



Antech/Zoasis Integration

Revised June 24, 2010

Table of Contents

Introduction	3
ImproMed Universal Lab Reader	4
<i>Configure Infinity</i>	4
<i>Configure the ImproMed Universal Lab Reader</i>	4
<i>Using the ImproMed Universal Lab Reader Console</i>	7
Zoasis 2D Requests	8
<i>Setup Zoasis 2D Requests</i>	9
<i>Configure Zoasis 2D Test Request Form Sheet</i>	11
<i>Using Zoasis 2D Requests</i>	12
Appendix A: Importing Labs	13
<i>Linking Fields in Lab Imports</i>	13
Appendix B: Mutli-Practice Lab Configurations	14

Introduction

The Lab Imports Module is designed to allow in-house lab equipment and reference labs to integrate with the patient's electronic medical record. Currently ImproMed, Inc. integrates with numerous in-house laboratory equipment vendors as well as reference labs (see complete list of partners below).

In order to allow any integrations to take place, the following is necessary:

1. The Lab Imports Module.
2. Infinity's lab reader services.
3. Communication between the in-house lab equipment and the Infinity workstation or network.

After the integration has been completed with the desired machine, Infinity has also added a Lab Requests feature. Lab Requests allows the lab to be invoiced and electronically filed with only a few steps.

Antech Diagnostics is the largest veterinary diagnostic laboratory dedicated to providing veterinarians the finest in laboratory medicine.

In Antech's partnership with Zoasis, ImproMed's Infinity offers the complete lab solution, including scanned requests, tests run, and automatic results, allowing for lab work to be charged at the time it is ordered. Eliminating all manual entry of information allows for all the information to become part of the patient's medical record.

Inside the LabResults folder, Zoasis/Antech must have their own results folder (per practice if necessary). ImproMed, Inc. can setup the ImproMed Universal Lab Reader to automatically download the results into the shared folder to be either imported by hand or used in conjunction with Zoasis 2D Lab Requests. Users will need the following information from their Antech Representative:

- ☒ Antech Account ID
- ☒ Lab Region
- ☒ Zoasis Practice ID
- ☒ Zoasis User Name
- ☒ Zoasis Password

ImproMed Universal Lab Reader

ImproMed has created a lab reader service that will enable all lab equipment to run using the same lab reader instead of having to install lab readers for each piece of in-house lab equipment. The new ImproMed Universal Lab Reader provides a console service that can only run when the service is not, but this is a helpful troubleshooting tool when communication complications arise.

The Zoasis Auto Download is configured with the ImproMed Universal Lab Reader.

Configure Infinity

Using the ImproMed Universal Lab Reader combines all of the lab results imported into the Lab Results Import Module into a single tab. The following steps need to be performed per practice.

From the Infinity Desktop:

1. Click **Setup | Medical Records | Dynamic Lab Screens | Lab Result Paths**.
2. Check **Using ImproMed Universal Lab Reader**.
3. Remove any path necessary from the **Path** to drop down.
4. Click **Apply** and **OK** to save the changes and close the dialog window.
5. Open the **Lab Results Import** module to verify the ImproMed Universal Lab Services tab appears.

Tip: If this is the first time the Universal Lab Reader is being used, users might have to relink test results. If necessary, please see page 12 for assistance.

Configure the ImproMed Universal Lab Reader

Install the Lab Reader

1. Log in as Administrator on the workstation closest to the Analyzer.
2. Click **Start | Run | type \\pdc1** (Note – this is an ImproMed standard naming convention. Your server name may vary).
3. Double click on the **Program CD** folder.
4. Double click on the **v4.6** folder
5. Double click on the **Lab Import Programs** folder.
6. Double click on the **LabReader** folder.
7. Double click on the **setup.exe** file.
8. Click **Next, Everyone, Next, Next, Close**.

