PART 7 – ADVANCED SOFTWARE MODULES

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Chapter 1: Tracker Module

Introduction

The Tracker Module keeps you advised as to the whereabouts of selected Tagholders (maximum 10 Tagholders per site) as they move about the Site. Alternatively, you may use the Tracker Module to monitor events at a selected Reader (maximum 10 Readers per Site). Both these facilities allow for better end user site management, by displaying the latest 20 transactions for today only, in time order per your group (Tagholders or Readers) selected.

*In instances where a single Tagholder (Reader) returns more transactions than others it may happen that some Tagholders (Readers) do not appear in the list of transactions. It must be emphasized that it is the **most recent 20 transactions for the group**, not the most recent for each individual Tagholder. Achieve best results with this Module by narrowing your range for monitoring to your exact requirements.*

On opening, the Tracker Module remains discreetly minimized as an icon in the System Tray (Notifications Area). As Tracker receives Tagholder transactions or events from Monitored Readers, notification pop-up windows display in the Notification area.

By default the Tracker Module refreshes every 10 seconds, this is the recommended setting. The refresh rate is, however, user configurable where you need a faster or slower refresh rate.

Each Tracker Client makes a single connection to the Database. The Engine and other Clients also make many connections to the Database, thus DO NOT exceed 30 connections in total.

Starting the Tracker Module

Starting ImproNet Engine on the HOST PC

1. In Windows®, click **Start**>**All Programs**>**ImproNet**>**Engine**.
2. Click on the Start button.

Starting the Tracker Module on a CLIENT PC (Separate PC Workstation)

Ensure that you do NOT open more than 1 instance of the Tracker Module per PC workstation.

1. In Windows®, click **Start**>**All Programs**>**ImproNet**>**Utils**>**Tracker**.
2. In the Logon dialog, complete the **Server Name** textbox. The default (Localhost) only applies where you run Tracker from the Host PC.
3. In the **Database** textbox, enter the Database's path and filename. (Only use the Browse button where the Server is Localhost).

4. Enter your **Username** (**SYSDBA**) and **Password** (**masterkey**).
5. Click the button.

User Interface

By default the Tracker Module remains discreetly minimized as an icon in the System Tray (Notifications Area). Configure Tracking settings by right-clicking your mouse over the Icon and selecting **Show Tracker**.

When open the Tracker Module lists the last 20 transactions generated by the tracked Tagholders or Readers. You may track a maximum of 10 Tagholders or Readers.

By double-clicking on any record displayed in the Tracker Module (Tagholders or Readers tab) a dialog opens displaying the last 10 transactions for the selected Tagholders or Readers.

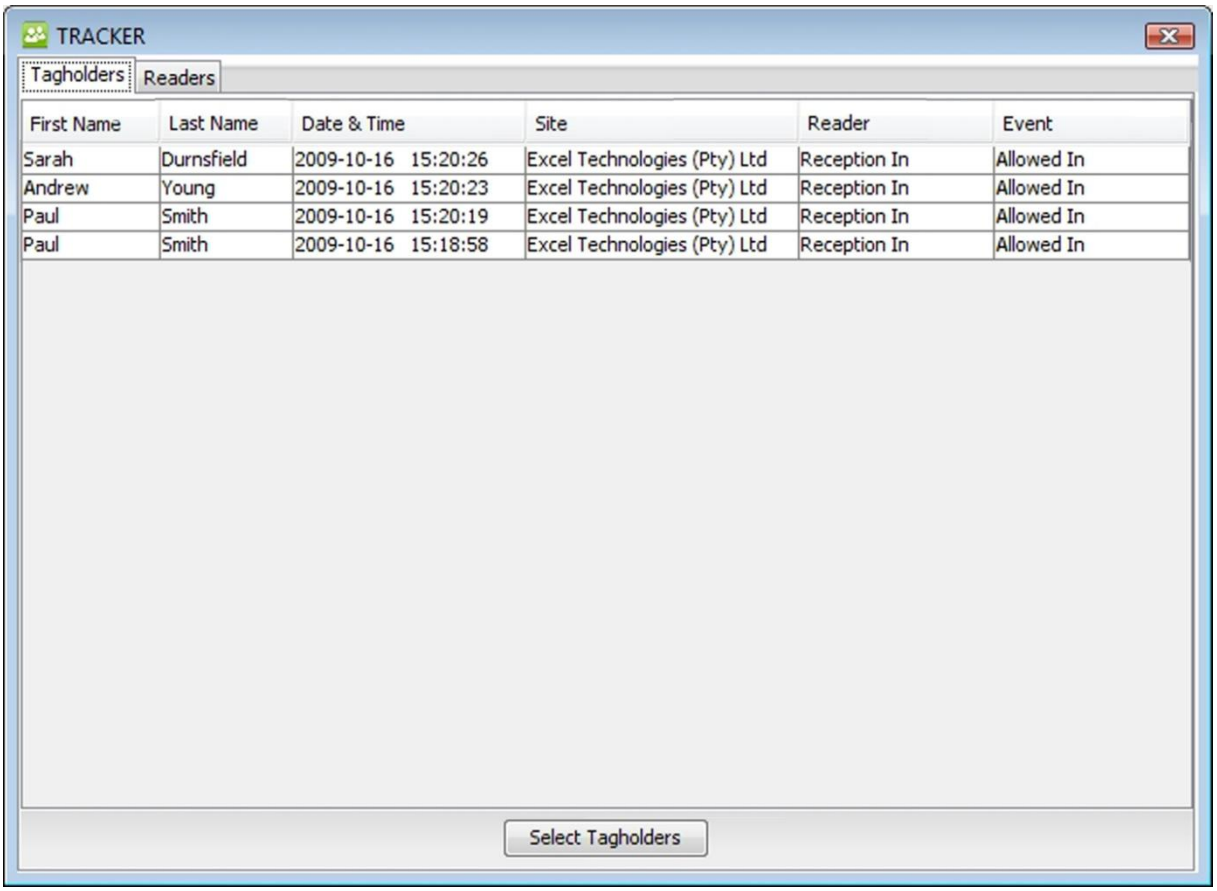

Figure 1 – Tracker Module User Interface

Tagholder Tracking

Add Tracked Tagholders

1. With the Tracker Module open (see User Interface on page 6), select the **Tagholders** tab.
2. Click the **Select Tagholders** button.
3. Make your selection from the displayed Tagholder records.
4. Click the button.

Remove Tracked Tagholders

1. With the Tracker Module open, select the **Tagholders** tab.
2. Click the **Select Tagholders** button.
3. Deselect, previously selected Tagholders.

Click the selected column header thus sorting by the selected Tagholders.

4. Click the button.

Find Tagholders

1. With the Tracker Module open, select the **Tagholders** tab.
2. Click the **Select Tagholders** button.
3. From the **In Column** drop-down list, select a search field, for example:
   - **Last Name**—searches the Last Name column for a matching record.
   - **First Name**—searches the First Name column for a matching record.
   - **Department**—searches the Department column for matching records.
4. Enter a suitable keyword in the **Find** textbox.

*When entering search criteria, keep in mind that the **Find** textbox is case sensitive.*

As you type, the Software automatically moves to the Tagholder record with the closest match.

Reader Event Tracking

Add Tracked Readers

1. With the Tracker Module open (see User Interface on page 6), select the **Readers** tab.
2. Click the **Select Readers** button.
3. Make your selection from the displayed records.
4. Click the button.

Remove Tracked Readers

1. With the Tracker Module open, select the **Readers** tab.
2. Click the **Select Readers** button.
3. Deselect, previously selected Readers.

Click the selected column header thus sorting by the selected Readers.

4. Click the button.

Find Readers

1. With the Tracker Module open, select the **Readers** tab.
2. Click the **Select Readers** button.
3. From the **In Column** drop-down list, select a search field, for example:

- **Site Name**—searches the Site Name column for a matching record.
- **Reader Address**—searches the Reader Address column for a matching record.
- **Reader Name**—searches the Reader Name column for matching records.

4. Enter a suitable keyword in the **Find** textbox.

*When entering search criteria, keep in mind that the **Find** textbox is case sensitive.*

As you type, the Software automatically moves to the record with the closest match.

Preference Setup

On opening, the Tracker Module remains discreetly minimized as an icon in the System Tray (Notifications Area). Set your custom preferences as follows:

1. Right-click your mouse over the Icon (minimized as an icon in the System Tray (Notifications Area)).
2. From the displayed menu, select the **Preferences** option.

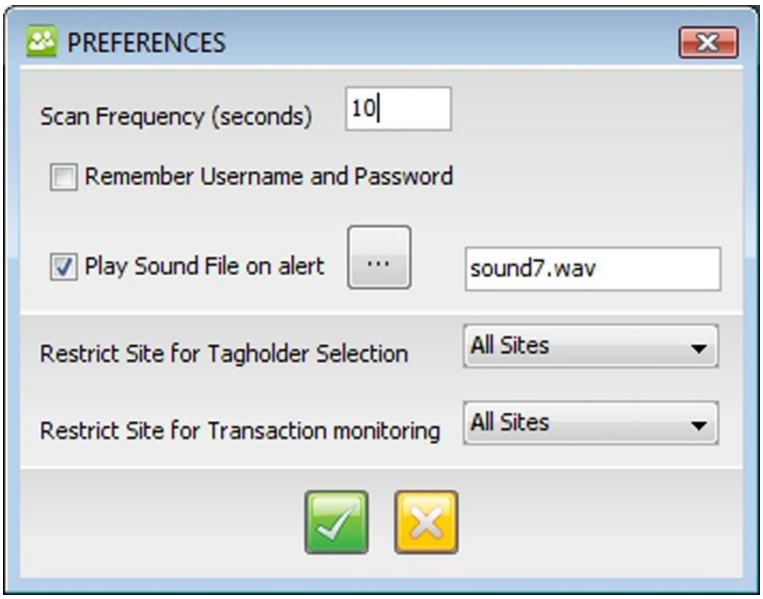

Figure 2 – Preferences Dialog

3. From the Preferences dialog, select a **Scan Frequency** (in seconds).
4. To have Tracker open without displaying the Logon dialog, select the **Remember Username and Password** checkbox.
5. Select the **Play Sound File on Alert** checkbox if required.

Browse for an alternate sound file by clicking the button. After selection, the file name displays in the textbox alongside the button.

6. During Tracker's configuration, if you log on as the SYSDBA Administrator you may restrict monitored sites for a "Normal User". "Normal Users" will NOT see this option. Make your selection from the **Restrict Site for Tagholder Selection** drop-down list.

7. Make your selection from the **Restrict Site for Transaction Monitoring** drop-down list.
8. Click the button.

Localisation and Translation

Localisation and Translation lets Users from different locales (countries and geographical locations), use the Tracker Module in their own language.

Choose Locale

1. Right-click your mouse over the Icon (minimized as an icon in the System Tray (Notifications Area)).
2. From the displayed menu, select the **Choose Locale** option.

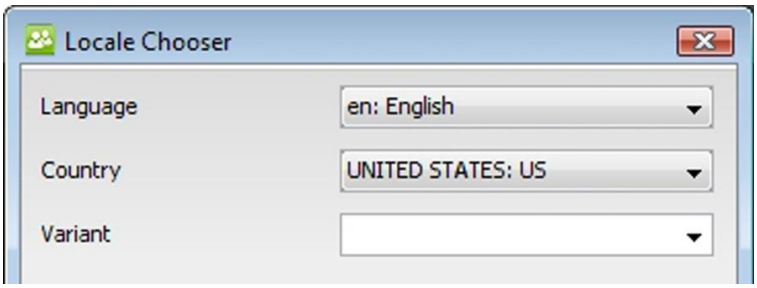

Figure 3 – Locale Chooser Dialog

3. In the **Locale Chooser** dialog, from the **Language** drop-down list, make your selection.
4. From the **Country** drop-down list, make your selection.
5. From the **Variant** drop-down list, select a language variant based on your previous selections (optional).
6. Click the **OK** button.

Translating the Software Interface

1. Right-click your mouse over the Icon.
2. From the displayed menu, select the **Translate** option.

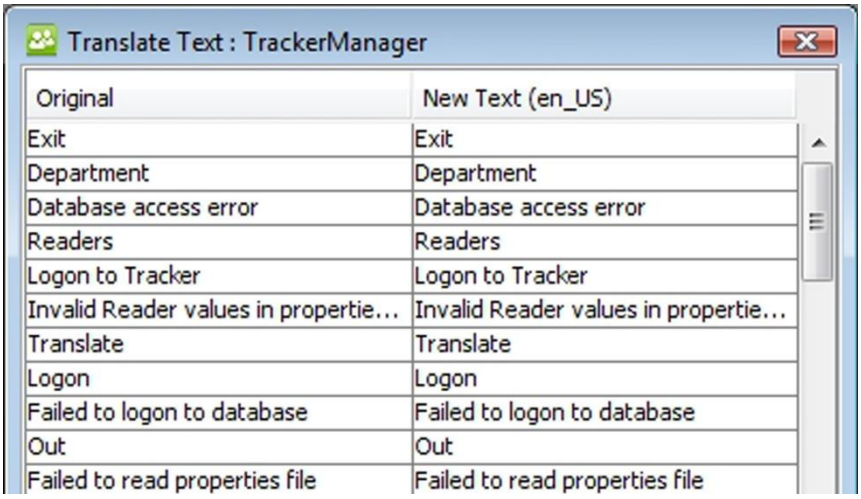

Figure 4 – Translate Dialog

3. In the **Translate Text : TrackerManager** dialog, from the **New Text** column, select a phrase to translate.

*The **Original** column displays words in English. The **New Text** column displays a copy of the English words, but it is editable. This means you can substitute the default words in the **New Text** column for words in your own language.*

4. Press the **F2** key, thus opening the phrase for editing.
5. Enter a substitute phrase suitable for your Locale.
6. Press the **Tab** key to move to the next phrase.
7. Repeat steps 0 to 7 for each phrase you wish to edit.
8. Click the **OK** button.
9. Click the **Close** button.

