THE CHRONOLOGY TOOLKIT
Chronolator

The **Integrate** Tool

Version 7.00

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Introduction

What is Chronolator Integrate?

Chronolator Integrate is one of the **Chronolator Browser Tools**. It works in a Web browser to integrate and combine multiple chronologies used in simple and complex investigations.

It is important to note that only the software resides on the Web. **The chronologies themselves stay on your computer, completely under your control. Their confidentiality is not compromised.**

If you want to get started straight away, jump to Familiarising Yourself.

The tool is automatically updated from time to time. See What's New for details about each version.

What other Chronolator Tools are there now, and what are coming in future?

There are currently four tools:

- **Define** is used to set up a new chronology, and (if licensed) to create and set a *Document Licence*.
- **Enter** is a simple and easy to use way to enter events into a chronology.
- **Integrate** merges individual chronologies from different sources.
- **Review** helps reviewers to understand and analyse the events contained in one.

Chronolator started life in 2000 as a Microsoft Word™ application. Since then, technology has moved on and the **Chronolator Browser Tools** have taken on most of its functions. A few minor features are yet to be migrated, so Chronolator for Word remains available, though not recommended for general use. A more modern implementation of it providing better integration with the Browser Tools is being investigated.

System Requirements

Software

Browser

Chronolator Integrate runs in any standards-compliant Web browser. Note that this means that Internet Explorer is not supported.
It is extensively tested in Windows Chrome, Firefox, and Edge, and informally tested in Android Chrome.

Hardware

Given that it is intended to help produce and analyse potentially large and data-intensive chronologies, the tool is mainly designed for use on laptop- and desktop-sized screens. Some features might work on smaller screens, but this is not currently a major design goal.

Licence

Chronolator Integrate is licensed software. You will be asked to review and accept the terms of a licence whenever you open a chronology. See Licensing for more details.

About this Help

This help documentation is designed so you can quickly learn about **Chronolator Integrate** as a new user, or enhance your knowledge as a regular user.

You can view detailed descriptions of the buttons in the tool, and information about how to use them to accomplish various tasks.

You can take a tour of the main features in the Familiarising Yourself topic.

What's New

Version 7.00 - April 11 2024

Chronolator Integrate Version 7.00 was published alongside new versions of the other **Chronolator Browser Tools**. All were given the same version number for consistency.

Major changes

Copying to the Clipboard - new and changed buttons above the Table display

> ℹ️ The **Clipboard** function in the **Print / Copy** group of the *Ribbon* is unaffected by these changes.

- The previous **Copy** button is now labelled **Copy (data)** to reflect the fact that it copies raw and unformatted events. When pasted into a word processor such as **Microsoft Word** or **Google Docs**, extra effort is required to convert the result to a table. As before, if any events are selected, only those events are copied.
- The new **Copy (formatted)** button copies the entire table. It is automatically rendered as a table when pasted into a word processor. The colour scheme is maintained when pasting into the desktop version of **Microsoft Word** (except when pasting from **Firefox**).

See Using the Clipboard.

Minor changes

None.

Bug fixes

None.

Version 6.01 - February 24 2024

Major changes

None.

Minor changes

None.

Bug fixes

The following bugs were fixed:

- Message **c9m6000** was issued when licensing a password-protected file.
- Message **c9m6000** was issued when opening a chronology whose only events were **Author Notes** dated in year 0100.

Version 6.00 - January 27 2024

First release.
Chronolator Integrate Version 6.00 was published alongside new versions of the other **Chronolator Browser Tools**. All were given the version number 6.00, and some were renamed.

The complete suite of tools now comprises **Chronolator Define**, **Chronolator Enter** (previously **Chronolator Data Entry**), **Chronolator Integrate**, and **Chronolator Review** (previously the **Chronolator Reviewer's Tool**).

Workspace Overview

The Chronolator Integrate workspace is in two main parts:

- the **Ribbon**
- the **Presentation Area**

Ribbon

Presentation Area

The Ribbon

The Ribbon contains buttons and drop-down lists that you can use to

- open, edit, and save files
- set application options
- customise the displays in the Presentation Area

The Presentation Area

The Presentation Area displays the chronology in a table.

Ribbon

The *Ribbon* has two `Tabs` (*File* and *Home*). You select a tab by clicking on its name.

To the right of the tabs, a small arrow `^` lets you collapse or expand the ribbon, and a question mark ❓ lets you open this **Help**, report a problem, and see copyright information.

Each Tab has some `Groups` (the *File* tab below has *System*, *Browser*, *Options*, and *System Tools*).

Each Group contains one or more `Controls`.

In this Help, an individual control is referred to as *Tab > Group > Control* - for example, the `Reports` control in the picture below is referred to as *File > System Tools > Reports*.
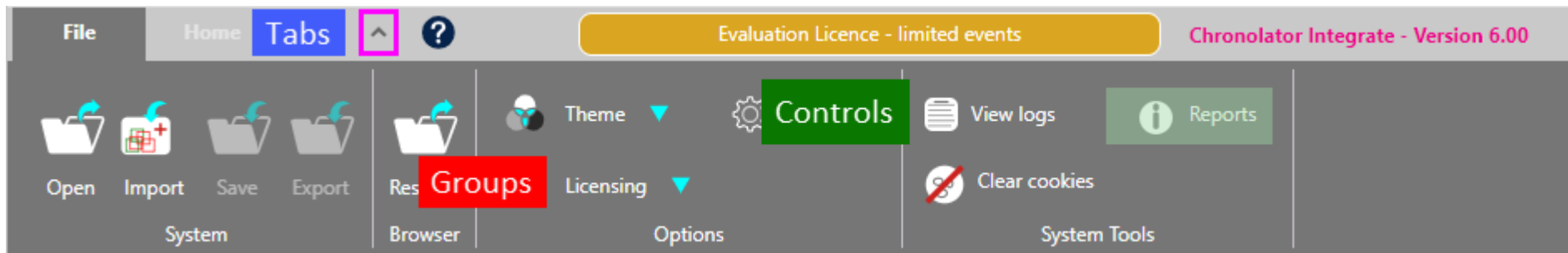
The *Ribbon* also displays a summary of the currently active licence to the right of the *Help* button. Clicking on it displays the licence.

File Tab

The *File* tab has four *Groups*:

- ⊚ *System*
- ⊚ *Browser*
- ⊚ *Options*
- ⊚ *System Tools*
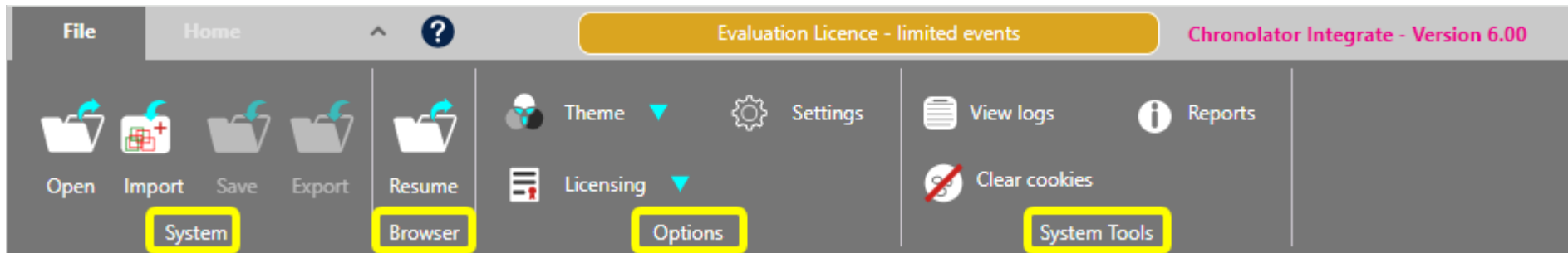
System and Browser

Chronolator Integrate can save and access your chronology in two places:

- ⊚ your computer's *file system*
- ⊚ browser storage

Use the *System* group to *Open* or *Import* a file from your computer's *file system*.

- ⊚ Use *Open* to open an existing *Composite ChronologyInternal Chronology* with **Chronolator Integrate**.
- ⊚ Use *Import* to import a chronology into an existing *Composite Chronology* or to start a new one.

You also use the *System* group to *Save* or *Export* a file to your computer's *file system*

> ℹ️ *Save* saves the file as a *txt* file that can only be made sense of by a **Chronolator Browser Tool**. *Export* saves the file as a *JSON* file that can be used to exchange data with **Chronolator for Word** and other programs.