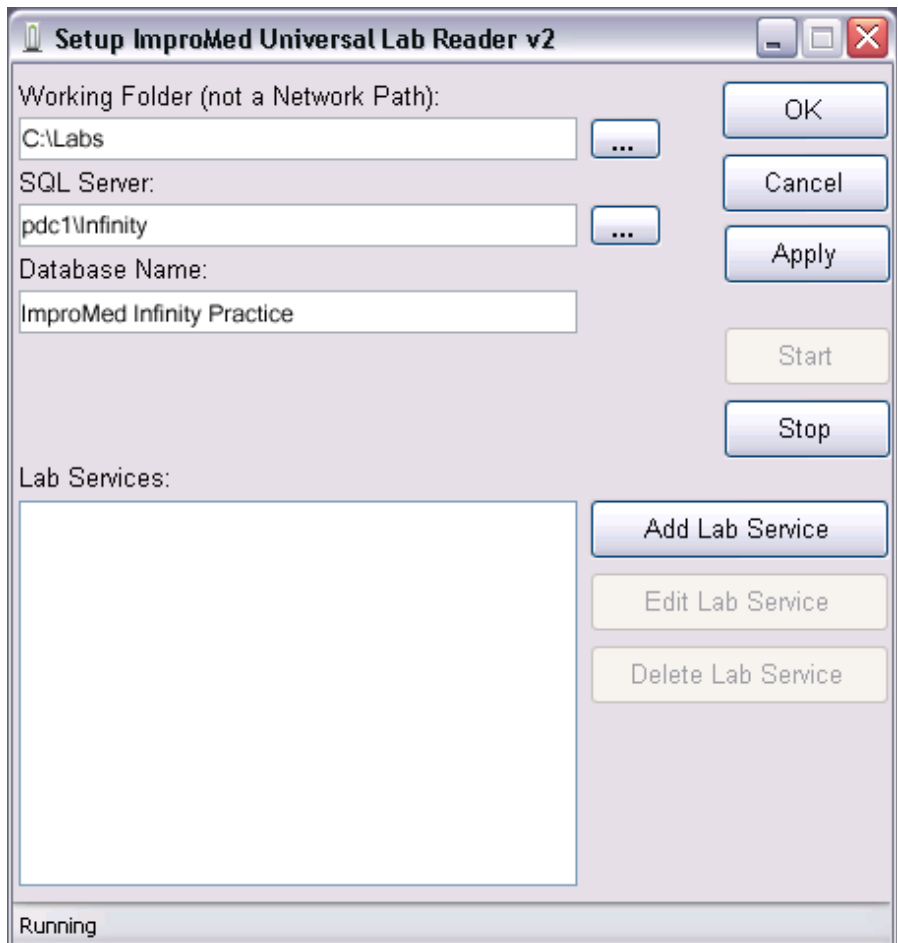
Configure the Lab Reader

1. Click **Start** | **[All] Programs** | **Infinity** | **ImproMed Universal Lab Reader** | **Setup ImproMed Universal Lab Reader**.
2. Click  for the Working Folder location.

IMPORTANT! The Lab folder must be a local folder and does NOT need to be shared.

3. Select the **Labs** folder. When the Universal Lab Reader is installed the Labs folder is automatically created on the Local C Disk.
4. Click **OK**.
5. Enter the **SQL Server** (i.e. pdc1\Infinity) (Note – this is an ImproMed standard naming convention. Your server name may vary).
6. Enter the **Database Name** (i.e. Infinity).
7. Click **Connect**.
8. Click **Apply** and **OK** to close the Setup Lab Services window.

Tip: The rest of the configuration will be specific to the analyzer being utilized at each practice.



Setup ImproMed Universal Lab Reader v2

Working Folder (not a Network Path):
 ...

SQL Server:
 ...

