AVImark ReadMe Version 2010.0

Dear AVImark user,

<u>Re:</u> **Technical Support Policy for Bi-Directional Integrations**

Welcome to 2010! We hope you are as excited as McAllister Software about the opportunities of the upcoming year as we all look forward to leaving the recession behind.

As it has for 20 years, AVImark continues to evolve and offer more functionality with each generation of enhancements. This coming year, AVImark will begin offering integrations with DICOM PACS software. We have also made tremendous strides in our most post popular lab equipment integrations, and we will start offering bi-directional communication. These integrations will continue to propel work flow efficiencies to save time and money in your clinical operations.

In order to control the costs of general technical support, MSS will charge a separate set-up and support fee for these advanced integrations. This will allow us to continue to offer the best software in the veterinary industry and create Specialty Technical Support Teams, yet not increase support costs for all AVImark clinics. **AVImark will *not* be increasing general support costs in 2010. All advanced integrations are optional. Current lab integrations will continue to function at no additional cost.**

The following fee schedule will apply for these new integrations:

Advanced Bi-Directional Lab equipment	**Set-up $499**	**Advanced Annual support $149**
Advanced Bi-Directional DICOM PACS	**Set-up $499**	**Advanced Annual support $149**

These advanced integrations will not immediately be available with all manufactures or equipment, but as development work continues, the list of partners with advanced integrations will grow. Vendors will let you know when these options are available. The set-up fee covers the first year of advanced support.

For technical information on the current integrations please go to: www.avimark.net/bi-directional

Please feel free to give us a call at 877-838-9273, ext. 604, with all your comments, questions or inquiries on these advanced integration options.

Best regards,

Scott McAllister
President

AVImark Version 2010.0 Enhancement List

1. AVImark Program Enhancements
2. State Specific Enhancements
3. New Markup Analysis
4. Security Features
5. Importing Test Results
6. Instrument Import Utility
7. Improved Antech interface
8. IDEXX VetLab Station (IVLS)
9. Veterinary Laboratory Resources (VLR)
10. Heska DCU (Data Capture Utility) Interface
11. VPR Drug Formulary Integration
12. Associated Veterinary Purchasing (AVP), Electronic Purchase Ordering for Canada
13. Fixes List

AVImark Program Enhancements

Work List feature Enhancements

AVImark provides the Work Lists functionality for defining different jobs the hospital staff
will perform. Version 2010.0 has several new enhancements to help this dependable feature
become even more user-friendly.

- Work Lists window works along-side of CID

The Work Lists window that is accessed from the Patient Area….right-click List now has the
ability to be a free floating window that can remain open along side of AVImark. This capability
will allow users to continue working on the CID screen while keeping the Work List open for
easy access.

If the work list form is kept open, and a patient is opened on the CID, if the patient exists on the
work list, then that patient will be selected automatically on the work list to match the patient on
the CID.

- **Work Lists More Stuff**

You will notice that updating to version 2010.0 will create new fields under Work With….System Tables….Additional Data Fields.   The addition of these new fields allows More Stuff to be added to Follow-Up list and Work List entries.

- Additional Follow-up Fields
- Additional Work List Fields
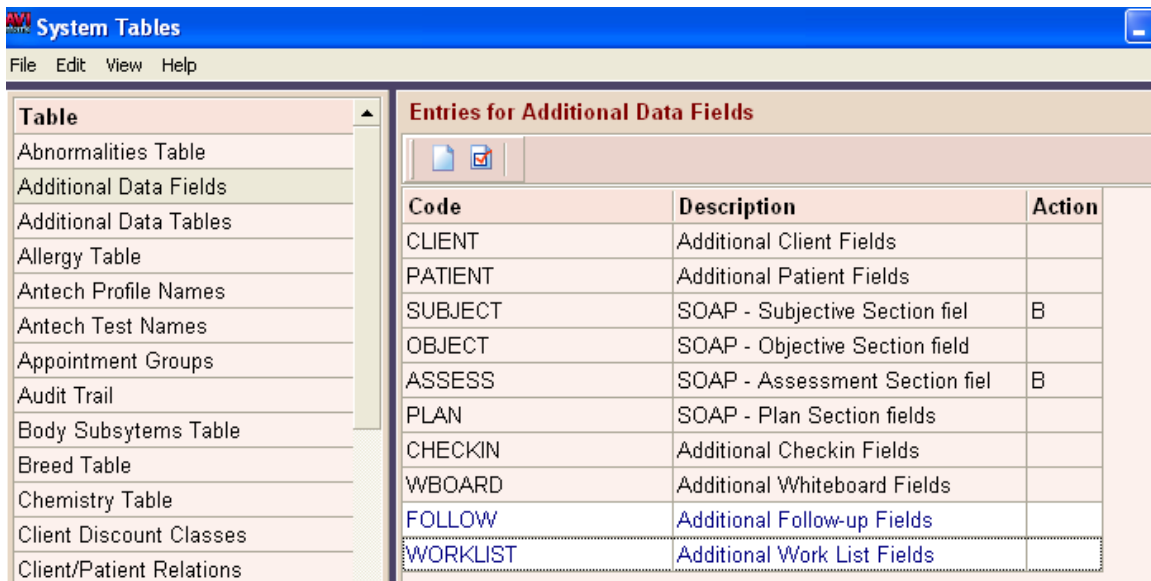
To use More Stuff fields with the Work List, right-click More Stuff on the appropriate Additional Data Field to define information.
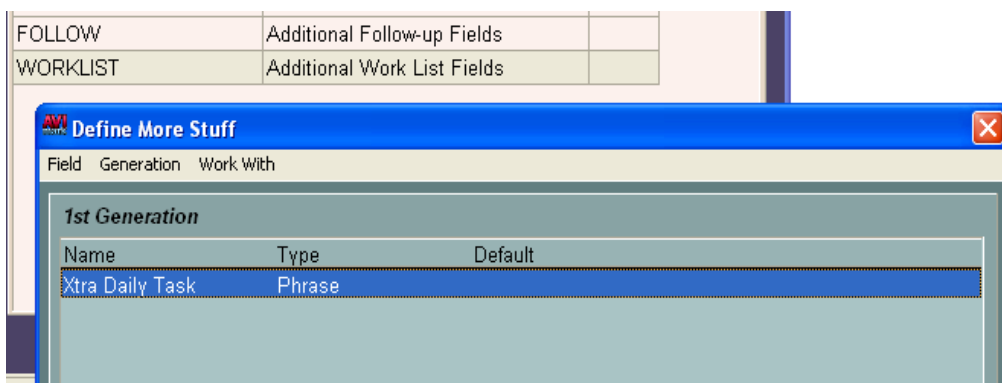
Once the new fields are defined the More Stuff will appear in the Change Work List window. When you double-click on a Work List entry that has already been added to the list you will see the new fields displayed at the bottom of the window.

Using the View|Columns feature you may also drag-out your own column heading to view More Stuff fields directly from the main Work List window.

From System Tables, from the Additional Data Field Tables category, select the "Additional Work List Fields" table then right-click More Stuff to setup fields. The type of "Phrase" must be used to have a blank field to type in information.

To setup a specific column heading in the Work List window right-click View..Columns then type the name of the more stuff field into the Find window, click on the plus sign in front of the name then drag out the field called "Text" as the column heading.

Then click on the Advanced tab to find and highlight the appropriate more stuff field. It can be renamed under "Caption". In the example below the Text column heading has been re-named "More Stuff".

** Important Note: Additional Data Fields attached to Work List entries do not transfer to Medical History when posting. These fields are for Work Lists use only.

- **Work Lists Entries now post to Medical History**

When highlighting a Work List entry you can now use F8 or right-click "Post" to post the selected line item into Medical History IF there are notes entered on the entry. You can also select multiple rows and post all selections at the same time.

The medical history entry that gets added into history will have a code of WLIST$, and the notes from the work list will be attached. The description will match what is setup in System Tables for the work list code. Once posted, the work list entry is ghosted.

** Important Note: Posting is now an undo-able function, however when you go to Undo, it won't remove the entry that was posted into Medical History, but it will however revive the work list entry.

- **Easy Access to Work List**

The Work List can now be accessed from the CID..Clients Menu or by using a shortcut keystoke Ctrl+Alt+F10.

- **Easy Access to selecting different lists**

Another new shortcut keystoke for switching between different lists once the Work Lists window is open is using Shift+Tab or hitting Tab twice to focus on the "Work List" field.   Once the highlighted area is focused in this field a different list can be opened by starting to type the name of the work list you want to open, then selecting it by hitting enter.
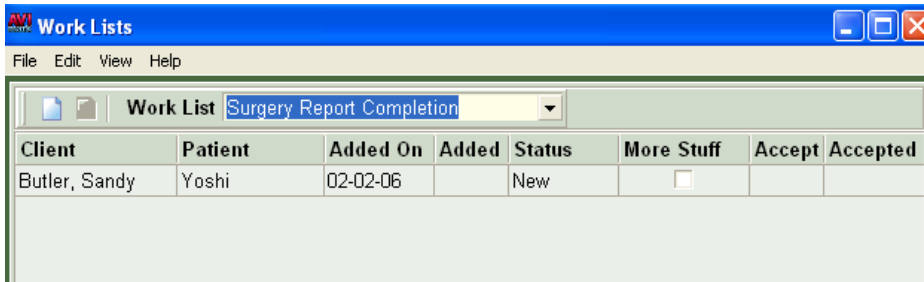
- **Ability to add patients to Work List at Check-in**

   Using the new Advanced Option "Add Patient to Work List Code" patients can now be automatically added to the list when checked-in. By default this advanced options will be left blank to allow setup by hospitals that prefer to automatically add patients to a certain list upon check-in.

To setup:
- Find the original Work List code by going to Work With…System Tables, Work Lists Table

In this example we'll use the code NEW.
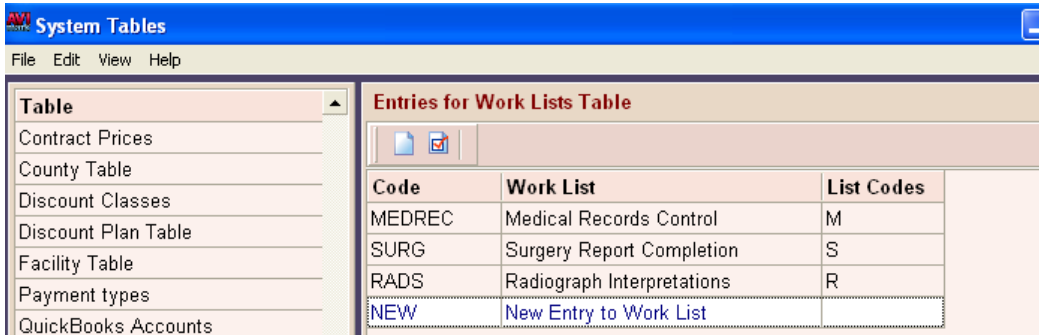
- Open the Options Maintenance window (using hammer, wrench, screwdriver icon on the CID) then type "work" in the search field
- Select the advanced option "Add Patient to Work List Code"
- Click Change to enter the code being used from the Work List Table
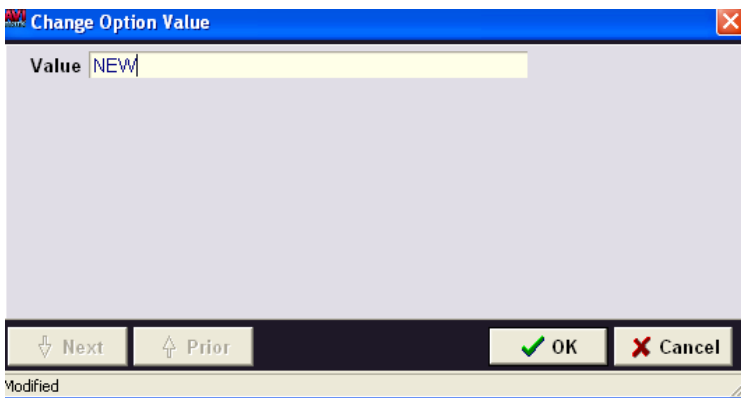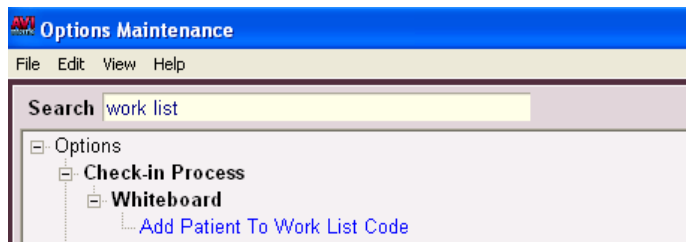
- Upon Check-in the patient will automatically be added to this Work List
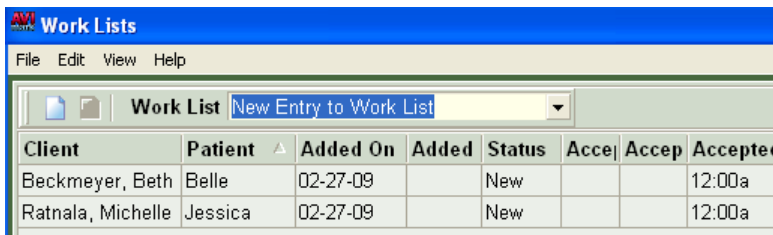
- **New Work Lists enhancements\New frame-work design**

The new Work List incorporates the same new frame-work features that have been updated through out different areas of the program in previous versions. Added benefits that can be used in the new frame-work design allows the use of customized columns, selection of multiple entries at one time, using the Undo\Redo feature, default layout and sorting options.

The list below explains several new features now available by using the new frame-work design.

- **Sorting the list by doctor can be accomplished by creating a column.** To set this up using View|Columns, type "Name" in the Find window. Under the Added By category pull Name out to create a new column on the grid. To re-name the column use the Advanced Tab to change the caption.
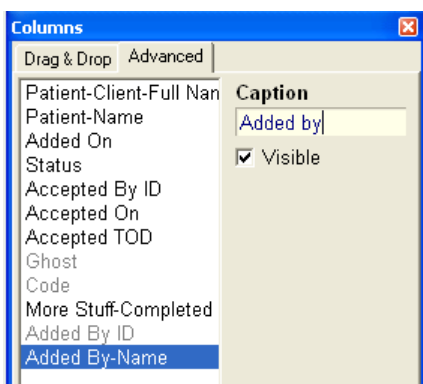
- **Selecting multiple work lists entries to be removed at one time is now supported by using right-click "Remove" in the Work List window.** There is a confirmation warning asking "You have requested to remove the selected record(s), proceed?" If you click Yes to remove a new entry that has not yet been accepted there is a separate warning message asking "Work List entry has not yet been accepted, remove anyway?"
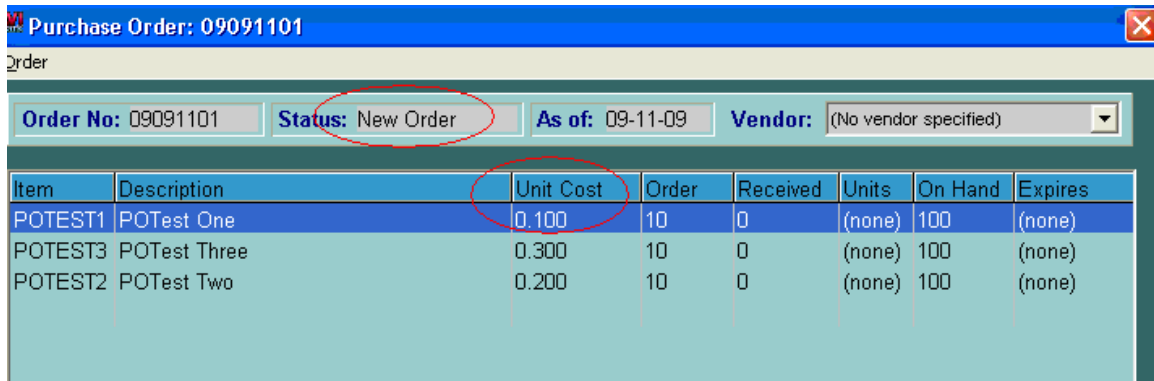
- **Selecting multiple entries and choosing right-click "Accept" is now supported** as opposed to having to Accept each entry individually.
  The Accept function also has the capability of using Undo from either the Edit menu or by right-click Edit…"Undo"on the entry.

- **Once an entry has been accepted you can now select entries simultaneously then use right-click "Renew" to put them back to new status.** The Renew option also has the capability of using Undo from either the Edit menu or by right-clicking Edit.."Undo"on the entry.

- **Double-clicking on a work list entry or using the F3 key now opens the Change Work List window**. This change was implemented to help maintain consistently throughout the program.

- **Using the right-click "Open Patient" option or the F6 key will directly open the patient account.**

- **You can now view and edit notes in the Change Work List window**.

- **The view ghosts' option has been moved under the menu "View|Show Ghosts".**

- **There is no longer a right-click "Transfer" option to move work list entries to anther list.** You may now use F3 change window to select a new work list you're transferring an entry to. Or select multiple entries to be transferred at one time.

- **The Users and Security function WL03, "Enter Work List Notes" has been renamed to "Change Work List Entries".** This name change does not affect the functionality of the security function. Also, the security check is still in place when using right-click Notes in the work list window.

Purchase Order Enhancement

In previous versions of AVImark when a Purchase Order window was at NEW and\or OPEN status it displayed the "Unit Cost" of items; showing the cost of the items that make up the package, instead of the entire package amount as it is received from the vendor. Then once the order was released and changed to Receipting status, the "Unit Cost" was converted to "Pkg Cost." This seemed confusing to new users or when starting to use the Purchase Orders system.

Examples of AVImark version 2009.1 and below:
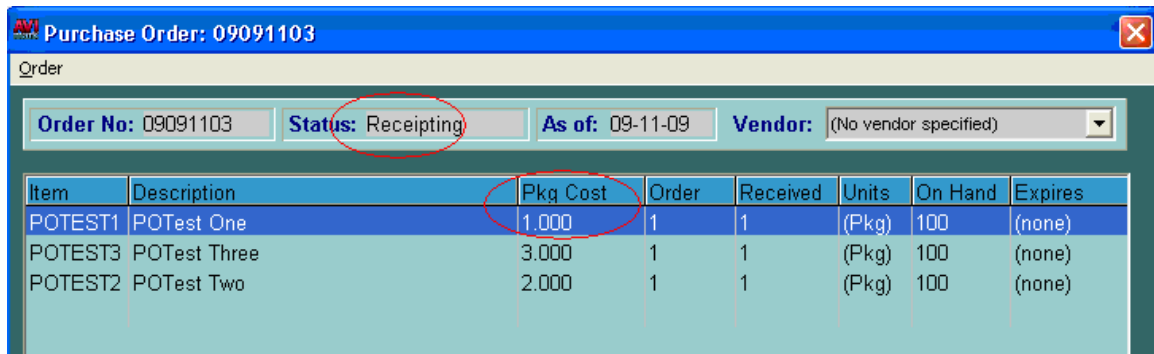
- **New Order Status, shows Unit Cost**

- **Receipting Order Status, shows Package Cost**

Version 2010.0 helps clarify the Purchase Order window from the time a New order is created until it's released and received by showing the "Total Cost" and "Pkg" amount through out the entire PO process. This allows the Purchase Orders to consistently show what's being placed on order from the time a new PO is created, without having to Release the order to have the units converted to package.

Examples of version 2010.0:

- **New Order Status, shows Total Cost**

- **Receipting Order Status, shows Total Cost**

Auto-refresh available in more areas of the program

Updating to version 2010.0 and running AVImark in Client\Server mode will allow new areas of the program to use the Auto-refresh feature.   If you're running AVImark in classic version, the auto-refresh option will work exactly as before and not auto-refresh in these new areas. But running Client\Server and setting the "Auto-refresh Windows" option to True in the Option Maintenance window will periodically refresh these areas:

- **Appointment Calendar**
- **Boarding Calendar**
- **Whiteboard**
- **CID**
- **Invoice window**
- **Accounting window**
- **Follow-up window**
- **Work-List window**
- **Patient Estimate window (not Canned Estimates)**

How it works…..

When using Client Server version the auto refresh will take place approximately four seconds after a change has been made on another workstation to update the window. In some cases the auto refresh will not take place if the change made on the other workstation is not relevant to the information shown. For example, on the CID screen and in the Accounting window, if another user removes a transaction for the same client, then a refresh will take place. But <u>only</u> if that transaction was for the same client; otherwise the information will not be refreshed. For appointments, any changes on other workstations to add/change/remove appointments will cause AVImark to refresh the calendar when clicking done.

A refresh will not take place if a "modal" window is being shown on top of the main window. Message windows are considered to be "modal" windows. Alerts on the CID are modal; any window that will not let you click on other windows until you click "Ok", "Done", "Cancel" etc. is a "modal" window. For example, in the Follow-up list, if the user is in a "Change Follow-up" window, then refreshing will not take place in the background until the user leaves the "Change Follow-up" window either by clicking Cancel or Done.

If however, the Follow-up window is open, but not focused, and the Appointment Calendar is opened and focused, a refresh may take place in the Follow-up window. This is because the Appointment Calendar is "non-modal". "Non-modal" means the user can switch between windows without having to close the window that is focused. For example, you may have the appointment calendar open in the background on one computer, and have someone make changes to the appointment calendar from another computer; the refresh still takes place on the computer that has the calendar open in the background.

A refresh will not take place if the user is actively using the keyboard or mouse. If there is a refresh pending, and the user stops moving the mouse or using the keyboard, the refresh will then take place about 1 second afterwards.

If a user makes many changes at once on one workstation, it should not cause other workstations to get many refresh events. For instance if one user chooses many treatments at once for a patient, another user viewing the same patient on the CID will get only one refresh to show these new treatments -- unless the original user is being asked to enter follow-ups, print drug labels, check-in the patient etc., in which case the other user may get several refresh events as the transactions are being added. This is why refreshing events happen about 4 seconds after changes are made on other workstations; AVImark is buffering the refresh events so that workstations doesn't get bombarded with requests to refresh the CID.

** Important Note: Auto-refresh will not pick up events made by other workstations that are running in Classic mode. In other words, if a workstation is running in Classic mode, then AVImarkServer will not know that the workstation is making changes; therefore AVImarkServer will not be able to notify other workstations running in client/server mode that changes are taking place.

Setting up AVImark to use auto-refresh:

As with Classic mode, Auto-refresh will not take place if the option is not turned on in Advanced Options. Also, turning on the option in Advanced Options may require the workstation to reboot or at least have a manual refresh of the CID window may need to be performed for Auto-refresh to start working.

- Open the Option Maintenance Window (hammer, screwdriver, wrench icon on the CID)
- In the Search field type "auto", highlight the Auto-refresh Windows option
- Set the default value to True.

SOAP- New consolidated entry window on Plan Tab

To help reduce the amount of time it takes to select entries on the Plan tab of SOAP there is now a new consolidated window that was modeled after the e-Travel sheet view to make Treatments and Inventory available from one area. By using F7 or right-click Choose Entry on the Plan tab the new window consolidates the Treatment and Inventory lists into one window; replacing the previous right-click options to Choose Therapeutic Entry and Choose Diagnostic Entry that opened the Treatment and Inventory lists separately.

Upon selecting right-click Choose Entry from the Plan tab the new consolidated window defaults to the species of the patient currently selected on the CID screen. (working the same as the previous Choose Therapeutic and Diagnostic Tx and Item windows)

Ability to use Entry History in Accounting

AVImark version 2010.0 adds the ability to use Entry History in Accounting.   Although, entries made in the accounting window prior to updating to 2010.0 will NOT show entry history unless you make a change to them after updating to this version.

Examples of what will produce "Entry History" in accounting:
- Posting a service to accounting
- Entering payments directly into accounting
- Changing a payment or transaction in accounting
- Removing and Un-deleting services in accounting…etc

Entry History can be secured in Users and Security by using the ACT03 function. (ACT03: Remove Accounting Transactions) This function now serves two purposes, "Removing" accounting and also "Changing" Entry History. Users that do not have authority to remove accounting will not be able to change Entry History information.

** Important Note: Each entry in Accounting will only show Entry History concerning that particular line entry except for Invoices and Balance Brought Forward (BBF) entries. The Entry History for Invoices and BBF are affected by what happens to services below them; removing or adding a service below an Invoice or BBF in accounting can affect the "amount", "balance" and "tax" of the invoice directly above that entry as well as the "balance" of any other invoice(s) or BBF(s) above it at a later date.

