move the selection to the bottom.
The button \( \rightarrow \) will navigate the user directly to the next dimension and \( \leftarrow \) to the previous one.

When the content of each dimension has been defined, a click on the button will proceed to Step 2 of the extraction process. Alternatively you can continue directly to the selection of outputs by pressing the button.

**Fig. 34: Summary of extraction query**

**Note:** The compress button enables the system to check the data availability and when possible, reduce automatically the “unused codes”. This will reduce the number of cells of your extraction. Please be aware that the compressed extraction may contain no data.

**Generation of the last system default query update date/time**

Every time the default query is updated, the system will stamp the dataset with the latest update time stamp.

**Fig. 35: Dataset last update date**
**Existing query options**

As mentioned above in this user manual, the 'Existing query’ options have been enhanced in order to provide users with additional functionalities, such as:

- Import / Export of query definition (including user and system aggregates and formulas)
- Enable the multiple query selection (for deletion)
- Set Auto Extract option on some existing queries
- Execute Query/ Modify Query/ Copy/ Move Query
- Display Aggregates/ Display Formulas
- Extraction Calendar
- Share Query

![Fig. 36: Existing query window](image)

**Folder management**

Queries can be stored in different folders which the user can create and delete. To create a new folder press button add new folder, to delete the folder select it and press.

**Note:** Only an empty folder can be deleted.

**Import/Export of query:**

Easy Comext offers the option of saving files containing queries or user lists at defined locations and transferring them back to the system when necessary. This option is very useful for exchanging queries (and user lists) between users. The output format is a XML file.

**Execute the query:**

To extract the query without any changes select the execute button of the “Action” section, corresponding to the query to be extracted.

**Modify the query:**

To modify the query select the modify button of the “Action” section, corresponding to the query to be modified.

**Delete the query:**

To delete the query select the delete button of the “Action” section, corresponding to the query to be deleted.
Move or copy the query:

To move or copy the query select the move/copy button of the “Action” section, corresponding to the query to be moved or copied. Move/Copy dialog will be opened.

The user can select the radio button if to move or copy the query and select the desired destination by the button.

Note: Move action allows renaming of the Query, i.e. the existing query will be “moved” into the specified folder under the new name.

Export query:

To export a query, select the export button of the “Action” section, corresponding to the query to be exported. This action will open a dialog to specify the folder in which the XML file will be saved:

Click on save button.

Display aggregates:

To display the aggregates select the aggregate button. The new window will be opened.
Select the icon to edit the corresponding aggregate. The new window will be opened.

Select the icon to convert the system aggregate to the user aggregate. The logic is the same as for system formulas.

**Display formulas**

To display the formulas select the formula button. The new window will be opened.

Select the icon to edit the corresponding formula. The new window will be opened.

Select the icon to convert the system formula to the user formula. The system will ask the confirmation.
When the user confirms it the system formula will be replaced by the user formula in the corresponding query.

**Note:** The system formula will not be changed, only removed from the query.

**Extraction Calendar**

To open the Extraction Calendar select the extraction calendar button. The system will open the new window where the user can plan the execution of the query.

Select the date, hours, minutes, frequency and the number of repetitions and press Save. The new entry will be added. The user can also Edit or Delete entries previously saved.

**Note:** The extraction will be done in batch mode and the results will be sent by email if the size allows it.
Query Sharing:

To share a Query (Registered User only) click on the “Share” image button located on the "Existing Query" page which will trigger the system to display the following:

Click on the Add button to search for an user to share your query with. The system will display the following screen:

![Search screen](image)

This enables you to Search for the User you would like to share the Query with. Type the first 3 letters of an existing username and click on the “Search” button to perform the search. The system will display the search result based on your search criteria.
Give the specific permission (Execute only – user will be allowed just to extract your shared query; Execute and Edit - user will be allowed to also edit your shared query) by clicking on the corresponding button. The Save will be done automatically and you will be notified about it. By clicking on Cancel button, the sharing will not be executed and the system will notify you about it.

It is always possible to change your preferences by selecting a radio button with the option – Execute or Execute and Edit as shown below:
It is also possible to Remove the User from the sharing. The changes are done automatically upon changing the selection, and the notification is displayed.

Existing Queries facility consists of two tabs: “My Queries” and “Shared with me”. My Queries lists your own existing queries, while “Shared with me” displays the queries that you share with the other users.

In the Action column there will be exactly what the shared permission type was granted for, meaning either only Execute, or Edit and Execute.

The system will indicate in the details of the Query once it has been executed or while you are editing a shared query, whether it is your own one or it is a shared one, as shown below:
NOTE: During the process of modification of a shared query, once you will start the process of saving, please note that the Query name, folder and description will be disabled, and therefore not editable.
Import query:

A query, previously exported from Easy Comext can be imported. To launch an importation process, use the following option:

![Import Plan](image)

The **Browse** button will enable the selection of the XML file to be imported. The **Import** button will start the import procedure.

**Note:** If the XML file to import contains already existing information (query, user objects such as aggregates or formulas, Easy Comext will ask for a confirmation to overwrite the existing information:

![Warning](image)

**Enable multiple query selection for deletion**
This feature will enable the selection of one or several queries for deletion. The query selection can be done by a click on the check box available on the “Selected” column or by the following buttons: Select All, Deselect All.

