August 2012

2012A XML Message Suite

Schema Publication Release Notes

Contents

About the OpenTravel Alliance

OpenTravel provides the preferred open source XML standard for the travel and leisure industry.

The OpenTravel specification is used worldwide by travel industry suppliers, resellers, global distributors and integrators to meet customer and trading partner XML distribution demands.

As a travel industry specific (and membership-based) organization, our schema products are built by and for travel companies. The OpenTravel Specification is made publicly available for download (at no charge) typically twice a year.

By using OpenTravel schema in their message frameworks, implementers benefit from a consistent data exchange through the OpenTravel Lexis—which is OpenTravel's method of providing a consistent vocabulary for the travel industry via our unique common information exchange model (CIEM).

Our schema products cover numerous travel industry segments, including Air, Car, Hotel, Vacation Rental, Golf, Travel Insurance, Rail, Ground Transportation, Day Tours & Activities, Packaged Tours and Dynamic Packages. They are well suited for reservation systems, branded websites and other such information exchanges between trading partners.

Key Facts…

Company

- Membership funded, not for profit organization
- Founded in 1999
- Valyn Perini, CEO
- Bonnie Lowell, Specification Architect

Specification

- Open source
- Free for all implementers
- OpenTravel 1.0 XML Message Suite
- OpenTravel 2.0 XML Object Suite

The maturity of OpenTravel's CIEM and XML schema suites—in combination with our specification adoption rate—provide OpenTravel implementers with an "interoperability" head start that allows them to transact with a broad base of trading partners while decreasing IT integration timeframes and cost.

For more information on OpenTravel membership, please visit our website at http://opentravel.org/Join/Default.aspx

Getting Started with the OpenTravel XML Message Suite

To help you prepare to use your OpenTravel schema product, follow these steps:

1. Read this document: You should review these notes for critical information, including new schema messages and changes to 2011B schema.
2. Refer to the *OpenTravel 2012A Schema Versioning* artifact (included in the publication download) to see the versions of all OpenTravel XML Message Suite schema, including schema messages that were enhanced as a part of this publication.
3. View OpenTravel Solution Scenarios (available from the OpenTravel Wiki) designed to educate implementers on the functionality within the OpenTravel Specification by serving as a library for code samples, best practices, and technical white papers; showcasing solution examples that are generic examples that can be re-used, repurposed or extended by developers; and showcasing schema components that provide common functionality and easy integration into corporate solutions, enabling the implementer to be more efficient and consistent in building those solutions.
4. View the OpenTravel 1.0 XML Message Suite Schema Delta guide (included in the publication download) for an overview of differences (delta) in schema message functionality from the 2011B publication to the 2012A publication. For each corresponding 2011B and 2012A schema XSD, there is a link in the XML Message Suite Schema Delta guide to a browser-based file that contains the results of the schema comparison in output delta format.
5. All actioned 2011B specification (schema) comments and (new) OpenTravel 2012A project team work are included in this 2012A Publication.

Key OpenTravel Online Implementer & Member Resources

You can find the answers too many of your questions on the OpenTravel Implementers Forum website:

OpenTravel Implementers Forum

OpenTravel has an extensive discussion Forum to provide an implementation resource for users of its schema, called *the OpenTravel Forum*, which has all the functionality members expect from a full-featured discussion board, with forums for:

- Architecture
- Hospitality
- Transport
- Travel Services
- Tours and Activities
- Implementers Discussion

Members can post a question and get an answer from a moderator. Also included are OpenTravel documentation, mailing list subscription, events and announcements, and feedback boards, as well as the OpenTravel Showcase where companies that provide tools, services or technologies to assist in the implementation of OpenTravel schemas can post about their offerings. Note that priority support is provided to OpenTravel member company participants on the Implementers Forum.

OpenTravel Solution Scenarios

OpenTravel Solution Scenarios are solution scenarios designed to educate implementers on the functionality within the OpenTravel Specification by:

1. Serving as a library for code samples, best practices, and technical white papers.
2. Showcasing solution examples that are generic examples that can be re-used, repurposed or extended by developers.
3. Showcasing schema components that provide common functionality and easy integration into corporate solutions, enabling the implementer to be more efficient and consistent in building those solutions.

Any questions about the OpenTravel Solution Scenarios should be directed to the OpenTravel Forum.

Solution Scenario Artifacts

Solution Scenarios may contain one or more of the following artifacts:

- Use case diagrams (MS-Visio UML, PNG format)
- Sample schema instances
- Reference web services (WSDL)

Specification Comments

All implementers are welcome to submit comments to enhance the OpenTravel specification. Comments may be submitted at: http://opentravel.org/Specifications/CommentOnSpec.aspx

There are two types of comments that you can submit:

- Technical—proposes a minor change to one or more elements of an OpenTravel XML schema product, such as an XML message and/or an XML object or object library.
- Artifact—proposes a correction and/or addition to a schema supporting artifact, such as release notes or an OpenTravel Solution Scenario.

OpenTravel Project Teams & Workgroups

All OpenTravel members are welcome to participate in OpenTravel workgroups, which are neutral environments comprised travel industry experts that meet once per month or as needed to:

- Review and action open specification comments
- Review and accept new and enhanced schema from project teams
- Discuss emerging business requirements and how OpenTravel schema can be enhanced to address them

Each workgroup serves the needs of one or more associated travel industry segments that are supported by the OpenTravel Specification:

- Architecture: Underlying constructs (or architecture) of OpenTravel schema products, design patterns, solution scenarios and implementation best practices
- Hospitality: Hotel, Hostel, Vacation Rental and Cruise
- Transport: Air, Rental Car, Ground Transportation and Rail
- Travel Integration: Tours and Activities, Dynamic Packages, Travel Insurance, Golf and other shared services including Travel Itineraries, Loyalty Programs and Customer Profiles

All OpenTravel members are welcome to propose and join any **project team**. Project teams serve as the primary method for introducing major enhancements into OpenTravel schema products as these teams are formed to address a set of business-specific enhancements for the OpenTravel specification—such as merchandising offers. In addition to OpenTravel schema and XML components, project team work produces a variety of artifacts, including use cases, capability maps, process models, business glossary terms and solution scenarios.

Important Notices

OpenTravel Schema

General Schema Maintenance

In an effort to reduce XML schema binding issues, general maintenance was performed on the 2012A schema. General maintenance functionality includes:

Common Files Have Namespaces

- All common files are namespaced as xmlns:ns=http://www.opentravel.org/OTA/2003/05/common. Note that "/alpha" will be appended for draft Member Review schema and "/beta" for draft Public Review schema.
- All request/ response messages that may include one or more common files are namespaced as xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="http://www.opentravel.org/OTA/2003/05 " targetNamespace="http://www.opentravel.org/OTA/2003/05 "

Nested attributeGroups have been removed

Certain XML manipulation and binding tools do not support or ignore nested attributeGroups, such as Microsoft XSD.exe.

Enumerated types atomic base type changed from xs:NMTOKEN to xs:string

Certain XML manipulation and binding tools produce marshalling and binding validation errors when the xs:NMTOKEN is used as the base type for an enumerated list—particularly when the enumerated literal contains whitespaces (in which case xs:NMTOKENS would be the proper base type as it essentially creates a collection of xs:NMTOKEN.) As `NMTOKEN` and `NMTOKENS` were originally designed for compatibility with DTDs, the predecessor of XML schema, all xs:NMTOKEN base types have been converted to xs:string.

Unbounded ComplexType Containers

All repeating complexTypes with maximum occurrences greater than 1 have been changed to unbounded to allow implementers to specify their unique system constraints and reduce payload sizes.

Schema design pattern enforced: Indicator attribute naming

All xs:boolean indicators have an enforced "Ind" naming pattern. Existing attributes that had no "Ind" at the end of the attribute name have had "Ind" added. Existing attributes with "Indicator" spelled out in the name have been abbreviated to "Ind".

Additional schema extensions have been added

Additional TPA_Extensions have been added throughout the specification.

Open Lists (extensible enumerated lists) have been incorporated into common types that support the new MultiModalOfferType.

These contain a string list of enumerations with an "Other_" literal to support an open enumeration list. Use the "Other_" value in combination with the @Code attribute to exchange a literal that is not in the list and is known to your trading partners.

The new OTA_Lists.xsd file contains the set of open lists currently supported in OpenTravel schema for the MultiModalOfferType type. This file will continue to be extended as additional open lists are identified by the OpenTravel Code List Optimization project team commencing in September of 2012 (for more information about this project team please contact Sandy Angel.) The target publication for the inclusion of the remainder of OpenTravel Code Lists is 2013A.

See Appendix A for information about using an Open List.

OTA_AirAncillaryOffer.xsd vertical common file has been deprecated.

To accommodate the new merchandising offer functionality in air booking path, seat and flight details messages and to minimize nested schema includes, the OTA_AirAncillaryOffer.xsd schema has been deprecated. The types within the OTA_AirAncillaryOffer.xsd schema have been added to the OTA_AirCommonTypes.xsd schema.

Support for secure information exchange has been added.

- Support for encrypted payment and account information has been added to the specification.
- Support for payment instrument tokenization has been added to the specification to make it easier for diverse systems to comply with PCI regulations and keep cardholder data secure. If you are not familiar with tokenization, you can find more information at http://www.shift4.com/tokenization.cfm.
- Support for 3-D Secure protocol information has been added to the specification for online credit and debit card transactions for programs such as Verified by Visa, MasterCard SecureCode, J/Secure and SafeKey.3-D Secure.
- Support for privacy protection via field encryption for certain combinations of elements and attributes.

See Appendix B for additional information including sample instances.