Change in the Update Process when installing version 2010.0

A utility program named Upd136 is the last update utility that has been used as a bridge to aid in the updating process for versions below 136. As new versions have been released since then; AVImark in theory, can now update a database all the way back from version 136 to the latest version, 2010.0. Due to many new enhancements written into the program over this length of time the risk of introducing problems during the update process has grown.

At the time of releasing 2010.0 it was decided it would be much safer to notify AVImark users during the update process, allowing AVImark to refuse to update a database on version 179 or lower. For this to happen, the update process must begin to be able to recognize the AVImark.exe in use is at a low version. When the exe doesn't pass this point of the update process a warning message will be shown: **"WARNING: This version of AVImark cannot update from version 169,176,178,179."**
At this time, it is VERY IMPORTANT that you contact Technical Support for immediate assistance. The update process has been interrupted and it is NOT recommended that you continue to use the database. Please call 877-838-9273 opt. 1.

Upon clicking Ok to the warning message and opening the program, the version information listed under Help… About AVImark will show Version 2010.0.0.xxxx and the Database Version will be listed as 169, 176, 178, 179 depending on the version the clinic was using prior to the update. At this point, please contact Technical Support.

** Important Note: A warning message has been added to version 2010.0 update window when downloading an update from the AVImark BBS; and a warning message is now noted on the main screen of the update CD to warn users NOT to update from a low version without contacting Technical Support.

PetDetect collars can now print the Patient Name using Large Font

AVImark is no longer limited to standard size print when printing Pet Detect collars. Version 2010.0 now has a new checkbox added to the Print Collar window called "Enlarge Name". With this option checked the patient name will be printed in large bold print on the collar.

Patient ID numbers used on CID screen

Many new AVImark features, such as DICOM integrations, require proper associations for imported studies. Unique identification information such as the Patient ID number in AVImark can be used for this reason by displaying the Patient ID number on the main CID screen. Version 2010.0 allows AVImark to show the Patient ID number the same as the Client Account number, on the right hand side of the Client and Patient information.

A new Advanced Option titled "Display Patient Record Number" can be set to True, to turn on the Patient ID. This option is set to False by default. Having it set to True allows a Patient ID number to be viewed on the CID on all accounts. Using Alt + Ctrl + R works as a toggle switch to turn the Patient ID off and on when the Advanced Option is set to False.

Customized Columns Made Printer-Friendly

AVImark now gives the option to print information from windows that use customized columns; areas of AVImark that use customized columns are:

Whiteboard
Treatment List
Inventory List
Work List
Users and Security
Canned Estimates and Patient Estimates

Unlike other reports generated in AVIMark, this report will print exactly as the grid appears on the screen.   Depending on the list of columns used, it may be necessary to decrease the size of other columns or remove them in order to make room for the information you want to use on the print out to print clearly.

To View\Print the window, right-click View, then Select Print.   See the examples below showing the Whiteboard and Inventory List.

Whiteboard:

File   Page   Zoom

Page 1 of 1   Zoom 100.0 %
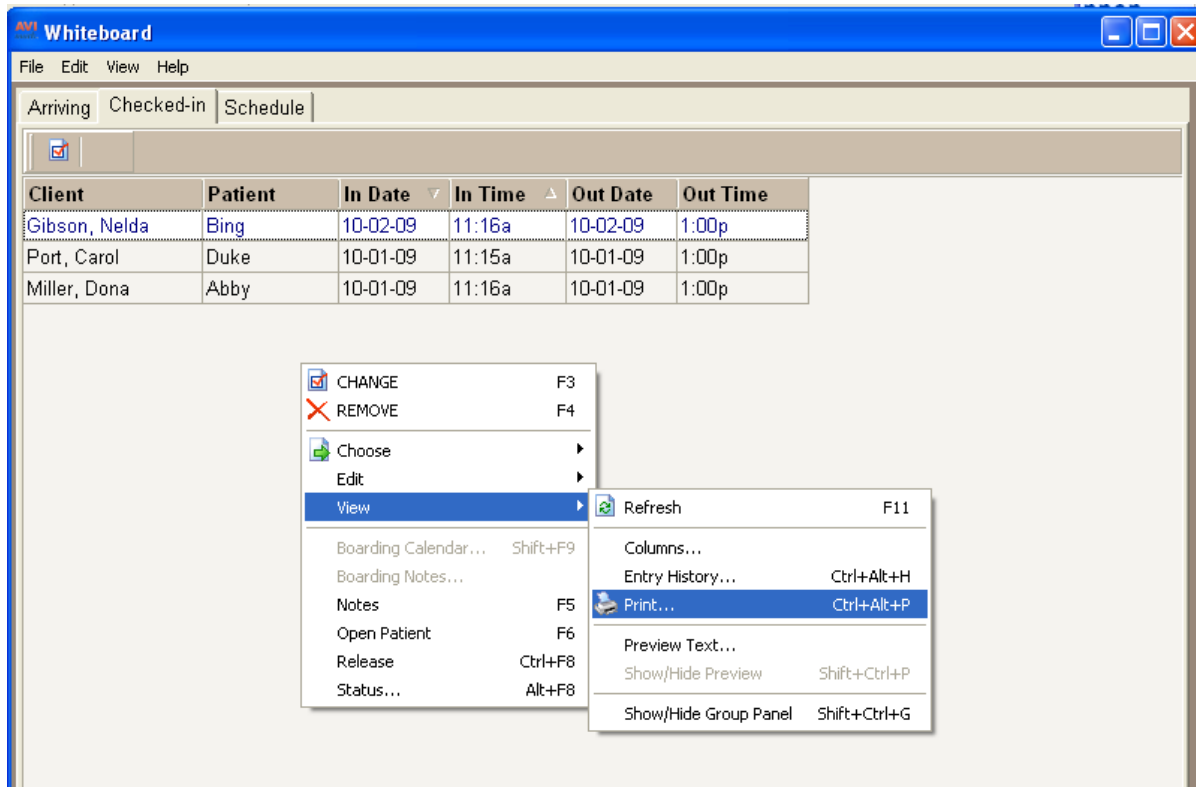
| Date: | 10-07-09 | | Loving Care Animal Hospital | | | Page: 1 |
| | | | Whiteboard | | | |

Client	Patient	In Date	In Time	Out Date	Out Time
Gibson, Nelda	Bing	10-02-09	11:16a	10-02-09	1:00p
Port, Carol	Duke	10-01-09	11:15a	10-01-09	1:00p
Miller, Dona	Abby	10-01-09	11:16a	10-01-09	1:00p

Inventory List:

File   Edit   View   Help

Category

Anesthesia Injectable
Anesthesia Inhalation
Bandaging/Casting
Bathing
Behavioral Management
Biologicals - Equine
Cremation/Disposal
Dentistry
Deworming - Equine

Records for Dentistry

☐ Include Tax   Species (all)

Code	Description	Price	Average C	Measure	On Hand	Order Pack	Actio
3900	Cavitron 25K P10 Dental Scaler	98.99	107.545	Each	1	1	F<
3901	Copal Cavity Varnish	0.00	0.000	Each	1	1	F<
3902	Disclosing Solution	0.00	0.000	Each	0	1	F<
3903	Gelfoam	0.00	87.614	Jar	3	1	F<
3904	Stomadhex Dental Patches-Lg	8.50	2.130	Card	0	10	FP<
3905	Stomadhex Dental Patches-Sm	8.50	2.130	Card	0	10	FP<
3906	Periodontal Disease ther. pack	47.21	23.665	Ea	4	1	F<

File   Page   Zoom

Page 1 of 1   Zoom 100.0 %

| Date: | 10-07-09 | | Loving Care Animal Hospital | | | | Page: 1 |
| | | | Inventory List | | | | |

Code	Description	Price	Average Cost	Measure	On Hand	Order Pack	Action Codes
3900	Cavitron 25K P10 Dental Scaler	98.99	107.545	Each	1	1	F<
3901	Copal Cavity Varnish	0.00	0.000	Each	1	1	F<
3902	Disclosing Solution	0.00	0.000	Each	0	1	F<
3903	Gelfoam	0.00	87.614	Jar	3	1	F<
3904	Stomadhex Dental Patches-Lg	8.50	2.130	Card	0	10	FP<
3905	Stomadhex Dental Patches-Sm	8.50	2.130	Card	0	10	FP<
3906	Periodontal Disease ther. pack	47.21	23.665	Ea	4	1	F<
3907	Disposable Prophy Angle	0.00	0.369	Ea	75	1	F<
3908	Hexa Rinse	0.06	0.029	ML	75	1	F<
4009	Prophy Cups	0.00	0.041	Each	100	1	F<
4010	Prophy paste 10 oz	0.00	5.425	Jar	0	1	F<
4011	Prophymatic #928-2280	0.00	219.400	Each	1	1	F<

SSL Security for E-mail

Secure Sockets Layer (SSL), provides network connection security using an encryption method. Most all email service providers offer SSL connectivity to their mail servers. For the purpose of sending emails through AVImark, version 2010.0 allows SSL encrypting to protect email message headers. This provides an additional degree of protection against traffic analysis, which can tell network intruders who you are communicating with, and how often. This enhancement allows for sending secure emails through AVImark and gives a wider choice of email providers.

Setup Advanced Options:

- **AVImark SMTP** will be the email service provider's port number.
- **Use Secure Connection** allows AVImark to use SSL security.
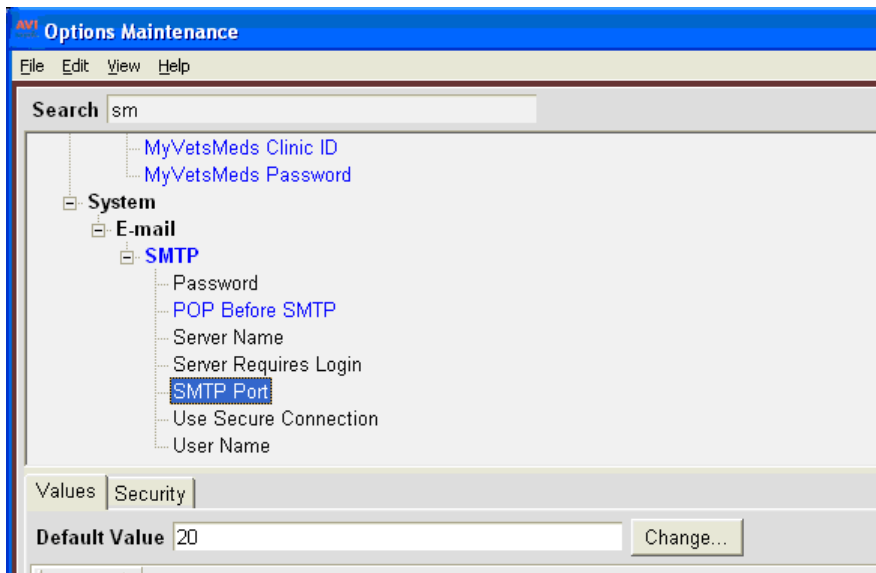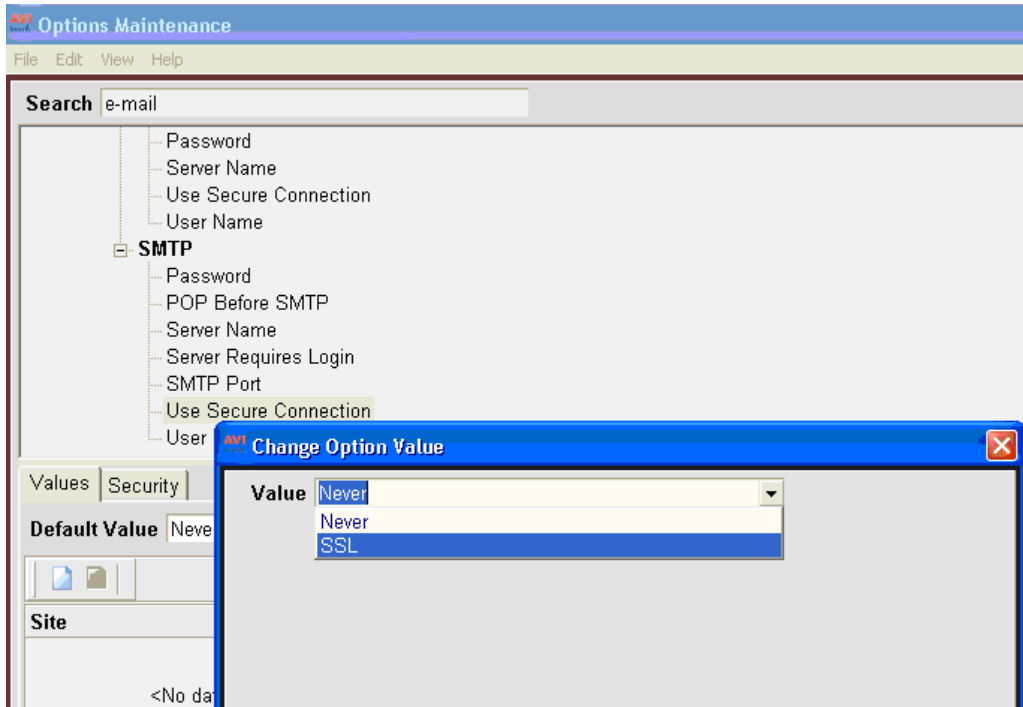
Item Lot Number to be printed on Drug Labels

Inventory item Lot Numbers can now be stored and printed on Drug Labels; using two new Advanced Options added to AVImark in version 2010.0:

- Inventory Lot Number
- Prompt to Update Lot Number When Lot Empty

Having the Advanced Option, "Inventory Lot Number" set to True allows these new fields to show in the Change Item window, Pharmacy Tab.

As the Inventory Item is given into Medical History the "with" amount will be subtracted from the Pharmacy Tab. When the "with" reaches 0 AVImark will give a message prompt on the CID showing "Lot Number appears to be empty. Assign new Lot?"

Upon clicking Yes to this message, the following window allows new information to be added. AVImark automatically fills the "With" amount using the Order Pack, minus however many over the last Lot was just dispensed.

** Note: To turn off this message prompt from appearing on the CID, the Advanced Option "Prompt to Update Lot Number When Lot Empty" should be set to False.

"Data has been changed by another user" Enhancement

The "Data has been changed by another user" warning message, that comes up when someone is editing the same record at the same time as another user on the network, has been improved in several areas of the program in version 2010.0. Although you will still receive the original warning message "Data has been changed by another user. You may need to reenter your changes" in some areas of the program; the new enhancement will allow users to decide if their changes should remain, be merged or discarded with the other changes made by another user on the network. This is how the new enhancement works….

When the same record has been opened more than one time and changes are made, the first person to click Done will immediately see the changes. The second person to click done will receive a "Resolve Changes" window with a message showing what area of the program was accessing the same record, the message will be something such as "Changes have been made to this "Client" by another user on the network."

In the Resolve Changes window the 2nd user will then decide to merge, override or discard their changes. Selecting the option **"Merge my changes with theirs"** will allow you to click Next to move to the next window to view the exact changes that have been made by both users and also gives you the ability to select which to save.
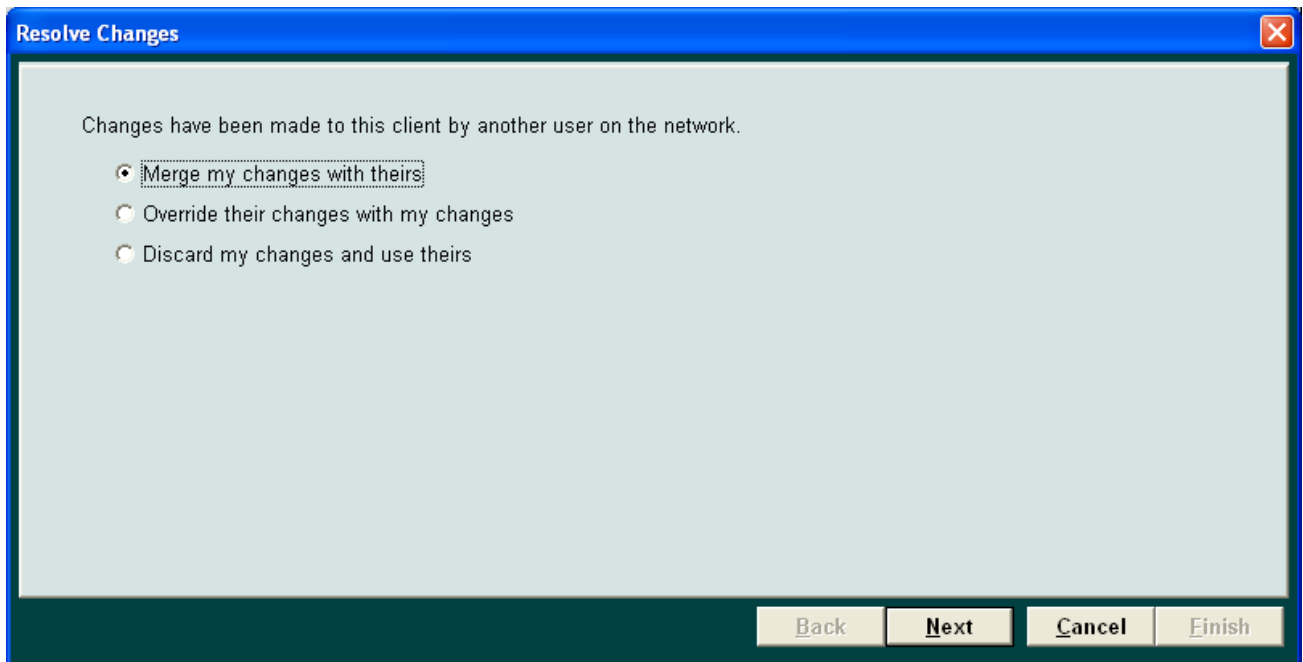
Resolve Changes

Select how each field should be resolved...

Field	Original	Mine	Theirs	Resolve
First	Sandys	Sandys	Sandy	Use Theirs
Phone	555-0156	714-0890	223-2356	Use Mine

Back   Next   Cancel   Finish

Selecting the option to **"Override their changes with my changes"** or **"Discard my changes and use theirs"** allows the 2nd user to make a decision in the Resolve Changes window by clicking Finish to save changes based on the option chosen or Cancel to close this window and save the initial changes that were made by user 1.

Resolve Changes

Changes have been made to this client by another user on the network.

○ Merge my changes with theirs
○ Override their changes with my changes
● Discard my changes and use theirs

Back   Next   Cancel   Finish

** Important Notes:

- The Boarding Calendar and Information Search areas will continue to show the original warning message that as has been used prior to 2010.0.

- Notes do not show in the Resolve Changes window but they may be resolved in the following windows: Change Appointment, Change Follow-Up and Change Glossary. The actual contents of the note change will not show. However, additional changes that are made like changing a category that a glossary entry belongs to or changing an increment on an appointment will be seen.

  For example: When one users is adding "notes" to one instance of a Change Appointment window and another user is changing the "increment" in another instance of the same appointment; clicking DONE to the "notes" instance first then to the "increment" changes will open the "Resolve Changes" window. If you choose to "Merge my changes with theirs" and click NEXT, the "Duration" will default to "Use mine" and the "Notes" will default to "User Theirs". Even though you cannot see those notes, clicking "Finish" will allow the notes to be updated as well as the incrmement change saved.

  If you had clicked Cancel to the Resolve Changes window in the above scenario, the notes are kept but the increment is not saved. The reason is because you have clicked "DONE" to the instance in which the notes were changed FIRST; therefore those are the notes that are kept. If you had clicked "DONE" to the increment changes first then canceled the Resolve Changes window from the "notes" change instance; it would have held the increment instead.

- The Options Maintenance area cannot easily show what data has been changed. The merge option is disabled , while the other 2 options to override or discard changes are still available.

Client\Server Network Administrator new log-off capabilities

Running Client\Server version 2010.0 brings more flexibility logging users off the network for hospital administrators.

Here are some examples of how hospitals can benefit from using this new enhancement:

An administrator who is logged into the server and wishes to open AVImarkServer may want to know if everyone is logged out before stopping the AVImarkServer service. To do this, the administrator can start AVImark at the server computer and open the Network Administration window to see if everyone is out, and log out users who are still in AVImark.

Also, a user that wishes to perform a backup at a workstation computer can go into the Network Administration window, log everyone out, then close AVImark (at this point AVImarkServer has no connections so it's connection to database files is closed), then restart AVImark in standalone mode and make the backup.

This feature brings a new option listed under the utilities menu on the main CID screen. To access, click on "Utilities"…. "Network Administration."

** Important Note: To access this window, you must be authorized to the new ADM38 security code. During update, anyone that is authorized to ADM02 will be automatically authorized to ADM38, so the network administrator window will be secured by default after updating.
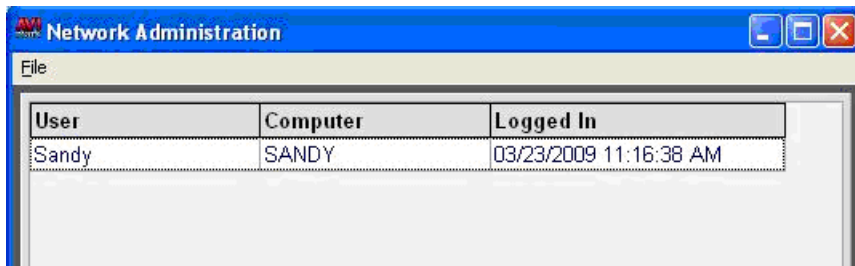
This window lists all users who are currently logged into the same AVImarkServer that you are currently logged into.

If users do not log into AVImark with a password, then they will show as "Unknown User" in the administrator window.

Also, the window will not show any users that are running AVImark in standalone mode. And, the window will not show yourself listed.

While you are in this window, users that are actively logging into and out of AVImark will have their status automatically updated in the Network Administration window. If however, you are automatically logged out of AVImark while you are in the Network Administration window, and then you log back into AVImark, the window will not be automatically refreshed until you perform a manual refresh or you leave and come back into the Network Administration window.

If a user is actively typing or using the mouse, they will not be logged out until about a second after using the mouse or keyboard.

We are very exited to announce…. You can now choose "File|Log Out All" to log out ALL users on other workstations. You can also, right-click and choose "Log Out" to log out individual users.

The logon window now shows a status message when running AVImark ClientServer and AVImark Classic. The bottom of the window indicates how the logon window came to be shown.

Possible status messages are:

- Starting AVImark – user just started AVImark
- Clocking-in – user who wasn't logged in tried to use the timeclock and was asked to login
- Logged-off – user was logged off manually
- Timed-out – user was logged off automatically through the auto-logoff feature
- Logged-off by Administrator – user was logged off by an administrator using the new network administrator window

Examples:
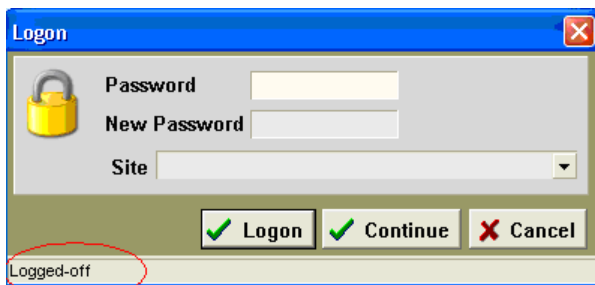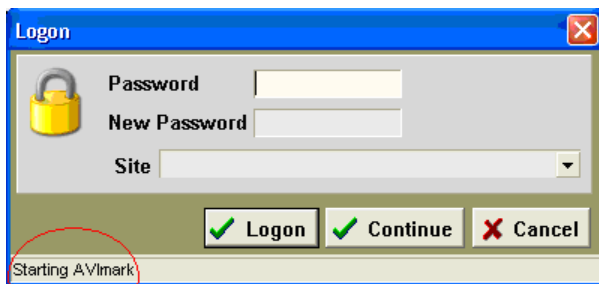
Ability to set default fields in the Client Selection Display window

After an enhancement was released in version 2008.2 to allow a default field be automatically set in the CSD window based on the last field that was searched from, we received many suggestions asking for this feature to be optional.

Version 2010.0 allows users to specify which field you want the curser to default to when opening the CSD window. A new Advanced Option, "Default Search Field" will allow each user to set the curser to a default field according to their persons needs.

Ability to Exclude/Include Inactive Clients from Client Selection Display

The ability to exclude/include inactive clients from being found in the client selection display (CSD) has been added to the program. With the addition of an "Include Inactive" check box in the bottom left corner of the CSD you will be able to search for only active clients, avoiding the task of searching through a list of active and inactive clients. After you have searched for a name with "Include Inactive" unchecked and you decide to include inactive clients you will just simply check "Include Inactive".

