

IBM Tivoli Netcool Performance Manager for Wireless V9.2.1

Running reports with the KPI browser



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IBM Tivoli® Netcool® Performance Manager for Wireless, run reports with the KPI Browser.

Assumptions

- You must already know how to use IBM Tivoli Netcool Performance Manager for Wireless software to perform the following tasks:
 - Log in
 - Navigate
- If you cannot perform these tasks, you can learn how to do them by taking a Tivoli Netcool Performance Manager for Wireless user course.

Before attempting this module, you should already know how to use IBM Tivoli Netcool Performance Manager for Wireless software to perform the following tasks:

- Log in
- Navigate

If you cannot perform these tasks, you can learn them by taking a Tivoli Netcool Performance Manager for Wireless user course.

Objectives

- When you complete this module, you should be able to:
 - Know when to use the KPI browser to run reports
 - Know what reporting functionality is available when creating reports with the KPI browser
 - Create a report with the KPI browser

When you complete this module, you should be able to know when to use the KPI browser to run reports, know what reporting functionality is available when creating reports with the KPI browser, and create a report with the KPI browser.

Outline

- When to use the KPI browser
- Open the KPI browser
- Configure the KPI browser
- Running a report
- Manipulate report results

This module presents information regarding when to use the KPI browser, how to open the KPI browser page, how to configure the KPI browser, run a report, and manipulate the report results.

When to use the KPI browser

- Graphs
- Quick
- Without a report definition

Use the KPI browser to quickly access your operational data in a graphical format. The report can quickly show data for several KPI on individual graphs or combined on a graph to present an operational dashboard.

These reports can be generated without creating a report definition. Data can be graphed by KPI or by entity resource. There are several graph types to select from including the following and more types:

