

# PatBase Analytics V2 Guide

#### **Table of Contents**

ABOUT PATBASE ANALYTICS	2
ACCESSING ANALYTICS	2
ANALYSIS CHOICES	2
ANALYSIS SETTINGS	3
DASHBOARD PAGE, WIDGETS AND MAIN SETTINGS	4
Dashboard page	
MAIN SETTINGS	6
CHART SETTINGS	10
SHARING A GRAPH	11
ANALYSING DATA BY JURISDICTION	12
ANALYSING DATA BY YEAR	14
ANALYSING DATA BY ASSIGNEE	16
ANALYSING DATA BY INVENTORS	18
ANALYSING DATA BY CLASSIFICATION CODES	19
ANALYSING DATA BY AGENTS	20
ANALYSING DATA BY LEGAL STATUS	21
ANALYSING BY KEYWORD	22
Cluster Rules Keyword clustering visualisations Landscapes	23
CITATION ANALYSIS	28
CITATION NETWORKS	30
REVIEWING SAVED SEARCHES	33
COMPARISON ANALYSES	34
RUNNING BASIC, ADVANCED & NUMBER SEARCHES	36
AUTOMATED REPORTING	37
EDITING THE REPORT TEMPLATEREPORT SETTINGSHIGHLIGHT ASSIGNEES/JURISDICTIONS	42
DOWNLOAD, EXPORT, PRINT OR SAVE GRAPHS	44
CONTACT US	45

Page 1 of 45
PatBase Analytics V2 Guide support@minesoft.com

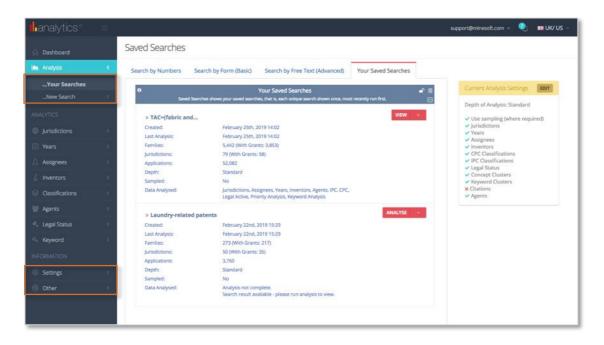
### **About PatBase Analytics**

PatBase Analytics offers fast analysis of up to 250,000 PatBase records in one go. It is included, at no extra charge, with every PatBase subscription.

# **Accessing Analytics**

Access PatBase Analytics from the "View" or "Hits" mode from this icon found at the top of the records within PatBase. Alternatively access PatBase Analytics from the "More..." option found on the History page for all search queries.

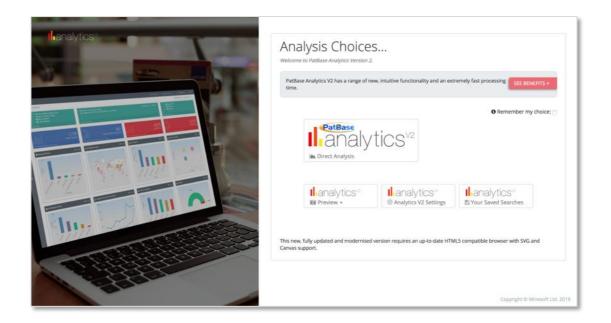
An additional entry point for PatBase Analytics is to visit the Analytics interface directly (as long as you are logged into PatBase) where you can modify the settings, run searches, and re-run previous saved analyses, you can log-in directly to Analytics V2 using your usual PatBase account.



### **Analysis Choices**

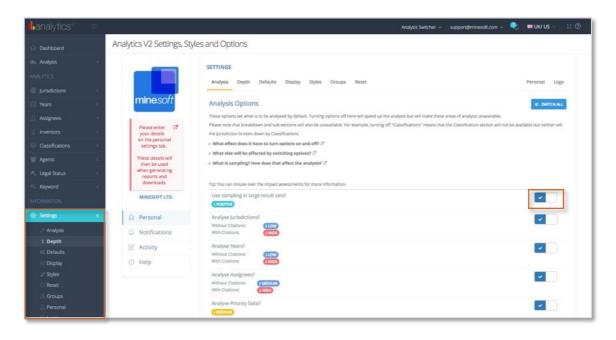
After selecting "Analytics" in PatBase, PatBase Analytics will open in a new tab in your browser. Here you can select whether you wish to access V2 directly, or go to the settings page, where you can customise your analysis.

Alternatively, you can access a preview which will analyse and take you to the main page for the selected section only, or you can choose to go directly to your saved searches. There is a box you can check to remember your choice for future visits.



### **Analysis Settings**

The Settings menu allows you to modify your Analytics settings to adjust what is and is not analysed, the depth of the analysis conducted (Basic, Standard or Deep), the default settings (which are remembered for your next Analytics session), the style and colour of the charts, and the assignee and jurisdiction groups. Furthermore, there is the option to Reset one or more of your settings.



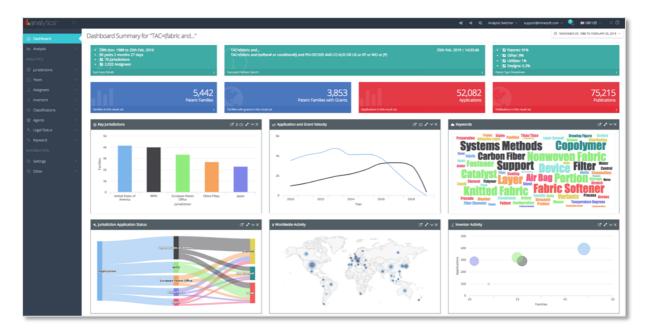
### Dashboard page, widgets and main settings

### **Dashboard page**

The Dashboard page provides an overview of your analysis, which is detailed in individual widgets. A selection of widgets will automatically be displayed when accessing PatBase Analytics.

### Widgets

The widgets in the Dashboard provide a visual summary of the data analysed and will vary depending on the data analysed (based on your settings).



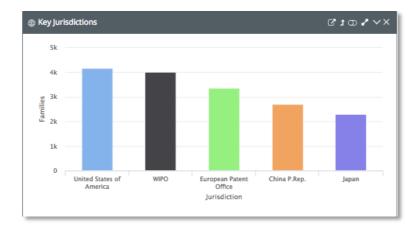
The Dashboard also provides some basic details of your analysis, the first and last publication date in the result set, the executed PatBase search, the type of data and the number of families, granted patents, applications, and total publications within the result set.

Furthermore, the search name (generated or user created), the date and time of the analysis, and the actual PatBase search time is shown. There is the ability to filter the data by jurisdiction, assignee, date or patent type by clicking on the filter icon and selecting the appropriate filters.

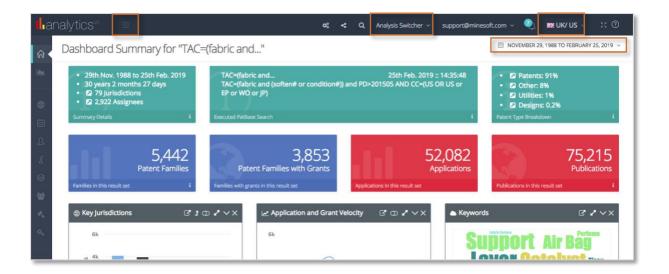


Each widget can be minimised or closed by clicking on the icons in the top right-hand corner of the widget. Clicking on the link icon within a widget takes the user to the corresponding detailed chart.

You can also view the chart in full screen view by selecting the expand (arrows) icon, use the toggle to show or hide the data labels for each metric (where applicable) or choose whether to display the bars as horizontal and vertical (where applicable). Clicking on the link icon within a widget takes the user to the section of AnalyticsV2 where you can fully investigate all of the available data.

