

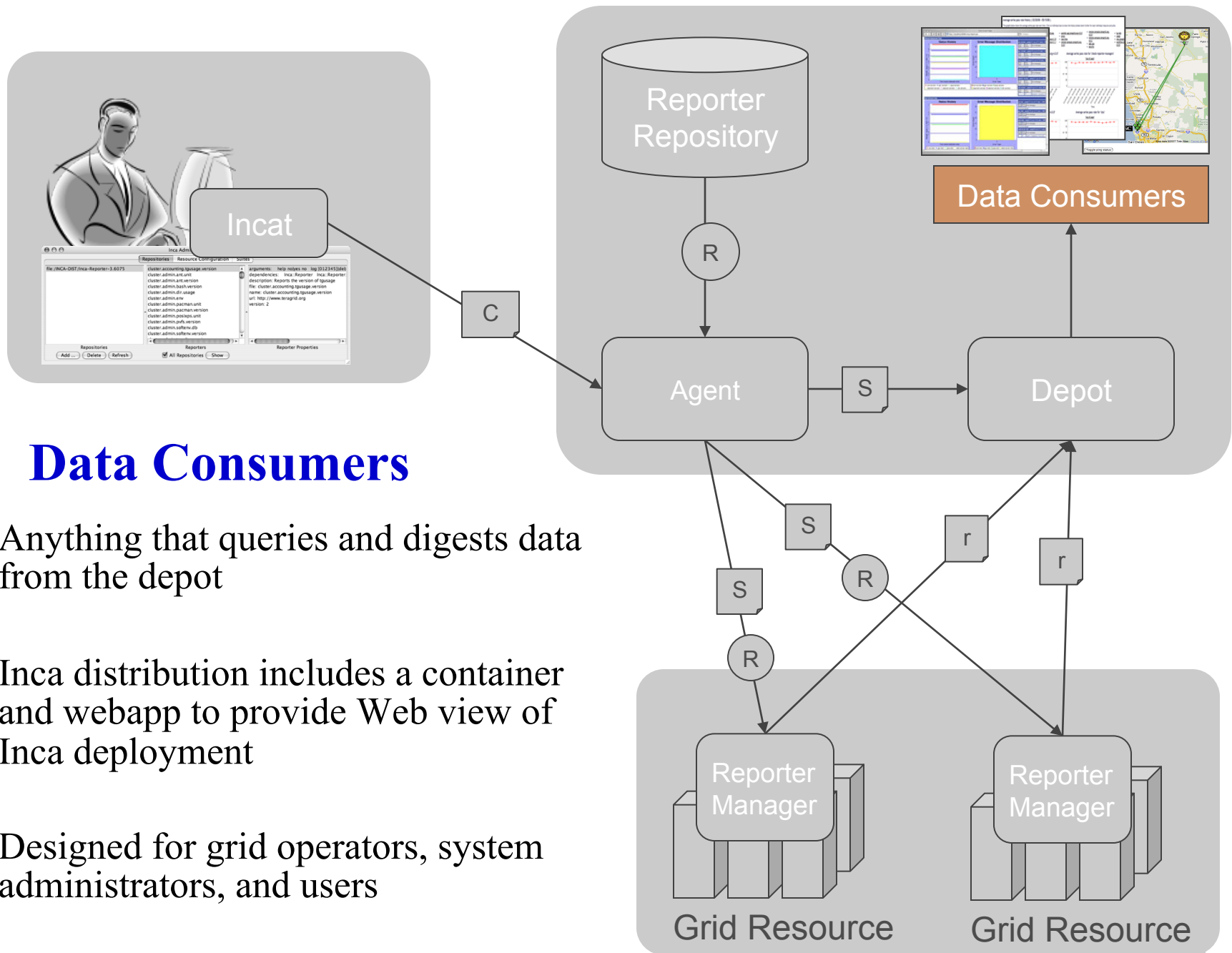
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# Inca Data Display (data consumers)

Kate Ericson

Inca Workshop  
August 27, 2010





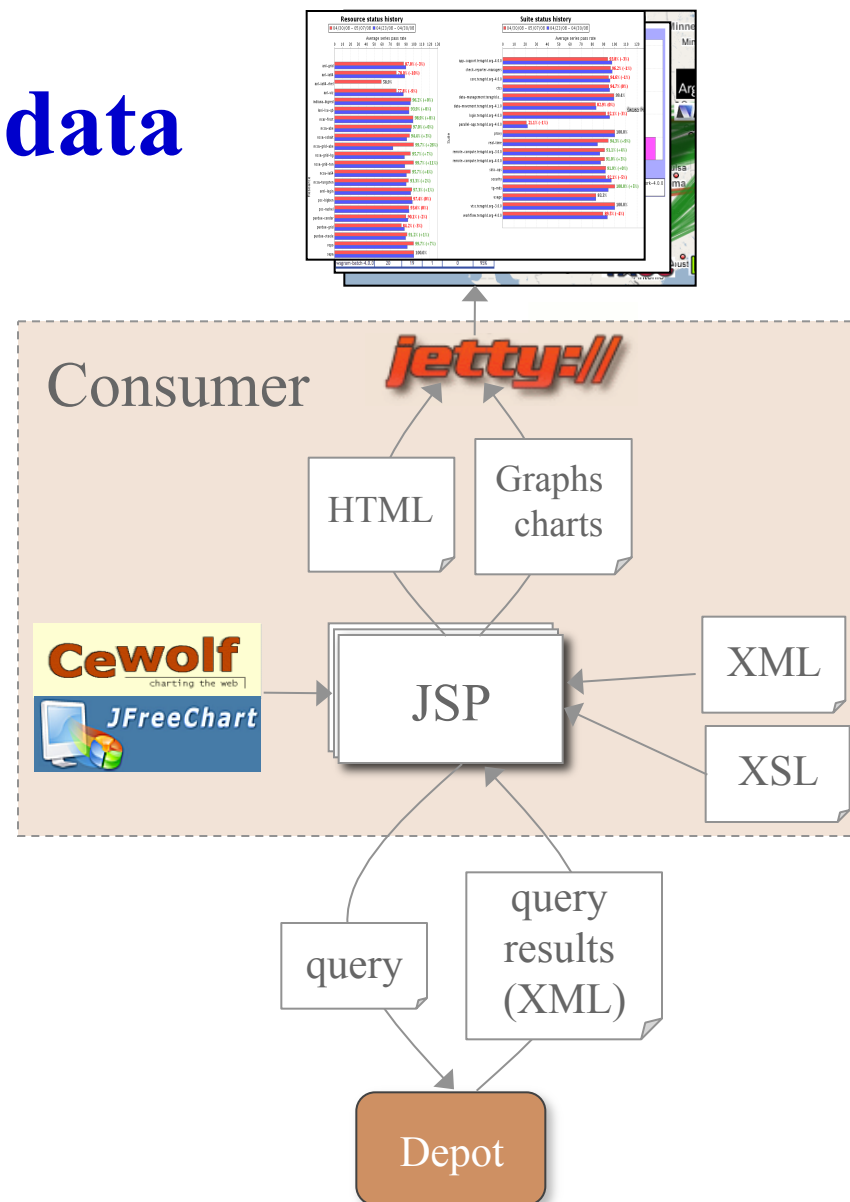
## Data Consumers

- Anything that queries and digests data from the depot
- Inca distribution includes a container and webapp to provide Web view of Inca deployment
- Designed for grid operators, system administrators, and users



# Consumer displays data

- Current and historical views
- Web application packaged with Jetty
- JSP 2.0 pages/tags to query data and format using XSLT
- CeWolf/JFreeChart to graph data
- Extensible





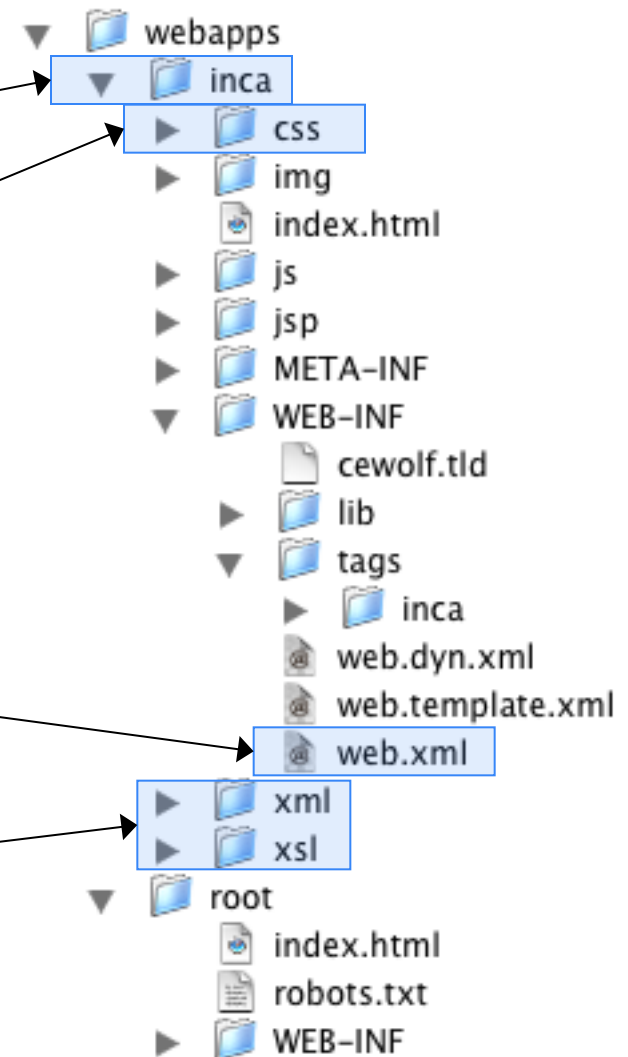
# Files for customization

Inca webapp runs inside  
Jetty 6 container

Config colors

Config authentication

Config files for views



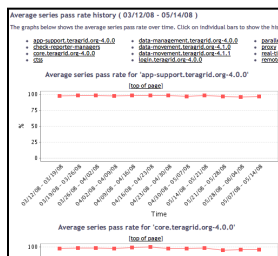


# Default Status Pages

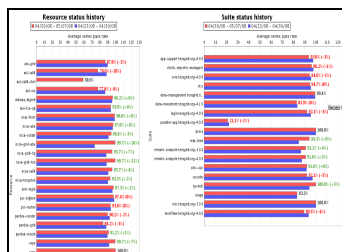




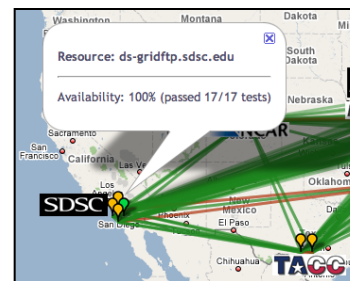
Series  
Summary



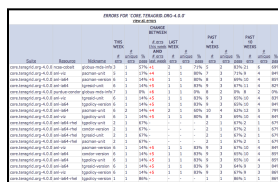
Suite & resource  
histories



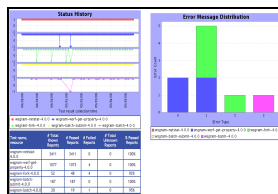
Weekly  
status  
report



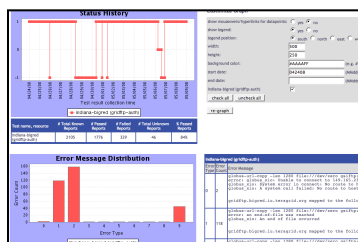
Cumulative  
series status  
by resource



Error history  
summary



Related series  
histories



Series  
Details

Individual  
series  
history



Individual report  
details

gsi-openssh	resource1	resource2	resource3	resource4
version: >= 3.9	4.6p1	4.6p1	4.5p1	4.5p1
gsiash-unit	pass	pass	error	pass
gx-map	resource1	resource2	resource3	resource4
version: 0.5.3.3(0.5.3.2p1)	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1
myproxy	resource1	resource2	resource3	resource4
version: >= 3.4	3.4	3.4	3.4	3.4
softenv	resource1	resource2	resource3	resource4
version: 1.6.2	1.6.2	1.6.2	1.6.2	1.6.2
softenv-unit	pass	pass	pass	pass
tgproxy	resource1	resource2	resource3	resource4
tgproxy-unit	pass	pass	pass	pass

Series status by  
package and  
resource

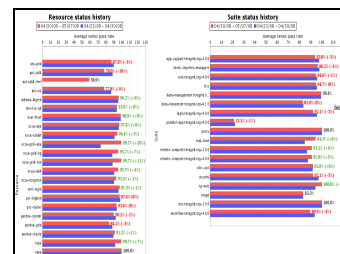
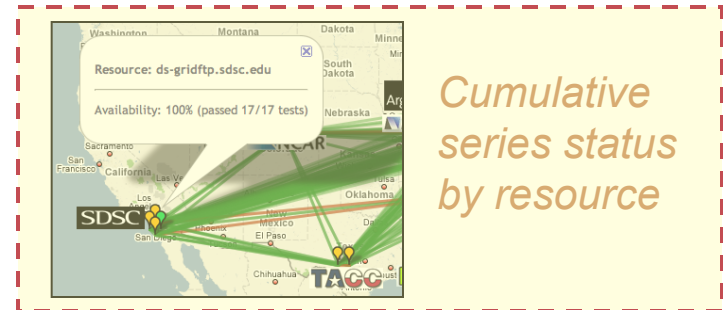
Historical

