

InfoGenesis POS

Transaction Processing Gateway (TPG)

Developer's Guide

Subject: Transaction Processing Gateway Technical Specification

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InfoGenesis POS Transaction Processing Gateway Guide

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Revision History

Rev.	Date	Name	Description of Change	
Α		Michael Smith	Preliminary Release	
В	03/30/2001	David L. Mastropieri	Format and Release for testing verification	
С	04/03/2001	David L Mastropieri	Released to coincide with Revelation Release 2.5.0	
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			Revised and re-formatted specification to coincide with release.	
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			Revisions for credit card authorization and process order credit card payment.	
			Revisions for choice group configuration data and screen configuration data.	
F	08/15/2001	Jack Stevens	Added Section 5.7.1 – New Service – Get List of Open Orders	
G	08/17/2001	Jack Stevens	Section 5.5.1.5 Enhanced ProcessOrder to support Add More Items to Existing Open Order	
Н	09/14/2001	Jack Stevens	Section 5.5.1.7 Included customer receipt text in Process Order (save open order) response	
ı	09/27/2001	Jack Stevens	Section 4.7 Added a list and definitions for the tender classes and over-payment types.	
			Section 5.2.7.1 Enhanced Get Tender Config to include the tender class (i.e. cash, credit,) and over-payment type (exact, change, tip)	
			Section 5.4.1.2 Enhanced Calculate Order Amount to support an existing order ID in the request. This is required to obtain the total amount for a pre-existing open order.	
			Section 5.4.1.3 Enhanced Calculate Order Amount to support an existing order ID in the request. This is required to obtain the total amount for a pre-existing open order.	
			Added Section 5.7.2 New service: Get Receipt Text for an existing open order.	
J	10/03/2001	Jack Stevens	Added Section 5.2.1 – New service – Get Last Config Change Time	
K	11/04/2001	Jack Stevens	Section 5.5.2 – Enhanced ProcessOrder to support tendering (close out) of an Existing Open Order.	
			Section 5.6.1 – Enhanced Credit Card Auth to support authing of an Existing Open Order	
			Added Section 5.6.2 – New Service Get List of Room Accounts	
			Added Section 5.6.3 – New Service – Room Charge payment processing.	



Rev.	Date	Name	Description of Change	
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			Added Section 5.6.5 – Generic Authorization (new service)	
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			Section 5.6.2.1 – List of Room Accounts request	
			Section 5.6.3.1 – Room Charge authorization request	
			Section 5.6.4.1 – Folio Charge authorization request	
			Section 5.6.5.1 – Generic authorization request	
Q	07/01/2003	Jerry McFerran	Add <early-payment-allowed> tag to Section 5.2.7.2 – Tender Configuration Data Response</early-payment-allowed>	
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			Add Section 5.7.3 – Get Order Summary Data for Existing Open Order	
R	10/16/03	Jerry McFerran	Add <item-price> tag to:</item-price>	
			Section 5.4.1 – Calculate Order Amount request	
			Section 5.5.1 – Process Order Request	
			Add <track-information> tags to Section 5.6.3.1 – List of Room Accounts request</track-information>	
			Add Section 5.6.5.3 – Generic Authorizaton Credit Requst	
			Add Section 5.6.5.4 – Generic Authorizaton Credit Response	
			Add Section 5.6.8.1 – Account Request	
			Add Section 5.6.8.2 – Account Response	



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ila 	00/20/10	odo noemola	Modify section 5.5.1.2 – Process Order to include typed special instructions Modify section 5.5.1.2 – Process Order to include course number
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2.01	06/27/11	Jack Stevens	Add support for creation of team serving checks Updated section 4.14 Added <team-id> to Process Order request messages Updated section 5.5.1.1 – 5.5.1.5</team-id>
2.02	10/25/11	Udo Hoerhold	Made edits based on spec review.



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1.0 Introduction

The POS Transaction Processing Gateway (TPG) is a utility installed on a InfoGenesis POS Back Office or Interface Server. The TPG is used to accept POS Service Requests in a structured XML message format and send it to the InfoGenesis POS system to be processed.

It is strongly recommended that a working understanding of the InfoGenesis POS system be obtained before developing applications that utilize the TPG services. In addition expertise with XML, HTTP, and SOAP is required. The book, "Developing XML Solutions" by Jake Sturm, provides an excellent technical reference.

2.0 POS Transaction Processing Gateway set up

Refer to InfoGenesis POS Installation documentation for setting up the POS Transaction Processing Gateway (TPG) utility.

3.0 HTTP Header Definitions for Transaction Processing Gateway

This section defines the formats for the HTTP request and response headers used to obtain services from the InfoGenesis POS Transaction Processing Gateway (TPG). These formats are based on the HTTP SOAP specification supported for version 1.1. of the HTTP protocol. A client must use the HTTP protocol with the POST command type to obtain TPG services.

3.1 HTTP Request Header Definition

An example of the HTTP request header for requesting a TPG service is shown below. This specific example is for a clock-in status request message.

```
/InfoGenesis HTTP/1.1\r\n
Host:www.InfoGenesis.com/POSTransGateway\r\n
Content-Type: text/xml\r\n
Content-Length: 234\r\n
SOAPAction: "urn:InfoGenesis.POSTransGateway.com:PTG#clock-status-
request"\r\n\r\n
<SOAP-ENV: Envelope
xmlns:xsi = "http://www.w3.org/1999/XMLSchema/instance"
xmlns:SOAP-ENV= "http://schemas.xmlsoap.org/soap/envelope"
  xsi:schemaLocation=
"http://www.infogenesis.com/schemas/ver1.4/POSTransGatewaySchema.xsd">
 <SOAP-ENV:Body xsi:type= "clock-status-request-Body">
  <clock-status-request-Body>
   <clock-status-request>
    <trans-services-header>
     <cli>ent-id>1</client-id>
    <session-id>4568989609680958</session-id>
     <authentication-code>ABCDEO39832098</authentication-code>
    </trans-services-header>
   </clock-status-request>
  </clock-status-request-Body>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Note that a carriage/return line feed ("\r\n") sequence must delimit each of the HTTP headers, and an extra carriage/return line feed ("\r\n\r\n") is required to signify that the header information is complete and that what will follow is the actual message payload.



3.2 HTTP Response Header Definition

The HTTP response headers are sent back to the client from the TPG server in response to a TPG client service request. Two examples are illustrated below. The first example shows what the response to a successfully processed HTTP request looks like. The second example shows what the response to an HTTP request that could not be processed looks like.

3.2.1 Successfully Processed HTTP Request

```
HTTP/1.1 200 OK\r\n
Content-Type: text/xml\r\n
Content-Length: 234\r\n\r\n
<SOAP-ENV:Envelope
   xmlns:xsi = "http://www.w3.org/1999/XMLSchema/instance"
   xmlns:SOAP-ENV= "http://schemas.xmlsoap.org/soap/envelope"
    xsi:schemaLocation=
"http://www.infogenesis.com/schemas/ver1.4/POSTransGatewaySchema.xsd">
   <SOAP-ENV:Body xsi:type= "clock-status-response-Body">
     <clock-status-response-Body>
     <clock-status-response>
       <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>4568989609680958</session-id>
        <authentication-code>ABCDE039832098</authentication-code>
       </trans-services-header>
         <service-completion-status>ok</service-completion-status>
         <clock-status-data>
          <authorization-name>Joe B</authorization-name>
        </clock-status-data>
   </clock-status-response>
  </clock-status-response-Body>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```



3.2.2 Failed to Process HTTP Request

```
HTTP/1.1 400 Bad Request\r\n
Content-Type: text/plain\r\n
Content-Length: 234

<SOAP-ENV:Fault
   xmlns:xsi = "http://www.w3.org/1999/XMLSchema/instance"
   xmlns:SOAP-ENV= "http://schemas.xmlsoap.org/soap/envelope"
   xsi:schemaLocation=
"http://www.infogenesis.com/schemas/ver1.4/POSTransGatewaySchema.xsd">
   <SOAP-ENV:Fault>
   <faultcode>300</faultcode>
   <faultstring>Invalid Request</faultstring>
   </SOAP-ENV:Fault>
```

The SOAP definitions for the faultcode and faultstring values are defined as follows:

faultstring value	faultcode value	Meaning
Version Mismatch	100	The call was using an unsupported SOAP
		version
Must Understand	200	An XML element was received that contained an element tagged with <i>mustUnderstand</i> = "1"
		that was not understood by the TPG server
Invalid Request	300	The request was not processed because it
		was incorrectly formed or not supported
Application Faulted	400	The TPG server was not able to process the
		request due to application failure



4.0 Supported Services

The services supported by the InfoGenesis POS Transaction Processing Gateway (TPG) are summarized in the following sections. TPG service requests from a client are processed by a TPG server. The TPG server is configured as a terminal on the InfoGenesis POS system, and therefore has access to configuration data specifically configured for the terminal. The TPG server is assigned to a specific profit center (which in turn belongs to a specific store), therefore all orders that are generated by a TPG client will be assigned to the TPG server's profit center. An XML schema specification is provided to specify the message format and data validation rules for the supported services. These are contained in the document "InfoGenesis POS Transaction Processing Gateway Schema Specification". Version 1.61 of the schema specification is compatible with the services contained in this document.

It is strongly recommended that a working understanding of the InfoGenesis POS system be obtained before developing applications that utilize the TPG services. In addition expertise with XML, HTTP, and SOAP is required. The book, "Developing XML Solutions" by Jake Sturm, provides an excellent technical reference.

4.1 Client Device Authentication

The client authentication service must be implemented by a TPG client application to obtain services from the TPG. This service is used to authenticate the client to ensure that it has been granted access to TPG services. A client must be successfully authenticated before they can obtain services from the TPG. The client must supply an authentication code in an authentication request. The authentication code supplied by the client is compared against the authentication code that is configured for the client in the INFOGENE.INI file. If they match, the client will be successfully authenticated, and can request additional TPG services.

4.2 Employee Configuration Data

The employee configuration data service is used by the client to obtain the employee records that correspond to the store the TPG server is assigned to.

4.3 Job Code Configuration Data

The job code configuration data service is used by the client to obtain the job code records that correspond to the terminal group the TPG server is assigned to.

4.4 Table Configuration Data

The table configuration data service is used by the client to obtain the table records that correspond to the profit center the TPG server is assigned to.

