datacap systems, inc.

100 New Britain Blvd
Chalfont, PA 18914
Tel: 215-997-8989
E-mail: datacap@dcap.com

dsiPDCX

Mobile Payment Transactions

XML Specification

Supplement 9

V01.42

Copyright and Trademark Notices

Notice

This document contains information proprietary to Datacap Systems Inc. The only acceptable use for the information contained herein is to interface third party systems exclusively to Datacap's ePay server and Tran products. Any other use is strictly prohibited.

Revision History

00.01	06 Dec 2010	• Preliminary Draft Release
00.02	09 Dec 2010	• Incorporated <TranType> and <PadType> tags for 'SecureDeviceInit' Admin transaction.
00.03	10 Dec 2010	• Incorporated advice on Check and EBT transaction capability
01.00	26 May 2011	• Formal Release • Added configuration and data flow information for VFI Vx810 support • Added new values for <PadType> and <SecureDevice>
01.12	30 Aug 2011	• Added configuration and data flow information for UIC PP795 support • Added new values for <PadType> and <SecureDevice>
01.15	20 Apr 2012	• Added configuration and data flow information for VivoPay 4500m support
01.16	24 May 2012	• Document reorganization; Core Integration Specification and XML transaction detail in separate sections by class • Added configuration and data flow information for MagTek MiniMSR and SureSwipe • Added new TranType <GetPrePaidStripe>
01.21	27 Aug 2012	• Synchronize version with latest in document set only – no changes to this Document
01.22	30 Sep 2012	• Added new section for Payair mobile transaction support • Added FDMS Buypass Host to NETePay Compatible Server List • Added new supplement (#10) for Check transactions
01.27	14 Jul 2013	• Synchronize version with latest in document set only – no changes to this Document since V1.22
01.28	4 Oct 2013	• Added new section for IPTranLT peripheral command support
01.30	22 Nov 2013	• Added new XML to support "PassThrough" TranCode for IPTranLT
01.32	25 Jan 2014	• Synchronize version with latest in document set only; no changes to this document since V1.30
01.33	01 Mar 2014	• Synchronize version with latest in document set only; no changes to this document since V1.30
01.34	13 Apr 2014	• Release to synchronize all supplement versions; no changes to this supplement since V1.30
01.38	24 Sep 2014	• Release to synchronize all supplement versions; no changes to this supplement since V1.30
01.42	13 Sep 2015	• Release to synchronize all supplement versions; no changes to this supplement since V1.30

Table of Contents

9.0 Payair Mobile Payment Transactions

9.01 Payair - Implementation Overview

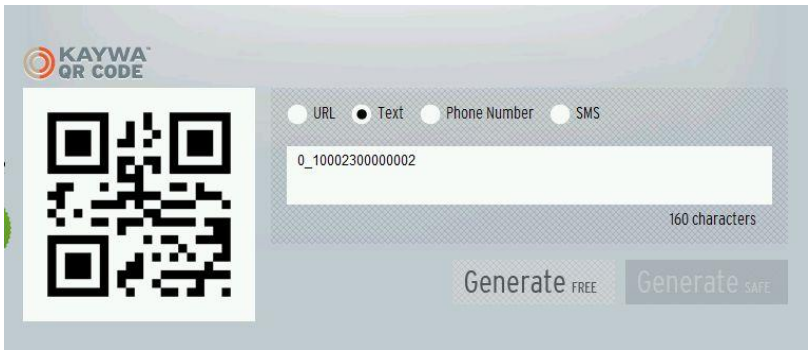
The NETePay for Payair server supports payments by mobile device users with internet access and a Payair services account at the point of sale. The payment process using Payair requires two transaction requests to NETePay.

The first request sent by the POS system to NETePay is TranCode 'CheckOut" which transmits the transaction details (including amount to be paid by the mobile device) to the Payair server so that mobile device user can identify, verify and approve the payment using the Payair service.