Current status

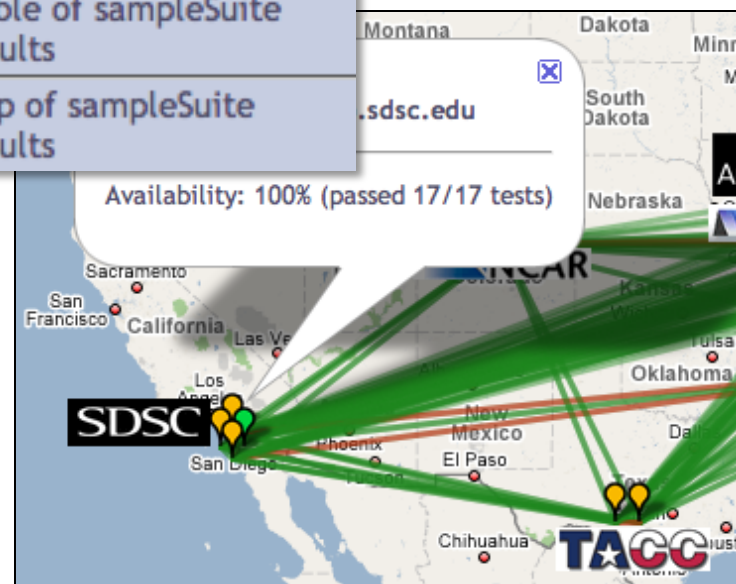
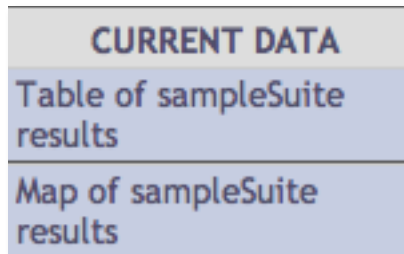
Inca's status  
pages provide  
multiple levels of  
details



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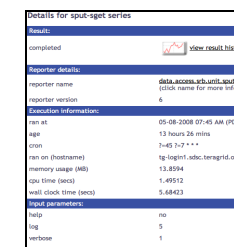
Weekly  
status  
report

## Cumulative series status by resource



gst-openssl	resource1	resource2	resource3	resource4
version: >= 3.9	4.6p1	4.6p1	4.5p1	4.5p1
gstssh-unit	pass	pass	error	pass
gx-map	resource1	resource2	resource3	resource4
version: 0.5.3.1[0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1
hmpoxy	resource1	resource2	resource3	resource4
version: >= 3.4	3.4	3.4	3.4	3.4
softenv	resource1	resource2	resource3	resource4
version: 1.6.2	1.6.2	1.6.2	1.6.2	1.6.2
softenv-unit	pass	pass	pass	pass
tgproxy	resource1	resource2	resource3	resource4
tgproxy-unit	pass	pass	pass	pass

### Series status by package and resource



## Individual report details

## Series Details

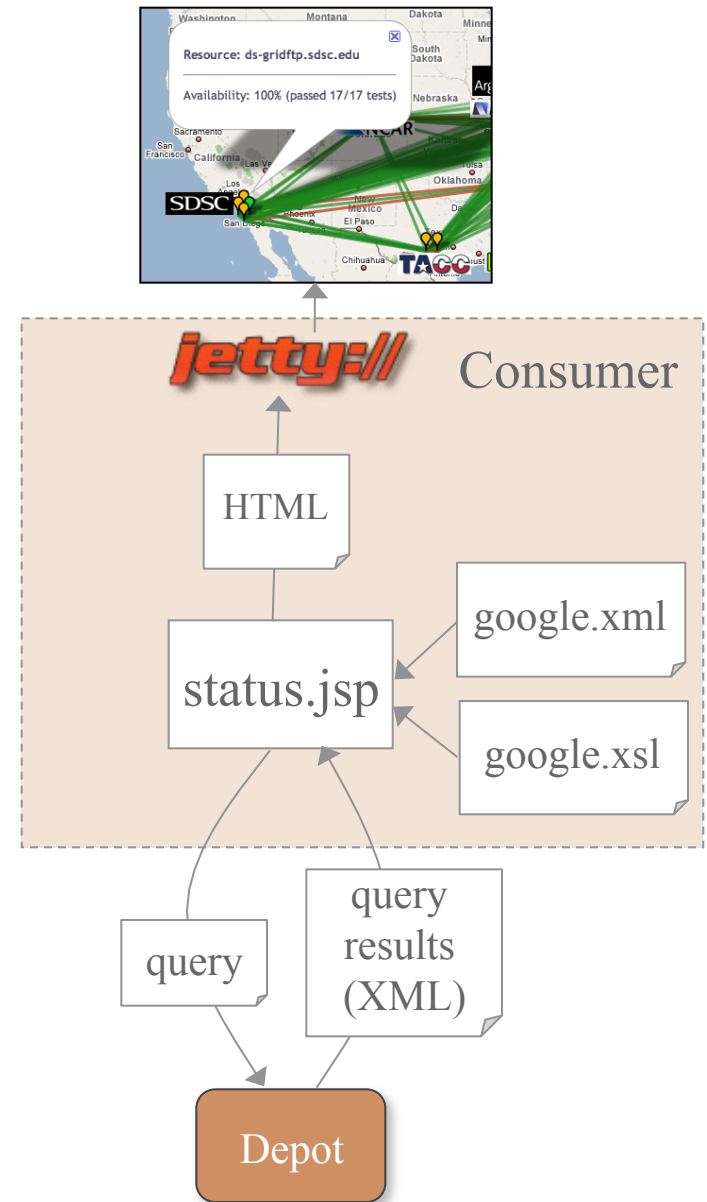
## Historical

### Current status



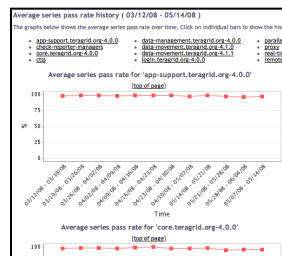
# View cumulative series status by resource

- Register for a Google Map API key  
<http://code.google.com/apis/maps/signup.html>
- Specify size of map, center of map, zoom level
- Define sites -- logo and resources
- Optionally change icons or colors

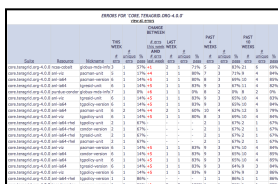




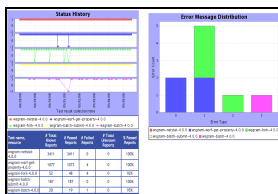
## Series Summary



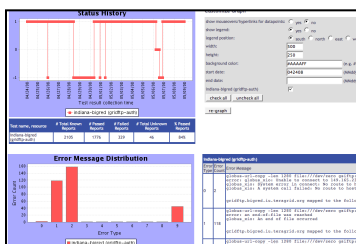
## Average suite & resource series pass rate history



## Error history summary



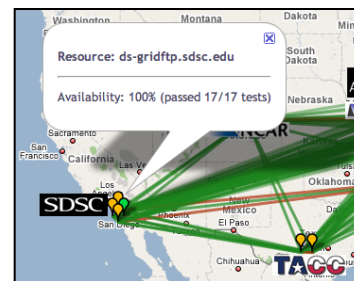
## Related series histories



## Series Details

## Individual series history

## Weekly status report



## Cumulative series status by resource

	resource1	resource2	resource3	resource4
gsi-openssh				
version: >= 3.9	4.6p1	4.6p1	4.5p1	4.5p1
gsissh-unit	pass	pass	error	pass
gx-map				
version: 0.5.3.3 0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1
myproxy				
version: >= 3.4	3.4	3.4	3.4	3.4
softenv				
version: 1.6.2	1.6.2	1.6.2	1.6.2	1.6.2
softenv-unit	pass	pass	pass	pass
tgproxy				
tgproxy-unit	pass	pass	pass	pass

	resource1	resource2	resource3	resource4
gsi-openssh				
version: >= 3.9	4.6p1	4.6p1	4.5p1	4.5p1
gsissh-unit	pass	pass	error	pass
gx-map				
version: 0.5.3.3 0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1
myproxy				
version: >= 3.4	3.4	3.4	3.4	3.4
softenv				
version: 1.6.2	1.6.2	1.6.2	1.6.2	1.6.2
softenv-unit	pass	pass	pass	pass
tgproxy				
tgproxy-unit	pass	pass	pass	pass

## Series status by package and resource

Details for spu-tiget series	
Result:	completed
Reporter details:	
reporter name	data.acorn.xb-unit-spu-test
reporter version	6
Execution information:	
run at	05-08-2008 07:45 AM (PDT)
age	13 hours 26 mins
cron	3-45 1-7 *
run on (hostname)	tg-light1.sdsc.toragrid.org
memory usage (MB)	13.8994
cpu time (secs)	1.49512
wait clock time (secs)	5.68423
Result parameters:	
help	no
log	5
verbose	1
version	02

## Individual report details

Historical

Current status



# View series status by package and resource

- Specify list of suite(s) and resource(s) in URL

<http://host:8080/inca/jsp/status.jsp> ?

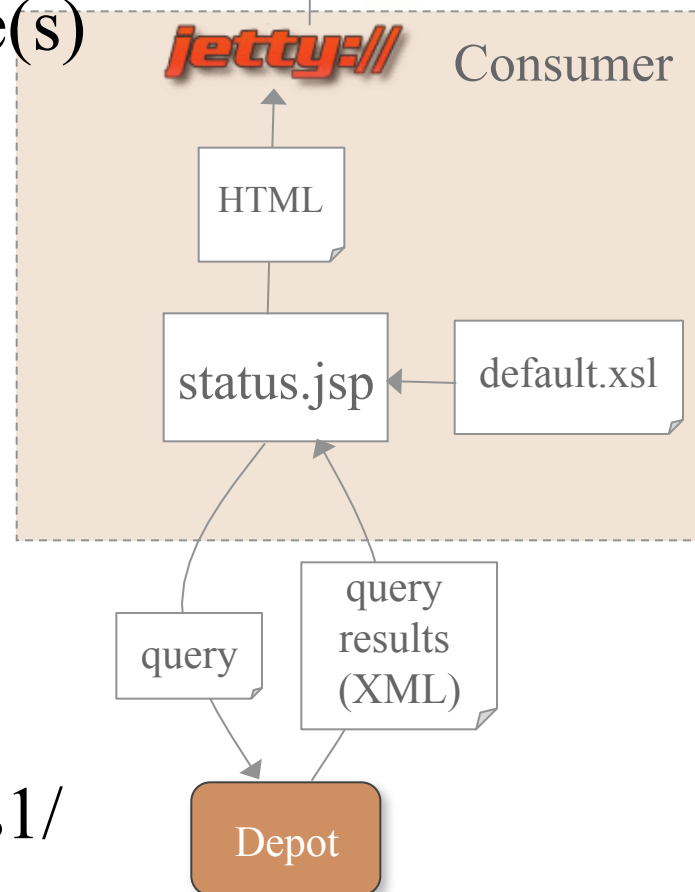
**suiteNames**=s1[,s2,...]

**resourceIds**=r1[,r2,...]

REST equivalent:

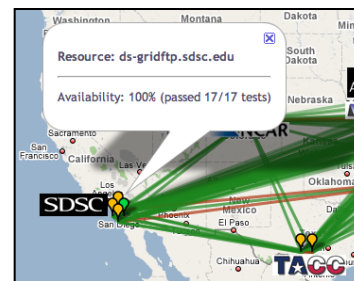
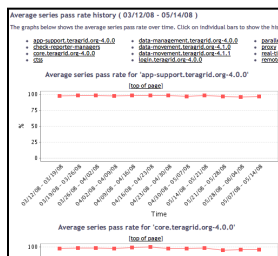
<http://host:8080/inca/HTML/rest/s1/r1>

	resource1	resource2	resource3	resource4
gsi-openssh				
version: >= 3.9	4.6p1	4.6p1	4.5p1	4.5p1
gsissh-unit	pass	pass	error	pass
gx-map				
version:	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1
myproxy				
version: >= 3.4	3.4	3.4	3.4	3.4
softenv				
version: 1.6.2	1.6.2	1.6.2	1.6.2	1.6.2
softenv-unit	pass	pass	pass	pass
tgproxy				
tgproxy-unit	pass	pass	pass	pass



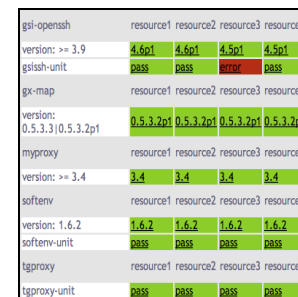
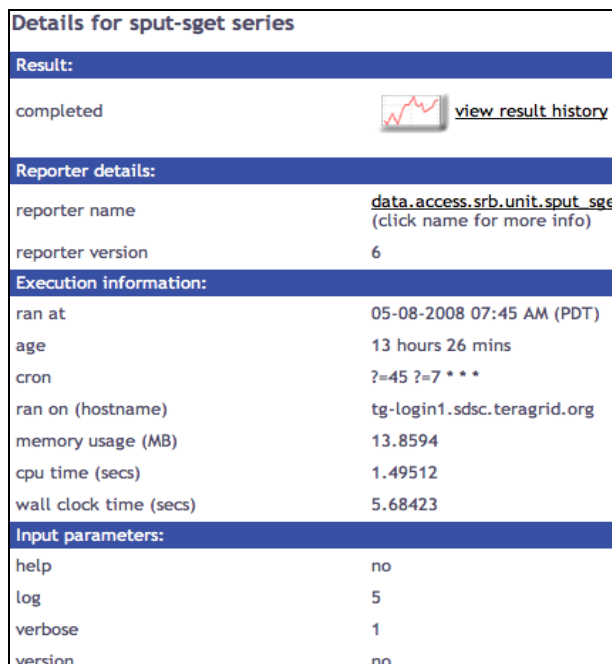
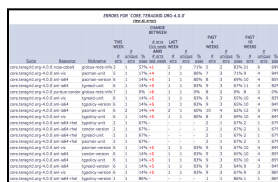


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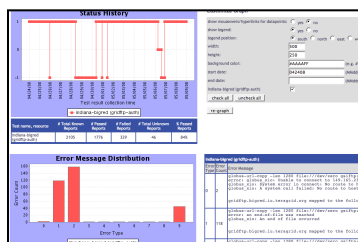


## Weekly status report

### Cumulative series status by resource



### Series status by package and resource



### Individual report details

## Series Details

*Individual  
series  
history*

## Historical

### Current status



# View individual report details

- Linked from other views
- Specify series nickname, resource, and collected time

<http://host:8080/inca/jsp/instance.jsp> ?