A new Advanced Option, "Default: Include Inactive During Client Selection", has been added to the option maintenance window. This will allow you to select True or False depending on whether you want the "Include Inactive" box checked or unchecked.

Scheduled Blockoff Enhancement

AVImark has enhanced its Out-of-Office Schedule Blockoff capability in the Appointment Calendar to become even more user-friendly. A few new changes you will notice are:

The Out-of-Office Schedule now opens with a larger Blockoff window which allows viewing multiple entries as well as the Blockoff Exceptions.
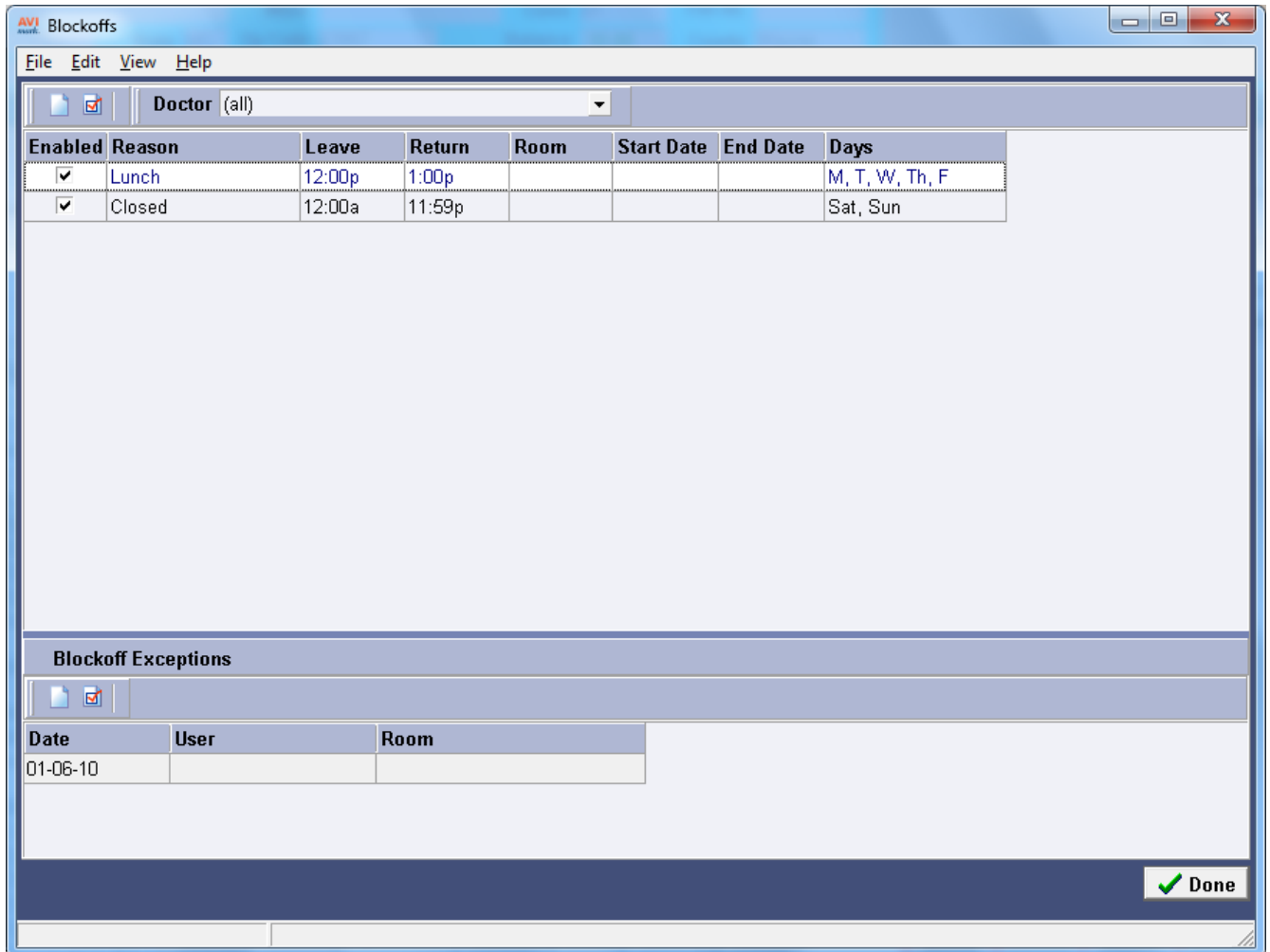
When selecting more than one entry, a record count is now displayed at the bottom left of the blockoff window.
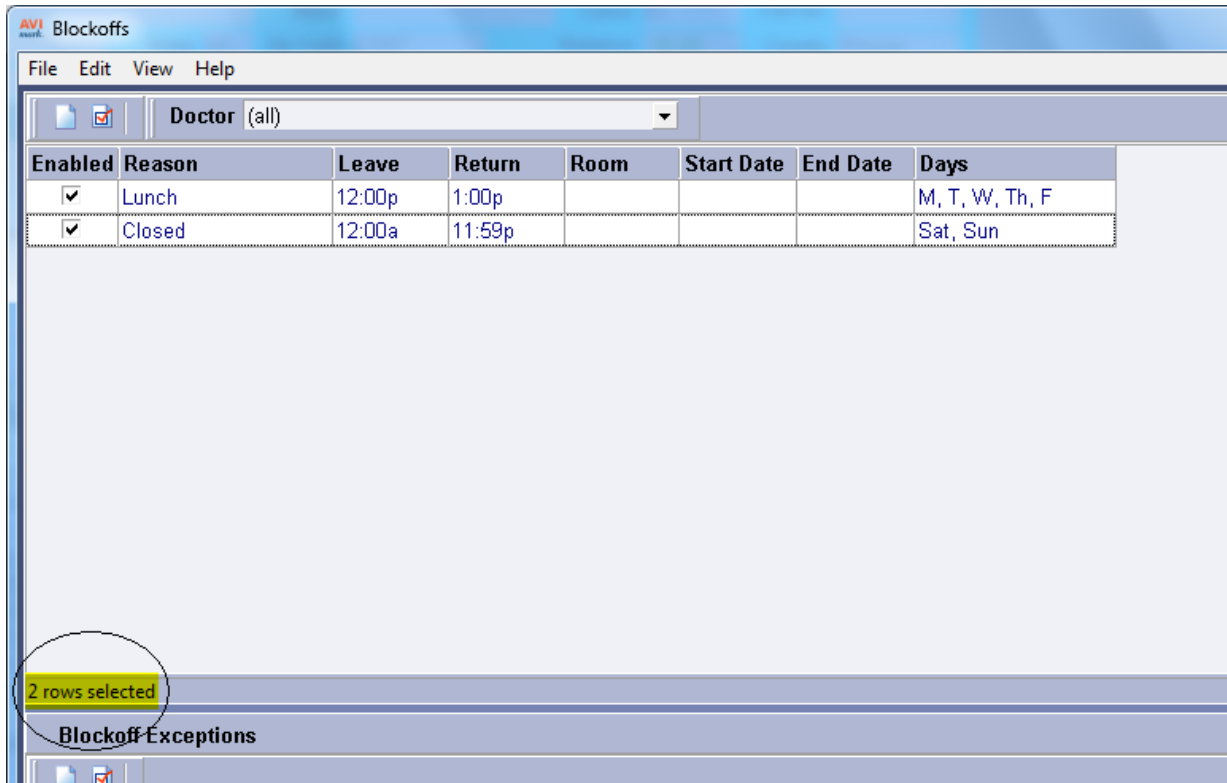
As with all AVImark grid windows, you are also able to right click view columns and drag out different columns to customize your view. The entry history feature is also available from this window. By doing a right click view entry history, you will be able to see who added or changed that entry. Sorting is done easily, by simply clicking on the column heading.

There are 3 new security functions that have been added to the Appointment category in Users and Security.

- APT07: New Blockoffs- Prevents unauthorized users from creating new blockoffs.
- APT08: Change Blockoffs- Prevents unauthorized users from changing blockoffs.
- APT09: Remove Blockoffs- Prevents unauthorized users from removing blockoffs.

Site users will also benefit from this enhancement as it allows adding and viewing blockoffs for users assigned only to that specific site.

AVImark also now allows you to print a blockoff report that will list each doctor's blockoffs, by going to File, Print…in the Blockoff window.   Each doctor will have their own page listing each past, present and future blockoff they have scheduled. Blockoff Exceptions are also included in the report.

State Specific Enhancements

This section contains new features added to version 2010.0 in order to allow AVImark to be compliant with certain state regulations.   Although, these new features aren't limited to only being used by the specific states; if your hospital can benefit from using one of these new features please feel free to apply them to your database.

New merge word <vacc-dosage> created for Tennessee

The state of TN requires the rabies report to include a dosage amount; this enhancement was added to the program in version 2008.2. As of version 2010.0 "dosage" can now be printed on rabies certificates by using a new merge word <vacc-dosage>.   This merge word pulls the dosage amount from the quantity field in the Inventory Used window that is attached to a rabies vaccination code in Medical History. Or it will also pull the correct information if the item is entered directly into Medical History.

<Vacc-dosage> looks at the measure field setup on the item, searching for only 2 types of measurements either ML or CC to make sure the correct item is being pulled from the Inventory Used window.

Patient Chart option added for North Carolina

According to the North Carolina Veterinary Medical Board inspection regulations, North Carolina clinics are required to have the hospital name and address displayed on each page of the Patient Chart. This new option was made available for the state of North Carolina but can be used by any other state that would like to use it as well. To allow the hospital name and address to be printed on each page of the Patient Chart there is a new Advanced Option that can be set to True. (upon updating to 2010.0 this option is set to False by default)
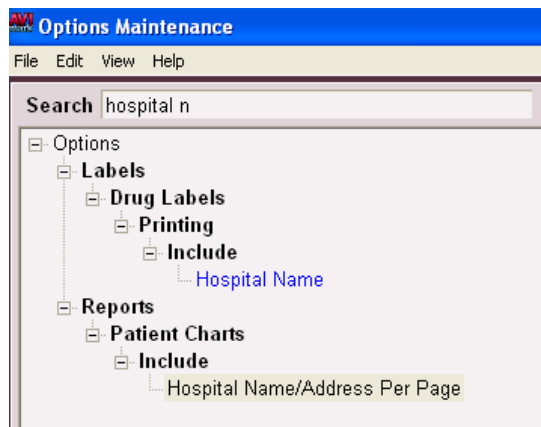
There is also a new check box listed under the "Include" options of the Patient Chart window.
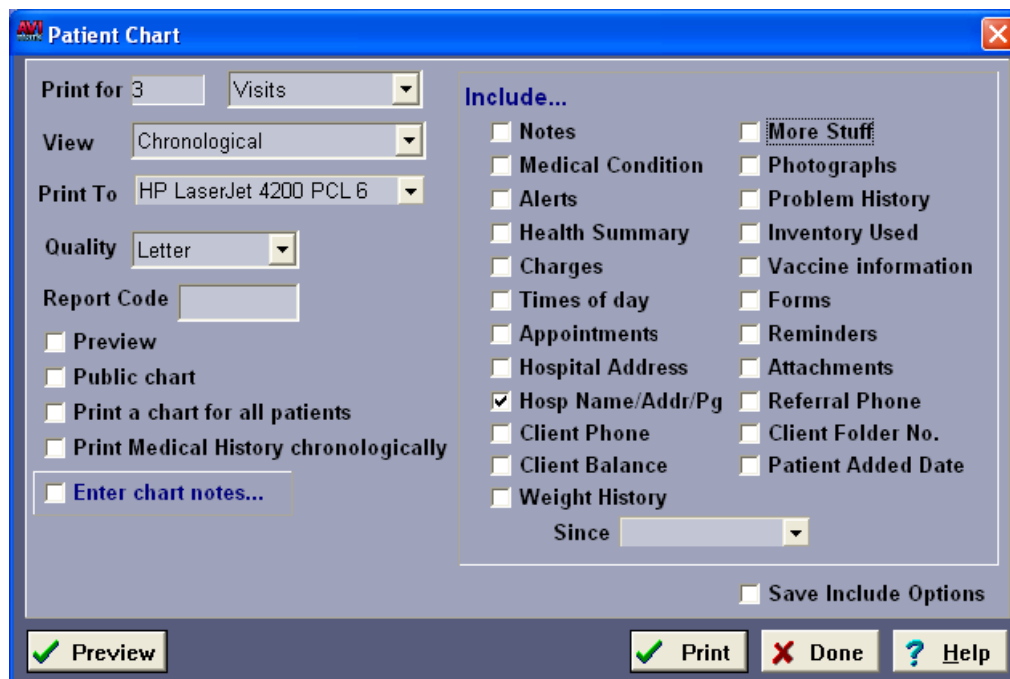
The existing option of "Hospital Address" still works the same as it always has; having it checked will only print the hospital name and phone number on the very first page of the chart.

ASAP report for Arizona

ASAP report for Arizona

AVImark has added Arizona to the ASAP reporting utility in an effort to assist clinics in maintaining compliance with Controlled Substance tracking requirements.

To access this utility to begin generating the report for the State of Arizona, you are required to:

- Have your Hospital DEA number assigned on the Demographics tab in Hospital Setup
- Assign your doctor DEA numbers in Users and Security
- Make sure the AVImark items to be reported have the C Action code (denoting it as Controlled Substance) and the NDC number assigned
- Setup client More Stuff with the Field Name of Owner_DOB, and type of Date, and there is an actual Client DOB entered into this field
- Setup client More Stuff with the Field Name of Owner_Gender, and type of Phrase, and enter M for Male or F for Female into this field
- Have the "Include Sequence Number option for printing Drug Labels" set to True
- Printing prescription labels through AVImark will assign numbers and maintain them in sequential order. This number will be a unique Rx number that will be printed on the corresponding Drug Label, as well as being reported for that Controlled Substance line entry on the ASAP report.

To get the properly reported data for your state:

- From the AVImark CID, select Utilities, Utilities….
- Type in ASAP
- You will be prompted with a backup option, if you currently do daily backups you can click No. If you would like AVImark to be backed up, click Yes.
- In the ASAP utility, select the From date and Days to send
- For Export to, select the location to which you wish to export the file. For example, the C:[ ] option.
- Select your state: Arizona
- Select the option "Only report entries with label notes". If a Controlled Substance entry in Medical History contains drug label notes, only those entries will be reported when using this option.
- Select .dat under File Extension. The State of Arizona requires .DAT format.
- Click Run.
- When completed, your report will be in .DAT format and can be found in the location listed in your "Export to" field.
- You will find the file located on the C Drive having a date for the filename such as YYYMMDD.DAT , (20090501.DAT).

ASAP change for Oklahoma

A new field has been added to the ASAP report for Oklahoma in version 2010.0. Per the Oklahoma Bureau of Narcotics the state now requires the first and last name of the owner listed on the report instead of the patient.

RabiesCSV requirements for El Paso, Texas

El Paso, Texas now requires each rabies report to display the Vaccine Mfg and Serial Number; along with a column on the report showing the annual registration certificate due date and patient name due to renew the certificate.   Rabies vaccination information is tracked and reported in AVImark on the CSV file by using the R action code assigned to rabies treatment codes. To report the certificate renewal date each hospital is required to use a treatment description of **EP Registration Certificate**. This exact name must be used on the treatment to flag AVImark to report the correct information on the CSV report. The **EP Registration Certificate** code must also have an annual reminder setup so the due date is reported and printed in the correct column on the report.

The city of El Paso must be assigned to the client for the correct information to be reported.

To access this new report go to Utilities….Utilities and type in Rabiescsv, then select El Paso, TX, enter the Hospital code, select the Output file and click OK to generate the CSV file at the location specified in the Filename field.

Important Note: Each hospital must use the exact treatment description of **EP Registration Certificate for the CSV report to meet El Paso requirements. If you have been using a previous code and description for the annual certificate renewal, please contact Technical Support at 877-838-9273   opt.   1.

Albuquerque, New Mexico added to RabiesCSV

Albuquerque, New Mexico has been added to the RabiesCSV utility to provide a CSV file reporting the city requirements. The city of Albuquerque requires the patient Microchip number to be listed along with the regular requirements that are on the csv report. The client must have Albuquerque selected as the city and NM selected as the state, and the R action code must be assigned to Rabies treatments.

To access this new report, go to Utilities….Utilities and type in Rabiescsv, then select Albuquerque, New Mexico format, enter the Hospital code, select the Output file and click OK to generate the CSV file at the location specified in the Filename field.

Nevada requires unique refill Rx number on drug labels

The state of Nevada now requires drug labels to print unique Rx numbers for refills. This can be done by setting these Advanced Options to True:

- Nevada Refill Sequence Number
- Sequence Number

As refills are entered into Medical History, AVImark will look back to the original sequence number that was assigned when the item was administered. Then assign the letter R to the end of the number to make it unique. For example: If the original sequence number was 500 the refill sequence number will be 500R.

Service Charge amounts cannot accrue from remaining balance

AVImark has received a request from different states to not allow Service Charges to accrue on previously added finance charges. In order to meet this request there is a new Advanced Option titled, "Service Charge Accrues From Previous Service Charges". This option defaults to True and allows AVImark to continue to work the same way it always has.
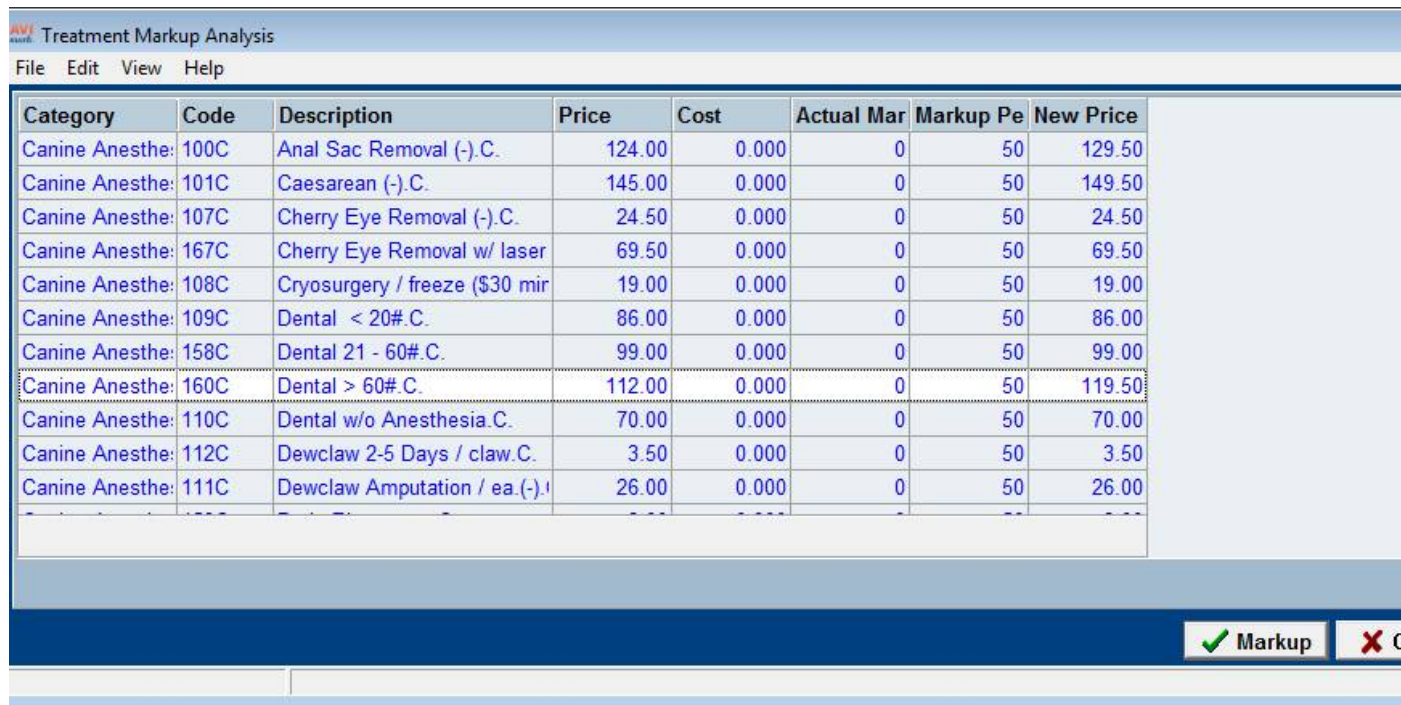
Having the option set to False will not allow the service charge amount to be compounded by adding to the previous balance that included a service charge fee. For example: If a client starts with a 10.00 balance, after 30-days overdue a 2.00 service charge will be added leaving a new balance of 12.00. Next month's service charge amount will only be based on the original 10.00, not 12.00.

New Markup Analysis

Treatment Markup Analysis

Version 2010.0 brings a new enhancement to the AVImark Markup tool, Markup Analysis window. The Markup Analysis window has integrated the new window format of using columns along with a new Advanced Option to give users several new choices of how to work with marking up prices.

To access the new Markup Analysis window from the Treatment and Inventory List, highlight a category or code then right-click Markup to select the Mark Up button to open the analysis window.

The new advanced option **"Show Sales Data by Default"** places 5 additional columns in the window to show Fiscal Income, Fiscal Sold (quantity,) Projected Income, Income Difference, and Income Difference Percent.   This new option is set to False by default. Setting it to True, automatically adds the 5 new columns to the analysis window as shown in the example below.

Note: This will cause the Markup window to take a little longer when opening since this will calculate the sales data for all entries during the opening process.
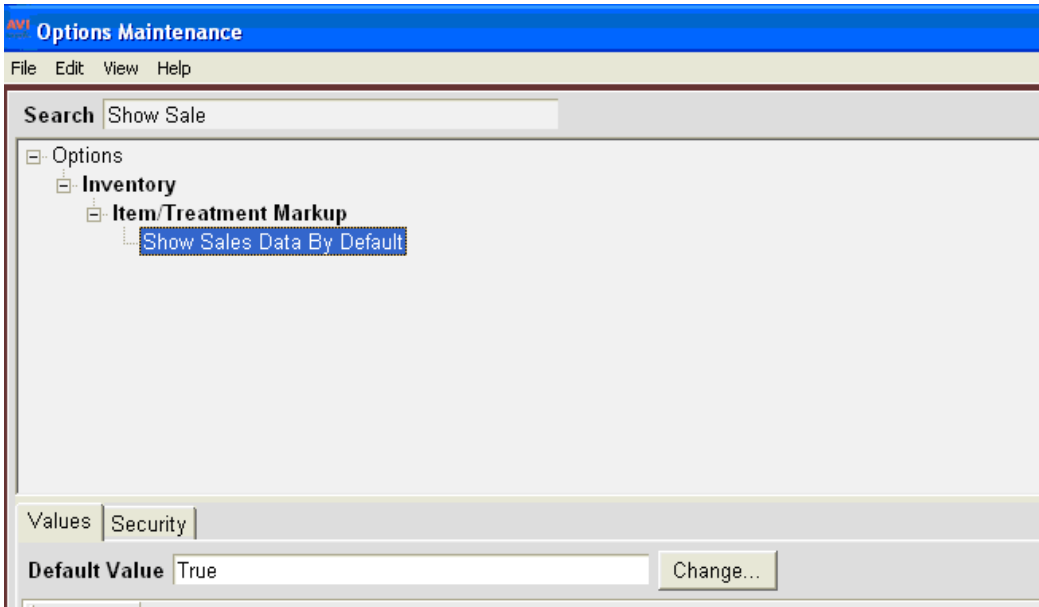
Sales data amounts are figured at the bottom of the analysis window.

With a minor change of clicking View…Show/Hide Group Panel, then dragging Category into the Group Panel, you can have the information grouped by Category which will give Sales data amounts categorically in addition to a total at the bottom.

Code	Description	Price	Actual Mar	Markup Pe	New Price	Fiscal Income	Fiscal Sold	Projected Income	Income Differ
+ Category : Anesthesia									
						0.00	0.00	0.00	
+ Category : Boarding & Grooming									
						0.00	0.00	0.00	
+ Category : Hospitalization									
						0.00	0.00	0.00	
+ Category : Lab Referred									
						0.00	0.00	0.00	
+ Category : Lab Services - Blood Tests									
						19.40	1.00	19.40	
+ Category : Lab Services - Other									
						169.50	1.00	169.50	
+ Category : Large Animal Anesthesia									
						0.00	0.00	0.00	
						1148.05	38.50	626.50	-5

All markup percent values can now be added as a decimal value, for example: 10.50.