4.5 Menu Item Configuration Data

The menu item configuration data service is used by the client to obtain the menu item records that correspond to screens assigned to the terminal group the TPG server is assigned to.

4.6 Modifier Configuration Data

The modifier configuration data service is used by the client to obtain the modifier records that correspond to the screens assigned to the TPG server's terminal group.



4.7 Tender Configuration Data

The tender configuration data service is used by the client to obtain the tender records that correspond to the available payment methods. Tender records define payment methods and consists of a tender ID, text description and a payment classification.

The currently supported payment tender classes (Verify Codes) are as follows:

- cash
- credit-card
- folio-charge
- room-charge
- account-charge
- account-charge-only
- account-lookup-only
- generic-auth
- generic-auth-credit
- other

The payment class is used by the client to trigger data input prompts and authorization service calls that are required for special payment methods such as credit card. Additional payment tender classes will be supported in future versions.

Some payment methods may be applied to the order prior to the time that the order is completed. These tenders are identified in the payment record as early-payment types.

Each tender record also includes one of the following over-payment indicators:

- exact over-payment not allowed; exact payment, only
- change over-payment is returned as change (e.g. cash)
- tip over-payment goes to tip (e.g. credit card)

The over-payment indicator is used to determine the disposition of any over payment amount. An example is an order with a total amount due of \$8.57. When the payment amount is entered as \$10.00, the over-payment indicator controls whether the \$1.43 over payment amount is returned as change or applied as a tip; in the case of exact amount only, the Process Order transaction will be rejected with an appropriate error code and message. The over-payment indicator can be used by the client to trigger specific user interface modes for payment amount and/or tip amount input based on the selected payment method class. For example, if an exact payment method was selected, the user could be prevented from entering a payment amount that exceeded the order total, thus avoiding a rejected transaction. For a tip over-payment method, the user could be prompted to input the tip amount.

4.8 Profit Center Configuration Data

The profit center configuration data service is used by the client to obtain the profit center records that have been assigned to the terminal identifier assigned to the TPG server.

4.9 Choice Group Configuration Data

The choice group configuration data service is used by the client to obtain a list of the choice groups and the choice selections (modifiers) assigned to choice group. Choice groups are assigned to menu items to force automatic prompting for extras such as choice of side dish, soup, salad, condiments, etc.



4.10 Screen Configuration Data

The screen configuration data service is used by the client to obtain a list of the menu screens and the screen button objects (items, modifiers, ...) assigned to each menu screen.

4.11 Clock-in Status

The clock-in status service is used by the client to obtain only those employee records for employees that are currently clocked-in to the profit center for which the TPG server is configured.

4.12 User Authorization

The user authorization service is used by the client to determine if a user is to be granted access to the POS system. The user authorization service requires that the user manually enter a user identifier and password, or that they swipe a card that contains their access number (it is the responsibility of the client application to determine what log in methods are implemented). If the user login information can be authenticated on the POS system, the user authorization service will indicate this to the client, and provide the client with the user's name as configured on the POS system and their current job code. Otherwise, the user authorization service will notify the client that no user matching the login information is currently clocked-in to the POS system.

4.13 Calculate Order Amount

The calculate order amount service is used by the client to request that the TPG server calculate the total amount for an order.

4.14 Process Order

The process order service is used by the client to create an order on the InfoGenesis POS system. The order may be created as an open order, which means it is available for recall at a later time for order modification, or the order can be closed, which means that the customer has paid for the order and therefore it needs to be included in the financial totals of the InfoGenesis POS system. The default will be to handle the order as an open order, unless it is specifically identified in the process order request that the intent is to close the order. To close an order, a payment method and any additional information for the payment method that is required to successfully settle the payment will be required in the process order request. In addition, the payment and tip amount must be included with each payment. The specified payment amount must fully cover the order amount plus tip amount. If not, the TPG server will notify the client that insufficient payment exists to close the order. It is not necessary that the order amount be included in the process order service for a closed order. The process order service will always perform all order amount calculations. If the payment amount covers or exceeds the order amount plus tip, the order will be closed, and the change due will be returned to the client, along with the order number.

The process order request supports both simple and complex payment methods. Cash is an example of a simple payment method; tender-id and payment amount are the only required data parameters (tip amount is optional.) Credit card is an example of a complex payment method; the user must be prompted to input account data, and an additional payment authorization service call (e.g. Credit Card Authorization) must be performed before the order can be processed. A successful payment authorization response includes sales draft text (for printing a customer signature receipt) and a payment-reference-key. The payment-reference-key must be included, along with the payment amount (and optional tip amount), in the process order request when using a complex payment method.



The client can specify in a process order request if receipt text is required. The receipt text is text information that has been formatted for a thirty column printer. Any white space included within the text must be preserved. The utilization of a carriage return and line feed sequence "\r\n" is used to indicate a new line. The use of pre-defined entities is also employed to handle special characters that are reserved by XML parsers. These include &, <, >, ", and '. If these special characters appear in receipt text they will be encoded by the use of pre-defined entities as follows:

- a) & will be encoded as &
- b) < will be encoded as &It
- c) > will be encoded as >
- d) " will encoded as "
- e) 'will be encoded as &apos

The order that is created on the InfoGenesis POS system will be set to the profit center specified as the primary profit center to the TPG server, if no profit center is specified in the process order request. If a profit center is specified in the process order request, and the profit center is in the list of profit centers supported by the TPG server, the profit center for the order will be set to the one specified in the order request.

If the process order request is for an open order that was previously saved, there are certain rules that need to be specified for handling the different types of information in the process order request. These are summarized as follows:

Multi-pass orders (tabs)

The process order service supports both single-pass and multi-pass orders. Multi-pass orders (also known as 'tabs') are open orders for which the client performs multiple process order requests for a single order number. The TPG supports multi-pass orders via the 'add items to existing open order' form of the process order request. The initial process order (starting a new open order) stores the open order data keyed by a unique order-number. A subsequent process order can add more items to the existing open order (e.g. another round of drinks) by including the order-number in the process order request. The original order-number is obtained by calling the Get List of Open Orders service. This service returns a list of open order records that includes order-number and table-number (the user identifiable handle to an order.) The user selects a specific table-number from the list of open orders, and then the client application includes the associated order-number, along with the newly ordered items, in a process order request. The TPG server will append the new items (and modifiers) to the existing open order.

Team serving operations (create team serving check)

The process order service supports the creation of team serving checks. A team serving check is "owned" by a team that can include up to eight (8) members such that the check can be accessed by any of the team members to add items and/or apply auths or payments to the check.

An example of an operation that might use team serving would be a pool bar with multiple teams where each team consists of a server and a runner. The servers take the orders using mobile ordering devices and the associated (team member) runner recalls the orders at a fixed station POS, prints the guest receipt and delivers the orders. Each check is assigned to a team, and only the team members (server and runner) can access that team's checks at either mobile devices or fixed station POS terminals.

To create a team check, the mobile device needs to submit the team# (and the signed-on employee id) in the Process Order request that creates the check. The TPG will validate the team# (i.e. it must be a valid team configured for the profit center) and the TPG will validate that the employee id is a member of the team. An appropriate error message is



returned if either validation criteria is not met. (Note: after a team serving check has been created, team# input is not required for subsequent Process Order requests to add items and/or apply auths or payment to an existing check. If a team# is sent, the TPG will ignore it for subsequent Process Order requests. Input of team# is only required for the initial Process Order request that creates the check.)

The client controls whether or not a check is a team serving check. If the initial Process Order request (that creates the check) includes a team# value, then the TPG will attempt to create a team serving check subject to the above validation criteria. If the team# value is missing (or = 0) then a "normal" check will be created.

4.15 Credit Card Authorization

The credit card authorization service is used by the client to obtain credit card authorization services from the TPG server. A credit card can either be swiped (preferable method for obtaining better discount rates) or the card number and expiration date can be entered manually. The client can determine if credit card authorization is required for a tender button by examining the authorization service type specified in the tender configuration record.

When the TPG server receives a credit card authorization request, it will determine if the credit card is a valid card, if the card number is valid (if manual entry), if the type of credit card is authorized for use, if the credit card matches the type of tender that was selected, or whether the credit card is expired. The TPG server will notify the client in the credit card authorization response if any of these problems are detected. If the credit card satisfies the above criteria, the TPG server will attempt to perform an online authorization. The possible results of the online authorization are:



- 1) the credit card has been successfully authorized for the specified amount
- 2) the credit card charge has been declined by the authorization agency
- 3) some error has occurred that prevented authorization from proceeding.

If the credit card authorization is successful, the authorization response message will include a payment reference-key along with sales draft text for printing of a signature receipt. The payment reference-key is a 'handle' that must be retained by the client for subsequent inclusion in the payment section of a Process Order request when the order is closed out with payment to the credit card.

The sales draft that is included with a successful credit card authorization response is text information that has been formatted for a thirty column printer. Any white space included within the text must be preserved, The utilization of a carriage return and line feed sequence "\r\n" is used to indicate a new line. The use of pre-defined entities is also employed to handle special characters that are reserved by XML parsers. These include &, <, >, ", and '. If these special characters appear in the credit card draft text, they will be encoded by the use of pre-defined entities as follows:

- a) & will be encoded as &
- b) < will be encoded as &It
- c) > will be encoded as >
- d) "will encoded as "
- e) 'will be encoded as &apos

4.16 Room Charge Authorization

The room charge authorization services are used by the client to obtain authorization for order payment by charging to a guest's room account number. Room charge authorization is a two step process. The first step is to perform a service request to obtain a list of guest accounts for a specific room or a list of guest accounts by guest name. (Note: many property management systems do not support the 'by guest name' feature.) The second step is to perform a service request to authorize a specific guest account that the user selected from the (step 1) list of guest accounts.

Step 1: Get List of Room Accounts

The Get List of Room Accounts service returns a list of guest accounts by room number or guest name. (Note: many property management systems do not support the 'by guest name' feature.) The request must include the room number (or guest name with byname tag) as the search criteria for the guest account list. This service request supports either manually keyed room number or MSR room card swipe input.

After the client receives the list of one or more guest accounts, it should present the list to the user for selection of the specific guest account to be charged. The selected guest account data is then used as the input to the actual room charge authorization service request.

Step 2: Room Charge Authorization

The Room Charge Authorization service is required to authorize a specific room guest account. The request data is obtained from one of the guest account records returned by the Get List of Room Accounts service. For proper authorization (and charge posting to the PMS host) the request must include the room number, account number and guest name. Room charge authorization is required for payment with a tender button (Tender Configuration data) assigned to the room-charge tender class.