Database Name:

Buttons: OK, Cancel, Apply, Start, Stop

Lab Services:

Buttons: Add Lab Service, Edit Lab Service, Delete Lab Service

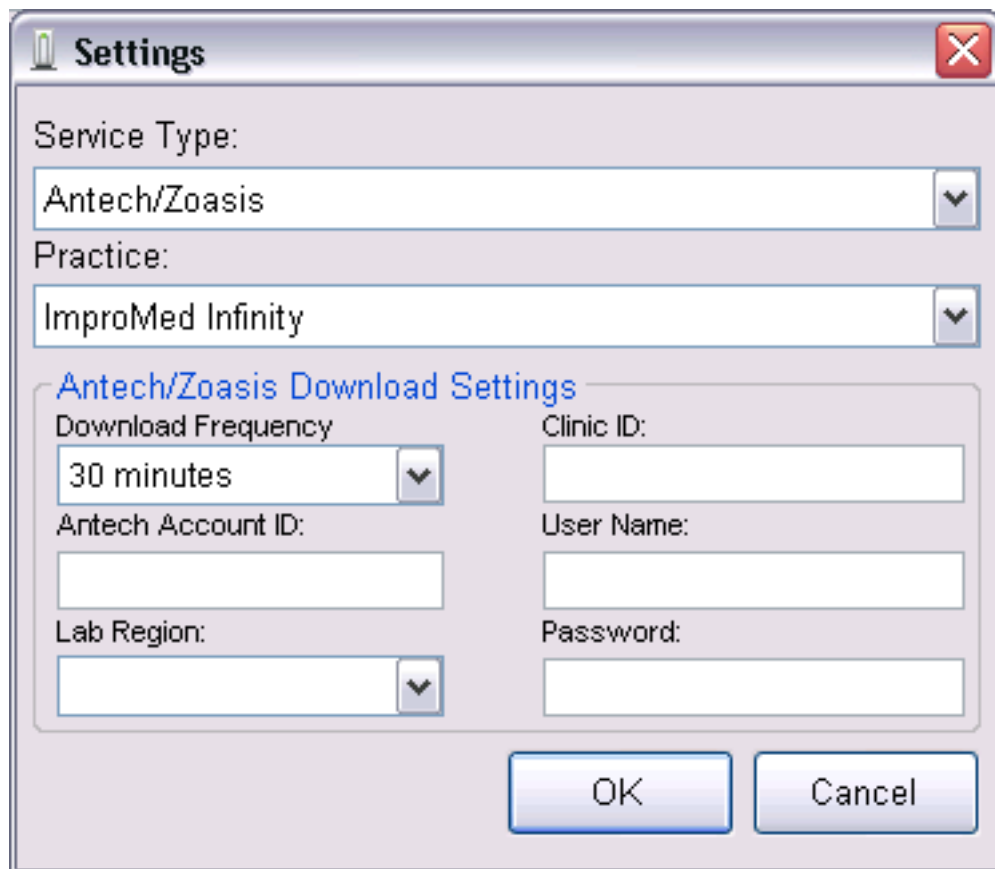
Running

Configure the Lab Service

1. Click **Start** | **[All] Programs** | **Infinity** | **ImproMed Universal Lab Reader** | **Setup ImproMed Universal Lab Reader**.
2. Click **Add a Lab Service**.
3. Select **Antech/Zoasis**.
4. Select a **Practice**.
5. Select the **Download Frequency**.
6. Enter the **Antech Account ID**, **Clinic ID (Zoasis ID)**, **User name**, and **Password**.

Tip: The User name and Password are case sensitive.

7. Select the **Lab Region**.
8. Click **OK**.
9. Click **Apply** to save the settings.
10. Click **Start** to begin the service or click **OK** to close the Setup Lab Services window.
11. Click **Start** | **[All] Programs** | **Infinity** | **ImproMed Universal Lab Reader** | **ImproMed Universal Lab Reader Console** to view the console session if the service isn't started.





