



OPN_LOGGER
(SQL COMPACT EDITION)
GETTING STARTED GUIDE
V. 1.01

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1.0 INTRODUCTION

The system is designed to provide a simple and flexible solution for a wide range of general logging tasks including:

- Equipment location or 'ownership' tracking
- Safety inspections and maintenance logging
- Job tracking
- Logging of equipment to site
- Simple equipment loans
- Etc.

Equipment tracking data collected using the OPN2001 may be easily downloaded to the system database via USB, to maintain an accurate record of both the current and historical equipment locations and statuses.

Standard reports included with the system include current and historical location and status reports. The Current equipment location/status may also be exported from the system in Excel format or as a simple text file for processing and reporting by other systems.

Equipment may be associated into groups or categories for reporting, and if required an optional 'Download Reference' may be entered when loading the stored tracking data into the database. This download reference may be used for a wide range of functions including specifying an expected return date for equipment being sent out on loan.

A barcode label printing facility is included as standard, allowing Equipment labels, Operator ID labels, Location labels and Status labels to be generated direct from the system database. Alternatively barcodes can be generated from other systems as required.

OPN-Logger is available with single or multi-user database. This User Guide relates to the single user database edition of OPN-Logger.

1.0 INSTALLATION

The system software and OPN2001 drivers may be installed as summarised below:

Notes:

- The .NET 2.0 Framework is a prerequisite of OPN-Logger.
- Some aspects of the software installation may require administrative privileges

1.1 INSTALLING OPN-LOGGER FROM CD

To install the OPN_LOGGER software from CD proceed as follows:

- 1) Run the installer **setup.exe** from the system CD and follow the prompts. (*Setup.exe will normally attempt to install the required .NET 2.0 Framework if not present on the PC*)
- 2) Run **CRRedist2005_x86.exe** to install components used by the software reports module
- 3) OPN_Logger is now installed.
- 4) Now run OPN-Logger and proceed as shown below to create the system database:

1. Click **Tools > Options** from the program menu bar

2. Click **Create Database**

3. Specify a location and name for the database file and click **OK**.
The default location for the database is:
C:\ProgramData\Electronic Reading Systems Ltd\OPN-Logger

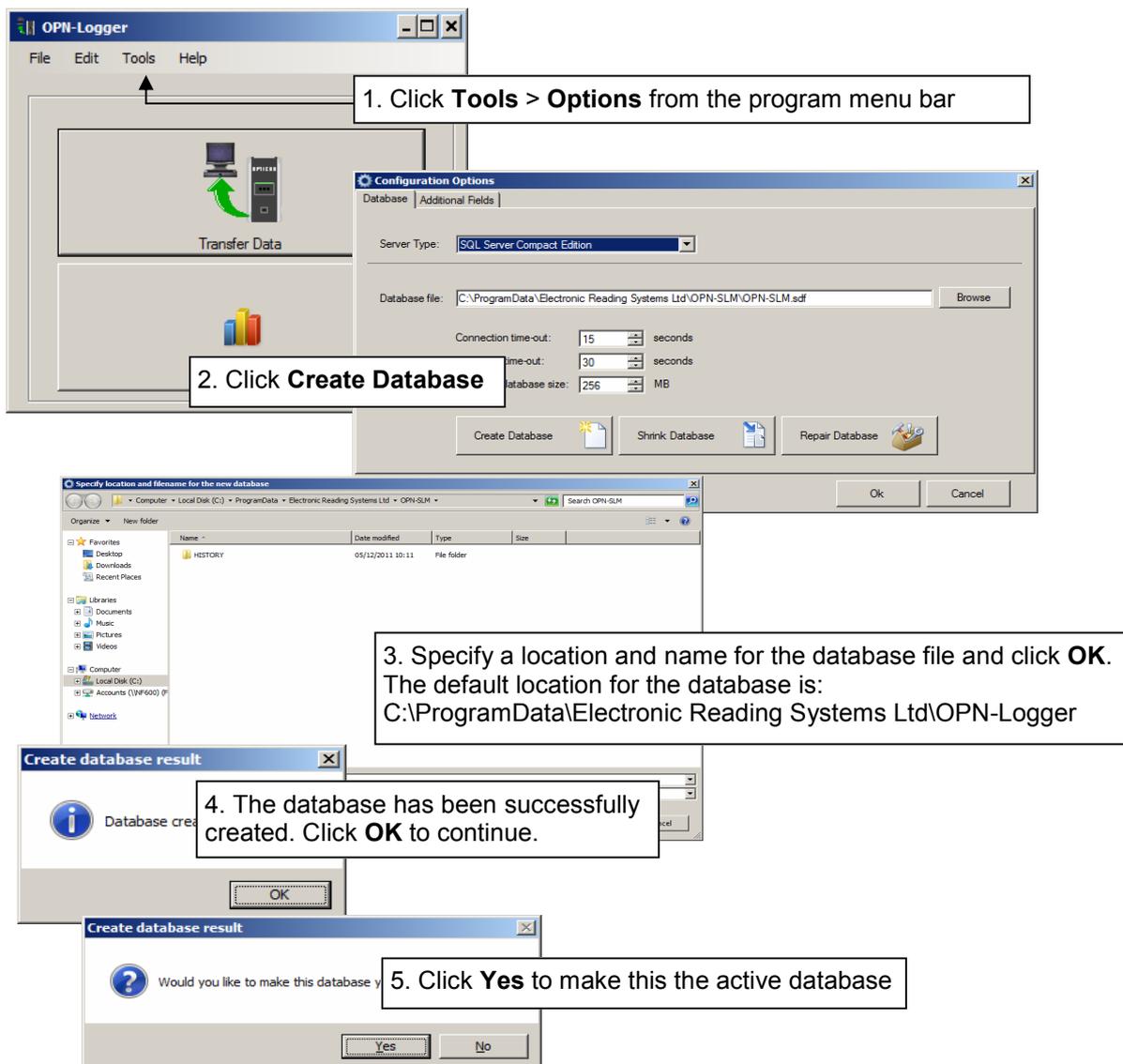
4. The database has been successfully created. Click **OK** to continue.

