



Elite System

Key Concepts

Installation Guides

Fault Finding Information

Elite-ID Electronic Systems

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Overview & Goals

1. Outline the Elite System
2. Provide in-depth installation information for installers of the Elite System.
3. Provide technical information to assist in fault finding & recovery.
4. Provide user guides for equipment

Key Concepts – How It All Works

“Elite Reporter” is an ‘exe file that uses the “Borland database engine” (“bde”) to access a number of relational databases that store time-attendance data. The “bde” is loaded into your computer at installation time.

The result of using the system is a set of reports showing where staff move throughout the day. This information is very valuable for defending public liability claims. It shows that the areas where data has been logged have had staff in attendance.

The information is also used to show that the contractors are providing the labour that they are charging for – proof of work done. This is typical of security applications.

The time attendance data is logged by

1. A radio wand that uses an internal radio receiver to pickup data transmitted from radio transmitters placed around a shopping centre. This is called “The Voyager System”. It can provide up to 500 records per day per person – or more,
2. XL Data Wands. Used to touch an identification button called an “iButton”. Typically this might provide up to 150 records per day per wand,
3. Data is extracted from the data wands into an XL Memory Unloader,
4. Data is extracted from the Unloader and dropped into raw data “ascii text” files,
5. These ascii files are imported into the Elite Reporter software and then populate the relational database tables from which reports are printed.

Capacity of the system is very high. There are sites generating, storing, reporting and managing 300,000 records per month. The Elite Voyager System stores and handles this data load easily.

Error Batches

This is a key concept of the system.

When data is imported into the data bases, any data that cannot be imported for any reason (usually something has not been setup properly) it is left in a place called “the error batches”. This contains a message outlining the problem along with the data. The user can inspect the error cause, fix it, then re-process the batch to extract the data and populate the database tables.

Use the “Data...Reprocess” option to inspect the error batches. Again...anything in the batch cannot be reported on because of some problem. The most usual problem is that a logging point serial number is not installed or a wand serial number is not installed.

A section of this manual details using the error batches.

Dates & Times

The Elite System logs where people are at dates and times.

More than almost any other type of program, the date and time is used throughout the system to log and control data.

It is VITAL that the date and time in the PC are kept correct.

Next, it is VITAL that the date and time in the XL Unloader is kept correct. The Unloader software will warn the user if it is different from the PC by more than 1 minute.

Next and less obvious, the date and time are used when parts of the Elite Reporter system are configured. It is VITAL that the configure date and time pre-date any logged data. For example – if a wand hits a button and the button is installed at a date after the logging event happens – the system won't know where the button was when it was hit.

Windows Login

When Elite Reporter starts it requests the current user name from Windows.

This is the name of the user that was entered when you started Windows.

If this information is not available because you were not logged in correctly Elite Reporter will terminate with an exception that describes this error.

Solution : start Windows with a valid user name and password.

BACKUP of Data

There are TWO directories (also called *folders*) to backup;

Raw Data : C:\EliteData”

Backup all the folders within this folder. This is the raw data as logged by the wands. It will contain a large number of raw data “ascii text” files.

Databases : “C:\ProgramFiles\EliteReporte\db”

The “db” directory contains all the relational databases. It grows by six (6) files per month as well. Each months data is stored in its own set of data base files.

Precautionary Centre Audit Report.

Get the user to print a “Centre Audit”. Keep this report. It is a list of locations and the serial numbers of the logging points at them. It will be very valuable in the event of a rebuild being required.

Installation – Quickly!

As of April 2005 – there are approx 1000 installs of the Elite System across Australia.

It is unusual for an installation to fail.

The Elite System has been in use since October 1998.

Use this sequence to do a quick install of everything.

Overview

1. Install the CD
2. Copy the database in if you were supplied one (self loading CD usually – check instructions)
3. Configure the unloader program
4. Extract any data in any wands into the Unloader (switch on unloader and touch wands onto it)
5. Start the reporter program
6. Do a test by importing some data into the software
7. Run reports.
8. Show the users how to extract data from the Unloader, then import, then run a report.