The Treatment List now has a new Markup Percent field below the Cost field on each individual treatment.

New Advanced Options have been added to remember the rounding settings in the Markup window. These default values will be in place when the Markup window is opened, but can also be edited or completely removed from the Markup window when necessary. For example, if you wanted to have no rounding, you could set each value to 0.00.

The following enhancements have been added for reviewing markups:

- From the Markup Analysis window you can use View...Show Sales Data to turn columns on or off, such as Fiscal Sales, Fiscal Sold, Projected Income, etc.

Treatment Markup Analysis

File   Edit   View   Help

	Refresh	F11	up Percer	Markup Percent
Descrip				
Dental F	Columns...		10.5	10
Dental F	Entry History...	Ctrl+Alt+H	10.5	10
Dental F	Preview Text...		10.5	10
Dental F	Show/Hide Preview	Shift+Ctrl+P	10.5	10
Canine [			10.5	10
Canine [	Show/Hide Group Panel	Shift+Ctrl+G	10.5	10
Feline D	✔ Show Sales Data		10.5	10
Feline Dental P	78.50	0.000	10.5	10
Dental Fluoride	7.60	0.000	10.5	10
Dental Prophyla	56.50	0.000	10.5	10

- By default, AVImark displays a variety of columns that will be explained in more detail below. To customize this window or group by column use the right-click View…Column option or refer to the Chapter 32 in the AVImark manual.

Treatment Markup Analysis

File   Edit   View   Help

Category	Code	Description	Price	Cost	Actual Mar	Markup Pe	New Price
Canine Anesthe:	100C	Anal Sac Removal (-).C.	124.00	0.000	0	50	129.50
Canine Anesthe:	101C	Caesarean (-).C.	145.00	0.000	0	50	149.50
Canine Anesthe:	107C	Cherry Eye Removal (-).C.	24.50	0.000	0	50	24.50
Canine Anesthe:	167C	Cherry Eye Removal w/ laser	69.50	0.000	0	50	69.50
Canine Anesthe:	108C	Cryosurgery / freeze ($30 mir	19.00	0.000	0	50	19.00
Canine Anesthe:	109C	Dental < 20#.C.	86.00	0.000	0	50	86.00
Canine Anesthe:	158C	Dental 21 - 60#.C.	99.00	0.000	0	50	99.00
Canine Anesthe:	160C	Dental > 60#.C.	112.00	0.000	0	50	119.50
Canine Anesthe:	110C	Dental w/o Anesthesia.C.	70.00	0.000	0	50	70.00
Canine Anesthe:	112C	Dewclaw 2-5 Days / claw.C.	3.50	0.000	0	50	3.50
Canine Anesthe:	111C	Dewclaw Amputation / ea.(-).(	26.00	0.000	0	50	26.00

✔ Markup   ✗ C

Treatment Markup Analysis

File Edit View Help

ice	Fiscal Income	Fiscal Sold	Projected Incon	Income Difference	Income Difference Percer
56.50	141.25	2.00	141.25	0.00	0.00
47.50	118.75	2.00	118.75	0.00	0.00
35.00	0.00	0.00	0.00	0.00	0.00
56.00	0.00	0.00	0.00	0.00	0.00
76.00	0.00	0.00	0.00	0.00	0.00
88.00	0.00	0.00	0.00	0.00	0.00
69.00	0.00	0.00	0.00	0.00	0.00
78.50	0.00	0.00	0.00	0.00	0.00
7.60	0.00	0.00	0.00	0.00	0.00
56.50	0.00	0.00	0.00	0.00	0.00
	260.00	4.00	260.00	0.00	0.00

New Markup Analysis features:

- **Columns**

Price\Cost: Current price and cost that is set on the Treatment or Inventory item.

Actual Markup Percent: Is shown by default and is the default markup percent value. If a user enters a new markup percent and it is different that the Actual Markup Percent, the row will change to be highlighted in blue.

Category	Code	Description	Price	Cost	Actual Markup Percent	Markup Pe	New Price	Fiscal Inco	Fiscal
Canine Anesthe:	100C	Anal Sac Removal (-).C	124.00	0.000	0	0	124.00	0.00	
Canine Anesthe:	101C	Caesarean (-).C.	145.00	0.000	0	0	145.00	0.00	
Canine Anesthe:	107C	Cherry Eye Removal (-)	24.50	0.000	0	0	24.50	0.00	
Canine Anesthe:	167C	Cherry Eye Removal w/	69.50	0.000	0	0	69.50	0.00	
Canine Anesthe:	108C	Cryosurgery / freeze ($:	19.00	0.000	0	0	19.00	0.00	
Canine Anesthe:	109C	Dental < 20#.C.	86.00	0.000	0	0	86.00	0.00	
								0.00	

Markup Percent: Is the percentage that is set on the calculation field of the Markup window.

New Price: It will be the price set on the Treatment or Inventory item after the Markup is completed.

Fiscal Income: Income received for the fiscal year for the Treatment or Inventory item.

Fiscal Sold: The amount sold for the fiscal year for the Treatment or Inventory item.

Projected Income: Is a projected amount of revenue the clinic may generate due to the markup.

Income Difference Percent Is the Projected Income divided by the **Income Difference**.

- **Entering a new price directly**

You can now enter a new price directly into the New Price column; this will update the sales data as well. When a new price has been entered manually, it will show the row in blue and the Markup Percent will be updated appropriately.

- **Listed in the "File" menu there are 2 new menu items, "Open" and "Save As".**

You can use these new options to save the markup values and new price values to a .dat file. This can be used to later access the file using "Open", for AVImark to read the file by using the current view, match up by code and show the new Markup Percent and New Price figures.

- **Printing the Markup window.**

The Print option has been moved under the File menu. The printed Markup Analysis reflects the columns you have customized and grouped by. If you are showing Sales Data, it will also give totals for each grouping and grand totals at the bottom of the report.

New security functions:

- **INV16: Change Inventory Category Markup Percent**

Prevents unauthorized users from changing the Markup Percent filed in the Change Inventory window.

- **INV17: Change Inventory Markup Percentage**

Prevents unauthorized users from changing the Inventory Markup Percentage.

- **TRT08: Change Treatment Category Markup Percent**

Prevents unauthorized users from changing the Markup Percent field in the Change Treatment window.

- **TRT09: Change Treatment Markup Percent**

Prevents unauthorized users from changing the markup on the Treatment Prices.

Security Features

Administrative Security Functions

Users and Security now has the following additional security options for Hospital Administrators.

- **ADM39: Download Utilities and Updates to AVImark**

Protects downloading an update through AVImark by using the Utilities Menu… Update AVImark.

- **ADM37: Work with Built-in Utilities**

Protects built-in utility programs when accessed through AVImark by using the Utilities.. Utilities menu. In previous versions, ADMO1 blocked users from accessing any built-in utility; this new function was added to allow security without authorizing system wide authority. Securing the ADM37 function will allow hospital administrators to protect utilities that have been built into the program.

- **ADM40: Update AVImark**

Protects AVImark from being updated either by downloading an update or installing it froma CD. After the original update prompt comes up and "Yes to update" is clicked, the Logon window prompts. Upon clicking Yes to proceed with an update, you will be presented with an "AVImark Version Update" window; clicking the Update check box in this screen will present the "Allow Access" prompt if ADM 40: Update AVIMark is secured.

- **ADM41: Use AVImark Sidekick**

Protects importing from Sidekick by only allowing authorized users to access the Utilities…Sidekick menu.

- **MED21- Unlock Medical History Notes**

Allows authorized users to unlock Notes and SOAP records.

Upon updating to version 2010.0, anyone authorized to ADMO1 will now be authorized to the new security function MED21.

Administrators can now use MED21 outside of the ADMO1 group to allow authorized users the ability to unlock notes and soap records when necessary.

In previous versions of AVImark only administrators with ADMO1 authority could unlock SOAP records or a note window. Once these windows had been locked because 2 different users had

accessed them at the same time, the Notes or MCR record was set to View Only status until an Admin logged in to allow them to be used again.

- **INV15: Allow Change to On-Hand Only**

Hospitals that want to protect everything in the Change Item window except the On Hand field can secure this new function to give permission to change On Hand. INV15 should ONLY be given to users that are allowed to change the On Hand amounts and no other item details in the Change Item window.

Sending Group E-mails from AVImark now provides client privacy

To help secure the privacy of client e-mail addresses, AVImark now has the ability to BCC (Blind Carbon Copy) a list of e-mail addressed rather than using CC (Carbon Copy) when seding to a "group" of recipients.
When the new Advanced Option, "Number of E-mails To Send To Client At One Time" is set to greater than 1, and you send e-mails to a group of clients either from an Information Search or through Work With Reminders; all e-mail addresses greater than one will now be placed in the BCC area.

Important Note: The Advanced Option defaults to 1 when updating to 2010.0. To start this feature the number of e-mails being sent at one time must be set higher than 1, as is shown in the example below:
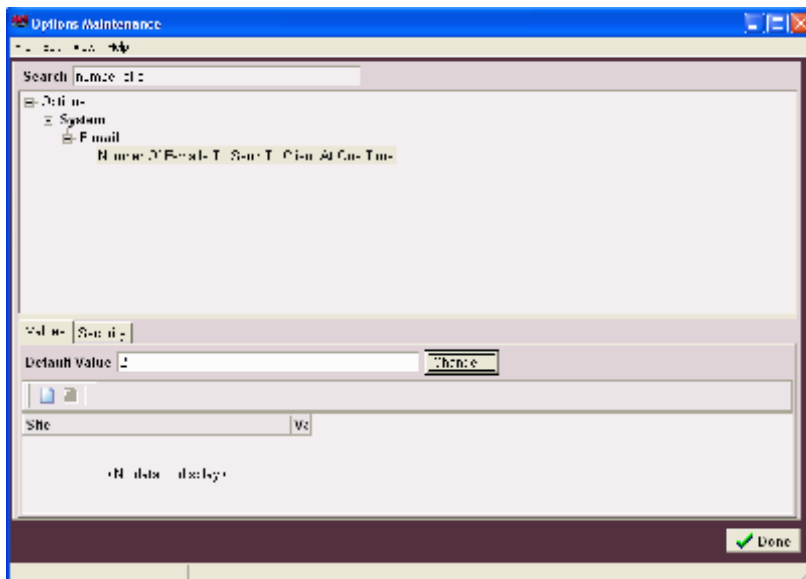
SSL Security for Email

Transport Layer Security (TLS), successor to Secure Sockets Layer (SSL), provides network connection security using an encryption method. Most all email service providers offer TLS/SSL connectivity to their mail servers. For the purpose of sending emails through AVImark, version 2010.0 allows TLS/SSL encrypting to protect email message headers. This provides an additional degree of protection against traffic analysis, which can tell network intruders who you are communicating with, and how often. This enhancement allows for sending secure emails through AVImark and gives a wider choice of email providers.

To use this feature the following Advanced Options will need to be setup:

- Set the "SMTP Port: to the email service provider's port number requiring the TLS/SSL communication protocol.

- Set the "Use Secure Connection" to SSL.
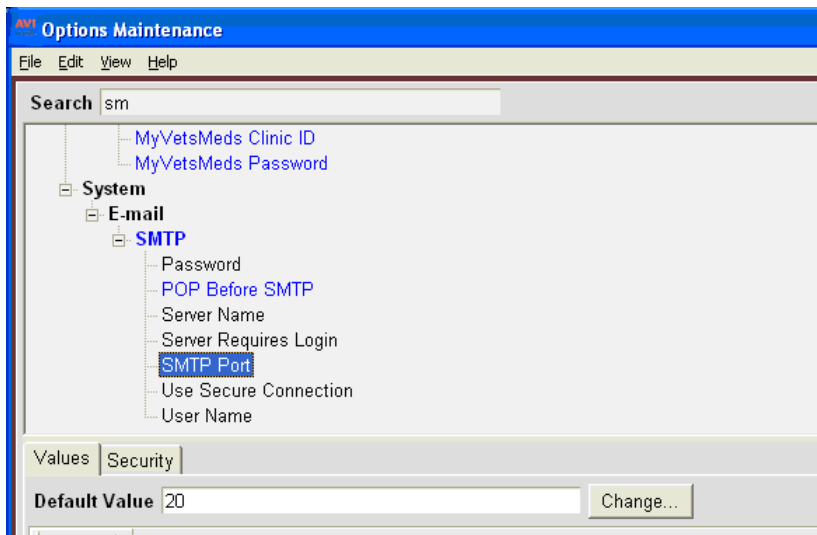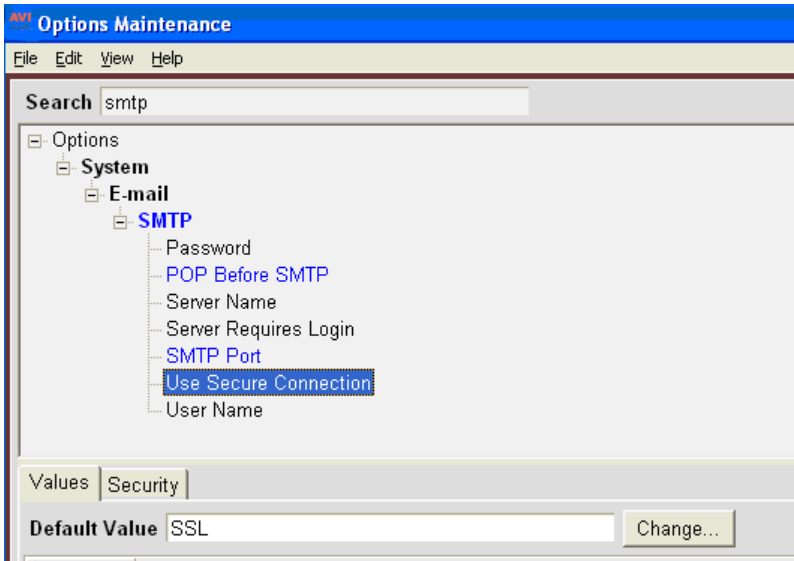
Improved Test Results Feature

Test Results Feature

With version 2009.3, you will see vast improvements to the way AVImark handles test results. We are excited bring you a totally new way to retrieve, store, and access results. With this new interface there will never be a need to pre-define test fields or reference ranges. AVImark will now import result values as they are received from the instrument or laboratory.
**NOTE: Results that currently exist in Medical History More Stuff will not be affected by this update. They will still remain as they are, print on Patient Charts, and maintain the ability to graph. However, graphing results between Medical History More Stuff values along with the new test result storage format will not be possible at this time. You will be able to graph More Stuff results, and will be able to graph values in the new Tests area, but not have both data styles appear in the same graph.

Key features of this new enhancement:

- No longer required to define fields on the AVImark treatment
- No longer required to define species specific reference ranges
- No longer required to use More Stuff to store test results
- No longer limited to the number of fields/results imported
- AVImark will be able to accept data (results) in any format as they are received from the instrument or lab without the limitations of being decimal, integer, ratio, word processing, phrase, range, etc.
- Comments will import whenever supplied by the lab
- All Cultures and Sensitivities results will be imported
- Any results that are outside the normal reference range will be displayed as "out of bounds" in bold red for easier identification
- You will be able to simply select the Medical History entry in which you want to import results, and right-click, Import to bring in results from the appropriate instrument.
- The ability to access our new "Test Inbox" storage location to retrieve any results that were unable to be automatically imported to the proper patients History, so those results can be manually imported to the patient record.
- Graphing results by test or field will continue to be available in Excel or AVImark

Importing lab results:

- Find and highlight the appropriate Medical History entry.
- Select the Tests checkbox located in the Attachments list.

- From the Tests window, select the Import From menu.
- Choose the option that represents the lab from which you intend to transfer results.
- Import the results.
- The results will be received in any value, type, and with any notes or comments as they are sent from the lab/instrument, as well as display the normal range as dictated by the lab or instrument at the time the test was completed.
- The results will be permanently associated to this AVImark Medical History entry.
- Once imported you will be able to open, view, print, and graph the results at any time.

Viewing results:

- To view results at any time, select the Medical History entry, then select the Tests checkbox.
- You can select the entry in the Tests window that represents the set of results you wish to view, and double-left click to open the Analytes window.
- In this window you will see the Analytes, Measure, Result, Low Value, High Value, as well as a "Quick Chart" indicating where the result value falls in comparison to the High-Low range.
- If the Result value falls outside the "normal" range, the line representing the result for that analyte will be displayed in bold red.

- The columns are able to be customized to the user's preference to display more or less information.
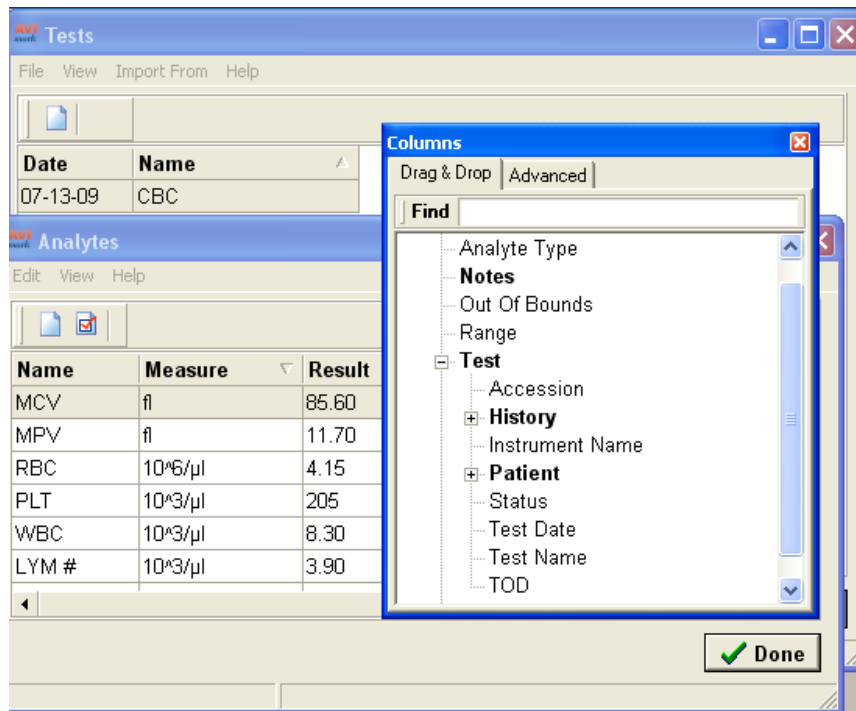
Graphing results:

- Graphing based on test or field name, is still available for integer or decimal result values using AVImark or Excel on selected analytes.

Printing results:

There are two methods for printing patient test results:

- o **The AVImark Patient Chart**
- o **AVImark Results Report**

Printing results with the AVImark Patient Chart

- A new option has been added to the Patient Chart area to include result data stored in the new Tests area.

- Below is an example of how results will be displayed on the Patient Chart:

Printing results using the AVImark Results Report:

- From the Tests window, you can highlight the test or tests you want to report, select File, then Print, to print the Result Report.
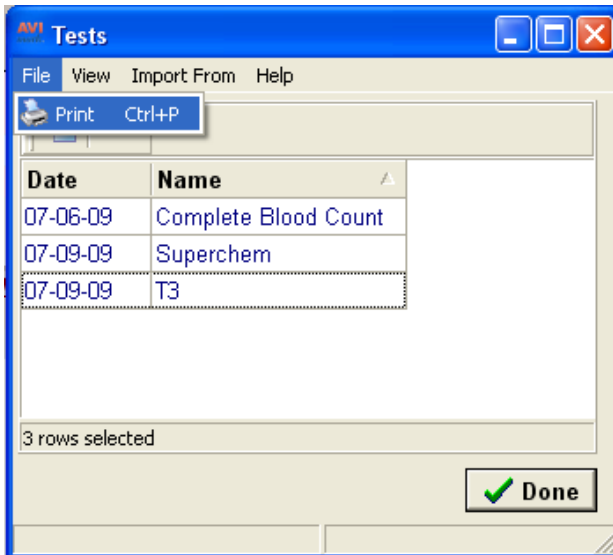
- The generated report will display detailed patient and hospital information, as well as the owner and doctor.
- The analyte results will be sorted by test names, and each line will clearly report the analyte name, result value, normal reference range, and a horizontal box plot graph. See example below:

Patient Info:
Name: Zoey
Chart No: GetThis
Owner: Cravens, Marla
Doctor: Marla Cravens

Speices: Canine
Breed: Border Collie
Age: 4Y
Sex: S

Hospital:
Marla's Test AVImark
1313 Mockingbird Ln.
Mockingbird Heights, CA 12345

Accession No.	Doctor Marla Cravens	Owner Cravens, Marla	Pet Name Zoey		
Test	Results	Adult ReferenceRange	L	Normal	H
Complete Blood Count					
WBC	7.2	4.0-15.5 10^3/mL			
RBC	6.8	4.8-9.3 10^6/mL			
HGB	15.2	12.1-20.3 g/dL			
HCT	43	36-60 %			
MCV	64	58-79 fL			
MCH	22.	19-28 pg			
MCHC	35	30-38 g/dL			
Comment					
Neutrophils	69	60-77 %			
Absolute Neutrophils	4968	2060-10600 /mL			
Lymphocytes	23	12-30 %			
Absolute Lymphocytes	1656	690-4500 /mL			
Monocytes	6	3-10 %			
Absolute Monocytes	432	0-840 /mL			
Eosinophils	2	2-10 %			
Absolute Eosinophils	144	0-1200 /mL			
Basophils	0	0-1 %			
Absolute Basophils	0	0-150 /mL			
Platelet Estimate	Adequate				
Platelet Count	183	170-400 10^3/mL			
Superchem					
Glucose	96	70-138 mg/dL			
Urea Nitrogen	52	6-25 mg/dL	HIGH		
Creatinine	1.9	0.5-1.6 mg/dL	HIGH		
Total Protein	6.0	5.0-7.4 g/dL			
Albumin	3.8	2.7-4.4 g/dL			
Total Bilirubin	0.3	0.1-0.3 mg/dL			

Accession No.	Doctor **Marla Cravens**	Owner **Cravens, Marla**	Pet Name **Zoey**		
Test	**Results**	**Adult ReferenceRange**	**L**	**Normal**	**H**
Alkaline Phosphatase	106	5-131 U/L			
ALT (SGPT)	118	12-118 U/L			
AST (SGOT)	107	15-66 U/L	HIGH		
Cholesterol	158	92-324 mg/dL			
Calcium	10.6	8.9-11.4 mg/dL			
Phosphorus	6.3	2.5-6.0 mg/dL	HIGH		
Sodium	159	139-154 mEq/L	HIGH		
Potassium	4.1	3.6-5.5 mEq/L			
Chloride	114	102-120 mEq/L			
Albumin/Globulin Ratio	1.7	0.8-2.0 RATIO			
BUN/Creatinine Ratio	27	4-27 RATIO			
Globulin	2.2	1.6-3.6 g/dL			
Lipase	425	77-695 U/L			
Amylase	2077	290-1125 U/L	HIGH		
Triglycerides	86	29-291 mg/dL			
CPK	673	59-895 U/L			
GGTP	<5	1-12 U/L			
Magnesium	1.4	1.5-2.5 mEq/L	LOW		
Calculated Osmolality	327	277-311 mOsm/L	HIGH		
T3					
T3	45	45-150 ng/dL			

Improved Instrument Import Utility

In an effort to make our in-house lab instrument connectivity utility more user friendly and require less staff intervention, we have implemented some changes. Some of the many benefits you will experience with this newly modified connectivity tool include:

- The instrument Import utility can run in the background whenever AVImark is running; or you may choose to have it run when AVImark is closed.
- This utility will no longer need to be opened and closed on a "per instrument, per file" basis.
- · It will be setup in a way to look for any ports that are assigned an instrument, and begin listening for data on those ports the entire time the utility is running.
- Results will be automatically imported to the appropriate AVImark Medical History entry when the proper AVImark identifying information is assigned to the test on the analyzer.
- No "missed results". If a match using the AVImark identifying information cannot be found automatically by the utility, the results will be stored in our new **Test Inbox** where it will await manual import to the desired Medical History entry.
- Results can be imported from the Test Inbox at any time, by selecting the Medical History record, open Test Results, and Import from Test Inbox
- In an emergency situation that required results to be viewed immediately upon test completion, a "listening" window has been incorporated that will watch the port associated to the instrument and as the test is completed, you will be notified they were received so you can open and view the test results.

Setup:

Much of the setup will already be in place for clinics that currently use our in-house lab interfaces.