After the POS system has sent the 'CheckOut' request, the mobile device uses the Payair application to scan a QR code displayed at the POS station. The QR code contains the fixed MerchantID (assigned to the merchant by Payair) and a TerminalID which can be defined by the POS system but must be unique for each POS station within the store location. The QR code can be on a permanently mounted printout at the POS station within easy access for the mobile device user.

The contents of the QR code is *text* with a fixed format as follows: 0_<MerchantID><TerminalID>

An example of a QR code with a <MerchantID> = '10002300000' and <TerminalID> = '002' is:



The second request sent by the POS to NETePay is TranCode 'CheckOutStatus' which is an inquiry to the Payair server to determine if the mobile device user has approved the transaction. The NETePay response to a 'CheckOutStatus' request can be either 'Pending' or 'Approved'.

The POS system should provide the operator with a mechanism (key sequence) to send the 'CheckOutStatus' request when the mobile device user indicates to the operator that they have approved the transaction with the Payair application.

If the response to the 'CheckOutStatus' request is 'Approved', that means that the Payair service has received an authorization from the mobile device user and the POS system can consider the transaction paid.

If the response to the 'CheckOutStatus' request is 'Pending', that means that the Payair service has not yet received an authorization to make the payment from the mobile device user.

If the POS system continues to receive a 'Pending' or 'Decline' response to the 'CheckOutStatus' request because the mobile device user is unable to approve the transaction with the Payair

application, or because a reasonable time for overall transaction throughput has elapsed, or because the transaction was declined by Payair, the POS system could retry the mobile payment process again by sending a new ‘CheckOut’ request to NETePay or accept some other type of payment.

If the response to the ‘CheckOutStatus’ request is ‘Approved’ and the POS system needs to void the transaction for some reason, it should send a TranCode ‘VoidCheckOut’ request to NETePay to void the transaction approved by Payair.

9.02 Payair - CheckOut

Use: To enable a mobile device user to make a payment using the Payair service.

XML Template: **CheckOut**

```
<?xml version="1.0"?>
<TStream>
  <Transaction>
    <IpAddress>999.999.999.999</IpAddress>
    <IpPort>9040</IpPort>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranType>MPayment</TranType>
    <TranCode>CheckOut</TranCode>
    <SecureDevice>NONE</SecureDevice>
    <ComPort>0</ComPort>
    <InvoiceNo>InvoiceNo</InvoiceNo>
    <RefNo>RefNo</RefNo>
    <Account>
      <AcctNo>SecureDevice</AcctNo>
    </Account>
    <Amount>
      <Purchase>Purchase</Purchase>
    </Amount>
  </Transaction>
</TStream>
```

Element	Req	Min	Max	Type	Description
IpAddress	O	7	15	AN	IP address of server to use for this transaction. This address will override the addresses obtained via ServerIPConfig.
IpPort	Y	1	5	N	"**9040**"
MerchantID	Y	1	24	AN	Merchant identification assigned by processor.
TerminalID	Y	1	24	AN	Terminal ID data must be supplied by POS system; unique for each POS station in a location.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the Transaction.
TranType	Y	1	20	A	"**MPayment**"
TranCode	Y	1	40	A	"**CheckOut**"
SecureDevice	Y	1	40	AN	"**NONE**"
ComPort	Y	1	3	N	"**0**" (Zero)
InvoiceNo	Y	1	16	AN	Invoice number – sequential receipt number, check

					number, or other unique transaction identifier.
RefNo	Y	1	16	AN	Use the same data as InvoiceNo
Account:AcctNo	Y	1	19	AN	"**SecureDevice**"
Amount:Purchase	Y	1	8	N	Purchase amount (with 2 place decimal – eg. 29.95)

Note:
The POS system should retain the value of <RefNo> returned in the response for subsequent 'CheckOutStatus' and 'VoidCheckOut' transaction use.

9.03 Payair - CheckOutStatus

Use: To determine the status of a Payair payment previously enabled with a CheckOut request.