When the authorization request is successful, the authorization response message will include the following data:

- payment reference-key
- confirmation display text
- sales draft text

The payment reference-key is a 'handle' that must be retained by the client for subsequent inclusion in the payment section of a Process Order request when the order is closed out.

The confirmation display text can be used for (optional) prompt to confirm that the correct room guest account is being charged.

The sales draft is text information that can be used to print a customer signature receipt, formatted for a thirty column printer. Any white space included within the text must be preserved. The utilization of a carriage return and line feed sequence (\r\n) is used to indicate a new line. The use of pre-defined entities is also employed to handle special characters that are reserved by XML parsers. These include &, <, >, ", and '. If these special characters appear in the draft text, they will be encoded by the use of pre-defined entities as described previously in the credit card authorization section.

Note: Any successful Room Charge Authorization that is not committed with a Process Order service request should be 'cleaned-up' with a Cancel Authorization service request. It is the client's responsibility to either commit (via Process Order) or cancel a successful Room Charge Authorization.

4.17 Folio Charge Authorization

The folio charge authorization service is used by the client to obtain authorization for order payment by charging to a guest's folio account number. The folio account number can be input either manually by keypad or MSR swiped by folio card. Folio charge authorization is required for payment with a tender button (Tender Configuration data) assigned to the folio-charge tender class.

When the authorization request is successful, the authorization response message will include the following data:

- payment reference-key
- confirmation display text
- sales draft text

The payment reference-key is a 'handle' that must be retained by the client for subsequent inclusion in the payment section of a Process Order request when the order is closed out.

The confirmation display text can be used for (optional) prompt to confirm that the correct folio account is being charged.

The sales draft is text information that can be used to print a customer signature receipt, formatted for a thirty column printer. Any white space included within the text must be preserved. The utilization of a carriage return and line feed sequence (\r\n) is used to indicate a new line. The use of pre-defined entities is also employed to handle special characters that are reserved by XML parsers. These include &, <, >, ", and '. If these special characters appear in the draft text, they will be encoded by the use of pre-defined entities as described previously in the credit card authorization section.

Note: Any successful Folio Authorization that is not committed with a Process Order service request should be 'cleaned-up' with a Cancel Authorization service request. It is the client's responsibility to either commit (via Process Order) or cancel a successful Folio Authorization.



4.18 Generic Authorization

Account Authorization Service

The generic authorization (GA) service is used by the client to obtain authorization for order payment by charging to a InfoGenesis Generic Authorization account number. The GA account number can be input either manually by keypad or MSR swiped card. GA charge authorization is required for payment with a tender button (Tender Configuration data) assigned to the 'generic-auth' tender class.

When the authorization request is successful, the authorization response message will include the following data:

- payment reference-key
- confirmation display text
- sales draft text (for customer signature)

The payment reference-key is a 'handle' that must be retained by the client for subsequent inclusion in the payment section of a Process Order request when the order is closed out.

The confirmation display text can be used for (optional) prompt to confirm that the correct account is being charged.

The sales draft is text information that can be used to print a customer signature receipt, formatted for a thirty column printer. Any white space included within the text must be preserved. The utilization of a carriage return and line feed sequence (\r\n) is used to indicate a new line. The use of pre-defined entities is also employed to handle special characters that are reserved by XML parsers. These include &, <, >, ", and '. If these special characters appear in the draft text, they will be encoded by the use of pre-defined entities as described previously in the credit card authorization section.

Note: Any successful Generic Authorization that is not committed with a Process Order service request should be 'cleaned-up' with a Cancel Authorization service request. It is the client's responsibility to either commit (via Process Order) or cancel a successful Generic Authorization.

Account Authorization Credit Service

The generic authorization (GA) credit service is used by the client to add funds to an InfoGenesis Generic Authorization account. Crediting a generic authorization account requires one or two steps depending on the payment type.

If the payment is cash or other tender type that does not require authorization, or if the payment is handled outside the TPG service then GA crediting can be handled in a single step. If the payment type is credit card or other tender type that requires that an authorization be performed, then this must be handled prior to crediting the GA account.

When the credit request is successful, the response message will include the following data:

- reference-key
- GA authorization text
- confirmation display text

The reference-key may be used to audit the transaction. If a tracking-key is provided in the service request then that number may be used to cross-reference client and server side transactions.

The confirmation display text can be used for (optional) client messaging.



The credit statement is text information that can be used to print a customer signature receipt, formatted for a thirty column printer. Any white space included within the text must be preserved. The utilization of a carriage return and line feed sequence (\r\n) is used to indicate a new line. The use of pre-defined entities is also employed to handle special characters that are reserved by XML parsers. These include &, <, >, ", and '. If these special characters appear in the draft text, they will be encoded by the use of pre-defined entities as described previously in the credit card authorization section.

4.19 Cancel Authorization

The cancel authorization service is used by the client to 'clean-up' an un-committed authorization. For example, whenever the client performs a successful room or folio charge authorization, but the authorization is not 'committed' with a Process Order service, then the client should cancel the authorization. Many charge authorizations actually post the charge at authorization service time (e.g. Fidelio PMS 'host-capture' room account charge) and the room account charge posting should be reversed via the Cancel Authorization service if the transaction is not completed and closed out.

Once an authorization is associated with an order, use the Modify Authorization Data service to void the authorization from the order.

The payment reference-key that was returned in the original authorization service response is the 'handle' that must be included in the Cancel Authorization request.

4.20 Modify Authorization Data

The modify authorization service is used by the client to change the authorization amount, or to void an existing authorization that is associated with an order. To use this service it's required that the request include the order number and payment reference-key. The payment reference-key is unique for every authorization and can be obtained from the Get Order Summary Data service.

4.20 Account Inquiry

The account inquiry service returns data and/or a list of accounts matching the request parameters. If the request parameters precisely identifies one and only one account then the account inquiry service returns data relevant to that account. On the other hand, if the request is unspecific then a list of matching accounts is returned. Depending on the account type this list may or may not include data specific to each account. If additional account data is needed account information from the matching list of accounts may be used in a more precise request.

The account inquiry service may be used for generic authorization accounts and interactive accounts. Support for additional types of accounts will be provided in the future. Depending on the account being requested some fields in the response block may not be supported.

The request must include an account number or account holders name, or MSR track data to define the search criteria. Tender ID or inquiry class must also be provided to identify the type of account being queried.

An error will be returned if there are no matches or too many matches.



4.21 Get Order Summary Data

The Get Order Summary Data service is used by the client to request that the TPG server provide summary information about a specific order. The information returned by the TPG includes the order amount, early-payment amount, early-payment details, and rules for dealing with future payments. Early-Payment details include the reference-key, previous payment amount, and user account information. Having the reference-key is critical to modifying an existing authorization.

4.22 Interactive Account Authorization

The interactive account authorization service is used by the client to obtain authorization for order payment by charging to a member's account number. The posting account number can be input either manually by keypad or MSR card swipe. A specific tender configured for interactive account charging may be supplied, otherwise the first tender configured for interactive account charging will be used.

When the authorization request is successful, the authorization response message will include the following data:

- payment reference-key
- confirmation display text
- sales draft text

The payment reference-key is a 'handle' that must be retained by the client for subsequent inclusion in the payment section of a Process Order request when the order is closed out.

The confirmation display text can be used for (optional) prompt to confirm that the correct folio account is being charged.

The sales draft is text information that can be used to print a customer signature receipt, formatted for a thirty column printer. Any white space included within the text must be preserved. The utilization of a carriage return and line feed sequence (\r\n) is used to indicate a new line. The use of pre-defined entities is also employed to handle special characters that are reserved by XML parsers. These include &, <, >, ", and '. If these special characters appear in the draft text, they will be encoded by the use of pre-defined entities as described previously in the credit card authorization section.

Note: Any successful interactive account authorization that is not committed with a Process Order service request should be 'cleaned-up' with a Cancel Authorization service request. It is the client's responsibility to either commit (via Process Order) or cancel a successful interactive account authorization.

4.23 Check Type Configuration Data

The check type configuration data service is used by the client to obtain a list of the configured check types that have been assigned for the terminal group to which the terminal belongs.

4.24 Partial Payments

A set of payment services can be used by the client to apply multiple partial payments to a check. Each payment may be authorized or otherwise confirmed based on the payment type. When sufficient payments have been made, the order may be finalized, closing the order.



Cash Payment Service

The cash payment service applies a cash payment to the check. No authorization of any kind is done.

Credit Card Payment Service

The credit card payment service applies a credit card payment to the check. A credit card authorization is done.

Gift Card Payment Service

The gift card payment service applies a gift card payment to the check. A balance inquiry is performed on the gift card to verify that it contains sufficient funds for the payment. No debit is done at the time of the payment request.

Loyalty Redemption

Adding a Loyalty Redemption creates a payment record for the value of the Loyalty promotion.

4.25 Finalize Order

The Finalize Order service is used by the client to process all payments entered against the check, and to close the order.

Cash Payments

Cash payments are converted to tenders. No other processing is done.

Credit Card Payments

Credit card payments are converted to tenders and processed.

Gift Card Payments

Gift card payments are converted to tenders and a debit is performed against the gift card account. If a gift card debit fails, any other gift card debits that have already been processed are reversed, any other pending payments are not processed, and the finalization request fails.

4.25 Product Packages

The TPG supports the sale of ad-hoc product packages. In order to add a package to an order, the package must be configured in the database. The package must include at least one item, which is defined as the "product mix" item, and has the same name as the package. A Process Order request can then be sent to the TPG that includes the package, followed by one or more items to be included in the package.

It is important to note that in the current version of TPG, an order with a package cannot be tendered and closed through the TPG. The order must be recalled at a terminal in order to tender and close it.



5.0 TPG SOAP Envelope Body Message Examples

This section provides examples of how the TPG SOAP envelope body for each of the service requests and responses defined in this document are structured. The TPG SOAP envelope body is the portion of the HTTP SOAP request that is sent from a TPG client to the TPG server that wraps the service request. Section 3.0 specifies the complete structure of the HTTP SOAP request from a client.

The XML schema specifies how the TPG SOAP envelope body messages are structured, whether elements are optional or required, and valid data types and specified ranges.