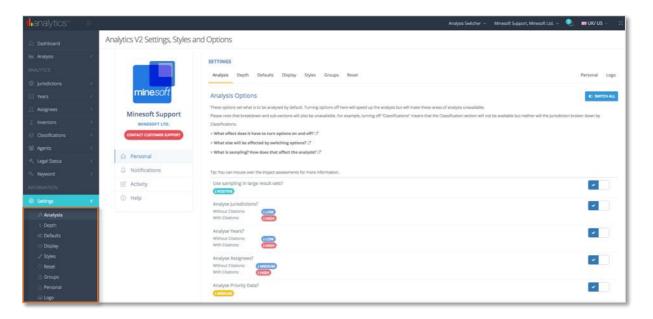


Additional functionality exists within the Dashboard to maximise the user experience including the ability to (see next page): minimise the main Analytics menu (1), switch between Analyses within your current PatBase session (2), select the primary chart default setting which provides different levels of insight (numerical, breakdown or graphical) (3), filter your analysis by publication date (4), and to change the language of the interface (5).



### **Main settings**

You can access the "Settings" page in the Analytics menu, where you can modify the data analysed in Analytics, the depth of the analysis, display settings, and reset your settings. Furthermore, you can personalise Analytics by adding your name, company, and a photo or logo.



### **Analysis**

Within the Analysis section you have the option to turn on or off the data which is analysed in PatBase Analytics (e.g. jurisdictions, assignees), and whether sampling is used for large result sets (over 25,000 families). Note that turning off the analysis of types of data which are not of interest will speed up the analysis to varying degrees, and this has been indicated by the labels:

low, medium and high. Turning off the analysis of keywords or legal status for example, will significantly reduce the time needed to complete the analysis.

The sample, when used, is selected from the families of your result set. Therefore, if the same family population is sampled on numerous occasions, the analysis will not always be identical, but it would bracket the true population within the selected error margin at the selected confidence level (both of which will vary given the size of the population).

### Depth

The depth of the analysis can be adjusted by selecting either "Basic", "Standard", or "Deep":

- Basic basic analysis including dashboard widgets and *Summary* sections
- Standard deeper analysis, with secondary breakdowns, drilldowns and open secondary series charts
- Deep full analysis, including ternary breakdowns and drilldowns. The finest available granularity; down to individual events and publications (where available)

Please note: the depth of analysis selected will influence the speed of the analysis and the data available for review.

Please note: clustering and random sampling is used in some cases. For example, if your result set includes tens of thousands of legal events, it is simply not possible to plot them all on a meaningful chart (the chart may become confusing, and in some cases unintelligible). To overcome this, we will plot a number of points - representative of the whole - that allows for an accurate interpretation of the full population.

#### **Defaults**

The Defaults section allows you to select the default settings for the charts, jurisdiction & legal status categories, dashboard, general layout & comparison analyses.

This includes three levels for the primary chart default settings, which have been designed to accommodate a range of users and requirements:

*Numeric*: this option will default charts to the simplest available chart type. The default will be to show a simple numeric representation of the data (for example the number of assignees in a jurisdiction, or the number of years in which a grant has been issued). Designed for the user that wants to focus on the basic numbers.

*Breakdown*: this option will show a breakdown of the data with the second dimension of data visible by default (for example specific assignees in a jurisdiction will be shown, or the years in which a grant has been issued). Designed for the user that wants to get stuck straight into the data breakdowns.

*Graphical*: this option will default your charts to show a more graphical, visually interesting representation of the data. The default will be to show the data in a variety of forms, using a range of charts and layouts, focusing more on the visual aspect than the other two options (for example less common chart types and 3D options where available will be used). Designed for the user that wants to create and download charts for presentations and reports, especially useful when the opportunity exists to present and explain the data, providing the possibility to be a little more creative with the chart's look and feel.

### Display

Select what data and charts are displayed by default on the Dashboard page.

Styles

Change theme settings & chart style to adapt the look & feel of PatBase Analytics V2.

### Groups

Within the groups section, you can:

- Turn on and off your groups (these can be also be individually turned on and off in specific graph settings)
- Download/upload group files by using the blue download/upload icons
   Note that groups can be shared with colleagues
- View your groups by clicking the pop-up icon (or the group counter)
- Manage how the groups appear in your graphs, i.e. bold, italic etc.
- (To edit the groups themselves, please visit the related section)

#### Reset

Reset one or more of your settings, these include: Analysis Settings, Display Settings, Your Personal Settings.

Please note: by using any of these reset methods, you will permanently lose the relevant current setting.

Page 8 of 45
PatBase Analytics V2 Guide support@minesoft.com

### Personal & logo/avatar

Personalise your analytics display and reports by adding your name, company and photo or logo.

We recommend either a passport style photo if this is to be your report, or your company logo if you'd like company branding on your reports.

Please note: your image will be resized to  $130 \times 130$  pixels - to retain the correct aspect ratio you may like to crop and or resize your image before uploading it.

#### Shortcuts

To aid navigation around Analytics there are a number of keyboard shortcuts available. To use these shortcuts, hold down the [Ctrl] and [Alt] keys, and then press one of the following:

R Reset current graph Re-run the current analysis Α S Go to your saved searches Go to the analysis settings D F Force full re-analysis 1 Reanalyse at the *Basic* depth 2 Reanalyse at the Standard depth 3 Reanalyse at the *Deep* depth В Switch to *Breakdown* display Ν Switch to *Numerical* display G Switch to *Graphic* display



### **Chart Settings**

Charts are available in numerous types and forms, such as column, pie, scatter etc., with the most appropriate display as the default setting. This can be changed by using the options in the "Chart Settings" menu at the top of each graph. In the "Type" tab, you can select the chart type and, depending on the type selected, modify the chart by selecting the options and 3D settings.



Within the chart settings you can also modify the "Titles", "Layout", and "Data" shown, including the ability to edit and apply jurisdiction and assignee groups. There is also a button which allows you to view the raw data on which the chart is based. From the raw data tables, you have the ability to view or take the specific data back into PatBase by clicking the data in question.

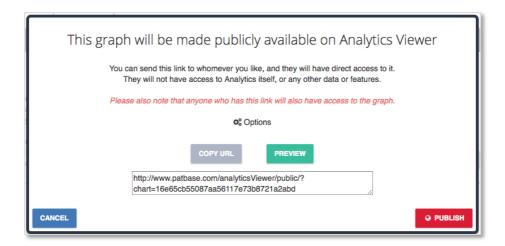


Finally, within the chart settings, you can export, print a chart, or share a chart with a colleague using the Generate Share Link function (See also: "Download, export, print or save graphs" on page 37).

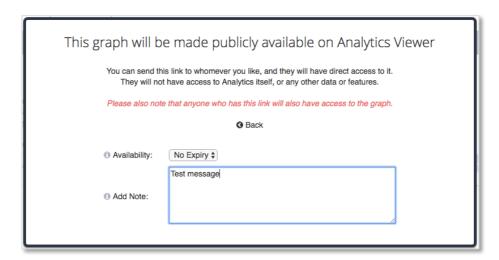


### Sharing a graph

Clicking on the "Generate Share Link" button launches a pop-up window where you can preview the chart you are sharing, copy & share the URL, and publish the chart so that it is accessible publicly

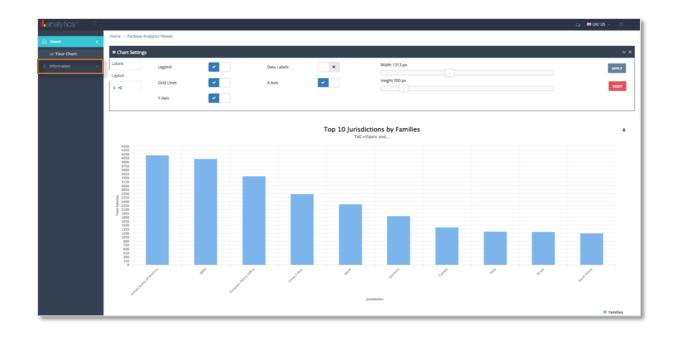


The options link allows you to add an expiry date for the public chart and add a note for the recipients. Once added, click "Back" and either preview or publish your final chart.