Once the selection has been done, the button Delete Selected will remove the query from your Easy Comext query repository.

**Massive extraction:**

Select the folder (or Existing query folder at the top of the tree) and press the massive extraction button at the top of the Action area. The new window will be opened with the 1st step of the Massive extraction wizard.

1. Step 1/3: Select the output options for the selected queries to be extracted.
2. Step 2/3: Select the elements to override the dimensions in the selected queries to be extracted.
3. Step 3/3: Launch the batch extractions for the selected queries.

Select the desired output and press the button Next to continue to the second step. The user can redefine the selected elements for one or more dimensions. Press the button Next to
continue to the step 3.

The system will show the summary. Press the button Submit to confirm the Massive Extraction.
Note: The Massive Extraction will process only queries based on the same dataset. The user will be informed about the queries which will not be extracted below each step. Limit of 100 plans cannot be exceeded.

Note: The Massive Extraction is applied only to the selected folder and not to queries inside the subfolders.
Step 1: Extraction query definition: method 2

Selecting the option New Text Query a Text query editor will open and allow to create a text based query.

Fig. 39: Text Query editor

The following rules will be applicable for the correct definition of the syntax of the text query properties file:

<table>
<thead>
<tr>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ItalicText</strong></td>
<td>Keyword</td>
</tr>
<tr>
<td>[...]</td>
<td>Optional element</td>
</tr>
<tr>
<td>[...]*</td>
<td>Optional repeatable element</td>
</tr>
<tr>
<td>[...]+</td>
<td>Repeatable element with at least one occurrence</td>
</tr>
<tr>
<td><strong>[ItalicText]</strong></td>
<td>Optional Keyword</td>
</tr>
<tr>
<td>[ItalicText ...]+</td>
<td>Repeatable keywords, see also repeatable parameters. Elements in the enumeration will not be separated by any special character.</td>
</tr>
<tr>
<td>[ItalicText1...</td>
<td>Choice between two or more elements.</td>
</tr>
<tr>
<td>ItalicText2...</td>
<td>]</td>
</tr>
<tr>
<td>[...]?</td>
<td>Optional choice between two or more elements.</td>
</tr>
<tr>
<td>&lt;Text&gt;</td>
<td>Parameter</td>
</tr>
</tbody>
</table>
Optional Parameter

Repeatable parameters. The elements in the enumeration will be separated by comma. Ex: Key1, Key2, Key3

**Note:** The EASY Comext application offers the possibility to store the definition of queries in text files. The text files are simple plain text .properties files, where values are stored in KEY=VALUE pairs. The .properties files allow the user to define a query which contains various types of fields and outputs. For consistency purposes the users are advised to use ".properties” for the extension of the files in which they store the query definitions.

**Query Definition**

Each line has a KEY = VALUE entry and **must** be terminated by ENTER.

Example: DATASET_NAME=DS-045513

**Note:** Incorrect example: DATASET_NAME=DS-045513; The last character ‘;’ in such case, the dataset name will be considered as ‘DS-045513;’ and it will fail on validation.

The KEY **must** contain only letters, numbers and underscore '_'. The VALUE format is CSV (comma separated values), where multiple values (if the case) are separated by commas ','. The value can have zero, one or many entries.

The allowed format for VALUE is:

- VALUE1 or “VALUE 1” (using double quotes)

  Multiple values are specified like:

  - VALUE1,VALUE2,VALUE3 or “VALUE1”,“VALUE2”,“VALUE3” (using double quotes)

**Note:** If the VALUE is not quoted, only letters, numbers and underscores '_' are allowed.

Example: REPORTER=EU25

**Note:** Incorrect example: REPORTER=FR,EU 25 (EU 25 is incorrect, no spaces without quotes)

If the VALUE is quoted, value can contain spaces and other characters.

Example: REPORTER= “EU 25”, “FR” (spaces and other characters are allowed between quotes.

**Note:** Incorrect example: REPORTER=“FR","EU 25 (EU 25 is incorrect, no spaces without quotes)

The following syntax is used to define a Query:
DATASET_NAME = <DATA_SET_NAME>

QUERY_NAME = "QUERY_NAME", ["QUERY_DESCRIPTION"]

<DIMENSION_NAME> = <CODE_1>+, <A:AGGREGATE>+, <F:FORMULA>+, <S:AGGREGATE_GROUP>+, <G:GROUP>+

IN_LINES = <DIMENSION_NAME>+,
IN_COLUMNS = <DIMENSION_NAME>+

ELIMINATE_ZEROES = <[ON|OFF]>

OUTPUT_FORMAT = <OUTPUT_FORMAT_TYPE>

BATCH = <[ON|OFF]>

BATCH_OUTPUT_FORMAT = <[BATCH_OUTPUT_FORMAT_TYPE]>

Mandatory Parameters:
DATASET_NAME = <DATA_SET_NAME> -> The dataset name. Mandatory.

QUERY_NAME = "QUERY_NAME", ["QUERY_DESCRIPTION"] -> The name of the query (mandatory). Can be simple as in "MY_QUERY" or preceded by my folder definition as in: "/folder1/MY_QUERY", followed by the optional query description;

<DIMENSION_NAME> = <DIMENSION_ELEMENT>+ -> the name of the dimension, followed by one or more dimension elements (mandatory), where dimension elements can be:

  <CODE_1>+ -> One or more dimension code;
  <A:AGGREGATE>+ -> One or more aggregate of the current dimension;
  <F:FORMULA>+ -> One or more formula of the current dimension;
  <S:AGGREGATE_GROUP>+ -> One or more aggregate groups of the current dimension;
  <G:GROUP>+ -> One or more groups of the current dimension;

Every dimension is mandatory to have at least one value.

