





# Regional Operator on Duty shifter guide

Tadeusz Szymocha EGI Operations Support (ACK Cyfronet AGH)







### Introduction

- ROD Regional Operator on Duty is a part of grid oversight activity shared between Operations Centers (OC).
- Each Operations Center delivers ROD team that handles issues and tickets within the Operations Center scope
- It allows **scalability** of Operations oversight and the ROD team is closer to sites and problems with the OC.
- Since April 2014 COD (Central Operator on Duty) team responsibility was transfered to EGI Operations

https://wiki.egi.eu/wiki/Regional\_Operator\_on\_Duty



### ROD team

The Regional Operations team is responsible for:

- solving problems on the infrastructure according to agreed procedures.
- ensuring that problems are properly recorded and progress according to specified time lines.
- ensuring that necessary information is available to all parties

#### **ROD** team:

- monitors sites in their region
- reacts to problems identified by the monitors, either directly or indirectly,
- provides support to sites as needed
- add information to the knowledge base
- provides informational flow to oversight bodies in cases of non-reactive or non-responsive sites.

The ROD team is provided by each Operation Center and requires **procedural knowledge on the process** (rather than technical skills) for their work.



## **Topics**

- Introduction
  - ROD duties
  - ROD procedures
- Becoming ROD team Member (GOCDB, GGUS, dteam)
  - Obtaining the recognized x509. Certificate
  - Registration in GOC DB
  - Registration in GGUS
  - Registration in Dteam VO
- ROD shift (using the Operational Dashboard)
  - Issues aka alarms
  - Tickets
  - Notepads
  - Handover
- Questions



## ROD duties

- Handling incidents The main responsibility of ROD is to deal with incidents at sites in the region. This includes making sure that the tickets are opened and handled properly. The procedure for handling tickets is described in EGI Infrastructure Oversight escalation procedure
- Propagate actions from EGI Operations down to sites ROD is responsible for ensuring that decisions taken on the EGI Operations level are propagated to sites.
- Putting a site in downtime or suspend for urgent matters In general,
  ROD can place a site in downtime (in the GOC DB) if it is either requested by
  the site, or ROD sees an urgent need to put the site into downtime. ROD may
  also suspend a site, under exceptional circumstances, without going through all
  the steps of the escalation procedure. For example, if a security hazard occurs,
  ROD must suspend a site on the spot in the case of such an emergency.
- Notify EGI Operations about core or urgent matters ROD is entitled to create tickets to EGI Operations in the case of core or urgent matters.



## ROD - procedures

- List of procedures
  - https://wiki.egi.eu/wiki/Operations\_Procedures
  - Used the most:
  - https://wiki.egi.eu/wiki/PROC01\_EGI\_Infrastructure\_Oversight\_escalation
- ROD FAQ
  - https://wiki.egi.eu/wiki/FAQ\_Regional\_Operator\_on\_Duty



## **Topics**

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## ROD Registration - Before first shift

- Welcome to the ROD team
  - https://wiki.egi.eu/wiki/Regional\_Operator\_on\_Duty\_welcome
- Get a valid grid certificate delivered by certifiation authorities. Find EUGRIDPMA members in your region and click on the map
  - http://www.eugridpma.org/members/worldmap/



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## **ROD Registration -**

▼ C S Google





Membership Contact us

IGTF
APGridPMA
TAGPMA
TERENA TACAR
TERENA REFEDS
SCI

#### **Documents**

Charter Guidelines One Statement Policies

CAOPS-WG Wiki

#### Technical Info

CA Distribution download Subject Locator Find your local CA About your certificate

Newsletter issues Subscribe Service notices RSS feed Nagios monitoring

Tools download and fetch-crl Technical documentation IGTF OID Registry SHA-2 timeline

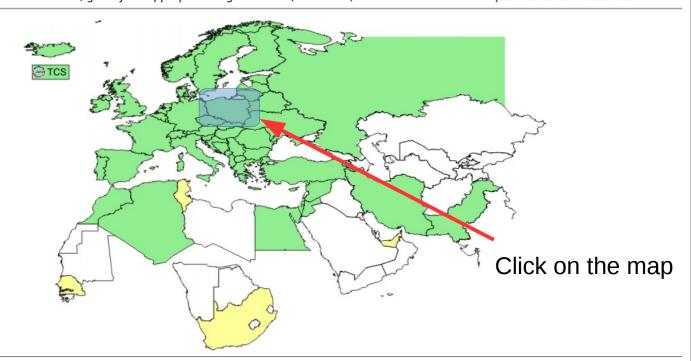
#### Meetings

Poznan Sept 2014

Overview Agendas Intranet and Reviews &

#### **EUGridPMA Clickable Map of Authorities**

The EUGridPMA itself does not issue certificates. It coordinates national and regional authorities that do the actual certificate issuing to end entities. Please select your country from the map below to be redirected to your local issuing certification authority. If your country is not located on the European continent, go to your appropriate regional PMA (see below) or have a look at the full plain-text Authorities list.



#### Authorities members not listed on the map

- TERENA Certificate Service (multiple countries in Europe) see the FAQ for details
- DOEGrids

Identity credential providers elsewhere in the world



# Tools - Registration in GOC DB

#### Register in GOC DB tool

- GOC DB is a central database which contains all the information about EGI grid infrastructure (sites and people). To be ROD member you have to be recoreded in this database.
- https://goc.egi.eu/portal/index.php?Page\_Type=Register

#### Request the Regional Staff role in the GOC DB

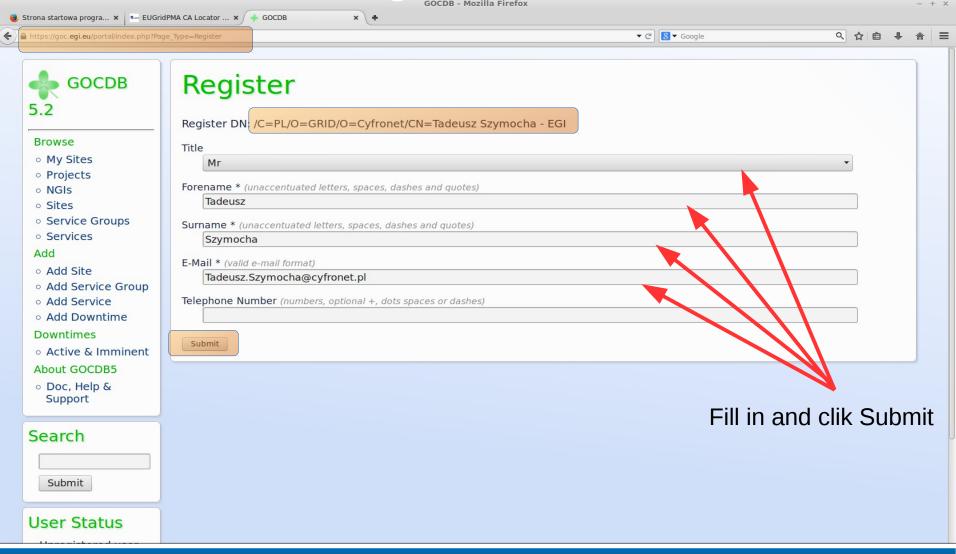
 Thanks to this role you will be recognized automatically in operations tools as ROD member. It gives you a several privilages in the database as well as in other tools.

#### Contact your NGI manager

 you need to contact your NGI manager to be approved in GOC DB as Regional Staff and to be added to ROD mailing list in your NGI (this mailing list is a contact point to the whole ROD team within the NGI).

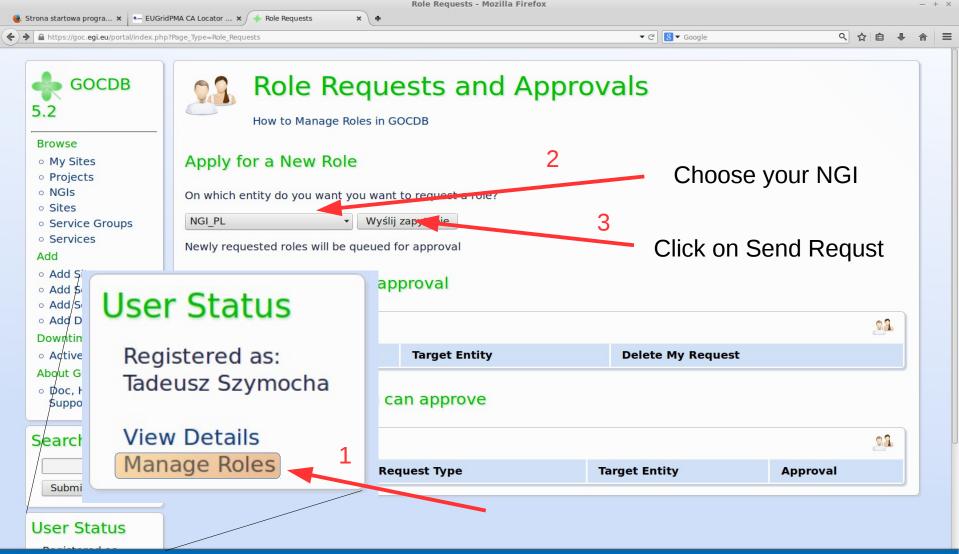


# Tools - Registration in GOC DB





# Tools Reuesting a role in GOC DB





# Tools Requesting a role in GOC DB



You receive e-mail

Dear GOCDB User,

The Regional Staff (ROD) role that you request over NGI\_PL has been approved. You can now manage this NGI in GocDB.

