

# Cyberquery Release Notes v9.10


## Introduction

Your system administrator must run [DDUPDATE](#) to update your data dictionary so it can be used with the 9.10 release.

These version **9.10** release notes describe the new features and significant enhancements to Cyberquery and Enterprise Cyberquery since version **9.05**.

We recommend that you read these **Release Notes** before installing the new software, and are familiar with the [Conventions](#) used in Cyberscience documentation. If you are upgrading from a previous version and using hold files, please see the [Hold file format](#).

## CQ/HTML

- [Dynamic Categories Options](#) are now also available in List Reports. Dynamic Categories allow you to group items into groupings that may not be represented in the database. For example, US states could be grouped into New England, Midwest, etc. categories. To use this functionality in List Reports, you use the Reporting tool to create your categories. *{Bug: 86121}*
- You can now move a selection to the report body for List and Sum reports using a new "Move selection to...Body" right-click **Reporting Tool** submenu option. As an example, you can move a top of report item to the body to insert it into the far-right column in the body of the report. *{Bug: 87197}*
- You can now set the default paper size for **PRINT/PDF** output using CQCS\_DEFAULT\_PAPER\_SIZE in the ACS configuration file. Otherwise, **CQ/HTML** uses the date format set in cqprofile to set the default paper size. If the date format is US, the default is Letter 8.5x11, and if the date format is anything other than US, the default is A4. See [CQCS\\_DEFAULT\\_PAPER\\_SIZE](#). *{Bug: 85122}*
- When you click in the Inline Help pane in the Language Editor, you can now use CTRL+F or click **Edit >Find...** to search the content in the pane. See [Searching for Content in the Help pane](#).
- You can now maximize resizable dialogs using the Maximize icon . *{Bug: 87621}*
- If the **Unsaved files** dialog appears when you open **CQ/HTML**, you no longer have to click **Cancel** to access the Report Wizard to paste a query, macro, or data. Instead, you can paste (CTRL+V) it into the **Unsaved files** dialog. See [Unsaved files](#). *{Bug: 87790}*

## Import Data Wizard

### Choose data settings dialog

- New record filters are now available for you to use on imported fields of any type in the Import Data Preview:
  - **Exclude records where <column name> is <value clicked>**
  - **Start Importing records when <column name> is <value clicked>**
  - **Stop Importing records when <column name> is <value clicked>**

In the screenshot below, we selected **Exclude records where LgID is "NA"** to exclude them from being imported. See [Record Filters](#). *{Bug: 76389}*

Import data: Choose data settings

Preview of file: Teams.csv

Drag the markers in the preview below to select the data headings.  
Rows and columns can be removed from the import by clicking their headings.

	9   Yearid	A Lgid	A Teamid	A Franchid
Heading	yearID	lgID	teamID	franchID
1	yearID	lgID	teamID	franchID
2	1871	NA	BS1	BNA
3	1871	NA	CH1	CNA
4	1871	NA	CL1	CFC
5	1871	NA		
6	1871	NA		
7	1871	NA		
8	1871	NA		
9	1871	NA		
10	1871	NA		
11	1872	NA		
12	1872	NA		
13	1872	NA		
14	1872	NA		
15				
16	1872	NA		
17	1872	NA		
18	1872	NA		
19	1872	NA		

Set "NA" as the null identifier

Add "NA" to the null identifier list

Remove "NA" from the null identifier list

Clear the null identifier list

**Exclude records where Lgid is "NA"**

Start importing records when Lgid is "NA"

Stop importing records when Lgid is "NA"

Filter by field class ▶

Filter records where Lgid...

Start importing records when Lgid...

Stop importing records when Lgid...