IN_LINES = <DIMENSION_NAME>+ -> Specifies which dimensions (one or more) will be displayed as LINES of the result. Mandatory.

IN_COLUMNS = <DIMENSION_NAME>+ -> Specifies which dimensions (one or more) will be displayed as COLUMNS of the result. Mandatory.

Optional Parameters:

ELIMINATE_ZEROES = <[ON|OFF]> -> Include/Eliminate zeroes in results [ON|OFF]. Default is OFF;

OUTPUT_FORMAT = <OUTPUT_FORMAT_TYPE> -> The type of the desired output (EXCEL, CSV, PDF, etc);

BATCH = <[ON|OFF]> -> Activate/Deactivate batch mode [ON|OFF]. Default is OFF;

BATCH_OUTPUT_FORMAT = <[BATCH_OUTPUT_FORMAT_TYPE]> -> Specify batch output format (CSV,EXCEL, etc)
BATCH_OUTPUT_LABELS_TYPE = [<{ BATCH_OUTPUT_LABELS_TYPE}>] -> Batch output codes, labels or both: [L|C|B]. Default is B
NOTIFY_ON_UPDATE = <[ON|OFF]> -> Activate/Deactivate dataset updated notification [ON|OFF]. Default is OFF.

Below is a full query example:

```
# Sample text query generated on: 2013-11-14 13:22:43.077
# MANDATORY PARAMETERS
# REPORTER
REPORTER=EU25
# PARTNER
PARTNER=US
# PRODUCT
PRODUCT=G:G_TOTAL
# FLOW
FLOW=1,2
# PERIOD
PERIOD=200310,200311
# INDICATORS
INDICATORS=QUANTITY_IN_100KG,SUPPLEMENTARY_QUANTITY,VALUE_IN_EUROS
# The dimensions to be displayed as Lines.
IN_LINES=REPORTER
# The dimensions to be displayed as Columns.
IN_COLUMNS=PARTNER
# OPTIONAL PARAMETERS
# Include/Eliminate zeroes in results [ON|OFF]. Default is OFF
ELIMINATE_ZEROES=OFF
# Specify output format [CSV, TSV, SDMX, SSS, TCSV, TFIX, HTML, HTML_TOC, LINE, BAR, COLUMN, PIE, MAP, PC_AXIS, EXCEL, GESMES, DSPL]
OUTPUT_FORMAT=
# Activate/Deactivate batch mode [ON|OFF]. Default is OFF
BATCH=ON
# Specify batch output format [CSV, TSV, SDMX, SSS, TCSV, TFIX, HTML, HTML_TOC, PC_AXIS, EXCEL, GESMES, DSPL]
BATCH_OUTPUT_FORMAT=CSV,EXCEL
# Batch output codes, labels or both: [L|C|B]. Default is B
BATCH_OUTPUT_LABELS_TYPE=B
# Activate/Deactivate dataset updated notification [ON|OFF]. Default is OFF
NOTIFY_ON_UPDATE=OFF
```

Note: The user can insert comments inside the text query properties file. A line from the file will be marked as a comment line by using sharp character ('#') in the beginning of the line.

**EX:** # This is a comment line
Displays the system open dialog allowing the user to open an existing text query file (only properties files can be opened). If the current query is modified and unsaved, asks for confirmation.

**New** Creates a new empty text query. If the current text query is modified and unsaved, asks for confirmation.

**Check** Verifies the text query syntax. In case of errors, provide error messages indicating the user where to perform corrections.

**Save to File** Saves the current text query into a .properties file. The user will be prompted for the new file name.

**Finish** Saves and submits the text query. Performs systematic syntactic checks before query submission and in case of errors, provide error messages indicating the user where to perform corrections.

**Add/Edit Aggregate** Opens Select Object window with all the available aggregates for the current user and dataset and the dimension selected in the box at the top of the text query editor. Selected aggregate is added on the position of cursor.

**Add/Edit Formula** Opens Select Object window with all the available formulas for the current user and dataset and the dimension selected in the box at the top of the text query editor. Selected formula is added on the position of cursor.

**Estimated number of cells:** Allows the user to display an estimated number of cells for the current text query. The query must be valid for this button to perform. If the query is not valid, displays -1 in red.

**Options:**

- **Ignore errors on save** If checked (default is off), when saving a text query to file, the query is saved disregarding the errors, allowing the user to save an incorrect text query to file for later editing.

- **Display results in new window/tab** If checked (default is off), allows the user to display the results (by clicking the Finish button) in a new window instead of the current one.

**Note:** If the number of estimated cells exceeds 120,000, extraction will be sent in batch regardless the definition of ‘Batch’ value in the text query. If the number of estimated cells exceed 1,800,000, extraction will be blocked and user will be prompted to reduce number of elements.
Step 2: Extraction Layout definition

The user can define the layout of the display/presentation of the extracted data. Up to five header columns and five header rows can be defined.