 In case of problem contact your NGI manager who approves it in GOCDB and should add you to regional ROD mailing list



# Tools - Registration in GOC DB



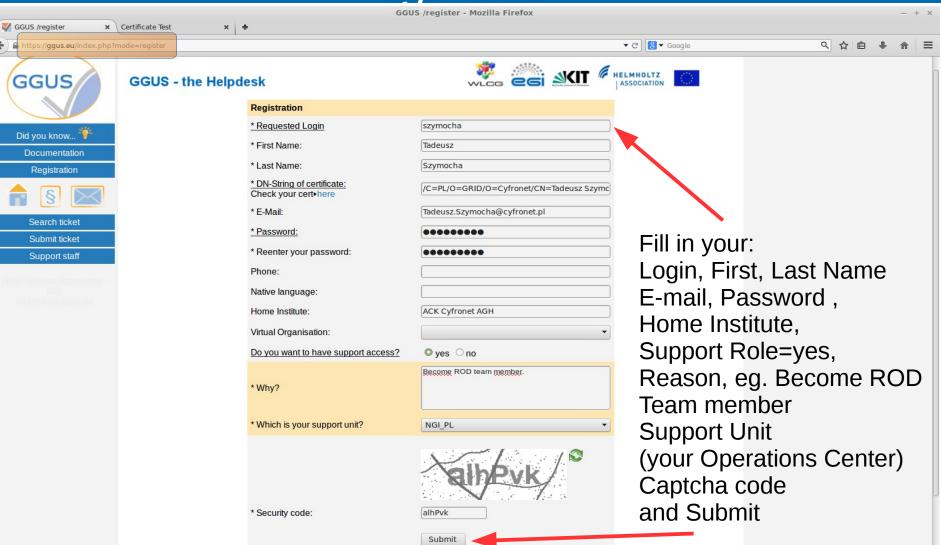


# Tools - Registration in GGUS

- Register into GGUS tool as support staff
  - GGUS is a ticketing system which is used for operational purpose within EGI. With support staff role you will be able to reply on and update recorded tickets.
  - https://ggus.eu/index.php?mode=register



# Tools - Registration in GGUS



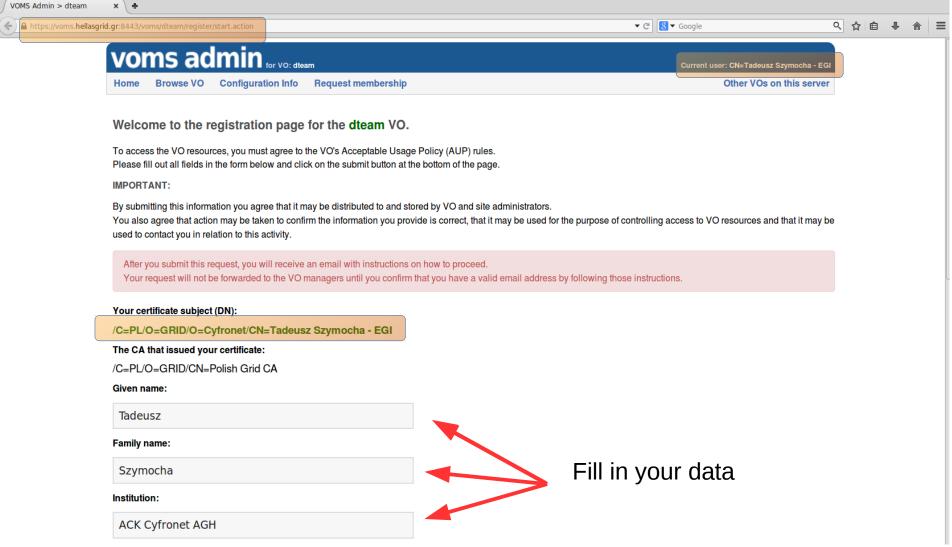


# Tools - Registration dteam vo

- Register to Dteam VO
  - Dteam membership will give you possibility to test sites, debug problems
  - Access Nagios web interface
- https://voms.hellasgrid.gr:8443/voms/dteam

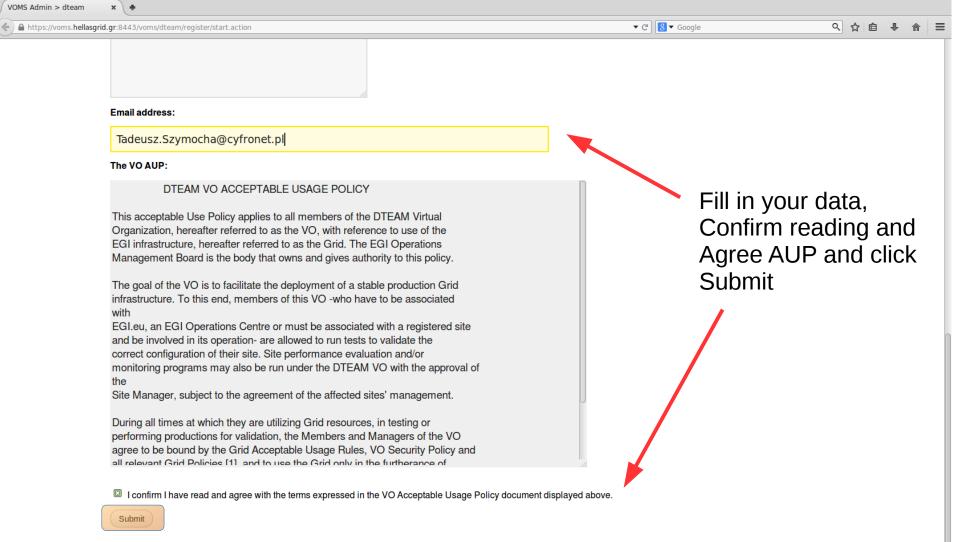


# Tools - Registration dteam vo 1/2





# Tools - Registration dteam vo 2/2





## Tools -Use of Operational Dashboard

#### Operations Portal

- Dashboard tool on the Operations Portal is a main tool which is used by ROD teams. All actions concerning incidents (issues and tickets) should be performed using this tool.
- https://operations-portal.egi.eu/rodDashboard



You will be redirected to the region scope that you are registered in GOCDB

https://operationsportal.egi.eu/rodDashboard/ngi/OPERATIONS\_CENTER\_NAME/tab/sites/filter/oper ators/page/sites e.g. NGI\_PL



## **Topics**

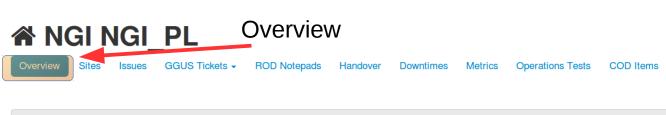
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  - Handover
- Questions

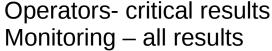


### Dashboard – detailed overview 1/16













my NGIs > NGI\_PL > overview





#### ROD Notepads

No item found! No matching items depending on your query and/or your roles to display.

https://operationsportal.egi.eu/rodDashboard/ngi/NGI\_PL/tab/overview/filter/operators/page/overview

www.egi.eu FGI-InSPIRE RI-261323



# Dashboard – detailed overview 2/16



Home

Help

Other Tools ▼

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#### ROD Tickets



#### MW Tickets

No item found! No matching items depending on your query and/or your roles to display.

#### COD Tickets

No item found! No matching items depending on your query and/or your roles to display.

#### Downtimes

No downtime found! No matching items on your NGI / Site(s).