Steps

1. Install CD. Insert it and allow it to install as per its suggestions.
2. If a database floppy or ZIP file was supplied, install it (un zipped!). Do this by using windows explorer to copy it to “C:\Program Files\Elite ID\EliteReporter\db”. Put the files into the DB directory.
3. Connect the XL Unloader unit via its serial cable to a COM port that DOES NOT have any modem software installed to it. We don’t share well with modems.
4. Make sure the XL Unloader is switched on – with a red flashing light.
5. Run the XL Unloader program. It will search the COM ports and install itself.
6. If this went OK – you will see an opening screen with the serial number, date and time in the unloader.
7. Press the “Configure” button. On the left, type in the name of the company into the “File Prefix” section. This is used the name data files.
8. Key the operators’ name into the next area below.
9. Close the screen
10. If there is any data in the Unloader, press the “Get Data” button. Allow it to extract to file (placed in “C:\EliteData\UnloadedData” folder).

Common Installation Problems.

Most installs of the Elite Voyager system go quickly and without fault. However – some fail :-

Privileges.

You must have administrator rights to the directories the system uses –“C:\EliteData” and “C:\ProgramFiles\EliteID”. This is more common on large corporate systems with XP and tight security.

Failed Database Engine Install.

This is very rare. Usually there is an old version of the BDE in the system or something that clashes. Oracle can cause problems. Try re-installing without first deleting (straight over the top again).

You are recommended to contact Elite-ID if you suspect this problem has occurred.

User Login Exception

This indicates that you did not log into Windows properly before starting Elite Reporter. Restart your PC and log in with a valid user name.

Install Elite CD & Configure Unloader Software

Install the CD

- Put CD into CD drive of computer. Wait for drive “busy” light to go out.
- The CD should “Auto Start” – start up automatically. (if not...”run...setup”)
- Tell it to install...allow it to install everything as per its suggestions.
- Installation is quick. Allow approx 1 to 2 minutes.
- Installation space is approx 70 megabytes.

What Installation Does

1. It creates the folders “C:\Program Files\Elite ID\Elite Reporter\db”
2. Puts executable files into the “EliteReporter” folder.
3. Populates the “db” folder with a set of blank database files.
4. Adds “bde administrator” icon into control panel.
5. Installs the Borland Database Engine into Windows folders.

Testing an Installation

1. Run the Elite Reporter program. It should ask for a login and password. Both are “Supervisor”. If this works then the database engine and some tables are all in the right spots.
2. Check that the “bde administrator” icon is in control panel. If not it indicates that there is a conflict with another old version of the bde components. Try re-installing the software. Failing this, resolution requires either removing all older versions of bde or a reload of windows or a new pc.

Configure Elite Unloader

- Connect your XL Memory Unloader to the computers COM port. Note which port it is – “1” or “2”.
- Switch your XL Memory Unloader ON. The red light should blink.
- Press “Start” then go to “Programs” then select “Elite ID” then select “XL Unloader”. Run this program.
- If your computer complains about its regional settings, go to “Start” then “Settings” then “Control Panel” then to “Regional Settings”. Ensure that your setting are set to; time is set as “HH/mm/ss”, the time separator is “:”, that the date is set as “dd/mm/yyyy”, that the date separator is “/”, that the language is set to “English (Australian)”.
- Press the “Configure” button.
- Press the “Test” button. If it reports “Failed” then the wrong COM port is selected – choose another – or press the AUTO button to automatically find the correct COM port and set it up for you.
- Go to the “Prefix” entry box – key in your company name or something similar
- Go to the “User Name” entry box – key in your name (Version 3 programs and above)
- Go to the date mode area – select Simple date.
- Press the “SHOW ME” button (version 3+). It will report any error of configuration. It will show you what Unloader data files will look like with the settings you have selected.

- If all this is done and you can press the “Test” button and get an “Ok” – your unloader is installed. Press “Close”.

Use Elite Unloader to Extract Data to Disk

- On the main screen – press the “Query Unloader Status” button. You will see the number of readings and other Unloader status information. This tells you that everything is working – Unloader / Cable / PC etc.
- After using the configure section to key in the company name and user name, press the “Get Data” button.
- You will be shown the file name and given the option of pressing save or cancel. Press save to copy data from the Unloader into a disk file.
- If you receive the “Invalid File Name” message – it is possible that the directory structure has not been created properly. Use Windows Explorer to ensure that “C:\EliteData\UnloadedData” folder(s) exist – and if not – create them
- Once the Unloading process has completed successfully, you can press “Delete” to delete the information from the Unloader unit – it is no longer needed since it is copied to disk.

