2008

Inventory, Location and Contact Information Control

Using barcode technology, InTrek© gives businesses a simple and inexpensive way to track the quantity, location and history of products/assets.

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Contents

What is InTrek©

InTrek© is an essential tool for any business trying to manage asset, location and contact information on a limited budget. The application allows the user to create locations, assets, and contact information and then assign the asset to a location while maintaining a complete history of the assets previous assigned locations.

Definitions

Attachment – Any type of electronic file that is to be uploaded into the database.

Cell - The intersection of a row and a column where individual pieces of data reside.

Database - Collection of text and numerical data stored in a list created and managed by an application called a Database Manager or DBM.

Field - A variable used to hold a record.

Rows - A horizontal group of cells on a spreadsheet identified by numbers.

Table - A group of rows and columns.

A Quick Overview of a Database

The most commonly used tool for managing critical data is the database. A Database is a collection of text and numerical data stored in a list created and managed by an application called a Data Base Management System or DBMS. The list is presented as a table that can be broken down into columns and rows. A column is the vertical grouping of entities, while the horizontal grouping is known as a row. When one or more columns are used in a table to identify a specific row, then that group of columns is called a key. All the information entered into a database is called a record. This information composes a variable called a field.

Installation of the Application

To install the application, double-click “Setup Application” located on the distribution disk. The “Setup Application” will guide you through the installation process. In most cases, the default installation setting will work fine. If the default installation does not work for your particular computer settings, then the “Setup Application” will allow you to customize the installation settings.

Starting the Application for the First Time

After the application has been installed and before you can start using the application for the first time, it will be necessary to log in to the application as administrator and create a user account. This is accomplished by first starting the application and logging in using the user name “admin” and the password “admin” (figure 1).

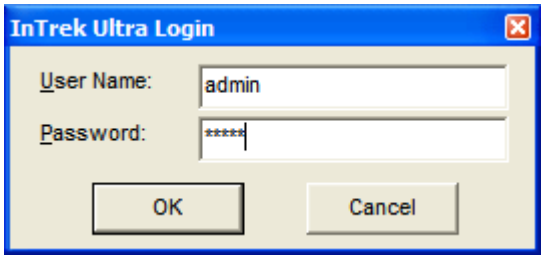

Figure 1 Logging in to the application for the first time

Creating a User Account

Once you are logged in as administrator, a new user account can be created by using the “New User Form” (figure 2). This form is automatically displayed and is used to capture the user information as well as the user login name and password. Once all the fields have been populated, selecting the “Save” option located at the bottom of the form creates the new user account (figure 2). After the user account has been created, the application is closed and the changes are saved to the database. At this point InTrek© can be restarted and the user can log in using the new account (figure 1).

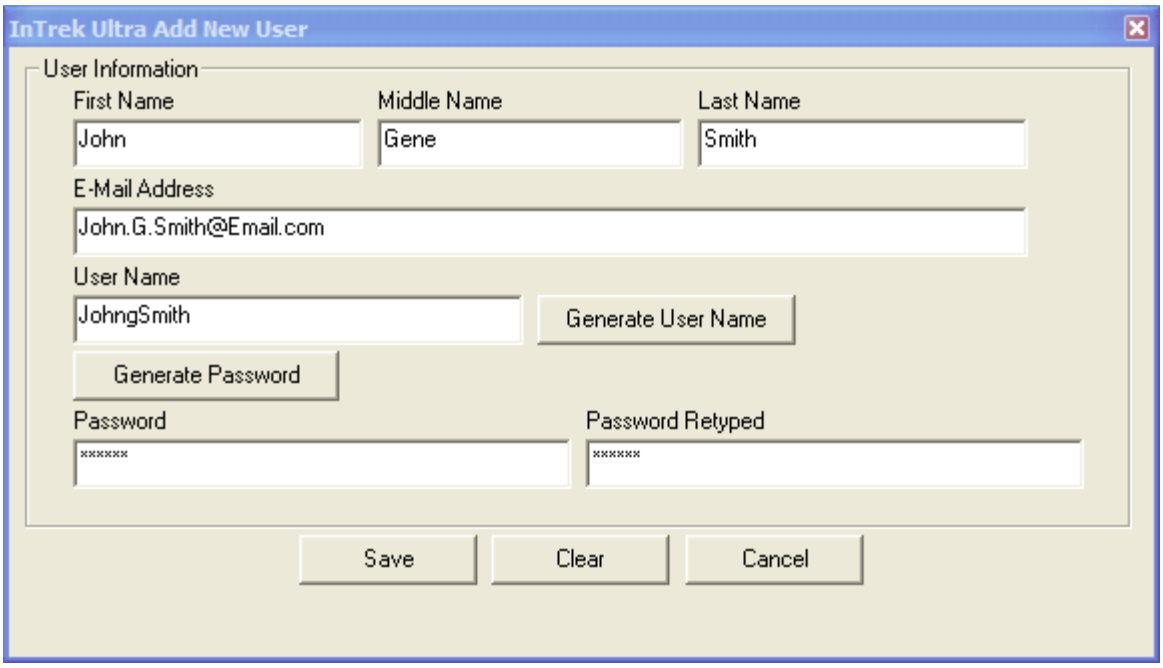

Figure 2 New User Form

Using the Application

InTrek© is a multi-document interface (MDI) application. This means the user can open multiple forms in a single application (also known as a container). When the application is started using a user account, the "Active Location(s) Explorer is launched by default (figure 3).

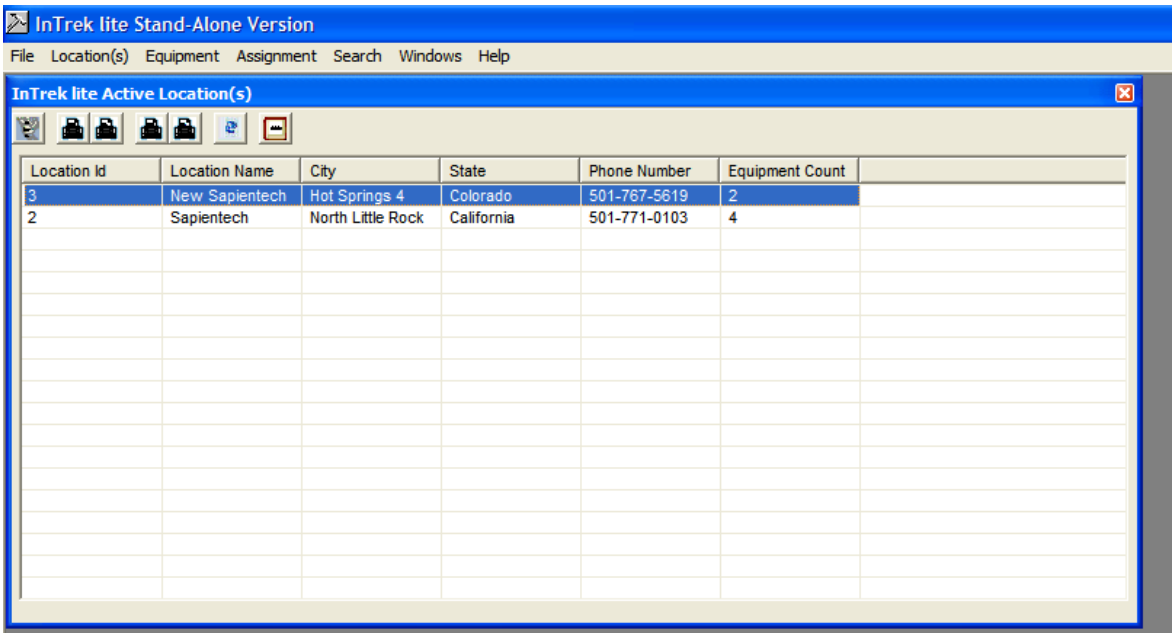

Figure 3 Active Location(s) Explorer

The Active Location(s) Explorer

The Active Location(s) Explorer is used to display all current location(s) defined in the database where equipment is currently assigned or could be assigned. The Active Location(s) Explorer displays the following information:

1. Location ID – This is used by the application to keep track of all records associated with a particular location.
2. Location Name – The name of the location. It should be noted that once a location has been defined it's name cannot be changed. Changing the location name is basically the same as defining a new location. Therefore, extreme care should be taken when defining a location name.
3. City – The city in which the location of the inventory resides.
4. State – The state in which the location of the inventory resides.
5. Phone Number – The phone number associated with the location where the inventory resides.
6. Equipment Count – The number of physical units located at a particular location.

By default the Active Location(s) explorer displays the location information in alphabetical order using the location name. However, this can be changed by selecting

one of the headers located at the top of the form (figure 4). Selecting the header once will order the Active Location(s) Explorer display in ascending order. Selecting the same header a second time will sort the Active Location(s) Explorer display in descending order.

Figure 4 Selecting a header to change the display order.

Displaying Detailed Location Information

Once a location has been defined in the database its detailed information can be displayed by double clicking that location in the Active Location(s) Explorer (figures 5 and 6).

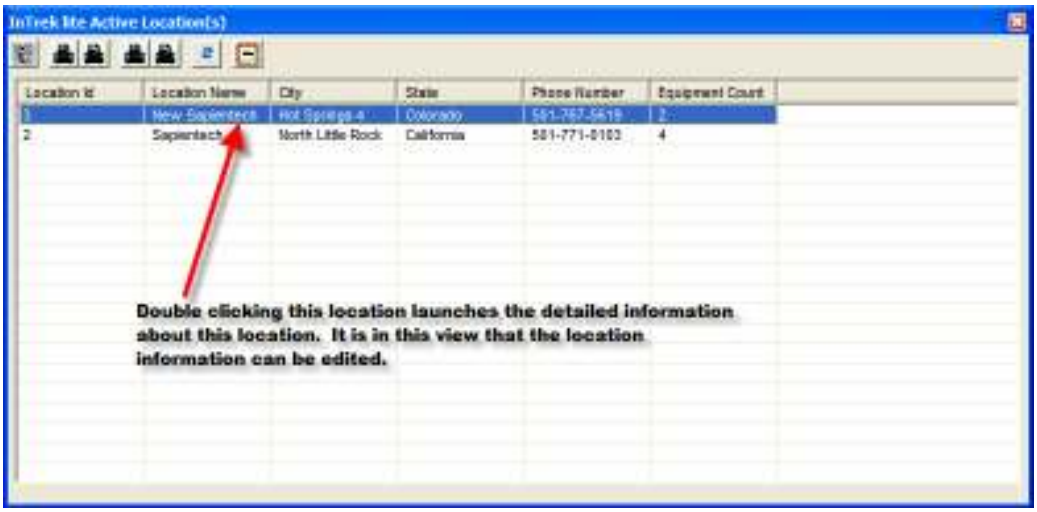

Figure 5 Detailed location information is obtained by double clicking a location.

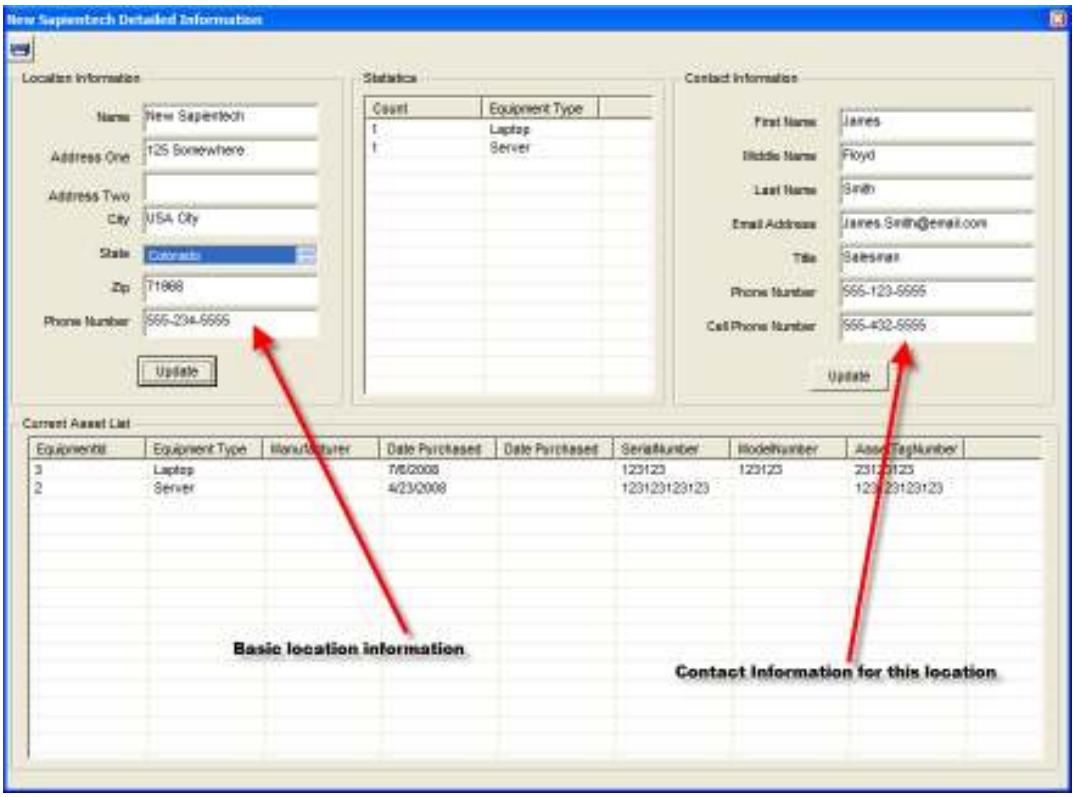

Figure 6 The detailed information about a location is displayed in a detail information form.

The detailed information associated with a location is divided into four categories: Location Information, Statistics, Contact Information and Current Asset List.

Location Information Category

The location information category displays the following information (figure 7):

1. Name – The name of the location.
2. Address One – The first line of the physical address associated with the location.
3. Address Two – The second line of the physical address associated with the location.
4. City – The city where the location of the inventory resides.
5. State – The state where the location of the inventory resides.
6. Zip – The zip code of the physical location.
7. Phone Number – The phone number associated with the location where the inventory resides.

