

# **CI System Updates**

## **LArSoft Coordination Meeting**

**April 25, 2017**

**Vito Di Benedetto  
(Fermilab)**

# Outline:

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- **New CI release will be deployed on April 26**
- **New features in the CI system:**
  - support for core dump analysis of CI/unit test that crashes;
  - Support to recover CI tests grid (aka validation) phase;
  - Improved CI web application.

# The CI web application

- CI web application:

Home

### Multiplatform Continuous Integration for Test

Navigation: Home, Help, Refresh

Select builds:  
From build:   
# of builds:

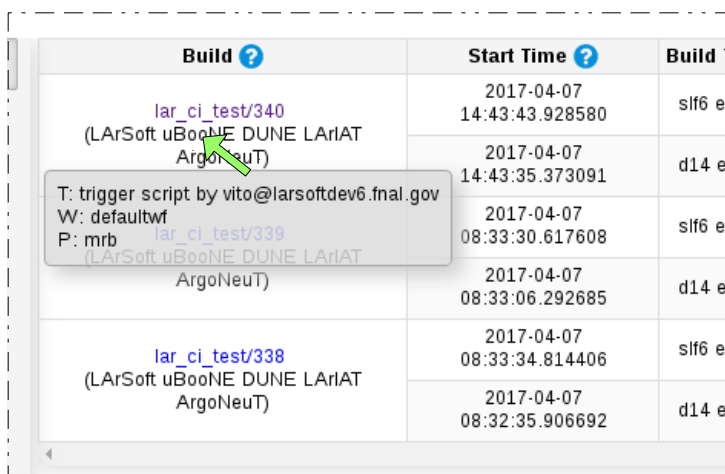
Select date range:  
From:   
To:

Select platforms:  
  d13/debug Darwin 13.4.0  
 d13/prof Darwin 13.4.0  
 d14/debug Darwin 14.5.0  
 d14/prof Darwin 14.5.0  
 Darwin 13.4.0  
 Darwin 14.5.0  
 Darwin 15.6.0  
 Linux 2.6.32-573.26.1.el6.x86\_64  
 Linux 2.6.32-642.11.1.el6.x86\_64  
 Linux 2.6.32-642.13.1.el6.x86\_64

Build	Start Time	Build Type	checkout	build	unit_test	install	ci_tests	Progress Legend
lar_ci_test/340 (LArSoft uBooNE DUNE LArIAT ArgoNeuT)	2017-04-07 14:43:43.928580	slf6 e10:prof	✓	✓	✓	✓	✗	Running
	2017-04-07 14:43:35.373091	d14 e10:prof	✓	✓	✗	?	?	Pending
lar_ci_test/339 (LArSoft uBooNE DUNE LArIAT ArgoNeuT)	2017-04-07 08:33:30.617608	slf6 e10:prof	✓	✓	✓	✓	✗	Succeeded
	2017-04-07 08:33:06.292685	d14 e10:prof	✓	✓	✗	?	?	Warning
lar_ci_test/338 (LArSoft uBooNE DUNE LArIAT ArgoNeuT)	2017-04-07 08:33:34.814406	slf6 e10:prof	✓	✓	✓	✓	✗	Failed
	2017-04-07 08:32:35.906692	d14 e10:prof	✓	✓	✓	✓	✗	Skipped

# The CI web application

- CI web application:



Build ?	Start Time ?	Build
<a href="#">lar_ci_test/340</a> (LArSoft uBooNE DUNE LArIAT ArgoNeuT)	2017-04-07 14:43:43.928580	slf6 e
<a href="#">lar_ci_test/339</a> (LArSoft uBooNE DUNE LArIAT ArgoNeuT)	2017-04-07 14:43:35.373091	d14 e
<a href="#">lar_ci_test/338</a> (LArSoft uBooNE DUNE LArIAT ArgoNeuT)	2017-04-07 08:33:30.617608	slf6 e
	2017-04-07 08:33:06.292685	d14 e
	2017-04-07 08:33:34.814406	slf6 e
	2017-04-07 08:32:35.906692	d14 e

Tooltip for [lar\\_ci\\_test/339](#):

- T: trigger script by vito@larsoftdev6.fnal.gov
- W: defaultwf
- P: mrb

- Hovering the mouse on the “ci\_test” box you will get a tooltip that shows:
  - Trigger reason (T:)
  - Workflow (W:)
  - Personality (P:)