New in the OpenTravel 1.0 Schema Message Suite 2012A Publication

New Schema

Air

The OpenTravel air merchandising & operations project team created one new OpenTravel 2012A 1.0 XML Schema message pair. The focus of this project team was to provide baggage pricing, allowance and list/ catalog functionality in the air schema. The new message pair, OTA_AirBaggageRQ/RS, includes the following functionality:

- Baggage Pricing
- Baggage Allowance
- Baggage List or Catalog with Pricing

Requested baggage operations may be based on a broad variety of criteria, including:

- Specific request type (Baggage Allowance, Baggage Charge, Baggage Allowance and Charge and Baggage List)
- A specified airline supplier
- A specified company (associated with the traveler)
- A specific flight
- An air reservation (PNR)
- A traveler type
- Traveler loyalty benefits
- A fare group (including private and negotiated fares)
- An origin/ destination pair
- An associated offer
- A service family (product group and subgroup)

Specific baggage information, including checked in indicator, quantity of pieces (checked bag and carry on), weight, dimensions, special item code & description, and excess baggage occurrences.

The new Air Baggage response message returns relevant baggage information that meet the search criteria. Returned information includes:

Allowance and Charge Information

- Baggage allowance and charge by origin and destination:
- Indicator if the baggage allowance may be subject to air supplier merchandising offers
- Baggage allowance details, including weight, dimensions, special item codes & descriptions, service family and per item pricing (including currency type, amount, taxes, exchange rate details, redemption currency, pricing rules and pricing qualifiers)
- Booking and upgrade instructions
- Associated loyalty program that influenced the baggage allowance and/or pricing
- Marketing airline
- Service or bag specific fee calculation information or warnings
- Ticket box
- Airline merchandising offers that apply to baggage allowance and/or charges
- The total baggage price for the entire trip (including all passengers)

Baggage List or Priced Catalog by origin and destination:

- Marketing airline
- Baggage detail, including maximum pieces, EMD type value, allowance method, service location, and service date)
- Airline or ATPCO service family with pricing and booking instructions and booking instructions, pricing, ticket box and offers at the product subgroup level

Golf

The OpenTravel golf project team created one new message pair, OTA_GolfRateRQ/RS, for exchanging tee time rates.

Requested rate criteria includes:

- The name of a golf course
- A date or range of dates, including days of the week, used to filter rate results
- Applied discounts that may include promotions and corporate IDs for negotiated rates
- Summary golfer type qualifying information, including quantity, age qualifier and golfer category
- Additional rate qualifiers to filter the rate results, including rate ID, rate code, rate plan type and rate category

The new Golf Rates response message returns relevant rate plan details by golf course including:

- Golf course code, ID, name, short name

- Prepaid rate indicator
- Available tee time rate indicator
- Rate details, including code, rate name, rate period, corporate discount number for special rates associated with a specific organization, promotion codes and customer loyalty program codes
- The date or range of dates, including days of the week, used to filter rate results
- Amenities included with a rate
- Constraints for the rate plan, including golfer types and facility(s) that the rate applies to
- Charge information associated with a cart rental
- Charge information associated with greens fee
- Policy(s) associated with the rate
- Rate category(s)
- Rate rules

Significantly Enhanced Schema

Air

Functionality to exchange air merchandising offers has been added to air booking path, seat management and flight details messages.

The new AirOfferChoiceType element allows the exchange of three categories of air merchandising offers within these messages:

- Summary— Air offer information with no pricing, including offer name, short description, service family, restrictions and terms & conditions.
- Priced (Detail)— Air offer information, including all summary information plus pricing details—including amounts, taxes, pricing rules, pricing influencers, exchange rates and redemption amounts—seat information, booking instructions, multimedia description and commissions.
- Purchased— Information for purchased air offers, including service family and references to traveler, O&D, O&D segment and O&D flight segment that indicate the applied pricing method.

Ground Transportation

Additional information was added for pickup, interim stop and dropoff locations, including:

- Relative positioning (geocoding)
- An implementer-extensible list of location types, including Company, Hotel, PointOfInterest and Port
- The name of the location, which may be a hotel or airport name as an example
- Special instructions regarding the pickup, stop or drop off
- Formatted directions

Support for shuttle service was added, including:

- Multiple stop specification
- Owner & operator information
- Operation schedules, including days and hours of operation
- Ticketing & reservation information

Hotel

New functionality to exchange property level environmental impact and green programs & initiatives has been added to the hotel schema.

The new EnvironmentalImpactType complexType:

- Has been added as a common type in OTA_HotelCommonTypes

- Has been added as a typed element to OTA_HotelContentDescription/ HotelDescriptiveContentType named EnvironmentalImpact.
- Is available anywhere the HotelDescriptiveContentType (complexType) element is referenced, such as in HotelDescriptiveInfoRS and OTA_HotelDescriptiveContentNotifRQ.

This new type allows the exchange of the following information:

- CarbonFootprint: Carbon foot print information.
- Water: Water usage information.
- Energy: Property energy and power usage information.
- Recycling: Recycling information.
- General: Other environmental program information.

Appendix A

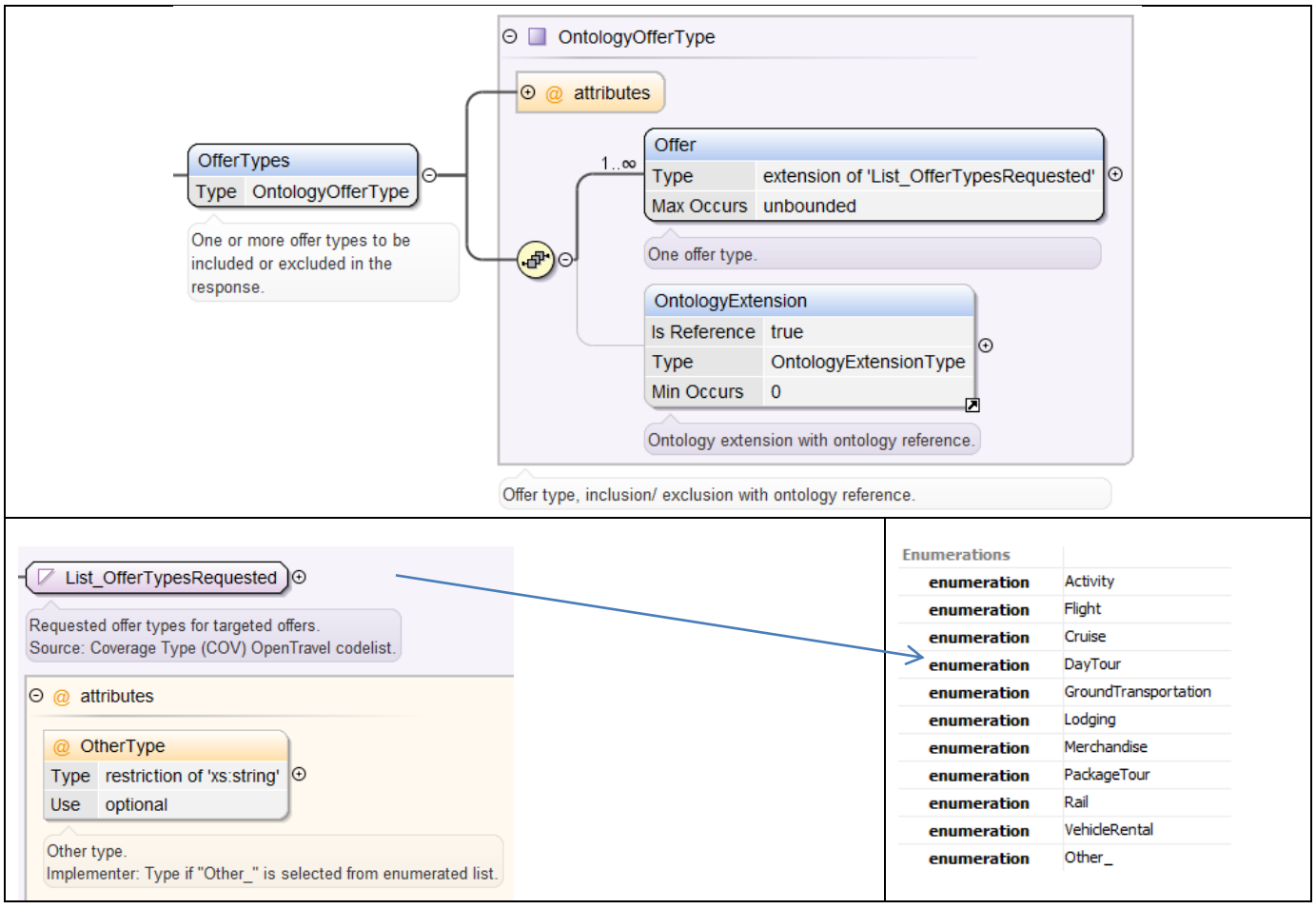
OpenTravel “Open List” Schema Extension Functionality

Overview

As part of an ongoing initiative to provide a deeper level of implementer extensibility in OpenTravel specifications, OpenTravel Code Lists and other inline schema enumerated lists are being converted to *Open Lists* that allow implementers to select a predefined item from the list or exchange a proprietary value with their trading partners. Open Lists also support other standards bodies, such as IATA and ISO, by providing an XML structure that accommodates defining and exchanging their code list and code list value information. Note that OpenTravel does not endorse or maintain any 3rd-party code lists.

The Open List Structure

The Open List XML structure is a complexType with a base type of a restricted xs:string list of enumerated values. The predefined list of enumerated values is determined by OpenTravel member project teams and workgroups based on implementation best practices.



Example of base type with predefined enumerated list

The last enumerated item in an Open List is “Other_”, which is an OpenTravel reserved word. If an implementer needs to exchange a value that is not in the predefined list of enumerations, they select the “Other_” literal and enter a value in the @extension attribute as shown in the example below:

```
<!-- PURCHASED RATE INFORMATION -->
<ota:Rate>
  <ota:Category>Standard</ota:Category>
  <ota:Code Code="Y" Description="ECONOMY"/>
</ota:Rate>

  <ota:PaymentStatus>Prepaid</ota:PaymentStatus>
  <ota:PaymentMethod>CreditCard</ota:PaymentMethod>
  <ota:CardType>VISA</ota:CardType>
  <ota:CardIssuer OtherType="JBL">Other_</ota:CardIssuer>
</ota:PriceAndPayment>
```

In the above example, the “CardIssuer” Open List contains a proprietary extension, while the “PaymentMethod” and “PaymentStatus” Open Lists use predefined literals from the enumerated list.