Use the *Resume* button in the *Browser* group to carry on working on the chronology you were using the last time you used the tool. There is no *Save* button in the *Browser* group, as the tool automatically saves your work as you go.

> ⚠️ Although Browser storage is quite robust and roomy, you should save your work to the file system from time to time to protect yourself against system failure.

Options

The *Options* group has a *Theme* button that lets you change how the *Ribbon* looks. When you click on it, two options are shown. Hovering on one displays its effect on the *Ribbon*. Click on the one you want to select it.

The *Licensing* button allows you to display the active licence, and to purchase and install new one.

> ℹ️ Please email *licences@chronolator.com* to obtain a licence.

The *Settings* button lets you specify whether the chronology should automatically be sorted whenever you import another chronology, and whether that should be in Ascending or Descending order. These settings apply only to the current session.

System Tools

There are three buttons in the *System Tools* group:

◎ *View Logs*

Chronolator logs how you use it so that Berrick Computing Ltd can diagnose any problems you encounter.
These logs remain on your computer unless you want to send them for diagnosis.
You can view, copy, and clear them.

◎ *Reports*

This button displays **Application Environment** and **Document Details** reports.
The **Application Environment** report is mainly of interest for problem diagnosis.
The **Document Details** describes the chronology - what columns are included, which of them are mandatory, what abbreviations are in the glossary and so on.

◎ *Clear cookies*

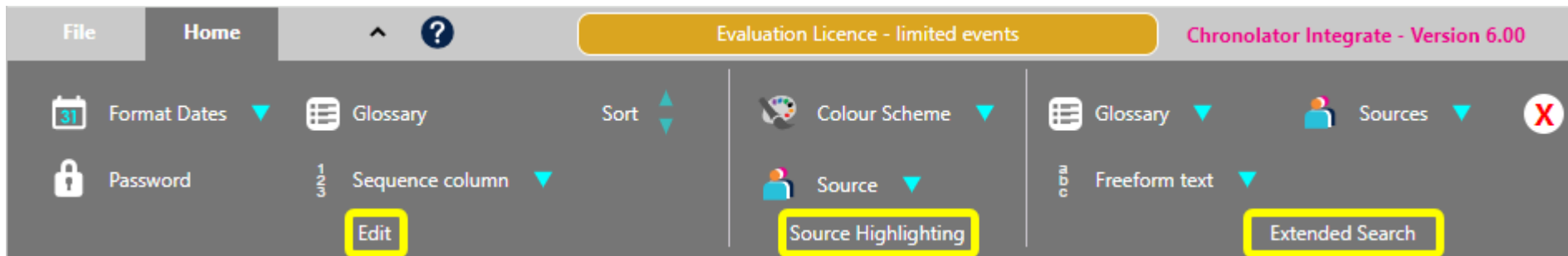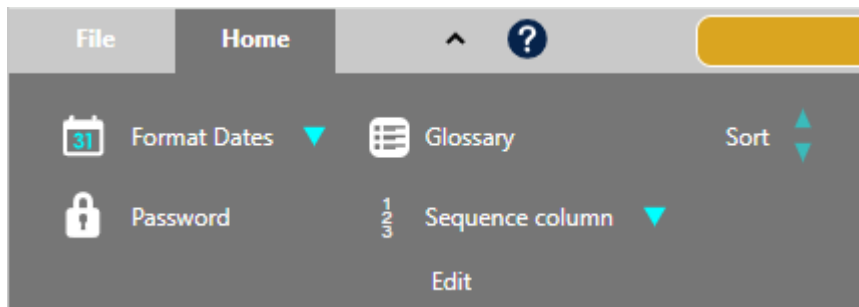Use this button to clear Chronolator *cookies*. This can be useful if browser problems prevent you starting the tool.

Home Tab

The *Home* tab has three *Groups*:

- *Edit*
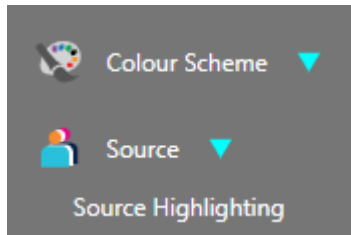- *Source Highlighting*
- *Extended Search*

Edit

The *Edit* tab lets you:

- put dates and times into a consistent format. When you press **Format Dates**, a list of possible date formats is shown: click on the one you want. Times

are put into the ISO 8601 format (a 24-hour time delimited by a colon, e.g. `18:15`).

- add, change, or remove password protection for the file with the *Password* button.
- add, change, and delete entries in the *Abbreviations Glossary* using the *Glossary* button. Abbreviations can be used in conjunction with the **Extended Search** feature to provide a powerful way to review selected events.
- add, change, update or delete a *Sequence Column* using the *Sequence column* button.
- sort the chronology in Ascending or Descending order

Source Highlighting

You can change the colours used to highlight agencies by using the buttons in the *Source Highlighting* group.

The *Colour Scheme* button affects all the agencies at the same time. Use it to choose an overall theme. When you press it, a list of schemes is shown. As you hover over each item in the list, you can see its effect on the presentation. Click on an item to set it.

The *Source* button affects a single agency. When you press it, a list of agencies is shown.

Click on the desired agency to display a swatch of possible colours. As you hover over each colour in the swatch, you can see its effect (as long as the selected agency has an event on screen). Click on a colour to set it.

Extended Search
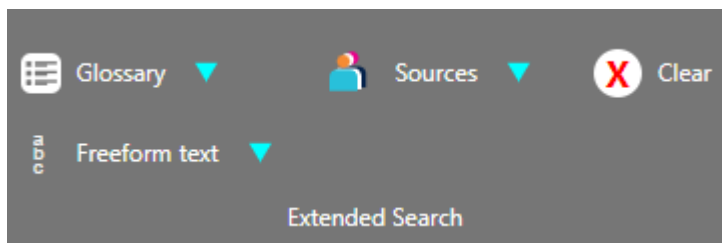
Use the buttons in this group to build and execute complex searches that apply to all presentations. See Searching and filtering events for more details.

Familiarising Yourself

The easiest way to find out what **Chronolator Integrate** can do is to use some sample files. Go to www.chronolator.com/downloads/samples and follow the instructions there to download some. They include some Internal Chronologies and a Composite Chronology.

This section suggests a few of the things you might try, and along the way introduces some of the terms used in the tool.

Get Started

When you first open the tool a licence will be displayed; usually a **Limited Licence** like this.

> ℹ️ If you have a licence for the tool, that will be shown instead.

> ℹ️ If you are working on licensed documents, their licence will take over when you open or import them

Limited Licence

Thank you for using Chronolator - The Chronology Tool.

This limited licence allows you to use it subject to some limitations, such as the number of events a chronology can contain. Chronolator will warn you if you if you are about to exceed such limitations.

To remove the limitations, you can buy a licence at *tools.chronolator.com/licensing.htm*.

Alternatively, most limitations will be removed if you open a Chronolator Document that has been created by a licensee. Press **OK** to indicate that you accept those terms, or *Cancel* to quit the program.

Message Reference: **c9m4000.** You can use this reference to look up more information online or in the product manuals

| Trace | View Details | Cancel | OK |

Start a new Composite Chronology

After you accept the licence terms, the *Ribbon* is displayed. Click on **File > Import**.	