- Assign the appropriate comport for each instrument on the appropriate AVImark workstation. For example, if you have the Abaxis HMT connected to serial port Com 1, then your AVImark port setting in Hospital Setup, System tab, Instrument sub tab should reflect that setting.
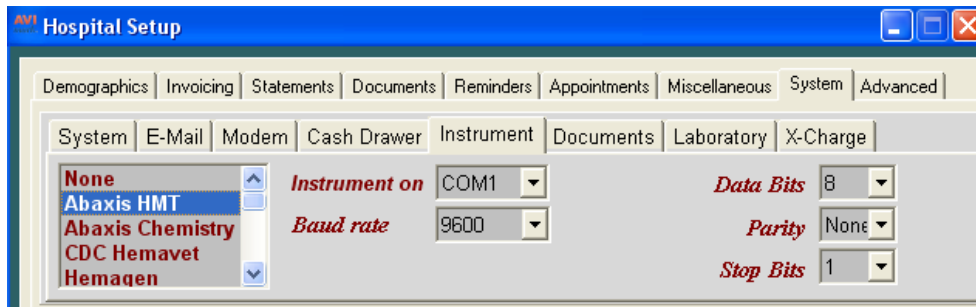
- Assign your instrument to the Instrument Types tab of the appropriate AVImark treatment.
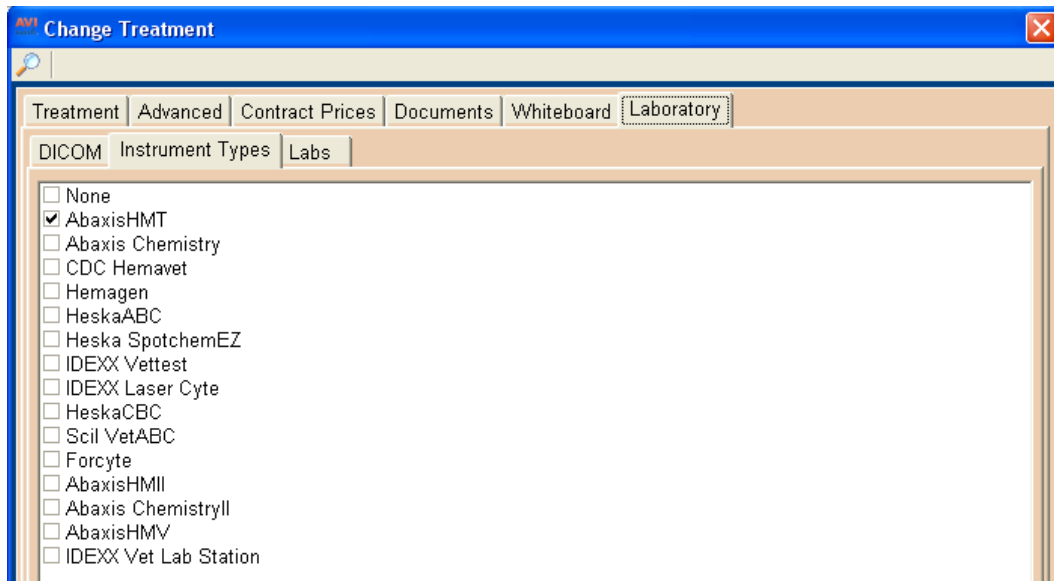
**Important NOTE: With AVImark version 2010.0, you will be able to assign multiple instruments or labs to a single AVImark treatment. If you have more than one instrument that is used to perform a single treatment such as a pre-surgical panel, you are no longer required to have one AVImark treatment per instrument; or in the case that you have more than one instrument that can perform the same test, such as an IDEXX instrument and an Abaxis instrument that can each run the same CBC test.

- The utility is much the same as in previous AVImark versions.
  - The utility can be found by accessing Utilities, Run Instrument Import.
  - This utility is now set up to automatically start when AVImark starts, and has the option to Close on AVImark Shutdown.
  - When AVImark opens you will see the "shaking hands" icon located in the System Tray of your workstation. This indicates that AVImark is in communication with the instrument(s) assigned to communication ports on this computer, and is "listening" on each port for any incoming data.
  - The options to Start when AVImark opens, and Close on AVImark Shutdown can be controlled by right click options on the icon in the System Tray.

✔ Open On AVImark Startup
✔ Close On AVImark Shutdown
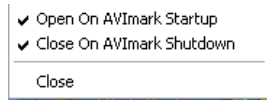
Close

** **Important NOTE:** If you have de-selected the Close on AVImark Shutdown option, please note you will need to manually close the connection utility prior to index rebuilding or any other maintenance utility that requires exclusive access to AVImark files.

Once the instrument is properly assigned in Hospital Setup, and associated to the AVImark treatment(s), your setup is complete.

Use:

When a treatment is entered into Medical History for a patient that has an instrument assignment, AVImark will start listening to the ports in which the associated instruments are assigned for results. As results are ready to be transmitted, AVImark will import the results to the proper Medical History entry. If the proper Medical History cannot be located, the results will be sent to the new **"Test Inbox"** to await manual import.

- First, the import utility looks for a patient with a record number that matches the "Patient ID" field received from the instrument.

  o The Patient ID that is being searched for a match is the AVImark Patient ID. To find out how to keep this ID displayed on the AVImark CID, click here.
  o When running the test on the designated analyzer, and prompted for a patient identifier, the AVImark Patient ID is the number that will allow the utility to make the proper patient association for automatic result import.
  o If this is successful, then the recent medical history of that patient is searched for a recorded treatment that is set to store results from the instrument.

- Once the patient identifier is located on the incoming results, the utility will begin searching for a Medical History entry for that patient that is awaiting results.
- When that Medical History entry is located, the results will be automatically imported into the Tests Attachment area.
- If the Patient ID doesn't match or exist or there is no matching Medical History entry on that patient awaiting results, the test results are placed in the **"Test Inbox."**
- To manually import the results that were sent to the Test Inbox, simply highlight the Medical History entry you wish to import results for, select the Tests attachment, **Import From, Test Inbox**. Here you will be presented with a list of results that were transmitted from instruments that did not find the Medical History entry to complete the automatic import. Select the set of results you wish to import to this history entry, and click Done.

- When you "Import from" the Test Inbox, the record is actually moved from the Test Inbox onto that Medical History entry. This will allow the Test Inbox to only contain results that have not been imported to Medical History.
- As an additional safety measure to ensure no results are lost, an RX$ file is also created with the transmitted results. This RX$ file is sent to the user defined Instruments storage folder. This path to this storage folder will need to be set in Advanced Options. Select the "Save Lab Instrument results To" entry and assign the path to your storage folder. If you are currently using AVImark to retrieve your results, you likely already have this in place.
  - o Results can be imported from this location if needed by opening the Tests attachment, select **Import From, Stored Tests.** This will display all stored RX$ files on the left pane. You can select the RX$ file that holds your test, move to the right pane, select the test, right-click Import Test.
- In the case of an emergency, where access to results is immediately needed, right click on the treatment in Medical History that has the lab instrument association that represents the test instrument being used, and select **Import Results.** This will open the **Associated Instruments** window displaying a list of associated instruments for this treatment. Place a check in the box that represents the instrument from you wish to receive results, click the Import Results button, and AVImark will begin listening to these ports. As the data is sent from the instrument via the port, AVImark will capture and place it immediately in the Test Results window. After the results are received, the Import Results window will disappear, and you can view the results by selecting the Tests attachment option for that Medical History entry.

**Important NOTE: To alleviate the chance of sending results automatically to the wrong Medical History record that may also meet the requirements for automatic import selection we have incorporated a two day time frame to use for searching, then selecting the oldest entry in that time frame for which these results would apply, to make the result attachment. To summarize, the utility will look for that patient record, then start at the farthest date/time as dictated by the two day time frame, and apply it to the first one it finds....versus starting with the most recent and looking back.

Antech Feature

With AVImark version 2010.0, the entire Antech interface has undergone reconstruction. The improvements are numerous and will streamline the process from creating the lab requisition to the automatic import of results to the proper patient as well as import all result values and any comments that are associated to the record. AVImark will now be using the Zoasis Web Service for requisition processing. When a test requisition is sent through the AVImark program interface, upon test completion, the results will be automatically imported into the proper AVImark Medical History record.

Setup:

Advanced Option settings

To open to the appropriate Advanced Options, select the hammer, wrench, screwdriver icon, and type Antech in the Search field. Then make the following settings:

- Login information
    - Antech ID number
    - Password
    - Region (please contact Antech for this information)
    - User Name
    - Zoasis ID Number

**Note – If you are currently using Antech with AVImark, the Antech ID, Password, User Name, and Zoasis ID Number will already be filled in appropriately. You will only need to add the Region information.

- Antech Options
    - **Additional charges may apply for criticals**. **Please contact Antech for additional information**. – This option will allow users to be prompted with a warning before marking a requisition as critical by setting this to prompt. Setting it to OK, indicates the user is aware of these additional charges, and wishes to bypass the warning message.
    - **Auto Import Results on Load** – Setting this option to True will automatically locate matching Antech requisitions in AVImark and import results to those entries when results are loaded from the Requisition Management area.
    - **Auto Print Requisition Form** – will automatically print the Antech requisition at the time a requisition is created.
    - **Print Results in grayscale** – Result Reports have the option of being printed in color or grayscale
    - **Use Zoasis Web Service** – should be set to True if you wish to use the AVImark/Antech interface

Species and Breed Table information

- Species Table
  - o Each species in the Species Table will need to have the corresponding Antech Species Code assigned as designated by Antech. If you need help determining the proper Antech Species Code to assign to your AVImark species, please contact Antech.
  - o To assign the species code, open the Change Species window in the AVImark Species Table, and enter the appropriate Antech Species Code. This will need to be done for all species.
- Breed Table
  - o To allow your current established AVImark breeds to be linked to the Antech established breed list, we have included the ability to assign a breed association between AVImark and Antech in the AVImark Breed Table. This can be set up in advance, or on the fly when creating requisitions.
  - o To make your breed associations in the AVImark Breed Table, open the Change Breed window, and select the Antech breed that best represents the breed as listed in the AVImark Breed Table.
  - o To make the associations "on the fly" during the requisition process, you will be presented with a message indicating you are creating a requisition for a patient that has no Antech breed assigned. Clicking OK will open a breed selection window that will allow you to make that association.

Making Laboratory Associations in the Treatment List

- In order to use this new feature, you must have the desired Antech test(s) associated to your AVImark treatment in the Treatment List. This will allow you to choose the AVImark treatment that represents the tests you wish to have processed by Antech, while placing the proper AVImark billing code into Medical History.

- In the Change Treatment window, select the Laboratory tab, and Labs subtab. You can assign the proper lab or labs for this treatment using F2 New or Right-Click New then select the appropriate lab and assign the ID. The information for this field can be found in your Antech Order Codes list, in the Antech Order Code column. If the test is a Pathology/Cytology request, place a check in the box provided. A check placed in this box will allow the proper Requisition Form to be provided for printing.

  ** The update process will remove the ANTECHLR.doc document assignment from all AVImark treatments that have an Antech Order Code assigned.

Creating Lab Requisitions

- Generating requisitions can be accomplished from more than one area.

    o From the Patient area:

    ➢ Right click; select Create Requisition to display the Create Requisition window where you can make a test requisition for the patient you have selected on the AVImark CID.

      ▪ Select Antech as your Lab Company
      ▪ Highlight the desired test from the list provided, and hit the spacebar to make the selection(s).
      ▪ Make your doctor selection.
      ▪ Your selected test(s) will be added to Medical History.
      ▪ This entry will be the entry that will receive the imported test results.

    ➢ Creating requisitions from the Medical History area is performed using the same steps used from the Patient area by using the right click option, Create Requisition.

    ➢ Requisitions can also be created by entering an AVImark treatment into Medical History that has been set up with the Antech Lab Company and Order Code. When the properly set up treatment is added to Medical History, the proper requisition is generated automatically.

Printing Requisitions

Set your designated default printer for Lab Requisitions. Select Utilities, Printer Setup, and select the printer you wish to use as your default requisition printer.

Your Antech requisition form will automatically prompt for printing when an Antech requisition is generated if you selected True for the Advanced Option to automatically print requisitions. If your option is set to False, you can print the requisitions from the Requisition Management area of AVImark.

To print from the Requisition Management area:

- Select Work With, Requisition Management.
- Find and highlight the requisition that represents the sample you are sending for analysis.
- Select File, Print, Print Requisition, or right-click, Print, Print Requisition, or use the Ctrl+P command.

This will print the hard coded internal Antech barcode document that represents the tests requested to be sent to the lab with the sample.

Antech Diagnostics

||||||||||||||| |||||||||||||||||||||||
10727-AVI23210

Req No: 10727-AVI23210

Account ID: 75144   10-07-09

Marla's Test AVImark

1313 Mockingbird Ln.
Mockingbird Heights, CA 12345
123-456-7890

Client Number:	1163			
Doctor:	Marla Cravens	Species:	Canine	
Owner Last Name:	Cravens	Breed:	Border Collie	
Owner First Name:	Marla	Sex:	S-Spayed Female	
Pet Name:	Zoey	Age:	4Y // 4 years	

Lab Use Only

☐USS ☐SS ☐S ☐R ☐L ☐SL ☐B ☐P ☐U ☐UC ☐RU ☐F ☐CULT ☐RF ☐LF ☐ST ☐OTHER

S   L   U   C   SL   P   F   B   G   AP   RS   BCB   FSS   OTHER

Ordered Tests

Code	Description
86111	MIC # 1

An example of a Cytology/Pathology requisition can be seen below:

AVImark

Antech Diagnostics

10727-AVI23211

Req No: 10727-AVI23211

Account ID: 75144   10-07-09

Marla's Test AVImark

1313 Mockingbird Ln.
Mockingbird Heights, CA 12345
123-456-7890

Client Number:	1163		
Doctor:	Marla Cravens	Species:	Canine
Owner Last Name:	Cravens	Breed:	Border Collie
Owner First Name:	Marla	Sex:	S-Spayed Female
Pet Name:	Zoey	Age:	4Y // 4 years

Lab Use Only

☐USS ☐SS ☐S ☐R ☐L ☐SL ☐B ☐P ☐U ☐UC ☐RU ☐F ☐CULT ☐RF ☐LF ☐ST ☐OTHER

S   L   U   C   SL   P   F   B   G   AP   RS   BCB   FSS   OTHER

Ordered Tests

Code	Description
85862	Antech

Container Size/Number Submitted:
Number of Specimens Submitted: 0
Special Stain:
Requested Pathologists:
Source/Site:
Previous Biopsy/Cytology Accession:
Type of Biopsy: Endoscopic
All Tissues Submitted: NO

Other Comments:

Patient History:
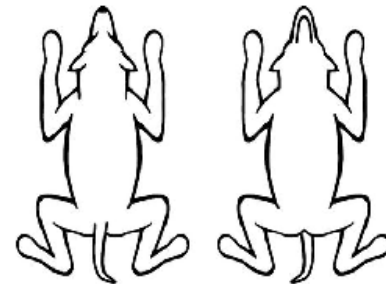
Downloading Results

Downloading results has now been fully automated. The test results will automatically be transmitted and stored to the proper AVImark Medical History record of the patient for which the test was requested when the requisition was created through AVImark. In the event that downloaded results are missing some or all of the identifying information that allow automatic transmission of results to the proper Medical History entry, the requisition and results will be accessible from the Requisition Management area of the program where they can be selected, viewed, and manually attached to the appropriate history record.

- To download and import results, select Work With, Requisition Management, click on the Download Requisitions tab, select Antech as the Lab Type, and click Load. The results will be automatically imported into the new Test Results area of AVImark's Medical History for all matched requisitions.
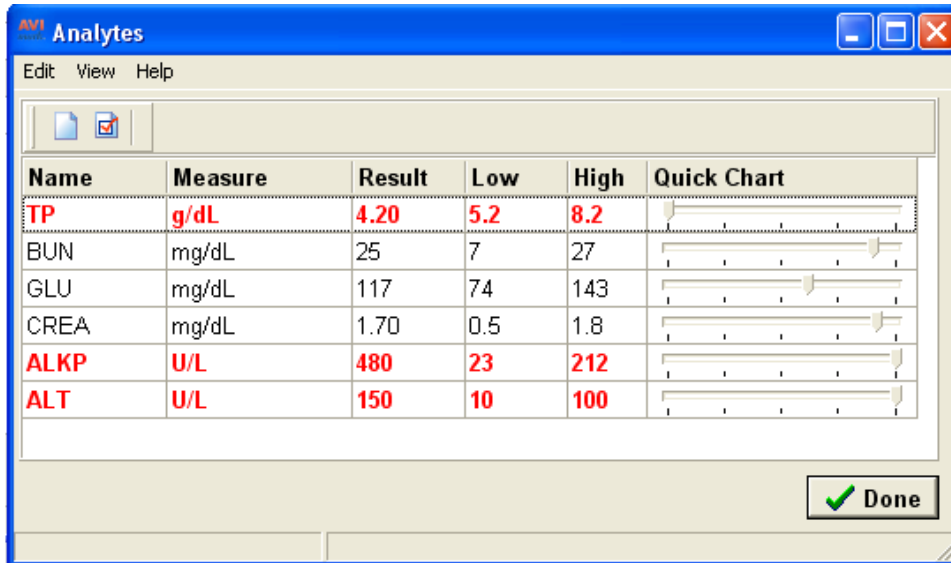
Importing Results

Results will automatically be downloaded and transmitted into the proper Medical History entry as long as all the identifying requisition information is in place. Should there be an instance where the appropriate Medical History record cannot be located or the treatment does not yet exist in the patient's Medical History, you can add the treatment, and bring in the results in one step by the following:
- Select Work With Requisition Management
- Select the Download Requisitions tab
- Select Antech from the Lab Type drop down menu, and click Load
- Locate and select the desired requisition
- Verify the lab association to each test on that requisition you wish to import.
- Right-Click each test, select the Select Lab option
- This will display the Lab Selection Form from which you can choose the AVImark treatment that represents the Antech test.
- Click OK
- Once all lab selections are set, and black in color, you are ready to right-click on the requisition and Import Results
- This will add the appropriate AVImark treatments to Medical History, as well as assign the test results to that entry

Viewing Imported Results:

- To view results at any time, select the Medical History entry, then select the Tests checkbox.
- You can select the entry in the Tests window that represents the set of results you wish to view, and double-left click to open the Analytes window.
- In this window you will see the Analytes, Measure, Result, Low Value, High Value, as well as a "Quick Chart" indicating where the result value falls in comparison to the High-Low range.
- If the Result value falls outside the "normal" range, the line representing the result for that analyte will be displayed in bold red.

Name	Measure	Result	Low	High	Quick Chart
TP	g/dL	4.20	5.2	8.2	
BUN	mg/dL	25	7	27	
GLU	mg/dL	117	74	143	
CREA	mg/dL	1.70	0.5	1.8	
ALKP	U/L	480	23	212	
ALT	U/L	150	10	100	

- The columns are able to be customized to the user's preference to display more or less information.
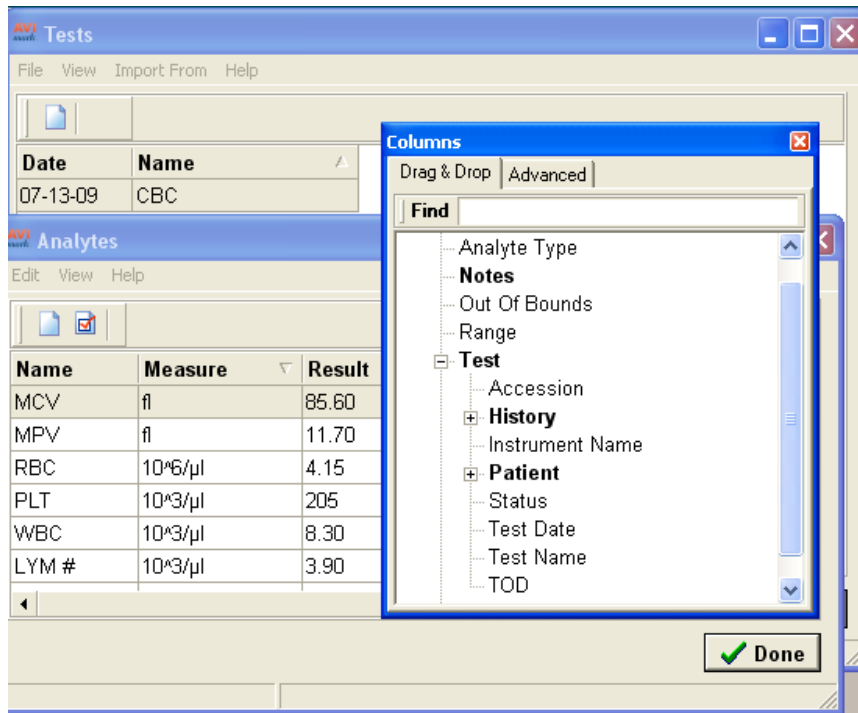
Graphing results:

- Graphing based on test or field name, is still available for integer or decimal result values using AVImark or Excel on selected analytes.

**NOTE: Results that currently exist in Medical History More Stuff will not be affected by this update. They will still remain as they are, print on Patient Charts, and maintain the ability to graph. However, graphing results between Medical History More Stuff values along with the new test result storage format will not be possible at this time. You will be able to graph More Stuff results, and will be able to graph values in the new Tests area, but not have both data styles appear in the same graph.

MCV History for Toby

Printing results:

There are two methods for printing patient test results:

- o **The AVImark Patient Chart**
- o **AVImark Results Report**

Printing results with the AVImark Patient Chart

- A new option has been added to the Patient Chart area to include result data stored in the new Tests area.

- Below is an example of how results will be displayed on the Patient Chart:

Marla's Test AVImark
1313 Mockingbird Ln.
Mockingbird Heights, CA 12345
123-456-7890

Patient Chart for Zoey   Client: Ms. Marla Cravens
Date: 10-07-09, Time: 6:00p   Page: 7

Date	By	Code	Description	Qty (Variance)

Polymyxin B
Timentin(ticarcillin-clavul
Tobramycin

Test					**Date of Test**
MIC Organism #2					08-06-09

Analyte	**Result**	**Low**	**High**
Organism #2			
Amikacin		4	32
Amoxicillin	<=2	2	16
Ampicillin	<=2	2	16
Cephadroxil	<=4	4	16
Cefazolin	<=4	4	16
Cefoxitin	<=4	4	16
Cefpodoxime(Simplicef)	<=2	2	8
Ceftiofur	<=2	2	8
Cephalexin	<=4	4	16
Clavamox	<=2	2	16
Difloxacin (Dicural)	<=0.25	0.25	2
Enrofloxacin (Baytril)	<=0.25	0.25	2
Gentamicin	4	2	8
Marbofloxacin (Zeniquin)	<=0.25	0.25	2
Potentiated Sulfonamide	<=1	1	2

Test   Date of Test

Printing results using the AVImark Results Report

- From the Results window, you can highlight the test or tests you want to report, select File, then Print, to print the Result Report.