Chapter 2: Alarms Client

Introduction

The Alarms Client monitors live alarm status in the ImproNet Access System. The Alarms Client pop-up windows contain information about alarms occurring in the System allowing alarm monitoring personnel to acknowledge specific alarm conditions.

*Ensure that **Engine's** running for the **Alarms Client** to work.*

*Ensure the **Alarms Server's** installed and running on the Database Server. However, the **Alarms Client** will run from any PC on the network.*

*More than one **Alarms client** can run simultaneously.*

It's assumed that after installing the Alarms Client Module that this application will run continuously 24 hours a day. However, if you must shut the application down, restart the program in the following manner:

Starting the Alarms Module

1. In Windows®, click **Start**>**Programs**>**ImproNet**>**Alarms**.
2. Enter your **Username** (**SYSDBA**) and **Password** (**masterkey**). The Password is case-sensitive.

*When the **Alarms Module** installations complete, change the **Password** thereby maintaining the security of the Database.*

Figure 5 – Alarm Host Selection Dialog

3. In the Alarm Host Selection dialog, select the required, available, **Host**.

4. Click the **OK** button.

*If the Servers not running an error message **Server could not be found** displays and the program closes.*

Operation of the Software

Alarm Pop-Up

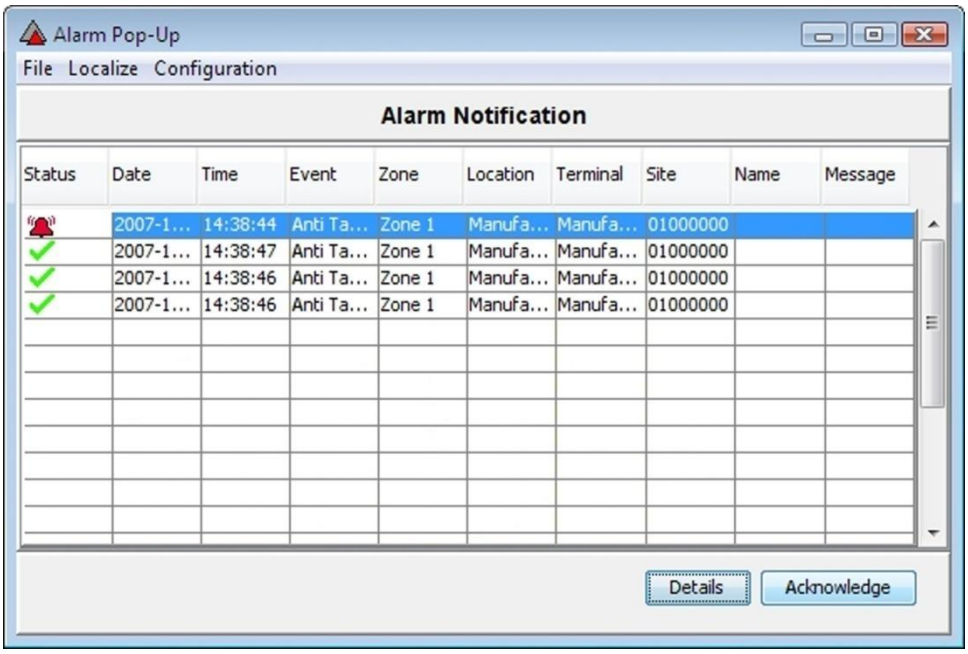

Figure 6 – Alarm Pop-up Dialog

A brief description of all the fields associated with the Alarm Client Module, the information displayed in these fields and button functions follows:

Option	Description
Status	Icons for new and acknowledged alarms.
Date	Date the event occurred.
Time	Time the event occurred.
Event	Type of event that occurred.
Zone	The zone name.
Location	The location name.
Terminal	Specific Terminal where alarm occurred.
Site	Site address of the alarm.
Name	Name of Tagholder (for acknowledged alarm).
Message	Message attached to alarm offence.
Details Button	Allows more details to be viewed.
Acknowledge Button	Accepts the alarm notification.

Table 1 – Alarm Pop-up Menu Options

Acknowledging Alarms

Continue as follows:

1. In the **Alarm Pop-up** dialog, select the alarm record.

An unacknowledged Alarm displays as a red bell under the status heading.

2. Select one of the following options:
   - Click the **Details** button—opens the Alarm Notice Details dialog, letting you review details of the Alarm or acknowledge the Alarm.
   - Click on the **Acknowledge** button—acknowledges the Alarm without review of the details.

Hints and Tips

Customized Event Alarms

A particular event, such as a **door forced**, an **Anti-Passback violation** detected, **Tag count exceeded**, can be made into an Alarm Event.

1. In Windows®, click **Start**>**Programs**>**ImproNet**>**Access**.
2. Enter your **Username** and **Password**.

*The default username is **SYSDBA**. The default password is **masterkey**.*

3. From the **Menu Bar**, select **Configuration**.
4. From the Configuration drop-down menu, select **System Event Editor**.

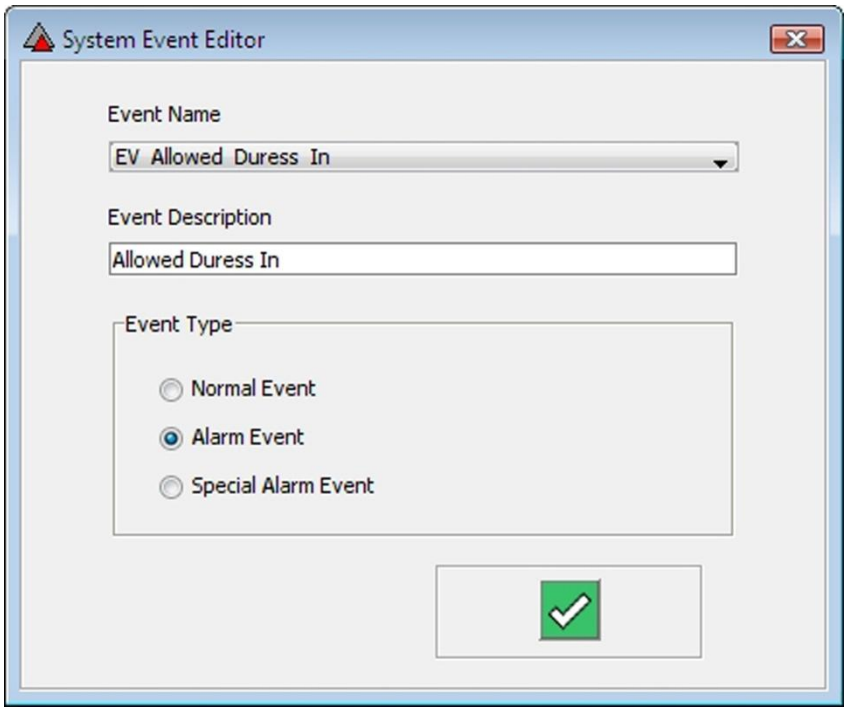

Figure 7 – System Event Editor Dialog

5. In the System **Event Editor** dialog, from the **Event Name** drop-down list, select the event you wish to become an Alarm Event.
6. Check the **Event Description** textbox matches the Event Name drop-down list item selected.
7. From the **Event Type** group, click the **Alarm Event** radio button.
8. Click the button.

Carry out the above steps for each Alarm Event, and then close Access.

Setting up an ImproX Terminal

To set-up the ImproX Terminal to raise **Forced Door** and **Door Open too Long** events which display on the Alarm Client screen similar to that shown earlier in this chapter:

1. In Windows®, click **Start**>**Programs**>**ImproNet**>**Access**.
2. Enter your **Username** and **Password**.
3. From the **Navigator Pane**, select the relevant **Terminal**.

A suitable Terminal could include the ImproX TA, ImproX iTT, ImproX iTRT, ImproX MfT or the ImproX I16.

Inputs Setup

1. In the **Main Pane**, click on the **Inputs** tab.
2. Select **Input/Port No 1**.
3. Click the button.
4. In the **Input Device** dialog, from the **Input Function** drop-down menu, select **Door Open Sensor**.

*As you want this feature to run continuously DO NOT click the **Enable Time Pattern** button.*

5. Click-on the **Input Parameters** button.
6. In the **Input Parameters** dialog, from the **Door Open Contact** group, select the **Door Open Is Open Contact** radio button.
7. Click on the button.
8. Select the appropriate **Logical Address** (of the Terminal where you positioned the Door Open Sensor) from the records.
9. Click the button.
10. In the **Input Parameters** dialog, click the button.
11. In the **Input Device** dialog, click the button.

Actions Setup

1. In the **Main Pane**, click on the **Actions** tab.
2. Click the button.
3. In the **New Action** dialog, from the **Select Action Type** drop-down list, select **Door Open Timer**.
4. In the **Action Name** field, type in a name for the Action.
5. Click the button.
6. In the **Action Parameters** dialog, from the **Select Door Open Sensor Input** panel, select the **Input 1** radio button.

7. Set the **Door Open Time** textbox to **30** (default).

In most situations, set the Relay Drive Time and Door Open Time to the same time setting.

8. Set the **Door Open Delay** textbox to **10** (default).
9. Click the button.

Write down the number of the Action you created above.

10. From the **Navigator Pane**, select the **Terminal** (that you named in the Door Open Sensor setup, where the Door Open Sensor's detecting if the door's open).
11. In the **Main Pane**, click on the **Actions** tab.
12. In the bottom left-hand side of the **Main Pane**, click the **Active System Events** button.
13. In the **Active System Events Editor** dialog, from the **Actions for Allowed Events** group, select the next available action (click on the number button to the right-hand side of the action).
14. In the **Action Selector** dialog, from the **Actions at Location** drop-down list, select the location where you defined the action.
15. From the list of records, select the correct action (the action name should read something like "door open timer").
16. Click the button.
17. In the **Active System Events Editor** dialog, click the button.
18. In the **Confirm Save** dialog, click the **Yes** button.

Ensure the Engine's running so these settings transfer to the Controller.

Translation - Localisation

This application is provided with English text. If you need Localisation of the text, dynamically translate the text making use of the Locale and Translate functions. Property resource files store the translated text, for distribution with the application.

Chapter 3: Custom Access Module

Introduction

General

The Custom Access Module works in conjunction with the Access Module. Where the Access Module allows access to Tagholders based on Access Time Patterns and Tagholder Access Groups the Custom Access Module uses its own set of rules for granting or denying access.

As a third-party validation system, the Custom Access Module connects via TCPIP Client Socket connection to the started Engine Module. The Custom Access Module listens for all third-party transactions coming from all Sites' Engines. Based on the Custom Access Module's own set of user defined rules, the Module allows or denies the transaction.

Properties File

The Custom Access Module requires that you start the third-party TCPIP Server whenever Engine starts. Change the following Engine property to ensure this happens automatically:

The settings referred to in the following paragraph refer to a default installation.

1. From **C:\ImproNet** open the **Engine.properties** file.
2. Change the **engine.site.Site.startThirdPartyServer=** setting to **True**.
3. Save the properties file.

Changing the Port Number

By default the Server listens on port number 26669. If this port number is already in use by another application, change the port number as follows:

1. In Windows®, click **Start**>**Programs**>**ImproNet**>**Access**.
2. Enter your **Username** (**SYSDBA**) and **Password** (**masterkey**).
3. Click the icon. The Site's details display in the **Main Pane**.
4. From the Socket Server Port Number Group, change the **Host Validation Port** value to your custom port value.
5. Click the button.

Starting the Custom Access Module

*The Custom Access Module does not function without a started Engine. Therefore, before using the Custom Access Module, ensure that you open Engine and click the **Start** button.*

It's assumed that after installing the Custom Access Module that this application will run continuously 24 hours a day. However, if you must shut the application down, restart the application in the following manner:

1. In Windows®, click **Start**>**Programs**>**ImproNet**>**Custom Access.**
2. Enter your **Username** (**SYSDBA**) and **Password** (**masterkey**). The Password is case-sensitive.

Operation of the Software

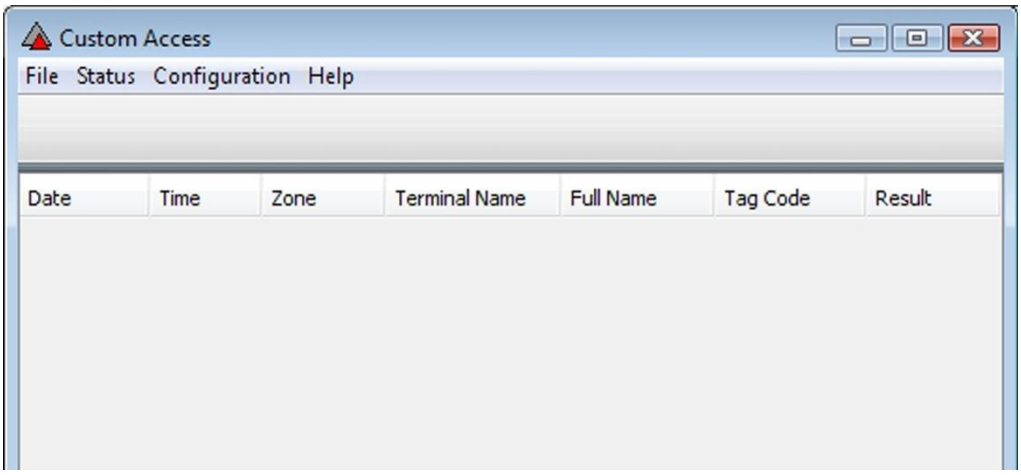

Figure 8 – Custom Access Module

*When the Custom Access Module denies entry, the transaction record appears in Red. Double-clicking the denied transaction record opens a dialog giving details of the transaction. Click on the **Allowed** button to allow the Tagholder access to the Zone.*

*The **Allowed** button only allows access once per denied transaction.*

Configuration of the Software takes place using a Wizard based user interface.

Daily Site Anti-passback (APB) Reset

This Wizard lets you specify a daily time, per Site, that Anti-passback (APB) resets across all Tagholders. Continue as follows to activate this feature:

1. From the Menu Bar, select **Configuration**>**Daily Site APB Reset**.
2. From the list of **Sites**, make your selection.
3. In the **Hrs** and **Mins** fields, make your selection. These fields make use of the 24-hour clock format.
4. Click the button.
5. Click the button.