The screenshot shows a 'Settings' dialog box with a title bar containing a printer icon and a close button. The dialog is divided into several sections:

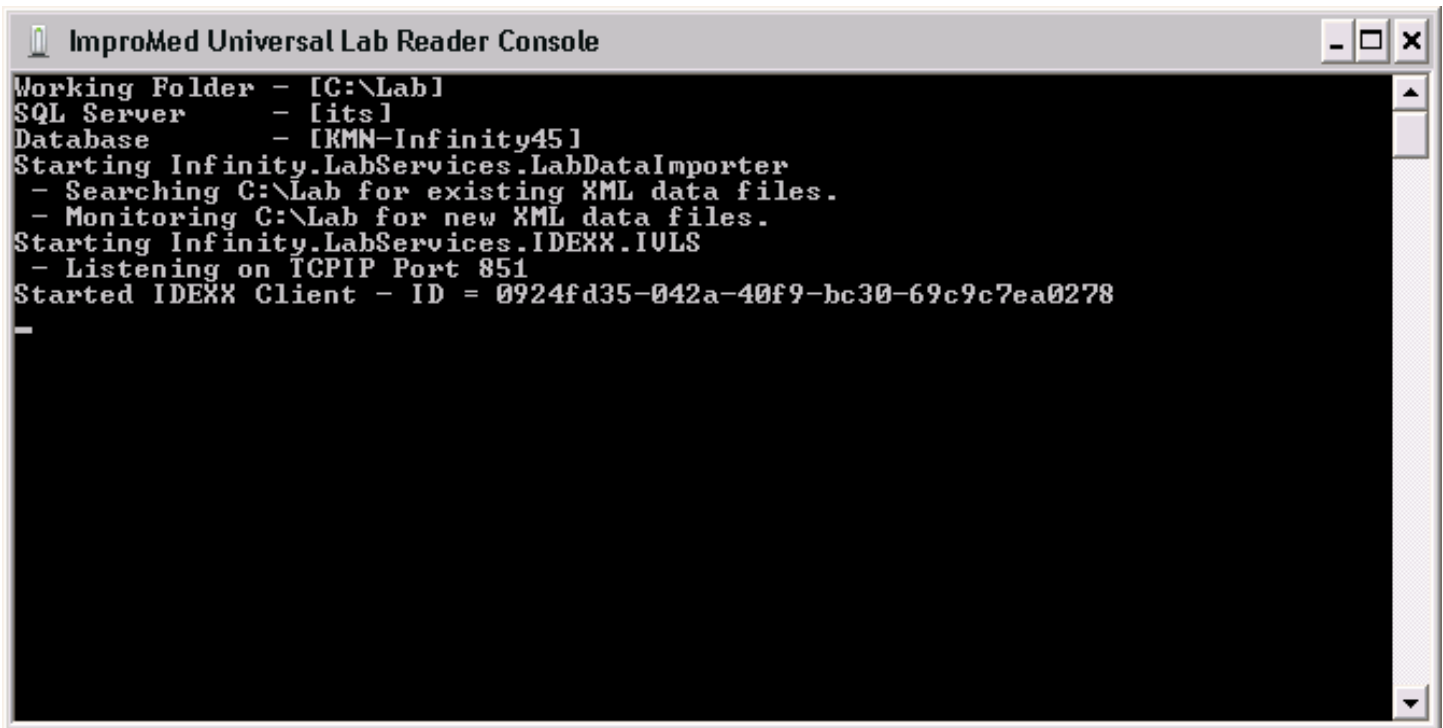
- Service Type:** A dropdown menu currently showing 'Antech/Zoasis'.
- Practice:** A dropdown menu currently showing 'ImproMed Infinity'.
- Antech/Zoasis Download Settings:** A section with a blue header containing:
 - Download Frequency:** A dropdown menu showing '30 minutes'.
 - Antech Account ID:** A text input field.
 - Lab Region:** A dropdown menu.
 - Clinic ID:** A text input field.
 - User Name:** A text input field.
 - Password:** A text input field.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

Using the ImproMed Universal Lab Reader Console

The ImproMed Universal Lab Reader Console is a very useful tool used for troubleshooting why lab results are not appearing in Infinity. Similar to other console services that ImproMed produces, this console cannot run while the ImproMed Universal Lab Reader service is running.

