

# AuctionServices Integration Documentation v0.9

## Ignite Beta RC2

### October 15, 2008

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# Introduction

Ignite is written in the latest version (as of this writing) of Ruby on Rails. As such, the core integration strategy for native integration with Ignite is using REST to send and receive XML. The intent of this document is to describe, in detail:

1. How Rails expects data to be sent and received via its service endpoints.
2. How Ignite alters this process according to AuctionServices business rules.
3. Common data formats which are used with Ignite.

## RESTful Rails

Rails, and therefore Ignite, is “opinionated” about the production and consumption of data with REST services.

### Overview

Starting with a very simplified concept, let’s consider a blog written RESTfully in Rails. The blog has two models, a Post and a Comment, which correlate to tables in a supporting database which store the data for these models. And the database (and Rails) will track the relationship between a Post and a Comment (in this case, a Post has many Comments, and a Comment belongs to a Post, indicating a one-to-many relationship within the database).

A Rails application written with REST services in mind will likely have two controllers for these models, a PostsController and a CommentsController. These controllers can be accessed with the following URLs:

- <http://our.imaginary.blog/posts>
- <http://our.imaginary.blog/comments>

Using a browser, one can hit either URL and pull a list of posts, as though to look at the frontpage of a blog, or a list of comments, respectively. Now, the list of comments is not particularly useful in and of itself, other than tracking overall activity and response on the blog, which is found most often in an RSS perspective. It would be more apt to have a context when viewing comments, and for a blog, the most common, logical context to provide is “all comments for a particular post”.

There are a number of approaches the developer can take at this point to provide such a URL to the end-user. The most frequent pattern encountered is relating the relationship (detailed above) between a Post and a Comment in the form of the following URL:

<http://our.imaginary.blog/posts/1/comments>

Where the 1 in the above URL is the ID for a particular post stored in the blog, and as such, is subject to change on a post-by-post basis. The above URL would present to the web browser all Comments available belonging to a Post with an ID of 1.

Now, transitioning away from the web browser context and into a RESTful library context, the above example remains valid but the URLs, which will be referred to hereafter as “endpoints”, change. The following endpoints, in a RESTful Rails website, will be in the order that they are presented above:

- <http://our.imaginary.blog/posts.xml>
- <http://our.imaginary.blog/comments.xml>
- <http://our.imaginary.blog/posts/1/comments.xml>

These endpoints will do the same thing as the browser-oriented URLs. Although instead of presenting a web page to a browser, will present what will be referred to hereafter as “resources”, in this case: a list of a posts, a list of comments (for all posts on the blog), and a list of comments for a post with an ID of 1, respectively. The difference being that the output of these resources will be in the form of XML (specified by the .xml extension to the URL/endpoint), which represents the resource in a straight-forward, easily parseable manner.

Other common extensions can be substituted to varying degrees of success, depending on the developer of the Rails site.

## Interaction

While a user with a web browser can view, create, update, and delete the data that they see via a web browser with forms provided by the developer of the site, using RESTful Rails, there are rules to follow.

Rails uses a broader range of HTTP verbs to facilitate RESTful interaction. While a normal web browser will only manage GET and POST verbs on a routine basis, Rails requires the library to manage to “speak” four HTTP verbs: GET, POST, PUT, and DELETE. The general rules for each of these verbs are:

- **GET** allows a client to view resources.
- **POST** is meant to create resources.
- **PUT** alters resources.
- **DELETE** removes resources.

Rails pairs particular HTTP verbs with particular endpoints to make available operations on various resources to a client library. With this in mind, and considering one set of endpoints (those having to do with posts) in our imaginary blog above, the following are examples of what a REST request is required to be to take advantage of all functions provided:

- **GET /posts.xml** will view all posts in our blog.
- **GET /posts/1.xml** will view the post with an ID of 1.
- **POST /posts.xml** will create a new post.
- **PUT /posts/1.xml** will alter the post with an ID of 1.
- **DELETE /posts/1.xml** will remove the post with an ID of 1.

Substituting all variations of “post” for “comment” in the list above will give you the endpoints and operations on resources having to do with the Comment model. Additionally, given our blog example above, **GET /posts/1/comments.xml** will provide a list of comments for the post having an ID of 1.

