Distribution Content Management Specifications Release 2009B

Issue 2

September 24, 2009

Issue 2 includes a minor update to the 'About HTNG' section.

Distribution Content Management Workgroup

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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1   Document History

1.1	Document Changes			
Version	**Date**	**Author**	**Comments**
0.0	23 Sep 2008	Victor Robison	First draft posted for workgroup review
0.1	17 Jun 2009	Jay Rosamilia	Transfer to new template and add initial message table
0.2	1 Jul 2009	Sara Pardo	General clean-up
0.3	9 Jul 2009	Jay Rosamilia	Added field definitions
0.4	14 Jul 2009	Jay Rosamilia	Updated XML Samples
0.5	16 Jul 2009	Sara Pardo, Jay Rosamilia	Added roles, inserted use cases, general clean-up
0.6	16 Jul 2009	Victor Robison	Updated Roles, Referenced Documents; added Behavior, Implementation and Processing Considerations
0.7	20 Jul 2009	Sara Pardo, Bonnie Lowell	Minor edits
1.0	24 Sep 2009		General Release

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2   Acknowledgements

HTNG gratefully acknowledges the contributions of the following people in the development of this document:

Workgroup Member	Company
Jaime Gallegos	Hyatt Hotels Corporation
Victor Robison	VFM Leonardo
Dee Thomas	Pegasus Solutions
Joyce Sade	Amadeus
Chad Stansbury	Carlson Hotels Worldwide

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3   Document Information

3.1   Document Purpose

This document defines the Hotel Technology Next Generation ("HTNG") Usage Profiles and Business Process for Digital Content Management Messages based on the OpenTravel Alliance ("OTA" or "OpenTravel") specifications published by this organization.

3.2   Scope

This document defines a common HTNG implementation of the OpenTravel specifications for Digital Content Management.

3.3   Audience

This document is designed as a guide for project managers, programmers, and analysts to gain detailed information needed to implement these messages.

3.4   Overview

The messages in the OpenTravel specification cover a large number of optional fields and the same information could be transferred in a number of different fields.

The intent of the HTNG usage profiles is to recommend a minimum common denominator and clarify what fields should be used to transfer the data required. The main aim is to avoid having to pass the same information in more than one field, thus avoiding confusion.

Trading partners may agree prior to implementation to use additional fields for data not covered in the usage profile, including TPA extensions as per the OpenTravel specifications schema.

3.5   Document Terms

For the purpose of this document the following terms have been defined as follows:

Term	Definition
HTNG	Hotel Technology – Next Generation
OpenTravel	OpenTravel Alliance
XML	Extensible Markup Language – This is a general-purpose markup language for creating special- purpose markup languages, capable of describing different kinds of data.

3.6   Referenced Documents

The following table shows the documents upon which this document depends:

Name	Location
OpenTravel 2009A Specification	http://www.opentravel.org/

3.7   Assumptions and Dependencies

It is assumed the usage profiles provide a common starting point for the definition of the messages exchanged and that the implementers of these messages will:

- a.) Add expansions as needed to enable exchange of additional information while retaining compliance with the OpenTravel specifications.
- b.) Report expansions deemed common to HTNG for consideration as additional usage profiles.
- c.) Report any missing elements or attributes to OpenTravel for inclusion in a future specification release.

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4 Business Process

This chapter defines minimum requirements and expected behavior of a participating system to assist in the partner certification exercise.

4.1 Overview

Partners will be responsible for creating their own Quality Assurance Test Scripts.

The intent of the HTNG usage profiles is to recommend a minimum common denominator and clarify what fields should be used to transfer the data required. The main aim is to avoid having to pass the same information in more than one field, thus avoiding confusion.

Trading partners may agree prior to implementation to use additional fields for data not covered in the usage profile, including TPA extensions as per the OpenTravel specifications schema.

4.2 Roles

There are two different roles that are defined for this specification: Publisher (Content Provider) and Subscriber (Content Recipient).

Publisher:
In the context of a particular transaction, the publisher is the provider of the content.

Subscriber:
In the context of a particular transaction, the subscriber is the recipient of the content.

