



RedMystic Developers Guide

Intended Audience: This guide is geared towards programmers that are interested in developing software to load products from various shopping carts to Redmystic and Google merchant center (Google base).

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Developer Requirements

Communicating with Redmystic is a relatively easy process but does require a few key skills.

1. A basic understanding the http protocol
2. An understanding and method of invoking http programatically (e.g. php)
3. Sql databases e.g. mysql
4. XML and libraries to read them
5. A good understanding of the targeted shopping cart

Shopping Cart Requirements

Since Redmystic communicates via http protocols there should be no limitations to posting requests and products to Redmystic.

Hosting Requirements

1. Outbound http/https protocols must not be blocked or provide a proxy mechanism
2. Server support for your particular language (e.g. php)

Design Principles

Redmystic works differently than you might expect due a few principles we felt important to adhere to:

1. First and foremost loosing a sale because of a delay in communication was unacceptable.
2. Appeal to the least common denominator. Most store owners have little understanding of cron or other server based tools.
3. Keep it as simple as possible and at the same deliver compelling functionality

To adhere to the design principles we opted to use a "pull" method instead of a push. This approach relieves potential customers from the direct impact of a feed transfer. It also allows for standard protocols that every webserver will have and avoids firewall restrictions on some hosting environments.

A typical scenario works like this... Product changes are detected and a very small and fast ping message is sent to the Redmystic server. The ping is verified to be valid and queued up on the Redmystic server. Included in the ping is a return call that will render a compressed feed file. The feed file is consumed by Redmystic and forwarded to Google if requested.



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Credentials

Redmystic uses username/passwords and keys to uniquely identify users, sites and software. Each of these are required to successfully communicate with the Redmystic server.

Softwarekey:

Description: A softwarekey uniquely identifies your software. Software keys can be registered in RedMystic Extension Manager (REM). First you will need to [request access to RedMystic Extension Manager - REM](#).

Responsible: Developers are responsible of retrieving a key, embedded with your application and submitting with each call to Redmystic

Registration:

Description: Each site must supply a username and password that was registered at redmystic.com .

User

Responsible: Site owners are responsible for obtaining a username and password. Developers are responsible for building a mechanism to send username/password with requests

Site Keys:

Site keys are unique identifiers for each site. Site Keys can be obtained from Redmystic.com

Responsible: Site owners are responsible for obtaining a sitekey. Developers are responsible for building a mechanism to send sitekeys with requests

Component Key:

Although not required it is highly recommended that you provide a component key within your pingback url to ensure that the calling service is Redmystic.

Services:

RedMystic provides a number of services to facilitate feed requests, retrieval of product metrics and site rank. These services can be called using standard http/https protocols and produce xml responses. All services require a valid softwarekey, sitekey and account username/password.

- **Product Feed**

The product feed service provides the mechanism to load products to RedMystic and optionally the Google Base. Each feed represents a complete refresh of products and statistics. The process involves two stages

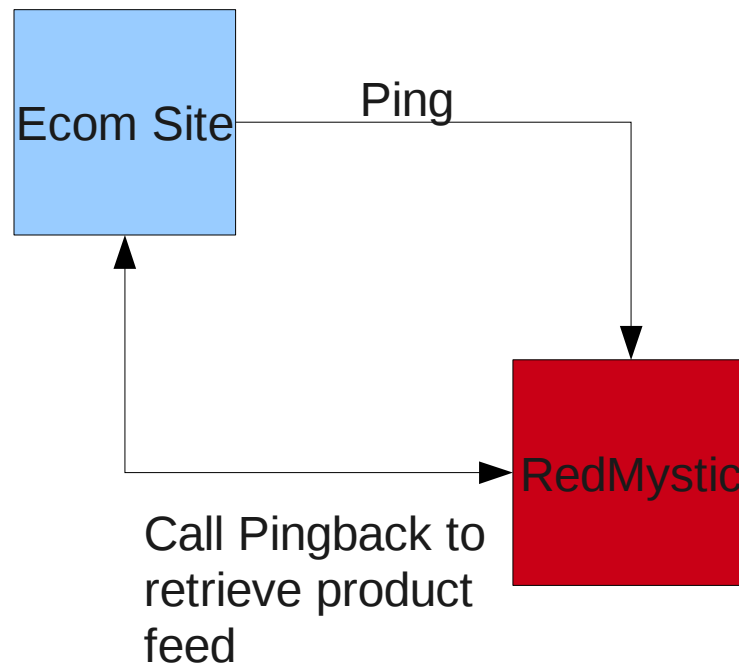
1. Ping: A fast asynchronous http request is sent to redmystic that is queued for processing. Included in this request is pingback url that will produce the actual product feed. This design ensures potential shoppers do not experience the burden of a slow network, servers etc.