Additional attributes associated with the Open List extensions are contained in the ExtensionGroup attributeGroup that is an extension of the Open List:

@Code, type="xs:string" use="optional"

Description: Implementer: Place a code value in this attribute if you have selected the "Other_" value in the enumerated list. Note that this value should be known to your trading partners.

Example: MYB

@Description, type="xs:string" use="optional"

Description: Code description.

Example: Party Supplies

@DescriptionDetail, type="xs:string" use="optional"

Description: Code description detail.

Example: Mylar Balloons

@SourceName, type="xs:string" use="optional"

Description: The code list source authority (owner) name.

Example: The Party Store

@SourceURL, type="xs:anyURI" use="optional"

Description: Code authority or owner URL.

Example: www.thepartystore12345.com

@ResourceName, type="xs:string" use="optional"

Description: Code resource name or ID.

Example: Party Supply List v3

@ResourceURL, type="xs:anyURI" use="optional"

Description: Code resource URL.

Example: www.thepartystore12345.com/partysupplylistv3.html

@UniqueID, type="xs:string" use="optional"

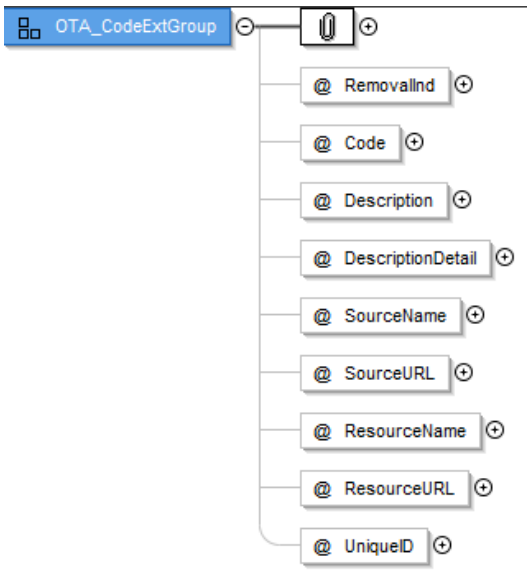
Description: Unique ID for code. This is used for a database or key ID for the code item (if it is different from the @Code) in relationship to the obsolete code indicator.

Example: MYB12345

@removalInd, type="xs:boolean" use="optional"

Description: If true, this item is obsolete and should be removed from the receiving system.

The new OTA_Lists.xsd contains the set of open lists currently supported in OpenTravel schema and will be extended as additional open lists are added for the 2013A XML Message Suite publication.



Additional extension attributes associated with an Open List

Exchanging 3rd-Party Code List Values

The @OTA_CodeExtGroup facilitates exchanging code list values from implementer internal and other 3rd-party code lists. An example of exchanging a value from an implementer internal code list is shown in the schema fragment below:

```
<ServiceLevel
code="Airport Transfer Express"
SourceName="Academy Limousine"
ResourceName="Service Category List"
ResourceURL="http://www.academylimousine.com/svclist.aspx">Other_</ServiceLevel>
```

OpenTravel Code List Conversions

OpenTravel has begun converting code lists from the OpenTravel Code List (Excel spreadsheet) into Open Lists and will continue to do so the remainder of 2012 in conjunction with OpenTravel Code List Optimization project team starting in September 2012. Some existing code lists have more than 200 code list items and these lists will be separated into subsets of smaller lists that contain logical value groupings. This work will be performed by OpenTravel workgroups and project teams.

Extending Predefined Enumerated List

OpenTravel will be introducing a new process and mechanism for online code list management with the completion of the OpenTravel Code List Optimization project and the anticipated inclusion of open lists in 2013A XML Message Suite schema. In the interim, any OpenTravel member can request that a new value be added to the predefined value set for an Open List by submitting a specification comment. The associated OpenTravel Best Practice regarding the use of Open Lists:

OpenTravel Best Practice: ***Using Open Enumerations***: It is RECOMMENDED that you submit comment(s) for each non-proprietary extended value that is used so the value may be permanently added to the associated OpenTravel List to support maximum trading partner interoperability.

Questions and Comments

Please direct all questions and comments to Bonnie.Lowell@opentravel.org

Appendix B

Secure Information Overview

Tokenization

Tokenization is the process of replacing some piece of sensitive data with a value that is not considered sensitive in the context of the environment that consumes the token and the original sensitive data. Tokenization technology can be used with sensitive data of all kinds and the OpenTravel implementation focuses on payment transactions.

In the payments industry, Tokenization has become a popular means of bolstering the security of electronic transactions while minimizing the complexity of compliance with industry standards and government regulations. Tokenization was applied to payment card data by Shift4 Corporation and released to the public in 2005.

The technology is meant to prevent the theft of the credit card information in storage. Shift4 defines Tokenization as: "The concept of using a non-decryptable piece of data to represent, by reference, sensitive or secret data. In PCI context, tokens are used to reference cardholder data that is stored in a separate database, application or off-site secure facility."

The Payment Card Industry Data Security Standard, an industry-wide standard that must be met by any organization that stores, processes, or transmits cardholder data, mandates that credit card data must be protected when stored. Tokenization, as applied to payment card data, is often implemented to meet this mandate, replacing credit card numbers in some systems with a random value. Tokens can be formatted in a variety of ways. Some token service providers or applications generate these stand-in values in such a way as to match the format of the original sensitive data.

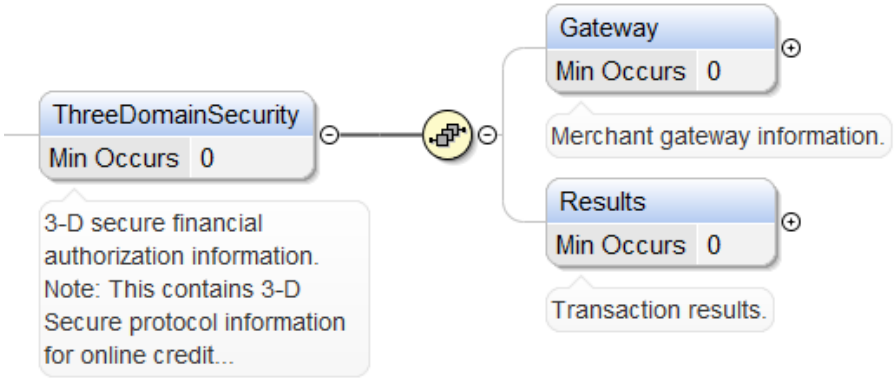
In the case of payment card data, a token might be the same length of a Primary Account Number (Bank card number) and contain elements of the original data such as the last four digits of the card number. When an authorization request is made to verify the legitimacy of a transaction, a token might be returned to the merchant instead of the card number, along with the authorization code for the transaction. The token is stored in the receiving system while the actual cardholder data is stored in a secure token storage system. Storage of tokens and payment card data must comply with current PCI standards.

Tokenization makes it more difficult for hackers to gain access to cardholder data outside of the token storage system. Implementation of tokenization could simplify the requirements of the PCI DSS, as systems that no longer store or process sensitive data are removed from the scope of the PCI audit.

