**BATCH JOB FAILING ISSUE**

* Check the JOB table.  Jobs show started, but no status and no end run date.

In case of any batch job failure, we need to check whether we have got any entry in Job table. You can find the query to run on table here

<https://wiki.swacorp.com/twiki/bin/view/Tech/OqsSupport#OQS_HANDY_SQL>

**1) Use this sql to view Job table data for post migration batch job execution.**

-- Show me the lastest batch job submitted, current status, job description, and elapsed time.

-- Do this first to see elapsed time in minutes and seconds.

alter session set NLS\_DATE\_FORMAT='yyyy-mm-dd HH24:MI:SS';

-- Do this second.

select j.job\_id,decode(j.job\_definition\_id, 10, 'SimLog', 11, 'SimLog','OQS') as "Application",jd.job\_description, js.job\_status\_description,j.status\_desc\_text,j.start\_run\_date,j.end\_run\_date, to\_timestamp (j.end\_run\_date,'yyyy-mm-dd HH24:MI:SS') - TO\_TIMESTAMP(j.start\_run\_date,'yyyy-mm-dd HH24:MI:SS') as "Elapsed Time", j.submitted\_by\_id,j.last\_update\_date from job j, job\_status\_type js, job\_definition jd where j.job\_status\_type\_id = js.job\_status\_type\_id and j.job\_definition\_id = jd.job\_definition\_id and j.start\_run\_date = (select max(start\_run\_date) from job);

-- The results should look like this.

handy_job_table_sql_1.png

**2) Use this sql to view Job table data for OQS RK and** [**SimLog**](https://wiki.swacorp.com/twiki/bin/edit/Tech/SimLog?topicparent=Tech.OqsSupport;nowysiwyg=0) **batch jobs.**

-- Show me the last time these three batch jobs were submitted, current status, job description, and elapsed time.

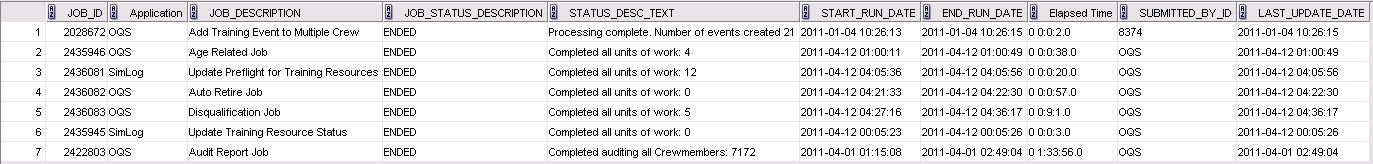
-- Do this first to see elapsed time in minutes and seconds.

alter session set NLS\_DATE\_FORMAT='yyyy-mm-dd HH24:MI:SS';

-- Do this second.

select j.job\_id,decode(j.job\_definition\_id, 10, 'SimLog', 11, 'SimLog','OQS') as "Application",jd.job\_description, js.job\_status\_description,j.status\_desc\_text,j.start\_run\_date,j.end\_run\_date, to\_timestamp (j.end\_run\_date,'yyyy-mm-dd HH24:MI:SS') - TO\_TIMESTAMP(j.start\_run\_date,'yyyy-mm-dd HH24:MI:SS') as "Elapsed Time", j.submitted\_by\_id,j.last\_update\_date from job j, job\_status\_type js, job\_definition jd where j.job\_status\_type\_id = js.job\_status\_type\_id and j.job\_definition\_id = jd.job\_definition\_id and ((j.start\_run\_date = (select max(start\_run\_date) from job where job\_definition\_id = 1) and j.job\_definition\_id = 1)or(j.start\_run\_date = (select max(start\_run\_date) from job where job\_definition\_id = 2) and j.job\_definition\_id = 2) or (j.start\_run\_date = (select max(start\_run\_date) from job where job\_definition\_id = 3) and j.job\_definition\_id = 3) or(j.start\_run\_date = (select max(start\_run\_date) from job where job\_definition\_id = 10) and j.job\_definition\_id = 10) or (j.start\_run\_date = (select max(start\_run\_date) from job where job\_definition\_id = 11) and j.job\_definition\_id = 11) or (j.start\_run\_date = (select max(start\_run\_date) from job where job\_definition\_id = 50) and j.job\_definition\_id = 50) or (j.start\_run\_date = (select max(start\_run\_date) from job where job\_definition\_id = 100) and j.job\_definition\_id = 100));

-- The results should look like this.



|  |  |
| --- | --- |
|  |  |

* Checked log files.  No exceptions found.

