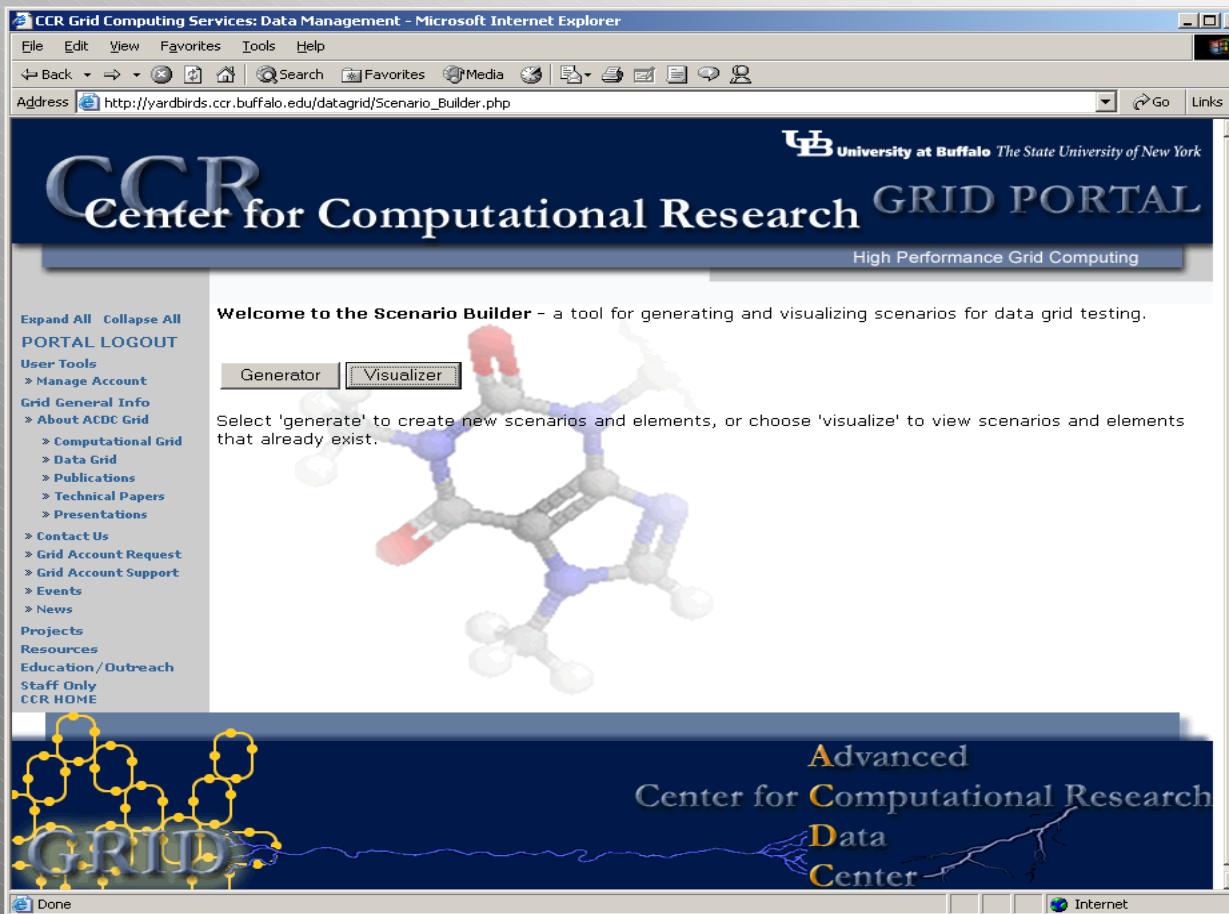
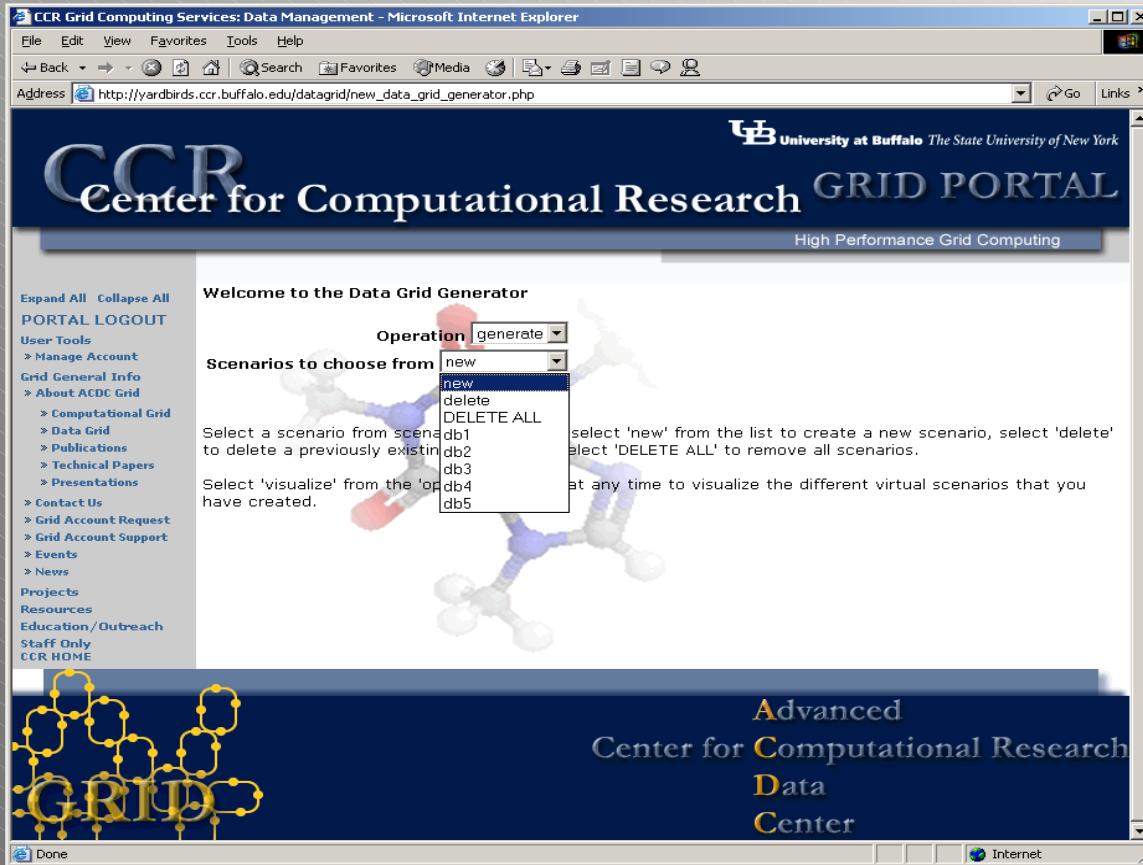


# Welcome to the “Scenario\_Builder” Tool

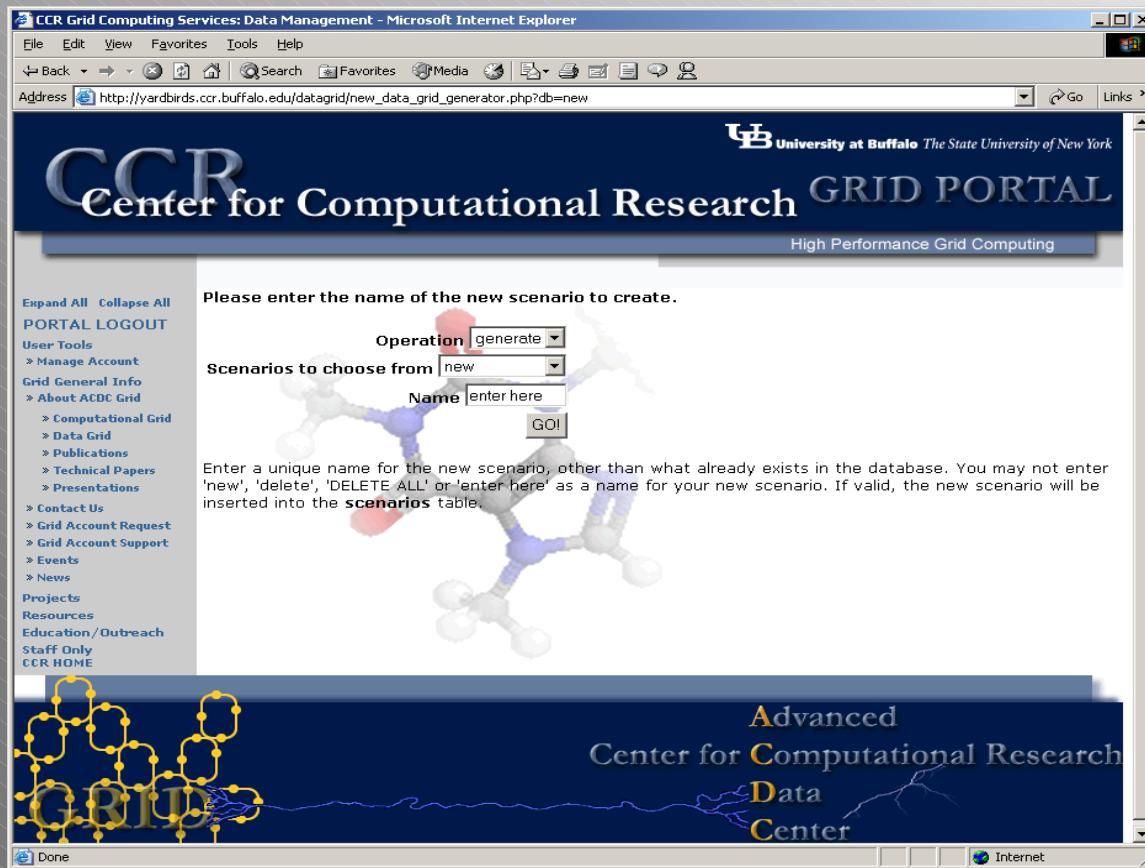


# Select Generator : Choose a scenario or create a new one



This application allows you to create, edit, and delete scenarios of virtual data grids. Here you can choose from any of the existing scenarios in the scenario table to work in. If you select “new”, you can create a new scenario to insert into the table and work from. “Delete” and “DELETE ALL” remove one scenario or all scenarios, respectively. At any point in this application you may choose “visualize” under the “Operation” menu to switch to the Scenario Visualizer.

# Enter the name of the new scenario



I have chosen to create a new scenario and am prompted to enter the name in the text box. I cannot enter the name of another existing scenario, or the words “new”, “enter here”, “delete”, or “DELETE ALL”.

# Illegal input handling

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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Address http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=new&name=db1 Go Links

**CCR** Center for Computational Research GRID PORTAL

High Performance Grid Computing

Please enter the name of the new scenario to create.

Operation: generate

Scenarios to choose from: new

Name: db1

Please enter a unique name for the new scenario.

GO!

Enter a unique name for the new scenario, other than what already exists in the database. You may not enter 'new', 'delete', 'DELETE ALL' or 'enter here' as a name for your new scenario. If valid, the new scenario will be inserted into the **scenarios** table.

Advanced Center for Computational Research

CCR HOME

Done Internet

A screenshot of a Microsoft Internet Explorer window displaying a web page for the Center for Computational Research (CCR) Grid Portal. The page shows a form for creating a new scenario. The 'Name' field contains 'db1', which is highlighted in red with an error message: 'Please enter a unique name for the new scenario.' The 'Operation' dropdown is set to 'generate'. A dropdown menu for 'Scenarios to choose from' shows 'new'. A molecular model graphic is visible in the background. The browser's address bar shows the URL: http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=new&name=db1.

Here I have entered “db1” as the name of the new scenario, which is not allowed because a scenario named “db1” already exists. I am bounced back to the same page and asked to try again.

