

Dues, Events, Orders, Oh My... Webservices for All!

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Getting Data In and Out of iMIS

- * SQL Reads and Writes
 - * Not sustainable
 - * May break applications with upgrades
 - * May violate license agreement
- * iMIS API's
 - * Upgradable
 - * Scalable



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Application Layer

- * Separate Presentation Layer from Business and Data Layer
 - * No direct SQL calls or API calls in your website pages
 - * Works with single or multiple server topologies



History of iMIS APIs

- * COM ibo's
 - * Worked with iMIS version 10.x
 - * Late 1990's
- * .NET ibo's
 - * Work with all versions of iMIS from 10.x to 20.x
- * SOA Webservices
 - * Generally based on .NET ibo's
 - * Still have some limited functionality



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History of ATS Webservices

- * Similar code was being written for similar projects (e.g., member directory)
- * Needed something upgradable that worked when clients upgraded iMIS and the underlying data structure changes.
- * Began building them in 2007
- * Used in every ATS project
- * Based on the iMIS Business Objects (ibo's)
- * Thousands of hours of development time



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Goals

- * Provide a consistent way for developers to call the underlying IBO
- * Allowed us to address bugs in IBO's and compensate for them by making the appropriate changes in the code
- * Allowed us to account for differences in versions of iMIS (e.g. some iMIS versions require you to set a regclass BEFORE overriding the price and other versions require you to override the price BEFORE setting the regclass)
- * One place for all batch creation, credit card charging calls.



Types of Projects

- * ATS Online Marketplace
- * Profile Management
- * Bridges to third party applications
- * Highly customized Forms

The screenshot displays the EyeCareMarketplace website. At the top, there is a navigation bar with 'Log On' and the 'EyeCareMarketplace™' logo. Below the logo are links for 'EyeCareMarketplace Home', 'EyeCareCE', and 'My Courses'. A search bar with a 'GO' button and a 'VIEW CART/CHECKOUT' button are visible. The main content area is divided into two columns. The left column, titled 'SEARCH RESULTS', shows 'Showing 1 - 10 of 242 Results' and 'Sort by Alphabetical by Title'. A search result is displayed for 'A Technician's Role in Refractive Surgery: Past, Present, and Future', featuring an icon of a microscope and contact lens, and listing 'CE Credit(s): 0.5 JCAHPO Group A, 0.5 AOC NC (Intermediate)', 'Product Code: ATAP1160', 'Member Price: \$8.00', and 'Nonmember Price: \$12.00'. A green badge indicates 'Available for Immediate Access'. Buttons for 'DETAILS' and 'ADD TO CART' are present. The right column, titled 'PRODUCT CATEGORIES', lists a tree structure: Marketplace, Assessments, Bookstore (RUSH Orders: 1-800-284-3937 Ext. 227), Books, CD Lecture Packets, Certificate of Completion, Exam Study Materials, Independent Study Courses, Learning Systems Series CDs, Merchandise, Refinements Modules, and Salary Survey.



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What the Webservices Are

- * A set of .NET SOAP based webservices
- * Can be called from any programming language with POST/GET calls
- * Provide success/failure responses with error messages
- * Can be locked down through IIS and/or through the use of an Authentication Token for SQL calls
- * Are separately licensed by Suite



ATS Webservice Suites

- * Contacts – includes the ability to get and put contact information including names, addresses, user defined fields, activities, relationships, etc. as well as Login
- * Dues – includes the ability to get information about subscriptions and dues products and pay dues
- * Orders – Includes the ability to get information about products, freight, shipping, and place orders
- * Events – Includes the ability to get information about an event and register people for an event
- * Donations – Includes the ability to get fundraising information and process donations



ATS Webservice

Individual Pre-Built Webservices for Third Party Platforms

- * Authorize.NET
- * Beacon Live
- * Blue Sky Broadcast
- * Boxwood
- * CadmiumCD
- * CDS
- * CECity
- * CommPartners
- * CQRC Engage
- * Digital Ignite
- * Digitec
- * Drupal
- * Elogic
- * Eshow
- * Experient
- * GoToTraining
- * GoToWebinar
- * MapYourShow
- * Moodle
- * Omnovia
- * Peach New Media
- * Powered By Dub
- * Ready Talk
- * Real Magnet
- * Refined Training
- * Scholar Lab
- * Sitefinity
- * Small World Labs
- * Socious
- * Walsworth
- * WebCourseWorks
- * **Many More in Development!**