### Dashboard – detailed overview 3/16







Operators- critical results Monitoring – all results





#### 4 Issues



#### ROD Notepads

No item found! No matching items depending on your query and/or your roles to display.

https://operationsportal.egi.eu/rodDashboard/ngi/NGI\_PL/tab/overview/filter/operators/page/overview

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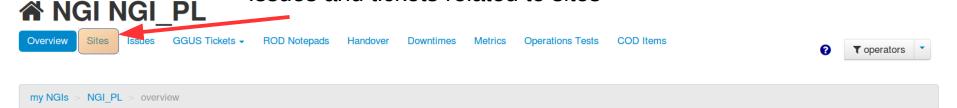
## Dashboard – detailed overview 4/16

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Other Tools -



Issues and tickets related to sites



#### Issues



#### ROD Notepads

No item found! No matching items depending on your query and/or your roles to display.

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## Dashboard – detailed overview 6/16

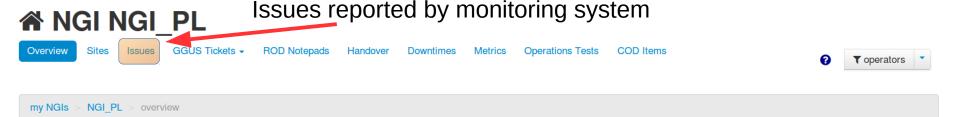


Home

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#### **4** Issues



#### ROD Notepads

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https://operationsportal.egi.eu/rodDashboard/ngi/NGI\_PL/tab/overview/filter/operators/page/overview

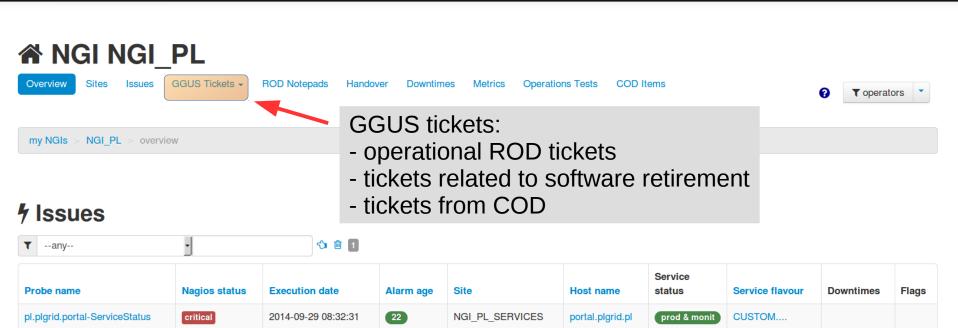


## Dashboard – detailed overview 7/16

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Other Tools -





#### ROD Notepads

No item found! No matching items depending on your query and/or your roles to display.

https://operationsportal.egi.eu/rodDashboard/ngi/NGI\_PL/tab/overview/filter/operators/page/overview



### Dashboard – detailed overview 8/16

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Other Tools -

Service

prod & monit

Service flavour

CUSTOM....

**Downtimes** 

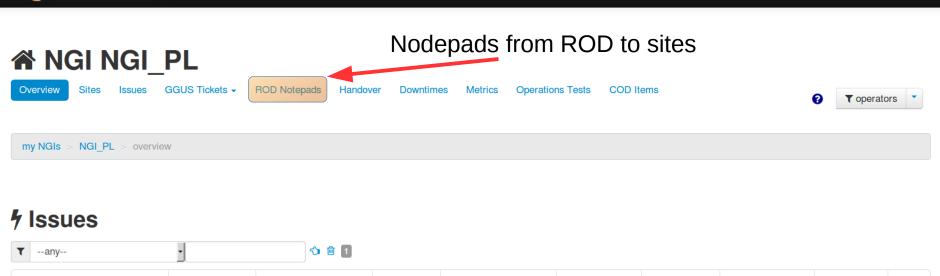
Flags

status

Host name

portal.plgrid.pl





#### ROD Notepads

pl.plgrid.portal-ServiceStatus

Probe name

No item found! No matching items depending on your query and/or your roles to display.

Nagios status

critical

**Execution date** 

2014-09-29 08:32:31

https://operationsportal.egi.eu/rodDashboard/ngi/NGI PL/tab/overview/filter/operators/page/overview

Site

NGI PL SERVICES

Alarm age

22

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### Dashboard – detailed overview 9/16



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#### Handover within the ROD team





#### ROD Notepads

No item found! No matching items depending on your query and/or your roles to display.

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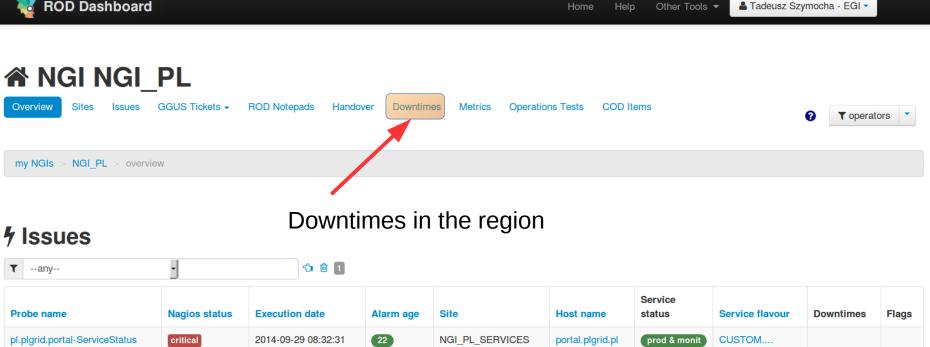
www.egi.eu EGI-InSPIRE RI-261323



### Dashboard – detailed overview 10/16

Other Tools -





#### ROD Notepads

No item found! No matching items depending on your query and/or your roles to display.

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## Dashboard – detailed overview 11/16

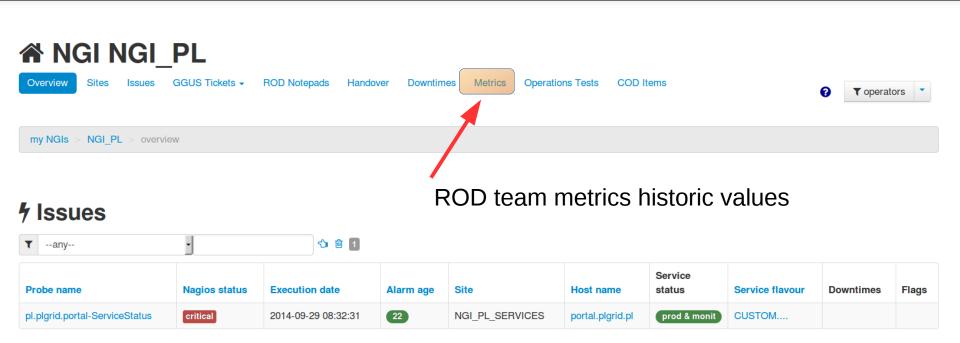


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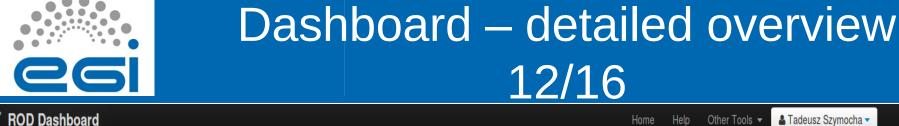


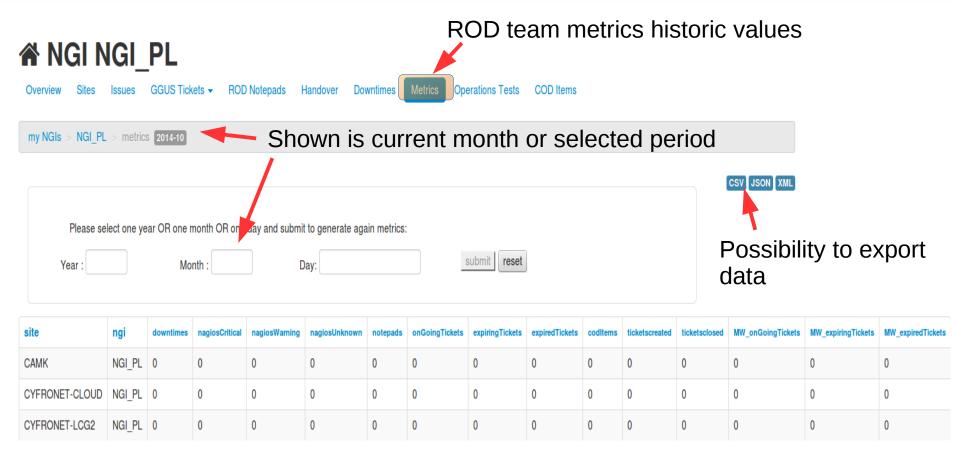
#### ROD Notepads

No item found! No matching items depending on your query and/or your roles to display.

