



HOTEL TECHNOLOGY – NEXT GENERATION

Property Web Services

Single Guest Itinerary Message Flow Documentation Version 1.0.1

Version 1.0.1 includes a minor update
to the 'About HTNG' section.

About HTNG

Hotel Technology Next Generation (“HTNG”) is a nonprofit organization with global scope, formed in 2002 to facilitate the development of next-generation, customer-centric technologies to better meet the needs of the global hotel community. HTNG’s mission is to provide leadership that will facilitate the creation of one (or more) industry solution set(s) for the lodging industry that:

- Are modeled around the customer and allow for a rich definition and distribution of hotel products, beyond simply sleeping rooms;
- Comprise best-of-breed software components from existing vendors, and enable vendors to collaboratively produce world-class software products encompassing all major areas of technology spending: hotel operations, telecommunications, in-room entertainment, customer information systems, and electronic distribution;
- Properly exploit and leverage a base system architecture that provides integration and interoperability through messaging; and that provides security, redundancy, and high availability;
- Target the needs of hotel companies up to several hundred properties, that are too small to solve the issues themselves;
- Will reduce technology management cost and complexity while improving reliability and scalability; and
- Can be deployed globally, managed remotely, and outsourced to service providers where needed.

In June 2005, HTNG announced the first-ever “Branding and Certification Program” for hotel technology. This program will enable vendors to certify their products against open HTNG specifications, and to use the "HTNG Certified" logo in their advertising and collateral materials.

It will enable hotels to determine which vendors have completed certification of their products against which specific capabilities, and the environments in which performance is certified. HTNG’s vision is to achieve a flexible technical environment that will allow multiple vendors’ systems to interoperate and that will facilitate vendor alliances and the consolidation of applications, in order to provide hotels with easily managed, continually evolving, cost-effective solutions to meet their complete technology needs on a global basis.

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Following paragraph added, for v1.0.1
on 13 May 2010:

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2. Overview

2.1 Scope

The Single Guest Itinerary team of Web Service Workgroup within HTNG has created and defined the following information flow concept.

1. Logically link the above defined systems to identify and link Guest Information, Accommodation Reservation and Activity Scheduling data.
2. Allow for Activity Reservation System to retrieve and store updated Accommodation Reservation information, and compare that with the scheduled activities.
3. Allow for Itinerary Consolidation System and Customer Profile System to receive summary Activity schedule information from various Activity Scheduling systems and consolidate into one view of all activities scheduled for a guest.
4. Provide a mechanism to Post charges from the Posting System into the Folio System.
5. Provide a mechanism for other external systems to retrieve consolidated summary Itinerary information

2.2 Key Design points

The main key design point is to allow all of the afore mentioned systems to be able to link with each other, using the following unique identifiers:

- Profile ID
- Activity ID
- Reservation ID

A set of messages will be used to maintain the integrity of Guest information between systems. An event model is active between systems to maintain the integrity of the data. Reservations and cancellations are distributed via notification messages.

Interface design was based on a more traditional approach/implementation style of a typical hotel environment, where PMS is playing the roles of ICS, FOL, CRM and ARS, and an Activity System is playing a role of ATS and POS. However, this does not preclude this interface being implemented with different roles assignments.

When vendors go to certify system implementation with each other, they would first have to clearly define and agree which roles will be played by which system in their environment.

3. Definitions

3.1 Accommodation Reservation System (ARS)

An Accommodation Reservation System is a computerized system managing information about rooms, reservations and customers.

It provides functionality for offering hotel availability, for making accommodation rate and room type inquiries, accommodation reservations, changing, canceling, confirming and viewing reservations, and modifying accommodation rates and types.

The system stores all of the information about the reservation such as customer name(s), address, phone number, number of people/rooms, number of days they will stay, check out date, rate, payment type, etc.

3.2 Posting System (POS)

A Posting system is an electronic system that accepts financial data at or near a selling location and transmits that data securely to a computer/system or authorization network for reporting activity, authorization and transaction logging.

A common example of a Posting system is a Point-of-Sale System.