**Websphere Log Files (xlpeip03/04 on Prod)**

The following OQS log files exist at the Websphere level. You can use these files to research issues like which user logged into OQS at what time etc. For OQS these files are not monitored by IT Ops.

/opt/waslogs/OQSEA/native\_stderr.log

/opt/waslogs/OQSEA/native\_stdout.log

/opt/waslogs/OQSEA/SystemErr.log

/opt/waslogs/OQSEA/SystemOut.log

**OQS Mule Log Files ( xlpsvc13/14 on Prod)**

The following OQS Log files exist the Mule framework level. To see activity at the back end (i.e. Mule Framework) level, you can use these log files. The files that end with .itops.log extension are monitored by ITOps whereas the files that end with server.log are not.

/opt/oqs/logs/<OQS Release No>/oqs.xspsvc21.itops.log

/opt/oqs/logs/<OQS Release No>/oqs.xpssvc22.itops.log

/opt/oqs/logs/OperationsQualificationSystem-prod/<OQS Release No>/xspsvc21-server.log

/opt/oqs/logs/OperationsQualificationSystem-prod/<OQS Release No>/xspsvc22-server.log

**CSS Log Files (xlpsvc05/06 on Prod)**

These are the log files for Mule Framework based CSS Crewmember Qual and Training Message services that OQS uses. These files exist outside the OQS Team's jurisdiction since CSS Team is the actually owner of these files. OQS Team should use these files only to research any CSS related issues.

/opt/css\_logs/CrewMemberQualificationService/<CSS Crewmember Qual Release No>/service.xlpsvc05.log

/opt/css\_logs/CrewMemberQualificationService/<CSS Crewmember Qual Release No>/service.xlpsvc06.log

/opt/css\_logs/TrainingMessageService/<CSS Training Msg Release No>/service.xlpsvc05.log

/opt/css\_logs/TrainingMessageService/<CSS Training Msg Release No>/service.xlpsvc06.log

**Mule Agent Log Files ( xlpsvc13/14 on Prod)**

At the Mule Framework level one file per server exists that keeps track of all services that reside on that server. Every time a mule service is started or stopped, a medium ticket log entry is generated in the given log file which in the case OQS is Medium page since the SLA for OQS states that a medium ticket should generate a page for OQS on call. In other words, if a server is restarted unexpectedly causing OQS mule service (among all other services that come back up automatically due to the reboot) to come, a medium page will be automatically generated. If the service is started or stopped successfully, it is a medium page but if it cannot start or stop and the attempt to do such fails, it is a high ticket that is generated. OQS Team should use these log files to see when the last time was a service was stopped/started.

/opt/esb/mgmt/agent/appstate/CorbaAgent\_xspsvc21\_AppStateChange.log

/opt/esb/mgmt/agent/appstate/CorbaAgent\_xspsvc22\_AppStateChange.log

* Checked services.  All show to be up.

This was the second step he took, in this case, he want to understand the services status.

<https://swaservices.swacorp.com/SWAServicesConsole/>

* Successfully logged in to both OQS RK and OQS SimLog.

                                Normal check on Application level availability

* Checked server memory usage on both xspsvc21 & 22.  Normal usage numbers with peaks and valleys.

                              Check to make it clear that Batch Jobs are having enough space to run, please understand any Service consuming about 1 GB is critical and about to die.

To get the process Id by name

**ps –ef | grep OperationsQ**

to see the total memory used by a process

**prstat –p <Process Id>**

to see size for all process

**prstat  –s size**

* (Batch jobs continued to abend.)

                    In this case, each job was failing one by one. This makes things bad and urgent to get it resolved on urgent basis.

* Checked queue consumers via JMS Viewer and found the consumer numbers to be 0 for the queues we care about.

                             JMS viewer is the place where we can check queues attached to service (1.12). and for OQS, we need to check that we should have listeners in place

<https://jmsviewer.swacorp.com/JmsViewerWeb5/index.jsp>

Here are the OQS queues/Topics you’re interested in and their Consumer numbers.