https://operationsportal.egi.eu/rodDashboard/ngi/NGI\_PL/tab/overview/filter/operators/page/overview







List of sites and metric values



## Dashboard – detailed overview 13/16





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Other Tools -





#### List of EGI operational tests – raising issues (alarms)

#### **4** Issues



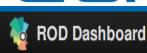
#### ROD Notepads

No item found! No matching items depending on your query and/or your roles to display.

https://operationsportal.egi.eu/rodDashboard/ngi/NGI\_PL/tab/overview/filter/operators/page/overview



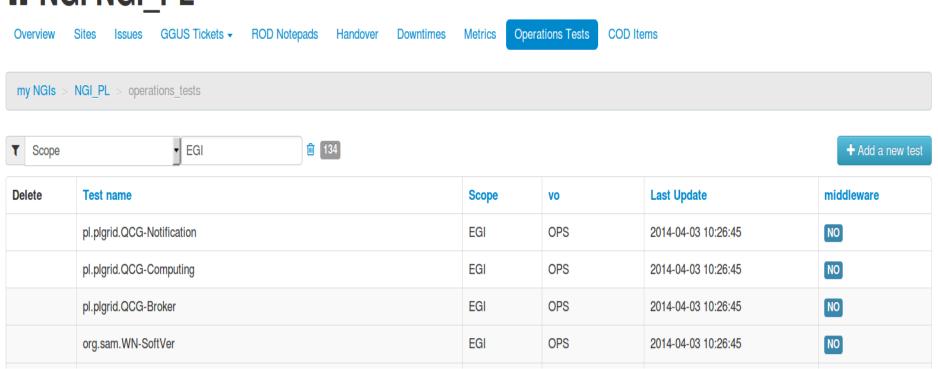
# Dashboard – detailed overview 14/16



Home Help Other Tools ▼ 🚨 Tadeusz Szymocha ▼

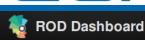
List of EGI operational tests – raising issues (alarms)







## Dashboard – detailed overview 15/16



Home

Other Tools -

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#### List of items visible in COD dashboard.





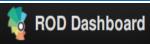
#### ROD Notepads

No item found! No matching items depending on your query and/or your roles to display.

https://operationsportal.egi.eu/rodDashboard/ngi/NGI\_PL/tab/overview/filter/operators/page/overview



# Dashboard – detailed overview 16/16

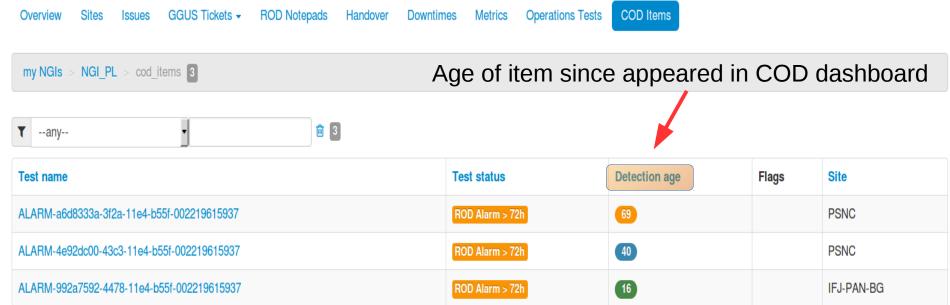


Home

Help Other Tools ▼





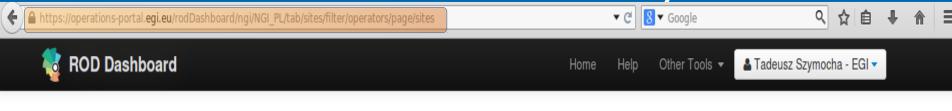


List of items visible in COD dashboard.

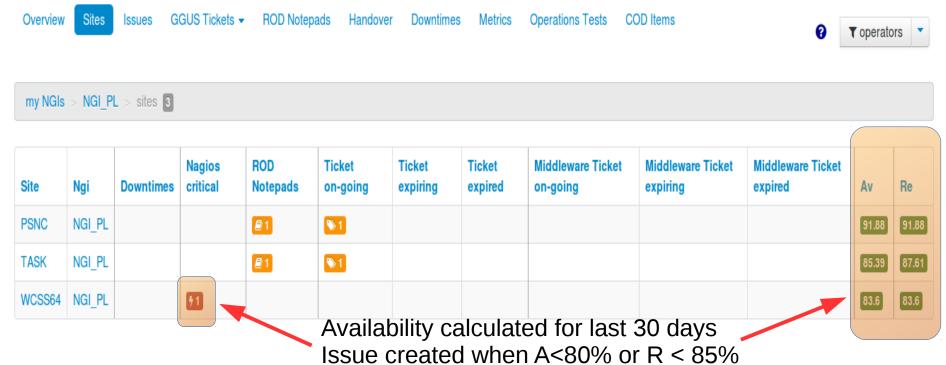
- ROD Alarms > 72h
- ROD Ticket (GGUS and MW) expired (not handled)
- ROD Tickets > 1 month (long lasting)
- Downtimes > 1 month



# Dashboard – Availability / Reliability

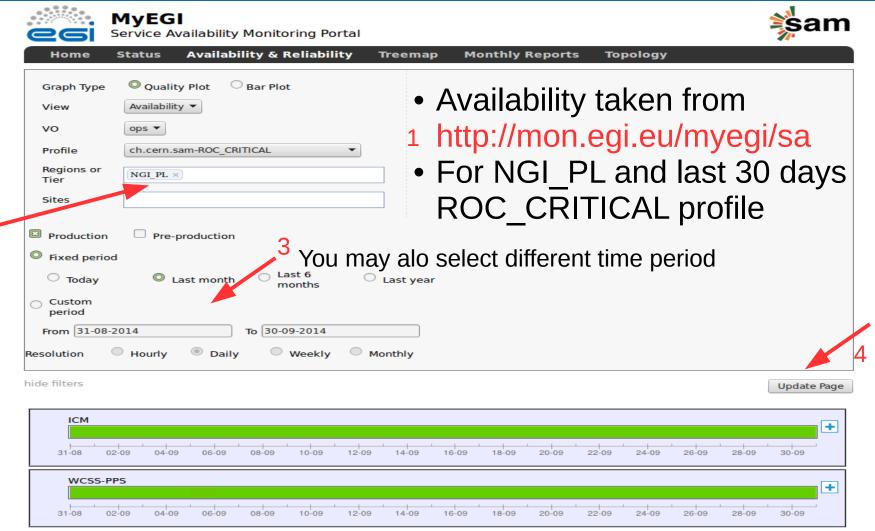








# Issues – Availability/Reliability





#### Issues

- Issue (aka alarm)
  - Dashboard representation of an incident an unplanned interruption to an IT Service
- Typical tasks
  - Grouping
  - Creating the ticket from issue
  - Closing the issue

https://operationsportal.egi.eu/rodDashboard/ngi/OPERATIONS\_CENTER\_NAME/tab/sites/filter/oper ators/page/sites



#### Issues

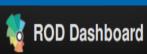
- Statuses of issues:
  - New (unhandled)
  - Assigned (handled, ticket created)
- **Division** by procedural status (depending on time that passed from issue creation)
  - Younger than 24h green colour
  - Between 24 and 72 h
    - blue colour <48h</li>
    - orange colour >48h
  - Older than 72h red color

#### Features:

- Issues for which Nagios test result turned into OK state are closed automatically.
- Actions menu (context)