# The CI web application

- CI web application:

Id	Type	checkout	build	unit_test	install	ci_tests
f6	e10:prof	✔	✔	✔	✔	✘
4	e10:prof	✔	✔	✔	✔	✔
f6	e10:prof	✔	✔	✔	✔	✔
4	e10:prof	✔	✔	✔	✔	✔
f6	e10:prof	✔	✔	✔	✔	✔
4	e10:prof	✔	✔	✔	✔	✔

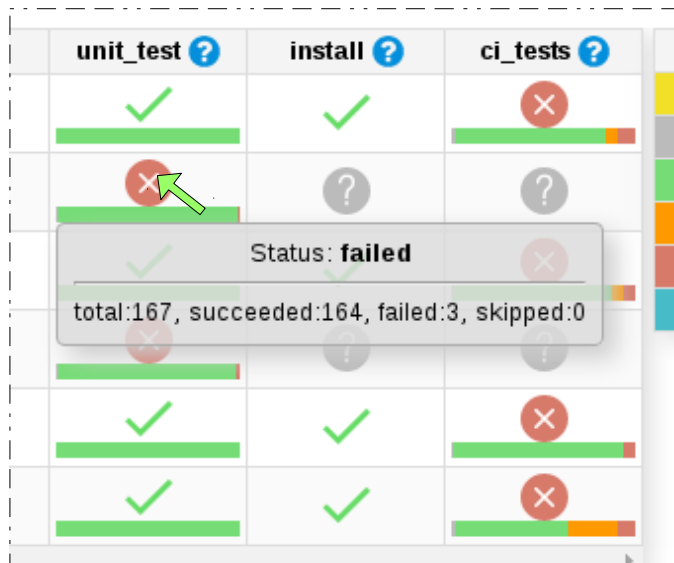
  

Repository	Git Description	Revision
● argoneutcode	v06_31_00-1-gf17fefc	
● dunetpc	v06_31_00-3-g5e7ef182	
● duneutil	v06_31_00-1-gfcc0e41	
● larana	LARSOFT_SUITE_v06_31_00	
● larcore	LARSOFT_SUITE_v06_31_00	
● larcoreobj	LARSOFT_SUITE_v06_31_00	
● lardata	LARSOFT_SUITE_v06_31_00-1-g8b97263	
● lardataobj	LARSOFT_SUITE_v06_31_00	
● lareventdisplay	LARSOFT_SUITE_v06_31_00	
● larevt	LARSOFT_SUITE_v06_31_00	
● larexamples	LARSOFT_SUITE_v06_31_00	
● lariatsoft	v06_31_00-4-g962e87b	
● lariatutil	v06_31_00-2-g1550cad	
● larpandora	LARSOFT_SUITE_v06_31_00	
● larpandoracontent	LARSOFT_SUITE_v06_31_00	
● larreco	LARSOFT_SUITE_v06_31_00	
● larsim	LARSOFT_SUITE_v06_31_00-1-g4f42576	
● larsoft	LARSOFT_SUITE_v06_31_00	
● larsoftobj	LARSOFT_SUITE_v06_31_00	
● larwirecell	LARSOFT_SUITE_v06_31_00	
● uboonecode	v06_31_00-1-gc0bec859	
● ubutil	v06_31_00-2-gbf367e9	

- Hovering the mouse on the “checkout” box you will get a tooltip that shows:
  - repository name
  - git description revision