# New scenario created

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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Address http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=new&name=db6

**CCR Center for Computational Research GRID PORTAL**  
High Performance Grid Computing

Expand All Collapse All  
PORTAL LOGOUT  
User Tools  
» Manage Account  
Grid General Info  
» About ACDC Grid  
  » Computational Grid  
  » Data Grid  
  » Publications  
  » Technical Papers  
  » Presentations  
» Contact Us  
» Grid Account Request  
» Grid Account Support  
» Events  
» News  
Projects  
Resources  
Education / Outreach  
Staff Only  
CCR HOME

**Creating new scenario**

loading database...done  
Information inserted  
**db6 created.**

**Operation** generate

**Scenarios to choose from**

**Name**

**new**

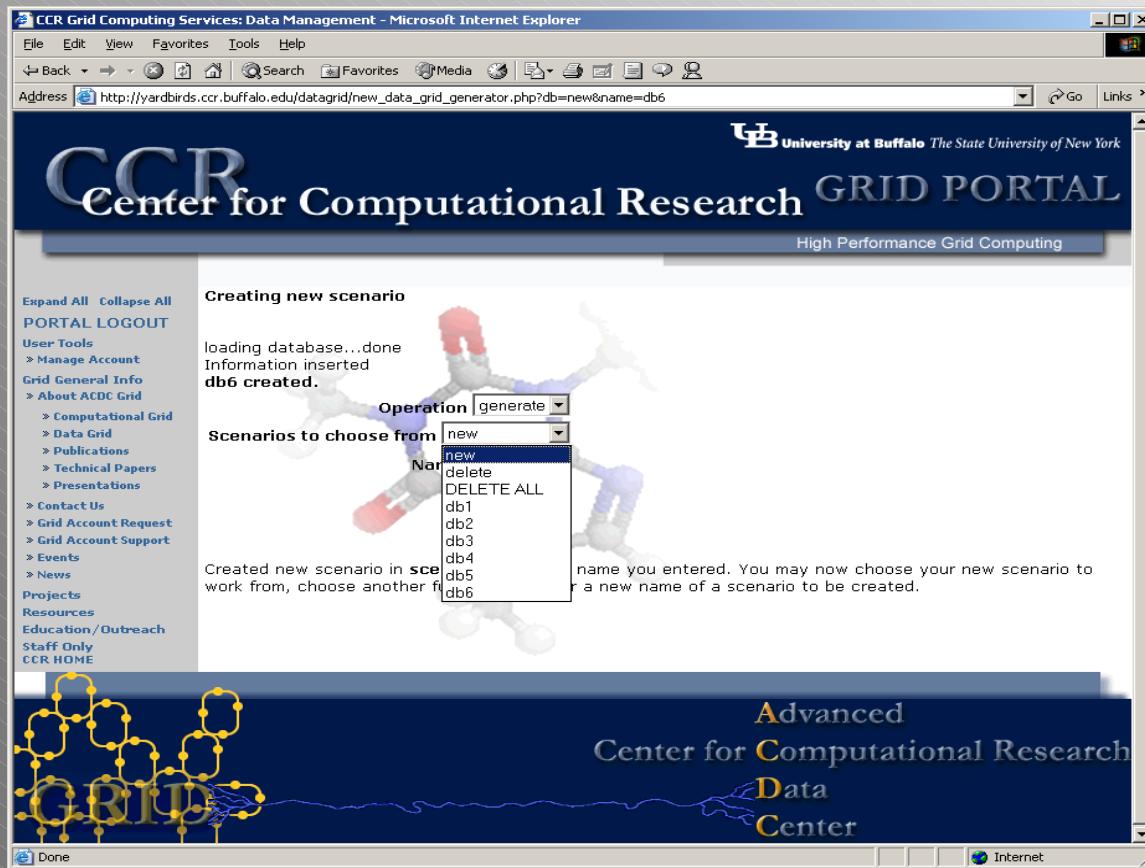
new  
delete  
DELETE ALL  
db1  
db2  
db3  
db4  
db5  
db6

Created new scenario in sce  
work from, choose another f  
name you entered. You may now choose your new scenario to  
or a new name of a scenario to be created.

Advanced  
Center for Computational Research  
Data  
Center

GRID

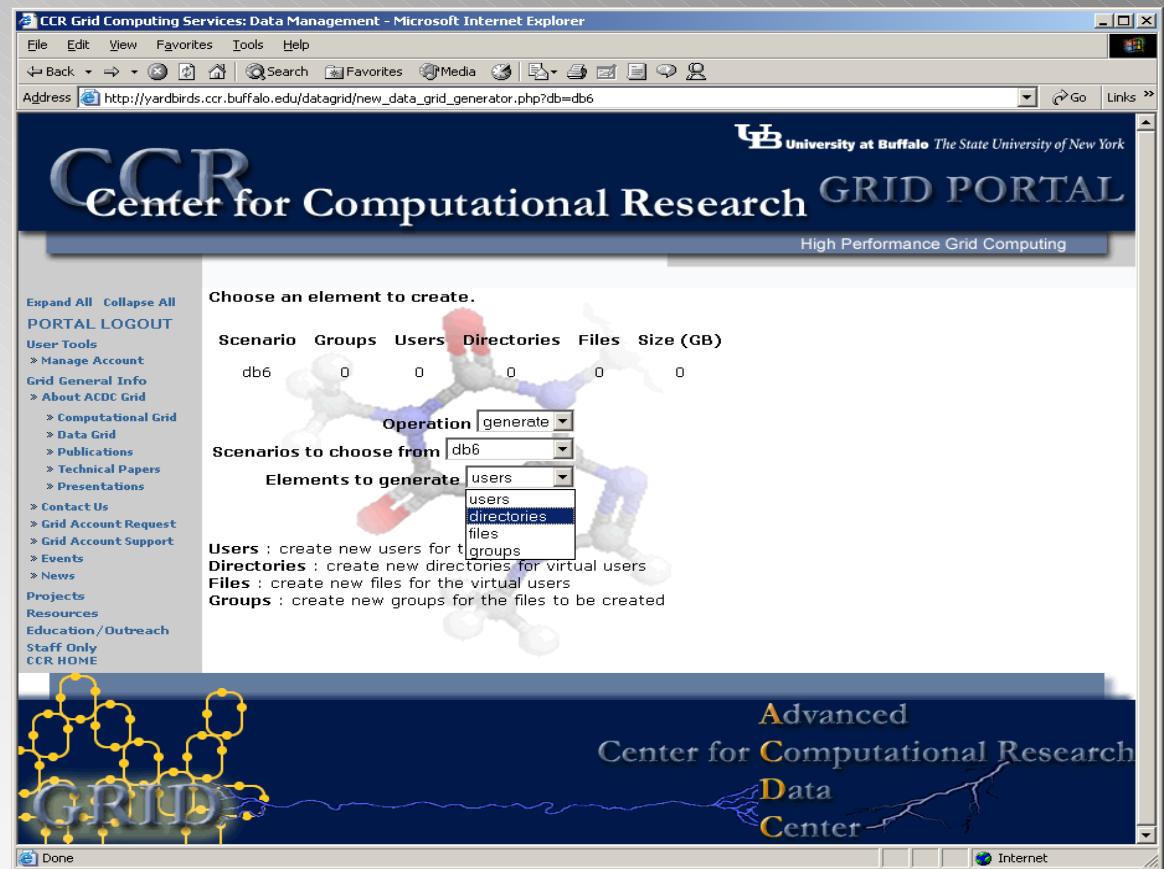
Done



I have entered a legal name for my new scenario and it is inserted into the “scenarios” table. Now I can begin with any scenario from the list, including the one I have just created.

# Choose and element to create

Now I have chosen to work in the scenario that I just made. I now have the option of creating new users, groups, directories or files. At any point I can choose to create a new scenario or change or delete the one I am working in. If I change which type of element I am creating at any time I will be sent to the appropriate page without navigating back to it. Note the display over the drop-down menus. This shows the numbers of groups, users, directories, files, and total file size of the selected scenario, taken from “scenarios” in phpmyadmin.



# No users to create directories for

I have attempted to create new directories. Since I have just created this scenario, I cannot choose to create new directories or files because there are no users to create them for. At this point I have to choose to create new users or groups.

The screenshot shows a Microsoft Internet Explorer window with the title "CCR Grid Computing Services: Data Management - Microsoft Internet Explorer". The address bar contains the URL "http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=db6&app=2". The main content area displays the "GRID PORTAL" logo for the University at Buffalo's Center for Computational Research. A message at the top reads: "Please select a user to create directories for and the number to create." Below this is a table with one row for "db6". The table columns are: Scenario, Groups, Users, Directories, Files, and Size (GB). The "Directories" column has a value of 0. To the right of the table is a form with fields: "Operation" set to "generate", "Scenarios to choose from" set to "db6", and "Elements to generate" set to "directories". A red warning message "Please create new users first" is displayed above a "GO!" button. A note below the form states: "This will create the specified number of directories for the specified user and insert them into the directory\_management table." The bottom of the page features the CCR logo and the text "Advanced Center for Computational Research Data Center".

# Create new users

I have selected “users” from the elements dropdown for the scenario I am working in.

I did not have to navigate back, changing items in the menus automatically sends me to the user creation page.

The screenshot shows a Microsoft Internet Explorer window with the title "CCR Grid Computing Services: Data Management - Microsoft Internet Explorer". The address bar contains the URL "http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=db6&app=1". The main content area displays the "GRID PORTAL" logo and the "Center for Computational Research" text. A banner at the top right reads "University at Buffalo The State University of New York" and "High Performance Grid Computing". On the left, a sidebar menu includes "PORTAL LOGOUT", "User Tools" (with options like "Manage Account", "Computational Grid", "Data Grid", etc.), "Grid General Info", "About ACDC Grid", "Contact Us", "Grid Account Request", "Grid Support", "Events", "News", "Projects", "Resources", "Education / Outreach", "Staff Only", and "CCR HOME". The central form is titled "Please enter the number of users to generate". It features fields for "Scenario" (set to "db6"), "Groups" (0), "Users" (0), "Directories" (0), "Files" (0), and "Size (GB)" (0). Below these are dropdown menus for "Operation" (set to "generate"), "Scenarios to choose from" (set to "db6"), "Elements to generate" (set to "users"), and a "Number to create" input field (set to 0). A "GO!" button is located next to the "Number to create" field. A note below the form states: "This will randomly generate the number of users you enter and insert them into the virtual\_users table." The bottom of the page features the "Advanced Center for Computational Research Data Center" logo and a network grid graphic.

# Illegal input handling (II)

I am sent back to this page until I enter a positive number less than 5000 (more than 5000 takes a very long time to process).

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=db6&app=1&createNum=-100

University at Buffalo The State University of New York

CCR Center for Computational Research GRID PORTAL

High Performance Grid Computing

Please enter the number of users to generate

Scenario	Groups	Users	Directories	Files	Size (GB)
db6	0	0	0	0	0

Operation: generate

Scenarios to choose from: db6

Elements to generate: users

Number to create: -100

Please enter a valid number of users

GO!

This will randomly generate the number of users you enter and insert them into the virtual\_users table.

Advanced Center for Computational Research Data Center

GRID

Done Internet

# New users created

I have entered a legal input and the 8 new users have been created and inserted into the “virtual\_users” table. The names are generated based on surnames from classic television shows (and some from the 90’s as well), plus 1 or 2 initials at the front and 0, 1, or 2 digits appended to the end.

I am also told how long the generation took and the number of repeats detected in the table and within this generation.

Screenshot of the CCR Grid Computing Services: Data Management - Microsoft Internet Explorer window.

The URL is [http://yardbirds.ccr.buffalo.edu/datagrid/new\\_data\\_grid\\_generator.php?db=db6&app=1&createNum=8](http://yardbirds.ccr.buffalo.edu/datagrid/new_data_grid_generator.php?db=db6&app=1&createNum=8)

The page title is "CCR Center for Computational Research GRID PORTAL High Performance Grid Computing".

The main content area shows a form for generating users:

- Operation: generate
- Scenarios to choose from: db6
- Elements to generate: users
- Number to create: 8
- Generate button (GO!)

Below the form, status information is displayed:

- Total time for generation = 0 seconds
- Number of repeats from the database : 0
- Number of repeats from this generation : 0

A table lists the generated users:

User #	User	Scenario
1	ovsnow	db6
2	khartley36	db6
3	hclavin81	db6
4	tsanford2	db6
5	symunster	db6
6	misnow	db6
7	phunnicutt	db6
8	mshunnicutt2	db6

Description of table fields:

Done Internet

# Extra Information

At the bottom of the page created after elements are generated there is further information. I am shown a description of the table fields along with an update of the numbers of elements in the current scenario and a description of the way the elements were generated.

Screenshot of a Microsoft Internet Explorer window titled "CCR Grid Computing Services: Data Management - Microsoft Internet Explorer". The address bar shows the URL: [http://yardbirds.ccr.buffalo.edu/datagrid/new\\_data\\_grid\\_generator.php?db=db6&app=1&createNum=8](http://yardbirds.ccr.buffalo.edu/datagrid/new_data_grid_generator.php?db=db6&app=1&createNum=8).

The left sidebar contains links: Projects, Resources, Education / Outreach, Staff Only, and CCR HOME.

A table titled "User #" is displayed:

User #	User	Scenario
1	ovsnow	db6
2	khartley36	db6
3	hclavin81	db6
4	tsanford2	db6
5	symunster	db6
6	misnow	db6
7	phunnicutt	db6
8	mshunnicutt2	db6

Description of table fields:

- User #** : The number of the user that was created.
- User** : The name of the random user that was created.
- Scenario** : The scenario that the user belongs to.

Summary statistics:

Scenario	Groups	Users	Directories	Files	Size (GB)
db6	0	8	0	0	0

This generates random user names to insert into **virtual\_users**. The names are randomly selected and based on the surnames of characters from classic television shows (and some from more recent times), and some number of initials on the front of the name and some number of digits appended to the name. The format of the randomly selected name is in one of 6 randomly selected formats :

- initial + surname
- initial + initial + surname
- initial + surname + digit (1-9)
- initial + initial + surname + digit (1-9)
- initial + surname + digit (1-9) + digit (0-9)
- initial + initial + surname + digit (1-9) + digit (0-9)

Advanced Center for Computational Research

# Create new directories

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://yardbirds.ccr.buffalo.edu/dagrid/new\_data\_grid\_generator.php?db=db6&app=2

**CCR Center for Computational Research GRID PORTAL**

High Performance Grid Computing

Please select a user to create directories for and the number to create.