To run the ImproMed Universal Lab Reader Console, please follow these steps:

1. Click **Start** | **[All] Programs** | **Infinity** | **ImproMed Universal Lab Reader** | **Setup ImproMed Universal Lab Reader Service**. *This opens the reader.*
2. Click **Stop**. *This will stop the reader service.*
3. Click  to close the reader.
4. Click **Start** | **[All] Programs** | **Infinity** | **ImproMed Universal Lab Reader** | **ImproMed Universal Lab Reader Console**.
5. Click  when you are finished.
6. Repeat steps 1 and when you get to step 2 click **Start** to restart the reader service.




Here are some helpful tips on the Lab Reader Console:

- ✓ The console displays error messages for:
 - ☒ Folder problems
 - ☒ Communication problems
 - ☒ SQL problems
- ✓ The console displays lab results as they are transferred

Zoasis 2D Requests

The Zoasis 2D Requests follow the same general flow as other lab requests. A Zoasis request is initiated by the user clicking the New button from the Lab Requests tab, selecting the Zoasis 2D Test Request Form, and selecting the desired test from the sheet. Once saved, this selection will print out the 2D Request Form that contains all of the unique marking necessary for the Antech Labs to process and return the result through Zoasis. This printout will look like the following image:

Antech Diagnostics		ImproMed						
		Req No: 1-IMP17.0						
Account ID: 987654321		2/14/2008						
Sigma Animal Hospital 304 Ohio Street Oshkosh, WI 54902 Phone: (920)236-7070								
Critical:	NO	Chart Number:						
Doctor:	Ashlee Cole	Species:						
Owner Last Name:	KOHL	Breed:						
Owner First Name:	WILLIAM & EVELYN	Sex:						
Pet Name:	SCREECH	Age:						
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> S <input type="checkbox"/> L <input type="checkbox"/> U <input type="checkbox"/> C <input type="checkbox"/> S <input type="checkbox"/> P <input type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> EP <input type="checkbox"/> R <input type="checkbox"/> B <input type="checkbox"/> F <input type="checkbox"/> T <input type="checkbox"/> OTHER </div> <div style="width: 30%;"> <input type="checkbox"/> S <input type="checkbox"/> L <input type="checkbox"/> U <input type="checkbox"/> C <input type="checkbox"/> S <input type="checkbox"/> P <input type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> EP <input type="checkbox"/> R <input type="checkbox"/> B <input type="checkbox"/> F <input type="checkbox"/> T <input type="checkbox"/> OTHER </div> </div>								
Ordered Tests: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Code</th> <th style="width: 45%;">Name</th> <th style="width: 40%;">Description</th> </tr> </thead> <tbody> <tr> <td>AE2D</td> <td>Standard Mammal Profile</td> <td></td> </tr> </tbody> </table>			Code	Name	Description	AE2D	Standard Mammal Profile	
Code	Name	Description						
AE2D	Standard Mammal Profile							

Contained on this form is the unique barcode used in the Antech Lab that contains a unique requisition number created by the Infinity application. This requisition number allows Antech lab results to be automatically imported into the patient record. Combined with the Zoasis Reader Service, the Zoasis 2D Request Form and the Lab Requests Module, Infinity provides an integration with Zoasis/Antech Labs that requires little user intervention.

To use the Zoasis 2D Requests the Zoasis Auto Download must be setup correctly.

Due to the deeply integrated nature of the Zoasis 2D Request feature, more detailed setup is required.

NOTE: This setup is done per practice.