5.1.1 Client Device Authentication

5.1.1.1 Client has been successfully authenticated

5.1.1.2 Client has not been successfully authenticated



5.2.1 Last Configuration Change Time

5.2.1.1 Configuration Change Time request

5.2.1.2 Configuration Change Time response



5.2.2 Employee Configuration Data

5.2.2.1 Employee configuration data request

5.2.2.2 Employee configuration data response – one or more employee records found

```
<employee-data-response-Body>
  <employee-data-response>
  <trans-services-header>
      <cli>ent-id>1</client-id>
      <session-id>4568989609680958</session-id>
      <authentication-code>ABCDEO4584763987</authentication-code>
 </trans-services-header>
 <service-completion-status>ok</service-completion-status>
  <employee>
      <employee-id>233/employee-id>
      <employee-name>Bill J.</employee-name>
  </employee>
  <employee>
      <employee-id>221
      <employee-name>Joe B.</employee-name>
  </employee>
</employee-data-response>
</employee-data-response-Body>
```

5.2.2.3 Employee configuration data response – no employee records found



5.2.3 Job Code Configuration Data

5.2.3.1 Job code configuration data request

5.2.3.2 Job code configuration data response – one or more job codes found

```
<jobcode-data-response-Body>
<jobcode-data-response>
  <trans-services-header>
      <client-id>1</client-id>
      <session-id>4568989609680958</session-id>
      <authentication-code>ABCDEO4584763987</authentication-code>
 </trans-services-header>
 <service-completion-status>ok</service-completion-status>
<jobcode>
       <jobcode-id>23</jobcode-id>
       <jobcode-description>bar tender</jobcode-description>
       <jobcode-button-text>bartender</jobcode-button-text>
</iobcode>
<iobcode>
       <jobcode-id>18</jobcode-id>
       <jobcode-description>cashier</jobcode-description>
       <jobcode-button-text>cashier</jobcode-button-text>
  </jobcode>
</jobcode-data-response>
</jobcode-data-response-Body>
```

5.2.3.3 Job code configuration data response – no job codes found



5.2.4 Table Configuration Data

5.2.4.1 Table configuration data request

5.2.4.2 Table configuration data response – one or more tables found

```
<table-data-response-Body>
 <table-data-response>
  <trans-services-header>
     <cli>ent-id>1</client-id>
     <session-id>4568989609680958</session-id>
     <authentication-code>ABCDEO4584763987</authentication-code>
 </trans-services-header>
 <service-completion-status>ok</service-completion-status>
  <table-name>A-123</table-name>
  <table-name>A-124</table-name>
  </table-data-response>
</table-data-response-Body>
```

5.2.4.3 Table configuration data response – no tables found



5.2.5 Menu Item Configuration Data

5.2.5.1 Menu item configuration data request

5.2.5.2 Menu item configuration data response

Note: If an item is not active (86), it will not appear in the response.

```
<item-data>
        <item-id>24855</item-id>
        <item-description>cheeseburger</item-description>
        <item-button-text>cheezbrgr</item-button-text>
        <item-base-price>797</item-base-price> (base price is in pennies)
        <item-product-class>1</item-product-class>
        <choicegroup-selection-data>
           <choicegroup-id>234</choicegroup-id>
            <choicegroup-id>235</choicegroup-id>
        </choicegroup-selection-data>
     </item-data>
     <item-data>
        <item-id>24385</item-id>
        <item-description>hamburger</item-description>
        <item-button-text>hambrgr</item-button-text>
        <item-base-price>695</item-base-price>
        <item-product-class>1</item-product-class>
      </item-data>
   </item-data-response>
</item-data-response-Body>
```

5.2.5.3 Menu item configuration data response – no menu items found



5.2.6 Modifier Configuration Data

5.2.6.1 Modifier configuration data request

5.2.6.2 Modifier configuration data response – one or more modifiers

```
<modifier-data-response-Body>
  <modifier-data-response>
  <trans-services-header>
      <client-id>1</client-id>
      <session-id>45689896098</session-id>
      <authentication-code>ABCDEO4584763987</authentication-code>
  </trans-services-header>
  <service-completion-status>ok</service-completion-status>
  <modifier-data>
        <modifier-id>234</modifier-id>
        <modifier-description>pickles</modifier-description>
        <modifier-button-text>pickle</modifier-button-text>
    </modifier-data>
    <modifier-data>
        <modifier-id>224</modifier-id>
        <modifier-description>cheese</modifier-description>
        <modifier-button-text>cheese</modifier-button-text>
        <choicegroup-id>323</choicegroup-id>
      </modifier-data>
</modifier-data-response>
</modifier-data-response-Body>
```

5.2.6.3 Modifier configuration data response – no modifiers found



5.2.7 Tender Configuration Data

5.2.7.1 Tender Configuration Data Request

5.2.7.2 Tender configuration data response

```
<tender-data-response-Body>
   <tender-data-response>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>45689896098</session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <service-completion-status>ok</service-completion-status>
      <tender-data>
         <tender-id>1</tender-id>
         <tender-description>Cash</tender-description>
         <tender-button-text>Cash</tender-button-text>
         <tender-class>cash</tender-class>
         <over-payment>change</over-payment>
         <early-payment>no</early-payment>
      </tender-data>
      <tender-data>
         <tender-id>2</tender-id>
         <tender-description>Visa credit card</tender-description>
         <tender-button-text>Visa</tender-button-text>
         <tender-class>credit-card</tender-class>
         <over-payment>tip</over-payment>
         <early-payment>yes
      </tender-data>
      <tender-data>
         <tender-id>3</tender-id>
         <tender-description>Keno Comp</tender-description>
         <tender-button-text>Keno</tender-button-text>
         <tender-class>other</tender-class>
         <over-payment>exact</over-payment>
         <early-payment>no/early-payment>
      </tender-data>
      <tender-data>
         <tender-id>4</tender-id>
         <tender-description>Slot Comp</tender-description>
         <tender-button-text>Slot</tender-button-text>
         <tender-class>other</tender-class>
         <over-payment>exact</over-payment>
         <early-payment>no
      </tender-data>
   </tender-data-response>
</tender-data-response-Body>
```



5.2.7.3 Tender configuration data response – no data found



5.2.8 Profit Center Configuration Data

5.2.8.1 Profit Center Configuration Data Request

5.2.8.2 Profit Center Configuration Data Response

```
fitcenter-data-response-Body>
  fitcenter-data-response>
  <trans-services-header>
     <client-id>1</client-id>
     <session-id>45689896098</session-id>
     <authentication-code>ABCDEO4584763987</authentication-code>
 </trans-services-header>
 <service-completion-status>ok</service-completion-status>
    cprofitcenter-data>
       fitcenter-id>1fitcenter-id>
       fitcenter-primary-indicator>yesfitcenter-primary-indicator/>
       fitcenter-description>Outside Patio/profitcenter-description>
       fitcenter-button-text>Outside Patio/profitcenter-button-text>
    </profitcenter-data>
    corofitcenter-data>
       fitcenter-id>2fitcenter-id>
       <prefitcenter-primary-indicator>no/profitcenter-primary-indicator/>
       fitcenter-description>Inside Bar/profitcenter-description>
       fitcenter-button-text>Inside Barfitcenter-button-text>
    </profitcenter-data>
</profitcenter-data-response>
</profitcenter-data-response-Body>
```

5.2.8.3 Profit Center Configuration Data Response – No Data Found



5.2.9 Choice Group Configuration Data

5.2.9.1 Choice group configuration data request

5.2.9.2 Choice group configuration data response – one or more choice groups

```
<choicegroup-data-response-Body>
  <choicegroup-data-response>
    <trans-services-header>
      <cli>ent-id>1</client-id>
      <session-id>45689896098/session-id>
      <authentication-code>ABCDE04584763987</authentication-code>
    </trans-services-header>
    <service-completion-status>ok</service-completion-status>
    <choicegroup-data id="1" name="condiments" button-text="conds">
      <minimum-choices>0</minimum-choices>
      <maximum-choices>3</maximum-choices>
      <modifier id="234" />
      <modifier id="235" />
      <modifier id="7" />
      <modifier id="34" />
     </choicegroup-data>
    <choicegroup-data id="2" name="side order" button-text="sides">
      <minimum-choices>1</minimum-choices>
      <maximum-choices>1</maximum-choices>
      <modifier id="1" />
      <modifier id="2" />
     <modifier id="3" />
      <modifier id="234" />
     </choicegroup-data>
    <choicegroup-data id="3" name="toppings" button-text="tops">
      <minimum-choices>0</minimum-choices>
      <maximum-choices>1</maximum-choices>
      <modifier id="34" />
      <modifier id="11" />
     <modifier id="12" />
      <modifier id="13" />
     </choicegroup-data>
  </choicegroup-data-response>
</choicegroup-data-response-Body>
```



5.2.9.3 Choice group configuration data response – no choice groups found



5.2.10 Screen Configuration Data

5.2.10.1 Screen configuration data request

5.2.10.2 Screen configuration data response – one or more screens

```
<screen-data-response-Body>
 <screen-data-response>
   <trans-services-header>
      <cli>ent-id>1</client-id>
      <session-id>45689896098</session-id>
      <authentication-code>ABCDEO4584763987</authentication-code>
   </trans-services-header>
   <service-completion-status>ok</service-completion-status>
   <primary-screen-id>3</primary-screen-id>
    <screen-data id="1" name="appetizers" button-text="apps">
     <button type="item" id="123" button-text="salad"/>
      <button type="item" id="12" button-text="soup"/>
      <button type="item" id="457" button-text="onion rings"/>
      <button type="item" id="258" button-text="nachos"/>
   </screen-data>
    <screen-data id="2" name="entrees" button-text="entrees">
     <button type="item" id="3" button-text="hot dog"/>
     <button type="item" id="24" button-text="hamburger"/>
     <button type="modifier" id="3" button-text="cheese"/>
     <button type="item" id="21" button-text="coffee"/>
     <button type="item" id="1" button-text="pasta"/>
     <button type="item" id="27" button-text="steak"/>
   </screen-data>
    <screen-data id="3" name="main menu" button-text="menus">
     <button type="screen" id="1" button-text="apps"/>
     <button type="screen" id="2" button-text="entrees"/>
     <button type="screen" id="4" button-text="mods"/>
     <button type="item" id="21" button-text="coffee"/>
   </screen-data>
    <screen-data id="4" name="modifier" button-text="mods">
     <button type="modifier" id="3" button-text="cheese"/>
     <button type="modifier" id="4" button-text="mustard"/>
     <button type="modifier" id="1" button-text="pickles"/>
     <button type="modifier" id="21" button-text="onions"/>
   </screen-data>
  </screen-data-response>
</screen-data-response-Body>
```