In the chain of distribution, there is always at least one publisher and one subscriber, and there may be systems (such as intermediaries) that act as both a publisher and a subscriber. Some systems may serve as publishers for some information (e.g. for certain hotels) and as subscribers for other information (e.g. other hotels).

4.3 Behavior

The purpose of this Hotel Descriptive Content Management is to support the transfer of hotel descriptive content from systems like CRS or PMS, to a receiving system, such as a distribution channel. The data comprises of property level information in the form of text as well images and video.

The Hotel Descriptive Content Management is necessary for subscribers to faster respond by pulling data from local systems instead of doing interactive calls to CRS or PMS. Also this means that publishers will not get as many interactive calls and can manage better their own performance.

The timing and frequency for the Hotel Descriptive Content Management will be agreed between the partners (publishers and subscribers) for both, complete load and partial load. In the case of interactive request the timing and frequency should be unlimited to subscribers.

Based on the definitions / schedules discussed above; the originating system will select the appropriate usage profile and fill in the XML according to the guidelines provided in the specific profile. The system will then send the XML to the appropriate Web Service set up by the receiving system which will, in turn, respond using the correct response for the selected profile.
The originating system should log both, the request and response and ensure the message is processed appropriately.

4.3.1 Behavior expected from the originating system (publisher) prior to receipt of extract by the receiving system (subscriber)

- The provision of the appropriate extract, for the appropriate property(ies) for a complete load
- The provision of the appropriate extract, for the appropriate property(ies), in accordance with the frequency and schedule agreed by the trading partners for a partial load
- Provision of all fields classed as mandatory in the Usage Profile Hotel Descriptive Content specification
- Creation and validation of XML message format
- Transmission of the XML to appropriate URL set up by the receiving system using the appropriate identification criteria (soap user and password provided by the receiving system)
- Keep a log of the message transmitted
- Ensure proper processing of the response message

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- Behavior Expected by the originating system (publisher) upon Receipt of the Response Message by the receiving system (subscriber)
- Once the XML has been processed by the receiving system, a response message will be sent back to the originating system. The originating system will need to perform the following:
- Keep a log of the response message received
- Be able to evaluate error responses coming from the receiving system
- Be able to evaluate warning messages contained in the responses from the receiving system
- React to error responses as needed, by modifying the XML and retransmitting if possible
- If retry attempts remain unsuccessful route through accepted escalation paths where applicable

4.3.2   Behavior expected from the receiving system (subscriber) upon receipt of extract

- Receive and validate the data contained in the message
- Extract data in the message detail and validate any coded fields with reference to a mapping table if applicable
- Ensure that a successful response message is generated and transmitted
- If errors were encountered but the message was still processed, verify that the response message contains the appropriate warnings as supported in OpenTravel 2009A
- Acknowledge successful/unsuccessful processing of the received pushed data or the received pulled data using the appropriate response message
- If unsuccessful processing continues, route through accepted escalation paths where applicable

- Process the received data and insert and/or update all provided information
    - In summary, the Usage Profiles outlined above are encompassed within the following functional capabilities:
    - Reading - accepting the associated data from within an inbound message.
    - Converting - translating the associated data to and from local coding and format standards, where appropriate, during receiving and transmitting operations.
    - Storing - holding the associated data locally.
    - Displaying- showing the associated data to users of the application in a way that maintains the logical association of the data to its purpose - i.e. in appropriate fields on screen, or with appropriate notation if displayed as part of free-form text.
    - Retransmitting - re-sending of the associated data in the correct position of an outbound message, where applicable