For each line or column, the user chooses to see the Codes, the Labels or both. For the remaining dimensions (which have not been put in the table), the user can select the output format in the SLICE sub-window.

When the output table has been defined, users have to click on the button to access the Step 3 (Last step of the extraction process).

Note: The option “Eliminate Zeros” will remove the “codes” not in use in the extraction. The Number of rows and columns to display must be lower or equal to 100. Indicators selection is mandatory on Z Axis in order to display the table.
Step 3: Extraction Option / Submission

This last step of the extraction will be different according to the status of the user. A non-registered user will only have the possibility to launch the extraction in Interactive mode. While a registered user will be able to specify if the extraction is to be launched in Interactive mode or in Batch mode, a non-registered user will only be able to submit Interactive extractions.

If the submission is interactive, the user should wait until Easy COMEXT has extracted and prepared the data for display.

The submission is launched through the following screen (not logged in users)

![Submission Screen](image)

Click on the "Finish" button below to launch the extraction now (interactively). Please wait for the completion of the extraction and results to be displayed.

Fig. 41: Submit an extraction (not registered users)

As mentioned here above, a logged-in user will have access to several options reaching step 3:
- Execute a remote extraction and visualise the results or download formatted files later
- Be informed by mail when the dataset used for the extraction is updated
- Save the extraction query in the specified folder and enable the Auto Extraction when the dataset will be updated
- Define the format of the file to be generated with the extraction’s results.

When the registered user requests a batch extraction, the notification message will be sent via email. This email will contain also the selected output(s) and is sent up to 5mb. In the case of larger size the email message will prompt the user to login into the system for retrieving it.
When the user selects the “interactive extraction” (not batch), the result of the extraction will be displayed, but the user can also generate the output file(s) in one (or several) available formats (Excel, CSV, SDMX, Text, PDF, RTF2 etc).

A new check box is added in the Save Query screen, on Step 3, “Re-extract this query when this dataset is updated” in order to allow the users to receive automatically the notification/data when the dataset is updated. When the users have multiple queries on a dataset which is subject to notification, only one notification is sent.
When a **batch** job is launched the user can visualise the processing status through the link “Batch Jobs” on the main Toolbar. The Refresh button renews the state status of the extractions.

The following window is displayed:

![Fig. 44: Batch Jobs](image)

When the submitted batch job’s State is **completed**, it’s added to the list of “Completed works”.

To access the following window, displaying the extractions submitted in Batch mode and saved under the user account, user have to click on the link “**Completed works**” from the main Toolbar.

![Fig. 45: Completed Works window](image)

**Note:** According to the selection made under the step 3 (Extraction options), users will be able to display the extraction or to download the output file (EXCEL, CSV, etc.).

Multiple selections of completed extractions can be done via the check box or using the buttons. The delete option is available via the button.

**Caution:** For some types of the outputs (EXCEL, HTML, HTML_TOC, PDF and RTF2) the option Compact output is available. The user can select the options remove empty rows, remove empty columns and remove empty tables. Only for EXCEL output the user can select the option All tables in the same worksheet. The EXCEL output limits are 1048576 rows and 16384 columns. In case of big queries in order to avoid reaching this limit, you can change the layout on the step 2 of the extraction process.
Display the result of an extraction

An extraction can be displayed either after an interactive extraction or after clicking on the “Display” button associated to the extraction list in the completed work window.

At this stage, the user is given the following options:

- Make new selection in the Header dimensions (Product, Indicators...)
- Print Slice
- Pivot the Slice
- Modify Query (a new extraction will be done)
- Change Layout
- Save query (only for registered users)
- Perform Post computations on the resulted extraction (Sum, Average, Count, Percentages, Growth Rate, Linear Regression, Indices etc )
- Save table or Extraction: download the data (view or all) in the requested format (Excel, CSV, HTML, etc).
- View dataset or Dimension metadata
- Interactively browse the dimension elements.
- Generate Graphics (Lines, Pies, Bar charts, Column charts etc)
- Generate and browse interactive charts
- Generate Treemap
- Generate Maps
- Show or hide footnotes
Perform computations on the extraction
Obtain a report on the extraction including data, graphs etc.
Sort the results ascending/descending order.
Update elements in the dimension via Plus sign
Add formulas from the spreadsheet
Obtain the basic statistics report information
Combine Tables and Charts
Have Relational View
Have Mirrored Output
Dump visual objects into an output container

**Basic Statistics Reporting**

The user through the button at the bottom of the main spreadsheet triggers the pop-up text box which contains the statistics based on the data table at the moment of viewing:

![Basic Statistic Report button](image)

**Note:** In case when there is a string table content, only the number of cells and values will be displayed. The new statistics will be calculated for each indicator separately.

The Basic Statistics Reports screen is generated as seen below:
‘Indicator’ displays the current indicator selected in the Z axis. If the indicator is selected on x/y axis, it displays the “All” string.

Decimals spinner allows the user to change the number of decimals that are displayed in the statistics table. Default value is 2, MIN is 0 and MAX is 10.

The Basic Statistics information table is in a tabular format with the following calculations performed on the currently visualised cells:

- Sum column displays the sum of the cells;
- Average column displays the average value of the cells;
- Cells column displays the number of cells visualised and taken into account;
- Values column displays the number of cells with non-empty values;
- Variance column displays the variance of the current cells;
- Standard Deviation column displays the standard deviation of the current cells;
- MAX column displays the maximum value found within the current cells;
- MIN column displays the minimum value found within the current cells.