5.2.10.3 Screen configuration data response - no screens found



5.2.11 Clock Status

5.2.11.1 Clock status request

5.2.11.2 Clock status response – one or more people are clocked-in

```
<clock-status-response-Body>
<clock-status-response>
  <trans-services-header>
      <client-id>1</client-id>
      <session-id>4568989609680958</session-id>
      <authentication-code>ABCDEO4584763987</authentication-code>
  </trans-services-header>
<service-completion-status>ok</service-completion-status>
<clock-status-data>
      <employee-id>23737/employee-id>
      <employee-name>Jim L.</employee-name>
      <jobcode-id>234</jobcode-id>
</clock-status-data>
 <clock-status-data>
      <employee-id>23767</employee-id>
      <employee-name>Joe B.</employee-name>
      <jobcode-id>212</jobcode-id>
 </clock-status-data>
</clock-status-response>
</clock-status-response-Body>
```

5.2.11.3 Clock status response – nobody is clocked-in



5.2.12 Check Type Configuration Data

5.2.12.1 Check Type configuration data request

5.2.12.2 Check Type configuration data response - one or more check types

```
<check-type-data-response-Body>
  <check-type-data-response>
    <trans-services-header>
      <cli>ent-id>1</client-id>
      <session-id>45689896098</session-id>
      <authentication-code>ABCDEO4584763987</authentication-code>
    </trans-services-header>
    <service-completion-status>ok</service-completion-status>
    <check-type-data>
      <check-type-id>1</check-type-id>
      <check-type-name>Entertainment</check-type-name>
    </check-type-data>
    <check-type-data>
      <check-type-id>2</check-type-id>
      <check-type-name>Room</check-type-name>
    </check-type-data>
  </check-type-data-response>
</check-type-data-response-Body>
```

5.2.12.3 Check Type configuration data response – no check types found



5.3.1 User Authorization

5.3.1.1 User authorization request – login information entered manually

5.3.1.2 User authorization request – login information provided by card swipe

Note: The InfoGenesis POS system will determine the user login information directly from the track data ${\sf Constant}$

5.3.1.3 User authorization response – user has been successfully authorized



5.4.1 Calculate Order Amount

5.4.1.1 Calculate order amount request – new order

Note: Check-type-id [optional]

Note: If the <item-price> field is blank the configured price will be used.

Note: If the <item-price> field is blank the configured price will be used.

</item>
<modifier>

Note: If an invalid <modifier-id> value is used, it is ignored.

5.4.1.2 Calculate order amount request – existing open order with new items

Note: Profitcenter-id and check-type-id [optional]

Note: If the <item-price> field is blank the configured price will be used.

```
</item>
<item>
     <item-id>23955</item-id>
          <item-quantity>1</item-quantity>
          <item-price></item-price> {Note: optional field}
```

Note: If the <item-price> field is blank the configured price will be used.

</item>
<modifier>



5.4.1.3 Calculate order amount request – existing open order, no new items

Note: Profitcenter-id and check-type-id [optional]

```
</order-body>
  </calculate-order-amount-request>
</calculate-order-amount-request-Body>
```

5.4.1.4 Calculate order amount response

```
<calculate-order-amount-response-Body>
   <calculate-order-amount-response>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>45689896098/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <service-completion-status>ok</service-completion-status>
      <order-amount>89080</order-amount>
      <detail-amounts>
         <sales-net>89080</sales-net>
         <sales-gross>89080</sales-gross>
         <discount>0</discount>
         <tax>0</tax>
         <gratuity>0</gratuity>
         <service>0</service>
         <tip>0</tip>
         <tender>0</tender>
         <balance>89080</palance>
         <total>89080</total>
      </detail-amounts>
   </calculate-order-amount-response>
</calculate-order-amount-response-Body>
```



5.4.1.5 Calculate order amount response - failure

Note: This will contain the ID of the item that caused the error.

<service-error-entry-id>9292</service-error-item-id>

Note: This will contain the position in the list of items (the first item is "0") that caused the error.

<service-error-entry-index>0</service-error-item-index>

```
Note: Entry type will be one of: "item", "modifier", "tender".
```

5.5.1 Process Order (open order)

5.5.1.1 Process order request – create an open order with no items

Note: non-zero team-id value will result in creation of a team serving check.

```
<employee-id>23435</employee-id>
<guest-count>2</guest-count>
```

Note: The guest count can be updated to a non-zero value in subsequent requests.



5.5.1.2 Process order request – create an open order with items and modifiers

Note: non-zero team-id value will result in creation of a team serving check.

<employee-id>23435</employee-id>
<quest-count>2</quest-count>

Note: The guest count can be updated to a non-zero value in subsequent requests.

Note: If the <item-price> field is blank the configured price will be used.

<seat-number>2</seat-number>

Note: A value of 1 will be used if the <seat-number> field is outside the range of 1 to 25.

<course-number>1</course-number>

Note: Checks can be started with only course 1 or 2, adding courses out of numerical order results in item being added to current existing course.

<item-kitchen-print-indicator>no</item-kitchen-print-indicator>
</item>

Note: An optional special instruction that is printed to the kitchen printer.

Note: If the <item-price> field is blank the configured price will be used.

<seat-number>2</seat-number>

Note: A value of 1 will be used if the seat-number> field is outside the range of 1 to 25.

Note: <service-charge> is an optional item.



</process-order-request-Body>



5.5.1.3 Process order request – create an open order with a package

Note: non-zero team-id value will result in creation of a team serving check.

<employee-id>23435</employee-id>
<guest-count>2</guest-count>

Note: The guest count can be updated to a non-zero value in subsequent requests.

Note: The first item is the "product mix" item.

<item id="1" price="0"/>

Note: Subsequent items are the "real" items to be included in the package.



5.5.1.4 Process order request – create an open order with credit card data captured for later authorization at fixed station register

(credit card data does not contain swipe information in this example; however, if swipe information is available, the track data should be provided)

```
cprocess-order-request-Body>
 cprocess-order-request>
  <trans-services-header>
      <cli>ent-id>1</client-id>
      <session-id>4568989609680958</session-id>
      <authentication-code>ABCDEO4584763987</authentication-code>
 </trans-services-header>
 <order-type>open</order-type>
 <order-header>
       <table-name>123</table-name>
       <team-id>1234</team-id>
       <employee-id>23435/employee-id>
       <quest-count>2</quest-count>
       fitcenter-id>23fitcenter-id>
       <check-type-id>1</check-type-id>
        <receipt-required>no</receipt-required>
  </order-header>
  <order-body>
     <item>
        <item-id>24855</item-id>
       <item-quantity>1</item-quantity>
        <item-price></item-price> {Note: optional field}
```

Note: If the <item-price> field is blank the configured price will be used.

<item-kitchen-print-indicator>no</item-kitchen-print-indicator>
<seat-number>2</seat-number>

Note: A value of 1 will be used if the <seat-number> field is outside the range of 1 to 25.

```
</ri></order-body>
<order-payment>
<payment-data>
```

Notice that the tender amount is zero; this will "trigger" an authorization to be performed at a fixed station register when credit card tendering is performed. Also notice that a <tender-id> element is not required because it will determined based on the credit card account number. If a <tender-id> element is included, it will just be ignored; it will not cause an error.

This is an optional field that is used to store information such as customer tracking number

```
</payment-data>
</order-payment>
</process-order-request>
</process-order-request-Body>
```



5.5.1.5 Process order request – create an open order with room/folio/account charge data captured for later authorization at fixed station register

```
cprocess-order-request-Body>
   cprocess-order-request>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>4568989609680958</session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <order-type>open</order-type>
      <order-header>
         <table-name>123</table-name>
         <team-id>1234</team-id>
         <employee-id>23435/employee-id>
         <quest-count>2</quest-count>
         fitcenter-id>23fitcenter-id>
         <check-type-id>1</check-type-id>
         <receipt-required>no</receipt-required>
      </order-header>
      <order-body>
         <item>
            <item-id>24855</item-id>
            <item-quantity>1</item-quantity>
            <item-price>65</item-price> {Note: optional field}
```

Note: If the <item-price> field is blank the configured price will be used.

<item-kitchen-print-indicator>no</item-kitchen-print-indicator>
<seat-number>2</seat-number>

Note: A value of 1 will be used if the <seat-number> field is outside the range of 1 to 25.

Notice that the tender amount is zero; this will "trigger" an authorization to be performed at a fixed station register when credit card tendering is performed. Also notice that a <tender-id> element is not required because it will determined based on the room/folio/account number. If a <tender-id> element is included, it will just be ignored; it will not cause an error.

```
<tender-amount-total>0</tender-amount-total>
<tip-amount>0</tip-amount>
<room-number>123</room-number>
<authorization-account-number>5453455</authorization-account-number>
<authorization-name>Williams, Joe</authorization-name>
<additional-information>4875987</additional-information>
```

Note: <additional-information> is an optional field that is used to store information such as customer tracking number

```
</payment-data>
</order-payment>
</process-order-request>
</process-order-request-Body>
```



5.5.1.6 Process order request – add items to existing open order

```
cprocess-order-request-Body>
   cprocess-order-request>
      <trans-services-header>
         <client-id>1</client-id>
         <session-id>4568989609680958/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
       </trans-services-header>
      <order-type>open</order-type>
      <order-header>
         <order-number>123554</order-number>
         <employee-id>23435/employee-id>
         fitcenter-id>23fitcenter-id>
         <check-type-id>1</check-type-id>
         <receipt-required>no</receipt-required>
       </order-header>
      <order-body>
         <item>
            <item-id>24855</item-id>
            <item-quantity>1</item-quantity>
            <item-price>0</item-price>
                                        {Note: optional field}
```

Note: If the <item-price> field is blank the configured price will be used.

<seat-number>2</seat-number>

Note: A value of 1 will be used if the <seat-number> field is outside the range of 1 to 25.

<course-number>3</course-number>

Note: Checks can be started with only course 1 or 2, adding courses out of numerical order results in item being added to current existing course.

Note: If the <item-price> field is blank the configured price will be used.

<item-kitchen-print-indicator>no</item-kitchen-print-indicator>
<seat-number>2</seat-number>

Note: A value of 1 will be used if the seat-number field is outside the range of 1 to 25.



