



DMAC
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Unibase by DMAC, Release 8.5, Now in Beta, To Meet Payment Card Industry (PCI) Data Security Standard with Encrypted Fields

The Payment Card Industry (PCI) Data Security Standard (DSS) provides specifications for data security and facilitates the broad adoption of consistent data security measures globally. For the data entry industry, this means encrypted fields. Unibase by DMAC, Release 8.5, now in beta testing, meets these standards for encrypted fields in the data entry environment.

The Payment Card Industry (PCI) Data Security Standard was released in October, 2008. DMAC and one of its major and valued clients immediately jumped on what this means for the data entry industry.

Let Us Look At the Pan As An Example

For example, on page 22 of the October, 2008 standard item 3.3 requires that the Primary Account Number (PAN) be masked when it is displayed. The standard allows the first six and last four digits to be the maximum number of digits to be displayed. This particular requirement does not apply to employees and other parties with a legitimate business need to see the full PAN.

Inside the data entry, verify, update, correct, and resume modes of Unibase the PAN is displayed in full just like a regular field is displayed in Unibase. The data entry people using these modes have a legitimate business need to see the full PAN. On the disk and in the examine mode the field data appears encrypted.

In Unibase by DMAC, Release 8.5, any field can be set as an encrypted field with the Encrypt checkbox. To output the field from the Unibase environment in a field edit, file edit, or output program an output mask (either PR or PI) can be used. (The output mask is just like the output

mask truncate spaces - TS).

An encrypted field has a minimum length of 12 characters and a maximum length of 99 characters. The field length of an encrypted field is two characters longer than the data to be keyed. This is for the RSA encryption process which is set to 128 bit encryption. Unibase by DMAC ,Release 8.5, allows for a general field encryption algorithm so DMAC client can use it for other data to be encrypted -- not just the PAN.

The PR stands for PAN Redacted. Redacted is a fancy word meaning obfuscated. The PAN mask ratio of the first three eighths and final one quarter apply to the encrypted output mask PR and is adjusted for the length of the Unibase field. The PI output mask only outputs the last one quarter unencrypted. Every other character of the field is output from the Unibase environment as an asterisk (*) in the beta version.

PAN Unredacted (PU) output mask is used to output the entire decrypted field. If this were not available, there would be no way to transfer the data entry data to other environments. But the Unibase by DMAC client will have to ensure that this transfer process meets all PCI requirements.

Render PAN Unreadable Anywhere It Is Stored

On page 23 of the October, 2008 standard item 3.4 states: Render PAN, at minimum, unreadable anywhere it is stored (including on portable digital media, backup media, in logs) by using any of the following approaches:

- One-way hashes based on strong cryptography.
- Truncation.
- Index tokens and pads (pads must be securely stored).
- Strong cryptography with associated key-management processes and procedures.

Unibase uses strong cryptography with associated key- management process and procedures. When field data is stored from computer RAM memory, it is encrypted. A user may seed an RSA encryption environment where the seed can be changed by client, batch, or whenever the DMAC client wishes in a "when start" portion of the field, file, or output edit.

The seed is a string of up to 256 characters provided by the DMAC client. There is also a default seed. The DMAC client can provide additional key management processes and procedures as the client wishes. DMAC changed its open text file verb to allow access anywhere on a network so that DMAC's client could store these seeds on secure servers. See the article elsewhere in this newsletter.

With the addition of encrypted fields to Unibase by DMAC, Release 8.5, DMAC's clients can meet the security challenges of the future.#

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BiMaint Joins Unibase by DMAC As DMAC's Dealer in Italy

After five years of a loose relationship with DMAC discussing how to service Unibase by DMAC clients in Italy, BiMAINT now is installing Unibase by DMAC software in Italy as a Unibase by DMAC dealer. BiMAINT plans to provide first line support for their clients also.

Paolo Ricci of BiMAINT says "Unibase by DMAC provides a logical upgrade path for our data entry clients." As Unibase by DMAC has expanded its conversion capabilities for clients coming from EZC and clients with "Point of Entry" OCR software, more clients choose Unibase by DMAC for next generation high speed data entry.

DMAC finds that every time a new client comes to the Unibase by DMAC environment, a new feature or so can be tested by the new client for all Unibase users. Paolo has agreed to beta test field masking as it appeared in EZC. This is where each character can have a different type. Unibase by DMAC, Release 8.5 will have this feature after Paolo says it works correctly.

Tina Kay says the hardest piece of moving keyers from the older software to Unibase by DMAC is the stricter environment in Unibase by DMAC. DMAC clients set some of the environment variables to increase accuracy. For instance, setting one variable no longer allows using a field release key when an error reset key was required. This provides greater accuracy, at a small inconvenience to the operators. The operators take some time to adjust to these changes. The end result is a more accurate client product.#

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DMAC Moves for the Third Time In Three Years - This Time for Growth

The internet is wonderful. You can service your clients via the internet from almost anywhere. Well, sorta. DMAC has learned in the last three years what you cannot do from anywhere.

