

Problem with BTS Stock Levels

Ref: r:\hng plan x\architecture\end to end assurance\btsstocklevels.doc

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1. Introduction

Yesterday, Peak 194458 was raised from Warwick Post Office (506246) about incorrect Stock Figures on their Branch Trading Statement (BTS).

The purpose of this note is to explain the problem and the underlying cause and proposed fix.

2. The Problem

Firstly it is worth explaining what the BTS is.

It is a report produced at the end of a Trading Period (TP) providing a summary to the Postmaster about the trading that was done during that period. When the report is produced the Branch is moved (or Rolled Over) into the next TP. The report can only be produced when all the Stock Units have rolled over into the new TP and certain mandatory Branch level reports have been produced. It is normally produced every 4 or 5 weeks either on a Wednesday evening or a Thursday morning. Problems in producing the BTS do not prevent the Branch from continuing to trade normally.

During BTS production the report is produced twice:

- A Trial Report to allow the Postmaster to check that the data is correct
- A Final Report which is produced after the trial report has been confirmed. This indicates that the Branch has rolled over into the next TP.

The BTS consists of two parts:

- Summary of Stock Unit and Suspense Account activities over the Trading Period
- Consolidated Branch Stock levels for all Volume Stock items

There have been issues (originally found at Coton and Warwick) with the figures in the first part of the report. Development took a copy of the data from Warwick on Thursday 12th Feb and checked that these figures in this part of the Report were correct.

However this Peak relates to the second part of the report which shows the consolidated Stock levels.

The problem is that in the Final Report, many of the figures are incorrect.

It should be noted that:

- The figures on the Trial Report (which the postmaster is asked to check) are correct
- The figures that are stored as Opening Figures for the new Trading Period are also correct

The only thing that is incorrect is the printing of figures on the Final BTS.

Development did not check this second part of the final BTS as there had been no previously reported problems with this, and no reported differences between the trial and final reports. Even when the second part is examined, the error is not obvious as demonstrated by the fact that several branches have balanced and not noticed, when they were highly likely to have had this error.

3. The Cause

The root cause of the problem is that the code that re-prints the report manages to overwrite some of the cache of data held at the counter for generating the report as it is printing the report.

4. The Fix

The fix is to ensure the Trial and Final reports work on copies of the cached data which are discarded when the report completes, thus ensuring that any changes made to the data during the production of the report have no impact after the report completes.

This is a one line change to a velocity template, which is held as Development Reference Data. This still needs to be developed and tested through the development process.