## Issues - Issues view



Home

Other Tools ▼



Overview Sites Issues

s (

GGUS Tickets ▼

**ROD Notepads** 

Handover Downtimes

es Me

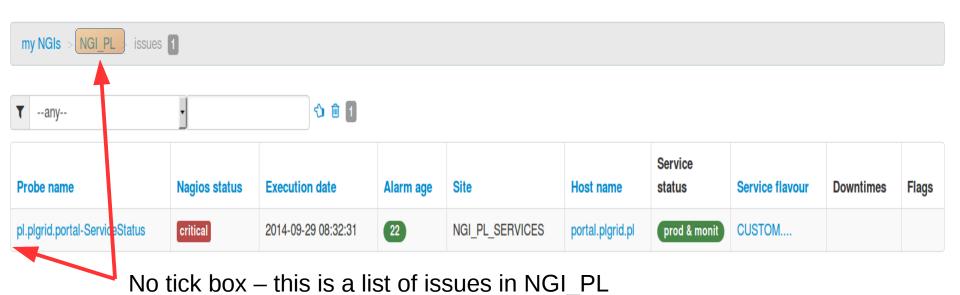
Metrics Operations Tests

COD Items

Help

a

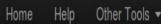
▼ operators ▼

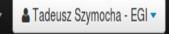




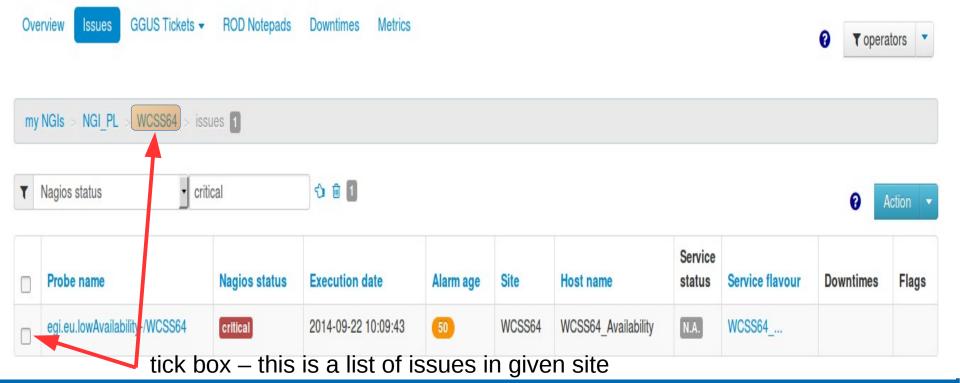
# Issues – issues in given site













# Issues – grouping

- Grouping
  - When more than 1 issue have the same root cause or if error of 1 alarm makes it impossible to check current status of other alarm



**ROD Dashboard** 

# Issues – Check with Nagios 1/2

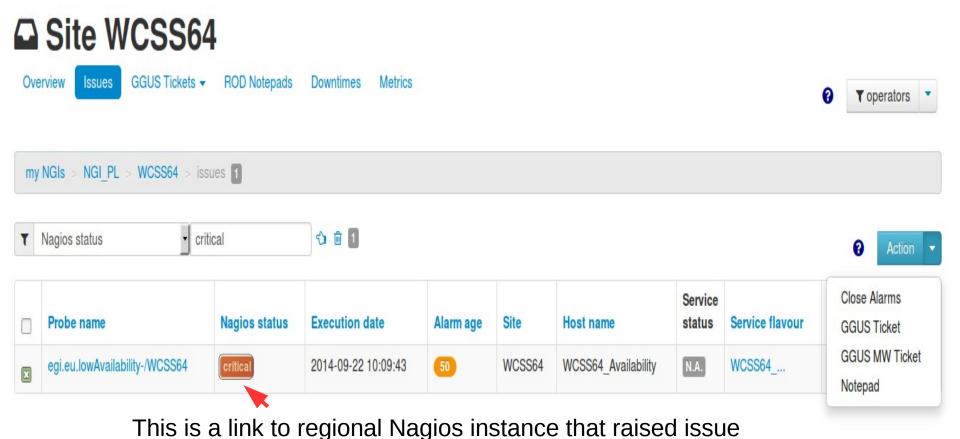
Home

Help

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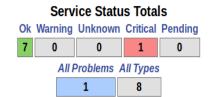
# Issues – Check with Nagios 2/2

#### Current Network Status

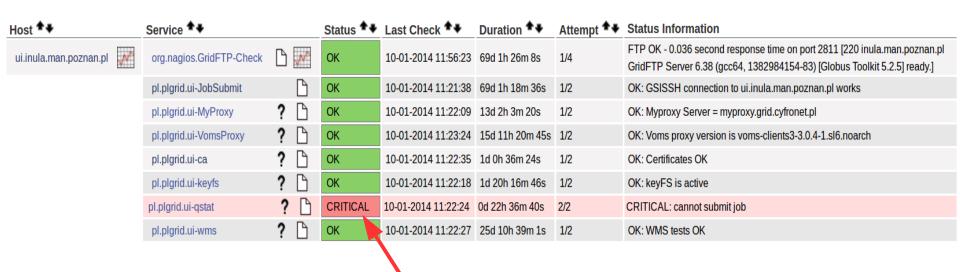
Last Updated: Wed Oct 1 11:58:50 CEST 2014
Updated every 601 seconds
Nagios® Core™ 3.3.1 - www.nagios.org
Logged in as /C=PL/O=GRID/O=Cyfronet/CN=Tadeusz Szymocha

View History For This Host View Notifications For This Host View Service Status Detail For All Hosts

Host Status Totals					
Up Down Unreachable				Pending	
1	0	0		0	
All Problems All Types					
	0		1		



#### Service Status Details For Host 'ui.inula.man.poznan.pl'



This is a operational test that critical status raised the issue in dashboard

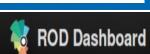


## Issues – ticket creation

- When do we create ticket?
  - If alarm is older than 24h and it is in non ok status
  - If service is unstable (flip-flaping results) (Nagios results)
  - How to create a ticket?
    - Mark selected related issues (or one) and Click on Action Button. Select GGUS ticket or GGUS MW ticket



## Issues – ticket creation





Help







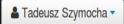


## Issues – ticket view



Help

Other Tools ▼



#### **ROD Tickets #108783**





To add or remove issues related to ticket – click here

my NGIs > NGI\_PL > WCSS64 > ROD Tickets > #108783 > details

#### **Original Submission**





 SU
 NGI\_PL

 NGI
 NGI\_PL

 Site
 WCSS64

#### Subject:

[Rod Dashboard] Issues detected at WCSS64

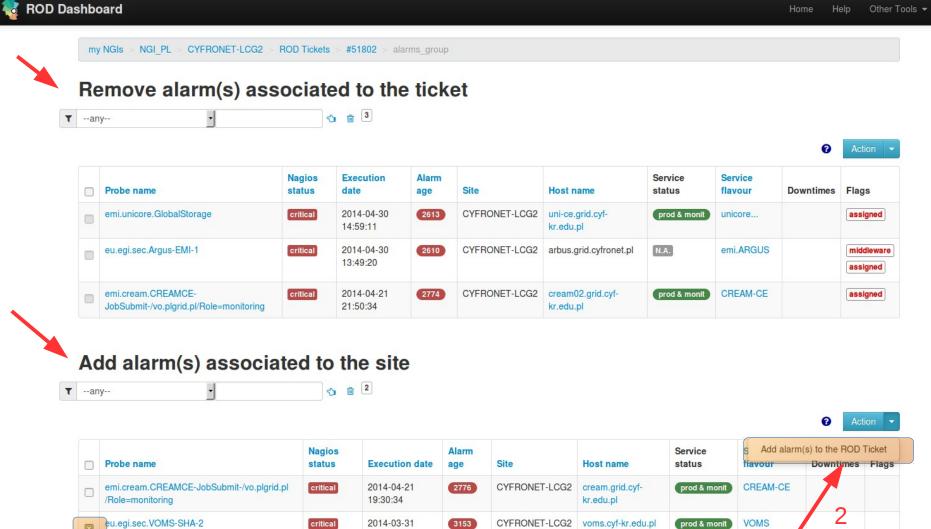
Dear site administrator,

We have detected 1 problem(s) at WCSS64.

Please find below a list of attached problems :



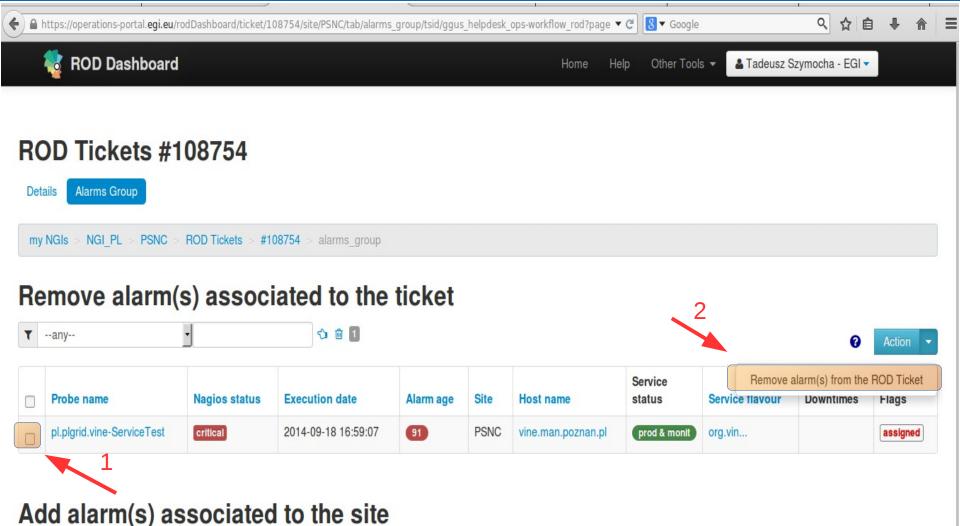
# Issues - grouping



01:20:44



# Issues – removing alarm associated to the ticket





# Issues – closing issue

- Closing the issue
  - when service in SD
  - dashboard not properly updated
  - service no more in production



