Signature Capture

This command directs the device to capture signature from a customer.

Note

Signature files for Android devices are larger in size compared to Engage and Mx devices, as Android devices have higher resolution screen. The Engage and Mx signature files are monochrome (1 bit per pixel) files whereas M440 is RGB with non-white background. This is the reason for higher data size and it always use 24 bit RGB. TIFF file format is not supported on Android based devices.

Rules

1. The SIGNATURE command is intended for non-payment purposes and is to be used outside of a payment transaction.
2. SIGNATURECAPTURE parameter should be enabled.
3. This command is supported by touch capable Engage devices only.

Configuration Parameters

Following are the configuration parameters which affect the operation.

- SIGNATURECAPTURE
- SIGIMAGETYPE
- CTLSIGLINE
- CNTSIGLINE

SIGNATURE (Message Interface)

The following tables provide corresponding device UI interactions, detailed protocol information, including field descriptions and examples.

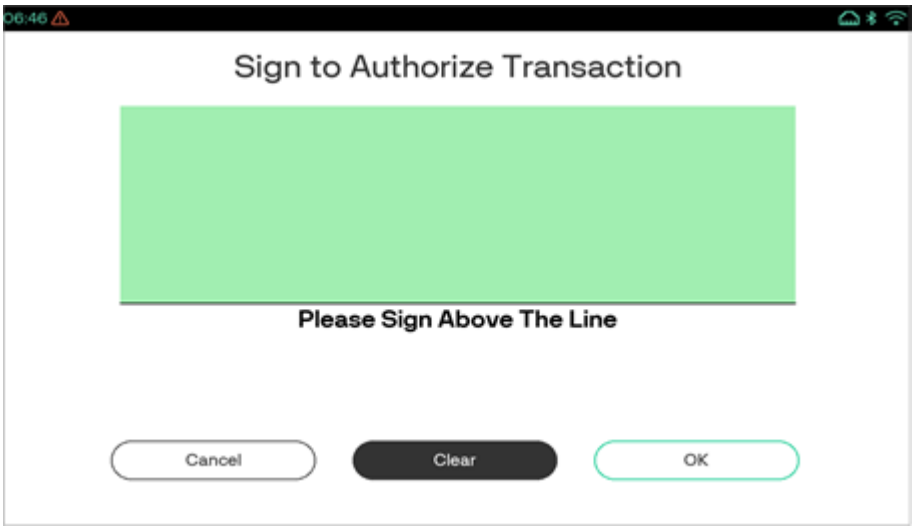
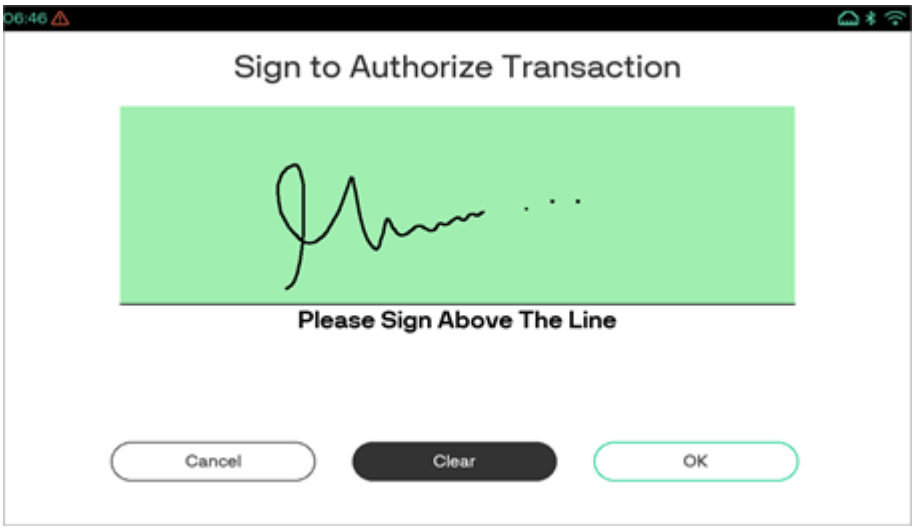
Note

Signature Capture will not prompt on Manual, due to the CardPresent variable not being populated. For Manual, the xml tag <CARD_PRESENT>TRUE</CARD_PRESENT> is required to add in the transaction requests for Signature Capture functionality to work as expected. Signature data gathered outside of a transaction is sent back only to the POS and not to the Point/PAYware Connect gateway or host.

Device UI Required

Note

Neo device (M450) is being used to capture screenshots for the Device UI Requirement section.