5. Click **Yes** to make this the active database

1.2 DOWNLOADING AND INSTALLING OPN-LOGGER FROM ERS WEBSITE

To download and install OPN-Logger from the ERS Website proceed as follows :

- 1) From the OPN-Logger product page click **Product Downloads** from the black menu bar below the product description
- 2) Download **OPN-Logger Demo Install** and **OPN-Logger Demo Reports Install**
- 3) Run the downloaded OPN-Logger Demo Install file (**OPN-Logger.msi**) and follow the prompts. *(Note that the downloaded msi installer will **not** attempt to install the required .NET 2.0 framework if not already present on the PC. In this case contact ERS for a copy of the installation kit which includes the .NET 2.0 framework)*
- 4) Run the OPN-Logger Demo Reports Install file (**CRRedist2005_x86.exe**) to install components used by the OPN-Logger reports
- 5) OPN_Logger is now installed.
- 6) Now run OPN-Logger and proceed as shown below to create the system database:



1.3 LICENCING OPN-LOGGER

After initial installation the software will run in demonstration/evaluation mode where the max. number of records in the database will be limited.

To licence the software for normal use click **Help > Licence Management** and proceed as follows:

1. Click **Help > Licence Management**

2. Click **Change Licence**

3. OPN_Logger generates a random Keycode. Contact ERS for the relevant release code

Description	Status
Single User	Enabled
Read Only	Disabled
OPN Licence Validation	Disabled

1.4 INSTALLING THE OPN2001 DRIVERS

To install the drivers for the OPN2001 run the Opticon Driver Installer (**USB Drivers Installer.exe**) from the system CD and proceed as shown below.

Note: Do not connect the OPN2001 data collector onto your PC until after the drivers have been installed below

1) Click **Run**

2) Click **OK**

3) Click **OK**

4) Click **OK**

5) Click **OK**.
The OPN drivers are now installed

6) Connect the OPN2001 to the PC. The Windows Found New Hardware wizard will automatically complete the installation of the device. This may take a few moments

1.4.1 CHECKING THE DRIVER INSTALLATION

The driver installations can be checked via the Windows Hardware Device Manager as follows:

The Windows Device Manager may be accessed by right-clicking **My Computer** then selecting **Properties** from the drop down menu.
Go to the **Hardware Tab** and click **Device Manager**

Connect the scanner to the PC and from the **Windows Device Manager** expand the **Ports** section. The scanner will be listed with a description similar to:
Opticon USB Code Reader (1D) (COMxx)

1.5 SYNCHRONISING THE OPN2001 REAL-TIME CLOCK

The real-time clock in the OPN2001 will be automatically synchronised to the PC clock when connecting to OPN-Logger to transfer data.