Line Plot

Bar

Stacked Bar

Superimposed Bar

Stacked Area

Scatter

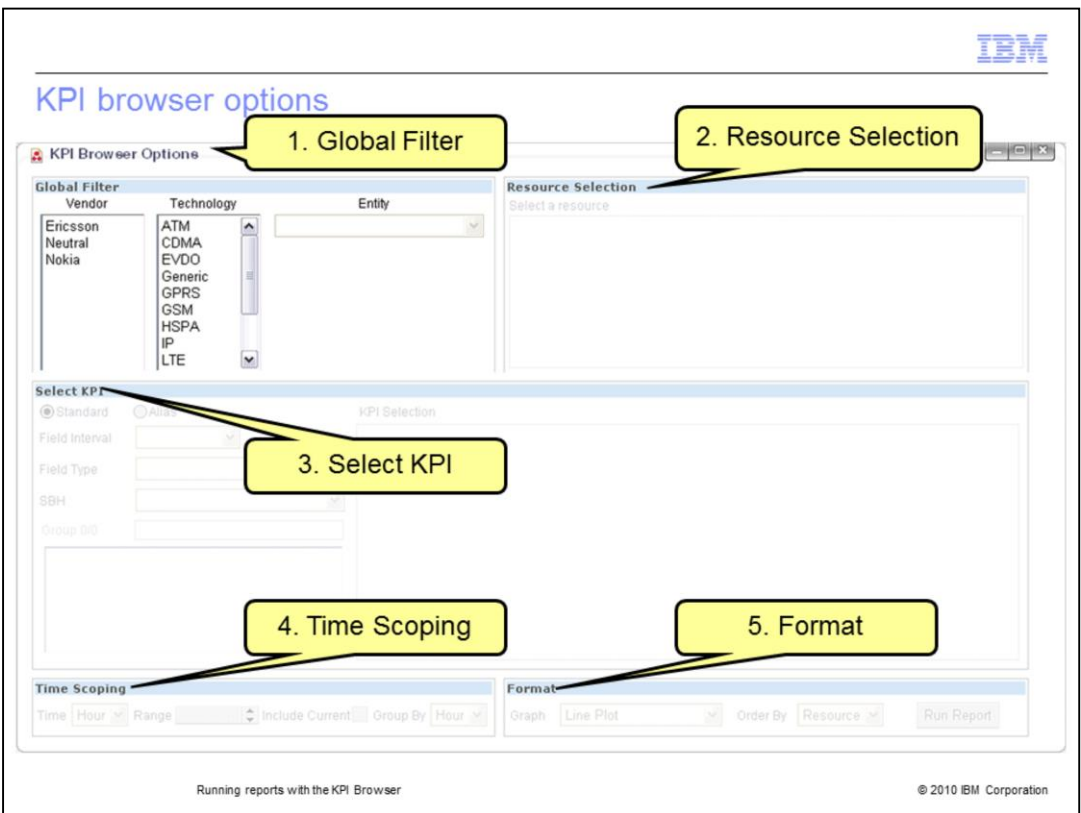
Stair

Overview of create a report using the KPI browser

1. Log in and navigate to the **Reporting** tab
2. Navigate to the **kpi browser** page
3. Locate the KPI Browser Options window
4. Select data criteria
5. Run the report
6. View the default KPI browser graphs
7. Adjust the graphs to meet your requirements

This is an overview of how to create a report. There is a demonstration in the module to show you the parameter selections.

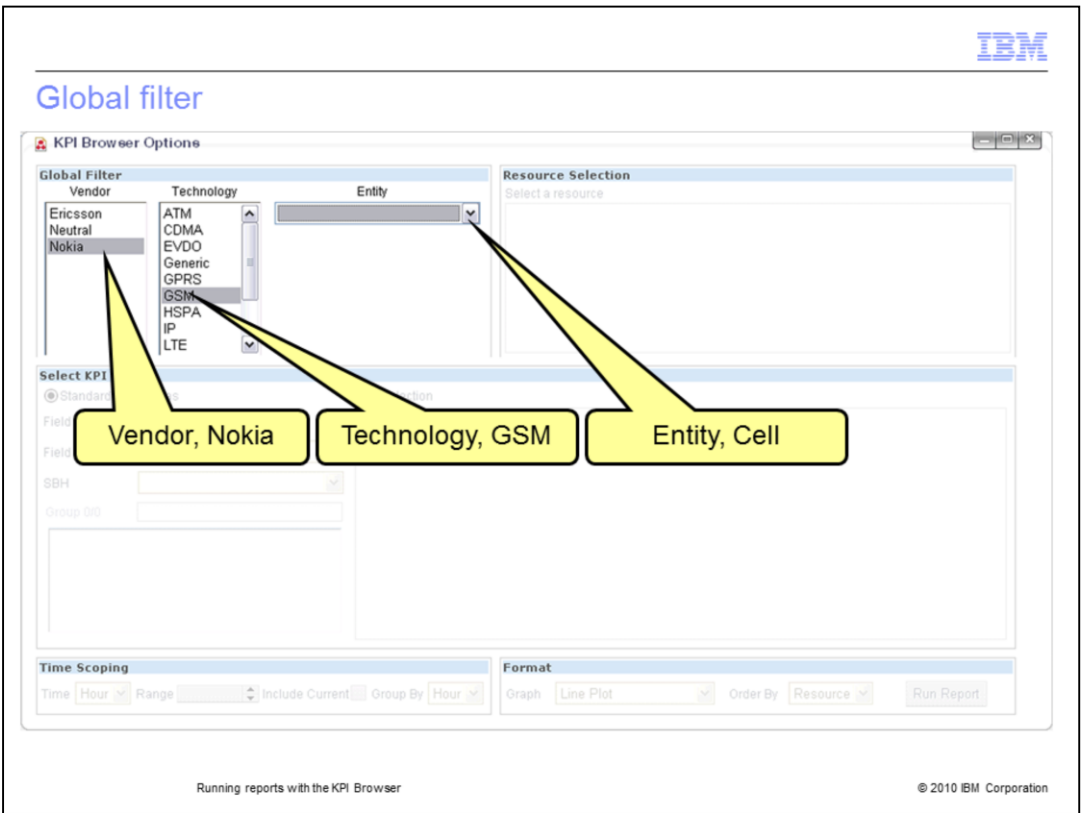
1. After logging into the main TNPMW interface, click the **Reporting** tab to access the reporting page buttons.
2. Click the **kpi browser** page.
3. The **kpi browser** page displays with the **KPI Browser Options** window overlaid.
4. Select the data criteria.
5. Click the **Run Report** button.
6. The **KPI Browser Options** window collapses and the graphs are generated using the default KPI browser configuration.
7. Use the Graph menu, Order By menu, and other controls to configure the report output to meet your requirements.