All resources at all endpoints on a RESTful Rails server will be accompanied by common HTTP headers. In particular, HTTP Status Codes are used to indicate the general status of a resource at an endpoint. The following statuses are used in particular:

- **200 OK** is most commonly encountered. This means your operation was successful.
  - In response to a GET request, it means that there is data to follow.
  - In response to a PUT request, it means that the resource (specifically the model object) has been updated successfully.
  - In response to a DELETE request, it means that the resource has been deleted successfully.
- **201 Created** is the successful response to a POST verb.
  - This status is accompanied by the body of the newly-created resource (specifically the model object) in XML format.
  - It is also accompanied by the location of the newly-created resource. For instance, a new post at /posts.xml will yield a location of /posts/2.xml if the new post has an ID of 2.
- **401 Unauthorized** means that the endpoint requires authentication to perform the action requested.
- **403 Forbidden** means that the request provided authentication, but the authenticated entity (generally if not always a user account) did not have authorization to perform the action requested.
- **404 Not Found** means that the resource was not found at this particular endpoint. In our blog right now, GET /posts/9999.xml will return with a 404.
- **405 Method Not Allowed** would typically be found via a client development mistake, so is included in this list. This would most commonly be found with a POST on an existing entity. This may also be presented as a 501 HTTP Status code.
- **422 Unprocessable Entity** is a “correct” failure. The transaction is correct insofar as RESTfulness and HTTP is concerned, but the server could not process the data provided. This is specifically an error of validation in Rails.
  - This is accompanied with an XML body which describes the errors which caused the request to fail for feedback purposes.
- **500 Internal Server Error** is the dreaded server error.

- **501 Not Implemented** may also be presented instead of a 405 HTTP Status Code. This would typically indicate a mistake in client development.

## Ignite Integration

From this point, there are a number of choices of interacting RESTfully with a Rails server which involve the decisions made by the developer of the software. Therefore, it is time to put our imaginary blog down and pick up Ignite.

Ignite, as of this release, is an upgrade of AuctionServices' existing calendar and state association management software, with additional employee management functionality for auctioneers. Ignite serves as the point of administration as well as the server-tier component to our new client architecture which powers our hosted sites, portals, and corporate presence.

### Entity Relationships

A high-level view of the various entities available within Ignite to developers are as follows:

- Company
  - Location
  - Auctions
    - Location
    - Events
    - Images
    - Galleries
      - Images
    - Documents
    - Links
    - Catalogs
  - Catalogs
    - Items
      - Location
      - Images
      - Documents
      - Links

These relationships are reflected in the contextual URL/endpoints discussion below.

Note that Locations, Images, Documents, and Links are shared resources within Ignite. These entities can belong to multiple other entities. Specifying the belonging relationships are done via two fields within each shared resource entities. Fields ending with "type" are Strings which contain the singular name of the parent resource, first

letter capitalized. Fields ending with id are Integers, and is the ID of the parent resource. These foreign-keys are provided below:

- Images
  - imageable\_type
  - imageable\_id
- Documents
  - documentable\_type
  - documentable\_id
- Links
  - linkable\_type
  - linkable\_id
- Location
  - locatable\_type
  - locatable\_id

More information regarding these fields are found below in the XML format descriptions.

## **REST Endpoints**

To create, update, and delete auctions and its various, supporting sub-entities, the following URLs are used. Note that under each URL various actions denoting additional endpoints are listed. These provide the “has many” parent-child relationship as described above with the posts/comments example.

- <http://ignite.auctionservices.com/auctions>
  - events
  - images
  - galleries
  - documents
  - links
  - catalogs
- <http://ignite.auctionservices.com/catalogs>
  - items
- <http://ignite.auctionservices.com/categories>
- <http://ignite.auctionservices.com/companies>
  - current\_auctions
  - past\_auctions
  - archived\_auctions
- <http://ignite.auctionservices.com/documents>
- <http://ignite.auctionservices.com/events>
- <http://ignite.auctionservices.com/galleries>
- <http://ignite.auctionservices.com/images>
- <http://ignite.auctionservices.com/items>
  - documents
  - links

- images
- <http://ignite.auctionservices.com/links>
- <http://ignite.auctionservices.com/locations>

Here are a few examples of the full contextual URLs:

- <http://ignite.auctionservices.com/auctions/1/events>
- <http://ignite.auctionservices.com/items/1/links>
- [http://ignite.auctionservices.com/companies/1/current\\_auctions](http://ignite.auctionservices.com/companies/1/current_auctions)
- <http://ignite.auctionservices.com/catalogs/1/items>

Bear in mind that the provided URLs are not listed in “endpoint format”. These URLs are the base strings used to derive REST endpoints as described earlier in this document (see the **Interaction** section under **RESTful Rails**).