Scenario	Groups	Users	Directories	Files	Size (GB)
db6	0	8	0	0	0

Scenarios to choose from db6

Elements to generate directories

User mshunnicut2

Number to create 0

Operation generate

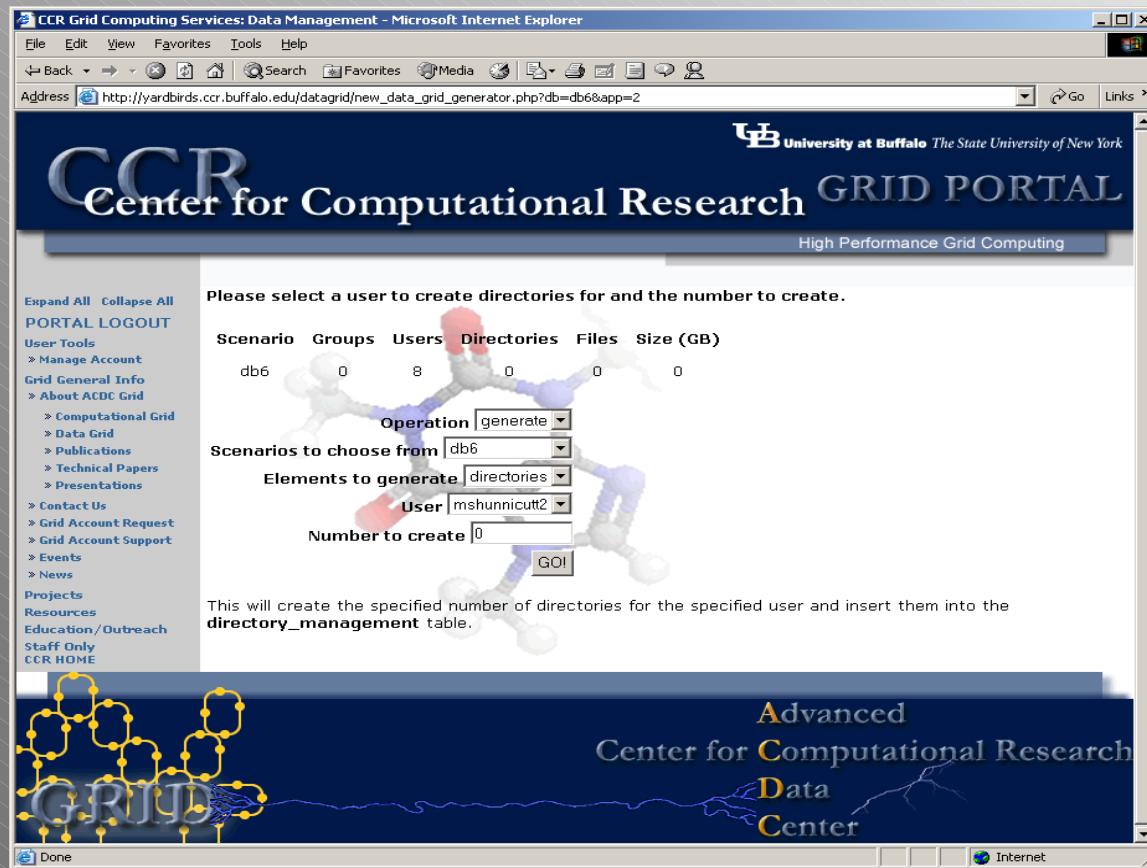
GO!

This will create the specified number of directories for the specified user and insert them into the directory\_management table.

Advanced Center for Computational Research Data Center

GRID

Done



I have chosen to create new directories now and have been given the option to enter the user to create the directories for and the number of directories to create. The users in the drop down menu are users associated with the current scenario in the “virtual\_users table”. (Note – the display above the menus was updated with the number of users in the current scenario)

# Illegal input handling (III)

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links >

Address http://yardbirds.ccr.buffalo.edu/dagrid/new\_data\_grid\_generator.php?db=db6&app=2&user=mshunnicutt2&createNum=50000 Go

**CCR** Center for Computational Research GRID PORTAL

University at Buffalo The State University of New York

High Performance Grid Computing

Please select a user to create directories for and the number to create.

Scenario	Groups	Users	Directories	Files	Size (GB)
db6	10	8	18	40	2.02

Scenarios to choose from db6

Elements to generate directories

User mshunnicutt2

Number to create 50000 Please enter a valid number of directories

GO!

This will create the specified number of directories for the specified user and insert them into the directory\_management table.

Advanced Center for Computational Research Data Center

GRID

Done Internet

I have entered invalid input for the number of directories to create. It must be a positive number and less than 5000 (more than 5000 takes a very long time to process).

# New directories created

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=db6&app=2&user=mshunnicutt2&createNum=10

**CCR** Center for Computational Research GRID PORTAL High Performance Grid Computing

Expand All Collapse All PORTAL LOGOUT User Tools > Manage Account Grid General Info > About ADCC Grid > Computational Grid > Data Grid > Publications > Technical Papers > Presentations > Contact Us > Grid Account Request > Grid Account Support > Events > News Projects Resources Education/Outreach Staff Only CCR HOME

Generating directories

Operation: generate Scenarios to choose from: db6 Elements to generate: directories User: mshunnicutt2 Number to create: 10 GO!

Loading existing directory info...  
No directories found for user...attempting to create a root directory...  
root created... done. Loading records.

Total time for generation = 0 seconds  
Number of repeats from the database : 0  
Number of repeats from this generation : 0

Directory #	Directory path_name	Owner	Scenario
1	/Agent/	mshunnicutt2	db6
2	/Agent/Oracle/	mshunnicutt2	db6
3	/Agent/Oracle/Rabbit/	mshunnicutt2	db6
4	/Agent/Oracle/Cypher/	mshunnicutt2	db6
5	/Trinity/	mshunnicutt2	db6

Done Internet

Ten new directories have been created for the given user and inserted into the “directory\_management” table. If the user has no directories a root is automatically inserted before the user-specified directories are created (making 11 total in this case). The names generated are based on names from The Matrix.

# Create new files (Illegal input handling IV)

I have chosen to create new files now but there is an error – I cannot create new files for this scenario until I have created users and groups to assign them to (in this case we have no groups). The users in the drop down are users associated with the current scenario in the “virtual\_users” table. Note – the display above the menus was updated with the new number of directories in the scenario.

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=db6&app=3

University at Buffalo The State University of New York

CCR Center for Computational Research GRID PORTAL

High Performance Grid Computing

Please select a user to create files for, the number to create and the resource id of the entries

Scenario	Groups	Users	Directories	Files	Size (GB)
db6	0	8	11	0	0

Operation generate

Scenarios to choose from db6

Elements to generate files

Please create new groups first

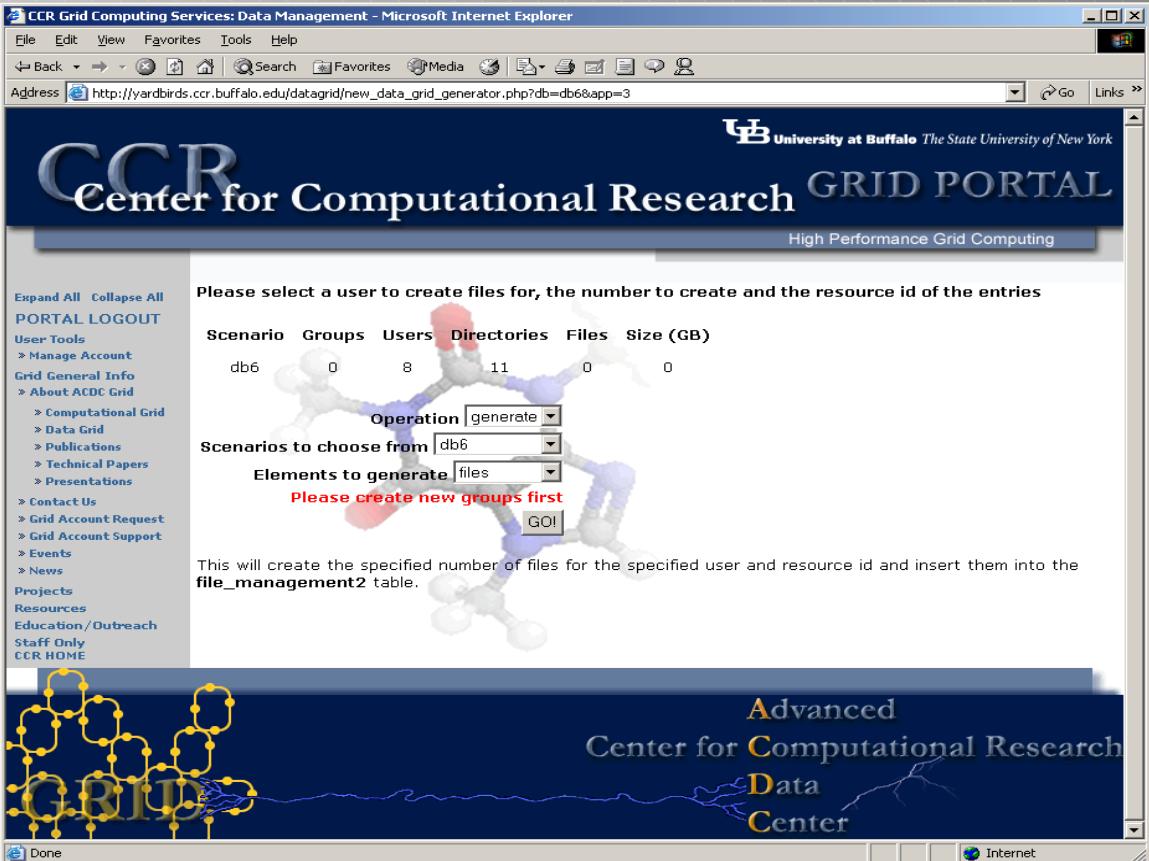
GO!

This will create the specified number of files for the specified user and resource id and insert them into the file\_management2 table.

Advanced Center for Computational Research Data Center

GRID

Done Internet



# Create new groups

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://yardbirds.ccr.buffalo.edu/dagrid/new\_data\_grid\_generator.php?db=db6&app=4

**CCR** Center for Computational Research GRID PORTAL

University at Buffalo The State University of New York

High Performance Grid Computing

Expand All Collapse All PORTAL LOGOUT

User Tools > Manage Account

Grid General Info > About ACDC Grid

- > Computational Grid
- > Data Grid
- > Publications
- > Technical Papers
- > Presentations

> Contact Us

> Grid Account Request

> Grid Account Support

> Events

> News

Projects Resources Education / Outreach Staff Only CCR HOME

Please enter the number of groups to generate.

Scenario	Groups	Users	Directories	Files	Size (GB)
db6	0	8	11	0	0

Operation:

Scenarios to choose from:

Elements to generate:

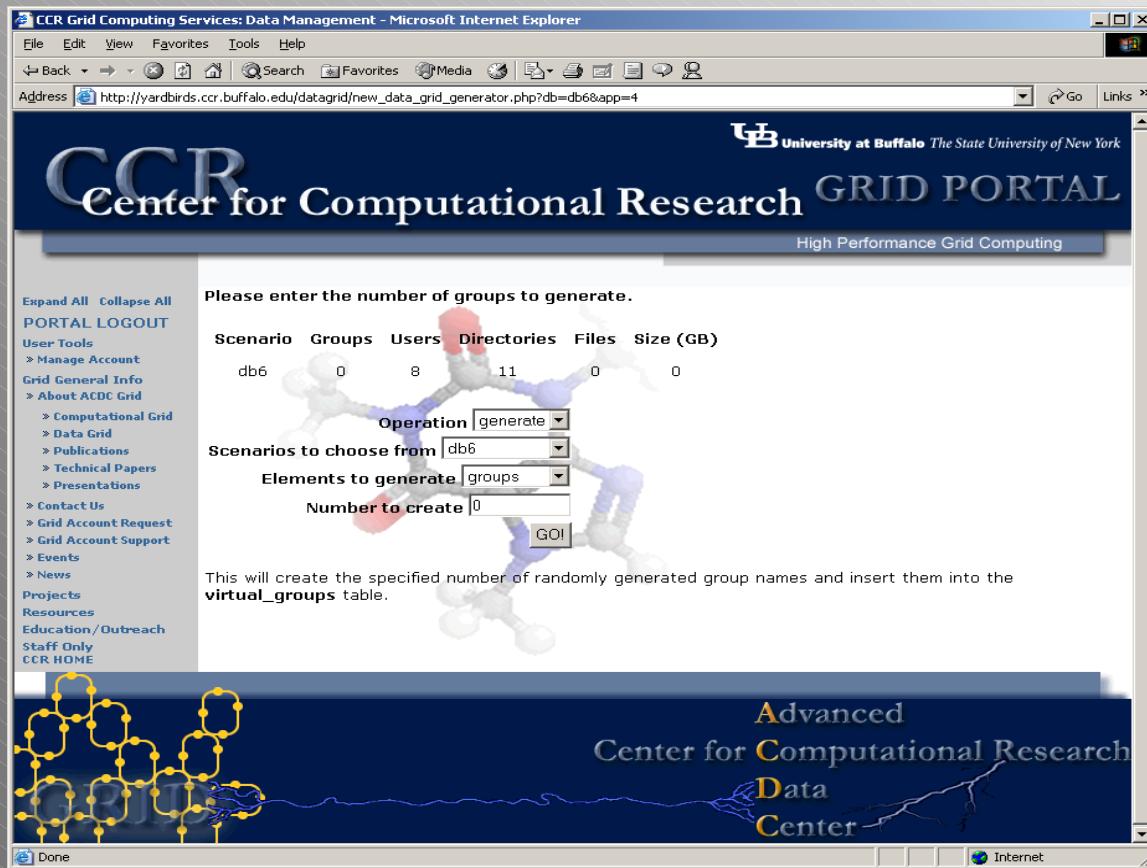
Number to create:

This will create the specified number of randomly generated group names and insert them into the virtual\_groups table.