Desired Environment: **PROD-9711-16000-36000-17000-37000**

**Consumers / Subscribers to the number listed in the table below.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| [**\*Connection Factory\***](https://wiki.swacorp.com/twiki/bin/view/Tech/OqsVerifyQueueConsumers?sortcol=0;table=3;up=0#sorted_table) | [**\*App\***](https://wiki.swacorp.com/twiki/bin/view/Tech/OqsVerifyQueueConsumers?sortcol=1;table=3;up=0#sorted_table) | [**\*Queue / Topic Name\***](https://wiki.swacorp.com/twiki/bin/view/Tech/OqsVerifyQueueConsumers?sortcol=2;table=3;up=0#sorted_table) | [**Queue / Topic**](https://wiki.swacorp.com/twiki/bin/view/Tech/OqsVerifyQueueConsumers?sortcol=3;table=3;up=0#sorted_table) | [**\*Number of Consumers / Subscribers Expected\***](https://wiki.swacorp.com/twiki/bin/view/Tech/OqsVerifyQueueConsumers?sortcol=4;table=3;up=0#sorted_table) |
| SwaOqsQcf (Queue) | RK | OQSJobRequest | OPS.OQS.ASYNCH\_REQUEST.QUEUE | 2 |
|  |  | OptRequest | CTP.OQS.OPTIMIZATION.DATA.REQUEST | 2 |
|  |  | OptResp | CTP.OQS.OPTIMIZATION.DATA.RESPONSE | 0 |
|  |  | SimSchedOptResp | CTP.OQS.SIM\_SCHEDULE.OPTIMIZATION.RESPONSE | 2 |
|  |  | SimSchedOptReq | COMMON.OPTIMIZATION.REQUEST | 1 |
|  |  |  |  |  |
|  | SimLog | OQSSimLogJobRequest | OPS.OQS\_SIMLOG.ASYNC\_REQUEST.QUEUE | 2 |
|  |  |  |  |  |
| SwaTeseractQcf (Queue) | RK | TeseractReq | PEOPLE\_PAYROLL.TESERACT.PASSPORT\_DATA\_OQS.QUEUE | 2 |
|  |  | SAPReq | HCM.OQS.FLIGHTOPS\_PASSPORT.QUEUE | 2 |
|  |  |  |  |  |
| SwaOqsTcf (Topic) | SimLog |  | EM.SIMLOGRESOURCE.STATUS.UPDATES | 6 |

* Checked all applicable async services via JMX and all shows to be running.  Tried to stop and restart via JMX, but the client did not respond.
* xspsvc21
* Stopped and restarted OQS RK and OQS SimLog (Current Versions) on both xspsvc21 & 22 via the Services Framework Management Console.

                             Last and hard step, he needed to take is 112 and 2.0 to be restarted

* Checked queue consumers again and did see the expected consumer numbers.
* Manually ran the abended batch jobs.

                         To run batch jobs manually in PROD and SAT please check following place

To run a batch job in PROD, you must retrieve the oqsadmin password from the Cyber Ark vault by doing the following:

* Go to the [Cyber-Ark Privileged Identity Management](https://swapv/PasswordVault/logon.aspx?ReturnUrl=/PasswordVault/default.aspx) page.
* Login using you SWA id and password.
* Enter 'oqsadmin' in the Search field and click Go. The results should list oqsadmin.
* Click on the "Connect with SSH" icon shown in the column to the right of the Password column. You'll be prompted to enter a reason for viewing this password. An IM, SR, or CR should be referenced in the reason.
* Enter the reason text and click 'OK'.
* A new SSH session will open and you will be connected to **xspbat01** as oqsadmin. Be default, you will be in the /opt/oqs/home folder.
* Cd to OQSBatch to run an OQS batch job or OQSSimLogBatch to run a SimLog batch job.
* See the table below for the specific batch job command.
* To run the autoretire batch job:  
  ./batchclient.sh [PROD](https://wiki.swacorp.com/twiki/bin/view/Tech/PROD) [AutoRetireBatchClient](https://wiki.swacorp.com/twiki/bin/edit/Tech/AutoRetireBatchClient?topicparent=Tech.OqsBuildDeploy;nowysiwyg=0)

 To run the disqual batch job:  
 ./batchclient.sh [PROD](https://wiki.swacorp.com/twiki/bin/view/Tech/PROD) [DisqualBatchClient](https://wiki.swacorp.com/twiki/bin/edit/Tech/DisqualBatchClient?topicparent=Tech.OqsBuildDeploy;nowysiwyg=0)