Zone Limiting Setup

This feature lets you allow a user defined number of Tags into a specified Zone, according to their Tagholder Access Group. This is essentially Zone counting by Tagholder Access Group. Activate this feature as follows:

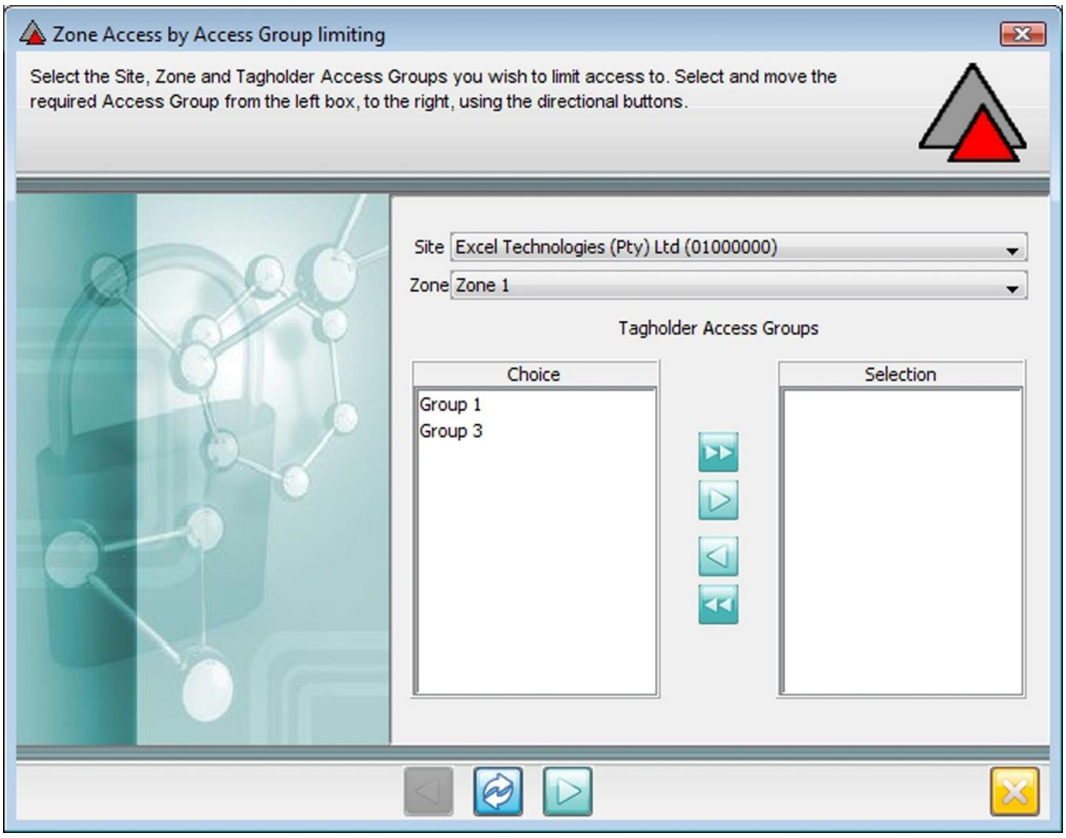

Figure 9 – Zone Limiting Wizard Dialog

Assigning Access Groups to a Zone

1. From the Menu Bar, select **Configuration**>**Zone Limiting**.
2. From the **Site** drop-down list, make your selection.
3. From the **Zone** drop-down list, make your selection.
4. From the **Choice** list, select the Tagholder Access Groups you wish to limit access to.
5. Click the button alongside the Choice list, thus moving the selected Tagholder Access Group to the Selection list.

This feature sets selected Zones to Strict Anti-passback (APB) as this feature does not keep record of who is in the Zone. Re-tagging therefore means an increment of people in the Zone, thus returning false results.

If a Tag belongs to more than one Tagholder Access Group in the Zone, Custom Access only applies zone counting on one of these groups. This takes place as the Custom Access Module does not keep a record of what Tagholder Access Group a Tag was allowed in on.

6. Click the button to move to the next Wizard page.

Setting the Number of Users Allowed into the Zone

*Selecting the **Edit Tagholder Access Group Actions** checkbox, lets you specify custom allowed and or denied actions for each of Tagholder Access Group in the Zone.*

1. If required, select the **Edit Tagholder Access Groups Actions** checkbox.

*By selecting the **Edit Tagholder Access Group Zone Full Actions** checkbox you can specify what actions occur when the Zone is full or when not yet full. This is ideal for notifying the next Tag of whether the Zone is full for their Tagholder Access Group. You can specify actions for every Tagholder Access Group selected in the Zone.*

2. If required, select the **Edit Tagholder Access Group Zone Full Actions** checkbox.
3. For each displayed Tagholder Access Group, enter the number of *ALLOWED* Tagholders into the associated textbox.
4. Click the button.

Selecting Terminals for Host Validation

By selecting Terminals here, you change their validation from Controller Validation to Host Validation. This allows the Custom Access Module to get their allowed transactions and decide whether to allow access or not.

*You can customize your actions by selecting the **Edit Terminal Actions** checkbox. By not selecting the checkbox, the Terminal's ALLOWED actions are automatically assigned if the Terminal does not already have host allowed actions assigned.*

1. If required, select the **Edit Terminal Actions** checkbox.
2. From the **Choice** list, select the Terminals to which you wish to apply Host Validation.
3. Click the button alongside the Choice list, thus moving the selected Terminal to the Selection list.
4. Click the button to move to the next Wizard page.
5. Click the button.

Status Monitoring

Zone Limiting

This feature lets you view the number of Tagholders currently in the Zone along with the maximum number of Tagholders allowed in the Zone. An editing option lets you change the **User Count** and **Maximum Users Allowed** settings from this Dialog.

*There are instances that when started, Engine transmits rollback transactions. In some cases these transactions filter their way into the Custom Access Module changing the Tag count in a Zone. In this instance, manually change the **User Count** setting.*

1. From the Menu Bar, select **Status**>**Zone Limiting**.
2. From the **Tagholder Access Groups** drop-down list make your selection.
3. Edit the Access Group's **User Count** and **Maximum Users Allowed** by clicking on the associated field's button.

Zone Limit Monitor

This feature shows a complete overview of the Zones setup for Zone Limiting by Tagholder Access Group. The Monitor lists all Zone's Tagholder Access Groups and their corresponding Current and Maximum user counts. This feature does NOT allow for editing of user counts or overriding of denied transactions.

From the Menu Bar, select **Status**>**Zone Limit Monitor**.

Time Limit Route Setup

This feature limits the time a Tagholder can take to proceed through two terminals. If the Tagholder exceeds the specified time limit, the Tagholder will have their access denied until someone is notified and the Custom Access Module allows access.

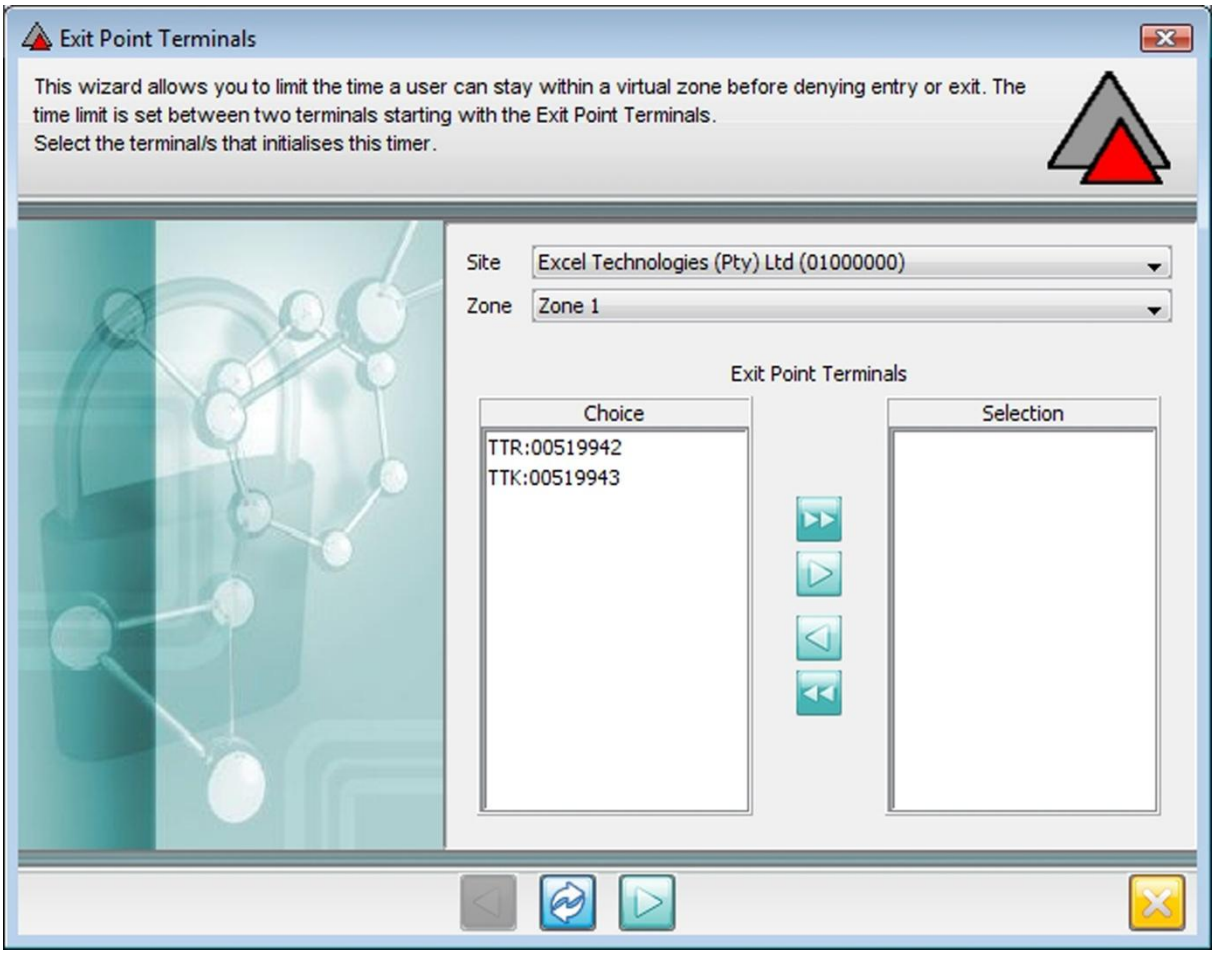

Figure 10 – Time Limited Route Wizard Dialog

Exit Terminal Setup

This is the Terminal that *STARTS* the timer.

1. From the Menu Bar, select **Configuration**>**Time Limit Route**.
2. From the **Site** drop-down list, make your selection.
3. From the **Zone** drop-down list, make your selection.
4. From the **Choice** list, select the Terminal that starts the timer.

5. Click the button alongside the Choice list, thus moving the selected Terminal to the Selection list.
6. Click the button to move to the next Wizard page.

Entry Terminal Setup

When a Tagholder tags at this point, the Custom Access Module calculates the time between the Exit Terminal and this Entry Terminal. If the difference exceeds the time specified, the Entry Terminal denies access.

1. From the **Choice** list, select the Entry Terminal.
2. Click the button alongside the Choice list, thus moving the selected Terminal to the Selection list.
3. In the Maximum Time group, complete the **Hrs**, **Mins** and **Secs** textboxes.

Depending on the number of Exit Terminals selected previously, this Wizard Page repeats for each selected Exit Terminal.

4. Click the button to move to the next Wizard page.
5. Click the button.

Translation - Localisation

This application is provided with English text. If you need Localization of the text, dynamically translate the text making use of the Locale and Translate functions. Property resource files store the translated text, for distribution with the application.

Chapter 4: ImproVision Module

Introduction

The ImproVision Integration Module is a rule-action based Module. This essentially means a matched rule must trigger for execution of up to 5 actions. Born as a Digital Video Recorder based system, for interfacing Digital Video Recorders direct to the ImproNet's Graphics Designer and Graphics Runtime Modules, ImproVision's interface capabilities now include other third-party devices (including Lift Servers and Alarm Panels).

ImproVision's digital video recording and monitoring integration facilities include:

- Integration with **Mirasys V/N Series** Digital Video Recording (DVR) equipment.
- Integration with **Dedicated Micro** Digital Video Recording (DVR) equipment.

Through the ImproVision framework *configuration* is carried out using configuration Wizards, forming part of ImproVision. *Integration* is carried out using graphic displays, part of Graphics Designer, and *control and monitoring* is carried out using the Graphics Runtime Module.

It is assumed that after installing the ImproVision Software that this application will run continuously 24 hours a day. However, if the application is shutdown or the PC needs rebooting continue as outlined below, Starting the ImproVision Module.

Refer to Part 6 – General Software Modules for information on the Graphics Designer and Graphics Runtime Modules.

*Ensure that **Engine's** running for **ImproVision** to work.*

Starting the ImproVision Module

1. In Windows®, click **Start**>**Programs**>**ImproNet**>**Vision Server**.
2. Enter your **Username** (**SYSDBA**) and **Password** (**masterkey**). The Password is case-sensitive.

User Interface

ImproVision Integration Server

The ImproVision Software has been designed with user-friendliness as a major design criterion. The Application Window has a menu at the top and three Tabs below. The System defaults to the Log Tab.