If this has all worked then the Unloader is installed and working and you have configured it.

Basic Setup Elite Reporter Software

Overview

To configure the system, you must;

1. Create a Company Name – this is shown on reports
2. Create Job Functions
3. Create the list of wand users
4. Create the wand serial numbers and assign them to users
5. Create the names of the centres
6. Create the names of the locations at the centres
7. Create the serial numbers of the logging points – iButtons or Pulsars
8. Assign the logging serial numbers to locations
9. Setup the risk management times.

Note : the “Unlock Code” is used to open up hidden database maintenance options and is not required for normal program operation. Please ignore.

Pre-Configured DataBases

If you have installed a pre-configured database then most if not all the following steps have already been done for you. What we did at Elite-ID was to do all these steps and save it to a self loading CD. (previously a floppy or compressed ZIP file may have been used).

Testing the installation is done by using the maintain options in Elite Reporter and checking what is loaded. A blank database will not have any centre, location, button serial number or other information.

If you were sent a self-loading CD with a database, it will be labelled with the name of the database. Simply install the program CD then install the database CD.

Starting Elite Reporter

- Press “Start” then go to “Programs” then select “Elite ID” then select “Elite Reporter”. Run this program.
- Select the “Supervisor” login. The password is exactly the same. You must spell it the same with a capital “S”.
- You must create a “company”. You can have as many as you want – but you need at least one;
- Press “Maintain” then “System Configure”.
- Press “New” Key in your company name and the name you want at the top of reports. Press SAVE then close the form.
- Setup job functions. Press “Maintain” then “Job Functions”. You need at least one.

- Press NEW and key your job function in. Press SAVE. Repeat for all job functions. Close the form when done.
- Setup users. Press “Maintain” then “Users”. You need at least one.
- Press NEW. Enter the users name. Select the Job function. Press save. Repeat then press close when done.
- Setup wands. Press “Maintain” then “Wands”. Every wand must be setup this way.
- Press NEW. Enter the Wand serial number then press SAVE.
- Select the “Users” tab.users name. Select the user and a date prior to the user actually using the wand then press ADD.

Generate Daily / Local Reports

If everything has been installed, then you can generate some reports. These are the steps.

Method

1. Use Data Wands to record attendance's by passing near Pulsar Radio zones OR by touching the Data Wands onto iButtons™ glued to strategic locations.
2. Extract the data from Data Wands when reporting is to be done. (We suggest daily extraction)
3. Switch on the XL Unloader – get a red flashing light
4. Touch the Data Wands onto the XL Unloader till the "wig-wag" Wand Empty indication.
5. Switch off the XL Unloader when not in use (to conserve battery power)
6. Extract Data from the XL Unloader into the PC
7. Connect the cable between the PC and the XL Unloader
8. Switch on the XL Unloader
9. In the PC, run the "XL Unloader" program.
10. Press "Query Unloader" to check that the XL Unloader is switched on and connected properly.
11. Press "Get All Data" button to extract data from the Unloader into a disk file
12. When complete and if you are not going to send the data via modem to a remote site, press the "Delete" memory button.
13. Print Reports by;
14. Import the data into Elite Reporter using the "Data . . .Import" function.
15. You select the disk file created by the Unloading process previously
16. Import the data. If there were errors, you should check them and fix them. You can't report on data that is in error (something is not configured properly usually)
17. Select the "Reports . . ." main menu and then select the report you want to use.
18. Make sure the date, centre, job functions are selected as required.
19. We recommend as the main reports...
20. Reports... Centre...Visits report for a simple running list of attendances by time
21. Reports...Location... Attendance report for a graphical report of attendance
22. Reports... Risk Management report for calculated average attendance times

Loading a Pre-configured Database on CD

As a service to clients, Elite-ID Electronic Systems can create a database to client specifications. This is loaded into an “auto starting” CD and will, with confirmation, install itself into the computer.

WARNING : Only install this CD ONCE. It will over-write any old settings.

