



TOTALFLOW

Technical Bulletin 181

TCI Toolkit Upgrade Notice

Totalflow Technical Bulletin
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1 Introduction

To describe a potential issue with Totalflow's TCI toolkit used with third party integrators to collect historical information from Totalflow devices. This bulletin will describe the potential issue along with the resolution.

The issue described below only pertains to the TCI toolkit and does **not** exist with WinCCU, TDS32 and PCCU host software.

2 Description

It has been reported that on infrequent occasions historical measurement data is being posted to the wrong meter using the Totalflow TCI toolkit driver with third party SCADA software. The end result of this infrequent behavior is that a portion of historical data returned for meter A could be incorrectly associated with meter B.

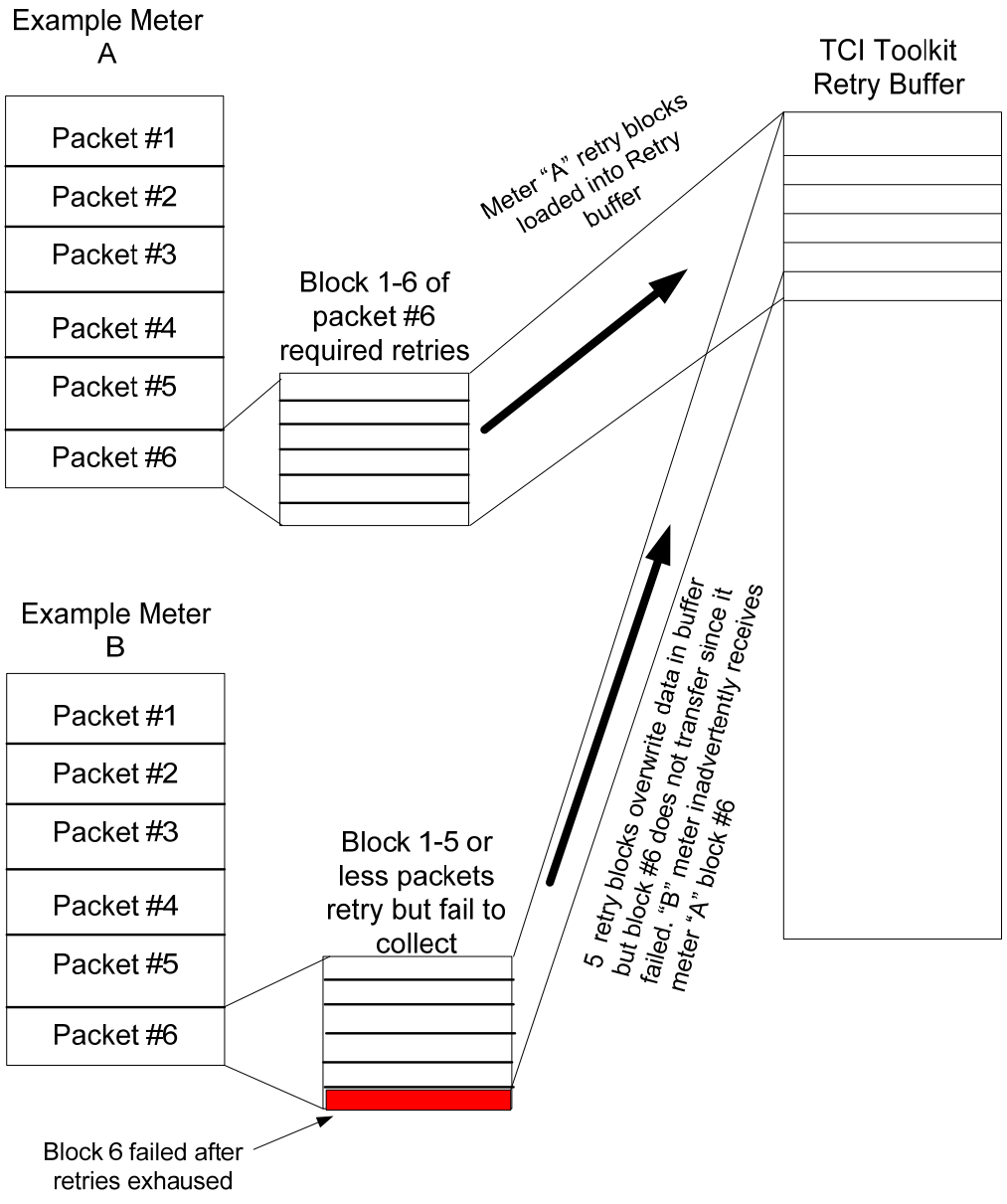
Example Collection and Retry Transactions:

Meter "A" and "B" are in a scheduled historical collection list. In this example, 6 packets of data are successfully collected from meter "A" with at least two blocks having to be retried due to bad blocks. These re-transmitted blocks are stored in a temporary TCI retry buffer before stitched to the good blocks and transferred to database (see diagram below).

The number of re-transmitted blocks from meter "B" must be at least one fewer than the number re-transmitted from meter "A" to cause this overwrite condition.

In this example, 6 packets of data are collected from meter "B" with an error on packet #6. Successful retry packets 1-5 are moved to the buffer and the TCI toolkit accepts block #6 from meter "A" as valid since it passes the CRC data integrity test. This incorrect handling of data is due to the fact that the TCI retry buffer was not initialized and zeroed between meter collections.

As you can see, this issue will seldom occur because both meters must have communications issues that require retries during collection with the quantity of meter B's retry blocks being fewer than the retry quantity from meter "A".



3 Conclusion

It is recommended that all third party SCADA packages using Totalflow's TCI toolkit upgrade to version 2.2.5.6 (part# 2100838-015) or later. Any version prior to this release (2.2.5.5 or earlier) will have the issue described above. Contact your ABB sales representative or our technical service department (800-442-3097 option #2) for this important upgrade.