Clear all conditions for Lgid

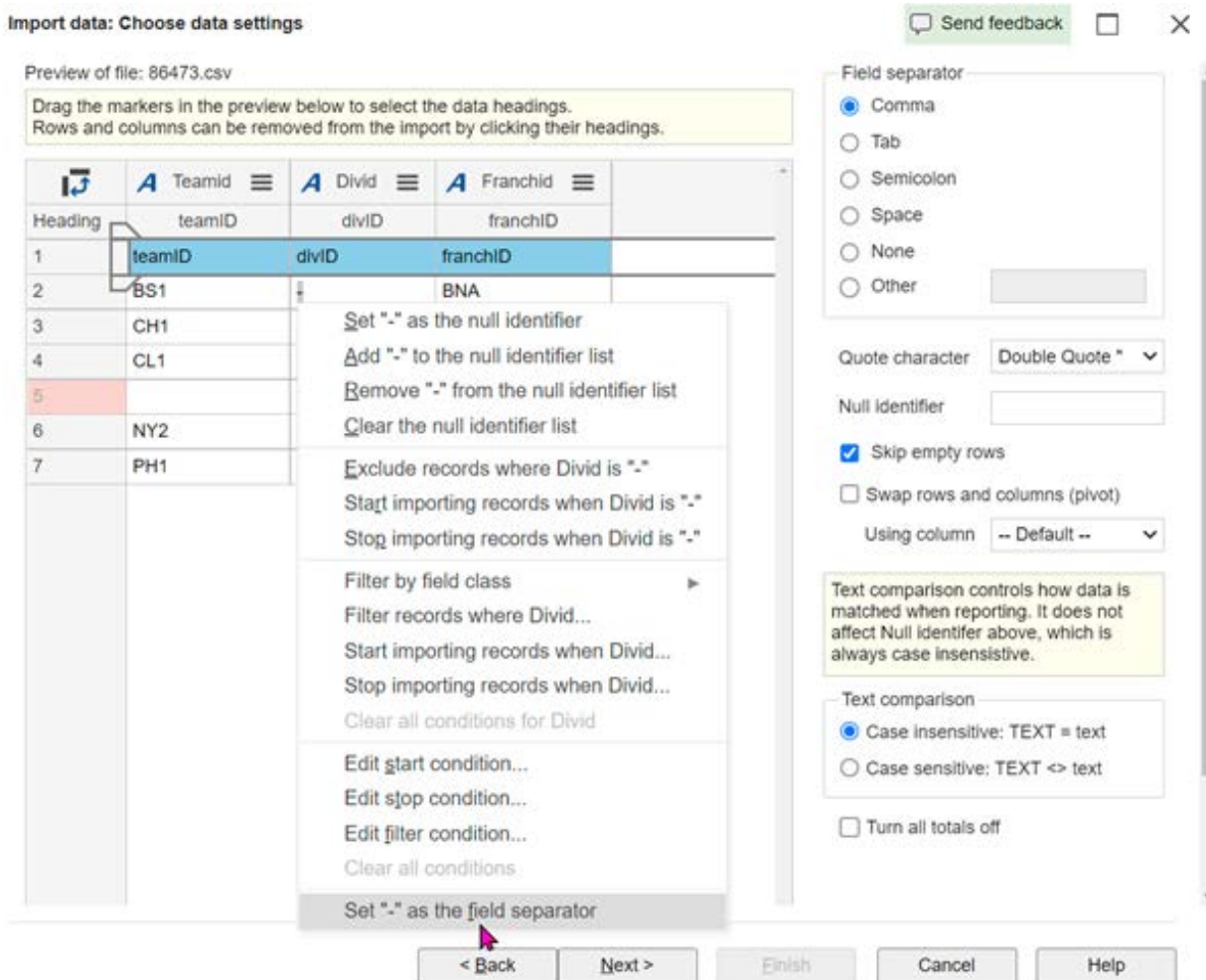
Edit start condition...

Edit stop condition...

Edit filter condition...

Clear all conditions

- You can select, copy (CTRL+C), and paste (CTRL+V) the cell contents into the *NULL IDENTIFIER* field or another application. See [Null Identifier](#). *{Bug: 86473}*
- You can select (highlight) the field separator in the cell, right-click your mouse, and select **"Set <char> as the field separator"** for CSV files. Review the screenshot below to see an example using this scenario. See [Field Separator](#). *{Bug: 86473}*



- When you import a URL or paste a CSV file, you now have the option to Skip empty rows in the **Choose data settings** dialog. CQ/HTML selects this checkbox by default when you do a data import, displays the empty rows in the preview, and highlights the row number to indicate that it is skipped. See [Skip Empty Rows](#). *{Bug: 82789,87634}*
- Now when you do an import that includes missing table headings, CQ/HTML automatically highlights the heading and adds an auto-generated heading. You can click the

**Field Properties** icon to change the heading name. Review the screenshot below to see an example of how this works. See [Import Data with Missing Table Headings](#). {Bug: 87429}

**Import data: Choose data settings**

Preview of file: field\_separator.csv

Drag the markers in the preview below to select the data headings.  
Rows and columns can be removed from the import by clicking their headings.

	9	Σ	Yearid	≡	A	Field_2	≡	A	Teamid	≡	A	Franchid
Heading			yearID									
1			yearID									
2			1871	-								
3			1871	-								
4			1871	-								
5			1871	-								
6			1871	-								
7			1871	-								
8			1871	-								

**Field queryname and properties**

The queryname is the name used to reference this field in a report.

Currently the queryname is derived from the field heading. Headings are evaluated first so editing the heading selection will update the queryname. A custom queryname can be set via the [field properties...](#)

Clicking the field queryname toggles the column from being included in the imported data or not.

**Field properties**

Customise this field including changing the data type, queryname, heading and default reporting properties.

- When you import a table that includes a ? in a cell, **CQ/HTML** now detects these entries as null values, highlights them, and notes them in the [Null Identifier](#) in the **Choose data**

settings dialog. Review the screenshot below to see an example of how this works. {Bug: 87394}

Import data: Choose data settings

Preview of file: Teams.csv

Drag the markers in the preview below to select the data headings.  
Rows and columns can be removed from the import by clicking their headings.

Heading	yearID	lgID	teamID	franchID
1	yearID	lgID	teamID	franchID
2	1871	NA	BS1	BNA
3	1871	NA	CH1	CNA
4	1871	NA	CL1	CFC
5	1871	NA	FW1	KEK
6	1871	NA	NY2	NNA
7	1871	NA	PH1	PNA
8	1871	NA	RC1	ROK
9	1871	NA	N/A	N/A
10	1871	NA	?	?
11	1872	NA	BL1	BLC
12	1872	NA	BR1	ECK
13	1872	NA	BR2	BRA
14	1872	NA	BS1	BNA
15				
16	1872	NA	MID	MAN
17	1872	NA	NY2	NNA
18	1872	NA	PH1	PNA
19	1872	NA	TRO	TRO

Field separator

☒ Comma

☐ Tab

☐ Semicolon

☐ Space

☐ None

☐ Other

Quote character Double Quote "

Null identifier n/a, ?