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Example Application Development

- * Create a custom membership directory
 - * Create a .NET application in Visual Studio Application
 - * Add a reference to the webservises
 - * Create object for the webservice
 - * Create object to hold webservice response
 - * Call the webservice
 - * Analyze the results



Sample Webservice Call

```
String iMISID = "101"; //Could be the id number of the currently logged in person
wsContacts.wsContacts objwsContacts = new wsContacts.wsContacts();
wsContacts.Results objResults = new wsContacts.Results();
objResults = objwsContacts.getContact(iMISID);
if (objResults.ResultCode != 0)
{
    HttpContext.Current.Response.Redirect(ConfigurationManager.AppSettings["ErrorPage"] +
        "?message=Error getting contact: " + iMISID + " - " +
        HttpContext.Current.Server.UrlEncode(objResults.ResultMessage));
}
else
{
    wsContacts.ContactStruct myContact = objResults.Contacts[0];
    String welcomeMessage = "Welcome " + myContact.FirstName + "!";
}
```



Sample Methods

- * Information on the ATS Website at <http://www.atsol.org/>
- * Demo calls at <http://demo.atsol.org/WebServices.aspx>

wsContacts

Click [here](#) for a complete list of operations.

getContact

Returns contact information for the passed in iMIS ID.

Test

To test the operation using the HTTP POST protocol, click the 'Invoke' button.

Parameter	Value
ContactId:	<input type="text" value="101"/>



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Sample Results

```
-<Results>
  -<Contacts>
    -<ContactStruct>
      <AddressCount>0</AddressCount>
    -<Addresses>
      -<Address>
        <Address1>P.O. Box 1111</Address1>
        <Address2/>
        <Address3/>
        <AddressFormatCode>0</AddressFormatCode>
        <AddressNumber>1</AddressNumber>
        <AddressPurpose>Address</AddressPurpose>
        <BadAddressReasonCode/>
        <Barcode>/0710725648</Barcode>
        <CarrierRoute/>
        <City>Newark</City>
        <Country/>
        <County/>
        <DeliveryPointBarcode/>
        <Directions/>
        <EmailAddress>rrichter@atsol.org</EmailAddress>
        <Fax/>
        <FormattedAddress>P.O. Box 1111 Newark, NJ 07107-2564</FormattedAddress>
        <InstituteName>Prodigy Makers International</InstituteName>
        <IsPreferredBill>true</IsPreferredBill>
        <IsPreferredMail>true</IsPreferredMail>
        <IsPreferredShip>true</IsPreferredShip>
        <LastQASBatchDateTime>0001-01-01T00:00:00</LastQASBatchDateTime>
        <LastVerifiedOn>0001-01-01T00:00:00</LastVerifiedOn>
        <LocalGovernmentDistrict1/>
        <LocalGovernmentDistrict2/>
```



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Licensing

- * Licensed per SUITE, Contacts, Dues, Orders, Events, Fundraising (\$2500 each)
- * Individual bridges to third party platforms are licensed separately (Price based on # of iMIS users)
- * If you are licensed for the ATS Online Marketplace you are automatically licensed for the corresponding webservice suites.
- * Full support is included for first year and is optional year 2 and beyond for additional SU fee.
 - * Includes any bug fixes
 - * New functionality/methods
 - * Versions to match iMIS upgrades



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Installation and Support

- * Typically scheduled in 1-2 weeks
- * WSDL definitions are very complete and include descriptions
- * Clients often reserve 4 hours for application support if needed to help with asking what methods to call in what order (for example)
 - * Create an order and let iMIS calc Freight, Tax, and Handling
 - * Collect and authorize a credit card
 - * Create the Batch
 - * Place the Order
 - * Delay Capture the Card



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Thank You

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<http://www.atsol.org/>



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