CALUMO is a Multi-dimensional Business Intelligence Software tool powered by Microsoft SQL Server Analysis Services at its core. UNSW use this Calumo/Microsoft solution to deliver budgeting, forecasting, management reporting and financial/business modelling.

It offers world class data analysis capabilities with a multitude of delivery platforms including: Web, Excel, Word, PowerPoint and PDF.

The Calumo system currently provides over a dozen different cubes for data analysis. These include:

- Finance
- HR
- Leave
- Payroll
- Credit Card
- Accounts Payable
- Student
- Energy
- Donation
What data is in Calumo

- Financial – General Ledger and budgeting information from NS Financials
- Student – Student Revenue from Info Hub
- Human Resources – People Costs from PiMs
- Leave – Leave details from PiMs
- Spend Analysis – Accounts Payable & Credit Card data from NS Financials
- Donate – UNSW Foundation information from NS Financials
- Student Accommodation – loads from StarRes
- Energy – Energy meters from Estate Management
- Service Desk – information from the CASD ticketing system

What data is in Calumo?
How often is Data Refreshed

• On the landing page when you log into Calumo is a schedule of when data is refreshed.

• It is also noted if there are any outages or delays (in the status column). If the status is green then everything is running normally, otherwise an explanation will be provided.

<table>
<thead>
<tr>
<th>Reporting Cube</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>Green</td>
<td>Balance load and journal loads occur every hour between 8:02am and 10:32pm on 7 days a week</td>
</tr>
<tr>
<td>HR</td>
<td>Green</td>
<td>July 2017 data loaded Casual FTE calculation has changed from January 2017 to be in line with PiMs reporting. Please refer to HR App FTE explained for more information</td>
</tr>
<tr>
<td>Leave</td>
<td>Green</td>
<td>Leave updated daily</td>
</tr>
<tr>
<td>Payroll Summary</td>
<td>Green</td>
<td>Updated every second week by paydate as per payroll calendar</td>
</tr>
<tr>
<td>Student</td>
<td>Green</td>
<td>Updated daily 9:30pm</td>
</tr>
<tr>
<td>AP &amp; Spend Analytics</td>
<td>Green</td>
<td>Updated daily 6am</td>
</tr>
<tr>
<td>Credit Card</td>
<td>Green</td>
<td>Workflow status updated every three hours from 7:30am Transactions updated every eight hours from 4am</td>
</tr>
<tr>
<td>Foundation/Raisers Edge</td>
<td>Green</td>
<td>Foundation updated every two hours between 5:52 am and 6:52 pm Raisers Edge updated daily at 9:30pm</td>
</tr>
</tbody>
</table>

Above is an example of how the schedule looks.
Get access to Calumo

To request access to Calumo complete the NS Financials Access Request form.

The Calumo section is underneath section 3 where you can specify what access you require and what department/school/faculty’s data you want to see.

If you need assistance completing the form please contact the IT Service Desk and ask to be directed to a NSS Security team member.

If you are a researcher and are listed as a Lead CI in InfoEd, you will automatically be given access to your project in Calumo once your grant is successful.
Log into Calumo

1. Go to the Finance website
   www.fin.unsw.edu.au

2. Hover over the login link to the top right of the page so that the drop down list of system logins appear

3. Click on Calumo

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1. What is Calumo
2. What Data is in Calumo
3. How often is data refreshed
4. Get access to Calumo
5. Log into Calumo
6. When your password changes
7. Common Reports
8. Add to your favourites
9. Drawers
10. Data Drawer
11. Apps Drawer
12. Library Drawer
13. My Drawer
14. Calumo Tabs
15. Document Types
16. Data Explorer
17. Member Explorer
18. Spreading
19. Excel Client
20. Client Ribbon
21. Skylights
22. Working with Views
23. Drilling
24. Understanding Drills
25. Troubleshooting
26. UNSW Reports
27. Need Help?
When your zPass changes you may be required to change the credentials in your Excel Client too.

To do so you need to open Excel, go to the Calumo Options and change the credentials:

1. Click on the Calumo menu
2. Click on Options
3. Click on Clear Credentials
4. Enter new credentials
5. Click on Connect
6. Save (this will appear once you’ve connected)
There are some Quick Links to popular reports at the bottom of the Calumo landing page when you log in. Click on a report, if you have run it before it will produce a report based on the criteria you last entered.
Add reports to your favourites

When you've run a report in Calumo you can press the star icon in the ribbon to add the report to your favourites. You need to be in the report you want to add to your favourites at the time.

To view your favourites click on My in at the top left of the page.
CALUMO is all about getting the information you need, at the right level of detail.

To start, we are presented with 5 main options (along the top) - Recent, My, Library, Apps and Data. These options are referred to as 'Drawers'.

If you are looking for something in particular, however, the simplest option may be to Search for it.

**Recent Drawer** is a handy list of the last few documents that you have viewed.

**My Drawer** shows items that are specific to you - private documents and favorites.

**Library Drawer** shows everything that has been made available to everyone (i.e. public).

**Apps Drawer** shows Apps (which are groups of items) - and might contain everything you need, if the App is created for you.