Tests

File   View   Import From   Help

Name	Instrument Name △	Date
Culture (Aerobic)		08-06-09
Kirby Bauer Sensitivity		08-06-09
MIC Organism #2		08-06-09
MIC Organism #1		08-06-09

✔ Done

- The generated report will display detailed patient and hospital information, as well as the owner and doctor.
- The analyte results will be sorted by test names, and each line will clearly report the analyte name, result value, normal reference range, and a horizontal box plot graph. See example below:

Patient Info:
Name: Zoey
Chart No: 3062
Owner: Cravens, Marla
Doctor: Marla Cravens

Speices: Canine
Breed: Border Collie
Age: 4Y
Sex: S

Hospital:
Marla's Test AVImark
1313 Mockingbird Ln.
Mockingbird Heights, CA 12345

Accession No.	Doctor Marla Cravens	Owner Cravens, Marla		Pet Name Zoey			

Test	Results	Adult ReferenceRange	L		Normal		H

MIC Organism #2		Interpretations:	1	2	3	4	5

Organism #2
Flavobacterium species

Amikacin Amikacin: 15 mg/kg IV or SC SID		4-32 ug/ml	8				
Amoxicillin Amoxicillin: 16.5 mg/kg PO BID	<=2	2-16 ug/ml	I				
Ampicillin Ampicillin (Sodium): 22 mg/kg IV or SC BID	<=2	2-16 ug/ml	I				
Cephadroxil Cefadroxil: 22 mg/kg PO BID	<=4	4-16 ug/ml	S				
Cefazolin Cefazolin: 15 mg/kg IV or SC BID	<=4	4-16 ug/ml	S				
Cefoxitin Cefoxitin: 15 mg/kg IV or SC BID	<=4	4-16 ug/ml	S				
Cefpodoxime(Simplicef) Cefpodoxime: 5 mg/kg PO SID	<=2	2-8 ug/ml	S				
Ceftiofur Ceftiofur: 2.2 mg/kg SC SID	<=2	2-8 ug/ml					
Cephalexin Cephalexin: 22 mg/kg PO BID	<=4	4-16 ug/ml	S				
Clavamox Clavamox: 13.75 mg/kg PO BID	<=2	2-16 ug/ml	S				
Difloxacin (Dicural) Difloxacin: 5 mg/kg PO SID	<=0.25	0.25-2 ug/ml	S				
Enrofloxacin (Baytril) Enrofloxacin: 5 mg/kg PO or SC SID	<=0.25	0.25-2 ug/ml	S				
Gentamicin Gentamicin: 6 mg/kg IV or SC SID	4	2-8 ug/ml	S				

Patient Info:
Name: Zoey
Chart No: 3062
Owner: Cravens, Marla
Doctor: Marla Cravens

Speices: Canine
Breed: Border Collie
Age: 4Y
Sex: S

Hospital:
Marla's Test AVImark
1313 Mockingbird Ln.
Mockingbird Heights, CA 12345

Accession No.	Doctor	Owner	Pet Name
	Marla Cravens	Cravens, Marla	Zoey

Test	Results	Adult ReferenceRange	L	Normal	H
Complete Blood Count					
WBC	13	4.0-15.5 10^3/µL			
RBC	7.9	4.8-9.3 10^6/µL			
HGB	18.1	12.1-20.3 g/dL			
HCT	52	36-60 %			
MCV	66	58-79 fL			
MCH	23	19-28 pg			
MCHC	35	30-38 g/dL			
Comment					
Neutrophils	65	60-77 %			
Absolute Neutrophils	8450	2060-10600 /µL			
Lymphocytes	28	12-30 %			
Absolute Lymphocytes	3640	690-4500 /µL			
Monocytes	4	3-10 %			
Absolute Monocytes	520	0-840 /µL			
Eosinophils	2	2-10 %			
Absolute Eosinophils	260	0-1200 /µL			
Basophils	1	0-1 %			
Absolute Basophils	130	0-150 /µL			
Platelet Estimate	Increased				
Platelet Count	559	170-400 10^3/µL	HIGH		

Special Features of the Requisition Management area :

The Requisition Management area is centralized location to monitor, control, access, download, and view lab results from many AVImark labs; containing in-house and reference laboratory information.

There are two main areas of Requisition Management –

- The Requisitions tab
  - o This tab contains status information on all laboratory requisitions. From this tab you can select the lab(s) and date range for any lab requisition information. You can collect detailed requisition information regarding patient, created date, Lab Company, status, etc. This area allows for column customization so the information pertinent to your clinic operation will be clearly displayed.

- Download Requisitions tab
  - o From this tab, you will select the Lab Type, and click Load.
  - o This will poll the Antech/Zoasis site for any lab results for your hospital and display them.
  - o If the requisition is matched to an AVImark Medical History entry, the results will be automatically downloaded directly to that entry and will not be displayed in this window.
  - o The top pane will display the Created date, requisition ID, Patient, Lab Company, and Accession ID.
  - o When a requisition is selected in the top pane, the tests associated to that requisition will be displayed in the lower pane. This will display the Test ID, Test Description, Test Status, and Imported Status. This area also offers column customization to better suit your hospital needs.

- o From this tab you can also view results, view imported results, and import results.
- o When you select the right-click option to View Results, you will be presented with two tabs. Tree View and XML. The Tree View will display the results as shown below:
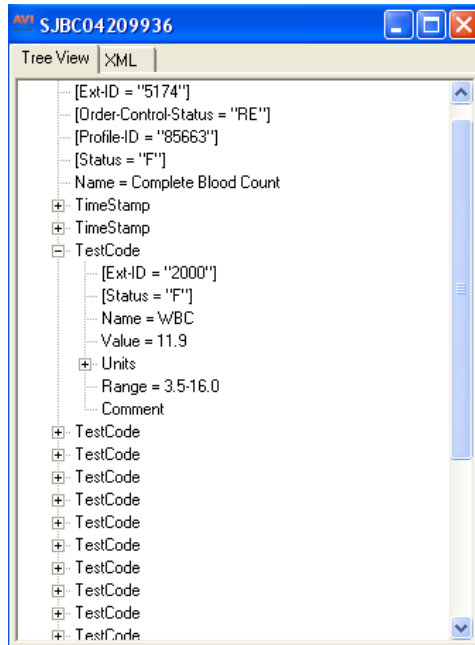
When you select XML, you will see the results displayed in XML format as shown below:
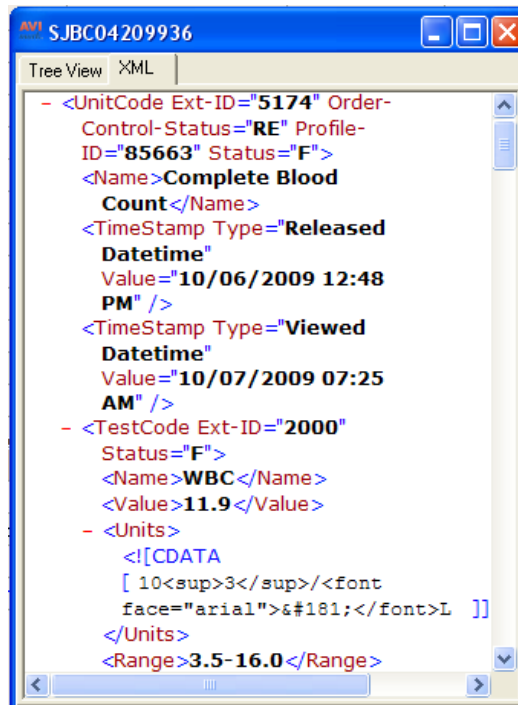
- o Tests showing in blue in the bottom pane indicate that the lab is unassigned for that test. You are able to make the lab assignment without leaving this window, by right-clicking on the test showing in blue, and select Select Lab. This will present you with a list of AVImark treatments that have this Antech Test ID assigned. Make your selection of the AVImark treatment that represents the test, and click OK. This will turn the test black and indicate readiness to be imported to a patient record.

Important NOTE: Only tests showing in black can be imported to a patient record. You can import a test at a time from the bottom pane by right-clicking on the appropriate test, and selecting Import Results. Or, you may choose to import all tests on the requisition at one time by highlighting the requisition in the top pane, and right-clicking and selecting Import Results. However, only those tests that were displayed in black, indicating lab association will be imported. The requisition will remain on this tab until all tests on that requisition have been imported.

o Once all tests have been imported to a patient record, the requisition will be removed from the Requisition Management window.

IDEXX VetLab® Station

Although AVImark has been compatible with IDEXX products for quite some time, we are constantly striving to improve the end user experience. Through combined efforts with the IDEXX team we are creating feature rich lab integrations that will increase productivity, streamline workflow, improve patient care and ultimately increase the practice bottom line.

One of the newest AVImark features is the bi-directional IDEXX VetLab Station integration enabled by IDEXX InterLink™ technology. Since the IDEXX VetLab Station will have the ability to be connected directly to your network, any AVImark workstation can be setup to automatically retrieve results. You are no longer tied to having to directly connect via serial port on one AVImark workstation.

This AVImark software release is the first half of what you will need to create the IDEXX InterLink connection. IDEXX VetLab Station software version 3.02 or greater is also required to realize the benefits of an integrated in-house laboratory that automatically communicates patient and medical information back and forth with your AVImark program. You may also need to purchase additional hardware or software. Ask your IDEXX sales representative to assess your practice network and determine what's needed.

For AVImark assistance call 877-838-9273 opt. 3.

A few of the many benefits you can expect with a fully integrated in-house laboratory include:

- Less initial communication setup; By connecting the IDEXX VetLab Station directly to your network, and installing the IDEXX Client software on one AVImark workstation designated to be the Proxy Server, test requisition information can be communicated between all workstations and the VetLab Station.

- This interface will UDP Multicasting instead of our traditional Serial Port connectivity.

- With this feature, results will automatically import upon test completion. There is no need to wait for the test to finish so you can transfer results into AVImark.

- Instant results are visible on the AVImark CID with the option to turn this feature on and off at will.

- The ability to automatically store test results in a user-defined storage location is also available.

- A connectivity monitoring tool has also been provided to allow "one stop" troubleshooting for any connection issues you may experience.

The IDEXX InterLink connection to AVImark offers a truly bi-directional communication experience. You can create test requisitions from AVImark and the requested test information along with pertinent

patient information will be automatically transmitted to the IDEXXX VetLabStation queue. From the IDEXX VetLabStation you can select the queued patient/requisition and start the test on the appropriate IDEXX instrument(s). As the tests are completed, they will be automatically transferred to the proper patient's AVImark Medical History. You can literally start the tests at the IDEXX VetLabStation and and walk away. AVImark and IDEXX will do the rest for you!

During the AVImark update process, a new table named "IDEXX VetLab Station Code" will be created in System Tables. This new table will hold the IDEXX test codes that will be used in the AVImark Treatment List to make the association between the selected AVImark treatment and IDEXX test.

Setup:

- In order to communicate tests and retrieve results from the VetLab Station into AVImark, you must have the Idexx Client software installed on one AVImark workstation with the correct IDEXX Client license file and IDEXXClient.ocx file registered.

- A new internal AVImark utility can be used to install and register the necessary IDEXX Client files on the AVImark workstation designated to be in communication with the VetLab Station computer.

    o Open AVImark on the workstation you wish to use to communicate with the VetLab Station. This will be formally referred to as the Proxy Server.

    o Select Utilities > Utilities. Type **instalLivls,** click OK
      If you are running Client Server, open the AVImark Guardian, Open AVImark Server, then select Utilities > Utilities and continue with the following steps.

    o You will be prompted for a backup. This is not necessary for this particular utility as nothing is being updated in the AVImark data. Clicking No will allow other AVImark users to remain working in the program.

    o Click Install. This will install the C++ software needed for communication, and register the .OCX file on this computer.

- The Advanced Options settings necessary in AVImark can now be made:

    o Click the hammer, wrench, screwdriver icon. Type idexx in the search field.
    o Click to expand the IDEXX VetLab Station entries. Several values will need to be established. These are:
        ▪ Active – Set to True
        ▪ Group IP Address – Supplied by IDEXX…Do NOT Adjust
        ▪ Group Port – Supplied by IDEXX… Do NOT Adjust
        ▪ Hailing Interval – Supplied by IDEXX… Do NOT Adjust
        ▪ Proxy Port – Automatically filled after Proxy Server information assigned
        ▪ Proxy Server – Either the IP address or the computer name of AVImark workstation that has the IDEXX Client installed and registered
        ▪ Server Port – Supplied by IDEXX… Do NOT Adjust
        ▪ Show Results on CID – Can be either True or False, more details below
        ▪ Use Hailing Server – Set to True
        ▪ Vendor ID – Supplied by IDEXX… Do NOT Adjust

    o Once the Proxy information is established and AVImark is opened on the AVImark Proxy Server, there will be a new icon appear in the System Tray of the Proxy computer. This icon is labeled IDEXX VetLab Station Proxy.

      This is the indicator that the AVImark workstation is communicating with the VetLab Station computer. You will also need to adjust your settings on the VetLab Station in order to complete the connection. However the VetLab Station must be connected into

the practice network to enable the two systems to communicate. This step will be assisted by IDEXX Laboratories.

o Your IDEXX VetLab Station menu should now be visible on the AVImark CID between Utilities and Help.

o The IDEXX VetLab Station Proxy utility provides these right click options:

➢ Communication Status -- Verification of your IDEXX Client installation and AVImark settings can be accomplished by selecting Communication Status. You will see three tabs. These tabs will allow connection verification.

▪ The first tab is the Client Tab. This will display:
  i. Active status
  ii. Whether the application is started
  iii. Application ID
  iv. Hailing Interval

From this location, you can start or stop the service, and register or unregister the ID. This Register Control provides a register method that will acquire an ID. Once this is done, the ID will be saved by the application to be used whenever the application starts.

NOTE: Each time you unregister, and register, a new ID will be assigned.

▪ The Server tab will display the activity state of the server. If the server is active, the following will be displayed:
  i. ID
  ii. Name
  iii. IP address
  iv. The "Get Connections" button is a tool used to display server details.

▪ The Tools tab offers three options:
  i. Resend Census List – This could be used in the event that the power to the VetLab Station was interrupted. After restarting the VetLab Station, you can resend the

animals that are of a "checked-in" status from AVImark to the Census tab of the VetLab Station.

ii. Resend Lab Orders – This would be used to resend any lab orders that are of a "pending" status or labeled as "none" from the Requisition Management section of AVImark.

iii. Launch Event Viewer – This can be used to troubleshoot connectivity issues without having to leave AVImark. This will mainly be used by Support.

➢ Open on AVImark Startup – This will open the Proxy utility whenever AVImark is opened when checked.
➢ Close on AVImark Shutdown – This will close the Proxy utility when AVImark is closed on the Proxy computer when checked.
➢ Close – will close the Proxy utility – This will be necessary when rebuilding Indexes or running some maintenance utilities.

o If the IDEXX Proxy utility becomes closed, it can be launched again by selecting IDEXX VetLab Station, Run VetLab Station Proxy.
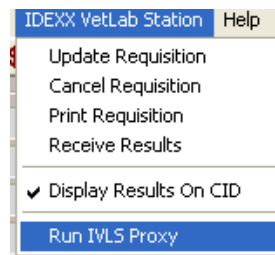
AVImark Treatment List associations:

• To make the VetLab Station associations to an existing AVImark treatment:

   o Open the Change Treatment window in the AVImark Treatment List
   o Select the Laboratory subtab, then the Labs tab
   o Right Click New to open the New Lab window

➢ Select the Lab Company (IDEXX Vet Lab Station)
➢ Select the proper Order Code from the Order Code drop down menu, and the description should be automatically imported into this field.

Access Points:

- There are multiple access points for different areas of the AVImark/VetLab Station interface. For general maintenance of the VetLab Station integration data, you can gain access from within the AVImark IDEXX VetLab Station menu.

  o This will display the following:

    ➢Update Requisition -- Allows you to make any additions to a pending requisition.
    ➢Cancel Requisition -- Allows you to cancel a requisition of pending status.
    ➢Print Requisition -- Allows you to print the results of the selected requisition.
    ➢Display Results on CID -- Allows the test results to be displayed directly on the CID of the appropriate entry of Medical History.
    Note: ** You can toggle this feature on and off by selecting this option.

  o Work With Requisition Management will allow your practice the ability to monitor the status of any requisitions.

- From the Patient area:

  o Right click, select Create Requisition. This will display the Create Requisition window where you can make a test requisition for the patient in which you have selected on the AVImark CID. You can select a requisition to be added to Medical History and automatically send the test requisition to the Pending tab of the VetLab Station computer.

- From Medical History:

  o Right click, select IDEXX VetLab Station, you will be presented with options:

    ➢ Update Requisitions – This will allow you to make any additions to a pending requisition.
    ➢ Cancel Requisitions – This will allow you to cancel a requisition that is still of a pending status.
    ➢ Print Requisitions – This will allow you to print the results of the requisition.
    ➢ Display Results on CID – This allows the results to be displayed directly on the CID of the appropriate entry of Medical History. Note: **You can toggle this feature on and off by selecting this option.

  o Right click, select Create Requisition. This will allow you access to the Create Requisition window where you can select a requisition to be added to Medical History and automatically send the test requisition to the Pending tab of the VetLab Station computer.

Use:

- When the patient is checked into AVImark, they will automatically be listed on the VetLab Station Census tab. This tab can be found on the Home screen of the VetLab Station computer. Although it should be noted that you are not restricted to only running tests on a patient of a checked-in status. *NOTE: If you run tests on patients from the Census list you will still need to enter the treatment into Medical History so that you may capture the charge for the treatment and associate the results.

- Generating requisitions can be accomplished from more than one area.

  o From the Patient area:

    ➢ Right click; select Create Requisition to display the Create Requisition window where you can make a test requisition for the patient you have selected on the AVImark CID.

      ▪ Select IDEXX VetLab Station as your Lab Company
      ▪ Highlight the desired test from the list provided, and hit the spacebar to make the selection(s).
      ▪ Your selected test(s) will be added to Medical History along with a new entry that represents the requisition and automatically send the test requisition to the Pending tab of the VetLab Station computer.
      ▪ The new entry will have a pre-defined code of VetLab StationO, and description of Requisition with a series of numbers. The numbers in the description will be a combination of the AVImark patient ID followed by an automatically assigned sequential number identifying the requisition. This requisition number will allow the automatic import of results to the proper Medical History entry.

Medical History							
Date	Time	Dr.	Type	Code	Description	Qty	Amount
09-02-09	11:49a		S	IVLSO	Requisition 3063-23064	1	0.00

      ▪ This entry will be the entry that will receive the imported test results.

    ➢ You will now be able to view that patient as well as their requested tests, on the Pending tab of the VetLab Station computer. This indicates that the test is queued and awaiting processing.

    ➢ Process the test on the appropriate analyzers.

When the test is completed, the results will automatically be displayed on the appropriate entry in Medical History, as well as imported into the new Test Results area of AVImark's Medical History. There will also be an rx$ file that contains the results being imported into the user defined storage folder for Instrument results.

- o Creating requisitions from the Medical History area is performed using the same steps used from the Patient area by using the right click option, Create Requisition.

- o From the VetLab Station (patient must be checked into AVImark)

  - ➢ On the census tab, select the patient for which you wish to run a test, and click Run.
  - ➢ Select the reason for testing, life stage (if necessary), doctor and the instrument icon that applies to the tests you are performing. Click Run.
  - ➢ As the test(s) complete, and AVImark is unable to locate the Requisition Entry for that Requisition ID for that patient (because the test was not initiated by an entry being entered into AVImark) they will be held in "storage" so they can be manually imported onto the proper Medical History record.
  - ➢ These results can be attached to the proper Medical History record by selecting the desired Medical History record, opening the Tests attachment, select Import From > Test Inbox. Find the appropriate results and click Done.

- o Requisitions can also be created by entering an AVImark treatment into Medical History that has been set up with the IDEXX VetLab Station Lab Company and Order Code. When the properly set up treatment is added to Medical History, the requisition information is automatically transmitted to the VetLab Station Pending tab queued for processing.

- To view received results:
  - o Once tests are completed on the selected analyzers, the transfer of results into AVImark will be automatic.
  - o The results can be visible directly from the Medical History entry in a format similar to the Medical History notes display. However, if you do not want these to be visible at all times, you can turn off the view by right clicking from Medical History, selecting IDEXX VetLab Station > Display Results on CID and de-selecting the option. This will allow you to toggle on and off the results from being immediately visible on the CID. The results will still be attached using the Tests integration.
  - o You can access the new Tests attachment to view or manually import results by selecting Tests in the Medical History Attachments area.

Attachments
- ☐ Dental Chart
- ☐ Form
- ☐ Inventory Used
- ☐ Medical Condition
- ☐ More Stuff
- ☐ Notes
- ☐ Photograph
- ☐ Attachments
- ☐ Vaccination
- ☑ Tests
- ☐ DICOM

- ➢ This will open the Tests window. From this window you can view and print attached results, or import new results.
- ➢ If results were queued for automatic transmission, but were not automatically linked to the Medical History record (for example if AVImark was closed at the time of import), these results can still be retrieved by selecting "Stored Results".
- ➢ Select the stored file that contains the results in the left pane, then in the right pane, right click and choose Import Test.
- ➢ Import the results.
- ➢ The results will be received in any value or type and with any notes or comments as they are sent from the lab/instrument. They will also display the normal range as dictated by the lab or instrument at the time the test was completed.
- ➢ The results will be permanently associated to this AVImark Medical History entry.

Tests

File	View	Import From	Help

Print...   Ctrl+P

Name	Instrument Name
VetLyte	VetLyte

Analytes

Edit   View   Help

Name	Measure	Result	Low	High	Out C	Quick Chai	Highl
Cl	mmol/L	122	109	122	☐		☐
Na	mmol/L	167	144	160	✔		☐
K	mmol/L	6.20	3.5	5.8	✔		☐

✔ Done
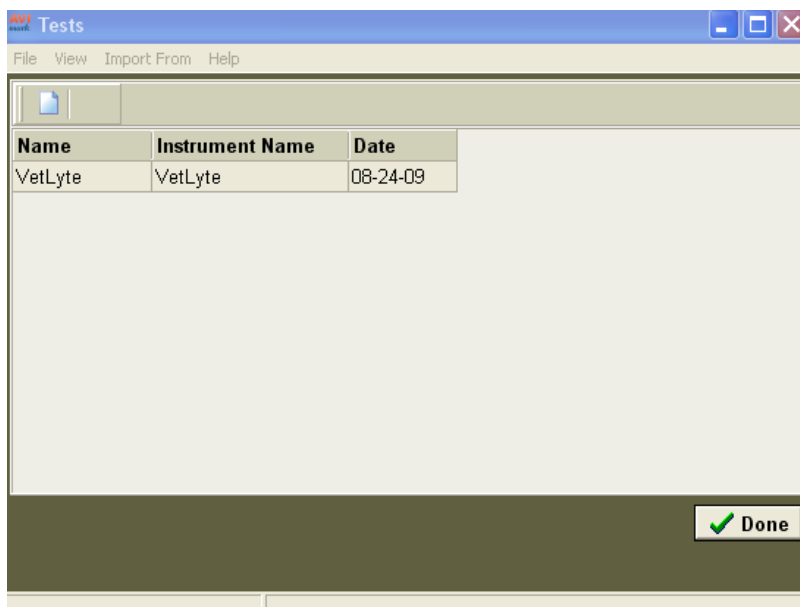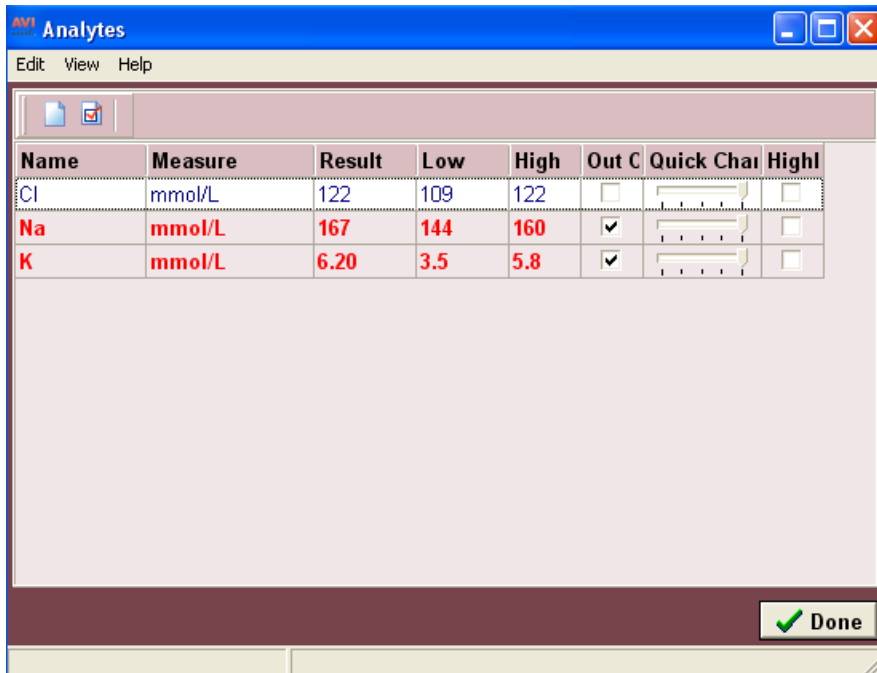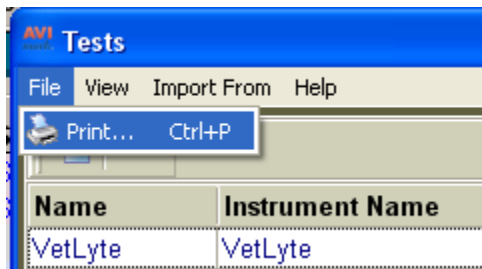
**NOTE: Click here, for more information about the many features directly associated with the new Tests Results area.

Veterinary Laboratory Resources (VLR)

VLR laboratory results are now able to be downloaded and imported directly into a patient record from within AVImark. Prior to this integration, AVImark users who utilized VLR for clinical laboratory testing would either retrieve results via Fax or emailed .pdf file. With AVImark version 2010.0, you will be able to download and import results from within the AVImark Medical History.