Having two offices about seventy miles apart seemed to be the best of both worlds. A flood in 2007 which ruined our offices made us just more determined to stay out in the boondocks. Those who wanted to live in the big city (Austin) could; those who wanted to live lake side (Marble Falls) could.

Then came the recession of 2008. What if you have enough work to justify one half a person - can you afford to splurge and get a whole person at each site? What if your internet supplier, electric supplier, water supplier, or what have you wanted to increase rates by 15% -- did you want to take the increase twice? And what about the several man days per month spent traveling back and forth? And what if the person who has the answer you need was at the other office?

So we who live lake side have decided to move to the city. We will trade the cows behind the office for the Bill Cosby live performance last week. Choices, we have lots of choices in life.

We did not give up everything. We will live just 2.3 miles by road from the office in Austin -- might even get a city car -- one of those new electric jobs.

With the promise of more help of just the right type for our needs and hopes of obtaining the lot behind the Scarlet Street office for expansion, and having all the company again in one location, we moved to 15408 Scarlet Street, Austin, Texas January 5, 2009. Not much difference to outsiders -- but us insiders we think we will be a whole lot happier.#

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DMAC and SSGINDIA Form Strategic Alliance For Ace Contact Manager 7

In December 2008, DMAC and SSGINDIA signed a strategic alliance agreement for Ace Contact Manager 7. With so many of Unibase by DMAC's clients also facing the reality of outsourcing, partnering, etc., DMAC thought its history to date here might be helpful to all.

Brief History of Ace Contact Manager

Ace Contact Manager started in the early 1980s. Technically Ace has been written in and converted from Basic, Basic for Business, and Visual Basic 1 through 6 prior to 2005. DMAC acquired Ace in the early 2000s to learn about technology during the slump caused by the 2000 recession. In 2005 DMAC decided to move Ace to Visual Basic.Net and get it certified for the Vista Operating System. The one year plan took three years.

SSGINDIA has worked with DMAC on this project since 2006. DMAC's Mark Rix spent four months in India working with Sabyasachi Gupta (Sabya) and his people of SSG Software Systems Private Limited (www.ssgindia.com). The technical challenge was enormous. But now Ace appears to be becoming bug free under Sabya's technical leadership.

Now It Is Time To Market Ace Contact Manager

Now that it is time to market the results of this project, Ace Contact Manager 7, DMAC and SSGINDIA looked at various ways to market the software. DMAC has the investment in the sales channel, the software, the customer needs study, the market study, the enhancement path, etc. SSGINDIA has invested in technology, programming, testing, work-around techniques (lot of those needed in Windows), and source, control and operating system control, etc.

So we are trying to pick the best that each of us has to offer and attempting to make some money going forward with this effort. We call it a strategic alliance at this point.

Why Is the Strategic Alliance Different?

In the past, DMAC has purchased software development as a product. We have had specifications for the final product and had the product built to those specifications. We have used Russian, Canadian, and Indian outsource companies. Once the product was complete, we separated. DMAC has always provided the support and bug fixes.

This time DMAC feels that the only way Ace Contact Manager can be successful is with a continuing effort on both our parts driven by the market reward -- revenue. India is a large English speaking country. If Ace has the price and product features which are needed there, it should sell well there. Ace has the newest CRM features for small to medium size businesses in the USA. It runs on Vista and Windows 7. Will this approach work? Stay Tuned.

What perhaps DMAC clients should do is substitute the words "Data Entry Service" for "Ace Contact Manager" and reread this article. If every DMAC client took a data entry service organization located in India -- selling to the market in India -- into a strategic alliance, would not both organizations benefit from the vast storehouse of knowledge the DMAC client has accumulated just to survive in the USA as well as the advantages of market and labor costs provided by the team in India? Think about it.#

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"define text" Verb Now Supports Full Path File Name Feature

Unibase by DMAC, Release 8.4.37 and later, now allows the "define text" verb to reference a file outside of the {ETROOT}/text folder. A full path using either the UNC or the drive letter naming convention can be specified within quotation marks where the previous file name within the {ETROOT}/text folder was specified.

This enhancement became necessary for the encrypt features in Release 8.5.#

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Special Check for Empty Batch Removal Added As Option

Unibase by DMAC, Release 8.4.37 or later, now has an Environment option, UBNRKD, which will delete any batch that is terminated or interrupted in data entry or image entry and the batch has no records.

A DMAC client pointed out that in their environment they used wild cards to output data and did not wish an empty batch to even be recorded in the output run. In addition, they said that first the wrong keyer started a batch and then recognized that it was the wrong batch and closed it before any keystrokes. Then the keyer who needs to reference the batch would find it already existed and would be confused.

This environment variable solves such problems. The UBNRKD environment variable joins hundreds of other environment variables which enable Unibase clients to customize the Unibase environment to their liking.#

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