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2. Pingback: As mentioned in step1, redmystic will queue ping requests in the order received. The pingback url is then called using the http protocol and expects a zip compressed file to be returned (only zip compression is supported). The name of the zip file is not important to redmystic but is very important to Google Base. The contents of the zip file must be an xml file named prods.xml.

Call workflow:



The anatomy of a ping request:

<https://www.redmystic.com/ping.php?username=someuser&password=somepass&sitekey=somesitekey&genable=Yes&guser=googleuser&gpass=googlepass&softwarekey=somesoftwarekey&ver=someversion&fragments=xxxx&pingback=http://yoursite.com/yourfeed.php>

Protocols:

http: Yes
https: Yes (must allow for self-signed certs)

Form Methods:

Post: Yes
Get: No

Form Variables:



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username:

Description: Username the site owner registers with at Redmystic.com

Required: Yes

Valid Values: Variable

Default: None

password:

Description: Password the site owner registers with at Redmystic.com

Required: Yes

Valid Values: Variable

Default: None

sitekey:

Description: Sitekey the site owner registers at Redmystic.com

Required: Yes

Valid Values: Variable

Default: None

genable:

Description: Indicates if feed should be forward to Google base (“Yes”, “No)

Required: Yes

Valid Values: Yes, No

Default: No

guser:

Description: Google base ftp username

Required: Yes if genable is set to “Yes” otherwise No

Valid Values: Variable

Default: None

gpass:

Description: Google base ftp password

Required: Yes if genable is set to “Yes” otherwise No

Valid Values: Variable

Default: None

softwarekey:

Description: Your software key registered at Redmystic.com

Required: Yes

Valid Values: Variable

Default: None

ver:

Description: Version number of your software

Required: Yes

Valid Values: Variable

Default: None

fragments:

Description: The number of feed fragments that comprise a product feed.

Fragmentation is a method of dividing up a product feed into



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smaller more manageable parts. This helps reduce resource constraints and timeout conditions. The number of fragments will direct the redmystic server to make that many pingback calls.

Required: Yes

Valid Values: 1-255

Default: 1

pingback:

Description: The urlencoded pingback url that produces the site's product feed. It is recommended that you also pass a unique md5 hash key to ensure that the pingback call is from redmystic.com.

Required: Yes

Valid Values: Variable

Default: None

connectiontest

Description: Test mode

Required: No

Valid Values: 1, 0

Default: None

Return Response:

** If the call has any possibility of burdening a potential customer/sale then it is highly recommended not to wait for the return call.

An xml response in the following format:

```
<?xml version="1.0" encoding="iso-8859-1"?>
<pingresult>
  <response>RESPONSE_CODE</response>
</pingresult>
```

Valid Response Codes:

001: Success

002: Invalid Credentials

003: Invalid Site Key

004: Unable to connect to Google base

005: Unable to authenticate to Google Base FTP

007: Invalid Software Key

010: Blocked Site

011: Blocked User

The anatomy of a Feed file:

Redmystic server will queue and call the pingback url embedded in the ping request. The request will include an additional parameter called "fragment" which will start with 1 and increment up to the max number of "fragments"



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requested in the original ping request. Redmystic expects the pingback url to serve up a feed file compressed in the popular zip format. The filename is not important with respect to Redmystic but is very important in terms of google (See the merchant center for details). The contents of the zip file must be called prods.xml and represents a complete data set of products. Products will be cleared and reloaded on both Redmystic and Google.

Redmystic leverages the Google RSS feed specification. Redmystic currently uses a subset of the entire specification and also extends it to deliver additional items of interest. More details of the Google specification can be [found here](#)

The following standard attributes are supported by Redmystic

1. <g:id>
2. <title>
3. <link>
4. <description>
5. <g:brand>
6. <g:currency>
7. <g:price>
8. <g:tax><g:rate>
9. <g:weight>
10. <g:shipping><g:price>
11. <g:condition>
12. <g:expiration>
13. <g:mpn>
14. <g:upc>
15. <g:isbn>
16. <g:image_link>

The following custom attributes are also supported. All of these attributes enable dynamic shipping that is calculated real-time on Redmysitc.com.

