



Trending & Aggregation
USER MANUAL
October 2015

WARNING

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Every possible effort has been made to guarantee that this manual and the information contained therein are as accurate as possible. However, in the case of the subsistence of any error(s), please do not hesitate to contact us. We also invite you to get in touch with us to make any comments you may have as to possible improvements.

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1. GENERAL INTRODUCTION

This document will guide you through the Trending&Aggregation (T&A) user interfaces. It explains all the available interfaces in the menus.

This document is a complement to the training provided by Astellia.

Feel free to give Astellia your comments on this document in order to improve it.

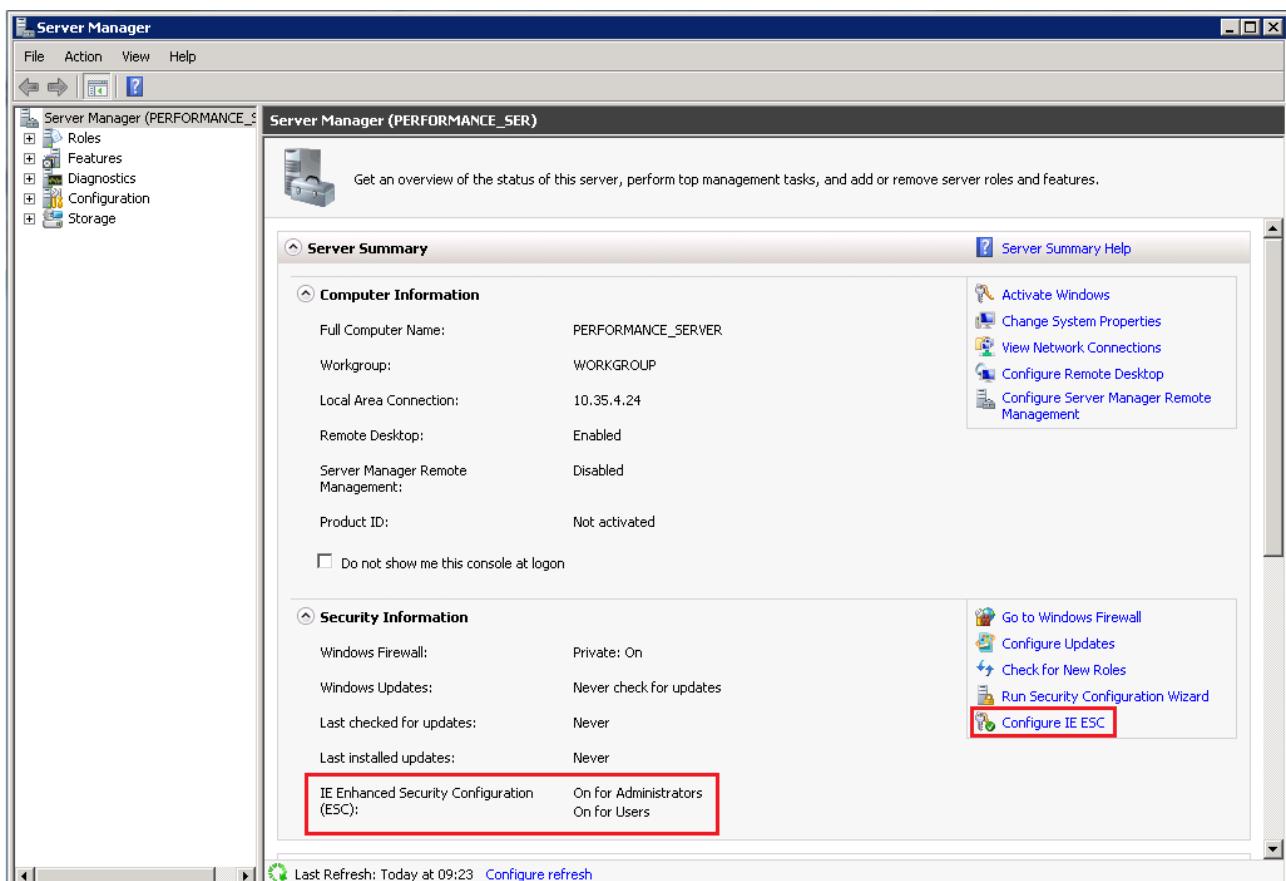
2. SOFTWARE CONFIGURATION

T&A application runs in your browser. To have the best possible user experience, we recommend using Firefox browser (<http://www.mozilla.org>). However T&A also runs under Internet Explorer. In order to have all options running properly, you need to ensure that you are using some specific settings:

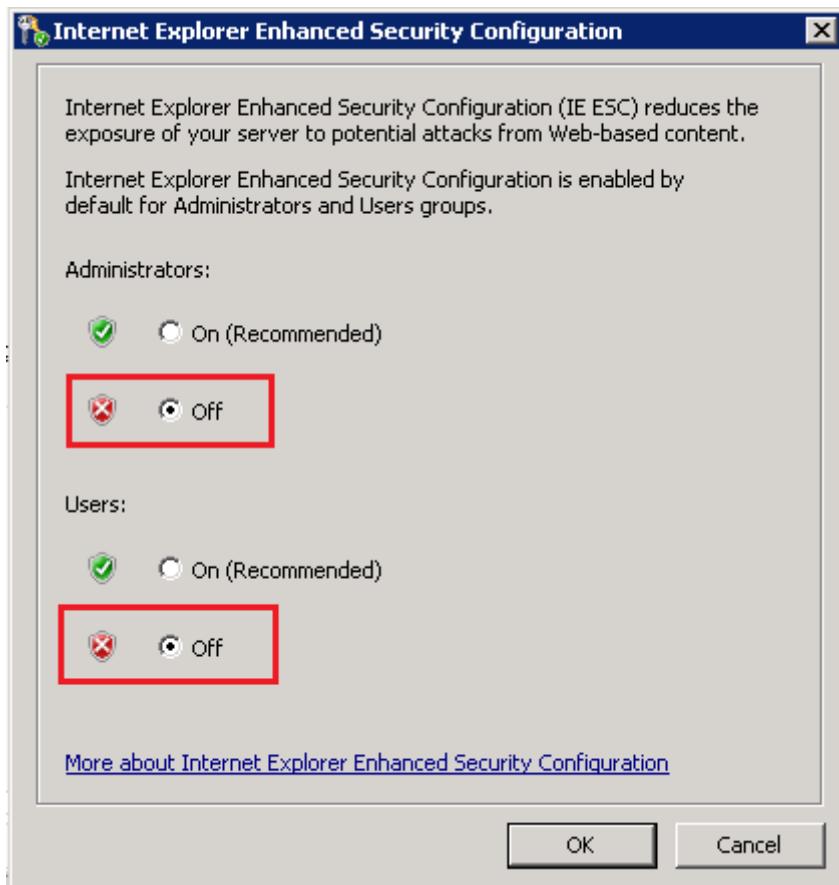
2.1. INTERNET EXPLORER

2.1.1. SYSTEM PREREQUISITES

For Windows 2008 Server, you have to disable the IE Enhanced Security Configuration feature (IE ESC). To access to the Server Manager panel, go to Control Panel > Administrative Tools.



Go to the Configure IE ESC dialog box, switch both radio buttons to off and validate.



2.1.2. VERSION

Go to the “**help**” menu and select “**About Internet Explorer**”. A popup window will appear and display the version number. If the version is 7, 8, 9, 10 or 11, you will be able to use Trending & Aggregation system. If the version you are using is 6 or lower, contact the IT service of your company for an upgrade of your web browser.



2.1.3. VIEW CONFIGURATION

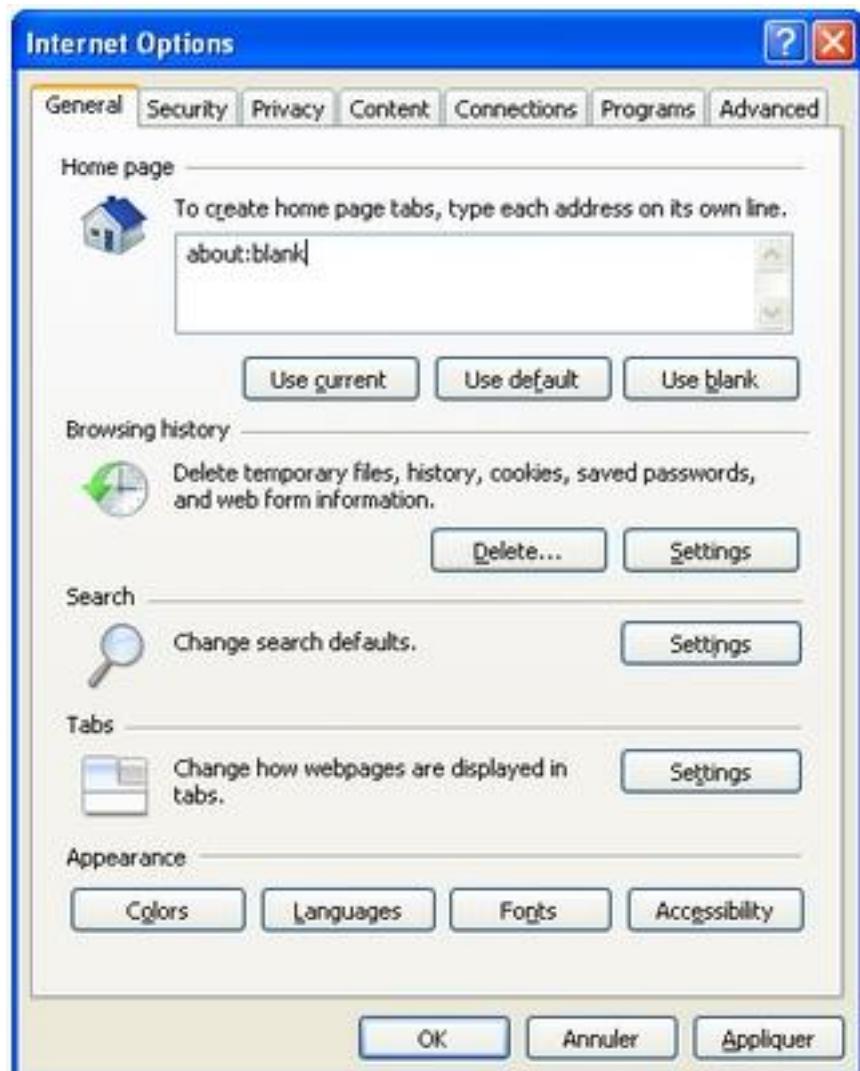
Go to the “**View**” menu.

Select “**Text Size**” and choose “**Medium**”.

Select “**Encoding**” and make sure you are not using “**Unicode**”. We advise to use the encoding “**Western European (ISO)**”.

2.1.4. OPTIONS

Go to the “Tools” menu and select “Internet Options...”



In the popup window, you can see 6 sections entitled “General”, “Security”, “Content”, “Connections”, “Programs” and “Advanced”.

In the “**Security**” section, choose “local intranet” and then “custom level”. You will be shown the window of “**security settings**”:



Choose “enable” or “prompt” for the following 2 settings:

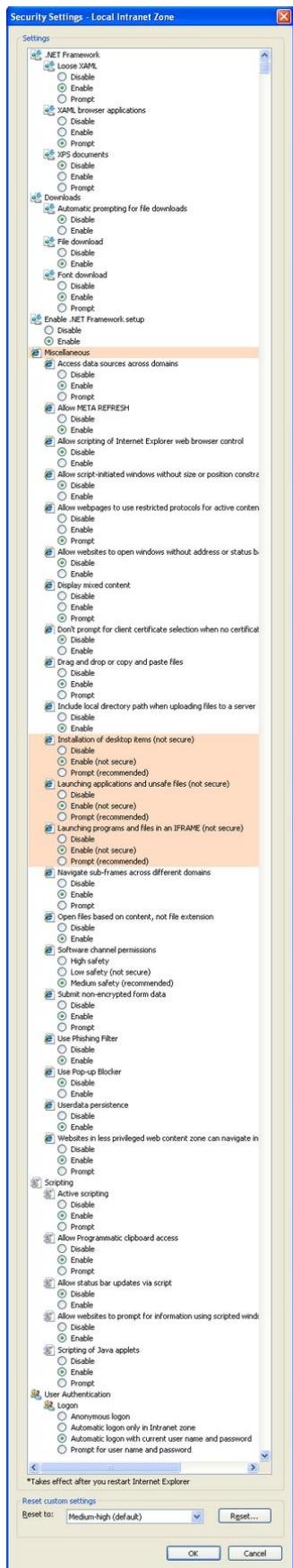
Initialize and script ActiveX controls not marked as safe

Run ActiveX controls and plug-ins

They are required for exporting pages to PDF format.

In the “**Privacy**” section, choose “**Advanced**” and verify that “**Override automatic cookie handling**” is not checked. Indeed cookies are required for the application to know which user you are and then allow you to see the pages.





Enable cookies because these cookies are required for the application to know which user you are and then allow you to see the pages.

Enable font download in case your computer doesn't have all the types of characters to display properly the information, as it was specified by the application.

Enable drag and drop.

Enable “launching programs and files in an IFRAME” because Trending & Aggregation takes widely advantage of IFRAMES.

Enable “submit non-encrypted form data” because Trending & Aggregation uses at least one form on almost every page.

Enable “active scripting”.