1. Click **Setup | Medical Records | Dynamic Lab Screens | Setup Zoasis 2D Requests**.

The screenshot shows the 'Antech/Zoasis' tab of the 'Zoasis 2D Request Setup' dialog. It contains the following fields and options:

- Antech ID:** A text box containing '321654' with a red checkmark icon.
- Region:** A group box with four radio buttons: 'US East' (selected), 'US West', 'Canada East', and 'Canada West'.
- Path to Zoasis results:** A text box containing '\\pdc1\labresults\zoasis\' with a browse button (...).
- Zoasis.com login information:** A group box containing:
 - Clinic ID:** A text box with '12345' and a red checkmark icon, next to a 'Clear' button.
 - Zip Code:** A text box with '54902'.
 - Username:** A text box with 'impromed'.
 - Password:** A text box with 'xxxxx'.
- Checkboxes:**
 - ☒ Fill Chart ID text box with the Client ID and Patient ID when creating a request.
 - ☐ Display button to download results. Below it, text reads: 'Disable the display of the download button if you are using the Zoasis reader to automatically download the results.'
- Buttons:** 'OK', 'Cancel', and 'Apply' are on the right side.

The Antech ID and Region will need to be provided by the practice. Antech maintains a different list of tests in each of their regions.

The Path to the Zoasis results should be left blank when using the ImproMed Universal Lab Reader. It has been added here for convenience. The Zoasis.com login information is also the same as the Lab Results Paths setup screen.

The screenshot shows the 'Species/Breeds Mapping' tab of the 'Zoasis 2D Request Setup' dialog. It contains two tables for mapping species and breeds to Antech codes.

Species (Required):		Breeds (Recommended):	
Infinity	Antech	Infinity	Antech
Avian		African Grey	
Bovine		Albino Parakeet	
Camelid		Amazon	
Canine	Canine	Amazon Parrot	
Caprine		Andie Conure	
Cervid		Blue Chest African	
Equine	Equine	Blue Front Amazon	
Feline	Feline	Blue Headed Parrot	
Lagomorph		Blue Jay	
Mustelid		Blue Lorri	
Other	Other	Blue Lorrie	
Ovine		Budgerigar	

Below each table is a 'Delete Link' button. The 'OK', 'Cancel', and 'Apply' buttons are on the right side.

The Species/Breeds Mapping tab allows the Infinity Species and Breed lists to be matched up to the Antech Species and Breed lists. Any species or breed that is not linked will be prompted for when the Zoasis 2D Request is generated.

Zoasis 2D Request Setup

Antech/Zoasis Species/Breeds Mapping **Antech Tests**

Antech Tests (East):

Antech Name	Antech Code	Infinity Product
Acetylcholine Receptor Antibody	S16005	L601 - ACTH Stimulation Test
Acid Fast Stain	M010	
Adrenal Androgen Panel for Ferrets	S17116	
Adult Wellness w/ Heartworm and Fecal	86092	
Albumin	T010	
Alkaline Phosphatase	T020	
Alkaline Phosphatase Isoenzymes	T215	
ALT (SGPT)	T030	
Amylase	T040	
Amylase, Lipase	T050	
Anaplasma phagocytophila(Ehrlichia equi)	S16872	
Antinuclear Antibodies	T515	

The Antech Tests tab provides a list of the Antech Tests and asks that they be linked to Infinity Product codes. This product mapping must be completed before the Antech items can be placed on a request sheet. In the event an Antech Test does not have a corresponding product entry in Infinity, the Setup Product Item screen can be called directly from this setup screen using the **Setup Product Item** button located at the bottom of the screen. In the event an Infinity product is incorrectly linked to an Antech Test, the **Delete Antech Test** button will remove the link and allow for the correct link to be created.

Since Antech provides customized testing to different regions and veterinarians, Infinity allows users to manually add those specific tests. Click the **Add Antech Test** to create a new Antech Test which displays with the existing list. Users can make changes to the test name by clicking **Modify Antech Test**, however, this only allows changes to the test created by the practice. If users incorrectly link an Antech Test and Infinity product, highlight the row and click **Delete Link**.

Once these items have been linked, a Lab Request Sheet will need to be created to allow for the selection of the appropriate Antech Test and subsequent generation of the correct Zoasis 2D Request form. The creation of the Lab Request Sheet will occur much like the Lab Request Sheets discussed earlier. However, it is important to grab the Lab titled Zoasis 2D Test Request Form as that entry has been specifically designed to generate the unique sheets for the Antech Labs. Specifically, the list of available products to add to the sheet will be restricted to only those products that have been linked to an Antech Test. It is important to note there is also an Antech Test Request Form available for practices that do not wish to use the Zoasis 2D Request sheets.