XML Template: **CheckOutStatus**

```
<?xml version="1.0"?>
<TStream>
  <Transaction>
    <IpAddress>999.999.999.999</IpAddress>
    <IpPort>9040</IpPort>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranType>MPayment</TranType>
    <TranCode>CheckOutStatus</TranCode>
    <SecureDevice>NONE</SecureDevice>
    <ComPort>0</ComPort>
    <InvoiceNo>InvoiceNo</InvoiceNo>
    <RefNo>RefNo</RefNo>
    <Account>
      <AcctNo>SecureDevice</AcctNo>
    </Account>
    <Amount>
      <Purchase>Purchase</Purchase>
    </Amount>
  </Transaction>
</TStream>
```

Element	Req	Min	Max	Type	Description
IpAddress	O	7	15	AN	IP address of server to use for this transaction. This address will override the addresses obtained via ServerIPConfig.
IpPort	Y	1	5	N	"**9040**"
MerchantID	Y	1	24	AN	Merchant identification assigned by processor.
TerminalID	Y	1	24	AN	Terminal ID data must be supplied by POS system; unique for each POS station in a location.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the Transaction.
TranType	Y	1	20	A	"**MPayment**"
TranCode	Y	1	40	A	"**CheckOutStatus**"
SecureDevice	Y	1	40	AN	"**NONE**"
ComPort	Y	1	3	N	"**0**" (Zero)
InvoiceNo	Y	1	16	AN	Use the same Invoice number supplied in the 'CheckOut'

					request.
RefNo	Y	1	16	AN	Use the value returned in the ‘CheckOut’ response.
Account:AcctNo	Y	1	19	AN	“**SecureDevice**”
Amount:Purchase	Y	1	8	N	Purchase amount (with 2 place decimal – eg. 29.95)

9.04 Payair - VoidCheckOut

Use: To cancel the ability of a mobile device to make a Payair payment enabled by a previously issued 'CheckOut' request.

XML Template: **VoidCheckOut**

```
<?xml version="1.0"?>
<TStream>
  <Transaction>
    <IpAddress>999.999.999.999</IpAddress>
    <IpPort>9040</IpPort>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranType>MPayment</TranType>
    <TranCode>VoidCheckOut</TranCode>
    <SecureDevice>NONE</SecureDevice>
    <ComPort>0</ComPort>
    <InvoiceNo>InvoiceNo</InvoiceNo>
    <RefNo>RefNo</RefNo>
    <Account>
      <AcctNo>SecureDevice</AcctNo>
    </Account>
    <Amount>
      <Purchase>Purchase</Purchase>
    </Amount>
  </Transaction>
</TStream>
```

Element	Req	Min	Max	Type	Description
IpAddress	O	7	15	AN	IP address of server to use for this transaction. This address will override the addresses obtained via ServerIPConfig.
IpPort	Y	1	5	N	"**9040**"
MerchantID	Y	1	24	AN	Merchant identification assigned by processor.
TerminalID	Y	1	24	AN	Terminal ID data must be supplied by POS system; unique for each POS station in a location.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the Transaction.
TranType	Y	1	20	A	"**MPayment**"
TranCode	Y	1	40	A	"**VoidCheckOut**"
SecureDevice	Y	1	40	AN	"**NONE**"
ComPort	Y	1	3	N	"**0**" (Zero)

InvoiceNo	Y	1	16	AN	Use the same Invoice number supplied in the 'CheckOut' request.
RefNo	Y	1	16	AN	Use the value returned in the 'CheckOut' response.
Account:AcctNo	Y	1	19	AN	"**SecureDevice**"
Amount:Purchase	Y	1	8	N	Purchase amount (with 2 place decimal – eg. 29.95)

9.1 IPTranLT Peripheral Control Commands

9.11 IPTranLT - Implementation Overview

The IPTranLT provides a convenient solution for wireless (WiFi) devices functioning as payment points or portable ECR/POS devices on a LAN to have access to common POS peripherals.

