# 2022-09-06 PLA/SFA Clicks/Revenue Drop

| **Environment** | Production |
| --- | --- |
| **Description** | [Original RCA document](https://docs.google.com/document/d/1cQDoWTkEbSTZI6EpwcVOCfrF04KLePFA18ONn-BJS3E/edit). Code change was introduced in [Organic real time ingest raptor based service](https://github.corp.ebay.com/BANDRUI/organicrealtimeingest) causing dropping realtime SFA Click events which caused downstream system to report incorrect revenue. Code change was originally trying to fix the bug [ADP-746](https://jirap.corp.ebay.com/browse/ADP-746) - SFA summary graph for international seller is not correct Closed |
|  |  |
| **Problem Report** | [Huang, Yichao](file:////display/~yichhuang)  [Liu, Pavel](file:////display/~yualiu) raised issue in SFA clicks. Issue was raised in the email “PLA/SFA Clicks/Revenue Drop from 9.6 11:00 AM”.  [Yu, He](file:////display/~hyu1) rolled back manifest for previous version. |
| **FCI** | Reporting systems couldn't calculate revenue correctly. |
| **Domain Impacted** | Revenue : no revenue loss. Seller seen wrong reporting for campaigns until issue fixed by offline ingestion.  Impacted domain(s):   * Selling * Reporting |
| **Triage** | * Events are dropped without logging. |
| **Examine** | Timeline:   1. 22/08/2022 10:30 - Fix for the currency bug was discussed     2. 02/09/2022 - [PR created](https://github.corp.ebay.com/BANDRUI/organicrealtimeingest/pull/159/files) with the change.    3. 06/09/2022 - PR approved    4. 06/09/2022 - PR merged to the master, all checks passed    5. 06/09/2022 10:30:33 - [Deployment](https://cmpaas.cloud.ebay.com/dashboard/job.jsp?method=jobs&jobid=2022-09-06%7CDeployJob.13da8b8e1830a68b87557f36fffffcf3%7CLSDSMraptor&appserviceid=/ENV2y1rpwqvcr3/organicrealtimeingest0-app__ENV2y1rpwqvcr3&platform=raptor) created, duration 37 mins    6. 06/09/2022 11:08:00 - Deployment finished    7. 06/09/2022 17:00 Pavel reached out to Marshall on Slack    8. 06/09/2022 17:05 - Issue raised in the email “PLA/SFA Clicks/Revenue Drop from 9.6 11:00 AM”    9. 06/09/2022 21:00 Marshall’s team rolled back the release    10. 09/09/2022 - offline data ingestion fixed reporting data |
| **Root Cause** | Direct cause :   * Buggy [PR created](https://github.corp.ebay.com/BANDRUI/organicrealtimeingest/pull/159/files) with the change. * Issue was not spotted on various steps of development lifecycle. |
| **Cure** | * Rollback to previous version * Fix buggy code |
|  | What can be improved   * Flink Job Alerting   + Job restart alerting has been added: <https://cloud.ebay.com/rule-groups/rg/plx_flink_job_restart?env=production&ug=ads_data_platform> * Add DoD when update Avro schema for Kafka topics. |
| **Flow** | SFA click events, impacts seller reporting and internal revenue reporting. |
| **Rollback** | [Rolled back same day.](https://cmpaas.cloud.ebay.com/dashboard/appjobs.jsp?method=jobs&appserviceid=%2FENV2y1rpwqvcr3%2Forganicrealtimeingest0-app__ENV2y1rpwqvcr3) |
| **Opportunities** | * Improve tests to test processing correctly * Improve deployment process for this service   + Improve deployment guide   + Use canary deployment * Add alerting for metrics dropping to 0   + Introduce alerting in staging   + Introduce SLI alerting in Production |
| **Follow up Actions** | 1. [ADP-898](https://jirap.corp.ebay.com/browse/ADP-898) - Improve pipeline to include automated tests for organicrealtimeingest Open 2. [ADP-899](https://jirap.corp.ebay.com/browse/ADP-899) - Create an alert for organicrealtimeingest PLA/SFA Clicks/Revenue Drop to 0 and also consider it to other metrics Open 3. [ADP-916](https://jirap.corp.ebay.com/browse/ADP-916) - Review and Improve instructions for organicrealtimeingest Open 4. [ADP-917](https://jirap.corp.ebay.com/browse/ADP-917) - Follow up on impact, investigate parts of the organization impacted and was everything resolved? Closed 5. [ADP-920](https://jirap.corp.ebay.com/browse/ADP-920) - Setup monitoring on Preproduction for organicrealtimeingest Open 6. [ADP-921](https://jirap.corp.ebay.com/browse/ADP-921) - Create a template playbook that includes what metrics need to be monitored Open 7. [ADP-922](https://jirap.corp.ebay.com/browse/ADP-922) - Create a canary deployment for organicrealtimeingest Open |
| **Status** | Investigating |