# The CI web application

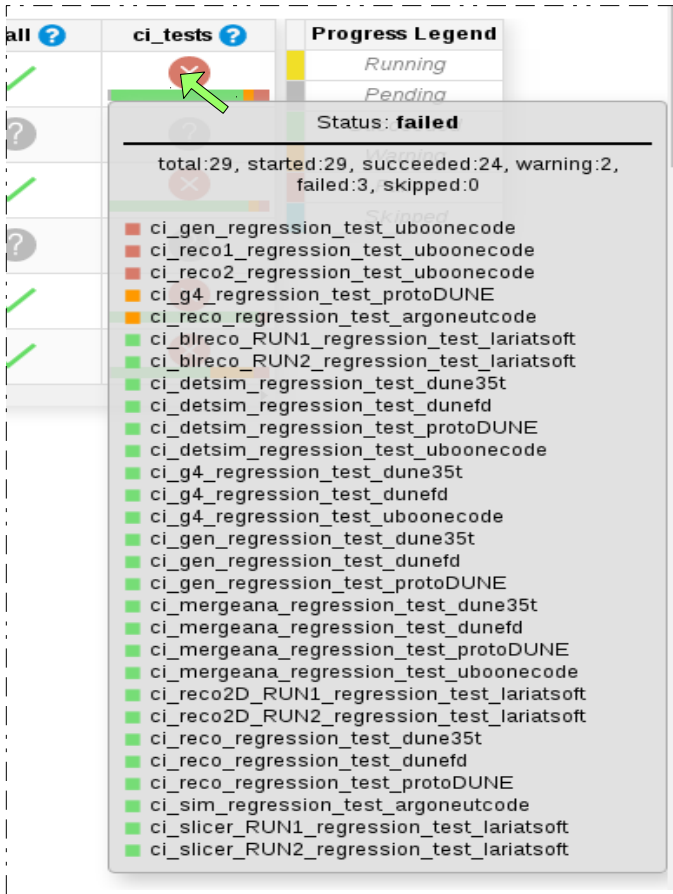
- CI web application:



- Hovering the mouse on the “unit\_test” box you will get a tooltip that shows:
  - Unit tests stats:
    - total number;
    - succeeded;
    - failed;
    - skipped.

# The CI web application

- CI web application:



- Hovering the mouse on the “ci\_test” box you will get a tooltip that shows:
  - CI tests stats:
    - total number;
    - succeeded;
    - warning;
    - failed;
    - Skipped.
  - Summary of CI tests status.

# The CI web application

## ● CI test view

Home

checkout

build

unit\_test

install

ci\_tests

ci\_tests for EL6  
Build lar\_ci/212, Trigger: git push on develop branch  
on EL6  
status: Success

Select date range:

From: 03/14/2017

To: 04/24/2017

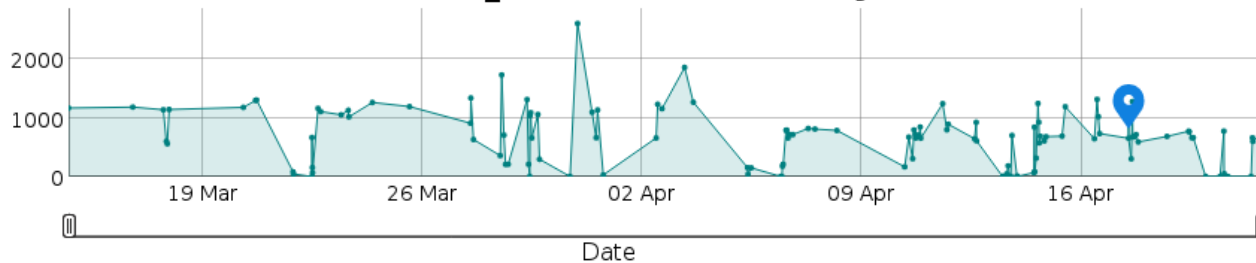
Update

Clear

Wall Clock Time (s)

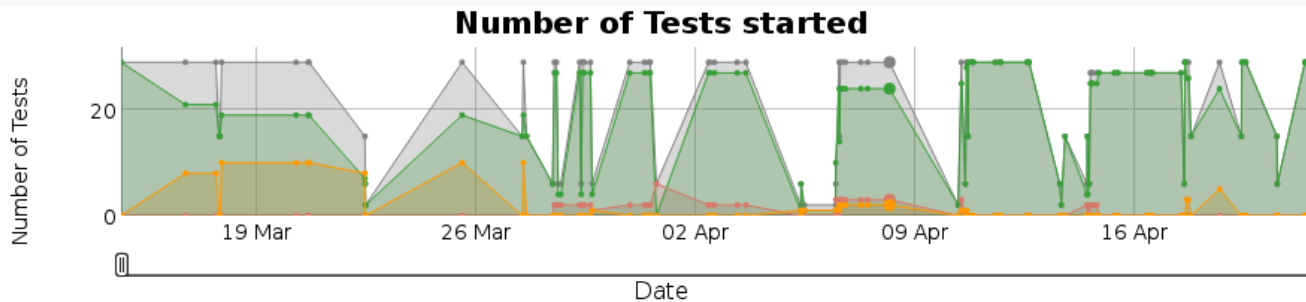
### Phase ci\_tests Runtime History

— Wall Clock Time (s)