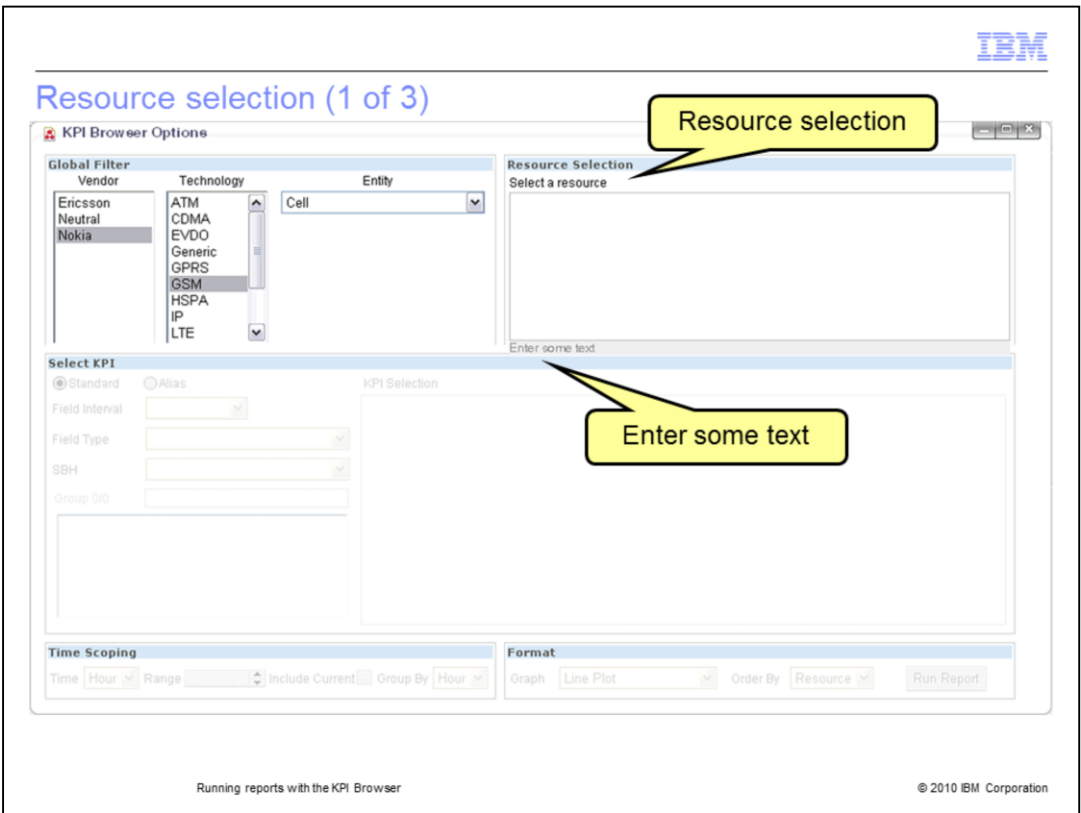
The KPI Browser Options window contains five panes that activate when you select required information in the preceding pane.

The five panes are Global Filter, Resource Selection, Select KPI, Time Scoping, and Format.

You can use the **Shift** and **Ctrl** keys to select multiple items in the selection lists.



At the Global Filter is where you select the Vendor, Technology, and Entity. The Entity is the Focal Entity of the report, like used in a report definition. The Entity field list does not activate until you select at least one item in both of the Vendor and Technology selection lists. After you have clicked the Entity menu, type the first letter of the entity. The list automatically scrolls to that letter. For this example, the vendor, Nokia; technology, GSM; and Entity, Cell are selected.