5.5.1.7 Process order response – open order was saved successfully

<u>5.5.1.8</u> Process order response – open order was saved successfully (with receipt text)

Note: The receipt text includes embedded CR/LF characters (\r\n) at the end of each individual line of text. Additional CR/LF pairs are added for each additional blank line in the receipt.

5.5.1.9 Process order response – Failure

Note: This will contain the ID of the item that caused the error.

<service-error-entry-id>9292</service-error-item-id>

Note: This will contain the position in the list of items (the first item is "0") that caused the error.

<service-error-entry-index>0</service-error-item-index>

```
</service-error>
</process-order-response>
```



5.5.2 Process Order (closed order)

5.5.2.1 Process order request – closed order (cash payment)

Note:To close out an existing, multi-pass, open order, include the following optional open <order number> tag. For a single-pass, new order, do not include the following tag.

Note: If the <item-price> field is blank the configured price will be used.

<item-kitchen-print-indicator>no</item-kitchen-print-indicator>
<seat-number>2</seat-number>

Note: A value of 1 will be used if the <seat-number> field is outside the range of 1 to 25.

Note: If the <item-price> field is blank the configured price will be used.

<item-kitchen-print-indicator>no</item-kitchen-print-indicator>
<seat-number>2</seat-number>

Note: A value of 1 will be used if the <seat-number> field is outside the range of 1 to 25.

This is the total amount of tender that must fully cover the order amount plus tip

<tip-amount>0</tip-amount>

The tip amount will be set to zero if no tip is included

```
</payment-data>
</order-payment>
</process-order-request>
</process-order-request-Body>
```



5.5.2.2 Process order request – closed order (credit card, folio, room or GA)

Note: To close out an existing, multi-pass, open order, include the following optional open order number tag. For a single-pass, new order, do not include the following tag.

Note: If the <item-price> field is blank the configured price will be used.

<item-kitchen-print-indicator>no</item-kitchen-print-indicator>
 <seat-number>2</seat-number>

Note: A value of 1 will be used if the <seat-number> field is outside the range of 1 to 25.

```
</item>
<order-payment>
<payment-data>
```

Note: Valid processing of a Credit Card, Folio, Room or GA charge payment requires that an appropriate authorization service request/response was successfully performed prior to calling this Process Order request. The authorization response included a <reference-key> value, and this same <reference-key> value must be included in this <payment-data> section for successful payment processing. The <reference-key> value is the key that is used to match-up the original authorization data with this order payment. The only other required payment data is <tender-amount-total>; all other data including tender ID and account settlement data is automatically supplied via the reference-key.



5.5.2.3 Process order response – closed order was saved successfully

5.5.2.4 Process order response – closed order was saved successfully (with receipt text)

Note: The receipt text includes embedded CR/LF characters (\r) at the end of each individual line of text. Additional CR/LF pairs are added for each additional blank line in the receipt.



5.6.1 Credit Card Authorization

5.6.1.1 Credit card authorization request – credit card entered manually

Note:To authorize an existing, multi-pass, open order, include the following optional open <order number> tag. For a single-pass, new order, do not include the following tag (if included value = 0).

```
<order-number>123554</order-number> {pre-existing open order id}
<profit-center-id>5</profit-center-id> {Note: optional field}
<table-name>123</table-name>
<employee-id>23435</employee-id>
<input-type>manual</input-type>
<authorization-account-number>43019480984098</authorization-account-number/>
<authorization-account-name>Sam Smith</authorization-account-name/>
<expiration-date format= "YYMM" date = "0102"/>
<auth-amount tender-amount = "10000" tip-amount = "0"/>
```

Note: The tender amount is the total amount that is requested for authorization, and the tip amount is how much of the total amount is tip

```
</creditcard-authorization-request-data>
</creditcard-authorization-request>
</creditcard-authorization-request-Body>
```

5.6.1.2 Credit card authorization request - credit card was swiped

Note: To authorize an existing, multi-pass, open order, include the following optional open order number tag. For a single-pass, new order, do not include the following tag (if included value = 0).

Note: The tender amount is the total amount that is requested for authorization, and the tip amount is how much of the total amount is tip

```
</creditcard-authorization-request-data>
</creditcard-authorization-request>
</creditcard-authorization-request-Body>
```



5.6.1.3 Credit card authorization response - successful authorization

Note: The Credit Card Auth response includes a <reference-key> value, and this same <reference-key> value must be included in the <payment-data> section for successful processing of a Process Order with credit card payment. The <reference-key> value is the key that is used to match-up the original authorization data with order payment.



5.6.2 Get List of Room Accounts

5.6.2.1 List of Room Accounts request – manual input or MSR card swipe

Note: Rooms list is available by room number or guest name lookup.

Note: <room-number> or <guest-name> or MSR swipe card <track-info...> tags may be provided.

```
</room-list-request-data>
</room-list-request>
</room-list-request-Body>
```

5.6.2.2 List of Room Accounts response

```
<room-list-response-Body>
   <room-list-response>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>4568989609680958</session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <service-completion-status>ok</service-completion-status>
      <room-list-response-data>
         <room-account-quest-record>
            <room-number>123ABC</room-number>
            <account-number>1111AAAA</account-number>
            <quest-name>Smith, Mike</quest-name>
            <charge-allowed>yes</charge-allowed>
         </room-account-guest-record>
         <room-account-guest-record>
            <room-number>123ABC</room-number>
            <account-number>2222BBBB</account-number>
            <guest-name>Smith, Belinda/guest-name>
            <charge-allowed>yes</charge-allowed>
         </room-account-quest-record>
         <room-account-quest-record>
            <room-number>123ABC</room-number>
            <account-number>3333CCCC</account-number>
            <guest-name>Smith, Harry</guest-name>
            <charge-allowed>no</charge-allowed>
          </room-account-guest-record>
      </room-list-response-data>
   </room-list-response>
</room-list-response-Body>
```



5.6.3 Room Charge Authorization

5.6.3.1 Room charge authorization request

Note: To authorize an existing, multi-pass, open order, include the following optional open order number tag. For a single-pass, new order, do not include the following tag (if included value = 0).

Note: The tender amount is the total amount that is requested for authorization, and the tip amount is how much of the total amount is tip

5.6.3.2 Room charge authorization response – successful authorization

Note: The <reference-key> value must be included in the Process Order <payment-data> section for Folio charge payment of the order.



5.6.4 Folio Charge Authorization

5.6.4.1 Folio charge authorization request – manual input or MSR card swipe

Note: To authorize an existing, multi-pass, open order, include the following optional open order number tag. For a single-pass, new order, do not include the following tag (if included value = 0).

Note: The tender amount is the total payment amount) that is requested for authorization, including tip. Tip amount is the tip portion of the total tender amount

Note:Both manual <folio-number> and MSR swipe card <track-info...> tags are supported. If both are included, the MSR swipe data will be used.

```
</folio-auth-request-data>
  </folio-auth-request>
</folio-auth-request-Body>
```

5.6.4.2 Folio charge authorization response - successful authorization

Note: The <reference-key> value must be included in the Process Order <payment-data> section for Folio charge payment of the order.



5.6.5 Generic Authorization

5.6.5.1 Generic authorization request – manual input or MSR card swipe

Note:To authorize an existing, multi-pass, open order, include the following optional open \langle order number \rangle tag. For a single-pass, new order, do not include the following tag (or include with value = 0.)

```
<order-number>123554</order-number> {pre-existing open order id}
cprofit-center-id>5</profit-center-id> {Note: optional field}
<table-name>123</table-name> {Note: optional field}
<employee-id>23435</employee-id>
<tender-id>4</tender-id> {Note: optional field}
<auth-amount tender-amount = "10000" tip-amount = "0"/>
```

Note: The tender amount is the total amount that is requested for authorization/payment, including tip. Tip amount is the tip portion of the total tender amount.

Note:Both manual <account-number> and MSR swipe card <track-info...> tags are supported. If both are included, the MSR swipe data will be used.

```
</generic-auth-request-data>
</generic-auth-request>
</generic-auth-request-Body>
```

5.6.5.2 Generic authorization response – successful authorization

Note: The <reference-key> value must be included in the Process Order <payment-data> section for Generic Auth charge payment of the order.

or



5.6.5.3 Generic authorization credit request

Note: <tender-id> is used to determine the GA type, if omitted, type 1 will be used.

Note: Both manual <account-number> and MSR swipe card <track-info...> tags are supported. If both are included, the MSR swipe data will be used.

```
</ga-credit-request-data>
<payment-data>
  <tracking-key>98765</tracking-key> {Note: optional field}
  <reference-key>123456789</reference-key> {Note: optional field}
```

<tender-id>1</tender-id> {Note: optional field}

Note: Depending on the payment type a <reference-key>, <tender-id>, or neither fields may be provided.

A Credit Card or other authorization type of payment requires that an authorization service request/response was successfully performed prior to calling this request. The <reference-key> provided in the authorization response must be included in this <payment-data> section for successful payment processing.

If the <reference-key> is blank then the <tender-id> will be used as the payment type. Typically this will be used for cash, or cash type payment types.

If both <reference-key> and <tender-id> tags are blank then the <tender-id> will default to the first tender with a verify code of "Account-No Verify." Typically this will occur when the payment is processed outside the TPG, but is included here for accounting purposes only.

```
</payment-data>
</ga-credit-request>
</ga-credit-request-Body>
```



5.6.5.4 Generic authorization credit response

```
<qa-credit-response-Body>
   <ga-credit-response>
      <trans-services-header>
         <client-id>1</client-id>
         <session-id>4568989609680958/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <service-completion-status>ok</service-completion-status>
      <ga-credit-response-data>
         <reference-key>123456789</reference-key>
         <draft-text>
             {signature draft text data with embedded \r\n's . . .}
         </draft-text>
         <display-text>
             {user confirmation display text. . .}
         </display-text>
      </ga-credit-response-data>
   </ga-credit-response>
</ga-credit-response-Body>
```

5.6.6 Cancel Authorization

5.6.6.1 Cancel Authorization request

Note: The <reference-key> value is the value from the original credit card, room charge, folio charge, or other authorization service response.

```
</cancel-auth-request-data>
</cancel-auth-request>
</cancel-auth-request-Body>
```

5.6.6.2 Cancel Authorization response



5.6.7 Modify Authorization Data

5.6.7.1 Modify authorization request

Note: This request can only be applied to authorizations performed at the TPG's primary profit center.