3.3 Itinerary Consolidation System (ICS)

An Itinerary Consolidation System is a system that compiles summary data for all customer itinerary reservations in one place. All itinerary bookings will be completed in an “Activity Reservation System” and sent to the “Itinerary Consolidation System”. The link between the “Activity Reservation System” and the “Itinerary Consolidation System” is typically linked pairs of guest identification numbers and optionally, linked pairs of guest reservation numbers. Most commonly the "Itinerary Consolidation System" will also be the “Folio System”.

3.4 Activity Reservation System (ATS)

Activity Reservation System is a system that manages guest reservations for any activity such as: Dining Reservations, Spa Reservations, Tee Time Reservations, and Transportation Reservations. Systems that manage accommodation reservations are not considered activity reservation systems. Some Activity Reservation Systems may process payments or post charges to an external system. The link between an external system and an Activity Reservation system is typically a guest record information which uniquely identify that guest.

3.5 Folio System (FOL)

Folio System is a system that compiles customer bills (commonly known in hotel industry as “folios”). Some charges and payments on folios may be posted by users of the Folio system, while other charges and payments may come through a “posting interface” from external system. The link between an external system and a folio system is an internal reservation ID. Most common example of a Folio System in hospitality industry is a Property Management System.

3.6 Customer Profile System (CRM)

Customer Profile System is system that contains information about hotels guests and customers, such as customer name(s), address, phone number, number of people/rooms, language, demographics, past stay and spending history, etc.

3.7 Itinerary Display System (IDS)

Itinerary Display System is a system that will be able to display guest itinerary to the guest but not necessarily store it. A good example of IDS would be a Pay-Per-View system that would allow a guest to view their itinerary on their guestroom TV.

4. Message Structure

Some of the messages are defined as “optional” and some are “mandatory”. Therefore, for certification purposes, any vendor that goes to certify their product against a particular role (POS, ICS, FOL, CRM, ARS, ATS, IDS) should be able to process all mandatory messages.

When an optional message is not supported by a system, that system should return result of “SUCCESS” in order for this not to be perceived as an error”

Messages can be classified into a number of categories within this interface. The following table can be used as a guideline for this purpose.

The following chart represents **Web Services Operations that will be provided by these systems**

Message Scope	WSDL Operation	Implementation						
		ICS	IDS	ATS	CRM	ARS	FOL	POS
Lookup guest / reservation	ReservationLookup					<input checked="" type="checkbox"/>		
	FetchReservation					<input checked="" type="checkbox"/>		
	ProfileLookup			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
	FetchProfile			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Guest profile management	NewProfile			Opt	Opt			
	UpdateProfile			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Activity management	ActivityLookup	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
	CreateActivity	<input checked="" type="checkbox"/>						
	UpdateActivity	<input checked="" type="checkbox"/>						
	CancelActivity	<input checked="" type="checkbox"/>						
	FetchActivities	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
Notification	OutOfScopeNotification			<input checked="" type="checkbox"/>				
	GuestStatusNotification			<input checked="" type="checkbox"/>				
Subscription	Subscription			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Post Charges	PostPayment						<input checked="" type="checkbox"/>	
Guest Services	LocationNotification					<input checked="" type="checkbox"/>		
	GuestMessage					<input checked="" type="checkbox"/>		

Opt denotes Optional Web Services

The following chart represents Web Service Operations which systems will **initiate these messages**.

Message Scope	WSDL Operation	Implementation						
		ICS	IDS	ATS	CRM	ARS	FOL	POS
Lookup guest / reservation	ReservationLookup		<input checked="" type="checkbox"/>	Opt				
	FetchReservation			Opt				
	ProfileLookup			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Guest profile management	FetchProfile			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
	NewProfile			Opt	Opt			
Activity management	UpdateProfile			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
	ActivityLookup	<input checked="" type="checkbox"/>						
	CreateActivity			<input checked="" type="checkbox"/>				
	UpdateActivity			<input checked="" type="checkbox"/>				
	CancelActivity			<input checked="" type="checkbox"/>				
Notification	FetchActivities	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
	OutOfScopeNotification					<input checked="" type="checkbox"/>		
	GuestStatusNotification					<input checked="" type="checkbox"/>		
Subscription	Subscription			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Post Charges	PostPayment						<input checked="" type="checkbox"/>	
Guest Services	LocationNotification			Opt				
	GuestMessage			Opt				

Opt denotes Optional Messages

5. Use Cases

The following use cases have been identified and illustrate how the various operations/messages defined in the specification can be orchestrated to realize a set of business use cases in the context of a specific system. The use cases are organized into groups where each group represents a system role. The other system that is being interacted with in a specific use case is called the “Provider.”

