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1 Introduction

1.1 Background

The Data Self-Assessment Toolkit (DSAT) has been developed to enable Auditors, Colleges and Work Based Learning (WBL) Providers to identify problems with the information in their Individualised Learner Record (ILR) data. In the case of WBL Providers the Provider Financial Return (PFR) is also used. This manual provides guidance on the minimum system requirements, how to load the DSAT software and the basic functionality of the Tool.

A Support Desk facility (e-Mail – details published on the LSC Website) has been created should you have any problems with the DSAT software either technically or with understanding the results. The Support Desk cannot, however, provide any interpretation of the DSAT in terms of eligibility for funding. For information on the eligibility for funding the Provider should contact the National Learning and Skills Council (LSC) or the LSC appointed auditors’.

This version of the DSAT software has been designed and tested for use with the Learner Information Suite (LIS) Version 13.02. At the time of production there was no indication that DSAT Ver 6.XX will not function with later versions of LIS Ver 13.XX.

1.2 Restrictions

DSAT does not produce definitive results within the Reports. The tool is designed to provide Auditors and Providers with indicative reports that highlight areas of concern and risk that may require further investigation for clarification/rectification.

DSAT can however, assist Providers to verify and check their ILR/PFR data in certain areas.

The LIS and other tools provided by the LSC should be used to provide definitive results in all areas.
2 System Requirements

2.1 Minimum requirements

The minimum requirements to operate the DSAT software are as follows:

- Pentium 166 MHz (1 Gig Hz or faster clock speed processor is recommended);
- 32 Mb RAM (128 Mb or larger RAM is recommended);
- Free hard disk space of 100 Mb for a small Provider, 100 to 200 Mb for a medium sized Provider and 500+Mb for a very large Provider or where DSAT is loaded with more than one Provider’s data; and
- Screen resolution of 1024 x 768 (Use of 800 x 600 will cause crucial areas of the DSAT screens to be unavailable to the User).

2.2 Pre-loaded requirements

To run DSAT, direct access to the following software is required on the Provider’s computer system:

- Microsoft Access2000, AccessXP or Access2003 (The same releases/versions of MS-Excel and MS-Access should be loaded on the Computer) (if a Microsoft Access97 version of the tool is required a special request should be placed through the Support Desk);
- Microsoft Excel2000, ExcelXP or Excel2003 (The same releases of MS-Excel and MS-Access should be loaded on the Computer);
- An exported MS-Access database file from The Learner Information Suite (LIS) Ver 13.02 or later containing the processed ILR data (if DSAT is not loaded via the LIS Link); and
- The database from the Learning Aim Database (LAD) Ver 2.00 or later that may be downloaded from the LSC website (Note: Connectivity to the full LAD is not required).

Note 1: It has been found that the following error may occur during import when DSAT is loaded onto a computer which either has a dual installation of MS-Access or a mix of Microsoft Access and Microsoft Office variants:

The expression on click you entered as the event property setting produced the following error - the expression may not result in the name of the macro, the name of a user-defined function or [event procedure]. There may have been an error evaluating the function, event or macro'.

In the event of receiving this error message please contact the DSAT Support Desk.
Note 2: Users in larger Providers may experience a “MaxFileLocks per File” error message. There are 2 solutions to this problem:

- To access the Registry and to increase the MaxFileLocks per File to 99,999; or
- Contact the Support Desk who can send you a Registry Patch. It is likely that you will receive this error when running the sampling mechanism.  (This patch is applied at the Users own risk and no responsibility for any system difficulties after applying the patch will be taken by the LSC or KPMG LLP).

2.3 Security

Users are able to generate their own queries within the software, however, users will not be able to amend or read KPMG LLP created queries and code. The DSAT Support Desk will not support a user’s locally created queries.

2.4 DSAT and LIS

The LIS and DSAT have been interlinked to facilitate the automated loading of DSAT with the LIS export data and linkage to the same version of the LAD as used by the LIS.

