



GOCDB 5.7 Release

WLCG Information System Evolution Task
Force

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GOCDB 5.7

- Released yesterday
- Release notes:
<https://wiki.egi.eu/wiki/GOCDB/notifications#v5.7>
- Three main changes:
 - New attributes on service endpoints (Enables EGI ARGO service to remove dependency on BDII):
 - New Boolean 'monitored' flag, exposed through read API.
 - New Email field for adding contact details to service endpoints.
 - Optional cursor based paging on Read API:
 - Replaces the current OFFSET-based paging that is available on the 'get_downtime*' methods. Response to possible data inconsistency issues when offset-paging over real-time data.
 - Write API



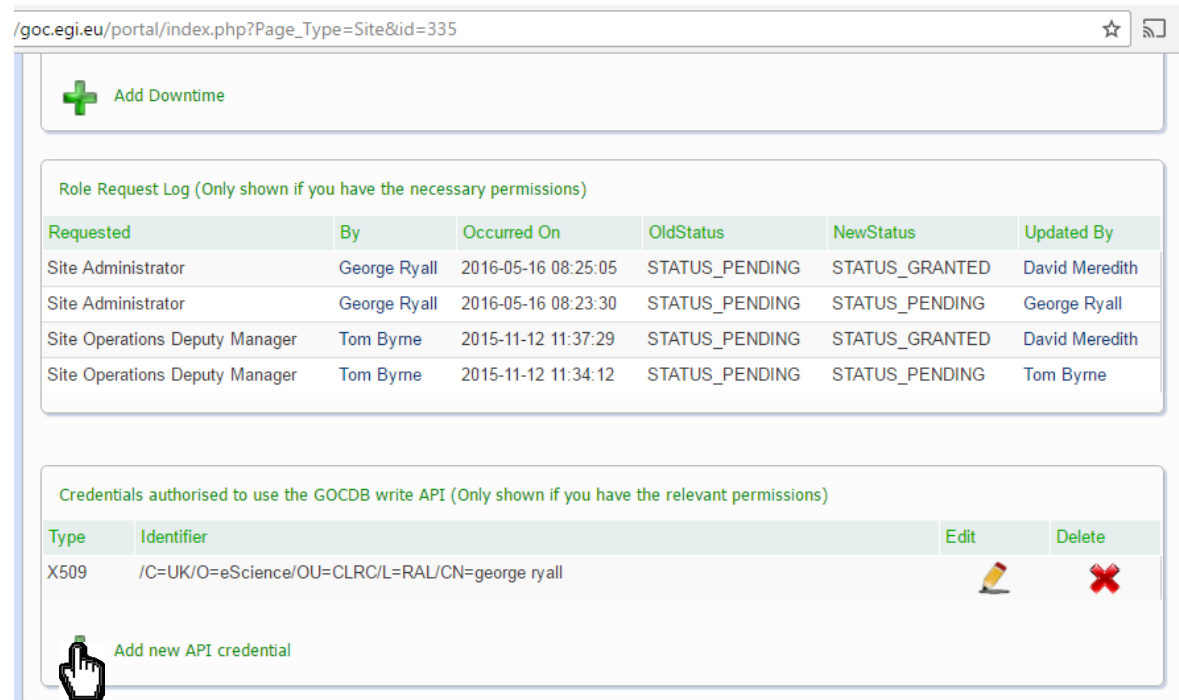
Write API

- Add/update/delete custom properties defined on Sites/Services/Endpoints using a REST API.
- Documentation:
https://wiki.egi.eu/wiki/GOCDB/Write_API/Technical_Documentation
- Following the release of 5.7, the write API will be running 'AT_RISK' for a few weeks while we closely monitor the extra loading. Should this load impact on the operation of the rest of GOCDB, we will shut down the write API in order to address the issue.
- Given the above, whilst we appreciate testing and feedback of the write-API , we would ask that you don't begin any new testing from the 23rd of December to the 3rd of January.



Write API Authorisation



- Authentication is by X509 certificate, a DN of a host allowed to make changes through the API can be associated with each site.
- This is then allowed to update custom properties for that site, its services, and service endpoints.
- This association is set through the web portal on the site details page.



The screenshot shows a web browser window with the URL `/goc.egi.eu/portal/index.php?Page_Type=Site&id=335`. The page contains several sections:

- Add Downtime**: A green plus icon and the text "Add Downtime".
- Role Request Log**: A table with the following data:

Requested	By	Occurred On	OldStatus	NewStatus	Updated By
Site Administrator	George Ryall	2016-05-16 08:25:05	STATUS_PENDING	STATUS_GRANTED	David Meredith
Site Administrator	George Ryall	2016-05-16 08:23:30	STATUS_PENDING	STATUS_PENDING	George Ryall
Site Operations Deputy Manager	Tom Byrne	2015-11-12 11:37:29	STATUS_PENDING	STATUS_GRANTED	David Meredith
Site Operations Deputy Manager	Tom Byrne	2015-11-12 11:34:12	STATUS_PENDING	STATUS_PENDING	Tom Byrne
- Credentials authorised to use the GOCDB write API**: A table with the following data:

Type	Identifier	Edit	Delete
X509	/C=UK/O=eScience/OU=CLRC/L=RAL/CN=george ryall		
- Add new API credential**: A green plus icon and the text "Add new API credential".