**Data Drawer** is for more advanced users who want to navigate data via cubes (and use Data Explorer).
The **Data** drawer allows the advanced user to navigate through datasource, catalog and cubes.

- It is also the place where you can maintain dimensions if you have the right level of access.
- Saved views appear here as children of their owner Cube.

Our cube is called **UNSWMIS** (UNSW Management Information System).
The Apps drawer shows all Apps available to the current user.
The **Library** drawer contains everything that has been made available to everyone by an administrator (i.e. public).

Documents are still subject to CALUMO Group Security, so any given user may not be able to see documents that have been restricted to a limited set of users.
Your “My” drawer contains your favourites as well as any private reports or views you have.

To add a report to your favourites, be in the report and (1) look for the star in the top ribbon and click it. When you next use your (2) My drawer you will see the report listed in your favourites.
Each option shows a hover tip as a description of their function - a full description is tabled below:

- Send an email (using your default email client) with the URL of the tab selected as the body text
- Copy the URL of the document to the clipboard
- Open the document in a New Browser Window
- Refresh/reload the document
- Close all other CALUMO tabs

CALUMO tabs provide a multi-window environment. The tabs function in a similar way to browser tabs (such as in Chrome and Firefox), but also provide custom CALUMO features.
CALUMO uses icons to represent the various document types that are used - as a visual guide to identification.

The table to the right matches icons to a description of the document type, for reference:

- Icons that are **green** indicate that the item is **public**
- Icons that are **orange** indicate that the item is **private**
The Data Explorer provides a way to analyse your data, to start using it open and existing Data View or look for the Finance cube in the Data Drawer.

Click on Data in the top ribbon and expand until you see UNSWMIS where you will find the Finance cube.

Once you’ve chosen your view or cube you can use the Member Explorer to narrow down the criteria for your report.
Once you are in your report you use the Member Explorer to narrow down the criteria for your report (open the member explorer by double clicking in a searchable field).

1. Type a keyword into the search field and click on search.

2. You can add criteria by clicking on it and then the tick in the toolbar (or dragging it to your cart) before pressing the OK button.

3. To remove criteria merely highlight it and click on the minus icon before pressing the OK button.

The field you double clicked in to open the Member Explorer will give you an indication of what your should look for – i.e., employee, entity, date, etc. There is also an ALL option where you can choose to view ALL members (you just have to search for ALL instead of other data).
Spreading

In a report or view you may want to alter the numbers as part of your process, e.g. when you are performing budgeting or forecasting. CALUMO allows you to easily and accurately achieve this by utilising the Spread functionality.

A spreading action is started by selecting a range of cells using click and drag to draw a box around the cells that you want to act on. When you do this, the additional spreading menu will appear:

A spreading action is started by selecting a range of cells using click and drag to draw a box around the cells that you want to act on (1), when you do this, the additional spreading menu will appear then you can specify the amount to spread (2), select a spread type (3), apply it to the selection (4), or copy it (5).

(Once you are happy with the result of the spreading, you can write back these changes by selecting the Update button in the toolbar of the report or the view)

<table>
<thead>
<tr>
<th>Spreading Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add To</td>
<td>This spread allows you to add a figure to the numbers across the range</td>
</tr>
<tr>
<td>Down by % of</td>
<td>This spread allows you to decrease the figures by a certain percentage</td>
</tr>
<tr>
<td>Even</td>
<td>This spread allows you to use a number evenly across your range</td>
</tr>
<tr>
<td>Percentage of</td>
<td>This spread allows you to add a percentage figure across the range</td>
</tr>
<tr>
<td>Proportional</td>
<td>This spread allows you to add a figure across the selected range proportionally</td>
</tr>
<tr>
<td>Subtract from</td>
<td>This spread allows you to subtract a figure from the numbers across the range</td>
</tr>
<tr>
<td>Up by % of</td>
<td>This spread allows you to increase the figures by a certain percentage</td>
</tr>
</tbody>
</table>

Spreading actions on a set of selected cells will always be applied left to right then top to bottom
CALUMO incorporates addins for Microsoft Office products - Excel, Word and Powerpoint (referred to as client software because it is installed on each user's computer).

**Excel** - The Excel Client allows you to use custom (CALUMO) formulas to view and manipulate your data and also publish worksheets to the web as live reports.

**Word and Powerpoint** - The Client for Word and Powerpoint is called Skylights and is used to add live CALUMO reports to documents or slideshows that can be refreshed and updated with the latest data - so that documents with many reports can simply be "refreshed" instead of regenerated with updated content each time.

You can download the CALUMO Excel Client by clicking on the Manage icon when you are logged into Calumo.
**Browse** - opens the CALUMO web application in your default browser

**Drill Through** - allows you to view, copy and slice the underlying transactions that form the basis of a particular value in a cell

**Publish** - publishes the current worksheet as a public report in the CALUMO Explorer Tree (Publish Administrators only)

**Private Publish** - publishes the current worksheet as a private report

**Deploy** - deploy an OLAP catalogue to CALUMO using the current PowerPivot workbook

**Formula** - discover and insert CALUMO formula

**Charts** - insert an interact chart for use in a CALUMO Published Report

**Hyperlink** - copies the URL of the current view so others can display it without having to be a CALUMO User. However, to view a published report, you must have access to the database

**Members** - allows you to pick members from any hierarchy and put that selection on the current sheet cells either horizontally or vertically.