Note: The $\langle reference-key \rangle$ value is the value returned from a Get Order Summary Data Request.

<authorization-amount>1000</authorization-amount>

Note: The authorization-amount should always equal the total order amount.

<void-authorization>no</void-authorization>

Note: The authorization-amount will be ignored if the void-authorization flag is yes.

```
</modify-auth-request-data>
</modify-auth-request>
</modify-auth-request-Body>
```

5.6.7.2 Modify authorization response – successful modification

```
<modify-auth-response-Body>
   <modify-auth-response>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>4568989609680958/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <service-completion-status>ok</service-completion-status>
      <modify-auth-response-data>
         <reference-key>123456789</reference-key>
         <draft-text>
             {signature draft text data with embedded \r\n's . . .}
         </draft-text>
         <display-text>
             {user confirmation display text. . .}
         </display-text>
      </modify-auth-response-data>
   </modify-auth-response>
</modify-auth-response-Body>
```



5.6.8 Account Inquiry

5.6.8.1 Account Request

Note: Either <inquiry-class> or <tender-id> must be specified. Inquiry-class identifies the type of inquiry to be performed -- Generic Authorization, Interactive, etc. Tender-id indirectly identifies the inquiry class and in the case of Generic Authorization identifies the "GA Type".

Inquiry-Class	Description
1	Generic Authorization
2	Interactive Account
3	Future

<account-number>123ABC</account-number>

or

<account-name>SMITH</account-name>

or

Note: Either <account-number> or <account-name> or MSR swipe card <track-info...> tags may be provided.

```
</account-request-data>
</account-request>
</account-request-Body>
```

5.6.8.2 Account Response (zero or more accounts)

Note: Depending on the inquiry-class, or the number of matching results, some of the following data types may not be supported.

```
<account-type>1</account-type>
<charge-allowed>yes</charge-allowed>
```



```
<charges-to-date>8719</charges-to-date>
<limit-on-account>yes</limit-on-account>
```

Note: Use the <remaining-amount> field when the imit-on-account> is "yes".

Note: Depending on the inquiry-class, or the number of matching results, some of the following data types may not be supported.

```
<account-type>1</account-type>
<charge-allowed>yes</charge-allowed>
<charges-to-date>10000</charges-to-date>
<limit-on-account>yes</limit-on-account>
```

Note: Use the <remaining-amount> field when the limit-on-account> is "yes".

Note: Depending on the inquiry-class, or the number of matching results, some of the following data types may not be supported.

```
<account-type>1</account-type>
<charge-allowed>yes</charge-allowed>
<charges-to-date>19721</charges-to-date>
<limit-on-account>no
```

Note: Use the <remaining-amount> field when the dimit-on-account> is "yes".



5.6.9 Interactive Account Authorization

5.6.9.1 Interactive account authorization request

Note:To authorize an existing, multi-pass, open order, include the optional open order number. For a single-pass, new order, set this value to 0. The

successful authorization will be added to the order. A new order will be created if one does not already exist and returned in the <reference-key>.

Note: The tender amount is the total payment amount) that is requested for authorization, including tip. Tip amount is the tip portion of the total tender amount.

Note: The manual <post-number> field is requied. MSR swipe card <track-info...> tag is optional. The interactive account request will include whatever information is provided.

5.6.9.2 Interactive account authorization response

```
<ia-auth-response-Body>
   <ia-auth-response>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>4568989609680958/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <service-completion-status>ok</service-completion-status>
      <ia-auth-response-data>
         <reference-key>123456789</reference-key>
         <draft-text>
             {signature draft text data with embedded \r\n's . . .}
         </draft-text>
         <display-text>
             {user confirmation display text. . .}
         </display-text>
      </ia-auth-response-data>
   </ia-auth-response>
</ia-auth-response-Body>
```



5.7.1 Get List of Open Orders

5.7.1.1 Get order list request – all orders

```
Note: profitcenter-id and employee-id are optional fields
Profitcenter-id 0 = Default Profit Center
Employee-id 0 = All Employees
```

5.7.1.2 Get order list request – order(s) assigned to a specific table

Note: profitcenter-id and employee-id are optional fields Profitcenter-id 0 = Default Profit Center Employee-id 0 = All Employees



5.7.1.3 Get order list response – one or more orders matched search criteria

5.7.1.4 Get order list response – no orders matched search criteria



5.7.2 Get Receipt Text for an Existing Open Order

5.7.2.1 Get recipt text request

5.7.2.2 Get recipt text response

Note: The receipt text includes embedded CR/LF characters (\r) at the end of each individual line of text. Additional CR/LF pairs are added for each additional blank line in the receipt.

```
</receipt-text-response>
</receipt-text-response-Body>
```



5.7.3 Get Order Summary Data for Existing Open Order

5.7.3.1 Get order summary request

5.7.3.2 Get order summary response

Note: Early-payments may be added to the order only if the early-paymentallowed flag is set to 'yes'. The flag will be set to 'no' if there is one or more payments already on the order.

<order-completion-allowed>no</order-completion-allowed>

Note: If the order-completion-allowed flag is set to 'no' then the order must be completed at a fixed station register. This may occur if there are multiple authorizations on the order.

Note: Depending on the tender type the user-account number may represent a room number, a folio account, credit card account, etc.

<modification-allowed>no</modification-allowed>

Note: If the modification-allowed flag is set to 'no' the authorization can only be modified at a fixed station register. This may occur if the authorization type is not supported at the TPG, if the authorization is for a 'cash only' room, or if there are multiple authorizations on the order.

```
</payment-record>
<payment-record>
    <reference-key>123456799</reference-key>
        <authorized-amount>1792</authorized-amount>
```



5.8 Gift Card Balance

5.8.1.1 Get Gift Card Balance request

```
<get-giftcard-balance-request-Body>
   <get-giftcard-balance-request>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>4568989609680958</session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <get-giftcard-balance-request-data>
         <table-name>123</table-name>
         <employee-id>23435/employee-id>
         <tender-id>9</tender-id>
         <track-information location = "track1" length = "80" data =</pre>
"509684965804958609568095689658496584968409684096840698450689"/>
         <track-information location = "track2" length = "40" data =</pre>
~509684965804958609568095689658496584968409684096840698450689~/>
      </get-giftcard-balance-request-data>
   </get-giftcard-balance-request>
</get-giftcard-balance-request-Body>
```

5.8.1.2 Get Gift Card Balance response – successful



5.9 Partial Payments

5.9.1.1 Add cash payment request

Note: The tender amount is the total amount that is requested for authorization, and the tip amount is how much of the total amount is tip

```
</add-cash-payment-request-data>
</add-cash-payment-request>
</add-cash-payment-request-Body>
```

5.9.1.2 Add cash payment response – successful

```
<add-cash-payment-response-Body>
   <add-cash-payment-response>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>4568989609680958</session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <service-completion-status>ok</service-completion-status>
      <add-cash-payment-response-data>
         <draft-text>
            06/06/01
                         16:43\r\n
               SALES DRAFT
                              \r\n\r\n
            Circle-X Restaurant\r\n ...
         </draft-text>
      </add-cash-payment-response-data>
   </add-cash-payment-response>
</add-cash-payment-response-Body>
```



5.9.2.1 Add credit card payment request – credit card entered manually

Note: The tender amount is the total amount that is requested for authorization, and the tip amount is how much of the total amount is tip

```
</add-creditcard-payment-request-data>
</add-creditcard-payment-request>
</add-creditcard-payment-request-Body>
```

5.9.2.2 Add credit card payment request - credit card was swiped

```
<add-creditcard-payment-request-Body>
   <add-creditcard-payment-request>
      <trans-services-header>
         <client-id>1</client-id>
         <session-id>4568989609680958/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <add-creditcard-payment-request-data>
         <order-number>123554</order-number> {pre-existing open order id}
         <table-name>123</table-name>
         <employee-id>23435/employee-id>
         <track-information location = "track1" length = "80" data =</pre>
~509684965804958609568095689658496584968409684096840698450689"/>
         <track-information location = "track2" length = "40" data =</pre>
"509684965804958609568095689658496584968409684096840698450689"/>
         <auth-amount tender-amount = "10000" tip-amount = "0"/>
```

Note: The tender amount is the total amount that is requested for authorization, and the tip amount is how much of the total amount is tip

```
</add-creditcard-payment-request-data>
</add-creditcard-payment-request>
</add-creditcard-payment-request-Body>
```



5.9.2.4 Add credit card payment response - successful

Note: The Credit Card Payment response includes a <reference-key> value. To cancel this payment, the <reference-key> should be passed to a Cancel Authorization request.

5.9.3.1 Add gift card payment request – gift card entered manually

Note: The tender amount is the total amount that is requested for authorization, and the tip amount is how much of the total amount is tip

```
</add-giftcard-payment-request-data>
</add-giftcard-payment-request>
</add-giftcard-payment-request-Body>
```



5.9.3.2 Add gift card payment request – gift card was swiped

```
<add-giftcard-payment-request-Body>
   <add-giftcard-payment-request>
      <trans-services-header>
         <client-id>1</client-id>
         <session-id>4568989609680958/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <add-giftcard-payment-request-data>
         <order-number>123554</order-number> {pre-existing open order id}
         <table-name>123</table-name>
         <employee-id>23435/employee-id>
         <track-information location = "track1" length = "80" data =</pre>
"509684965804958609568095689658496584968409684096840698450689"/>
         <track-information location = "track2" length = "40" data =</pre>
"509684965804958609568095689658496584968409684096840698450689"/>
         <auth-amount tender-amount = "10000" tip-amount = "0"/>
```

Note: The tender amount is the total amount that is requested for authorization, and the tip amount is how much of the total amount is tip

```
</add-giftcard-payment-request-data>
</add-giftcard-payment-request>
</add-giftcard-payment-request-Body>
```

5.9.3.3 Add gift card payment response – successful

```
<add-giftcard-payment-response-Body>
   <add-giftcard-payment-response>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>4568989609680958/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <service-completion-status>ok</service-completion-status>
      <add-giftcard-payment-response-data>
         <draft-text>
            06/06/01
                         16:43\r\n
               SALES DRAFT
                             \r\n\r\n
            Circle-X Restaurant\r\n ...
         </draft-text>
      </add-giftcard-payment-response-data>
   </add-giftcard-payment-response>
</add-giftcard-payment-response-Body>
```



