

Thin Client for the Windows Platform - "Jazz Front"

Carol Rigsbee and Kelly Kral, SAS Institute Inc., Cary, NC

ABSTRACT

"Jazz Front" is the code name for a new Windows Thin Client that is available with the Nashville release. "Jazz Front" provides a point and click, code based user interface to all the Version 7 SAS® System servers. "Jazz Front" provides transparent data access to both SAS and non-SAS data, interactive dialogs that lead you through dozens of analytical and reporting tasks, the ability to export results to other Windows applications and to the Web, and the ability to schedule your project to run at a later time.

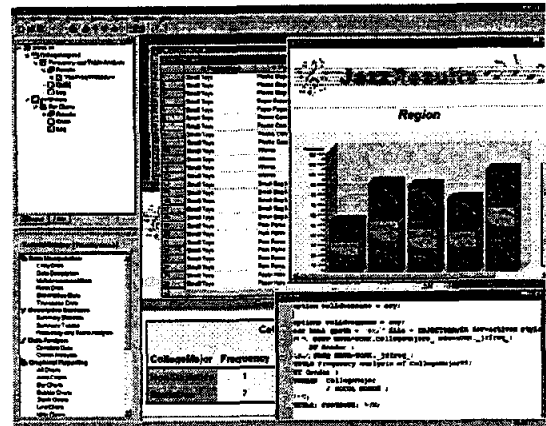
INTRODUCTION

This thin client Windows application provides transparent, simultaneous access to all Version 7 SAS System platforms, including Windows, Unix and mainframe systems. "Jazz Front" is a separate Windows application that communicates with the SAS System to access data, execute code and generate results. Behind the scenes, the SAS System does all the work so you get a native Windows user interface with the power, stability and scalability of the SAS System. When you use "Jazz Front", it can simultaneously use both the SAS System for Windows on your local PC and versions of the SAS System for Windows, Unix or the mainframe that are installed on other machines. "Jazz Front" is a true thin client application – there is no need for SAS to be installed on the same machine where "Jazz Front" is installed.

USER INTERFACE

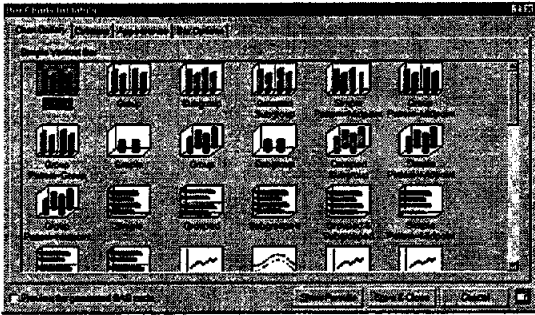
"Jazz Front" uses a project-centric user interface like many other Windows' products. Data, tasks, and results for a particular project are displayed in a project tree.

Here is an example of a "Jazz Front" project that contains SAS and non-SAS data, a "Frequency and Table Analysis" task, a "Bar Chart" task and the results that each task generated:



The tasks in a project are data-centric. The data can be either SAS or non-SAS data that can be stored either locally or remotely. "Jazz Front" provides a set of dialogs, wizards and property sheets to accomplish tasks and generate reports through a point and click user interface. Tasks generate SAS code and results. The Version 7 ODS system generates the results information.

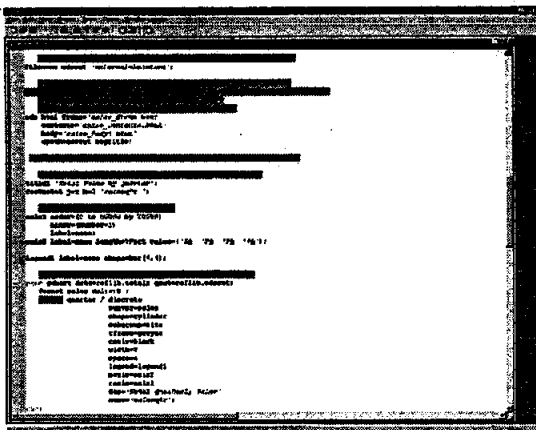
Here is an example of a graphics dialog that "Jazz Front" provides:



You can save the results as HTML that can be used later in any browser. The "Jazz Front" graphics results are interactive – you can click on a graph and modify the graph's presentation. Projects may also contain log information as well as "yellow sticky" note information. For documentation purposes, you can also add existing files to your project such as Microsoft Word or Powerpoint files.