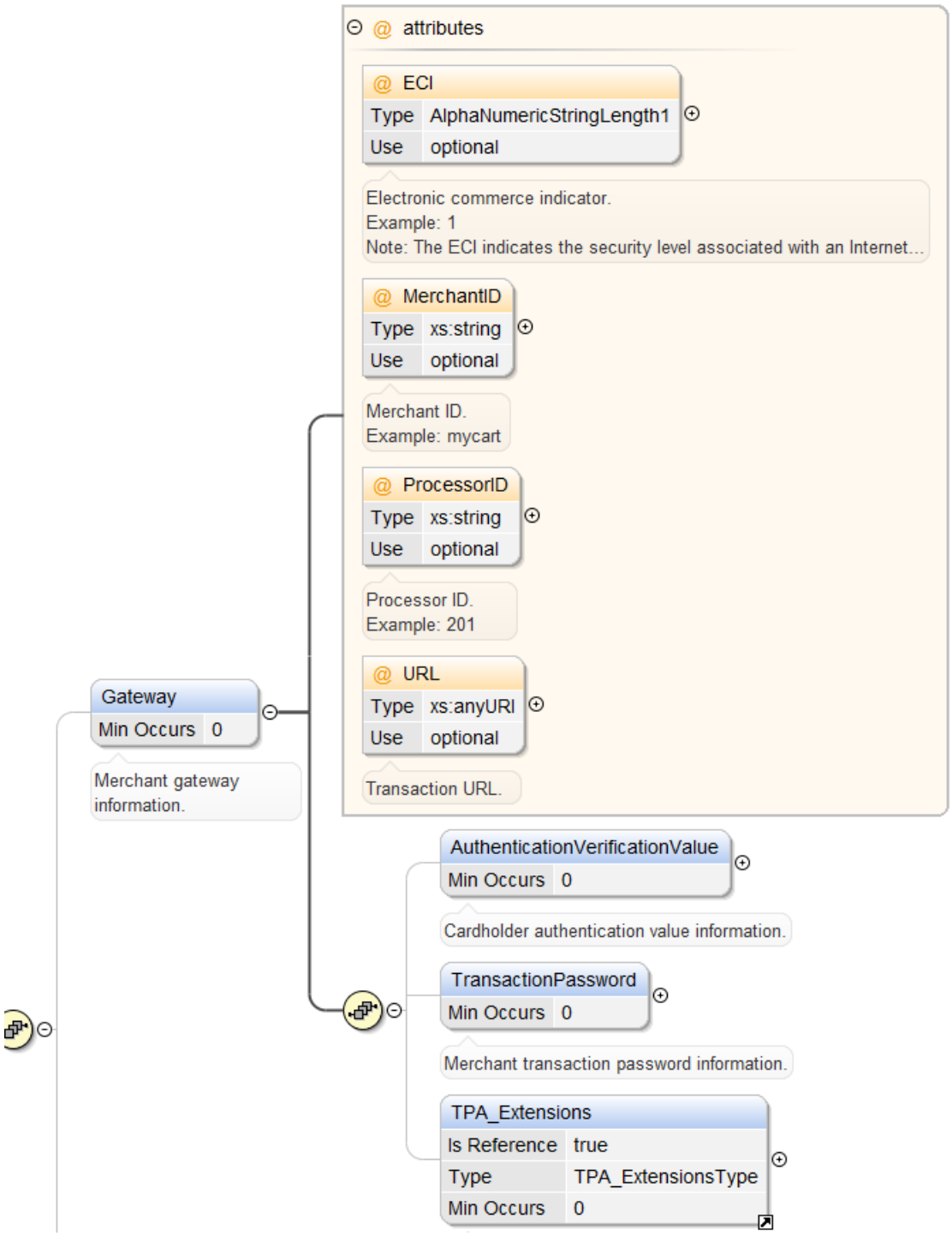
Three Domain Secure

3D Secure stands for Three Domain Secure, the payment industry's internet authentication standard which has been developed by the major card schemes. For example, Visa has called their version of the scheme 'Verified by Visa' and MasterCard have called their equivalent initiative 'MasterCard SecureCode'. OpenTravel specification support includes:

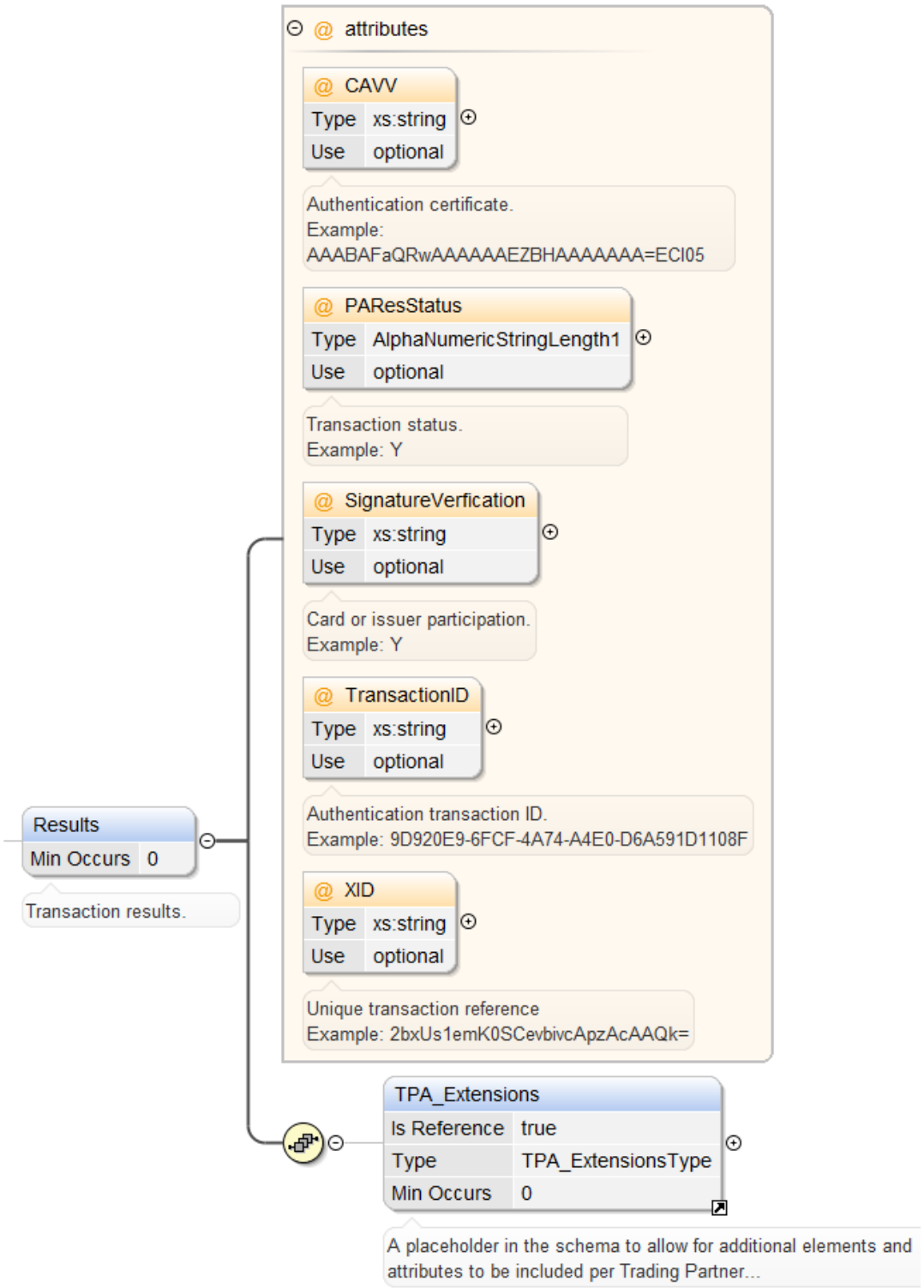
ThreeDomainSecurity Element in PaymentCardType



Merchant Information:



Transaction Processing Results:



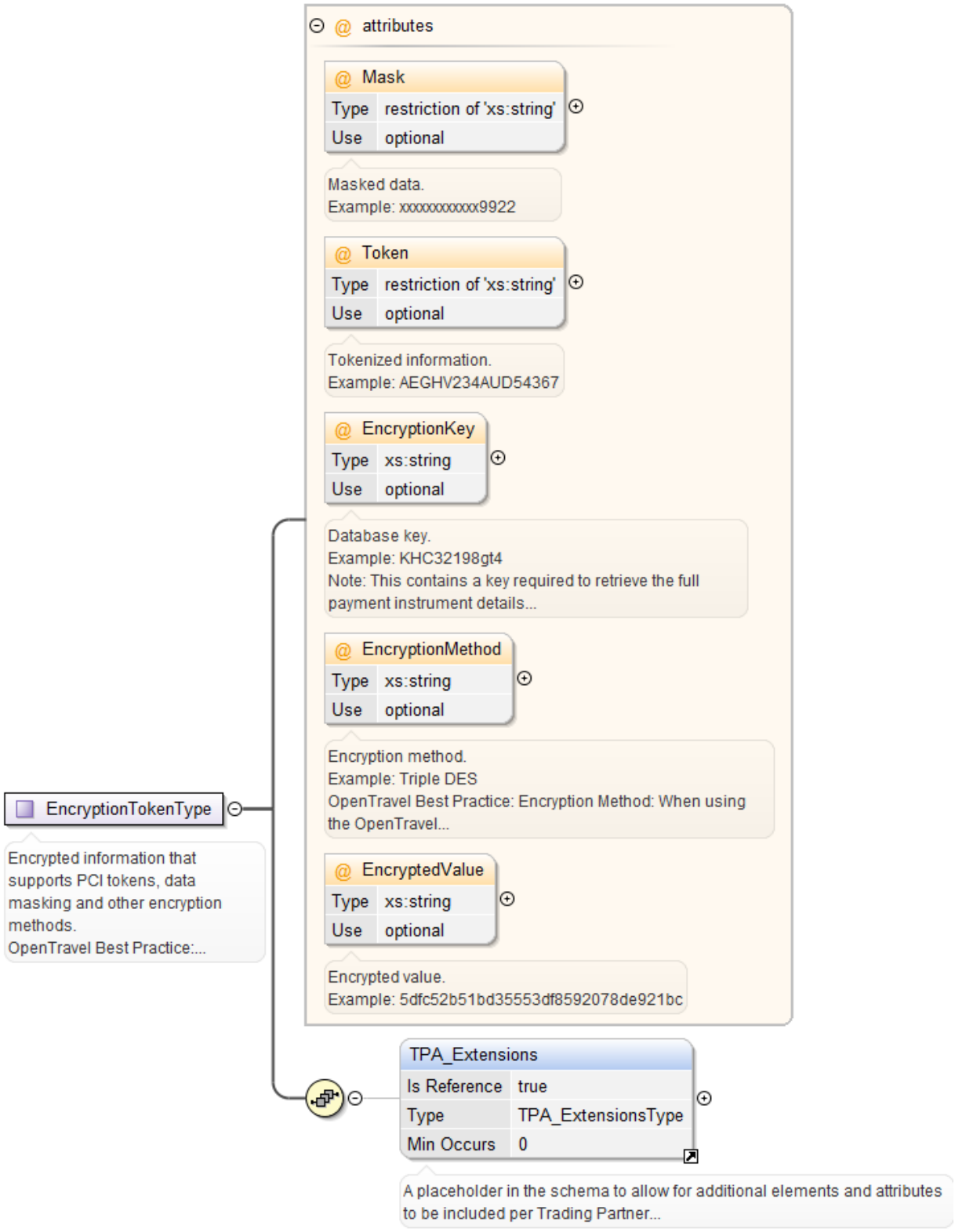
XML Message Suite Schema Enhancements

OpenTravel schema enhancements that support encryption, tokenization and data masking include:

- EncryptionTokenType
- AuthorizationType
- BankAcctType
- DocumentType
- PaymentCardType
- PaymentDetailType
- PaymentFormType
- PersonNameType
- RelatedTravelerType