Be sure to publish the chart to make it available publicly. If you only preview the chart a warning message will appear at the top of the chart reminding you to publish the chart.

The PatBase Analytics Viewer allows the recipient to view the chart shared and make minor alterations to the chart layout via the chart menu. They are also able to find out more information about PatBase Analytics and Minesoft via the "Information" option.



# Analysing data by jurisdiction



Clicking on Jurisdiction in the Analytics menu reveals the Jurisdiction menu where the following options are available:

### Summary

A chart showing the number of families, applications, grants, and priority filings that have been filed in a specific jurisdiction. Data for families is represented by one or more publication(s) having been filed in a specific jurisdiction, and data for priority filings shows the number of families by earliest priority jurisdiction.

The "Chart Settings" allow you to select the data visualised in the chart and the type of chart, as well as edit the jurisdiction groups.



### Jurisdiction by assignee

A chart showing the number of families, applications or grants (selected from the chart settings) filed by the top assignees in a specific jurisdiction.

#### Jurisdiction by classification

A chart showing the number of families, applications or grants (selected from the chart settings) within a specific technology area (based on IPC and CPC classification codes) or with a specific IPC/CPC classification code that have been filed in a specific jurisdiction.

### Jurisdiction by year

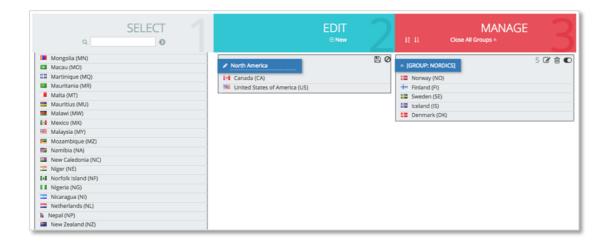
A chart showing the number of families, applications or grants (selected from the chart settings) filed over the past number of years in a specific jurisdiction.

### Jurisdiction by legal status

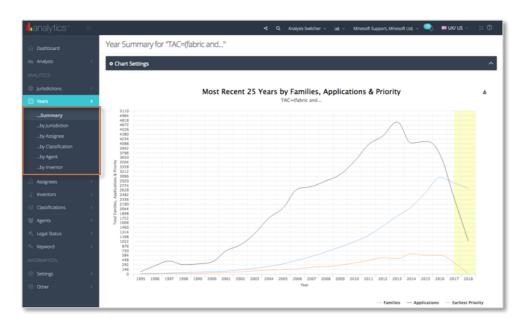
A chart showing the number of families, applications or grants (selected from the chart settings) filed in a jurisdiction, broken down by the latest legal status event group (e.g. LSPB = published, LSGT = granted etc.).

Please note: In the cases of jurisdiction/families and jurisdiction/applications, the total count of jurisdiction hits may exceed the total number of families and applications being analyses. This is because one family may have publications and/or applications in multiple jurisdictions.

Jurisdictions may be grouped using the jurisdiction grouping dialogue which is accessible from the "Data" tab in all Jurisdiction sections.



### Analysing data by year



Page 14 of 45
PatBase Analytics V2 Guide support@minesoft.com

Clicking on "Years" in the menu reveals a menu where the following options are available:

### **Summary**

A chart showing the number of families, applications, grants and priority filings that have been filed each year for the last number of years. The chart shows the number of families with published activities in any given year, the number of priorities by earliest (filing) date, the number of applications by application date and the number of granted patents by grant date. Note that the chart settings allows you to select the data visualised in the chart and the type of chart.

### Years by Jurisdiction

A chart showing the number of families, applications or grants (selected from the chart settings) which have been published over time in the top jurisdictions.

### Years by Assignee

A chart showing the number of families, applications or grants (selected from the chart settings) which have been published over time by the top assignees.

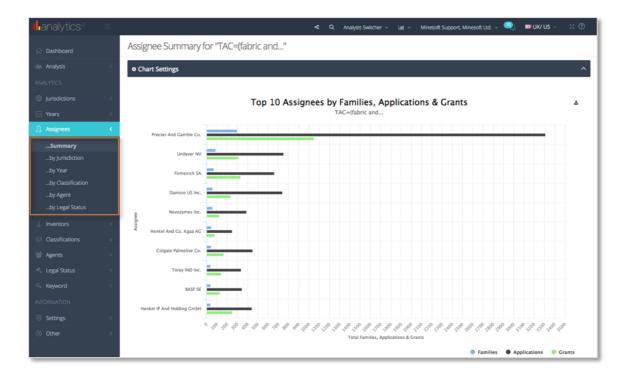
### Years by Classification

A chart showing the number of families, applications or grants (selected from the chart settings) which have been published over time in the key technology areas (based on IPC and CPC classification code) or with the top IPC or CPC classification codes.

### Year by Inventor

A chart showing the number of families, applications or grants (selected from the chart settings) which have been published over time by the top inventors.

### Analysing data by assignee



Clicking on "Assignees" in the menu reveals a menu where the following options are available:

# **Summary**

A chart showing the number of families, applications and grants that have been ordered by the top assignees.

### Assignees by jurisdiction

A chart showing the number of families, applications or grants (selected from the chart settings) which have been filed in the top jurisdictions by the top assignees.

### Assignees by year

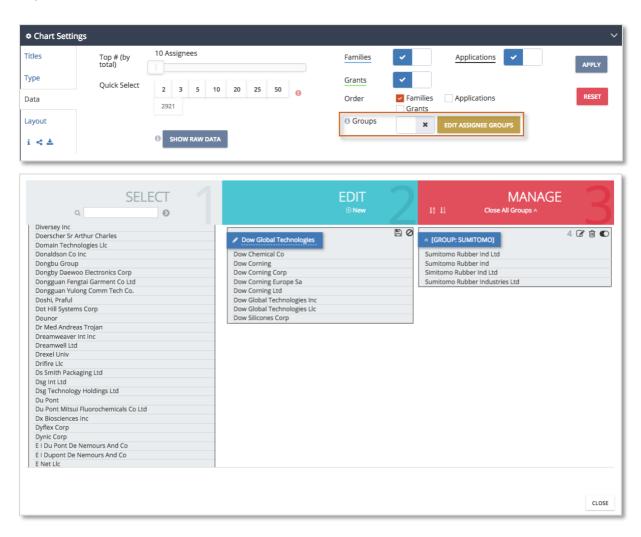
A chart showing the number of families, applications or grants (selected from the chart settings) filed over the past number of years by the top assignees.

### Assignee by classification

A chart showing the number of families, applications or grants (selected from the chart settings) which have been filed in the key technology areas (based on IPC and CPC classification code) or with the top IPC or CPC classification codes by the top assignees.