Choose one of the sample files - **SampleInternalChronologyPolice.txt**, say.	
The **Enter source prefix** dialog is displayed	
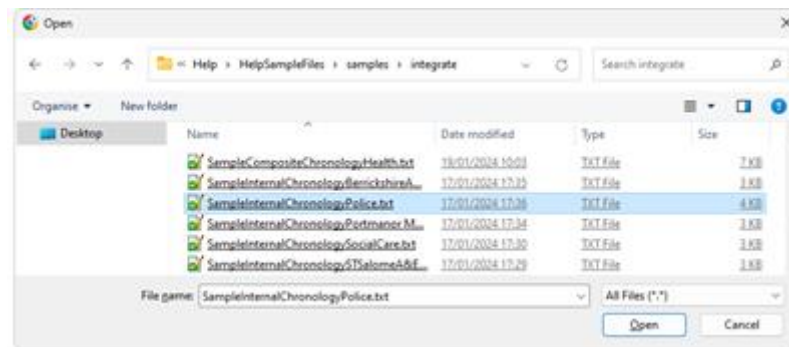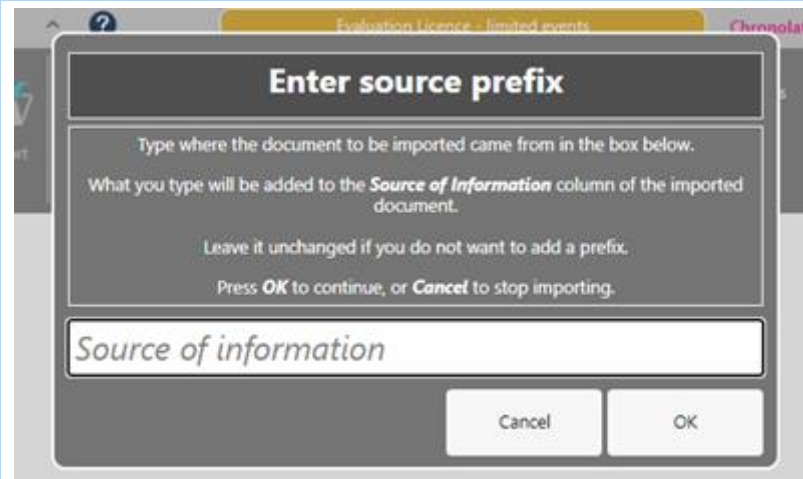
Type *Police*	
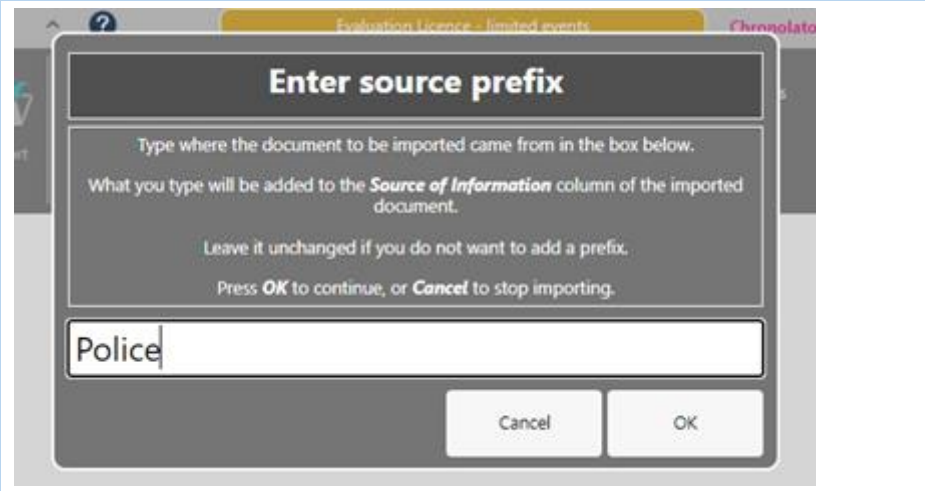
Notice:

- Chronolator has switched to the Home tab and displayed the imported chronology
- *Police >* has been added to every event's **Source of Information**

Import another chronology (press *File > Import* again) and give it a suitable prefix.

In this example, we have imported **SampleCompositeChronologyHealth.txt** with prefix *Health*

Like the other Chronolator Browser Tools, **Chronolator Integrate** automatically saves your work in the Browser. If you close and reopen your browser, you can use *File > Resume* to pick up where you left off.

> ⚠️ Although Browser storage is quite robust and roomy, you should save your work to the file system from time to time to protect yourself against system failure.

Using the other buttons on the Ribbon

See the Ribbon topic for other buttons and controls on the *Ribbon* which allow you to save files, change the appearance of the tool and the colours used to highlight different **Sources of Information**, view information about and search the chronology, format dates, set a password and so on.

Using the buttons above the table

Sort

By default, the events in the table are in **Date / Time** order. You can sort the table by different columns if you want.
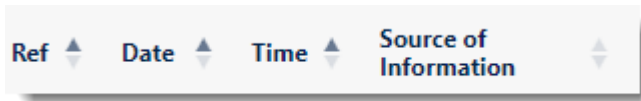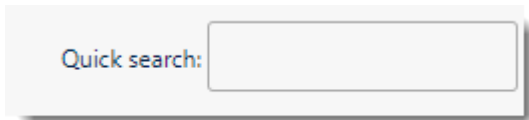
For example, clicking on *Source of Information* in the table header row will sort the table by agency, in ascending order. Clicking it again will sort in descending order.

To go back to date order, just click *Date* in the table header row.

To sort by multiple columns, hold the *Shift* key as you click on a heading.

Quick Search

You can use the box in the top right corner of the *Presentation Area* to search for text. Only those events that contain your search terms are displayed.

Searches are cumulative - the more terms you enter, the fewer events are displayed. This can provide a powerful way to sift through desired events.

Try searching for `Ms F` - only the events in which she plays a part are shown.

Next, add `midwife` to the search - Ms F's interactions with midwives are shown.

> 💡 ***Quick Search*** only searches the ***Table*** presentation. Use ***Home > Extended Search*** to search across all presentations (see Searching and filtering events for details).

Editing, copying, and printing events
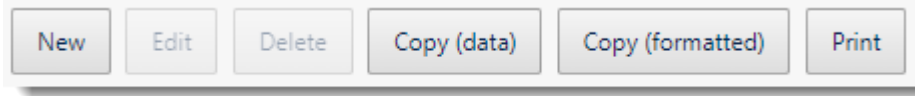
The buttons between the table and the *Ribbon* let you add, change, or delete events, copy them to the **Clipboard**, or print them.

You must click an event to select it before using the ***Edit*** or ***Delete*** buttons.
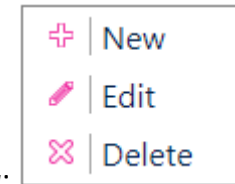
You can also invoke the Editor commands by right-clicking on an event to display this *Context MenuglossaryContextMenu*:

See Using the Clipboard for information about copying to the **Clipboard**.

When you press the ***Print*** button, the chronology table is displayed in a new browser tab. Use the browser's print facilities to print it to a physical printer or save it as a PDF or other file.

Common Tasks

Finding out what you can do

Chronolator Integrate includes a number of features.

For a broad overview of what you can do with it, look at Familiarising Yourself.

This section lists some common tasks.

Opening, copying, printing, and saving files

Opening a file

Press *File > System > Open* to open a either a *JSON* or *txt* file:

- suitable *JSON* files can be produced by one of the **Chronolator Browser Tools** or by **Chronolator for Word**.
- *txt* files must have been produced by one of the **Chronolator Browser Tools**.

Resuming your work

Chronolator Integrate automatically saves your work in the browser.

Press *File > Browser > Resume* to pick up where you left off.

Saving files

Although **Chronolator Integrate** automatically saves your work in the browser, you should periodically save it to your computer to protect yourself against system failure.

Use the buttons in the *File > System* group to save files:

- Press *Save* to save as a *txt* file

or press **Export** to save as *JSON*

Printing the chronology table

You can print the chronology table by pressing the **Print** button above it. This creates a printable version of the table in a new browser tab. Use the browser's print facility to send the document to an actual printer.

Copying the chronology table to another program

You can copy the entire chronology table to another program by using the system Clipboard. See Using the clipboard.

Setting, changing, and removing a password

Use **Home > Edit > Password** to add, change, or remove a password required to open a file. After doing so, save the file as a *txt* file to ensure your settings are used next time it is opened.

You cannot protect a *JSON* file with a password.

If you forget the password, there is no way to recover your chronology.

Formatting dates and times

Press **Home > Edit > Format Dates** to put dates and times into a consistent format, including the day of the week if desired.

Adding, changing, and deleting abbreviations

A chronology can contain a list of abbreviations. These can help save time entering events, and can also be used by **Chronolator Review** to help review the chronology.

See Using Abbreviations for more details.

Using a Sequence column

A *Sequence Column* can contain a reference number for each event. The number can be used to force events into order when you know the date on which they

occurred but not the time. to add, delete, or update a **Sequence** column.

See Using a Sequence Column for more details.

Searching for events

Use the *Quick Search* button above the table to find events containing particular words.

Use the buttons in the *Home > Extended Search* group to build more sophisticated searches that apply to all presentations. See Searching and filtering events for details.

Searching and filtering events

You can search the chronology in two ways:

- *Quick Search*
- *Extended Search*

Search types

Quick Search

There is a *Quick search* button above the table.	

