# *Monetra ® Payment System*

## Protocol Addendum: Signature Capture/Storage

Revision: 1.0
November 2009

# Table of Contents

# 1 Signature Capture Overview

For many years large format retailers have taken advantage of electronic signature capture to reduce fraud and streamline transaction reporting. The benefits of having an electronic signature tied to a credit or gift card transaction are obvious to these large companies and well worth the hardware and integration costs associated.

Today there are many manufacturers of signature capture devices and these companies have developed software kits to help developers easily integrate their devices. Since the devices are easier to use and costs have come down small and medium business are once again looking at integrated signature capture.

Monetra® v7 includes native data storage facilities that can be used to store and associate images of signatures captured at the Point of Purchase.

## 1.1 Frequent Developer Questions

**What signature capture devices are supported?**
Monetra itself does not communicate directly with hardware. Integration with the signature capture device is the responsibility of the POS application.

**What signature capture devices should we use?**
As long as you can retrive an image from your device (and properly format it) the particular device used is irelevant.

**What image formats are supported?**
Currently Monetra supports the TIFF format with the following restrictions.

- Must be base64 encoded
- Any return characters must conform to RFC4180 style quoting
- Image must be less than 64k in size
- Must be compressed using Class 4 (FAX)

LibMonetra 6.+ implements a M_TransBinaryKeyVal() function which will perform the base64 encoding for you.

# 2 Image Processing Protocol

The Monetra payment software provides a native facility for image storage and retrieval. Integration with the image storage features is acomplished using the standard Monetra protocol. Note: All image processing calls are adminstrative requests (i.e. admin='').

## 2.1 Parameters Table

| PARAMETER | | NOTES |
|---|---|---|
| Action | = | Admin |
| Admin | = | imageadd \| imagedel \| getimages |
| | | |
| IMAGE_TYPE | = | The image type to be stored. For signature capture its always 'signature' |
| IMAGE | = | TIFF image, base64 encoded (return characters should conform with RFC4180 style quoting). TIFF should be less than 64k in size, and use Compression Class 4 (FAX). LibMonetra 6.+ implements a M_TransBinaryKeyVal() function which will perform the base64 encoding for you. |
| TTID | = | Transaction tracking number for the Credit Card transaction associated with the image. |
| PTRANNUM | = | Ptrannum of Credit Card transaction associated with the image. (Optional) |
| BATCH | = | Batch number assigned. Used with getimages request. (Optional) |
| STATUS | = | "settled" or "unsettled". Used with getimages request. (Optional) |
| BDATE | = | "settled" or "unsettled". Begining search date used with getimages request. (Optional) |
| EDATE | = | "settled" or "unsettled". Ending search date used with getimages request. (Optional) |

# 3 Examples

## 3.1 Example: Add Signature Image

**Transaction**

```
================
username=testuser
password=test123
action=admin
admin=imageadd
image_type=signature
image=[base64 encoded tiff data here]
ttid=1234 [note: this is the ttid from the
associated credit card transaction]
================
```

**Response**

```
================
code=AUTH
msoft_code=INT_SUCCESS
phard_code=UNKNOWN
================
```

## 3.2 Example: Retrieve Signature Image

**Transaction**

```
================
username=testuser
password=test123
action=admin
admin=getimages
image_type=signature
================
```

**Response**

```
================
ttid,status,ptrannum,batch,image
32,unsettled,0,1,(base64 encoded image
data here)
================
```

## 3.3 Example: Remove Signature Image

**Transaction**

```
================
username=testuser
password=test123
action=admin
admin=imagedel
ttid=1234 [note: this is the ttid from the
associated credit card transaction]
================
```

**Response**

```
================
code=AUTH
msoft_code=INT_SUCCESS
phard_code=UNKNOWN
================
```

# 4 Document Version and Changes

| Date | Version | Change |
|---|---|---|
| Nov, 2009 | 1.0 | Initial version |