**nickname**=ant\_version &

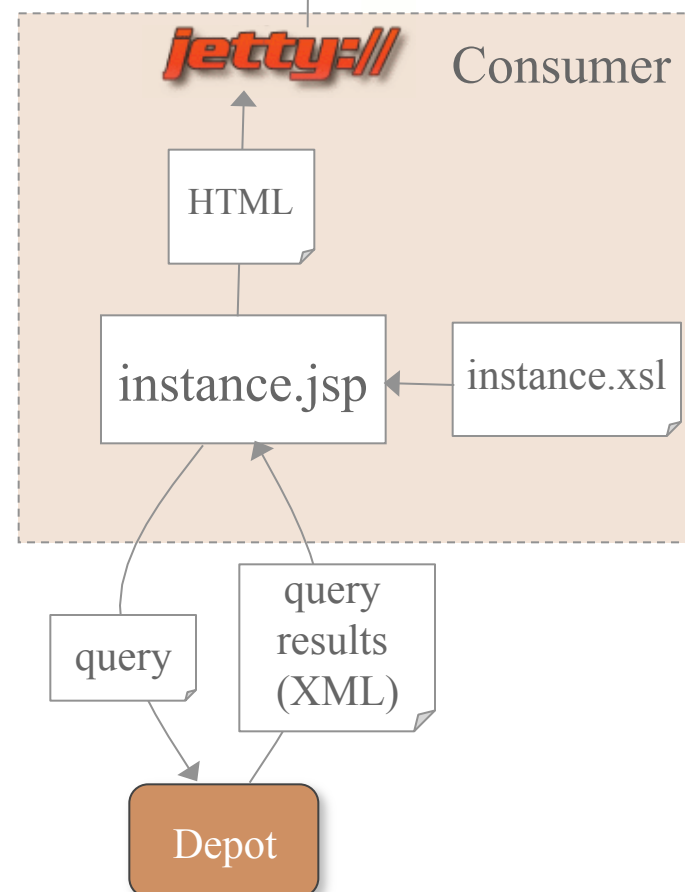
**resource**=localResource &

**collected**=2010-08-11T20:51:08.000-07:00

REST equivalent (latest instance):

[http://host:8080/inca/HTML/rest/sampleSuite/  
localResource/ant\\_version](http://host:8080/inca/HTML/rest/sampleSuite/localResource/ant_version)

Details for spu-egot series	
Result:	completed <a href="#">view result history</a>
Reporter details:	
reporter name:	data.accounts.ifs.univ.egot.ams (click name for more info)
reporter version:	6
Execution information:	
run at:	05-08-2008 07:45 AM (PDT)
age:	13 hours 26 mins
cron:	3-45 3-7 * * *
run on (hostname):	lg-logint1.sdsc.toragrid.org
memory usage (MB):	13.8594
cpu time (secs):	1.49512
wall clock time (secs):	5.68423
Input parameters:	
help:	no
log:	5
verbose:	1
version:	0.0.0







### Cumulative series status by resource

**Status History**

Test result collection time	Status
04/24/08	1
04/25/08	1
04/26/08	-1
04/27/08	1
04/28/08	1
04/29/08	-1
04/30/08	-1
05/01/08	1
05/02/08	-1
05/03/08	1
05/04/08	1
05/05/08	1
05/06/08	0
05/07/08	-1
05/08/08	1
05/09/08	1

Legend: ■ indiana-biased (gridto-auth)

show mouseovers/hyperlinks for datapoints: ☐ yes ☒ no

show legend: ☐ yes ☒ no

legend position: ☒ south ☐ north ☐ east ☐ west

width:

height:

background color:  (e.g. #FFFFFF)

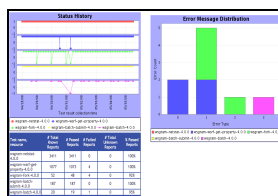
start date:  (MMGG)

end date:

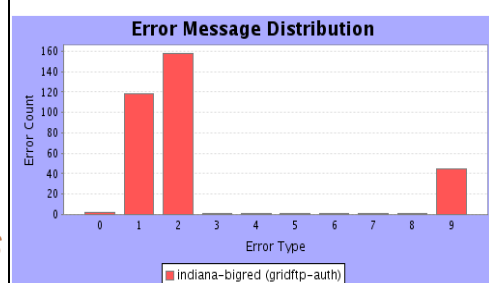
Indiana-bigred (gridftp-auth) ☒

[illegible]

## Error history summary



Test name, resource	# Total Known Reports	# Passed Reports	# Failed Reports	# Total Unknown Reports	% Passed Reports
indiana-bigred (gridftp-auth)	2105	1776	329	46	84%

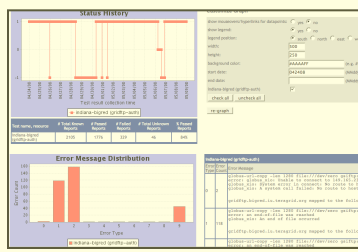


Indiana-bigred (gridftp-auth)		
Error Type	Error Count	Error Message
0	2	globus-url-copy -len 1280 file:///dev/zero gsfzft error: globus_xio: Unable to connect to 149.165. globus_xio: System error in connect: No route to ho globus_xio: A system call failed: No route to ho
1	118	gridftp.bigred.iu.teragrid.org mapped to the fol globus-url-copy -len 1280 file:///dev/zero gsfzft error: an end-of-file was reached globus_xio: An end of file occurred gridftp.bigred.iu.teragrid.org mapped to the fol globus-url-copy -len 1280 file:///dev/zero gsfzft error: an end-of-file was reached globus_xio: An end of file occurred

gsl-openssh	resource1	resource2	resource3	resource4
version: >= 3.9	4.6p1	4.6p1	4.5p1	4.5p1
gslssh-unit	pass	pass	error	pass
gx-map	resource1	resource2	resource3	resource4
version: 0.5.3.3[0.5.3.2p1]	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1
myproxy	resource1	resource2	resource3	resource4
version: >= 3.4	3.4	3.4	3.4	3.4
softwm	resource1	resource2	resource3	resource4
version: 1.6.2	1.6.2	1.6.2	1.6.2	1.6.2
softwm-unit	pass	pass	pass	pass
tgproxy	resource1	resource2	resource3	resource4
tgproxy-unit	pass	pass	pass	pass

### Series status by package and resource

*Related series histories*



Individual  
series  
history

## Series Details

Details for sput-agent-series	
<b>Result:</b>	
completed	 <a href="#">view report history</a>
<b>Reporter details:</b>	
reporter name	data-access- <a href="#">sput-unit</a> <small>(click name for more info)</small>
reporter version	8
<b>Structure information:</b>	
run at	05-08-2008 07:45 AM (PST)
age	13 hours 26 mins
cron	*-45 7-7 * * *
run on (hostname)	log-tnfr1-sdcx.tengrad.it
memory usage (MB)	13,8594
cpu time (secs)	1,49512
total clock time (secs)	5,48403
<b>Input parameters:</b>	
help	no
log	5
verbose	1

## Individual report details

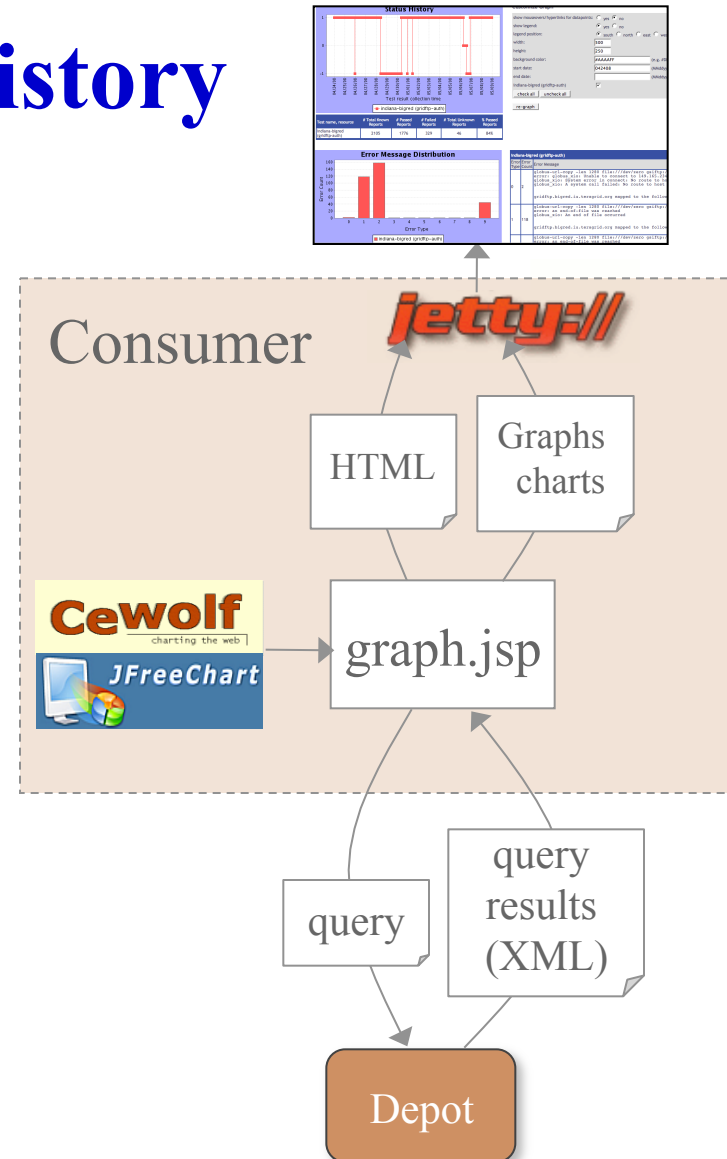
## Historical

## Current status



# View individual series history

- Linked from individual report details page
- Requires series nickname, resource, and title
- By default for week, month, quarter or year
- Options:
  - Mouseovers and links
  - Legend ( and position)
  - Width, Height
  - Background color





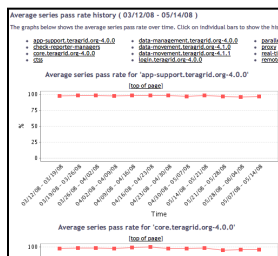
## Choose selected series histories

- Is an error related to the resource or the software?
- What is the reliability of a service (viewing multiple tests)?

data-management.teragrid.org-4.0.0							
		psc-bigben	purdue-condor	purdue-steele	sdsc-bg	sdsc-datastar	sdsc-ia64
select row or column:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ctss-data-management-4.0.0-registration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
sls-dm-4.0.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
sput-sget-dm-4.0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



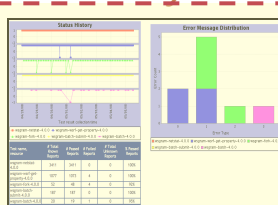
## Series Summary



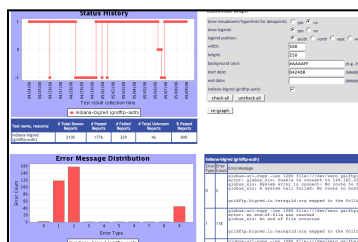
## Suite & resource histories

Test Name	Resource	Version	Test Result	Test Time	Test Date	Test User	Test Host	Test Location	Test Status
wsgram-netstat-4.0.0	resource1	4.0.0	pass	1.46s	04/29/08	root	toragrid.org	toragrid.org	pass
wsgram-wsrf-get-property-4.0.0	resource1	4.0.0	pass	1.46s	04/29/08	root	toragrid.org	toragrid.org	pass
wsgram-fork-4.0.0	resource1	4.0.0	pass	1.46s	04/29/08	root	toragrid.org	toragrid.org	pass
wsgram-batch-submit-4.0.0	resource1	4.0.0	pass	1.46s	04/29/08	root	toragrid.org	toragrid.org	pass
wsgram-batch-4.0.0	resource1	4.0.0	pass	1.46s	04/29/08	root	toragrid.org	toragrid.org	pass

## Error history summary



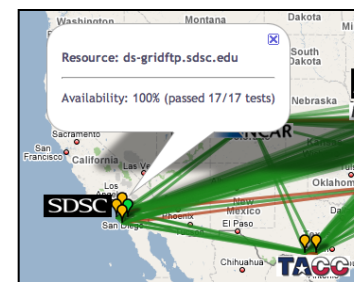
## Related series histories



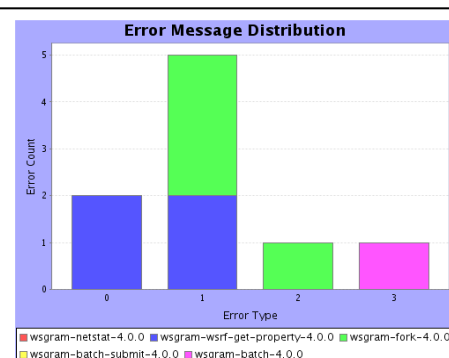
## Series Details

## Individual series history

## Weekly status report



## Cumulative series status by resource



gsi-openish	resource1	resource2	resource3	resource4
version: >= 3.9	4.6p1	4.6p1	4.5p1	4.5p1
gsiash-unit	pass	pass	error	pass
gx-map	resource1	resource2	resource3	resource4
version: 0.5.3.3(0.5.3.2p1)	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1
myproxy	resource1	resource2	resource3	resource4
version: >= 3.4	3.4	3.4	3.4	3.4
softenv	resource1	resource2	resource3	resource4
version: 1.6.2	1.6.2	1.6.2	1.6.2	1.6.2
softenv-unit	pass	pass	pass	pass
tgproxy	resource1	resource2	resource3	resource4
tgproxy-unit	pass	pass	pass	pass