☒ Skip empty rows

☐ Swap rows and columns (pivot)

Using column -- Default --

Text comparison controls how data is matched when reporting. It does not affect Null identifier above, which is always case insensitive.

Text comparison

☒ Case insensitive: TEXT = text

☐ Case sensitive: TEXT <> text

☐ Turn all totals off

< Back Next > Finish Cancel Help

## Choose output options dialog

- You can now save a macro when you do a data import on the **Choose output options** dialog. The macro contains a command which repeats the import with the options that you selected (for example, to update for new data or to adapt to import similar sources). You cannot use this macro with data clauses. Instead, you can re-run the macro to overwrite the import originally done in the wizard. See [Query Generation](#). {Bug: 74267}

Private: Internal only -->

## Data Import Filter Example Video

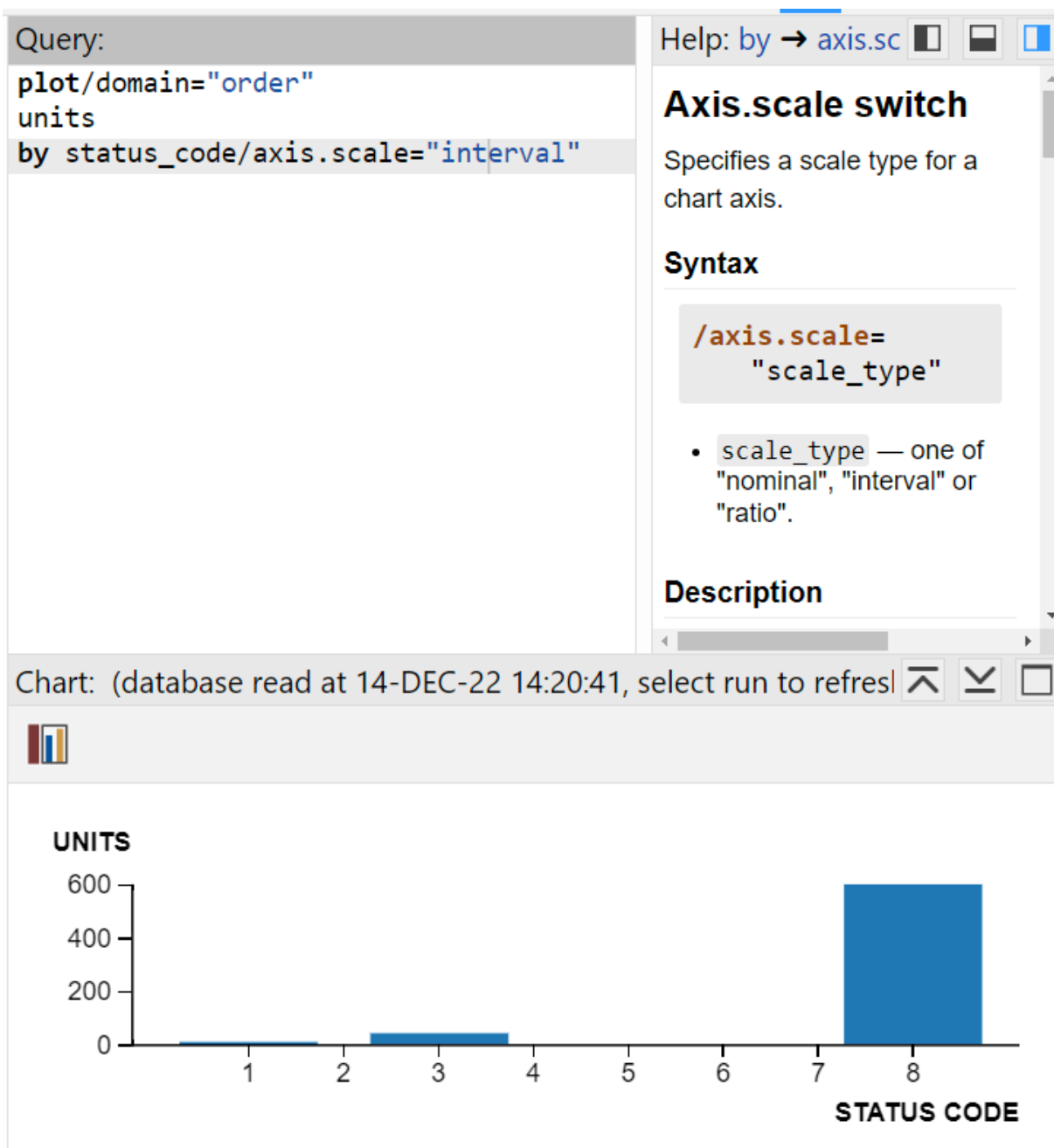
You can view a short video demonstrating the data upload filter by clicking on the following link: [Data Import Filter Demo](#).