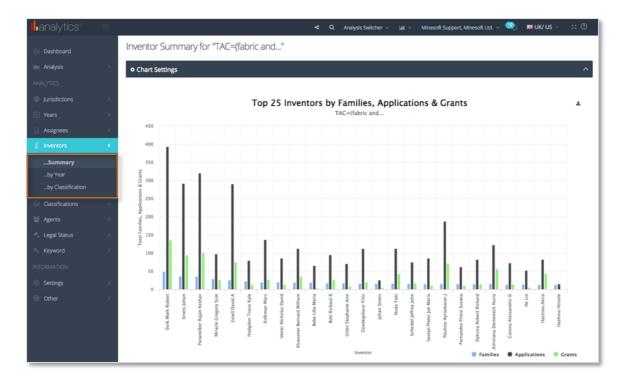
### Assignees by legal status

A chart showing the number of families, applications or grants filed by the top assignees broken down by the latest legal status event group (e.g. LSPB = published, LSGT = granted etc).



Assignees may be grouped using the assignees grouping dialogue which is accessible from the Data tab in all Assignees sections.

### **Analysing data by inventors**



Clicking on "Inventors" in the menu reveals a menu where the following options are available:

#### **Summary**

A chart showing the number of families, applications and grants that have been filed by the top inventors. Note that the chart settings allows you to select the data visualised in the chart and the type of chart.

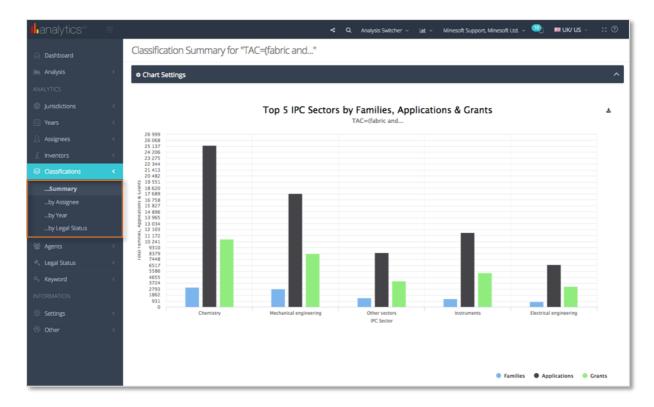
### Inventors by Year

A chart showing the number of families, applications or grants (selected from the chart settings) filed over the past number of years by the top inventors.

### *Inventors by Classification*

A chart showing the number of families, applications or grants (selected from the chart settings) which have been filed in the key technology areas (based on IPC and CPC classification code) or with the top IPC or CPC classification codes by the top inventors.

# **Analysing data by classification codes**



Clicking on "Classifications" in the menu reveals a menu where the following options are available:

### **Summary**

A chart showing the number of families, applications and grants separated into the top technology areas (based on IPC and CPC classification code). Note that the chart settings allows you to select the data visualised in the chart, the type of chart and the classification schema of interest.

### Classifications by assignee

a chart showing the number of families, applications or grants (selected from the chart settings) in the top technology areas or with the top IPC/CPC classification codes which have been published by the top assignees.

### Classifications by year

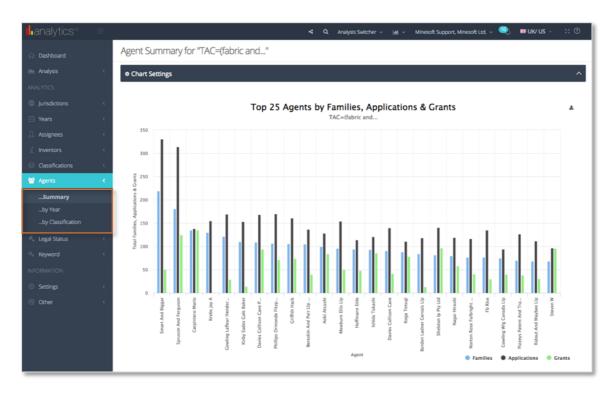
A chart showing the number of families, applications or grants (selected from the chart settings) in the top technology areas or with the top IPC/CPC classification codes which have been published over the last number of years.

### Classifications by Legal Status

A chart showing the number of families, applications or grants in the top technology areas or with the top IPC/CPC classification codes broken down by the latest legal status event group (e.g. LSPB = published, LSGT = granted etc).

Please note: each main classification is only counted once for each family.

### **Analysing data by agents**



Clicking on "Agents" in the menu reveals a menu where the following options are available:

# **Summary**

A chart showing the number of families, applications and grants broken down by the prosecuting agent. Note that the chart settings allows you to select the data visualised in the chart and the type of chart.

### Agents by Year

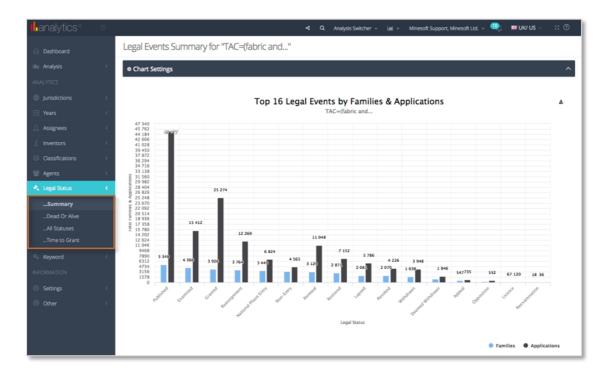
A chart showing the number of families, applications or grants (selected from the chart settings) which have been prosecuted by the top agents which have been published over the last number of years.

### Agents by Classification

A chart showing the number of families, applications or grants (selected from the chart settings) which have been prosecuted by the top agents in the key technology areas (based on IPC and CPC classification code) or with the top IPC or CPC classification codes

### Analysing data by legal status

Clicking on "Legal Status" in the menu reveals a menu where the following options are available:



### **Summary**

A chart showing the number of families and applications broken down by the latest legal status event group (e.g. LSPB = published, LSGT = granted). Note that the chart settings allows you to select the data visualised in the chart and the type of chart.

### Dead or Alive

A chart showing the number of publications which are dead or alive from a legal status perspective.

The Legal Status groupings are based on the PRS codes from INPADOC and the patent office codes from each National Patent Office. They are then allocated into a category to make them easier to manage.

Please note: the legal status event groupings were put together by Minesoft and RWS to group INPADOC and National Patent Office event codes into a set of consistent groups.

# **Analysing by keyword**

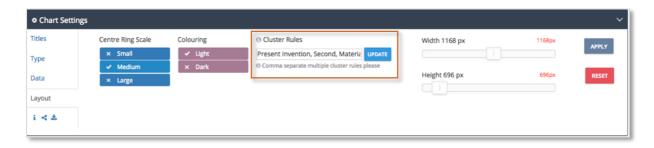
The Keyword tab provides visualisations of either frequently occurring keywords or concepts.

The keywords option uses the most commonly occurring keywords (found within titles and abstracts), whereas the concepts option uses concepts semantically derived from the top classification codes (you can select which option to view from the Data tab within the Chart Settings).

Either option will produce a set of clusters, with the families clustered by either the relevant keywords or the concepts.

#### **Cluster Rules**

When analysing by keyword you may find that you get some irrelevant keywords that occur frequently in the patent documents, for example "Present Invention". These can be removed across all keyword landscapes and clusters by going to *Cluster Rules* in the *Layout* tab in chart settings:



The basic cluster rules are shown in the table below:

Rule	Description	Example
Remove	Enter the exact (case sensitive)	Light bulb, Light Fitting (1)
	name	
Wildcard remove	Use an asterisk (*)	Light*
Rename	User a pointer (>)	Light Bulb > Luminare
Merge <sup>(2)</sup>	User a plus (+) to join clusters	Light Bulb + Light Bulbs > Luminares
	and a pointer (>) to give the	
	cluster a name	

- (1) This example includes comma separated multiple rules
- (2) Merging is only possible on the Landscape, it is not available in the keyword clustering view

### **Keyword clustering visualisations**

Keywords or concepts can be displayed in either a circle, tree or word-cloud form, based on the selection made in the chart settings.