Note that the contextual URLs are provided for reading data ONLY, and cannot be used to create, update, or delete data.

Also note that, due to scalability concerns, reading full lists of data from each of these endpoints are disabled (you can only read what your account is permitted to read) via the contextual endpoints provided in the list above.

## XML Formats

Reading from and writing to Ignite REST services utilize two different, but related XML formats. The following formats represent the transactional format of the entities managed by Ignite. These are stand-alone formats meant to interact with Ignite transactionally via service endpoints.

The following information regarding the formats are below:

- Strings are 255 characters and typically do not allow HTML.
- Text fields (or just Text) are typically up to 32KB or higher, and typically do allow HTML.
- HTML permissiveness is noted.
- If a field has a value, it is the default value.
- XML nodes can be written with dashes (as in auction-id) or with underscores (as in auction\_id). It is recommended to use dashes in the transactional formats. Underscores are used in output formats for compatibility purposes.

### Company

```
<?xml version="1.0" encoding="UTF-8"?>
<company>
  <name></name>
  <web-site></web-site>
</company>
```

name: String. Required.  
web-site: String.

## Auction

```
<?xml version="1.0" encoding="UTF-8"?>
<auction>
  <company-id></company-id>
  <details></details>
  <directions></directions>
  <is-archived>false</is-archived>
  <is-closed>false</is-closed>
  <is-manual>false</is-manual>
  <is-past>false</is-past>
  <is-published>false</is-published>
  <is-publishing>false</is-publishing>
  <is-sold>false</is-sold>
  <short-description></short-description>
  <subtitle></subtitle>
  <subtitle-color></subtitle-color>
  <terms></terms>
  <title></title>
</auction>
```

company-id: Integer. Required.  
details: Text. HTML Allowed.  
short-description: String. Required. HTML Allowed.  
subtitle: String.  
subtitle-color: String. Note: correlates to CSS values for color.  
terms: Text. HTML Allowed.  
title: String. Required.  
is-archived: Boolean fields for rapid access to auction status. Not required. Defaults as shown.  
is-closed: Boolean fields for rapid access to auction status. Not required. Defaults as shown.  
is-manual: Boolean fields for rapid access to auction status. Not required. Defaults as shown.  
is-past: Boolean fields for rapid access to auction status. Not required. Defaults as shown.  
is-published: Boolean fields for rapid access to auction status. Not required. Defaults as shown.  
is-publishing: Boolean fields for rapid access to auction status. Not required. Defaults as shown.  
is-sold: Boolean fields for rapid access to auction status. Not required. Defaults as shown.

## Catalog

```
<?xml version="1.0" encoding="UTF-8"?>
<catalog>
  <auction-id></auction-id>
  <company-id></company-id>
  <currency-id></currency-id>
  <details></details>
  <ordering></ordering>
  <short-description></short-description>
  <terms></terms>
  <title></title>
</catalog>
```

auction-id: Integer. Required.  
company-id: Integer. Required.  
currency-id: Integer. Required.  
details: Text. HTML Allowed.  
ordering: Integer.  
short-description: Text. HTML Allowed.

## Location

```
<?xml version="1.0" encoding="UTF-8"?>
<location>
  <city></city>
  <country-id></country-id>
  <first-address></first-address>
  <is-geolocatable></is-geolocatable>
  <latitude></latitude>
  <locatable-id></locatable-id>
  <locatable-type></locatable-type>
  <longitude></longitude>
  <second-address></second-address>
  <state-id></state-id>
  <third-address></third-address>
  <zipcode></zipcode>
</location>
```

city: String.  
country-id: Integer. Required.  
is-geolocatable: Boolean indicating the presence or requirement of computation of latitude and longitude.  
latitude: Float.  
longitude: Float.  
state-id: Integer. Required.  
zipcode: String.  
first-address: String. Required.  
second-address: String.  
third-address: String.  
locatable-type: String. One of Auction, Item, Event, Company, etc.

You may provide your own latitude and longitude values for a location. If so, you must set is-geolocatable to true. Setting is-geolocatable to true without providing these values will instruct Ignite to derive these values for you. Ignite will reset the is-geolocatable flag if a latitude and longitude cannot be found.