<-- Private

## Charts

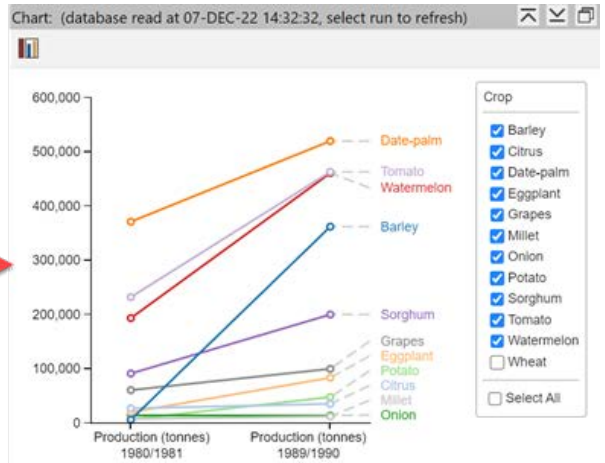
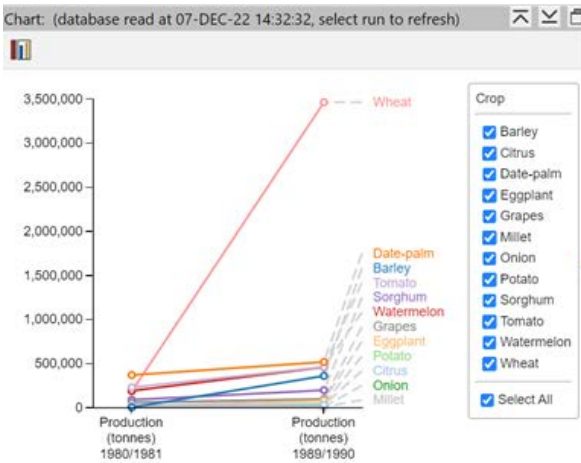
- You should now use `/axis.scale="interval"` instead of the `/dateaxis` switch with non-string data types (date, time, timestamp, interval, number) when you create a chart. The `/dateaxis` switch was built to be used with the date or timestamp data types, whereas the `/axis.scale="interval"` is more robust and allows for any non-string data type. Review the screenshot below to see how using `/axis.scale="interval"` in the query displays a label for

all of the status codes. Before this update, if you used `/dateaxis` in this query, the chart only displayed one label for each status code that had a value. *{Bug: 72725}*



- You can now use a new `/unlockscale` switch with the **multiple** selector to display sub-charts with independent scales. Review the screenshots below to see how this works when you have a main contributor (like "wheat" in this example) in your data:
  - On the left, you see that "wheat" is the main contributor.
  - On the right, when you unselect "wheat", the chart rescales to better display the remaining data points. Before this change, the chart did not rescale. *{Bug: 81284}*