5.1 Activity Reservation System (ATS)

5.1.1 ATS01 – Select Guest

Name	Select Guest
ID	ATS01
Provider	Customer Profile System
Actor	Activity Reservation System User

5.1.1.1 Brief Description

This use cases describes the process when the actor is in the process of locating a Guest record in the ATS. The ATS has the ability to search in both its own guest storage and in the Provider’s profile storage. Depending on where the guest/profile is located, once the use case is completed, there must be a record of the guest/profile in both systems and a link must have been established between them.

5.1.1.2 Basic Flow

1. The use case starts when the actor chooses to locate a guest. The actor enters in a set of search criteria and searches both the ATS and CRM.
2. The ATS can search for a profile using the following methods
 - a. By issuing a **ProfileLookup** call to the CRM, e.g. to search for a profile using name or a phone number, etc.
 - b. By issuing a **ReservationLookup** call to the CRM.
3. The actor selects a record (that originated from either the ATS or the CRM)
4. [OPTIONAL: If a guest is located in the ATS and not in the CRM]
 - a. The ATS will issue a **NewProfile** call to the CRM to create the profile in the CRM.
 - b. The ATS will issue a **Subscription** call to the CRM to link the newly created profile in the CRM with the existing guest in the ATS.
5. [If a guest is located in the CRM and not in the ATS]
 - a. The ATS may choose to call **FetchProfile** on the CRM to fetch more detail about the profile, if needed.
 - b. The ATS will create the record locally.
 - c. The ATS will issue a **Subscription** call to the CRM to link the newly created guest record in the ATS to the existing profile in the CRM.
6. [If a guest is located in both systems and already linked]
 - a. No action is taken
7. [If a guest is located in both systems but not linked]
 - a. The ATS will issue a **Subscription** call to the CRM to link the two records.
8. The use case terminates.

5.1.1.3 Preconditions

None

5.1.1.4 Postconditions

1. A guest exists in the ATS
2. A profile exists in the CRM
3. The guest in the ATS and the corresponding profile in the CRM have been linked.

5.1.2 ATS02 – Update a Guest

Name	Update Guest
-------------	--------------

ID	ATS02
Provider	Customer Profile System
Actor	Activity Reservation System User

5.1.2.1 Brief Description

This use case describes the process when the actor is updating an existing guest record in the ATS. In case the guest record is linked, the linked/external system must be notified of the change as well to keep the systems in sync.

5.1.2.2 Basic Flow

1. The use case starts when the actor chooses an existing guest to update in the ATS. The actor then enters in some updated information about the guest and saves the information.
2. [If the guest record is linked]
 - a. OPTIONAL: In case the ATS needs to verify the information has not changed in the CRM before issuing an update, the ATS can call one of the following methods to refresh information about the guest: **FetchProfile, ProfileLookup, ReservationLookup**.
 - b. The ATS calls the **UpdateProfile** method on the CRM to update the profile with the new information.
3. The use case terminates.

5.1.2.3 Preconditions

1. A guest record exists in the ATS
2. A corresponding, linked, profile exists in the CRM

5.1.2.4 Postconditions

1. The guest record in the ATS has been updated
2. The guest profile in the CRM has been updated with the same information

5.1.3 ATS03 – Create an Activity

Name	Create an Activity
ID	ATS03
Provider	Customer Profile System, Itinerary Consolidation System
Actor	Activity Reservation System User

5.1.3.1 Brief Description

This use case describes the process when the actor is creating an activity for an existing guest. In the case where the actor is creating an activity for a guest that is not yet in the ATS, the ATS01 use case can be executed before this use case is run, although it is not required.

