

Digital Levelling Suite

User Manual

For Use in Conjunction With

Excel 97 - 2007

Distributed by Opti-cal Survey Equipment Ltd 3 The Pavilions, Brighton Road, Pease Pottage, Crawley, West Sussex, RH11 9BJ





INDEX

INTRODUCTION4	ļ
Minimum System Requirements	
Recommended System Requirements	
RESTRICTIONS WITHIN THE APPLICATION6	5
Facilities not available within Demo Version	6
APPLICATION OUTLINE	i
DNA INSTRUMENT FORMAT FILE7	,
Installing the DNA Format File Exporting Data from the Leica DNA / SPRINTER, to the Digital Levelling Suite	
DIGITAL LEVELLING SUITE INSTALLATION8	5
Welcome Screen Information Screen License Agreement Directory Create Directory	9 9 10 10
Confirmation Installing Software	
End Screen	12
Exit Installation Directory Structure	
Uninstall Application	
LAUNCHING APPLICATION EXCEL 97 - 200315	5
LAUNCHING APPLICATION 200717	,
IMPORTING LEICA DNA OR SPRINTER DATA	
BACK UP FILE PROMPT22	2
DROP DOWN MENU	5
SURVEY PROPERTIES SHEET	
RAW DATA SHEET24	ļ
CHEK&ADJ25	
LINE SHEETS	i
AMENDING CELLS WITHIN LEVELLING BOOKING SHEETS	,
LEVELLING BOOK – RECORD AND MEASURE	}
LEVELLING BOOK – NO CLOSE	}
CHANGE START / CLOSE HEIGHT & POINT ID'S	
MERGE LINES	
EXPORT LINES	2
PRINTING	Ļ
PRINT SETTINGS	5
SCANNED COPY OF PRINTED LEVELLING BOOKING SHEET	5







Introduction

Thank you for purchasing the Leica DNA / SPRINTER Import Tool. This program has been designed in conjunction with Land Surveyors who use the Leica DNA / SPRINTER on a day to day basis.

It has been designed to overcome some of the short falls with the Leica DNA / SPRINTER software, to allow easy conversion from the raw data file to a standard Levelling Book format.

The software has been designed on the Microsoft Excel platform thus giving the user the advantage of the Microsoft Excel interface which most surveyors will already be familiar with.

Provided with this software is the format file required to be loaded into the Leica DNA / SPRINTER, and instruction how to accomplish this.

Please Note

If you open the Excel 97 - 2003 version of this software in Excel 2007 it will work however if you save the file as **.XLSM** then you will be unable to open the application again in Excel versions 97 - 2003. If this occurs by accident then reinstall the software. You will not loose any back up file in the 'ASCII Archive Files' folder.

System Requirements

Minimum System Requirements

Windows 98* Microsoft Excel 97* Pentium 233 128 MB RAM 4X CD-ROM Mouse and Keyboard 649x480 SVGA display 30 MB free hard drive space USB 1.0 Printer

Recommended System Requirements

Windows XP/Vista* Microsoft Excel 2000 or above* Pentium 1GB+ 512 MB RAM 52X CD-ROM Drive Mouse and Keyboard 1280x1024 32bit displays 100MB free hard drive space USB 2.0 Colour Printer

*With the latest Service Pack





Restrictions within the Application

The following functions have been disabled in the software to stop unauthorised copying.

CTRL Break Ctrl V Ctrl C Cut Paste Right Mouse Click Only Cells that are unprotected can be modified

Facilities not available within Demo Version

If you are running a Demo Version of this software the following restriction also apply or have been disabled.

Print Print Preview Opening files other than those supplied with the Demo software No Leica DNA / SPRINTER format file supplied

Application Outline

This application has been designed to convert exported ASCII data from the Leica DNA / SPRINTER Level, and convert it to a standard levelling book appearance. The result shows Collimation, Reduced level and Adjusted Levels.



DNA Instrument Format File

Installing the DNA Format File

XXX_IMPORT_TOOL.frt

XXX=company Initials

The format file provided needs to uploaded to the instrument; it has been edited to contain the chosen logo and address of your company.

To upload the file use the exchange manager in LGO tools, and follow the help section under:

"Transfer – format files"

Once the format file is in the instrument it will be displayed as an option every time the instrument field data is downloaded. This format is required for the Digital Levelling Suite to function correctly.

Exporting Data from the Leica DNA / SPRINTER, to the Digital Levelling Suite.