Configure Zoasis 2D Test Request Form Sheet

To set up the Lab Requests feature in Infinity, the user will need to go to **Setup | Medical Records | Dynamic Lab Screens | Lab Result Paths** and check the box to **Show Lab Request Tab**. This will display a new tab called Lab Requests as the first and default tab in the Lab Imports Module.

The user will next go to **Setup | Patient Processing | Travel Sheets** and create the needed Lab Request Sheet(s).

Note: The Travel Sheets Module is required to use the Lab Requests feature.

When creating the Travel Sheet for Lab Requests, it is important to designate the lab machine the sheet is for. The following illustration shows the Lab drop-down box as seen in the Setup Travel Sheets screen:

Tip: If using Lab Requests with Zoasis, users will want to complete the specific setup configurations prior to setting up a Travel Sheet.

The screenshot shows the 'Setup Travel Sheets' interface. On the left, there are fields for 'Name' (with a red checkmark), 'Product Name', 'Low Quantity to increment by' (set to 1.00), 'High Quantity to increment by' (set to 1.00), and 'Travel Sheet Items' (with a red checkmark). The 'Lab' drop-down menu is open, showing a list of options: 'Travel Sheet', 'Lab', 'LaserCyte', 'Marshfield Labs', 'Nova CCX', 'Travel Sheet' (highlighted in blue), 'VetConnect', 'VetScan', 'VetScan HMT', 'VetScan2', 'VetTest', and 'Zoasis'. To the right of the drop-down menu are buttons for 'Info' and 'Search...'.

Tip: For the Zoasis 2D Request to be generated the Zoasis 2D Test Request Lab should be selected.

It is important to remember that the Request Sheets are unique to each piece of equipment and must be created for each lab that requests are going to be generated for.

Using Zoasis 2D Requests

Creating a New Request

From the Infinity Desktop:

1. Click **Modules | Lab Results Import**.
2. Click **Lab Requests**.
3. Select a client and patient.
4. Click **New**.
5. Select a **Practice**, if necessary.
6. Choose your **Zoasis Sheet** from the drop-down menu.

*Note: Sheets are created in **Setup | Patient Processing | Travel Sheets** area of Infinity.*

7. Select a **Provider**.
8. Change the **Date Performed**, if necessary.
9. Change the **Time Performed**, if necessary.
10. Select a **SuperMode**, if necessary.
11. Enter **Comments**, if desired.
12. Select the items on the sheet that you wish to request.
13. Click **Create**.
14. Click **OK** to the Move Products Transfer Screen. *This screen verifies that the products you selected on the Travel Sheet are correct to be moved to the selected destination.*
15. Click **Zoasis 2D TRF** to get the on screen preview of the paperwork that gets shipped with the sample to Antech/Zoasis.
16. Click **Print**.
17. Click **Close**.

Creating a Zoasis 2D Recheck Request

Users will follow the steps to create a Zoasis 2D Request, with one additional step. Here are a couple of items that need to be complied with in order for a recheck request to be successful:

- ✓ An Infinity product must be linked to the Antech Test for RECHECK.
- ✓ The original result must have been completed within the last 30 days. *Infinity will not recognize any result based on the imported date, only the date of the result.*

From the Infinity Desktop:

1. Repeat **steps 1-11** (see above) for Creating a Zoasis 2D Request.
2. Select the **Original Lab Result** based on the available Accession IDs. Infinity will only show lab results based on the last 30 days for the selected patient.
3. Select the Recheck Product from the Zoasis 2D Test Request Travel Sheet. If the Recheck product is not displayed on the Travel Sheet, it will need to be added by modifying the Travel Sheet.
4. Click **Create**.
5. Click **OK** to the Move Products Transfer Screen. *This screen verifies that the products you selected on the Travel Sheet are correct to be moved to the selected destination.*
6. Click **Zoasis 2D TRF** to get the on screen preview of the paperwork that gets shipped with the sample to Antech/Zoasis.
7. Click **Print**.
8. Click **Close**.

