

RAZOR WEB SERVICES

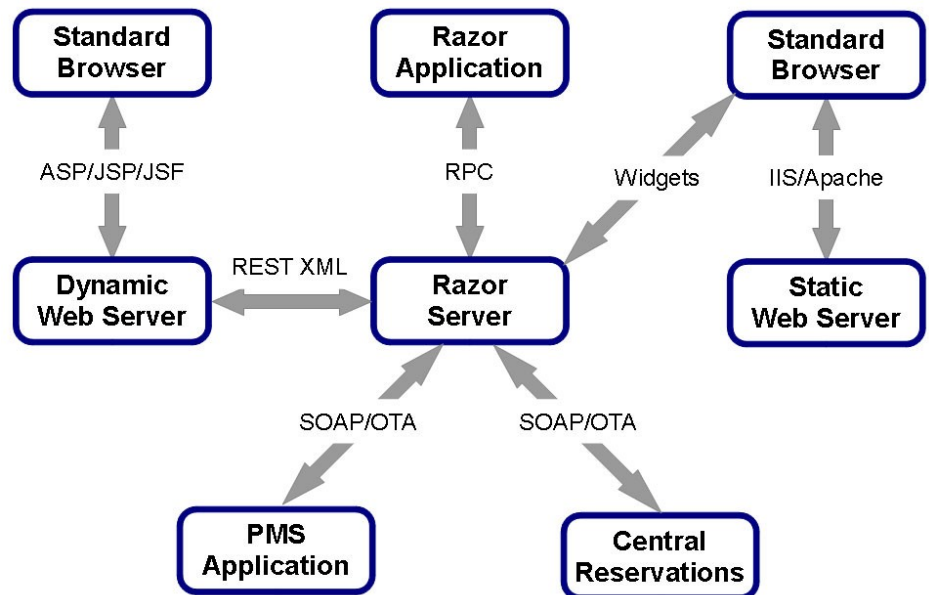
The Razor property management system offers a comprehensive set of web services to provide business partners with up to date property information, pricing and availability, and to enable on-line reservations to be made. The diagram illustrates various scenarios by which this is achieved.

SOAP Services

Razor has SOAP (Simple Object Access Protocol) web services with documents that conform to OTA (Open Travel Alliance) XML schema. SOAP/OTA may be used to communicate with legacy property management systems and central reservations systems. The only benefit of this approach is standardization.

REST Services

Razor also has REST (Representational State Transfer) web services for both OTA and a set of simple XML documents that directly reflect Razor information. A simple approach is recommended to link Razor to dynamic web servers which typically have their own databases. Web servers that integrate data from multiple sources may require this approach.



Razor client applications communicate directly with the server via fast and efficient remote procedure calls. The applications can be inserted into a web page either as a page division or as a button. Clicking the button opens the application page in situ – the page has a close button to restore the button view. This option might be used by property managers and agencies to embed the application into their internet and/or intranet web sites.

Widget Services

The most simple option, however, is to use Razor widgets. A widget is a modular software component that exposes dynamic content in static web pages. Widgets are embedded in a standard HTML web page using a few lines of code to configure them – a task easily performed without use of ASP, JSP, JSF, plug-ins or other technologies. Each widget has direct and secure access to the appropriate Razor service and updates itself to reflect parameters in the host web page. For simplicity, use embedded widgets and applications, for flexibility use REST services, and for legacy integration use SOAP services.

Access Identification and Control

A unique web service code is allocated to each business partner, which is used to set an auto-login parameter in the host web page. This identifies the partner to the system and enables reservations, orders and commissions to be allocated accordingly. Once installed and configured widgets require no maintenance or administration – software upgrades are installed with no user intervention – and data is refreshed automatically.

Razor applications are more specialized but are also very simple to embed in existing web pages. Applications are typically used by business partners which require integrated functions. Simple applications group related functions into a tabbed panels. Complex applications group many more functions into tabbed panels according to the roles and permissions that the user has been allocated.

REST services should be used where there is no corporate or legacy imperative to use SOAP services. The decision between the simple XML document formats and the Open Travel Alliance (OTA) XML schema depends on one's attitude to simplicity versus standardization. Initiatives by the OTA, European Committee for Standardization (CEN),

Hotel Technology - Next Generation (HTNG), Expedia Quick Connect (EQC) etc indicate that the benefits of such standards will take some time to accrue. Other major players such as Amadeus, TripAdvisor, LastMinute, HomeAway etc do not use OTA but prefer simple schema that meet their specific needs.