If you want to add existing SAS programs to your project, write SAS code or view the SAS code that "Jazz Front" has generated for you, "Jazz Front" provides a color-coded, syntax-checking SAS language editor. The editor checks for mismatched quotes. You can control the colors of the SAS syntax using the Options dialog.

Here is an example of the "Jazz Front" editor:



You can save your project and reopen it at a later time. All of your data, tasks and results are saved in your project.

DATA ACCESS

"Jazz Front" provides transparent access to both SAS and non-SAS data. For example, suppose you add a data set from your MVS system and a Microsoft Excel spreadsheet from your PC to your project. You can view either file with the "Jazz Front" data grid. You can use the variables from either file in any of the "Jazz Front" tasks.

Moving data and accessing remote data is also easy within "Jazz Front." You can drag an Excel file and drop it on one of the systems where you have your SAS System installed, like MVS, to move the contents of the Excel file from your PC to the MVS system. From the "Jazz Front" Open dialog, you can navigate the native file systems of all machines where you have the SAS System installed.

DATA GRID

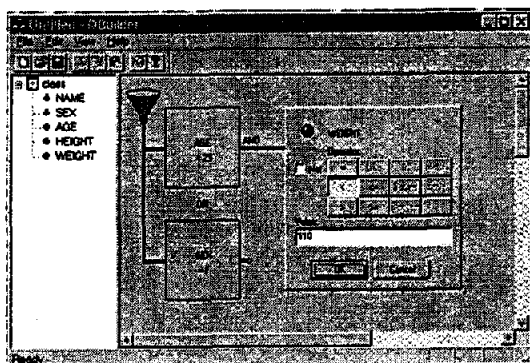
You can use the "Jazz Front" data grid to browse and manipulate existing data. You can sort the data columns, view either the column or label names, view column attributes or add comments a particular column. You can also hide columns of data.

Using the data grid, you also can create a new data source and store the data on any of your SAS servers. You can enter data by simply typing information in the data grid cells. In addition, you can also copy the data from an existing grid using copy and paste or drag and drop.

QUERY BUILDER

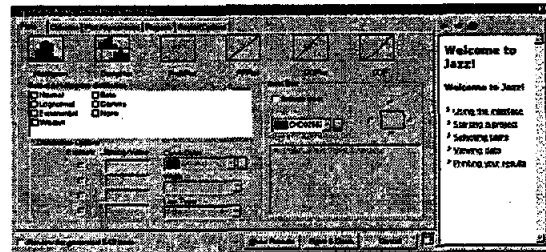
In addition to using data “as is” from the table, you can use the graphical Query Builder to filter data, select columns, set ranges and sort your data before you use it for a task. This interactive tool lets you build queries without being an SQL expert. Building a WHERE clause is like setting up a series of filters that the data is piped through. The AND and OR relationships can be changed by dragging the column objects around to change the “flow” of the data that is filtered. To create expressions, point and click on column objects and use the simple dialog to set the filtering conditions.

Here is an example query created using the Query Builder.



INTEGRATED HELP

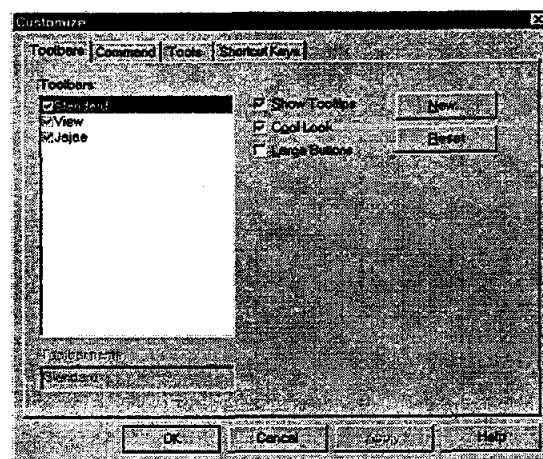
“Jazz Front” provides user assistance through a combination of a standard help system and innovative integrated aids. For example, the help topics that describe the details about performing a particular task are attached directly to the task window so that you can view the topic as you navigate the task. Here’s an example from the Capability Analysis task:



CUSTOMIZABLE USER INTERFACE

“Jazz Front” is fully customizable at the user and site level. At the user level, you can customize the appearance of “Jazz Front” using the Customize dialog. This dialog allows you to customize the menus, toolbars, and define commands. Existing tasks can be extended with user modifications. You can access this dialog by using the menu and selecting Tools->Customize or pressing your right mouse button in the toolbar area. At the site level, you can customize the list of available tasks that “Jazz Front” provides to a particular user.

