V2.012 Update – what should you expect?

I am sending you this memo because I have updated your system to Carousel Version 2.012.

The previous version was V2.010, and was 10 years old (first released in 2013).

V2.011 was skipped. I worked on it for several years, and finally abandoned it. A lot of what was supposed to be in V2.011 did end up (or will soon end up) in V2.012.

You will see very little difference in the screens. The database itself got rather a lot of new field additions. Nothing was deleted from the database.

This was prompted by the requirement that Carousel provide for Multi Factor Authentication. Since I was in there, I figured I might as well toss in all the other changes that I have been planning, and to toss in more changes to hopefully deal someday with changes that I am not at all anticipating currently.

There was one deletion: I did have database tables and logic for Leases. Only one client used it, and he went broke years ago. It is all ripped out of the program. I am not interested in leases because no two dealers handle them the same, it turns out.

Multi Factor Authentication (MFA)

There are a lot of ways to do this. I chose Yubikey. Yubikey is a USB device that you can get from Amazon and elsewhere for $25-$50. When you press a key on the device, it sends an encrypted message to your computer. That computer sends the message to a Yubikey server, which verifies that a real Yubikey generated the message, and sends back the serial number of that Yubikey. Carousel can then validate that serial number to verify that
a) it is owned by the Dealership
b) it is assigned to a specific employee (optional)
c) it is assigned to a specific computer (also optional).

This whole thing is actually optional, and I expect only a small fracti on of my clients to enable it.

You must buy one or more physical Yubikeys if you choose to use this MFA function. I will provide you with a software tool that allows you to manage the Yubikeys in your dealership. When enabled, no Carousel program will be allowed to run unless a Yubikey has been authenticated and verified. The only program in Carousel that actually does this is the Splash program. All other programs, before they run, check to see if the Splash program has authenticated itself.

The splash program is sometimes referred to as the "screen with all the horsies".

When you leave for the day, or leave for lunch, or something like that, you should shut down the

Splash program, and any other Carousel programs that are running. That will prevent new instances of Carousel from running on that computer, until you restart the splash program and redo the Yubikey procedure.

The following new or modified screen fields will appear in V2.012.

Pay Type

The pay type in the Deal program is now captured.
Before it was available for the duration of that deal session, but then discarded, because I had no place to put it.

Middle Initials

The middle names of both the buyer and the spouse are now captured. There was a time when I needed that for license number generation, but that is no longer something that Washington allows.

Spouse Cell Phone

I was capturing the Buyer cell phone, but not the Spouse cell phone.
I still do not capture a spouse email address if it is different from the Buyer's email address.

Buyer Mailing Address

I was capturing the Buyer's mailing address, if it was different from his physical address, but I combined the City and State in one field. They now have separate fields.

Engine Fuel

I have been letting you enter the vehicle Engine Fuel, but I had no place to put it in the database. Now I have a new field entry, so it will be maintained. So far this affects the Vehicle Title App for Washington, which you had to redundantly enter the fuel code. Now that is picked up from the database.

Title and Plates

I had always asked you to enter the title number when you received the vehicle, and its plate number. I finally realized that I needed a separate entry for when the vehicle is sold, since you get a new title, and in Washington, a new plate. Those items will appear on the Complete screen.

Plates Received

There is now a checkbox to indicate that the plates have been received.
That will allow me to write a report displaying those vehicles where you are still waiting for

plates. That report is Admin 1208.

Last Stock Number

I modified the Inventory program during the pandemic to remember the last stock number you
worked on. The Deal program now remembers that too.

Postal Abbreviations

I have had a list of all US States and Territories, and Canadian provinces, in my state pick list. I
have now added Mexican states. If you want countries anywhere on the globe, there is a
"Global" button to click, and I will fill in all that too. Since only a couple clients have asked for
that information, you have to ask for it to get it. For the Inventory program, I have added a blank
state, for use when you do not know just where the vehicle came from. This replaces "Other"
that used to be the only other option.

<p align="center">So what should you worry about?</p>

Essentially, all those new fields.

When a new field is created in a database, it contains a value of Null. Null is not a number. It is
not 0, not 1, not -1. It is nothing. And computers don't like Nulls. They make a fit if they find
one and then blow up.

There are ways to prevent that, and I believe I have.
But, you never know.
Even with the testing I have done, I may have missed something.
Which is why I am rolling this out slowly.
And to small dealerships first, so that if something does blow up, it does not affect a 10 car a day
sales location.

<p align="center">Conclusion</p>

So far, that is all the new fields on the various screens that you will see.
Over time, I expect to add a bunch more. They will roll out as I have time to modify everything.
You can always see these changes in my "Changes to Version 2.012" document on our web site,
or for a much more detailed description of all this, look at the Version2010Changes.pdf
document that you will find in your list of documents.