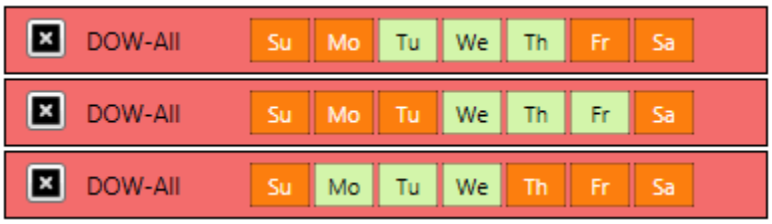
Deep Dive into the Logic of WBidValet and the Bid Automator

OK, don't get scared, this really is not rocket science. Although my daughter did work for NASA ☺.

The logic is real simple, the app will try to find lines for every filter. If the app cannot find lines for every filter, it will then start turning off the lowest priority filters, one at a time, to find lines that meet the filters that are still turned on.

Huh?

Ok, let's use an example, to do so, I will set 3 filters as shown below.



The app will first test for all 3 filters ON. Of course no lines exist where for this test as NO lines will have every day off except Wed, so test 1 will produce NO lines. The second test turns off the 3rd filter, but again the combination of the first two filters looks for lines that have every day off except Wed and Thu, and of course no lines exist. The third test will now look for lines that have all days off except Tue and Wed – same thing, no lines exist. Now with the 4th test, the app will look for lines that have Su-Mo-Fr-Sa off, and now the app will find those lines.

As shown below is the methodical way the app turns the lowest priority filters on and off, until the app has tested every combination for the set filters. The scientific demonstration of this is called a "Truth Table".

Truth Table for 3 Filters

	Tu-We-Th	We-Th-Fr	Mo-Tu-We	
Test	Filter 1	Filter 2	Filter 3	Result
1	yes	yes	yes	nothing
2	yes	yes	no	nothing
3	yes	no	yes	nothing
4	yes	no	no	Tu-We-Th
5	no	yes	yes	nothing
6	no	yes	no	We-Th-Fr
7	no	no	yes	Mo-Tu-We
8	no	no	no	All remaining lines

How many tests will the APP do before it breaks?

I don't know! I can tell you I have tested the app with 14 filters set, and the app worked perfectly. But keep in mind there are billions of possibilities and the more filters you set the more combinations or tests the app will do to logically step through your filters one at a time. Actually, every time you add a

filter, the app will double the number of tests it will do in finding the lines based upon your filter priorities.

Specifically, the app will do 2 to the X^{th} power number of tests, where X represents the number of set filters. When I set 3 filters, the app will test for 2 to the 3^{rd} power or 2 ^ 3 = 8 tests.

If you set 14 filters, the app will test for 2 ^ 14 combinations. 2 ^ 14 equals 16,384 tests.

I have no idea where the breaking point is, but I'm sure one of you will find it ☺.

At any rate, this is the logic behind WBidValet and the Bid Automator.

Happy Bidding!

P.S. since this App is new, there will likely be problems. Please insure you check of the bid list for any submitted bid and also review your bid receipt with what is received by the company.

P.P.S. Remember you can always review your submitted bid on SwaLife:

For pilots: Flight Ops => our business => bid info => bidinfo => search bids

For flt att: Inflight => bidding => bidinfo => bidinfo => search bids