4.3.3   Behavior expected from the receiving system (subscriber) upon receipt of extract

- Receive and validate the data contained in the message
- Extract data in the message detail and validate any coded fields with reference to a mapping table if applicable
- Ensure that a successful response message is generated and transmitted
- If errors were encountered but the message was still processed, verify that the response message contains the appropriate warnings as supported in OpenTravel 2009A recommends
- Acknowledge successful/unsuccessful processing of the received pushed data or the received pulled data using the appropriate response message
- If unsuccessful processing continues, route through accepted escalation paths where applicable
- Process the received data and insert and/or update all provided information
- In summary, the Usage Profiles outlined above are encompassed within the following functional capabilities:
- Reading - accepting the associated data from within an inbound message.
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- Storing - holding the associated data locally.
- Displaying- showing the associated data to users of the application in a way that maintains the logical association of the data to its purpose - i.e. in appropriate fields on screen, or with appropriate notation if displayed as part of free-form text.
- Retransmitting - re-sending of the associated data in the correct position of an outbound message, where applicable
- It is recommended that textual data received by the subscriber should be processed in its entirety, i.e. not truncated. Specific instances of truncated data should be agreed upon between the subscriber and the publisher.
- The subscriber may not necessarily store all of the content as described in the messages exchanged. For this reason, the subscriber and the publisher should agree on how the stored content is re-published and what the limitations are on the capabilities of the re-publishing of content

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4.4　　　Use Cases

4.4.1　Complete Load

All content for a set of hotels is sent to the subscriber. To achieve a complete replace, every element that is defined in the publisher system must be sent to the subscriber. The subscriber must replace all content with the received content. The content is typically used to populate or refresh the database maintained by the subscriber. A transaction may indicate a new property for insertion, which must contain all of the minimum descriptive content used to inform the subscriber of a new property.

•　　　　A complete load will be initiated by the publisher.

•　　　　The OTA_HotelDescriptiveContentNotifRQ message(s) will include all of the agreed upon properties to the subscriber. The subscriber will respond with OTA_HotelDescriptiveContentNotifRS message(s), indicating the success or failure status of the transaction(s).

•　　　　Multiple properties may be sent in a single message, or multiple messages.

•　　　　The message(s) can be processed synchronously or asynchronously.

4.4.2　Partial Load

Content is sent from the publisher to the subscriber specifically for properties for which content has changed. The content is typically used to update the database maintained by the subscriber. An update must not remove any of the minimum descriptive content required by the receiving system.

When updating an existing item, typically and ID attribute is used to refer to the originally uploaded content.

•　　　　A partial load will be initiated by the publisher.

•　　　　The OTA_HotelDescriptiveContentNotifRQ message(s) will be sent to the subscriber and will describe a request to update some or all data elements for one or more properties. The subscriber will respond with OTA_HotelDescriptiveContentNotifRS message(s), indicating the success or failure status of the transaction(s).

•　　　　Multiple properties may be sent in a single message, or multiple messages.

•　　　　The message(s) can be processed synchronously or asynchronously.

4.5　　　Implementation and Processing Considerations

4.5.1　Rich Media Content Delivery

Content described in OTA messages for videos and other rich media items may have different underlying methods of delivery based on the technology used to deliver the content. For this reason, the URL may describe a rich media object directly, such as an MPEG file, or may be a URL referencing a web page that displays the hosted content. The methods for delivery and display of such content must be agreed upon by the publisher and subscriber.

4.5.2　Content Availability

Image or rich media content must be copied to the location specified by the URL prior to sending an update. Content must not be removed until all subscribers have successfully received and acknowledged update messages. If the publisher agrees to host content for real time consumption by subscriber systems or online consumers, deleted elements should remain accessible for a mutually agreed upon "grace period" to ensure that downstream systems do not encounter file retrieval errors prior to processing updates.

4.5.3　Media Item Display Order

The sequence or media items as provided in the XML determines the order in which media items are intended to be displayed in ascending order. However, subscribers may choose to display images grouped by image category. In such cases, the potential exists where the sequence ensures that the intra-category sort order is preserved, but does not ensure that the overall content order is preserved.

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For example:

If a property includes 2 Exterior images and 2 room images that are ordered as follows:

Caption	Category	Sort
Exterior	Exterior view	1
Spacious Room	Guest Room	2
Balcony View	Guest Room	3
Gardens	Exterior view	4

The subscriber may group images by category and display exterior images first as shown, preserving only the intra category sort order:

Caption	Category	Sort attribute originally received
Exterior	Exterior view	1
Gardens	Exterior view	4
Spacious Room	Guest Room	2
Balcony View	Guest Room	3

4.5.4   Storage and Processing of Received Data

It is recommended that textual data received by the subscriber should be processed in its entirety, i.e. not truncated. Specific instances of truncated data should be agreed upon between the subscriber and the publisher.

