



HTNG Web Services Product Specification

Version 2011B

About HTNG

Hotel Technology Next Generation (HTNG) is a non-profit association with a mission to foster, through collaboration and partnership, the development of next-generation systems and solutions that will enable hoteliers and their technology vendors to do business globally in the 21st century; to be recognized as a leading voice of the global hotel community, articulating the technology requirements of hotel companies of all sizes to the vendor community; and to facilitate the development of technology models for hospitality that will foster innovation, improve the guest experience, increase the effectiveness and efficiency of hotels, and create a healthy ecosystem of technology suppliers.

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1 Introduction

This document defines the Hotel Technology Next Generation (“HTNG”) Product Specification for all HTNG Web Service-based technical specifications.

The following HTNG documents are referenced in this document and can be found at <http://collaboration.htng.org/specs/> :

1. HTNG Back Office Integration Travel Agent Commissions Specification 2011B, Version 1.0
2. HTNG Distribution Content Management Specifications 2009B
3. HTNG Guest & Room Status Messaging Specifications 2011B
4. HTNG Kiosk Integration Specifications 2010B
5. HTNG Open Data eXchange Query Specification 2010B
6. HTNG Payment Systems & Data Security Specifications 2010A, Data Proxy Specification V1.1
7. HTNG Payment Systems & Data Security Specifications 2010B, Payment Processing Specification V2.0
8. HTNG Product Distribution Specifications 2011B
9. HTNG Property Web Services Specifications 2009B
10. HTNG Protocol & Message Transport Specification 2011A, Event Notification Specification V1.0

The following ancillary documents are also referenced in some of the technical specifications:

1. WS-I Basic Profile 1.0 – available at <http://www.ws-i.org>
2. WS-Security 1.0 Specification – available at <http://www.ws-i.org>
3. WS-Addressing 1.0, Core W3C Working Draft, 2006-05-09 – available at www.w3.org/TR/2006/REC-ws-addr-core-20060509
4. PCI Data Security Standard – available at https://www.pcisecuritystandards.org/security_standards/pci_dss.shtml
5. OpenTravel Alliance Specifications – available at <http://www.opentravel.org>

2 Product Standard

2.1 Name

HTNG Web Services

2.2 Label for "HTNG Certified" Certification Logo

HTNG Web Services 2011B

When the "HTNG Certified" certification logo, along with this label, is used on, or in relation to, a product registered as conformant to this Product Specification, it must be accompanied by an attribution in the form defined in the HTNG Certification Program Trademark License Agreement.

2.3 Description

This Product Specification references all HTNG Web Service-based technical specifications that are part of the HTNG Certification Program and describes the externally observable behavior of a given product. The detailed requirements to achieve conformance are outlined below.

2.4 Conformance Requirements

This Product Specification requires conformance to at least one of the following specifications:

1. HTNG Distribution Content Management Specifications 2009B – Version 1.0
2. HTNG Kiosk Integration Specifications 2010B – Version 2.0
3. HTNG Payment Systems & Data Security Specifications 2010A, Data Proxy Specification V1.1
4. HTNG Payment Systems & Data Security Specifications 2010B, Payment Processing Specification V2.0
5. HTNG Product Distribution Specifications 2011B – Part 1: Reservations, Version 2.5
6. HTNG Product Distribution Specifications 2011B – Part 2: Availability, Version 2.2
7. HTNG Product Distribution Specifications 2011B – Part 3: Statistics, Version 2.0
8. HTNG Product Distribution Specifications 2011B – Part 4: Groups, Version 1.2
9. HTNG Product Distribution Specifications 2011B – Part 5: Rates, Version 1.3
10. HTNG Product Distribution Specifications 2011B – Part 6: Inventory, Version 1.0
11. HTNG Product Distribution Specifications 2011B – Part 7: Seamless Shop/Book, Version 1.2
12. HTNG Property Web Services Specifications 2009B – Part 1: Web Services Framework Version 2.1.1
13. HTNG Property Web Services Specifications 2009B – Part 5: Back Office Integration Version 2.0

In addition, the following specifications require conformance to the Web Services Framework Version 2.1.1 specification:

1. HTNG Back Office Integration Travel Agent Commissions Specification 2011B – Version 1.0
2. HTNG Guest & Room Status Messaging Specifications 2011B – Version 2.0
3. HTNG Open Data eXchange Query Specification 2010B – Version 1.0
4. HTNG Property Web Services Specifications 2009B – Part 2: Single Guest Itinerary Version 2.2.1
5. HTNG Property Web Services Specifications 2009B – Part 3: Digital Signage Version 1.0
6. HTNG Property Web Services Specifications 2009B – Part 4: Open Data eXchange Basic Version 1.4.2
7. HTNG Property Web Services Specifications 2009B – Part 6: Guest Self Service Version 1.0.3
8. HTNG Property Web Services Specifications 2009B – Part 7: Food and Beverage Ordering Version 1.0
9. HTNG Protocol & Message Transport Specifications 2011A, Event Notification Specification V1.0

The above documents are all available at <http://collaboration.htng.org/specs/>.