The REST services described below are designed to provide property descriptions, images, contacts, locations, rates and availability in the simplest possible XML format. The documents are largely self describing and provide detailed and timely information using simple URLs. There is no need for complex web service setup, and in many cases there is no need to parse the XML response. Razor allows the service requester to specify an XSL file that can transform the XML into HTML or other format without programming. For example, a drop down list of property names or a table showing availability can be generated from the raw XML with suitable XSL files.

REST services may also be used to effect the OTA request/response (RQ/RS) cycle. A URL is provided to create and return an OTA request (RQ) document using parameters specified in the URL. This URL does not perform any operation but is intended to show the request format expected by the SOAP service. However, if one substitutes RS for RQ in the URL, Razor creates a request from the URL parameters, passes it to the appropriate service, and returns the OTA response (RS) document. The REST response is used in exactly the same way as would be a SOAP response.

SOAP services require that the OTA request document is created and sent to the appropriate SOAP port and operation, which returns the matching response document. Examples of the Java source code and libraries to create and marshal request documents and to un-marshal response documents are included. It is recommended that the JAXB class library and object factory provided by Razor be used unless you are committed to another platform. This facilitates deployment via REST and SOAP, and makes best use of modern open source technology such as CXF.

Razor provide these web services as is and without charge in the hope that they will be useful in promoting property reservations via the Razor Property Management applications, widgets and XML services. The use of these services for any other purpose is expressly prohibited. The services and the information contained in this document are provided without liability and are subject to change without notice. Feedback and constructive suggestions and requests are welcome and should be directed to info@razorpms.com.

RAZOR REST SERVICES

Razor provides a number of simple XML and XSL web services which are described below. These are meant to illustrate what may be provided by the system and are by no means exhaustive. Additional services will be provided on request. Developers wishing to use these web services should have an understanding of RESTful web services, XML messages and XSL transformations.

- A brief introduction to REST is at <http://www.infoq.com/articles/rest-introduction>
- The W3C tutorial on XML is at <http://www.w3schools.com/xml/default.asp>
- An overview of XSL transformation (XSLT) is at http://www.digital-web.com/articles/client_side_xslt
- The W3C tutorial on XSLT is at <http://www.w3schools.com/XSL/default.asp>
- Client and server side XSLT options are described at http://xmlfiles.com/XSL/XSL_intro.asp
- A comprehensive tutorial is at <http://www.cch.kcl.ac.uk/legacy/teaching/avmpub/xslt/web/xslt-avmpub.pdf>

The web services provide REST access to Razor application data via a set of resource URLs. The URLs have static and dynamic parts that define what information is to be returned.

For example, the URL: <http://razorpms.com/service/xml/product/list>

returns a list of product names and identities.

The product detail is returned using the URL: <http://razorpms.com/service/xml/product/id>

where *id* is the identity of the product.

The information is returned in a simple XML format, the structure of which is obvious by inspecting the element names and by referring to the field help URLs. The XML may be parsed and used by an application, or it may be converted into different formats using XSL transformations. Sample XSL transformation files (having the extension *.xsl) may be downloaded from the <http://razorpms.com/service> directory. Words in *italic* indicate the variable parameters in the URLs.

Help Services

To display basic help in XML format.	http://razorpms.com/service/xml/help
Information for developers.	http://razorpms.com/service/xml/help/developer
Description of party elements and attributes.	http://razorpms.com/service/xml/help/fields/party
Description of product elements and attributes.	http://razorpms.com/service/xml/help/fields/product
Description of the reservation elements and attributes.	http://razorpms.com/service/xml/help/fields/reservation

Location Services

Detailed information of the location with identity = <i>id</i> .	http://razorpms.com/service/xml/location/id
List of all countries and their two character ISO code.	http://razorpms.com/service/xml/location/countries
List of provinces, states, etc in the ISO <i>country</i> .	http://razorpms.com/service/xml/location/subdivisions/country
List of locations in the specified ISO <i>country</i> .	http://razorpms.com/service/xml/location/list/country
List of locations for ISO <i>country</i> and <i>subdivision</i> codes.	http://razorpms.com/service/xml/location/list/country/subdivision
List of distance units eg: KMT (kilometer), SMI (mile).	http://razorpms.com/service/xml/location/units
Locations within <i>distance</i> and <i>unit</i> of location with <i>id</i> .	http://razorpms.com/service/xml/location/list/id/distance/unit
Locations within <i>distance</i> and <i>unit</i> of position at <i>latitude/longitude</i> .	http://razorpms.com/service/xml/location/list/latitude/longitude/distance/unit