After the Entity is selected, the Resource Selection pane is active. When you click in the blank text box, the prompt, "Enter some text" is displayed at the bottom of the pane.

Resource selection (2 of 3)

The screenshot displays the 'KPI Browser Options' dialog box. It is divided into several sections:

- Global Filter:** Includes 'Vendor' (Ericsson, Neutral, Nokia), 'Technology' (ATM, CDMA, EVDO, Generic, GPRS, GSM, HSPA, IP, LTE), and 'Entity' (Cell).
- Resource Selection:** A text input field with the text '1-' and a callout bubble stating: 'Type the first few letters of the entity ID'. Below it, a list of 16 matches is shown, with the first item '1-1-1' highlighted. A callout bubble states: 'The matching entity ID list is displayed. Click at least one or more entity ID'. The list includes items like 1-1-1, 1-1-2, 1-1-3, 1-2-1, 1-2-2, 1-2-3, 1-3-1, and 1-3-2.
- Select KPI:** Features radio buttons for 'Standard' and 'Alias', and various dropdown menus for 'Field Interval', 'Field Type', 'SBH', and 'Group ID'.
- Time Scoping:** Includes 'Time' (Hour), 'Range', 'Include Current', and 'Group By' (Hour).
- Format:** Includes 'Graph' (Line Plot), 'Order By' (Resource), and a 'Run Report' button.

At the bottom of the dialog, it says 'Running reports with the KPI Browser' and '© 2010 IBM Corporation'.

After you type part of the entity ID for the resources you want to evaluate, a list of matching entity ID display along with a count of the number of matching entities. Click an entity to select it; it displays above in the Select a resource list.

Resource selection (3 of 3)

The selected entity ID display. You can delete an entity ID by clicking on the X.

KPI Browser Options

Global Filter

Vendor	Technology	Entity
Ericsson	ATM	Cell
Neutral	CDMA	
Nokia	EVDO	
	Generic	
	GPRS	
	HSPA	
	UMTS	

Resource Selection

Select a resource

1-1-1-1 1-1-1-2 1-1-1-3

1-1-1-1 1-1-1-2 1-1-1-3

Select KPI

Standard

Field Intensity

Field Type

SBH

Group By

Time Scoping

Time: Hour Range: Include Current: Group By: Hour

Format

Graph: Line Plot Order By: Resource Run Report

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The selected entity ID display. You can delete an entity ID by clicking on its X. Erase the first few letters in the selection text box to close the selection list.

Select KPI (1 of 3)

Several fields that activate one at a time

Field Types based upon Field Interval selected:

- Raw:**
 - Primitive calc
 - Peg count
 - UDC
- Daily, Weekly, or Monthly:**
 - Summary
 - SBH (Stored Busy Hour)

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The Select KPI pane contains seven fields that activate after you select its predecessor. The first two fields are Standard and Alias. Click the KPI type, normally Standard. The Field Interval menu choices are Raw, Daily, Weekly, and Monthly. These represent raw data and the three options for stored data. The next two fields depend upon the Field Interval selection.

If you select Raw, then the Field Type available are Primitive calculations, Peg count, and UDC. If you select Daily, Weekly, or Monthly, then the Field Type available are the associated Summary or Stored Busy Hour. The following SBH field is only activated if a Stored Busy Hour is chosen for the Field Type.

If used, the SBH menu lists the available Stored Busy Hour definitions for the entities selected earlier.

Select KPI (2 of 3)

The screenshot displays the KPI Browser interface. On the left, a list of KPI categories is shown, with 'Traffic' selected. The main area shows a list of 204 matching KPIs, including 'sdcch_a_ft_fail_call', 'sdcch_a_ft_fail_new', 'sdcch_a_ft_fail_old', 'sdcch_abis_fail', 'sdcch_abis_fail_call', 'sdcch_abis_fail_new', 'sdcch_abis_fail_old', and 'sdcch_act_fail'. A callout box points to the top of this list, stating '204 matches'. Another callout box points to the search text box, which contains an asterisk (*). A third callout box points to the search text box, stating 'KPI Selection text box with an * wild character entered'. The interface also includes a 'Time Scoping' section with 'Time' set to 'Hour' and 'Range' set to 'Include Current', and a 'Format' section with 'Graph' set to 'Line Plot' and 'Order By' set to 'Resource'. A 'Run Report' button is visible at the bottom right.