2.4.1 HTNG Distribution Content Management Specifications 2009B – Version 1.0

The Distribution Content Management specification defines roles:

Publisher
Subscriber

Conformance to the Distribution Content Management technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.2 HTNG Kiosk Integration Specifications 2010B – Version 2.0

The Kiosk Integration specification defines roles:

Kiosk Application
PMS Application

Conformance to the Kiosk Integration technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.3 HTNG Payment Systems & Data Security Specifications 2010A, Data Proxy Specification V1.1

The Data Proxy technical specification defines roles:

Business Logic System
Proxy Vault

Conformance to the Data Proxy technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.4 HTNG Payment Systems & Data Security Specifications 2010B, Payment Processing Specification V2.0

The Payment Processing specification defines roles:

Business Logic System
Payment Processing System

Conformance to the Payment Processing technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.5 HTNG Product Distribution Specifications 2011B – Part 1: Reservations, Version 2.5

The Product Distribution technical specification defines roles:

Reservation Broker
Reservation Server

Conformance to the Product Distribution technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.6 HTNG Product Distribution Specifications 2011B – Part 2: Availability, Version 2.2

The Product Distribution technical specification defines roles:

Reservation Broker
Reservation Server
Control System

Conformance to the Product Distribution technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.7 HTNG Product Distribution Specifications 2011B – Part 3: Statistics, Version 2.0

The Product Distribution technical specification defines roles:

Reservation Broker
Reservation Server
Control System

Conformance to the Product Distribution technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.8 HTNG Product Distribution Specifications 2011B – Part 4: Groups, Version 1.2

The Product Distribution technical specification defines roles:

Reservation Broker
Reservation Server
Control System

Conformance to the Product Distribution technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.9 HTNG Product Distribution Specifications 2011B – Part 5: Rates, Version 1.3

The Product Distribution technical specification defines roles:

Reservation Broker
Reservation Server
Control System

Conformance to the Product Distribution technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.10 HTNG Product Distribution Specifications 2011B – Part 6: Inventory, Version 1.0

The Product Distribution technical specification defines roles:

Reservation Broker
Reservation Server

Conformance to the Product Distribution technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.11 HTNG Product Distribution Specifications 2011B – Part 7: Seamless Shop/Book, Version 1.2

The Product Distribution technical specification defines roles:

Reservation Broker
Reservation Server

Conformance to the Product Distribution technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.12 HTNG Property Web Services Specifications 2009B – Part 1: Web Services Framework Version 2.1.1

Conformance to the Web Services Framework Version 2.1.1 technical specification requires the implementation of all mandatory features. Optional features must be documented if implemented.

The list of HTNG Web Services technical specifications that may be referenced to demonstrate conformance can be found here:

<http://collaboration.htng.org/specs/>.

The HTNG specified Web Services and proprietary services must be identified and evidence of a successful implementation must be provided in one of three ways:

1. By identifying another implementation with which the product has successfully interoperated.
2. By providing a report of successful internal testing.
3. By providing other evidence of a successful implementation.

At least one Web Service must be cited. Details of proprietary systems cited must be provided.

For each Web Service supported, up to six possible supporting documents may be provided, three of which are mandatory. For HTNG specified services, a fourth document is mandatory – a reference to the HTNG specification.

The communication styles supported must be documented. At least one of the communications styles listed must be supported

2.4.13 HTNG Property Web Services Specifications 2009B – Part 5: Back Office Integration Version 2.0

The Back Office Integration specification defines roles:

Accounting System
Budgeting System
Revenue Capturing System

Conformance to the Back Office Integration technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.14 HTNG Back Office Integration Travel Agent Commissions Specification 2011B – Version 1.0

The Back Office Integration Travel Agent Commissions Specification defines roles:

Commission Calculation Server
Commission Payment Server

Conformance to the Back Office Integration Travel Agent Commissions technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.15 HTNG Guest & Room Status Messaging Specification 2011B – Version 2.0

The Guest & Room Status Messaging specification defines roles:

Room Stay Information Provider
Room Stay Information Consumer
Wakeup Notification Provider
Wakeup Notification Consumer

Restriction Notification Provider
Restriction Notification Consumer
Room Status Search Provider
Room Status Search Consumer
Message Waiting Provider
Message Waiting Consumer
Room Status Information Provider
Room Status Information Consumer

Conformance to the Guest & Room Status Messaging technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.16 HTNG Open Data eXchange Query Specification 2010B – Version 1.0

The Open Data eXchange Query specification defines roles:

Requesting System
Provider System

Conformance to the Open Data eXchange Query technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.17 HTNG Property Web Services Specifications 2009B – Part 2: Single Guest Itinerary Version 2.2.1