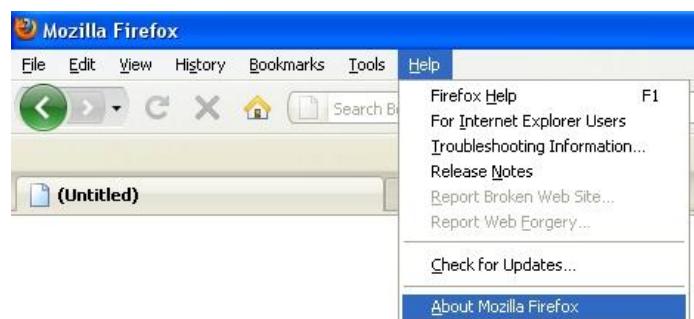
In the “**Security**” section, choose “**Trusted sites**” and click on “Sites” button. You will then be able to add T&A server URL (<http://X.X.X.X>) to you trusted sites.

Then, choose “**custom level**” and activate all controls.

2.2. MOZILLA FIREFOX

2.2.1. VERSION

Go to the “**help**” menu and select “**About Mozilla Firefox**”. A popup window will appear and display the version number. If the version is at least 3.6, you will be able to use Trending & Aggregation system. If the version you are using is lower, contact the IT service of your company for an upgrade of your web browser.



2.2.2. CONTENT CONFIGURATION

Go to the “**Tools**” menu and select “**Options...**”. In the opening popup window, select the “**Content**” tab.



Verify that “**Load images automatically**” is enabled.

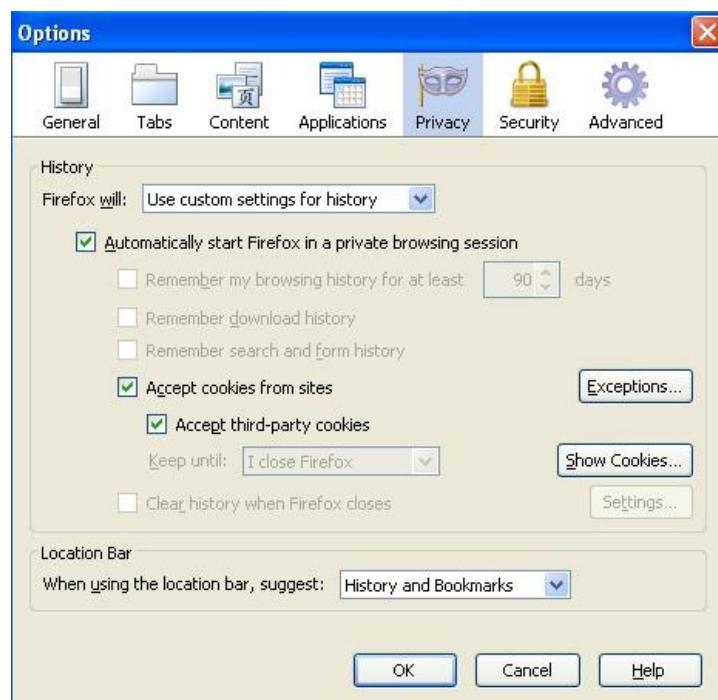
Verify also that “**Enable JavaScript**” is selected and in the corresponding advanced settings window, the “**Move or resize existing windows**” and “**Disable or replace context menus**” options are also enabled.



Click the “**Fonts & Colors**” Advanced button and make sure the “**Default Character Encoding**” is not set to “**Unicode**”. Astellia advises to use the encoding “**Western (ISO-8859-1)**”.

2.2.3. PRIVACY CONFIGURATION

In the Option Menu, select the “**Privacy**” tab.



Verify that “**Accept third-party cookies**” is enabled.

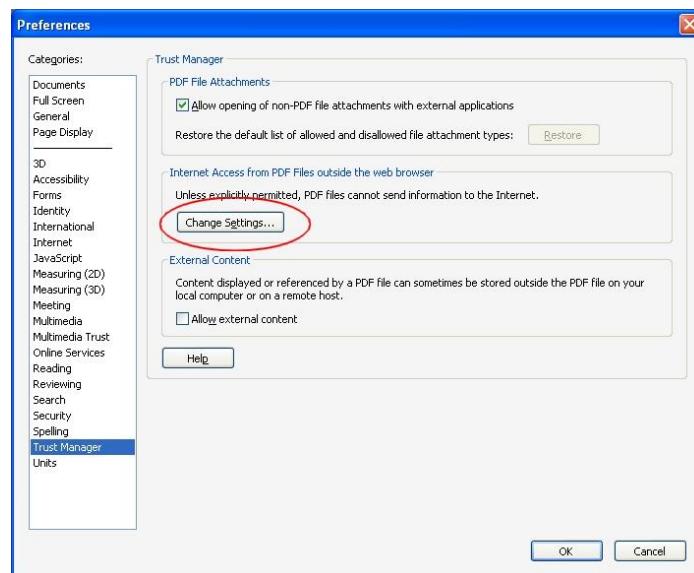
2.3. ADOBE ACROBAT READER 8.0 CONFIGURATION

In order to allow web browser opening from a PDF document please follow the instructions below:

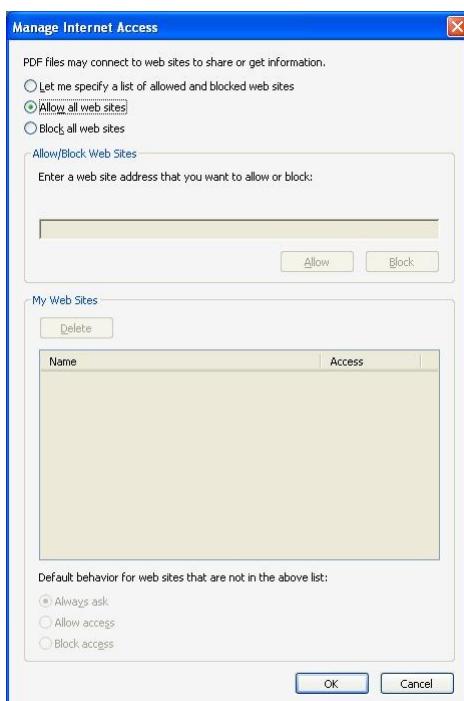
Edit menu / Preferences

Select “Trust manager”

Click on the “Change Settings” button



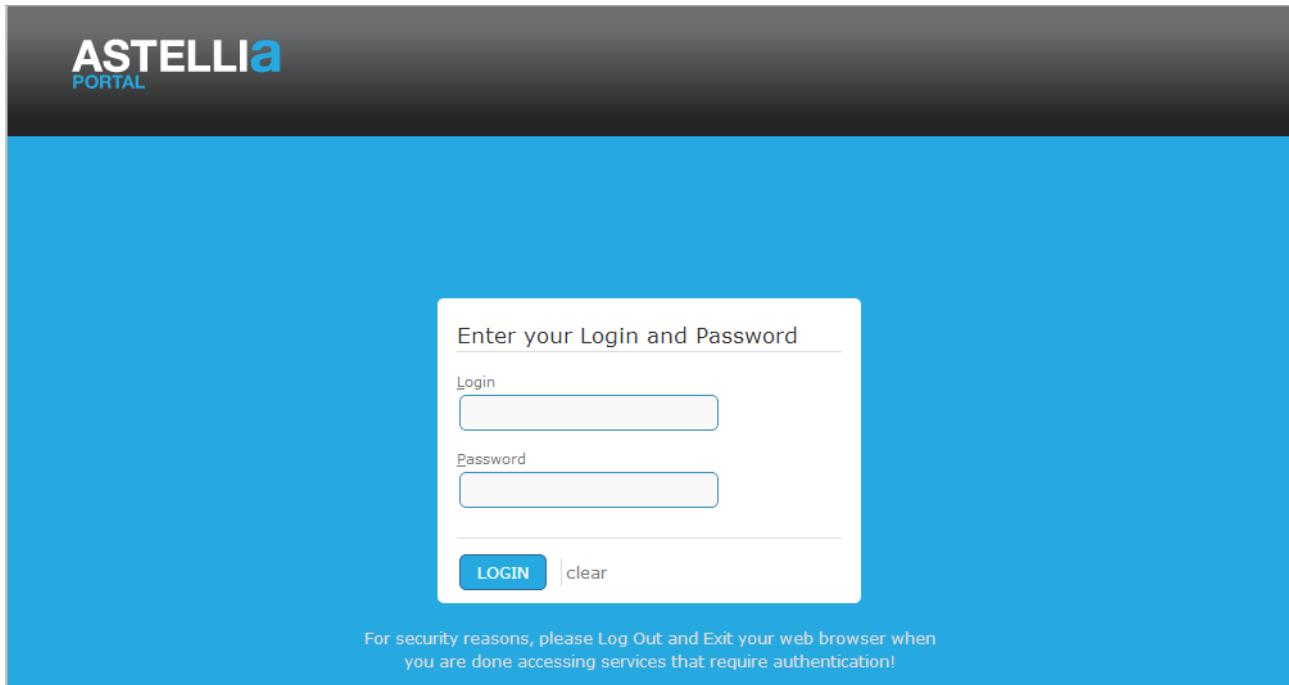
Check “Allow all websites” or “Let me specify a list of allowed and blocked websites”. If the “Let me specify a list of allowed and blocked websites” option is checked, enter the domain on which T&A is installed and click on “Allow”.



3. T&A INTERFACES

3.1. LOG IN T&A APPLICATION

Enter “<http://<T&A server IP address>/<T&A application name>/>” URL in your browser to launch T&A application log in interface :



In case another user is already connected with the same user account, following message appears:



By clicking "Enter", this will end the session of the connected user.

In case the application key is no more valid, user is warned by the following message:



Product key is not valid

Logout

Astellia 2012 - List of Products :

- [Topology master] - Evaluation valid until : -- - Master - Topology master

Product key : 1 2 Update About

1 Write the key in the text field.

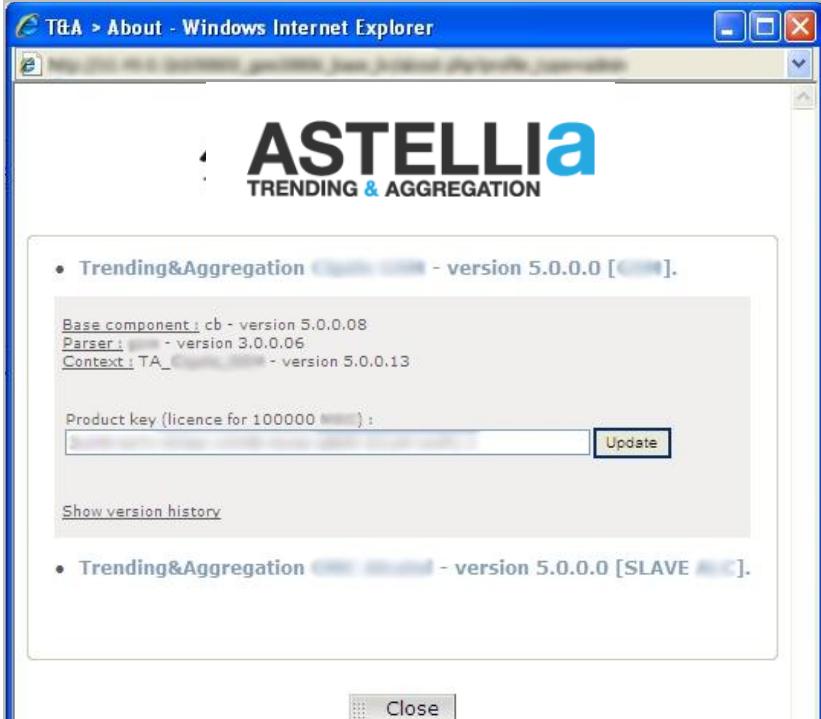
2 Click on the “Update” to update the key.

Note that application key can also be updated through “[About](#)” interface (see “[Top Banner](#)” paragraph).

Application key is valid for a limited number of network aggregation equipments. Only data related to this network aggregation in topology will be integrated to T&A application.

3.2. TOP BANNER

When entering the user interface, the top page will always contain a banner which displays some general information.

	TRENDING & AGGREGATION Home > GENERAL DASHBOARDS > Overview > Over Time	● UserProfile / astellia_admin ASTELLIA CLIENT DASHBOARD ALARM INVESTIGATION NAVIGATION 28-11-2012 11:02 / W48-2012
	● UserProfile / astellia_admin ASTELLIA  INVESTIGATION NAVIGATION	
	TRENDING & AGGREGATION Home > GENERAL DASHBOARDS > Overview > Over Time	
	Current date (including both current day and current week).	
	Current user profile / current user name.	
Icons:		Icon to open the cart.
		Icon to access to Gis Supervision module
		Icon to open the About page. 
		
		Icon to access the Source Availability. Allows returning to the homepage.

			Allow the user to switch to another profile he owns on this application.
④			The menus to access the modules.
⑤			Your company logo.
⑥			Current selected path.

3.3. CART FUNCTION

This icon allows visualizing all items you have added to your cart during your analysis.

Your cart
content of your cart

You have 2 element(s) in your cart.

Options

- Export graph and GIS raster.
- Export alarm.