Using The Pre-configured Database On CD

- Install your Voyager Program CD FIRST,
- After installing the programs, insert the Pre-configured Database CD,
- Allow it to install the database,
- Start Elite Reporter. User is “Supervisor”. Password is “Supervisor”.

Preconfigured CD – Older Floppy Disk Version

Prior to 2005.

The following information is useful if you have been supplied a pre-configured data-base on **floppy** disk that you want to copy into Elite Reporter. (note this process is now obsolete since the newer self loading CDs install quicker and more easily).

Overview

- Elite Reporter maintains all its proper data base files in a directory called “db” located in “C:\ProgramFiles\EliteID\EliteReporter.
- After a “new install” and if you are going to copy in a pre-configured data-base, we suggest that you rename the “db” directory (also called a folder) to “BlankDB” – so you know what it is later.
- Next – copy in the “db” directory from the floppy disk into the same place. Note well – the “db” directory must be inside EliteReporter directory.
- Run Elite Reporter software to prove that it works.
- If it does not work, it is almost guaranteed that the “db” directory is in the wrong place.

Copying the “db” in detail

- Install your Program CD FIRST.
- Start Windows Explorer.
- Insert the floppy disk into your computer.
- Select the floppy disk – this is usually the “A:” drive.
- You should see the “db” directory. Click on it so that it is highlighted.
- At the top of the screen, select the “Edit” menu then select the “Copy” option.
- Now – select the “ProgramFiles” directory of your computers “C:” drive.
- Next select the “EliteID” directory. Inside this will be the “EliteReporter” directory.
- Inside the EliteReporter directory is the “db” directory. Select it. The “db” directory will be highlighted.
- Select the “File” menu at the top of the screen. Select the “Rename” option – then key in the new name – we suggest that you use “BlankDB” as the name.
- Next – click on the “EliteReporter” directory again so that it is highlighted. Make sure of this. Critical.
- Next – click on the “Edit” menu again then select the “Paste” option. Data will now be copied from the floppy disk. It may take a minute or two.
- Check that it has been done correctly. Select the “EliteID” directory. Inside this is the “EliteReporter” directory. Inside “EliteReporter” directory is the “db” directory and the “BlankDB” directory.
- Start EliteReporter software (use “Start” then “Programs” then “EliteReporter”). If you can log into the program then use the “Maintain” menu options all is well.
- If the “Maintain” menu options are greyed out and the program complains about missing files then the “db” directory is not in the correct place – please check and correct it.

Adding NEW iButtons™ to the Elite System

Briefly

Adding a new iButton™ or a radio logging point (“Pulsar”) to the Elite System is a simple and straight forward process if you follow some easy steps.

We suggest you write down the serial number & where it is to be installed, then log the button with a wand, import it into Elite Reporter, then use the error batch and wizard to complete the install. It is quite quick.

This way is guaranteed to give you a good result.

In Detail

1. Write the serial number from the iButton™ onto a piece of paper along with the name of the centre and the location at the centre where you are going to install it.
2. Log the button with an XL Data Wand
3. Unload the wand into an Unloader, get the data from the Unloader, Import into Elite Reporter
4. The new button(s) will be “in error” – the serial number is unknown – not recognised.
5. Open the Error batch (Data...Reprocess) option. Select the batch with the new serial numbers in it, select the serial number, and press the “Copy” button
6. Use the Wizard
7. Tell it you want to add a **new** button.
8. Paste the button into the serial number section at the top.
9. Select an existing centre if you are adding this button to a site you have already got buttons at – OR- select new centre **only** if you have never installed there before.
10. If a new Centre.....key in its name on the form then press “save” then close the form.
11. Do the same for location.....select an existing location if you are replacing a button –OR- select new to add the button to a totally new location (key in its name, save, close the form).
12. Select an install date that is before the button was hit (so that the program knows where the button was when it was hit).
13. Save. The Wizard will setup the databases with these new configurations for you.
14. Select the first line of the batch...then press the “re Import” button. This will process the data and since you’ve added the button to the database, it will take it out of the error batch and you can now generate a report on it.

That is all. Next time you import data with this button in it, it will automatically go into the data base.

An import point in all of this is that anything that is “not known” is left in the error batches. You can inspect them, determine button locations, update your data base, re-import the data and generate reports.