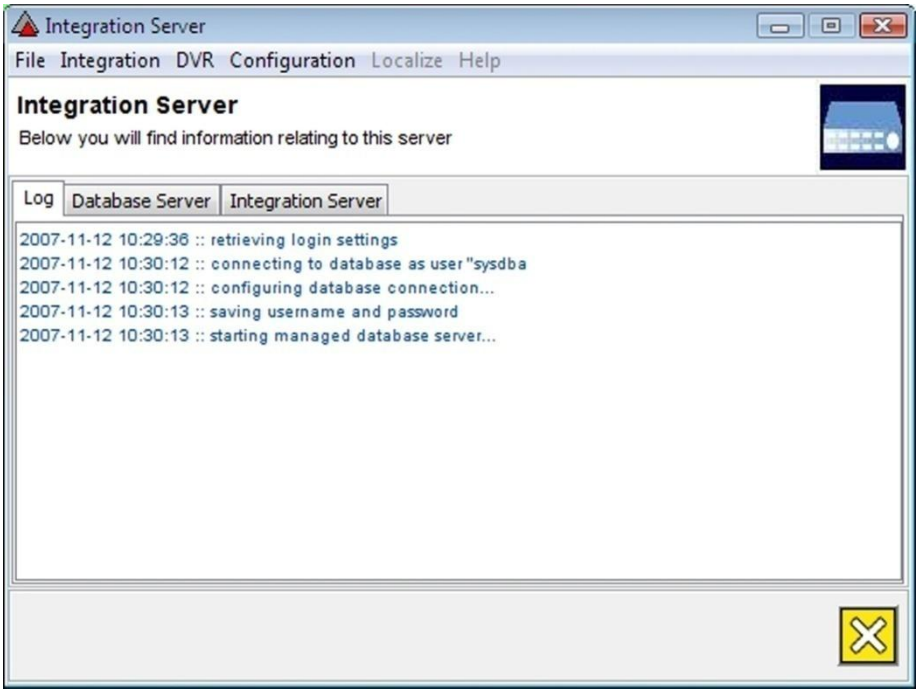

Figure 11 – Integration Server Dialog

A brief description of each of the drop-down menus associated with the ImproVision Application Window follows:

File

Option	Description
Exit	Exits the ImproVision Integration Server.

Table 2 – File Drop-down Menu

Integration

Option	Description
Actions	Actions you want the ImproVision System to perform.
Rule	Rules to be applied to the Actions.
Log	A log of executed Actions.

Table 3 – Integration Drop-down Menu

Supported Actions could include:

- ***Record****—creates Actions for camera recordings.*
- ***Snapshot****—creates Actions for capturing pictures locally from a camera.*
- ***Preset****—creates Actions for moving a Pan Tilt Zoom (PTZ) Camera to a preset position.*
- ***Email****—creates Actions for emailing.*
- ***Log Event****—creates Actions for logging to the Integration Server only.*
- ***IXP400 Action****—creates Actions for executing IXP400 created actions and operations.*
- ***Virtual Output****—creates Actions for transmitting data via RS232 or Ethernet Communications.*
- ***Server Executed App****—creates Actions for running applications on the PC hosting the Integration Server.*
- ***Graphics Executed App****—creates Actions for running applications on Graphics Runtime PCs.*

Supported Rules could include:

- ***IXP400**—rules based on IXP400 transactions.*
- ***Ziton**—rules based on Ziton Sensors.*
- ***Virtual Input**—rules based on RS232 or Ethernet Communications.*

DVR

Option	Description
Units	A list of the Digital Video Recording (DVR) units stored in the System.

Table 4 – DVR Drop-down Menu

Configuration

Option	Description
Event Log Path	The default storage location for all recorded Actions.

Table 5 – Configuration Drop-down Menu

Localize

Option	Description
Choose Locale	Selection of the Country, Language and Variant.
Translation	Allows translation from the base language to the desired language.

Table 6 – Localize Drop-down Menu

A brief description of Tabs associated with the ImproVision Application Window follows:

Option	Description
Log	Displays a log of server-client interaction.
Database Server	A log notifying you of any changes that have taken place in the Database (that is creation or modification of Actions or Rules).
Integration Server	A log showing you Actions as they are executed.

Table 7 – Tabs Displayed in the Application Window

Translation - Localisation

This ImproVision Software Application is provided with English text. If you need Localisation of the text, dynamically translate the text making use of the Locale and Translate functions. Property resource files store the translated text, for distribution with the Application.

Mirasys V (or N) Series Digital Video Recorder (DVR)

Activation of Third-party Communication

Note that the Mirasys V (or N) System Manager application mentioned below is NOT an Impro supplied application and is therefore NOT included on the ImproNet Software CD.

Please note that the Mirasys V (or N) System Manager V4.4.10 does NOT support the Vista operating system platform.

1. Open the **Mirasys V** (or N) **System Manager** application.

2. Select the (**Local Recorder**) tab.
3. From the Navigation Tree, select **General**.
4. Select the **Allow SDK and RMC Video Server** checkbox.
5. Select the **Allow SDK Alarm Control** checkbox.
6. Click the button.
7. From the Navigation Tree select **Storage**.
8. Under the Alarm Storage group, select both **Not Specified** checkboxes (for each camera).
9. Click the button.

Adding Digital Video Recorders (DVRs)

Add Digital Video Recorders (DVRs) in the Integration Server as follows:

1. From the **DVR** drop-down menu, select **Units**.
2. Click the button.
3. Read the **DVR Wizard** start-up screen and then click the button.
4. In the **DVR Name** field, assign your Digital Video Recorder (DVR) a name.
5. From the **DVR Type** drop-down menu, select **Mirasys V/N Series**.
6. In the **IP Address** textbox, insert the IP Address of the Digital Video Recorder (DVR).
7. Click the button.
8. Read the Information Screen carefully. On completion of the download process click the button.
9. Click the button to exit the Wizard.

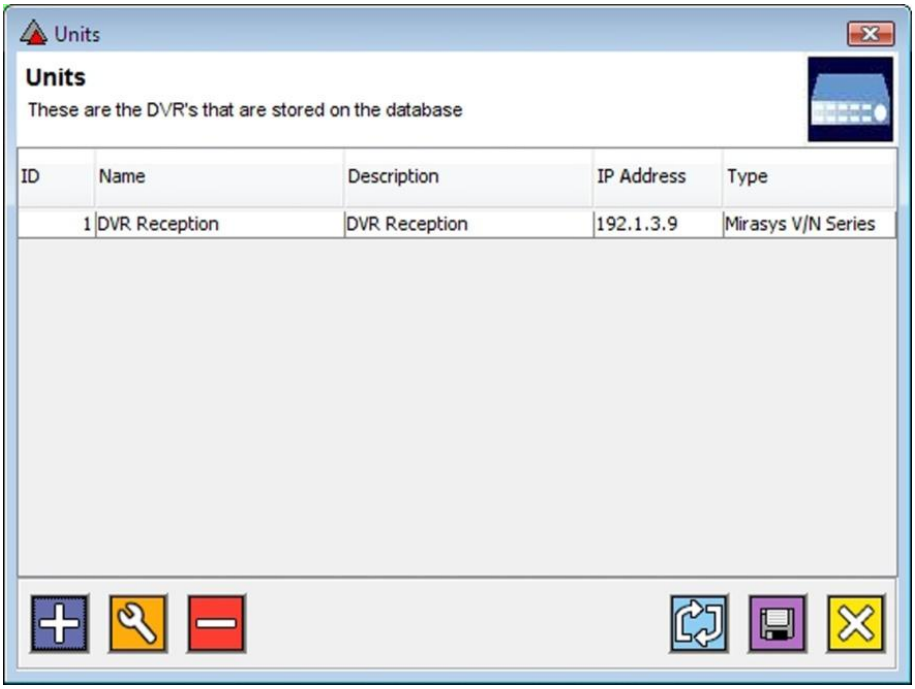

Figure 12 – Units Dialog

Enabling the Cameras

1. At the Units dialog, select the Digital Video Recorder's (DVRs) record you wish to match to the camera name.
2. Click the button.

3. In the Cameras dialog, select the Camera record you wish to match to your chosen Digital Video Recorder's (DVRs) record.
4. Double-click your mouse in the records Title column, replace the text with the Digital Video Recorder's name you assigned earlier.
5. Click the button.
6. Click the button.
7. At the Units dialog, click the button.

Adding Digital Video Recorder (DVR) Actions

Follow these steps when adding actions you would like the Digital Video Recorder (DVR) Camera to perform (that is record, take a snapshot or move):

1. From the **Integration** drop-down menu, select **Actions**.
2. Click the button.
3. Read the **Action Wizard** start-up screen and then click the button.
4. In the Action Name textbox, assign your Action a name.
5. From the Action Type drop-down list, select the appropriate **Action Type**:
   - **Record**—opens a new pane at the bottom of the Wizard page letting you add Record Duration (secs) and Record Framerate details. The maximum Record Duration is *120* seconds and the maximum Framerate is *25.*
   - **Snapshot**—opens a new pane at the bottom of the Wizard page letting you add Pre Snapshot Delay details. The maximum Pre Snapshot Delay is *10.*
   - **Preset**—directs you to the Next button for selection of the Dome Camera.

For the sake of this example we selected the **Record Action Type**.

6. In the **Record Duration (secs)** textbox adjust the figure according to your requirements.
7. In the **Record Framerate** textbox adjust the figure according to your requirements.
8. Click the button.
9. From the list of available cameras, click the record of the camera you want.
10. Click the button.
11. Read the Information Screen carefully. On completion click the button.

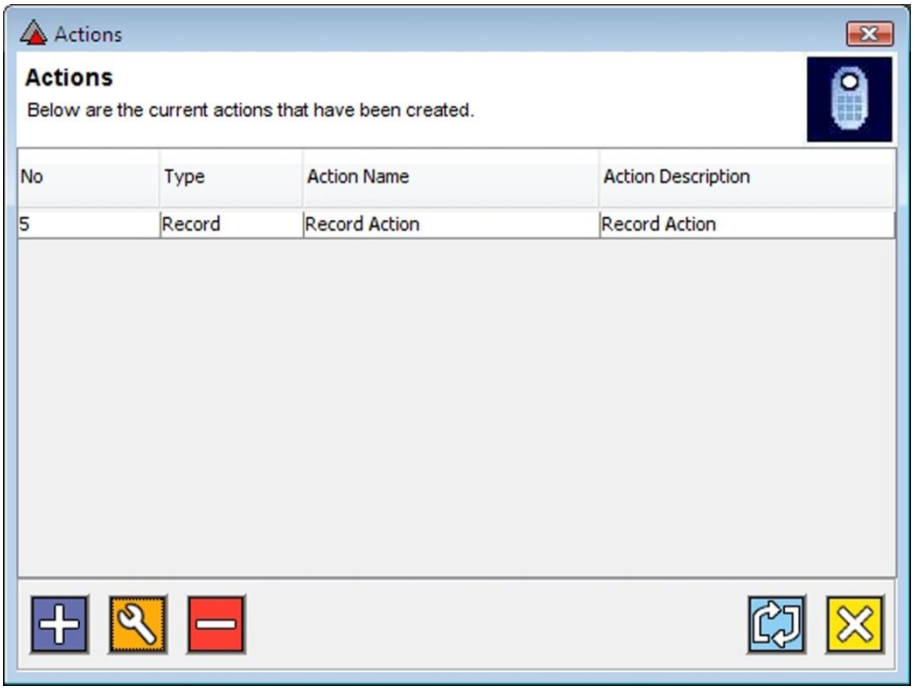

Figure 13 – Actions Dialog

12. At the Actions dialog, click the button.

Adding Rules

A Rule is best described as criteria required for performance of an Action (like the Record Action just created). Set Rules as follows:

1. From the **Integration** drop-down menu, select **Rules**.
2. Click the button.
3. Read the **Rule Wizard** start-up screen and then click the button.
4. In the **Rule Name** textbox, assign your Rule a name.
5. From the **Rule Type** drop-down list, select **IXP400**.
6. From the **Rule Filter** panel select the event filter you want action to take place on.

When Engine receives a transaction, the Integration Server matches the transaction with the IXP400 Rule filters selected.

For the sake of this example we selected the **Tagholders** event filter.

Selecting other (or additional) event filters return different lists for refining you Rules. For example by selecting Terminals from the Rule Filter panel, a list of available Terminals returns for your selection.

7. Click the button.
8. Select a Tagholder record from the list.

A Select All checkbox appears at the bottom of the dialog.

9. Click the button.

10. In the **All Actions** panel, select the Action you created earlier.
11. Click the button to move the Action into the **Selected Actions** panel.
12. Click the button.
13. Click the button.

Figure 14 – Rules Dialog

14. Click the button.

View Actions Logged

This option lets you view a log of all executed Actions.

1. From the **Integration** drop-down menu, select **Log**.
2. Click the button.

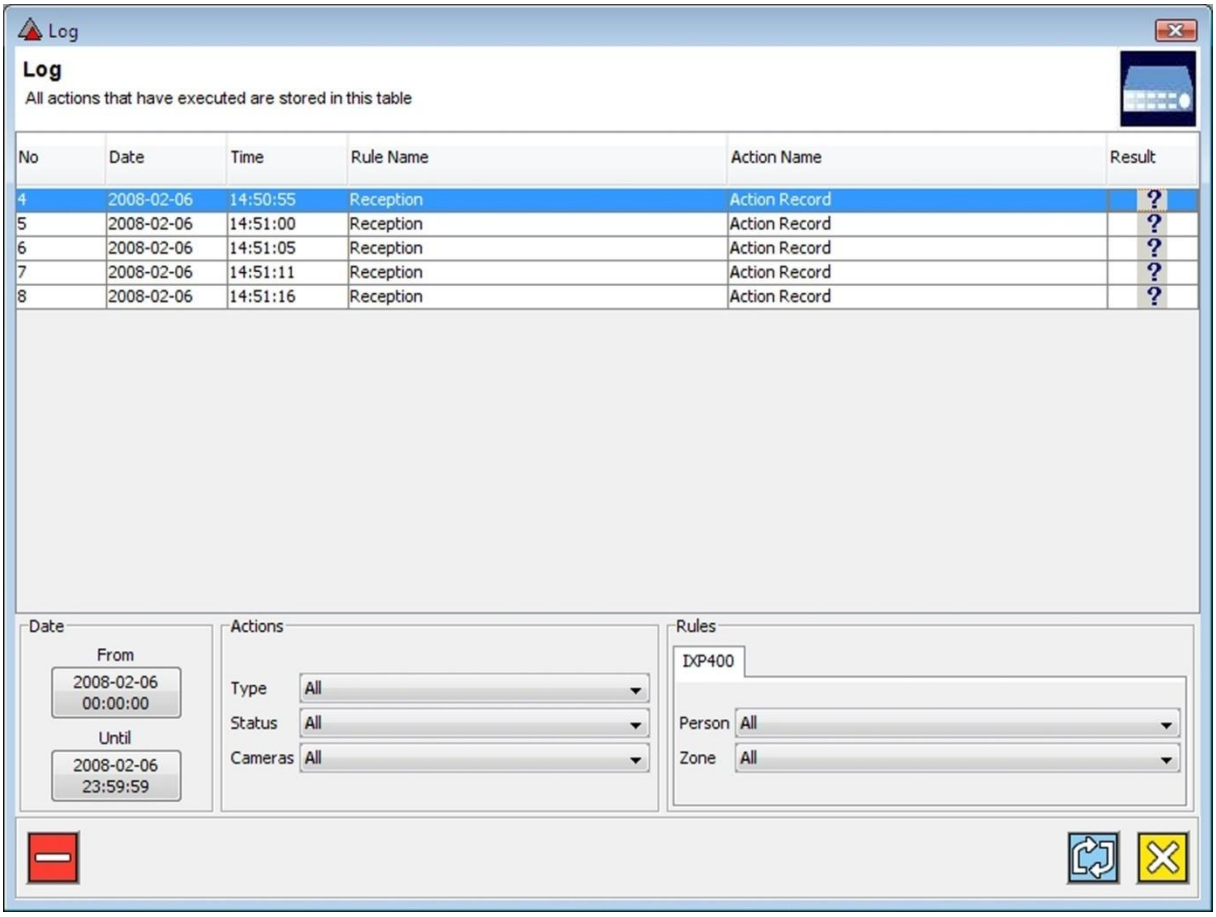

Figure 15 – Log Dialog

The Date, Actions and Rules panels situated at the bottom of the Log dialog provide you with additional filtering (search) options.

