

# GOCDDB v5 PI Changes

David Meredith

George Ryall

# 1) v4 PKs carried over for Downtimes and Sites

- Affects 'get\_downtime' and 'get\_site' PI methods
- Downtime/Site XML: **ID vals different, PRIMARY\_KEY preserved**
- Are v4 PKs from other entities required to be carried over?

```
-<DOWNTIME ID="2274" PRIMARY_KEY="41751G0" CLASSIFICATION="SCHEDULED">
  <PRIMARY_KEY>41751G0</PRIMARY_KEY>
  <HOSTNAME>goc.egi.eu</HOSTNAME>
  <SERVICE_TYPE>egi.GOCDB</SERVICE_TYPE>
  <ENDPOINT>goc.egi.eu.egi.GOCDB</ENDPOINT>
  <HOSTED_BY>GRIDOPS-GOCDB</HOSTED_BY>
- <GOCDB_PORTAL_URL>
  https://testing.host.com/portal/index.php?Page_Type=Downtime&id=2274
</GOCDB_PORTAL_URL>
<SEVERITY>AT_RISK</SEVERITY>
<DESCRIPTION>At risk period following server updates. </DESCRIPTION>
<INSERT_DATE>1295016360</INSERT_DATE>
<START_DATE>1295434800</START_DATE>
<END_DATE>1295449200</END_DATE>
<FORMATED_START_DATE>2011-01-19 11:00</FORMATED_START_DATE>
<FORMATED_END_DATE>2011-01-19 15:00</FORMATED_END_DATE>
</DOWNTIME>
```

```
-<SITE ID="568" PRIMARY_KEY="123G0" NAME="GRIDOPS-GOCDB">
  <PRIMARY_KEY>123G0</PRIMARY_KEY>
  <SHORT_NAME>GRIDOPS-GOCDB</SHORT_NAME>
- <OFFICIAL_NAME>
  Grid Operations Center Database Portal and Web Services
</OFFICIAL_NAME>
- <SITE_DESCRIPTION>
```

V5 test instance

```
-<DOWNTIME ID="24509" PRIMARY_KEY="41751G0" CLASSIFICATION="SCHEDULED">
  <PRIMARY_KEY>41751G0</PRIMARY_KEY>
  <HOSTNAME>goc.egi.eu</HOSTNAME>
  <SERVICE_TYPE>egi.GOCDB</SERVICE_TYPE>
  <ENDPOINT>goc.egi.eu.egi.GOCDB</ENDPOINT>
  <HOSTED_BY>GRIDOPS-GOCDB</HOSTED_BY>
- <GOCDB_PORTAL_URL>
  https://goc.egi.eu/portal/index.php?Page_Type=View_Object&object_id=24509&grid_id=0
</GOCDB_PORTAL_URL>
<SEVERITY>AT_RISK</SEVERITY>
<DESCRIPTION>At risk period following server updates. </DESCRIPTION>
<INSERT_DATE>1295016360</INSERT_DATE>
<START_DATE>1295434800</START_DATE>
<END_DATE>1295449200</END_DATE>
<FORMATED_START_DATE>2011-01-19 11:00</FORMATED_START_DATE>
<FORMATED_END_DATE>2011-01-19 15:00</FORMATED_END_DATE>
</DOWNTIME>
```

```
-<SITE ID="405005" PRIMARY_KEY="123G0" NAME="GRIDOPS-GOCDB">
  <PRIMARY_KEY>123G0</PRIMARY_KEY>
  <SHORT_NAME>GRIDOPS-GOCDB</SHORT_NAME>
- <OFFICIAL_NAME>
  Grid Operations Center Database Portal and Web Services
</OFFICIAL_NAME>
- <SITE_DESCRIPTION>
```

V4 Production instance

## 2) Scoping: **&scope** and **&scope\_match**

- '**&scope**' parameter (optional)
  - PI methods that support scope parameter now allow a comma-sep list of values rather than a single 'EGI' or 'Local' val
  - Empty value can be used to ignore scope filtering '**&scope=**'
  - If '**&scope**' is not specified, 'EGI' is matched by default (preserves v4 behaviour).
- New '**&scope\_match**' parameter for methods supporting **&scope**:
  - '**&scope\_match=any**' matches entities that define any of the specified scopes
  - '**&scope\_match=all**' matches entities that define all of the specified scopes

