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Scenario Setup

System Console

1. Stop Archive Process

Database Server

1. Modify a previous job run's RUN_STATUS to be -1
2. Modify a previous job run's individual batch to have RUN_STATUS=-1 and WHEN_COMPLETED=NULL

Problem Statement

Issue is reported where Archiving is failing. But what does this mean?

1. Are the Archive Process and Instance both running?
2. Will an Archive Job start but fail shortly after?
3. Can an Archive Job be created and saved?

Whenever the answer to #2 is **Yes**, then #3 will be **No.** Per the Administration Guide, "If a job fails, no other scheduled job can run in the system till the failure of the job is resolved and the failed job is restarted manually." Creating a new Archive Job won't work - the failed job run must be addressed and allowed to complete.

Why Does the Job Fail?

There isn't much that can be done from the UI. You can try DEBUG level logs, but there are typically a lot of benign exceptions, errors, and failures that are irrelevant to the problem at hand. It's off to the eGActiveDB for this scenario.

1. Start by finding the JOB_ID from the Job table.

```
select * from egpl_arch_job
```

Results | Messages

	JOB_ID	JOB_NAME	DESCRIPTION	DEPARTMENT_ID	STAT...	LAST_RUN_STATUS	LAST_RUN_TIME	NEXT_RUN_TIME	NEXT_RUN_END_TIME	WHO_CREAT
1	1000	Archive Data Older than 2 months	Archive Email and Chat Older than 8 weeks	999	0	0	2011-02-11 21:32:42.000	2011-02-11 03:00:00.000	2011-02-11 07:00:00.000	1
2	1001	DO_NOT_USE	Do not make this job active .You can purge the j...	999	0	-1	2011-06-07 19:46:57.000	2011-06-08 03:00:00.000	2011-06-08 07:00:00.000	1
3	1002	New archive job_#DELETED_1002		999	1	0	NULL	2011-05-22 06:00:00.000	2011-05-22 18:00:00.000	1
4	1003	New_Archive_#DELETED_1003		999	1	0	NULL	2011-06-06 22:10:00.000	2011-06-06 22:20:00.000	1
5	1004	Activities Older Than 8 Months	No queues selected in criteria means ALL queues	999	1	0	2011-06-08 02:00:27.000	2011-06-09 02:00:00.000	2011-06-09 05:59:59.000	1

2. Next, determine which JOB_RUN_ID corresponds to the failed Job Run.

```
select * from egpl_arch_job_run where job_id=<JOB_ID_FROM_1>
```

Results | Messages

	JOB_RUN_ID	JOB_ID	DEPARTMENT_ID	RUN_STAT...	WHEN_STARTED	WHEN_COMPLETED	JOB_RUN_COMMENT	PURGED_FLAG	WHEN_PURGED	WHO_PURGED	RUN_BY
1	1001	1001	999	0	2011-02-12 03:00:11.000	2011-02-13 02:33:00.000	Job run completed after restart.	n	NULL	-1	12
2	1002	1001	999	0	2011-02-14 03:00:20.000	2011-02-14 07:06:08.000	Job Run Schedule ended.	n	NULL	-1	12
3	1003	1001	999	-1	2011-02-15 03:00:20.000	2011-06-07 19:46:57.000	Job run completed after restart.	n	NULL	-1	12

Notice the JOB_RUN with RUN_STATUS=-1. RUN_STATUS should always be 0 when a job is not running. We will focus on this JOB_RUN_ID.

3. List out the Batches from that particular Job Run.

```
select * from egpl_arch_job_run_batch where job_run_id=<JOB_RUN_ID_FROM_2>
```

Results | Messages

	BATCH_ID	JOB_RUN_ID	RUN_STAT...	WHEN_STARTED	WHEN_COMPLETED
1	1023	1003	0	2011-02-15 03:00:20.000	2011-02-15 03:00:25.000
2	1024	1003	0	2011-02-15 03:00:26.000	2011-02-15 03:19:39.000
3	1025	1003	0	2011-02-15 03:19:39.000	2011-02-15 03:38:46.000
4	1026	1003	0	2011-02-15 03:38:46.000	2011-02-15 03:56:24.000
5	1027	1003	0	2011-02-15 03:56:24.000	2011-02-15 04:13:35.000
6	1028	1003	0	2011-02-15 04:13:35.000	2011-02-15 04:26:51.000
7	1029	1003	-1	2011-02-15 04:26:51.000	NULL
8	1030	1003	0	2011-02-15 04:49:32.000	2011-02-15 05:03:36.000
9	1031	1003	0	2011-02-15 05:03:36.000	2011-02-15 05:17:16.000
10	1032	1003	0	2011-02-15 05:17:16.000	2011-02-15 05:34:17.000
11	1033	1003	0	2011-02-15 05:34:18.000	2011-02-15 05:49:00.000
12	1034	1003	0	2011-02-15 05:49:00.000	2011-02-15 06:04:41.000
13	1035	1003	0	2011-02-15 06:04:41.000	NULL
14	1036	1003	0	2011-02-15 14:06:52.000	NULL
15	1037	1003	0	2011-02-15 14:10:25.000	NULL
16	1038	1003	0	2011-02-15 14:17:28.000	NULL
17	1039	1003	0	2011-02-15 14:25:34.000	NULL
18	1040	1003	0	2011-02-15 15:01:38.000	NULL
19	1041	1003	0	2011-02-15 15:30:12.000	NULL

Query executed successfully.

Notice that most of the batches have a value of NULL for WHEN_COMPLETED, and one in particular has a RUN_STATUS of -1. RUN_STATUS should always be 0 when a job is not running.