Since the transaction date and time is used by OPN-Logger to determine an item's latest Location or Status we make the following recommendations:

- 1) Before using the system connect each OPN2001 to OPN-Logger and click **Transfer Data** to initialise the clocks (see Section 4.0 - Downloading the Data Collectors)
- 2) In normal use the data collectors will be regularly synchronised during the download process. If a data collector has not however been used for an extended period of time it may be advisable to synchronise its clock by connecting to OPN-Logger and clicking **Transfer Data**
- 3) After ad hoc regional time changes (eg: BST) make sure the data collectors are again re-synchronised to the correct time before proceeding to scan items. Failure to do this will log items with the incorrect date/time stamp until the terminal is subsequently downloaded and the clock is synchronised.
(In the majority of cases this will have no detrimental effect however if an item is scanned into a location before being synchronised to the ad hoc time change, and is then scanned to a different location shortly after synchronisation, the ad hoc time change could result in the wrong record being used when reporting the latest location for the item).

2.0 OPN_LOGGER DATABASES

OPN_Logger incorporates a number of internal databases as summarised below.

OPERATORS - A database of operator names may optionally be created in order to track the operators performing the logging if required

ITEMS - A database of the items being logged may be maintained including Item description and up to 4 additional fields (Note: The titles for the additional fields are user configurable - see section 2.3 below)

LOCATIONS - A database of location descriptions may be maintained. These will be the locations to which items will be logged.

STATUS CODES - a status code may also be associated with each item being logged. This might for example indicate the condition of the item, or flag that the item requires calibration or repair work etc. A database of status code descriptions may be maintained as required.

In addition OPN_Logger includes a **Transactions** database which is used to hold the tracking data downloaded from the data collectors. (See Section 4.0 below)

The Operators, Items, Locations and Status Codes databases may be initialised by file import, or by manual editing via the PC keyboard (See sections 2.1 - 2.3 below).

2.1 IMPORTING OPERATORS, LOCATIONS, ITEMS AND STATUS CODES

To import details of Operators, Locations, Items and Status codes proceed as shown below. (Note: Formats for the import data files are summarised in APPENDIX 2 below)

1. Click **File > Import** from the program menu bar and select the type of file to be imported from the list

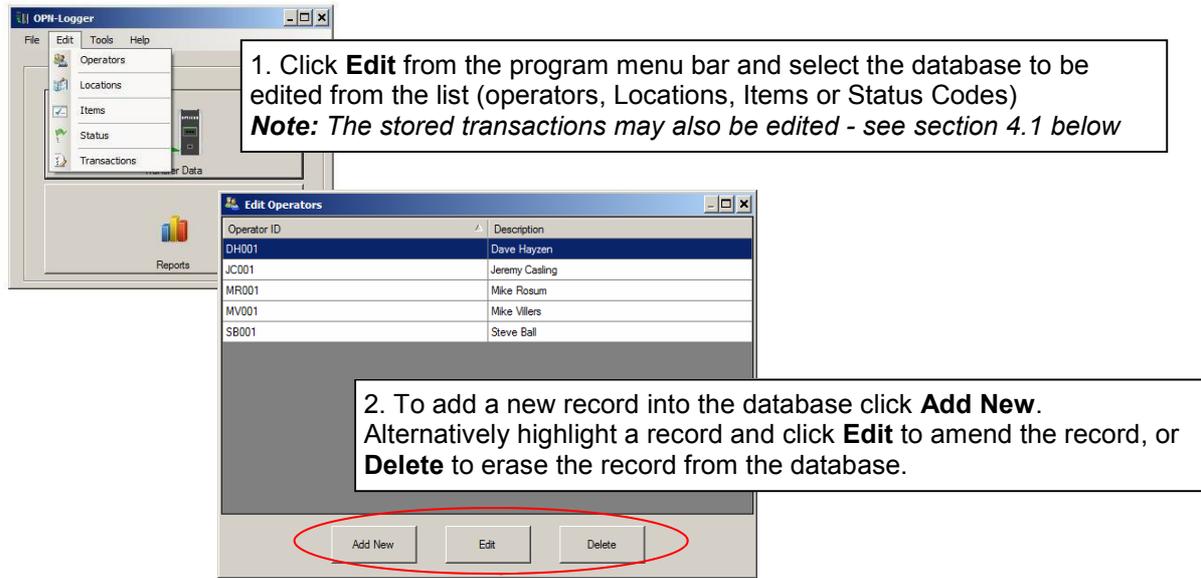
2. Browse to the location where the file is stored and click **Open**.