IPTranLT can be configured with multiple interfaces to simultaneously run a combination of attached peripherals such as cash drawers, printers, bar code scanners, and pole displays.

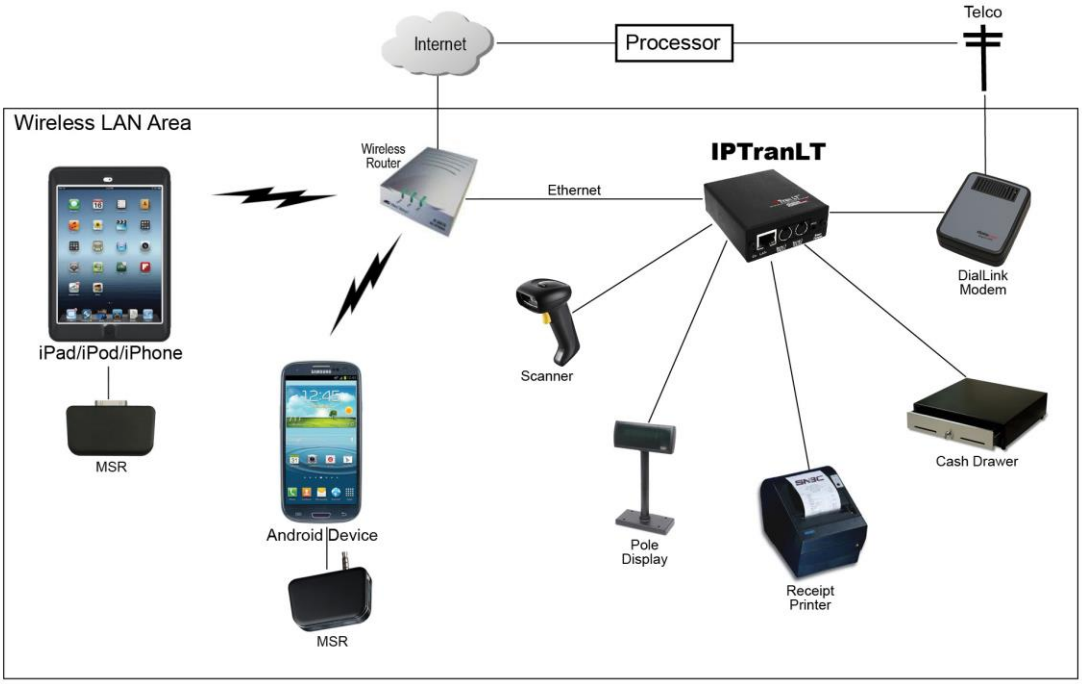
In addition to peripheral support, select IPTranLT applications can process payments securely over the Internet or phone lines with support for most of the major payment processing providers.

Datacap has libraries for iOS and selected Android devices that allow developers to easily incorporate support for IPTranLT in their application code. These libraries provide secure IP communications to IPTranLT's within a LAN and allow applications to control devices and process payments using an XML command structure.

The XML command definitions for processing payments are contained in their respective supplements in the dsiPDCX or DSIClientX family of documents. The XML command structure employed by IPTranLT is also supported by Datacap's ePay server products. This provides WiFi devices that don't need to control peripherals with another approach to processing payments.

This Mobile Payments Supplement section describes how to use the peripheral devices that can be attached to IPTranLT.

A typical configuration utilizing an IPTranLT:



9.12 Cash Drawer Open

Use: To open a cash drawer attached to an IPTranLT

XML Request Template: **DrawerOpen**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>DrawerOpen</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
  </Admin>
</TStream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value to which the cash drawer to be opened is attached. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"DrawerOpen"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"
SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous transaction response.
TerminalName	O	1	20	AN	Terminal name
ShiftID	O	1	20	AN	Shift identification

XML Response Template: **DrawerOpen**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: "Server" = generated by Datacap server "Processor" = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code which identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: "Success" = command completed successfully "Error" = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of "Drawer Opened"
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	"NONE"