# Issues – closing issue

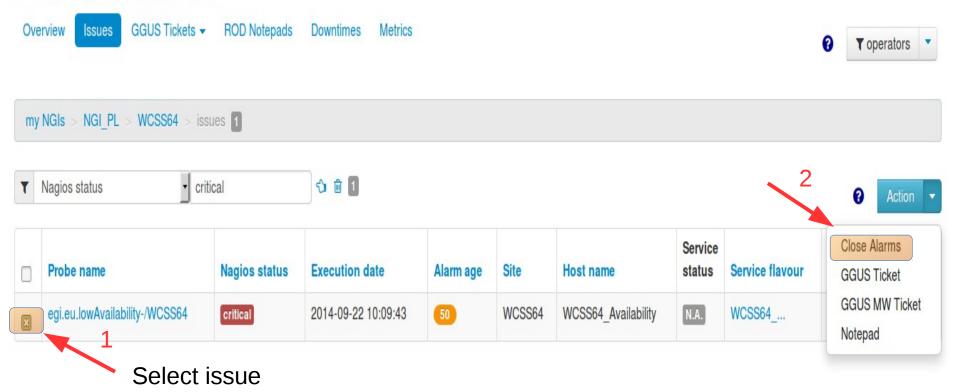


Home

Help Other Tools ▼

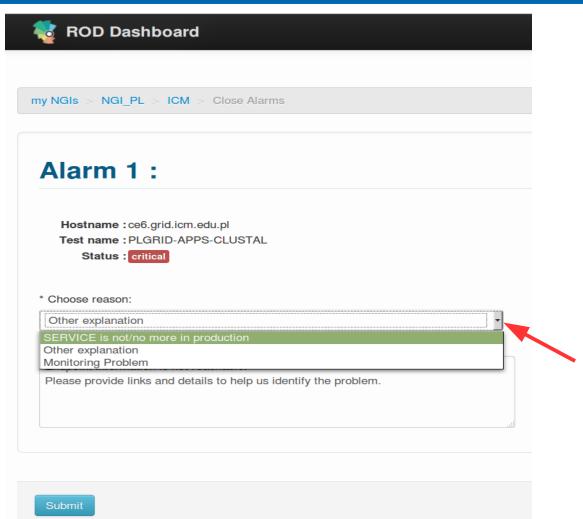
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# Issues – closing issue



You can select reason:

- service not in production
- monitoring problem
- other explaination

Explainations visible in Metrics Part of dashboard



## **Tickets**

#### Ticket

- A record of incident, its detection, reporting and resolution
- https://operations-portal.egi.eu/rodDashboard

#### • Typical tasks:

- Creating a ticket
- Escalating a ticket
- Updating ticket without escalation
- Closing / Verifying a ticket



## **Tickets**

- When to create ticket?
  - If alarm is older than 24h and it is in non ok status
  - If service is unstable (flip-flaping results) (Nagios)
  - Operational division:
    - On-going orange
    - Expiring red (take action today)
    - Expired black

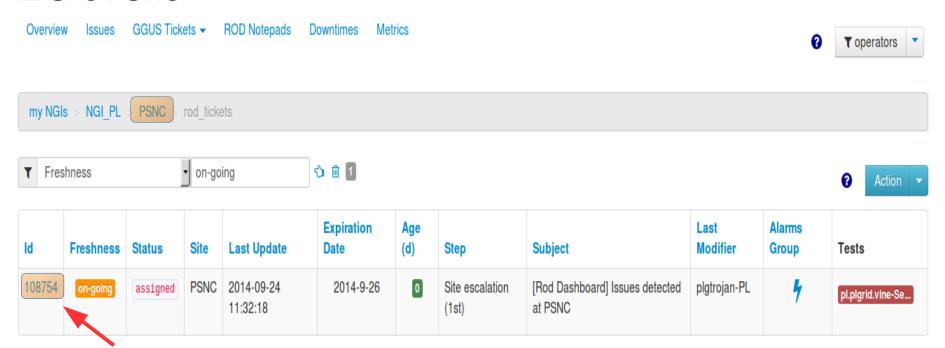
Expired tickets influence ROD Performance Index