Access Control

Access to the following services is restricted to registered users of the Razor system. To gain access you must append the query `?pos=pos_code` to the end of each URL, where *pos_code* is an encrypted identifier of the property manager or agency wanting to gain access. Log into Razor and select the Login tab to see the *pos_code* in the Webservice POS Code field. If the field is blank, request the system administrator to check that the Employer field of the user is properly set in the User tab, or contact info@razorpms.com for the *pos_code*. The pos code identifies the manager or agency to the system to ensure that correct data is returned, and to prevent invalid access to restricted information.

Party Services – append `?pos=pos_code` to the URL

Detailed information of the party with identity = <i>id</i> .	http://razorpms.com/service/xml/party/id
List of the identity and name of all parties.	http://razorpms.com/service/xml/party/list
List of valid party types.	http://razorpms.com/service/xml/party/types
List of the parties of the specified <i>type</i> .	http://razorpms.com/service/xml/party/list/type
List of attributes of the party with identity = <i>id</i> .	http://razorpms.com/service/xml/party/id/attribute
List of file URLs of the party with identity = <i>id</i> .	http://razorpms.com/service/xml/party/id/file
List of image URLs of the party with identity = <i>id</i> .	http://razorpms.com/service/xml/party/id/image
List of types of the party with identity = <i>id</i> .	http://razorpms.com/service/xml/party/id/type

Product Services – append ?pos=pos_code to the URL

Summary information of the product with identity = <i>id</i> .	http://razorpms.com/service/xml/product/id
Detailed information of the product with identity = <i>id</i> .	http://razorpms.com/service/xml/product/id/detail
Data of the product with identity = <i>id</i> in ISO <i>language</i> .	http://razorpms.com/service/xml/product/id/language
List of the identity and name of all products.	http://razorpms.com/service/xml/product/list
List of valid product types.	http://razorpms.com/service/xml/product/types
List of the products of the specified <i>type</i> .	http://razorpms.com/service/xml/product/list/type
List of attributes of the product with identity = <i>id</i> .	http://razorpms.com/service/xml/product/id/attribute
List of file URLs of the product with identity = <i>id</i> .	http://razorpms.com/service/xml/product/id/file
List of image URLs of the product with identity = <i>id</i> .	http://razorpms.com/service/xml/product/id/image
List of guest ratings of the product with identity = <i>id</i> .	http://razorpms.com/service/xml/product/id/rating
List of types of the product with identity = <i>id</i> .	http://razorpms.com/service/xml/product/id/type
List price of the product with identity = <i>id</i> for the specified <i>agent</i> , <i>date</i> , <i>quantity</i> , <i>unit</i> and <i>currency</i> .	http://razorpms.com/service/xml/product/id/price/agent/date/quantity/unit/currency

Reservation Services – append ?pos=pos_code to the URL

Reservation services are less simple than those described above because they typically require several dynamic parameters and can be used to upload as well as download information. The services are designed to present availability and prices in simple formats, and to accept provisional reservations with minimum difficulty.

This URL returns true if the property with identity = *productid* is available between *arrive* and *depart* dates:

<http://razorpms.com/service/xml/reservation/available/productid/arrive/depart>

This URL returns a tabular schedule of the property with identity = *productid* between *fromdate* and *todate*:

<http://razorpms.com/service/xml/reservation/product/productid/fromdate/todate>

This URL returns a tabular schedule of properties at the location with identity = *locationid* between *fromdate* and *todate*:

<http://razorpms.com/service/xml/reservation/location/locationid/fromdate/todate>

This URL returns the rack, quoted, STO (standard tourism operator) and deposit amounts and currency for the property with identity = *productid* for the period between *arrive* and *depart* dates. The quoted amount includes the effect of yield management rules (eg for last minute, gap fillers, long stay etc), and the STO amount further includes the discount in the contract that must exist between the property manager and the agency:

<http://razorpms.com/service/xml/reservation/quote/productid/arrive/depart>

This URL returns the rack, quoted, STO and deposit amounts and currency for available properties at the location with identity *locationid*, between *arrive* and *depart* dates. Multiple locations may be specified by a comma delimited list of location identities:

<http://razorpms.com/service/xml/reservation/quotes/locationid/arrive/depart>

This URL returns the rack, quoted, STO and deposit amounts and currency for available properties within *distance* and *unit* of *locationid*, between *arrive* and *depart* dates:

<http://razorpms.com/service/xml/reservation/quotes/locationid/distance/unit/arrive/depart>

This URL lists the identity, rack, quoted, STO and deposit amounts and currency of properties offering discounts at the location with identity *locationid*. Multiple locations may be specified by a comma delimited list of location identities:

<http://razorpms.com/service/xml/reservation/special/locationid>

This URL is to create a provisional reservation for the property with identity = *productid* between *arrive* and *depart* dates:

<http://razorpms.com/service/xml/reservation/productid/arrive/depart/emailaddress/familyname/firstname>

where the variable parameters (*in italic*) are:

<i>arrive</i>	Date of arrival in strict <i>yyyy-MM-dd</i> format
<i>depart</i>	Date of departure in strict <i>yyyy-MM-dd</i> format
<i>distance</i>	Maximum distance from a location, default 50
<i>emailaddress</i>	Email address of the guest which must be in a valid format
<i>familyname</i>	Family name of the guest(s)

<i>firstname</i>	First name or initials of the paying guest
<i>pos_code</i>	Point of sale code of the agency making the reservation
<i>productid</i>	Identity of property to be reserved
<i>unit</i>	Unit of measure of <i>distance</i> , default KMT (kilometers)

and the values returned by the system are:

currency	ISO currency code in which the rack, quote, sto and deposit amounts are quoted
deposit	Deposit amount required to confirm the reservation's
locationid	Identity of the location of the product
message	Message indication the reservation number or an error condition
productid	Identity of the product
productname	Name of the product having the specified <i>productid</i>
quote	Quoted price in the above currency for the reservation, including yield management rules
rack	Rack rate or list price for the reservation, excluding yield management rules
sto	STO amount payable by the agency, including yield management rules and contract discount
terms	The terms and conditions that apply to the provisional reservation

REST Messages

A REST request may respond with advisory and error messages, which are self explanatory and also display the requesting URL, including any default parameters:

- Contact the property manager for a quotation
- No price has been set for this property and period so it is not yet available
- The date range is absent or invalid - ensure dates are in yyyy-MM-dd format
- The email address is absent or invalid
- The family name is absent or invalid - ensure that it is not blank
- The first name is absent or invalid - ensure that it is not blank
- The party has no attributes
- The party has no files
- The party has no images
- The party has no types
- The point of sale (pos) code cannot access this party
- The point of sale (pos) code cannot access this product
- The point of sale (pos) code does not belong to an agency
- The point of sale (pos) code is invalid
- The product has no attributes
- The product has no files
- The product has no images
- The product has no price for the specified parameters
- The product has no ratings
- The product has no types
- The property id is invalid or does not exist
- The property is not available for these dates
- The proposed reservation collides with an existing reservation
- The provisional reservation number is xxxxx
- There are no exchange rates for the specified date
- There are no parties of this type
- There are no products for this point of sale (pos) code
- There are no products of this type
- There are no properties at these location(s)
- There are no specials available at these location(s)
- There is no contract between the agency and the property's manager
- There is no point of sale (pos) code

HTTP Messages

Possibly the most frustrating error messages are raw HTTP error such as:

HTTP 500 - Internal server error

These are almost always due to malformed URLs in which parameters are absent, incorrectly formatted, or in the incorrect order. Carefully check the request URL against the documentation to eliminate this source of error. If the error persists please contact info@razorpms.com for assistance.

Formats and Codes

The Razor REST services require parameters to be strictly formatted according to the following rules:

Parameter Type	Description	Examples
Currency Codes	Three character ISO currency code	EUR, GBP, JPY and USD
Date Format	Strict yyyy-MM-dd format	2010-12-25, 2011-01-01
Distance Units	Three character ISO unit of measure code	KMT (kilometer), SMI (statute mile)
Language Codes	Two character ISO language code	DE, FR, EN and IT
Latitude & Longitude	Decimal numbers in Google Maps format	
Party Types	http://razorpms.com/service/xml/party/types	Agent, Customer, Organization, Owner, Supplier
Product Types	http://razorpms.com/service/xml/product/types	Accommodation, Food & Beverage, Travel

REST XML Documents

This section shows a small sample of REST XML documents to illustrate how complex results are achieved with simple URL formats. Please refer to the sections above to understand the URL structures and parameters.

