



Product Specification

**Property/Distribution Solution
Version 2009B**

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 Introduction

This document defines the Hotel Technology Next Generation (“HTNG”) Product Specification for the Property/Distribution Solution.

The following documents are referenced in this document:

1. HTNG Property/Distribution Solution Usage Profile and Business Process– Reservations Version 2.2 available at <http://www.htng.org/specs/published.htm>
2. HTNG Property/Distribution Solution Usage Profile and Business Process – Availability Version 2.2 available at <http://www.htng.org/specs/published.htm>
3. HTNG Property/Distribution Solution Usage Profile and Business Process – Statistics Version 2.0 available at <http://www.htng.org/specs/published.htm>
4. HTNG Property/Distribution Solution Usage Profile and Business Process – Groups Version 1.1 available at <http://www.htng.org/specs/published.htm>
5. HTNG Property/Distribution Solution Usage Profile and Business Process – Rates Version 1.2 available at <http://www.htng.org/specs/published.htm>
6. The OTA Specifications, published twice yearly and available at <http://www.opentravel.org/>

2 Product Standard

2.1 Name

Property/Distribution Solution

2.2 Label for "HTNG Certified" Certification Logo

Property/Distribution Solution 2009B

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 requires conformance to one or more of the following specifications:

1. HTNG Property/Distribution Solution Usage Profile and Business Process– Reservations Version 2.2 available at <http://www.htng.org/specs/published.htm>
2. HTNG Property/Distribution Solution Usage Profile and Business Process – Availability Version 2.2 available at <http://www.htng.org/specs/published.htm>
3. HTNG Property/Distribution Solution Usage Profile and Business Process – Statistics Version 2.0 available at <http://www.htng.org/specs/published.htm>
4. HTNG Property/Distribution Solution Usage Profile and Business Process – Groups Version 1.1 available at <http://www.htng.org/specs/published.htm>
5. HTNG Property/Distribution Solution Usage Profile and Business Process – Rates Version 1.2 available at <http://www.htng.org/specs/published.htm>

The following roles have been identified for products conforming to this Product Specification:

- Reservation Broker
- Reservation Server
- Control System

The definition of these roles and other relevant roles are reported below:

Guest: A person who purchases accommodations, goods, and service from a hotel. This person interacts with the Reservation Agent.

Reservation Agent: A person or system that assists the guest in requesting hotel accommodations and the reporting of the subsequent result of such request in the form of reservation confirmation (if successful). The Reservation Agent interacts with the Reservation Broker. Example: person or web page.

Reservation Broker: A system that receives reservation requests and responds to the booking request based on its Non-Seamless image of inventory. It interacts with the Reservation Agent, the Reservation Server and/or Control System. Example: OTA with allocated inventory, CRS, Group Reservation System.

Reservation Server: A system that controls inventory for a hotel and is thus able to determine whether to accept reservation requests based on what has been uploaded from the Control System. Example: CRS/PMS.

Control System: A system that produces decisions (restrictions and overbooking) and controls (group status) for the Reservation Server and/or Reservation Broker. Decision data is based on information it receives from the Reservation Server system. It interacts with the Reservation Server and Reservation Broker. Example: RMS, Sales and Catering.

The following table defines the mandatory functionality applicable to each role:

		Reservation Broker		Reservation Server		Control System	
		Receiving	Sending	Receiving	Sending	Receiving	Sending
Reservation Functionality (Push)	Update Reservations		Mandatory	Mandatory	Mandatory		
	Profile Matching						
	Share Handling						
	Handling of advanced deposits with notification						
		Reservation Broker		Reservation Server		Control System	
Reservation	Update	Receiving	Sending	Receiving	Sending	Receiving	Sending
			Mandatory	Mandatory	Mandatory		