Appendix A: Importing Labs

The Lab Results module is an enhancement module that is used for importing data gathered by lab equipment. The module interfaces with many popular brands of lab equipment and reference lab services. Once the data is imported into the Lab Results module it is placed into lab screens in the patient's medical history.

Currently, the Lab Imports Module will allow you to manually import all lab results if the Lab Requests option is not used. However, if the Lab Requests option is being used, the following lab results will still need to be manually imported: IDEXX VetTest (if used as a standalone machine), IDEXX VetConnect (without using LabREXX), American Labs, Marshfield Laboratories, HemaVet DMS, Forcyte HemaVet, Drew Scientific HemaVet, and Phoenix Laboratories.

With the Lab Results Import module open on the desktop:

1. Click the tab for corresponding lab equipment used to gather lab results. *A list of lab result records is displayed.*

Tip: *If the Universal Lab Reader is being used, there will only be a single tab shown for all lab results.*

2. Click the checkbox or highlight the lab result file you want to import.

Tip: *Some lab equipment may allow you to import multiple results simultaneously into the same lab result form.*

Note: *Once a lab result file has been imported, it is removed from the list of available files to import.*

3. Click Import. *The Import... dialog box opens.*
4. Using the Find Client button or the Client drop-down list, select the client and patient.

Note: *This step is sometimes unnecessary, as Infinity will attempt to match clients with the import results.*

5. Click **OK**. The Dynamic Lab Screen opens and is imported into the patient's medical record.

Linking Fields in Lab Imports

While importing a lab, a screen may appear asking to Link Fields. This screen displays when the type of lab being imported does not match any fields in Infinity for that specific type of result.

As an example, Protein from Zoasis must match to the Protein field in Infinity for the result to display properly. When the Link Fields Screen displays the Name Field should match the Link To field.

This screen may display multiple times for the same result, however once a field has been linked, it does not need to be linked again.

If you get the message *"The Name must be Unique. Please enter a new name."*, please click OK and enter a new name for the field. This message can come up when users have CPLT as a decimal field, but the machine is transmitting text instead. Infinity cannot have the same field name even though the field types are different.

The screenshot shows a 'Link Field' dialog box. It contains a 'New Field' section with a text box showing 'Name: Protein' and 'Key: 2154'. Below this is a 'Link To:' section with a dropdown menu currently set to 'Protein'. At the bottom of the dialog are three buttons: 'Edit Fields', 'OK', and 'Cancel'. Red circles are drawn around the 'Name: Protein' text and the 'Protein' dropdown selection.

Appendix B: Mutli-Practice Lab Configurations

With multi-practice instances, there are a few things that users need to know about the lab integrations. The following will go through all of the items that need to be done within each chapter when multi-practice circumstances are in place:

- ✓ ImproMed Universal Lab Reader
 - ☑ The lab reader has a practice selector that needs to be used when lab machines are set to go to different practices.
 - ☑ If there is only one machine that is used by all practices, only one practice will receive the results.
- ✓ Lab Requests
 - ☑ Each practice has their own travel sheets that can either be setup manually or can be copied between practices using the Multi-Practice Maintenance Utility.
 - ☑ Even if the Travel Sheet has been created (or copied from), each practice still needs to complete the Zoasis 2D Request setup (**Setup | Medical Records | Dynamic Lab Screens | Zoasis 2D Requests**).
- ✓ Importing Labs
 - ☑ When importing results, if Infinity prompts the user to link fields, this can only be done in the primary database.
 - ☑ The Lab Results Paths are setup per practice (**Setup | Medical Records | Dynamic Lab Screens | Lab Result Paths**) and each tab that is configured for the practice will only show that practice's results.