5.1.3.2 Basic Flow

1. The use case starts when the actor has created an activity reservation for an existing guest in the ATS.
2. [If the guest record is NOT linked]
 - a. The ATS will need either link the guest record to an existing guest record in the CRM, which is can be done through a series of calls to **FetchProfile**, **LookupProfile** and **Subscribe**, in the case of an existing matching profile, or in the case there is no match in the CRM; **NewProfile**, **Subscription**.
3. The ATS will issue an **CreateActivity** call to the ICS.
4. The use case terminates.

5.1.3.3 Preconditions

None

5.1.3.4 Postconditions

1. There is a record of the newly created activity both in the CRM and ATS.
2. The guest record in the ATS and corresponding profile in the CRM are linked.

5.1.4 *ATS04 – Update an Activity*

Name	Update an Activity
ID	ATS04
Provider	Itinerary Consolidation System
Actor	Activity Reservation System User

5.1.4.1 Brief Description

This use case describes the process when the actor is updating an existing activity in the ATS where the guest record is linked to a profile in the CRM.

5.1.4.2 Basic Flow

1. The use case starts when the actor has updated an existing activity reservation.
2. The ATS will issue an **UpdateActivity** call to the ICS.
3. The use case terminates.

5.1.4.3 Preconditions

1. The related guest record in the ATS is linked to a profile in the CRM.

5.1.4.4 Postconditions

1. There is a matching record of the updated created activity both in the CRM and ATS.

5.1.5 *ATS05 – Cancel an Activity*

Name	Cancel an Activity
ID	ATS05
Provider	Itinerary Consolidation System
Actor	Activity Reservation System User

5.1.5.1 Brief Description

This use case describes the process when the actor is canceling an existing activity in the ATS where the activity is for a linked guest.

5.1.5.2 Basic Flow

1. The use case starts when the actor has canceled an existing activity reservation.
2. The ATS will issue a **CancelActivity** call to the ICS.
3. The use case terminates.

5.1.5.3 Preconditions

1. The related guest record in the ATS is linked to a profile in the CRM.

5.1.5.4 Postconditions

1. The Activity reservation is canceled in both the ATS and the CRM.

5.1.6 ATS06 – Guest Message

Name	Guest Message
ID	ATS06
Provider	Accommodation Reservation System
Actor	Activity Reservation System User

5.1.6.1 Brief Description

This use case describes the process when the actor is sending a message to a guest. Accommodation Reservation System may generate a guest notification, such as turning on the message light in the guest's room.

5.1.6.2 Basic Flow

1. The use case starts when the actor has sent a message to a linked guest.
2. The ATS will issue a **GuestMessage** call to the ARS passing ReservationID
3. The use case terminates.

5.1.6.3 Preconditions

1. The related guest record in the ATS is linked to a profile in the CRM which has a reservation in the ARS

5.1.6.4 Postconditions

1. The guest message is submitted to the ARS.

5.1.7 ATS07 – Guest Location Notification

Name	Guest Location Notification
ID	ATS07
Provider	Accommodation Reservation System
Actor	Activity Reservation System User

5.1.7.1 Brief Description

This use case describes the process when a location notification message is submitted by the actor in order to notify

the Accommodation Reservation System of a guest's current physical location. ARS may implement the feature of locating a guest in order to forward phone calls or deliver messages.

Basic Flow

1. The use case starts when the actor has sent a location notification message to a linked guest.
2. The ATS will issue a **LocationNotification** call to the ARS passing ResevationID
3. The use case terminates.

5.1.7.2 Preconditions

1. The related guest record in the ATS is linked to a profile in the CRM which has a reservation in the ARS

5.1.7.3 Postconditions

1. The guest location notification message is submitted to the ARS.

5.2 Itinerary Display System (IDS)

5.2.1 IDS01 – Show Itinerary

Name	Show Itinerary
ID	IDS01
Provider	Accommodation Reservation System / Itinerary Consolidation System
Actor	Guest

The guest can view his or hers own itinerary by implicitly querying the IDS through some sort of guest User Interface, e.g. a web site, an in-room interactive TV, etc.

5.2.1.1 Basic Flow

1. The use case starts when the actor chooses to view his or her own itinerary.
2. The IDS issues a **ReservationLookup** call to the ARS. The search criteria supplied to the **ReservationLookup** call will typically be one of the following identifiers:
 - a. A ProfileID if a ProfileID is already known, e.g. because the actor has logged onto a web site and the profile is already known.