The subscriber may not necessarily store all of the content as described in the messages exchanged. For this reason, the subscriber and the publisher should agree on how the stored content is re-published and what the limitations are on the capabilities of the re-publishing of content.

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5   Schemas

5.1   Usage Profile: Insert or Update Hotel Information

The update hotel information usage profile covers the pushing of digital media from one system that defines them, or provides a user an interface to define them, or receives them from another system, to another system with the ability to display them.

5.1.1   Scope

This usage profile includes any hotel information setting that can be pushed from one system to another.
It does not include polling hotel information settings. It is important to note that the OTA_HotelDescriptiveContentNotifRQ message can be used to either insert new records or update existing records in the target system. This one message is used to cover the two use cases outlined previously in this document.

5.1.2   Insert or Update Hotel Information Request

The insert or update hotel information request is sent using the OTA_HotelDescriptiveContentNotifRQ message.

5.1.2.1   Usage Profile Table

Element | @Attribute	Num	Description/Contents
OTA_HotelDescriptiveContentNotifRQ	1	Root element of the message.
@EchoToken	0..1	Required for Asynchronous responses, otherwise optional
@TimeStamp	1	Not mandatory in OTA BUT MUST BE MADE MANDATORY IN THE HTNG RECOMMENDATIONS – time of the transaction.
@Version	1	Version is a mandatory attribute in OTA – therefore it must remain mandatory in HTNG in order to be able to use the same message
@PrimaryLangID	0..1	Optional, describes the language for the XML message, not the content, usually EN.
@Target	0..1	Used to indicate whether the request is for the Test or Production system.
OTA_HotelDescriptiveContentNotifRQ / POS	1	Identifies the party sending the information
OTA_HotelDescriptiveContentNotifRQ / POS / Source	1	This holds details regarding the requestor. It may be repeated to also accommodate the delivery systems.
OTA_HotelDescriptiveContentNotifRQ / POS / Source / RequestorID	1	An identifier of the entity making the request (e.g. ATA/IATA/ID number, Electronic Reservation Service Provider (ERSP), Association of British Travel Agents (ABTA)).
@ID	1	A unique identifying value assigned by the creating system. The ID attribute may be used to reference a primary-key value within a database or in a particular implementation.
@Type	1	Not mandatory in OTA BUT MUST BE MADE MANDATORY IN THE HTNG RECOMMENDATIONS. This identifies the system which is requesting the information. This is required to identify elements that may be specific to the system requesting the info (e.g. leisure travel sites may receive content relevant to leisure travel)
@ID_Context	1	Used to identify the source of the identifier (e.g., IATA, ABTA).
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents	1	Must be sent for the message to have a meaning
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent	1	The HotelDescriptiveContent element contains the descriptive information about a hotel property.
@BrandCode	1	A code that identifies the brand or flag of a hotel, often used for independently-owned or franchised properties who are known by a specific brand.
@BrandName	0..1	The name of a brand of hotels (e.g., Courtyard, Hampton Inn).
@ChainCode	1	The code that identifies a hotel chain or management group. The hotel chain code is decided between vendors. This attribute is optional if the hotel is an