Name	Date modified	Type	Size
BarTender	05/03/2012 13:56	File folder	
BarTender	13/09/2011 09:17	File folder	
My Data Sources	27/01/2012 16:44	File folder	
My Videos	14/07/2009 05:53	File folder	
My Widgets	25/08/2011 10:53	File folder	
Remote Assistance Logs	16/03/2012 15:32	File folder	
Seagull License Server	03/10/2011 17:23	File folder	
Send	15/09/2011 18:07	File folder	
DATA.TXT	13/03/2012 10:59	Text Document	1 KB
test.txt	30/11/2011 13:47	Text Document	1 KB

3. The relevant database will be initialised with the data imported from the file. **Note: The import will overwrite the database.**

2.2 MANUALLY EDITING THE SYSTEM DATABASES

The system databases may also be initialised or edited via the PC keyboard as follows:



1. Click **Edit** from the program menu bar and select the database to be edited from the list (operators, Locations, Items or Status Codes)
Note: The stored transactions may also be edited - see section 4.1 below

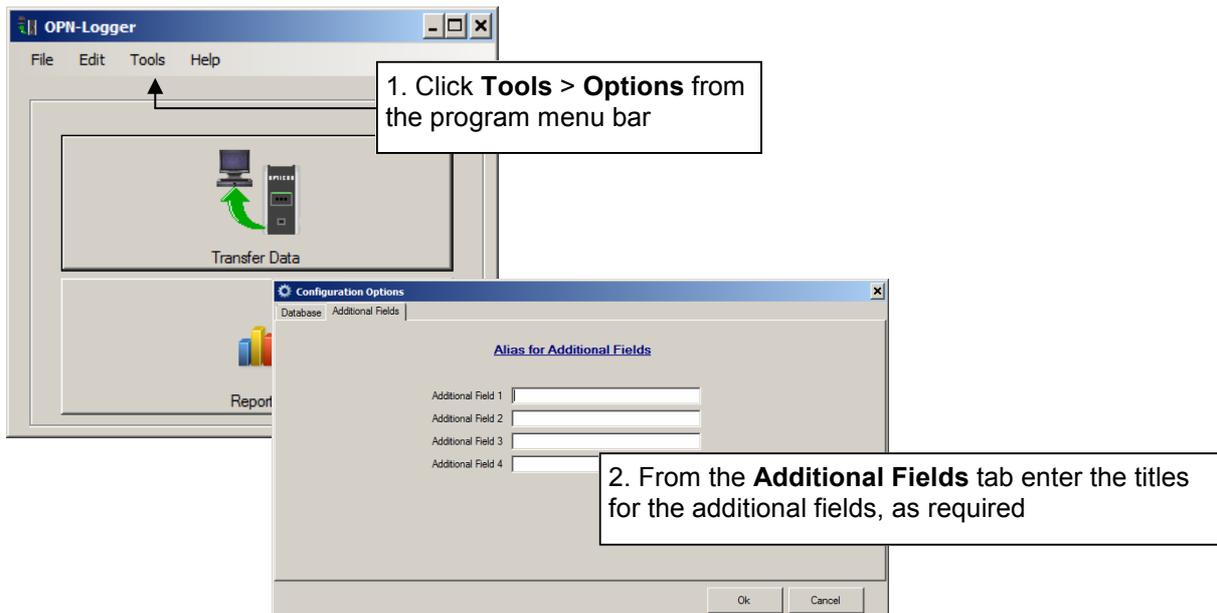
2. To add a new record into the database click **Add New**. Alternatively highlight a record and click **Edit** to amend the record, or **Delete** to erase the record from the database.

2.3 CONFIGURING THE ITEMS DATABASE ADDITIONAL DATA FIELDS

The items database includes the barcoded Item ID and description together with 4 additional database fields.

These additional fields may be used as selection criteria when configuring a set of data for reporting. For example an additional field might be used to group equipment of a similar type together for maintenance or safety checking purposes

The titles of these additional fields are user configurable, as follows:

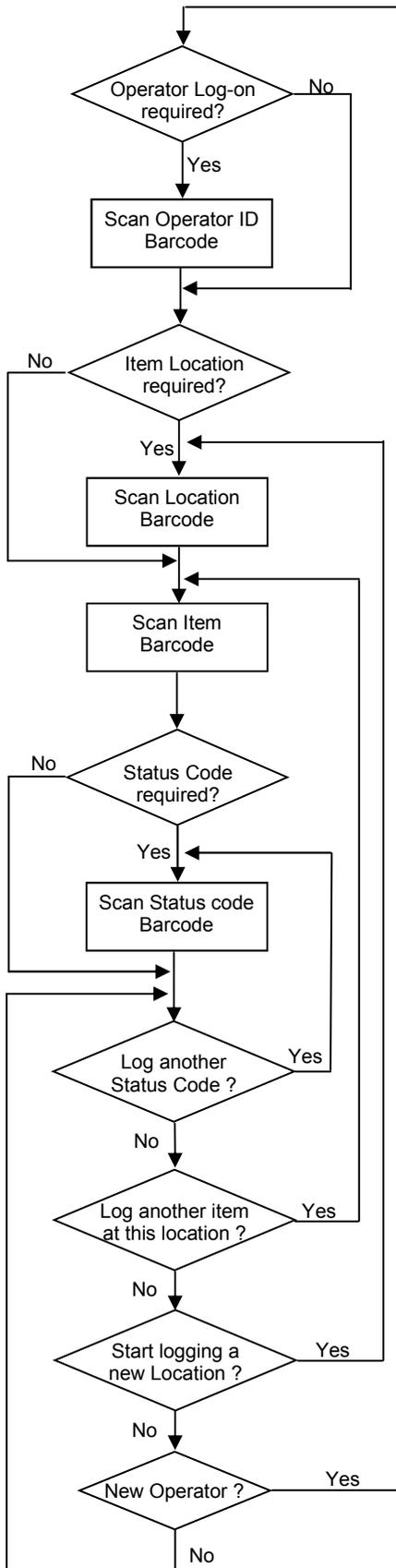


1. Click **Tools > Options** from the program menu bar

2. From the **Additional Fields** tab enter the titles for the additional fields, as required

3.0 LOGGING ITEMS

The OPN2001 data collector may be used to track item locations and log item statuses by scanning barcodes as shown below: (Refer also to **Appendix A** below for details of barcode data formats)



1. If required the operator performing the logging can be logged by scanning an Operator ID. **Note:** There is no 'Logoff' function - an operator will automatically be logged off if another operator logs on, or after the data collector has been downloaded.

2. If the item is being logged to a location the relevant Location barcode will now be scanned. This is optional and is only required if booking items to a location

3. The item barcode will be scanned

4. One or more Status codes may be attached to the item if required. These are optional and are only required if the item status is to be logged.

4. Depending on the requirement the operator may now:

- Scan another status code against the item
- Scan another item to the current location
- Scan a new Location code

Alternatively a new operator may 'Logon' by scan an Operator ID

Note: Scanned data will automatically be date/ time tagged and stored in the data collector for subsequent downloading to the OPN_Logger 'transactions' database (see section 4.0 below).

4.0 DOWNLOADING THE DATA COLLECTORS

To download stored data from the data collectors proceed as follows:

Note: The Transfer Data facility will automatically synchronise the OPN2001 real-time clock. Before using the data collectors we therefore recommend using the Transfer Data function to ensure all the devices are synchronised and set to the correct time

1. Connect the data collector to a suitable USB port on the PC and click **Transfer Data**

2. Click to enable entry of a download reference, if required. This Reference will be attached to the data downloaded from the OPN2001 and may be subsequently used as a selection criteria when reporting.
If using OPN_Logger to regularly audit asset locations, the download reference can for example be useful in identifying assets which have not been scanned during the current audit.

3. OPN_Logger connects to the data collector and downloads stored data.

4. OPN_Logger synchronises data collector to PC Clock

5. enter a download reference (if required)

4. Download successful. The data collector may be disconnected.
Note: stored data will automatically be cleared from the data collector after a successful download.

4.1 EDITING THE DOWNLOADED TRANSACTIONS

The downloaded transactions may be edited or new transactions manually entered if required, as shown below:

1. Click **Edit > Transactions** from the program menu bar

Operator ID	SerialNo	Location	Item	Status	DTS
	026288	LOC001	IT001		10/04/2012 16:57:42
	026288	LOC002	IT002		10/04/2012 16:57:43
	026288	LOC003	IT003		10/04/2012 16:57:46
	026288	LOC003	IT004	SC001	10/04/2012 16:57:49
	026288	LOC003	IT004	SC002	10/04/2012 16:57:49

2. To add a new record into the database click **Add New**. Alternatively highlight a record and click **Edit** to amend the record, or **Delete** to erase the record from the database.

3. Enter or amend the relevant transaction details and click **OK** to update the database

EDIT Transaction

Operator ID:

Serial No.:

Location Code:

Item Code:

Status Code:

DTS:

Note: The Serial No. of the data collector used to log the item is also stored in the transactions database. This may be used as part of the data selection criteria when running reports but is otherwise not used by the system. The device serial no. is optional when manually adding or editing transactions.

5.0 RUNNING REPORTS

A selection of standard reports are incorporated into the system. To run reports proceed as follows:

The screenshot shows the OPN-Logger application window. The 'Reports' button is highlighted with a callout box: "1. Click Reports". A 'Reports' dialog box is open, showing a list of report types. The 'Current Location [By Item]' report is selected. Below the list are fields for 'Operator ID', 'Location Code', 'Item Code', and 'Additional Field 1-4'. The 'End Date' is set to 10/04/2012. 'Run Report' and 'Clear Selection' buttons are at the bottom.