Graph & Alarm

07-09-2009 23:00 [Hour]
graph

[static,Cell Based] on [Cell] - 01-09-2009 [Day]
alarm_export

A new window is created containing the list of the saved elements:

	With this icon, user will zoom on an element.
	With this icon, user will remove an element.
	With this icon, user will remove all elements from the cart.
	With this icon, user will zoom all elements.
	With this icon, user will export elements to PDF.
	With this icon, user will export elements to Ms Excel.
	With this icon, user will export elements to Ms Word.

User can choose to export:

- graph and GIS raster in various format: Ms Word (picture of the graph), Ms Excel (data as table) and PDF (picture of the graph),
- or alarms in Ms Word, Ms Excel and PDF (data as table for each).

3.4. SOURCE AVAILABILITY

	This icon allows the visualization of source file availability.
---	---

Source Availability displays history of file collection per connection. It allows the visualization of percentage of collection files missing over time, over a month or a day.

The Source Availability is configured through the Administrator ‘Setup Connection’ and ‘Setup Data Files’ Menus.



 ①	Selection of the period for Source Availability history display, month or day depending on the current view mode (daily or hourly)
 ②	<p>Filtering options</p> <ul style="list-style-type: none"> ➤ “Show errors only” if selected, displays only connections with reported missing files during the selected period, ordered by severity ➤ “Show errors first” if selected, orders connections list by severity.
 ③	<p>Source Availability rates per connections over days of the month or hours of the day. Daily mode can be drilled down to hourly mode for a selected day.</p> <p>The Overview row summarizes source availability over all connections.</p> <p>Point the mouse over the colored cells to get the exact percentage of available files in a tooltip.</p>
	Export Displayed Source Availability data into Excel file.

3.5. DASHBOARDS

3.5.1. GENERAL INFORMATION

Trending & Aggregation dashboards enable data analysis in a multidimensional environment.

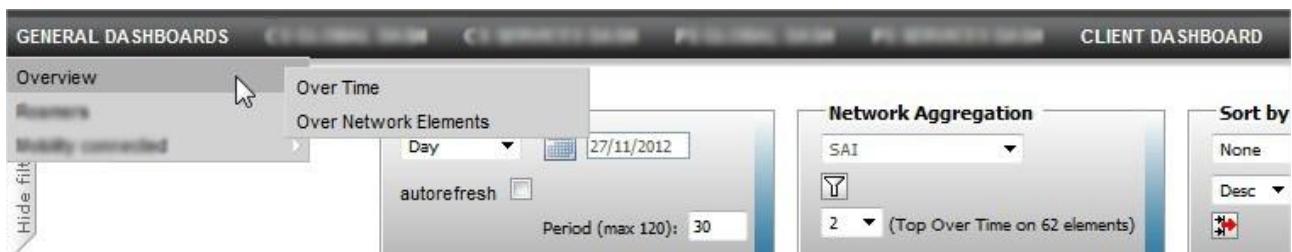
Two or three dimensions are available in the dashboards: the observed network, the time aggregations and (if exists) the third axis.

For each network element you can analyze the evolution of the KPIs during hours, days, weeks and months.

Astellia provides many pre-defined dashboards.

Each dashboard is composed of a set of graphs which permits to analyze network performance and quality of service.

- How to launch a dashboard:

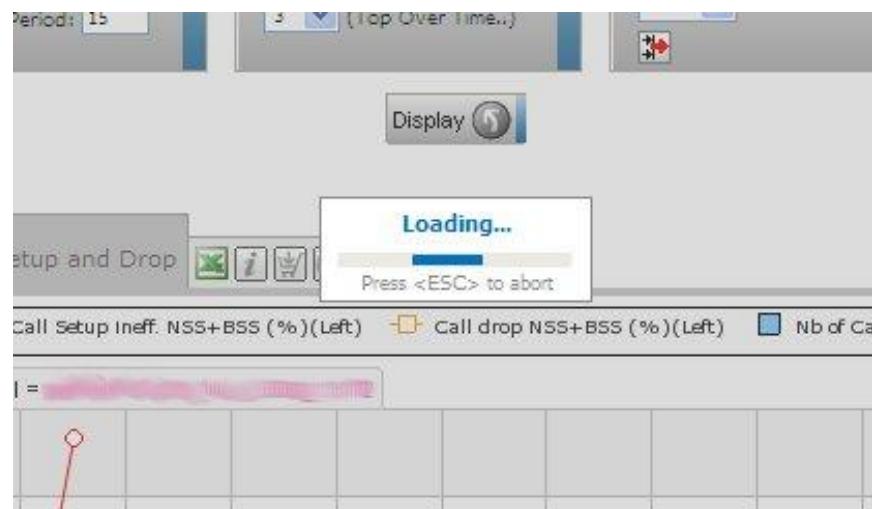


Select the dashboard you want to display and then select **over time** or **over network elements** navigation mode.

3.5.2. LOADING PAGE SYSTEM

All interfaces of application use new “Loading page” system.

Application shows “Loading page” window popup during Internet Explorer downloads graphics, alarms, query builder information. User can abort loading the current page by pressing escape “Esc” on keyboard when popup is visible.



3.5.3. “OVER TIME” MODE SPECIFICITY

In Overtime mode, one graph per network and third axis (if exists) elements is displayed. For example, if Cell network aggregation is selected and “Top Over Time” is set to “3”, three graphs giving time trend for one particular Cell will be displayed.

- Over Time selector:



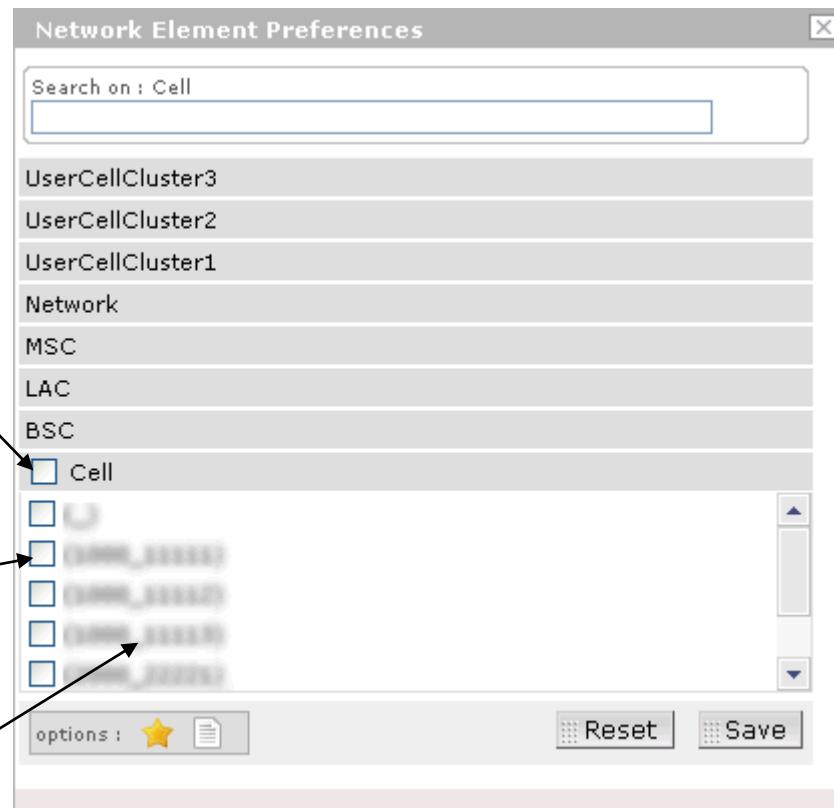
The Over Time selector is divided in three parts:

1 The time aggregation selector which allows selecting the time level to be displayed.
2 The Network and third axis aggregations selector which allows selecting: <ul style="list-style-type: none"> ➤ The network level ➤ The third axis level (Class of service, Type of Service, URL, Host)
3 The “Sort by” part which allows selecting: <ul style="list-style-type: none"> ➤ A raw/kpi for ordering the graphs ➤ A raw/kpi for filtering displayed data ➤ In this interface raw counters are displayed in orange color and KPI in green color.

4 This icon allows filtering data on a raw or a kpi value with following interface:
<p>The dialog box is titled "Raw / Kpi Filter". It contains a dropdown menu for selecting a metric, a numeric input field with a value of "10", and buttons for "Ok" and "Reset".</p>



This icon allows selecting particular network elements with “Network Element Preferences” interface:



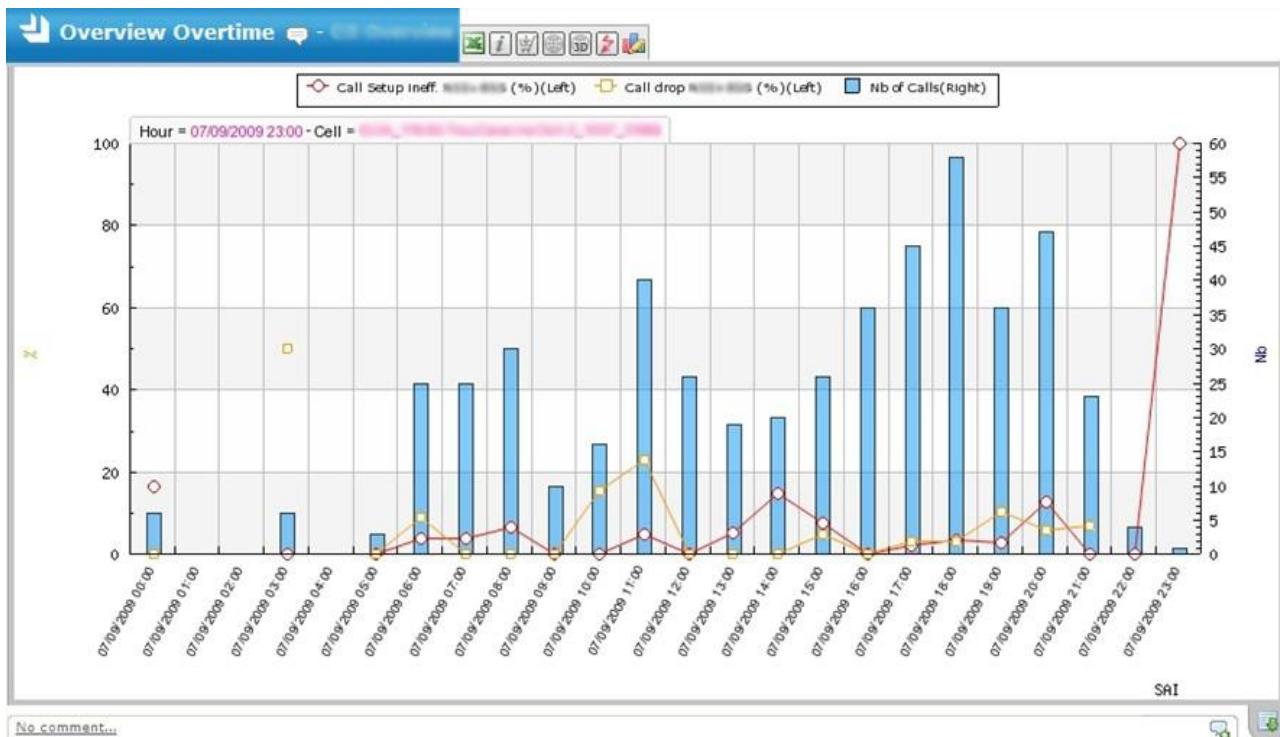
This icon loads user network elements selected in “My profile” interface. (See “[My Profile](#)”) paragraph.

This “View current selection” icon shows/hides the “List of selected elements” part.

With the “search on” feature, user writes a string and only elements which name contains this string will be displayed.

The filtering feature consists in hiding children elements function of parent elements.

- Over Time graph:



	This icon allows exporting graph data to Excel.
	This icon allows getting information about counters and KPIs used in the graph.
	This icon allows adding the graph in your Cart.
	<ul style="list-style-type: none"> - <i>This icon allows launching GIS interface (if activated on product).</i> - <i>Note that GIS data are only available after data integration (one retrieve/compute execution).</i>
	<ul style="list-style-type: none"> - <i>This icon allows launching Google Earth (if activated on product).</i>
	<p>To click on this icon will give you information on graph data reliability.</p> <p>Reliability Indicator is based on the availability of network elements KPIs which are contributing to provide the aggregated KPIs.</p>
	This icon allows drawing a line on the graph. The user can choose the scale used (left or right), a value, a legend and a color. The line can be applied to all the graphs or only the selected one. A box allows removing the line(s).