1. RUN_STATUS 1 = RUNNING
2. RUN_STATUS -1 = FAILED
3. RUN_STATUS 0 = COMPLETED

4. Dig deeper into the failed batch's steps.

```
select * from egpl_arch_batch_step where batch_id=<BATCH_ID_FROM_3>
```

Results | Messages

	BATCH_ID	STEP_ID	RUN_STAT...	WHEN_STARTED	WHEN_COMPLETED
1	1029	7010010	0	2011-02-15 04:26:51.140	2011-02-15 04:27:13.000
2	1029	10010010	0	2011-02-15 04:27:13.000	2011-02-15 04:27:24.360
3	1029	10010020	0	2011-02-15 04:27:24.373	2011-02-15 04:27:24.373
4	1029	10010030	0	2011-02-15 04:27:24.390	2011-02-15 04:28:40.783
5	1029	10010040	0	2011-02-15 04:28:40.800	2011-02-15 04:28:41.860
6	1029	10020010	0	2011-02-15 04:28:41.877	2011-02-15 04:28:53.377
7	1029	10020020	0	2011-02-15 04:28:53.393	2011-02-15 04:28:53.550
8	1029	10020030	0	2011-02-15 04:28:53.550	2011-02-15 04:29:13.940
9	1029	10020040	0	2011-02-15 04:29:13.957	2011-02-15 04:29:15.313
10	1029	10020050	0	2011-02-15 04:29:15.330	2011-02-15 04:29:15.330
11	1029	10030010	0	2011-02-15 04:29:15.347	2011-02-15 04:29:28.393
12	1029	10030020	0	2011-02-15 04:29:28.410	2011-02-15 04:31:34.820
13	1029	10030030	0	2011-02-15 04:39:20.830	2011-02-15 04:40:37.490
14	1029	10030040	0	2011-02-15 04:40:37.503	2011-02-15 04:40:47.380
15	1029	10030050	0	2011-02-15 04:40:47.380	2011-02-15 04:40:51.910
16	1029	10030060	0	2011-02-15 04:40:51.927	2011-02-15 04:40:52.270
17	1029	10040010	0	2011-02-15 04:40:52.287	2011-02-15 04:40:52.287
18	1029	10040020	0	2011-02-15 04:40:52.287	2011-02-15 04:40:52.300
19	1029	10050010	0	2011-02-15 04:40:52.317	2011-02-15 04:40:52.317
20	1029	10050020	0	2011-02-15 04:40:52.317	2011-02-15 04:40:52.317
21	1029	10050030	0	2011-02-15 04:40:52.333	2011-02-15 04:40:52.333
22	1029	10060010	0	2011-02-15 04:40:52.350	2011-02-15 04:40:52.957
23	1029	10060020	0	2011-02-15 04:40:52.973	2011-02-15 04:40:56.833
24	1029	10060030	0	2011-02-15 04:40:56.850	2011-02-15 04:40:57.443
25	1029	10060040	0	2011-02-15 04:40:57.457	2011-02-15 04:40:57.457
26	1029	29941010	0	2011-02-15 04:40:57.473	2011-02-15 04:40:57.473
27	1029	29941020	0	2011-02-15 04:40:57.473	2011-02-15 04:40:57.660

All of the Steps in the Batch have RUN_STATUS=0, meaning they all completed successfully. For some reason, the Batch did not reflect this, which caused the whole Job Run to fail.

How do we make the job Complete?

We can manually update the Batch and Job Run to take care of this. We must also purge the list of objects tied to that problematic job run.

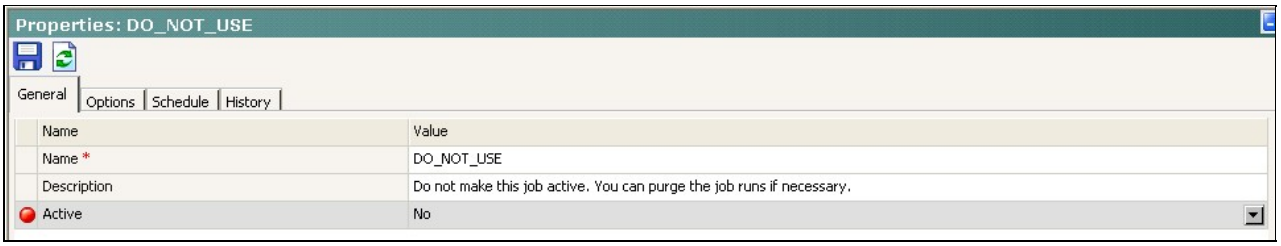
```
update egpl_arch_job_run_batch set run_status=0 where batch_id=<BATCH_ID_FROM_3> and job_run_id=<J
update egpl_arch_job_run set run_status=0 where job_run_id=<JOB_RUN_ID_FROM_2> and job_id=<JOB_ID_
delete from egpl_arch_object_list where job_run_id=<JOB_RUN_ID_FROM_2>
```

Cycle the Archive Process and Instance, then confirm that the job run is listed as "Archive Completed"

Properties: DO_NOT_USE

General | Options | Schedule | History

Run By	Start Time	End Time	Status	Cases Arch...	Activities A...
system	02/11/2011 08:00 PM	02/12/2011 07:33 PM	Archive completed	4996	12527
system	02/13/2011 08:00 PM	02/14/2011 12:06 AM	Archive completed	88509	251754
system	02/14/2011 08:00 PM	06/07/2011 01:46 PM	Archive completed	58662	144832

Resolution

There are clearly problems with the job for it to get into this state, and we should not take another chance with it. It is best to set this job as Not Active, and create a new job to take its place.