Show Series:

- Number of Tests
- Succeeded
- Failed
- Warning
- Skipped



Phase: ci\_tests

[ci\\_tests.log](#)

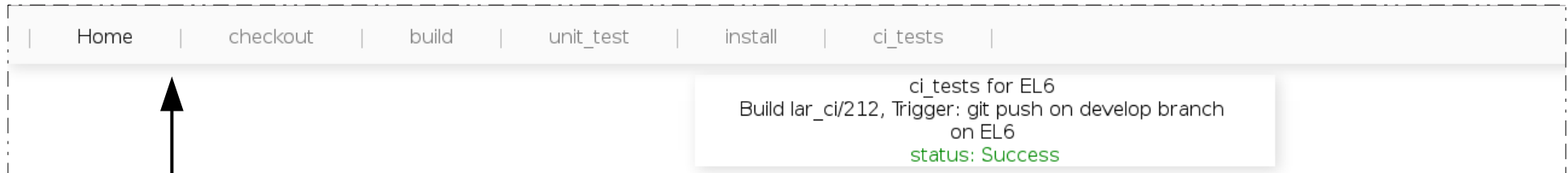
Started: 04/17/2017 13:05:19  
Finished: 04/17/2017 13:16:15. Exit code: 0

#	Test Name
1	<a href="#">ci_blreco_RUN1_regression_test_lariatsoft</a>
2	<a href="#">ci_blreco_RUN2_regression_test_lariatsoft</a>
14	<a href="#">ci_gen_regression_test_uboonecode</a>
15	<a href="#">ci_mergeana_regression_test_dune35t</a>



# The CI web application

- CI test view



Navigation bar to easily navigate through CI phases

# The CI web application

## ● CI test view

Select date range:

From: 03/14/2017

To: 04/24/2017

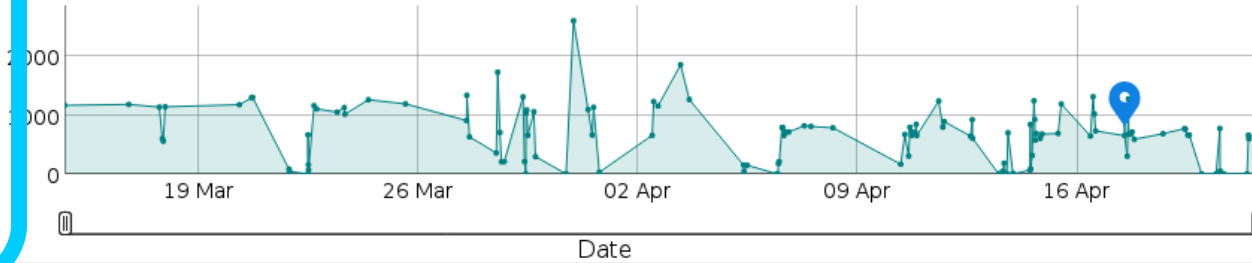
Update

Clear

Wall Clock Time (s)

### Phase ci\_tests Runtime History

— Wall Clock Time (s)



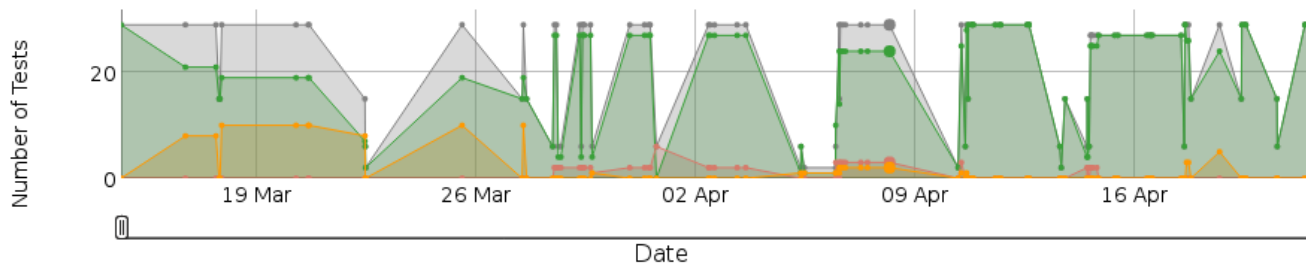
Show Series:

- Number of Tests
- Succeeded
- Failed
- Warning
- Skipped

Number of Tests

### Number of Tests started

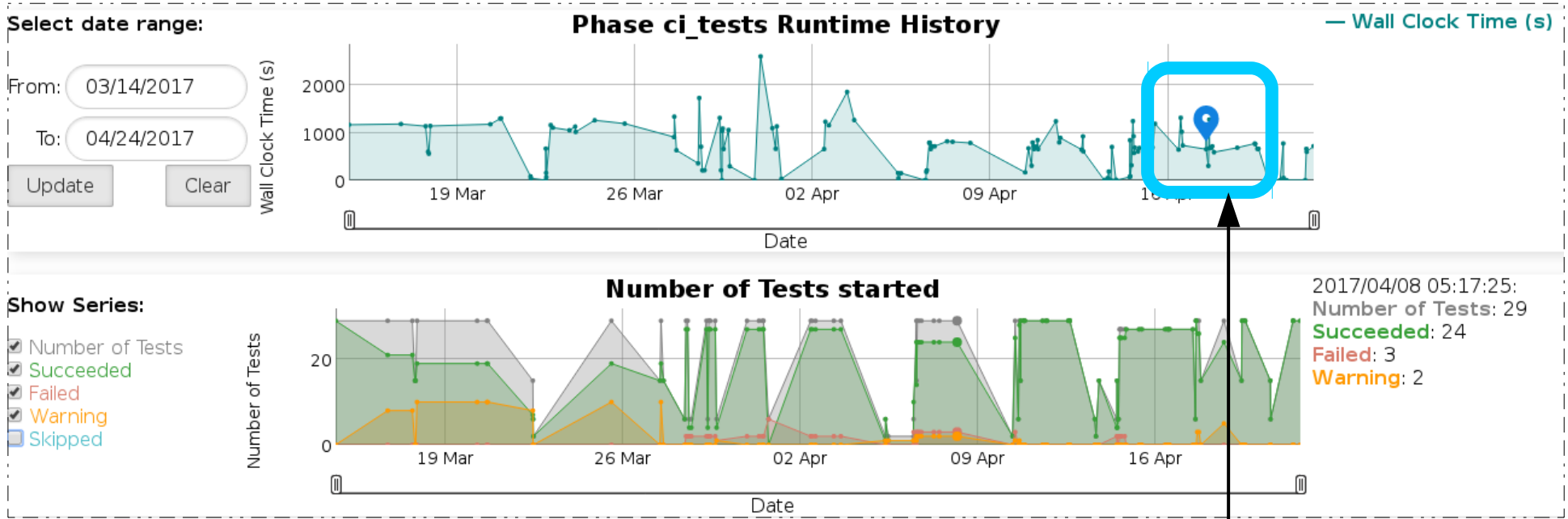
2017/04/08 05:17:25:  
Number of Tests: 29  
Succeeded: 24  
Failed: 3  
Warning: 2