- b. A Confirmation Number
- c. A Room Number of an in-house guest.
- 3. [If more than one reservation/stay was found]
 - a. The system asks the actor to choose the reservation/stay for which to retrieve the itinerary for.
 - b. The actor selects one of the reservations/stays.
- 4. The IDS issues a **FetchActivities** call to the ICS to retrieve all the activities for the (now known) ProfileID and ReservationID.
- 5. The IDS displays the itinerary to the guest.
- 6. The use case terminates.

5.2.1.2 Preconditions

- 1. There exists at least one reservation in the ARS for the guest in question.

5.2.1.3 Postconditions

None

5.3 Accommodation Reservation System (ARS)

5.3.1 ARS01 Create a Reservation

Name	Create a Reservation
ID	ARS01
Provider	Activity Reservation System
Actor	Typical ARS user

Whenever a reservation is created in the ARS that involves a linked guest/profile, the ARS should be able to notify subscribers of the new reservation. While the ability to generate this notification is required, the activation of the notification should remain configurable, and implementation dependent.

5.3.1.1 Basic Flow

- 1. The use case starts when the actor has changed or created a reservation in ARS.
- 2. [If the associated guest/profile is linked]
 - a. The ARS will issue a **GuestStatusNotification** call to the ATS.
- 3. The use case terminates.

5.3.1.2 Preconditions

1. The guest record is linked.

5.3.1.3 Postconditions

1. The reservation is canceled in both the ATS and the CRM.

5.3.2 *ARS02 –Change in Reservation Status*

Name	Change Reservation Status
ID	ARS02
Provider	Activity Reservation System
Actor	Typical ARS user

Whenever a status change is made to a reservation with a linked guest profile in the ARS, the ARS should notify subscribers of the change. For example, when a guest checks in or out, the ATS would typically be notified of the change in guest status.

5.3.2.1 Basic Flow

1. The use case starts when the actor checks in or out an existing linked reservation.
2. [If the associated guest/profile is linked]
 - a. The ARS will issue a **GuestStatusNotification** call to the ATS.
3. The use case terminates.

5.3.2.2 Preconditions

1. The guest record is linked.

5.3.2.3 Postconditions

1. None.

5.3.3 *ARS03 –Cancel or Move a Reservation*

Name	Cancel or Move a Reservation
ID	ARS03
Provider	Activity Reservation System
Actor	Typical ARS user

Whenever a reservation which has linked activities is cancelled or moved in the ARS, it may be desirable to notify the ATS of the reservation change. While the ability to generate the notification is required, it should be operationally configurable and implementation dependent.

5.3.3.1 Basic Flow

1. The use case starts when the actor has cancels or moves a reservation in ARS which has linked activities.
2. [If the reservation contains linked activities, that ARS may (per actor option or implementation default):]
 - a. Issue an **OutOfScopeNotification** message to the ATS to release (cancel) the associated activities.
 - b. Issue an **OutOfScopeNotification** message to the ATS to notify the reservation change for later follow up action.
 - c. Make no notification.
3. The ATS would perform the following actions per the conditions above.
 - a. The activity is automatically cancelled.
 - b. An actor in the ATS system follows up to determine whether the activity should be cancelled.
 - c. No action occurs in the ATS.
4. The use case terminates.

5.3.3.2 Preconditions

1. The reservation contains linked activities..

5.3.3.3 Postconditions

1. The reservation is canceled or moved in the ARS. The activities in the ATS may be cancelled.

5.4 Itinerary Consolidation System (ICS)

5.4.1 ICS01 – Retrieve Itinerary

Name	Retrieve Itinerary
ID	ICS01
Provider	Activity Reservation System
Actor	Typical ICS user

The ICS has the ability to query the ATS for (typically unlinked) guest records and reservations for that guest.