## Series status by package and resource

Details for spu1-tgset series	
Result:	completed
Reporter details:	
reporter name	data.acorn.su.unit.su1_test
reporter version	6
Execution information:	
run at	05-08-2008 07:45 AM (PDT)
age	13 hours 26 mins
cron	3-40 3-7 *
run on (hostname)	tg-night1.sdsc.toragrid.org
memory usage (MB)	13.894
cpu time (secs)	1.49512
wait clock time (secs)	5.68423
Result parameters:	
help	no
log	5
verbose	1
version	02

## Individual report details

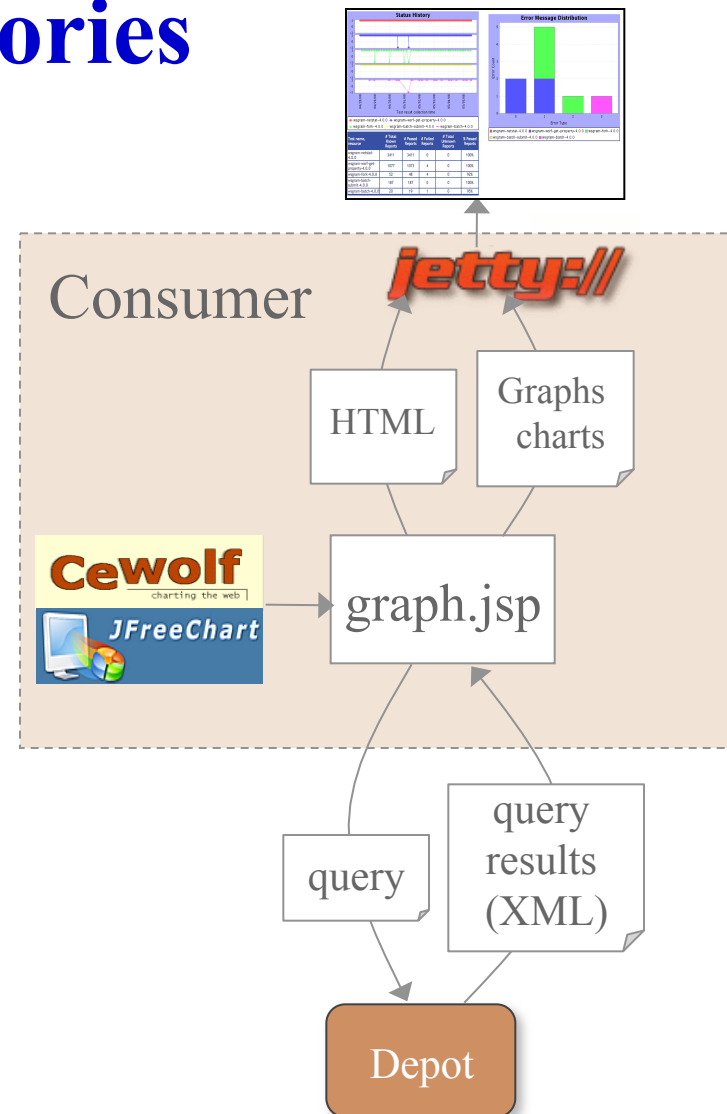
Historical

Current status



# View related series histories

- Requires multiple series nickname, resource, and title
- Two weeks of history by default
- Options:
  - Mouseovers and links
  - Legend ( and position)
  - Width, Height
  - Background color





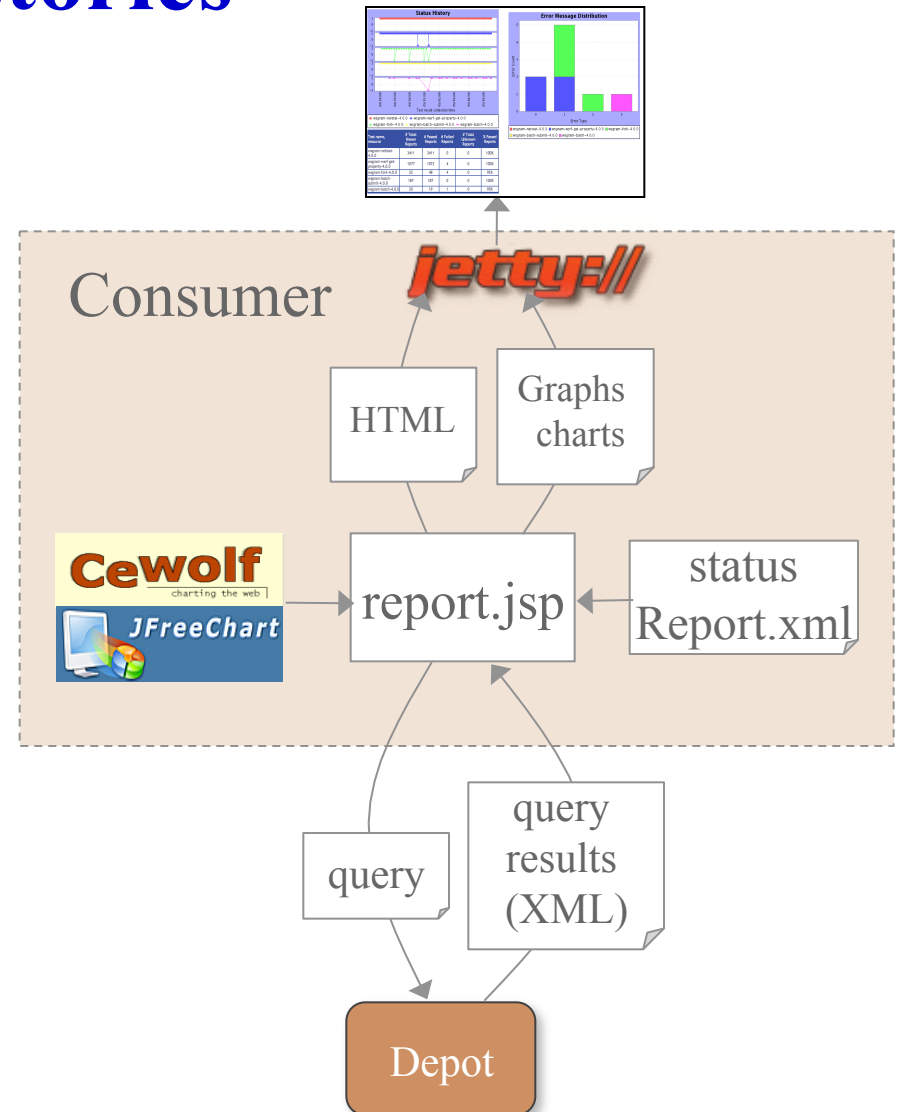
# View related series histories as report

REPORTS
Past week: sampleSuite pass/fail graphs and err msgs
Past week: avg pass rate by resource/suite
Past 4 weeks: series error summary
Resource avg pass history
Suite avg pass history

- Requires multiple series nickname, resource, and titles described in XML file
- Two weeks of history by default

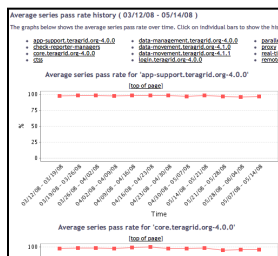
## Options:

- Mouseovers and links
- Legend ( and position)
- Width, Height
- Background color
- Metrics

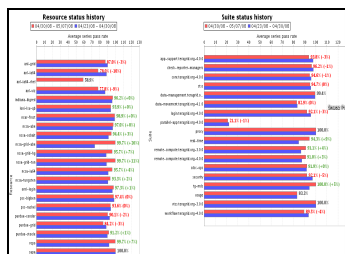




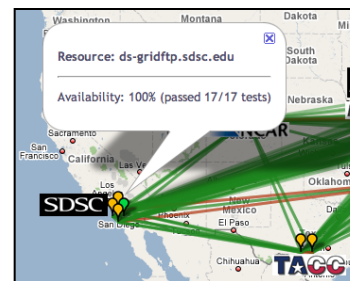
## Series Summary



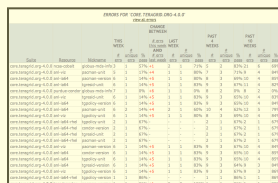
## Suite & resource histories



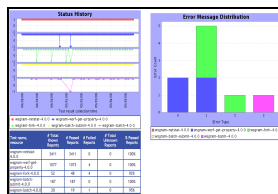
## Weekly status report



## Cumulative series status by resource



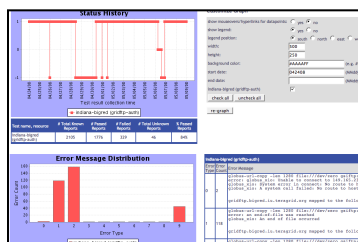
## Error history summary



## Related series histories

Nickname	THIS WEEK			CHANGE BETWEEN		LAST WEEK			PAST 4 WEEKS	
	# errs	# unique errs	% pass	# errs this week AND # errs last week	% pass this week AND % pass last week	# errs	# unique errs	% pass	# errs	# unique errs
<a href="#">gridftp-auth</a>	3	3	100%	-103	+11%	106	4	89%	1957	14
<a href="#">wsgram-fork</a>	6	1	0%	-1	0%	7	1	0%	24	4
<a href="#">prews-gram-batch</a>	7	1	46%	+4	-33%	3	1	79%	33	5
<a href="#">wsgram-batch</a>	7	1	0%	0	0%	7	1	0%	25	4
<a href="#">wsgram-batch-submit</a>	7	1	0%	0	0%	7	1	0%	25	4
<a href="#">wsgram-fork</a>	7	1	0%	0	0%	7	1	0%	25	5
<a href="#">wsgram-netstat</a>	2	1	86%	+1	-4%	1	1	90%	3	2
<a href="#">wsgram-wsrf-get-property</a>	7	1	0%	0	0%	7	1	0%	25	4
<a href="#">wsgram-batch</a>	1	1	83%	+1	-17%	0	0	100%	1	1
<a href="#">wsgram-netstat</a>	7	1	0%	0	0%	7	1	0%	24	4

## Series Details



## Individual series history

Details for spu-tget series	
Result:	completed
Reporter details:	data.acorn.xb-unit-test
Reporter name:	6
Reporter version:	6
Execution information:	05-08-2008 07:45 AM (PDT)
Run ID:	13 hours 26 mins
Cron:	3-42 1-7 *
Run on (hostname):	lg-light1.sdsc.toragrid.org
Memory usage (MB):	13.894
CPU time (secs):	1.49512
Wall clock time (secs):	5.68423
Result parameters:	
Help:	no
Log:	5
Verbose:	1
Version:	02

## Individual report details

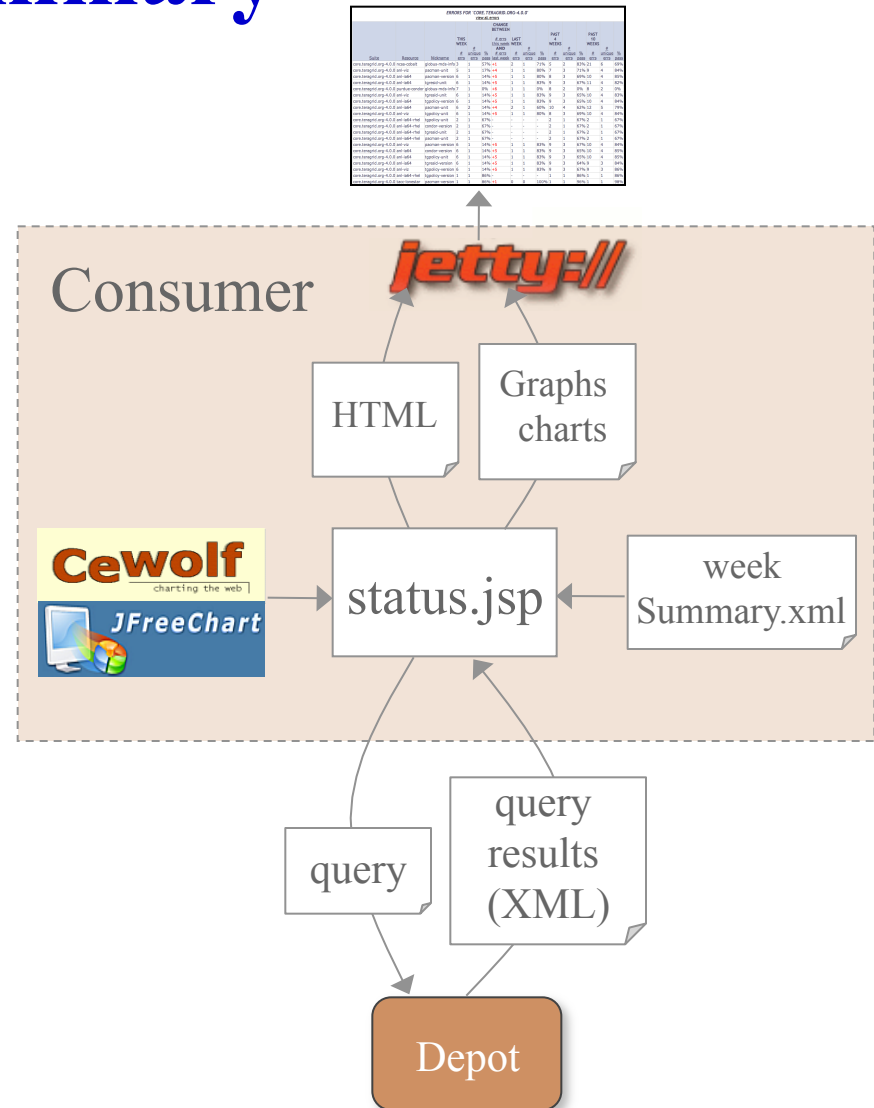
Historical

Current status



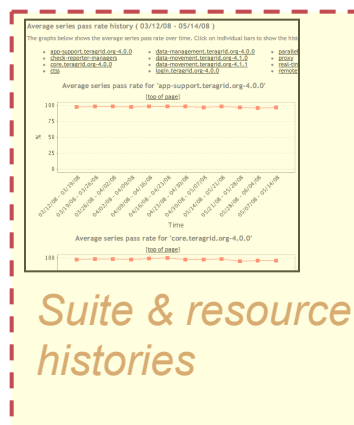
# View error history summary ( “diff” )