Advanced Center for Computational Research Data Center

Internet

Done



I have chosen to create new groups. I must only enter the number of groups to create – the process does not rely on any information other than the number and the scenario to create them for. Again, I must enter a positive value less than 5000 or I will be bounced back to this page with an error.

# New groups created

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://yardbirds.ccr.buffalo.edu/dagrid/new\_data\_grid\_generator.php?db=db6&app=4&createNum=10

**CCR Center for Computational Research GRID PORTAL**

High Performance Grid Computing

Expand All Collapse All PORTAL LOGOUT

User Tools > Manage Account

Grid General Info > About ACDC Grid

- > Computational Grid
- > Data Grid
- > Publications
- > Technical Papers
- > Presentations

> Contact Us

> Grid Account Request

> Grid Account Support

> Events

> News

Projects Resources Education/Outreach Staff Only CCR HOME

**Generating groups**

Operation: generate Scenarios to choose from: db6 Elements to generate: groups Number to create: 10 GO!

Total time for generation = 0 seconds  
Number of repeats from the database : 0  
Number of repeats from this generation : 0

Group #	Group name	Scenario
1	vh1618	db6
2	cspan35	db6
3	cnn92	db6
4	nbc8	db6
5	cbs271	db6
6	tlc85	db6
7	fox14	db6
8	cspan8	db6
9	nbc32	db6
10	abc14	db6

Done Internet

The specified number of new groups were created and inserted into the “virtual\_groups” table. The names of the groups are based on television stations with either 1, 2, or 3 digits on the end.

# Back to files

Here I may enter the user to create files for, the number of files to create and the resource id for the files (taken from “grid\_user/resources”). For the number to create, as before, I must enter a positive number less than 5000. Note – the display above the menus was updated with the new number of groups.

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back → Search Favorites Media Bookmarks Home

Address http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=db6&app=3 Go Links

**CCR** Center for Computational Research GRID PORTAL

University at Buffalo The State University of New York

High Performance Grid Computing

Please select a user to create files for, the number to create and the resource id of the entries

Scenario	Groups	Users	Directories	Files	Size (GB)
db6	10	8	11	0	0

Operation: generate

Scenarios to choose from: db6

Elements to generate: files

User: mshunnicut2

Number to create: 0

Resource ID: young.ccr.buffalo.edu

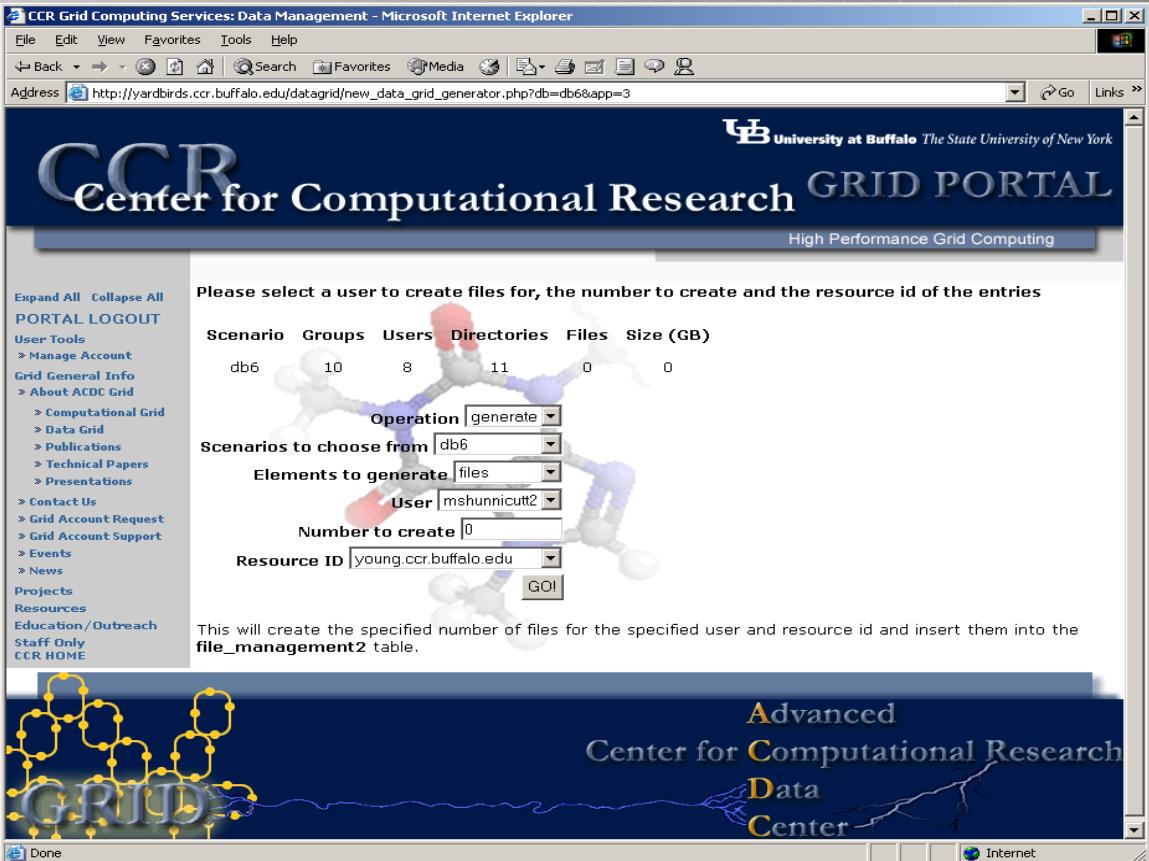
GO!

This will create the specified number of files for the specified user and resource id and insert them into the file\_management2 table.

Advanced Center for Computational Research Data Center

GRID

Done Internet



# New files created

The new files have been created for the given user and inserted into the “file\_management2” table. If the user has no directories, a root is created and the files are stored in it, otherwise the directories to store the files in are chosen at random. The names of the files are also based on The Matrix and random attributes are chosen for the files and stored with them.

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=db6&app=3&user=ojsnow&createNum=5&rID=nexus.hwi.buffalo.edu Go Links

**CCR Center for Computational Research GRID PORTAL**  
University at Buffalo The State University of New York  
High Performance Grid Computing

Generating files

Operation generate

Scenarios to choose from db6

Elements to generate files

User ojsnow

Number to create 5

Resource ID nexus.hwi.buffalo.edu

GO!

Loading existing directory info...

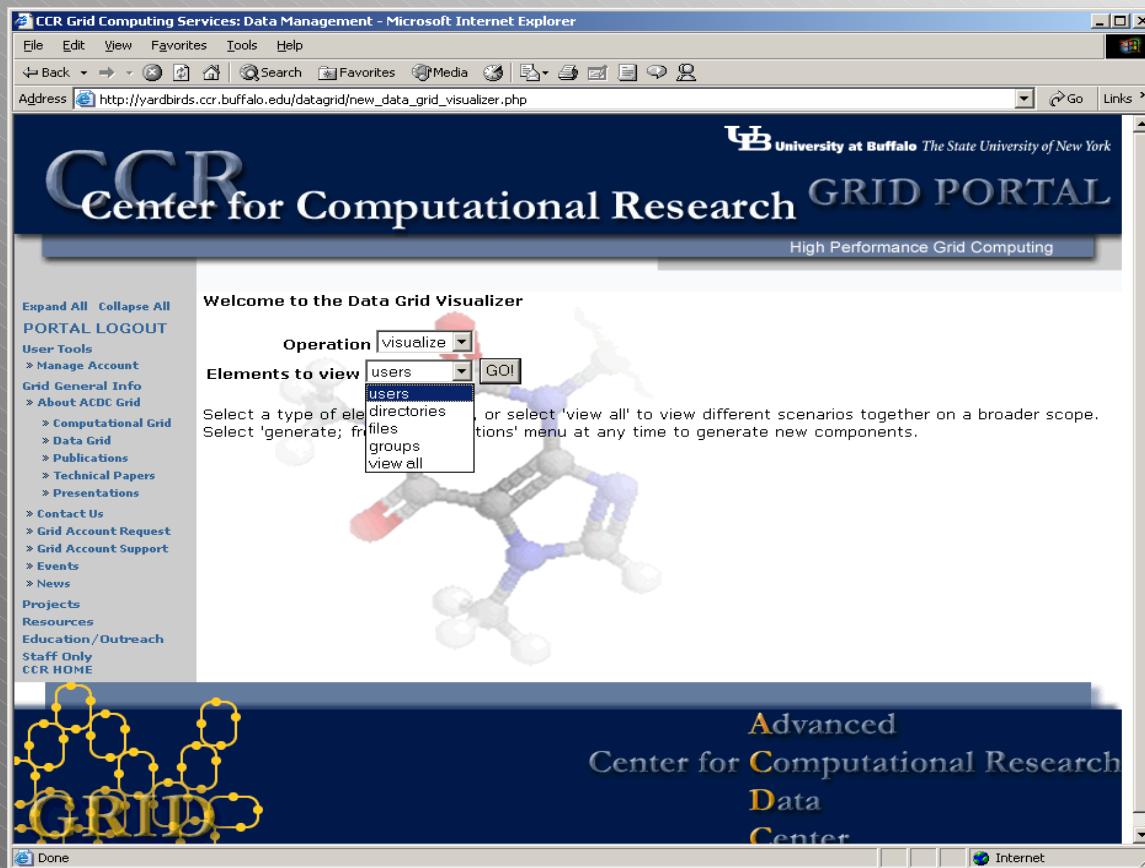
No directories found for user...attempting to create a root directory...  
root created... done. Loading records.

Total time for generation = 0 seconds  
Number of repeats from the database : 0  
Number of repeats from this generation : 0

File #	Filename	Resource	r_id	dir_id	Owner	Group	Scenario	Creation time	Size	Permissions
1	Neo.ppt	nexus.hwi.buffalo.edu	57	577	ojsnow	cspan35	db6	2000-07-15 09:10:30	7486	
2	Rabbit.doc	nexus.hwi.buffalo.edu	57	577	ojsnow	cnn92	db6	2000-04-15 02:26:43	83852	