When choosing the way that you want to display your keyword analysis, you can also choose whether to split the screen. If your screen is split, you will be able to click on a section of interest and view all related families to the right-hand side. Alternatively, if you choose to keep your screen unsplit then when you click on a section of interest a pop-up window will show related families instead.



Please note: sometimes families do not contain an appropriate abstract, in which case they cannot be used by the clustering software; in addition, there is an upper limit for the number of families that may be clustered in which case no more than the maximum allowed (for the current analysis depth) will be taken into account. This means that not all families will appear in the keyword visualisations.

# Circle clustering



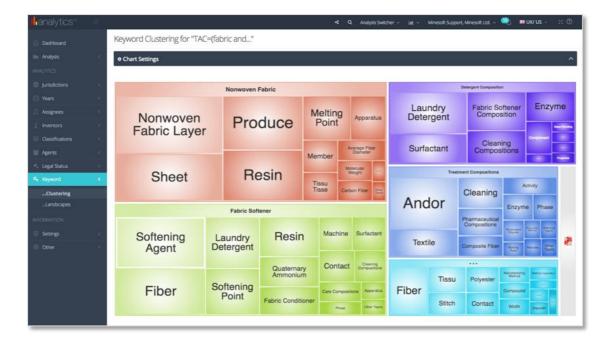
PatBase Keyword Clustered Circle is an interactive visualization of multi-level clustered and grouped family data.

The clustered circle allows you to click and zoom in on a cluster (which is shown on the outside) to nodes (sub-clusters) on the inside.

Click on the pink arrows to expand/collapse the number of clusters displayed.



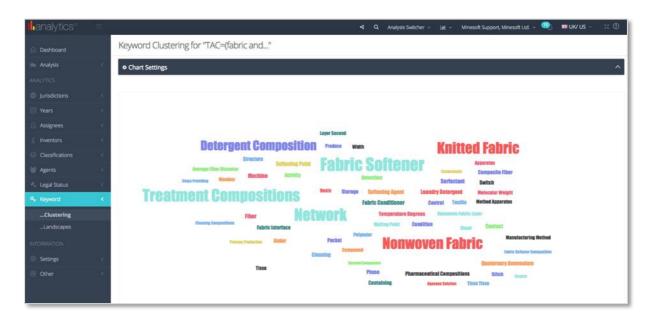
### Tree clustering



PatBase Keyword Clustered Tree is an implementation of hierarchical Voronoi Tree maps. With animated transitions, zooming, searching, and nested meta data available via a split screen view.

The clustered tree allows you to click and zoom in on a cluster and zoom further to nodes (sub-clusters).

### Word Cloud clustering



A Word Cloud takes clustered keyword data (in our case patent documents that are organised into clearly labelled thematic groups), and then presents the keywords (thematic groups) relative to their size. The idea is to provide an attractive easy to understand visual representation of a large dataset in one easy to consume graphic.

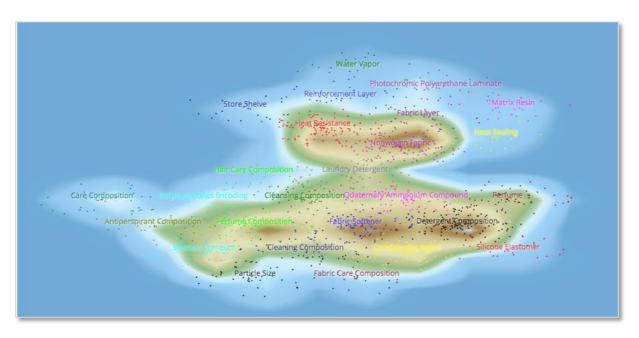
Please note: the requirements of the Word Cloud mean that layout takes precedent over content, and as such – while the word cloud provides a nice intro or overview into a subject area - conclusions or analysis should only be drawn in conjunction with other analysis.

#### Landscapes

Keywords or concepts are displayed in either a 2D or 3D landscape view, based on the selection made in the chart settings.



The 2D landscape highlights commonly used keywords (or concepts) as clusters, with intensity (occurrences) in line with the implied "height" of the landscape, with the blue "sea" being lowlying (fewer families) and the land (from coast to peak) being "higher" and therefore representing more families. If you have trouble distinguishing clusters, try increasing the available height in the Layout tab.



The layout of the landscape can be modified using the chart settings, where the form of cluster & family markers can be selected, as well as visual features such as font size & colour. If you're viewing a 3D landscape you would also have the option to alter the altitude between flat, hilly or mountainous, like below.



The 3D (topographical) landscape works as per the 2D landscape, except it renders the third (Z) dimension displaying the "height" in a 3D rendering instead of just implying height by colouring (as the 2D version does). Therefore "hot" clusters (those with more families) are shown as relative "height" in the z-plane.

The perspective of the 3D landscape can be modified by using your mouse by holding the left button and dragging across the landscape. The exact mode of rotation can be set using the context menu that appears top right when you hover over the landscape –

( • + • • • • • ) these include panning, orbital or turntable rotation - there is also a home button that you can use to reset the display. Use your mouse wheel to zoom in and/ or out.



As with clustering, you can also choose to view the landscapes in split screen view. As below:

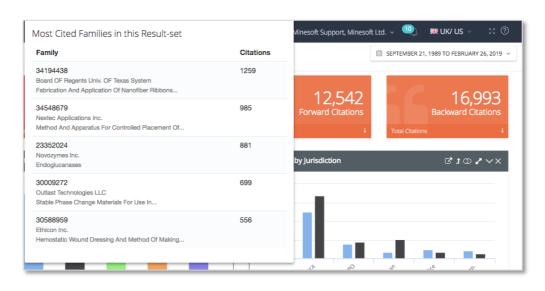


## **Citation Analysis**

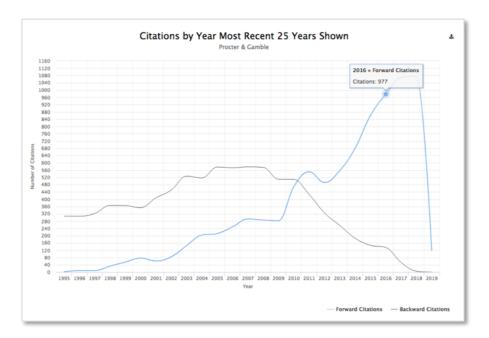
Citation analysis allows you to investigate citations by jurisdiction, year and assignee. The absolute total number of citations will be shown on the dashboard.



If you mouse over these figures, you'll see the top 5 most citing (or cited) families.



If "Citation Analysis" is turned on in your analysis settings, then for each analysis you run, both forwards and backwards citations will be collected and analysed for jurisdictions, years and by assignee. This simply means that the citations are totalled up for each jurisdiction – forwards (from these jurisdictions) and backward (to these jurisdiction) – and the same applies for each year and each assignee (probable assignee is used). This means the cited (or citing) jurisdiction, the cited (or citing) year and/or the cited (or citing) assignee.



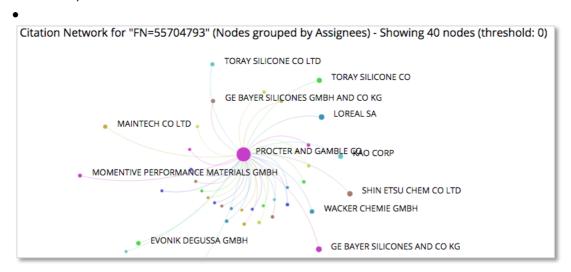
Please note: there are some limitations on which citations are used. Due to the nature of citations, the number of citations can grow quickly and exponentially as the number of families being analysed increases. Therefore, we use a sample when the analysis reaches a specific threshold - this threshold is 500 families when the Standard analysis is used and 1000 when a Deep analysis is run. If you are analysing more families than this, then only this many families will be taken (at random) and the number of citations will be calculated from this sample.