Extended Search

The buttons in the *Home > Extended Search* group allow you to build and execute complex searches using the *Search Builder*. You can search for *Glossary* items, *Sources of Information*, and *Freeform text* Search results are highlighted in all presentations. They can also be exported to a new file. Press the *Clear* button to clear the search and display all events.	
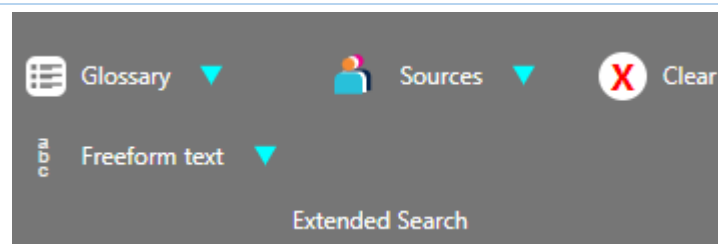
Extended Search Builder

> The illustrations below are from searches saved in the *Sample 01* file (*File > Samples > Sample 01*) in the **Chronolator Review** tool.

When you press *Glossary*, *Sources*, or *Freeform text* for the first time in a document, a *New* button appears:	If you have already made and / or saved some searches, they appear in a list:
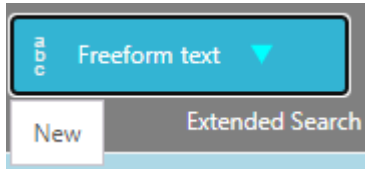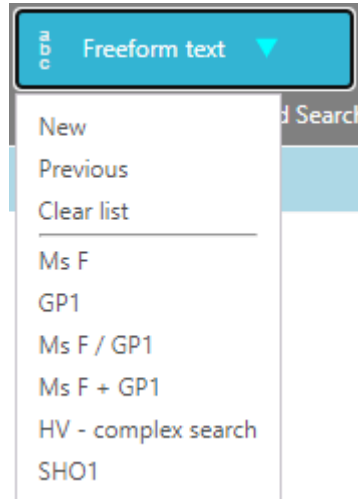
When you press *New* or select a saved search, the **Search Builder** appears:
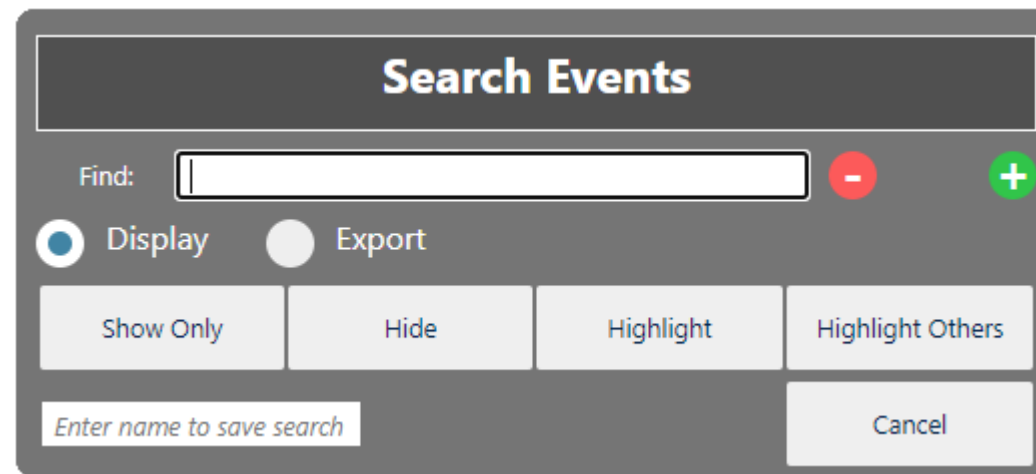
The Search Builder has four principal areas:

The **query row** is where you enter a search term. It also includes buttons to the right to add or delete terms.

Freeform text and *Sources* search terms are not case-sensitive. *Glossary* searches are.

| Find: | | | |

The **mode buttons** switch the **action buttons** below between *Display* and *Export* modes.

● Display ○ Export

In *Display* mode, you can choose between showing only those events that match, hiding them, highlighting them. or highlighting the others.

| Show Only | Hide | Highlight | Highlight Others |

In *Export* mode, you can choose between exporting the events that match or those that do not.

Export mode can be useful if you want to extract some events into a separate chronology.

| Matches | Others |

Enter a name in the *Save Search* box if you want to save it.

Press the *Cancel* button to cancel the search.

| *Enter name to save search* | Cancel |

The Sample file in the **Chronolator Review** tool (*File > Samples > Sample 01*) contains a number of searches you can experiment with. The most complex example is *Freeform text > HV - complex search*, shown here.

This will find:

- any events that involved **both** a `Health Visitor` **and** `Ms F`, **plus**
- any events that included `maternity`, **but not**
- any of the events selected so far that included `midwife 1`

When you press one of the *action buttons*, all presentations will be updated with the results of the search. The background colour of the *Home > Extended Search* group will be updated to show that a search is active, and how many events were matched.
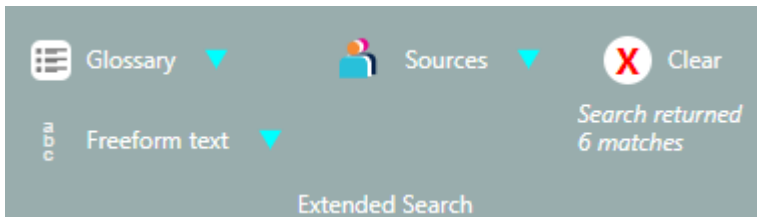
If you want to clear the search results and display all events, press the *Clear* button at the top of the group.

Search criteria

When building a complex search you should carefully consider exactly what you want.

Criteria order

The Search Builder assembles your search in the order in which you specify the criteria - if you swap them around you will get very different results. Try and visualise what it is doing as you create the search.

Operators - 'includes', 'also', 'but not'

Most search builders use the traditional 'logical operators' *and*, *or* and *not*. The first two often give rise to confusion: when you search for, say, `Bill`*and* `Harry`, are you looking for events that involved `Bill`, and also those that involved `Harry`? Or do you want just those events that they involve both together?

The Search Builder uses the terms *includes*, *also*, and *but not* to try to overcome this confusion.

💡 Under the covers though, these operators do indeed use the traditional concepts of *and*, *or* and *not* respectively.

As an example, suppose we have these three events:

Reference	What Happened
1	Harry went shopping
2	Bill went to the cinema
3	Harry met Bill at the pub

Traditional Search	Search Builder Search	Matches these events
`Bill`	`Bill`	2 and 3
`Harry`	`Harry`	1 and 3
`Bill` *or* `Harry`	`Bill` *also* `Harry`	1, 2 and 3
`Bill` *and* `Harry`	`Bill` *includes* `Harry`	3

Operator precedence

Traditional logic also defines an 'order of precedence' for operators, and allows them to be grouped using brackets. The Search Builder does not do this, simply evaluating criteria in the order you specify them and whittling the matched events down or adding to them accordingly. This approach has some limitations in the complexity that can be achieved in a search, but is chosen here for being generally more intuitive.

ℹ️ A future release might well include a more traditional approach to complex searches.

Glossary search

This search exploits items in the *Abbreviations Glossary*. Chronologies are often anonymised, sometimes only partially. The *Glossary* search builder searches for abbreviations and definitions at the same time.

Another convenience it offers is that as you start typing in a query, suggestions are made from the glossary. Click on one, or use the *Arrow Up*, *Arrow Down*, and *Enter* keys to select it.

Try out the *Freeform Text* and *Glossary* searches for `GP1` and for `SHO 1` in the **Sample 01** file to see the difference.

Sources search

The *Sources* search looks for events with particular **Sources of Information**. Every individual source can be looked for. In many chronologies this could be tens or even hundreds of entries. The *Sources* search makes this manageable in two ways:

- The highest-level sources are shown first when you click on a **query row**, followed by a dividing line and then all sources in alphabetical order.
- As with the *Glossary* search, the list is filtered as you type into the query.