The Single Guest Itinerary specification defines roles:

Activity Reservation System
Accommodation Reservation System
Posting System
Folio System
Customer Profile System
Itinerary Consolidation System
Itinerary Display System

Conformance to the Single Guest Itinerary technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.18 HTNG Property Web Services Specifications 2009B – Part 3: Digital Signage Version 1.0

The Digital Signage specification defines roles:

Event Information Display Manager
Event and Meeting Space Manager

Conformance to the Digital Signage technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.19 HTNG Property Web Services Specifications 2009B – Part 4: Open Data eXchange Basic Version 1.4.2

The Open Data eXchange Basic specification defines roles:

Data Receiver
Data Sender

Conformance to the Open Data eXchange technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.20 HTNG Property Web Services Specifications 2009B – Part 6: Guest Self Service Version 1.0.3

The Guest Self Service specification defines roles:

Self Service Frontend
Services Scheduling System

Conformance to the Guest Self Service technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.21 HTNG Property Web Services Specifications 2009B – Part 7: Food and Beverage Ordering Version 1.0

The Food and Beverage Ordering specification defines roles:

Device (Kiosk, Touch Screen, In-Room TV, IP Phone, etc)
Food and Beverage POS System

Conformance to the Food and Beverage Ordering technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.4.22 HTNG Protocol & Message Transport Specifications 2011A, Event Notification Specification V1.0

The Event Notification Specification defines roles:

Event Producer
Event Consumer

Conformance to the Event Notification technical specification requires the support of at least one role, and all of the mandatory functions and messages appropriate to each role supported. All optional functions and messages must be documented.

2.5 Portability Environment

Not applicable.

2.6 Overriding Standards

None.

2.7 Indicators of Compliance

2.7.1 HTNG Property Web Services Specifications 2009B – Part 1: Web Services Framework Version 2.1.1

Interoperability must be demonstrated by providing one of the following:

1. The name of other companies with whom you have successfully interoperated.
2. A test report from internal testing. These can be either a URL on your own website or as inline text.
3. Other evidence of a successful implementation.

2.8 Migration

The following technical specifications are unchanged from previous versions and will present no migration issues:

- HTNG Distribution Content Management Specifications 2009B, Version 1.0
- HTNG Kiosk Integration Specifications 2010B – Version 2.0
- HTNG Open Data eXchange Query Specification 2010B – Version 1.0
- HTNG Payment Systems & Data Security Specifications 2010A, Data Proxy Specification V1.1
- HTNG Payment Systems & Data Security Specifications 2010B, Payment Processing Specification V2.0
- HTNG Product Distribution Specifications 2011B – Part 2: Availability, Version 2.2
- HTNG Product Distribution Specifications 2011B – Part 3: Statistics, Version 2.0
- HTNG Product Distribution Specifications 2011B – Part 4: Groups, Version 1.2
- HTNG Product Distribution Specifications 2011B – Part 6: Inventory, Version 1.0
- HTNG Property Web Services Specifications Version 2009B – Part 1: Web Services Framework Version 2.1.1
- HTNG Property Web Services Specifications Version 2009B – Part 2: Single Guest Itinerary Version 2.2.1
- HTNG Property Web Services Specifications Version 2009B – Part 3: Digital Signage Version 1.0
- HTNG Property Web Services Specifications Version 2009B – Part 4: Open Data eXchange Basic Version 1.4.2
- HTNG Property Web Services Specifications Version 2009B – Part 5: Back Office Integration Version 2.0
- HTNG Property Web Services Specifications Version 2009B – Part 6: Guest Self Service Version 1.0.3
- HTNG Property Web Services Specifications Version 2009B – Part 7: Food and Beverage Ordering Version 1.0
- HTNG Protocol & Message Transport Specification 2011A, Event Notification Specification V1.0

The following technical specifications are modified from the previous release. Possible migration issues are described below.

2.8.1 HTNG Guest & Room Status Messaging Specifications 2011B – Version 2.0

The Guest & Room Status Messaging Specification Version 2.0 brings the previously released specifications (Versions 1.0 and 1.1) into the standard HTNG schema data model, and therefore is not backward compatible.

2.8.2 HTNG Product Distribution Specifications 2011B – Part 1: Reservations, Version 2.5

The behavior and the use of the UnitMultiplier attribute on the Rate element is updated to more accurately reflect OpenTravel Alliance's intended purpose.

2.8.3 HTNG Product Distribution Specifications 2011B – Part 5: Rates, Version 1.3

No migration issues.

2.8.4 HTNG Product Distribution Specifications 2011B – Part 7: Seamless Shop/Book, Version 1.2

The behavior and the use of the UnitMultiplier attribute on the Rate element is updated to more accurately reflect OpenTravel Alliance's intended purpose.