Deleting Orphaned Database Items

Customers who deleted echoes in earlier versions of EchoSystem (prior to 5.3) may have orphaned items in their database. Earlier versions of EchoSystem primarily deleted echoes from the Presentation table, but this left related data in other tables orphaned. Beginning with EchoSystem 5.3, echo deletion comprehensively deletes all presentation *and* related table data.

Customers currently running 5.2 or who have upgraded to 5.3 can remove this legacy orphaned data using a database cleanup script provided by Echo360.

This document contains instructions for determining if you need to run the database cleanup script, and then for configuring the script as a scheduled job to run when system usage is low.

IMPORTANT: This process has been tested and can be run against a 5.2 or 5.3 ESS Database. Do NOT run these scripts if you are running EchoSystem v5.1 or earlier.

Before configuring the script to run, check to see if you need to run the script at all, and if you do, for how long the script must run to complete the deletion task.

Use the following script to query the database. The figure returned indicates how many hours it will take to complete the task of removing orphaned database items.

```
SELECT count(distinct(c.ID))/60 as Hours from CAPTURE c

left join PRESENTATION p on c.id=p.capture_id

left join PROCESSING_TASK pt on c.id=pt.CAPTURE_ID

where p.id is null and pt.id is not null and STATUS_ID in (select ID
from CAPTURE_STATUS where NAME_KEY  like '%complete%')
```

If the query returns a zero (0), you do not need to run the deletion script. Otherwise you need to plan to run the script for the number of hours returned by this query.

The scheduled job that runs the deletion script is configured by default to run for 3 hours, from 12AM to 3AM every day until disabled. You can change both the duration and the launch time of the job.

Use the appropriate instructions provided for the database you are running:

- MSSQL (Microsoft SQL Server)
- MySQL

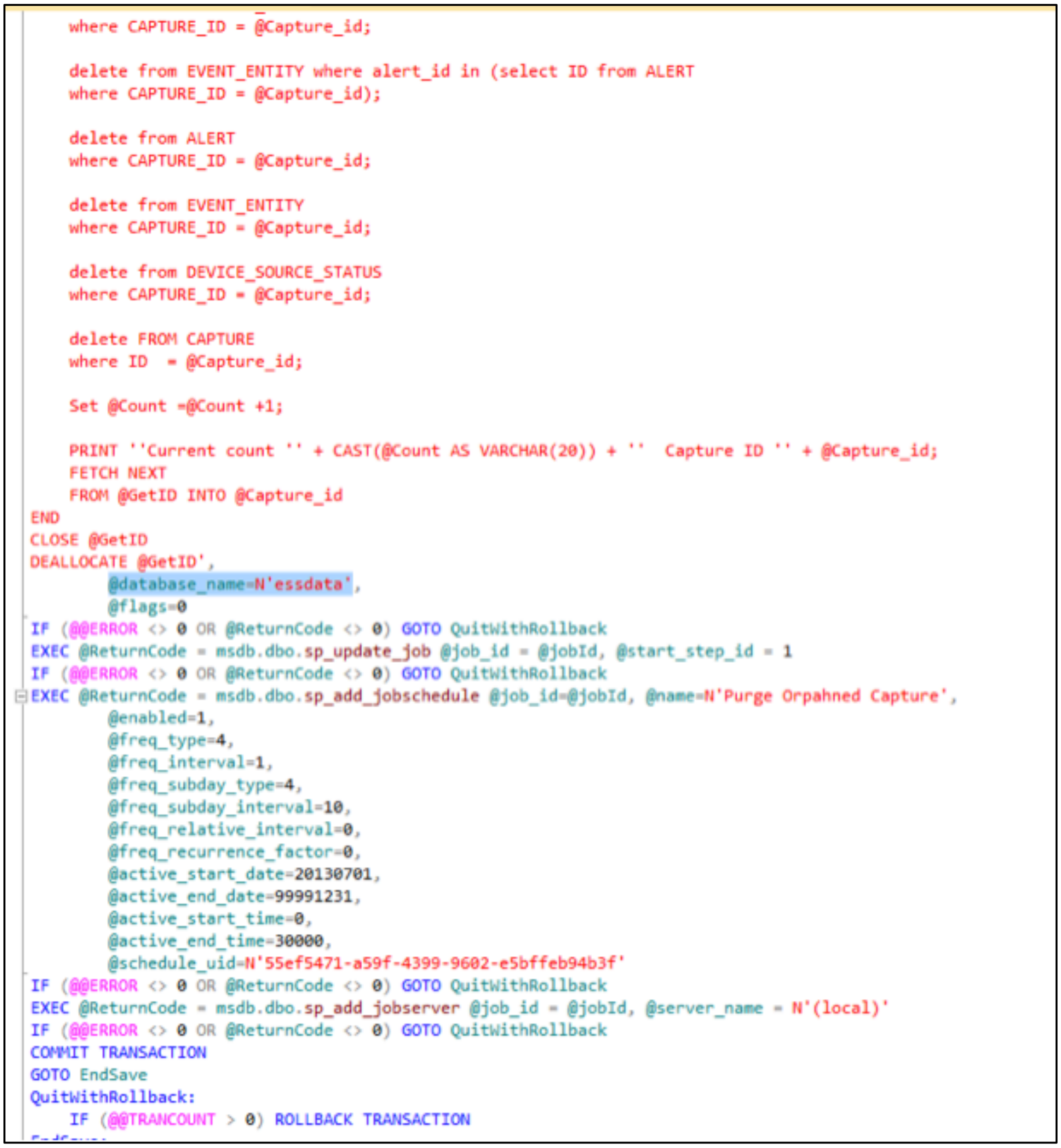
As always, you can contact *Customer Support* for assistance if needed.