EncryptionTokenType

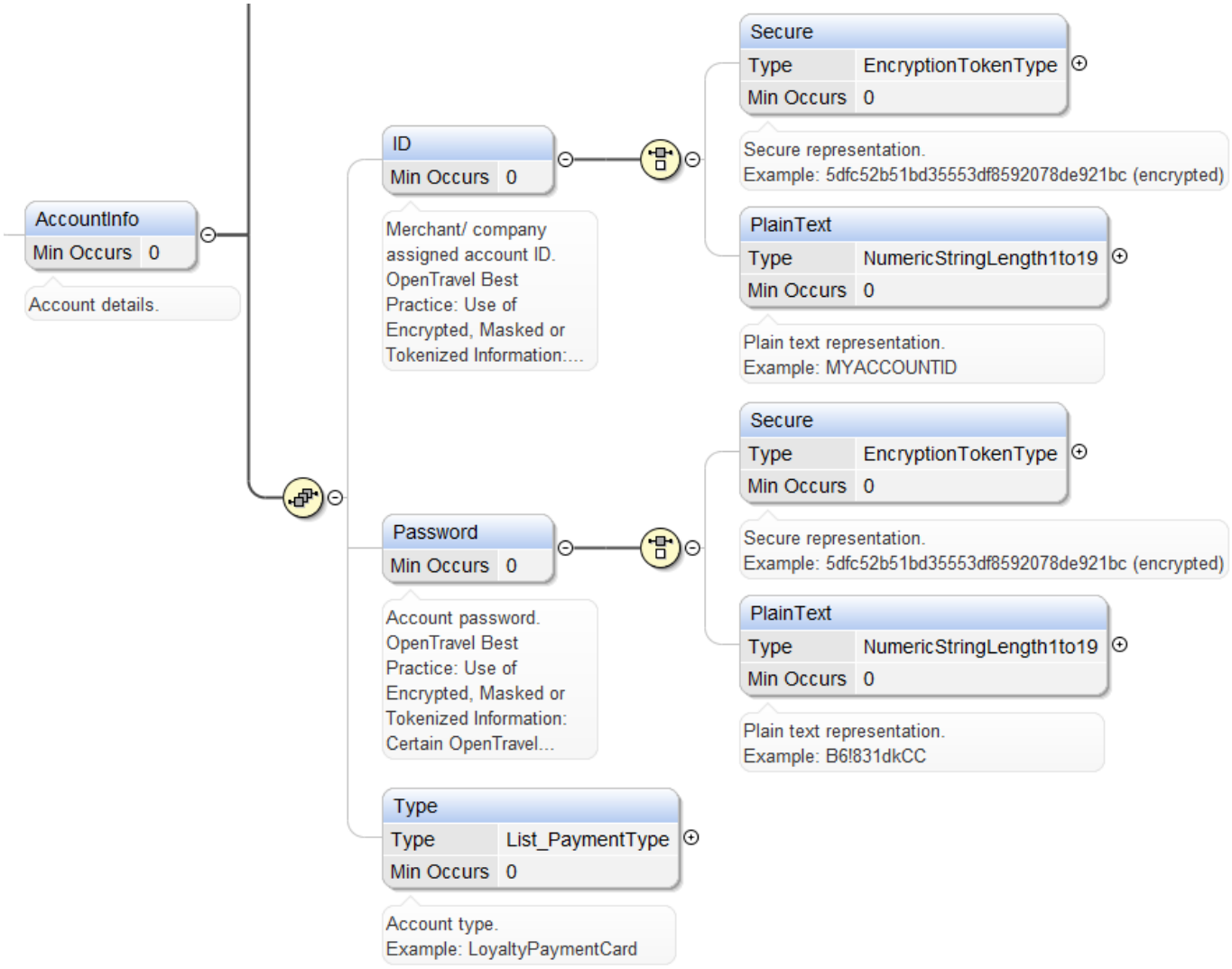
A new **EncryptionTokenType** element was added:



Elements and Attributes

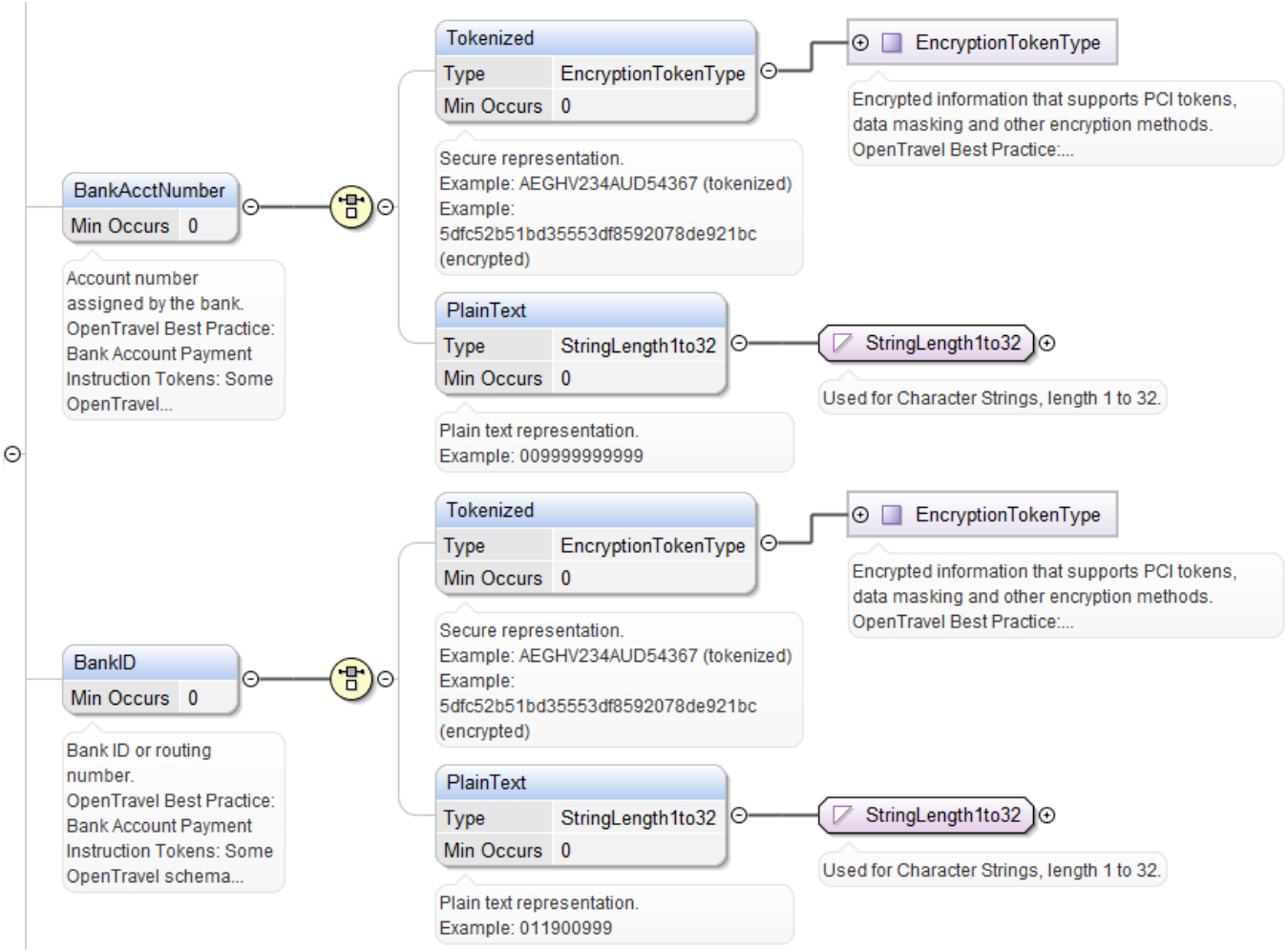
Name	*Type*	*Notes*
EncryptionTokenType	ComplexType	*Description*: Encrypted information that supports PCI tokens, data masking and other encryption methods. *OpenTravel Best Practice*: Use of Encrypted, Masked or Tokenized Information: Certain OpenTravel schema may have combinations payment and/or account information with other personally identifying information, such as customer name and date of birth. For enhanced customer privacy and security, it is RECOMMENDED that the payment and account information be protected, using tokenization or some other encryption method and displayed in a masked format.
EncryptionKey	xs:string	*Description*: Database key. *Example*: KHC32198gt4 *Note*: This contains a key required to retrieve the full payment instrument details compliant with PCI DSS standards.
EncryptionMethod	xs:string	*Description*: Encryption method. *Example*: Triple DES *OpenTravel Best Practice*: Encryption Method: When using the OpenTravel Encryption element, it is RECOMMENDED that all trading partners be informed of all encryption methods being used in advance of implementation to ensure message processing compatibility.
EncryptedValue	xs:string	*Description*: Encrypted value *Example*: 5dfc52b51bd35553df8592078de921bc
Mask	xs:string xs:pattern value="[0-9a-zA-Z]{1,32}"	*Description*: Masked data *Example*: xxxxxxxxxxxx9922
Token	xs:string xs:pattern value="[0-9a-zA-Z]{1,32}"	*Description*: Tokenized information. *Example*: AEGHV234AUD54367
TPA_Extensions		*Description*: A placeholder in the schema to allow for additional elements and attributes to be included per Trading Partner Agreement (TPA). *OpenTravel Best Practice*: Trading Partner Extensions (TPA_Extensions): It is RECOMMENDED that you submit comment(s) against OpenTravel Schema for each non-proprietary schema extension so the elements and attributes may be permanently added to the OpenTravel specification to support maximum trading partner interoperability.