- Designed for daily/weekly review
- Uses cached historical query
- Four weeks of history by default
- Sortable by column



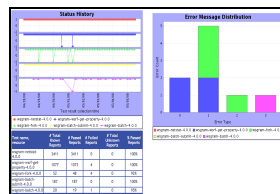


## Series Summary

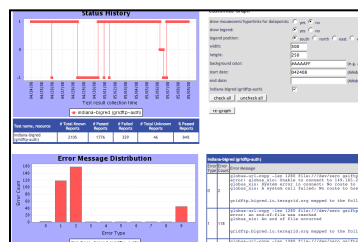


Series	Resource	Version	Pass Rate	Test Name	Test Result
data-movement.teragrid.org-4.0.0	resource1	4.0.0	100%	test1	pass
data-movement.teragrid.org-4.0.0	resource2	4.0.0	100%	test1	pass
data-movement.teragrid.org-4.0.0	resource3	4.0.0	100%	test1	pass
data-movement.teragrid.org-4.0.0	resource4	4.0.0	100%	test1	pass
data-movement.teragrid.org-4.0.0	resource1	4.0.0	100%	test2	pass
data-movement.teragrid.org-4.0.0	resource2	4.0.0	100%	test2	pass
data-movement.teragrid.org-4.0.0	resource3	4.0.0	100%	test2	pass
data-movement.teragrid.org-4.0.0	resource4	4.0.0	100%	test2	pass
data-movement.teragrid.org-4.0.0	resource1	4.0.0	100%	test3	pass
data-movement.teragrid.org-4.0.0	resource2	4.0.0	100%	test3	pass
data-movement.teragrid.org-4.0.0	resource3	4.0.0	100%	test3	pass
data-movement.teragrid.org-4.0.0	resource4	4.0.0	100%	test3	pass
data-movement.teragrid.org-4.0.0	resource1	4.0.0	100%	test4	pass
data-movement.teragrid.org-4.0.0	resource2	4.0.0	100%	test4	pass
data-movement.teragrid.org-4.0.0	resource3	4.0.0	100%	test4	pass
data-movement.teragrid.org-4.0.0	resource4	4.0.0	100%	test4	pass

## Error history summary

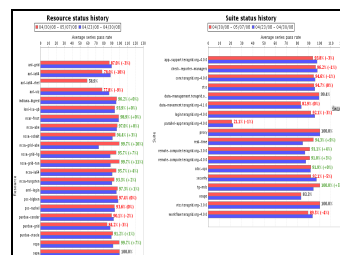


## Related series histories

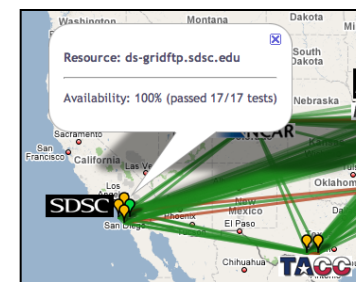
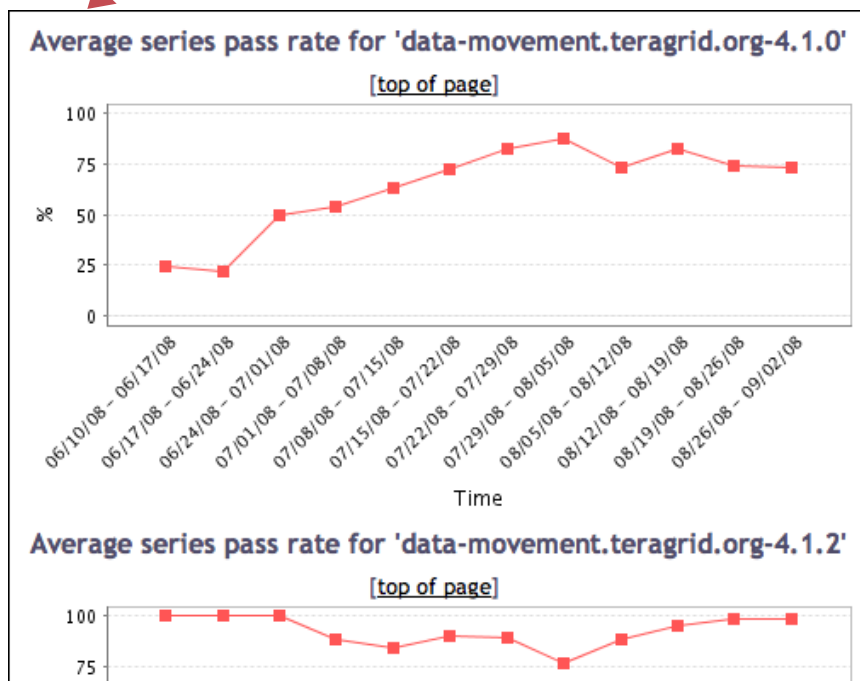


## Series Details

## Individual series history



## Weekly status report



## Cumulative series status by resource

gsi-openssh	resource1	resource2	resource3	resource4
version: >= 3.9	4.6p1	4.6p1	4.5p1	4.5p1
gsiash-unit	pass	pass	error	pass
gx-map	resource1	resource2	resource3	resource4
version: 0.5.3.3(0.5.3.2p1)	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1	0.5.3.2p1
myproxy	resource1	resource2	resource3	resource4
version: >= 3.4	3.4	3.4	3.4	3.4
softenv	resource1	resource2	resource3	resource4
version: 1.6.2	1.6.2	1.6.2	1.6.2	1.6.2
softenv-unit	pass	pass	pass	pass
tgproxy	resource1	resource2	resource3	resource4
tgproxy-unit	pass	pass	pass	pass

## Series status by package and resource

Details for spu-tiget series	
Result:	completed
Reporter details:	
reporter name	data.accom.sp-unit.sp-unit
reporter version	6
Execution information:	
run at	05-08-2008 07:45 AM (PDT)
age	13 hours 26 mins
cron	*/45 * * * *
run on (hostname)	tg-night1.sdsc.teragrid.org
memory usage (MB)	13.8994
cpu time (secs)	1.49512
wait clock time (secs)	5.68423
Result parameters:	
help	no
log	5
verbose	1
version	02

## Individual report details

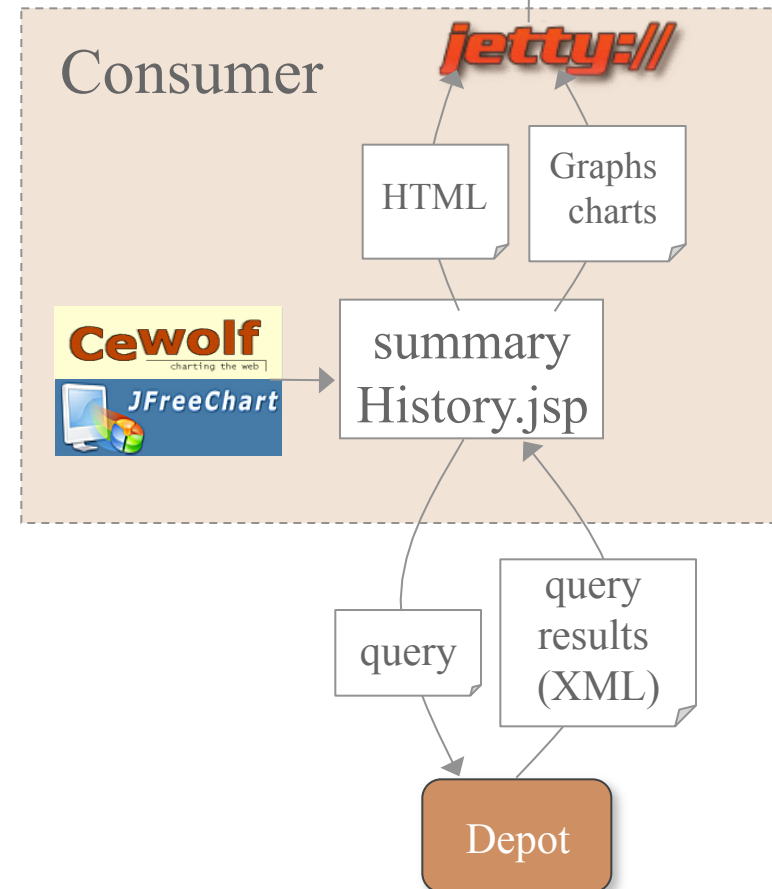
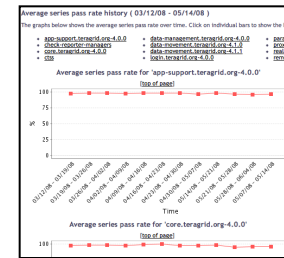
Historical

Current status



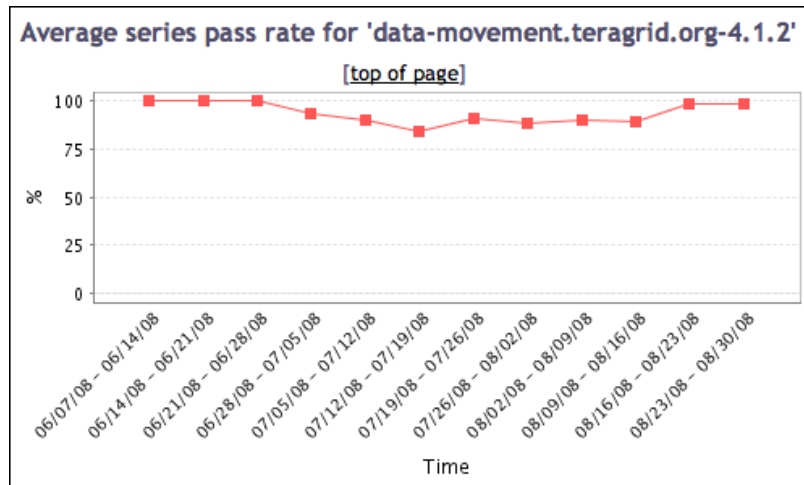
## View average suite and resource histories

- Designed for daily/weekly review
- Uses cached historical query
- Four weeks of history by default
- Click to view further details