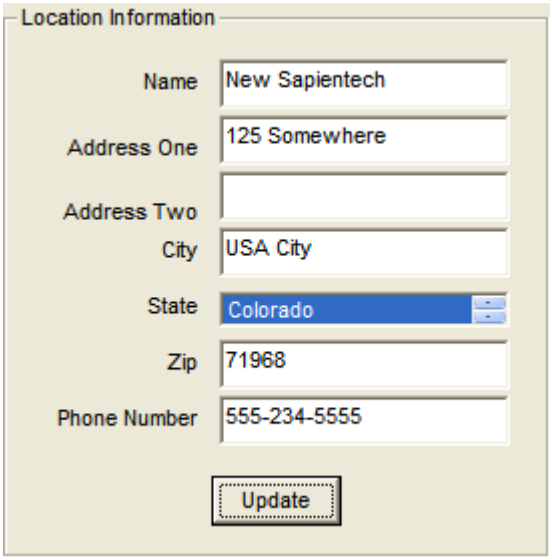

Figure 7 Location information category

Statistics Category

The statistics category displays the various types of equipment associated with a location and the number of units associated with that type (figure 8).

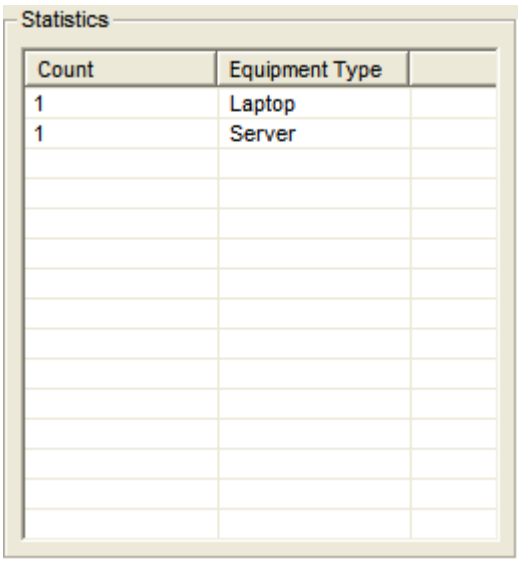

Figure 8 Statistics category

Contact Information Category

The contact information category displays information for the primary contact person at a given location (figure 9). The information displayed in this category is as follows:

1. First Name – The first name of the location's contact person.
2. Middle Name – The middle name of the location's contact person.
3. Last Name – The last name of the location's contact person.
4. Email Address – The email address of the location's contact person.
5. Title – The title of the contact person.
6. Phone Number – The contact person land line phone number.
7. Cell Phone Number – The contact person's cell phone number.

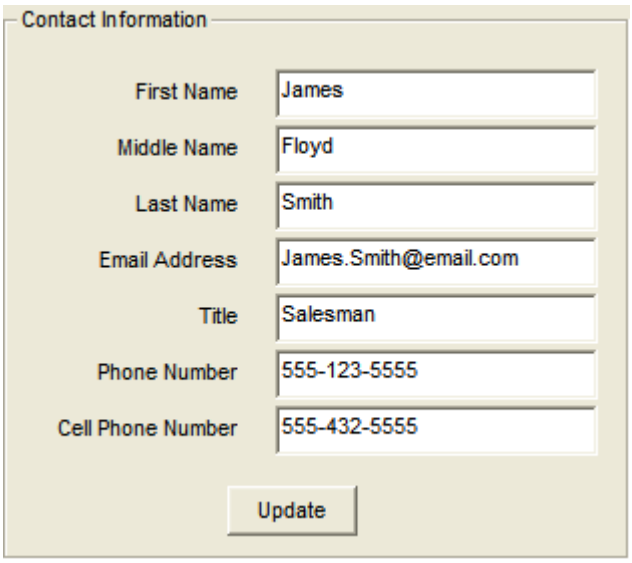

Figure 9 Contact Information Category

Current Asset List Category

The current asset list category displays a listing of the inventory (assets) currently assigned to a particular location (figure 10). The information associated with this category is:

1. Equipment Id - This is used by the application to keep track of all records associated with a particular piece of equipment (inventory – asset).
2. Equipment Type – The type of equipment associated with this record. Equipment types are defined in the database, see Defining Equipment Types.
3. Manufacturer – The manufacturer of the equipment.
4. Date Purchased – The date the equipment was purchased.
5. Serial Number – The equipment's serial number.
6. Model Number – The model number of the equipment.
7. Asset Tag Number – The asset tag associated with the equipment.

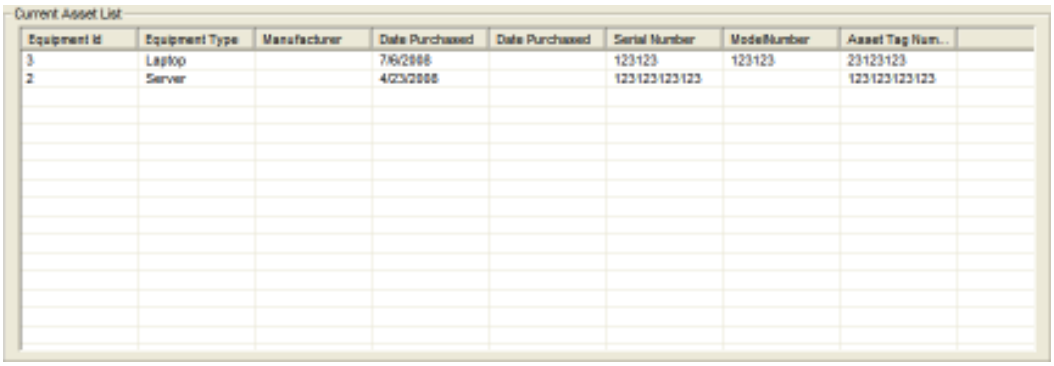

Figure 10 Current asset list category

By default the current asset list displays the equipment information in alphabetical order going by the equipment's serial number. However, this can be changed by selecting one of the headers located at the top of the form (figure 11). Selecting the header once will order the current asset list display in ascending order. Selecting the same header a second time will sort the current asset list display in descending order.

Figure 11 Selecting a header to change the display order

Editing Location Information

Once location information has been entered into the database it can only be edited from the Detailed Location Information Form (figure 6). To update location information change the information contained in the Location Information Category (figure 7). Once the information has been updated select the update button (figure 7).

Editing Contact Information

Contact information associated with a location can be updated from the Detail Location Information Form (figure 9). To update contact information, change the information contained in the Contact Information Category (figure 9). Once the information has been updated select the update button (figure 9).

Displaying Equipment Information from the Detail Location Information Form

Detailed information about a particular asset (equipment) can be viewed by double clicking the asset in the `Current Asset' window (figure 12).