Enhancements to AuthorizationType



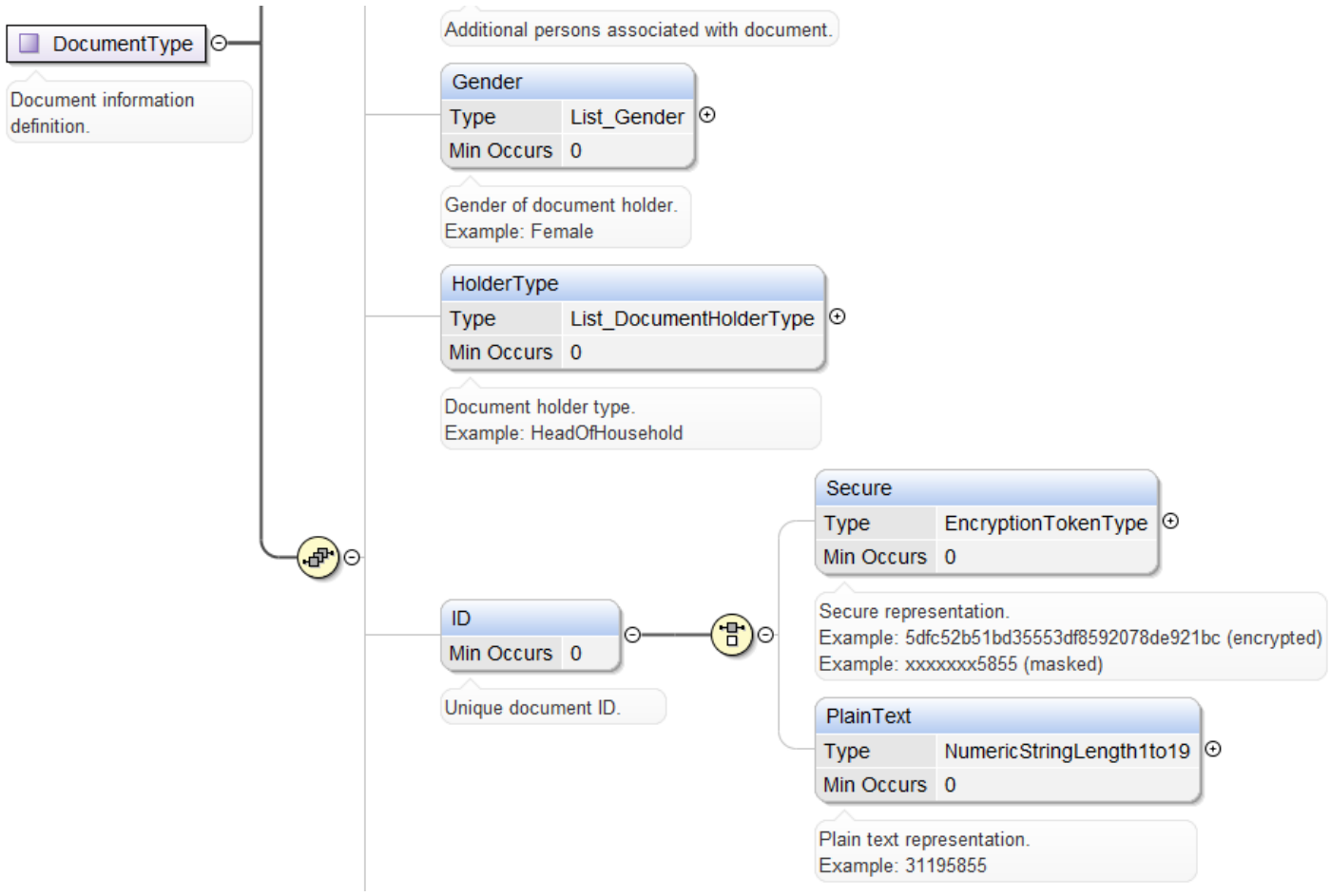
Enhancements to BankAcctType

The @BankAcctNumber and @BankID attributes were converted to elements, with a choice of entering plain text or secure information (with a base type of EncryptionTokenType).



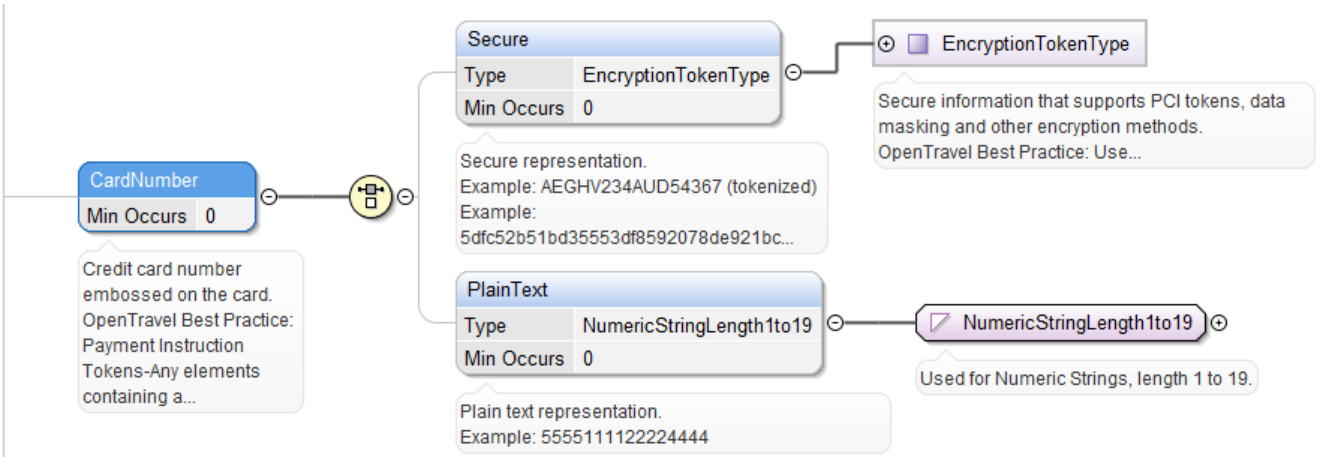
- The @ BankAcctNumber attribute was deprecated.
- The @ BankID attribute was deprecated.