To begin using this feature, it is necessary to input VLR account information in AVImark Advanced Options.

Setup:

- Open Advanced Options by selecting the hammer, wrench, and screwdriver icon.
- Begin typing vet lab in the search field
- You will be presented with a list of options
    - FTP Host (defaults to 12.158.138.156)
    - Password (obtained from VLR)
    - User Name (obtained from VLR)
    - Vet Lab Resource Path (user defined storage location)
        - This can be a subfolder of your AVImark folder. If an AVImark subfolder is selected for use, the path will simply be the folder name.

Use:

- Select the Medical History record that you wish to attach test results.
- Open the Tests Attachment checkbox
- Select Import From > Vet Lab Resources
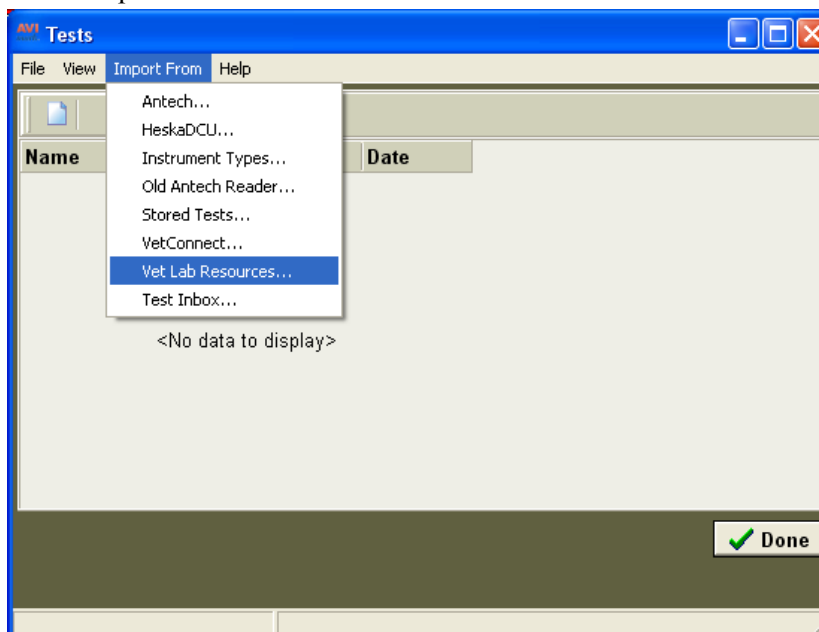
- Select the .XML on the left pane that contains the set of results to be imported for this record.
- If the requested test XML does not appear in this window, you can use the Download Option to download any completed test results from the VLR site.
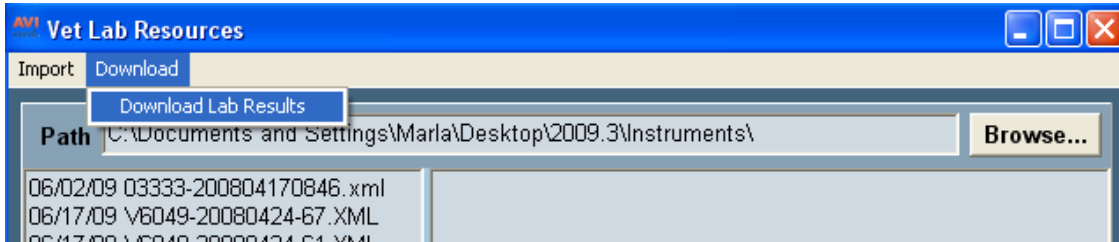
- Once selected, you can import the results by left clicking on the test, then right-click, select Import, Test.
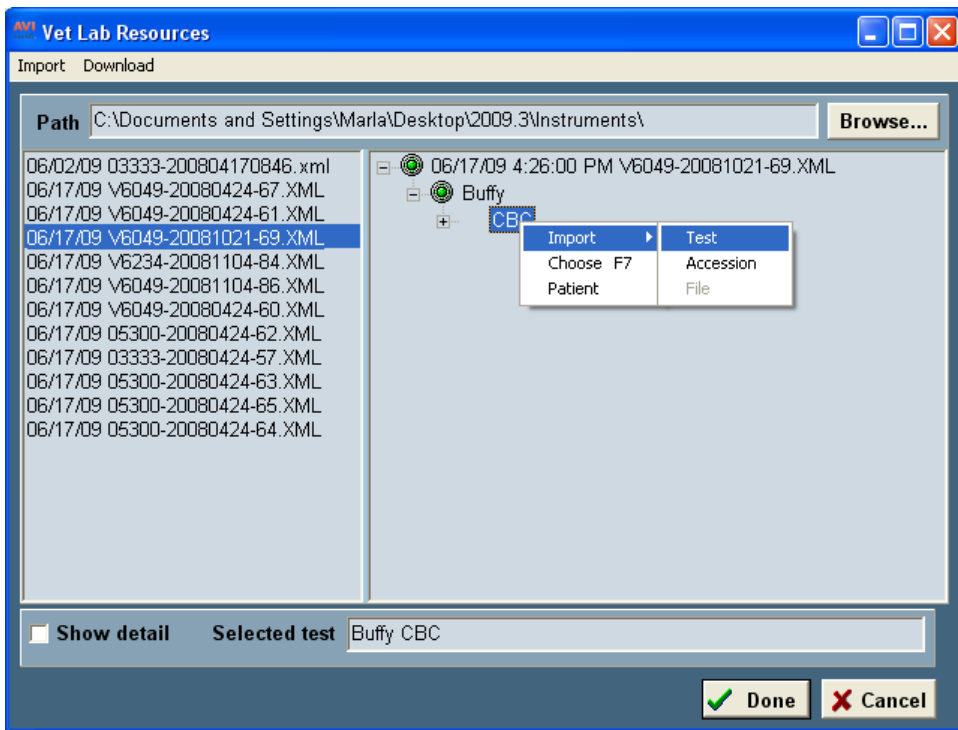
- Once import is completed, you will be returned to the Tests window.
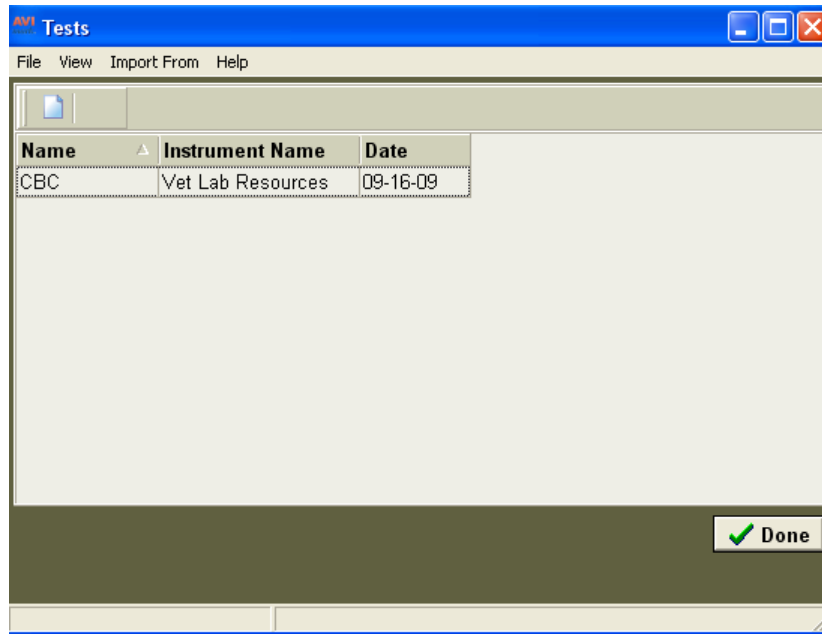
- Analyte values can be viewed by double left clicking on the test.

Analytes

Edit   View   Help

Name	Measure	Result	Low	High	Out Of Boun	Quick Char
Corrected WBC	x10.e3/uL	4.00	4.0	18.0	☐	
RBC	x10.e6/uL	4.60	4.60	9.30	☐	
Hemoglobin	gm/dL	12.00	12.0	20.0	☐	
Hematocrit	%	34.00	34.0	54.0	☐	
MCV	fL	59	59	74	☐	
MCH	pg	20.50	20.5	26.8	☐	
MCHC	%	32.00	32.0	39.0	☐	
Platelet Count	x10.e3/uL	100	100	500	☐	
Segs	%	50.00	50.0	90.0	☐	
Lymphocytes	%	10.00	10.0	40.0	☐	
Monocytes	%	1.00	1.0	12.0	☐	
Eosinophils	%	0.00	0	15	☐	
Basophils	%	0.00	0.0	3.0	☐	
RBC Morphology		Normal			☐	

✓ Done

**NOTE: For more information on the new Test Results feature click here.

Heska DCU (Data Capture Utility) Interface

AVImark now has the ability to retrieve lab results via the Heska DCU. This new interface will allow the capture and subsequent storage of results from several Heska instruments. AVImark users have been able to retrieve results from the Heska Spotchem and CBC Diff for quite some time using the straight serial interface. However, with our DCU interface you will now be able to utilize results from these instruments as well as the following:

- **Hema True**

- **DRI-CHEM**

- **i-STAT**

**Note: If you are currently using the Heska Spotchem and/or CBC Diff, and are not going to be using the DCU, you will still be able continue using your interface with no changes in the functionality.

- **Setup:**

These results will be automatically transmitted to a user specified storage folder in an .XML format. This storage folder will need to be assigned in the DCU software as well as AVImark. You can create your storage folder in any accessible location. An example of an accessible location would be in the AVImark folder as a sub-directory. Open the Heska DCU by clicking on it in your System Tray, select Preferences, in the Output Folder field click on the ellipse (three dots) to browse to the location of the storage folder you created. Your Output Folder path should be similar to this:
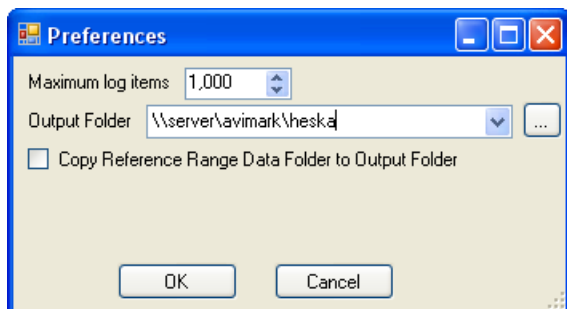
In order to retrieve results using this interface, you will need to assign the directory location for these stored results in the AVImark Advanced Options. This can be accomplished by clicking on the hammer, wrench, and screwdriver icon in the AVImark Speedbar. Type DCU in the Search field, then select the DCU Results Path option and enter the path to the location in which your DCU software receives and stores results. If the folder you created for your result storage was in your AVImark directory, your Advanced Option path will look like this:
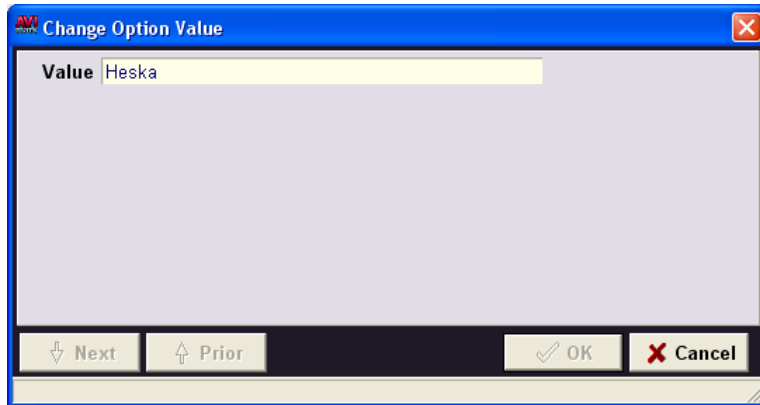
You will also need to set the directory path in which you wish the result XML to be moved after importing to the patient record. This will keep the DCU Results folder from displaying results that have already been imported. Once imported to a patient record, the result.XML file will be moved out of the DCU folder and into the AVImark DCU Results folder. This will be a user defined folder and can be placed in the AVImark folder. You will need to set the path to this folder in AVImark Advanced Options as well.

Once results have been transmitted to the specified folder, you are now ready for AVImark data field definition and result importation.

**Important Note: We have also added the ability to delete any XML file desired from within the Heska DCU import window at any time. To do this, simply select the XML file you wish to delete, right-click, select Delete.

- ● **Importing Test Results:**

  - Select the patient's Medical History record in which you wish to import results.
  - With this treatment code highlighted, **select Tests.**
  - Choose **Import From…Heska DCU.**
  - The **Heska DCU** window will be displayed with the test files located on the left side of the screen.
  - Select the appropriate file to display the file details.
  - Select the line that represents the test that you want to import into the patient's record, and Right-click…Import on that line.
  - Import the results.

- The results will be received in any value, type, and with any notes or comments as they are sent from the lab/instrument, as well as display the normal range as dictated by the lab or instrument at the time the test was completed.
- The results will be permanently associated to this AVImark Medical History entry.
- Once imported you will be able to open, view, print, and graph the results at any time.

Viewing results:

- To view results at any time, select the Medical History entry, then select the Tests checkbox.
- You can select the entry in the Tests window that represents the set of results you wish to view, and double-left click to open the Analytes window.
- In this window you will see the Analytes, Measure, Result, Low Value, High Value, as well as a "Quick Chart" indicating where the result value falls in comparison to the High-Low range.

  If the Result value falls outside the "normal" range, the line representing the result for that analyte will be displayed in bold red.

For more information on how to graph values, print a result report, or print results on the AVImark Patient Chart, click here for more details about Test Results.

Associated Veterinary Purchasing (AVP)

AVImark version 2010.0 now integrates with Associated Veterinary Purchasing, an electronic purchase order system. This integration will allow Canadian AVImark users that are members\customers of AVP to place inventory orders electronically from within AVImark.

**NOTE: If you currently have AVP Order Code information stored in the Mfg. No., UPC code, or NDC/MSDS field of your AVImark inventory items, there is a utility available that will copy or move the AVP codes from those locations to the new AVP Order Code field of the AVImark Change Item window for you. Please contact our friendly support staff for more information regarding this utility.

AVImark Advanced Options Setup:

To use the AVP integration these new Advanced Options must be setup. To access the Options Maintenance window click on the Advanced Options speed bar button (hammer, wrench, and screwdriver icon), type AVP in the Search field.

- **AVP Billing Code**- This code is assigned by AVP and will be unique to each clinic.
- **AVP FTP Address**- Automatically defaults to the AVP FTP address (FTP2.EDOC.CA).
- **Directory**- A new AVP folder will need to be created in the AVImark folder. Enter the name of the folder into this field, ie, AVP.
  This folder is used to store the purchase orders using the AVP billing code and purchase order number. Each file will have an .avp extension.
- **FTP Password-** The password is automatically setup in AVImark by default.
- **FTP User Name-** The user name is automatically setup in AVImark by default (AVPWEB).
- **Password-** AVP will provide each clinic with a password to enter in this field. Although, each AVImark user within the clinic that is authorized to use AVP will also need to setup a User Defined account under the Password default value.
- **User Name-** AVP will provide each clinic with a user name to enter in this field. Although, each AVImark user will also need to setup a User Defined account under the User Name default value.
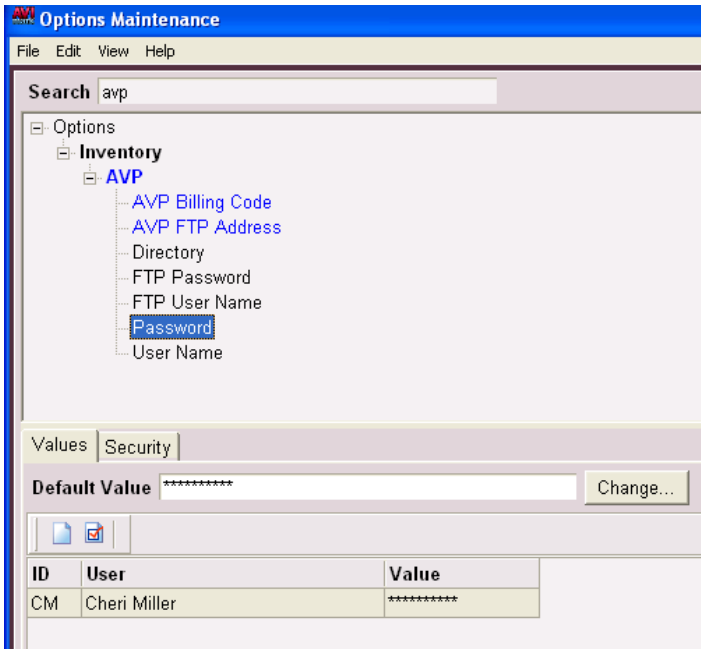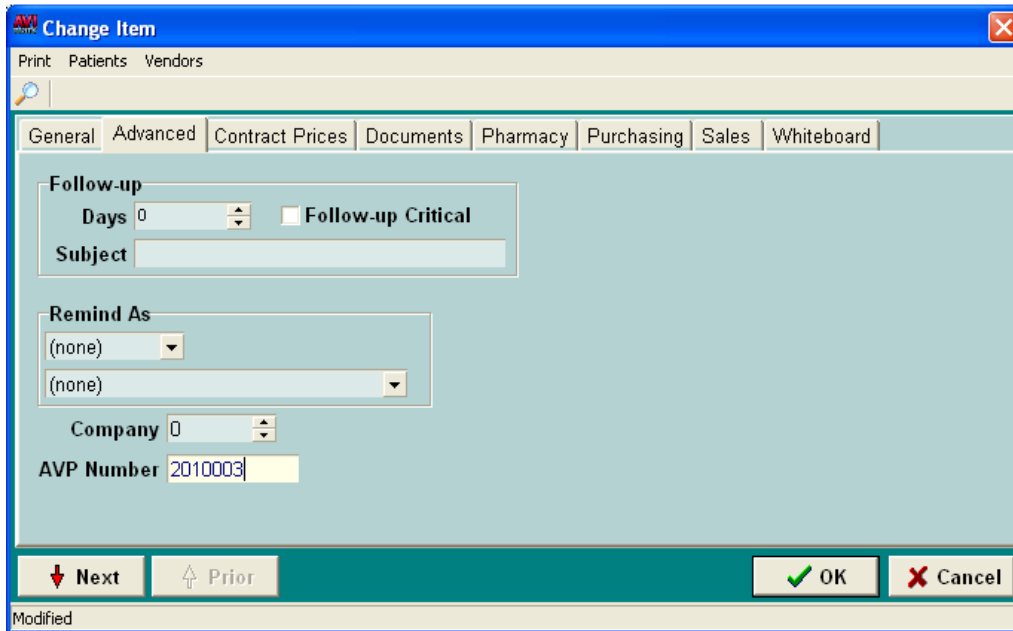
Adding AVP Vendor:

After the Advanced Options have been setup a new AVP Vendor will need to be added to the AVImark vendor list. To enter this vendor, open the Inventory List, choose File…Vendor and right-click New.   **The Code and Name of the vendor must be AVP**.
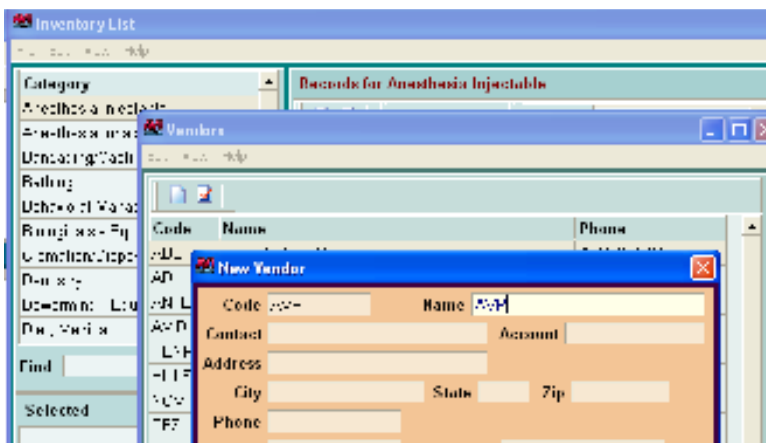
Attaching AVP Number:

Once the **Billing Code** has been setup in Advanced Options all Inventory Items will have a new AVP field in the Change Item window, Advanced Tab.   This number is the product code found on the AVP Price List and will need to be manually entered the first time an item is purchased from AVP.

Placing an Order:

When creating a Purchase Order (PO) in AVImark, the AVP vendor will have to be selected from the top right hand corner of the purchase order window in the Vendor field:
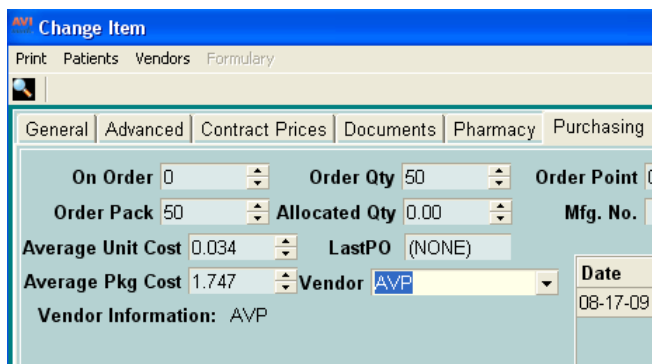
**Important NOTE: You can also assign the AVP Vendor directly to the item. Assigning the vendor in the Change Item window will allow the vendor field on the purchase order to automatically default accordingly when all items selected for an order have the same vendor assignment.
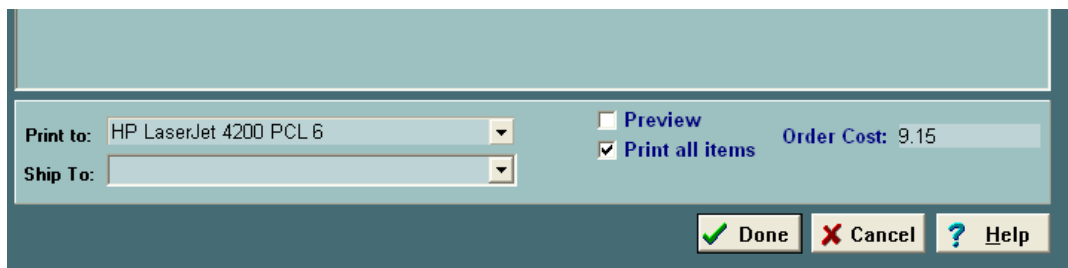
When the AVP vendor is selected a new "Ship To" field will be added at the bottom of the purchase order window below the Print field.

AVImark will retrieve a list of approved Ship To locations for the clinic from AVP. The Ship To field will default to the current location of the clinic but it will also contain all possible locations for the clinic. The list of "Ship To" locations is loaded from the AVP webserver.

Releasing an Order:

When the order is completed and ready to release, you can do so by selecting, Order, Release.
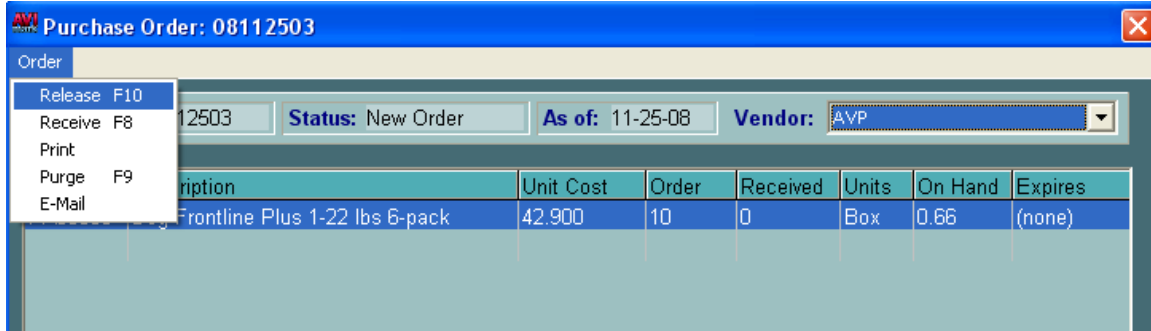
As each PO is released, the product code(s) will be verified and the inventory status will be checked for sufficient and\or insufficient quantities. If the item is not in stock, the clinic will receive a message showing the current available quantity; then have the option to change the quantity on the PO, remove the item or select a substitute.