 To run the agerelated batch job:  
 ./batchclient.sh [PROD](https://wiki.swacorp.com/twiki/bin/view/Tech/PROD) [AgeRelatedBatchClient](https://wiki.swacorp.com/twiki/bin/edit/Tech/AgeRelatedBatchClient?topicparent=Tech.OqsBuildDeploy;nowysiwyg=0)

For DEV and ITEST, following are the instructions on running the batch jobs:

* Log into one of the Framework Servers for the environment in which we want to run the batch jobs (For Example: xsdsvc06 for DEV).
* copy OQSBatch (for [RecordKeeping](https://wiki.swacorp.com/twiki/bin/edit/Tech/RecordKeeping?topicparent=Tech.OqsBatchJobs;nowysiwyg=0) application) or [OQSSimLogBatch](https://wiki.swacorp.com/twiki/bin/edit/Tech/OQSSimLogBatch?topicparent=Tech.OqsBatchJobs;nowysiwyg=0) (for [SimLog](https://wiki.swacorp.com/twiki/bin/edit/Tech/SimLog?topicparent=Tech.OqsBatchJobs;nowysiwyg=0) application) folder from staging (/opt/stagin/oqs/oqsea\_r<Release>/<Build>/buildOutput/OQSBatch) to any temporary folder.
* For example: cp -r /opt/stagin/oqs/oqsea\_r1.17.0/OQSEA\_R1.17.0\_DEV15/buildOutput/OQSBatch /tmp
* Run the following commands:

1. cd /tmp/OQSBatch
2. unzip \*.zip
3. chmod 777 \*

* Open batchclient.sh file and change "OQS\_DIR" to point to your current directory (for example: /tmp/OQSBatch instead of /opt/oqs/home/OQSBatch)
* To run a batch job, login to the server for the target environment, cd to the target directory, then submit the appropriate command. See the table below for those details:

| **App** | **Env** | **Server** | **Directory** | **Batch Job** | **Command** |
| --- | --- | --- | --- | --- | --- |
| OQS RK | DEV | xldeip03 | your directory | Auto Retire | ./batchclient.sh DEV AutoRetireBatchClient |
|  |  |  |  | Disqual | ./batchclient.sh DEV DisqualBatchClient |
|  |  |  |  | Age Related | ./batchclient.sh DEV AgeRelatedBatchClient |
|  |  |  |  |  |  |
| OQS RK | SAT | xsqsvc01 | /opt/oqs/home/OQSBatch | Auto Retire | ./batchclient.sh SAT AutoRetireBatchClient |
|  |  |  |  | Disqual | ./batchclient.sh SAT DisqualBatchClient |
|  |  |  |  | Age Related | ./batchclient.sh SAT AgeRelatedBatchClient |
|  |  |  |  |  |  |
| OQS RK | Prod | xspbat01, xspbat02 | /opt/oqs/home/OQSBatch | Auto Retire | ./batchclient.sh PROD AutoRetireBatchClient |
|  |  |  |  | Disqual | ./batchclient.sh PROD DisqualBatchClient |
|  |  |  |  | Age Related | ./batchclient.sh PROD AgeRelatedBatchClient |
|  |  |  |  |  |  |
| OQS SimLog | DEV | xldeip03 | your directory | Update Resource Status | ./batchclient.sh DEV UpdateResourceStatusBatchClient |
|  |  |  |  | Update Preflight | ./batchclient.sh DEV UpdatePreflightBatchClient |
|  |  |  |  |  |  |
| OQS SimLog | SAT | xsqsvc01 | /opt/oqs/home/OQSSimLogBatch | Update Resource Status | ./batchclient.sh SAT UpdateResourceStatusBatchClient |
|  |  |  |  | Update Preflight | ./batchclient.sh SAT UpdatePreflightBatchClient |
|  |  |  |  |  |  |
| OQS SimLog | Prod | xspbat01, xspbat02 | /opt/oqs/home/OQSSimLogBatch | Update Resource Status | ./batchclient.sh PROD UpdateResourceStatusBatchClient |
|  |  |  |  | Update Preflight | ./batchclient.sh PROD UpdatePreflightBatchClient |

<https://wiki.swacorp.com/twiki/bin/view/Tech/OqsBatchJobs>

* Verify the success via the JOB table and email messages.

**OQS QA---**

We are using SAT\_HANGAR3

(xsqsvc07/08)

SPT using the 1.10.0 service in the past.

Currently it is using 1.13.0-B33

Direct link--<http://xlqeip03.swacorp.com:9134/OQS/login.do?dept=01>