To load DSAT directly from the LIS, refer to Section 3 or to carry out a data load from within DSAT refer to Section 4.
3  Setting Up DSAT to Run the Data Import

3.1  Files Required Before You Start

Before using DSAT for the first time you will require access to the following files:

- The DSAT distributed mde file “CaaTs (DSAT) v6.30 (2000).mde”;
- The export database from LIS with the funding and derived calculations completed;
- For WBL Providers only, their PFR return relating to the export database from LIS; and
- The same version of the LAD database as used to generate the LIS Export database.

3.2  Information Required Before You Start

Before starting to use DSAT you will need the following information:

- The location (directory) where you are going to place the DSAT Tool (this may be in any location either on a local drive or a network drive);
- The location you are going to use for the export of DSAT specific information;

(\textbf{WARNING}: DSAT/MS-Access sometimes does not recognise mapped network drives. If you are going to place this directory on a network drive you may need the \textbf{absolute} drive path rather than the mapped drive path. You should seek advice from your IT Department for this information. It is therefore recommended you use a local (or unmapped) drive for this location.)

- The location of the LIS Export file (WBL Providers should also place their PFR file(s) here);

(\textbf{WARNING}: DSAT/MS-Access sometimes does not recognise mapped network drives. If you are going to place this directory on a network drive you may need the \textbf{absolute} drive path rather than the mapped drive path. You should seek advice from your IT Department for this information. It is therefore recommended you use a local (or unmapped) drive for this location.)

- The name of the LIS Export File (The name of the PFR file(s) for WBL Providers);

(\textbf{Note 1}: The LIS export file should start with the string “LIS_”)

(\textbf{Note 2}: The PFR file(s) should start with the string “PFR_A” and should contain the spreadsheet “2005-6 Comprehensive Occ List”)

- The location of the Learner Aim Database; and

(\textbf{WARNING}: DSAT/MS-Access does not recognise mapped network drives. If you are going to place this directory on a network drive you will need the \textbf{absolute} drive path)
rather than the mapped drive path. You should seek advice from your IT Department for this information. It is therefore recommended you use a local drive for this location.)

- The name of the LAD database

(Note: Depending on the date of downloading from the LSC web site the name of this file changes).

(GENERAL WARNING: The error message (On Click) at Note 1 of Section 2.2 may occur if one of the files that you are importing has a "block" put upon it by the security of your system. To check for this - right click on each of the files and select properties. Below the Attributes Section on the General screen there may be a section that refers to blocked files. If this appears - unblock the file. If the section does not appear the file is not blocked.

3.3 Setting up DSAT

The following steps will allow the user to set-up and begin using DSAT:

- The pre-loaded requirements listed at Section 2.2 should be installed on the computer prior to setting up DSAT;
- Create a directory in which to operate DSAT. It is recommended that the directory is called “DSAT”. The directory should not be created under the LIS directory tree;
- Copy the DSAT mde file (“CaaTs (DSAT) v6.60 (2000).mde” into this using Windows Explorer;
- Highlight the DSAT file using the mouse and depress and hold the left hand mouse key;
- Drag the program to the desktop and while holding down the left hand mouse key depress and hold the <SHIFT> and <CTRL> keys. Release the left hand mouse button. A shortcut will have been dragged to the desktop; and
- DSAT is now ready to import data.

To start using DSAT go to Section 4.1 to import data.

3.4 Updating DSAT

From time to time, new versions of DSAT may be made available to Providers and Auditors via the LSC’s web site. Once the tool has been downloaded from the LSC’s Web site, to update the DSAT tool, carryout the following:

- If a shortcut was created on the desktop, delete the shortcut;
- Either delete the old version of DSAT or move it to an alternative location; and
- Follow the steps in Section 3.3 etc as if you were setting up for initial use.
4 Using DSAT

4.1 Data Import

4.2 Applicability of DSAT

DSAT Ver 6.30 will allow users to import ILR and PFR processed data for year 2005-2006 only.