	<p>The screenshot shows a graph with multiple data series represented by bars and lines. A context menu is open, titled 'Draw a line :'. It includes options for alignment ('Align on Left' or 'Right'), a value input field ('Value' set to 87), a legend entry ('Legend' set to 'My Line'), a color swatch ('Color' set to dark green), and checkboxes for 'Update all graphs' and 'Remove all lines'. There are 'Update' and 'Close' buttons at the bottom right.</p>
	<p>This icon allows the user to add comments to the graph. The user can choose a priority for the comment (no level, information, medium or critical). He can specify the comment and the action to take.</p>
	<p>The dialog box has fields for 'Your comment...' and 'Action...'. A dropdown menu for 'Priority' shows 'No level' as the current selection, with other options like 'Priority', 'information', 'medium', and 'critical' listed below it. A 'Save' button is at the bottom right.</p>
	<p>Once saved the comment appears at the bottom of the graph.</p> <p>The graph now shows a new data series at the bottom representing saved comments. One specific comment is circled in orange, labeled 'Another comment to show a comment'.</p>
	<p>By clicking on this title, the comments history is shown in a new window. The user can use a filter to view the different messages. By default, all comments are shown.</p>

	<p style="text-align: center;">List of all comments</p>			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px; vertical-align: top;"> 1 Comments filter. Available parameters are: priority level (none, information, medium, critical), date (ascending, descendant). The user can also choose to “View all” comments. </td> </tr> <tr> <td style="padding: 5px; vertical-align: top;"> 2 Header with the various information about the comment (the writer, the date, the graph concerned, the priority and the trouble ticket reference number). </td></tr> <tr> <td style="padding: 5px; vertical-align: top;"> 3 ➤ Content: the comment and the action to take. </td></tr> </table>	1 Comments filter. Available parameters are: priority level (none, information, medium, critical), date (ascending, descendant). The user can also choose to “View all” comments.	2 Header with the various information about the comment (the writer, the date, the graph concerned, the priority and the trouble ticket reference number).	3 ➤ Content: the comment and the action to take.
1 Comments filter. Available parameters are: priority level (none, information, medium, critical), date (ascending, descendant). The user can also choose to “View all” comments.				
2 Header with the various information about the comment (the writer, the date, the graph concerned, the priority and the trouble ticket reference number).				
3 ➤ Content: the comment and the action to take.				
	<p>This icon allows the user to open the graph data table. In this table, user can directly see the graph values. By clicking on icon, a new container will appear under the current graph.</p>			

	Avg PS Session Act. dur. (s)	Nb of PS Sessions	Avg CS Call Setup dur. (s)	Nb of CS Call Setup
00000_9384	0.2685	2	3.75516	58
00000_501	0.3405	2	5.26591	11
00000_501	0.28	1	3.128	23
00000_501	0.557	1	5.58663	16
00223_501	0.4005	2	4.24983	29
46042_501	0.406	14	3.32441	32
07093_501	0.262	2	3.67043	35
GAT_10121_0467	0.235667	3	3.87743	44
40000_501	0.2945	2	5.5331	20
00000_737	0.320188	16	3.72678	106
47000_501	0.401	8	4.56448	25
00000_501	0.373875	8	4.47434	65
40000_501	0.322	1	4.31	6
00000_501	0.225	1	3.78931	16
00000_501	0.38575	4	4.74467	48
00000_55012	0.2635	2	3.91054	48
00000_591	0.235	1	4.53019	26
640_500	0.3855	2	5.193	7
GAT_10121_0469	0.2855	2	3.99964	28
00000_51131	0.3505	2	3.1145	12

No comment...

User can at any time, close the graph data table by clicking on  icon

- Over Time mode rules:

If you select an “over time” mode for all network elements, the maximum number of graph displayed in the dashboard is 50, and the “on mouse over” functionality will be activated for the 20 first graphs. The network elements will be sorted by the KPI specified in the “Sort By” input.

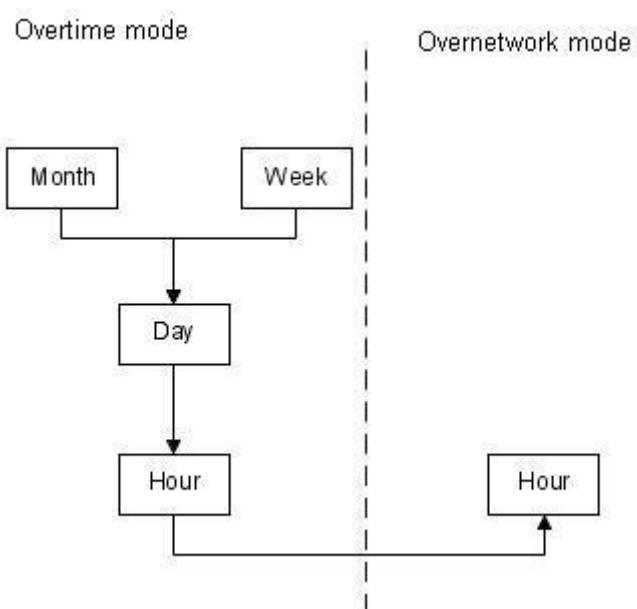
Be careful that high values for “period” parameter can lead to low display performances. It is advised to limit display to 100 periods. Actually, it is limited to 200.

- Over Time Dashboard navigation:

On a click on a value of a graph, a window will let select the action to lead.



The user can navigate on following elements:



On the click on a graph value, the network element considered becomes selected for the next view.

3.5.4. “OVER NETWORK ELEMENTS” MODE SPECIFICITY

With Over Network Elements mode, for a selected time aggregation, data are displayed according to network aggregation axis (i.e. X axis).

- Over Network Elements selector:

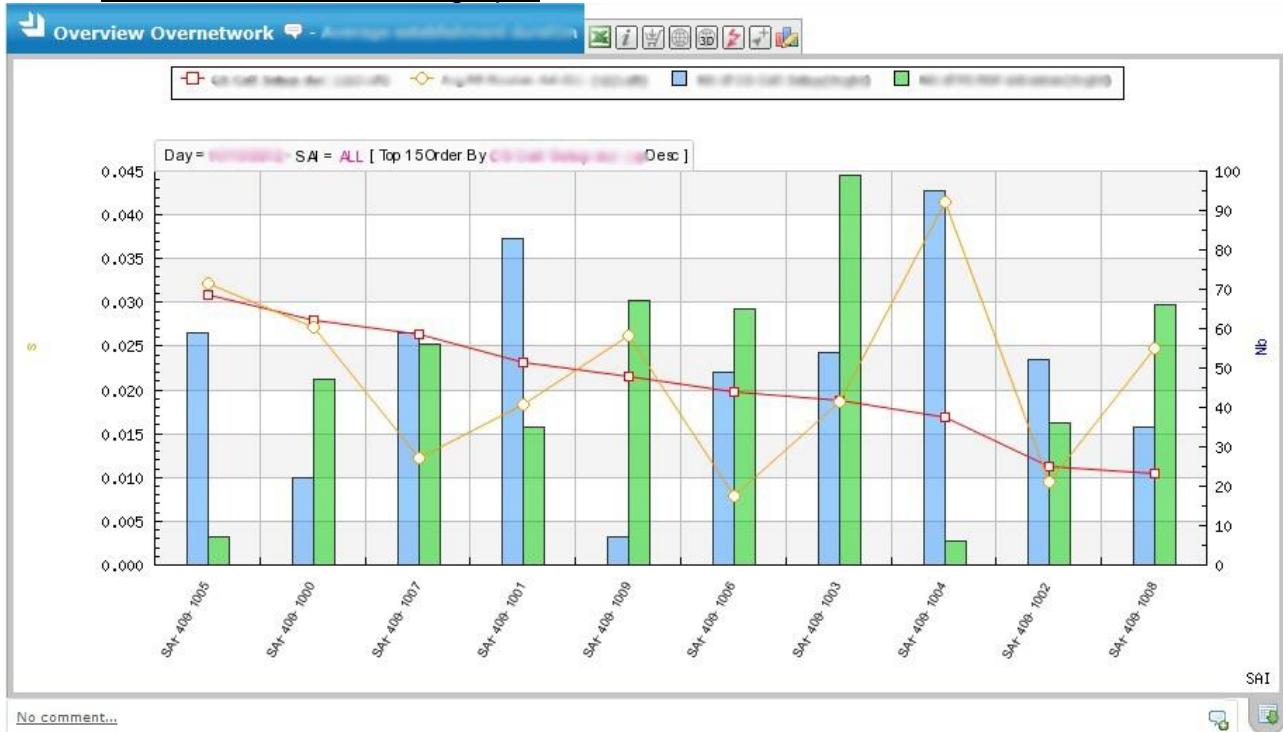


The Over Network selector is divided in three parts:

①	The time aggregation selector which allows selecting the time level to be displayed.
②	The Network and third axis (if exists) aggregations selector which allows selecting: <ul style="list-style-type: none">➤ The network level➤ The third axis level (Class of service, Type of Service, URL, Host).
③	The “Sort by” part which allows selecting: <ul style="list-style-type: none">➤ A raw/kpi for ordering the graphs.➤ A raw/kpi for filtering displayed data.

See “Over Time” selector part for and icons description.

- Over Network Elements graph:



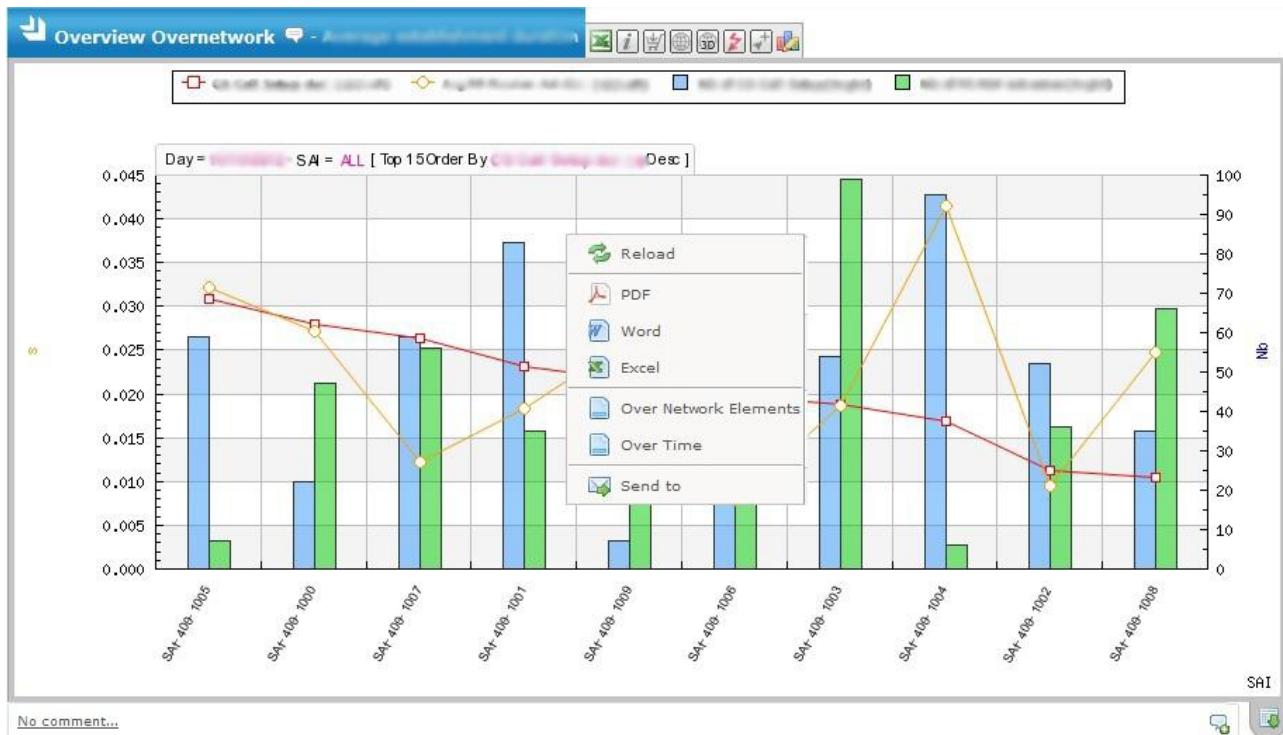
See “Over Time” selector part for icons.

In each graph, only the “Top Over Network” first network elements are displayed but all network elements data values can be displayed with  icon.

A new page will open with all network elements data displayed. Then, the user can use the same icons than seen in “Over Time” part.

The number of network elements per graph is defined with “Top Over Network elements” value. The number of displayed graph is limited to 50.

3.5.5. DASHBOARDS CONTEXTUAL MENU



With right-clicking on dashboard page, user can:

- Refresh dashboard page
- Export whole dashboard to a pdf file
- Export whole dashboard to a Word file
- Export whole dashboard to a Excel file
- Navigate to Over Network Elements mode
- Navigate to Over Time mode
- Send an email with to the whole dashboard in pdf format.

If one or more T&A Xpert are installed, a “Go to Xpert” Link can also be available when right-clicked on a particular data of a graph.

It allows the user to display the T&A Xpert viewer’s Statistic tab over the selected network element and period.

“Go to Xpert” link are only available for network elements of type Cell or SAI, it also requires T&A Xpert Version 1.2 or greater.

Finally, with right-clicking on a particular data of a graph, if the global parameter “Nova Explorer url” is configured, user can launch Nova explorer.

The same applies if link to AA is configured, user can launch Activity Analysis.

Two kinds of links to Activity Analysis are available:

- Basic links with filters on date and network elements:
- Telecom links with filters on date, network elements and additional columns for

advanced investigation

- **“Send To” feature**

- User can send an email with to the whole dashboard in pdf format to:
 - a group of users

PDF file send to 

Subject * Join PDF file.
(checked = yes)

Message

● Group selector

Available groups	Selected groups
<input type="text"/>	<input type="text"/>

>
<

- a user

● User selector

Available users	Subscribed users
<input type="text"/>	<input type="text"/>

>
<

➤ an e-mail:

The screenshot shows a user interface for managing email subscriptions. On the left, under the heading "Email selector", there are two input fields: "Name :" and "Email :". Below these fields are two buttons: a right-pointing arrow ("→") and a left-pointing arrow ("←"). To the right of these buttons is a large rectangular box labeled "Subscribed emails". At the bottom center of the interface is a "Send" button.

- Go To Activity Analysis feature:

If you get the message below, please, refer to [Internet Explorer options](#) section.