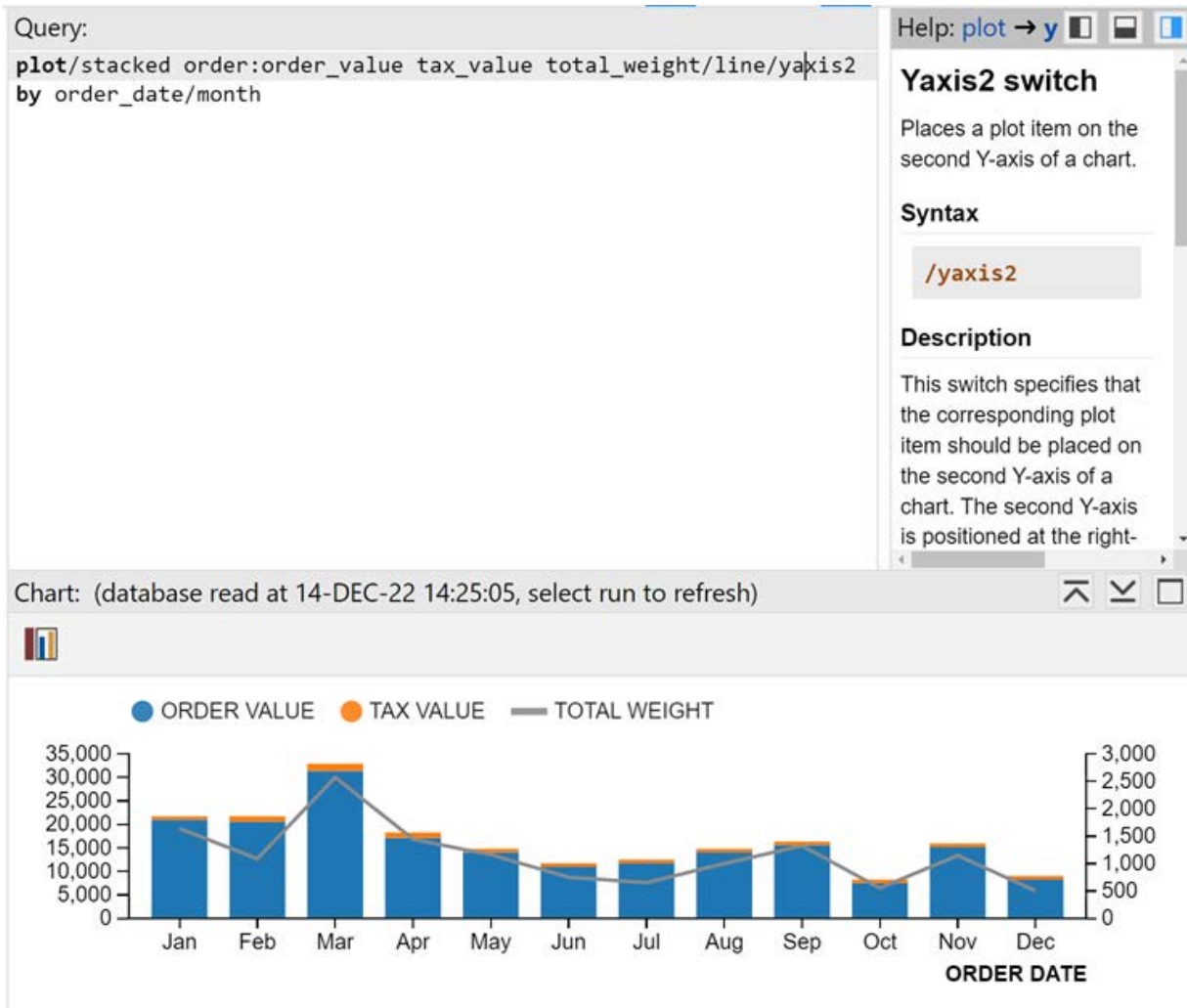




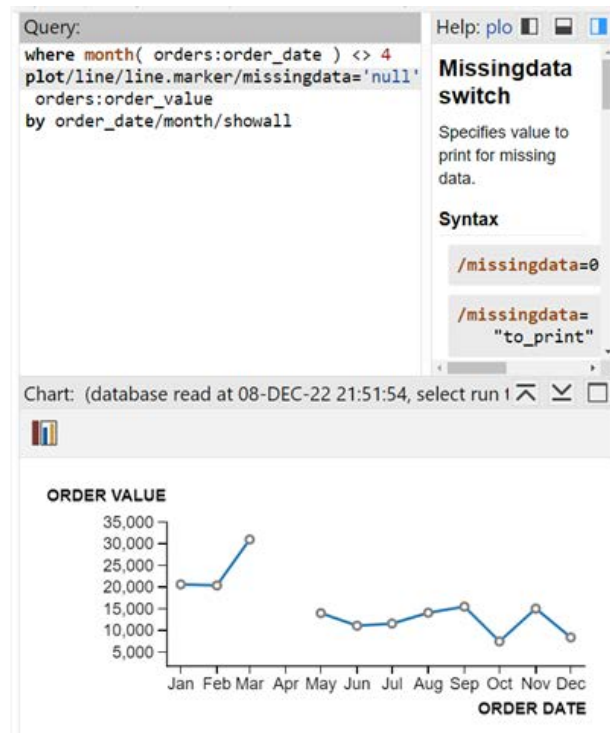
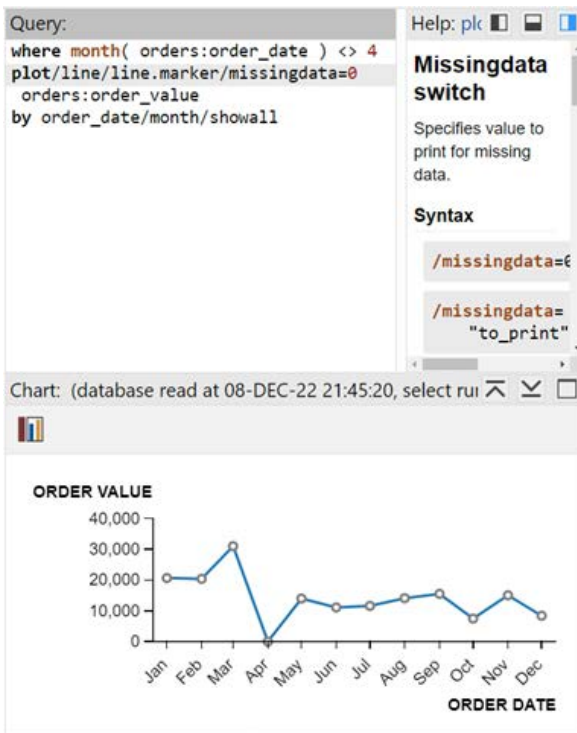
- You can now use **/yaxis** in combination with **/stacked** and **/line** conditions to display the 2<sup>nd</sup> y-axis. Review the screenshot below to see that when you use the **/yaxis** switch in the query,



the 2<sup>nd</sup> y-axis is displayed for the line. Before this update, the 2<sup>nd</sup> y-axis did not display.  
{Bug: 86684}

