Real Estate Agent Email Capture
## By Aaron Fischer

Executive Summary

My brother is a real estate agent in the DC area. He has access to the MRIS internet database that all other real estate agents in the surrounding area are a part of. This database has agent information by broker office and when you select an office you are then given a list of agents in that office. One issue with this database is that if he wants to send an email to several of his colleagues in the same area, or the same agency (i.e. to let them know about an open house, etc.) he would have to look up each individual and click to send an email. The email address is not listed, but can only be accessed from each individual's record by clicking an "Email Agent" link. This link opens up a window with whatever your default email program is, and has the agent's email in the "To:" line. So in a list of 20-30 agents, you can imagine what kind of a pain this would be.

I have developed a program that logs in to the system for him and allows him to input the broker code for an office. The program takes this code and runs to output to an excel spreadsheet, the real estate agent name and email address for each agent in the office. This will save him much time an effort, especially when he has several different broker offices of which he needs the information.

Implementation

Below I will outline the steps of the project, views of the code, and corresponding screen shots of what actually happens with the website.

1. Form was created to allow user to enter the desired broker code. The form initiates as soon as the excel spreadsheet is opened. When the submit button is pressed on the form it calls the "getdata" sub procedure, which is where the bulk of the code exists.
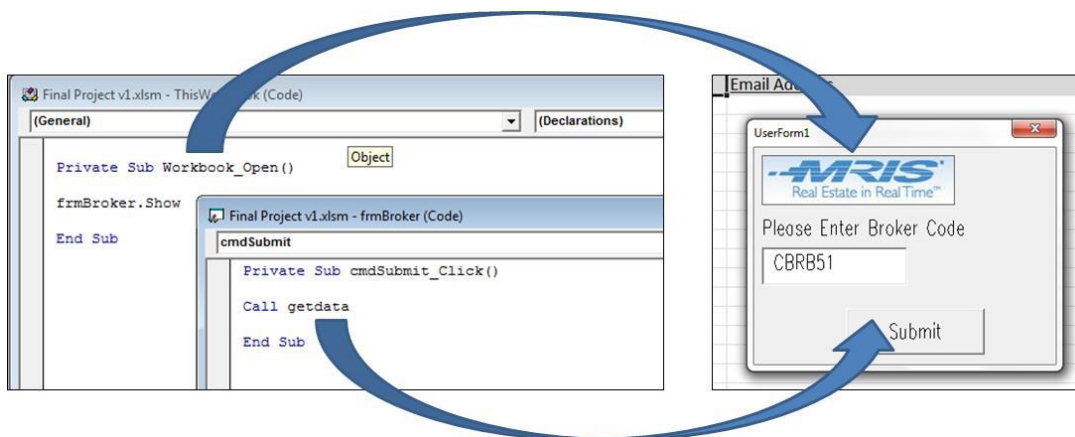
2. To start the get data sub procedure, uses the cls agent to open the MRIS webpage. The login is clicked and we move to the next step.
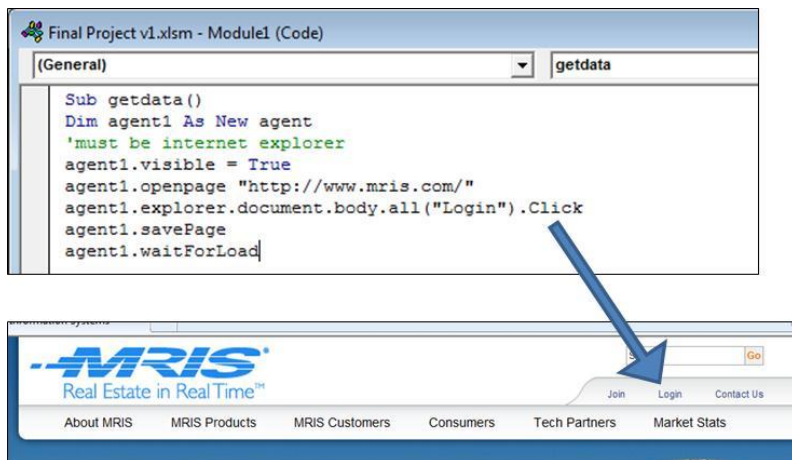
3. This step is where it automatically enters the 3 account identifiers and logs in to my brother's account.
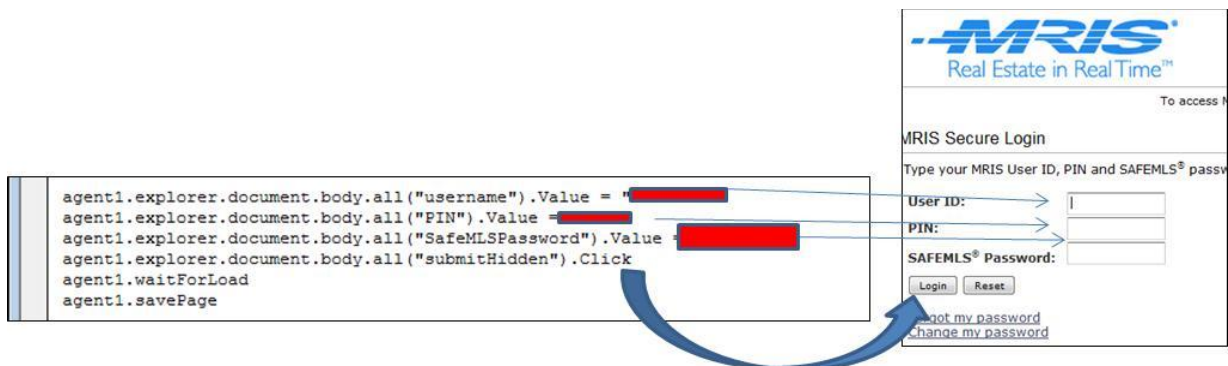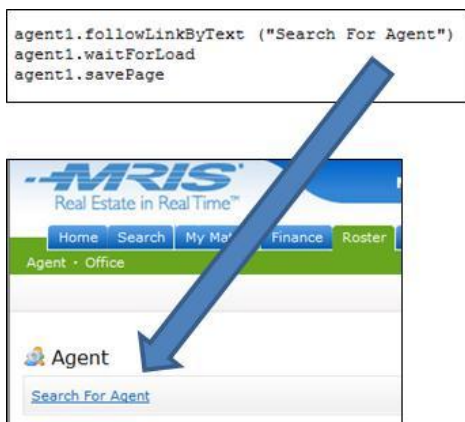