Functionality (Pull)	Reservations						
	Profile Matching						
	Share Handling						
	Handling of advanced deposits with notification						
		Reservation Broker		Reservation Server		Control System	
		Receiving	Sending	Receiving	Sending	Receiving	Sending
Availability Functionality (Push)	Room Type Availability	Mandatory			Mandatory		
	Rate Availability	Mandatory			Mandatory		Mandatory
	Room/Rate Availability						
	Segment Availability						
	Segment Room Availability						
	House Availability						
	Hurdle Rate						
	BAR Rate						
		Reservation Broker		Reservation Server		Control System	
		Receiving	Sending	Receiving	Sending	Receiving	Sending
Availability Functionality (Pull)	Room Type Availability	Mandatory			Mandatory		
	Rate Availability	Mandatory			Mandatory		Mandatory
	Room/Rate Availability						
	Segment Availability						
	Segment Room Availability						
	House Availability						
	Hurdle Rate						
	BAR Rate						
		Reservation Broker		Reservation Server		Control System	
		Receiving	Sending	Receiving	Sending	Receiving	Sending
Statistics Functionality	Current Daily Totals Report				Mandatory	Mandatory	
	Current categorized Totals Report				Mandatory	Mandatory	
	Past Daily Totals Report						
	Past categorized Totals Report						
		Reservation Broker		Reservation Server		Control System	
		Receiving	Sending	Receiving	Sending	Receiving	Sending
Groups Functionality (Push)	Creation of brand new block	Mandatory		Mandatory			Mandatory
	Modification of block with pick up information						
		Reservation Broker		Reservation Server		Control System	
		Receiving	Sending	Receiving	Sending	Receiving	Sending
Groups Functionality (Pull)	Creation of brand new block	Mandatory		Mandatory			Mandatory
	Modification of						

	block with pick up information						
		Reservation Broker		Reservation Server		Control System	
		Receiving	Sending	Receiving	Sending	Receiving	Sending
Rates Functionality (Push)	Update Rates	Mandatory		Mandatory			
	Rate Category						
	Yieldable Indicators						
	Confidential Rates						
	Booking Restrictions						
	Rate Restrictions						
	Day of the Week Patterns						
	Total Pricing						
	Rate Policy						
	Group Rate						
	Update Rates						
	Rate Category						
			Reservation Broker		Reservation Server		Control System
		Receiving	Sending	Receiving	Sending	Receiving	Sending
Rates Functionality (Pull)	Update Rates	Mandatory		Mandatory			
	Rate Category						
	Yieldable Indicators						
	Confidential Rates						
	Booking Restrictions						
	Rate Restrictions						
	Day of the Week Patterns						
	Total Pricing						
	Rate Policy						
	Group Rate						
	Update Rates						
	Rate Category						

Functionality not marked as mandatory is optional.

The following communication types may be supported:

- SOAP/HTTP (Sync)
- SOAP/HTTP (Async)
- HTTP
- HTTPS

2.4 Conformance Requirements

A product may support any combination of Usage Profile and roles.

The conformance requirements for a product to achieve certification to this Product Specification are as follows:

1. Implementation of the mandatory features and of the behavior defined in the of the HTNG Property/Distribution Solution Usage Profile and Business Process – Reservations, Version 2.2, appropriate to the roles supported.
2. Implementation of the mandatory features and of behavior defined in the HTNG Property/Distribution Solution Usage Profile and Business Process – Availability, Version 2.2., appropriate to the roles supported.
3. Implementation of the mandatory features and of the behavior defined in the HTNG Property/Distribution Solution Business Process – Statistics, Version 2.0, appropriate to the roles supported.
4. Implementation of the mandatory features and of the behavior defined in the HTNG Property/Distribution Solution Business Process – Groups, Version 1.1, appropriate to the roles supported.
5. Implementation of the mandatory features and of the behavior defined in the HTNG Property/Distribution Solution Business Process – Rates, Version 1.2, appropriate to the roles supported.
6. Document the optional features supported.
7. Document any TPA extensions supported.
8. Document the communications types supported. At least one of the options must be supported.

2.5 Operational Environment

Not applicable.

2.6 Portability Environment

Not applicable.

2.7 Overriding Standards

None.

2.8 Indicators of Compliance

None.

There is no test suite defined for this Product Specification.

2.9 Migration

Reservation v2.2 extends v2.1 by providing a change in the way @AmountBeforeTax and @AmountAfterTax are to be used. Implementing the new usage profile may cause migration issues. @AmountAfterTax is now mandatory and @AmountBeforeTax is optional. To differentiate tax inclusive and tax exclusive rates, @TaxInclusiveFlag can optionally be passed.

Availability 2.2 extends v2.1 but changing the data the data transmitted in RestrictionStatus. Previous versions included CloseToArrival in RestrictionStatus/@Status. This has been deprecated. New version incorporates RestrictionStatus/@Restriction to provide for Master, Arrival, Departure. Implementing the new usage profile may cause migration issues. Additionally a pull version of the message has been created. See next paragraph.

New usage profiles have been created to address pull versions of Availability, Rates and Groups messages. The version numbers have been updated to reflect the change. Since the pull messages are new, there should be no migration issues associated with implementing them.