Indication of the number of groups selected and available

Selection list filtered by text in the KPI Selection text box

KPI Selection text box with an * wild character entered

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The ratio following the Group field indicates the number of count groups selected and the total number of count groups available. In the KPI Selection text box, type characters to filter the list of fields to select. For this example, the Field Type is Peg Count and an asterisk (*) is typed in the KPI Selection text box. The list of 204 matching peg counts displays as shown in the slide. Click each KPI name to add it to the selection list. When finished, delete the filter to close the selection list.

Select KPI (3 of 3)

Selected KPI list

Time Scoping and Format are activated after you select the first KPI

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The selected KPI list contains all of the fields to be graphed. You can delete these by clicking the "X" next to their name. The sequence they display matches the selection sequence and the sequence of the graphs. You can reorder them by dragging them into the sequence required. After you select the first KPI, the Time Scoping pane activates.

Time scoping

The screenshot shows the 'KPI Browser Options' dialog box. A yellow callout box is overlaid on the left side, containing the following text:

Time scoping

- Time:** Either Day or Hour
- Range:** The number of Time units
- Include Current:** Inclusion of partial data for incomplete hours or days
- Group By:** Hour or 15 min

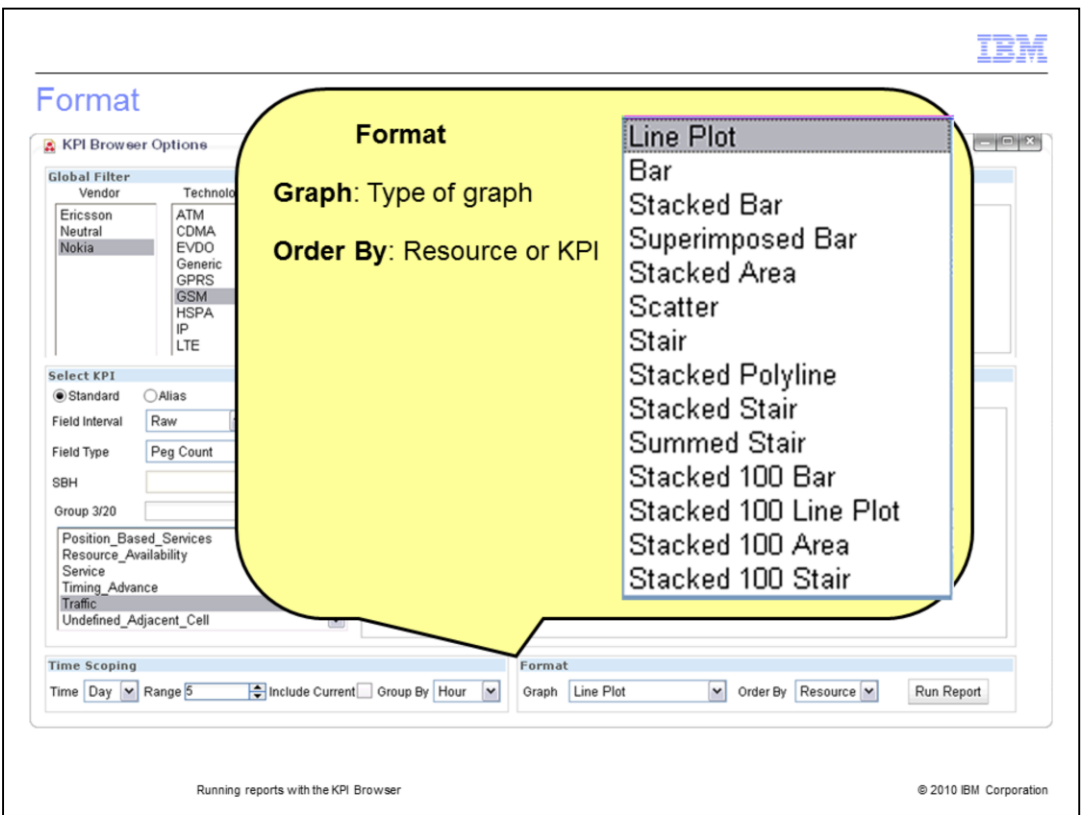
The dialog box itself has several sections: 'Global Filter' with columns for Vendor, Technology, and Entity; 'Resource Selection' with a list of resources (1-1-1-1, 1-1-1-2, 1-1-1-3); a list of metrics (no_seiz, sdcch_la_pd_fail, sdcch_netw_act, sdcch_fa_et_seiz); 'Time Scoping' with dropdowns for Time (Day), Range (5), Include Current (checkbox), and Group By (Hour); and 'Format' with dropdowns for Graph (Line Plot), Order By (Resource), and a Run Report button.