They have no significance to Goolge however.

1. <r:shipping_carrier type="string">
2. <r:shipping_domestic_service type="string">
3. <r:shipping_international_service type="string">
4. <r:shipping_shipfromzip type="string">
5. <r:shipping_shipfromcountry type="string">
6. <r:shipping_weight type="decimal">
7. <r:shipping_handling type="string">

Additional Information about custom attributes can be found here.

<http://base.google.com/support/bin/answer.py?answer=59558&hl=en>

See Appendix A for examples.



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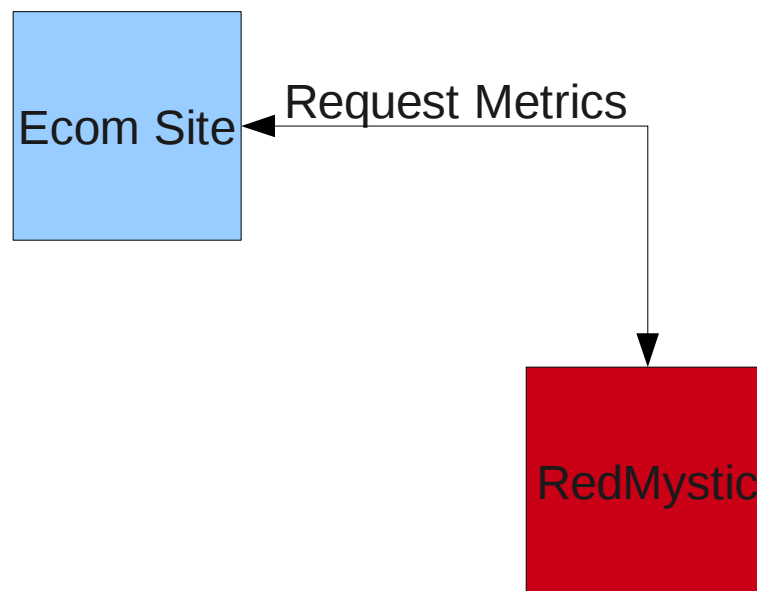
Responses

Automated status emails are submitted to the site owners email address.

- **Performance Metrics**

Basic performance metrics can be retrieved from redmystic.com . Metrics are represented as clicks and impressions for each product from the last successful feed submission. Retrieving metrics simply involves sending a specially crafted http post and consuming the returned xml document. Timing is important because redmystic will validate products prior to making them searchable and available to the statistics service.

Call workflow:



The anatomy of a statistics request:

[https://www.redmystic.com/sitesats.php?](https://www.redmystic.com/sitesats.php?username=someuser&password=somepass&sitekey=somesitekey&softwarekey=somesoftwarekey&ver=someversion)

`username=someuser&password=somepass&sitekey=somesitekey&softwarekey=somesoftwarekey&ver=someversion`

Protocols:



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http: Yes
https: Yes (must allow for self-signed certs)

Form Methods:

Post: Yes
Get: No

Form Variables:

username:

Description: Username the site owner registers with at Redmystic.com
Required: Yes
Valid Values: Variable
Default: None

password:

Description: Password the site owner registers with at Redmystic.com
Required: Yes
Valid Values: Variable
Default: None

sitekey:

Description: Sitekey the site owner registers at Redmystic.com
Required: Yes
Valid Values: Variable
Default: None

softwarekey:

Description: Your software key registered at Redmystic.com
Required: Yes
Valid Values: Variable
Default: None

ver:

Description: Version number of your software
Required: Yes
Valid Values: Variable
Default: None

Return Response:

```
<?xml version="1.0" encoding="utf-8"?>
<rss version="2.0">
<channel>
<title>RedMystic Site Statistics</title>
<lastbuilddate>BUILD_DATE</lastbuilddate>
<generator>RedMystic Stat Creator 1.0.0</generator>
<statsresult><response>RESPONSE_CODE</response>/<statsresult>
<item>
```