Time picker to select data range

# The CI web application

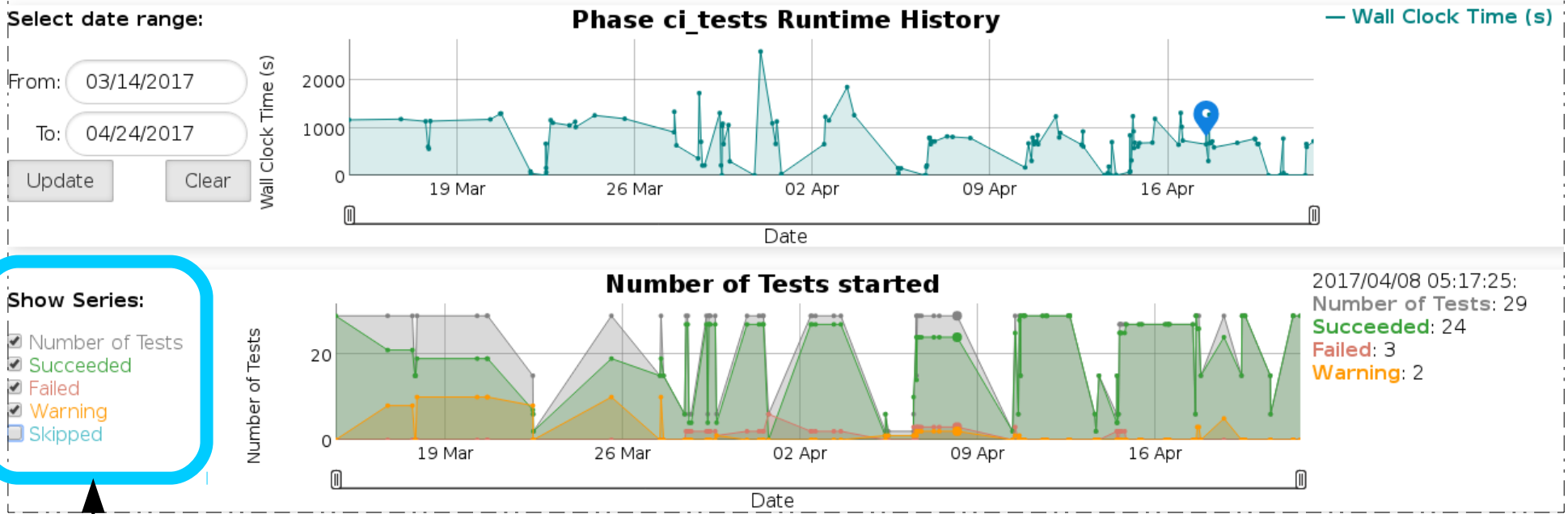
- CI test view



Marker to indicate the selected CI build

# The CI web application

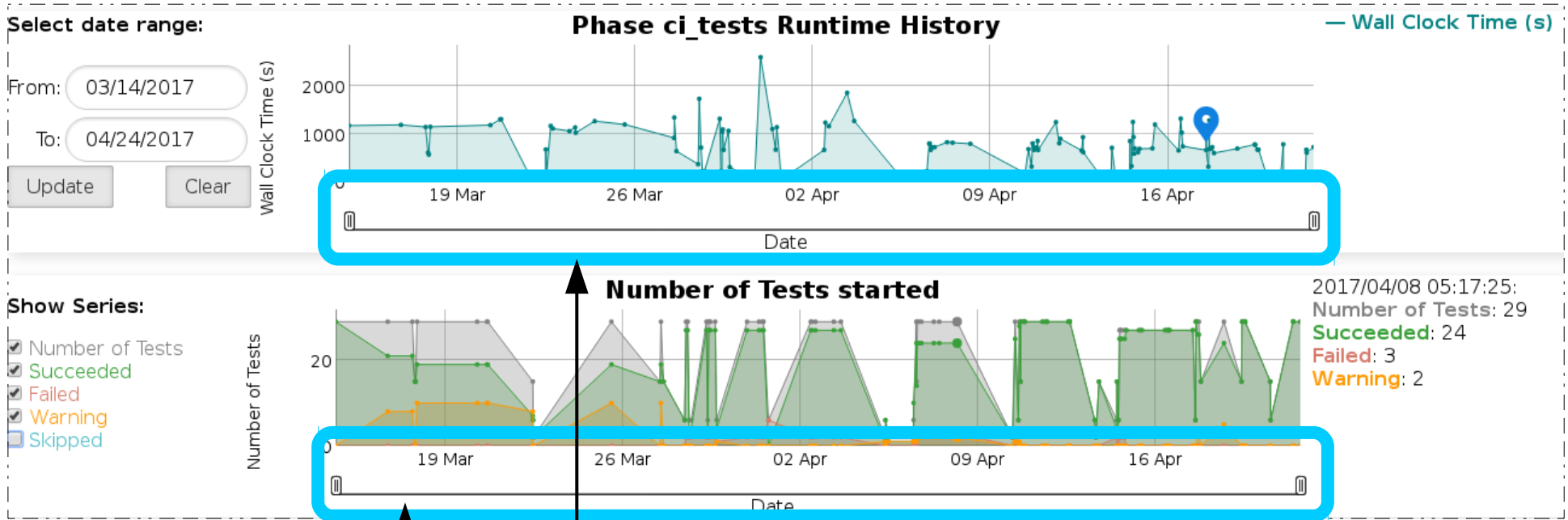
## ● CI test view



Check box to select the series to show

# The CI web application

- CI test view



Range selector to zoom in the graph