Here are some examples:

Search Events

Find: [Type here to filter the list]   ⊖   ⊕

○ Displ

#Berrick-Computing-Ltd

Show

Berrick New Town Clinic >

Berrickshire Ambulance Service >

Enter name

Portmanor Medical Centre >

ST Salome A&E >

St Salome Community Midwives >

St Salome Labour Ward >

St Salome Maternity Unit >

───────────────

#Berrick-Computing-Ltd

Berrick New Town Clinic > Health Visitor HV1 diary

Berrick New Town Clinic > Health Visitor HV2 diary

Berrickshire Ambulance Service > Central Ambulance Control log

Berrickshire Ambulance Service > Paramedic notes

Portmanor Medical Centre > GP records

Portmanor Medical Centre > Reception notes

ST Salome A&E > Notes ref 150389

ST Salome A&E > Notes ref 151011

ST Salome A&E > Notes ref 151102

ST Salome A&E > Notes ref 151103

ST Salome A&E > Notes ref 151152

St Salome Community Midwives > Team records ref 1542

St Salome Labour Ward > Labour ward records ref 010320

Search Events

Find: [po]   ⊖   ⊕

○ Displ

Portmanor Medical Centre >

Show

Portmanor Medical Centre > GP records

Portmanor Medical Centre > Reception notes

Enter name to save search

St Salome Maternity Unit > Postnatal records ref 020311

Cancel

Using Abbreviations

The Administrator who sets up a new chronology can define entries in its *Abbreviations Glossary*.

Chronology users can also add and change glossary entries.

Abbreviations can be up to 10 characters long, and their Definitions up to 50.

Displaying and Editing the Abbreviations Glossary

Use *Home > Edit > Glossary* to view, change, add and delete abbreviations.

The resulting display shows where an abbreviation was originally defined, and includes buttons to implement whatever actions are allowed.

It also includes a button to add a new abbreviation.

Permissions

What you are allowed to do with an abbreviation depends on where it was originally defined:

- Entries defined by the Administrator who set up the original chronology cannot be changed or deleted.
- Entries defined by one of the agencies in a multi-agency chronology can be changed, but not deleted.
- Entries you define in the current document can be changed and deleted.

Changing an abbreviation

Since agencies can add their own entries to the *Abbreviations Glossary,* it is possible that two of them might add similar entries (for example, `AD/Alan Daniels` and `AD/Adam Donoghue`). Chronolator always keeps track of where an abbreviation has been defined, but if you want to use the **Anonymisation** feature (to be added in a future release) all abbreviations and definitions must be unique.

When you change a glossary entry, Chronolator updates the document to match.

It also keeps a record of the original definition.

Using the glossary to search a document

You can use the **Extended Search** feature to search for events containing entries from the glossary. See Searching and filtering events.

Using Author Notes to annotate a chronology

As you add to the chronology, you might want to add some notes.

What is an Author Note?

Author Notes are events whose **Source of Information** column contains a single word starting with one of the characters # ^ ¬ ~. Other columns in the event - except **Date** and **Time** columns - are not checked for errors.

How do you create an Author Note?

Add or change an event to add an **Author Note**. Either use one of the buttons above the table, or right-click any event to display this *Context Menu:*
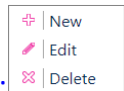
In the **Source of Information** column, type a single word beginning with one of the characters # ^ ¬ ~.

You can add an **Author Note** wherever you like; give it a **Date** and **Time** to put it in the relevant place in the chronology. If you want it to be at the start of the chronology, give it a date in the year **0100**.

How to use the notes - some suggestions

Being in the **Source of Information** column, each 'author' gets its own track on the **Timeline - by Source** presentation in the **Chronolator Review** tool. With that in mind, it is best to keep the number of different 'authors' to a minimum. In this picture, two authors have added notes:
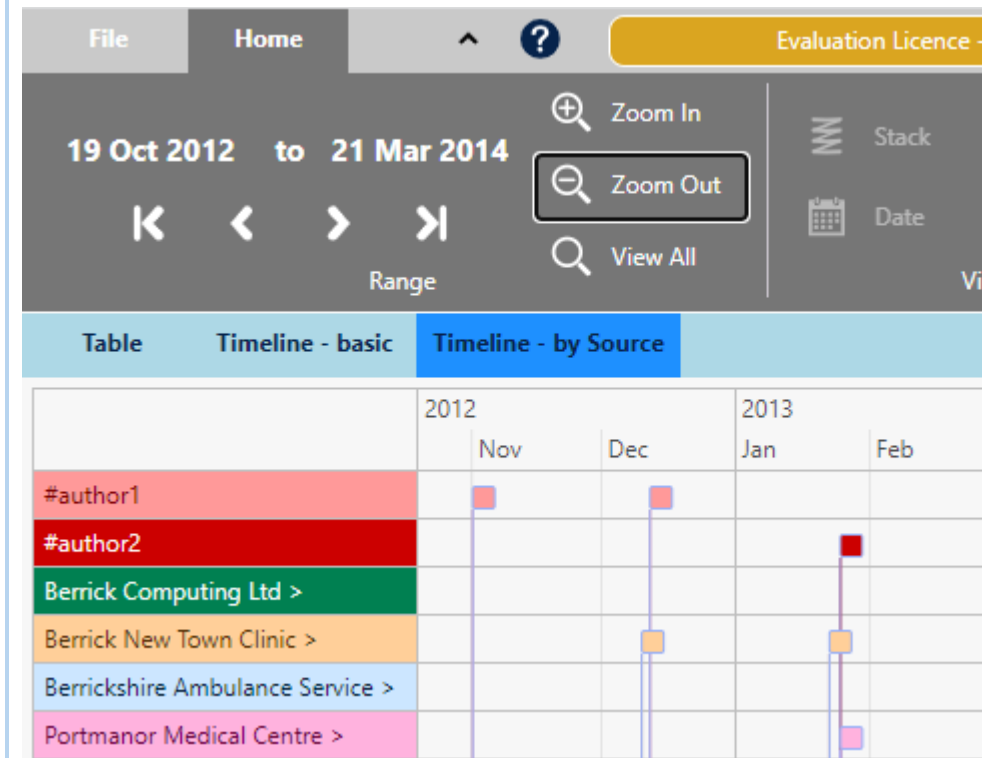
If several authors add notes, you might also find it useful to add their names to the *Abbreviations Glossary*. That way, you will not forget who was who if you leave the review for a long while.
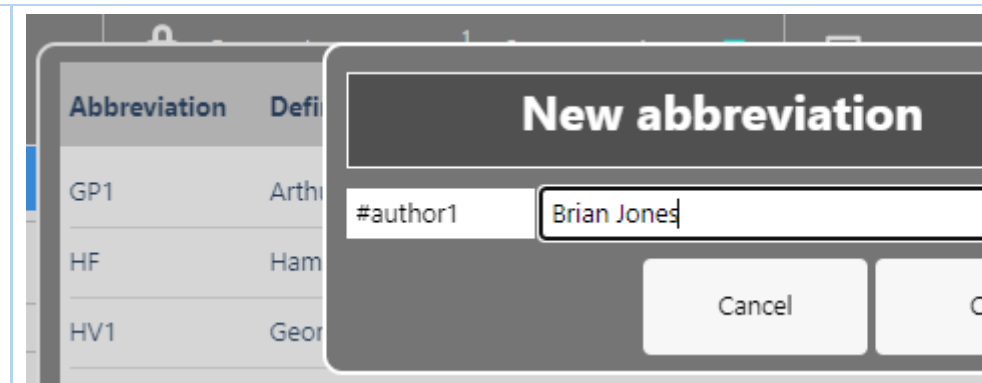
You will also be able to take advantage of the suggestions as you type in a *Glossary Extended Search* (see Searching and filtering events).
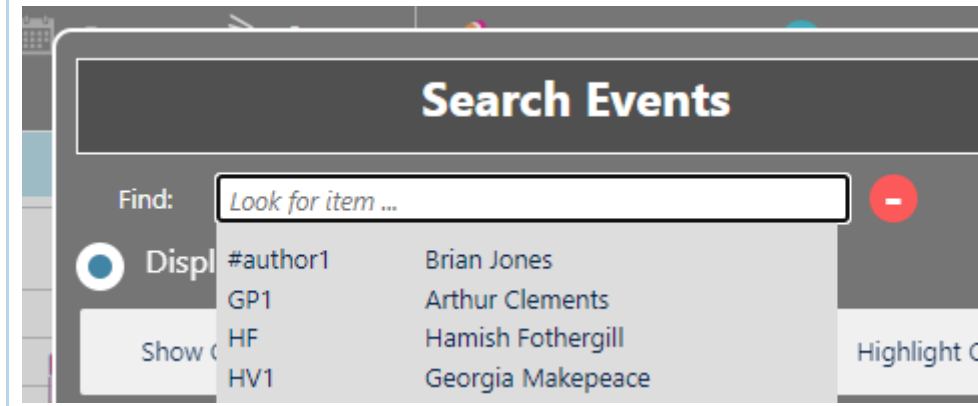
Using the Clipboard

You can copy data from **Chronolator Integrate** to another program by using the system **Clipboard**.