9.12 Cash Drawer Status

Use: To get the status (open or closed) of a cash drawer attached to an IPTranLT

XML Request Template: **DrawerStatus**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>DrawerStatus</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
  </Admin>
</TStream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value to which the cash drawer whose status to be read is attached. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"DrawerStatus"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"
SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous transaction response.
TerminalName	O	1	20	AN	Terminal name
ShiftID	O	1	20	AN	Shift identification

XML Response Template: **DrawerStatus**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
  <DrawerStatus>DrawerStatus</DrawerStatus>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: "Server" = generated by Datacap server "Processor" = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code which identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: "Success" = command completed successfully "Error" = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of either "Drawer is Opened" or "Drawer is Closed".
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	"NONE"
DrawerStatus	1	24	AN	"Open" or "Closed"

9.13 Put Text Message on Pole Display

Use: To put a text message on a pole display attached to an IPTranLT

XML Request Template: **PoleDisplay**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>PoleDisplay</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
    <DisplayData>
      <Line1>Line1</Llne1>
      <Line2>Line2</Llne2>
    </DisplayData>
  </Admin>
</Tstream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value to which the cash drawer whose status to be read is attached. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"PoleDisplay"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"
SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous transaction response.
TerminalName	O	1	20	AN	Terminal name
ShiftID	O	1	20	AN	Shift identification
DisplayData:Line1	Y	1	21	AN	A period (".") followed by the text to be displayed on first

					line of pole display
DisplayData:Line2	O	1	21	AN	A period (“.”) followed by the text to be displayed on second line of pole display

XML Response Template: **PoleDisplay**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: “Server” = generated by Datacap server “Processor” = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code which identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: “Success” = command completed successfully “Error” = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of “DISPLAYED”.
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	“NONE”

9.14 Print Receipt

Use: To print a multi-line receipt on a printer attached to an IPTranLT

XML Request Template: **PrintReceipt**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>PrintReceipt</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
    <PrintData>
      <Line1>Line1</Llne1>
      <Line2>Line2</Llne2>
      .
      .
      <LineN>LineN</LlneN>
    </PrintData>
  </Admin>
</Tstream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value to which the cash drawer whose status to be read is attached. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"PrintReceipt"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"
SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous transaction response.
TerminalName	O	1	20	AN	Terminal name

ShiftID	O	1	20	AN	Shift identification
PrintData:Line1	Y	1	41	AN	A period (“.”) followed by the text to be displayed on first line of printer
PrintData:Line2…N	O	1	41	AN	A period (“.”) followed by the text to be displayed on second (and subsequent) line(s) of printer

XML Response Template: **PrintReceipt**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: “Server” = generated by Datacap server “Processor” = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code which identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: “Success” = command completed successfully “Error” = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of “PRINTED”. An Error response will contain text describing the error encountered.
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	“NONE”

9.15 Print Test

Use: To print a fixed message to verify proper printer operation on a printer attached to an IPTranLT

XML Request Template: **PrintTest**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>PrintTest</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
  </Admin>
</Tstream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value to which the cash drawer whose status to be read is attached. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"PrintTest"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"
SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous transaction response.
TerminalName	O	1	20	AN	Terminal name
ShiftID	O	1	20	AN	Shift identification

XML Response Template: **PrintTest**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: "Server" = generated by Datacap server "Processor" = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code which identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: "Success" = command completed successfully "Error" = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of "PRINTED". An Error response will contain text describing the error encountered.
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	"NONE"

9.16 Scan a Bar Code

Use: To scan a bar code on a scanner attached to an IPTranLT

XML Request Template: **ScanItem**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>ScanItem</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
  </Admin>
</Tstream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value to which the cash drawer whose status to be read is attached. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"ScanItem"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"
SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous transaction response.
TerminalName	O	1	20	AN	Terminal name
ShiftID	O	1	20	AN	Shift identification

XML Response Template: **ScanItem**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
  <ItenNo>ItemNo</ItenNo>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: "Server" = generated by Datacap server "Processor" = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code which identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: "Success" = command completed successfully "Error" = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of "SCANNED". An Error response will contain text describing the error encountered.
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	"NONE"
ItemNo	1	24	AN	Scanned item number/value if command is successful. The <ItemNo> tag will not be included in the <ScanItem> response if the command returns an Error response.