Element | @Attribute	Num	Description/Contents
		independent property that can be identified by the HotelCode attribute.
@ChainName	0..1	The name of the hotel chain (e.g., Hilton, Marriott, Hyatt).
@HotelCode	1	The code that uniquely identifies a single hotel property. The hotel code is decided between vendors.
@HotelCodeContext	1	A text field used to communicate the context (or source of - ex Sabre, Galileo, Worldspan, Amadeus) of the codes.
@HotelName	1	A text field used to communicate the proper name of the hotel.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo		Optional. Absence of this field indicates that no HotelInfo is requested.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / HotelName		The full name of the hotel.
@HotelShortName		Concise hotel name.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / CategoryCodes		Collection of descriptive details about a hotel.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / CategoryCodes / LocationCategory		Defines the general location of the hotel such as airport, suburban, downtown.
@Code		This defines the location of the hotel (e.g. downtown, airport or suburban, etc.). Refer to OTA Code List Location Category Codes (LOC).
@Removal		Optional. Used to flag obsolete or deleted items. If this flag is present, the corresponding item should be removed from the system.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / CategoryCodes / GuestRoomInfo		The types and quantities of guest rooms at a hotel.
@Code		Refer to OTA Code List Guest Room Info (GRI).
@Quantity		The number of rooms that match the Code attribute.
@Removal		Optional. Used to flag obsolete or deleted items. If this flag is present, the corresponding item should be removed from the system.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions		Collection of hotel and/or renovation information.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions		Multimedia information about the hotel.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription		A multimedia item.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions /		A collection of image items.

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Element | @Attribute	Num	Description/Contents
MultimediaDescriptions / MultimediaDescription / ImageItems		
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription / ImageItems / ImageItem		Image of a given category.
@Category		Optional in OTA BUT MUST BE MADE MANDATORY IN THE HTNG RECOMMENDATIONS. Refer to the OTA code list Picture Category Code (PIC).
@CreateDataTime		Optional. Date that the item was created.
@ID		A unique identifying value assigned by the creating system. The ID attribute may be used to reference a primary-key value within a database or in a particular implementation.
@LastModifyDateTime		Optional. Date that the item was last modified.
@PurgeDate		Date an item will be purged from a database (e.g., from a live database to an archive.)
@Removal		Optional. Used to flag obsolete or deleted items. If this flag is present, the corresponding item should be removed from the system.
@Version		Optional. Used to identify the version of the image.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription / ImageItems / ImageItem / ImageFormat		A set of images for a given category which may be provided in multiple forms.
@Height		Optional. Height of the image item (units specified by UnitOfMeasureCode)
@UnitOfMeasureCode		Optional. Unit of measure used to describe the dimensions of the image item. Refer to the OTA Code UOM, usually Pixels.
@Width		Optional. Width of the image item (units specified by UnitOfMeasureCode)
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription / ImageItems / ImageItem / ImageFormat / URL		Optional. The URL for the image item. The URL may refer to a publicly accessible web server or may be private between the sender and receiver. Publicly accessible URLs may be used to avoid the transfer of the media item if the item is being hosted by the Hotelier or a third party (e.g. Akamai).
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription / VideoItems		A collection of video items.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription / VideoItems / VideoItem		Each video item represents a specific category.

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Element	@Attribute	Num	Description/Contents
@Category		Optional. Refer to the OTA code list Picture Category Code (PIC).This field is usually not applicable to video items, since video items tend to cover multiple areas within a hotel However, if this attribute is included, the category should identify the main featured item in the video (e.g. Golf Course, Promotional, etc.)
@CreateDataTime		Optional. Date that the item was created.
@LastModifyDateTime		Optional. Date that the item was last modified.
@PurgeDate		Date an item will be purged from a database (e.g., from a live database to an archive.)
@Removal		Optional. Used to flag obsolete or deleted items. If this flag is present, the corresponding item should be removed from the system.
@Version		Optional. Used to identify the version of the video. The unique ID shall be used to identify the content, so the version shall not be used to identify the content.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription / VideoItems / VideoItem / VideoFormat		Optional in OTA but Required if the item is not being removed.
@Height		Optional. Height of the video item (units specified by UnitOfMeasureCode)
@Width		Optional. Width of the video item (units specified by UnitOfMeasureCode)
@FileSize		Optional. The size of the video item in bytes.
@BitRate		Optional in OTA BUT MUST BE MADE MANDATORY IN THE HTNG RECOMMENDATIONS to ensure that the receiving system does not need to read the media metadata to determine the bandwidth requirements for displaying the media.
@Format		Optional in OTA BUT MUST BE MADE MANDATORY IN THE HTNG RECOMMENDATIONS to ensure that the receiving system does not need to derive the encoding type from the file name.
@UnitOfMeasureCode		Optional. Unit of measure used to describe the dimensions of the video item. Refer to the OTA Code UOM, usually Pixels.
@ID		A unique identifying value assigned by the creating system. The ID attribute may be used to reference a primary-key value within a database or in a particular implementation.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription / VideoItems / VideoItem / VideoFormat / URL		Optional. The URL for the video item. The URL may refer to a publicly accessible web server or may be private between the sender and receiver. Publicly accessible URLs may be used to avoid the transfer of the media item if the item is being hosted by the Hotelier or a third party (e.g. Akamai).
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription / TextItems		A collection of text items.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription /		The description of a given category.