**Sparks** - allows you to easily create CALUMO SPARKS in-cell charts including: Axis, Bar, Bullet, Grid, KPI, Line, Pie, Progress, Strip and Trend Arrow charts

**Action** - are components you can add to your report to perform specific tasks. This task is backed by a Stored Procedure that you have written and authorised

**Format** - format the numbers in your sheet

**Clear Writebacks** - allows you to cancel your writeback changes so your data reverts to its state since the last calculation. Only unsaved Writeback Values will be cleared

**Clear CALUMO Formula** - clears all of the formulas in an Excel worksheet, giving you the option of saving it to a new workbook or clearing your existing one

**Pause CALUMO** - pause or resume the CALUMO calculation engine
**CALUMO Skylights** is an Office addin for **Word** and **Powerpoint** that allows you to treat ordinary Pictures as dynamic web pages - called Skylights

Once a Skylight is inserted, it is possible to refresh all Skylights (to retrieve the latest data) within a document, all at once. This is particularly useful in creating documents, such as financial reports, that need to be recreated at regular intervals but usually have to be recreated from scratch every time.

If a document contains, say, 50 or more Skylights rather than plain Pictures, then they can all be positioned and sized in a certain way and then refreshed using Skylights so that the underlying URL is refreshed (e.g. a CALUMO report) to contain the latest data. Using Skylights, you can keep one single document and just refresh it, to reproduce ongoing reports.

Without Skylights, each of the 50 images would need to be recaptured and re-inserted into a new document - a significantly more time-consuming task.

There are a number of other features to enhance the usefulness of Skylights, such as being able to Mask Skylights so that documents can be shared while being restricted to those with permissions to see the underlying page or data.
A data view is a saved Data Explorer session. Once you have clicked on the Data Drawer and navigated to the UNSWMIS directory – any report you click on is a saved view. You can choose a view you like, edit it to your needs and save it as a private view for you to use in the future.

1. Recalculate (F9)
2. Clear any pending writebacks
3. Toggle Auto Calculation
4. Save your view
5. Clone your view
6. Undo last action
7. Redo the last action you un-did
8. Hide empty rows
9. Hide empty Columns
10. Enable visual data discovery
11. View MDX
12. Flip columns and rows around
13. Drill on the selected cell
14. Download to Excel
15. Download to PDF
Drilling

When working on CALUMO online (not the Excel Client) you can double click on a cell to drill down to further detail.

When you are viewing a report in Excel you can go to the CALUMO menu and click on the Drill Through menu item on columns identified with a star to view transactional detail.
Understanding Drills

1. The default drill is to General Ledger Journals, however by clicking on the tabs you can view transactions from Accounts Payable, Accounts Receivable, Human Resources, etc.

2. You can also export the details to Excel.

3. View the transactions that make up the amount you drilled to. You can click on headers to sort or click on for more ways to analyse your data.
Troubleshooting

• Object error when opening the member explorer – you might get this error for one of two reasons. 1) you have disconnected from Calumo (go to the Calumo menu in Excel and reconnect) or 2) your credentials have changed (go to the Calumo menu in Excel, clear your credentials and log in again).

• Login asking for email address instead of user name - This happens either when Calumo is installed without giving a correct server name or the user is using another computer that has already been used by someone else, but logging with their own user id. This is because the client settings file is stored under the user’s profile on the computer and doesn’t get copied to the new computer or user. You will need to manually configure the server connection. Go to the Calumo menu in Excel, click on Clear credentials, tick the manually configure server connection, enter https://www.calumo.unsw.edu.au/calumo/calumo, enter your credentials (Domain is ADUNSW) and connect. You will find more detailed instructions on the Calumo FAQs page (link provided on the top right)

• Installing Calumo on your computer – if you are on a SOE computer you will need desktop support to install the client. If not you can download the client once you have logged into Calumo and clicking on the manage icon at the top right of the screen. When prompted for the url use https://www.calumo.unsw.edu.au/calumo/Calumo.

• Calumo add-in not working – when the add-in isn’t working you will see #VALUE in your sheet. Click on Calumo FAQs at the top right of this page to view the documentation entitled “Calumo add-in not working”.

• Calumo disabled in Excel – you will no longer see the Calumo menu in Excel. Click on Calumo FAQs at the top right of this page to view the documentation entitled “Calumo disabled in Excel”.

• Enable Macros – when you open an Excel based report you should be prompted to enable your macros (you need to say yes when prompted), but if for some reason you need to enable them manually you can find the instructions here.

To improve performance set your calculation to manual (particularly when using files with Macros)

Mac users need to use Citrix for Excel reports (but not for web based reports – these can be used as per normal on a Mac)
UNSW Reports

- Project Financials
- Credit Card Dashboard
- Financial Reports (for schools or units)
Need Help?

Contact:
The Finance Help Desk
financehelp@unsw.edu.au

Finance Guidance
fti@unsw.edu.au

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