3. In the Log dialog, select an Action record for review.
4. Click on the Action record's ? button.
5. The Execution Results dialog gives you an overview of the executed action. Review the actual Digital Video Recorder (DVR) footage, by clicking on the (*View Results*) button.
6. Close the Digital Video Recorder footage dialog, by clicking the **Close** button in the top right-hand corner of the dialog.
7. Close the Execution Results dialogue, click the button.
8. Close the Log dialog, click the button.

Graphics

Graphics.properties File

1. From **C:\ImproNet**, open the **Graphics.properties** file.
2. Set the **system.cctv** setting to your preferred setting from within the range of **6** to **10**.
3. From the **File** drop-down menu select **Save**.
4. From the **File** drop-down menu select **Exit**.

Graphics Designer

1. Open the Graphics Designer Module. (For more information refer to Part 6 – General Software Modules).

*If you do not see the **Units** icon palette (with the Digital Video Recorder (DVR) and Camera icons), your Registration Reader is NOT unlocked for Closed Circuit Television (CCTV).*

2. From the **Units** icon palette, click and drag the **Digital Video Recorder (DVR)** icon into position on the Floor Plan.
3. From the Select Camera dialog, select the **Digital Video Recorder (DVR)** you want to add to the Floor Plan.
4. Click the button.
5. From the **Units** icon palette, click and drag the **Camera** icon into position on the Floor Plan.
6. From the Select Camera dialog, select the **Camera** you want to add to the Floor Plan.
7. Click the button.

After dragging and placing each unit, the units allocated will be removed from the list of units available.

Graphics Runtime

Open the Graphics Runtime Module. (For more information refer to Part 6 – General Software Modules).

*If you do not see the **Digital Video Recorder (DVR)** and **Camera** icons, your Registration Reader is NOT unlocked for Closed Circuit Television (CCTV).*

Right-clicking your mouse over the **Digital Video Recorder (DVR)** and **Camera** icons gives you access to the following options:

Digital Video Recorder (DVR)

Option	Description
Live	Displays a live screening of the Digital Video Recorder (DVR) footage.
Playback	Plays back a recorded screening of the Digital Video Recorder (DVR) footage.
V (or N) Workstation	A shortcut to the Mirasys V (or N) Workstation application, for viewing Mirasys related events (for example motion detection).

Table 8 – Digital Video Recorder (DVR) Icon Options

Camera

Option	Description
Live	Displays a live screening of the Digital Video Recorder (DVR) footage.
Playback	Plays back a recorded screening of the Digital Video Recorder (DVR) footage.

Table 9 – Camera Icon Options

When a Camera Action occurs, a live video dialog briefly opens, letting you view the camera footage.

Using the Graphics Runtime, Tools drop-down menu, gives you access to the following options:

Tools

Option	Description
Event Log Path	Lets you set or change the path to the stored video files.
Event Log	Provides you with a table of all Actions recorded.
Video Settings	Offers settings for the live video dialog.

Table 10 – Tools Drop-down Menu Options

Dedicated Micros Digital Video Recorder (DVR)

Adding Digital Video Recorders (DVRs)

Add Digital Video Recorders (DVRs) in the Integration Server as follows:

1. From the **DVR** drop-down menu, select **Units**.
2. Click the button.
3. Read the **DVR Wizard** start-up screen and then click the button.
4. In the **DVR Name** field, assign your Digital Video Recorder (DVR) a name.
5. From the **DVR Type** drop-down menu, select **Dedicated Micros**.
6. In the **IP Address** textbox, insert the IP Address of the Digital Video Recorder (DVR).
7. Click the button.
8. In the **Usernames and Passwords** screen, if using the default settings, click the button.

The FTP username and password referred to here is the ADMIN FTP account.

9. Read the **Information Screen** carefully. On completion of the download process click the button.
10. At the DVR Reset screen, select the **Reset the DVR after Wizard has completed (Recommended)** checkbox.

We recommend that you load the script and reset the DVR at this time. If you don't load the script and reset the Digital Video Recorder (DVR), the Digital Video Recorder (DVR) will load, however the record action will not function.

11. Click the button.
12. Click the button to exit the Wizard.

Please note, configuration of the Digital Video Recorder (DVR) takes approximately 2 minutes per Digital Video Recorder (DVR).

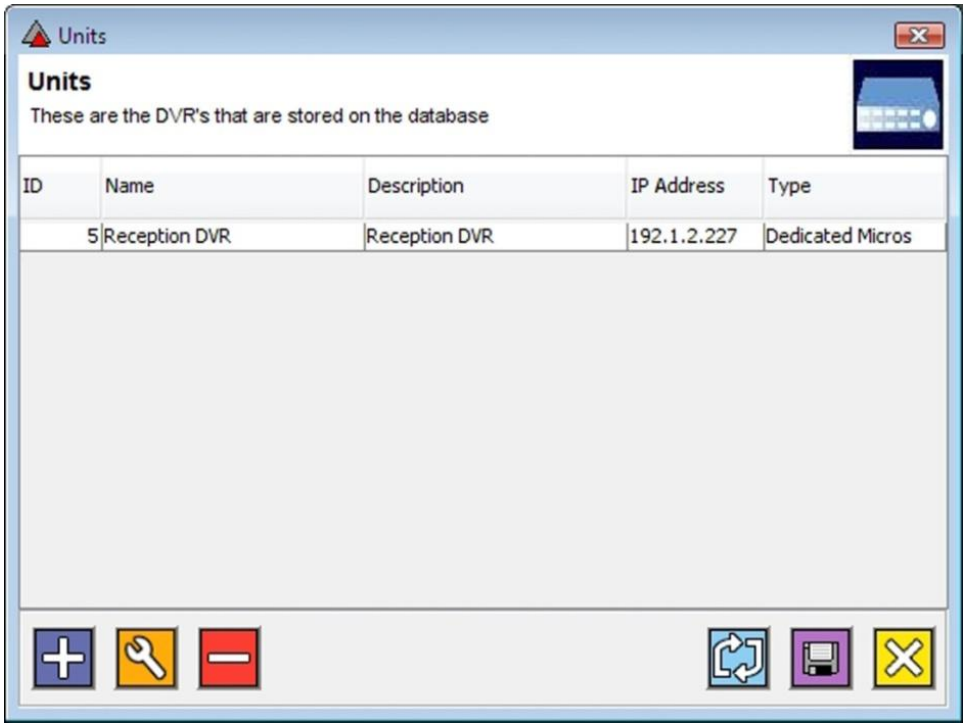

Figure 16 – Units Dialog

Extra Functions Available from the Units Dialog

Right clicking on a particular Dedicated Micros Digital Video Recorder (DVR) record presents the following options:

- **Remote Setup**—opens a web browser and logs on to the Digital Video Recorder's (DVR) web server. When requested, enter the web or HTTP protocol Username and Password.

*The default username is **dm**. The default password is **web**. The password is case-sensitive.*

Once logged on you may change any setting on the Digital Video Recorder (DVR), therefore ensure that you follow the supplied Dedicated Micros User Manual shipped with the Digital Video Recorder (DVR).
Ensure that you do NOT change any settings that may conflict with the Vision Server. These settings include: Module, Nuisance Count, Pulse Extension (secs), Select Alarm Zone, Zone Alarm Input and Create Database Entry.

- **Add/Change Script**— lets you run the script update on the Digital Video Recorder (DVR). If you failed to run the script during the DVR Wizard, then run the script from this location. The script is included with ImproNet V7.6. In a default installation, run the script from **C:\ImproNet\thirdparty\dm\scripts**.

The Digital Video Recorder (DVR) resets after this action.

- **Passwords**—lets you make sure that the Vision Server has the correct credentials to work with. Each of these usernames and passwords have a specific background purpose. It is, therefore, important that you update these usernames and passwords after changing them

on the Digital Video Recorder (DVR) itself (through the Remote Setup). The FTP username and password referred to here is the ADMIN FTP account.

Adding Digital Video Recorder (DVR) Actions

Follow these steps when adding actions you would like the Digital Video Recorder (DVR) Camera to perform (that is record, take a snapshot or move):

1. From the **Integration** drop-down menu, select **Actions**.
2. Click the button.
3. Read the **Action Wizard** start-up screen and then click the button.
4. In the Action Name textbox, assign your Action a name.
5. From the Action Type drop-down list, select the appropriate **Action Type**:
   - **Record**—opens a new pane at the bottom of the Wizard page letting you add Record Duration (secs) and Record Framerate details. The maximum Record Duration is *120* seconds and the maximum Framerate is *25.*
   - **Snapshot**—opens a new pane at the bottom of the Wizard page letting you add Pre Snapshot Delay details. The maximum Pre Snapshot Delay is *10.*
   - **Preset**—directs you to the Next button for selection of the Dome Camera.

For the sake of this example we selected the **Record Action Type**.

6. Click the button.
7. From the list of available cameras, click the record of the camera you want.
8. Click the button.
9. Read the Information Screen carefully. On completion click the button.

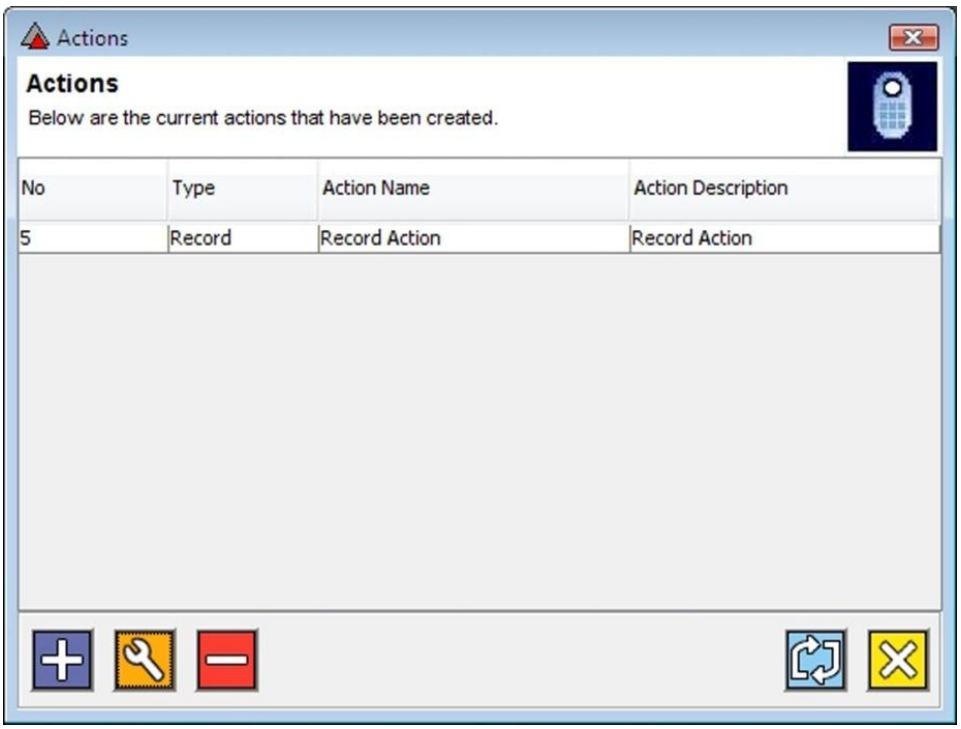

Figure 17 – Actions Dialog

10. At the Actions dialog, click the button.

Adding Rules

A Rule is best described as criteria required for performance of an Action (like the Record Action just created). Set Rules as follows:

1. From the **Integration** drop-down menu, select **Rules**.
2. Click the button.
3. Read the **Rule Wizard** start-up screen and then click the button.
4. In the **Rule Name** textbox, assign your Rule a name.
5. From the **Rule Type** drop-down list, select **IXP400**.
6. From the **Rule Filter** panel select the event filter you want action to take place on.

When Engine receives a transaction, the Integration Server matches the transaction with the IXP400 Rule filters selected.

For the sake of this example we selected the **Tagholders** event filter.

Selecting other (or additional) event filters return different lists for refining you Rules. For example by selecting Terminals from the Rule Filter panel, a list of available Terminals returns for your selection.

7. Click the button.
8. Select a Tagholder record from the list.

A Select All checkbox appears at the bottom of the dialog.

9. Click the button.
10. In the **All Actions** panel, select the Action you created earlier.
11. Click the button to move the Action into the **Selected Actions** panel.
12. Click the button.
13. Click the button.