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Element | @Attribute	Num	Description/Contents
TextItems / TextItem		
@Category		Optional. N/A for text items.
@CreateDateTime		Optional. Date that the item was created.
@LastModifyDateTime		Optional. Date that the item was last modified.
@RecordID		Optional. Uniquely identifies this file in the message.
@PurgeDate		Date an item will be purged from a database (e.g., from a live database to an archive.)
@Removal		Optional. Used to flag obsolete or deleted items. If this flag is present, the corresponding item should be removed from the system.
@Version		Version is a mandatory attribute in OTA – therefore it must remain mandatory in HTNG in order to be able to use the same message
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Descriptions / MultimediaDescriptions / MultimediaDescription / TextItems / TextItem / Description		The text in a specific language.
@Language		Language identification.
@Formatted		Textual information, which may be formatted as a line of information, or unformatted, as a paragraph of text.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Services	1	Collection of hotel services and/or amenities available to the guest.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / HotelInfo / Services / Service	1	A hotel service or amenity available to the guest such as a business center, concierge, valet parking, maggage, newspapers, etc.
@Code	1	Refer to OTA List Hotel Amenity Code (HAC).
@Included	1	This may be used to identify a standard service included in the room rate.
@ProximityCode	1	Denotes whether a service is onsite, offsite or information is not available, Refer to OTA Code Table Proximity (PRX).
@ID		A unique identifying value assigned by the creating system. The ID attribute may be used to reference a primary-key value within a database or in a particular implementation.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo	1	Provides information pertaining to the hotel facility itself.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms	1	Collection of guest room types that are comprised within the hotel.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms / GuestRoom	1	The accommodation occupied by the guest.
@Code	1	The room type code.
@ID	1	A unique identifying value assigned by the creating system. The ID attribute may be used to reference a primary-key value within a database or in a particular implementation.

Element | @Attribute	Num	Description/Contents
@MaxOccupancy	1	Maximum number of guests allowed in a single room.
@RoomTypeName		A textual description of the guest room.
@CodeContext		Identifies the source authority of the code.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms / GuestRoom / TypeRoom	1	Optional in OTA, but Required for HTNG Compliance, since the absence of this field will not enable systems to distinguish what type of room the description refers to.
@BedTypeCode	1	Indicates the type of bed(s) found in the room. Typical values would be Double, Twin, Queen, or King. Refer to OTA Code List Bed Code (BED).
@RoomLocationCode	1	Indicates the location of the room within the hotel structure. Typical values would be "Near Exit", "Close to elevator", "Low Floor", or "High Floor". Refer to OTA Code List Rom Location Type (RLT.)
@RoomViewCode	1	Indicates the view of the room. Typical values would be "Ocean view", "Pool view", or "Garden view". Refer to OTA Code List Room View Type (RVT).
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms / GuestRoom / Amenities	1	Collection of room amenity items available to the guest.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms / GuestRoom / Amenities / Amenity	1	Tangible room item(s) (e.g., newspaper) available to the guest.
@Removal	1	Optional. Used to flag obsolete or deleted items. If this flag is present, the corresponding item should be removed from the system.
@IncludedInRateIndicator	1	When true, this indicates that the amenity or service is included in the room rate (i.e., this service or amenity had no additional charge.)
@RoomAmenityCode	1	Refer to OTA Code List Room Amenity Type (RMA).
@ID		A unique identifying value assigned by the creating system. The ID attribute may be used to reference a primary-key value within a database or in a particular implementation.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms / GuestRoom / MultimediaDescriptions	1	Multimedia information about the guest room.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms / GuestRoom / MultimediaDescriptions / MultimediaDescription		A multimedia item.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms / GuestRoom / MultimediaDescriptions / MultimediaDescription / TextItems		A collection of text items.
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms /		Text description of a given category.