2. Select the report type required from the list, and selection criteria for the data. Click **Run Report** to generate the report

Current Location [By Item]
Printed on Wednesday 25 April 2012

Item	Location	Last Status	Operator	Reference	Scan Date
IT001 - Office Chair Type 1 Blue, Large, 23kg, 1	Stock Room		Dave Hayzen	23 test	23/04/2012 14:49:55
* IT002 - Office Chair Type 2 Red, Large, 23kg, 1	Stock Room	SC004	Dave Hayzen	23 test	23/04/2012 14:49:55
IT003 - Office Chair Type 3 Blue, Medium, 21kg, 1	Stock Room		Dave Hayzen	23 test	23/04/2012 14:49:56
IT004 - Office Chair Type 4 Red, Medium, 21kg, 1	Stock Room		Dave Hayzen	23 test	23/04/2012 14:49:56
IT005 - Office Desk Type 1 Oak, 6x4, 40kg, 1	Sales Floor	* SC005	Dave Hayzen	23 test	23/04/2012 14:50:01
IT006	Sales Floor		Dave Hayzen	23 test	23/04/2012 14:49:57
Total : 6					

3. The report is generated.

Note:

- Data records which have been manually entered or edited will be highlighted with an asterisk in the left hand column.
- If multiple Status codes have been entered against an item only the last Status code entered will be shown in the Current Locations report. In this case the status code will be prefixed by an asterisk. Run the Current Status report to view all the Status codes for that location.

6.0 BARCODE PRINTING

OPN_Logger includes a facility to print item and location barcodes using the Toshiba B-EV4T desktop label printer. This option may be used to generate 70mm x 32mm self adhesive paper or polyester labels including (where necessary) the relevant formatting characters as summarised in Appendix 1 below.

To print barcoded labels click **Tools > Barcode** printing and proceed as shown below:

The screenshot shows the 'Barcode Label Printing' window. At the top, there are navigation tabs: OPERATORS, LOCATIONS, STATUSES, and ITEMS. A callout box points to these tabs with the text: '1. Select type of label to be printed'. Below the tabs, a large grey area contains the text: 'The label printing option works with the B-EV4T thermal label printer with 70mm x 32mm paper or polyester labels'. The main interface includes a 'Select All' checkbox, a 'Printer Model' dropdown set to 'Toshiba EV4T-GS13-QM-R', and a 'Label Media' dropdown set to 'Z-Select 70mm x 32mm'. There are four 'Label fields' dropdown menus, all currently set to 'None'. A callout box points to these fields with the text: '2. Configure the format of the Labels. Use the relevant drop down list to select up to 4 lines of data from the OPN-Logger database for the labels. Once configured this format will remain as default until subsequently changed. In this example an item label has been configured to include the item code (as a code39 barcode), the item code (as text) plus the item Description. The 4th line in this example hasn't been used.' A second callout box shows a zoomed-in view of the 'Label fields' configuration: Field 1 is 'Item Code (Code 39 Barcode)', Field 2 is 'Item Code', Field 3 is 'Description', and Field 4 is 'None'. Below the configuration, there is a 'No. of copies' input field set to '1' and a 'Print' button. A third callout box points to a search bar at the top of the data table with the text: '3. Use the search facility to display a specific record as required, or use the * wild card to display all records'. Below the search bar is a table with columns 'Item Code', 'Description', and 'Additional Field 1'. The table contains the following data:

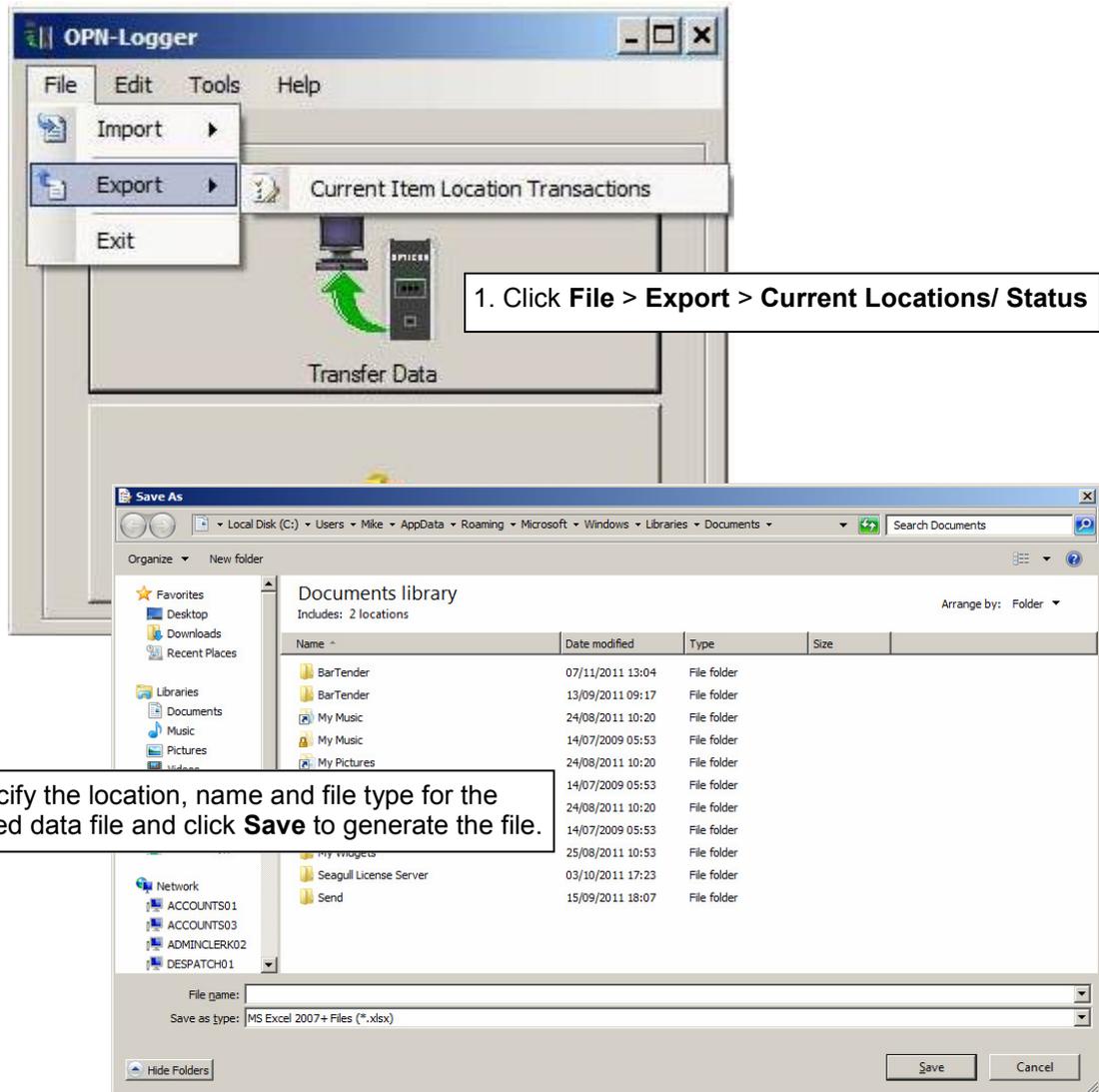
Item Code	Description	Additional Field 1
IT001	Office Chair Type 1	Blue
IT002	Office Chair Type 2	Red
IT003	Office Chair Type 3	Blue
IT004	Office Chair Type 4	Red
IT005	Office Desk Type 1	Oak
IT010	Pack of Staples	Silver

A callout box points to the 'Select All' checkbox and the table with the text: 'Highlight the record(s) to be printed, or click the **Select All** box to print all records.' At the bottom of the window, the 'No. of copies' input field and 'Print' button are circled, with a callout box pointing to them: '4. Specify the no. of copies required and click **Print** to generate the labels'.

7.0 EXPORTING THE TRANSACTIONS

The transactions relating to the latest location and status may be exported from OPN-Logger in text or Excel format.

To edit the transactions proceed as follows:



APPENDIX 1 BARCODE DATA FORMATS

OPN_Logger allows items to be associated with a Location Code and/or various Status codes. In addition the system allows the Operator performing the logging to be identified using an Operator ID.

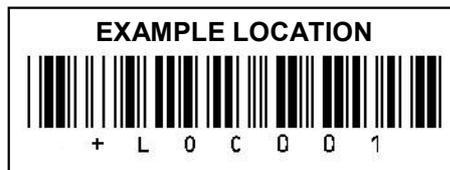
In order to distinguish the different codes and IDs OPN_Logger defines a specific data format for Location codes, Status codes and Operator IDs as summarised below.

If using the barcode printing facility in OPN_Logger these formats will automatically be handled by the software as required (see Section 6.0 above). These formats will however need to be considered if using other software packages to generate the Location and Status Code barcodes.