The key steps to achieve this are as follows:

1. Export field data from the DNA to the PC via the given format file.

This file converts the field data to the required format that the import tool recognises and can manipulate. If the data is exported without this format file the import tool will not accept the data and give an error message (see page23). To export data from the DNA you can check your Leica user manual, but to summarize you have two options

- i. Download the data directly using the USB cable and the free LGO tools programme, available from. <u>http://www.surveyequipment.com/shop/index.php?main_page=page&id=22&chapter</u> =1&zenid=0821bcba4054e73b3753d93c7a5c12ec
- ii. Export on the instrument to the removable card then copy over the data on the CF card to the PC.

2. Run the Digital Levelling Suite.

Select the chosen file in the open dialogue box and run the application,

- i. Check the sheet tabs along the bottom.
- ii. Open the "chek and adjust" sheet, for values from the two peg test.
- iii. Open the raw data sheet, for any problems from the field.
- iv. Open all the line sheets, and check that the start and close heights are correct for each level run, adding the lines location in the header.
- v. Open the error graph sheet, and press update to highlight any lines that have large misclosures.
- 3. Print out each level run.



Digital Levelling Suite Installation

Insert either the USB Flash Drive into the USB port of your computer or insert the CD into the CD/DVD Rom Drive.

Open the USB or CD/DVD Drive

😂 G:\	
<u> E</u> ile <u>E</u> dit <u>V</u> iew F <u>a</u> vorites <u>I</u> ools <u>H</u> elp	ala da anti-anti-anti-anti-anti-anti-anti-anti-
G Back 🔹 🕥 🕤 🏂 🔎 Search 🔊 Folders 💷	
Address 🖙 G:\	💌 🄁 Go
	Setup DNA Import Tool.exe Application Double click on the Set-up Icon; this will launch the installation program
 	

Welcome Screen

🕹 DNA Import Tool In	stall Program 📃 🗖 🔀
	Welcome to the DNA Import Tool Install Program
	This program allows you to install DNA Import Tool on your hard drive.
	It is strongly recommended that before proceeding, you ensure that no other Windows programs are running.
	If you do not wish to install DNA Import Tool, click 'Exit' now, otherwise click 'Next' to continue.
	Select 'Next'
	< Back Next > Exit

Information Screen



License Agreement

🕹 DNA Import Tool Install Program	
License Please read the license agreement below.	•
Please read the license agreement below and select "I Agree" if you agree with it and conditions.	s terms
End User License Agreement (EULA) DNA Import Tool Full & Demo Versions	
DNA Import Tool Full and Demo Versions Copyright 2009 David Prater, David Monaghan and Monaghan Surveys Ltd Adobe 7 Copyright 1984-2004 Adobe Systems Incorporated and its licensors. All rights reserved.	>
 I agree with the above terms and conditions No not agree 	
< Back Next >	E <u>x</u> it
If you agree with the terms of the software license select 'I agree with the above terms and conditions' then select 'Next'	





Directory

If you do not wish to install the software into the default directory amend the directory path shown, then select 'Next'.

🕹 DNA Import Tool Install Program	
Directory Choose an installation folder and click Next to continue.	0
DNA Import Tool's files will be installed in the following directory:	
C:\Program Files\Leica\DNA Import Tool	
Disk space needed : Available disk space :	26 Mb 24623 Mb
If you do not wish to install the software into the default directory amend the directory path shown, then select 'Next'.	If you do wish to install the software into the default directory select 'Next'.
< Back	Next > Exit

Create Directory





Confirmation

🕹 DNA Import Tool Inst	all Program	
Confirmation You are now ready to inst	tall DNA Import Tool.	•
This program will install DN	NA Import Tool into C:\Program Files\Leica\DNA Import Tool	
Click 'Start' to install DNA Ir	Select 'Start' to install software.	
	< Back Start	E <u>x</u> it

Installing Software

🕹 DNA Import Tool Install Program	
Installing Installation in progress, please wait.	•
File : C:\\DNA 03 Level Run Sheet Demo Template.xtt 90%	
< Back Next >	Cancel
< Back Next >	Cancel



End Screen

🕹 DNA Import Tool Install Program	
End Installation completed.	0
DNA Import Tool has been successfully installed. If you <u>do not</u> wish to install Adobe 7 then de –select tick box Please note that a PDF reader is required to view the 'User Manual' Install Adobe Acrobat 7, Copyright (C) 2004 by Netopsystems AG	
< Back Next >	Exit