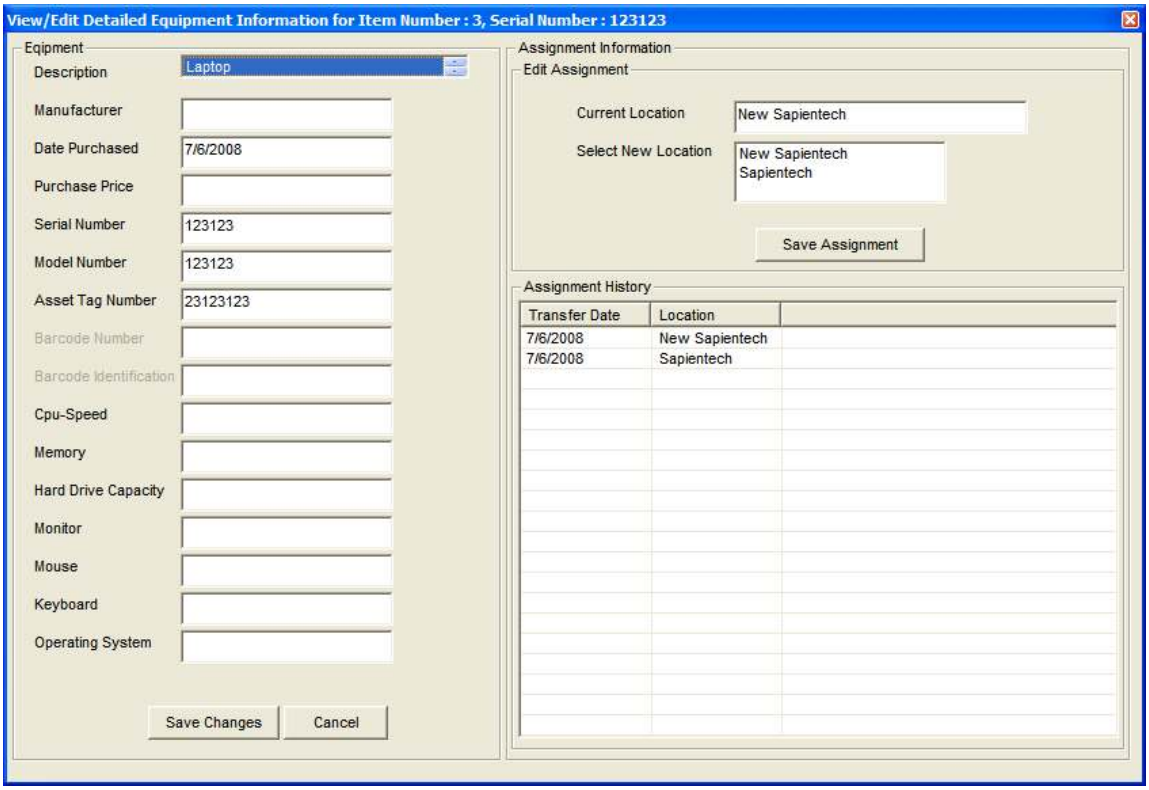

Figure 12 Detailed Equipment Information

Viewing/Editing Detailed Equipment Information

Detailed equipment information can be obtained by double clicking a particular piece of equipment in the detailed location's information current asset listing category. The detailed equipment form displays the information in one of three categories. These categories are: Equipment, Assignment Information and Assignment History (figure 12).

Equipment Category

The equipment category displays the general information associated with the asset. Not all fields in this section will apply to every piece of equipment. The information displayed in this category is:

1. Description – This field contains information related to the type of equipment being tracked. All descriptions are maintained in the database, see Defining Equipment Types.
2. Manufacturer– The manufacturer of the equipment.
3. Date Purchased– The date the equipment was purchased.
4. Serial Number – The equipment's serial number.
5. Model Number – The model number of the equipment.
6. Asset Tag Number – The asset tag associated with the equipment.
7. Barcode Number – This field is reserved.
8. Barcode Identification – This field is reserved.
9. CPU-Speed – This field contains information regarding the speed of the CPU associated with the equipment being tracked.
10. Memory – This field contains information regarding the memory associated with the equipment being tracked.
11. Hard Drive Capacity – This field contains information regarding the Hard Drive Capacity associated with the equipment being tracked.
12. Monitor – This field contains information regarding the monitor associated with the equipment being tracked.
13. Mouse - This field contains information regarding the mouse associated with the equipment being tracked.
14. Keyboard - This field contains information regarding the keyboard associated with the equipment being tracked.
15. Operating System - This field contains information regarding the operating system associated with the equipment being tracked.

Assignment Information Category

The Assignment Information Category displays information regarding the current location of the equipment. The information display in this category is:

1. Current Location – This field shows the current location of the equipment
2. Select New Location – This option allows the user to change the current location of the equipment.

Assignment History Category

The Assignment History category provides the user with the assignment history of the equipment. The information displayed in this category is show in reverse order, meaning that the last assigned location is always listed on top (figure 12). The information displayed in this section is:

1. Transfer Date – The date in which the equipment was transferred from the listed location.
2. Location – The location in which the equipment was transferred from.

Editing Equipment Information

Equipment information can be edited by changing the information contained within the Detailed Equipment Information Form (figure 12). Editing general information associated with a particular piece of equipment is done by changing the general information contained within the equipment category. Once the changes have been made, selecting the `save changes' button located at the bottom of that category will commit the changes to the database (figure 13).

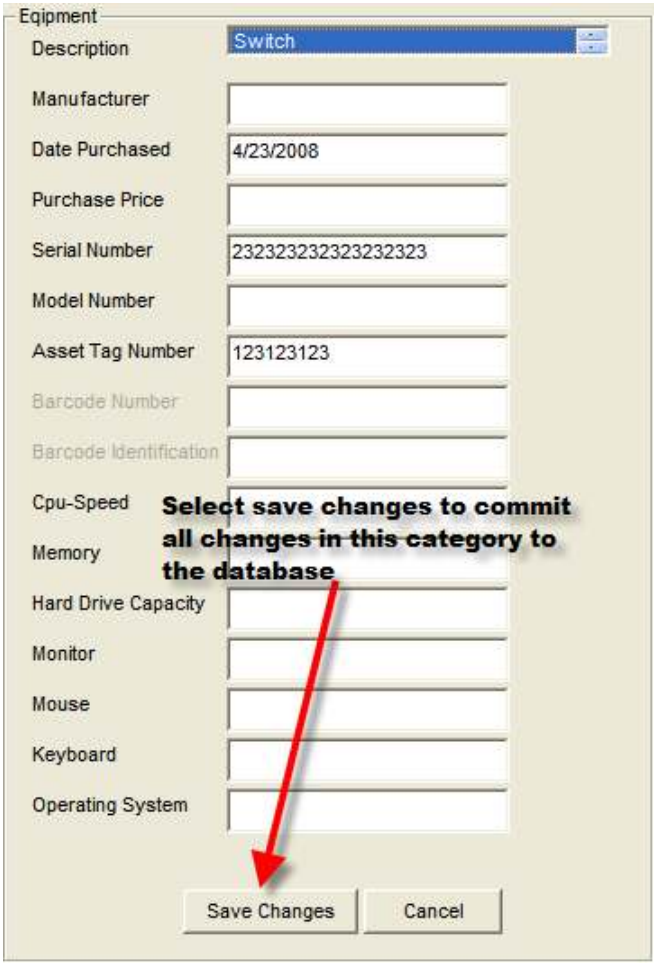

Figure 13 Saving equipment information changes to the database

Changing an Equipment's Assigned Location

The current location of a piece of equipment can be changed by selecting a new location and then selecting save in the Assignment Information category (figure 14).