Locations by Country and Region

Lists the name and identity of each location in the country and region (state, province or county) using two character ISO codes, where US is the United States country code and NC is the North Carolina state code. The request is made by the business partner with point of sale (pos) code 8508a7e6ce43e091.

URL:

<http://razorpms.com/service/xml/location/list/US/NC?pos=8508a7e6ce43e091>

XML:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<locations>
  <country>US</country>
  <region>NC</region>
  <item>
    <id>45156</id>
    <name>Aberdeen</name>
  </item>
  <item>
    <id>45209</id>
    <name>Advance</name>
  </item>
  <!-- excluded items -->
  <item>
    <id>58018</id>
    <name>Youngsville</name>
  </item>
  <item>
    <id>58033</id>
    <name>Zebulon</name>
  </item>
  <xsl>'no_xsl'</xsl>
</locations>
```

Locations by ID

Returns name, description, country, region, ISO code and GPS position of location having identity 58777.

URL:

<http://razorpms.com/service/xml/location/58777?pos=8508a7e6ce43e091>

XML:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<location>
  <altitude>0.0</altitude>
  <code>CPT</code>
  <country>ZA</country>
```

```
<date>0806</date>
<function>6</function>
<id>58777</id>
<latitude>-33.952971981277</latitude>
<locationid>58777</locationid>
<longitude>18.3773803710938</longitude>
<name>Camps Bay</name>
<status>UR</status>
<region>WC</region>
<xsl>'no_xsl'</xsl>
</location>
```

Locations Nearby

Lists the name and identity of locations within five statute miles (ISO unit SMI) of location 58777.

URL:

<http://razorpms.com/service/xml/location/list/58777/5/SMI?pos=8508a7e6ce43e091>

XML:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<locations>
  <item>
    <id>58975</id>
    <name>Bakoven</name>
  </item>
  <item>
    <id>58757</id>
    <name>Bantry Bay</name>
  </item>
  <!-- excluded items -->
  <item>
    <id>58964</id>
    <name>Waterfront</name>
  </item>
  <item>
    <id>58972</id>
    <name>Woodstock</name>
  </item>
  <xsl>'no_xsl'</xsl>
</locations>
```

Locations Near GPS Position

Lists the name and identity of locations within three thousand yards (ISO unit YRD) of latitude S33.95° and E18.37°.

URL:

<http://razorpms.com/service/xml/location/list/-33.95/18.37/3000/YRD?pos=8508a7e6ce43e091>

XML:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<locations>
  <item>
    <id>58975</id>
    <name>Bakoven</name>
  </item>
  <item>
    <id>58777</id>
    <name>Camps Bay</name>
  </item>
  <item>
    <id>58789</id>
    <name>Clifton</name>
  </item>
  <xsl>'no_xsl'</xsl>
</locations>
```

Parties by Type

Lists the name and identity of parties (organizations and individuals) of type Employee. Note that a party may have multiple types, so an Employee might also be a Customer and a Guest.

URL:

<http://razorpms.com/service/xml/party/list/Employee?pos=8508a7e6ce43e091>

XML:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<items>
  <entity>Party</entity>
  <type>Employee</type>
  <item>
    <id>1</id>
    <name>Administrator</name>
  </item>
  <item>
    <id>10285</id>
    <name>Eksteen, Lindy</name>
  </item>
  <item>
    <id>11281</id>
    <name>Murphy, Brendan</name>
  </item>
  <xsl>'no_xsl'</xsl>
</items>
```

Party by ID

Returns details of the party having identity 5135.

URL:

<http://razorpms.com/service/xml/party/5135?pos=039d737e208a0819>

XML:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<party>
  <birthdate>2002-02-07T00:00:00+02:00</birthdate>
  <country>ZA</country>
  <currency>EUR</currency>
  <dayphone>+27 21 424 3353</dayphone>
  <extraname>Thomas Cook</extraname>
  <faxphone>+27 21 424 3355</faxphone>
  <financeid>489</financeid>
  <id>5</id>
  <identitynumber>2002/011707/23</identitynumber>
  <language>EN</language>
  <locationid>0</locationid>
  <mobilephone>+27 84 804 9902</mobilephone>
  <name>Nox Tourism Ltd</name>
  <partyid>5135</partyid>
  <postaladdress>P.O.Box 32452&#xD;
    Camps Bay&#xD;
    Cape Town</postaladdress>
  <postalcode>8040</postalcode>
  <state>Created</state>
  <taxnumber>4310227717</taxnumber>
  <webaddress>www.noxrentals.co.za</webaddress>
  <xsl>'no_xsl'</xsl>
</party>
```

Product by ID

Returns summary information about the product with identity 145.