MSSQL (Microsoft SQL Server) Instructions

Before you begin, download the script to your server. It is titled "Purge_Orphaned_Capture_Job_MSSQL.sql".

You will need to modify some of the entries using the following steps.

1. Open the downloaded script in SQL Server Management Studio. To do so, navigate to **File** > **Open** > **File** then select the Purge_Orphaned_Capture_Job_MSSQL.sql file.
2. Modify the database name in the script to match your database name. Search for **@database_name=N'essdata'** highlighted in the below figure, and replace 'essdata' with your database name.



```
    where CAPTURE_ID = @Capture_id;

    delete from EVENT_ENTITY where alert_id in (select ID from ALERT
    where CAPTURE_ID = @Capture_id);

    delete from ALERT
    where CAPTURE_ID = @Capture_id;

    delete from EVENT_ENTITY
    where CAPTURE_ID = @Capture_id;

    delete from DEVICE_SOURCE_STATUS
    where CAPTURE_ID = @Capture_id;

    delete FROM CAPTURE
    where ID  = @Capture_id;

    Set @Count =@Count +1;

    PRINT ''Current count '' + CAST(@Count AS VARCHAR(20)) + ''  Capture ID '' + @Capture_id;
    FETCH NEXT
    FROM @GetID INTO @Capture_id
END
CLOSE @GetID
DEALLOCATE @GetID',
        @database_name=N'essdata',
        @flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
EXEC @ReturnCode = msdb.dbo.sp_update_job @job_id = @jobId, @start_step_id = 1
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
EXEC @ReturnCode = msdb.dbo.sp_add_jobschedule @job_id=@jobId, @name=N'Purge Orpahned Capture',
        @enabled=1,
        @freq_type=4,
        @freq_interval=1,
        @freq_subday_type=4,
        @freq_subday_interval=10,
        @freq_relative_interval=0,
        @freq_recurrence_factor=0,
        @active_start_date=20130701,
        @active_end_date=99991231,
        @active_start_time=0,
        @active_end_time=30000,
        @schedule_uid=N'55ef5471-a59f-4399-9602-e5bffeb94b3f'
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
EXEC @ReturnCode = msdb.dbo.sp_add_jobserver @job_id = @jobId, @server_name = N'(local)'
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
COMMIT TRANSACTION
GOTO EndSave
QuitWithRollback:
    IF (@@TRANCOUNT > 0) ROLLBACK TRANSACTION
```

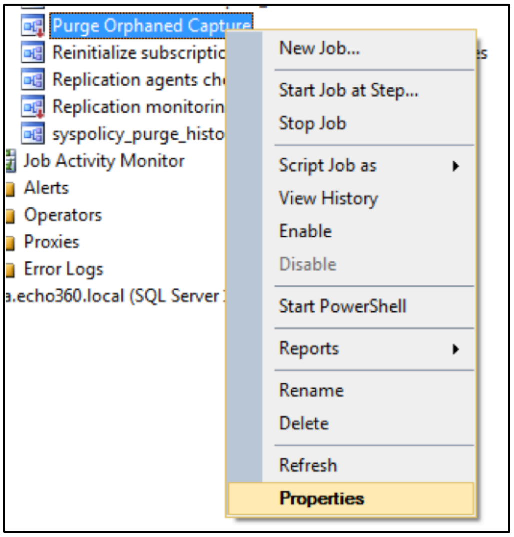
3. **Save** the changes.
4. **Execute** the saved script. This creates the scheduled job for deleting orphaned items.

When finished, a Purge Orphaned Capture job should appear in the Jobs tab under SQL Server Agent in the left side of the window. If no changes are made to the scheduled job, it will kick off at 12AM every night and run for three hours until disabled.