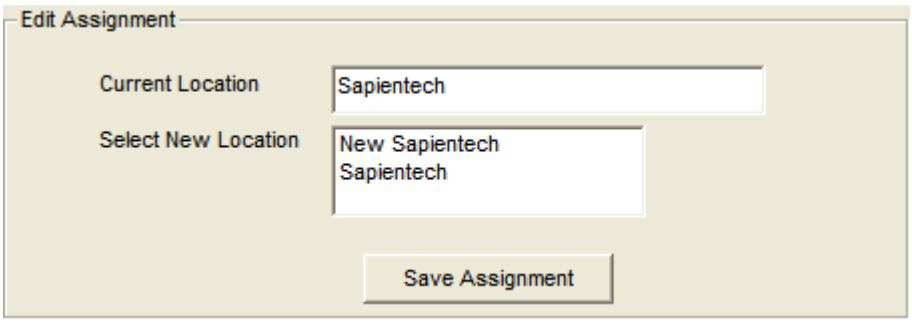

Figure 14 Changing the current location assignment of a piece of equipment

Creating a New Location

To create a new location select “Location(s)” drop down menu followed by “Create Location”. This action launches the “Create Location” form (figure 15).

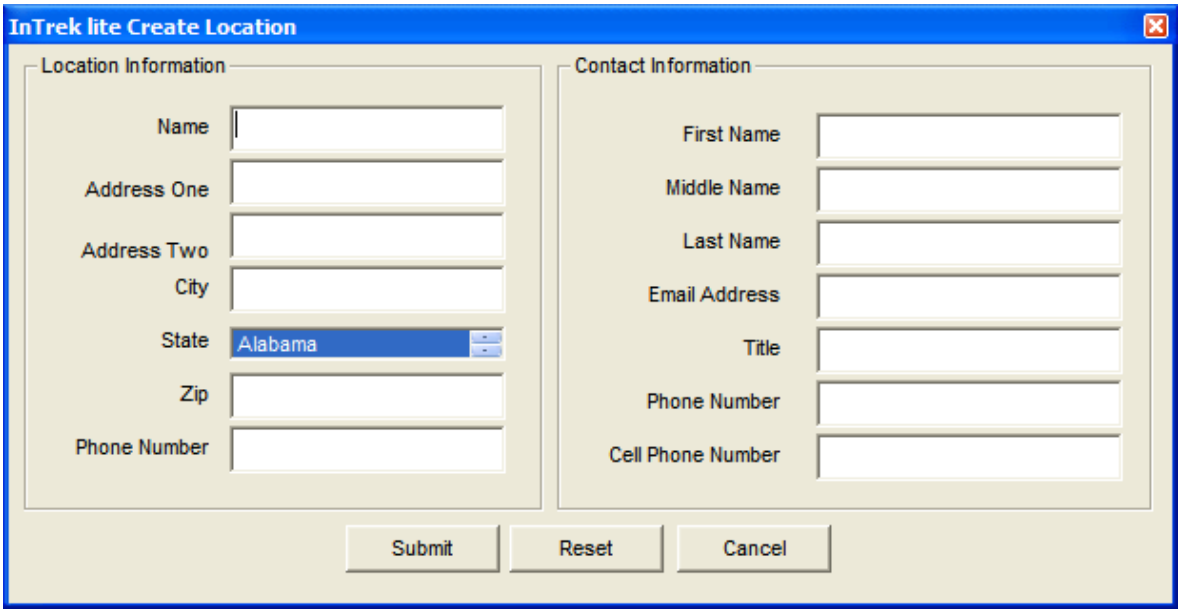

Figure 15 Create Location Form

Entering Equipment Into the Database

To enter a new piece of equipment into the database select the “Equipment” drop down menu followed by the “Enter Equipment” option (figure 16), thereby activating the equipment entry form (figure 17).

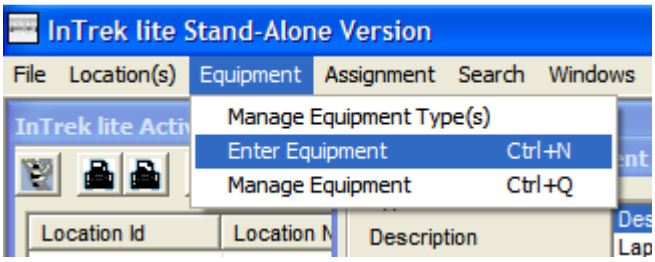

Figure 16 Selecting the enter equipment menu option

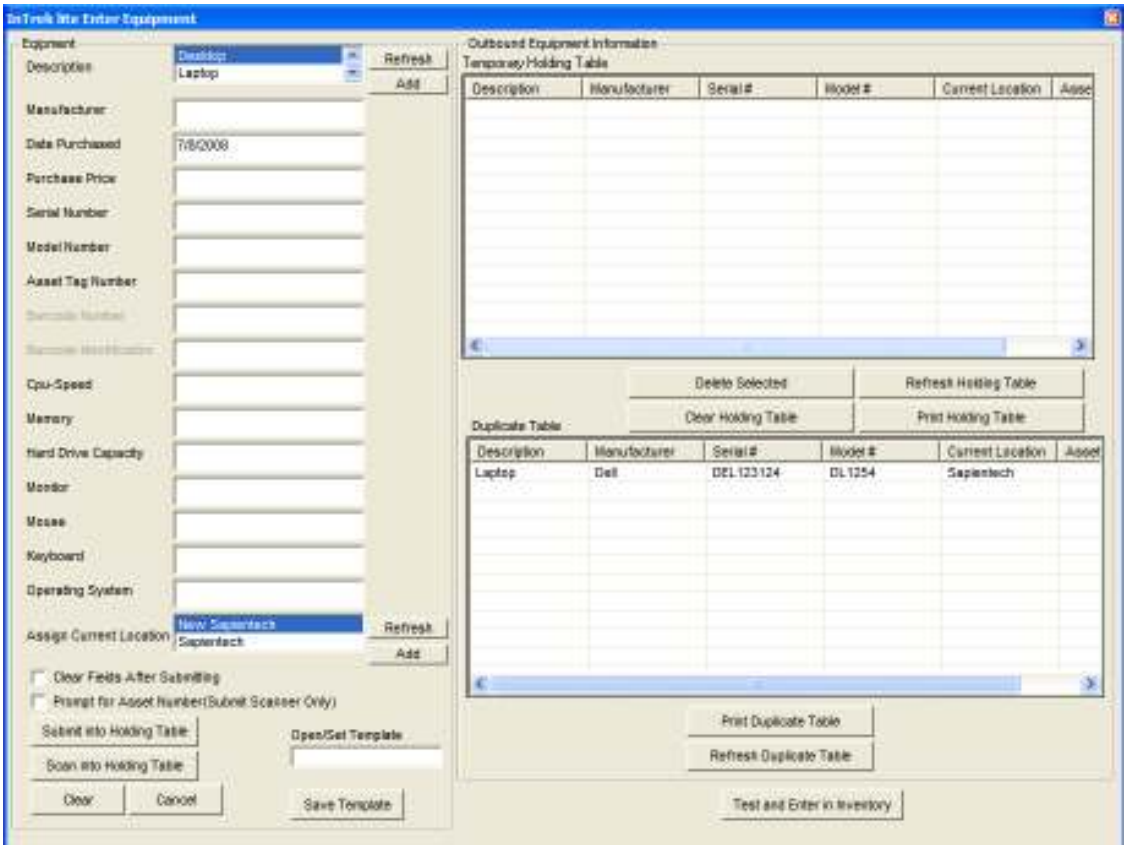

Figure 17 Equipment Entry Form

The Equipment Entry Form divided into two sections: Equipment and Outbound Equipment Information. The equipment category allows the user to enter the equipment into the application's holding table area. The holding table is a special table that captures temporary equipent information. Once equipment is entered into the system, the user has the option of testing (checking for duplicates) the temporary information before committing it to the database. If the application does not detect a duplicate then the information is dumped into the perminant tables and the holding table is cleared. If the application detects a duplicate then that record is placed in a duplicates table for futher processing.