URL:

<http://razorpms.com/service/xml/product/145?pos=8508a7e6ce43e091>

XML:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
```

```

<product>
  <altitude>250.0</altitude>
  <currency>EUR</currency>
  <description>The Penthouse Apartment is Camps Bay Terrace's premier
    accommodation. Come and treat yourself to absolute luxury with
    <!-- excluded items -->
    in Camps Bay! We look forward to having you join us!</description>
  <id>145</id>
  <language>EN</language>
  <latitude>-33.9569677762237</latitude>
  <locationid>58777</locationid>
  <longitude>18.377611041069</longitude>
  <name>CBT Penthouse</name>
  <pricetype>Rack</pricetype>
  <productid>145</productid>
  <state>Created</state>
  <supplierid>5</supplierid>
  <tax>VAT Normal</tax>
  <unit>DAY</unit>
  <webaddress>www.noxrentals.co.za/property.asp?propid=7</webaddress>
  <xsl>'no_xsl'</xsl>
</product>

```

Product Detail by ID

Returns detailed information about the product with identity 145. This is typically used to populate static or dynamic web pages with sufficient information for a potential customer to assess its suitability.

URL:

<http://razorpms.com/service/xml/product/145/detail?pos=8508a7e6ce43e091>

XML:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<product>
  <altitude>0.0</altitude>
  <attributes>
    <attribute>
      <key>Environment</key>
      <values>
        <value>Sea Views</value>
        <value>Within 1km of Beach</value>
        <value>Within 1km of Restaurants</value>
      </values>
    </attribute>
    <attribute>
      <key>Suitability</key>
      <values>
        <value>Elderly Accessible</value>
      </values>
    </attribute>
    <attribute>
      <key>Grading</key>
      <values>
        <value>5 Star</value>
      </values>
    </attribute>
    <attribute>
      <key>Facilities</key>
      <values>
        <value>Air Conditioning</value>
        <value>Balcony</value>
        <value>Braai/BBQ</value>
        <value>Heated Pool</value>
        <value>Internet Access</value>
        <value>Pool</value>
        <value>Private Pool</value>
        <value>Satellite Television</value>
      </values>
    </attribute>
  </attributes>
</product>

```

```

    </attribute>
    <attribute>
      <key>Accommodation Size</key>
      <values>
        <value>2 Bedrooms</value>
      </values>
    </attribute>
  </attributes>
  <contents>Daily Servicing: Monday - Saturday except Public Holidays
    Laundry Service
    Concierge Service
    All Taxes
    All Linen and Towels
    Pool Towels
    Satellite TV
    Toiletries
    Wireless internet access
  </contents>
  <currency>EUR</currency>
  <description>The Penthouse Apartment is Camps Bay Terrace's premier
    accommodation. Come and treat yourself to absolute luxury with
    <!-- excluded items -->
    in Camps Bay! We look forward to having you join us!</description>
  <files>
    <file>http://razorpms.com/service/pictures/CBT Penthouse.pdf
    </file>
  </files>
  <id>145</id>
  <images>
    <image>http://razorpms.com/service/pictures/Product145-001.jpg</image>
    <image>http://razorpms.com/service/pictures/Product145-002.jpg</image>
    <!-- excluded items -->
    <image>http://razorpms.com/service/pictures/Product145-014.jpg</image>
    <image>http://razorpms.com/service/pictures/Product145-015.jpg</image>
  </images>
  <inventory>true</inventory>
  <language>EN</language>
  <latitude>-33.9569677762237</latitude>
  <locationid>58777</locationid>
  <longitude>18.377611041069</longitude>
  <name>CBT Penthouse</name>
  <options>Transfers/Shuttles at additional expense
    Dinner Reservations
    Grocery stocking at additional expense
  </options>
  <pricelist>
    <prices>
      <date>2010-04-06T00:00:00+02:00</date>
      <todate>2010-04-30T00:00:00+02:00</todate>
      <quantity>0.0</quantity>
      <unit>DAY</unit>
      <EUR>319.0</EUR>
      <GBP>267.0</GBP>
      <JPY>35300.0</JPY>
      <USD>388.0</USD>
      <ZAR>3000.0</ZAR>
    </prices>
    <!-- excluded items -->
    <prices>
      <date>2011-10-01T00:00:00+02:00</date>
      <todate>2011-10-31T00:00:00+02:00</todate>
      <quantity>0.0</quantity>
      <unit>DAY</unit>
      <EUR>351.0</EUR>
      <GBP>293.0</GBP>
      <JPY>38900.0</JPY>
      <USD>427.0</USD>
    </prices>
  </pricelist>