Importantly, data is not lost, it is always available and you can fix problems as they arise.

Adding NEW Wands to the Elite System

Adding the Wand

Until a data wand is installed into Elite Reporter, data will not be accepted – it will remain as an error in the error batches. You will not be able to generate a report for data from the wand(s).

Basically – you need to tell Elite Reporter the serial number of the wand and assign it to a user.

Do this by;

1. Use the “Maintain Wands” menu option.
2. press the “New” button (this creates a new record in the wands database),
3. enter the serial number of the new wand,
4. press “Save”,
5. select the “Users” tab,
6. select the user from the drop down list of users,
7. select a date before the wand was first used,
8. finally, press “Add”. You will see the new assignment in the list of assignments for this wand.

Note : If you need to assign the wand to a **new** user, you must add the user **before** adding the wand.

If there is any data for the wand in the error batches, all you need to do is use the “Re-import” or “Re-All” options in the “Data Reprocess” option (select the batch first). Data will be moved from the error batches into your reports.

Importantly, in the Elite System data is not lost, it is always available and you can fix problems as they arise.

The “Error Batches” is the place you check to find out if there is data in the system that has not been accepted because of missing configurations.

You can re-process an error batch to make use of data after you have changed your configurations.

Missing Data Information

There is nothing more annoying than performing patrols, using your wands and then not being able to generate a report for some reason.

The following is “data finding” information designed to help you locate data, fix errors and generate reports.

The following is a list of steps to use to check your system for data that may not have been used or not available for reporting.

Steps

1. Check the Error Batches. This is the number-one place to check for any data that has not been properly imported into the Elite System. If there is data in the error batches, it will not be included in any reports. Open batches, inspect errors, rectify and re-process.
2. When you imported the raw data files, were there any special messages? If so, contact Elite-ID.
3. Check for any files in “Unloaded Data”. In other words. Have you imported ALL your files? Anything not imported cannot be reported on.
4. Did you extract data from ALL your wands? Did you extract data from the XL Unloader?
5. Is your XL Unloader clock correct? If it has the wrong data and time (because your PC is not setup correctly) then this will enter the wands and hence your reports will be wrong. Contact Elite-ID for assistance – there are ways of fixing this.

Don't hesitate to contact Elite-ID if you need assistance.

Error Batch Error Message Specifics

The following is a list of the most common error batch reasons why data cannot be imported.

Unknown Serial Number

You have not put this serial number into Elite-Reporter. It has no knowledge of this button.

Fix : Select the line. Press “Copy”. Press “Wizard”. Press “New”. Paste the serial number, assign to an existing or create a new centre, same for location. Make sure the install data is prior to this button being first fit. Save. Reprocess.

Unknown Wand

The wand that hit the button has not been installed into the system.

Fix : Use Maintain Wands to add the wand, save, then assign the wand to a user. Reprocess.

Wand Not Assigned To A User

As it says! The wand has been coded into the system but you have not assigned it to a user.

Fix : Use Maintain Wands, select the wand, select a user and press “add”. Reprocess the batch.

Button No xx not assigned to a location

The button serial number has been installed into the system but it has not been assigned to a centre and location.

Fix : Use Maintain Buttons. Find the button. Select a centre and location. Make sure that the install date is prior to when the button was first hit.

Button Not Assigned to a location on dd/mm/yy

As it says. The system tried to use the data but found that the button was hit at a date prior to when it was assigned to a location.

This may sound pedantic but it is important! Every time data is imported, the date of installation of the button is checked and data is assigned to locations accordingly. This allows buttons to be moved from location to location and data allocated correctly.

This error can also be caused if a wand real time clock is reset to year 2000 by being allowed to go flat and not reset with an XL Memory Unloader. The date and times of attendances are shifted back in time. If your Unloader has the correct date and time in it, send the data file to Elite-ID for checking and possible repair.

Fix : Use Maintain Buttons, find the button, use the location tab to assign to the correct location and date and time to suit the date it was hit.

HARDWARE USER GUIDES

XL Memory Unloader

Switching On

1. Switch on. Charging bypasses the on-off switch (to on).
2. Alternating LED and beeping indicates internal fault.
3. Diagnose faults with “XL Unloader” PC program,
4. Switch off when not in use. Charging bypasses the on-off switch (to on).