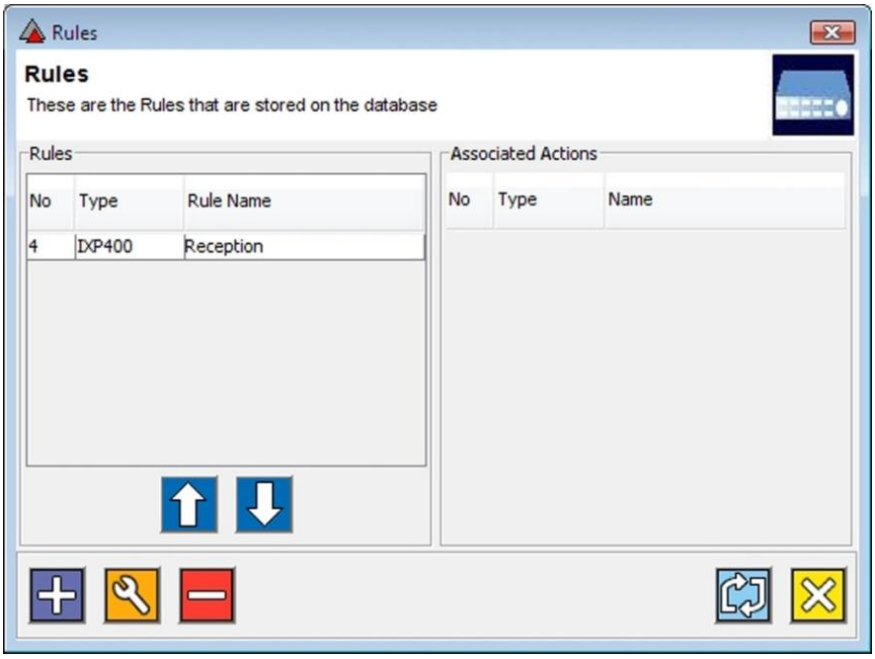

Figure 18 – Rules Dialog

14. Click the button.

View Actions Logged

This option lets you view a log of all executed Actions.

1. From the **Integration** drop-down menu, select **Log**.
2. Click the button.

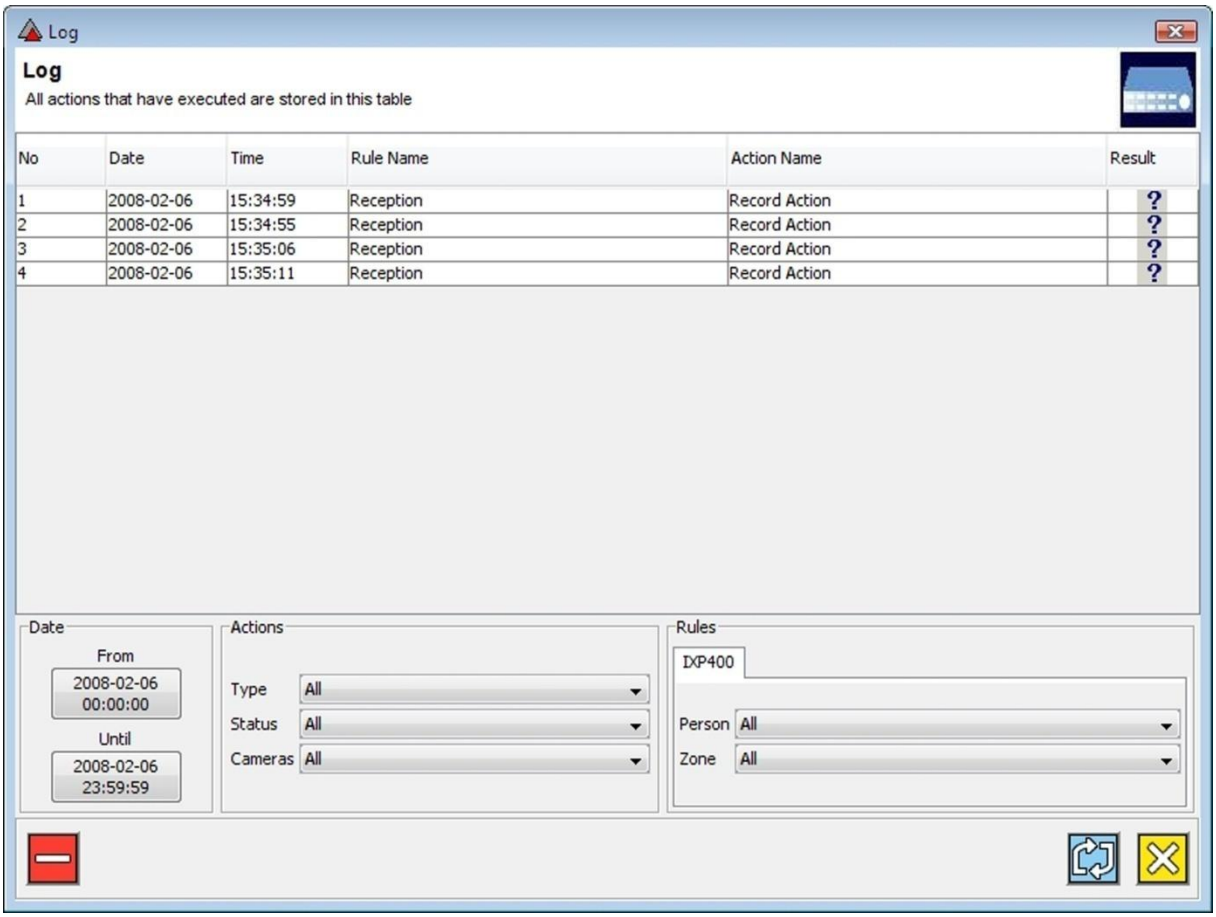

Figure 19 – Log Dialog

The Date, Actions and Rules panels situated at the bottom of the Log dialog provides you with additional filtering (search) options.

3. In the Log dialog, select an Action record for review.
4. Click on the Action record's ? button.

Double-clicking your mouse over the Action's record also opens the Execution Results dialog.

5. The Execution Results dialog gives you an overview of the executed action. Review the actual Digital Video Recorder (DVR) footage, by clicking on the (*View Results*) button.
6. Close the Digital Video Recorder footage dialog, by clicking the **Close** button in the top right-hand corner of the dialog.
7. Close the Execution Results dialogue, click the button.

8. Close the Log dialog, click the button.

Graphics

Graphics.properties File

1. From **C:\ImproNet**, open the **Graphics.properties** file.
2. Set the **system.cctv** setting to **8**.
3. From the **File** drop-down menu select **Save**.
4. From the **File** drop-down menu select **Exit**.

Graphics Designer

1. Open the Graphics Designer Module. (For more information refer to Part 6 – General Software Modules).

*If you do not see the **Units** icon palette (with the Digital Video Recorder (DVR) and Camera icons), your Registration Reader is NOT unlocked for Closed Circuit Television (CCTV).*

2. From the **Units** icon palette, click and drag the **Digital Video Recorder (DVR)** icon into position on the Floor Plan.
3. From the Select Camera dialog, select the **Digital Video Recorder (DVR)** you want to add to the Floor Plan.
4. Click the button.
5. From the **Units** icon palette, click and drag the **Camera** icon into position on the Floor Plan.
6. From the Select Camera dialog, select the **Camera** you want to add to the Floor Plan.
7. Click the button.

After dragging and placing each unit, the units allocated will be removed from the list of units available.

Graphics Runtime

Open the Graphics Runtime Module. (For more information refer to Part 6 – General Software Modules).

*If you do not see the **Digital Video Recorder (DVR)** and **Camera** icons, your Registration Reader is NOT unlocked for Closed Circuit Television (CCTV).*

Right-clicking your mouse over the **Digital Video Recorder (DVR)** and **Camera** icons gives you access to the following options:

Digital Video Recorder (DVR)

Option	Description
Live	Displays a live screening of the Digital Video Recorder (DVR) footage.
Playback	Plays back a recorded screening of the Digital Video Recorder (DVR) footage.
Event Log	Provides you with a table of all Actions recorded.

Table 11 – Digital Video Recorder (DVR) Icon Options

Camera

Option	Description
Live	Displays a live screening of the Digital Video Recorder (DVR) footage.
Playback	Plays back a recorded screening of the Digital Video Recorder (DVR) footage.
Event Log	Provides you with a table of all Actions recorded.

Table 12 – Camera Icon Options

When a Camera Action occurs, a live video dialog briefly opens, letting you view the camera footage.

Using the Graphics Runtime, Tools drop-down menu, gives you access to the following options:

Tools

Option	Description
Event Log Path	Lets you set or change the path to the stored video files.
Event Log	Provides you with a table of all Actions recorded.
Video Settings	Offers settings for the live video dialog.

Table 13 – Tools Drop-down Menu Options

Virtual Input Output Control

Virtual Input Output Control is an add-on to the existing ImproVision Integration Server. The Virtual Input Output feature is a software controlled Input or Output communications mechanism capable of listening to and transmitting data via TCP/IP, UDP or Serial (COM or USB). Virtual Input functions as a rule, which means that, data received must match up to the user defined data. When a match is found, any one or more of the Integration Server Actions can be executed.

*Ensure that you unlock your Registration Interface for **Virtual IO** before proceeding further.*

Virtual Input Setup

A Rule is best described as criteria required for performance of an Action. Set the Virtual Input Setup Rules as follows:

1. From the **Integration** drop-down menu, select **Rules**.
2. Click the button.
3. Read the **Rule Wizard** start-up screen and then click the button.
4. In the **Rule Name** textbox, assign your Rule a name.
5. From the **Rule Type** drop-down list, select **Virtual Input**.
6. Complete the **Regular Expression Search String** textbox.

*For help writing Regular Expressions go to **http://java.sun.com/docs/books/tutorial/essential/regex/**.*

7. To reply to the third-party device, select the **Reply String** checkbox.

8. In the **Reply String** textbox, enter the string for matching.

*The **Reply String** textbox is ASCII based, however if you require a character such as a carriage return or line feed, right-click your mouse over the textbox. From the shortcut menu, select **Custom Character**. Thereafter make your selection from the available options.*

9. In the **Reply String** textbox, capture the response string.
10. From the **Listen Via** drop-down list, make your selection from the following:
    - **Serial Communications**—select this option for COM and USB Communications. On selection, you are asked to complete the *Comm Port*, *Baud Rate*, *Data Bits*, *Stop Bits* and *Parity* settings.
    - **TCPIP Server Communications**—select this option when using your local TCPIP Server. On selection, you are asked to complete the *Local IP* and *Local Port* textboxes.
    - **TCPIP Client Communications**—select this option to connect to the TCPIP Server. On selection, you are asked to complete the *Host IP* and *Host Port* textboxes. Thereafter indicate whether to *Enable Polling*. On selecting the Enable Polling checkbox, the *Polling Interval*, *Polling String* and *Poll on Inactivity* or *Poll Continuously* fields activate for completion.
    - **UDP Communications**—this option simulates a local UDP Server. On selection, you are asked to complete the *Local IP* and *Local Port* textboxes. Thereafter indicate whether to *Enable Polling*. On selecting the Enable Polling checkbox, the *Polling Interval*, *Polling String* and *Poll on Inactivity* or *Poll Continuously* fields activate for completion.
11. Click the button.
12. Based on the selection you made in point 10, complete the available fields.
13. Click the button.
14. In the **All Actions** panel, select an Action you created earlier.
15. Click the button to move the Action into the **Selected Actions** panel.
16. Click the button.
17. Click the button.
18. Click the button.

Virtual Output Setup

An Action is best described as a task you want the Integration Server to perform.

1. From the **Integration** drop-down menu, select **Actions**.
2. Click the button.
3. Read the **Action Wizard** start-up screen and then click the button.
4. In the **Action Name** textbox, assign your Action a name.
5. From the **Action Type** drop-down list, select **Virtual Output**.
6. In the **Command String** textbox, enter the string you wish to send or transmit.

*The **Command String** and **Acknowledge String** textboxes are ASCII based, to add a non-ASCII character or information from the triggering IXP400 rule by right-clicking your mouse over the textbox. Select one of the following options:*

- ***IXP400 Details**—enters information from the triggering IXP400 rule, for example Controller Name or Controller SLA.*
- ***Custom Character**—enters a non-ASCII character such as a carriage return or line feed.*

7. To verify that the server has received the data correctly, select the **Acknowledge String** checkbox.
8. Complete the **Acknowledge String** textbox.
9. From the **Send Via** drop-down list, make your selection from the following:
   - **Serial Communications**—select this option for COM and USB Communications. On selection, you are asked to complete the *Comm Port*, *Baud Rate*, *Data Bits*, *Stop Bits* and *Parity* settings.
   - **TCPIP Client Communications**—select this option to connect to the TCPIP Server. On selection, you are asked to complete the *Host IP* and *Host Port* textboxes. Thereafter indicate whether to *Enable Polling*. On selecting the Enable Polling checkbox, the *Polling Interval*, *Polling String* and *Poll on Inactivity* or *Poll Continuously* fields activate for completion.
   - **UDP Communications**—this option simulates a local UDP Server. On selection, you are asked to complete the *Subnet Mask*, *Destination IP* and *Destination Port* textboxes. Thereafter indicate whether to *Enable Polling*. On selecting the Enable Polling checkbox, the *Polling Interval*, *Polling String* and *Poll on Inactivity* or *Poll Continuously* fields activate for completion.
10. Click the button.
11. Read the Information Screen carefully. On completion click the button.
12. At the Actions dialog, click the button.

Chapter 5: Ganz Server Module

Introduction

The Ganz Server Module is a complete, graphic-based digital video recording and monitoring software application.

Ganz Server integrates closely with ImproNet's Graphics Designer and Graphics Runtime Modules.

Through the Ganz Server framework *configuration* of the Ganz CCTV system is carried out using configuration Wizards, forming part of Ganz Server. *Integration* is carried out using graphic displays, part of Graphics Designer, and *control and monitoring* is carried out using the Graphics Runtime Module.

It is assumed that after installing the Ganz Server Module that this application will run continuously 24 hours a day. However, if the application is shutdown or the PC needs rebooting continue as outlined below, Starting the Ganz Server Module.