```

```

        <ZAR>3300.0</ZAR>
    </prices>
</pricelist>
<pricetype>Rack</pricetype>
<productid>145</productid>
<state>Created</state>
<supplierid>5</supplierid>
<tax>VAT Normal</tax>
<terms>Please contact us if we can help in any way. We arrange airport
    transfers, car hire, tours, restaurant bookings or anything else to
    <!-- excluded items -->
    information, and communicated such to the client.
</terms>
<types>
    <type>Accommodation</type>
</types>
<unit>DAY</unit>
<webaddress>www.noxrentals.co.za/property.asp?propid=7</webaddress>
<xsl>'no_xsl'</xsl>
</product>

```

Reservation Schedule by Product(s) - Tabular

Returns a tabular schedule of the reservation status and availability of product 145 between 15th and 30th June 2010. The document is structured so that it can automatically create an HTML table for display in a web page using an XSL transformation template.

URL:

<http://razorpms.com/service/xml/reservation/product/145/2010-06-15/2010-06-30?pos=8508a7e6ce43e091>

XML:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<schedule>
    <row>
        <id>145</id>
        <name>CBT Penthouse</name>
        <col>
            <date>2010-06-15T00:00:00+02:00</date>
            <day>15</day>
            <month>06</month>
            <reservation>106001</reservation>
            <state>Reserved</state>
            <year>2010</year>
        </col>
        <col>
            <date>2010-06-16T00:00:00+02:00</date>
            <day>16</day>
            <month>06</month>
            <reservation>106001</reservation>
            <state>Reserved</state>
            <year>2010</year>
        </col>
        <!-- excluded items -->
        <col>
            <date>2010-06-29T00:00:00+02:00</date>
            <day>29</day>
            <month>06</month>
            <state>Available</state>
            <year>2010</year>
        </col>
        <col>
            <date>2010-06-30T00:00:00+02:00</date>
            <day>30</day>
            <month>06</month>
            <state>Available</state>
            <year>2010</year>
        </col>
    </row>

```

```
<xsl>'no_xsl'</xsl>
</schedule>
```

Product Ratings

Returns a list of guest ratings of property 144. Each rating specifies the aspect being rated (state), the number of ratings (count), and the arithmetical mean percentage rating (average). The rating aspects are similar to those used by FlipKey and TripAdvisor.

URL:

<http://razorpms.com/service/xml/product/144/rating?pos=8508a7e6ce43e091>

XML:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ratings>
  <type>Product</type>
  <id>144</id>
  <rating>
    <average>89.4</average>
    <count>11</count>
    <id>144</id>
    <name>CBT Palm Suite</name>
    <state>Check-in</state>
  </rating>
  <!-- excluded items -->
  <rating>
    <average>83.3</average>
    <count>11</count>
    <id>144</id>
    <name>CBT Palm Suite</name>
    <state>Value</state>
  </rating>
  <xsl>'no_xsl'</xsl>
</ratings>
```

Reservation Schedule by Location(s) - Tabular

Returns a tabular schedule of the reservation status and availability of products at locations 58777, 58900 and 59182 between 21st and 24th May 2010. The document is structured so that it can automatically create an HTML table for display in a web page using an XSL transformation template.

URL:

<http://razorpms.com/service/xml/reservation/location/58777,58900,59182/2010-05-21/2010-05-24?pos=8508a7e6ce43e091>

XML:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<schedule>
  <locationid>58777</locationid>
  <row>
    <id>121</id>
    <name>100 Geneva Drive</name>
    <col>
      <date>2010-05-21T00:00:00+02:00</date>
      <day>21</day>
      <month>05</month>
      <state>Available</state>
      <year>2010</year>
    </col>
  </row>
  <!-- excluded items -->
  <row>
    <id>678</id>
    <name>12 Glen Beach Penthouse</name>
    <col>
      <date>2010-05-24T00:00:00+02:00</date>
      <day>21</day>
      <month>05</month>
```