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```
<g_sku>PRODUCT_SKU</g_sku>  
<title>PRODUCT_TITLE</title>  
<clicks>NUMBER_OF_CLICKS</clicks>  
<impressions>NUMBER_OF_IMPRESSSIONS</impressions>  
</item>  
</channel>  
</rss>
```

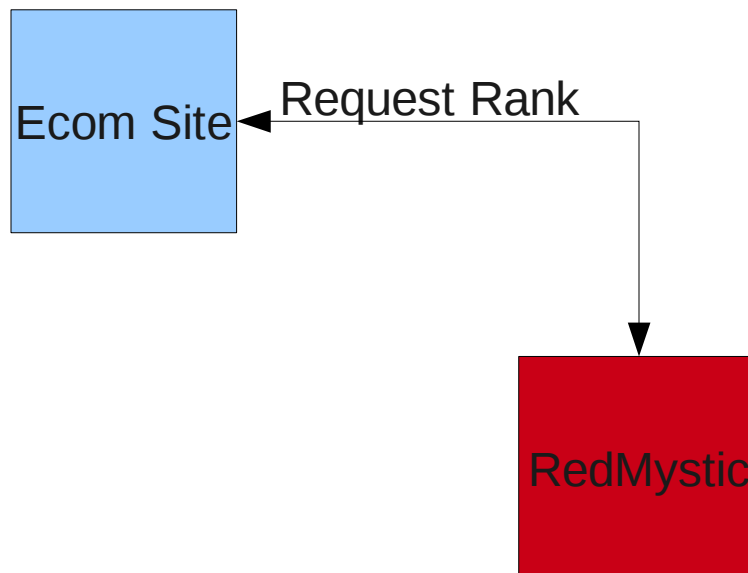
Valid Response Codes:

001: Success
002: Invalid Credentials
003: Invalid Site Key
007: Invalid Software Key
010: Blocked Site
011: Blocked User

- **Rank**

Redmystic periodically ranks all participating sites. Detailed information of the Redmystic ranking system can be found [here](#).

Call workflow:



The anatomy of a rank request:

[https://www.redmystic.com/getrank?
username=someuser&password=somepass&sitekey=somesitekey&softwarekey=somesoftwarekey&ver=someversion](https://www.redmystic.com/getrank?username=someuser&password=somepass&sitekey=somesitekey&softwarekey=somesoftwarekey&ver=someversion)



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Protocols:

http: Yes
https: Yes (must allow for self-signed certs)

Form Methods:

Post: Yes
Get: No

Form Variables:

username:

Description: Username the site owner registers with at Redmystic.com
Required: Yes
Valid Values: Variable
Default: None

password:

Description: Password the site owner registers with at Redmystic.com
Required: Yes
Valid Values: Variable
Default: None

sitekey:

Description: Sitekey the site owner registers at Redmystic.com
Required: Yes
Valid Values: Variable
Default: None

softwarekey:

Description: Your software key registered at Redmystic.com
Required: Yes
Valid Values: Variable
Default: None

ver:

Description: Version number of your software
Required: Yes
Valid Values: Variable
Default: None

Return Response:

```
<?xml version="1.0" encoding="iso-8859-1"?>  
<rank>  
<rankresponse>RESPONSE_CODE</rankresponse>  
<response>RANK</response>  
</rank>
```



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Valid Response Codes:

001: Success

002: Invalid Credentials

003: Invalid Site Key

007: Invalid Software Key

010: Blocked Site

011: Blocked User



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Appendix A

Sample Feed

```
<?xml version="1.0" encoding="utf-8"?>
  <!-- generator="RedMystic FeedCreator 1.2.1" -->
  <rss version="2.0" xmlns:g="http://base.google.com/ns/1.0"
xmlns:r="http://base.google.com/cns/1.0">
  <channel>
    <title> http://www.somesite.com/</title>
    <description>product</description>
    <link> http://www.somesite.com/ </link>
    <lastbuilddate>2010-04-17T21:26:08-06:00</lastbuilddate>
    <generator>Red Mystic FeedCreator 1.0.0</generator>
    <productcount>1</productcount>
    <image>
      <url>http://www.somesite.com/logo_46.png</url>
      <title>RSS Product Feeder</title>
      <link>http://www.somesite.com/</link>
      <description>product</description>
    </image>
    <item>
      <g:id>Product01</g:id>
      <title>Bravia Sony Television</title>
      <description>32' Sony Television 1080p</description>
      <link>http://www.somesite.com/someproduct.html</link>
      <g:condition>New</g:condition>
      <g:expiration>2010-05-17</g:expiration>
      <g:brand>Sony</g:brand>
      <g:image_link>http://www.somesite.com/sony.png</g:image_link>
      <g:currency>USD</g:currency>
      <g:price>3.09000</g:price>
      <g:product_type>Televisions</g:product_type>
    </item>
  </channel>
</rss>
```