**Note:** Refresh button allows the user to change the number of decimals displayed in the statistics table. Close window button closes the Basic Statistics Reporting screen.
Update the spreadsheet

The user can update the elements in the dimension by pressing the plus sign. This button is available behind each dimension. A new window is opened that contains available elements for the selected dimension.

![Image of a spreadsheet with various options and buttons]

Fig. 49: Display of an Extraction

Buttons Select All and Deselect All are available. User can check or uncheck these boxes. To compress the extraction, check the box Compress Extraction. When the selection is ready press the button Update and spreadsheet will be updated according to the selection. Press button Cancel to cancel the spreadsheet’s update.

Add the formula to the spreadsheet

To add the formula to the dimension press formula icon available behind the each dimension. Formula definition screen is opened but formula can be based only on elements available in the current extraction. In order to compute the formulas, the new extraction will be based on the available data, i.e. data will not be extracted from the database. Define the formula and press button to add the formula to the spreadsheet.
Make a new selection in the Header dimensions (Product, Indicators, ...)

The Dimension which has not been put into the table, remains as Header. Consequently, only one code of each header's dimension can be used to present the table.

Users can change the code selection by clicking on the Dimension drop down selection box and select another code in the list displayed.

Fig. 50: Selection of another code in a Header dimension

Change layout of the table

Select the Details tab from the left panel. Details will be shown
The modify query button will enable you to change the definition of your extraction. This selection will enable you to proceed to a new extraction with the new defined query.

To change the layout of the table, users have to use the change layout button. This option will bring user to the window where the table presentation is to be defined.

This window is similar to the step 2 of the extraction procedure. Once the presentation has been defined, the refresh button will display the table accordingly.

Select the Output tab from the left panel and the options to create the output from the Spreadsheet will be available.

Print screen

The print screen button will provide a print preview of the data displayed on the screen (which may be only a part of the table)

Print slice

The print screen button will provide a print preview of whole extraction, cut in slice.

The slice of the extraction can be displayed on the screen using the following icon:

The following “slide selection” sub window appears:

Enabling users to display a selected slide:
**Save table / Save Extraction**

The Save table or Save Extraction buttons will enable you to save the displayed Table or the entire table. The output format is to be defined before clicking on the “Save” buttons. The following options are available:

- CSV
- TSV
- HTML
- HTML_TOC (Table of Contents)
- SDMX
- Triple S (2.0)
- Tabular CSV
- Tabular Fixed
- Line chart
- Bar chart
- Column chart
- PC_AXIS
- GESMES
- EXCEL
- DSPL
- PDF
- RTF
- OESMES

**View dataset or Dimension metadata**

Metadata can be accessed at three levels:

- From the main toolbar the user can have a **global metadata covering all datasets**
- From each dataset the user may access **metadata related to the specific dataset**
- From each dimension the user can access **metadata related to this dimension**

All files can be downloaded or opened.

In general the user can find metadata related to methodology, classification, quality, timeliness information and update information, important notices and software. The available metadata information will increase and improve continuously.
Perform post computations on the extraction

Select the Post Computations tab at the right panel. Panel will be expanded.

Post computations option enables users to perform processing on the results of the extraction:
The post computation operations are available at Step 3 through the top options on the screen as shown below:

Triggering the post computations button, the system will display the post computation screen:
The calculation operations available for the user are:

**Average**
The average will be processed on the dimension(s) selected in the table. A variable name will be proposed, but can be edited from the user.

**Count**
The count will be processed on the dimension(s) selected in the table. A variable name will be proposed, but can be edited from the user.

**Sum**
The sum will be processed on the dimension(s) selected. A variable name will be proposed, but can be edited from the user.

**Percentage**
When clicking on the computations button (processing type: percentage the percentage is computed and the name for the new indicator(s) that is (are) created (PERCENT_DIMENSION NAME)

**Growth Rate**
User can select the only Period dimension and axis selection is disabled. The basic Growth rate computation will be performed.

**Linear Regression**
The Linear Regression will be processed on the dimension(s) selected in the table. A variable name will be proposed, but can be edited from the user.

**Indices**
The Indices will be processed on the dimension(s) selected in the table. A variable name will be proposed, but can be edited from the user.

**Median**
Selecting this option will allow you to define a median post computation. Median is the value separating the higher half of a data sample, a population or a probability distribution from the lower half.
**Exponential Smoothing**

Selecting this option will allow you to define an Exponential Smoothing post computation. It applies only to temporal dimensions and it is used to smooth out irregularities (peak and valleys) in order to easily recognize trends.

**Moving Average**

Selecting this option will allow you to define a Moving Average post computation. It applies to temporal dimensions only. Moving average is a calculation to analyse data points by creating series of averages of different subsets of the full data set. The system will prompt you for the sizes of sliding data sample window value.

**Standard Deviation**

Selecting this option will allow you to define a Standard Deviation post computation. Standard Deviation is a measure that is used to quantify the amount of variation or dispersion of a set of data values.

**Median Absolute Deviation**

Selecting this option will allow you to define MAD post computation. It is a robust measure of the variability of a univariate sample of quantitative data.

**Robust Regression**

Selecting this option will allow you to define a Robust Regression post computation. It applies to temporal dimensions only. It is a form of regression analysis designed to circumvent some limitations of traditional parametric and non-parametric methods.

