# 1 3M Swipe Reader SDK – Change History

# 1.1 Version 1.2.1.2 – 29 April 2016

#### 1.1.1 SDK

- Windows 64-bit version of swipe SDK now available.
- Added support for TECS protocol.
- Added some missing enumerations to the Java wrapper.
- Fixed issue that could cause increased CPU usage when no swipe reader is connected.
- Clear USB buffer upon SDK initialization to avoid capturing any swipes before the SDK is initialized.
- AAMVA added IIN number used by Nunavut and Northwest Territories.
- Java exposed a method, ParseCodelineData, to parse a codeline string.
- Add support for Chinese 1 line ID starting with "C<", in addition to the already supported "CS"</li>
- Fix issue not properly detecting when a swipe reader is reconnected on slower configurations due to delay of the device being removed from the windows USB list.

# 1.1.2 Applications

OutputWedge – added options to control output for Unknown document and Bad Char documents.

#### 1.1.3 Documentation

Added an Output Wedge Reference guide.



# 1.2 Version 1.2.0 – 24 July 2015

#### 1.2.1 Miscellaneous

 .NET applications and .NET wrapper are now built for .NET 4.0. .NET 2.0 wrapper is provided for backwards compatibility.

# 1.2.2 Applications

- OutputWedge
  - Added new item INPUT\_SOURCE to be set as OCR or MAG to indicate the device source for the data.
  - o Fixed bug with string task because the "str" identifier was improperly defined as string.
- CRSeriesConfigUtility fixed an issue when saving settings changes that caused an invalid USBVID
  entry to be created in the G2OS.xml file on the CR100. The USBPID was also being saved as the
  USBVID. The issue was only cosmetic at this time because the USBVID value is not used by the
  CR100 firmware.

#### 1.2.3 SDK

- Fixed AAMVA data decoder for the Yukon DL, which now ignores data element separators placed in the header.
- Update AAMVAParser.xml with templates for versions 6, 7 and 8 to make sure newer AAMVA data is parsed and displayed.
- AAMVA added support for decoding Canadian Military Driver License, which has an improperly coded IIN.
- Update parsing rules for 3-line 30 Chinese ID.
- Fix to prevent Kenyan VISA with no checksum from being treated as a standard passport with a checksum error.
- Fix to parsing of old Romanian ID to return Nationality as empty "" instead of 132 as printed on the document. Newer Romanian ID Nationality is returned as ROU.
- Update to support 3-line 30 Mexican Voter Card to treat Sex as ALPHA to allow reading of non-ICAO H
  (male) and F (female) values.
- Add support for 1-line 30 Dutch DL.
- Add support for 3-line 30 Hong Kong / Macau Entry Card starting with CT instead of CR.



#### 1.3 Version 1.1.0 – 14 Nov 2014

#### **VC Runtime Changes**

Version 1.1.0 and above of the SDK is upgraded to use the Microsoft VC10 runtime. The Microsoft VC8 runtime is no longer used and the VC8 redistributable is no longer part of the installation or deployment process. SDK sample projects have also been updated accordingly to Visual Studio 2010.

If you are deploying the 3M SDK with your application, the following Microsoft VC10 binaries should be included:

- msvcr100.dll
- msvcp100.dll
- mfc100u.dll
- mfc100.dll
- atl100.dll

#### SDK

- AAMVA parser added rule for date format on Delware AAMVA 2003 standard
- OutputWedge added clr option to Simplified dialog and allow appending to an existing script.
   Assigned KeyDelay default value on task initialization. Modified Event xml read to allow/ignore events without tasks.
- OutputWedgeSysTray Fixed issue with not reading image format from xml file. Fixed issue with parameters not being written properly for both input and output module sections. Added a localKeyDelay option to PressKeyChar and TypeString tasks (to slow down specific tasks to accommodate external requirements.)
- Fixed AAMVA data decoder for the Yukon DL, which now ignores data element separators placed in the header.
- Update AAMVAParser.xml with templates for versions 6, 7 and 8 to make sure newer AAMVA data is parsed and displayed.
- Update to handle reading non-ICAO gender field on IDMEX 3 line of 30 documents, as required by the Mexican Voter Card IFE.
- Added 1 line of 30 Dutch DL.

#### 1.4 Version 1.0.12.1 – 13 March 2014

#### SDK

- 1. Add parsing of standard ICAO fields for 3 line Chinese home return card.
- 2. Updates for 1 line MRZ parsing to better ignore text above the MRZ.
- 3. Added Chinese 1 x 30 ID card for Mainland to Hongkong and Macao.
- 4. Added 2013 French Vehicle Registration 2 x 44.

#### **Utility Changes**

- 1. CRSeries Config Utility Added support for updating firmware on full page readers and CR5400.
- CRSeries Config Utility Added support for CR100 with new memory, which has a different boot loader.



# 1.5 Version 1.0.12 – 08 August 2013

#### SDK

- 1. Handle narrow border on sides of MRZ.
- 2. Added noise check to ignore miscellaneous characters near the MRZ on 1 line documents.
- 3. Update document type of Slovakia 1 line DL.

# 1.6 Version 1.0.11 – 11 July 2013

## **Utility Changes**

1. CRSeries Config Utility – changed the way the serial number is displayed.

#### SDK

- 1. Added support for 1 Line EU Drivers license for Slovakia.
- 2. Added support for (IA, C1, C2, C3, C5, C7) USA 3x30 documents.
- 3. Remove MRZ hard context rule for the first optional field on the 3x30 documents to allow alpha numeric.
- 4. Add MRZ context rules for 3x30 documents starting with INUSA for improved processing.
- 5. Fixed MRZ processing of CR 3x30 documents.