Copy to the Clipboard

Copying the table

Use one of the buttons above the table to copy it.

- the *Copy (data)* button copies the selected event, or the entire chronology if no event is selected. Columns in the resulting clipboard item are separated by tabs, and might need to be converted to a table in the receiving application. Any line breaks in the table will be converted to the ` character.
- the *Copy (formatted)* button copies the entire chronology. The resulting clipboard item will be pasted as a table in the receiving application, and line breaks are automatically converted.Any colours applied to the table will be preserved (except if you are using **Firefox**).

Copying the current display

- press the *Clipboard* button on the *Print / Copy* group on the Ribbon to copy the display in the active *Presentation Area*

Paste the Clipboard

You can paste the clipboard into another application such as **Microsoft Word** or **Excel** (or, indeed, any other).

> 💡 In **Microsoft Office** applications, you can paste the clipboard by using the *Paste* button on the *Home* tab, or by pressing *Ctrl+V*.

The following instructions assume you are pasting into a new, blank Microsoft Office document.

After pasting

Excel

Excel should automatically split the data into columns when you paste it into a blank spreadsheet.

Word

If you have used the *Copy (formatted)* button, **Word** will produce a table when you paste it as long as you press the *Keep source formatting* option on the small
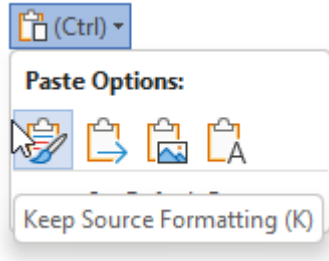
Paste Options menu:

(for more information, see https://tinyurl.com/paste-into-word

If you accidentally paste as plain text, or have used the *Copy (data)* **button**, you will need to convert it to a table like this:

- Select All (*Ctrl+A*)
- Convert the selection to a table using the *Insert* tab, choosing *Table > Convert text to table* and using all the defaults

Line breaks: Word and Excel

If you used the *Copy (data)* button, or pasted as plain text, any line breaks in the table will have been transformed into the ` character.

Do the following to change them back into line breaks:

- Select All (*Ctrl+A*)
- Open the *Replace* dialog (*Ctrl+H*)
- Type ` in the *Find What* box. You should find the ` character at the top left of your keyboard

- (In **Word**): Type ^p in the Replace with box. You should find the ^ character with *Shift+6*
- (In **Excel**): Type *Ctrl+Shift+J* in the *Replace with* box

- Press *Replace All*

Using a Sequence Column

The first column in a chronology table can be a **Sequence** column. This provides two main benefits:
- it can contain a reference number for each event
- you can use it to specify the order of events on a particular day when you do not know their times

Defining a Sequence Column

The Case Review Administrator can define a **Sequence** column when setting up the chronology document.
You can define one using *Home > Edit > Sequence column* (this is the only change Chronolator allows to Administrator-defined column headings).

When adding a column this way, it is automatically populated with sequence numbers.

Updating Sequence Numbers

When you first add a **Sequence** column, Chronolator automatically adds a sequence number to each event.

Later, you can update the numbers at any time - for example, if some events are added or removed.
- Press *Home > Edit > Sequence column*

and then
- Press *Update - sequential* to give each event a unique number or *Update - group by day* to start the numbering at **1** on each new day
- Press *Clear* to delete the numbers in the column

Deleting a Sequence Column

Press *Home > Edit > Sequence column > Delete column*.

Forcing events into order

Sometimes you might not know at what time events happened on a particular day, but you do know their order. You can use the **Sequence** column to specify it.

In this example from a multi-agency chronology, the time has only been given for one of the events of **July 15 (2013-07-15)**, and events are in the wrong order (in the first one an infant has collapsed, while in the second he seemed well):

Date	Time	Source of Information	Family Contact - Child	Family Contact - Adult
2013-07-15		Paramedic notes	Infant collapsed. Resuscitation commenced.	Mother sustained facial injuries and is distressed.
2013-07-15		Reception notes	Brought SJW with her. Baby seemed well as far as he can recall. Certainly no injuries.	Ms F attended morning surgery for consultation with G regarding flu-like symptoms.
2013-07-15		Notes ref 150389		
2013-07-15	13:00	Central Ambulance Control log		999 call from Ms F reporting baby is injured and not breathing. Paramedic unit dispatched.

We can put them in the right order by adding a **Sequence** column …

Ref	Date	Time	Source of Information	Family Contact - Child	Family Contact - Adult
1	2013-07-15		Paramedic notes	Infant collapsed. Resuscitation commenced.	Mother sustained facial injuries and is distressed
2	2013-07-15		Reception notes	Brought SJW with her. Baby seemed well as far as he can recall. Certainly no injuries.	Ms F attended morning surgery for consultation GP1 regarding flu-like symptoms.
3	2013-07-15		Notes ref 150389		
4	2013-07-15	13:00	Central Ambulance Control log		999 call from Ms F reporting baby is injured and breathing. Paramedic unit dispatched.

... and editing each event, putting the desired sequence number in it:

When you press *Update*, the event will be put in the correct place (in this picture, we have edited all the required events)

Ref ▲	Date ▲	Time ▲	Source of Information	Family Contact - Child	Family Contact - Adult
1	2013-07-15		Reception notes	Brought SJW with her. Baby seemed well as far as he can recall. Certainly no injuries.	Ms F attended morning surgery for consultation GP1 regarding flu-like symptoms.
2	2013-07-15	13:00	Central Ambulance Control log		999 call from Ms F reporting baby is injured and breathing. Paramedic unit dispatched.
3	2013-07-15		Paramedic notes	Infant collapsed. Resuscitation commenced.	Mother sustained facial injuries and is distressed
4	2013-07-15		Notes ref 150389		

You do not always have to update sequence numbers in all the events, as the sort recognises decimal numbers. For example, suppose that you now wanted to put event **4** before event **2** (this might not make sense in terms of the story, but we will do it here just to illustrate the feature).

Replace the **4** in the event with a number between **1** and **2** - **1.5** say:

Ref ⬍	Date ⬍	Time ⬍	Source of Information	Family Contact - Child	Family Contact - Adult
1	2013-07-15		Reception notes	Brought SJW with her. Baby seemed well as far as he can recall. Certainly no injuries.	Ms F attended morning surgery for consultation v GP1 regarding flu-like symptoms.
2	2013-07-15	13:00	Central Ambulance Control log		999 call from Ms F reporting baby is injured and r breathing. Paramedic unit dispatched.
3	2013-07-15		Paramedic notes	Infant collapsed. Resuscitation commenced.	Mother sustained facial injuries and is distressed.
1.5	2013-07-15		Notes ref 150389		

When you press *Update*, the event will be put in the correct place ...

Ref ▲	Date ▲	Time ▲	Source of Information	Family Contact - Child	Family Contact - Adult
1	2013-07-15		Reception notes	Brought SJW with her. Baby seemed well as far as he can recall. Certainly no injuries.	Ms F attended morning surgery for consultation GP1 regarding flu-like symptoms.
1.5	2013-07-15		Notes ref 150389		
2	2013-07-15	13:00	Central Ambulance Control log		999 call from Ms F reporting baby is injured and breathing. Paramedic unit dispatched.
3	2013-07-15		Paramedic notes	Infant collapsed. Resuscitation commenced.	Mother sustained facial injuries and is distressed.

... and then you can update the numbers as described above.

Ref	Date	Time	Source of Information	Family Contact - Child	Family Contact - Adult
1	2013-07-15		Reception notes	Brought SJW with her. Baby seemed well as far as he can recall. Certainly no injuries.	Ms F attended morning surgery for consultation GP1 regarding flu-like symptoms.
2	2013-07-15		Notes ref 150389		
3	2013-07-15	13:00	Central Ambulance Control log		999 call from Ms F reporting baby is injured and breathing. Paramedic unit dispatched.
4	2013-07-15		Paramedic notes	Infant collapsed. Resuscitation commenced.	Mother sustained facial injuries and is distressed

Sequence column conflicts when merging chronologies

Because anybody can add a **Sequence** column it might happen that a chronology you are importing has one but not the one you are importing into, and vice versa.
When such conflicts occur, **Chronolator Integrate** adds a column to the chronology that lacks one.