**Standardised series**

Selecting this option will allow you to define a Standardised Series post computation. The Standard Score is the signed number of standard deviations by which an observation or data is above the mean of what is being observed or measured.

**Minimum**

Selecting this option will allow the user to define a minimum post computation. Minimum (the smallest observation is the value of the least elements of a sample).

**Maximum**

Selecting this option will allow the user to define a maximum post computation. Maximum (the largest observation) is the value of the greatest elements of a sample.

**Median**

Selecting this option will allow the user to define a median post computation. Median is the value separating the higher half of data sample, a population, or a probability distribution from the lower half.
**Standard Deviation**

Selecting this option will allow the user to define a Standard Deviation post computation. Standard Deviation is a measure that is used to quantify the amount of variation or dispersion of a set of data values.

**Decimals format**

When clicking on the ‘Decimal’ button, (percentage), the following form allows specifying the decimal format for each indicator of the table:

![Figure 54: Indicator selection for User format](image)

Click on ‘Continue’ to validate the selection.

**Show or hide footnotes**

The button enable user to show or hide footnotes when necessary. This option is available in the Post Computation tab.
**Generate Static graphics and Map**

Select the 'Static Charts' tab from the left panel of the Spreadsheet. The panel will be expanded and will allow the user to select the Graph type, Map or to generate the Report.

The user can generate 4 static graphic types:

- Line
- Pie
- Bar
  - Horizontal
  - Vertical
- Map

**Note:** The Line & Bar graphics require that less than 10 rows are displayed in the table. The Pie and the Map graphic only permit one row.

**Note:** The spreadsheet tab from the visualisation screen also either permits the simultaneous presentation of a data table and a chart. Any change in the data table will be reflected automatically. The chart is displayed by default. If you want to change the chart type, go to the tab “Charts”, select the new type of chart and click to Refresh. Once you are back to the View Spreadsheet screen, the chart type is updated.
Example of Line Graph:

![Example of Line Graph](image)

Fig. 55: Static Line Graph

Example of Pie Graph:

![Example of Pie Graph](image)

Fig. 56: Static Pie graphic
Map parameters

To generate a Map with easy COMEXT, users must give a name to the Map (Title) and can also define colours according to the range of values. These selections are to be done under the following window:

Once the Map specifications have been given, click on **Continue** to obtain the Map.

Example of a map:
Fig. 58: Map
Generation of interactive Charts

The user can generate 8 interactive Chart types by selecting the “Chart button” at Step 3 of the extraction:

- Pie
- Line
- Bar
  - Horizontal
  - Vertical
  - Stacked
- Area
- Scatter
- Radar

Example of an Interactive Line Chart:

The values can be interactively browsed just hovering the mouse over the graphs. A tooltip will appear along with the corresponding value hovered over the mouse, which will include the dimension and specific values information.
Example of Interactive Pie Chart:

![Interactive Pie Chart](image)

Fig. 60: Interactive Pie Chart

**Change Interactive Chart Type**

The user can select by clicking on the radio buttons, any available type of Chart based on the extracted spreadsheet.

```
Interactive Graph Selection
- [ ] Pie Chart
- [ ] Line Chart
- [ ] Horizontal Bar Chart
- [ ] Vertical Bar Chart
- [ ] Stacked Bar Chart
- [ ] Area Chart
- [ ] Scatter Chart
- [ ] Radar Chart
```

The button [Refresh] will trigger the generation of the newly selected chart type and the new chart will be displayed to the user's screen.

**Note:** The Stacked Bar Chart needs at least two rows to be selected to be displayed. The Pie Chart only permits one row to be displayed. If the above conditions are not met, the corresponding buttons will be disabled for selection.
**Save Interactive Chart**

The user has the option to save any Chart **currently displayed** on the screen.

To do so, click on the **Save to File** button. A dialog will open to save the chart as a PNG image:

![Save Interactive Line Chart](image-url)

*Fig. 61: Save Interactive Line Chart*

Save the chart on your preferred location. The Chart’s image is available for display:

![Chart Image](image-url)

**Note:** The Chart can be resized from the **bottom right corner**. Any size modification will be also reflected at the saved image.
Print Interactive Chart

The user has the option to print any Chart currently displayed on the screen. To do so, click on the Print button. A new tab will open generating the print preview.

Fig. 62: Print Interactive Pie Chart

Print the chart on your preferred printer.
**Generation of Treemap dynamic chart**

The treemap visualization contains only data from the current slice as the rest of the interactive charts. The maximum number of elements to display is the same as in the spreadsheet (a configured parameter with default value of 50, max value of 100). The treemap Chart can be saved and printed by button Save to file and Print as other graphs. The options Strip and Squarified are available on the right panel.

![Fig. 63: Treemap dynamic chart](image)

**Note:** If the selection is not suitable for the Treemap visualization or exceeds the limits (maximum number of elements allowed) the user is informed via a proper message and no Treemap is rendered.

**Generation of geographic map**

Select tab to generate the Geo map.

**Example of a Map:**
**Note:** If you have selected multiple rows in the Spreadsheet and the dimension is a Country, the system will automatically preselect the first row only (and deselect the other) and displays the geographical map normally.