9.17 Load an IPTranLT Application

Use: To load a new application into an IPTranLT from Datacap's PSCS server on the Internet.

XML Request Template: **LoadApp**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>LoadApp</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
  </Admin>
</Tstream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value to which a new application should be loaded. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"LoadApp"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"
SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous transaction response.
TerminalName	O	1	20	AN	Terminal name
ShiftID	O	1	20	AN	Shift identification

XML Response Template: **LoadApp**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: "Server" = generated by Datacap server "Processor" = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code which identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: "Success" = command completed successfully "Error" = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of "Load In Progress". An Error response will contain text describing the error encountered.
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	"NONE"

9.18 Load IPTranLT Parameters

Use: To load configuration parameters into an IPTranLT from Datacap's PSCS server on the Internet.

XML Request Template: **LoadParams**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>LoadParams</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
  </Admin>
</Tstream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value to which a new application should be loaded. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"LoadParams"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"
SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous transaction response.
TerminalName	O	1	20	AN	Terminal name
ShiftID	O	1	20	AN	Shift identification

XML Response Template: **LoadParams**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: "Server" = generated by Datacap server "Processor" = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code which identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: "Success" = command completed successfully "Error" = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of either "PARAM LOAD ENABLED". An Error response will contain text describing the error encountered.
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	"NONE"

9.19 Set IPTranLT Test Mode

Use: To put the IPTranLT into Test Mode. In Test Mode, the IPTran will utilize the payment processor's available test system to process payment transaction requests. Test Mode is intended for troubleshooting processing problems only. It is recommended that developers who support the TestMode command provide restricted access control to his function.

Important: **Payment transaction requests processed while IPTranLT is in Test Mode *will not be paid to the merchant account*. Any payment transactions performed in test mode must not use live credit card account information – only test account information supplied by the processing service provider should be used. Once the need for Test Mode transactions is completed, the IPTran LT must be power cycled (power off then power on) to cancel Test Mode and allow resumption of normal payment processing activity.**

XML Request Template: **TestMode**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>TestMode</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
  </Admin>
</Tstream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value which should be put into test mode. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"TestMode"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"

SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous transaction response.
TerminalName	O	1	20	AN	Terminal name
ShiftID	O	1	20	AN	Shift identification

XML Response Template: **TestMode**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: "Server" = generated by Datacap server "Processor" = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code which identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: "Success" = command completed successfully "Error" = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of either "TEST MODE ENABLED". An Error response will contain text describing the error encountered.
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	"NONE"

9.20 Send Tran AT Command in Pass Through Mode

Use: To send a Tran AT command in Pass Through mode. This permits the transmission of a Tran AT command via IP from the client (dsiPDCX) to an IP capable Tran device that would normally be sent on the Tran's RS-232 host interface. It is recommended that developers who support the Pass Through command provide restricted access control to his function.

Notes:
1. Contact your Datacap representataive for the latest document titled **Tran Products OEM Integration Guide** for a reference on using Tran AT commands.
2. Tran AT commands submitted via PassThrough mode in the client must replace all occurrances of the character "&" with the character "!"