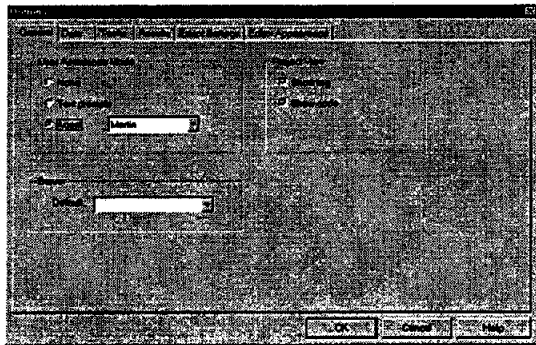
Here is an example of the Customize dialog:



You can use the Options dialog to configure the way the “Jazz Front” application behaves. You can change your default server. You can control the presentation of your project view – you can

show or suppress the code and log nodes under each task. You can override the presentation of the results. You can set the colors for the SAS code in the editor windows.

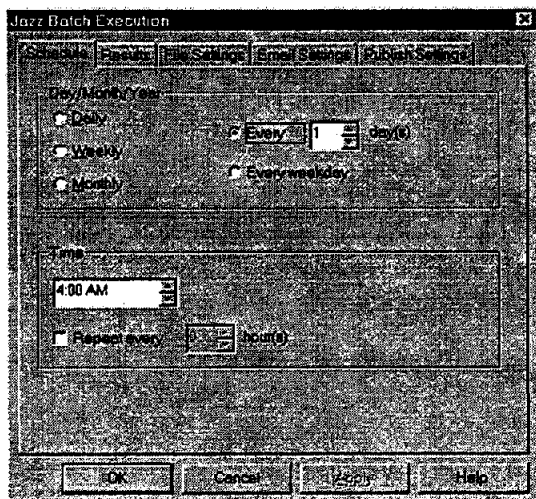
Here is an example of the Options dialog:



SCHEDULER

One of the strengths of the SAS System is the ability to repeat tasks. Once you have created a project in "Jazz Front", you can schedule either the entire project or a portion of that project to run in batch at a later time. You can specify that the generated results be published as an HTML file.

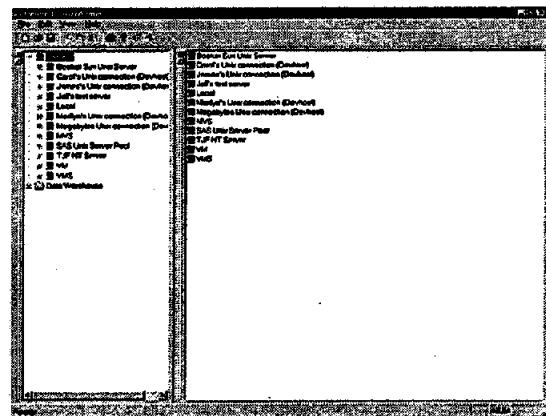
Here is an example of the Scheduler dialog:



ADMINISTRATION

You can administer "Jazz Front" using the "Jazz Administrator". On a site, group or user level, you can set up SAS server access, SAS libraries and predefined data sources. Additionally, you can customization the task dialogs that appear on the "Jazz Front" menus.

Here is a screen shot of the "Jazz Administrator" application.



CONCLUSIONS

At the time this paper was written all the details concerning "Jazz Front" (including the official name of this application) were still being finalized. For more details, you can refer to the SAS Institute web site:

<http://www.sas.com/software/app/active x.html>.

REFERENCES

SAS is a registered trademark or trademark of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

Applications and Publishing

Other brand or product names are registered trademarks or trademarks of their respective companies.

Author Information:

Carol Rigsbee
SAS Institute Inc.
SAS Campus Drive
Cary, NC 27513
(919) 677-8000
e-mail: sasczw@sas.com

Kelly Kral
SAS Institute Inc.
SAS Campus Drive
Cary, NC 27513
(919) 677-8000
e-mail: saskek@sas.com