LOCATION CODES

Location Codes must be preceded by a + symbol. This is used to identify the barcode as a 'Location' and will be automatically stripped by the system before the data is stored in the database.

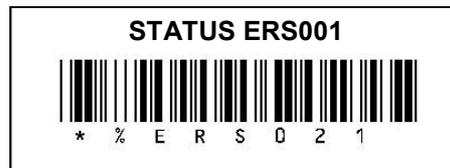
For example the Location LOC001 should coded as +LOC001:



STATUS CODES

Status Codes must be preceded by a % symbol. This is used to identify the barcode as a 'Status' and will be automatically stripped by the system before the data is stored in the database.

For example the Status Code ERS021 should coded as %ERS021:



OPERATOR IDs

Operator IDs must be preceded by a . symbol. This is used to identify the barcode as an Operator ID and will be automatically stripped by the system before the data is stored in the database.

For example the Operator ID 1001 should coded as .1001:



ITEMS

Barcodes without any of the above leading characters will be identified as Item codes.

APPENDIX 2 FILE FORMATS FOR IMPORT FILES

The formats for the imported data files are summarised below:

OPERATORS FILE - The Operators data file includes the Operator ID and name as follows:

[OP ID] , [Name] [cr.lf]

Where

[OP ID] is the barcoded Operator ID
, (comma) is used as a delimiter
[Name] is the operator name
[cr,lf] are the Carriage return and line feed characters

For example:

10004,John Smith
10005,Robert Stone
30055,Amanda Johnson
M025,Peter Piper

LOCATIONS FILE - The Locations data file includes the Location ID and description as follows:

[LOCATION ID] , [Description] [cr.lf]

Where

[LOCATION ID] is the barcoded Operator ID
, (comma) is used as a delimiter
[Description] is the Location description
[cr,lf] are the Carriage return and line feed characters

For example:

LOC001,Entrance Hall
LOC002,Secure Stock Room
ACM001,Project ACM001
C000X,Customer X

ITEMS FILE - The Items file includes the Location ID and description as follows:

[ITEM ID] , [Description] , [Field 1] , [Field 2] , [Field 3] , [Field 4] [cr.lf]

Where

[ITEM ID] is the barcoded Item ID
, (comma) is used as a delimiter
[Description] is the item description
[Field 1]... [Field 4] are the optional additional data fields (see section 2.3 below)
[cr,lf] are the Carriage return and line feed characters

For example:

IT001,Office Chair Type 1,Blue,Large,23kg,1
IT002,Office Chair Type 2,Red,Large,23kg,1
IT003,Office Chair Type 3,Blue,Medium,21kg,1

STATUS CODES FILE - The Status Codes file includes the Status Codes and descriptions as follows:

[STATUS CODE] , [Description] [cr.lf]

Where

[STATUS CODE] is the barcoded Status Code
, (comma) is used as a delimiter
[Description] is the status description
[cr,lf] are the Carriage return and line feed characters

For example:

SC002,Unlocked Door
SC003,Broken Window
SC005,Missing Light
SC006,Missing Chair

APPENDIX 3 - HINTS & TIPS

3.1 USING OPN-LOGGER TO TRACK EQUIPMENT LOANS

OPN-Logger may be used to provide a simple means of tracking equipment and assets which are sent out on temporary loan, for example:

- Equipment loaned to clients or personnel on a temporary basis
- Equipment sent to site or installation purposes or temporarily booked to specific Projects
- Etc.

In this case the following ideas may be of assistance:

- 1) **Using the Download Reference to specify an Expected Return Date:** OPN-Logger can be configured to prompt for entry of an optional Reference code when downloading the stored tracking data from the OPN20001 Data Collector.
Assuming that the Location, Client or Project etc. to which the equipment is being booked will be scanned into the OPN2001 data collector as a barcoded 'Location' Code, the Download Reference could be used to specify an expected return date for the items if required.
- 2) **Using an Additional Database field to identify Equipment Part Nos:** OPN-Logger uses a unique barcode ID for each item of equipment in order to track the location and history of individual items. even if the stock includes multiple.
If the Part No. of each item in the Equipment database is included as one of the available 'Additional Data fields' the system may then be used to generate a list of all items for a specific part no. including the current 'availability' (eg: showing whether the item is currently in stock or at a different location). Where the Download Reference has been used as above to hold a return date this will also be shown where relevant).
- 3) **Reserving Items:** Items of equipment which are required for projects in the very short term may be booked to a 'Reserved' Location, and the Download Reference used to indicate the Project/ Client ID and 'required' date if required. The current status for these items will then show as reserved in order to prevent allocation elsewhere.
Note: We do not recommend this technique for logging future reservations.