```

                <state>Provisional</state>
                <year>2010</year>
            </col>
        </row>
        <xsl>'no_xsl'</xsl>
    </schedule>

```

Reservation Quotations by Location(s)

Returns the rack, quoted, STO (standard tourism operator) and deposit amounts and currency for all available properties at location 58777 between 15th and 30th June, 2010. The quoted amount includes the effect of yield management rules (eg for last minute, gap fillers, long stay etc), and the STO amount further includes the discount in the contract that must exist between the property manager and the distribution channel:

URL:

<http://razorpms.com/service/xml/reservation/quotes/58777/2010-06-15/2010-06-30?pos=8508a7e6ce43e091>

XML:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<quotes>
    <id>58777</id>
    <quote>
        <arrive>2010-06-15</arrive>
        <currency>EUR</currency>
        <depart>2010-06-30</depart>
        <deposit>2754.00</deposit>
        <locationid>58777</locationid>
        <productid>123</productid>
        <productname>17 Geneva - Middle</productname>
        <quote>2754.00</quote>
        <rack>3600.00</rack>
        <sto>2203.20</sto>
    </quote>
    <!-- excluded items -->
    <quote>
        <arrive>2010-06-15</arrive>
        <currency>EUR</currency>
        <depart>2010-06-30</depart>
        <deposit>9180.00</deposit>
        <locationid>58777</locationid>
        <productid>559</productid>
        <productname>Shala Gashle</productname>
        <quote>9180.00</quote>
        <rack>12000.00</rack>
        <sto>7344.00</sto>
    </quote>
    <xsl>'no_xsl'</xsl>
</quotes>

```

Reservation Quotations near Location

Returns the rack, quoted, STO and deposit amounts and currency for all available properties within ten kilometers (ISO unit KMT) of location 58777 between 15th and 30th June, 2010. The id element is a list of the locations found by the URL.

URL:

<http://razorpms.com/service/xml/reservation/quotes/58777/10/KMT/2010-06-15/2010-06-30?pos=8508a7e6ce43e091>

XML:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<quotes>
    <type>Within 10.0 KMT of Camps Bay</type>
    <id>'58975','58757','58763','58766','58777','58482','58977','58789','58792','62482',
    '58809','58812','58814','58825','62483','58976','58883','58597','58907','58925','58978',
    '58961','58964','58972'</id>
    <quote>
        <arrive>2010-06-15</arrive>
        <currency>EUR</currency>
        <depart>2010-06-30</depart>
        <deposit>2754.00</deposit>
    </quote>

```

```

        <locationid>58777</locationid>
        <productid>123</productid>
        <productname>17 Geneva - Middle</productname>
        <quote>2754.00</quote>
        <rack>3600.00</rack>
        <sto>2203.20</sto>
    </quote>
    <!-- excluded items -->
    <quote>
        <arrive>2010-06-15</arrive>
        <currency>EUR</currency>
        <depart>2010-06-30</depart>
        <deposit>3442.50</deposit>
        <locationid>58789</locationid>
        <productid>170</productid>
        <productname>White Cliffs</productname>
        <quote>3442.50</quote>
        <rack>4500.00</rack>
        <sto>2754.00</sto>
    </quote>
    <xsl>'no_xsl'</xsl>
</quotes>

```

Reservation Special Offers at Location(s)

Returns the rack, quoted, STO and deposit amounts and currency for all special offers and promotions for properties at locations 58777 and 58326.

URL:

<http://razorpms.com/service/xml/reservation/special/58777,58326?pos=8508a7e6ce43e091>

XML:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<specials>
    <quote>
        <arrive>2010-06-03</arrive>
        <currency>EUR</currency>
        <depart>2010-06-05</depart>
        <deposit>1680.00</deposit>
        <locationid>58777</locationid>
        <productid>144</productid>
        <productname>CBT Palm Suite</productname>
        <quote>1680.00</quote>
        <rack>3200.00</rack>
        <sto>1344.00</sto>
        <xsl>'no_xsl'</xsl>
    </quote>
    <!-- excluded items -->
    <quote>
        <arrive>2011-02-15</arrive>
        <currency>EUR</currency>
        <depart>2011-02-16</depart>
        <deposit>820.00</deposit>
        <locationid>58777</locationid>
        <productid>146</productid>
        <productname>CBT Suite</productname>
        <quote>1640.00</quote>
        <rack>2050.00</rack>
        <sto>1312.00</sto>
        <xsl>'no_xsl'</xsl>
    </quote>
    <xsl>'no_xsl'</xsl>
</specials>

```