Chronolator For Word

The **Chronolator Browser Tools** can work with chronologies produced by **Chronolator for Word**.

However, the **Browser Tools** and **Chronolator for Word** use different types of file. This section describes how to transfer chronologies between them.

Transfer from Word to one of the Chronolator Browser Tools

On the Chronolator toolbar, press *Publish > JSON* to produce a file in *JSON* format:
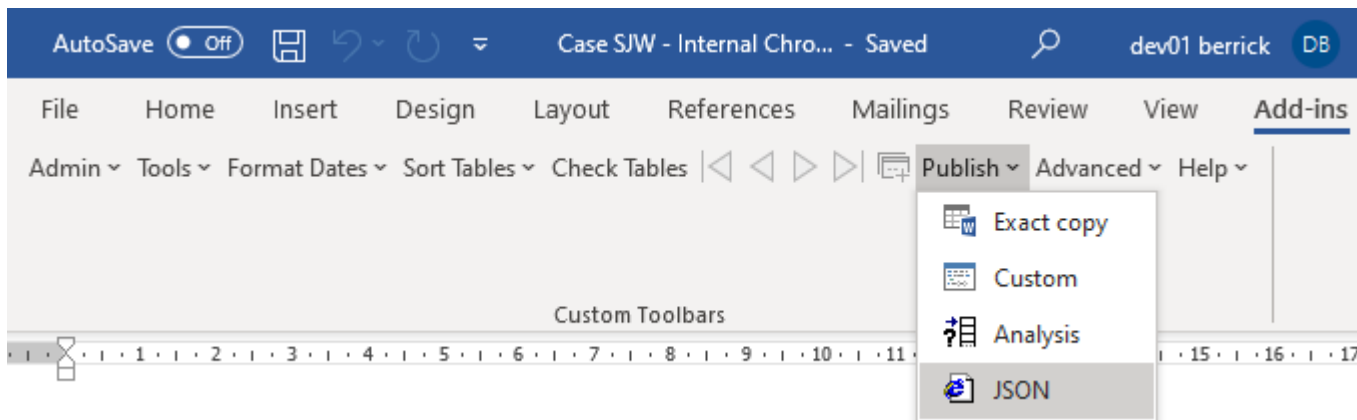
Note that the *JSON* file is unencrypted and readable by humans with a simple text editor. If you want to prevent this, open it in one of the **Chronolator Browser Tools** and save it: this will produce a *txt* file that only the browser tools can interpret.

If you want to further protect the chronology with a password, follow the instructions in the Browser Tool's *Help*.

Transfer from one of the Chronolator Browser Tools to Word (or Excel or other

program)

There are three ways to transfer data from the **Chronolator Browser Tools** to Word:

- use the *Chronolator Conversion Tool*
- import a *JSON* file into a Composite Chronology
- use the Clipboard

Use the **Conversion Tool** if you want to use **Chronolator for Word** features. If you only want to produce a plain Word document, you can use the Clipboard as described above.

Using the Conversion Tool

The conversion tool works on a *JSON* file. To make one, press ***File > System > Export***.

- If you already have a **Chronolator for Word** licence, you will find the Conversion Tool in the ***ChronologySetup*** folder.
- If you do not, you can download it from www.chronolator.com/downloads/download-conversion-tool.htm.

In either case, the aforementioned Web page includes instructions about how to use it.

Importing a JSON file into a Composite Chronology

Chronolator for Word Version 5.00 Composite Chronologies can import *JSON* files, except for the very first one. To start a new Composite Chronology with a *JSON* file, you should download the latest version of the **Blank Composite Chronology** from www.chronolator.com/downloads/download-composite-chronology.htm instead of creating one in the **Online Workbench**.

Using the Clipboard

See Using the Clipboard.

Licensing

The **Chronolator Browser Tools** are licensed software. You can evaluate them without having a licence, but the number of events you can process is limited. You can increase or remove the limit by buying a licence.

> 💡 Documents produced by licensed versions of **Chronolator Define** or **Chronolator for Word** are automatically licensed. Please email *licences@chronolator.com* to obtain a licence for a particular tool.

In this topic

Browser and Document licences
Installing a licence
Licence periods and expiry
Chronolator for Word licences

Browser and Document licences

You can license the tools themselves (a **Browser** licence), or a document that they process (a **Document** licence).

- A **Browser** licence lets you use the tool on any number of Chronolator Documents.
- A **Document** licence lets you open that document in any Browser tool.

When you start using a tool or open a document, Chronolator checks what licences are available and uses the most permissive one it finds.

If no licence is found, a **Limited Licence** is displayed.	**Limited Licence** Thank you for using Chronolator - The Chronology Tool. This limited licence allows you to use it subject to some limitations, such as the number of events a chronology can contain. Chronolator will warn you if you if you are about to exceed such limitations. To remove the limitations, you can buy a licence at _tools.chronolator.com/licensing.htm._ Alternatively, most limitations will be removed if you open a Chronolator Document that has been created by a licensee. Press **OK** to indicate that you accept those terms, or **Cancel** to quit the program. Message Reference: **c9m4000.** You can use this reference to look up more information online or in the product manuals Trace · View Details · Cancel · OK
If a licence is found, the **Licensee** and **Expiry Date** are shown, together with the licence reference and any restrictions.	**Chronolator Licence** Licensee(s): Berrick Computing Ltd Reference(s): C900002 Maximum Events: 1000 Expiry Date: 22 May 2024 Use of this product is subject to the terms of the above licence(s). Press **OK** to indicate that you accept those terms, or **Cancel** to quit the program. Message Reference: **c9m4010.** You can use this reference to look up more information online or in the product manuals Trace · View Details · Cancel · OK

The *Trace* button displays what licences Chronolator has found and which one it is using.

Chronolator Licence

Licensee(s): Croenge Safeguarding
Reference(s): C900004
Maximum Events: unrestricted
Expiry Date: 22 May 2024

Use of this product is subject to the terms of the above licence(s).

Press **OK** to indicate that you accept those terms, or *Cancel* to quit the program.

Here is what it found:

Type	Reference Licensee	Expiry Date	Maximum Events	Least Restrictive
Document	C900004 Croenge Safeguarding	2024-05-22	unrestricted	*
This Tool	C900002 Berrick Computing Ltd	2024-05-22	1000	
All tools	C900001 Berrick Computing Ltd	2024-05-22	500	

Message Reference: **c9m4010.** You can use this reference to look up more information online or in the product manuals

| Trace | View Details | Cancel | OK |

The full terms of the licence can be displayed by pressing the *View Details* button.
Press *OK* to accept the licence terms, or *Cancel* to close the tool or document.

Installing a licence

Licences are supplied with two components: the licensee and the licence itself. For example:

Licensee

[Berrick Computing Ltd]
Licence

[JTdCJTlydmVyc2lvbiUyMiUzQSUyMlYyJTlyJTJDJTIyaWQlMjIlM0ElMjJ
DOTAwMDAxJTIyJTJDJTIybGljZW5zZWUlMjIlM0ElMjJCZXJyaWNrJTIwQ2 9
tcHV0aW5nJTIwTHRkJTIyJTJDJTIycHJvZHVjdCUyMiUzQSUyMmElMjIlM kM
lMjJ0eXBlJTIyJTNBJTIyYnJvd3NlciUyMiUyQyUyMnJlc3RyaWN0aW9u cyU
yMiUzQSUyMjUwMCUyMiUyQyUyMmV4cGlyeURhdGUlMjIlM0ElMjIyMDI
0LTA 1LTIyJTIyJTdEJUMyJThEMjliNjNlYWNlNzE1NDZhNzI5NGEwMTA4M2
ZmYTU 0NDQ4NTU5MDM3Yg==]

Licensee: [Berrick Computing Ltd]

Licence: [JTdCJTlydmVyc2lvbiUyMiUzQSUyMlYyJTlyJTJDJTIyaWQlMjIlM0ElMjJ
CRVJSSUNLQ09NUFVUSU4yMzAzMjMtMjQwMy03MzEyMiUyMiUyQyUyMmxpY2V
uc2VlJTIyJTNBJTIyU2FtdWVsJTIwSm9obiUyMiUyQyUyMnByb2R1Y3QlMjl
lM0ElMjJhJTIyJTJDJTlydHlwZSUyMiUzQSUyMmJyb3dzZXIlMjIlMkMlMjJ
leHBpcnlEYXRlJTIyJTNBJTIyMjAyNC0wMy0yMyUyMiUyQyUyMnJlc3RyaWN
0aW9ucyUyMiUzQSUyMnUlMjIlN0QlQzIlOEQ3ZDFiYjEwYTA2ZTMzZDlmZDU
zYjVjNzM2NDY2Y2RiNTFmZWQxY2Y0]

Each component is in square brackets.

