***After the Event, Step 18 workflow:***

*Performing a fixity check on your digital collection*

To use MD5Summer to perform a fixity check on your digital collection, follow these instructions:

* 1. Download a copy of your digital collection from your Digital Preservation Storage Platform.
* 2. Visually confirm that you can see your saved checksum file in the folder structure (in bold below).

Digital Preservation Hard Drive

* event#-YYYYMMDD-event-name
  + **event#-YYYYMMDD-event-name-checksum.md5**
  + items
    - preservation-copies-f0
      * all-items
    - production-copies-f1
  + metadata
* 3. Open the MD5Summer tool. If you encounter a pop-up window that reads something like “MD5Summer failed to set file associations…” just click “OK.” The window that opens should read something like “MD5Summer / Please select the root folder:”
* 4. Navigate your *event#-YYYYMMDD-event-name* folder in your digital collection’s folder structure. (in bold below).

Digital Preservation Hard Drive

* **event#-YYYYMMDD-event-name**
  + event#-YYYYMMDD-event-name-checksum.md5
  + items
    - preservation-copies-f0
      * all-items
    - production-copies-f1
  + metadata
* 5. Select that folder and make sure that the Checksum type is “MD5” at the bottom of the window and click the “Verify sums” button. This should open a File Explorer window showing the *event#-YYYYMMDD-event-name* folder.
* 6. Select the MD5Summer checksum file in the *event#-YYYYMMDD-event-name* folder. It should have a filename like “event#-YYYYMMDD-event-name-checksum.md5” (in this case, with the date being the date you created the checksum).
* 7. Select this MD5Summer checksum file and click “Open.”
* 8. MD5Summer will automatically generate a new checksum and compare these two checksum files against each other. If there are errors, MD5Summer will display an error message and the red error indicator in the lower left corner of the window will report the number of errors.
* 9. If there are no errors, click on “Save” and (without changing the new filename, which should end in “\_Result”) save the new checksum file to the metadata folder for your event on the Digital Preservation Hard Drive (in bold below).

Digital Preservation Hard Drive

* event#-YYYYMMDD-event-name
  + event#-YYYYMMDD-event-name-checksum.md5
  + items
    - preservation-copies-f0
      * all-items
    - production-copies-f1
  + metadata
    - **event#-YYYYMMDD-event-name-checksum\_Result.md5**
* 10. After you’ve saved the checksum file, click on “Close” in the first checksum generating window, and then click the “X” in the top right corner of the “MD5Summer / Please select the root folder:” window. This will close out of MD5Summer entirely.