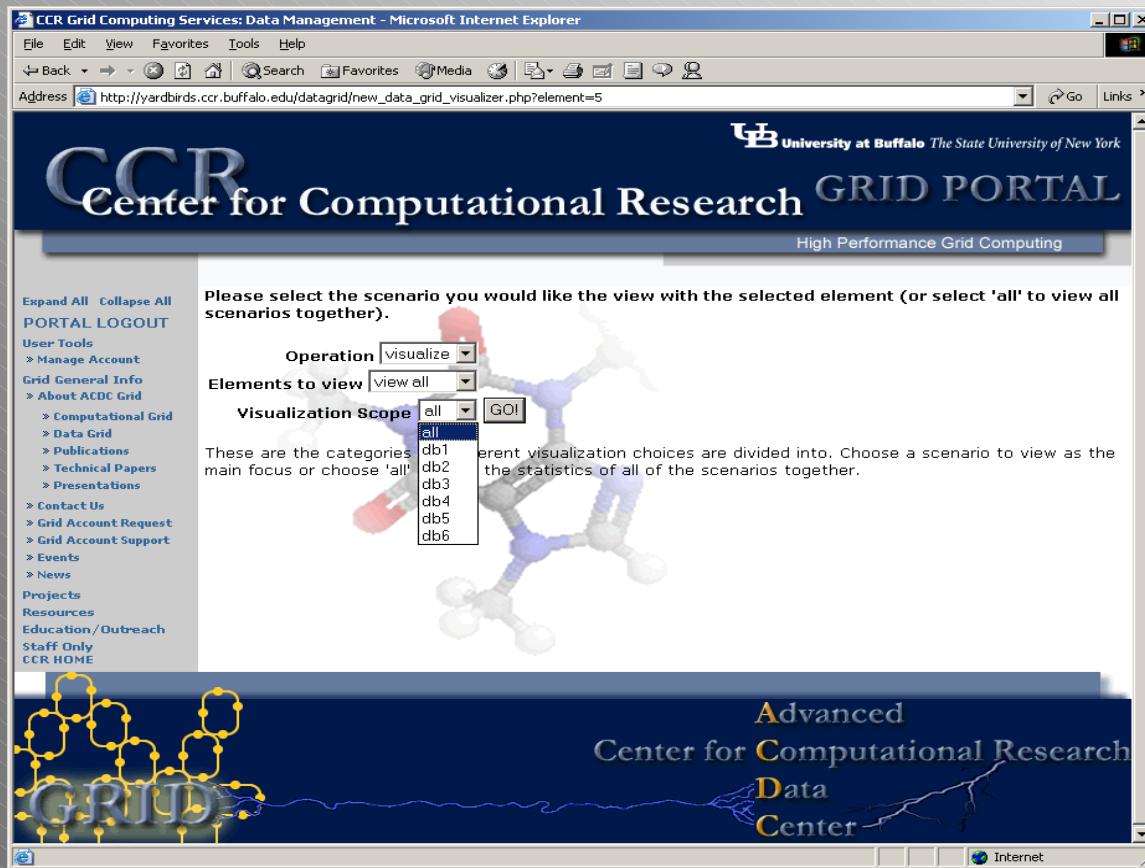
Done Internet

# Jump to Scenario Visualizer



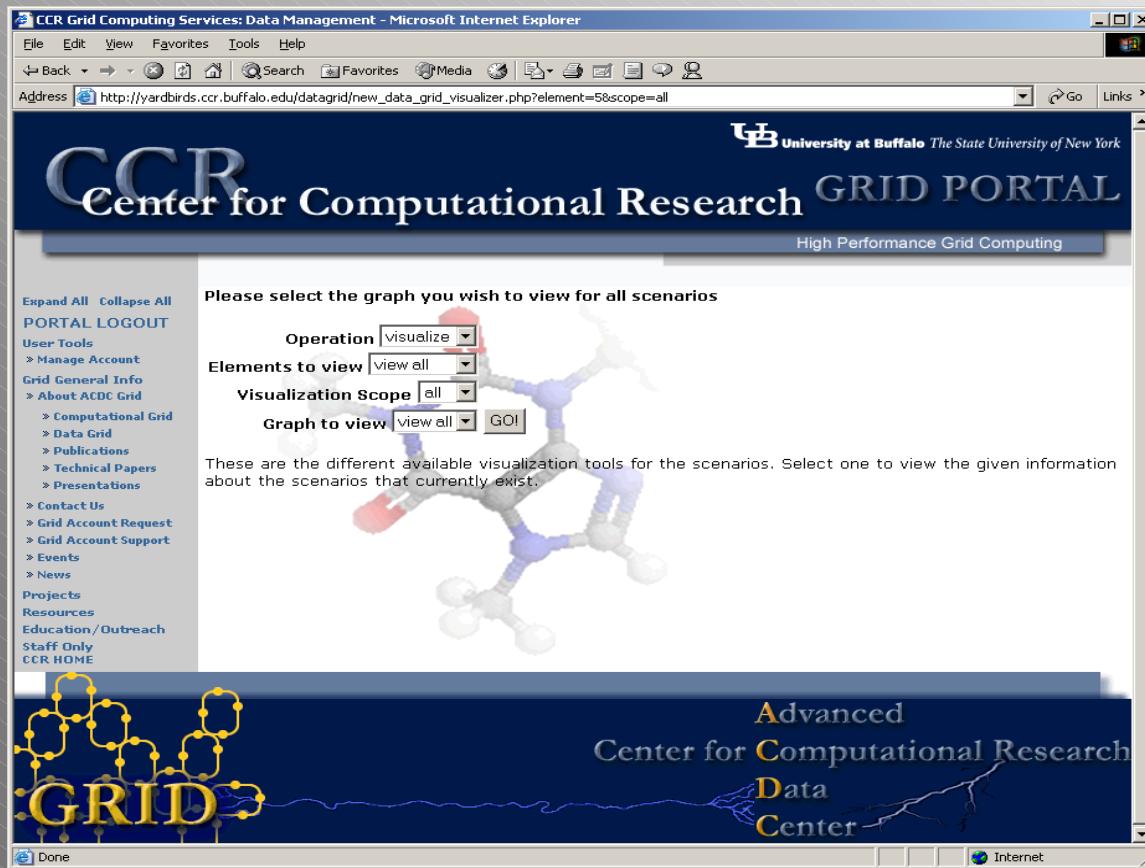
Now I wish to view the aspects of the scenario I just created. I select “visualize” from the “Operation” menu after generating my files and select an element to view. (choosing an element allows me to view aspects of it, and “view all” explores all elements together). At any point in this application I may choose “generate” from the “Operation” menu to return to the Scenario Generator.

# View All Elements



I have chosen to view all elements and now must choose a scope. I can pick an individual scenario to view or I may choose “all” to view all scenarios comparatively. Currently there are no graphs to “view all” per scenario, so I choose “all” as my scope.

# Choose a graph

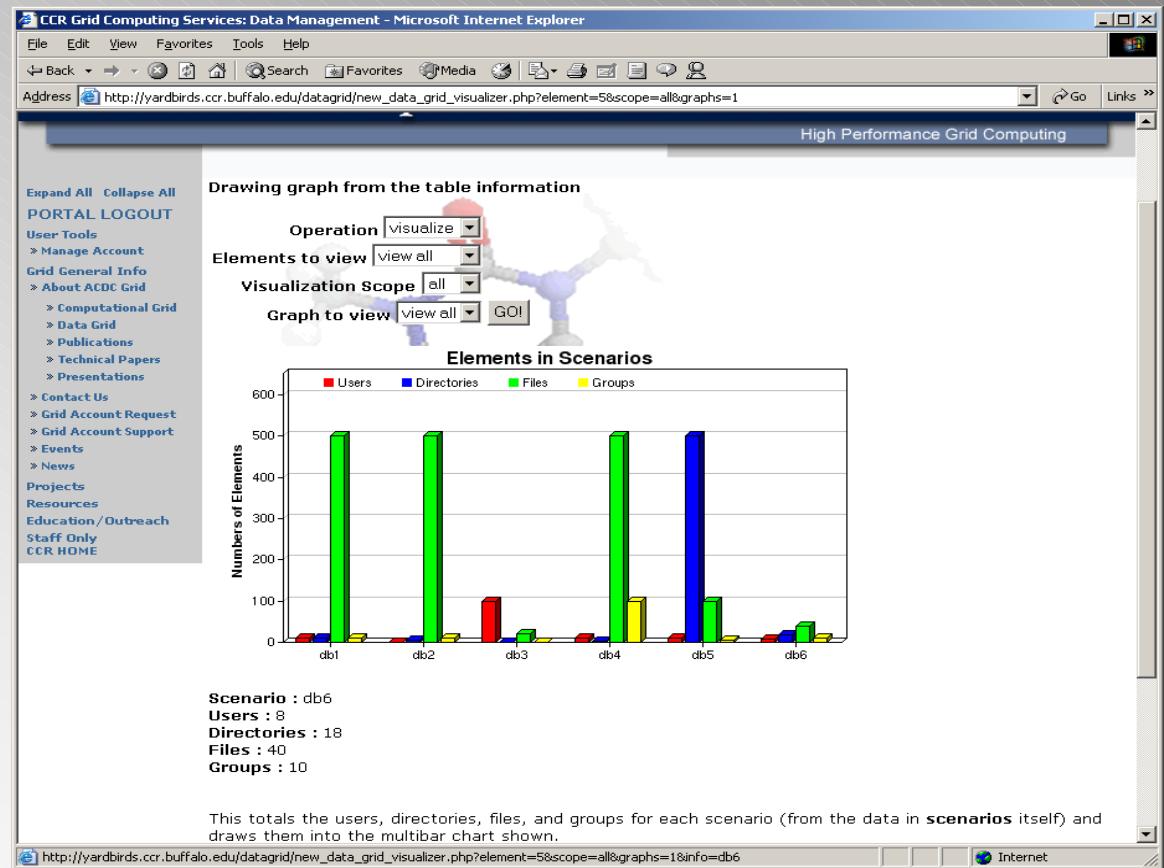


At this point I must choose a graph to view. All elements and scopes have some number of choices of graphs that show pertinent information about the element and scenario in question. Here there is only one choice – “view all”. I can change the element, scope, or graph choice at any time by changing the choices in the menus; no backward navigation is required.

# Viewing all elements of all scenarios together

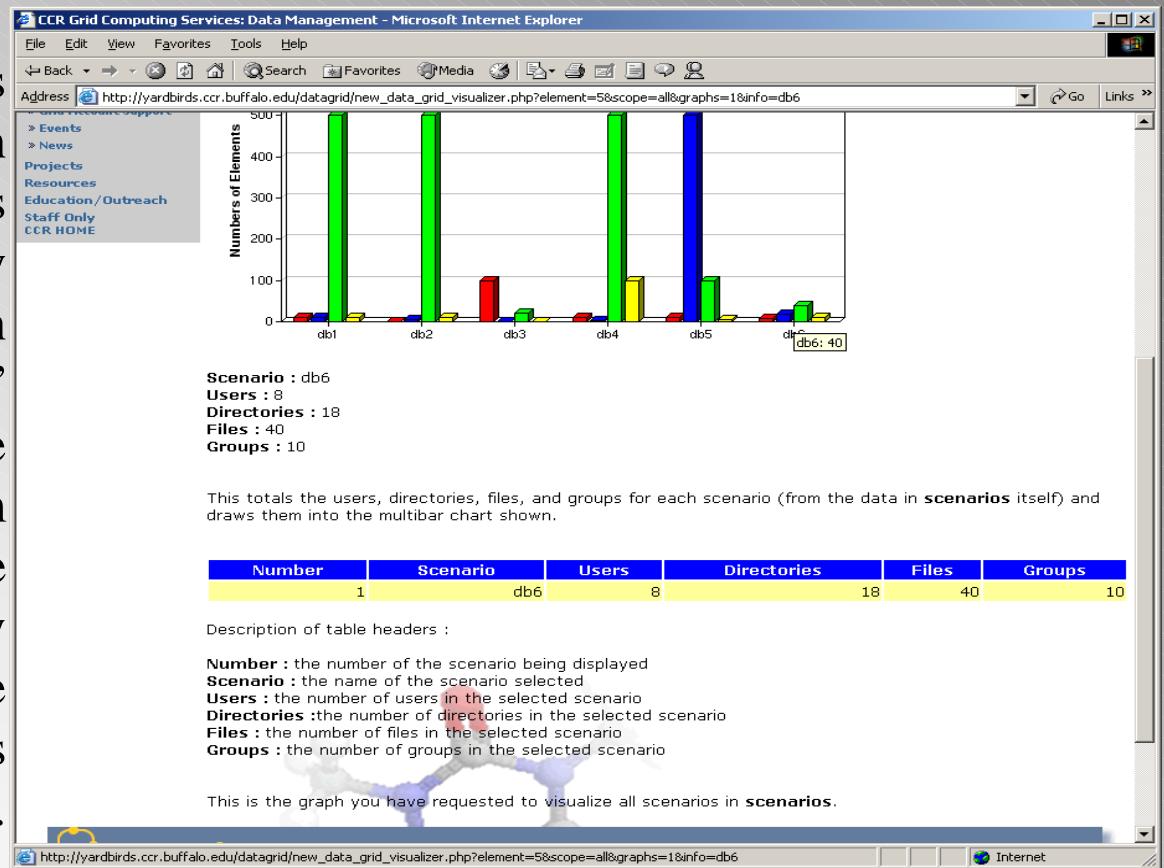
A graph is created based on the element, scope, and graph choices made. Here the four elements of the scenarios are displayed together. More information is displayed below the graph when the mouse is moved over different regions.

Here, when I point to “db6”, the scenario name and numbers of its elements are shown. I am also given a brief description of how the chart was built.