You can install a licence by clicking . In the subsequent display, enter the two components, including the square brackets, and press *OK*:

Install licence

Paste the Licensee and the Licence into the boxes below then press **OK**

[Berrick Computing Ltd]

[JTdCJTIydmVyc2lvbiUyMiUzQSUyMlYyJTIyJTJDJTIyaWQlMjIlM0ElMjJDOTAwMDAxJTIyJTJDJTIybGljZW5zZWUlMjIlM0ElMjJCZXJyaWNrJTIwQ2 9 tcHV0aW5nJTIwTHRkJTIyJTJDJTIycHJvZHVjdCUyMiUzQSUyMmElMjIlMkMlMjJ0eXBlJTIyJTNBJTIyYnJvd3NlciUyMiUyQyUyMnJlc3RyaWN0aW9ucyU yMiUzQSUyMjUwMCUyMiUyQyUyMmV4cGlyeURhdGUlMjIlM0ElMjIyMDI 0LTA 1LTIyJTIyJTdEJUMyJThEMjliNjNlNYWNlNzE1NDZhNzI5NGEwMTA4M2ZmYTU 0NDQ4NTU5MDM3Yg==]

Cancel   OK

Licence periods

A Chronolator licence is valid for a specified period:

- ⊚ **Browser** licences are valid for the period chosen upon purchase.
- ⊚ **Document** licences created by the **Chronolator Define** tool are valid for up to six calendar months from the day they are created, subject to a maximum of one month after the **Chronolator Define** tool licence expires.
- ⊚ **Single Case Document** licences created by Berrick Computing Ltd under the terms of a Single Case licence are licensed for the period agreed with the purchaser.

What happens when a licence expires

When a licence expires, you will be prompted to install a new one when opening the tool or document. The tools continue to function, but with some

limitations:

- Most tools open in 'Read Only' mode, in which you cannot add or change events in the chronology. If you do not wish to install a new licence, it is still possible to export the complete chronology to another program using *JSON*.
- In the **Chronolator Define** tool, it is not possible to create a licensed document.

FAQ

Can I work offline?

Yes. The first time you use the tool, it is downloaded and stored in your browser.

💡 If you clear your browser storage, you will need to visit tools.chronolator.com to download the relevant tool again.

I pressed *Save* or *Export* to save my work, but I can't find the saved file

Depending on your browser settings, your work might automatically be saved in your usual **Downloads** folder.

If you want to be prompted to save it in a particular place, search for instructions relevant to your browser, using a search such as *get browser to prompt for download location*.

How do I get the latest version?

If you are connected to the Internet, your browser checks if there is a later version and should automatically download it.

If the automatic update does not work, you can force an update by clearing your browser cache. Before you do that, **save your chronology in your computer's** *file system*, as work saved only in the browser will be lost.

Save the chronology in your File System

See above for information about saving to the *file system*.

Clearing the browser cache

At the time of writing this **Help**, you could clear your browser cache in **Chrome**, **Edge**, and **Firefox** as follows:
- press *Ctrl+Shift+Delete* simultaneously on the keyboard. In the resulting panel:
  - In **Edge** and **Chrome**, clear *Cookies and other site data*.

- In **Firefox**, clear *Offline website data*.
- Close the browser and reopen it.
- Restart the Browser Tool you want to use.

How secure is my chronology? Can I password-protect it?

Your chronology is stored in a compressed text format that can only properly be understood by one of the **Chronolator Browser Tools**. If you open the file in **Notepad** or any other text editor it appears to be nonsensical. However, anyone can use one of the **Chronolator Browser Tools** to read it.

You can also password-protect the file, which encrypts it even further. A **Chronolator Browser Tool** will require the password to be supplied before decrypting and opening it.

See Common Tasks for how to set, change, or remove a password.

Can I save the chronology in a way that does not require one of the Chronolator Browser Tools to open it?

You can do this in two ways:

- Press the *Print* button above the chronology table to display it in a new browser tab, and then use the browser's print facilities to print it to a physical printer or save it as a **PDF** or other file.
- Use the **Clipboard** to transfer it to another program as described next.

Can I save the chronology as a Word document?

Your chronology is stored in a format that can only properly be understood by one of the **Chronolator Browser Tools**.

You can save a copy in **Microsoft Word**™ or a similar program by copying it to the system **Clipboard** and then pasting it into another program. See Using the Clipboard.

You can also use the *Chronolator Conversion Tool* to convert a *JSON* file to a macro-enabled Word document, but note that you must be allowed to run Word macros to do this. See Chronolator For Word above.

What will happen to the Word version of Chronolator?

Chronolator started life in 2000 as a **Microsoft Word**™ application. Since then, technology has moved on and the **Chronolator Browser Tools** have taken on

most of its functions. A few minor features are yet to be migrated, so a limited version of **Chronolator for Word** remains available at www.chronolator.com/for-word.htm. A more modern implementation of it providing better integration with the Browser Tools is being investigated.

Please see Chronolator For Word above for details about using **Chronolator for Word** and the **Chronolator Browser Tools** together.

File types and security

Chronolator Integrate can process two types of file: *JSON* (JavaScript Object Notation) and *txt* (simple text).

- *JSON* files provide a 'bridge' between **Chronolator Integrate** and other programs such as **Chronolator for Word**. *JSON* is the least secure format, insofar as anyone with a text editor can open and make some sense of the file.
- *txt* files are produced when you save a chronology with one of the tools. If opened in a text editor, the text appears to be nonsense. However, anyone who uses one of the tools will be able to read it. If you want to, you can protect the file with a password by following the instructions under **Setting, changing, and removing a password** in Common Tasks.

Glossary

A

Abbreviations Glossary
Contains a list of Abbreviations and Definitions. The list can be used by the **Extended Search** feature.

Author Notes
A chronology can be annotated with **Author Notes**. To create one, add an event whose **Source of Information** begins with one of the characters # ^ ¬ ~ .

B

Browser Licence
A licence that is installed in a Chronolator tool and applies to any document opened in that tool.

C

Case Details Wizard
The wizard in **Chronolator Define** that is used to define a new Chronology Document.

Case Reference
An identifier for a particular case. Prevents accidentally merging chronologies for different reviews.

Chronolator Conversion Tool
The Conversion Tool converts a *JSON* file to a **Chronolator for Word** Document. It can be downloaded from www.chronolator.com/downloads/download-conversion-tool.htm.

Composite Chronology
A chronology containing information pertaining to several agencies or organisations. Sometimes referred to as an Integrated chronology.

Context Menu

A small menu that is displayed when you right-click on some items.

Cookies

Chronolator uses cookies to maintain the integrity of your data and to store your preferences about such things as the appearance of the tool. Cookies do not contain any data to identify you as a person and are never sent to the Internet.

D

Document Licence
A licence that is installed in a document and lets you open that document in any Browser tool.

F

File system
The place where your computer stores files. Can be a hard drive on your computer or on the network, or possibly in the 'cloud'. Basically whatever Windows users see in **File Explorer**, and Mac users in the **Finder**.

I

Integrated Chronology
A chronology containing information pertaining to several agencies or organisations. Sometimes referred to as a Composite chronology.

Internal Chronology
A chronology containing information pertaining to a single agency or organisation.

J

JSON
JavaScript Object Notation. A text-based format for storing and exchanging data. Can be read by any text editor, such as **Notepad**.

P

Presentation Area

The area underneath the Ribbon.

R

Ribbon
The area at the top of the window that contains tabs and buttons.

S

Sequence column
A column at the left of the chronology table that contains reference numbers.

T

txt
A text file produced by one of the **Chronolator Browser Tools**. Although simple text, only the Tools can make sense of it.