## Event

```
<?xml version="1.0" encoding="UTF-8"?>
<event>
  <alternate-text></alternate-text>
  <auction-id></auction-id>
  <ending-at></ending-at>
  <starting-at></starting-at>
  <variant></variant>
  <zone></zone>
</event>
```

alternate-text: String.

auction-id: Integer. Required.  
ending-at: Date in ISO Web Format. Required for Bidding and Inspection variants.  
starting-at: Date in ISO Web Format. Required.  
zone: String as Ruby-formatted TimeZone.  
variant: String. One of Auction, AuctionOnline, Inspection, OnlinePreBidding, OnlineBidding

Notes: Variants are keywords delineating small bits of business logic. Auction variants are floor events. Inspection variants are for lot inspection prior to the Auction. OnlinePreBidding variants are for online bidding prior to the auction event. OnlineBidding variants denote an online bidding window. AuctionOnline variants are a combination of the Auction and OnlineBidding variants.

Auction, Inspection, and AuctionOnline variants require a Location entity to render properly on our portals and websites.

## Image

```
<?xml version="1.0" encoding="UTF-8"?>
<image>
  <description></description>
  <imageable-id></imageable-id>
  <imageable-type></imageable-type>
  <ordering></ordering>
  <title></title>
  <url></url>
</image>
```

imageable-id: Integer. Required.  
imageable-type: String. One of Auction, Gallery, or Item. Required.  
description: Text. HTML is not allowed. Required.  
title: String. Required.  
URL: String. Requires http:// prefix and must be publicly available. Required.

Notes: On image creation, Ignite will download the image if it is available and ingest the file into the system. Any changes to the file at its original URL will not be reflected in Ignite unless the image is edited. On create or update, Ignite will create 4 thumbnails for an image. These thumbnails are: large-url, medium-url, small-url, and tiny-url. These XML nodes are available on reading the image object.

## Link

```
<?xml version="1.0" encoding="UTF-8"?>
<link>
  <html></html>
  <linkable-id></linkable-id>
  <linkable-type></linkable-type>
  <title></title>
  <url></url>
  <variant></variant>
</link>
```

html: String. Required for Video variant.. This is the HTML output of the link.  
linkable-id: Integer. Required.  
linkable-type: String. One of Auction or Item. Required.  
title: String. Required for Base variants.  
url: String. Required for all variants except Video.

variant: String. One of Base, MoreInfo, OnlineBidding, OnlinePreBidding, Video, or VirtualTour.

Notes: Base variants are listed in Ignite administration is a General/All-Purpose Link, and that is their intent.

## Gallery

```
<?xml version="1.0" encoding="UTF-8"?>
<gallery>
  <auction-id></auction-id>
  <ordering></ordering>
  <title></title>
</gallery>
```

auction-id: Integer. Required.

ordering: Integer.

title: String. Required.

## Document

```
<?xml version="1.0" encoding="UTF-8"?>
<document>
  <documentable-id></documentable-id>
  <documentable-type></documentable-type>
  <title></title>
  <url></url>
</document>
```

documentable-id: Integer. Required.

documentable-type: String. One of Auction or Item. Required.

title: String. Required.

url: String. Requires http:// prefix and must be publicly available. Required.

Notes: On document creation, Ignite will download the document if it is available and ingest the file into the system. Any changes to the file at its original URL will not be reflected in Ignite unless the document is edited.

## Item

```
<?xml version="1.0" encoding="UTF-8"?>
<item>
  <details></details>
  <estimated-maximum-value></estimated-maximum-value>
  <estimated-minimum-value></estimated-minimum-value>
  <number></number>
  <quantity></quantity>
  <serial-number></serial-number>
  <short-description></short-description>
  <title></title>
</item>
```

details: Text. HTML Allowed.

estimated-maximum-value: Float.

estimated-minimum-value: Float.

number: Integer. This is the Lot Number.  
quantity: Integer.  
serial-number: String.  
short-description: String. HTML Allowed.  
title: String. Required.

## Car

```
<?xml version="1.0" encoding="UTF-8"?>
<item>
  <clear-title></clear-title>
  <condition></condition>
  <details></details>
  <doors></doors>
  <engine></engine>
  <estimated-maximum-value></estimated-maximum-value>
  <estimated-minimum-value></estimated-minimum-value>
  <exterior></exterior>
  <fuel-type></fuel-type>
  <inspection></inspection>
  <interior></interior>
  <make></make>
  <miles></miles>
  <model></model>
  <number></number>
  <quantity></quantity>
  <serial-number></serial-number>
  <short-description></short-description>
  <title></title>
  <transmission></transmission>
  <vin></vin>
  <warranty></warranty>
  <wheel-drive></wheel-drive>
  <year></year>
</item>
```

details: Text. HTML Allowed.  
estimated-maximum-value: Float.  
estimated-minimum-value: Float.  
number: Integer. This is the Lot Number.  
quantity: Integer.  
serial-number: String.  
short-description: String. HTML Allowed.  
title: String. Required.  
clear-title: Boolean.  
condition: String.  
doors: Integer  
engine: String.  
exterior: String. (This is a color.)  
fuel-type: String.  
inspection: Boolean.  
interior: String. (This is a color.)  
make: String.  
miles: Integer

model: String.  
title: Boolean.  
transmission: String.  
vin: String.  
warranty: Boolean.  
wheel-drive: String.  
year: Integer.