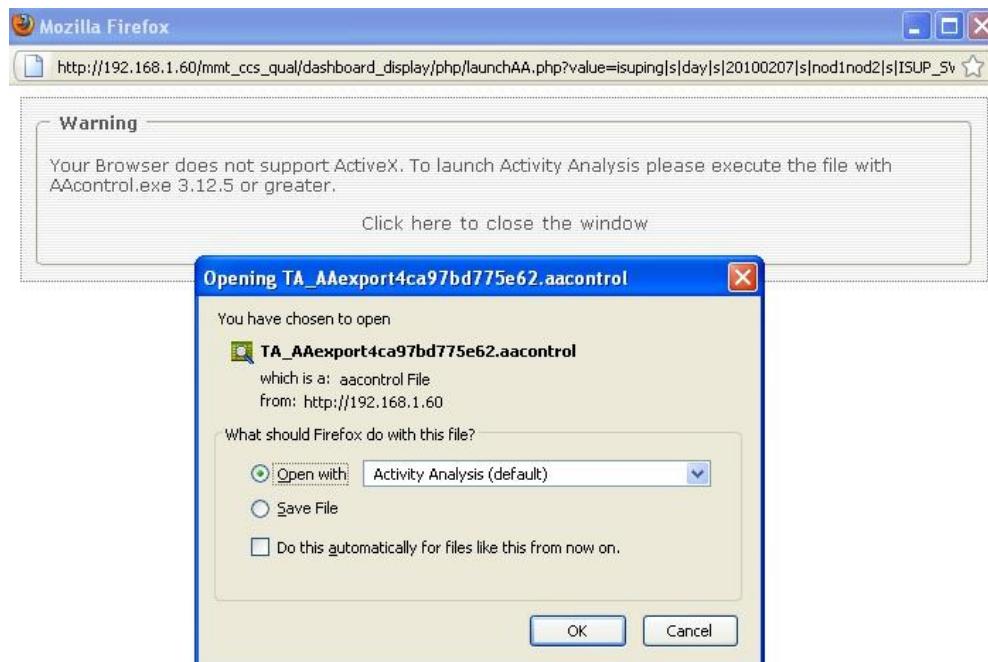


Mozilla Firefox

If you are using Mozilla Firefox browser, when attempting to launch Activity Analysis, the browser downloads an .aacontrol extension file. An opening file window appears.

The default program to open the file should be Activity Analysis. Click the “OK” Button to run Activity Analysis on your current dashboard context information.

In order to skip this window in the future, you can check the “**Do this automatically for files like this from now on**” box.

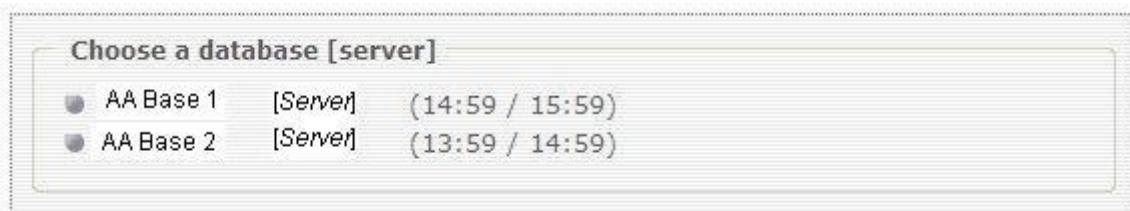


Important: you will only be able to launch Activity Analysis with Trending & Aggregation under Mozilla Firefox if you have Activity Analysis version 3.12.5 or greater installed.

You will find the list of configured AA links in

“Trending&AggregationCigaleGSM30_AstelliaConfiguration.pdf” document.

If several AA bases are available, user must choose the AA base he wants to be opened:



In case of no database available following error message is displayed:



3.5.6. DASHBOARDS NAVIGATION

Following rules applies during user navigation through several dashboards:

- The time aggregation is kept during
 - inter-dashboard navigation
 - inter-mode navigation (Overtime ⇔ Over Network Elements)
- The network aggregation level is kept when user navigates towards dashboards belonging to the same family. (See “Trending&AggregationCigaleGSM30_AstelliaConfiguration.pdf” document to know dashboards family). In case of navigation towards a dashboard belonging to another family, the network level is kept if this level exists in this family. Otherwise, the network aggregation level is set to the default one for this family.

From a dashboard in “Over Time” mode, with a click on a data value, user can switch to “Over Network Elements” mode:



From a dashboard in “Over Network Elements” mode, with a click on a data value, user:

- Stay in “Over Network Elements” mode and switch to the child level. (for example from LAC to CELL for GSM product),
- switch to “Over Time” mode if network aggregation is the minimum one:

3.5.7. ASTELLIA DASHBOARDS

You will find the lists all available Astellia dashboards in “Trending&AggregationCigaleGSM30_AstelliaConfiguration.pdf” document.

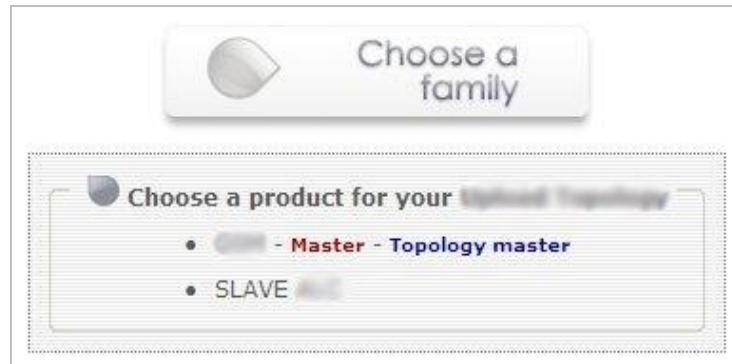
3.5.8. CLIENT DASHBOARD



With this menu, it is possible to access to the dashboards created by users (with an administrator or client profile – section [Dashboard Builder](#)).

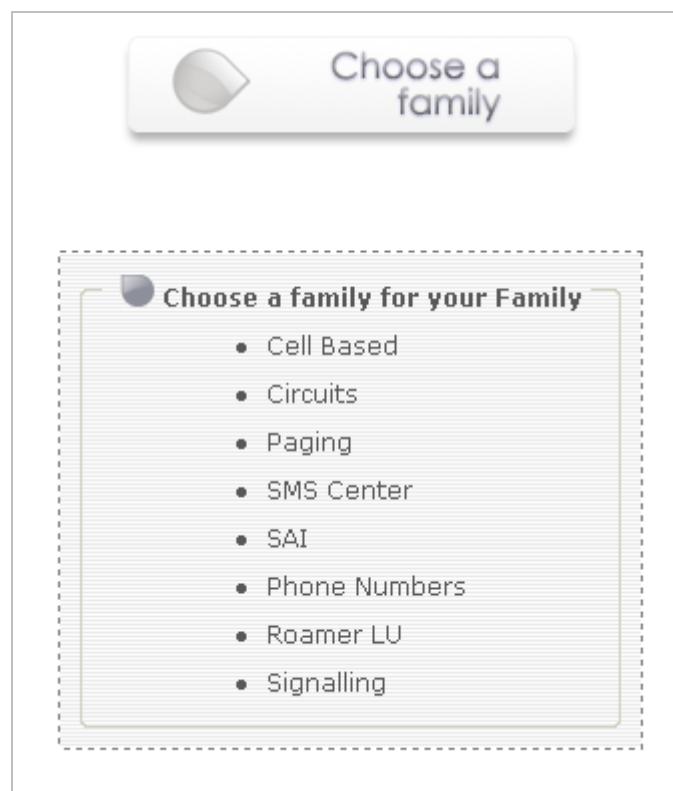
3.6. CHOOSE A PRODUCT

In some interfaces, it is needed to select the product on which apply a configuration. Click on the name of the product to select it and move forward to the menu that has been selected (or to the family choose).



3.7. CHOOSE A FAMILY

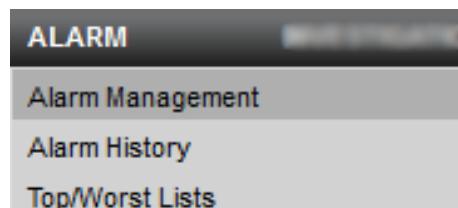
In some interfaces, it is needed to select the family on which will apply a configuration. Click on the name of the family to select it and move forward to the menu that has been selected.



Example for an IU product

3.8. ALARM

3.8.1. ALARM MANAGEMENT



The interface “Alarm Management” presents in a list the static and the dynamic alarms for each product.

Calculation time	Network element	Alarm name / source time	Options
- 2009-09-16 11:07:17	(...) [BSC]	2 critical, 0 major, 0 minor / Day	<input checked="" type="checkbox"/>
		BSC Call setup inefficiency [dynamic,Cell Based] / 2009-09-14	<input checked="" type="checkbox"/>
+ 2009-09-16 11:07:17	(...) [PCM]	8 critical, 0 major, 0 minor / Day	<input checked="" type="checkbox"/>
+ 2009-09-16 11:07:17	(...) [PCM]	14 critical, 0 major, 0 minor / Day	<input checked="" type="checkbox"/>
		CRC conversation time - 0103 [static,Circuits] / 2009-09-14	<input checked="" type="checkbox"/>
		CRC conversation time - 0103 [static,Circuits] / 2009-09-14	<input checked="" type="checkbox"/>

All alarms are listed from the most to the less recent, but you can:

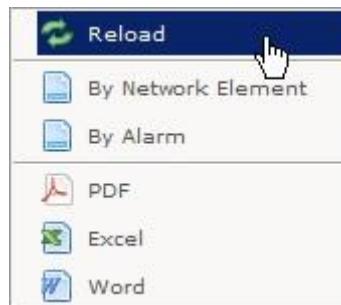
- select a date for the data:

- with the filter icon (), launch “Network Element Preferences” interface (see “[Over time mode specificity](#)” part) to select particular network elements
- filter the alarm list on a time aggregation level

- select the type of alarms:

“Collapse All” and “Expand All” is to resume or display alarm information.

There are two display types provided in this interface: you can display the alarms group by network elements or group by alarm name. To switch from one display to another right click on the interface and choose “By Network Element” or “By Alarm”:



This interface is refreshed each 5 minutes, but you can force it with a click on “reload”.

Finally, user can export alarms list to PDF, Excel or Word file.

- Alarm management options:



From a particular alarm, following options are available:

<input checked="" type="checkbox"/>	If you want to acknowledge an alarm, click on the check box. The alarm will not be displayed any more in this interface, but you can see it on the "Alarm History" interface.
<input type="checkbox"/>	You can have more details by clicking on the "+" icon:

Alarm properties (Static alarm)

- Alarm Name:
- Alarm Description:
- Network Level:
- Time resolution: Hour
- Period of exclusion: Monday Tuesday Wednesday Thursday
 Friday Saturday Sunday

Trigger **Additional fields** **Results**

General information
 Family : Critical level : critical

Source time : 16-04-2007 20:00 [Hour] Network aggregation :

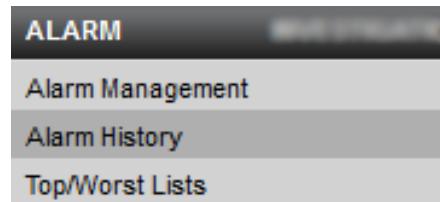
Trigger

Critical level	Trigger	Condition	Value
Critical	<input type="text"/>	≥ 5	6.94
	<input type="text"/>	≥ 60	72