4. After being logged in this code takes you to the matrix database what real estate information is housed.
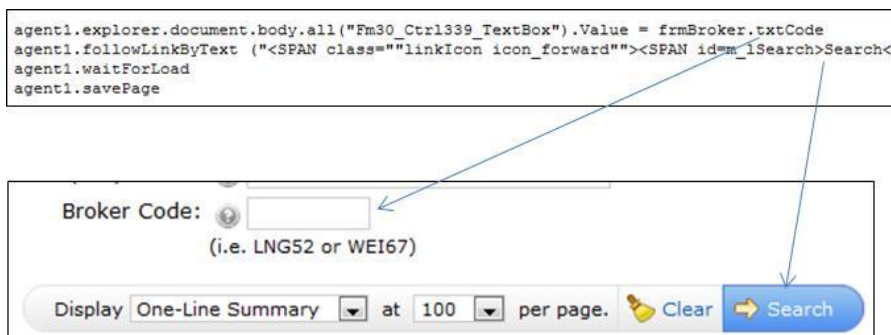
5. While in matrix database, we now click on the roster tab.

```
agent1.followLinkByText ("<SPAN>Roster</SPAN>")
agent1.waitForLoad
agent1.savePage
```


6. Now we choose the option to Search for Agent.

```
agent1.followLinkByText ("Search For Agent")
agent1.waitForLoad
agent1.savePage
```


7. At this step, the Broker code that was entered into the user form at the beginning of the project is now entered into the web field. The search button is then pressed by following the link that is by the long string of text seen below (cut off of print screen because it is so long).

```
agent1.explorer.document.body.all("Fm30_Ctrl339_TextBox").Value = frmBroker.txtCode
agent1.followLinkByText ("<SPAN class=""linkIcon icon_forward""><SPAN id=m_1Search>Search</
agent1.waitForLoad
agent1.savePage
```

8. Here the for loop under the "followlinkbyHref" sub procedure in the cls agent, is used. The declared y variable will be used in the next step. The first agent is found (regardless of the name) because the text "Javascript:ReDisplay(" appears in the source code of the by the each Real Estate Agent. Once one is found, the loop is ended and we move forward.

```
Dim y As Integer
Dim alink As Variant

y = 2

    For Each alink In agent1.explorer.document.Links
        If InStr(1, alink.href, "javascript:ReDisplay(") > 0 Then
            alink.Click
            agent1.waitForLoad
            Exit For
        End If
    Next

agent1.savePage
```

Results 1-31 of 31 · Checked 0 · Che... 31   Display One-Line Summa
Previous · Next · [1]

☐	Name	AgentID	Agent Phone	Office Name
☐	Zeitz, Jacquelyn (Jackie)	15478	(703) 734-7020	Coldwell Banker Residential Brokerage
☐	Modolo, Kathleen	52143	(703) 356-7000	Coldwell Banker Residential Brokerage
☐	Wright, Kendra	75754	(703) 269-2399	Coldwell Banker Residential Brokerage
☐	Birge, Sally	1370	(703) 734-7020	Coldwell Banker Residential Brokerage

9. Now the first agent's screen is up where we capture the name and email address (email address is in the source code of the page, so it can be captured without clicking "email agent"). The name and address are inputted into two columns of the excel spreadsheet. The loop continues incrementing the row, until all of the agents that work for this office are entered (in this case, 31 agents).

```
Do
    agent1.position = 1
    agent1.moveTo ("Name: ")
    agent1.moveTo ("<SPAN class="" d146m9"">")
    Range("A" & y).Value = agent1.getText("</SPAN>"
    agent1.moveTo ("mailto:")
    Range("B" & y).Value = agent1.getText("?")
    y = y + 1
Loop Until agent1.followLinkByText("Next") = False

End Sub
```