### Tickets - list

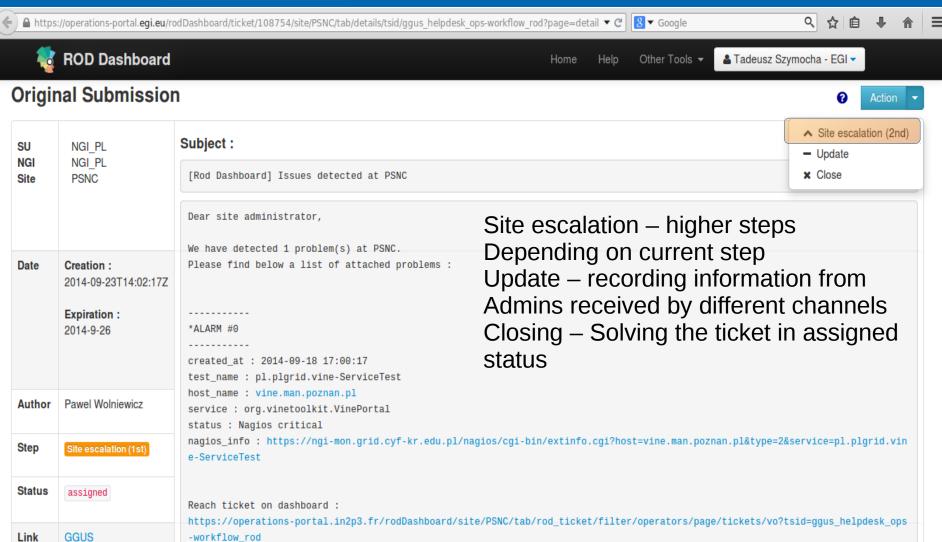


#### **△** Site PSNC





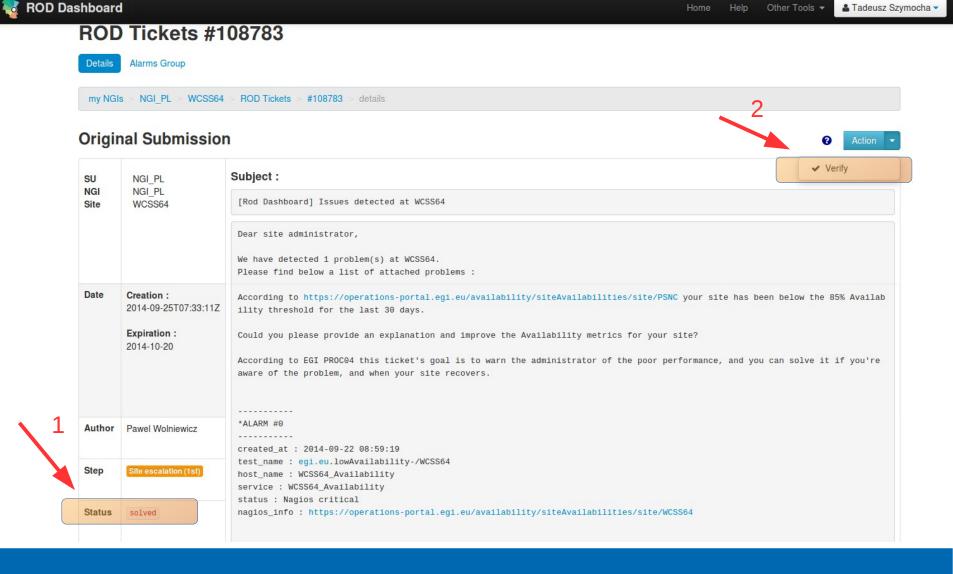
## Tickets - details





## Tickets - verification

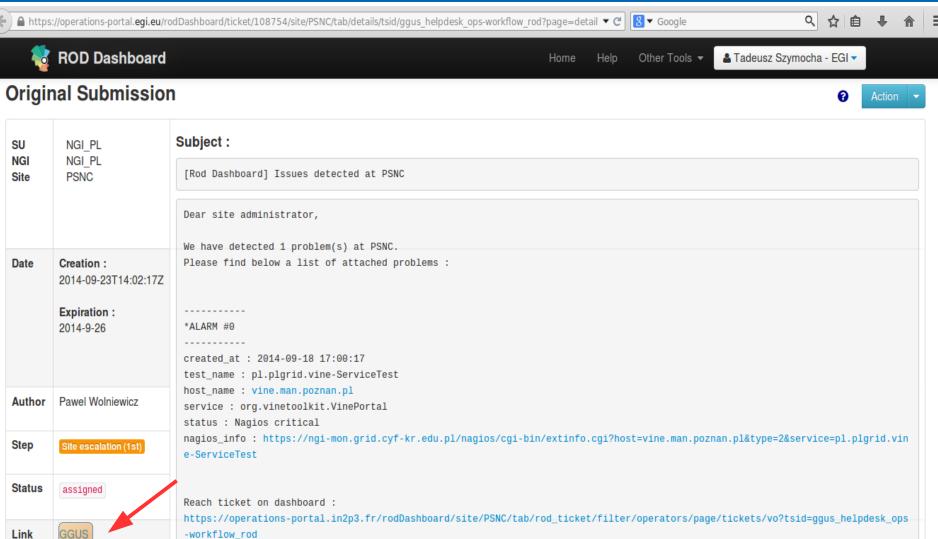




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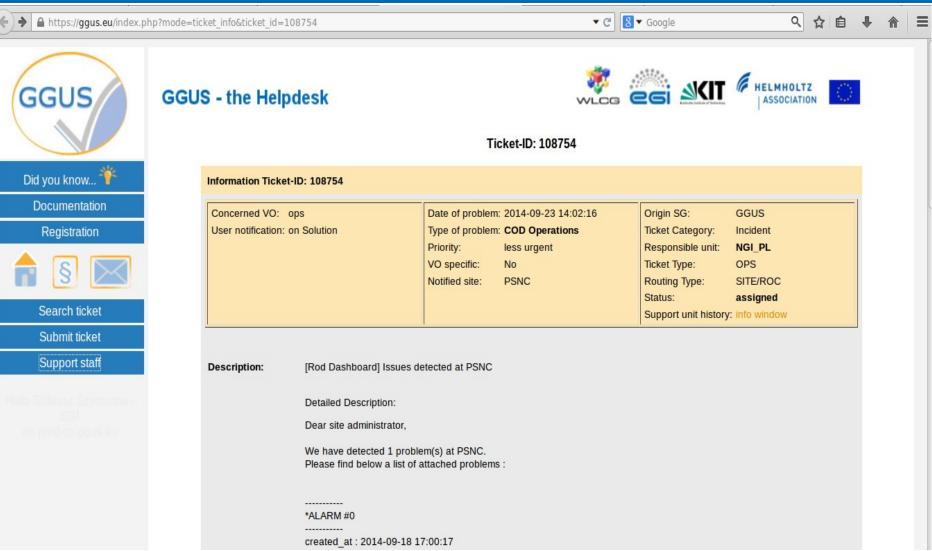


## Tickets – link to GGUS





## Ticket – cross check with GGUS





# Notepads

- For internal communication ROD can use mailing list(s), instant messengers, etc. Each ROD team is free to choose how the internal communication is established.
- One-way to sites communication can be held in Dashboard Notepads. It is ROD team who updates and notifies sites
- Can be transformed into ticket and keep existing communication



# Notepad - creation

Notepads can be created in connection to issues

Notepad





#### Site IFJ-PAN-BG GGUS Tickets -Overview **ROD Notepads Downtimes** Metrics **Y** operators my NGIs > NGI PL > IFJ-PAN-BG > issues 1 0 1 critical Nagios status Close Alarms Service flavour Probe name Nagios status **Execution date** Alarm age Site Host name Service status **GGUS Ticket** org.nagios.GLUE2-Check critical 2014-04-29 18:32:05 2625 IFJ-PAN-BG fwe02.ifj.edu.pl prod & monit Site-BDII **GGUS MW Ticket**

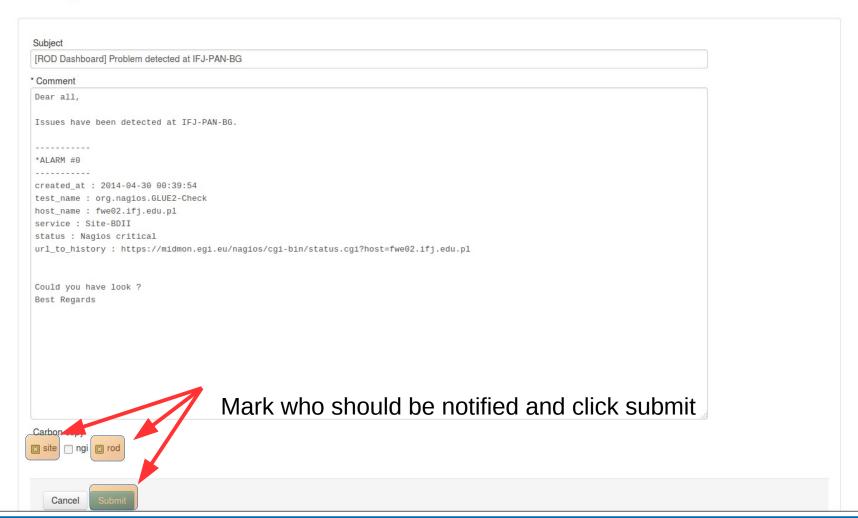
www.egi.eu EGI-InSPIRE RI-261323



# Notepad - creation



#### Notepad / New submission





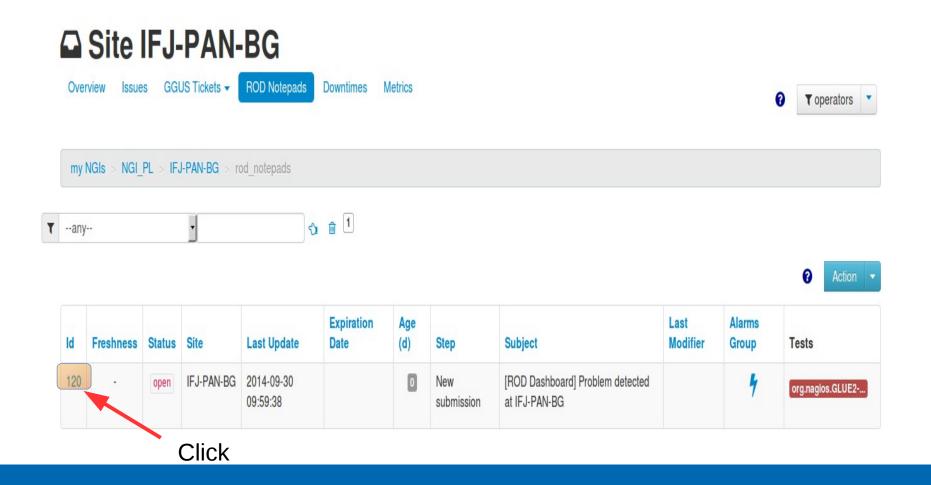
ROD Dashboard



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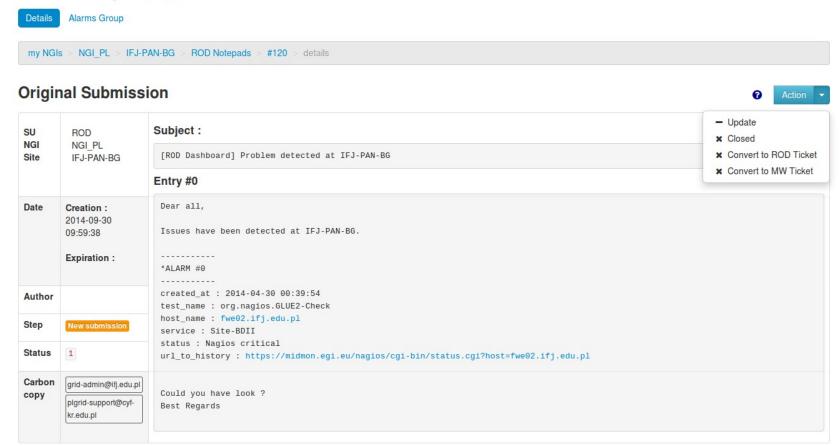


