Project Scope: Integration of DCUO API

Requestor: Patrick L. Lykins aka Mael Magnus
Request Date: 2017-04-13

Reason for Project:

Requestor has used several guild sites over the course of the years and chose Guild Launch for the home of his DC Universe Online (DCUO) league after weighing out the pros and cons of the different systems and came to the conclusion that Guild Launch could meet the most of his leagues needs with the easiest management for his officers. One of the things that drew him was the integration capabilities with WoW, which is missing for DCUO.

There is an API available to integrate for the system and requestor will provide as much information and examples as possible to allow Guild Launch developers the quickest and easiest route to implement the changes, if they also agree that this is a worthwhile project for them to undertake.

This project will be able to benefit Guild Launch in these ways (included but not excluded):
- No other guild site (as over February 15th, 2017) has an integration to DCUO allowing you to market to DCUO players.
- The Forsaken Order will be an unofficial (or official if you like) mouthpiece to lure as many DCUO leagues to Guild Launch.
- Existing DCUO sites can utilize this function, with hopes to increase revenue and bring them back online.

This project will be able to benefit users in the following ways (included but not excluded):
- Users can now do a one click import of their character.
- Guild officers can save hours of time updating their guilds character lists each month.
- It will allow raid matching to work better by knowing what toons qualify for raids.

Preparation Steps for Guild Launch

First you will need to go to the Daybreak Game Census site and register guild launch. In the examples I will give you, you will just need to change "lykins" with the code you registered. https://census.daybreakgames.com/#service-id

This site will also explain how the API works, however, it is more geared towards Planetside 2 than DCUO and not everything is compatible.

Typically DCUO only wants people querying their system once every minute or so. Typically you will want to pull the data and store it in your own database. Retrieving the data once every 1 to 10 minutes would be sufficient.

Implementation

There will need to be a three step implementation for the guilds.

World Information

First the site owner / admins will need to choose what world their league is in. The following code will bring back the worlds that are available. Display the results as a drop down.

https://census.daybreakgames.com/s:lykins/get/dcuo:v1/world?c:limit=100

Notes:

- The world's doesn't change often but it has a few times in the past few years. This could be pulled on a nightly basis, just to ensure items are retrieved.

Guild Information

Now that the world has been selected, a list of those guilds needs to be populated. Due to the amount of guilds per world a lookup is best.

https://census.daybreakgames.com/s:lykins/get/dcuo:v1/guild?world_id=2&name=*forsaken&c:limit=100

Notes:

- Replace the "2" with the world selected.
- Replace the "forsaken" with the text entered by the admin.
- The * in front of the name acts as %search% in SQL

Character Retrieval

Now that the guild has been selected the character retrieval can occur.

https://census.daybreakgames.com/s:lykins/get/dcuo:v1/guild_roster?c:limit=100&guild_id=225554148085514456&c:join=character^on:character_id^to:character_id^terms:active=true(movement_mode^on:movement_mode_id^to:movement_mode_id,characters_item^on:character_id^to:c

haracter_id^terms:equipment_slot_id=17(item^on:item_id^to:item_id(item_category^to:item_cat
egory_id^on:item_category_id)))

Notes:

- I did not filter out anything in the query as I'm not sure if you all would want to add more information to the character stats or not. It would be great but in my case I use DCUOBloguide to get the other stats.
- Guild_id is derived from the guild query that will be attached to the league.
- Equipment Slot ID 17 is the weapon of the character and is used to derive the weapon type.
  - Due to Daybreaks inability to update the API in a timely manner not all characters weapon can be derived.
  - Weapon type is not important in DCUO but you make it a required field.
  - If the weapon can't be found here is the suggested list.
    - If a weapon existed on the character retain that weapon.
    - Otherwise, either change it to "Unknown" or default "Hand Blasters" as the default weapon which was the most common
- Primary vs Secondary Role can't be derived from the query, however, your database already has the powers and their DPS vs other Role.
  - If a character already has a role assigned leave it as is. If not the following formula can derive a close match for the primary role
    - Defence higher than Might and Precision = Tank
    - Vitalization higher than Might and Precision = Troll
    - Restoration higher than Might and Precision = Healer

Final Process

Once a database is created then we will need a method to convert our guilds characters to the API version. My suggestion is to allow the site admins to have a dashboard that will link the character name on the site to the dashboard (if the name was found with the guild list then there can be a button to convert to API version which will constantly update the stats of that character. Characters with names misspelled will need to be removed and readded.

Conclusion

If you need anymore information please contact me at lykins@gmail.com or through my guild launch account Mael Magnus at https://theforsakenorder.com