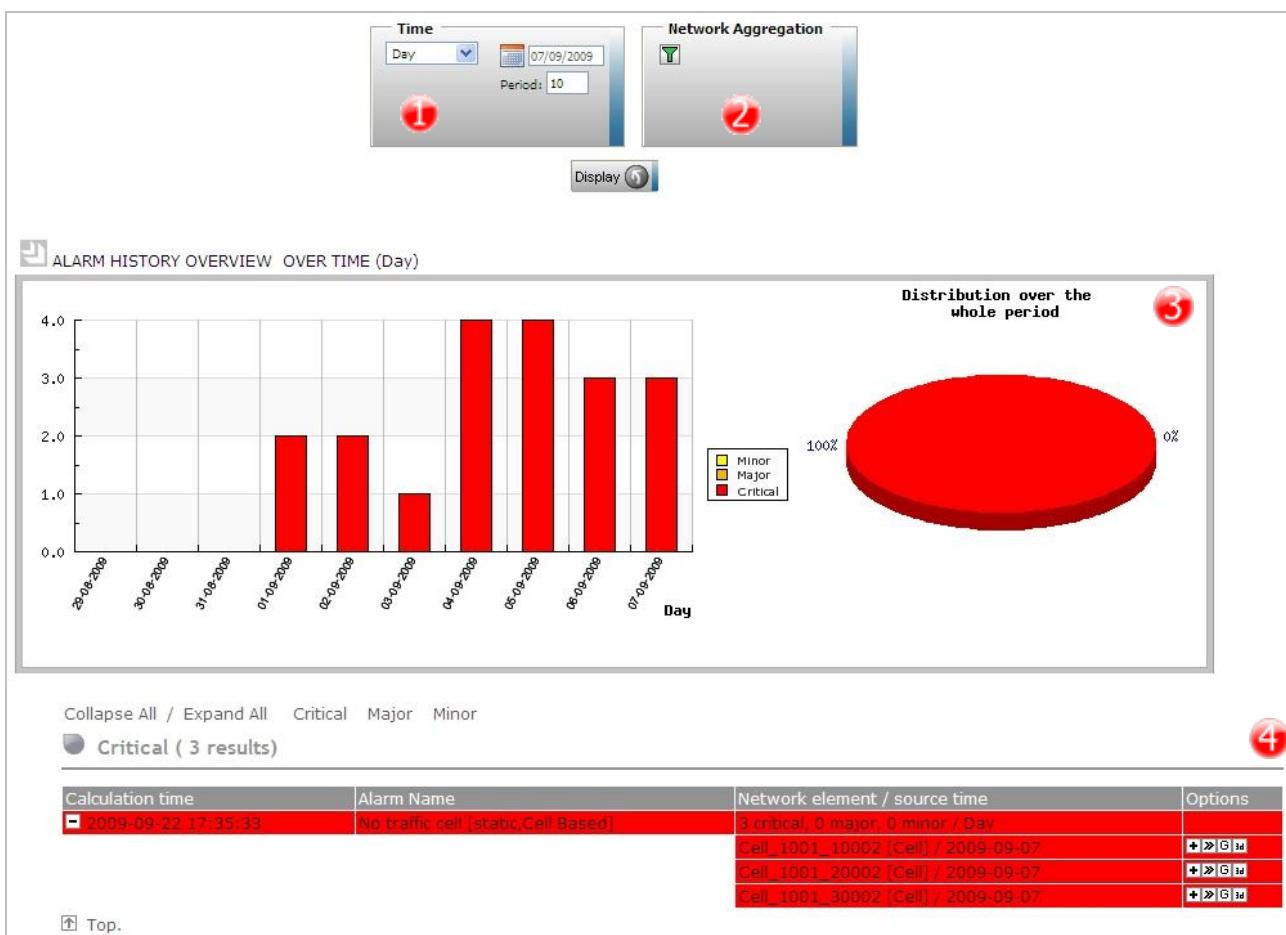
Additional fields
 No additional field defined for this alarm

	With the arrow icon you can see dashboards related to the alarm.
	Gis icon allows launching GIS interface.
	This icon allows launching GIS 3D interface.

3.8.2. ALARM HISTORY



The interface “Alarm History” presents in graph and list the static and the dynamic alarms, acknowledged and non-acknowledged, for each product.



The “Alarm History” interface is composed by four elements:

①	The time aggregation filter
②	The network aggregation filter. See “ Over time mode specificity ” part for the filter icon () description.
③	A graph that give an overview of the alarms based on the filter (alarms started during the configured period)
④	A list of all acknowledged and non-acknowledged alarms. Alarms displayed in this list are those started at the specific date selected in the time aggregation filter (not during the period).

“Collapse All” and “Expand All” is to resume or display alarm information.

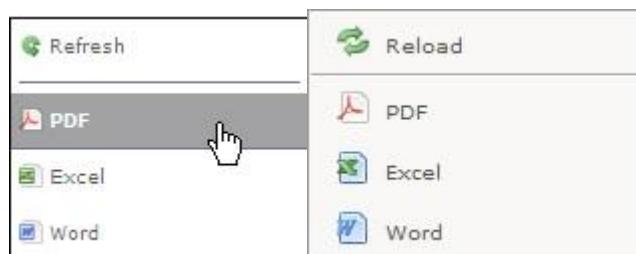
You can select the type of alarms to be displayed:

Critical Major Minor

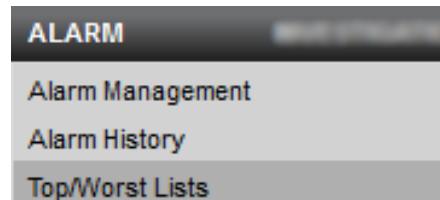
See “[Alarm management](#)” part for more information about alarm history options.

With Right click on the interface, user can:

- manually reload the alarm list
- export alarms list to PDF, Excel or Word file



3.8.3. TOP/WORST LISTS



The “Top/Worst Lists” are lists of network elements ordered by a raw/kpi for each family on each product.

The screenshot shows the 'Top / Worst Cell List' interface. At the top, there are two filter sections: 'Time' (set to 'Day' and '01/07/2009') and 'Network Aggregation' (with a Y-shaped icon). Below these are three numbered callouts: 1 points to the time filter, 2 points to the network aggregation filter, and 3 points to the table of results. The table has columns: 'Calculation time', 'Time aggregation', 'Alarm Name', 'Network aggregation', and 'Options'. The 'Alarm Name' column contains entries like 'OLD ALARM_100_10000000000000000000000000000000'. The 'Network aggregation' column contains entries like '(12200-2)[PCM]'. The 'Options' column contains icons for each row.

This interface is composed by three elements:

1	The time aggregation filter
2	The network aggregation filter. See “ Over time mode specificity ” part for the filter icon () description.
3	The list of network elements

“Collapse All” and “Expand All” is to resume or display top/worst list information.

See “[Alarm management](#)” part for more information about Top/Worst lists options.

With Right click on the interface, user can:

- manually reload the alarm list
- export alarms list to PDF, Excel or Word file



3.9. INVESTIGATION

3.9.1. QUERY BUILDER



Query builder is available from the “investigation” menu. Its aim is to provide a friendly interface to create queries. The result can be displayed as data grid, graph or CSV export.

Warning: Depending on the queries complexity and the number of simultaneous executed queries (from all users), using query builder can have a significant impact on T&A overall performance.

3.9.1.1. “Query Builder interface

The screenshot displays the "Query builder interface" with several numbered callouts:

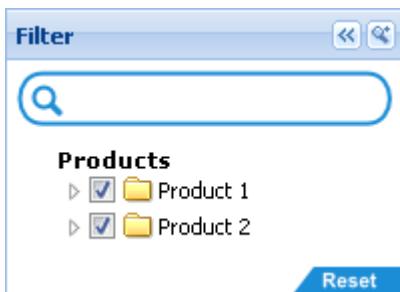
- 1**: A red circle points to the "Products" section in the left sidebar, which lists categories like "All Node1", "Node1", "All Node2", and "Node2".
- 2**: A red circle points to the "RAW list" section in the left sidebar, which contains a long list of metrics such as "A_SI_Download", "A_SI_Uplink", "ABNORMAL (BICC PC)", etc.
- 3**: A red circle points to the "Network and time" section at the top of the main panel, which includes buttons for "All Node1", "Node1", "All Node2", "Node2", "Hour", "Day", "Week", "Month", "Day BH", "Week BH", and "Month BH".
- 4**: A red circle points to the "Selected elements" table, which lists four items: "ACM (BICC PC)" (label), "bicc_pc_nb_acm" (name), "CCS" (product), and "N/A" (function). It also includes columns for "Group", "Visible", "Filter", and "Info".
- 5**: A red circle points to the "Filters" section, which shows two filter rules: "Max. nb. results" (label) with value "1000" and "N/A" (value), and "Day" (label) with operator "Equals to" and value "12/11/2012".
- 6**: A red circle points to the "Queries" panel on the right, which shows a single query named "Test".
- 7**: A red circle points to the "Exports" panel on the right, which shows a single export named "Test".

Query builder interface

1	RAW and KPI filter: used to refine RAW and KPI lists.
2	RAW and KPI lists: contains RAW and KPI lists.
3	Network and time: contains network and time aggregation in common between the selected elements.
4	Selected elements panel: contains the data that will be viewed in the result data grid, graph or CSV export.
5	Filters panel: contains the filters apply to the query (to filter on a date, on a KPI value ...).
6	Queries panel: contains queries saved by the current user and public queries (queries shared by other user).
7	Exports panel: contains CSV exports

3.9.1.2. Building a query

To build a query you have to add elements (RAW/KPI) to “selected elements” and “filters” panels. You can find elements using the “RAW and KPI filter” panel



This panel is used to refine the RAW and KPI lists displayed below.

Advanced filter options are displayed by default and may be hidden using this icon: .

Filtering options are applied on the element label, element code, description and comment (not case sensitive).

Example:

If you want to add the following KPI:

Label: CS Authentication average duration (s)

Code: CS_AUTH_DUR_AVG

You may search for: “Authentication”, “authen”, “average”, “CS_AUTH”, “dur_avg” ...

When you found the required element, you can add it to the “selected elements” or “filter” panel.

To add the element into the “Selected elements”, there are three possibilities:

- **Left click:** when an element is clicked, it is automatically added to the “Selected

elements” panel.

- **Drag&Drop:** You can drag the element and drop it on the “Selected elements” panel.
- **Right click:** Right click on the element then select “Add to: selected elements” in the menu.

To add the element into the “Filter” panel, there are two possibilities:

- **Drag&Drop:** Drag the element and drop it on the “Filter” panel.
- **Right click:** Right click on the element then select “Add to: filter” in the menu.

When an element has been added to the “Selected element” panel, it can be duplicated in the “Filter panel” using the following icon  in the “Filter” column of the “Selected element” grid.

3.9.1.3. “Selected elements” panel

To build a valid query you must select at least: 1 counter/KPI, 1 network and 1 time aggregation. When an element is added to the “Selected elements” panel, a new line is created into the grid. The line contains the following columns.

Name	Description
Label	By default the label (RAW's label, KPI's label...), you can edit this field.
Name	The element name (KPI or Counter name).
Product	The product name
Function	Function apply to the element (combo list), possible values: None Sum Average Maximum Minimum Count
Order	Order apply on the element (combo list): None Ascending Descending
Group	Checkbox, if checked add the element in the “GROUP BY” SQL clause.
Visible	Checkbox, if not checked, this element will not be displayed in the result grid, graph or CSV export. But it will be added to the SQL query (may be used for ordering results).
Filter	Displays an icon. When it is clicked, the current element is added into the “Filter” panel.

The column label for editable columns is flagged with a pencil icon:

	Label		Name
1	Day		day
2	ASCMPI		ASCM

Pencil icon for editable cells

Toolbar buttons details

Label	Description
Apply distinct clause	If clicked, a “distinct” SQL clause will be added to the query.
Disable functions	If clicked, disable function and group column. This removes “Group by” clause and aggregate functions from the query.
Delete all	Remove all the elements

Ordering elements

Elements can be ordered by drag and drop.

Removing an element

A line can be removed using the “red cross” icon of the last column.

3.9.1.4. “Filters” panel

By default, the filters panel contains a line ‘Max nb. results’, this line cannot be deleted and is used to set the maximum number of result.

Each time an element is added, a new line is created in the grid. The line contains the following columns.

Columns details

Name	Description
Enable	Checkbox, to enable or disable this filter row.
Label	By default the element name (RAW’s name, KPI’s name...), you can edit this field.
Name	The element code
Operator	Operator condition applied to the element (combo list).
	<u>Possible values for RAW/KPI :</u> Equals to Not equals to Less than

Less than or equals
Greater than
Greater than or equals
Between
Not between
Is null
Is not null
Is true
Is false

Possible values for TA :

Equals to
Not equals to
Less than
Less than or equals
Greater than
Greater than or equals
Is null
Is not null
Is true
Is false

Possible values for NA :

In
Not in
Is null
Is not null
Starts with
Not start with
Ends with
Not ends with
Contains
Not contains

Value	<p>Value of the condition applied to the element.</p> <p>This field is a standard text input field where you can type text, except for 2 cases:</p> <p>For TA (Day and Day BH), a date picker is displayed.</p> <p>For TA (Hour), a combo list is displayed.</p>
-------	--

	For NA with ‘In’ or ‘Not in’ operator, the Network selection window is displayed.
Connector	Boolean operator applied between this filter element and the filter below. If there is no filter element below, this operator is ignored.

For TA, the value field contains a default value which indicates the expected format:

For date: dd/mm/yyyy.

For time: hh:mm

For week: yyyyww or ww

For month: yyymm or mm

Toolbar buttons details

Name	Description
Delete all	Remove all elements (except max nb result).

Ordering elements

Elements can be ordered by drag&drop.

Removing an element

A line can be removed using the “red cross” icon of the last column.

3.9.1.5. “Network and time” panel

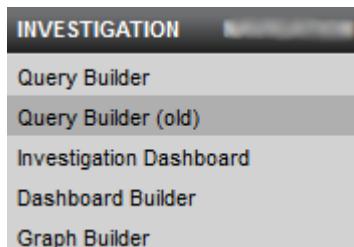
When you add RAW and KPI to your query, the “Network and time” panel is automatically refreshed. It displays the Network and time aggregations in common between the selected RAW and KPI. To add an aggregation in the query you have three possibilities:

- **Left click:** when an aggregation is clicked, it is automatically added to the “Selected elements” panel.
- **Drag&Drop:** You can drag the element and drop it on the “Selected elements” and “filters” panel.
- **Right click:** Right click on the element then select “Add to: selected elements” or “Add to: filters” in the menu.

3.9.1.6. Toolbar buttons

Button name	Description
New	Create a new query
Save/Save as	Save your query
Show SQL	View the SQL corresponding to your query
Edit SQL	Edit the SQL
Preview	Display the query results in the browser
Export	Export the result in a CSV file

3.9.2. QUERY BUILDER (OLD)



“Query builder (old)” link gives access to the old version of the Query builder. This version is only available to display old queries created before the new version of the query builder. With this version you cannot create nor save queries.