5.9.4.1 Add loyalty redemption request

```
<add-loyalty-redemption-request-Body>
   <add-loyalty-redemption-request>
      <trans-services-header>
          <client-id>1</client-id>
         <session-id>4568989609680958/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <add-loyalty-redemption-request-data>
         <order-number>123554</order-number> {pre-existing open order id}
         <table-name>123</table-name>
         <employee-id>23435/employee-id>
         <loyalty-id>23435</loyalty-id>
         cpromotion-name>free coffee/promotion-name>
          <payment-amount>500</payment-amount>
      </add-loyalty-redemption-request-data>
   </add-loyalty-redemption-request>
</add-loyalty-redemption-request-Body>
```

5.9.4.2 Add loyalty redemption response - successful



5.9.4.1 Finalize order

5.9.4.2 Finalize order response – successful

```
<finalize-order-response-Body>
   <finalize-order-response>
      <trans-services-header>
         <cli>ent-id>1</client-id>
         <session-id>4568989609680958/session-id>
         <authentication-code>ABCDEO4584763987</authentication-code>
      </trans-services-header>
      <service-completion-status>ok</service-completion-status>
      <finalize-order-response-data>
         <draft-text>
            06/06/01
                         16:43\r\n
               SALES DRAFT
                              \r\n\r\n
            Circle-X Restaurant\r\n ...
         </draft-text>
      </finalize-order-response-data>
   </finalize-order-response>
</finalize-order-response-Body>
```

5.10 Error Processing

If a service was not completed successfully, the service completion status will be set to "fail", and an error identifier and display message will be supplied. The following is an example of a generic XXX service request with the service error fields in **bold**:



APPENDIX A

API Return Codes

Code	Message
30002	Service not supported in OFFLINE mode
30003	Invalid Employee ID
30004	Config Data is not available
30005	TLOG Build problem
30006	Save/Tender Order LSR problem
30007	Invalid Item ID (item not exist)
30008	Open Priced Item problem
30009	Weighted Item problem
30010	Item Order internal processing problem
30011	Kitchen Printing problem
30012	Invalid Tender Payment ID
30013	Internal Tender Processing problem
30014	Insufficient Payment Amount
30016	Get Clocked-in Employee List - LSR failure
30017	Client Authentication - Internal problem
30018	Client Authentication - Invalid Auth Code
30020	User Auth - Internal problem
30021	User Auth - Invalid Employee ID
30022	User Auth - Invalid Swipe Card ID
30023	User Auth - Invalid Password
30024	User Auth - Employee NOT clocked-in
30025	User Auth - Invalid Jobcode ID (not in terminal group)
30030	Invalid Team ID
30031	Server not on team
30051	Credit Card - Service not available
30053	Credit Card - Invalid Tender ID
30054	Credit Card - Invalid Account# (LunMod10)
30056	Credit Card - Invalid Expire Date
30057	Credit Card - Card is Expired
30061	Credit Card - DENIED (Auth is rejected)
30062	Credit Card - REFERRAL (Call for Voice Auth)
30063	Credit Card - OFFLINE (Service not available)
30064	Credit Card - DEFAULT (Invalid auth status)
30066	Credit Card - TIMEOUT (Try again?)
30067	Credit Card - Internal UDP Socket Error
30068	Credit Card - Invalid MSR swipe data (Track 1)
30069	Credit Card - Invalid MSR swipe data (Track 2)
30070	Credit Card - Token not allowed
30071	Room Charge - Invalid Tender ID
30091	Process Order - Over-payment not allowed for the tender type
30101	Invalid Order ID - Order does not exist
30102	Invalid Profit Center ID - does not exist
30103	Invalid Employee ID - does not exist
30104	Invalid Check Type ID - does not exist



Code	Message
30115	Get List of Open Orders - Service failure
00404	
30121	Recall Order - Order is assigned to different Profit Center
30122	Recall Order - Not your order (assigned to different Server ID)
30130	Recall Order - Recall order LSR error
30131	Recall Order - Open order does not exist
30132	Recall Order - Open order is locked by another terminal
30201	Process Order - Negative Tip Amount
30305	Ordered Item is out of stock
30400	PMS Interface is not running
30421	Room Charge - Not available in offline mode
30422	Room Charge - LSR failure
30423	Room Charge - Invalid room number
30424	Room Charge - Service Timeout
30425	Room Charge - Invalid tender ID
30426	Room Charge - Invalid tender class
30427	Room Charge - Denied (CASH ONLY)
30432	Room Charge - DENIED (Auth is rejected)
30433	Room Charge - OFFLINE (Service not available)
30434	Room Charge - DEFAULT (Invalid auth status)
30436	Room Charge - TIMEOUT (Try again?)
30437	Room Charge - Internal UDP Socket Error
30441	Folio Charge - Not available in offline mode
30442	Folio Charge - LSR failure
30443	Folio Charge - Invalid room number
30444	Folio Charge - Service Timeout
30445	Folio Charge - Invalid tender ID
30446	Folio Charge - Invalid tender class
30447	Folio Charge - Denied (CASH ONLY)
30448	Folio Charge - Invalid payment type for this Account
30501	UDP socket CREATE failure
30502	UDP socket BIND failure
30503	UDP socket SEND failure
30504	UDP socket READ failure
30601	TPG Internal Failure - Auth Data memory alloc
30602	TPG Internal Failure - Auth Data invalid type
30603	Payment Authorization - Invalid auth reference key
30604	TPG Internal Failure - Auth Data bad parameter
30701	TPG ERR GA SERVICE NOT AVAILABLE
30701	TPG_ERR_GA_SERVICE_NOT_AVAILABLE TPG_ERR_GA_SERVICE_NOT_AVAILABLE
30711	TPG_ERR_GA_CHARGE_LSR_INVALID_PARMS
30712	TPG_ERR_GA_CHARGE_LSR_TIMEOUT
30713	TPG_ERR_GA_CHARGE_LSR_FAILURE
30714	TPG_ERR_GA_CHARGE_DENIED
30715	TPG_ERR_GA_CHARGE_INVALID_TENDER_ID
30716	TPG_ERR_GA_CHARGE_INVALID_GA_TENDER_CLASS
30717	TPG_ERR_GA_CHARGE_ACCOUNT_NOT_FOUND
30718	TPG_ERR_GA_CHARGE_ACCOUNT_NOT_ACTIVE



Code	Message
30719	TPG_ERR_GA_CHARGE_ACCOUNT_INVALID_TYPE
30720	TPG ERR GA CHARGE ACCOUNT CASH ONLY
30721	TPG ERR GA CHARGE CREDIT NOT ALLOWED
30722	TPG ERR GA CHARGE ACCOUNT BALANCE EXCEEDED
30723	TPG ERR GA CHARGE ACCOUNT IS EMPTY
30724	TPG ERR GA CHARGE INVALID GA AMOUNT
30725	TPG ERR GA CHARGE INVALID PAYMENT AMOUNT
30726	TPG ERR GA CHARGE MISSING INVALID DATA
30727	TPG ERR GA CHARGE MISSING TENDER DATA
30728	TPG_ERR_GA_CHARGE_AUTH_TENDER_TYPE
30729	TPG_ERR_GA_CHARGE_TOO_MANY_AUTHS_ON_CHK
30801	TPG ERR TENDER AUTH ON REFUND CHECK
30802	TPG ERR TENDER AUTH NOT FOUND
30803	TPG_ERR_TOO_MANY_TENDER_AUTHS
30804	TPG ERR TENDER AUTH FULLY AUTHD
30805	TPG ERR NEGATIVE TENDER AUTH AMT
30806	TPG ERR TENDER AUTH AMT EXCEEDS BALANCE
30807	TPG_ERR_TENDER_AUTH_AMT_BELOW_BALANCE
30808	TPG_ERR_HOST_CAPTURE_TENDER_AUTH
30809	TPG_ERR_CASH_ONLY_TENDER_AUTH
30810	TPG_ERR_AUTH_TYPE_NOT_SUPPORTED
30811	TPG_ERR_TENDER_AUTH_INVALID_XREF_KEY
30812	TPG_ERR_TENDER_RESTRICTED
30901	TPG ERR INQ INVALID TYPE
30902	TPG ERR INQ MISSING INVALID DATA
30903	TPG_ERR_INQ_ZERO_RESPONSES
30904	TPG_ERR_INQ_TOO_MANY_RESPONSES
30905	TPG ERR INQ INVALID TENDER TYPE
30912	TPG_ERR_INQ_INVALID_TENDER_PAYMENT_ID
31011	TPG ERR INVALID ORDER ATTRIBUTE
31100	TPG ERR IA SERVICE INVALID PARMS
31101	TPG ERR IA SERVICE OFFLINE
31102	TPG_ERR_IA_SERVICE_TIMEOUT
31103	TPG ERR IA SERVICE FAILURE
31104	TPG_ERR_IA_INVALID_IA_TENDER_ID
31105	TPG_ERR_IA_ACCOUNT_NOT_FOUND
31106	TPG_ERR_IA_ACCOUNT_NOT_ACTIVE
31107	TPG_ERR_IA_ACCOUNT_IS_EMPTY
31108	TPG_ERR_IA_ACCOUNT_REQ_LOWER_AMT
31109	TPG_ERR_IA_ACCOUNT_CASH_ONLY
31110	TPG_ERR_IA_ACCOUNT_INVALID_TYPE
31111	TPG_ERR_IA_ACCOUNT_BALANCE_EXCEEDED
31112	TPG_ERR_IA_CREDIT_NOT_ALLOWED
31113	TPG_ERR_IA_MISSING_INVALID_DATA
31114	TPG_ERR_IA_AUTH_ACCOUNT_TYPE
31115	TPG_ERR_IA_INQ_ACCOUNT_TYPE
31116	TPG_ERR_IA_TOO_MANY_AUTHS_ON_CHK
31117	TPG_ERR_IA_DENIED
31118	TPG_ERR_IA_DENIED_USE_LIMIT_AMT
31119	TPG_ERR_IA_INVALID
31201	Gift Card – Invalid Tender ID
31201	Gift Card – Refund Not Supported
31201	Gift Card – Insufficient Balance
31201	Gift Card – Invalid MSR Track Data



Code	Message
32001	Check Full
32002	Item Exceeds Max Check Total
32003	Incomplete Config
90002	TPG Buffer Error - see Dr. Watson
90009	Order Total - Internal problem