Some examples of using the write API

```
$ curl -i -k --cacert /cygdrive/c/George_local/GOCDB/certs/escience-root.pem --cert  
/cygdrive/c/George_local/personalCerts/2016.crt.pem --key /cygdrive/c/George_local/personalCerts/2016.key.pem -X  
POST https://goc.egi.eu/gocdbpi/V5/service/782/ExtensionProperties -d '{"TestProp":"someKey"}'  
HTTP/1.1 403 Forbidden  
Date: Thu, 08 Dec 2016 12:00:44 GMT  
Server: Apache/2.2.15 (Red Hat)  
X-Powered-By: PHP/5.3.3  
Content-Length: 248  
Connection: close  
Content-Type: application/json
```

```
{"Error":{"Code":403,"Message":"The X509 identifier \"VC=UKVO=eScienceVOU=CLRCVL=RALVCN=george ryall\" is not  
authorised to alter the RAL-LCG2 site\",\"API-  
Documentation\":\"https://wiki.egi.eu/wiki/GOCDBVWrite_API/Technical_Documentation\"}}
```

I try and edit a service which I am not authorised to, so I get a 403 error code and a JSON formatted error message explaining the error



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```
$ curl -i -k --cacert /cygdrive/c/George_local/GOCDB/certs/escience-root.pem --cert  
/cygdrive/c/George_local/personalCerts/2016.crt.pem --key /cygdrive/c/George_local/personalCerts/2016.key.pem -X  
POST https://goc.egi.eu/gocdbpi/V5/service/4180/ExtensionProperties -d '{"TestProp":"someValue"}'  
HTTP/1.1 204 No Content  
Date: Thu, 08 Dec 2016 12:02:28 GMT  
Server: Apache/2.2.15 (Red Hat)  
X-Powered-By: PHP/5.3.3  
Content-Length: 0  
Connection: close  
Content-Type:
```

- This time I am authorised to change this service.
- I add an extension property with the key ‘TestProp’ and value ‘someValue’ to the service with ID 4180.
- Currently the API returns no content, but it provides a 204 http response code on success.



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```
$ curl -i -k --cacert /cygdrive/c/George_local/GOCDB/certs/escience-root.pem --cert /cygdrive/c/George_local/personalCerts/2016.crt.pem --key /cygdrive/c/George_local/personalCerts/2016.key.pem -X POST https://goc.egi.eu/gocdbpi/V5/service/4180/ExtensionProperties -d '{"TestProp":"someDifferentValue","secondTestProp":"someOtherValue"}'
```

HTTP/1.1 409 Conflict
[...]
Content-Type: application/json
{\"Error\":{\"Code\":409,\"Message\":\"A property with name \\\"TestProp\\\" already exists for this object, no properties were added.\",\"API-Documentation\":\"https://wiki.egi.eu/wiki/GOCDB/Write_API/Technical_Documentation\"}}

```
$ curl -i -k --cacert /cygdrive/c/George_local/GOCDB/certs/escience-root.pem --cert /cygdrive/c/George_local/personalCerts/2016.crt.pem --key /cygdrive/c/George_local/personalCerts/2016.key.pem -X PUT https://goc.egi.eu/gocdbpi/V5/service/4180/ExtensionProperties -d '{"TestProp": "someDifferentValue","secondTestProp":"someOtherValue"}'
```

HTTP/1.1 204 No Content
[...]

- This is a demonstration that the behaviour of 'PUT' and 'POST' requests is different.
- POST will not override existing properties, PUT will



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```
$ curl -i -k --cacert /cygdrive/c/George_local/GOCDB/certs/escience-root.pem --cert  
/cygdrive/c/George_local/personalCerts/2016.crt.pem --key /cygdrive/c/George_local/personalCerts/2016.key.pem -X  
DELETE https://goc.egi.eu/gocdbpi/V5/service/4180/ExtensionProperties  
HTTP/1.1 204 No Content  
Date: Thu, 08 Dec 2016 12:03:28 GMT  
Server: Apache/2.2.15 (Red Hat)  
X-Powered-By: PHP/5.3.3  
Content-Length: 0  
Connection: close  
Content-Type:
```

- Here we delete all the extension properties for the service with id 4180
- Properties can also be deleted individually or several at a time by specifying keys



Some examples of using the write API

```
$ curl -i -k --cacert /cygdrive/c/George_local/GOCDB/certs/escience-root.pem --cert /cygdrive/c/George_local/personalCerts/2016.crt.pem --key /cygdrive/c/George_local/personalCerts/2016.key.pem -X PUT https://goc.egi.eu/gocdbpi/V5/endpoint/6313/ExtensionProperties/TestProp -d '{"value":"SomeValue"}'  
HTTP/1.1 204 No Content  
[...]
```

```
$ curl -i -k --cacert /cygdrive/c/George_local/GOCDB/certs/escience-root.pem --cert /cygdrive/c/George_local/personalCerts/2016.crt.pem --key /cygdrive/c/George_local/personalCerts/2016.key.pem -X DELETE https://goc.egi.eu/gocdbpi/V5/endpoint/6313/ExtensionProperties/TestProp  
HTTP/1.1 204 No Content  
[...]
```

- Finally I wanted to show that properties can also be added and deleted one at a time



Question?



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