**Note 2:** You can change the current reporting country (either Z or X axis) by clicking directly on the new country in the map. When the country that you clicked on is on the Z axis list, the system will automatically change the slice and refresh the map. When the country that you clicked on is on the X axis, select it and deselect all the others and refresh the map. When the country does not exist originally in any axis, your selection will be ignored.

The size of the map can be increased by the button in the top left corner. Press button to show the default map size.

The user can change the map type in Interactive Graph Selection panel. Three types are available. The user can also check or uncheck boxes and . Press to save the map and press to print it. The colors can be updated by clicking to the colored areas and .
Relational View/Table Tab

A new tab “Table” has been introduced in the Relational View to help you view the data in a tabular manner. You are able to navigate through the document in a usual way using the navigational buttons. The visualisation is read-only.

The system displays the data that is presented in the spreadsheet tab as a set of rows using a relational paradigm. You are able to select the number of columns at the step 2 of the Easy ComExt extraction process. The columns are cross tabulated and together with the selected rows become an integral part of the data row. The empty rows are removed. The number of rows that are to be displayed are set in the Spreadsheet tab.

You are also able to do a search, reload or export. The facilities are at the bottom of the page.

For a Search simply form the criteria, as shown below:

The system will come back with the result list, if any matches the search criteria. By clicking Reload, the system will display the original table. By clicking on the Export button, the system exports the data in csv format.

Note: Indicators selection is mandatory on Z Axis to display the table. Otherwise, the message is displayed:
Mirrored Output

Easy Comext application is able to automatically produce mirror statistics based on some predefined metadata that must be defined by the Comext administrator.

A New Check Box is added to the “Output Selection” step and is available for both logged in and anonymous users. This enables/disables the generation of automated mirrored extraction of the current query.

When the option is enabled, that means that mirror extractions are enabled for the dataset and the result of the extraction will be automated mirror extraction. The check box is enabled only for the datasets that are enabled via Metadata Editor.

The option is also added in the “Save Query” screen.
As well as in the “Existing Query” screen:
Dump visual objects into an Output Container

There is a new type of the “on the fly” dump container that allows the user to capture the current visualized screen in it. The dump container is generated upon a request either in HTML or PDF format. This option is in the sliding menu at the results screen.

Clicking on the tab “View Container” the system will display the dialog allowing you to dump various views into it.

The dialog is not a modal one and should stay available unless you navigated away to a different page. Once you have selected which data to view (table, charts or map) you will be able to add (DUMP) the current view on the Output Container by clicking on the Add Current View button.
The most recent dump will be added to the top of the list. The amount of information captured is currently limited to each user to 10 items per container.

The following visualisations are supported:

- **Table**: it is generated as the current HTML/PDF data table;
- **Charts**: they will represent a PNG screenshot of the currently dumped dynamic chart;
- **Treemap**: it will represent a PNG screenshot of the currently dumped dynamic treemap;
- **Map**: it will represent a PNG screenshot of the currently dumped dynamic map

By selecting PDF radio button (PDF), you will save the current output container in PDF format.

By selecting HTML radio button (HTML), you will save the current output container in HTML format.

By clicking SAVE button, the system will prompt you to save the current output container in PDF/HTML format under the File Name. A predefined generated name will also be suggested. The dumps/view will be displayed in the report with the most recent at the bottom. In case you want to change File Name, use this icon (File Name). The new File Name will appear in the Report.

By clicking CLOSE button, the system closes the dialog.
The option 

enables you to clean all the list, and the option deleted represented by the button  can be used alternatively if you want to remove only a particular captured screen.

**Report**

The Report is available in the Static Charts tab. This option enables the production of report including (according to user selections, the table, and / or graphs and Map). The content selection is done via the following dialog:

![Fig. 65: Report content selection]

Report formats PDF, RTF and HTML are available. The user can select the options Remove empty rows, Remove empty columns and Remove empty tables. Extraction Slices radio buttons allow either all the extraction slices to be generated in the report or only the current displayed slice (default selected).

**Note:** The list of available elements to be included in the selection in the report is subject to the same limitation as for the charts:

The Line & Bar graphs require that less than 10 rows are displayed in the table. The Pie and the Map graphic only permit one row.

If E-mail Report is selected the report will be send by e-mail (zip attached archive) to the user's email address after the report is generated. If the size of the report is too big for email system user will receive e-mail without attachment and have to login to retrieve it in Completed Works.

**Note:** If the selection exceeds the limits of the current extraction (number of cells/rows) the Report will not be presented directly to the user and will be executed in Batch mode. If the user is anonymous, the "All" radio button and "E-mail Report" checkbox will be disabled.
NOMENCLATURES and RELATIONS

Introduction

On the main page, Easy COMEXT displays the list of Available Nomenclatures and Relations between nomenclatures:

When selecting a nomenclature / relation, a floating menu will enable user to open or download the nomenclature / relation.

Fig. 66: Available nomenclatures and Relations
Open a nomenclature

Selecting **Open nomenclature** in the floating menu will open the following dialog:

When a Nomenclature is open, Easy ComEXT display the codes, the validity period (when relevant) and the Labels. On the top of the dialog, several options are available to enable users to change the display or (and) to perform a search.

The available options can be split in two categories, display and filter.

**Display options**

**Label:**
This drop down menu will display the list of the available labels.

![Label selection](image)

![Label selection](image)
Sort order
This drop down menu will enable users to select the sort order (ascending / descending) according to the codes or Labels.