#### **Citation Networks**

PatBase Analytics V2 Citation Network Explorer creates visual representations of complex patent citation networks. This tool creates a graph network for citations of the set of families in your result-set.

The first thing to know is that while all nodes represent a specific assignee, there are two main types of node:

- Parent nodes formed from at least one family from your currently analysed result set (i.e. if an assignee in your search is cited or citing that it is a *Parent Node*)
- Citation nodes consist only of a citing (or cited) assignee (i.e. if the assignee does
  not otherwise appear in the result set). If you look at the network below, you'll see
  a network that is formed from just one family (55704793), the assignee of the
  family is *Procter and Gamble* which therefore forms the sole parent node (in the
  centre)



The Citation Network is a graphical representation of citations (represented as edges) between selected entities (represented as nodes). It is constructed as a Network Graph using nodes and edges. The nodes currently only represent assignees.

The size of the node is relative to the total number of citations to (or from) that node. So, an assignee with lots of citations appears as a large node, and assignee with fewer citations appears as a smaller node.

The links, known as "edges" in a network graph, represent the citations to or from each of the nodes. To be precise - a single edge represents any number of citations from one assignee to another. So, you should interpret an edge between two nodes as representing at least one citation of the selected direction (either forward or backward).

The absolute number of edges therefore shows the unique number of citing (or cited) assignees. That is - one edge represents a unique assignee to assignee link (set of citations).

#### The simulation menu

The network is based on simulated "forces", these separate the nodes, stop nodes overlapping and define the length of the edges. For example: larger nodes exert a proportionately larger outward "pushing" force (called Node Force), this means that they clear some space around themselves and are therefore more readily identified. The simulation menu allows you some control over these fundamentals of the simulation.



The image on the previous shows the simulation menu, the specific parts of it are:

#### Network controls:

- Stop turn off all currently applied forces, this has the effect of stopping all current node interactions, if there are any
- Continue turn on all current forces, this has the effect of starting (or un-pausing) all current node interactions
- Push gives all the forces a little "shove" by slightly re-powering the strength of the forces (this added power will then degrade as normal)
- Redraw this will simply redraw the active network using the current settings

#### Forces:

- Auto set forces will automatically adjust the Node and Citation Forces until all nodes sit nicely within the Network Panel
- Node force this is the repulsive force between nodes, the larger the force the more the nodes repulse each other
- Citation force determines the length of the citation links, the larger the force the longer the citation links appear

#### Pinning:

Pin node position after dragging – nodes are pinned in place once you drag them
to a location. You can turn off this behaviour using the checkbox. You can also
unpin all pinned nodes by using the *Unpin All* button

#### The nodes menu

The Node Menu is where you have control over the number (and the type) of nodes to be displayed, so by using this menu you can easily create a network that you can readily interpret on screen. You are really just controlling what part of the complete network that is being rendered to the screen, the entire network exists, you are just selecting which part to view.

You can also manage the node labels, toggle them on or off, set the threshold, size, and control the node tooltips and network highlighting.



#### Nodes (entities):

#### Threshold

- The threshold number of citations required for a node to be included in the network graph
- You can enter a custom number in the box at the end, should you wish
- The "Auto" option will automatically select a threshold that means that the number of nodes falls below the Node Limit

#### Node limit

- The node limit, this is the maximum number of nodes allowed.
- This needs to be carefully managed, as too many nodes can become unintelligible, and/or significantly slow down your browser

#### Result-set only

- The "Result-set Only" setting will switch between accounting for only nodes and citations that originate within the current result-set or not
- When this is set to No all citations are used regardless of their origin, when it is set to Yes, only citations which originate from within the current set will be counted

### Isolated nodes

- Isolated Nodes are nodes with zero citations, they therefore do not form part of network at all. The reason that these occur is that they may have one (or more) citations, but not from (or to) any of the other nodes currently shown in the network
- They will have a connecting node, but any number of settings may cause the connecting node to not be shown. You can switch them on or off here

### End nodes

- End Nodes are nodes with only one citation, therefore they do not form part of an extended network
- They can be turned on or off here

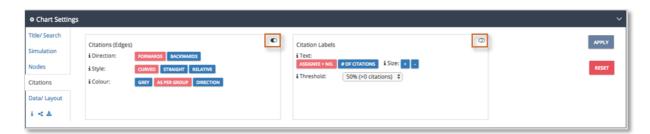
### Nodes Labels/Tooltips

- Text set the contents of the node labels. This is literally what label text will contain, either the assignee name, the number of citations or a combination.
- Size adjust the size of the node labels.
- Threshold the threshold above which node labels are shown. For example, when 25% is selected labels will be shown for nodes which have a number of citations that fall in the top 25% when compared to the maximum
- Tooltip this is the mouseover for the network itself (what happens when you
  mouseover a node). Details are displayed in a tooltip, the network highlight option
  highlights the network adjacent to the current node. You can also select both or
  none. The pin will pin the tooltip to the edge of the network so that it doesn't
  obscure the network itself.

#### The citations menu

The citations menu is focusses on the citations – the "edges" in the network

The main feature here is the Direction (Forward/ Backward) toggle - any network will display only forward or backward citations - the default being forward. The *Style* option changes the type of edge straight/ curved or relative (this option renders the edge with a width relative to the number of citations that it represents).



The colour option is either all grey, "as per group" (which is set to assignee in this version), or as per the direction blue for forward citations and red for backward citations.

Note that the citation labels are off by default, you can use the marked toggle to switch them on (marked on the image above). There are also size and threshold options for these labels.

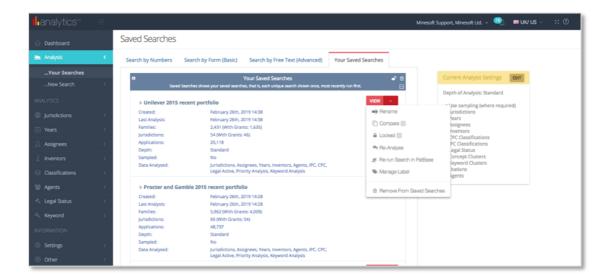
### **Reviewing saved searches**

PatBase Analytics V2 keeps a history of your previous searches within the "Your Searches" menu under "Analysis" in the main menu.

Details of each previous search are displayed including the date created, date last analysed in Analytics, number of families, jurisdictions and applications analysed, depth and settings. The drop-down menu for each saved search allows you to rename, lock the analysis to prevent its removal from the saved searches after 21 days, re-analyse the original data in Analytics, re-run the search in PatBase, edit the search, view the notifications of new data based on your query,

Page 33 of 45
PatBase Analytics V2 Guide support@minesoft.com

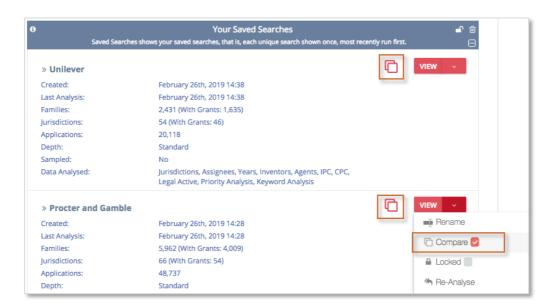
and delete the saved search. There is also an option to compare analyses, this will be covered in more detail in the next section.