# Notepad - details





#### **ROD Notepads #120**



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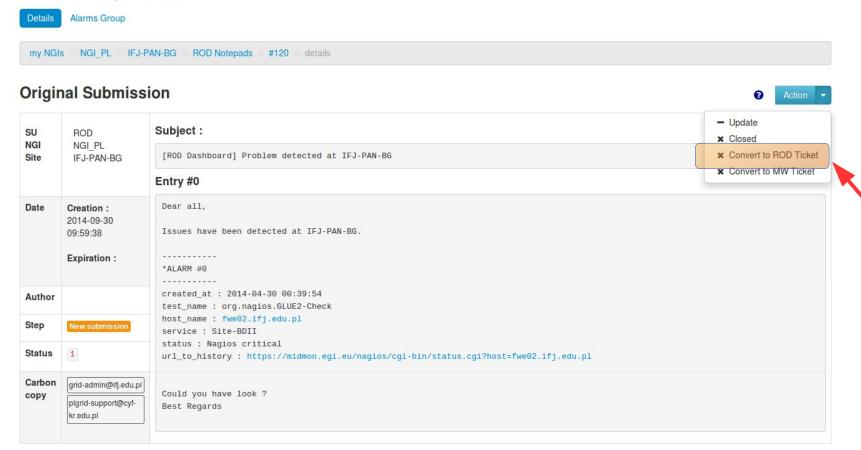


## Notepad – conversion to ticket





#### **ROD Notepads #120**





\* Subject

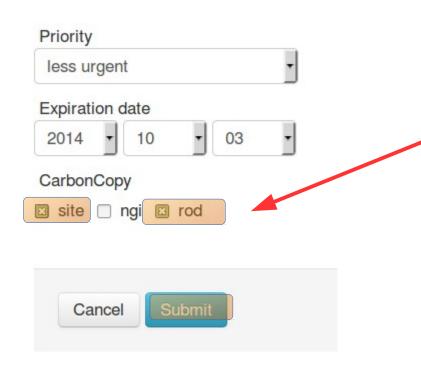
## Notepad – conversion to ticket

#### to ROD ticket conversion / Site escalation (1st)

```
[Rod Dashboard] Issues detected at IFJ-PAN-BG
Problem description
*** THIS TICKET HAS BEEN GENERATED FROM A NOTEPAD
Dear site administrator,
We have detected 1 problem(s) at IFJ-PAN-BG.
Please find below a list of attached problems :
*ALARM #0
created at: 2014-04-30 00:39:54
test_name : org.nagios.GLUE2-Check
host_name : fwe02.ifj.edu.pl
service : Site-BDII
status : Nagios critical
nagios_info : https://midmon.egi.eu/nagios/cgi-bin/extinfo.cgi?host=fwe02.ifj.edu.pl&type=2&service=org.nagios.GLUE2-Check
Reach ticket on dashboard :
http://operations-portal.in2p3.fr/test/frontend_test.php/rodDashboard/site/IFJ-PAN-BG/tab/rod_ticket/filter/operators/page/tickets
/vo?tsid=ggus_helpdesk_ops-workflow_rod
Could you please have a look ?
Thank you
```



# Notepad – conversion to ticket



Similary to creation of ticket, you specify who should be informed and click submit

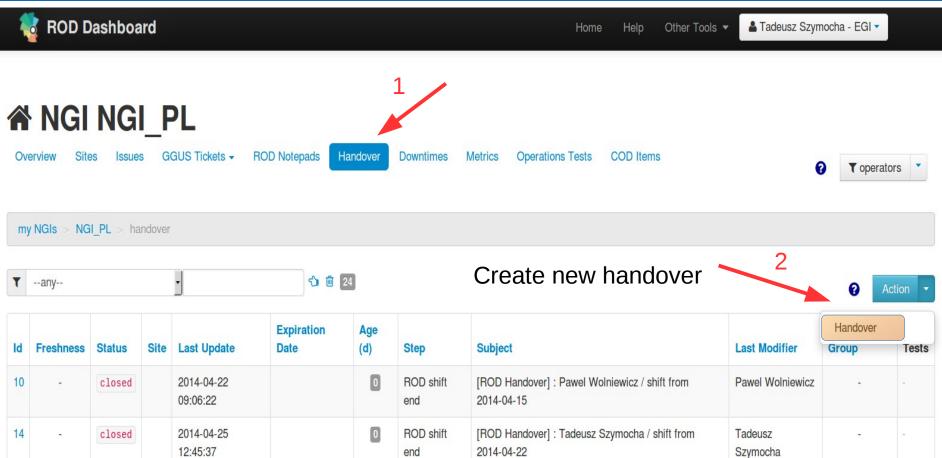


#### Handover

- ROD intra-team communication
  - At the end of a shift the current ROD team should prepare the handover for internal ROD matters. Each ROD can decide independently on what the handover should look like and how it should be passed on to the next team. The following list provides mere suggestions for what should be included:
    - a list of tickets which will continue into the next week. Each item should contain the name of the site in question, GGUS ticket number, an optional ROD ticket ID if your NGI uses an internal ticket system, and the current status of the ticket;
    - any tickets opened that are not related to a particular alarm;
    - a summary of problems encountered with core grid services;
    - a report of any problems with operational tools that occured during the shift;
    - anything else the new team should be aware of.



## Handover – start shift



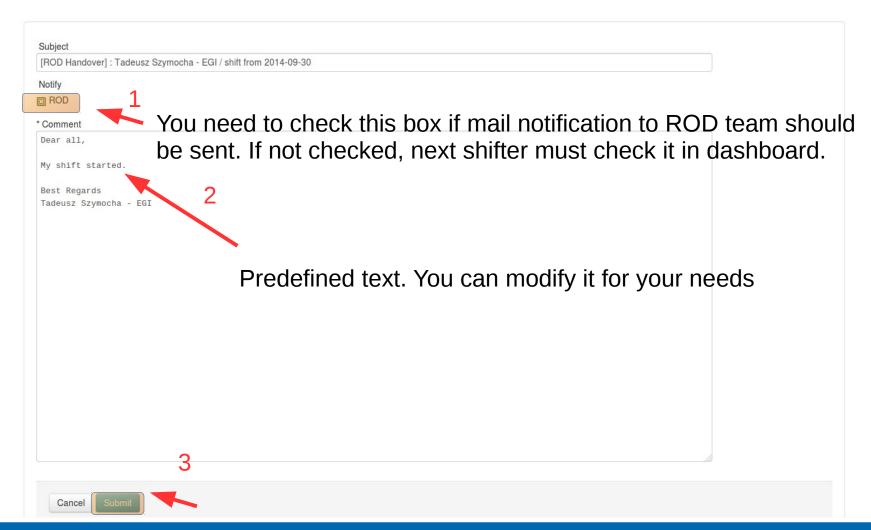


## Handover - creation

ne Help Other Tools 🔻

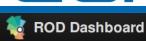
Tadeusz Szymocha - EGI ▼

#### Handover / ROD shift start





# Handover – Ending shift



Hom

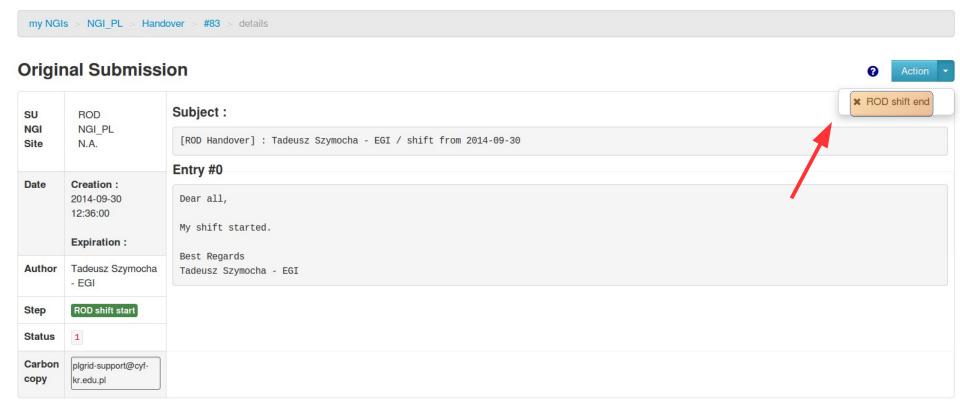
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#### Handover #83







# Summary

- ROD is an important part of Operations activity
- Operations oversight is close to sites in region
- Supporting tool: Dashboard
  - We get familiar with
    - issues (aka alarms)
    - tickets
    - notepads
    - handovers
- Good luck!



# Questions?

- Dashboard is being tuned. You are welcome to send us suggestions and opinions.
  - Create ticket in GGUS: Operational Portal SU
- The Operations Portal Advisory and Testing Board will disscuss requirements

- Contact in procedural matters:
  - EGI Operations Support
  - operations-support@mailman.egi.eu
  - Since 1.10.2014 also at GGUS "EGI Operations Support" SU