

Work Order Status issue due to SubtitleType Changes in Inventory

Incident Description:

Work orders in Duplo stopped autocompleted or there were orders which were wrongly marked as completed.

How was the incident detected?

User reported that work orders are not completing correctly. The one which should be completed are in in-progress state and many that ought not to have been marked completed are marked completed.

What were the symptoms?

Users gave a list of asset IDs for which the status was wrong. Duplo team did an independent analysis on the defined assets to validate the Duplo status against what was available in the Mediaflex and the inventory. While it was correct that asset status was wrongly marked, the team analysed the basis on which the status was being updated. It was found after investigation that the Subtitle metadata on AssetRegistry (PI) had been changed from HOH to Full , Standard to Full etc., without any prior notice.

Since Duplo definitions/configurations rely on the subtitle type to decide which work orders to create, Duplo was taking wrong decisions and was not able to identify whether the tasks were complete (i.e., all necessary subtitles) were available or not for the given asset.

What was the customer or business impact?

Around more than 40k work orders were impacted due to wrong status update in Duplo across the region.

EMEA Lang Go Live was delayed by 1.5 months due to wrong statuses and users felt that they could not trust in status reported by Duplo.

How was the issue resolved?

Duplo team reached out to Inventory team who further investigated the issue in inventory and found there were some wrong updates that happened during inventory consolidation.

Both team discussed the changes and Duplo team made the code correction as per changes in inventory, and had to wait for AR team to finish all their updates.

5-Whys & Root-Cause

Problem Statement:

Why did user face this issue?

There was a change made by GCR team to include the subtitleUsage in GCR and send it to downstream systems. This change was made after getting signoff on the requirements from product and different stake holders but the requirements were revised after the changes were deployed to production and the assets were updated in GCR and AR which happened to be the root cause of the issue.

Why did we not face this issue before ?

Previously the logic to set subtitleUsage did not reside in GCR and would be updated by AR team to the inventory which was inline with the logic that existed with duplo.

Why the change was made ?

Based on the new requirements from product a new subtitleUsage tag needed to be set in GCR and this tag might even be sent from rally in future. So to accomodate these changes the logic had to be moved to GCR and then update the downstream systems. This logic was not communicated to duplo team and resulted in impacts.

Additional details on the logic is captured under the below confluence

 [GCR - GCR workflow](#)

Overall learnings and recommendations

- The teams involved in Inventory and Duplo need to work in tandem and keep each other informed in case of any changes. Inventory team needs to manage data type changes as it has implications on the downstream systems like Duplo.
 - If Inventory team can involve downstream systems in loop at the time of any change planning can help downstream system to plan their work in pararell and finish together to avoid tedious clean up activity
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