DSAT will also support the importing of more than one Provider’s data and FE and WBL data from the same provider. However, it should be noted that large volumes of data will adversely affect performance.

4.3 Importing Data - FE

PLEASE NOTE: ONLY VALIDATED EXPORT DATABASES FROM LIS SHOULD BE IMPORTED INTO THE DSAT DATABASE. PROBLEMS MAY BE EXPERIENCED IF A NON-VALIDATED ILR IS IMPORTED INTO DSAT.

DSAT will not import an ILR directly – it must have been processed by LIS prior to import.

To import FE data into DSAT, carry out the following steps:

- Ensure the components listed in Section 2.2 are loaded and that you have access to the information listed in Section 3.2;
- Open the LIS;
- If the data set required is not already loaded into LIS, the user will need to load the required dataset as well as exporting the ILR data;
  - If importing an ILR, using LIS’s “Batch Import”. Ensure that the “Import ILR data”, “Validate Data”, “Calculate FE Funding”, “Derive Data” and “Export DB” <Check Boxes> are all ticked. Ensure the export “Access (MDB)” option is selected. Run the batch process using the “Start” button;
  - If only exporting ILR data, using LIS’s “Batch Import”. Ensure that the “Export DB” <Check Box> is ticked. Ensure the export “Access (MDB)” option is selected. Run the batch process using the “Start” button;
- On completion of the Export - Close LIS;
- Open DSAT. The screen at Figure 1 will appear;
Figure 1 - DSAT Opening Screen

- Use the “LIS Import (FE Only)” button on the “Database Utilities” screen to select the “LIS_EXP.mdb” file;
- If the user has renamed the “LIS_EXP.mdb” file then select that file;
- The LIS load will then proceed on selection of the file and a “Completed” pop-up message box will appear. Click on “OK” to close the pop-up message box;
- Click on the “LAD Link” button and wait for the “Completed” pop-up message box to appear. and
- Click on the “Set Reports Directory” button and select the location for the output of reports. Please note the following:
  - When the user has navigated to the Reports Directory, the system needs a file to enable DSAT to pick up the directory;
  - In the window, right click in the window:
  - On the pop-up menu that appears move the mouse cursor down to “New”;
  - And select “Text Document”;
  - Hit “Return” and select the newly created file; and
  - The path will be inserted into the “Set Reports Directory” box.
- DSAT is now ready for use and the screen will look as in Figure 2:
Figure 2 - DSAT Database Utilities Screen (Post Import)

- Click on the “Reporting Screen” button to access the reports (see Figure 3).
4.4 Importing Data - WBL

PLEASE NOTE: ONLY VALIDATED EXPORT DATABASES FROM LIS SHOULD BE IMPORTED INTO THE DSAT DATABASE. PROBLEMS MAY BE EXPERIENCED IF A NON-VALIDATED ILR IS IMPORTED INTO DSAT.

DSAT will not import an ILR directly – it must have been processed by LIS prior to import.

To Import WBL data into DSAT, carry out the following steps:

- Ensure the components listed in Section 2.2 are loaded and that you have access to the information listed in Section 3.2;
- Open the LIS;
- If the data set required is not already loaded into LIS, the user will need to load the required dataset as well as exporting the ILR data;

  - If importing an ILR, using LIS’s “Batch Import”. Ensure that the “Import ILR data”, “Validate Data”, “Derive Data” and “Export DB” <Check Boxes> are all ticked. Ensure the export “Access (MDB)” option is selected. Run the batch process using the “Start” button;
- If only exporting ILR data, using LIS’s “Batch Import”. Ensure that the “Export DB” <Check Box> is ticked. Ensure the export “Access (MDB)” option is selected. Run the batch process using the “Start” button;