Exit

🕹 DNA Import Tool	Install Program	
Clickteam Install Cre Copyright © 1999-2008 http://www.clickteam.c	Clickteam	
This install program has simple and powerful ins	been created with the freeware versio stall maker.	n of Clickteam Install Creator, a
Visit our <u>Web site</u> and o creation tools.	discover Clickteam Install Creator as well	as our game and multimedia
	ve just installed has not been created b blisher for any question about it.	y Clickteam, please directly
	Select 'Exit' to close installation dialogue box.	
	If you have opted to install Adobe 7 then this will install after the installation dialogue box has closed	
		Exit



Installation Directory Structure

The application is now installed in the follow directory (if default directory is used during install)

DO NOT AMMEND, CHANGE, DELETE or RENAME any of the directories or files associated with this application.

😂 DNA Import Tool					
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp					*
🚱 Back 🝷 🕥 👻 🏂 🔎 Search	6 Folders	•			
Address 🗁 C:\Program Files\DNA Import Tool					💌 🄁 Go
Folders	×	Name 🔺	Size	Туре	Date Modified
 INVIDIA Program Files Adobe Adobe Adobe AVG AVG Canon CanonBJ ComPlus Applications ComPlus Applications Creative CyberLink DNA Import Tool Exported Data Tree Audio Pack 		 DNA ASCII files Exported Data Manual DNA Import Tool Ver 1.00N.xls Excelico Uninstal.exe 	2,496 KB 147 KB 82 KB	File Folder File Folder File Folder Microsoft Office Exc Icon Application	30/09/2009 09:4 30/09/2009 09:4 30/09/2009 09:4 30/09/2009 09:3 02/05/2006 17:1 30/09/2009 09:4
I Co Free Screen To Video	~	<			>



Uninstall Application

To uninstall the application select the Uninstall Icon in the DNA folder.



The application will be removed from your PC.

Uninsta	🔀
(į)	This program will uninstall DNA Import Tool from your hard drive. Click OK to continue.
	OK Cancel

When complete select OK



If you have saved any ASCII back up files in the 'ASCII Archive Files' folder, these will not be deleted, if you wish to delete these then manually delete the folder



Launching Application Excel 97 - 2003

Before launching the application please refer to Appendix D: Macro Security Settings.

To launch the application just double click on the Digital Levelling Suite icon on the desk top or contained within the Digital Levelling Suite folder.





When prompted click 'Enable Macros'



This will then launch the application with all the relevant Macros running.

	Microsoft Excel - Leica Suite						- PX
		<u>T</u> ools <u>D</u> ata <u>W</u> indow <u>H</u> elp Levellir					_ 8 ×
Ari	al 🔹 11 💌 🖪	<i>I</i> U E E E E E Ø Ø	%,%%年程日•参•	🗛 • 🚚 🔛 🖀 🌌 🛛 🖛 .	그 이 🕮 🛱 🚽 🗄 /	A 🖾 🖄 🗸	
	🖻 🖬 🔒 🎒 🖏 💖 👗	🖹 🛍 💅 🗠 - Ci + 🍓	Σ 🐅 👌 Ž↓ 🛍 🚜 🕄 😮	🖕 Security 😤 🔛 🙄 🎦	后当当 🖬 🖬 01 00	新 朝	≞ -0} ~
	E5 💌 =						
1	A B C	D	E	F	G	H I J	-
2	YOUR LOGO			DNA Import	Sprinter Import		
3		Survey	/ Properties	Merge Lines	Clear Lines		
5 6		Project Name					
7		Remarks]	
9 10		Operator		Date / Time			
11 12		Instrument Number		Number Of Lines			
13		Imported Document		Check & Adjust Sheet			
15		Installation Path					
16 17 18	17 WARNING DEVELOPERS VERSION						
	Survey Properties /	Raw Survey Data 🖌 Closing Err	or Graph /			•	
	Draw - 🔓 🌀 AutoShapes	• 🔪 🗆 🔿 🗃 🐗 🙍	🂩 • 🟒 • 🚣 • ≡ 📰 🚍 🛢 🍘 🧊 .				
Rea	ady					NUM	



Launching Application 2007

Before launching the application please refer to Appendix D: Macro Security Settings.

To launch the application just double click on the Digital Levelling Suite icon on the desk top or contained within the Digital Levelling Suite folder.