# The CI web application

## ● Unit test view

Home | checkout | build | unit\_test | install | ci\_tests

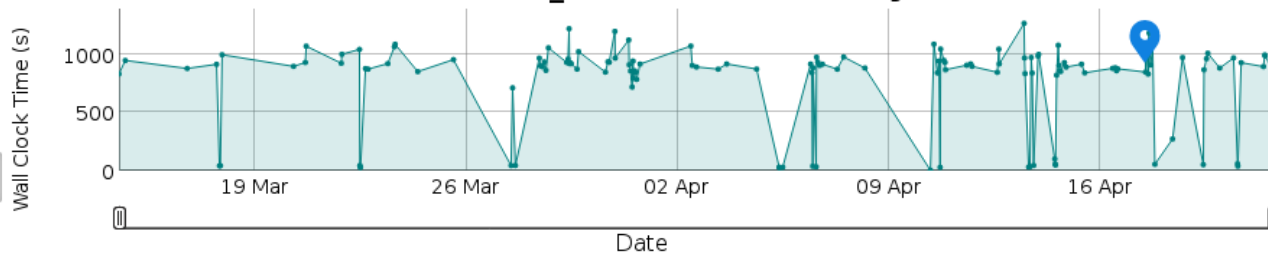
unit\_test for EL6  
Build lar\_ci/212, Trigger: git push on develop branch on EL6  
status: Success

Select date range:

From: 03/14/2017  
To: 04/24/2017  
Update Clear

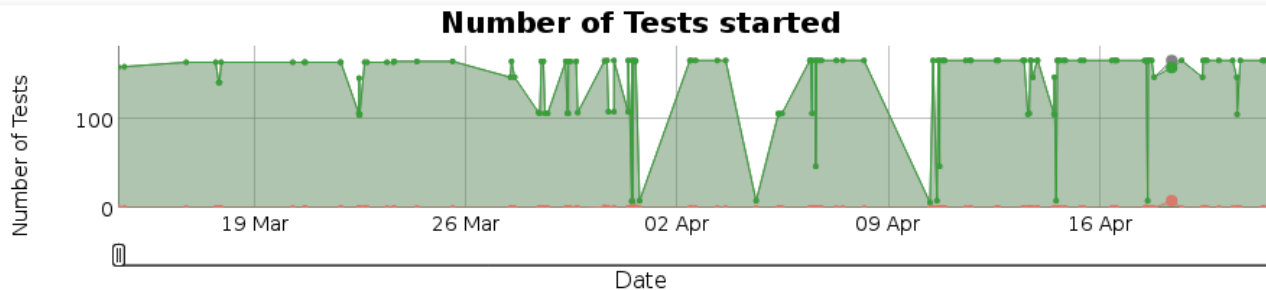
### Phase unit\_test Runtime History

— Wall Clock Time (s)



Show Series:

- Number of Tests
- Succeeded
- Failed
- Warning
- Skipped



2017/04/18 09:51:  
Number of Tests: 167  
Succeeded: 159  
Failed: 8

Phase: unit\_test

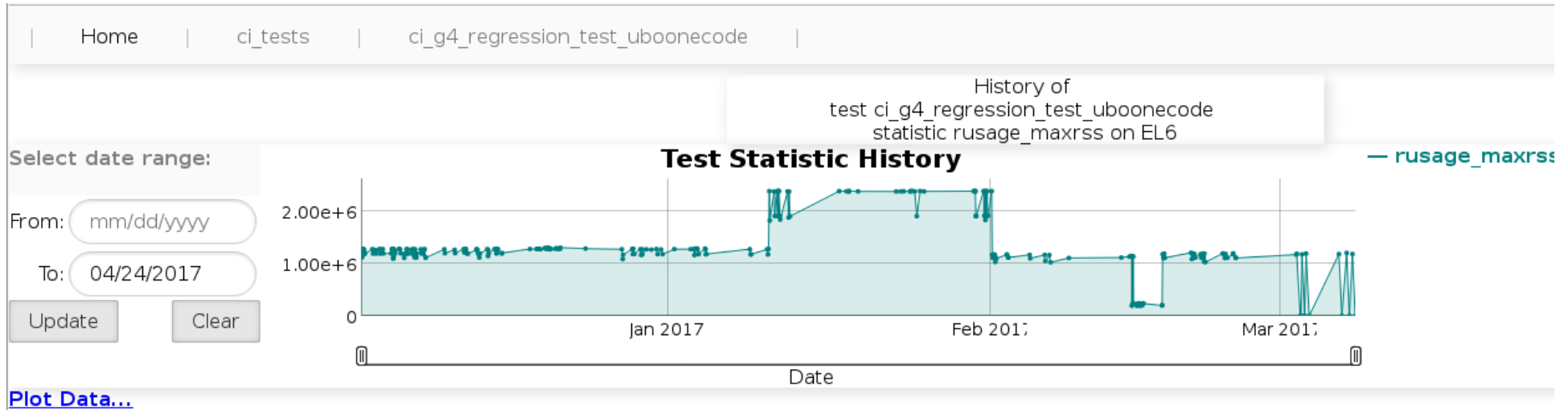
- [unit\\_test.log](#)
- [CTestCostData.txt](#)
- [LastTest.log](#)

Started: 04/17/2017 12:49:19  
Finished: 04/17/2017 13:03:28. Exit code: 0

#	Test Name	Start Time	Duration (s)				
1	AtomicNumberService_test	04/17/2017 12:49:45	5.77	84	<a href="#">donothing_dune35t</a>	04/17/2017 12:50:04	1
				85	<a href="#">donothing_dunefd</a>	04/17/2017 12:50:06	1

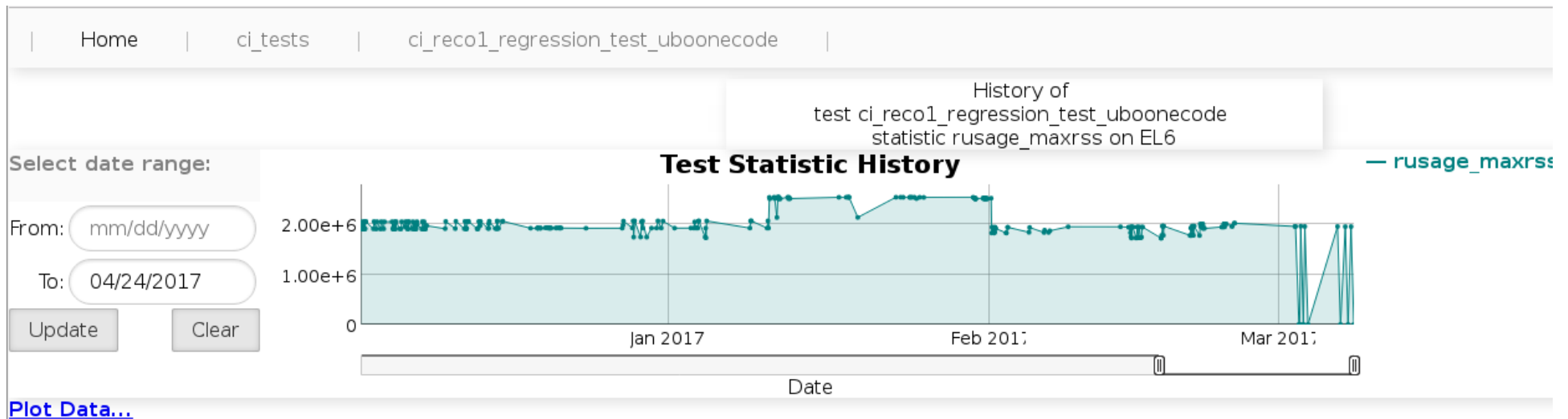
# The CI web application

- **CI test details:**
  - RSS memory peak, uboonecode g4 stage as an example



# The CI web application

- **CI test details:**
  - RSS memory peak, uboonocode reco stage 1 as an example





# Documentation:

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The redmine wiki is available at:

CI: <http://cdcvs.fnal.gov/redmine/projects/ci/wiki>

LarCI: [http://cdcvs.fnal.gov/redmine/projects/lar\\_ci/wiki](http://cdcvs.fnal.gov/redmine/projects/lar_ci/wiki)