- On completion of the Export - Close LIS;

- Open DSAT. The screen at Figure 4 will appear;

Figure 4 - DSAT Opening Screen

- Use the “LIS/PFR Import (WBL Only)” button on the “Database Utilities” screen to select either the “LIS_EXP.mdb” file or one of the “PFR_A” file(s);

(Note: that the LIS export file and the PFR file(s) must be in the same directory)

- If the user has renamed the “LIS_EXP.mdb” file then select that file;

- The LIS load will then proceed on selection of the file and a “Completed” pop-up message box will appear. Click on “OK” to close the pop-up message box;

(Note: It does not matter whether the LIS export database or one of the PFR file(s) is selected both sets of information will be loaded into DSAT).

- Click on the “LAD Link” button and wait for the “Completed” pop-up message box to appear. and

- Click on the “Set Reports Directory” button and select the location for the output of reports. Please note the following:
• When the user has navigated to the Reports Directory, the system needs a file to enable DSAT to pick up the directory;
• In the window, right click in the window:
• On the pop-up menu that appears move the mouse cursor down to “New”;
• And select “Text Document”;
• Hit “Return” and select the newly created file; and
• The path will be inserted into the “Set Reports Directory” box.

• A new window will appear as in Figure 5

![Figure 5 - WBL Post Import Window.](image)

• This window provides information on the import and access to three reports:
  • Records the appear on the LIS but not on the PFR;
  • Records appearing on the PFR that are not on the LIS;
  • Duplicate records;
  • If a report is unavailable (no records to report) the relevant part of the window will be greyed out (if all the reports are clear (no errors) the window at Figure 5 will not appear);
• To view the details, click the path displayed. These reports are also saved in the same folder which the WBL data is held as MS-Excel spreadsheets.

• DSAT is now ready for use and the screen will look as in Figure 6:

Figure 6 - DSAT Database Utilities Screen (Post Import)

• Click on the “Reporting Screen” button to access the reports (see Figure 7).

4.5 Understanding Reports

In DSAT v6.30, assistance in understanding reports has been provided. To access the assistance, the user should single click their mouse cursor on the report title box, second column from left and a window will appear showing the relevant report information, see Figure 8 - DSAT Report Assistance Window.

The window may be moved around the screen as required by the user, by dragging the title bar to the most convenient position for the user.
4.6 Selecting Reports

Before starting click on the “FE”, “WBL” or “FE/WBL” button to make the relevant reports available depending on which set of data the user wishes to investigate.

NB. If only FE data has been loaded into DSAT for a particular provider, only the “FE” button will be visible and only the FE reports will be available for selection. If only WBL data has been loaded into DSAT, only the “WBL” button will be available and only the WBL reports will be available for selection.

If FE and WBL data has been loaded for the same provider, then the “FE/WBL” button will also be displayed.

To navigate between the DSAT Report Categories, a user must click using the mouse cursor on the Buttons titling each category. An “All Types” button is available to list all the report.

In order to run the DSAT reports, the user needs to select the required reports by checking the <check boxes> immediately to the right of the Report Titles. A user may select reports from more than one Report Category and as many as they require at a time.
Figure 9 - Investigative Reports with some Selections

4.7 Viewing Reports

Once the required selections have been made:

- The user may view the reports by clicking the “Run Reports” button, see Figure 9;
- On completion of the report run the screen at Figure 10 will appear;
The user may then click on the “PathAndName” window to open the reports or close the window by clicking on the button in the top right of the screen;

Microsoft Excel will be opened and the selected reports shown in the screen as in Figure 11;

When a set of reports have been run the reports are displayed in a single workbook according to their category. All general reports run will be stored in a workbook which will be titled with the date and the suffix “GEN”, any investigative reports will be stored in a work book titled with the date and the suffix “INV” and so on.