5.4.1.1 Basic Flow

1. The use case starts when the actor wishes to view the itinerary for a guest, which is likely unlinked, although the actor may or may not be aware of that. The actor enters in a set of search criteria.
2. The ICS can query the ATS for a profile using either a **ProfileLookup** or **ActivityLookup** call. The system displays the results to the actor (perhaps incorporated with its own matching lists of guests).
3. The actor selects a guest
4. The ICS can query the ATS for more detailed profile information by issuing a **FetchProfile** call, and the ICS issues a **FetchActivities** call to the ATS to fetch all the activities for that guest. The ICS will then issue a **Subscription** call to the ATS to subscribe for changes to the profile that was just brought over.
5. The system displays the itinerary to the actor.
6. The use case terminates.

5.4.1.2 Preconditions

None

5.4.1.3 Postconditions

1. The guest selected guest record is linked in both systems.
2. The ICS has an up-to-date list of activities for the selected guest.

5.5 Customer Profile System (CRM)

5.5.1 CRM01 – Select Guest

Name	Select Guest
ID	CRM01
Provider	Activity Reservation System
Actor	Typical Customer Profile System user

5.5.1.1 Brief Description

This use cases describes the process when the actor is in the process of locating a Guest record in the CRM. The CRM has the ability to search in both its own guest storage and in external ATS systems. If the profile is retrieved from the external ATS, there must be a record of the guest/profile in both systems and a link must have been established between them.

5.5.1.2 Basic Flow

1. The use case starts when the actor chooses to locate a guest. The actor enters in a set of search criteria and searches both the ATS and CRM.
2. The ATS can search for a profile using the following methods
 - a. By issuing a **ProfileLookup** call to the ATS, e.g. to search for a profile using name or a phone number, etc.
 - b. By issuing a **ActivityLookup** call to the ATS.
3. The actor selects a record (that originated from either the ATS or the CRM)
4. [If a guest is located in the ATS and not the CRM]
 - a. The CRM may choose to call **FetchProfile** on the ATS to fetch more detail about the profile, if needed.
 - b. The CRM will create the record locally.
 - c. The CRM will issue a **Subscription** call to the ATS to link the newly created guest record in the CRM to the existing profile in the ATS.
5. [If a guest is located in both systems and already linked]
 - a. No action is taken
6. [If a guest is located in both systems but not linked]
 - a. The CRM will issue a **Subscription** call to the ATS to link the two records.
7. The use case terminates.

5.5.1.3 Preconditions

None

5.5.1.4 Postconditions

1. A guest exists in the CRM
2. A profile may exist in the ATS (if retrieved from the ATS)
3. The guest in the CRM and the corresponding profile in the ATS (if exists) have been linked.

5.5.2 CRM02 – Update a Guest

Name	Update Guest
ID	CRM02
Provider	Activity Reservation System
Actor	Typical Customer Profile System user

5.5.2.1 Brief Description

This use case describes the process when the actor is updating an existing guest record in the CRM. In case the guest record is linked, the linked/external system must be notified of the change as well to keep the systems in sync.

5.5.2.2 Basic Flow

1. The use case starts when the actor chooses an existing guest to update in the CRM. The actor then enters in some updated information about the guest and saves the information.
2. [If the guest record is linked]
3. The CRM calls the **UpdateProfile** method on the ATS to update the profile with the new information.
4. The use case terminates.

5.5.2.3 Preconditions

1. A guest record exists in the CRM
2. A corresponding, linked, profile exists in the ATS

5.5.2.4 Postconditions

1. The guest record in the CRM has been updated
2. The guest profile in the ATS has been updated with the same information

5.6 Posting System (POS)

5.6.1 POS01 – Posting Guest Related Charges

Name	Posting Guest Related Charges
ID	POS01
Provider	Folio System
Actor	Posting System user

5.6.1.1 Brief Description

This use cases describes the process when the actor adds a charge or submits a refund to a guest folio which is managed by the Folio System.

5.6.1.2 Basic Flow

1. The use case starts when the actor chooses to submit a guest's related charge or refund to the Folio System.
2. The POS will issue a **PostPayment** (pmtpostingupdate)
3. The POS will receives back a PostPayment response message (pmtpostingresults)
 - a. If the response is successful no action is taken
 - b. If the response is failure the POS will retry the sequence of PostPayment
4. The use case terminates.

5.6.1.3 Preconditions

5. A corresponding guest folio exists in the FOL

5.6.1.4 Postconditions

1. A guest related charges and refunds exist in the FOL