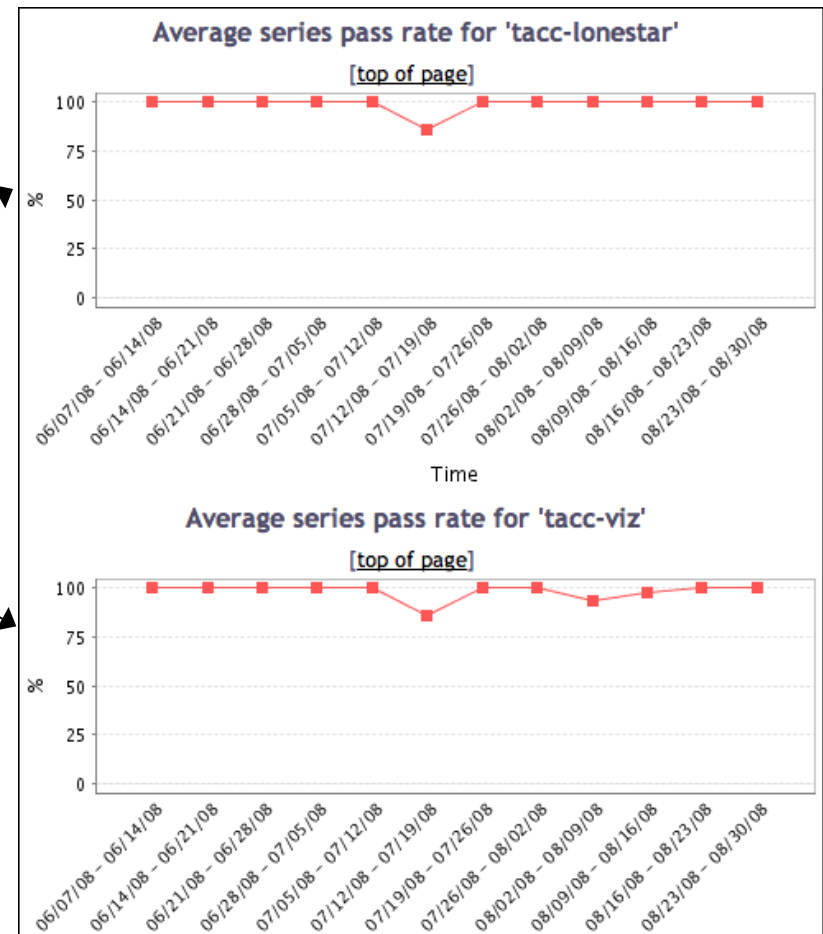


# View suite or resource history details



Status of suite on all resources

Suite status for each resource



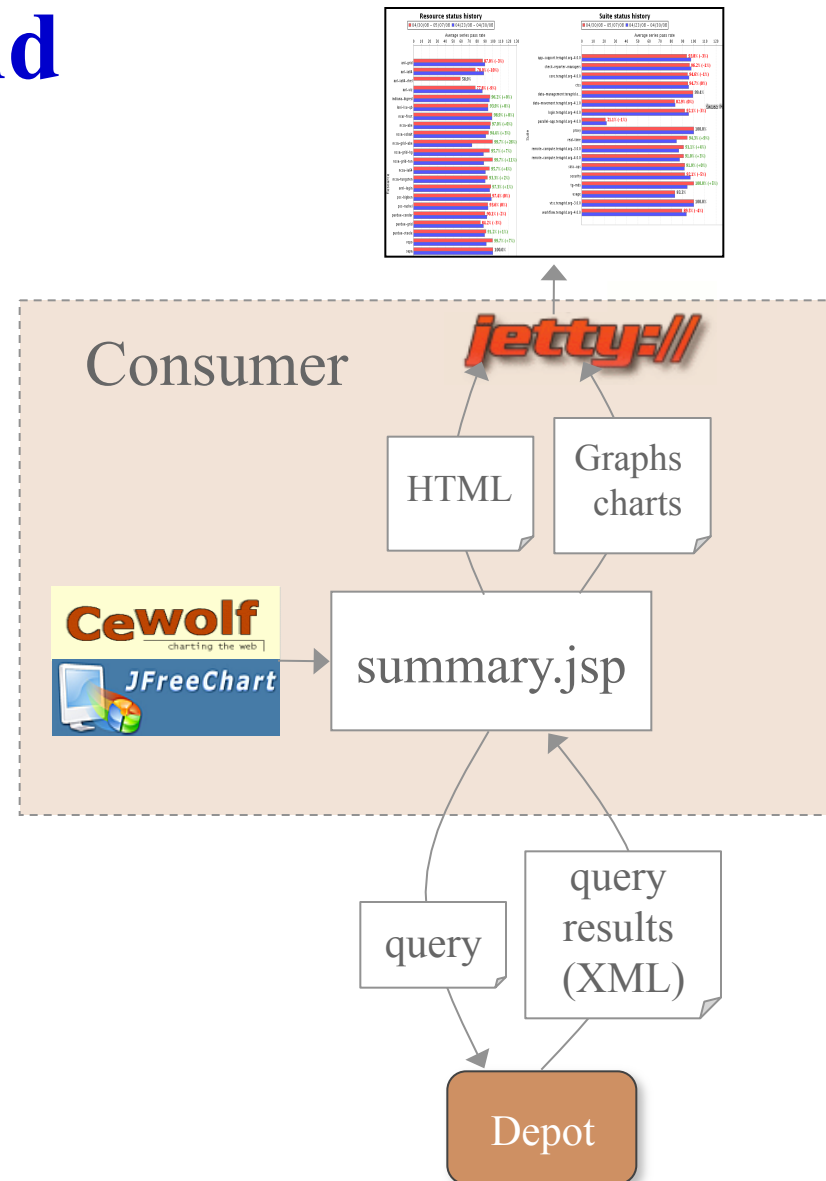






# View weekly suite and resource status

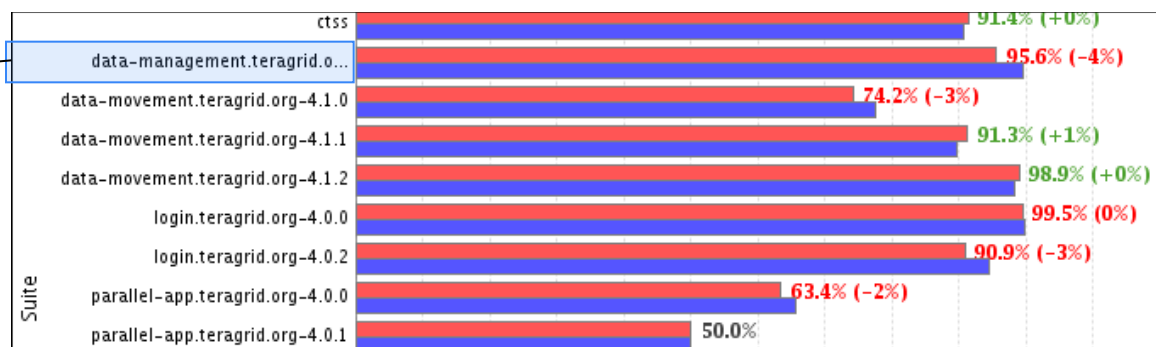
- Designed for daily/weekly review
- Uses cached historical query
- Four weeks of history by default
- Click to view further details





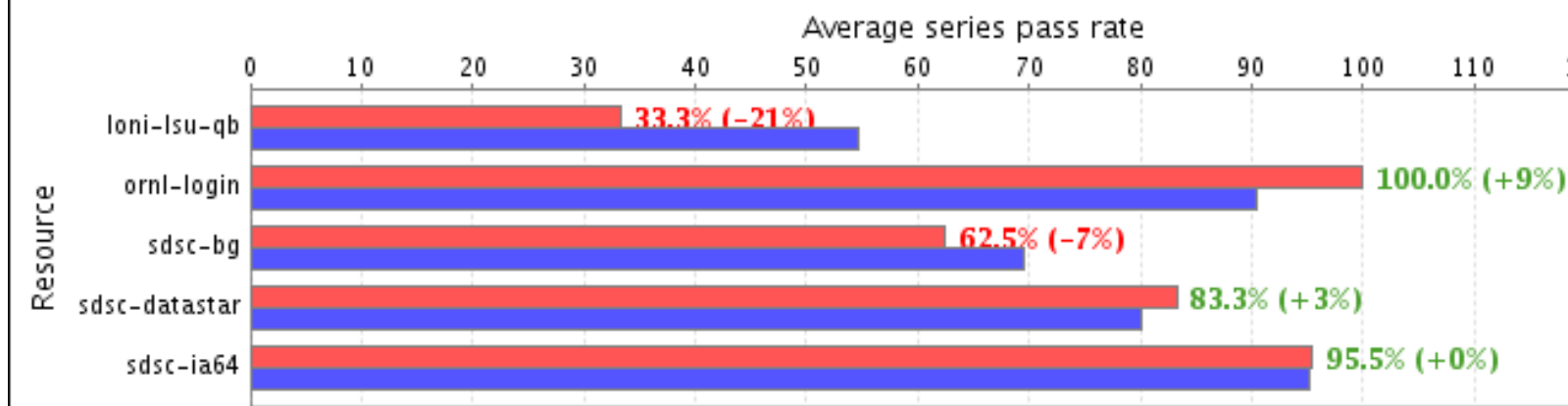
# View suite and resource details

Suite  
status for  
each  
resource



## Status history for suite data-movement.teragrid.org-4.1.0

08/23/08 - 08/30/08 08/16/08 - 08/23/08





# Caching provides quick page load times

- Periodically load and store large queries
- Latest suite instances cached by default -- frequency from **reload** property
- Query management page allows view, execute, refresh, and modification action on queries (requires authentication)

QUERY	
Create sampleSuite graph	
Create sampleSuite stored query	
Manage stored queries	

Query Management

Stored Queries:

incaQueryLatest+incas:\_\_\_rocks-101.sdsc.edu:6323\_sampleSuite

incaQueryStatus

myquery

De-select stored queries (refresh page)

query name:

incaQueryLatest+incas:\_\_\_rocks-101.sdsc.edu:6323\_sampleSuite

fetch every (seconds):

120

first fetch at (WW:HH:MM):

\* : \* : \*

command:

latest

params:

suite.guid = 'incas://rocks-101.sdsc.edu:6323/sampleSuite'

View

Execute

Refresh

Add

Change

Delete

*Query management page*



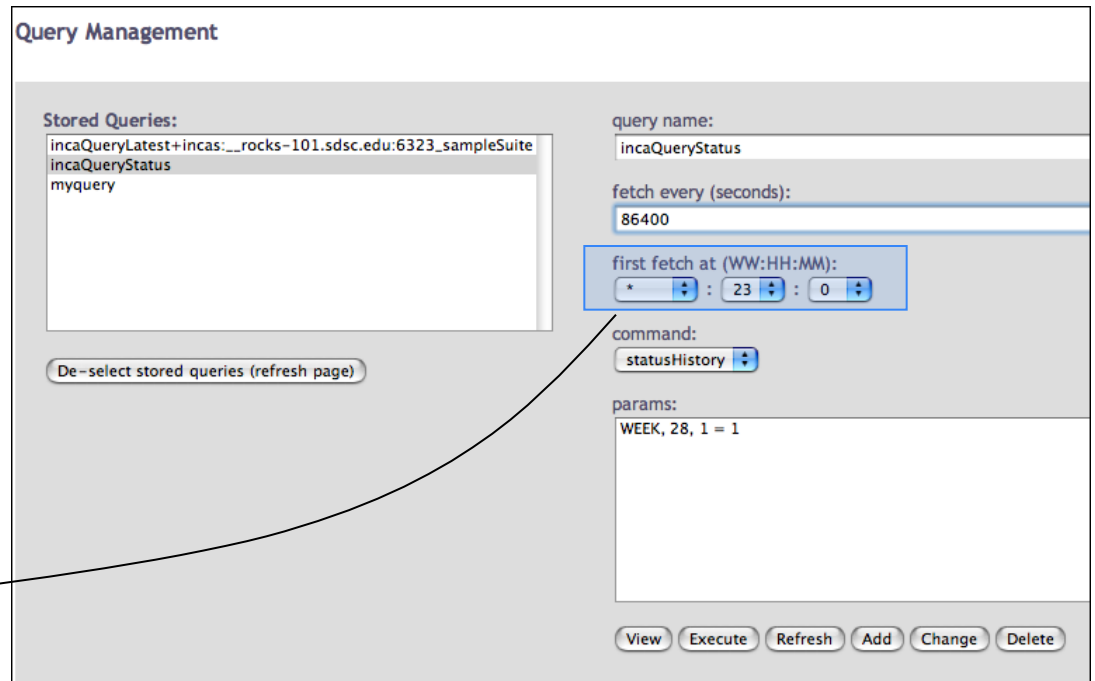
# Daily history query analyzes errors

*PERIOD, DAYS, CONDITION*

where

*PERIOD = DAY | WEEK |  
MONTH | QUARTER*

- Four weeks of history loaded every day -- time of day from **reloadAt** property
- TeraGrid - 10 weeks of history (WEEK, 70, 1 = 1)



The screenshot shows a web interface titled "Query Management". On the left, under "Stored Queries:", there is a list containing "incaQueryLatest+incas:\_\_\_rocks-101.sdsc.edu:6323\_sampleSuite", "incaQueryStatus", and "myquery". Below this list is a button that says "De-select stored queries (refresh page)". On the right, there are configuration fields: "query name:" with the value "incaQueryStatus", "fetch every (seconds):" with the value "86400", and "first fetch at (WW:HH:MM):" with a time picker set to \*:23:0. Below these is a "command:" dropdown menu showing "statusHistory". At the bottom right, there is a "params:" section with the text "WEEK, 28, 1 = 1". At the very bottom of the interface are several buttons: "View", "Execute", "Refresh", "Add", "Change", and "Delete".

*Query management page*



# Daily history query output

<quer:object>

<row><series>

<guid>incas://rocks-101.sdsc.edu:6323/sampleSuite</guid>

← suite

<nickname>gcc\_hello\_world</nickname>

← series

<resource>localResource</resource>

<period>

<begin>1217830004174</begin>

<end>1218434804173</end>

← period 1

<success>1008</success>

← num successes

<failure>

<message>gcc: Command not found</message>

← failure

<count>2</count>

</failure>

</period> <period>

<begin>1218434804174</begin>



# Create a custom query

**Create Stored Query**

Create a stored query for Inca report series on specified resources.  
Enter a name to store this query under, check the boxes for each Inca report series to be queried, and

Stored query name:  Fetch every (secs):

sampleSuite

select row or column:	localResource
ant_helloworld_compile_test	<input type="checkbox"/>
ant_version	<input type="checkbox"/>
gcc_hello_world	<input checked="" type="checkbox"/>
gcc_version	<input checked="" type="checkbox"/>
java_hello_world	<input type="checkbox"/>
java_version	<input type="checkbox"/>
openssh_version	<input type="checkbox"/>
openssl_version	<input type="checkbox"/>
vtk-nvgl_version	<input type="checkbox"/>
wget_page_test	<input type="checkbox"/>

- View subset of series in a suite
- View series in multiple suites

**Query Management**

Stored Queries:

- incaQueryLatest+incas:\_\_\_rocks-101.sdsc.edu:6323\_sampleSuite
- incaQueryStatus
- myquery**

query name:

fetch every (seconds):

first fetch at (WW:HH:MM):

command:

params:  
(config.nickname='gcc\_hello\_world' AND series.resource='localResource') OR  
(config.nickname='gcc\_version' AND series.resource='localResource')

Requires authentication  
and suiteNames



# Use custom query name in views

- Use **queryNames** in place of **suiteNames**

<http://host:8080/inca/jsp/status.jsp> ?

**queryNames**=myquery

**resourceIds**=defaultGrid

REST equivalent:

<http://host:8080/inca/HTML/rest/myquery/defaultGrid>

myquery	
<ul style="list-style-type: none"><li>• <u>gcc_hello_world</u></li><li>• <u>gcc_version</u></li></ul>	
	localResource
gcc_hello_world	pass
gcc_version	3.4.4



# Admin pages: configure Google map view

The screenshot shows the 'Google status page maps' admin interface. It features a tree view on the left with folders for 'google', 'key', 'width', 'height', 'center', 'mapType', 'magnificationLevel', 'markerDist', 'maxErrors', 'line', 'marker', 'sites', and 'debug'. The 'sites' folder is highlighted. Annotations point to 'width' and 'height' as 'Size of map', 'center' as 'Center of map -- default is middle of US', and 'sites' as 'Site name, location, logo and list of resources'. On the right, an 'ADMIN' menu includes 'List running reporters', 'List running reporters - detail', and 'View/Change configuration'. A text box on the right provides a URL to the user guide.