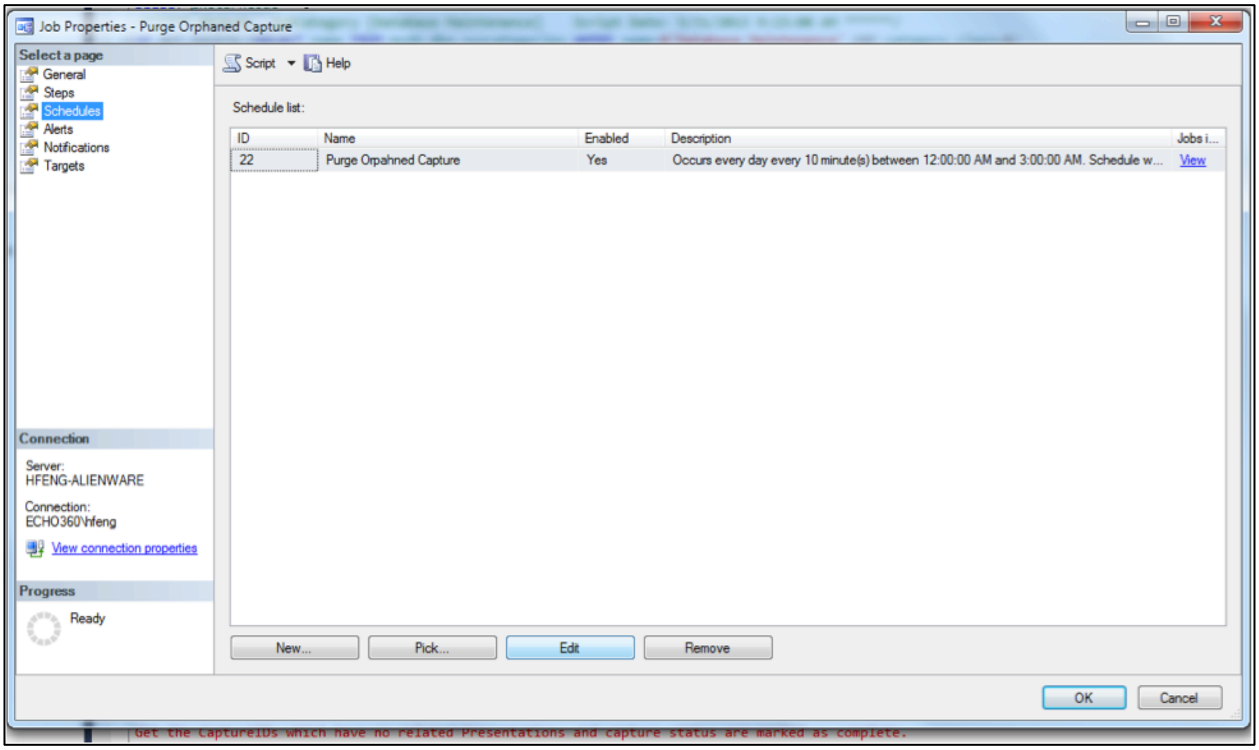
Once the job has run for the estimated time (returned from the initial query located at the beginning of this document) run the query again to see if more time is needed. When the query returns a zero, you can disable the scheduled job.

If you want to change either the time the job begins or the duration, continue with the following steps. Otherwise you are finished.

1. Right-click the **Purge Orphaned Capture** job from the left side of the window, then click **Properties** as shown in the below figure.



2. Click the **Schedules** tab from the left side to display the schedule for the job, as shown in the below figure.


Job Properties - Purge Orphaned Capture
Select a page
General
Steps
Schedules
Alerts
Notifications
Targets
Script
Help
Connection
View connection properties
Progress
Ready
New...
Pick...
Edit
Remove
OK
Cancel
Get the CaptureIDs which have no related Presentations and capture status are marked as complete.

Schedule list:

ID	Name	Enabled	Description	Jobs i...
22	Purge Orpahned Capture	Yes	Occurs every day every 10 minute(s) between 12:00:00 AM and 3:00:00 AM. Schedule w...	View

Server:
HFENG-ALIENWARE

Connection:
ECHO360\hfeng

3. Click **Edit** to change the scheduled time and/or duration.
4. Click **Save** when finished.

Once the job has run for the estimated time (returned from the initial query located at the beginning of this document) run the query again to see if more time is needed. When the query returns a zero, you can disable the scheduled job.

MYSQL Instructions

Before you begin, download the script to your server. It is titled “Purge_Orphaned_Capture_Job_MYSQL.sql”.

1. Run the downloaded Purge_Orphaned_Capture_Job_MYSQL.sql against the ESS database. This script creates the scheduled job for deleting orphaned items.

   If no changes are made to the job, it will kick off at 12AM every night and run for three hours until the job is manually disabled.

2. To change the scheduled start time or duration, run the following statement, changing the start-time value in the `TIMESTAMP` entry to your preferred start time. This value is highlighted in the below statement.

```
DELIMITER $$
ALTER
      EVENT `Purge_Orphaned_Capture`
      ON SCHEDULE EVERY 1 DAY
      STARTS
      TIMESTAMP(CURRENT_DATE+0,'00:00:00')
      DO BEGIN
            Call delete_orphaned_captures();
      END
```

Once the job has run for the estimated time (returned from the initial query located at the beginning of this document) run the query again to see if more time is needed. When the query returns a zero, you can disable the scheduled job.