The equipment data entry form has several options designed to expedite the data entry process. These options are:

1. Clear Fields After Submitting – Automatically clears the data entry fields after each submission.

2. Prompt for Asset Number (Submit Scanner Only) – If this option is selected the program prompts the user to enter an asset number for each piece of equipment that is scanned.
3. Open/Set Template – This option allows the user to save and load templates. To save a template fill in the fields you would like to save to a template then select the "Save Template" button. To load a template double click the name of the template listed in the templates list box.
4. Scan into Holding Table – This option is used for inputing serial information using a hand held scanner.
5. Submit into Holding Table – This option is used for manual input only.

Temporary Holding Table Options

As stated earlier, the temporary Holding Table is designed to house equipment information before it is actually submitted to the perminant tables in the database. The options associated with temporary holding table are:

1. Delete Selected – This option deletes the selected items fron the holding table.
2. Clear Holding Table – This option deletes all records from the holding table.
3. Refresh Holding Table – This option refreshes the holding table contents.
4. Print Holding Table – This option allows the user to print a list of the equipent listed in the temporary holding table.

Duplicate Table Options

The Duplicate Table has two basic options associated with it. They are:

1. Print Duplicate Table – This option allows the user to print of the equipment listed in the duplicates table.
2. Refresh Duplicate Table – This option allows the user to refresh the duplicate table content.

Working with Duplicates

When a duplicate has been detected it is placed in the duplicates table. Any entry in the duplicates table can be accessed by double clicking the equipment in the duplicates Table Display (figures 18 and 19).

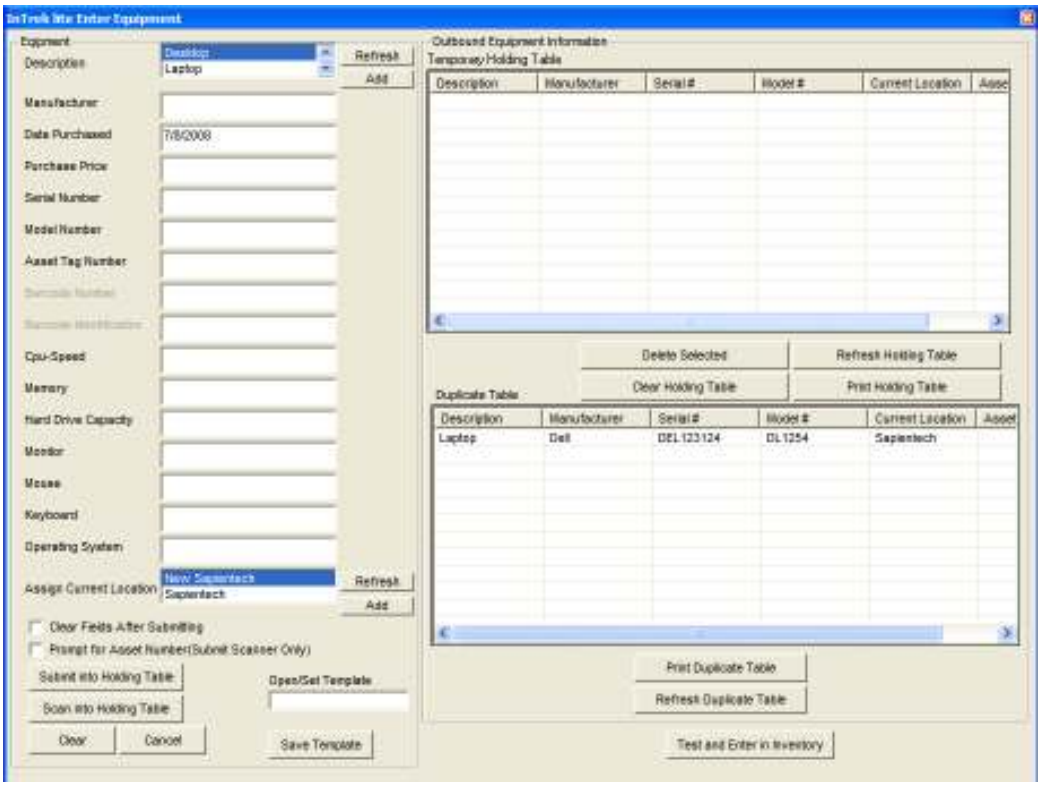

Figure 18 Working with duplicates

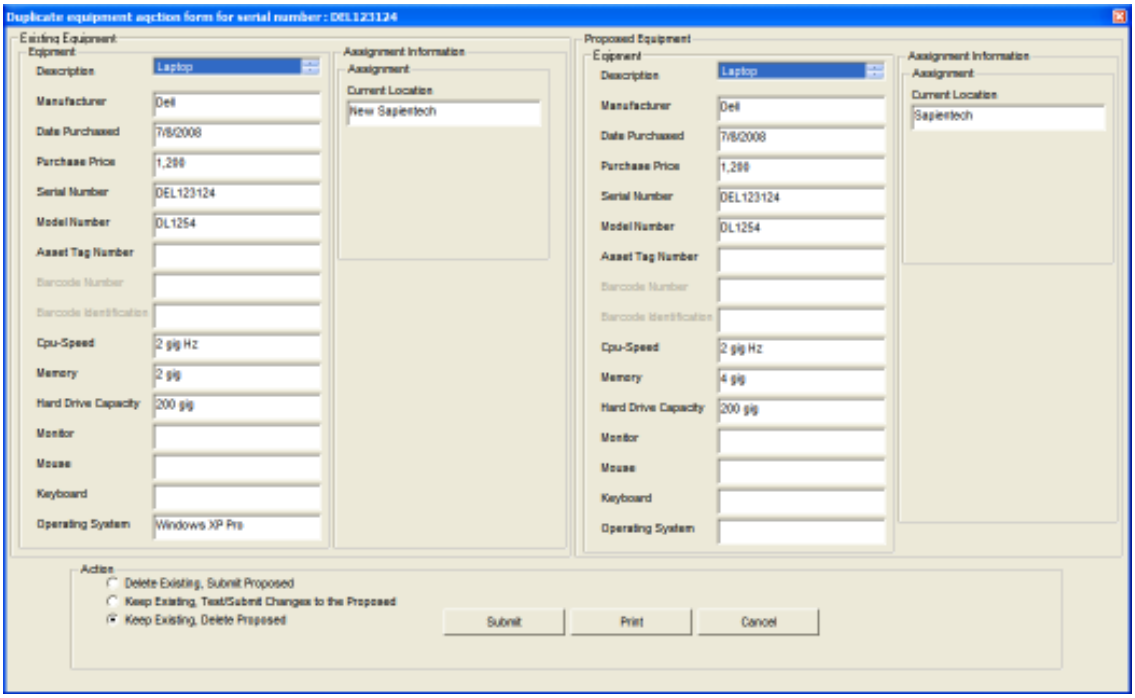

Figure 19 Duplicate Equipment Action Form

Actions Associated with the Duplicate Action Form

The Duplicate Action Form provides the user with the following possible actions to take on a duplicate.