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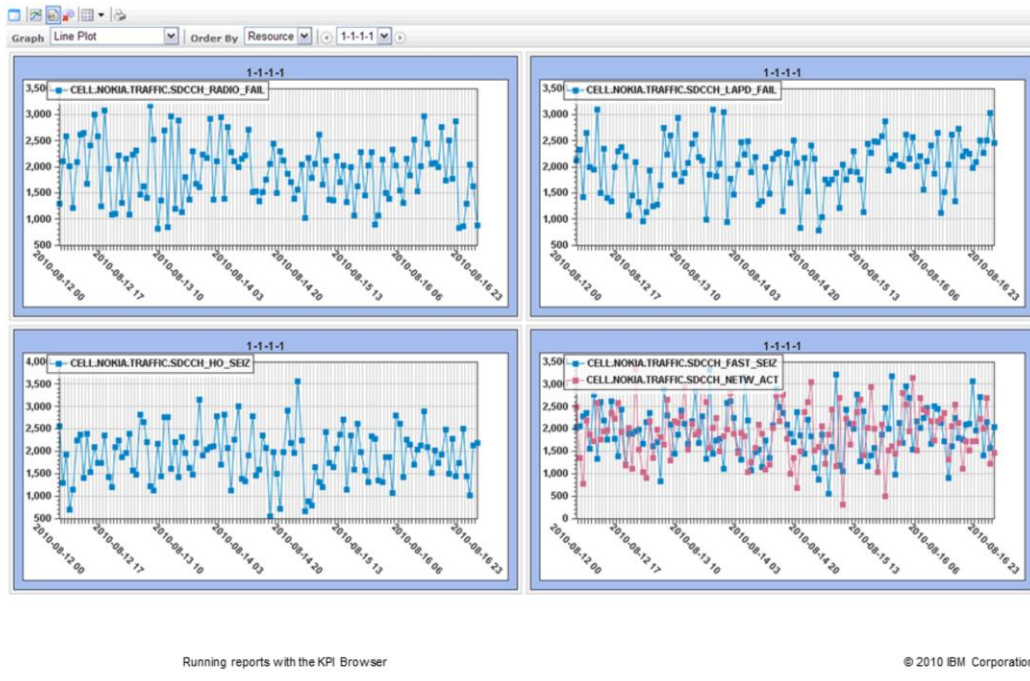
At Time Scoping you indicate four parameters. These options change if you select stored data. For raw data, the options are as follows:

- Time: Either Day or Hour
- Range: The number of Time units. For example, I want to see data for the past 5 days
- Include Current: Could include partial data for incomplete hours or days. If you want only complete data, leave this unselected.
- Group By: Hour or 15 min. Do you want 15 minute data aggregated to an hour before displaying the data? Your choice here depends upon what you are analyzing.



The Format pane is the first place you can choose the organization of the data in the graphs. After you run the report, you can select alternative graph types and change the order. This pane also contains the **Run Report** button. The default Graph type is Line Plot. The default Order By is Resource. Resource refers to the entity ID you selected in the Resource Selection pane. When you click the **Run Report** button, the KPI Browser Options window closes. After a few seconds the KPI browser display updates. The update takes longer depending upon the number of KPI and Resources selected.