The individual reports will also be saved separately in the specified drive and folder (see 4.8) with the report number and name.
Figure 11 - MS-Excel Reports

- The Reports may then be printed using the normal MS-Excel output buttons;
- The reports may then be closed using the normal windows buttons at the top right hand side of each report window; and
- When a report has been run the number of records for that report are shown in the box next to the check box.

In DSAT v6.30, it is not necessary to close all the open reports before running further reports. However, running large numbers of reports may exceed the resources of the user’s computer.

4.8 Report Location

When Running WBL Reports, a folder is created and named with the corresponding ILR name in the reporting directory as set in Sections 4.3 and 4.4 above. All WBL reports for that provider will be saved in this folder. Likewise when FE reports are run, a folder is created with the name of the IRL and corresponding reports will be saved in it.

If cross FE/WBL reports are run. A folder with the Provider ID is created, all cross year reports will be stored in this folder.
4.9 **Exporting To MS-Excel**

All DSAT Reports are exported to MS-Excel by using the “Export to MS-Excel” button.

A warning will be raised if the number of records exceeds 10,000. As errors in the “Export to MS-Excel” with this number of records have been encountered, the user is offered the option to “Export to CSV file” as an alternative. The resulting CSV File may then be opened in MS-Excel provided the user’s machine resources are sufficient.

If the number of records exceeds 15,000, the file is exported to a CSV file as it is unlikely that the Export to MS-Excel will be successfully completed.

Once each report has been streamed a confirmation message is displayed to the user showing the filename of the export. The filenames correspond to the report filenames and will show the report identifier.
4.10 **Reloading a Provider’s Dataset**

To reload an updated set of Provider data as the result of changes:

- Click on the “Database Utilities” button;
- Follow the process described at Section 4.1; and
- The provider’s data will be replaced with the new download. Reports run with the previous load are shown in the reports screen see Figure 13.

![Figure 13 - DSAT on 2nd Load of Provider Data](image)

### 4.11 Loading More Than One Dataset

DSAT Ver 6.30 will only allow a single dataset for year 2005/2006 for each Provider to be imported. If a second import is carried out for a Provider, the Previous Boxes adjacent to the Report Check Boxes will indicate the number of records for each report from the previous import. Current values for run reports will be shown in the Current Boxes see Figure 14.

However, datasets from more than one provider may be imported and processed within DSAT.
To import a second provider:

- Select the “Database Utilities” Button; and

**Figure 14 - Database Utilities Screen**

- Amend each one of the entry boxes below the “Database Utilities” Tab to the new settings. The process described in Section 4.1 should be followed.

The new dataset will be imported into DSAT.

### 4.12 Using More Than One Dataset

To work with two or more datasets in DSAT, the user can toggle between the providers by using the “Provider Selection” button at the top of the screen, see Figure 15.

All the detail including the number of records for run reports will toggle with the provider information.
Figure 15 - Selecting a New Provider
5 DSAT Maintenance

5.1 Compacting DSAT
Over time, DSAT will become increasingly large according to the amount, and number of
times dataset are added and deleted. To overcome this issue, a Compact button is
available on the Database Utilities Screen which will help to reduce the size of the
database. To compact DSAT, click “Compact DSAT”. The database will compact and
then reopen. No data is removed from the tool during this process.

It is recommended that the data is compacted after data has been deleted from DSAT.

5.2 Post Code File Update
On occasion, a new postcode may become available. To update DSAT with a new post
code:

- On the Utilities Screen, Click “Update Postcode”.
- A browse window will appear. See Figure 16.

![Postcode Update Window](image)

Figure 16 – Postcode Update Window

- Locate and Click the postcode file, DSAT will be automatically updated. A message
  box will appear indicating the update is complete. Click “OK” to continue.
6 DSAT Support

6.1 DSAT Support Process
Help and assistance for DSAT is available by:

- e-mail.