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Element | @Attribute	Num	Description/Contents
GuestRoom / MultimediaDescriptions / MultimediaDescription / TextItems / TextItem		
@Category	1	Optional. N/A for text items.
@CreateDateTime		Optional. Date that the item was created.
@LastModifyDateTime		Optional. Date that the item was last modified.
@RecordID		Optional. Uniquely identifies this file in the message.
@PurgeDate		Date an item will be purged from a database (e.g., from a live database to an archive.)
@Removal		Optional. Used to flag obsolete or deleted items. If this flag is present, the corresponding item should be removed from the system.
@Version		Version is a mandatory attribute in OTA – therefore it must remain mandatory in HTNG in order to be able to use the same message
OTA_HotelDescriptiveContentNotifRQ / HotelDescriptiveContents / HotelDescriptiveContent / FacilityInfo / GuestRooms / GuestRoom / MultimediaDescriptions / MultimediaDescription / TextItems / TextItem / Description		The text in a specific language.
@Language		Language identification.
@Formatted		Textual information, which may be formatted as a line of information, or unformatted, as a paragraph of text.

5.1.2.2   Example Message

Scenario:

Hotel System 40394 needs to transmit the following digital media update to an Online Travel Agency.

Chain Code:	HH
Brand Code:	DT
Hotel Code:	123456

```
<?xml version="1.0" encoding="UTF-8"?>
<OTA_HotelDescriptiveContentNotifRQ xmlns="http://www.opentravel.org/OTA/2003/05"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" PrimaryLangID="en-us" EchoToken="GUID"
TimeStamp="2001-12-17T09:30:47Z" Version="1.0" Target="Production"
xsi:schemaLocation="http://www.opentravel.org/OTA/2003/05 FS_OTA_HotelDescriptiveContentNotifRQ.xsd">
  <POS>
    <Source>
      <RequestorID ID="40394" Type="18" ID_Context="SomeSystem"/>
    </Source>
  </POS>
  <HotelDescriptiveContents>
    <HotelDescriptiveContent BrandCode="DT" BrandName="Doubletree" ChainCode="HH" ChainName="Hilton"
HotelCode="123456" HotelCodeContext="Sabre" HotelName="Doubletree Grand Chicago">
      <HotelInfo>
        <HotelName HotelShortName="Doubletree Grand Chicago" />
        <CategoryCodes>
          <LocationCategory Code="2" Removal="false" />
          <GuestRoomInfo Code="52" Quantity="10" Removal="false"/>
        </CategoryCodes>
        <Descriptions>
          <MultimediaDescriptions>
            <MultimediaDescription>
              <ImageItems>
```