## House

```
<?xml version="1.0" encoding="UTF-8"?>
<item>
  <apn></apn>
  <area></area>
  <bathrooms></bathrooms>
  <bedrooms></bedrooms>
  <deed-book></deed-book>
  <details></details>
  <estimated-maximum-value></estimated-maximum-value>
  <estimated-minimum-value></estimated-minimum-value>
  <garage></garage>
  <grid></grid>
  <house-type></house-type>
  <lot></lot>
  <lot-size></lot-size>
  <number></number>
  <quantity></quantity>
  <rooms></rooms>
  <serial-number></serial-number>
  <sheds></sheds>
  <short-description></short-description>
  <square-footage></square-footage>
  <title></title>
  <views></views>
</item>
```

details: Text. HTML Allowed.  
estimated-maximum-value: Float.  
estimated-minimum-value: Float.  
number: Integer. This is the Lot Number.  
quantity: Integer.  
serial-number: String.  
short-description: String. HTML Allowed.  
title: String. Required.  
apn: String.  
area: String.  
bathrooms: Float.  
bedrooms: Integer.  
deed-book: String.  
garage: String.  
grid: String.  
house-type: String.  
lot: String.  
lot-size: Float.

rooms: Integer.  
sheds: Boolean.  
square-footage: Integer.  
views: Boolean.

Formatted for reading, the following XML is indicative of one auction with multiple sub-entities. Sub-entities, such as links, are grouped together in a node plural of the form of the subnodes: links is the parent node of multiple link nodes, events is the parent node of multiple event nodes, etc.

Note that, programmatically, the XML is rendered in a tiered fashion. Therefore, any subentity with subentities of its own, when rendered by itself, will also render its subentities. Events rendered singularly will render its location should it have one, catalogs rendered singularly will render all the items within the catalog, items will render images, documents, links, location when rendered singularly, and so on. Also note is that dashes are converted to underscores.

This is a real auction with its values stripped out.

```
<?xml version="1.0" encoding="UTF-8"?>
<auction>
  <details nil="true"></details>
  <directions nil="true"></directions>
  <id type="integer"></id>
  <is_archived type="boolean"></is_archived>
  <is_closed type="boolean"></is_closed>
  <is_manual type="boolean"></is_manual>
  <is_past type="boolean"></is_past>
  <is_published type="boolean"></is_published>
  <is_publishing type="boolean"></is_publishing>
  <is_sold type="boolean"></is_sold>
  <short_description></short_description>
  <sort_date type="datetime"></sort_date>
  <subtitle></subtitle>
  <subtitle_color></subtitle_color>
  <terms nil="true"></terms>
  <title></title>
  <categories type="array">
    <category>
      <abbreviation></abbreviation>
      <id type="integer"></id>
      <name></name>
    </category>
    <category>
      <abbreviation></abbreviation>
      <id type="integer"></id>
      <name></name>
    </category>
  </categories>
  <catalogs type="array">
    <catalog>
```

```

<details></details>
<id type="integer"></id>
<ordering type="integer" nil="true"></ordering>
<short_description></short_description>
<terms></terms>
<title></title>
<currency>
  <abbreviation></abbreviation>
  <id type="integer"></id>
  <name></name>
</currency>
<items type="array">
  <item>
    <details nil="true"></details>
    <estimated_maximum_value type="float"></estimated_maximum_value>
    <estimated_minimum_value type="float"></estimated_minimum_value>
    <id type="integer"></id>
    <number type="integer"></number>
    <quantity type="integer" nil="true"></quantity>
    <serial_number></serial_number>
    <short_description></short_description>
    <title></title>
    <label></label>
    <category>
      <abbreviation></abbreviation>
      <id type="integer"></id>
      <name></name>
    </category>
    <currency>
      <abbreviation></abbreviation>
      <id type="integer"></id>
      <name></name>
    </currency>
    <documents type="array"/>
    <images type="array"/>
    <links type="array"/>
    <auction_id></auction_id>
  </item>
  <item>
    <details></details>
    <estimated_maximum_value type="float"></estimated_maximum_value>
    <estimated_minimum_value type="float"></estimated_minimum_value>
    <id type="integer"></id>
    <number type="integer"></number>
    <quantity type="integer" nil="true"></quantity>
    <serial_number></serial_number>
    <short_description></short_description>
    <title></title>
    <label></label>
    <category>
      <abbreviation></abbreviation>
      <id type="integer"></id>
      <name></name>
    </category>
  </item>
</items>

