# GIATA Integration Developments

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| **Version Number** | **Updates** | **Updated By** |
| 1.00 | Developments Documentation Created | Alex Trumic |
| 1.01 | 21/08/2018 Problem | Alex Trumic |

## 21/08/2018

### Problem:

Contacting Giata WebServices to get specific hotel information takes a long time.

Contacting Giata for specific hotel details is done in two ways

1. Sending individual item requests to Giata to return item details

This method takes a long time because in order to get information on all of Giatas items/hotels over 800,000 calls need to be made.

1. Sending a XML file containing the IDs of wanted items details

This method can send a maximum of 1000 full item detail requests per XML message. To get a response from Giata with response to this XML message, it will take on average about 1min 10sec. Australia itself has 8,500 items that need to be sorted through so even with 9 XML’s messages sent, it will still take over 10 minutes to load the data.

### Possible Solution:

Putting an intermediate application that ‘scrapes’ Giata information into a storage area that can be accessed by the clients mapping application. This intermediate application would have the following features:

1. Ability to do a full scrape of all desired information from Giata (Long time period to complete)
2. Ability to do a partial scrape of all items in Giata that have been changed since last scrape (Will take a shorter time than initial scrape as will only look for items that have changed since the last scrape)

The scraping will result in Giata hotel information being accessible for fast and efficient use.

The intermediate application can be placed in two locations

1. Client side: Clients will have to do the initial set up + set up the constant scrapings before they start using the mapping application. Every client will have to do the same process of downloading the same data.
2. Tourplans side: Tourplan does one initial Scrape and can set it up to run on a schedule to scrape fresh information. Clients do not need to know about the application or do anything extra.

**Data storage methods**

There are different ways of storing the data so the deciding factor when choosing one will be the amount and type of data stored.

If we are saving minimal data such as Name, City, Country and Giata ID then a JSON, or a XML file should be sufficient. This option does not have a lot of scalability with it as this could be a key factor with Giata continually updating their database.

If more data is to be stored then a more elaborate data filing system will have to be put in place. A data base could be a way of storing all data in such a way that it is easily accessible and can store large amounts of data.

**Data that will need to be stored:**

Data that is needed for Phase1 Mapping:

* Name
* City
* Country
* GiataID

Data that could be needed for later phases/later projects

* Fact sheet information(fax, phone, building info)
* Text sheet(General overview for different features of the item/hotel eg: Location, Facilities, sports/entertainment)
* Images(Can come in 3 sizes per image)

All the above data can be saved as a link to the Giata webservice or the actual data itself.

**Saving as a link**

* Quicker initial scrape of information from Giata
* Not as much data to be stored
* Getting the specific information such as the fact sheet will take longer and involve more steps. Would have to set up another connection to Giata
* Can be set up later on to save more data. (why save data that we may or may not use… just use what is needed at the moment)

**Saving all Giata data**

* Longer initial scrape as more webservice calls will have to be made (Could be a very long time for all items to have factsheets, text sheets, and all images)
* Getting information out of this pool of data will be fast
* Lots of data to be stored

**Suggestion/Plan going forward:**

Suggestion/Plan going forward will be decided on when John, Craig, Lorna and Alex have a meeting to discuss the strategy going forward.