Once the purchase order is released, AVImark exports the purchase order data to a text file that is sent via FTP to AVP. If the file is sent successfully, an e-mail notification will be sent to orders@avpbc.com with the filename as the subject. The order will then be processed and the PO can be received into AVImark as it would normally be done.

VPR Drug Formulary Integration

We are pleased to introduce our new integration with Veterinary Pharmacy Reference (VPR) as a way to gain vital drug formulary information access without ever having to leave AVImark!

This new feature will not only allow instant access to drug formulary information, but it will also allow you the ability to provide important drug information sheets to your clients along with their prescriptions.

Setup:

The steps needed to utilize this interface are:

- VPR software must be installed.
  **Note: If you do not currently have VPR, but would like additional information regarding the VPR product, please contact one of our qualified Sales Representatives at 877-838-9273, option 2, submenu 2.
- Set the Path to your VPR software in Advanced Options by typing VPR in the Search field and typing the path to your VPR folder. This folder defaults to being installed in the c:\Program Files directory. Your path in Advanced Options will be C:\Program Files\VPR, unless your VPR software is installed in a different location.
- While in Advanced Options, in the Search field, type Active. Select the Active Option directly beneath Veterinary Pharmacy Reference and set it to True.
- To register your VPRClassCodeGen.dll file, hold down the Shift + Ctrl keys, select Utilities, Register, click VPRClassCodeGen.dll.
- Once you receive the successful registration message, you are ready to begin using the interface.

Additional Advanced Option Settings:

There are four additional options available with the use of this integration:

- **Print VPR Drug Info Sheets when printing Drug Label**

  o Setting this option to True, will allow the Drug Information Sheet to be prompted for print at the time you print a Drug Label through AVImark for a drug that has a VPR Code assigned.

- **Check History for Drug Interactions**

  o Setting this to True, will activate the ability to search through Medical History for VPR associated medications that have known interactions with the VPR associated medication when doing a right-click Formulary from the Medical History area.

- **Check History for Drug Interactions at Entry?**

  o Setting this to Yes will initiate the VPR associated drug interaction check when adding a new VPR assigned item or treatment with associated VPR items to Medical History.
  o Setting this option to No will not run the Drug Interaction Matrix when an AVImark item with a VPR code association is entered into Medical History. However you can still launch the Interaction Matrix by using the Right-Click Formulary in Medical History if the **Check History for Drug Interactions** is set to True.
  o Setting this option to Prompt will prompt the user when entering a VPR code associated item into Medical History, allowing the user to select Yes to see the Interactions Matrix, or No to bypass it.

- **Check History for Drug Interactions Days Back**

  o This allows users the ability to set the number of days they would like the Interactions Matrix to search AVImark Medical History for possible drug interactions between VPR associated drugs.
  ** Important Note: Leaving this blank or setting it to 0 will search the entire Medical History for the patient when the **Check History for Drug Interactions** is set to True.

Use:

AVImark provides access to the VPR Drug Formulary from several different key locations within the AVImark program. These areas are:

- **Utilities Menu, Formulary**

- **Patient Area, as a Right-Click option**

- **Inventory List, as a Right-Click option on Item**

- **Change Item window, as a Menu Item**

- **Treatment List, as a Right-Click option on a Treatment**

- **Change Treatment window, Right-Click on Inventory Used Entry in the Associated Treatments and Items area.**

- **Medical History as a Right-Click option on selected Medical History entries**

- **Medical History, Inventory Used window as a Right-Click option on each line entry**

- **Drug Label window in Medical History, as a Menu Item**

  **Note: At any point you choose to access the Formulary, the patient that is selected on the AVImark CID will have their weight defaulted in the Formulary window.   There will be a check automatically placed in the "Patient is a Feline" checkbox if the selected patient is a feline.
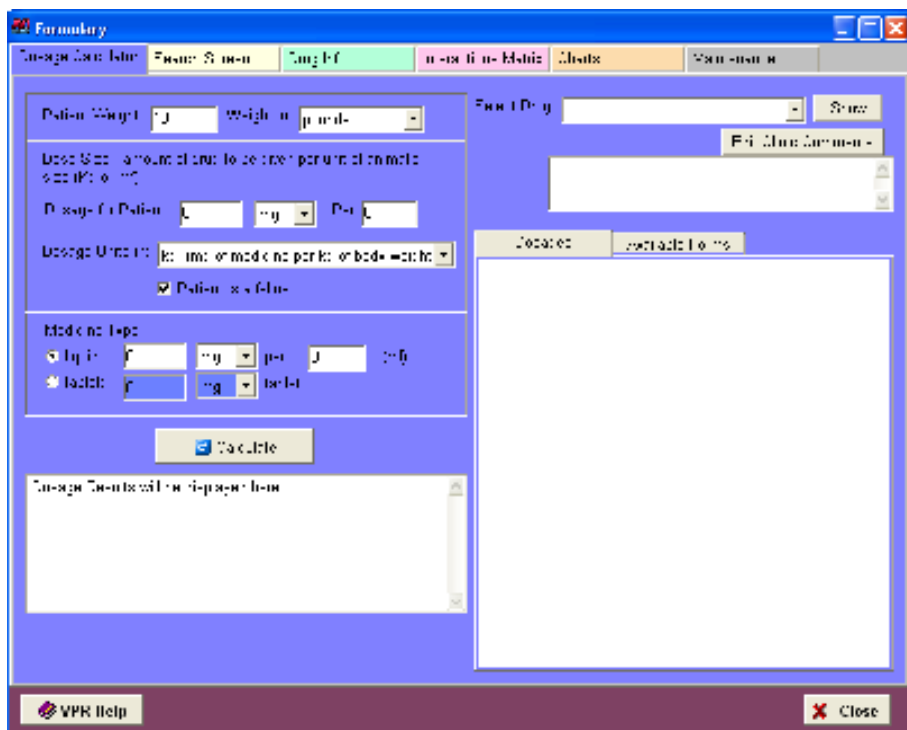
You can associate specific VPR drug codes to AVImark inventory items or you can use the Formulary "on-the-fly" and make drug selections from within the formulary window.

Attaching VPR Drug Codes to AVImark inventory items:

- You can assign specific VPR Drug Codes to items in your inventory list. This will allow drug formulary information specific to that AVImark item to be automatically displayed when you open the VPR Formulary from that particular item. You can find this new field in the Change Item window, on the Advanced tab.   This field contains a drop down menu that contains a full list of generic drugs available for selection.   When you find the drug you wish to associate to this item, simply select it by left-clicking on it, and Click OK. See image:
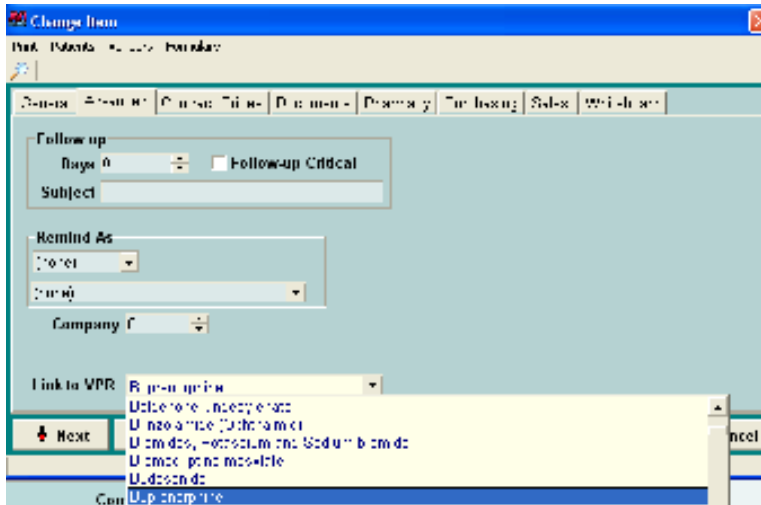
- Once the association has been made, when the formulary is opened for this item, the appropriate information for that drug will automatically be displayed.

NOTE: The list of drugs displayed in the drop down list for item association will only contain generic drugs. To get a complete printed list of the VPR Drug Codes, you can open the Formulary window from any of the access points listed above, select the Maintenance tab, and print the Generic Drug Names and Codes.

- If you are editing an item with no VPR code assigned, and open the formulary, select a drug on the blue Dosage Calculator tab, when you click Close, you will be prompted with a message asking if you would like to add the selected VPR code to this item. Selecting Yes, will place the proper VPR drug in the VPR field of the Change Item window. Clicking No will simply close the formulary and make no change to the AVImark item.

- Accessing the Formulary from an item that has no Formulary Code associated will open the Formulary window with no defaulted information. However you are able to select any drug and get the appropriate formulary information.

- Accessing the Formulary from an item that has a Formulary Code assigned, will allow the Formulary window to be automatically display the information for that drug association. However, you are not limited to only viewing that particular drug information, you still have the ability to select any drug from the Select Drug pull down list and Show the information for the newly selected drug, without altering the drug assignment for that AVImark item.

- Items associated will automatically display the pink Interactions Matrix tab with the attached VPR coded items already listed. You can select more entries for interactions as needed from this window for interaction information, without altering the list that is automatically displayed.

Avimark 2010.0 Fixes List

Appointments\Boarding:

3531: Error clicking cancel or X out of Logon window from appointment calendar
Using the Advanced Option "Calendar Format" set to Daily By Room; when clicking CANCEL or X-ing out of the Logon window after pressing F12 to open the Appointment Calendar the following error was coming up: "Error. Record, Table, record number, -1, record state, Unknown. Record is deleted. Attempt to load invalid record number."

4509: New Blockoff exception not defaulting to correct doctor
In the new blockoff maintance window when a new blockoff exception is created it should default to the doctor selected for the original blockoff.

Client Area:

2696: When searching for a Rabies tag number from the CSD
When searching for a Rabies tag number from the CSD; it is only locating patients that have the number in the Rabies field of the Change Patient area. Previously, in 179, you could find any patient that has the number as a Vacc Id in the Vaccine Information window of a service in Medical History.

3786: Social Security field not behaving consistently
Depending on where you click in the SSN field and whether or not you type a client name; it behaves differently concerning how many characters it will let you type in and where it is left justified.

Estimates:

3654: Canned Estimate not expanding group treatment with correct prices
Upon expanding a Treatment Group to a Canned Estimate, if "Charge Normal Prices" is NOT checked on the Tx Group, and any one of the services has a quantity greater than one, the group components were not being prorated correctly. (Patient Specific Estimates were working correctly)

3277: Making price change to entry on Estimate, is not recognized as discount
When using "Print Total Discount" for Estimates, AVImark should show the "Discount" amount along with the Charges, Payments & Balance underneath the list of services.
If you are using "Line Item discounts" it should show the discount under a "Discount" column up with list of services.

It is not showing the discount amount when you have:
A. UNCHECKED(allow reprice) or
B. Choose a canned estimate that has an entry with (use current price) UNCHECKED.

If (allow reprice) or (use current price) was checked on that entry; it would show the discount amount correctly.

If the default number of days for an Estimate to expire is set to any number other than 0; it will fail without unchecking (allow reprice) or (use current price).

Having a default number of days for the Estimate to expire also causes discounts to not show that were given because of a "client" class discount.

Information Search:

1415: Saving new criteria as the same name of an existing Information Search
From the information search library, click Cancel to open a New search or double click on an existing search to open and modify. After setting up new criteria then click on File, Save As and give it the same name of an existing search; AVImark gives a prompt that "Another search by the same name already exists" if you click Yes a new search is created with the same name but the old one still exists too. The new information search with the same name should replace the previous search.
AVImark should also default to the name of the search in the "Name" field when an existing search is opened, then Save As is selected. Both of these issues have been corrected.

Inventory List:

3633: Printing Vendor List to Excel
When printing the Vendor List from Work With…Inventory File..Print…Vendor, the State Column does print to paper, but does NOT print to Excel.
Can this column be included on the report when exported/printed to Excel.

Lab Machine:

4251: AVImark- Importing lab results change
The Lab Result Importation process is being totally re-written. This new feature will do away with Defining Fields on Treatments, being forced to use generations of More Stuff, defining Normal Ranges and more. Lab results will only be tied to a particular Medical History entry. AVImark will be able to accept data (results) in whatever form or fashion in which they are received from the instrument/lab. This will include, but not limited to, number of fields/results imported, what the normal range was at the time the test was received, what instrument/lab from which results were received, and additional extras (add-ons).   This will allow us to receive Comments when they are supplied by the lab, Cultures and Sensitivities results with no regard to what was being tested for sensitivity, values in any form, with no limitations of being decimal, integer, ratio, word processing, phrase, range, etc.
Please see the 2010.0 ReadMe for more information.

Medical History:

3652: Vaccination window not holding entire serial number
Post a vaccination to Medical History. In the green vaccination window, type a 30 digit serial number. Click DONE. Reopen that vaccinatio window. The serial number will be truncated to 15 digits. Although, the "Change Vaccine Entry" window in system tables WILL hold 30 digits. The vaccine window needs to hold 30 digits as well.

3998: Medical History Amount not updated when changing QTY and surcharging by Inventory Used
Add a treatment to medical history with the & action code (surcharge by item price) and select the inventory used. It charges the correct price. Double click on the treatment and change the quantity to 2. Instead of doubling the price it only charges the price of the treatment twice. This only fails if you wait for the Inventory Used window to choose your item. If it was previously linked as "Inventory Used" to the treatment before posting to Medical History, then the amount updates fine when changing the quantity of the Medical History entry.

Miscellaneous:

3343: AVImark doesn't close when clicking Cancel to Logon window
Open AVImark in a regular state and close it. The next time you try to open it, if you "CANCEL" the Logon window; it just completely goes away.
Open AVImark. Minimize it. Right-click...close AVImark from the taskbar. Attempt to reopen AVImark. Clicking "CANCEL" at the Logon window puts AVImark minimized on the task bar again. You have to click on it to make it completely go away.
This last step was eliminated so the program completely closes when the Logon window is cancelled.

4282: Access violation closing AVImark

4077: Access violation rebuilding index from AVImarkServer window

3789: Prompt that AVImark is already running is not working
Open AVImark on a computer.
Click on shortcut to open it again.
We receive prompt: "AVImark is already running on this workstation, Continue anyway?"
Click No...it opens anyways. It should not.

3538: Client/Server: Access violation attempting to print index rebuild errors

Upon rebuilding indexes in the AVImarkServer and attempting to print any rebuild error message at the end of the rebuild, an Access Violation error would not allow the report to print.

4283: AVImark does not open fully maximized
Open AVImark. Maximize it. X-out to close program. Reopen AVImark.
It opens with a double square in the top right corner (as if it is maximized), but it is not really taking up the entire monitor screen. You have to restore down then maximize again for it to fill entire monitor.

4469: Using Healthy Pet and merge word <reminders> includes Treatment code
The merge word <reminders> now pulls the Treatment code when pulling reminder information ONLY IF Healthy Pet is being used as the reminder magazine. This has become a problem for some clinics that use the merge word <reminders> on cage cards because the code did not print before, only the description and due date printed; now having the code included on the cage cards is too much information. The <reminders> merge word will work as it did before for clinics using Healthy pet by NOT including the code.

Reminders:

3961: Two reminders print for last patient
When printing/emailing reminders through AVImark or printing through MSWord (not including consolidated); An extra card was being sent for the last patient using print and\or email. This same issue was also reported concerning the merge file that is created when sending reminders to PawPrints or Healthy Pet; the last client and patient information on file was being duplicated.

Patient Area:

3003: Unable to Import patient records
When using the AVImark Data Export feature from the CID screen. The feature was exporting patient information to a removable media. When trying to Import the data an error was coming up (Invalid XML name), then a message said the patient records were imported, but they were not.

4389: Unable to Export or Import patients using Client\Server mode

3364: Patient deleted when moving to client it already exists on
When using right-click Move on a patient, then entering it's own account number to move it to a message prompt asked if you want to move the patient, click Yes. As of version 183 another prompt followed saying, "Patient with the same name already exists. Merge medical history?" When clicking Yes, the patient was completely removed from account; selecting No worked fine.

Version 2010.0 changes the second message when trying to move the patient to the same account it exists on. The message now says, "Patient "Daisy" is already attached to client John Doe, can not move patient to itself" with the option to click OK to continue and the patient is not removed from the account.

Sidekick:

3728: Dr's Instruction lost when importing from Sidekick
If using Sidekick in the field and Dr.'s Instructions were added to a Tx, when importing to the server computer then refreshing the Sidekick the words: (Information not Available) was replacing the instructions in the Dr's Instruction window of that treatment on the Medical History entry on both the sidekick and server.

4421: Medical History notes are not importing from Sidekick when running Server in C/S mode
When importing to Server and running Server in Client\Server, none of the notes were coming over after importing. **After this fix all notes i**mport fine as long as Sidekick is ran in "classic" mode, while running the AVImark Server in either "classic" or "Client/Server".
Important Note:
Notes will not import if the Sidekick was running in Client Server mode at the time they were entered; it is NOT recommended to run the Sidekick in Client Server mode since there is no need since C|S should be used to improve the speed of the network.

Site:

3341: Improper warning when posting linked treatment at Site clinic
When using the Site option "Copied From" for your Inventory and Treatment List upon posting a Treatment with Inventory Used, to Medical History; an incorrect message was coming up even though there was currently plenty in stock for the item, "Sufficient quantity of "...." may not be in stock." The message was prompting when logged in as the Home or Site clinic.

SOAP:

3899: Unable to mouse click and drag to highlight multiple entries in SOAP
In previous versions, we were able to use the mouse to left-click and drag to highlight multiple entries for posting from both the Assessment and Plan areas of a Medical Condition Record. As of version 2008.1 we are no longer able to do this. As soon as you left-click and start to drag; we receive the circle with a slash through it that shows it is trying to move the entry instead of highlighting multiples.
This correction is available in version 2009.1 and applies to any change in the "new style" framework of AVImark that doesn't use drag and drop. If the form uses drag and drop this option will be unavailable.

3824: Weight History tool tip no longer displays in SOAP record
From a Medical Condition Record, when you highlight or hover over the weight field in a SOAP record, the weight history tooltip is no longer being displayed when using AVImark version 2008.2. This was a new feature that was added in the version 183 as a new feature and how now been corrected in version 2009.1.
Holding your curser over the Weight field will display a tooltip window with the entire weight history of the selected patient. This tooltip will list the date each weight was taken and the weight that was recorded for each date.

3968: Error clicking DONE to SOAP record after changing Admitted Dr.
When Checking in an Appointment Reservation from the patient's Schedule Tab.
Click "Yes" to create medical condition record. Then change the "Admitted By" doctor. Click Done.
Upon creating a Medical Condition record with a patient "check-in" and changing the "Admitted By" Doctor; we receive the following error upon clicking DONE using version 2008.2: Error. Record, Check-in, record number, 12869, record state, Modified. Destroying modified object. This error has been corrected in version 2009.1.

4375: Assertion failure adding "NEW" service to Plan of SOAP record
Open a Medical Condition Record. Scroll down to Plan area then right-click New Therapeutic Entry.
This will bring up the "New Therapeutic Medical Usage" window. Tab to "Description" field. Type "Rabies" or something you know will find services.
Normally, you have to double left-click on a service to select it in that window. That is fine and is consistent with how the "Enter Medical History" window works too.
However, if you just single left click on a service (so that it is highlighted but has not yet been fully selected), and then click "OK'" we receive the assertion failure.
As of version 2009.1 AVImark now gives a message prompt telling the user there has not been a code selected, the message comes up for both Therapeutic and Diagnostic entries. The message reads "New Therapeutic Medical Usage: Code blank" or "New Diagnostic Medical Usage: Code blank."

3801: Attempting to print MCR after x-ing out of abnormality note window causes access violation
Open a new Medical Condition record on a medical history entry. Select an abnormality. Type some text.
Then use the X to close out of the text window. At the top of the SOAP window, click Med Condition... PRINT.
As of version 2008.1 this error comes up ONLY if you X to close the abnormality note window: Access violation at address 00B4F4DB in module 'AVImark.exe'. Read of address 00000030. Clicking "Done" to close the SOAP record and then reopen it; it was not failing.

3778: Changes made to SOAP record are being lost
If you open a SOAP record and type notes in several fields, leave the SOAP record open behind Avimark and close Avimark or let the program log you out, you will get the prompt "There are unsaved changes on this MCR do you wish to cancel." Clicking NO will close Avimark but several errors will come up. When re-opening AVImark and trying to open the same MCR this message was prompting, "Another user is currently entering notes for this medical history entry.

Continue?" Choosing Yes, would open the SOAP record in VIEW ONLY status and the changes had not been saved.   Also, if you log back in as an Administrator to have authority to reset the window, the changes were still lost.

Version 2009.1 corrects this issue by giving a new message that your unable to close AVImark with a SOAP window open. If attempting to do so this message will now prompt: "For your information, Please close Medical Condition window before closing AVImark." Click Ok.

4042: Spell checker doesn't check all Abnormality note fields when multiple used in SOAP
If a misspelled word or text was added to more than one Abnormality, spell checked worked correctly for first Abnormality with misspellings. But clicking Add, Change, Ignore or Cancel in the first window spell check was only being done in the first window instead of checking all Abnormality text fields.

4396: Soap Abnormality notes show in light gray until you close and reopen the SOAP record.
Upon entering notes for an Abnormality in the Medical Condition Record and tabbing or clicking to the next field; those notes only show in light gray until you close and reopen that SOAP record, then they will show in black.

3900: Default High Scores are removed when tabbing through field on SOAP
If the Advanced Options default value was set for "BCS High Score" and "Other High Score", when opening a Medical Condition Record and tabbing through the BCS and Other fields the default high score was being set back to 0.

3958: Notes added to service in Plan area of SOAP do not import from Sidekick
While using Sidekick, if a patient was checked-in then a Medical Condition record created. When notes were added to the Plan area, then the entry was posted to Medical History. The notes should show up in both places, on the Plan tab in the SOAP record and in Medical History. After importing to the Server, the notes were missing from both areas then after refreshing the Sidekick they were lost.

System Tables:

3923: Assertion failure attempting to add a new Facility
When running AVImark as Client Server; go into Work-with...System Tables, highlight the Facility Table,
from the "Entries" side; do a righ-click...New to add a new Facility. Upon clicking OK to the "New Facility Entry" window, this error was coming up: Assertion failure (C:\AlphaDev\Synchronized\2008.2_mcs\umcsBuffer.pas, line 1074).

Time Clock:

3745: Time Card window, Clock Out, Click Done
Several suggestions have come in to change the way the time card Clock-Out feature works, back to the way it worked before version 183. To help avoid user error of not clocking out before clicking Done on the time card, version 183 changed the way clocking out worked. Since then, we have received many requests to change it back to the way it worked before by allowing the user to select Clock Out- then select a Clock Out Reason- then click Done to close the time card. Version 2010.0 does NOT automatically close the time card after clicking the Clock Out button.

Treatment List:

3971: Right-click..Another option not working correctly
In version 2008.1.0.6535, when using the Find field to locate a code in the Treatment list, then doing right-click Another on that code, it would create "another" but would not include More Stuff. Although, if you had found the treatment by selecting the category it exists in first, then do right-click Another, the More Stuff was in place.

In version 2008.2.6536: An error comes up when doing right-click Another on a treatment that has any associated information setup under "Attachments" in the Change Treatment window.

Version 2010.0.0.9086 corrects the issue using the Find field and also creates Another service without giving an error message.
** <u>Important Note</u>: The new service that is created will include Doctor's Instructions and More Stuff that was setup on the original code. Version 2010.0.0 works consistently with version 179 by NOT including Associated Treatments or Items when using right-click Another.

3899: Program asks to save changes when none have been made
Open Treatment List. Do a r-click....CHANGE on almost any treatment. From Change Treatment window, click on "Doctor's Instructions", "Associated Treatments/Items", or "More Stuff". Even though no changes have been made we receive:
Confirm Changes have not been saved. Save now? Yes No

Once you click "Yes" or "No" and close the "Change Treatment" window, upon reopening the "Change Treatment" window for that service; we no longer receive that message when accessing one of those three Attachment areas.

Utility programs:

4001: Unable to import from .txt file to run ChgCode
Using the built-in ChgCode from the Utilities menu in AVImark. Click Import when using a csv file to import new codes from, the program closes without changing anything.

Worklist:

3074: Removing a Work List entry after the client account has been deleted
When a patient has been added to a Work List and then the Client Account the patient was attached to is deleted, when you go to the Work List and try to remove the patient Avimark gives an error and does not remove the patient. "Error. Record, Work List, record number, Record is deleted. Cannot save due to the following errors."

In previous versions (prior to 183.6) you could remove a patient from the Work List after the client had been deleted.