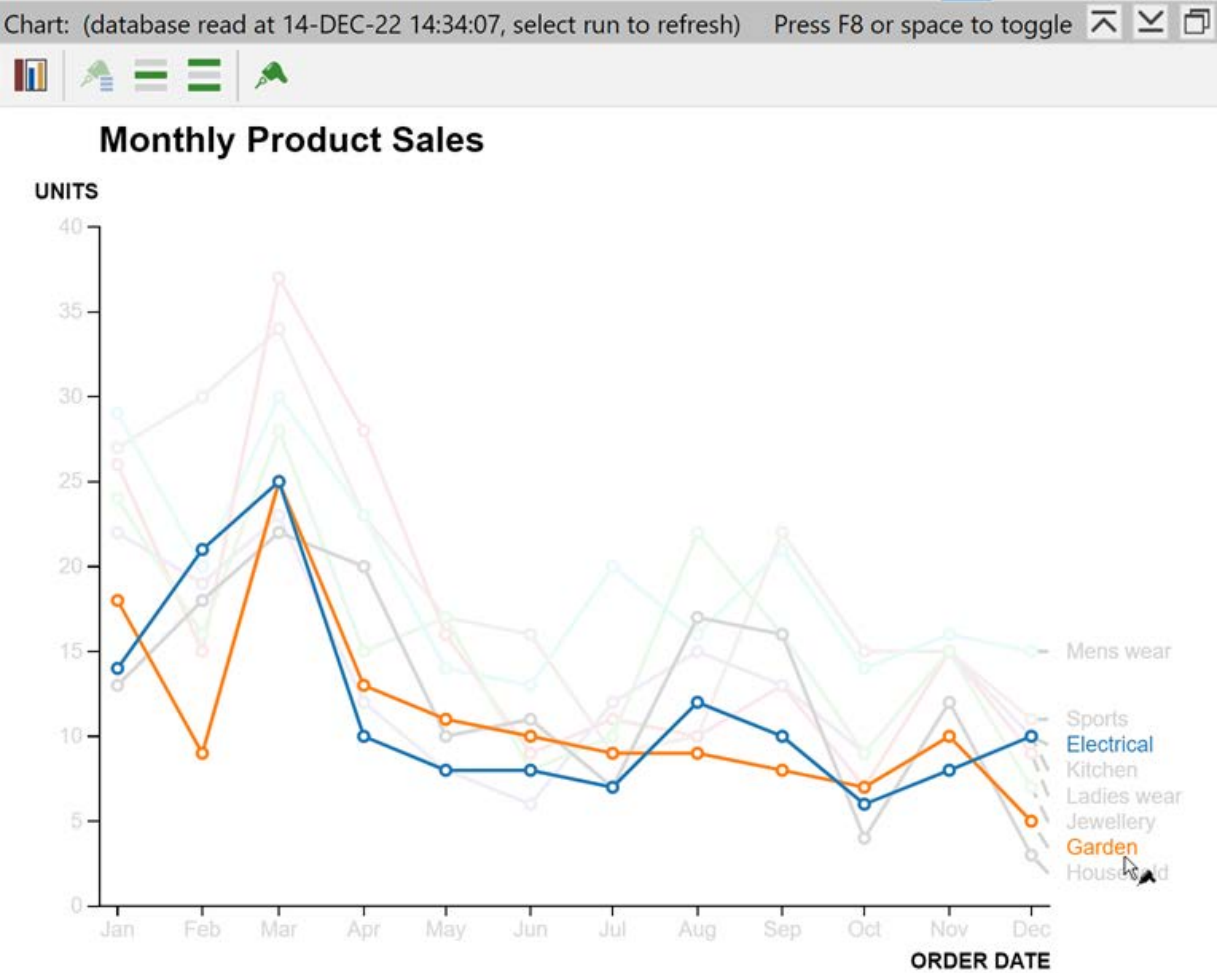


- You can now use the **/missingdata** switch in charts to control how the chart handles missing data. Review the screenshots below to see how this works:
  - On the left, it shows the result of running a query that uses **/missingdata=0**
  - On the right, it shows the result of running a query that uses **/missingdata="null"**  
{Bug: 74665}



- You can now hover over legend series and axis labels to highlight them when you use the **Reporting** and **Drill** tools. To use this new functionality, you first have to select a series label (or axis label), and then you can hover over any of the other series labels (or axis labels) to highlight them. In addition, you can then click the label while depressing CTRL to add the series to the selection and keep it highlighted as you move the mouse away. In the

screenshot below, we selected the Electrical series label and then hovered over the Garden series label to highlight it using the **Drill** tool. *{Bug: 77330}*



# Cyberquery

- You can now pass the base URL using **-baseurl** to **cc2html**, **cc2pdf**, **cqe2html**, and **cqe2pdf** to help resolve relative links. See [Relative Links](#). *{Bug: 83719}*
- **CQ\_DEFAULT\_ECHO** is a new CQ configuration environment value. If you have **CQ\_DEFAULT\_ECHO** set to false, the user in **Webreports** or **Launchpad** now only sees the final report output and not the detailed output of the macro. *{Bug: 87901}*
- These switches are now available as body item switches in List reports and are available to apply as follows:
  - **/date**: Prints only the date part of the timestamp. Apply as a sorting switch for Sum report By items.
  - **/month**: Prints only the month of a date or timestamp.
  - **/year**: Prints only the year of a date or timestamp.
  - **/year/month**: Prints only the month and year of a date or timestamp.
  - **/year/qtr**: Prints only the quarter and year of a date or timestamp.
  - **/qtr**: Prints only the quarter of a date or timestamp.
  - **/isoyear**: Prints only the isoyear of a date or timestamp.
  - **/isoyear/isoweek**: Prints only the isoweek and isoyear of a date or timestamp.
  - **/isoweek**: Prints only the isoweek of a date or timestamp.