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```xml
                <ImageItem Category="1" CreateDateTime="2005-08-04T18:44:27.000-04:00" ID="5306730"
LastModifyDateTime="2008-12-22T10:39:48.000-05:00" PurgeDate="2010-01-01" Removal="false"
Version="1.01">
                    <ImageFormat Height="70" UnitOfMeasureCode="9" Width="70">
                      <URL>http://www.mediasourceserver.com/media/5306733.jpg</URL>
                    </ImageFormat>
                    <ImageFormat Height="230" UnitOfMeasureCode="9" Width="307">
                      <URL>http://www.mediasourceserver.com/media/5306732.jpg</URL>
                    </ImageFormat>
                    <ImageFormat Height="100" UnitOfMeasureCode="9" Width="100">
                      <URL>http://www.mediasourceserver.com/media/6162953.jpg</URL>
                    </ImageFormat>
                    <Description Caption="View" Language="en"/>
                    <Description Caption="View" Language="fr"/>
                </ImageItem>
                <ImageItem Category="2" CreateDateTime="2005-08-04T18:45:08.000-04:00" ID="5306754"
LastModifyDateTime="2008-12-22T10:39:48.000-05:00" PurgeDate="2010-01-01" Removal="false"
Version="1.01">
                    <ImageFormat Height="224" UnitOfMeasureCode="9" Width="300">
                      <URL>http://www.mediasourceserver.com/media/6162963.jpg</URL>
                    </ImageFormat>
                    <ImageFormat Height="249" UnitOfMeasureCode="9" Width="333">
                      <URL>http://www.mediasourceserver.com/media/5306758.jpg</URL>
                    </ImageFormat>
                    <ImageFormat Height="70" UnitOfMeasureCode="9" Width="70">
                      <URL>http://www.mediasourceserver.com/media/5306756.jpg</URL>
                    </ImageFormat>
                    <Description Caption="View" Language="en"></Description>
                    <Description Caption="View" Language="fr"></Description>
                </ImageItem>
              </ImageItems>
          </MultimediaDescription>
          <MultimediaDescription>
            <VideoItems>
                <VideoItem Category="1" CreateDateTime="2005-08-04T18:44:27.000-04:00"
LastModifyDateTime="2008-12-22T10:39:48.000-05:00" PurgeDate="2010-01-01" Removal="false"
Version="1.01">
                    <VideoFormat Height="320" Width="240" FileSize="65530" BitRate="512" Format="3"
UnitOfMeasureCode="9" ID="123456">
                        <URL>http://www.mediasourceserver.com/media/6162963.avi</URL>
                    </VideoFormat>
                </VideoItem>
                <VideoItem Category="2" CreateDateTime="2005-08-04T18:44:27.000-04:00"
LastModifyDateTime="2008-12-22T10:39:48.000-05:00" PurgeDate="2010-01-01" Removal="false"
Version="1.01" >
                    <VideoFormat Height="320" Width="240" FileSize="65530" BitRate="512" Format="3"
UnitOfMeasureCode="9" ID="123457">
                        <URL>http://www.mediasourceserver.com/media/5306733.avi</URL>
                    </VideoFormat>
                </VideoItem>
              </VideoItems>
          </MultimediaDescription>
          <MultimediaDescription>
            <TextItems>
                <TextItem Category="1" CreateDateTime="2005-08-04T18:44:27.000-04:00"
LastModifyDateTime="2008-12-22T10:39:48.000-05:00" RecordID="123456" PurgeDate="2010-01-01"
Removal="false" Version="1.01">
                    <Description Language="en-us" Formatted="true">This is a description</Description>
                </TextItem>
              </TextItems>
          </MultimediaDescription>
        </MultimediaDescriptions>
      </Descriptions>
      <Services>
        <Service Code="274" Included="true" ProximityCode="3" ID="123456"/>
      </Services>
    </HotelInfo>
    <FacilityInfo>
      <GuestRooms>
```

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```
        <GuestRoom ID="123456" RoomTypeName="Grand Room" Code="KING" CodeContext="Sabre"
MaxOccupancy="4">
            <TypeRoom BedTypeCode="1" RoomLocationCode="1" RoomViewCode="1"/>
            <Amenities>
              <Amenity Removal="false" IncludedInRateIndicator="true" RoomAmenityCode="3"
ID="123456"/>
            </Amenities>
            <MultimediaDescriptions>
              <MultimediaDescription>
                <TextItems>
                  <TextItem Category="1" CreateDateTime="2005-08-04T18:44:27.000-04:00"
LastModifyDateTime="2008-12-22T10:39:48.000-05:00" RecordID="123456" PurgeDate="2010-01-01"
Removal="false" Version="1.01">
                    <Description Language="en-us" Formatted="true">This is a
description</Description>
                  </TextItem>
                </TextItems>
              </MultimediaDescription>
            </MultimediaDescriptions>
        </GuestRoom>
      </GuestRooms>
    </FacilityInfo>
   </HotelDescriptiveContent>
  </HotelDescriptiveContents>
</OTA_HotelDescriptiveContentNotifRQ>
```

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