![Sort order options](image)

Print Preview
A nomenclature or a relation can also be printed. The command button Print Preview will open a dedicated window.

![Print preview](image)
View Thesaurus, Successors / Predecessors

For the Nomenclatures, the view option will give access to the Thesaurus or Successors / Predecessors information related to codes (when relevant).

To display the information’s user must select one of the view options (Thesaurus or S/P) and then click on the icon located in front of the code.

The information will be displayed in a new window, showing the following information:

Thesaurus View

Thesaurus displays the evolution of the concerned code with its direct and indirect successors/predecessors in all levels.

Double click on a related code (a link from column Codes), will be displayed the thesaurus for the selected code

Double click again on the same code to return

Fig. 71: Thesaurus View

Fig. 72: Thesaurus View Navigation
**Successors / Predecessors**

Specific Codes evolution can be seen in this screen. A code can be changed over time and this screen will show the current code (Code column), the previous code (Successor column) and the following code after the previous code (Predecessor column). Along with the codes numbers the validity period is displayed.

![Fig. 73: Successors / Predecessors View](image)

The successors and predecessors are hyperlinks. Click on each of them and the system will scroll and highlight the code at the first column.

![Fig. 74: Successors / Predecessors View hyperlinks](image)

Put the mouse over a code, the label is displayed as a tooltip:

![Fig. 75: Successors / Predecessors View tooltips](image)

**Note:** Only the codes that have data inside the column “Label” will have a tooltip for a code.

Within the Nomenclatures, you also have the option to see the successor-predecessor relationship using a graphical view.
Clicking the button “Save” enables you to save the graphical representation of the successor-predecessor in a PNG file.

Clicking the “Cancel” button enables you to close the screen.

Clicking the “Print” button allows you to print the successor-predecessor nomenclature codes in graphical visualisation.
Filter options

Validity period:

Two fields are available to define the list of codes according to the validity period (Start date - End date). According to the “dates” entered in these fields, the list of code will be reduced.

Filter by Code:

User can search a specific code by typing it in the available text box.

Label Search:

User can search a specific code by typing it in the available text box.

The search can be done either by label or by typing words and selecting one of the options:
- The phrase
- All the words
- Any of the words

The Free Text option is also available from the following text box:

Navigation buttons

User can navigate in the nomenclature via the command button located at the bottom of the window.

User can select the first code to display, using the text box and the Go button, navigate in the nomenclature’s pages or go directly to a specific page number.
Select among decimal separators

The option has been added permitting the user to select another decimal separator for all textual outputs. The default option is the point ("."). This option is enabled for each user in their profiles section. Select the Extraction Preferences tab.

![Extraction Preferences-Preferred Decimal Separator](image)

Extraction checksum Completed Works

Each extraction performed in the system has a checksum computed. The checksum is based on the data contents of the extraction. The two extractions with the same checksum will have identical data.

The checksum is visible and enabled for copy at visualisation. It is also present in all outputs in order to permit the user to compare if the contents are identical to the previous extraction.

![Completed Works Screen-Checksum column](image)

The checksum column displays for each extraction a hyperlink allowing the user to click on it and display the associated checksum.

**Note:** To enable the checksum calculation please login, go to your profile and enable the option.
**Extraction checksum Step 3**

The checksum calculation is also available during the visualisation of the extraction at Step 3. An example is shown below:

![Result Extraction Screen-Checksum information](image)

**Excel output – All tables in the same worksheet**

The user can check the box in the Extraction preferences of his profile. The system will generate the Excel output according to the user’s preferences.

**Tabular output – Compact Mode**

The user can check his preferences for Tabular output as well.
User Satisfaction Form

Please be aware that a user satisfaction form has been introduced in the system for the registered users and is displayed after a pre-determined amount of system wide extractions. The form will be available in your local language selected and will take less than 1 minute to complete and provide to Eurostat. The feedback will help Eurostat to make Easy Comext even better.

How would you rate the overall experience with Easy Comext?

Your feedback will help us make Easy Comext better

![Rating Stars](image)

Enter your comments (optional)

Submit Skip

Fig. 81: User Satisfaction Form

You can choose to specify the satisfaction level by clicking on the corresponding star (1 to 5).

Notes: Clicking the button “Skip” will submit the feedback and close the dialog. The system will store the information that you have chosen to “skip” the survey.

Clicking the “Submit” button will submit the feedback and close the dialog. The system will store the selected satisfaction value (1-5) as well as the comment you have optionally entered. The system will validate that you have selected the rating before submitting the form.
Help

Video-help on Demand

The system supports small thematic video-help clips that demonstrate the functions of Easy Comext. The Main section of the Help system for which the video help is available contains a list of videos related to the specific section. For example:

Fig. 82: Help video on demand

The drop-down list displays the list of all available Video Tutorials related to the current help section. If you click on the View button the system will open and allow you to play it.
You will also notice that there is a new menu added next to the existing “Context Help” called “Tutorials” and which is available only for the registered users. If you click on this menu, the system will launch a new pop up window with the clips related to the specific section you were at the time of clicking the “Tutorials” menu.

**Note:** Additionally, if you right click inside the Video Player, and depending on the Browser, you will be presented with controls, as shown below:
Now, for each dimension, you need to select data you want to extract.