Review the screenshot below to see examples of how to use these new switches. See [Local Switches](#) and [Switches that affect the Sequence of a Report](#). *{Bug: 30640}*

Query:

```
viewpoint native;

list/domain="order"
  order:order_date
  order:order_date/year/month
  order:order_date/year/qtr
  order:order_date/qtr
  order:order_date/month
  order:order_date/isoyear
  order:order_date/isoyear/isoweek
  order:order_date/isoweek
```

Help: [list](#) → [month](#)

### Month switch

Show only the the month part of a date or timestamp.

#### Syntax

```
/month
```

#### Description

This switch causes only the month to be shown for a date or timestamp value.

It can be combined with the [/year](#) switch to show the year alongside the month.

This switch can only be used on date or timestamp print items.

Report: (database read at 14-DEC-22 14:41:31, select run to refresh)

Arial 10 B / U

Run date: 14-DEC-2022							Cyberscience Corporation	Page: ^
ORDER DATE	ORDER DATE	ORDER DATE	ORDER DATE	ORDER DATE	ORDER DATE	ORDER DATE	ORDER DATE	
03-JAN-1986	JAN-1986	Q1-1986	Q1	JAN	1986	1986-W01	W01	
03-JAN-1986	JAN-1986	Q1-1986	Q1	JAN	1986	1986-W01	W01	
04-JAN-1986	JAN-1986	Q1-1986	Q1	JAN	1986	1986-W01	W01	
04-JAN-1986	JAN-1986	Q1-1986	Q1	JAN	1986	1986-W01	W01	
06-JAN-1986	JAN-1986	Q1-1986	Q1	JAN	1986	1986-W02	W02	
06-JAN-1986	JAN-1986	Q1-1986	Q1	JAN	1986	1986-W02	W02	
08-JAN-1986	JAN-1986	Q1-1986	Q1	JAN	1986	1986-W02	W02	

- The new **getword** and **countwords** functions are now available to use to extract and count words in a string. Like several of our string functions, they are useful when you have to

extract a piece of information from a text item that is a compound string and includes other information, or when you need to normalize values to process without punctuation, etc.

- The **countwords** function returns the number of words that are present in a string. See [COUNTWORDS](#).
- The **getword** function extracts a word or sequence of words from a string. The screenshot below shows an example of using the getword function with -1 (returns the last word in the string). See [GETWORD](#). *{Bug: 65857}*

The screenshot displays a software interface with three main sections. The top-left section, titled 'Query:', contains a data table with names and a command: `list getword( names:name, -1)/heading="Surname"`. The top-right section is a 'Help: list → getword → 0..9' window titled 'Getword function', which explains that it extracts a word or sequence of words from a string and provides syntax examples: `getword(source_string, first_word)` and `getword(source_string, first_word, last_word)`. It also lists parameters: `source_string` (a defined variable, queryname, expression or constant), `first_word` (the occurrence of the first word to return), and `last_word` (the occurrence of the last word). The bottom section is a 'Report:' window showing the output of the query. It includes a header with 'Run date: 14-DEC-2022', 'Cyberscience Corporation', and 'Page: 1'. The report content shows a table with the heading 'Surname' and the following entries: Smith, Jones, Martin, and Brown. The report concludes with 'END OF REPORT'.

Query:

```
data names
Name
Jessica P Smith
Lucy A Jones
David L Martin
James V Brown
;
list getword( names:name, -1)/heading="Surname"
```

Help: list → **getword** → 0..9

### Getword function

Extracts a word, or sequence of words, from a string.

#### Syntax

```
getword(source_string, first_word)
getword(source_string, first_word, last_word)
```

- `source_string` — a defined variable, queryname, expression or constant.
- `first_word` — the occurrence of the first word to return.
- `last_word` — the occurrence of the last word

Report: (database read at 14-DEC-22 14:45:37, select run to refresh)

Run date: 14-DEC-2022    Cyberscience Corporation    Page: 1

Surname
Smith
Jones
Martin
Brown

END OF REPORT

- The new compose switch (**/pdf**) creates **PDF** output from a compose command. Before this update, it was only possible to get an **HTML** output in a **Compose macro** command. See [Commands to combine Multiple Reports on a page - eCQ only](#). *{Bug: 79186}*
- The **date** function now works if you include the day of the week. For example: `date(Wed, 27 Jul 2022 13:52:55 GMT')` now returns a result of 27-JUL-2022. Before this update, you had to use **getdate()** to produce the same result. In general, you should use **getdate()** to search for a date in longer pieces of text, and **date()** when the entire text represents a date. See [DATE](#). *{Bug: 86678}*



## CQ Configuration Variable

- [CQ\\_DEFAULT\\_ECHO](#) is a new CQ configuration environment value. If you have [CQ\\_DEFAULT\\_ECHO](#) set to false, the user in **Webreports** or **Launchpad** now only sees the final report output and not the detailed output of the macro. *{Bug: 87901}*

## Data Dictionary

- We enhanced the Data Dictionary structure and you need to run [DDUPDATE](#) before you can use your data dictionary with CQCS version **9.10**.