**Google status page maps**

+ - Add Alias Key Add Site Add Resource Delete Restore to Defaults

google

- key
  - ABQJAAAA\_4IHDoSvxQqISMa1RKFLQBSSICzupJMr-Xoh\_\_duR37DAX9UVBRVn9-X9\_4ILpmvilr
- width
- height
- center
- mapType
- magnificationLevel
- markerDist
- maxErrors
- line
- marker
- sites
- debug

Size of map

Center of map -- default is middle of US

Site name, location, logo and list of resources

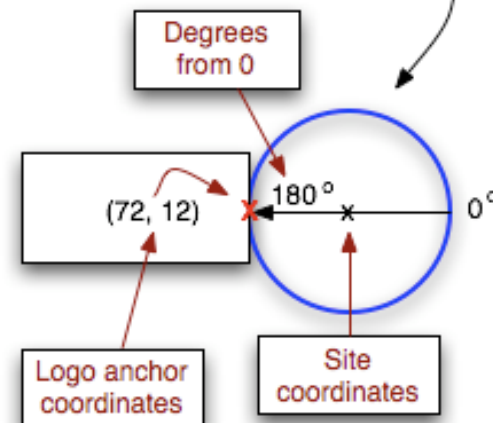
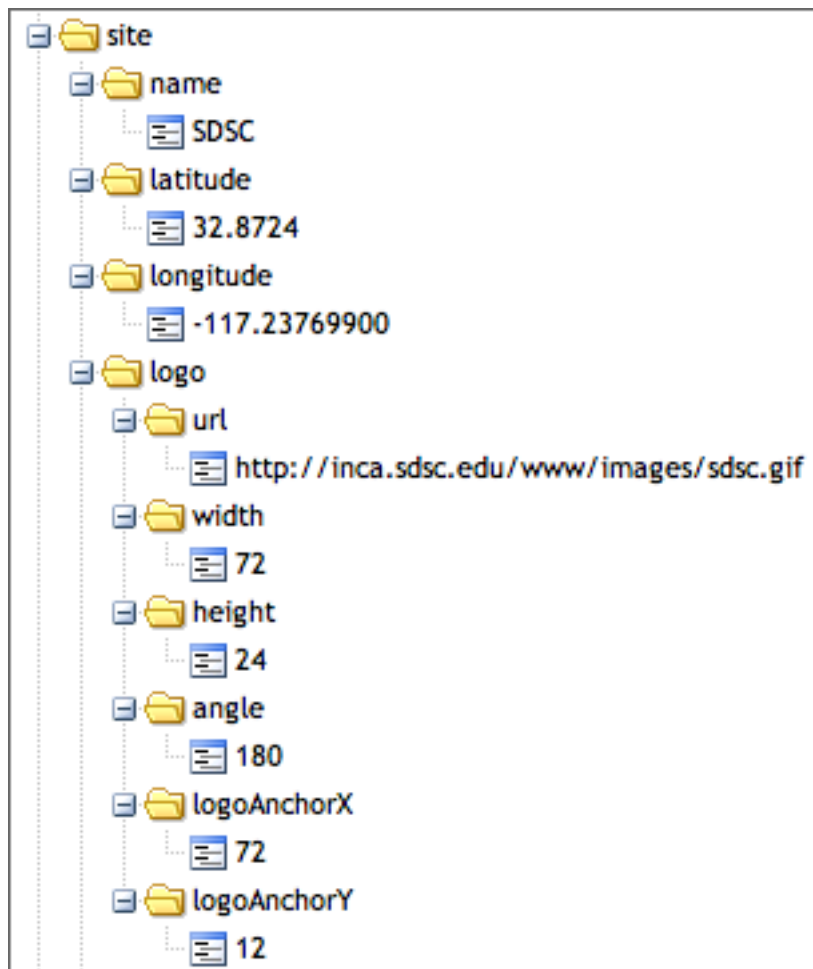
**ADMIN**

- List running reporters
- List running reporters - detail
- View/Change configuration

All options are described in detail in the user guide:  
<http://inca.sdsc.edu/releases/latest/guide/userguide-one.html#GOOGLE-SETUP>

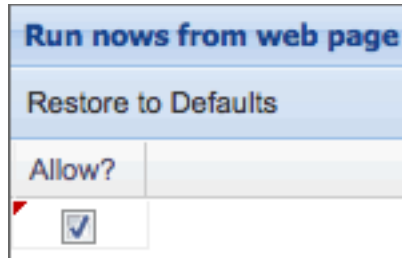


# Admin pages: Google map site logos



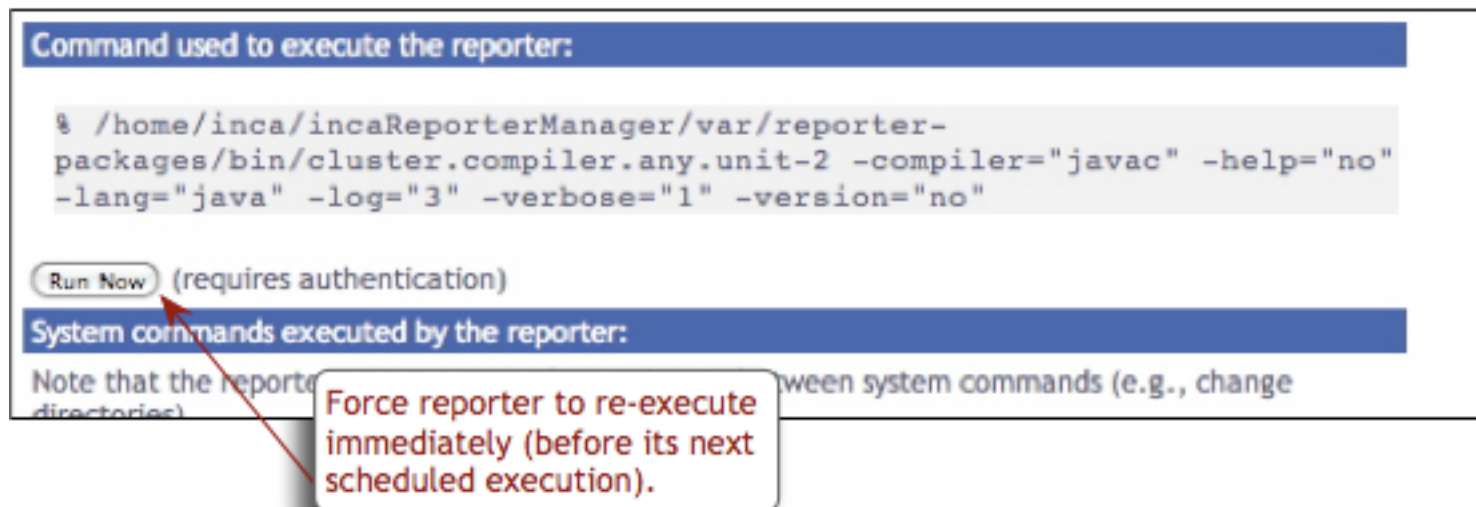


# Admin pages: Run Nows



Run nows from web page	
Restore to Defaults	
Allow?	
<input checked="" type="checkbox"/>	

- triggers reporter execution on the local machine
- useful for admin who have worked on an issue and want to verify that a problem has been resolved



Command used to execute the reporter:

```
% /home/inca/incaReporterManager/var/reporter-packages/bin/cluster.compiler.any.unit-2 -compiler="javac" -help="no" -lang="java" -log="3" -verbose="1" -version="no"
```

Run Now (requires authentication)

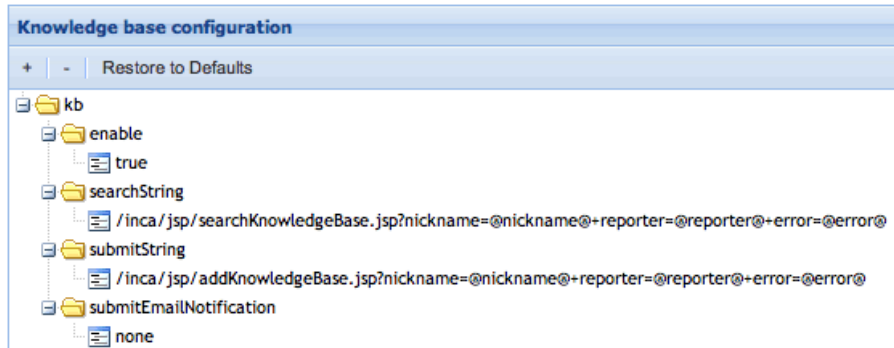
System commands executed by the reporter:

Note that the reporter... between system commands (e.g., change directories).

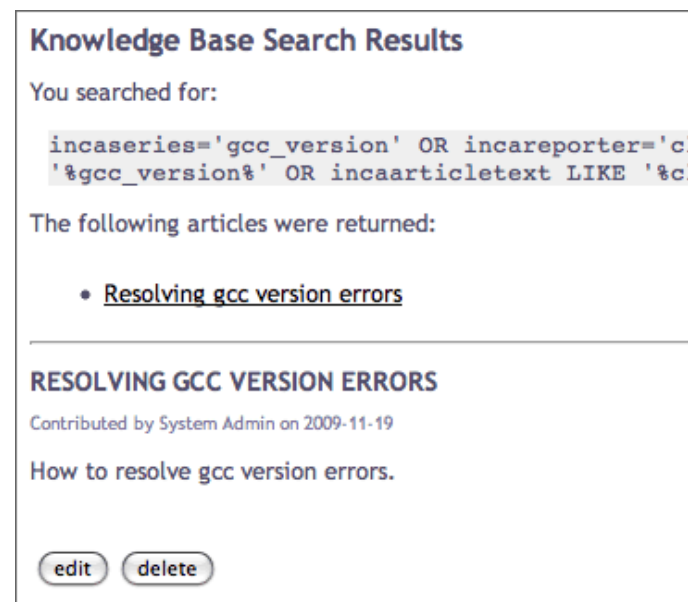
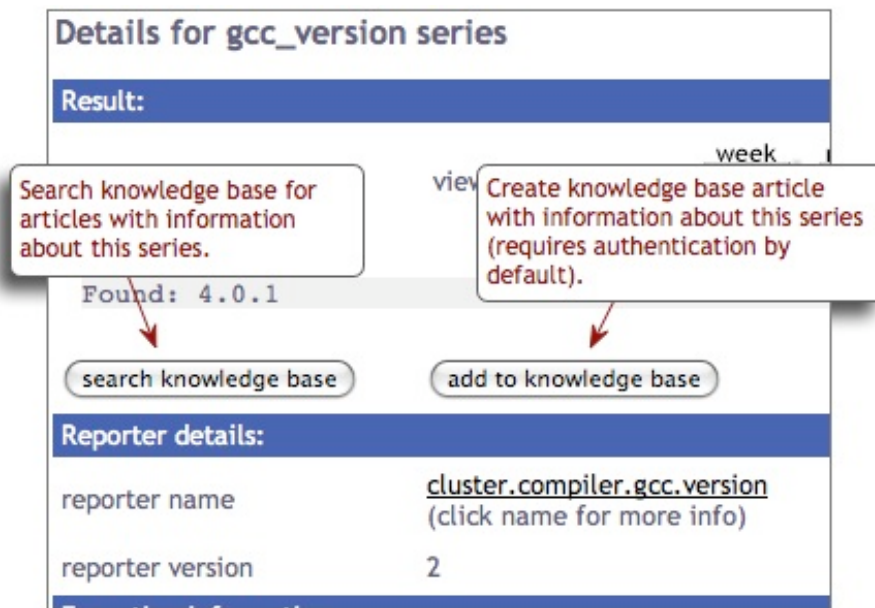
Force reporter to re-execute immediately (before its next scheduled execution).



# Admin pages: Knowledge Base



- designed to collect problem resolution information for tests
- used to debug problems





# Admin pages: Series Error Summary

- summarize test series errors by time period
- time periods and titles (i.e., PAST 4 WEEKS) can be customized

### Series error summary periods

+ - Add Summary Delete Restore

- summaries
  - summary
  - summary
  - summary
    - title
      - past 4 weeks
    - beginIndex
      - 4
    - endIndex
      - 1
    - summary

### Series Error Summary

Page loaded: 06-14-2008 11:42 PM (PDT)

The table below summarizes test series errors by time period. A legend of the time periods and associated dates is located above the table on the right. Each time period includes the number of errors for the series during the time period, the number of unique or distinct errors during the period and the percentage of the total results that passed during the period.

The change between the total number of errors in the most recent period and the total number of errors in the period before it is also given. If the number of errors in the most recent period is greater than the number of errors in the previous period (+), the number appears in red. If the number of errors in the most recent period is less than the number in the previous period (-), the number is green.

Click on the column headers in the table to sort it. Sorting is applied to the table in the order the column headers are clicked on (e.g. to sort by Resource and then Suite, click on the Suite column header then the Resource column header). The column header clicked on last will be the primary sort for the table.