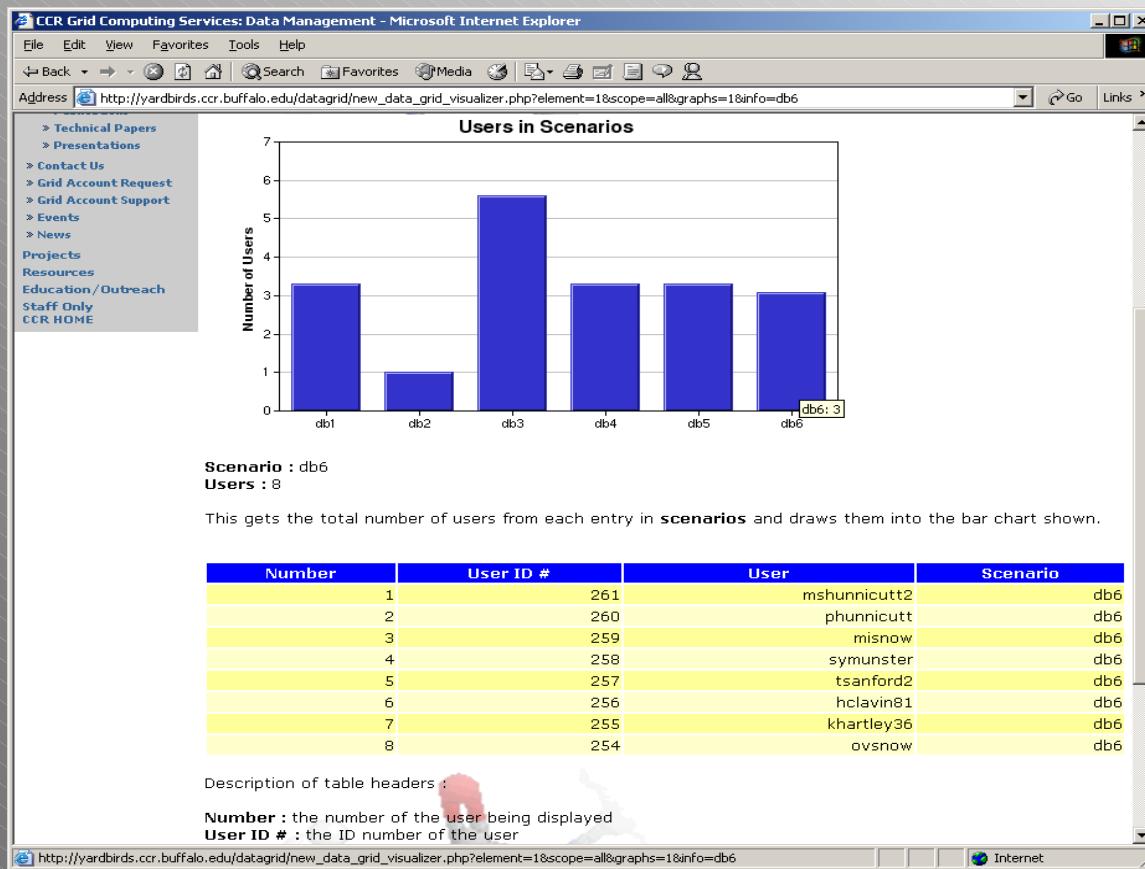


# Clicking the graph – more information

Each graph, when clicked, creates a table of the information used in the graph generation. Here, this graph is built by reading the entry in “scenarios” for the scenario in question, so clicking in the “db6” region of the graph displays the “db6” entry from the table. I am given a description of the table fields as well. Clicking in any other graph region refreshes the table; no extra navigation is required.

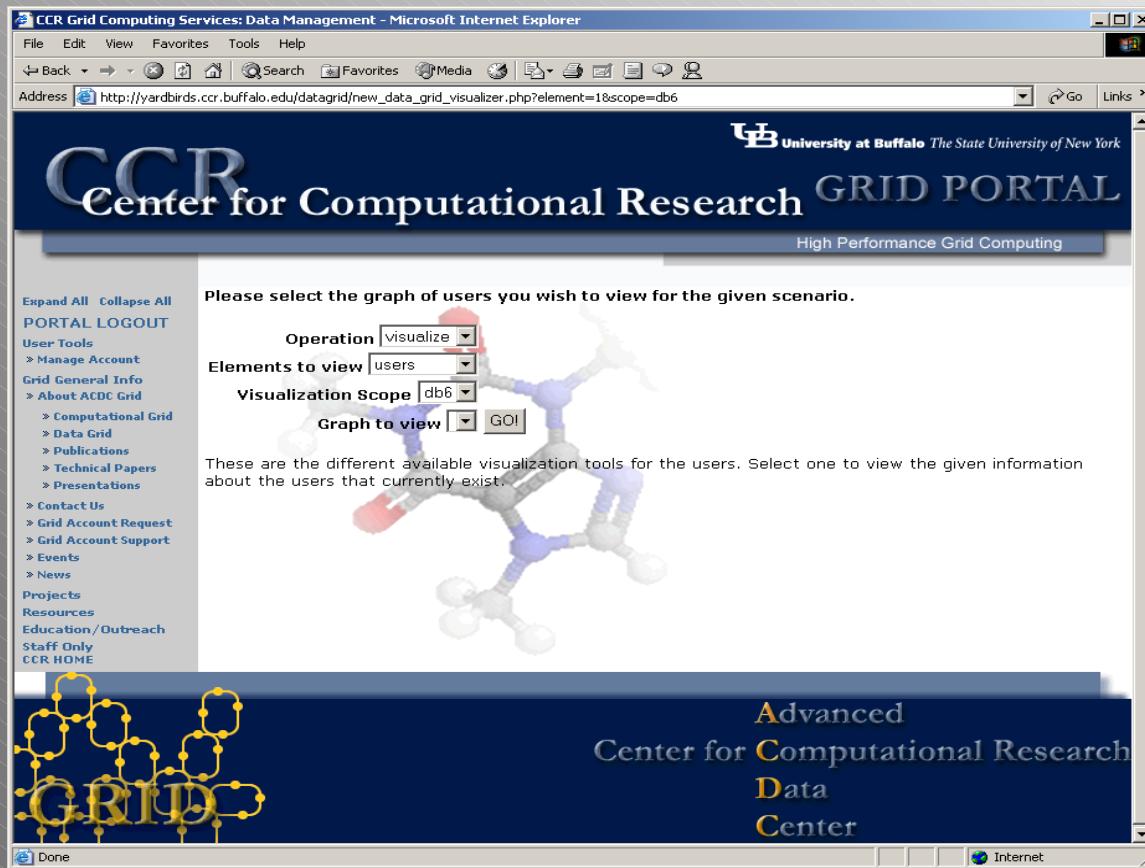


# Users – scope “all”



Now I have chosen to view the users in a scope of “all”, or across all scenarios. Here there is only one graph choice – “all users”. I am shown the total numbers of users for all scenarios. Even though this graph is built by pulling the figures out of the entries in “scenarios” in phpmyadmin, displaying the users with their corresponding information when clicking a region is more useful to the user. There is another element to this graph – db2 has only 1 user though db3 has 100 – this drastic difference would make db2 very difficult to click on because its bar would be very small. The values in the chart are logarithmically scaled to avoid this situation.

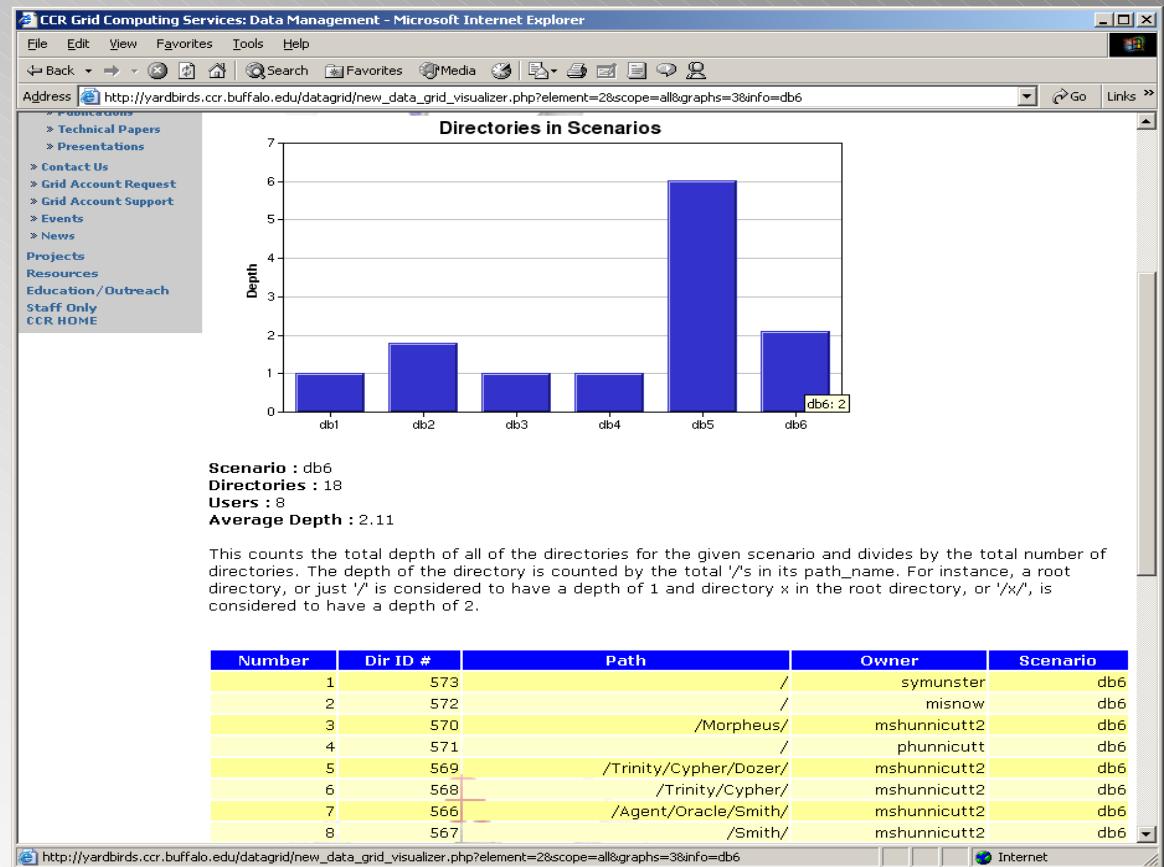
# Users – specific scenarios



Here there are no choices for viewing users in the scope of a single scenario. This information has not yet been added. More graphs can be added to the code that already exists. There are comments in the source code which indicate how to make such changes.

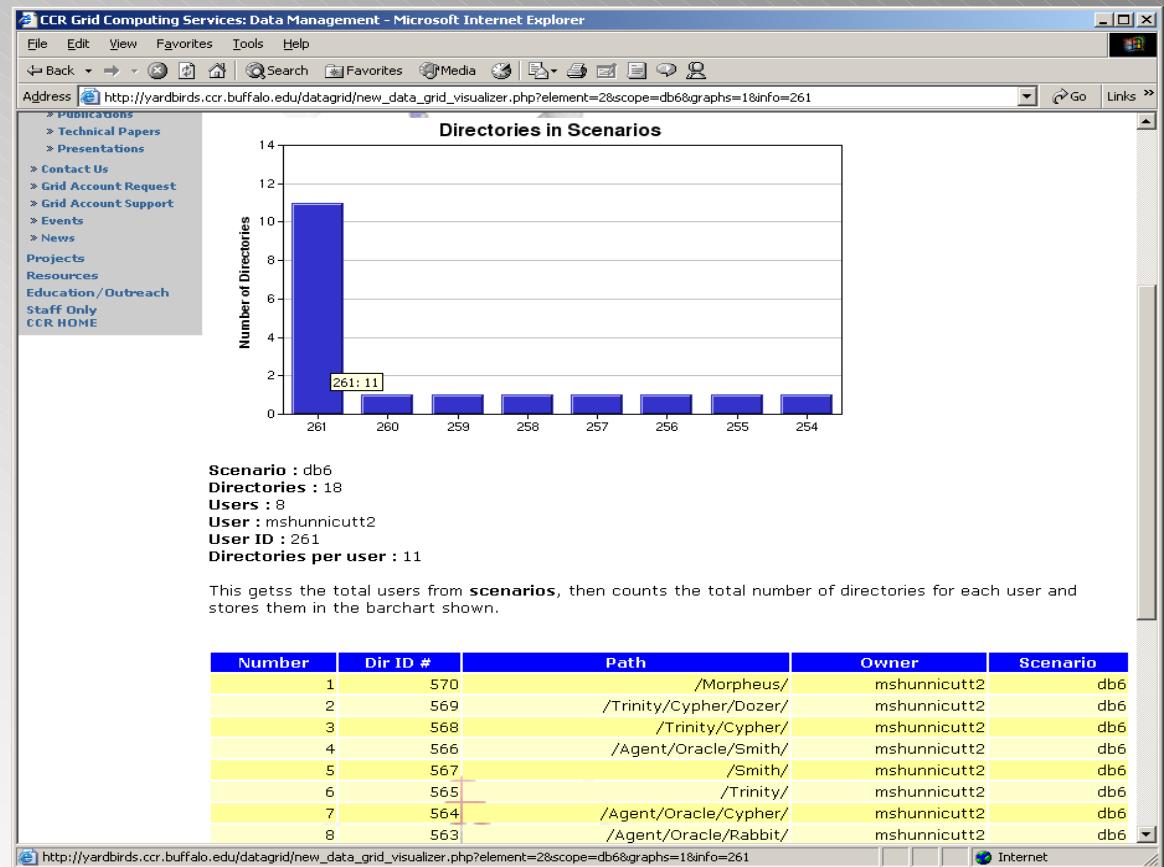
# Directories – scope “all”

Now I have chosen to view the directories with a scope of “all”. There are a few choices of graphs. I chose “Average Directory Depth”, which shows me the average depth of the directories in each scenario. Moving the mouse over the regions displays the exact figures and clicking the regions builds a table of all directories used to arrive at this number.

