

## Automated Data Entry

### Problem

As part of a planned data change the Client identified that there were approximately 2,500 records which were not in a consistent condition to allow a required and planned data correction to be applied.

Although of initial concern, additional Client analysis prompted the Client to seek a quick and cost effective solution to resolve this data inconsistency. The original assumption being that this condition would not be a constraining issue for the data correction project. Subsequently this proved not to be the case and accordingly this data inconsistency featured as a potential significant project barrier.

### Solution

The problem records were analysed comprehensively and found to be in error as a consequence of a failing validation check, attributable to invalid data being present on the associated record. This resulted in the corresponding record being rejected during batch processing within the parent application during the course of normal scheduled batch activities, requiring corrective action to be initiated to resolve.

The initial method of correction was to be by means of user interaction via the parent application where standard functionality was readily available to apply the requisite amendment to each of the individual erroneous records. Correction would enable successful validation and processing of the impacted records by the scheduled batch job. Manual correction and processing would however require 3 to 4 minutes per record (equating to 20 man days of effort assuming no distractions and errors) to action and implement and as with all aspects of human activity would be susceptible to additional, and more significantly, inconsistent errors being introduced.

The initially preferred solution was further threatened by identification that this was limited by a constraining time frame of opportunity, being further compromised by insufficient qualified and experienced resource availability to complete the required parent application activities and achieve the objectives within the available time frame. This resulted in a high probability that there was liable to be a prejudicial impact on the successful and timely completion of the required data corrections which, had they been able to complete in a timely manner, would have allowed the project to progress with minimal risk.

If resources had been available to enable the records to be readily progressed to an acceptable condition then the planned data change could have been undertaken as per program requirements, such resources were however not available and this was identified as a significant project risk. With an ever-increasing backlog growing weekly, time became the enemy. Remedial action was essential and as a result seen as a pivotal activity on the critical path for successful delivery of the overarching project and as such the clearance of these issues became a priority.

In order to apply the required data corrections the client sought to engage qualified resources. They approached Caski to assist in the identification of an alternative solution.

Caski were invited to assist and a requirements specification was established. The iCask product was identified as a method of achieving the desired results within the time and financial constraints presented without the need for engaging additional experienced resources.

As the identified remedial actions were a consistent and repetitive set of key strokes and actions within the parent application, Caski's iCask solution was a good technical fit to replace these actions. The utilisation of this was commensurate with the initial brief and was assessed as providing a more accurate solution without the risk of introducing inconsistent errors.

iCask has the ability to log the pre and post data conditions and create logs that demonstrate the exact activities that have been carried out. This can be seen as a significant benefit when being utilised in business critical application environments as it provides an audit trail that allows diagnostics, more details of the features of iCask can be found via the link below;

Of particular note in this utilisation of iCask, is the functionality of iCask to interact with the parent product and accurately repeat a sequence of events without the errors associated with these being conducted by a human operative. As the product can be configured to generate output files which detail the associated record in a pre- and post-condition it can also be utilised to capture the required audit trail information thus providing a functional regression capability.

Once engaged by the client, Caski provided the technical resources to develop and test the associated actions that the iCask product was to carry out.

With the assistance of the client, iCask was successfully tested in a Production-size test region with comparable data volumes. A test report was written by Caski and this was subsequently accepted by the client.

## Conclusions

The data correction applied by the iCask data maintenance tool was successfully completed and had no adverse effects on either the data or the parent application.

The Client Governance body noted the successful completion of the data correction activities using the iCask data maintenance tool and hence authorised the use of iCask to apply the correction to the 'Live Production environment'. The required data correction was successfully applied to the Production environment using iCask and was key to ensuring the successful completion of the original requirement