Refer to Part 6 – General Software Modules for information on the Graphics Designer Module and the Graphics Runtime Module.

*Ensure that **Engine's** running for the **Ganz Server Module** to work.*

Starting the Ganz Server Module

1. In Windows®, click **Start**>**Programs**>**ImproNet**>**Ganz Server**.

User Interface

Ganz Server Module

The Ganz Server Software Module has been designed with user-friendliness as a major design criterion. The Application Window has a menu at the top and five Tabs below. The System defaults to the Log Tab.

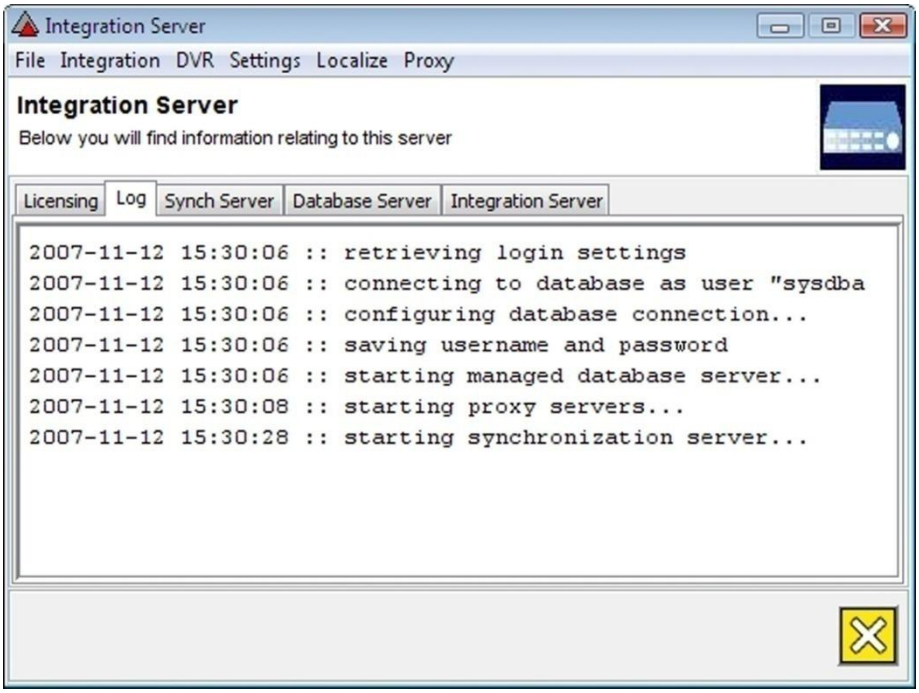

Figure 20 – Integration Server Dialog

A brief description of each of the drop-down menus associated with the Ganz Server Application Window follows:

File

Option	Description
Open Wavelet Viewer	Lets you select the channel for viewing of snapshots and video on that channel.
Exit	Exits the Ganz Integration Server.

Table 14 – File Drop-down Menu

Integration

Option	Description
Actions	Actions you want the Digital Video Recording (DVR) System to perform.
Rules	Rules to be applied to the Actions.
Log	A list of the Digital Video Recording (DVR) units stored in the System.

Table 15 – Integration Drop-down Menu

DVR

Option	Description
Remote Download	Enables the downloading of video to a desired storage location.
Syncronize	Runs the Digital Video Recording (DVR) Synch Wizard, assisting in Database maintenance.
Units	A list of the Digital Video Recording (DVR) units stored in the System.

Table 16 – DVR Drop-down Menu

Settings

Option	Description
Server Settings	Accesses the Advanced Server Settings dialog.
General Settings	Accesses the General Server Settings dialog.
Configuration Settings	Lets you change the Event Server Port and Proxy Server Base Port numbers.

Table 17 – Settings Drop-down Menu

Localize

Option	Description
Choose Locale	Selection of the Country, Language and Variant.
Translation	Allows translation from the base language to the desired language.

Table 18 – Localize Drop-down Menu

Proxy

Option	Description
View	Lets you view the statistics from the Proxy Servers.

Table 19 – Proxy Drop-down Menu

A brief description of Tabs associated with the ImproVision Application Window follows:

Option	Description
Licensing	Displays the number of PCs allowed to use the application.
Log	Displays a log of server-client interaction.
Synch Server	Displays synchronisation details for the Database and Digital Video Recorder (DVR) Proxy.
Database Server	A log notifying you of any changes that have taken place in the Database (that is creation or edition of Actions or Rules).
Integration Server	A log showing you Actions as they are executed.

Table 20 – Tabs Displayed in the Application Window

Translation - Localisation

This Ganz Server Software Application is provided with English text. If you need Localisation of the text, dynamically translate the text making use of the Locale and Translate functions. Property resource files store the translated text, for distribution with the Application.

Ganz Digital Video Recorder (DVR)

Adding Digital Video Recorders (DVRs)

Add Digital Video Recorders (DVRs) in the Integration Server as follows:

1. From the **DVR** drop-down menu, select **Units**.
2. Click the button.
3. Read the **DVR Wizard** start-up screen and then click the button.
4. In the **DVR Name** field, assign your Digital Video Recorder (DVR) a name.
5. From the **DVR Type** drop-down menu, select **GANZ**.

6. In the **IP Address** textbox, insert the IP Address of the Digital Video Recorder (DVR).
7. Click the button.
8. Read the DVR Information Screen carefully. On completion of the download process click the button.
9. Read the next DVR Information Screen carefully and then click the button.
10. Read the Camera Information Screen carefully and then click the button.
11. Click the button to exit the Wizard.

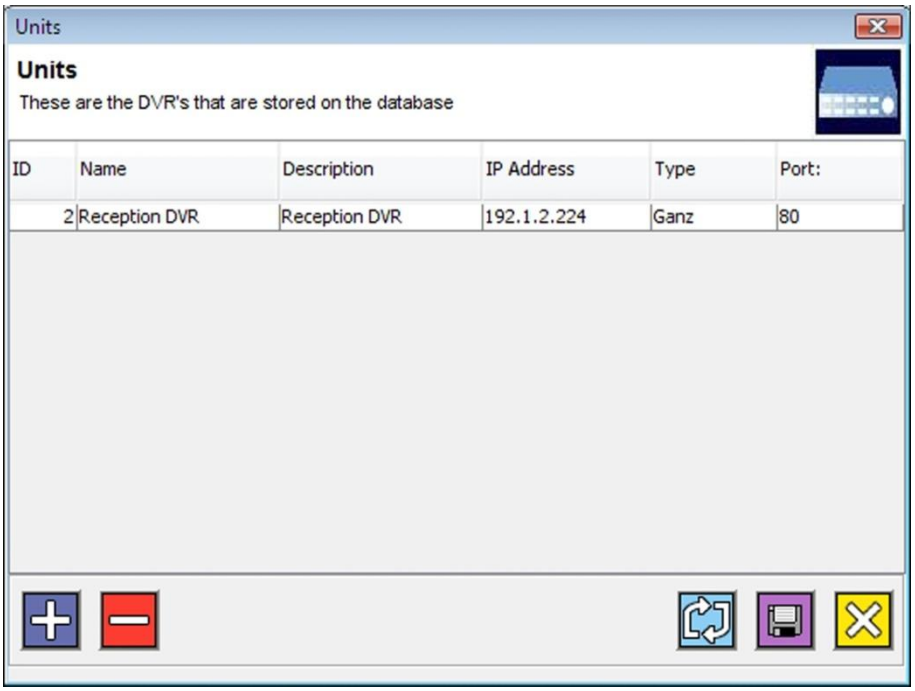

Figure 21 – Units Dialog

12. At the Units dialog, click the button.
13. Click the button.

Adding Actions

Follow these steps when adding actions you would like the Digital Video Recorder (DVR) Camera to perform (that is record, take a snapshot or move):

1. From the **Integration** drop-down menu, select **Actions**.
2. Click the button.
3. Read the **Action Wizard** start-up screen and then click the button.
4. In the Action Name textbox, assign your Action a name.
5. From the Action Type drop-down list, select the appropriate **Action Type**:
   - **Record**—opens a new Action Filter textbox, letting you add Record Duration details. The maximum Record Duration is *300* seconds.
   - **Snapshot**—opens a new Action Filter textbox, letting you add Delay details. The maximum Delay is *300* seconds.
   - **Preset**—lets you direct the Camera to a specified Preset position. The maximum Preset position is *99.*

- **Email**—opens two new Action Filter textboxes, letting you add Host and Port details.
- **Log Event**—opens a new Action Filter textbox, letting you select an item to associate with.

For the sake of this example we selected the **Record** Action Type.

6. In the **Action Filter** textbox adjust the **Record for** duration figure according to your requirements.
7. Click the button.
8. From the list of available cameras, click the record of the camera you want.
9. Click the button.
10. Read the Information Screen carefully. On completion click the button.

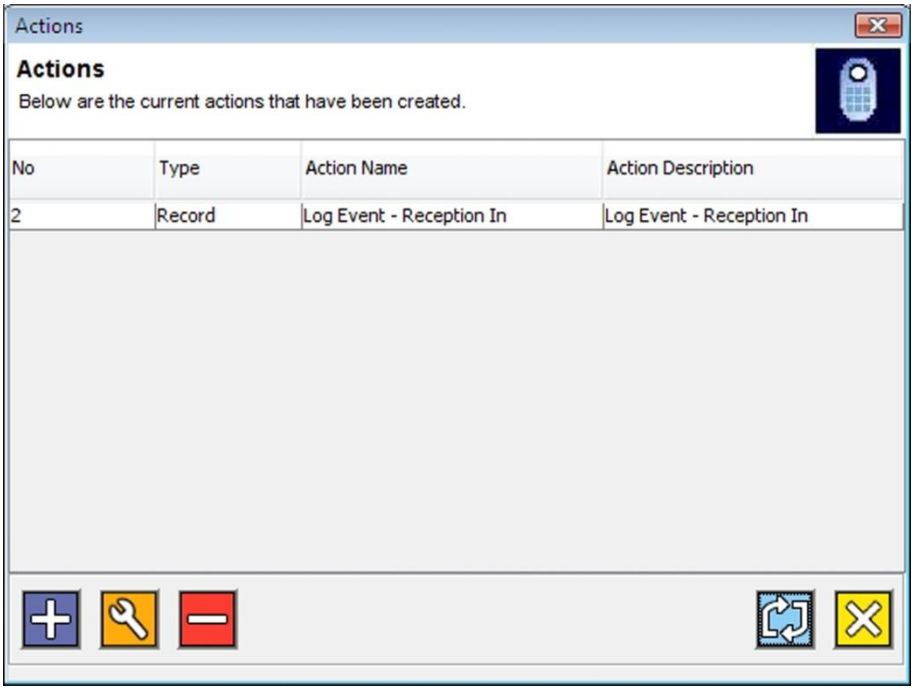

Figure 22 – Actions Dialog

11. At the Actions dialog, click the button.

Adding Rules

A Rule is best described as criteria required for performance of an Action (like the Record Action just created). Set Rules as follows:

1. From the **Integration** drop-down menu, select **Rules**.
2. Click the button.
3. Read the **Rule Wizard** start-up screen and then click the button.
4. In the **Rule Name** textbox, assign your Rule a name.
5. From the **Rule Type** drop-down list, select **IXP400**.
6. From the **Rule Filter** panel select the event filter you want action to take place on.

When Engine receives a transaction, the Integration Server matches the transaction with the IXP400 Rules filters selected.

For the sake of this example we selected the **Tagholders** event filter.

Selecting other (or additional) event filters return different lists for refining you Rules. For example by selecting Terminals from the Rule Filter panel, a list of available Terminals returns for your selection.

7. Click the button.
8. Select a Tagholder record from the list.

A Select All checkbox appears at the bottom of the dialog.

9. Click the button.
10. In the **All Actions** panel, select the Action you created earlier.
11. Click the button to move the Action into the **Selected Actions** panel.
12. Click the button.
13. Click the button.

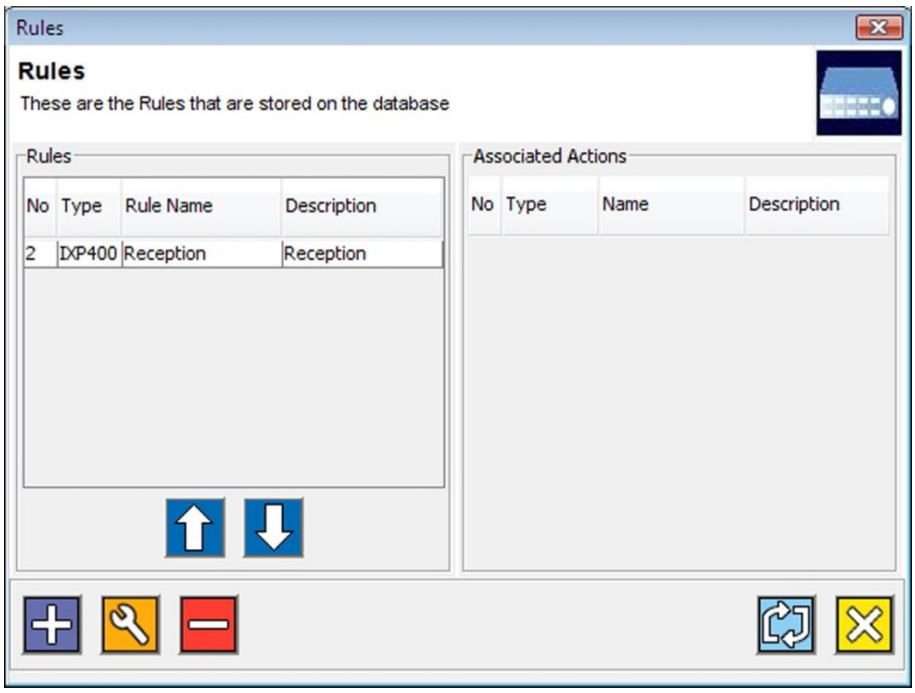

Figure 23 – Rules Dialog

14. Click the button.

View Actions Logged

This option lets you view a log of all executed Actions.