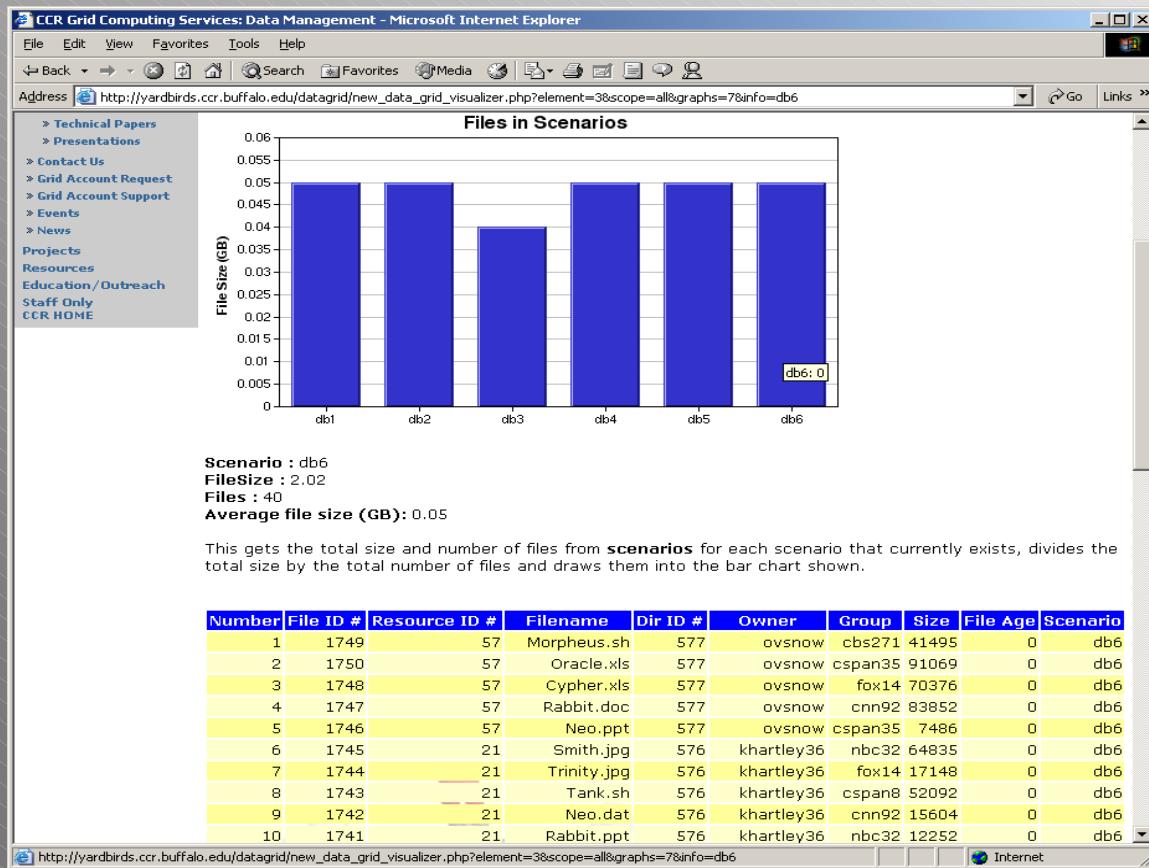


# Directories – specific scenarios

Now I have chosen “db6” as my scope. I chose the graph, “Directories per User”. Here we can see the directories we created during scenario generation – we created 10 directories for user “mshunnicutt2” and we can see this reflected in the table. More information is displayed when the mouse is over the region and clicking builds a table of the directories for the user in question.

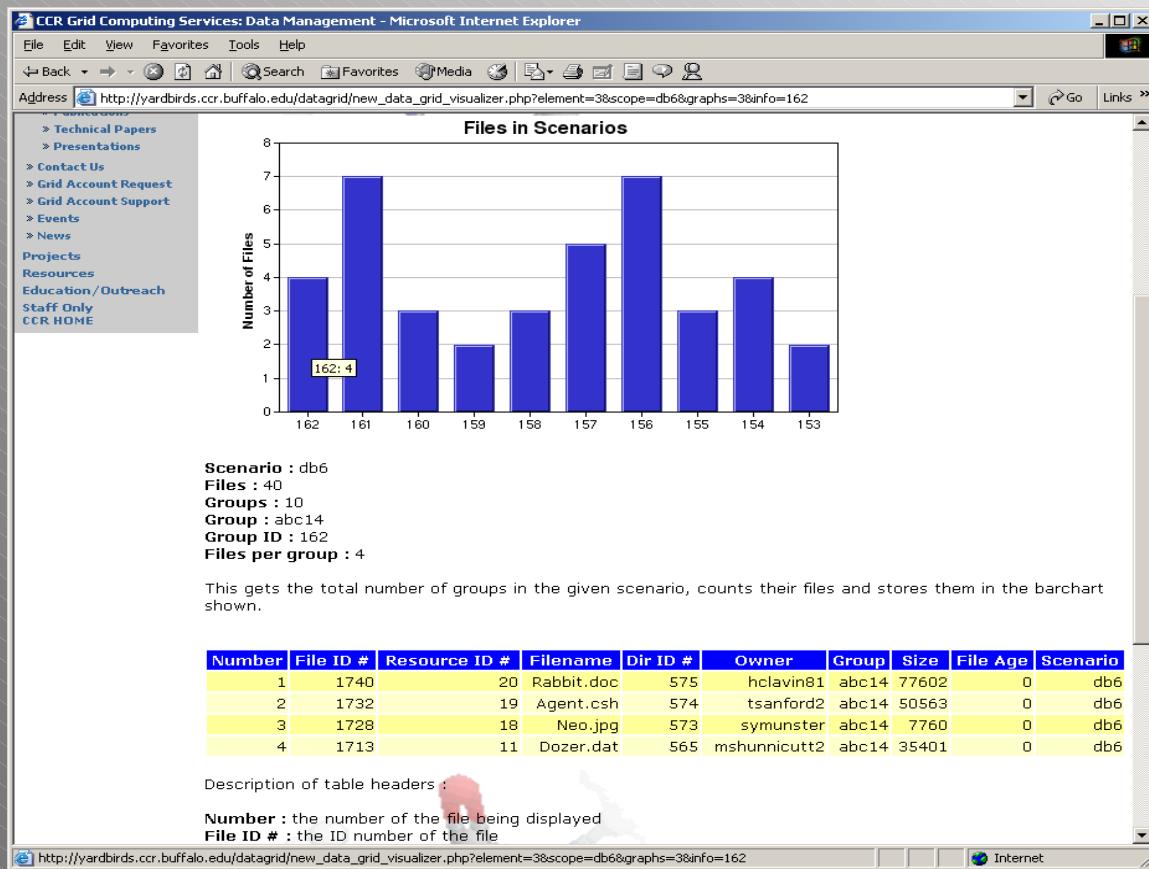


# Files – scope “all”



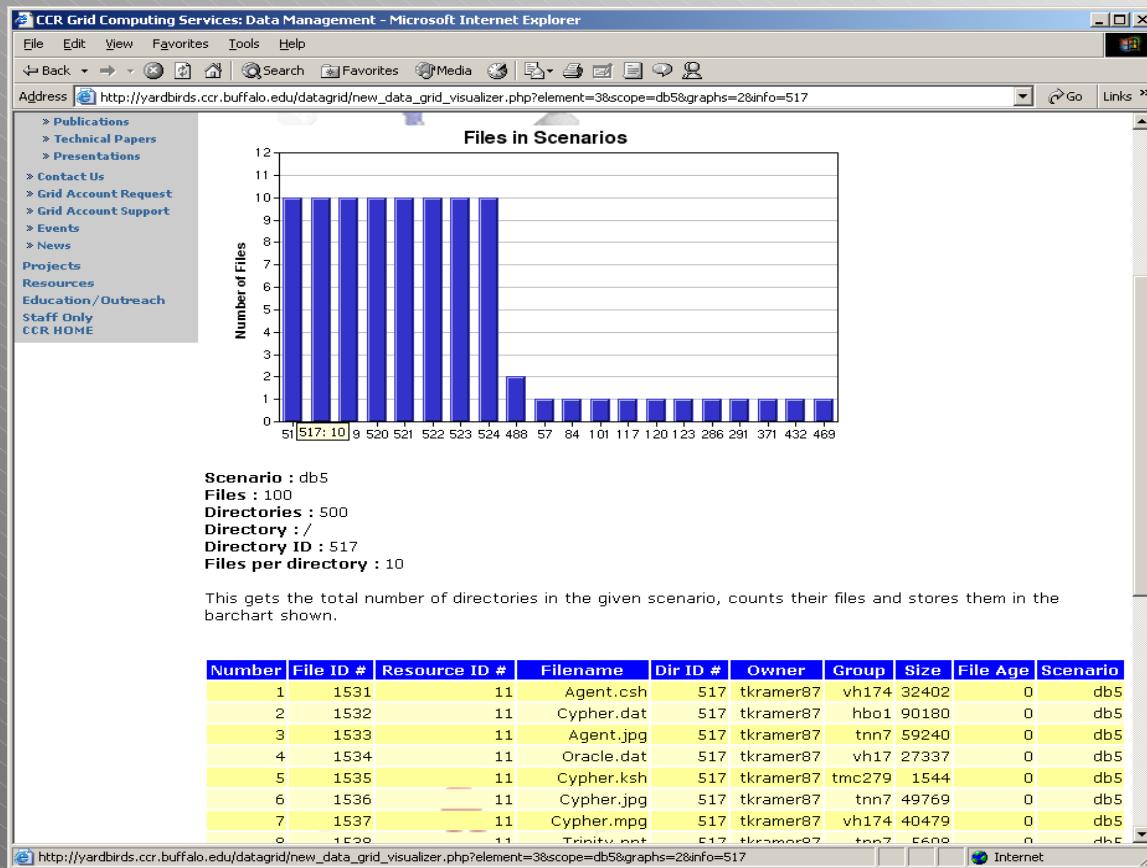
Here I have chosen to view files over all scenarios. There are many choices of applicable graphs; here I picked “average file size” which finds the average sizes of all files across all scenarios. Moving the mouse over regions prints the exact average (up to two significant figures), and clicking on “db6” shows all files that were counted in the average (i.e. all files in “db6”).

# Files – specific scenarios



Now I have chosen to see “files per group” on “db6”. The groups are shown by their group ID’s and the exact number of files is displayed when the mouse is moved over specific regions. When clicked, the files in the scenario with the selected group are shown in the table.

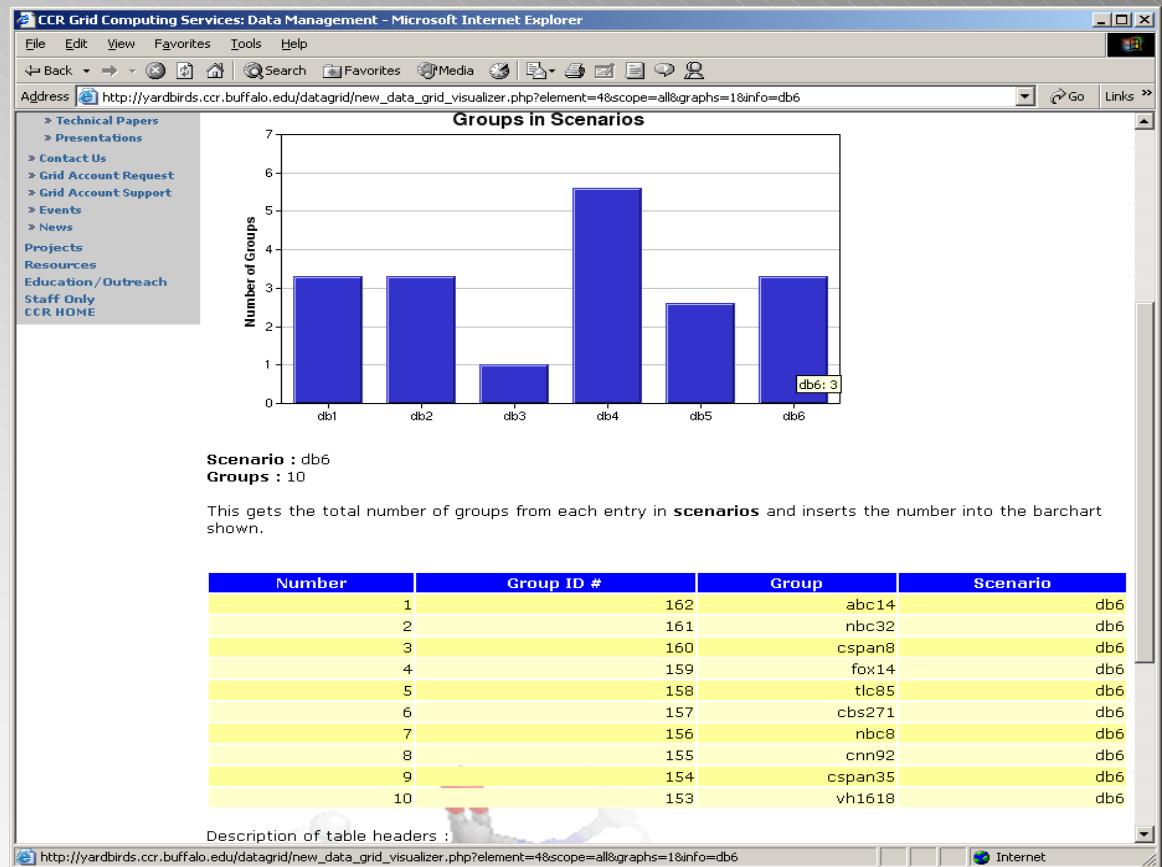
# Formatting the graph



In some cases the information for a graph can be much too big to display. For instance, scenario “db5” has 500 directories, so this graph “files per directory” for “db5” would be difficult to view. In the case when there are more than 20 elements on the x-axis, the data is sorted in descending order by y-value and only the top 20 x-values are displayed.