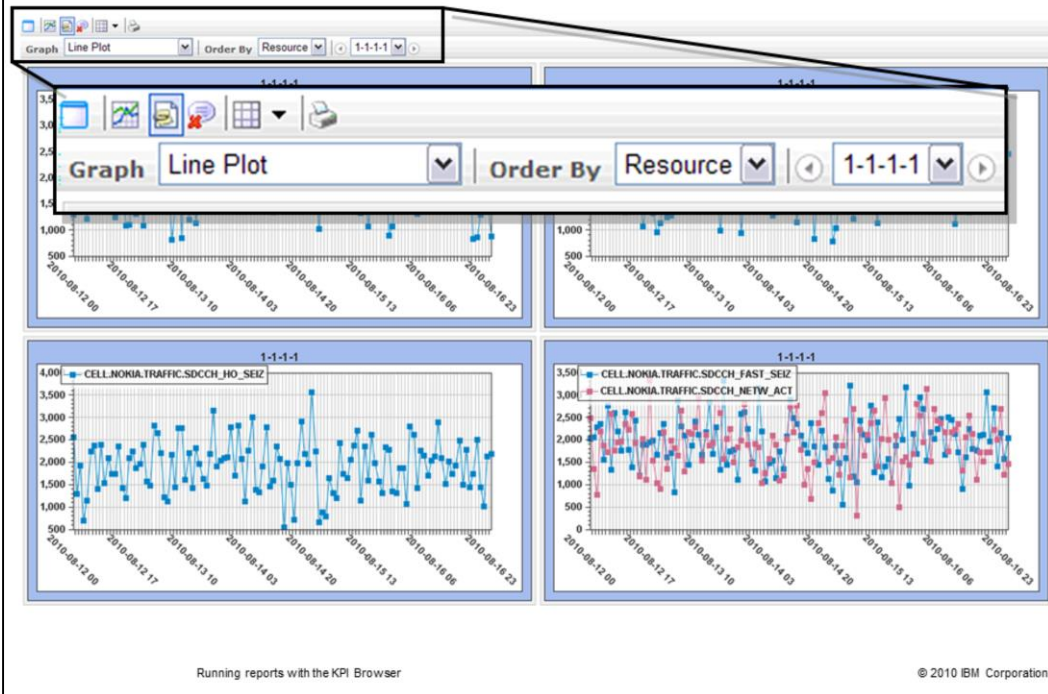
Results



In the results, the five KPI selected display on four line graphs. This is the default format. If you want each KPI on its own graph, increase the number of graphs. Alternatively, if you want all of the data to overlay on one graph, decrease the number of graphs.

The configuration controls for this screen are located in the upper left corner.

Control buttons



Point at the control buttons to see what they do. From left to right, the first row are as follows:

Menu Dialog.

Enable and Disable 3D graph.

Enable and Disable Legend.

Enable and Disable Tool tips.

Update Graph Grid Layout.

Print.

Most of those are self-explanatory. Legends indicate the names of the KPI on each of the graphs. The Update Graph Grid Layout enables you to change the number of graphs displayed.

The second row has Graph and Order By. You can change what you selected on the KPI Options. The last items are a left arrow, menu, and right arrow. The menu lists either the Resources or KPI for the report that matches the Group By selection. Use the two arrows to move backward or forward through the particular item.

Results by KPI



For the results by KPI, I changed the Order By to KPI and the Graph Grid Layout to three graphs vertically and one horizontally. Since I selected three resources, I can compare the KPI field for each of the resources. If I click on the forward arrow, I can move to each of the KPI and make my analysis. When you point at a data point, in the middle of the screen, a pop-up displays the data for that point. The data includes the entity ID, date, time period slice, and KPI value. This feature is active when the tooltips are enabled.

If you want to run another report, click the **Menu Dialog** button to open the **KPI Browser Options** window. The original options are still selected so you can edit them as required.

Summary

You should be able to

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- Create a report with the KPI browser

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