6.2 E-Mail Support
To obtain e-mail support send an e-mail to:

CaaTsSupportDesk@kpmg.co.uk

Please include the following information:

- Your Organisation Name;
- Your Name;
- Your e-Mail address;
- Your contact telephone number;
- Your operating system detail i.e. Windows2000
- Your MS-Office detail i.e. Microsoft Office 2000
- The version of the LIS you are using;
- The LAD version you are using; and
- A description of your problem.

The DSAT Support Desk will respond to your call at the earliest opportunity.
7 Producing Audit Data Samples for Testing (FE Data Only)

7.1 The Sampling Process

DSAT v6.30 includes the capability to select and create samples for audit purposes. The sampling strategy is based on the LSC’s Audit Guidance, the LSC’s Sampling Methodology and the assessment of risk.

The mechanism uses assurance factors based on the LSC’s Sampling Methodology to achieve the populations to be sampled (maximum of three). See table below:

<table>
<thead>
<tr>
<th>Inherent</th>
<th>Control</th>
<th>Substantive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1.3</td>
<td>0.7</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>0</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1.3</td>
<td>2</td>
</tr>
</tbody>
</table>

The substantive assurance factors above relate to the number of sample points that are determined under the Sampling Methodology but are based on the numbers below. The actual sample points is determined by DSAT using the LSC’s calculations for determining the number of sample points.

<table>
<thead>
<tr>
<th>Substantive assurance factor</th>
<th>Number of sample points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.7</td>
<td>51</td>
</tr>
<tr>
<td>2</td>
<td>147</td>
</tr>
<tr>
<td>3</td>
<td>221</td>
</tr>
</tbody>
</table>
To establish the sample you are required to assign an Assurance Factor to each of the different elements of the provision operated by the Provider. To do this just, ‘click on’ the relevant Assurance Factor for the area of provision. E.g. For the main sample which relates to provision not covered by the other areas the testing in the inherent and controls may lead to a substantive assurance factor of 0.7, therefore the user should click the 0.7 Assurance Factor button.

Users should note that where funding may appear under one or more sample areas except Achievement and Additional Support, the Sampling Mechanism will determine the sample group according to the Highest Level of Risk. Consequently, selecting an Assurance Factor of 2 for the Main Sample and 0.7 for Open Learning and Distance Learning would cause the Open and Distance Learning funding to be moved to the Main Sample as it is the highest level of risk.

However, the Assurance Factors for the other elements can be altered as required. E.g. An Assurance Factor of 3 may be chosen for franchise provision and therefore that button should be clicked.

All provision delivered by the Provider should be attributed to an Assurance Factor.

7.2 Creating Samples

To create samples for analysis:

- On the “Reporting” Screen, select the “Sampling Report” – “60-04-10 Selected Samples for Audit” by checking the “60-04-10 Selected Samples for Audit” <Check Box>. There will be a delay as the data is prepared to enable the samples to be generated. The screen at Figure 17 will appear;
Figure 17 - Sample Selection Screen

- The user may then make the appropriate Assurance Factor selections to determine the sample to be created see Figure 18;

- Selection of differing Assurance Factors will require the records that make up the sample groups to be recalculated. Users may update the sample groups by clicking on the “Revise Samples” button. Should the user fail to update the sample groups prior to selecting to “Output Report” button, the sample groups will be automatically recalculated;

- Once the user has input the pre-determined Assurance Factors, they may generate the “60-04-10 Select Samples for Audit” report by clicking on the “Output Report” button. See Figure 19.
Figure 18 - Assurance Factor Selections
Once the “60-04-10 Select Samples for Audit” report has been generated the user has the standard DSAT Report View Option as described in Section 4.7

7.3 Closing the Sample Mechanism

To close the Sample Mechanism, the user should click on the “Close” button on the bottom right of the screen.

NOTE: Once the Sample Mechanism has been closed, the calculated data supporting the report is removed from the database and it is extremely unlikely that the same samples may be generated for subsequent report generation.