Return sites that define **either** the EGI or PROJX scope tags:

[https://gocdb-test.esc.rl.ac.uk/v5\\_pi/public/?method=get\\_site&scope=EGI,PROJX&scope\\_match=any](https://gocdb-test.esc.rl.ac.uk/v5_pi/public/?method=get_site&scope=EGI,PROJX&scope_match=any)

Return sites that define **both** the EGI and PROJX scope tags:

[https://gocdb-test.esc.rl.ac.uk/v5\\_pi/public/?method=get\\_site&scope=EGI,PROJX&scope\\_match=all](https://gocdb-test.esc.rl.ac.uk/v5_pi/public/?method=get_site&scope=EGI,PROJX&scope_match=all)

Return sites that define the default configured scope tag ('EGI') in our case (scope tag not specified):

[https://gocdb-test.esc.rl.ac.uk/v5\\_pi/public/?method=get\\_site](https://gocdb-test.esc.rl.ac.uk/v5_pi/public/?method=get_site)

Return sites **irrespective** of their scope tags (empty 'scope='):

[https://gocdb-test.esc.rl.ac.uk/v5\\_pi/public/?method=get\\_site&scope=](https://gocdb-test.esc.rl.ac.uk/v5_pi/public/?method=get_site&scope=)

Return all DTs for Services that define **both** PROJX+EGI scope (scope references the Service scope):

[https://gocdb-test.esc.rl.ac.uk/v5\\_pi/public/?method=get\\_downtime&scope=PROJX,EGI&scope\\_match=all](https://gocdb-test.esc.rl.ac.uk/v5_pi/public/?method=get_downtime&scope=PROJX,EGI&scope_match=all)

### 3) Paging for get\_downtime PI method

- 'get\_downtime' PI method requires new '&page' parameter to limit the number of returned downtimes to a sensible limit (500 in each page, limit is configurable).
- Required to reduce server load and max query execution time (consider ~10,000 XML downtimes rendered in one page).
- To iterate all downtimes, re-issue query and increment 'page' value until an empty </results> element is returned indicating no more results e.g.
  - [https://goc.egi.eu/gocdbpi/public/?method=get\\_downtime&page=1](https://goc.egi.eu/gocdbpi/public/?method=get_downtime&page=1)
  - [https://goc.egi.eu/gocdbpi/public/?method=get\\_downtime&page=2](https://goc.egi.eu/gocdbpi/public/?method=get_downtime&page=2)
  - [https://goc.egi.eu/gocdbpi/public/?method=get\\_downtime&page=3](https://goc.egi.eu/gocdbpi/public/?method=get_downtime&page=3) and so on...
- Paging currently only implemented on 'get\_downtime' method.
- If suitable, would like to apply to other methods e.g. 'get\_downtime\_to\_broadcast' as/when required (maybe other methods in future).

## 4) get\_downtime 'all\_lastmonth' param

- Shortcut parameter for ATP who need to fetch all downtimes that started from one month ago in one query (i.e. no paging).
- '**&all\_lastmonth**' can be used to return all downtimes that have started or will start within 1month+1day from current date (inc. current and future DTs).
- Results are not paged - \*all\* DTs returned for this window. '&page' parameter can be excluded if specifying 'all\_lastmonth' e.g.

[https://gocdb-test.esc.rl.ac.uk/v5\\_pi/public/?method=get\\_downtime&all\\_lastmonth](https://gocdb-test.esc.rl.ac.uk/v5_pi/public/?method=get_downtime&all_lastmonth)

- **WARNING:** The number of results should normally fall within the page limit, but since paging is turned off, this query could potentially be expensive/problematic if there are many more DTs than the page limit. Without paging, this query can theoretically fail!
- So, paging should really be enforced, but lets see how we get on...