			THIS WEEK		CHANGE BETWEEN		LAST WEEK		PAST 4 WEEKS	
Suite	Resource	Nickname	# errs	# unique errs	% pass	# errs this week AND # errs last week	% pass this week AND % pass last week	# errs	# unique errs	% pass
workflow.teragrid.org-4.0.0	sdsc-bg	condorg-condorg	3	1	50%	-4	+50%	7	1	0%
workflow.teragrid.org-4.0.0	loni-lsu-qb	gridshell-version	7	1	0%	0	0%	7	1	0%
workflow.teragrid.org-4.0.0	nca-tungsten	condorg-condorg	1	1	86%	0	+6%	1	1	80%
workflow.teragrid.org-4.0.0	loni-lsu-qb	condorg-condorg	7	1	0%	+7	-100%	0	0	100%
workflow.teragrid.org-4.0.0	purdue-steele	condorg-condorg	1	1	86%	+1	-14%	0	0	100%
usage	sdsc-ia64	grid.jobs.usage	7	1	0%	0	0%	7	1	0%

this week: 05/03/08 - 05/10/08

last week: 06/07/08 - 06/14/08

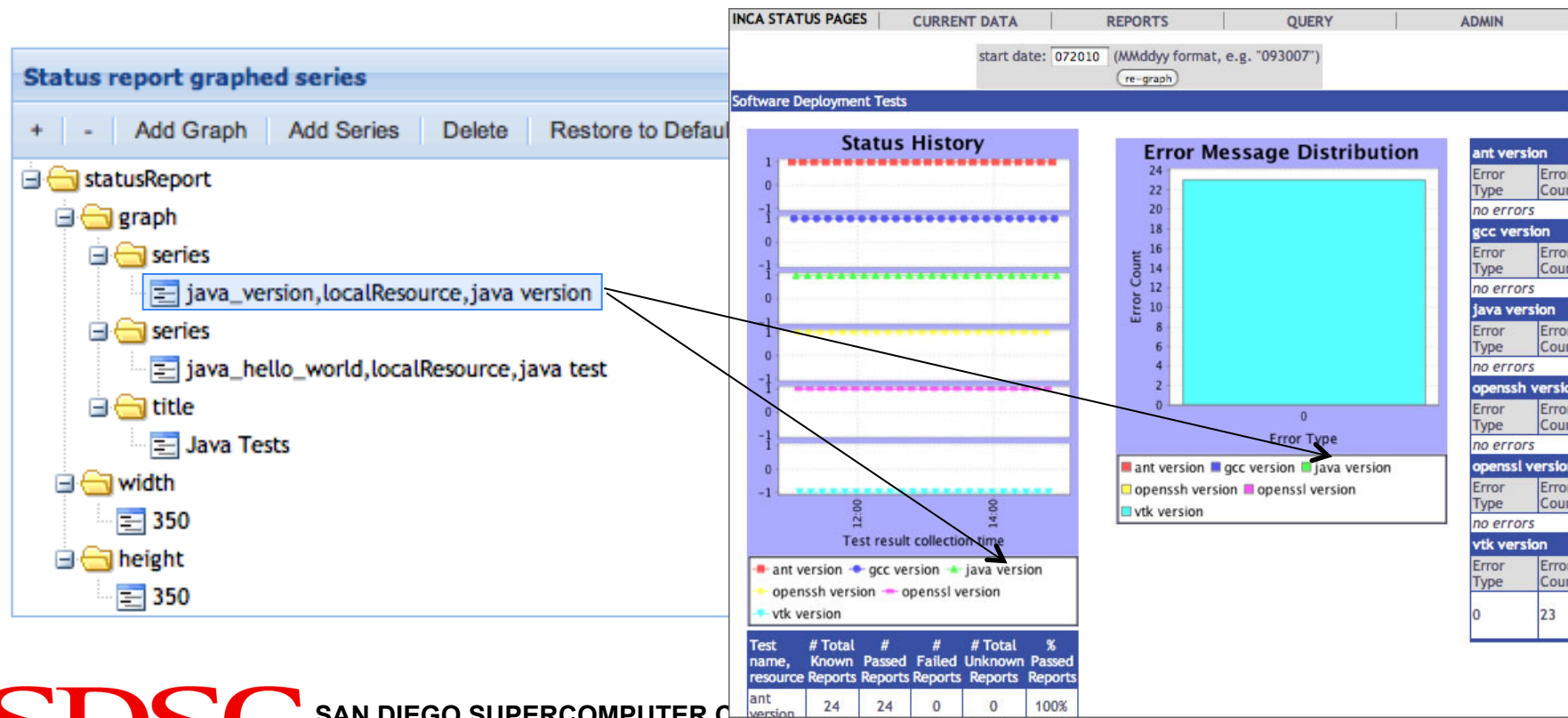
past 4 weeks: 05/24/08 - 05/10/08

past 10 weeks: 04/05/08 - 05/10/08



# Admin pages: Pass/Fail Reports

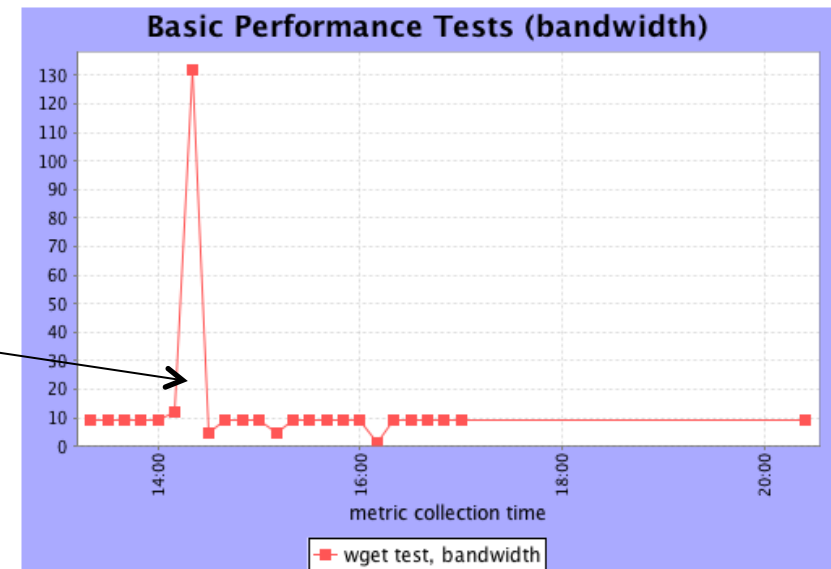
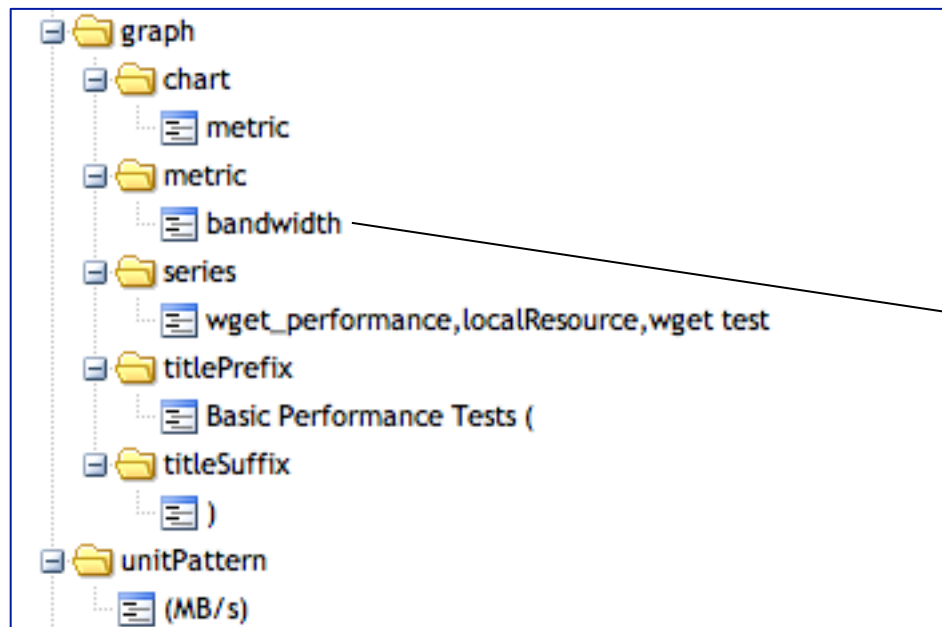
- historical summary reports with pass/fail status and error information
- selected series can be customized





# Admin Pages: Statistics – new for 2.6

- historical summary reports with statistics
- selected series can be customized



Test name, resource	# Total Known Reports	# Passed Reports	# Failed Reports	# Total Unknown Reports	% Passed Reports
wget test	25	24	1	0	96%



---

# Password authentication can be customized

- Ports: HTTP on 8080, HTTPS on 8443
- Password protection on query.jsp and status-auth.jsp  
(change in \$INCA\_DIST/webapps/inca/WEB-INF/web.xml)
- Password set in \$INCA\_DIST/etc/realm.properties  
username: password



---

# REST Syntax

- Fetch suite or stored query data in XML or HTML format using REST URLs.
- By default, the consumer recognizes a REST URL using the following format:  
`http://localhost:8080/inca/XML|HTML/rest/<suiteName>|<queryName>[/<resourceId>[/<seriesNickname>[/week|month|quarter|year]]]`
- <http://inca.sdsc.edu/releases/2.6/guide/userguide-one.html#REST>



# Customize the header

*Add logo or background color here*

INCA STATUS PAGES	CURRENT DATA	REPORTS	QUERY	ADMIN
	Table of sampleSuite results	Past week: sampleSuite pass/fail graphs and err msgs	Create sampleSuite graph	List running reporters
	Map of sampleSuite results	Past week: avg pass rate by resource/suite	Create sampleSuite stored query	List running reporters - detail
		Past 4 weeks: series error summary	Manage stored queries	View/Change configuration
		Resource avg pass history		
		Suite avg pass history		

- Header can be customized by editing unordered list in header.xsl -- change for your suites
- Add logo at top or background color by adding row to table



...

```
<table width="100%" class="subheader">
```

```
<tr> <td> <a href="http://www.geongrid.org">  
    
</a></td>
```

Add GEON  
logo to top  
of page

```
</tr> <tr>
```

...

```
<ul>
```

```
<li><h2>Current Data</h2>
```

```
<ul>
```

```
<li>
```

```
<a href="{concat($jsp, 'status.jsp?', $all)}">Table View</a>
```

```
<ul>
```

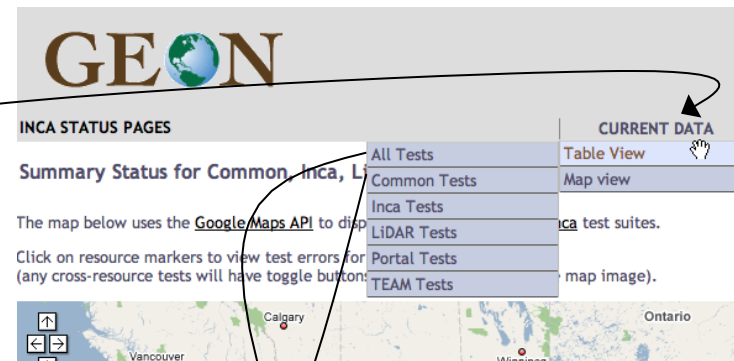
```
<li><a href="{concat($jsp, 'status.jsp?', $all)}">All Tests</a></li>
```

```
<li>
```

```
<a href="{concat($jsp, 'status.jsp?suiteNames=Common&resourceIds=ROCKS')}">
```

```
Common Tests
```

```
</a></li>
```



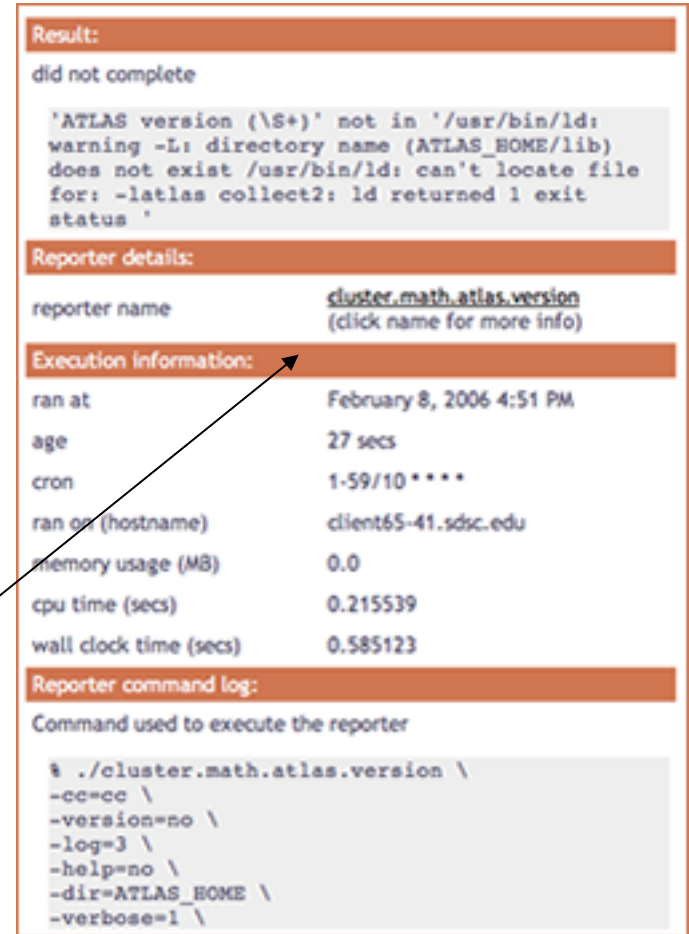


# Changing colors in CSS

- Edit CSS (Cascading Style Sheet) to change colors and fonts
- E.g. change `.header background-color`

`$INCA_INSTALL/webapps/inca/css/inca.css`

```
.header {  
    background-color: #D07651;
```



The screenshot shows a web application error report. It includes a 'Result' section indicating the process did not complete with a warning about a missing directory. Below this is a 'Reporter details' section with the reporter name 'cluster.math.atlas.version'. The 'Execution information' section provides details such as the run time (February 8, 2006 4:51 PM), duration (27 secs), and CPU time (0.215539 secs). The 'Reporter command log' section shows the command used to execute the reporter, including options like `-cc=cc`, `-version=no`, `-log=3`, `-help=no`, `-dir=ATLAS_HOME`, and `-verbose=1`.

Execution information:	
ran at	February 8, 2006 4:51 PM
age	27 secs
cron	1-59/10 ****
ran on (hostname)	client65-41.sdsc.edu
memory usage (MB)	0.0
cpu time (secs)	0.215539
wall clock time (secs)	0.585123



---

# Summary

- A data consumer is anything that queries and digests data from the depot
- Inca includes a data consumer -- an embedded Jetty web container that includes a webapp
- Inca's status pages provide multiple levels of details from historical to current data and summary and detail views
- Caching of queries is automated to optimize page load times and can be customized
- Status pages' content, look, and security can be customized