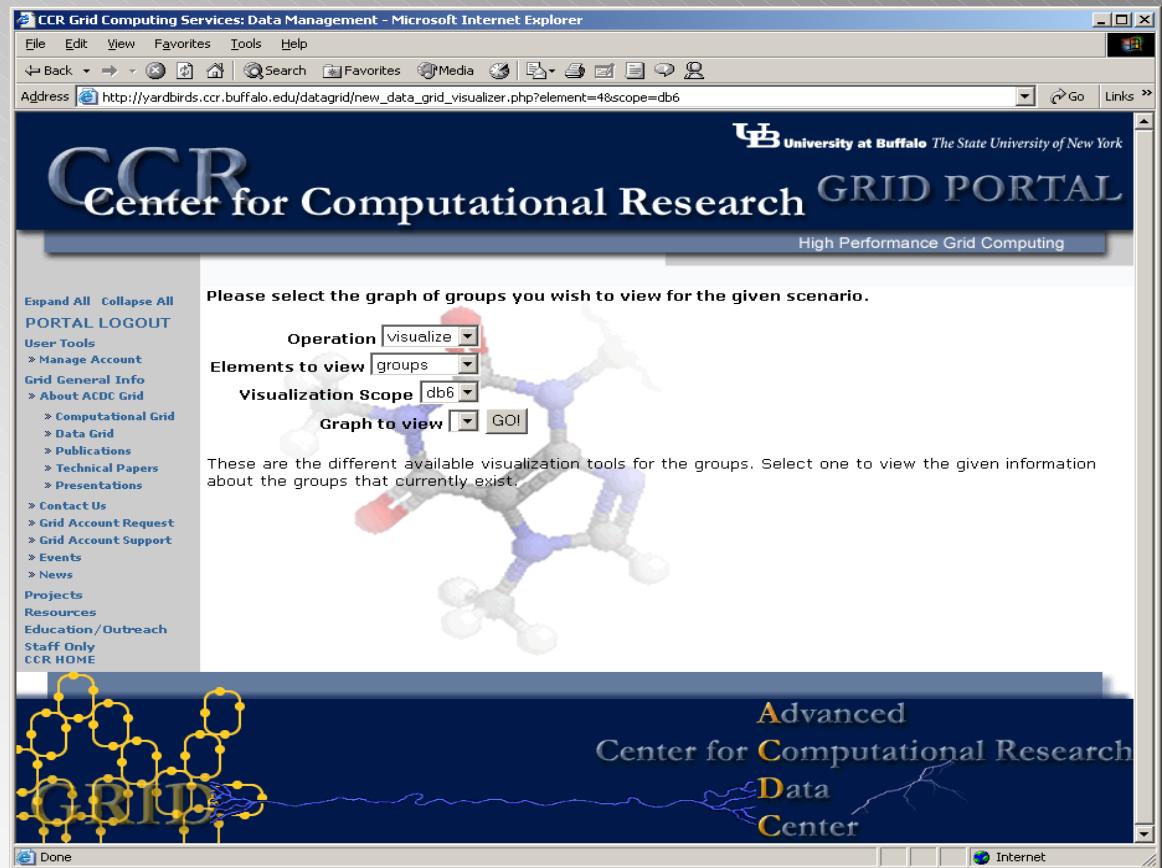
# Groups – scope “all”

This is the only graph available for viewing groups over all scenarios. It shows the numbers of groups in each scenario, with the exact number printed when the mouse enters the region. The table is populated with the names and ID's of the groups in the selected scenario.

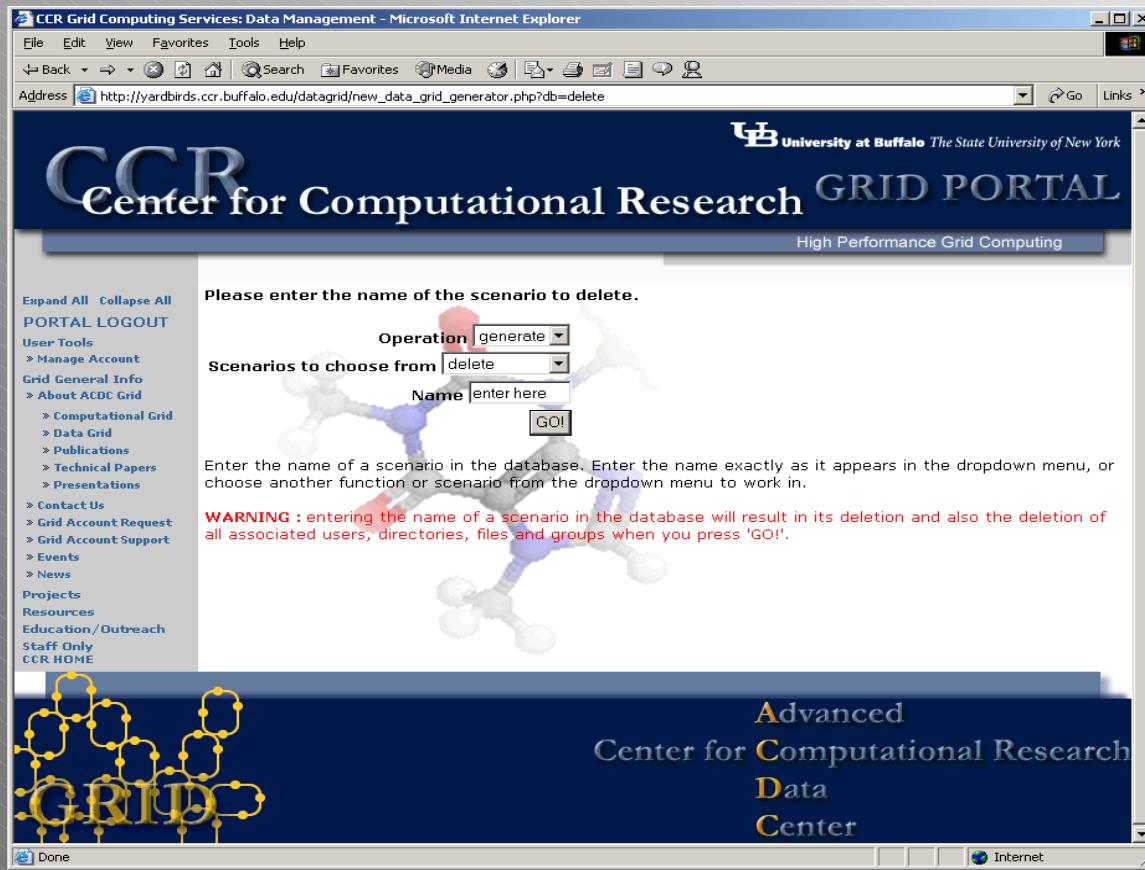


# Groups – specific scenarios

There are no graphs available to view for groups over a single scenario. More can be added at any time, as instructions were included in the comments of the source code. When graphs for this element are found necessary they can be added without much more coding.

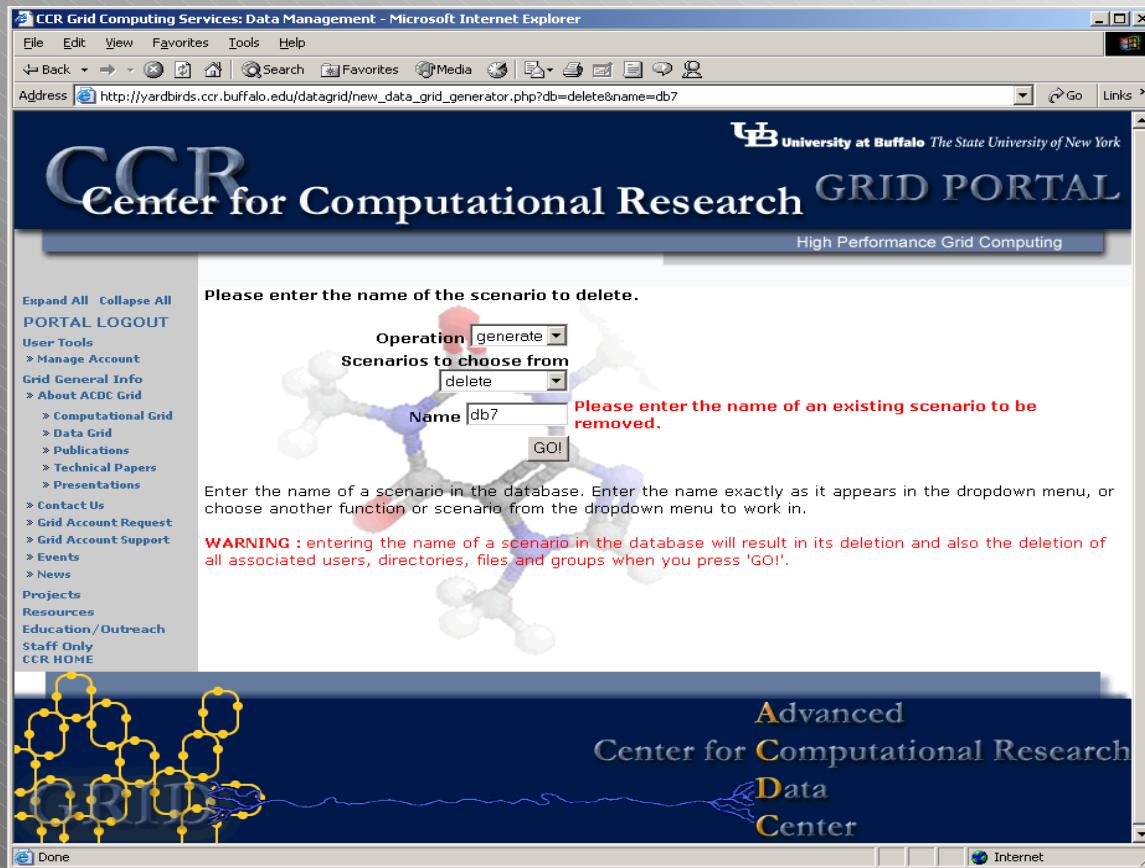


# Deleting information



Back in the generator application, it is possible to delete information from the tables in phpmyadmin. Selecting “DELETE ALL” from menu “Scenarios to choose from” removes all scenarios and all of their corresponding elements by emptying the element tables in phpmyadmin completely after asking if the user is sure. Here we have chosen to delete one specific scenario.

# Entering scenario name



It would be very easy for a user to accidentally select the wrong scenario name from a dropdown menu to delete, so as a precaution the user must type the scenario's exact name in order to have it deleted properly. Here I have entered “db7” which does not exist, and an error is generated.

# Deletion complete

CCR Grid Computing Services: Data Management - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://yardbirds.ccr.buffalo.edu/datagrid/new\_data\_grid\_generator.php?db=delete&name=db6

**CCR** Center for Computational Research GRID PORTAL

University at Buffalo The State University of New York

High Performance Grid Computing

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**Deleting scenario**

loading database...  
Information found... **db6 deleted.**  
Information found... **associated users deleted.**  
Information found... **associated directories deleted.**  
Information found... **associated files deleted.**  
Information found... **associated groups deleted.**  
...done

Operation generate Scenarios to choose from delete Name db6 GO!

Deleted scenario in **scenarios**, as well as all associated users, directories, files and groups with the name you entered. Enter the name of another scenario to delete, choose a scenario to work or another function to perform from the dropdown menu.

Advanced Center for Computational Research Data

CCR

Done Internet

The screenshot shows a Microsoft Internet Explorer window displaying the CCR Grid Computing Services: Data Management portal. The main content area is titled 'Deleting scenario' and shows a series of messages indicating the successful deletion of a database named 'db6'. These messages include: 'loading database...', 'Information found... **db6 deleted.**', 'Information found... **associated users deleted.**', 'Information found... **associated directories deleted.**', 'Information found... **associated files deleted.**', 'Information found... **associated groups deleted.**', and '...done'. Below this, there is a form with fields for 'Operation' (set to 'generate'), 'Scenarios to choose from' (set to 'delete'), 'Name' (set to 'db6'), and a 'GO!' button. A message at the bottom states: 'Deleted scenario in **scenarios**, as well as all associated users, directories, files and groups with the name you entered. Enter the name of another scenario to delete, choose a scenario to work or another function to perform from the dropdown menu.' The portal has a blue and white color scheme with a molecular structure logo. The footer features the text 'Advanced Center for Computational Research Data' and the acronym 'CCR'.

A valid scenario name was entered and the scenario and all of its corresponding information was deleted. All applicable phpmyadmin tables were searched and entries with the scenario set to “db6” were removed. The scenario is permanently deleted and the name is now free to be created as a new scenario and populated.

# Things to add

There are a few features that I would like to add to this tool in the future...

- I would like to alphabetize the “users” drop down menu populated for “create new directories” and “create new files”. It is difficult to find specific users when there are many of them.
- I would like to give the user the option of viewing or not viewing the table of newly created elements.
- The user should be able to specify the number of groups to choose from randomly when creating new files. Currently the groups are picked from a large array.
- Modify the logarithmic scaling such that the y-axis labels are scaled properly as well.