3.9.2.1. “Query Builder (old)” interface

The screenshot shows the 'Query builder (old)' interface. At the top, there are three tabs: 'EQUATION DEFINE' (which is selected and highlighted in blue), 'TABLE RESULT', and 'GRAPH RESULT'. Below the tabs, there are three main sections: 'Select' (containing five rows of data with red 'X' icons), 'Condition' (containing a dropdown menu, a 'Value' input field, and a '+' button), and 'Parameters' (containing 'Order By' and 'Limit' dropdown menus). At the bottom are five action buttons labeled 1 through 5: 'Display Result', 'Clear Query', 'Edit Query', and 'Cancel' (button 5).

Query builder (old) interface

1	Query Items list, are be used in each section of the query panel
2	“Select” section of the query. Items dropped here will be columns in the result table
3	“Condition” section of the query. Items are used here as criteria to filter the query results
4	“Order by” section of the query. One item can be use to sort the result table
5	Action buttons: “Display result” Runs the query and display a preview of the first 1000 rows in the Table Result tab.

“Clear Query” removes all items of the query panel.

“Delete Query” deletes the currently loaded saved query if applicable.

You can open a saved query using drag & drop from: “Queries List” to “Select” section.



Save queries

3.9.2.2. “Table Result” interface:

With clicking on “Display Result” button  of “Equation Define” interface, the result appears on the “Table Result” tab:



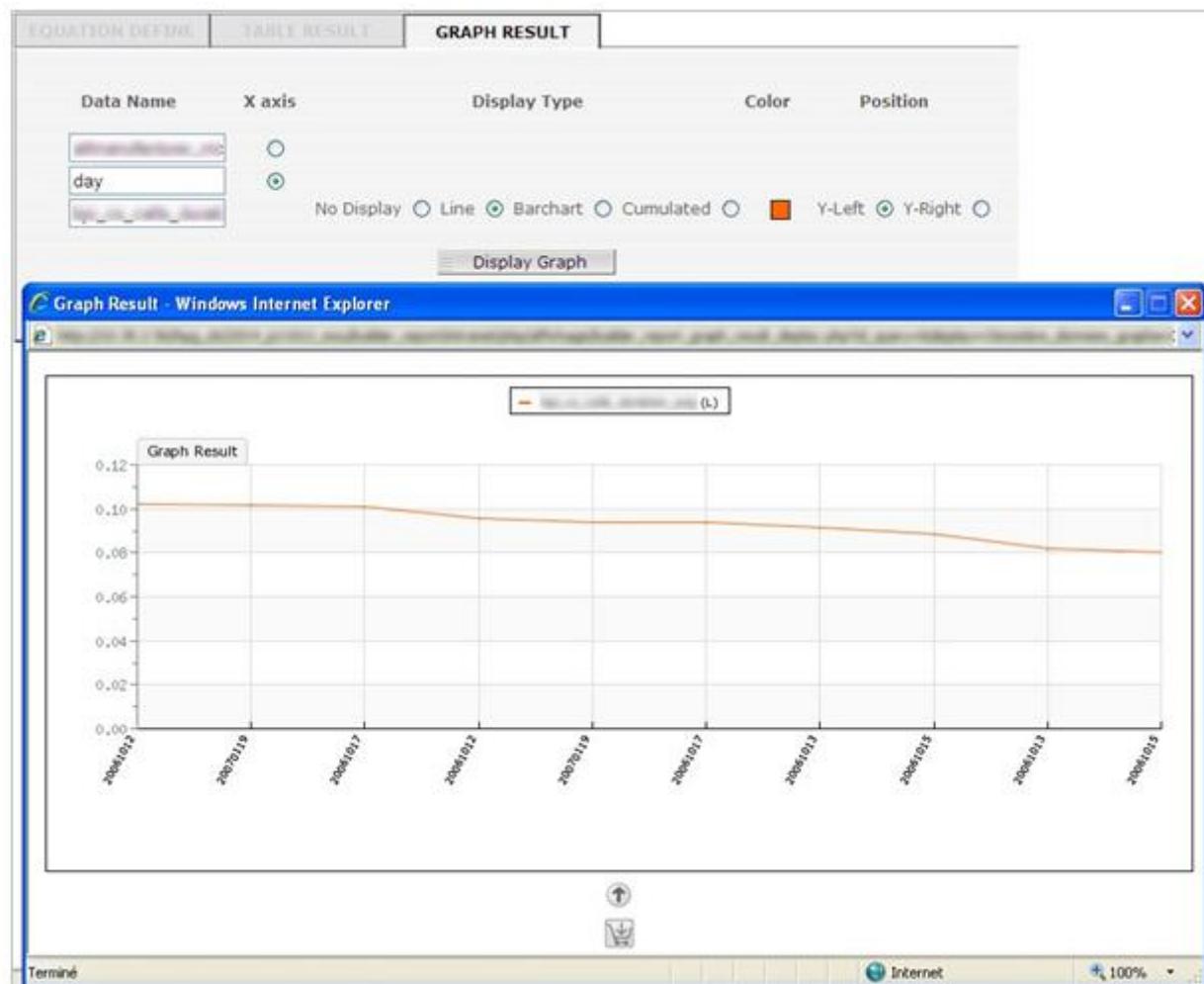
Cell	Day	Week	Call Drop Rate
2241	20090825	200935	3.73832
3153	20090825	200935	3.25941
4472	20090825	200935	2.73438
3152	20090825	200935	2.08791
2261	20090825	200935	1.44404
3151	20090825	200935	1.39685
2282	20090825	200935	0.739372
2252	20090825	200935	0
2242	20090825	200935	0
2251	20090825	200935	

The full results can be exported to a CSV file with the Export button.

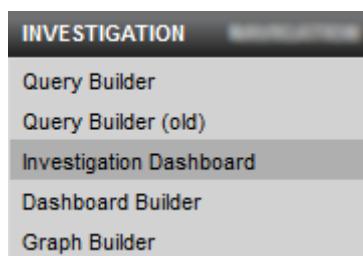
The “Save query” button is disabled since the new version of Query builder is available.

3.9.2.3. Graph Result interface:

You can define parameters for a graph in the “graph result” tab.

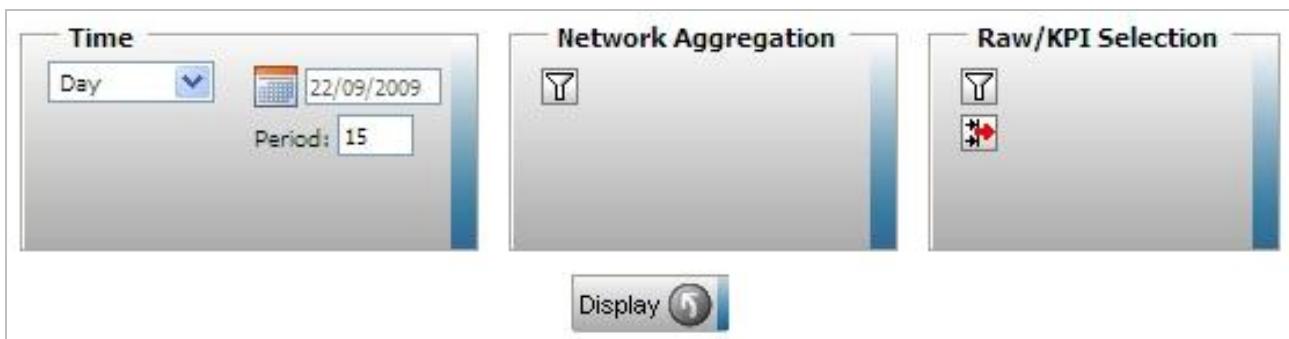


3.9.3. INVESTIGATION DASHBOARD



With this interface you can display on the same graph the evolution of a KPI comparing its values to the different network elements. After choosing the product and the family, the user gets the interface “Investigation Dashboard” composed by two parts:

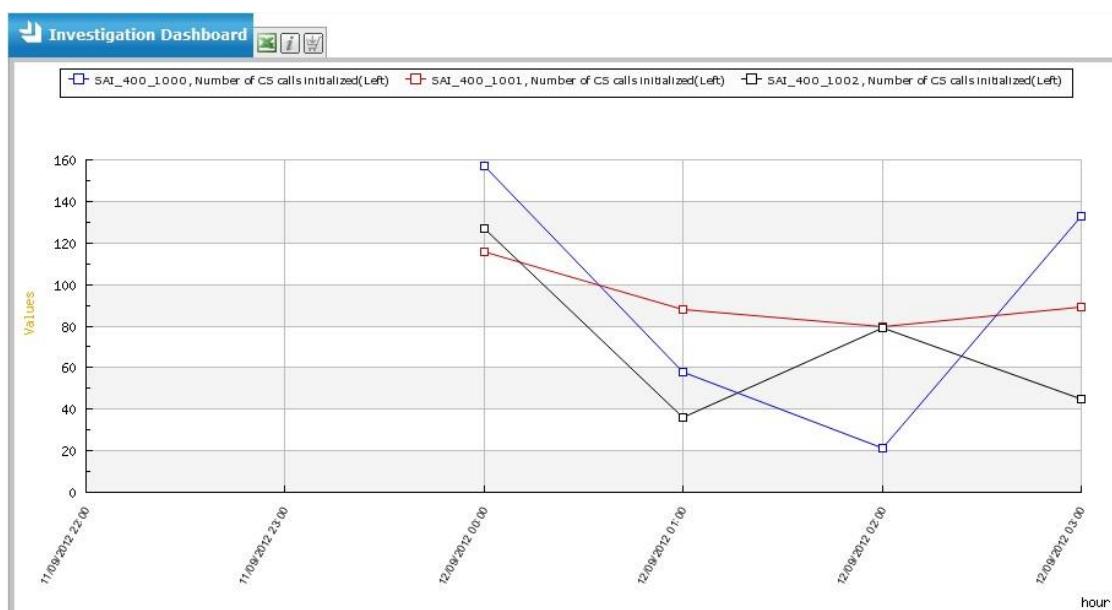
- A filter:



You have to select a date, the time aggregation, a period, a list of network aggregation, a KPI and optionally a raw/kpi filter.

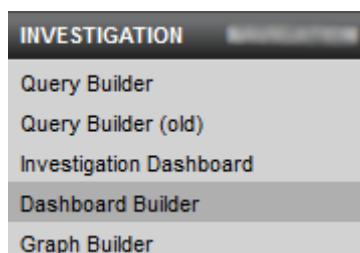
- A graph

For each network elements selected, you can see their values over time.



3.9.4. DASHBOARD BUILDER

With the “Dashboard Builder”, dashboards can be created and published.



- “Dashboard Builder” main interface:



	List of existing Dashboards. Choose one by clicking its name in the select box.
①	Create a new by clicking on the “New” button. The Dashboards are ordered by owner (Astellia, Administrator, Users and Your).
②	List of Graphs to import in the opened Dashboard.
③	Parameters to filter the graphs list. The text box enables you to specify a chain of characters. Tick the other boxes to choose the graphs owners.

- How to create a new Dashboard?

Step 1: Click on the button “New”. A window opens with information to be parameterized.

Step 2: Fill in the information. The “title” field is mandatory.

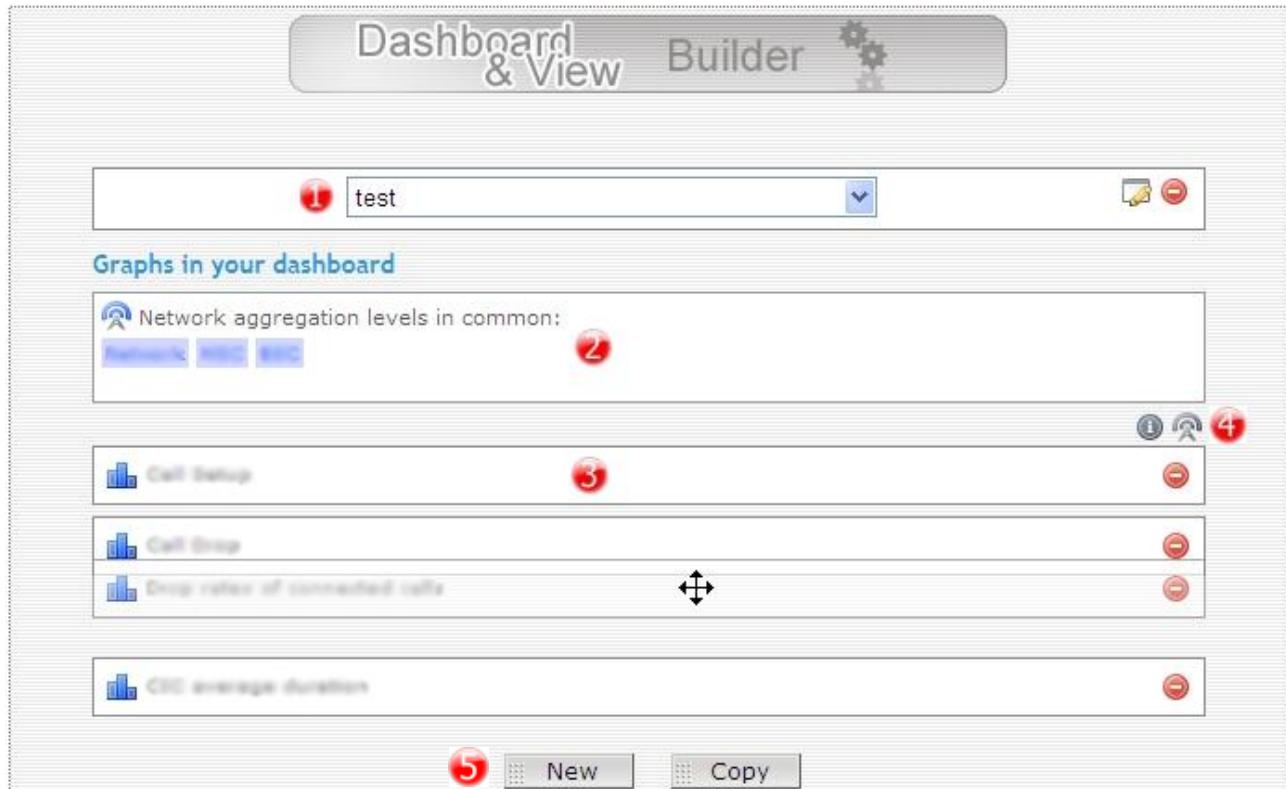
Dashboard title	Name of the dashboard (only alphanumeric characters are allowed).
Mode	Choose the mode to display the dashboard (Overtime, Over network elements, both).
Menu link	A dashboard can be affected to a user menu. Select a menu in the list box and check “online” to publish it.