### **Comparison Analyses**

The comparison analyses option directly compares result sets side-by-side. This makes it easy to compare patenting trends, whether it's between two competitors, one company at two different periods of time or two parallel technology areas etc.

To run a comparison analyses, begin by loading an analysis for two different result sets. Once each analysis has fully loaded it will be automatically added to "Your Searches". This example will compare the recent portfolios of Unilever and Procter and Gamble.



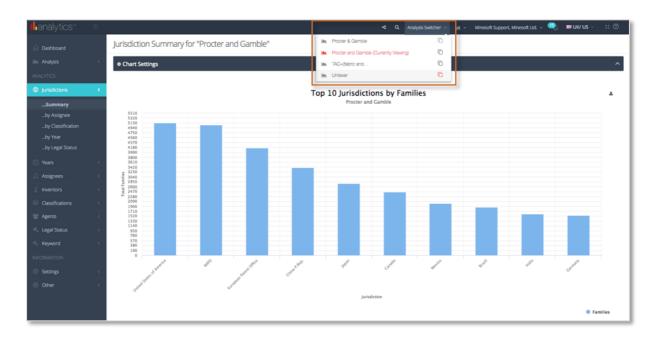
Tick the "Compare" check box in the drop-down menu, note that two squares should appear once the box has been ticked indicating which (once selected you will see a large red icon next to each analysis). Then click the red "Analyse" button (or the "View" button if they are already analysed) on either of the selected searches.

If the searches are not analysed then the analysis (based on your current settings) will run as normal, but one after the other.

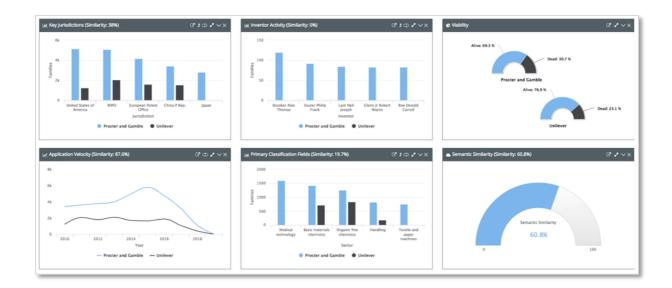
Once both of the selected analysis has run you will automatically be transferred to the comparison dashboard.

In addition - when available - you can add a comparison analysis to a current analysis by clicking the compare icon in the "Analysis Switcher", two things have to be true for this to be available. Firstly, only analysed searches appear in the Analysis Switcher so the analysis you want to add must have been analyses. Secondly you must be on a page (in a section) that allows for comparison graphs, in general this means the dashboard, or a Summary section.

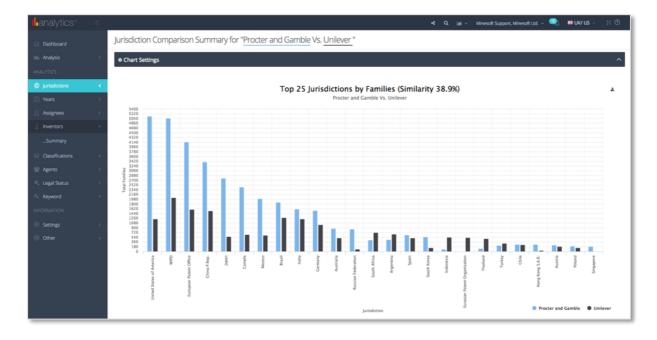
Please note: the Analysis Switcher is not available when viewing a comparison, so you'll need to remove an analysis before selecting a new one to compare (more on how to do this later).



Once two analyses have been selected, they will both be shown on the dashboard with associated details (the analysis on the left in known and the Primary Analysis, and the one on the right as the Comparison Analysis. In the example below, Procter and Gamble is shown as the Primary Analysis, and Unilever as the comparison analysis.

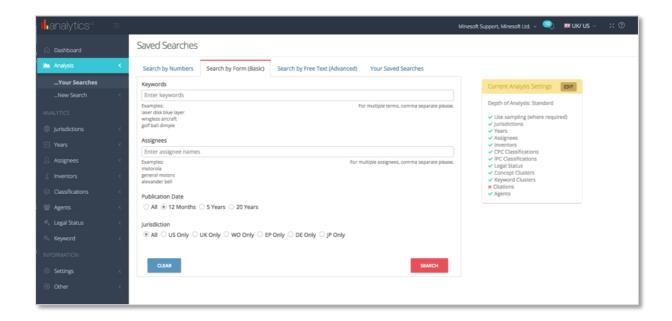


You can go through the categories in the menu as normal, the only difference being that a comparison analysis only shows the Summary charts.



# **Running Basic, Advanced & Number searches**

PatBase Analytics V2 allows you to run a Numbers search (by pasting family numbers into the input box), Basic search (using keywords, assignees, publication dates and jurisdictions) or Advanced search (using PatBase command line language) in PatBase and then analyse this new dataset directly in PatBase Analytics.



# **Automated reporting**

This option in Analytics V2 automates the generation of reports that can be exported and edited/printed/shared etc. Currently, Analytics V2 reports can be exported as PDF, Word, or PowerPoint files.

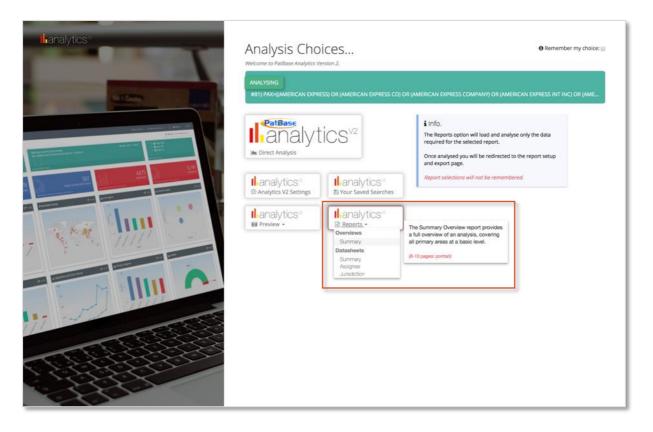
There are 4 types of reports available:

- Overview summary report provides a full overview of an analysis, covering all primary areas at a basic level (available as an 8-10 page / portrait option)
- Summary datasheet provides a brief overview of an analysis, covering only a basic level but for a range of metrics (available as 2 3 page / landscape / 1 chart per page option)
- Assignee datasheet provides a brief overview of a selected assignee within an analysis, this report covers the basic data but for a range of metrics
- Jurisdiction datasheet focusses on the jurisdiction data of the current analysis

To generate a report, select Reports from the Analytics V2 menu.



Alternatively, you can generate a report directly from the Analysis Choices page.

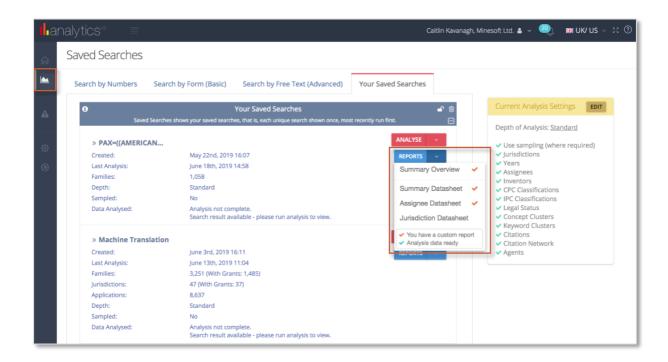


As you hover your mouse over the different options, a tooltip will appear with a description of each report type.