Display	User Action	Terminal Action
	Sign the provided box to authorize the transaction.	The device displays Signature screen.
	Press Enter to confirm.	The device displays Signature screen.

Request Packet

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
FUNCTION_TYPE	Required	Static value	N/A	N/A	DEVICE	Type of function.
COMMAND	Required	Static value	N/A	N/A	SIGNATURE	Command name
DISPLAY_TEXT	Optional	Character	1	4000		Display allows for up to four lines of text before scroll bar is displayed. When four lines are exceeded, the box will include scroll bars to navigate up/down through text area. **Example:** *I Hereby Agree to Pay The Amount in Full*. **NOTE:** If not provided, display text will default to Example shown.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
FORMATTED_DISPLAY_TEXT	Optional	Binary			• 0 - Application does formatting of the display text. • 1 - Application expects POS to perform the formatting and send it to the device.	Formatting the display text.
POS_RECON	Optional	Character	1	30		POS reconciliation. POS Reconciliation field to be echoed back in response to POS. **Example:** RetailPOS1
COUNTER	Required	Numeric	1	10		COUNTER is used for a given MAC label. Each COUNTER should be higher than the last one. This is used to authenticate the POS. **Example:** 100
MAC	Required	Base64 Encoded Data	N/A	N/A	N/A	Message Authentication Code. This is used to authenticate the POS.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
MAC_LABEL	Required	Character	1	50		Associated label that tells the device which MAC_KEY to use to decrypt the value of MAC. This is used to authenticate the POS. **Example:** REG1

Example

Following is an example of request packet

```
<TRANSACTION>
        <FUNCTION_TYPE>DEVICE</FUNCTION_TYPE>
        <COMMAND>SIGNATURE</COMMAND>
        <COUNTER>1</COUNTER>
        <MAC> … </MAC>
        <MAC_LABEL>REG2</MAC_LABEL>
</TRANSACTION>
```

Response Packet

Field	Type	Value	Description
RESPONSE_TEXT	Character		Processor response text. **Example:** Signature Captured
RESULT	Character		This indicates the Result details. **Example:** OK
RESULT_CODE	Numeric	Expected result code: -1, 59001, 59006, 59040	This indicates the result code. Refer to Result/Error Codes for details.
TERMINATION_STATUS	Character	SUCCESS or FAILURE	This indicates the transaction termination status. This is the overall status of the transaction irrespective of approved or declined. Like, if the output is generated then the status is SUCCESS and if no output is generated then the status will be FAILURE.
COUNTER	Numeric		Echoes counter sent in the request. **Example:** 100

Field	Type	Value	Description
SIGNATUREDATA	Base 64 encoded data		Signature data.
MIME_TYPE	Character	Valid values: • BMP • TIFF • 3BA • PNG • RAW	Mime type of the signature image. **Example:** Ex: image/png, image/bmp. **NOTE:** The response data for MIME_TYPE field is depending on the value set in SIGIMAGETYPE parameter (Application Parameters).
POS_RECON	Character		POS reconciliation field echoed back if sent in request. **Example:** RetailPOS1

Transaction Performance Metric

Note

These fields are returned, if SCAPERFMETRIC parameter (Application Parameters) is enabled.

Field	Type Value	Description
UI_TIME	Time	This indicates the time duration, for which the device screen is displayed (like error message, prompt screen, remove card screen) till any user action is performed in the command execution flow. This field is not applicable to capture the time for the Processing, Authorizing and transaction status screen. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. **Example:** `<UI_TIME>44.028</UI_TIME>`
HOST_TIME	Time	This indicates the time taken for the Connection to the host, sending request and receives data from the host. This field also take the cumulative time for multiple requests which may sent to the host during the transaction including two legged transactions, timeout requests, Auto Last Tran requests, DCC, Credit app proxy. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. **Example:** `<HOST_TIME>1.389</HOST_TIME>`
CMD_TIME	Time	This field indicates the total amount of time for a command, which is executed by the application from request received to the response sent. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. **Example:** `<CMD_TIME>70.765</CMD_TIME>`

Example

Following is an example of response packet

```
<RESPONSE>
        <RESPONSE_TEXT>Signature Captured</RESPONSE_TEXT>
        <RESULT>OK</RESULT>
        <RESULT_CODE>-1</RESULT_CODE>
        <TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
        <SIGNATUREDATA>{base64 encoded data}</SIGNATUREDATA>
        <MIME_TYPE>image/png</MIME_TYPE>
        <COUNTER>1</COUNTER>
</RESPONSE>
```