Default order by	Once a graph is added to the dashboard, you can select here a raw or Kpi used for default order by. User can override this using the selector.
Sorting order	Choose the data sorting order.
Period	Default period to use in time aggregation mode.
Top Over Time	Default number of top elements to select on Over Time mode.
Top Over Network	Default number of top elements to select on Over Network mode.
Network Aggregation	Once a graph is added to the dashboard, you can select here the network aggregation level to display. The list shows only levels common to the various graphs.

Step 3: Click on the button “Create new dashboard” to save your parameters.

Step 4: Choose graphs in the left area and click on them. They are added to your dashboard and appear in the right area.

- Add Graphs to a Dashboard



1	Selected element. Click on to view and modify details if you are authorized. Click on to delete this element.
2	List of network aggregation levels common to the various components.
3	Components of the element. Click on the component name to access to its details. Click on to delete the component. You can modify the components order by simple drag'n drop.
4	Click these buttons to get help () or to view network aggregation levels of all the components ()
5	Click these buttons to create a new element or to copy the selected one.

- Rules applied to the Dashboard:

It is not possible to remove a Graph which contains a KPI/raw counter used for the order in an Overtime display mode.

3.9.5. GRAPH ELEMENT BUILDER



With the “Graph element builder” interface, you can create graphs.
You can also assign and configure their data.

- “Graph Element Builder” main interface:

The screenshot shows the "Graph element Builder" interface. On the left is a sidebar with "Raw counters and KPI FILTER" at the top, followed by sections for "Type of elements" (Raw counters, KPI), "Product list" (GSM, SLAVE ALC), and "Type of display" (No sort, By family). Below this is a "Graph elements" section with a tree view of raw counters under "Raw counters". The main panel has a title "Graph element Builder" with a gear icon, a dropdown menu "Choose a graph or create a new one:", and a "New" button.

1	List of existing Graphs. Choose one by clicking its name in the select box. Create a new by clicking on the “New” button. The Graphs are ordered by owner (Astellia, Administrator, Users).
2	List of Raw/KPIs to import in the opened Graph.
3	Parameters to filter the Raw/KPIs list according to their type, product or family..

- How to create a Graph element?

Step 1: Click on the button “New”. A window opens with information to be parameterized.
Step 2: Fill in the information. The “title” field is mandatory.

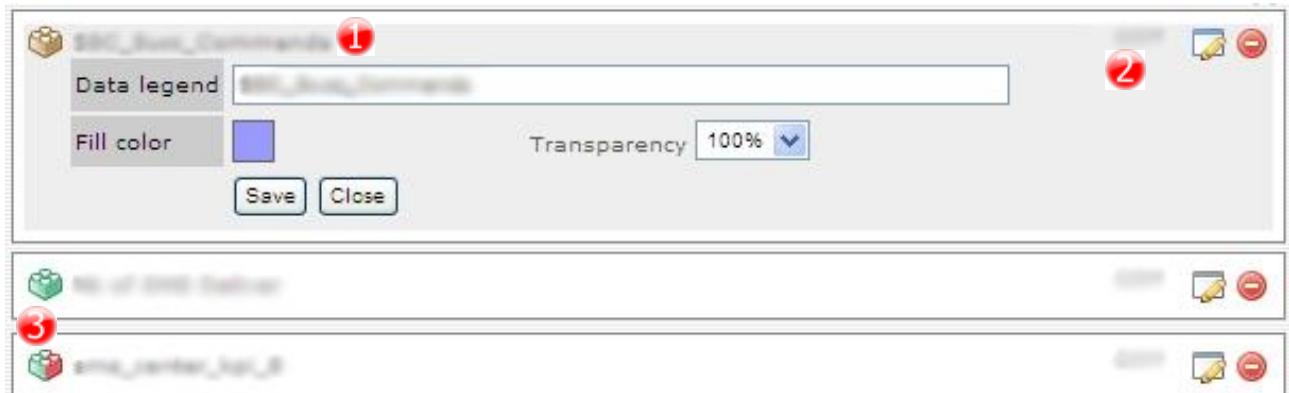
Choose a graph or create a new one:	
Title	<input type="text"/>
Definition	<input type="text"/>
Troubleshooting	<input type="text"/>
Graph type	<input checked="" type="radio"/> Graph <input type="radio"/> Pie <input type="radio"/> SingleKPI Scale type: <input checked="" type="radio"/> linear <input type="radio"/> db
Y-axis label	Left* <input type="text" value="Data"/> Right <input type="text"/>
Graph size	Width* <input type="text" value="900"/> Height <input type="text" value="450"/> <small>(minimum size: width = 700, height = 350)</small>
Legend's position	<input checked="" type="radio"/> Top <input type="radio"/> Right
GIS	<input checked="" type="radio"/> Off <input type="radio"/> On
Default order by	there is no data in your graph <input type="button" value="Desc"/>
<input type="button" value="Create new graph"/> <input type="button" value="Close"/>	

Title	Name of the graph (only alphanumeric characters are allowed).
Definition	A definition for the graph.
Troubleshooting	Information, explanations, actions to lead.
Graph type	You can choose between graph () , pie () or Single KPI () and then: - for graph, scale type linear or db, - for pie, split by first axis or third axis and a raw/kpi name for it (once one is added). - for Single KPI, the legend position is forced to be top
Y-axis label	The label for the Y-axis label left and right (if used).
Graph size	Edit graph width and height.
Legend's position	Select legend's position (top or right)
GIS	Activate GIS display. When GIS is 'On', select the raw/KPI used for the GIS display. • GIS : <input type="radio"/> Off <input checked="" type="radio"/> On Gis display based on: <input type="text"/>
Default order by	Once a graph is added to the dashboard, you can select here a raw or Kpi used for default order by.

Step 3: Click on the button "Save" to save your parameters.

Step 4: Choose raws and KPIs in the left area and click on them. They are added to your dashboard and appear in the right area.

Step 5: You can edit components details (edit icon), and modify the data label, fill color and transparency.

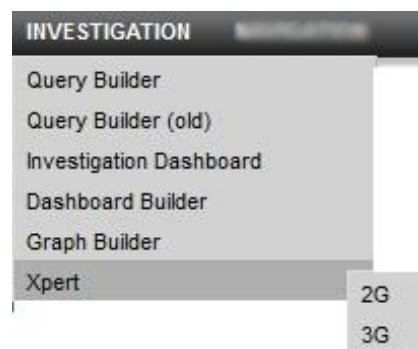


①	Raw/kpi legend
②	Product name
③	Element type: 📦: raw counter, 🏭: KPI, 🏭: KPI with range, 🏭: KPI from client.

- Rules on the Graphs:

1. It is not possible to remove a raw/KPI from a Graph when this KPI is used in the Geographical Overview (GIS option).
2. It is not possible to remove a raw/KPI from a Graph when this KPI is used for the “Default order by” option.

3.9.6. XPERT



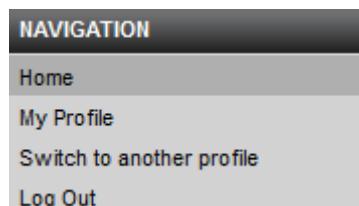
If one or more T&A Xpert software is installed with the T&A Master Product, an Xpert sub menu is available in the user Investigation menu.

This link allows the user to access the T&A Xpert viewer user interface (Please report to T&A Xpert user manual for details)

If more than one T&A Xpert is configured, multiple Xpert submenus will be available, one for each Xpert viewer (as displayed in the screenshot above).

3.10. NAVIGATION

3.10.1. HOME



The “Home” menu will let you go back to the Homepage.

3.10.2. MY PROFILE



The “My Profile” menu is an interface dedicated to any user who can modify his/her own information that has been initialized by the administrator.

This interface is divided in three parts.

The User Administration Interface allows users to edit their own profile. It consists of three main sections:

- My Profile:** Displays basic information: User Login (admin), Username (Administrator), Email (support@astellia.com), and Phone number (for SMS) (redacted). A red circle with the number 1 is positioned to the right of the email field.
- My Homepage:** Shows the default dashboard selection (Default dashboard) and a note: "You must log out/log in to apply your changes." A red circle with the number 2 is positioned to the right of the note.
- Network Element Preferences:** Contains a notice: "Notice : only common network elements will be displayed" and a note: "Notice : You must log out/log in to apply your changes." A red circle with the number 3 is positioned to the right of the note.

A "Save" button is located at the bottom of the interface.

	“ My profile ” part allows user to consult his personal information. All parameters are managed on Portal.
	“ My homepage ” part allows user to configure his own home page.
	“ Network Elements Preferences ” part allows user to select particular network elements that will be automatically selected during user navigation.

- “My homepage” feature:

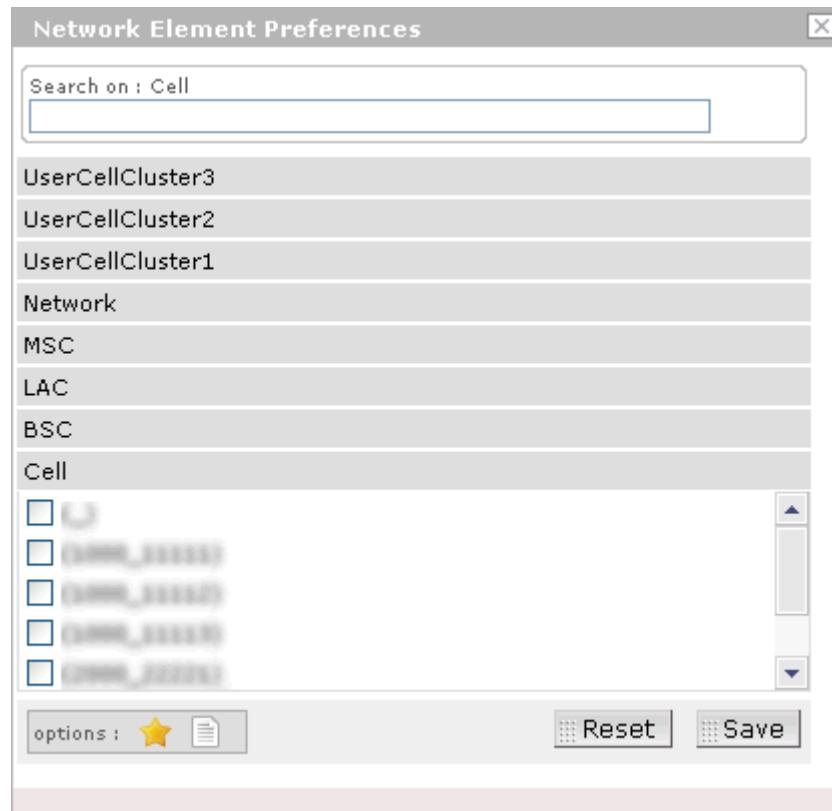
Once user selects the home page dashboard:



He has to configure its display mode by clicking on the red eye:

If user selects “None”, no dashboard is displayed.

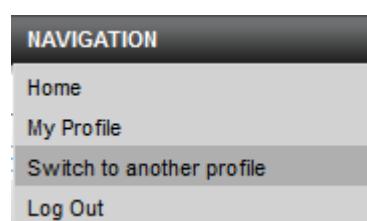
- “Network Elements Preferences” feature :



With this interface user can select network elements that will be automatically selected during user's navigation in:

- Dashboards interfaces
- Alarms Management interface
- Alarm history interface
- Top/Worst lists interface

3.10.3. SWITCH TO ANOTHER PROFILE



This interface allows the user to change the profile he uses. If a user owns various profiles (rights) for the current application, he can then switch from one to another without logging out.



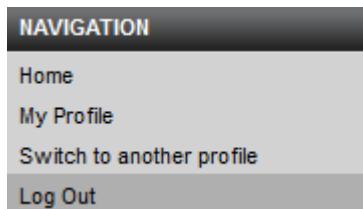
If the user owns more than two profiles, the icon  will lead to the same list as the menu.

If he owns only two profiles, the icon  allows to directly switch from the current profile to the other one.

If the user owns only one profile, the icon is not displayed.

Profiles can be from the various types “admin” and “user”.

3.10.4. LOG OUT



To log out T&A application, user has just to click on navigation “Log Out” menu.