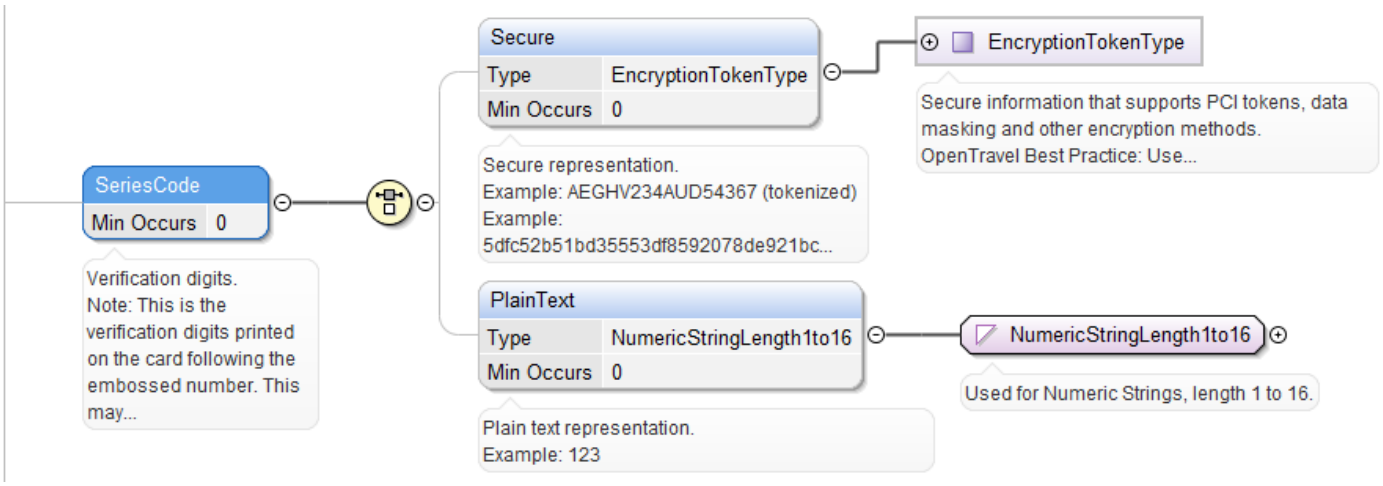
Enhancements to DocumentType



Enhancements to PaymentCardType

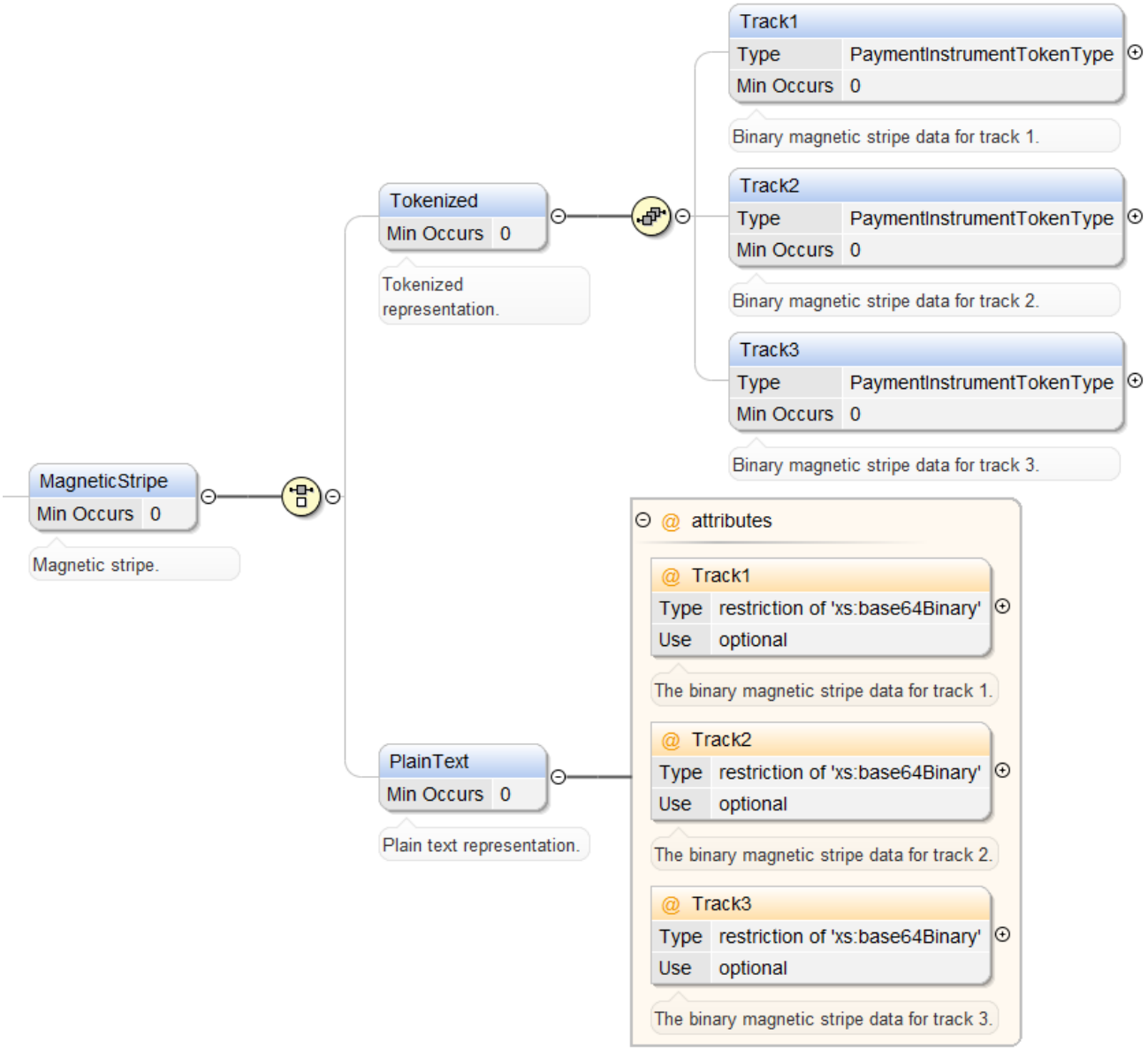
The @CardNumber and @SeriesCode attributes were converted to elements, with a choice of entering plain text or secure information (with a base type of EncryptionTokenType).



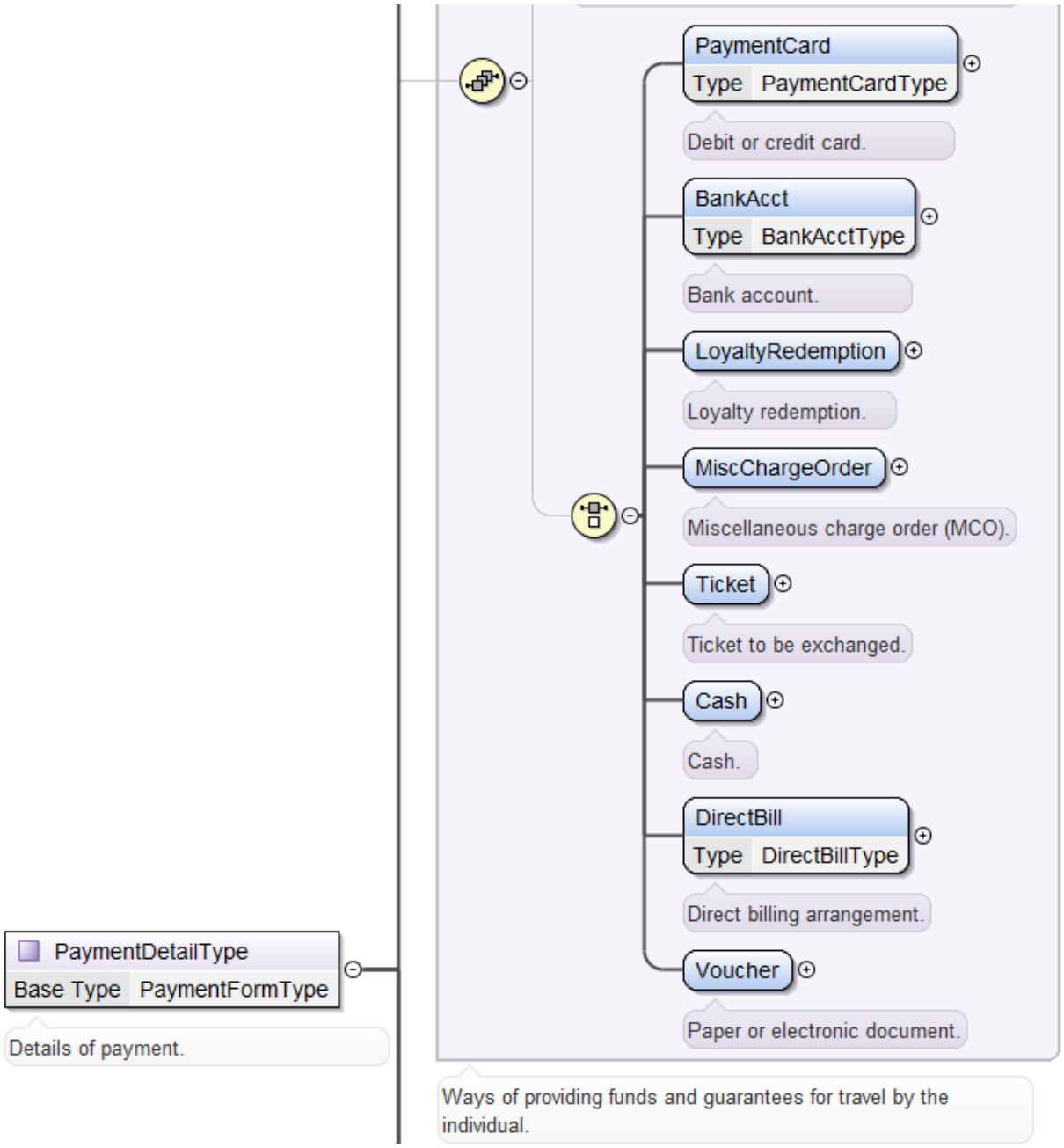


- The @CardNumber attribute was deprecated.
- The @ EncryptionKey attribute was deprecated.
- The @ MaskedCardNumber attribute was deprecated.
- The @SeriesCode attribute was deprecated.

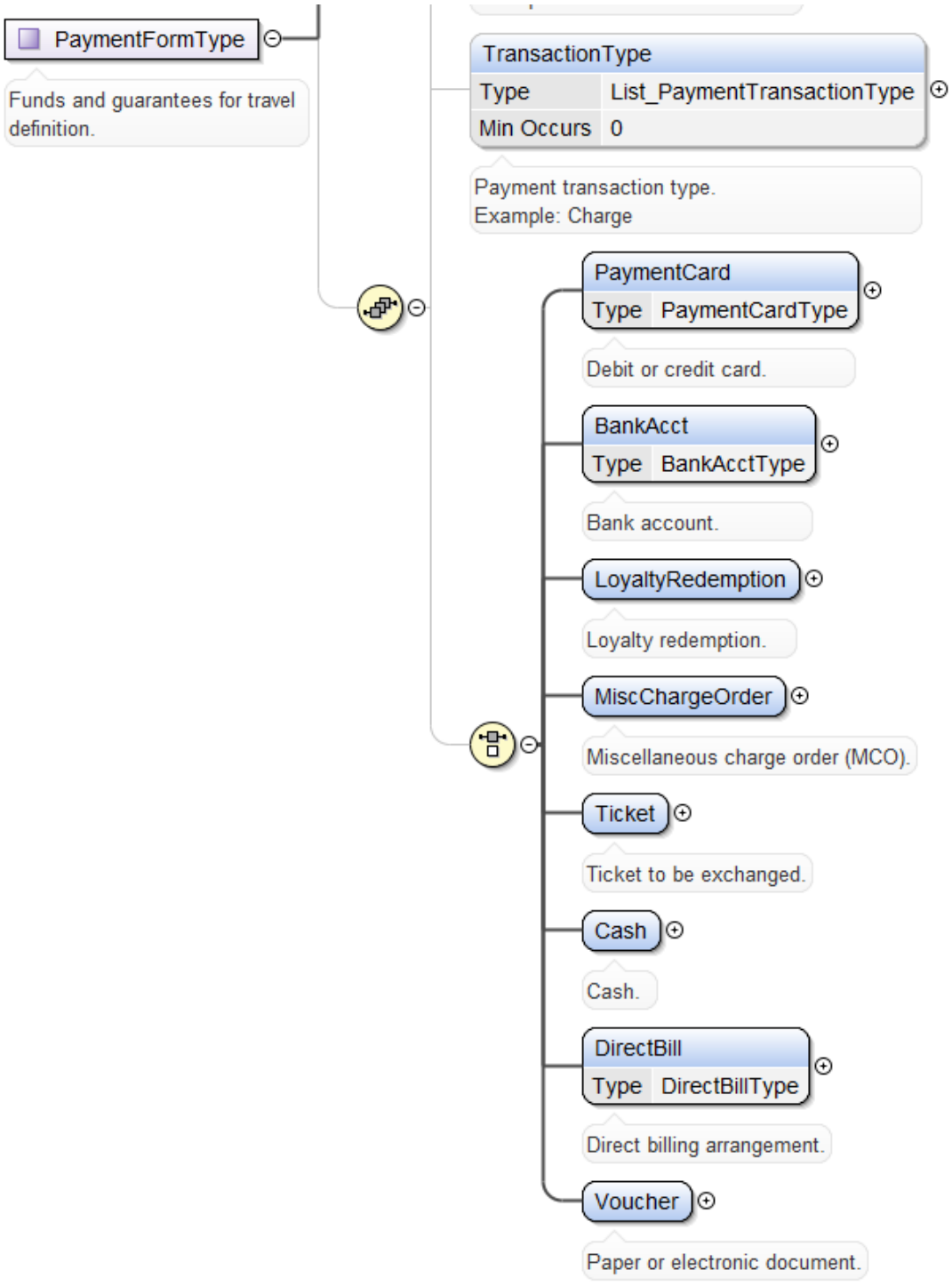
The MagneticStripe element was converted to support plain text or secure information:



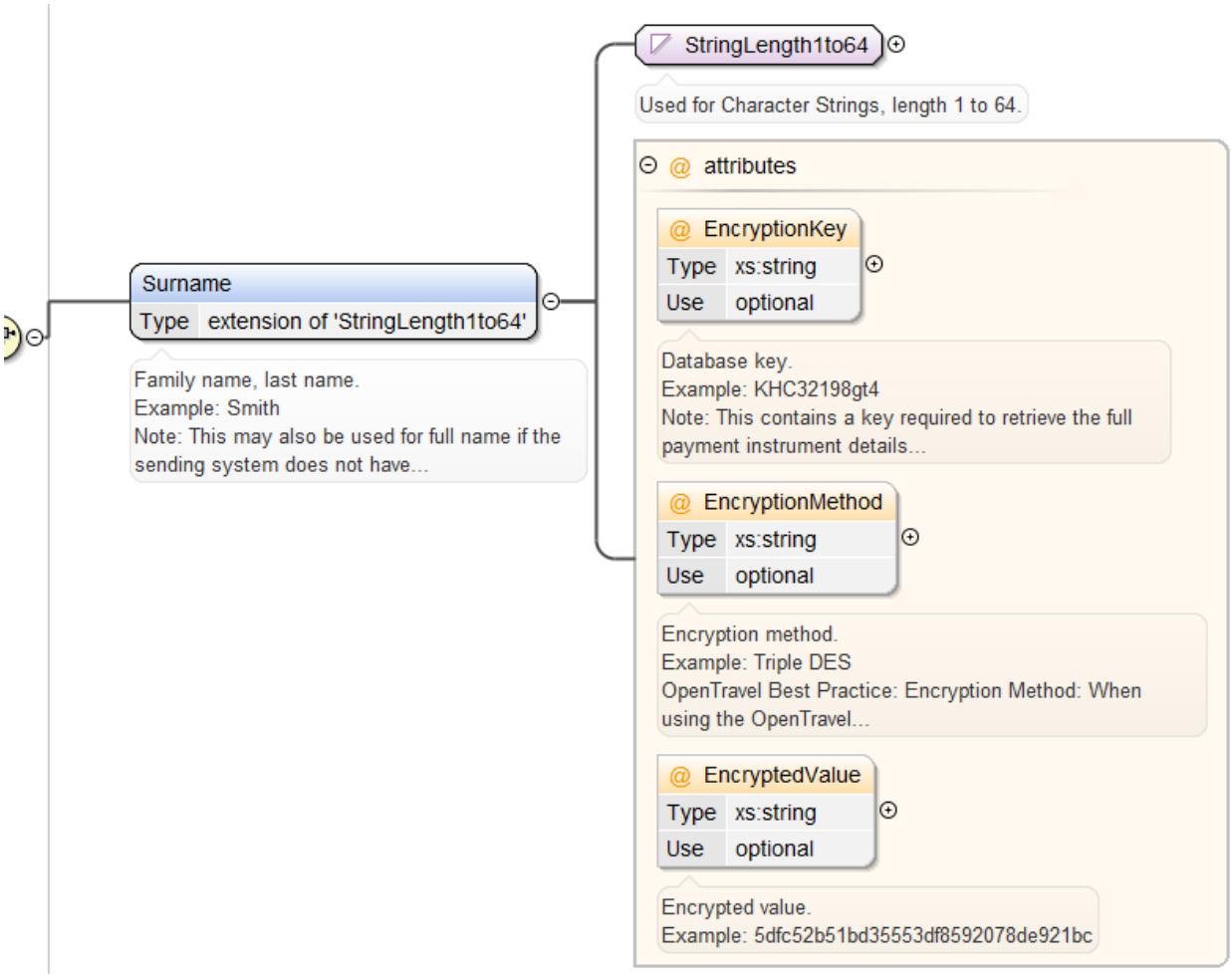
Enhancements to PaymentDetailType



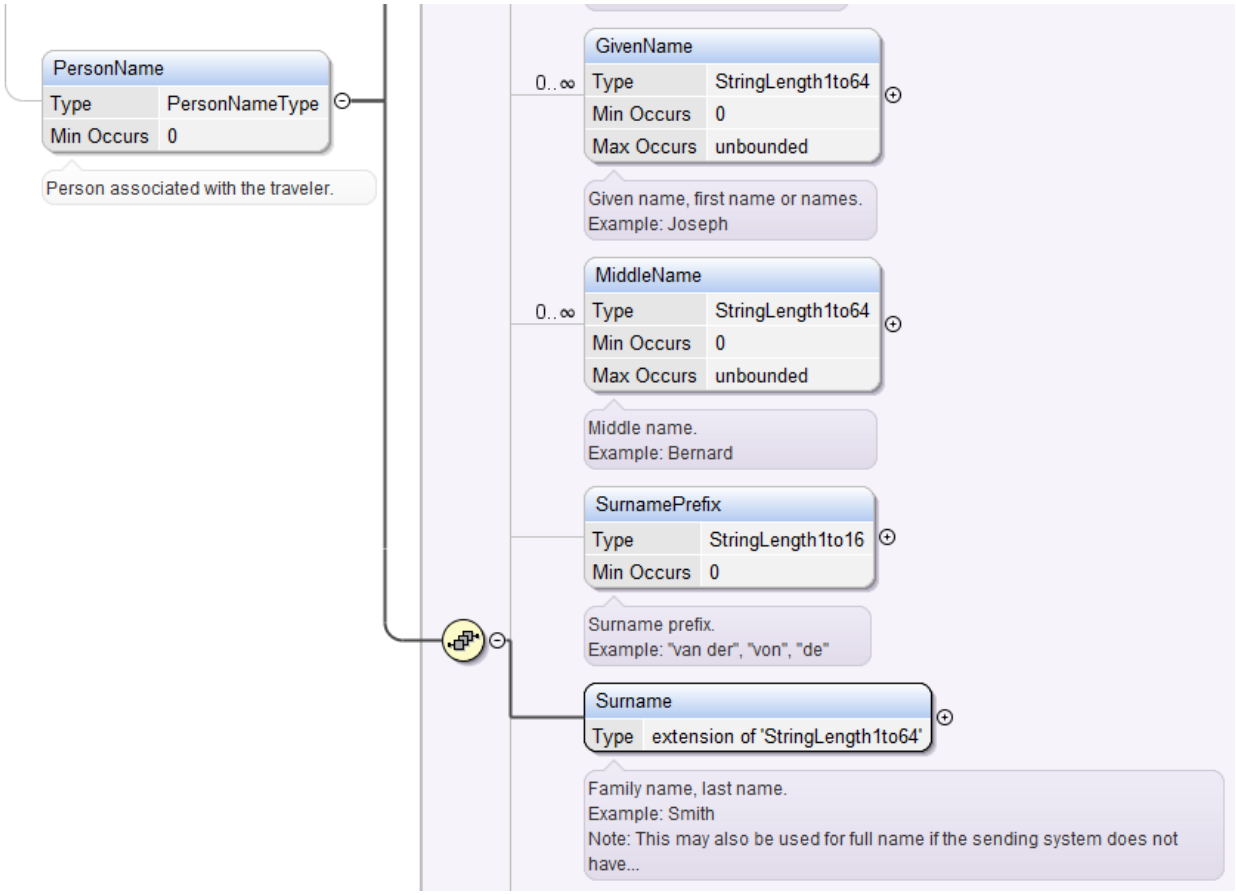
Enhancements to PaymentFormType



Enhancements to PersonNameType



Enhancements to RelatedTravelerType



Tokenized Payment Instrument Example

```
<Payments>
  <!-- PAYMENT GUARANTEE: Required 50% of estimated service fee guarantee
specified in Availability Response payment rules -->
  <!-- Note that tokenized payment form is being used in this example. -->
  <Payment>
    <GuaranteeType>CreditCard</GuaranteeType>
    <PaymentCard CardCode="MC" ExpireDate="0113">
      <Address>
        <AddressLine>100 Main Street</AddressLine>
        <CityName>Tampa</CityName>
        <PostalCode>33626</PostalCode>
        <StateProv StateCode="FL"/>
      </Address>
      <CardHolderName>Jane M. Smith</CardHolderName>
      <CardNumber>
        <Tokenized Token="AEGHV234AUD54367"></Tokenized>
      </CardNumber>
      <Email>Jane.Smith@SomeCompany.com</Email>
      <SeriesCode>
        <Tokenized Token="AEGHV234AUD54367"></Tokenized>
      </SeriesCode>
      <Telephone PhoneNumber="8139990011"/>
    </PaymentCard>
  </Payment>
</Payments>
```

Plain Text Payment Instrument Example

```
<Payments>
  <!-- PAYMENT GUARANTEE: Required 50% of estimated service fee guarantee
specified in Availability Response payment rules -->
  <!-- Note that plain text payment form is being used in this example. -->
  <Payment>
    <GuaranteeType>CreditCard</GuaranteeType>
    <PaymentCard CardCode="MC" ExpireDate="0113">
      <Address>
        <AddressLine>100 Main Street</AddressLine>
        <CityName>Tampa</CityName>
        <PostalCode>33626</PostalCode>
        <StateProv StateCode="FL"/>
      </Address>
      <CardHolderName>Jane M. Smith</CardHolderName>
      <CardNumber>
        <PlainText>5555111122223333</PlainText>
      </CardNumber>
      <Email>Jane.Smith@SomeCompany.com</Email>
      <SeriesCode>
        <PlainText>123</PlainText>
      </SeriesCode>
      <Telephone PhoneNumber="8139990011"/>
    </PaymentCard>
  </Payment>
</Payments>
```