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**Application Development/Strategic Projects/Systems Support**

**Code, Test, and Promotion Guidelines**

**June 10, 2019**

1. Code
   1. Code must not be changed in production without prior authorization.
   2. As part of promotion, code can be moved from one location to another or copied and pasted to a live location by an analyst according to the promotion notes. However, actual code must not be modified in any way by anyone other than a programmer and according to the guidelines outlined in this document
   3. If additional or missed changes are required to live code, they must first be added by the programmer to the test location or hold area, and the new code must be migrated to live again.
      1. With the exception of remote SAS jobs, any code changes needed must be reviewed with the Manager of Application Development, or Senior Programmer when the manager is not available.
      2. Post-Implementation Review (PIR) approval from department management is required if the process has already been promoted and has been in production more than one day or for one production run.
   4. Code must not be updated after testing has been completed without prior authorization.
      1. The only exception is in the instance of test/live reference changes necessary for promotion. An example of a test/live reference change would be a programmer updating the code to point to a production database instead of a test database.
   5. Code must not be modified by anyone other than a programmer.
      1. An exception to this is in the case of a Programmer Internship and only under the review and guidance of the designated Application Development internship mentor.
      2. Any changes made or suggested by any other individual must be reviewed and made to the development code by a programmer.
2. Testing
   1. Analysts and programmers should be aware of when they are in a test or a production environment. Production operations should never be negatively impacted by testing. Production locations should never be used while testing a job for any of the following situations:
      1. Running files through a script
      2. Picking up files using a script or automated process
      3. Creating files
      4. Moving files
      5. Storing files
      6. Running development code in live
3. Promotion
   1. Jobs must not be promoted without Change Control Board (CCB) Approval
      1. CCB approval must be received and notated in Sacker prior to promotion
         1. CCB approval is only valid for 30 days, at which time a new CCB approval must be received.
      2. In addition to CCB approval, the CCB must be confirmed and noted in Sacker by a department manager or director prior to promotion.
   2. SQL Server Reporting Services (SSRS) reports should not be deployed until CCB Approval is received and confirmed
4. Letter Testing and Promotion
   1. Analysts must verify that all letters match the original letter requested before submitting the letter for Test Approval.
   2. Letter content must never be changed in test or production without authorization.
   3. All letter promotions must be checked and documented the same day by another analyst. The analyst should check that the document to be promoted does not contain markups or other tracked changes, and document in Letter Tracking that this was checked.