1. Delete Existing, Submit Proposed – Deletes the equipment currently listed in the database and replaces with the proposed equipment.
2. Keep Existing, Test/Submit Changes to Proposed – No changes are made to the existing equipment however, the proposed equipment is changed and resubmitted.
3. Keep Existing, Delete Proposed – The prosposed equipment is deleted.

Defining Equipment Types

To define additional equipment types in the InTrek© application, select Equipment followed by the `Manage Equipment Type(s)' menu option.

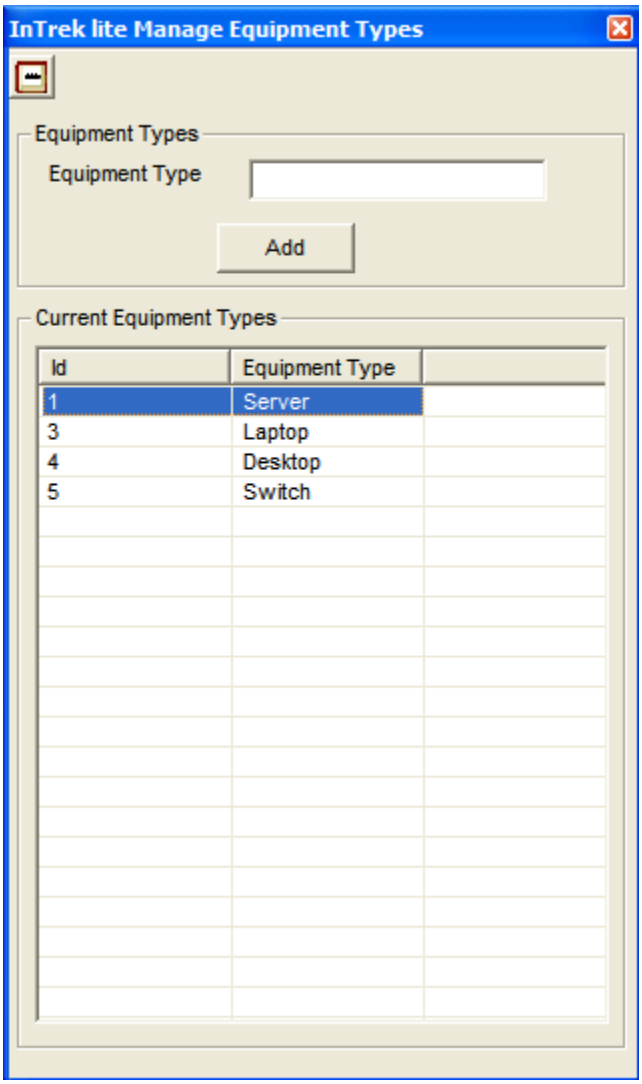

Figure 20 Manage Equipment Types Form

InTrek and Its Barcode Scanner Capability

While information can be entered into InTrek using the keyboard, it can also be entered into the system using a handheld barcode scanner; so that equipment can be quickly identified and reassigned once that database has been created..

Installing a Handheld scanner

To install and configure a handheld barcode scanner please refer to the barcode scanner manufacturer's installation instructions.

Using a Barcode Scanner

Barcode scanners can be used to search for equipment already located in the InTrek database as well as to enter serial numbers, model numbers, part numbers, etc. into the InTrek database.

Using the Scanner to Search for Equipment in the Database

To search for a particular asset using a barcode scanner:

1. Select `Search' from the drop down menu (figure 21)

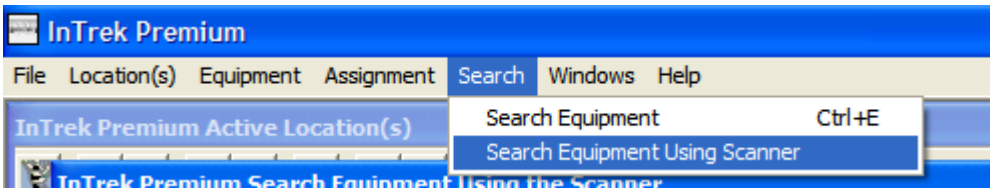

Figure 21 Selecting the "Search Equipment Using Scanner" menu option

2. Select `Search Equipment using Scanner'

This action will display a dialog box (figure 22). Once the dialog box is displayed, select the dialog box with your mouse. This will ensure that the dialog box is currently active and ready to receive input from the scanner.

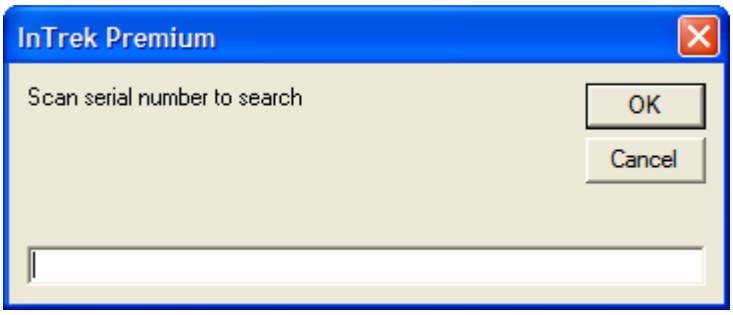

Figure 22 Scanner Search Input Screen

3. Using the scanner, scan the model number barcode of the asset to locate.

If the asset is found in the database then InTrek will return the following screen (figure 23). Double clicking the equipment displayed in the results panel will launch the View/Edit Detailed equipment form (figure 24).