Please note: the analysis that runs will be specific to the requirements of the selected report, so only those components required for the report will be analysed. If you are unsure which report to choose, run a full "Direct Analysis", where you will have access to all reports from the menu as mentioned above.

The final way to access the Analytics V2 reports is via your saved searches.

Page 38 of 45
PatBase Analytics V2 Guide support@minesoft.com



The red check means that there is a custom report or "template" available for this analysis already. A green check means that all data required to complete the report is available (has been analysed), and you will be taken directly to the report from the saved searches page.

If you select a report that doesn't have a green check then it will have charts missing. However, you run the report regardless and then navigate to the "Data Required" button in report settings and then select "Re-Analyse with these Components" from the pop-up window to complete the report.

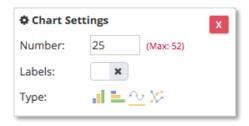


# **Editing the report template**



Once loaded you will be directed to a page like the above image with a list of charts, categorised into pages. In the top right-hand corner for each page there are options to download a specific page as a PDF, PNG, JPEG or to print the page. There is also an information icon to give more of a breakdown of each of these download options.

You can interact further with each graph, for example zooming in and out of the heat map, adjusting the basic setting options (just look for the settings icon  $^{*}$ ).



You can adjust the number of data points shown, i.e. number of jurisdictions included, number of years, et cetera; add labels, i.e. show the exact numbers in the graphs; or adjust the type of graph used. This will show a different set of options depending on the chart type.

Where a graph is showing multiple types of data, for example, families and applications. There will be an arrows icon at the bottom right-hand corner • Clicking this will change the order that the selected metrics are shown in, this works hand-in-hand with the ability to turn on or off the displayed metrics using the legend (simply click "families" or "applications" etc. to turn them on/off or show/hide them). These changes are stored in the default template.

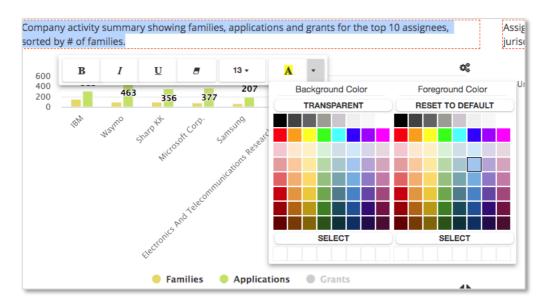
### Highlight editable text

When editing the report, there are some areas of text which can also be changes, to identify these areas, select "Highlight Editable Text" under report settings. Editable areas will be outlined with a red dotted line, like below:

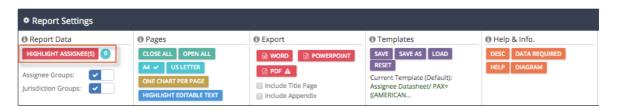


Page 41 of 45
PatBase Analytics V2 Guide support@minesoft.com

When clicking on these areas, you can remove or add content, or make formatting changes. All these changes can be saved in a "default" template by clicking "save" under report settings.



#### **Report settings**



Report data – toggle off/on assignee or jurisdiction groups, for information about the highlight assignee option please read next sub-section

Pages – minimise or maximise all pages/graphs, adjust page size, change to one chart per page, highlight any editable text

Export – decide whether or not to include a title page, export the report as a Word, PowerPoint or PDF document.

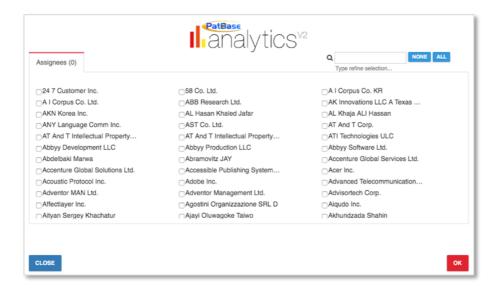
Please note: there is a "warning" triangle next to the PDF export option because the PDF is generated directly from the screen, therefore the picture quality may not be great depending on the user's screen resolution. To rectify this, choose the Word export option and then "Save As" a PDF from Microsoft Word.

Templates – save the current template, save the current template with a different name for future use, load a saved template, reset a default template or delete a custom template. Help & Info. – see a description of the type of report you have generated, check if any further data needs to be analysed or view a diagram on using templates

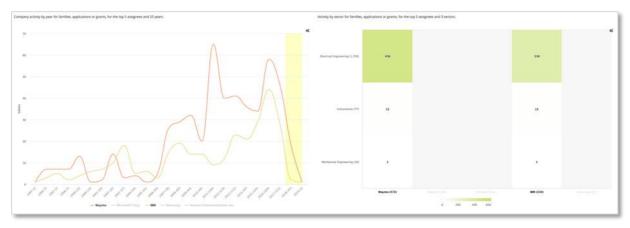
### Highlight assignees/jurisdictions

The highlight assignees/jurisdictions option will allow you to select and highlight one or more assignees/jurisdictions of particular interest. This will highlight them within the report and allow you to compare and contrast their positions within the current result set/report.

To open the option, click "Highlight Assignee(s)" from "Report Settings" from the assignee data sheet or click "Highlight Jurisdiction(s) from the jurisdiction datasheet. This will open a pop-up window like below.



Using the example of assignee highlighting: Select the assignees you're interested in by ticking the checkbox next to the assignee name, for example, Waymo & IBM, and click "OK". The selected assignees will then be highlighted within the report, like in the example below:

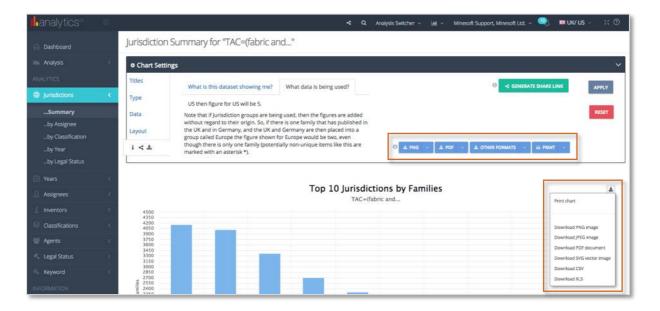


Please note: turn groups on from "Report Settings" to include assignee or jurisdiction groups.

# Download, export, print or save graphs

### Download or print

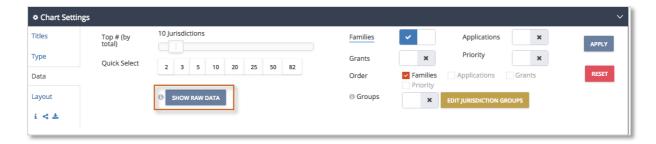
Options to print or download an image can be found at the top-right of the graph by clicking on the chart context menu, or in the *Chart Settings* under the info/share/download tab.

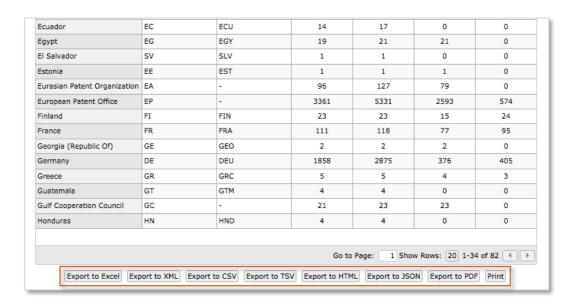


Choose to print the chart of download as a PNG, JPEG, PDF or SVG. The file can also be downloaded as a CSV or XLS for further manipulation.

### Export

The underlying data can be exported from within the Chart Settings as either an Excel, XML, CSV, HTML and JSON file.





#### **Contact us**

Please contact support@minesoft.com if you have any further questions or queries, or you require help with anything you have seen in this guide.