Date	November 19, 2015
Applies To	Kofax Capture 10.x
Summary	Batch Recovery Process and steps to remove orphaned records from the xLock table
Revision	1.4

Kofax Capture Batch Recovery Overview

Kofax Capture's Batch Recovery system utilizes a background worker process named KdoBackgroundWorker (KBW). KBW is transparent and active on any station that has a Kofax Capture module running, either as a module or as a service, and is intended for the management of Batches and Kofax Capture processes across the system.

The xLock Table is intended to control single-instances of Batches among other processing tasks; preventing the same Batch from having multiple operations from different sessions. Any time a record written to the xLock table is not properly removed via Kofax Capture code, allowing for Batch Recovery by KdoBackgroundWorker, then the record is flagged as abandoned. These orphaned records may pose problems for the Remote Synchronization Agent during downloading of Batches; a variety of errors may manifest as shown within the ACIC/ACIS Logs and the Error Log.

The Batch Recovery Process

The Batch recovery process works in one of the two ways described below.

Scenario One

- A Kofax Capture module has a Batch open and that module is abruptly shut down (e.g., *end task*) on station A.

- No one will log back into Station A.

- Station B will reset station A's Batch after 20 minutes, only if the module on Station B is open for at least 20 minutes (just the module can be opened without any Batches open.) This may log an error message such as the following into the Error Log:

```
2007-06-07 10:50:50, 0x00000018, 0x00000000, 0x00000000, 0x00000000,
0x00000000, C:\Program Files\Kofax\Capture\Bin, Kofax Capture Batch
Manager, <Machine_Name>, 10.2, KdoBackgroundWorker.cpp, 582, Abandoning
lock {F11A4ACD-F782-45d5-A8F4-74A4FB807B11} because update count is
stale, ,
```

Scenario Two

- If a Batch crashes on station A, it will reset immediately (in most cases) once any module is launched at station A. This may log an error message such as the following into the Error Log:

```
2007-06-07 10:19:41, 0x00000018, 0x00000000, 0x00000000, 0x00000000,
0x00000000, C:\Program Files\CaptureSS\ServLib\Bin, Kofax Capture Batch
Manager, <Machine_Name>, 10.2, KdoBackgroundWorker.cpp, 627, Abandoning
lock {41A59414-309F-4129-85D1-9FA0D4AE69D2} because owning process 1796
<module>.exe has died, ,
```

- In some cases, a Batch may show an "In Progress" state in Batch Manager and still permit you to view the Batch History. If you click OK in the History tab, it will update the Batch Status to the previous state that it was in before it went into 'In Progress.' This occurs in rare cases because the Batch was recovered but the status hadn't updated. Viewing Batch History forces a status update.

- Otherwise, you will receive a message stating that the Batch is locked and request that you retry in 20 minutes.

Steps to Remove Orphaned Records from the xLock table

Follow the steps below to remove orphaned records from the xLock table in order to eliminate the errors these records cause:

1. Determine the affected Batches which are encountering an Abandoning Lock error.

   a. Review the Kofax Capture Error Log for occurrences of '***Abandoning Lock***'

   b. Locate the 32-digit LockID surrounded by **{curly braces}**

   ```
   2015-10-15 17:38:38, 0x00000018, 0x00000000, 0x00000000,
   0x00000000, 0x00000000, C:\Program Files (x86)\Kofax\Capture\Bin,
   Kofax Capture Validation Application, <Machine Name>, 10.2,
   KdoBackgroundWorker.cpp, 774, Abandoning lock {e121a399-419a-
   4a0a-a4ee-c4f2bd0bedfa} because owning process 12196 <module>.exe
   has died, ,
   ```

2. Stop the RSA and all running Kofax Capture Services and Kofax modules.

3. Run the following query to find all the items in the xLock table.

   ```
   SELECT * FROM <YourKCDatabase>.xLock;
   ```

4. From the results, find and match the LockID, listed in the error message and run the following query to delete it.

   ```
   DELETE FROM <YourKCDatabase>.xLock WHERE LockID='{LockID}'
   ```

5. Restart Kofax Capture Services and the RSA.

6. The next time the RSA synchronizes, the error should not appear.