## Launchpad

- The **Launchpad** layout is now more responsive and adapts better on mobile devices. *{Bug: 86849}*

## Webreports

- Now when you run charts from **webreports**, the default view gives you an e-mail option . *{Bug: 76542}*




## PDF

- We have introduced a new technology for converting reports and charts to **PDF** replacing the old **cqprint** system. The new system works on the same server as **Cyberquery** itself, as long as that server is running Windows or modern Linux. (If that's not the case, refer to [Converting Cyberquery Charts to PDF from Cyberquery Version 9](#) in the online help.) **Cyberquery** version **9.10** offers better pagination of reports and better alignment of mailing labels and pre-printed stationery. On servers where the new PDF-conversion system is available, CTRL+P will print via **PDF** rather than **HTML**. *{Bug: 86846}*
- PDF-conversion now defaults to using a server-side conversion instead of the **cqprint** system used in previous versions. This new system uses better technology and supports PDF-conversion of composed reports. The following new switches (see [Using the cq2pdf Command Line Utility](#)) were added to **cq2pdf**:
  - **PDFTIMEOUT=***value*: Time out if no document is created in this many seconds.
  - **PAGEWIDTH=***value*: Width of the document page in pixels.
  - **PAGEHEIGHT=***value*: Height of the document page in pixels.
  - **FIXEDMARGIN=***value*: Margin width in pixels.
  - **SVG**: Output a plot in **SVG** format using **Inkscape**. **Inkscape** requires a separate installation. See [Converting Cyberquery Charts to SVG](#).
  - **BASEURL:***text*: The base **URL** to use for any relative links.
- If you want to keep using the old system (note that this applies to **cq2pdf** and **CQ/HTML**), you can switch it back on by setting [CQCS\\_PDF\\_USE\\_CQPRINT](#), or by passing the **/legacy** switch to **cq2pdf** (see [Using the cq2pdf Command Line Utility](#)). *{Bug: 82619}*



# Bug Fixes

## CQ/HTML


- When you convert a report or chart into a **PDF** that includes relative links, those links now work in the **PDF** because they use the Base **URL** from the **Hyperlink Settings** dialog (**Report > Hyperlink settings...**) preferences. See [Relative Links](#). *{Bug: 83719}*
- The **Page Setup** dialog now affects printing via **HTML** as well as **PDF**. *{Bug: 86843}*
- You now see updated icons on the **Parameters** dialog for the **Choose parameters...** , **Load Values...** , and **Save values...**  buttons. *{Bug: 86651}*
- When you have the cursor on a file name in the Language editor, the inline help now displays the list of fields that are part of the file. *{Bug: 86703}*
- The inline help now uses mixed case instead of uppercase letters to identify Files, Fields, and Classes. *{Bug: 87254}*
- **CQ/HTML** now displays an updated orange/yellow color scheme when you use the **Find** feature. *{Bug: 87598}*

## Import Data Wizard

- If you remove a column on the **Choose data settings** dialog that has a warning icon, since you are making a selection to not import the field (remove the column), you no longer need to resolve the issue with the field. *{Bug: 86673}*
- The **Import Data** wizard now displays a warning message when you try to pivot a table that has more than 9999 fields (see [Pivot the Data](#)):

This data cannot be pivoted as it contains too many records. Imported data can have a maximum of 9999 fields, the current record selection would generate [#] fields when pivoted.

*{Bug: 86450}*

- The **Choose data settings** dialog field warnings now automatically update the button options based on your selections and include inline help. *{Bug: 87495}*
- The **Choose data settings** dialog now displays a warning message for the *OTHER FIELD SEPARATOR* if the entry contains an invisible character to prevent you from parsing your data incorrectly. *{Bug: 87636}*
- The **Open** and **Save** dialogs now display an icon for **CSV** files . *{Bug: 88237}*

## Charts

- It is now easier to see marker lines (the lines that identify the vertical and horizontal intersection of a data point on a line) in charts. When you hover over a data point on a chart, the chart now displays the data point marker lines as dashed lines that take on the color of the series line, even if the line is not displayed as the default (active) line. Before this update, the marker lines were displayed as black and sometimes solid lines. *{Bug: 88057}*
- **CQ/HTML** charts now default to the 'single' selector type instead of 'multiple' for non-overlapping chart types. *{Bug: 82057}*

- Now when you have Y and Y2 axis labels, they both have the same alignment, meaning they are both above or both beside the axes. *{Bug: 77217}*
- Before this update, if there were multiple body items undefined in the query, **CQ/HTML** displayed them using the 'multiple selector' by default. This could be misleading though especially if the data items were not meant to be added together. Now the default is to display them using the 'single' selector. *{Bug: 77517}*

## Webreports

- *WEBREPORTS.FORM-TOP* and *WEBREPORT.FORM-BOTTOM* HCF rules no longer affect Parameter forms in **CQ/HTML**. *{Bug: 87092}*