Charging & Battery Care

1. Connect XL Unloader to plug pack & switch plug pack on.
2. Leave on charge for 12 hours (from flat).
3. Battery life from new full charged battery approx 10 hours.
4. Disconnect from charge after 12 hours.
5. Only charge when necessary (to reduce battery memory effect).
6. Periodically flatten battery and recharge (to reduce memory effect).

Unloading Data From Wands (either XL Data Wand or Radio Wands)

1. Switch on XL Memory Unloader.
2. Connect Data Wand to front panel “can”.
3. Flickering Data Wand led indicates data transfer.
4. XL Memory Unloader beeps every 16 readings unloaded.
5. Alternating red & green led flashes indicate empty Data Wand.
6. Failure to unload XL Data Wand indicates Data Wand fault.

Connecting To a PC

1. Direct connect (no null modem required).
2. Use the “XLUnloader” program supplied.
3. Only delete memory when XL Memory Unloader is on charge.

XL Data Wand (iButton only Wand)

1. Touch XL Data Wand onto button.
2. Single long beep and long red led flash indicates good read.
3. Extra beeps on good read indicate XL Data Wand full.
4. Double flash and double beep indicates a re-read of same button.
5. Do not allow XL Data Wand to become flat (clock stops).
6. Flat XL Data Wands must be recharged for 12 hours minimum.
7. Flat XL Data Wands must have their clocks reset with XL Unloader.
8. Reading capacity 4095 readings.
9. Battery life approximately 13 weeks when new from a full charge.
10. No user serviceable parts inside, box glued shut, battery soldered in.

Recharging XL Data Wand & Battery Care

1. Recharge XL Data Wand each week preferably.
2. Recharge XL Data Wand till green charger light clears.
3. Yellow charger light indicates flat XL Data Wand.
4. RED Led on charger indicates fault – Wand not connected properly.
5. Recharge time dependant on use time (approx 4 to 8 hours weekly).
6. Do not allow XL Data Wand to become flat – real time clock lost.

Testing XL Data Wands

1. Short out XL Data Wand probe with a coin.
2. After approx 1 second Red led lights and beeper sounds.
3. Short out XL Recharger button- all leds light.

Voyager Radio Wand

Data and Fault Leds

Short “data” led blinks when close to a radio ID point.

Fault led flashes if

1. bad read of iButton™ (try again) or
2. battery flat (charge please) or
3. real time clock not working (touch onto Unloader to reset).



Battery and Charging

Please charge wand every day for approx 6 to 8 hours.

Led at rear of wand lights when charging. Important.

Operation life from fully charged new battery approx 40 hours.

Battery recharge time from flat approx 12 hours.

Do not allow battery to remain flat for long periods – battery will be damaged

Voyager - Pulsar

Installation Guidelines

- The front faces direction of maximum radio output.
- Ideal height is 3 metres off floor.
- In multi-level sites, avoid installing near voids

Testing During Installation

After each Pulsar is installed, use a Radio Wand to test the range of the Pulsar.

This is essential : check that the pulsar range is correct.

Testing – Daily

We recommend that every day, a check of all pulsars and wands is done.

Most importantly, check that all Radio Wands are receiving data at the correct ranges.

Precautions

Pulsars must be sited so that the radio signal has a clear path to the required areas.

Concrete and steel will reduce or stop radio signals depending on thickness and type and therefore there will be “blind spots” behind pillars etc.

Radio signals penetrate plaster and wooden walls and doors.

Options

Unless otherwise noted, Pulsars are supplied in “Medium Range” mode. This suits most applications.

Other range options can be supplied on request (no extra cost).



Indicators

At power up both red and green leds flash.

Every few minutes the red led flashes to indicate a self test in progress.

If the red led stays on it means there has been an internal failure. Contact Elite-ID.

Operation

Approximately every second the Elite-ID Pulsar transmits an extremely low power identification signal for a very short period of time.

Passing staff carrying an Elite-ID Radio Wand will record the signal from the Pulsar into their memories for later extraction and reporting.

Normal Operation

The green flashes indicate a transmission.

Occasional short red flash indicates self test.