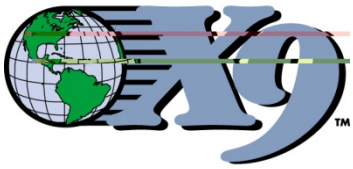
ASC X9 TR 40–2011

Bridging ANSI X9.100-187 to ANSI X9.100-182-2-1: Transferring Data from an Image Cash Letter File to an XML Check Delivery Document



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Financial Industry Standards

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Foreword

The ANSI X9.100-182 Bulk Data and Image Delivery Schema addresses the formatting of check image payment items in a comprehensive XML structure. The ANSI X9.100-182 standard is not intended to compete with or to replace the more traditional standard for image payment exchange, the ANSI X9.100-187-2008 and its predecessor the withdrawn DSTU X9.37-2003. Rather, ANSI X9.100-182 is intended to complement the cash letter image delivery standard by extending a supported data structure to the transfer and storage of image cash letter originated payments. For example, image payments data can be formatted in a standardized structure on a delivery medium such as DVD, or a storage medium such as an archive. Image payments information can also be transferred in a standardized structure from one application to another within an organization's internal upstream or downstream service.

The XML format that is embodied in the ANSI X9.100-182 Bulk Data and Image Delivery Schema actually reflects a structure that is similar in context to the ANSI X9.100-187-2008 cash letter file. However, the data is in a format that is more readily accessible to modern XML-sensitive applications. Furthermore, the XML structure actually lends itself to storing payments, with or without embedded images, as individual independent entities, while still retaining the envelopment concept of a traditional cash letter file format (i.e. a transaction within bundle, a bundle within cash letter, and a cash letter within file).

When an organization receives payments data originating from standard image cash letter files, the payments data is likely to be retained for some period of time as individual transactions within a receiver's applications. Furthermore, transaction level data originating from the image cash letter file is likely to be transferred from one application to another for payments processing enrichment.

Many organizations, including payments processors, exchange channels, banks and check truncation product vendors, are very familiar with the industry-wide standard content of the image cash letter format. However, few such organizations are likely to be familiar with the format of the XML equivalent as embodied in the ANSI X9.100-182 Bulk Data and Image Delivery Schema. The challenge is that, without a simple guideline to assist an organization to relate the image cash letter data structure to the XML-based standard equivalent, it can be relatively difficult to see how the XML standard can be of benefit to the organization. Without an awareness of the potential benefit of the XML standard as applied to internal systems, the organization may embark on developing a separate proprietary application interface standard or a separate data storage structure, whereas an industry supported standard could more readily have provided a consistent solution.

The effective use of the XML standard emphasizes commonality and predictability for data transfer and storage. The standard can be a common point of agreement among adopting parties, whether these are intra-organizational systems or inter-organizational arrangements. This in turn can help reduce the time to market for new application services, help contain the risk associated with proprietary one-off implementations, and can promote greater longevity of developed solutions that are more broadly supportable.

This Technical Report provides a guideline to co-relate the two data structures, the image cash letter file and the XML document. The content of this document originated from a technical reference guideline that was authored by Brian Salway, Symcor Inc., for internal company use to assist with early adoption of the ANSI X9.100-182 standard. The content was then further developed to comply with standards conventions and general industry use. It was then offered by Symcor Inc. to Accredited Standards Committee X9 as a prospective ANS Technical Report.

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Introduction

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This Technical Report provides information related to the bridging of data between the ANSI X9.100-187 and the ANSI X9.100-182 standards. To understand the concepts discussed in this document, the reader must be knowledgeable of the purpose and the content of these two standards.

Bridging the ANSI X9.100-187 to the ANSI X9.100-182-2-1: Transferring Data from an Image Cash Letter File to an XML Check Delivery Document

1 Introduction

This Technical Report contains considerations for the transfer of data from an ANSI X9.100-187 Electronic Exchange of Check and Image Data – Domestic cash letter file to an ANSI X9.100-182 Part 2-1 Bulk Data and Image Delivery – General Check Delivery XML document. It describes a technique for the mapping of data elements contained within these source image cash letter (ICL) files [1] to a programmatically addressable storage structure, embodied in an XML document.

The ICL files arrive into the payments process from a variety of sources. These include inclearings image exchange, upstream truncated deposits in a depository bank process (for example, branch capture), regional distributed proof-of-deposit truncated capture within a bank network, third party depository sources (for example, merchant capture), and post-presentment payments processing services (for example, outbound and inbound image returns).

1.1 Scope

The Technical Report provides some background material and a relevant synopsis of the ANSI X9.100-182 standard. It explains the structure principle behind the mapping approach. And finally, it provides field-by-field data content mapping from the image cash letter file records to the respective XML element layers.

The Technical Report focuses on, and restricts itself to, those ANSI X9.100-182 Part 2-1 defined elements and element layers in the XML structure that have equivalence in the ANSI X9.100-187 file record fields. The Technical Report does not provide content detail on ANSI X9.100-182 Part 2-1 XML elements that do not have a direct equivalence in ANSI X9.100-187 file record fields.

The guidelines and suggestions in the Technical Report apply to the technical specifications as documented in the ANSI X9.100.187 image cash letter standard, and the technical functionality implemented in the XML schema files that are a component of the ANSI X9.100-182 Part 2-1 standard. A proprietary adoption of the ANSI X9.100-187 standard, or the use of a proprietary rendering of the ANSI X9.100-182 schema files, may render some or all of the guidelines in this Technical Report to be incompatible with the programming processes of the adopter.

Although it is possible and even desirable in certain situations to transfer data from the ANSI X9.100-182 XML element structure to equivalent data placement in an ANSI X9.100-187 cash letter file, this Technical Report does not provide specific information to assist with that directional transition. The Technical Report focuses on the transfer from ANSI X9.100-187 to ANSI X9.100-182 Part 2-1 only. However, the information provided in this Technical Report is sufficient for the reader to conclude how to affect a transfer of data from ANSI X9.100-182 Part 2-1 to ANSI X9.100-187.

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[1] The term ICL is used throughout this document to refer generically to any ANSI X9.100-187 formatted check and image data file. These can include, but are not necessarily restricted to, clearings exchange files, depository source files and proprietary internal application-to-application files.