Result 1 of 31 · Checked 0 · Check all 31 · Back to Results

Previous · Next · [1] 2 3 4 5 6 7 8 9 10 ...
☐

Agent Information:

ID #:	15478
Name:	Zeitz, Jacquelyn (Jackie)
Home:	(703) 356-60
Home Fax:	(703) 356-7033
E-mail:	Email Agent
Cell:	(703) 850-6736
Pager:	
Agent Office #:	(703) 734-7020
Agent Office Fax:	(703) 356-7033
Voice Mail:	(703) 734-7020 2369
Last Updated:	2008-11-12

10. The program is now complete and the output as seen in the excel spreadsheet below is then ready for my Brother's use.

1	Agent Name	Email Address
2	Zeitz, Jacquelyn (Jackie)	jzeitz@cbmove.com
3	Modolo, Kathleen	kmodolo@yahoo.com
4	Wright, Kendra	KEWright@CBMove.com
5	Birge, Sally	salbirge@aol.com
6	Hommel, Heidi	HeidiHommel@mris.com
7	Madden, Suzanne	smadden@usa.com
8	Mathios, Maria	mmathios@cbmove.com
9	Lathrop, Sharone	slathrop@CBMove.com
10	Hios, Dimitrios (Dimi)	dhios@cbmove.com
11	Kumar, Ratan	rkumar@cbmove.com
12	Thatcher, William (Bill)	billthatcher@mris.com
13	Fred, Steven (Steve)	sfred@cbmove.com
14	Knowles, Linda	lknowles@cbmove.com
15	Makiya, Layla	lkmakiya@yahoo.com
16	Estryn, Patricia	pestryn@cbmove.com
17	Holland, Virginia (Ginny)	gholland@coldwellbankermove.com
18	Lyons, Christine	clyons@cbmove.com
19	Djordjevic, Peter	pdjordjevic@cbmove.com
20	Lebedev, Darlene	dlebedev@cbmove.com
21	Husk, Maureen	mhusk@cbmove.com
22	McCarthy, Margaret (Peggy)	pmccarthy@cbmove.com
23	Friedlander, Irene (Candy)	Candy.Friedlander@cbmove.com
24	Song, Sue	sjsong@cbmove.com
25	Watts, Vicky	vwatts@cbmove.com

◄ ◄ ► ►◄ MRIS Output Sheet2 Sheet3

Discussion of learning and conceptual difficulties encountered

I feel that I had a pretty good grasp on what needed to be done to accomplish the goal of my project. It was very beneficial to spend some time over the phone with my brother, to truly understand the online database, and the issue that he had. I feel that having a good understanding of what he really wanted saved me from some headaches later. I actually laid out all of the steps that I would have to go through in my module, commenting them out, before working on the project itself. After laying out the steps, in my mind I thought that it wouldn't be all that difficult to accomplish my goal. This thinking couldn't be farther from the truth.

Some people in this world are gifted in different ways, and I certainly was not given the gift of programming. Just as in each of the homework assignments this semester, where I would spend several times the amount that it took for the average person, I felt much the same here. As simple of a thing this was in theory, in practice it caused many of my hairs to go gray. I can honestly say that I have never been more frustrated in my life, and I have two kids! The most frustrating part was the knowledge that someone proficient in VBA could have probably spent several hours to have this program running smoothly. Here I am an MBA who has many talents and near perfect grades, and I literally spent hours at a time thinking, googling, and trying to figure out how to make this work…to no avail. In the end, I

kept enduring and eventually got the task done. I have to say that never asked for Professor or TA help. I did however get a classmate's help on one or two parts that I just could not figure out. I was a little prideful, and maybe should have gotten help sooner, but there is also some benefit to trudging through it for a while before getting help.

My project relied heavily upon the web crawler agent, but I encountered issues where the "explorer.document.body.all" code referencing a link to click, did not work. It would come back with an error "Object variable or with block variable not set". I spent forever scrubbing through and trying to figure out why I kept getting this error. I felt like I tried everything. I googled the error, and searched many sites to get help. The problem was that the agent code was not a common module on the internet, and so it was very difficult to get any useful help. Eventually I found out that I could use the "openpage", "followlinkbytext", and "followlinkbyHref" commands to overcome this issue. The key learning here is that when working with code that is "homemade", such as this code being made by Dr. Allen, it is difficult to get trouble shooting from anywhere but the source. It takes a lot of trial and error to get through some of these items.

The most difficult issue was to click on the first agent once the list of agents came up. The difficulty was that you couldn't use the name of the first agent as one to click on, because then the program wouldn't be dynamic and work for another broker code. In the end, the solution was to take the for loop found under the followlinkbyHref sub procedure and manipulate it. I manipulated it in such that it picked the href closest to some code that was next to each name listed, but nowhere else in the page. This solution worked and I was able to move on and complete the project.

In the end, everything that my project set out to do was accomplished, and will be a great help to my brother.