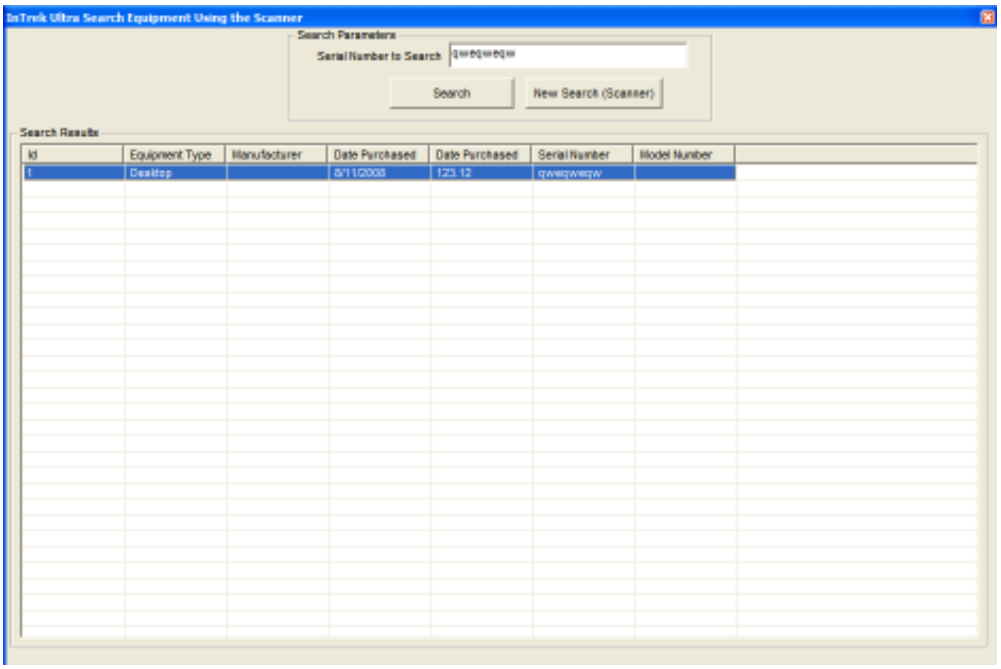

Figure 23 Results returned from the "Search Equipment Using Scanner' option

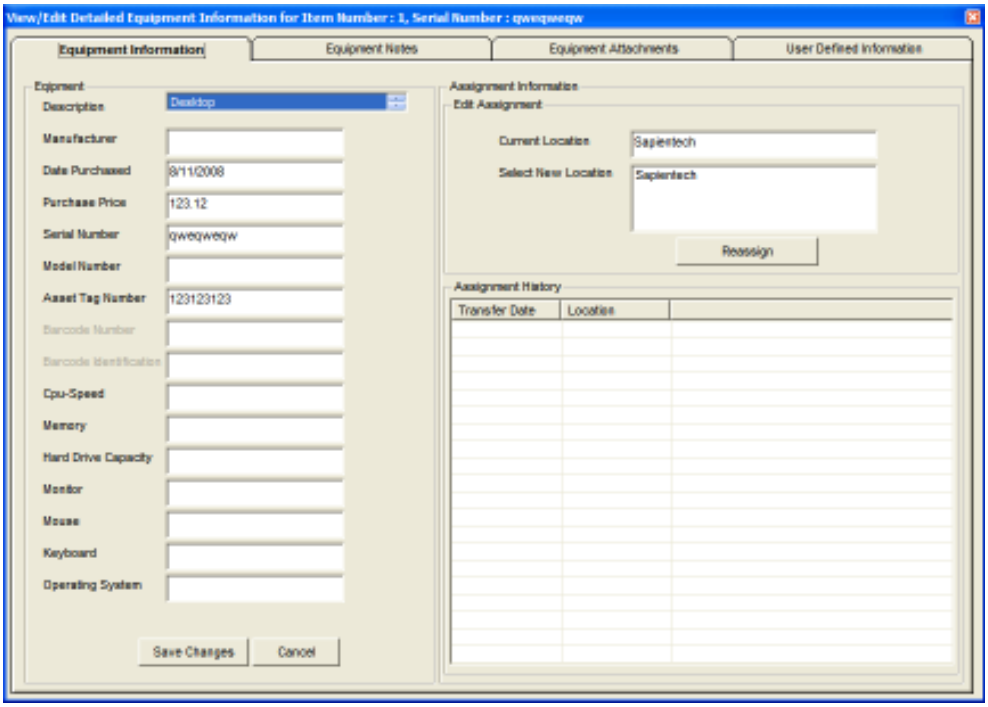

Figure 24 View/Edit Equipment Form

At this point the information can be edited and/or reassigned to a different location. For example, to reassign the asset “112EDA4311298” using a scanner:

1. Select `Search’ from the drop down menu
2. Select `Search Equipment using Scanner.
3. Using the scanner, scan the model number barcode of the asset to locate.
4. Double clicking the equipment displayed in the results panel.
5. In the View/Edit Equipment Form select the new location (from the `Select New Location’) list box (figurer 24).
6. Selecting the `Reassign’ button reassign the equipment to the new location.

Using the Barcode Scanner to Enter Asset Information into InTrek

Serial and model number information can be fed into InTrek’s `Enter Equipment’ form (figure 25).

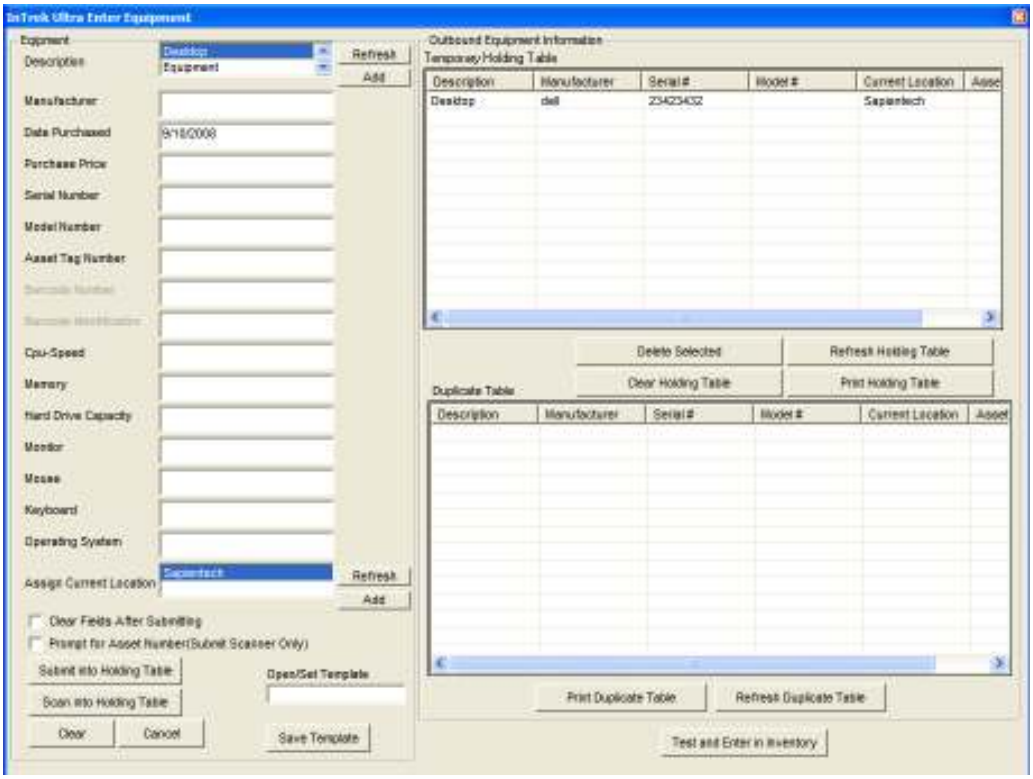

Figure 25 Enter Equipment form

Because a typical UPC (Barcode) only contains serial number or model number information, the actual parameters regarding the asset must be keyed into InTrek. However, if the user is entering a series of assets, using the scanner can speed up the process significantly. For example, if a location is to receive 25 new computers, that all have 250 gig hard drives, and 4 gig of ram, then entering the information into InTrek can be accomplished by:

1. Filling in all fields of the enter equipment form (except for the serial number).
2. Selecting the `Scan into Holding Table' button located at the bottom of the `Enter Equipment Form'. (When this option has been selected a dialog box is displayed and the application is now ready to receive input from the scanner.)
3. Using the handheld scanner to scan the barcode of the equipment being entered into the database. InTrek will automatically insert the serial number into the record and post that record to the database.
4. Once all twenty five computers have been entered into InTrek, press `Enter' to terminate the scanner input.

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