```

```

<currency>
  <abbreviation></abbreviation>
  <id type="integer"></id>
  <name></name>
</currency>
<documents type="array"/>
<images type="array"/>
<location>
  <city></city>
  <first_address></first_address>
  <id type="integer"></id>
  <is_geolocatable type="boolean"></is_geolocatable>
  <latitude type="float" nil="true"></latitude>
  <longitude type="float" nil="true"></longitude>
  <second_address></second_address>
  <third_address></third_address>
  <zipcode></zipcode>
  <state>
    <abbreviation></abbreviation>
    <id type="integer"></id>
    <name></name>
  </state>
  <country>
    <abbreviation></abbreviation>
    <id type="integer"></id>
    <name></name>
  </country>
</location>
<links type="array"/>
<auction_id></auction_id>
</item>
<item>
  <details></details>
  <estimated_maximum_value type="float"></estimated_maximum_value>
  <estimated_minimum_value type="float"></estimated_minimum_value>
  <id type="integer"></id>
  <number type="integer"></number>
  <quantity type="integer" nil="true"></quantity>
  <serial_number></serial_number>
  <short_description></short_description>
  <title></title>
  <label></label>
  <category>
    <abbreviation></abbreviation>
    <id type="integer"></id>
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```

## Further notes on items, cars, and houses

When rendered singularly, a base Item will have a root node of “item”, a Car will have a root node of “car”, and Houses (meant for residential real-estate in general) will have a root node of “house”. As cars and houses are subclasses of item, all objects of each class share the same fields. However, the subclasses repress printing of non-applicable fields, and the Item superclass represses printing of all extraneous fields. When interacting with Ignite transactionally, the templates supplied above are mandatory for use for each type, i.e., do not use a root node other than “item” in your XML.

Distinguishing between an Item and a Car or House is done with the use of the `<category_id></category_id>` field.

## Publishing

Once auctions, catalogs and items (lots) are added to Ignite, they are not automatically available to our portals and customer or association sites. These entities must be published in order to be viewable to the public at large. This is accomplished by a creating a publish profile. The endpoint for publish profile creation is:

<http://ignite.auctionservices.com/publishes>

And the format required to create a publish profile is as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<publish>
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  <auction-zip-password></auction-zip-password>
  <auction-zip-username></auction-zip-username>
  <naa-password></naa-password>
  <naa-username></naa-username>
  <proxibid-password></proxibid-password>
  <proxibid-username></proxibid-username>
  <to-auction-zip>>false</to-auction-zip>
  <to-company>>true</to-company>
  <to-naa>>false</to-naa>
  <to-portals>>true</to-portals>
  <to-proxibid>>false</to-proxibid>
</publish>
```

Of the above fields, only auction-id is required.

A publish profile will cause the Ignite daemon to begin the publish process for a particular auction. As the publish process is focused on auctions, in order to publish catalogs and items (lots), items must be correctly associated with a catalog, and the catalog must be associated with an auction prior to publishing the auction.

Any changes made to an auction after publishing the auction will require a new publish profile created for that auction before those changes are made public.

## Searches

Searches in Ignite are the principle method of pulling auction data from Ignite. Searches are metadata which provide a cached resultset which supports pagination in a wide array of output formats, including XML, JSON, and RSS. For developers and partners wishing read-only access to Ignite, you must request a search from an AuctionServices team member who will supply you a Search ID containing the search you specified. You will be provided additional, supplemental documentation regarding interacting with the search mechanism.

# Glossary

- **Controller:** Connects URLs with webpages, or endpoints with resources.
- **Endpoint:** A URL which can be interacted with in a RESTful manner. Not all URLs are endpoints, but all endpoints are URLs.
- **Model:** A model is a class which represents data. In Rails and Ignite, a model is most often the representation of a particular table in a database. Instantiating an object from a model is a representation of a row in that database.
- **Resource:** Data found at an endpoint. In Rails, a resource can be one or more instances of a model.