XML Request Template: **PassThrough**

```
<?xml version="1.0"?>
<TStream>
  <Admin>
    <TranDeviceID>TranDeviceID</TranDeviceID>
    <MerchantID>MerchantID</MerchantID>
    <TerminalID>TerminalID</TerminalID>
    <OperatorID>OperatorID</OperatorID>
    <TranCode>PassThrough</TranCode>
    <SecureDevice>ValidSecureDeviceID</SecureDevice>
    <ComPort>ComPort</ComPort>
    <SequenceNo>SequenceNo</SequenceNo>
    <TerminalName>TerminalName</TerminalName>
    <ShiftID>ShiftID</ShiftID>
    <ATCommand>ATCommand</ATCommand>
  </Admin>
</Tstream>
```

Element	Req	Min	Max	Type	Description/Value
TranDeviceID	Y	1	24	AN	Use the IPTranLT Device ID (DID) value where the AT command should be executed. The DID value is printed on a sticker on the bottom of every IPTranLT.
MerchantID	Y	1	24	AN	"NONE"
TerminalID	O	1	24	AN	Terminal ID data must be supplied in this tag only if provided by the processor or merchant service provider; otherwise this tag should not be included.
OperatorID	O	1	10	N	Operator (clerk, server, etc.) associated with the request.
TranCode	Y	1	40	A	"PassThrough"
SecureDevice	Y	1	40	AN	"NONE"
ComPort	Y	1	3	N	"0"
SequenceNo	O	1	20	AN	Use the SequenceNo value returned in the previous

					transaction response.
TerminalName	O	1	20	AN	Terminal name
ShiftID	O	1	20	AN	Shift identification
ATCommand	R	1	40	An	Vaild Tran AT Command string (See note 2)

XML Response Template: **PassThrough**

```
<?xml version="1.0"?>
<RStream>
  <CmdResponse>
    <ResponseOrigin>ResponseOrigin</ResponseOrigin>
    <DSIXReturnCode>DSIXReturnCode</DSIXReturnCode>
    <CmdStatus>CmdStatus</CmdStatus>
    <TextResponse>TextResponse</TextResponse>
    <UserTraceData>UserTraceData</UserTraceData>
  </CmdResponse>
  <MerchantID>MerchantID</MerchantID>
  <TranResponse>
    <LineNNN>TranResponseText</LineNNN>
  </TranResponse>
</RStream>
```

Element	Min	Max	Type	Description/Value
ResponseOrigin	1	10	A	Indicates the source of the response: "Server" = generated by Datacap server "Processor" = generated by payment processor
DSIXReturnCode	6	6	N	Six digit return code that identifies an error type.
CmdStatus	1	10	A	Indicates the outcome of the command: "Success" = command completed successfully "Error" = error processing command. Check DSIXReturnCode and TextResponse for additional info on error
TextResponse	1	40	AN	For Successful responses, this field will have a value of either "SUCCESS". An Error response will contain text describing the error encountered.
UserTraceData	0	40	AN	Echo of data supplied by the user system in the request; for use by the user system for internal tracking.
MerchantID	1	24	AN	"NONE"
TranResponse:LineNN	1	40	AN	Text response line(s) from Tran. NN = 1-999

Sample PassThrough command for AT!UP96 Tran AT command:

Request:

```
<?xml version="1.0"?>
<TStream>
 <Admin>
```

```
  <TranDeviceID>TT6912082069</TranDeviceID>
  <ComPort>0</ComPort>
  <SecureDevice>NONE</SecureDevice>
  <MerchantID>NONE</MerchantID>
  <TranCode>PassThrough</TranCode>
  <ATCommand>AT!UP96</ATCommand>
 </Admin>
</TStream>
```

Response:

```
<?xml version="1.0"?>
<RStream>
 <CmdResponse>
  <ResponseOrigin>Processor</ResponseOrigin>
  <DSIXReturnCode>000000</DSIXReturnCode>
  <CmdStatus>Success</CmdStatus>
  <TextResponse>SUCCESS</TextResponse>
  <UserTraceData>XMLTENH</UserTraceData>
 </CmdResponse>
 <MerchantID>NONE</MerchantID>
 <TranResponse>
  <Line1>VS2 --- --- ---  Ver: 3.80 sl</Line1>
  <Line2>ON  OFF OFF OFF</Line2>
  <Line3>OK</Line3>
 </TranResponse>
<RStream>
```