## 1.7 Version 1.0.10 – 11 March 2013

## **Utility Changes**

1. Corrected issues with the CRSeries Config Utility.

#### SDK

1. Rebuilt for compatibility with the 3.1.10 build of the 3M Page Reader SDK release.

#### 1.8 Version 1.0.9 – 14 December 2012

#### SDK

- 1. Corrected an error which sometimes occurred when swiping documents that had non-standard lengths or misread characters.
- 2. Added support for a non-ICAO compliant 2x34 document.



#### 1.9 Version 1.0.8 – 30 October 2012

#### **AAMVA**

- 1. General AAMVA improvements.
- 2. AAMVA parser now extracting biometric data.

## SDK

- 1. The SDK can now auto-detect the correct protocol from CR-100/M devices, overriding that set in #Swipe.ini
- 2. Release available for Ubuntu 10.04 and CentOS 6.3 Linux platforms.

## 1.10 Version 1.0.7 – 28 May 2012

# **API Changes**

1. Bug Fix for AAMVA parsing in .NET wrapper.

## **Application Changes**

1. SwipeReaderMessages.NET2k5 correctly parses AAMVA data

# 1.11 Version 1.0.6 – 4 May 2012

Not Released.

# 1.12 Version 1.0.5 – 03 April 2012

# **API Changes**

- 1. Added support for CR100 Keyboard MSR.
- 2. Bug fix for overall check digit being set incorrectly

## **Application changes**

1. Added blue colouring for WARNING check digits in MRZ Viewer



2. Added error bar in MRZ Viewer to replace message boxes.

## **Utility Changes**

2. Swipe Reader Configuration Wizard now supports CR100 Keyboard MSR

# 1.13 Version 1.0.4 – 14 February 2011

#### **CR Series Config Utility**

- 1. Improved error reporting
- 2. Multiple bug fixes in latest version, including interface fixes for settings dialogue

#### **Output Wedge**

1. Keyboard output module now turns caps lock off while running a script, turning it back to its original state once complete

#### **MRZ Viewer**

1. Fix for 3 line codelines having their check digits incorrectly displayed.

## 1.14 Version 1.0.3 – 21 September 2011

#### **MRZ Viewer**

- 1. Now displays data from AAMVA compliant driving licences
- 2. Result of MRZ checksums now displayed by colour coding

## **Config Utility**

- 1. Renamed to CR Series Config Utility
- 2. Added latest version to SDK

## 1.15 Version 1.0.2 – 28 July 2011

# **API Changes**

- 1. Added a new error for failure to allocate memory, ERROR\_ALLOCATING\_MEMORY.
- 2. Paths stored in ReaderSettings are now explicitly read only, to reinforce the intention that these strings should not be modified once the SDK has been initialised.
- 3. Fixed issue where a disconnection of a CR-100 would not fire a device disconnected event.



# **3M Security Systems**

- 4. Changed MMMReaderCodelineData object to store optional data from an MRZ document in two fields, OptionalData1 and OptionalData2, and is now filled by ICAO compliant MRZs of 2x36, 2x44 and 3x30 lengths. The Entries field has also been removed.
- 5. Added AAMVA parsing for MSR data.
- 6. Now supports CR-100M

# **Application Changes**

- 1. OutputWedge application now only processes one data item at a time, to prevent END\_OF\_DOCUMENT\_DATA being processed before the actual data.
- 2. MRZViewer now supports parsing MSR data, including from AAMVA compliant driving licences.

## Sample Changes

1. SwipeReaderMessages can now display AAMVA parsed MSR data.

## Java Wrapper

1. Added AAMVA data type to Java low level Modules/Swipe



#### 1.16 Version 1.0.1 – 22 March 2011

#### .NET Wrapper

 Fixed issue with MMMReader\_GetData() returning an ERROR\_STRING\_BUFFER\_TOO\_SMALL message. Now resolves this issue using a correctly sized buffer.

## **API Changes**

- 1. Improvements to parsing of MRZ for multiple documents, including Swiss and French ID cards.
- 2. Fixes for parsing MRZ of documents with an extended document number.
- 3. Further improvements to check digit validation.

#### 1.17 Version 1.0.0 – 1 March 2011

## **API Changes**

- 1. Added "out of the box" default swipe settings to work with CR-100 and RTE670X
- 2. Low level check digit validation functions now available in Swipe SDK
- 3. Improvements to MRZ identification and parsing

## Sample Changes

1. Swipe Document Viewer replaced by 3M MRZ Viewer

## **Documentation Changes**

1. Added quick start guide for CR100 and Swipe Reader SDK EULA

## 1.18 Version 0.1.4 (Beta) – 26 November 2010

#### **API Changes**

2. Swiss Driving Licence codeline is now parsed and returned in the MMMReader\_CodelineData structure.

## **Utility Changes**

- 1. Now supports CR-100
- 2. Now support CR-150



# 1.19 Version 0.1.3 (Beta) – 20 August 2010

## **API Changes**

- 1. Added ERROR\_SWIPE\_READER\_NOT\_CONNECTED error code.
- 2. Corrected issue with OCR data being returned in RTE protocol formats. If less than 3 lines are returned, they should be shifted down, i.e. for 2 line documents lines 2 and 3 should contain the data and line 1 should be blank. Corrected this so that the RTE protocol is upheld.

## **Sample Changes**

- 1. Made changes to SwipeDocumentViewer
  - a. User is notified when the application is ready to be used.
  - b. Corrected user interface to not have text overlap each other.
  - c. Bad character errors are suppressed to not interfere with the user experience.

# 1.20 Version 0.1.2 (Beta) – 13 August 2010

## **API Changes**

1. Added support for the 3M™ CR100 Document Reader.