1. From the **Integration** drop-down menu, select **Log**.
2. Click the button.

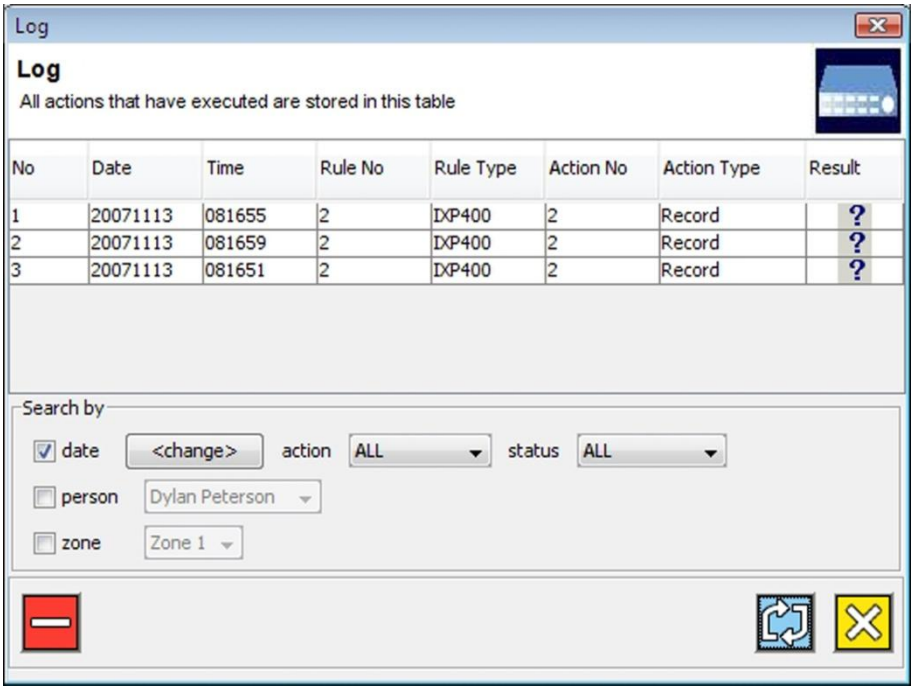

Figure 24 – Log Dialog

3. In the Log dialog, select an Action record for review.
4. Click on the Action record's ? button.
5. The Execution Results dialog gives you an overview of the executed action. Review the actual Digital Video Recorder (DVR) footage, by clicking on the (*View Results*) button.
6. Close the Digital Video Recorder footage dialog, by clicking the **Close** button in the top right-hand corner of the dialog.
7. Close the Execution Results dialogue, click the button.
8. Close the Log dialog, click the button.

Graphics

Graphics.properties File

1. From **C:\ImproNet**, open the **Graphics.properties** file.
2. Set the **system.cctv** setting to **5**.
3. From the **File** drop-down menu select **Save**.
4. From the **File** drop-down menu select **Exit**.

Graphics Designer

1. Open the Graphics Designer Module. (For more information refer to Part 6 – General Software Modules).

*If you do not see the **Units** icon palette (with the Digital Video Recorder (DVR) and Camera icons), your Registration Reader is NOT unlocked for Closed Circuit Television (CCTV).*

2. From the **Units** icon palette, click and drag the **Digital Video Recorder (DVR)** icon into position on the Floor Plan.
3. From the Select Camera dialog, select the **Digital Video Recorder (DVR)** you want to add to the Floor Plan.
4. Click the button.

5. From the **Units** icon palette, click and drag the **Camera** icon into position on the Floor Plan.
6. From the Select Camera dialog, select the **Camera** you want to add to the Floor Plan.
7. Click the button.

After dragging and placing each unit, the units allocated will be removed from the list of units available.

Graphics Runtime

Open the Graphics Runtime Module. (For more information refer to Part 6 – General Software Modules).

*If you do not see the **Digital Video Recorder (DVR)** and **Camera** icons, your Registration Reader is NOT unlocked for Closed Circuit Television (CCTV).*

Right-clicking your mouse over the **Digital Video Recorder (DVR)** and **Camera** icons gives you access to the following options:

Option	Description
Live	Displays a live screening of the Digital Video Recorder (DVR) footage.
Playback	Plays back a recorded screening of the Digital Video Recorder (DVR) footage.

Table 21 – Digital Video Recorder (DVR) and Camera Icon Options

When a Camera Action occurs, a live video dialog briefly opens, letting you view the camera footage.

Using the Graphics Runtime, Tools drop-down menu, gives you access to the following options:

Option	Description
Event Log	Provides you with a table of all Actions recorded.
Video Settings	Offers settings for the live video dialog.

Table 22 – Digital Video Recorder (DVR) Icon Options

Advanced Setup Options for the Ganz Digital Video Recorder (DVR)

Server Settings

1. In the Ganz Integration Server, from the **Settings** drop-down menu, select **Server Settings**.
2. The Advanced Settings dialog lets you change the following settings:
   - **Check the Database for changes delay (ms)**—set the delay in milliseconds.
   - **Config Keep Alive Delay (ms)**—keeps the connection to the Digital Video Recorder (DVR) alive for a maximum of 30 seconds.
   - **DVR Date Format**—sets the Digital Video Recorders (DVR) date format.
   - **Sync Manager Sleep Delay**—synchronizes the Digital Video Recorder (DVR) and the PC using the PCs time.
3. Click the button.

General Settings

Changes to these settings can adversely affect the System's functionality.

1. In the Ganz Integration Server, from the **Settings** drop-down menu, select **General Settings**.
2. The General Settings dialog lets you change the following settings:
   - **Timeout Wait (ms)**—period of time to delay before communication times out.
   - **Tips**—lets you enable or disable the display of tips on software start-up.
   - **Bandwidth Settings**—sets the communications bandwidth to suit the protocol in use.
   - **Sleep Rate**—sets the time between sending network packets. Increasing this value may improve performance on slower network connections (WAN Connections).
   - **Validate Termination with Password**—lets you enable or disable the close program password request.
3. Click the button.

Configuration Settings

Activate these settings by re-starting the Integration Server.

1. In the Ganz Integration Server, from the **Settings** drop-down menu, select **Configuration Settings**.
2. The Configuration Settings dialog lets you change the following settings:
   - **Event Server Port**—select the Port number, the default setting is **26673**.
   - **Proxy server Base Port**—select the Port number, the default setting is **2000**.
   - **Logging Mode**—set the state of the Log file.
3. Click the button.

Digital Video Recorder (DVR) Remote Setup

This menu provides for the setting up and or viewing of many of the Closed Circuit Television (CCTV) system parameters. Some of these settings are read-only and dependant on the Digital Video Recorder (DVR) unit.

1. In the Ganz Integration Server, from the **DVR** drop-down menu, select **Units**.
2. In the Units dialog, select the **Digital Video Recorder (DVR)**.
3. Right-click over the selected Digital Video Recorder (DVR).
4. From the Menu, select the **Remote Setup** option.

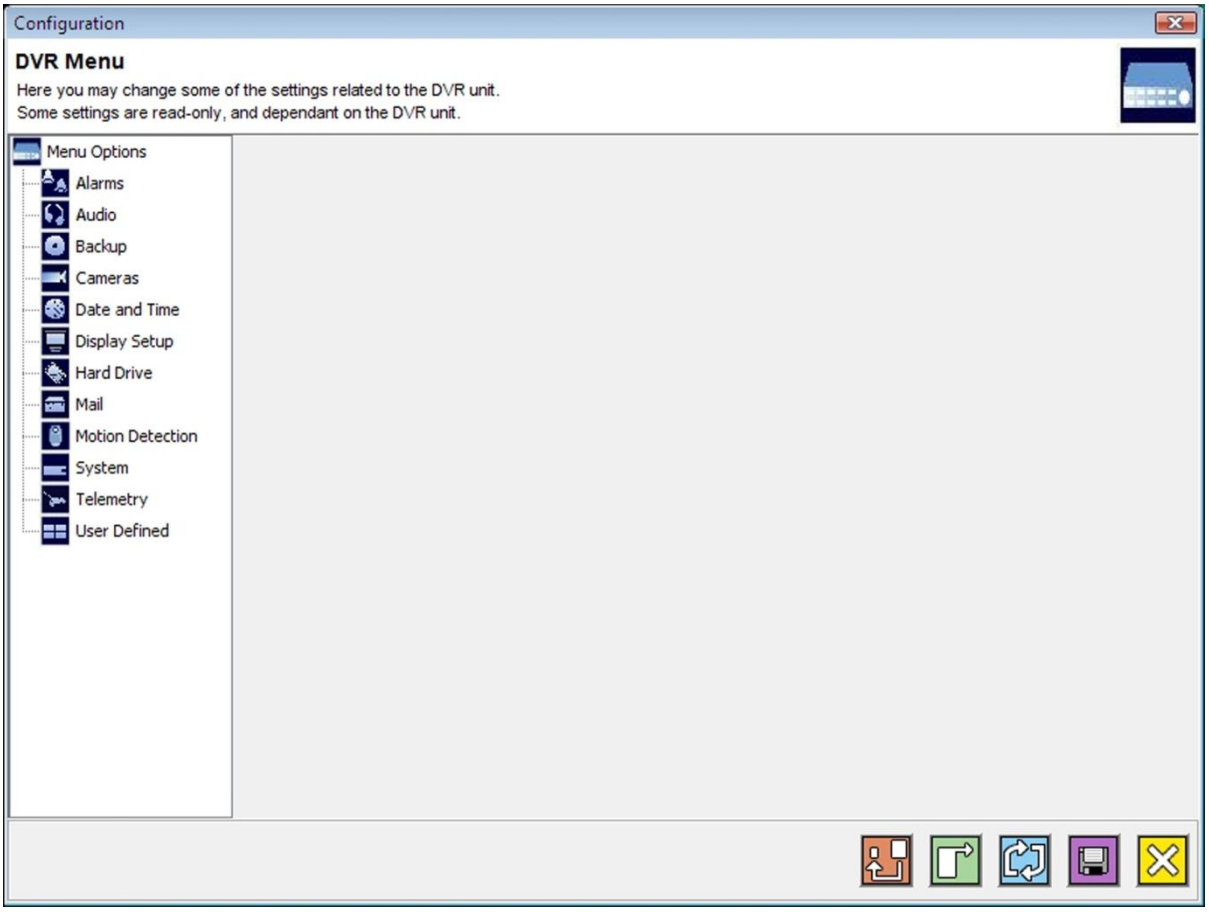

Figure 25 – Remote Setup Dialog

The sections that follow refer to settings directly affecting ImproNet, for details on all other settings, please refer to the Ganz Digital Video Recorder (DVR) Instruction Manual.

Alarms

Option	Description
General Tag	Lets you set the pre and post recording times and the Buzzer parameters for each listed alarm number.
Alarm Output 1 Tab	Allows selection of the following Closed Circuit Television (CCTV) triggers: – **Disk Full**—if checked, an alarm occurs when the disk is full. – **Admin Password**—if checked, an alarm occurs on entry of the incorrect Admin Password. – **Network Failure**—if checked, an alarm occurs when Closed Circuit Television (CCTV) network failure occurs. – **Event Partition**—if checked, an alarm occurs when the Event Partitions at maximum capacity. – **Select All Motion**—if checked, an alarm occurs when motions detected by ANY Camera. – **Motion On**—if checked, an alarm occurs when motions detected by ONE Camera. – **Select All Video**—if checked, an alarm occurs when videos lost on ALL Cameras.

Option	Description
	– **Video Loss On**—if checked, an alarm occurs when videos lost on any Camera. – **Alarm On Channels**—check the channel on which the Alarm conditions required. – **Alarm Off**—select Manual or Auto method of switching Alarm off.

Table 23 – Alarm Menu Options

Audio

This menu option lets you select the audio settings (**Associated Video Channel**, **Volume**, **Bypass On** and **Associated Audio Volume**) for each video channel on the Digital Video Recorder (DVR).

Cameras

This menu option lets you select various parameters for each camera connected to the Digital Video Recorder (DVR). These parameters include: **Brightness**, **Contrast**, **Saturation** and **Hue**. More complex options include:

Option	Description
Covert Monitor	The Camera is covert (not displayable or locked) on the Digital Video Recorder (DVR) monitor when you select this option.
Covert Web	The Camera is covert (not displayable or locked) on Graphics Runtime or through the Web when you select this option.

Table 24 – Camera Menu Options

Date and Time

This menu option lets you select various date and time related parameters. These parameters include: **Daylight Saving** and **Date Display**. A more complex option includes:

Option	Description
Time Server Setup	Time reference from another server.

Table 25 – Date and Time Menu Options

Display Setup

This menu option lets you select the display settings (**Sequence**, **Spot Monitor** and **Transparency Settings**) for each Digital Video Recorder (DVR) Monitor only.

Hard Drive

This menu option provides you with information about the Hard Drives in the Digital Video Recorder (DVR)

Mail

This menu option lets you enable mail notification; this means that notification of various Events (**Incorrect Administrator Password**, **Disk Full**, **Motion Detection**, **Alarm On**, **Menu Modified**, **Video Loss On**, **No Event** and **Event Conditions**) in the Digital Video Recorder (DVR) can be e-mailed automatically to designated e-mail addresses.

Motion Detection

This menu option lets you set up Camera motion detection options.

Option	Description
Area	Monitors only the selected screen area. (Define the selection by right-clicking the required squares on the Screen panel.
Full	Monitors the entire screen area.
Sensitivity	Sets the screen sensitivity.
Camera Details	Review the Camera details for each channel here.

Table 26 – Motion Detection Menu Options

System

This menu option provides system information for the Digital Video Recorder (DVR).

Telemetry

This menu option shows the selected Digital Video Recorders (DVR) **Unit Address** and **Baud Rate**.

User Defined

This menu option lets you define how you want the Cameras, attached to the Digital Video Recorder (DVR), to display in the Digital Video Recorder (DVR) Monitor.

Option	Description
Channel or Camera Selection	Select the Camera and Channel combination.
Screen Selection	Select the various screen formats.

Table 27 – User Defined Menu Options

USER NOTES