When the security warning appears, select 'Options'

8				Leica Suite Ver	r 0.16.16 Beta.xls [Compatib	oility Mode] - Micro 💶 🗖 🗙
	Arial 11 La B Z U C Font		Alignment Num	Salast (Op)	tions' when /arning	Format 2 Sort & Find & Filter Select Editing
<u> </u>	Security Warning Some active	f _x	ptions			*
	E5 • (***********************************	J _x D	E	F	G	₩ I J 冒
2		YOU	R LOGO	DNA Import	Sprinter Import	
3 4		Survey	/ Properties	Merge Lines	Clear Lines	
5		Project Name				ه ≡
7		Remarks				
9 10		Operator		Date / Time		
11 12		Instrument Number		Number Of Lines		
13 14		Imported Document		Check & Adjust Sheet		
15		Installation Path]
	Survey Properties	Kaw Survey Data 📈 Closing E	rror Graph 🖉			



When prompted select 'Enable this content' then 'OK'

Microsoft Office Security Options	? 🗙
Security Alerts - Multiple Issues	
Macros & ActiveX Macros and one or more ActiveX controls have been disabled. This active content might contain viruses or other security hazards. Do not enable this content unless you trust the source of this file.	^
Warning: It is not possible to determine that this content came from a trustworthy source. You should leave this content disabled unless the content provides critical functionality and you trust its source.	
More information	
File Path: C:\Program Files\Leica\DNA Import Tool\DNA03 Import Tool Ver x.xx.xls	; 🔳
 Help protect me from unknown content (recommended) Enable this content 	
Data Connection	
Data connections have been blocked. If you choose to enable data connections, your computer may no longer be secure. Do not enable this content unless you trus the source of this file.	t
File Path: C:\Program Files\Leica\DNA Import Tool\DNA03 Import Tool Ver x.xx.xls	;
Help protect me from upknown content (recommended)	~
Open the Trust Center OK Can	cel

This will then launch the application with all the relevant Macros running.

Clipi	Home Insert Page	$\begin{array}{c c} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \\ \hline \\ 1 & \hline \\ 1 & \hline \\ 2 & \hline \\ \hline \end{array} \end{array} \xrightarrow[]{} \begin{array}{c} \text{Formulas} & \text{Data}\\ \hline \\ \hline \\ \hline \\ \hline \end{array} \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \\ \hline \\ \hline \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \\ \hline \\ \hline \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \\ \hline \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \\ \hline \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Data}\\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Data}\\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} & \text{Pormulas} & \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} \text{Pormulas} \\ \hline \end{array} \xrightarrow[]{} \begin{array}{c} Pormulas$		dd.Ins	nat Cell ble - Styles -	Image: Constraint of the second s
	E5 • •	f _x	E	F	G	H I J
1			R LOGO	DNA Import	Sprinter Import	
2				line line	Characteriza	
3		Survey	Properties	Merge Lines	Clear Lines	
5		Project Name				
7 8		Remarks]
9 10		Operator		Date / Time		
11		Instrument Number		Number Of Lines]
13		Imported Document		Check & Adjust Sheet] .
14		Installation Path				
		Raw Survey Data / Closing E	WARNING DEVELOPER:		(Data Management Software	✓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
Rea	uy				<u> </u>	



Importing Leica DNA or Sprinter Data

	gelayout Formulas Data P M A 11 • A A A □ △ • A • E = = ♥	Review View Developer Review View Developer Constant	Leica Suite Ver 0.16 Aduns Conditional Format Formatting * as Table * Styles	Cell Insert Delete	Click Here To Activate th Open File Dialogue Box
A B C	D	E R LOGO	F DNA Import	G Sprinter Import	
	Survey	Properties	Merge Lines	Clear Lines	
	Project Name				
	Remarks				
	Operator		Date / Time	/	
	Instrument Number		Number Of Lines		
	Imported Document		Check & Adjust Sheet		
	Installation Path				
			© D°M″S″ (Data	a Management Software	ļ
dy 🔝	/ Raw Survey Data / Closing Er	WARNING DEVELOP		/	
dy 🔛	/ Raw Survey Data / Closing Er	WARNING DEVELOP			↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
pen Look in:	Raw Survey Data / Closing Ei My Documents Cam Files CyberLink	WARNING DEVELOP			
pen Look in:	Raw Survey Data Closing E My Documents Cam Files CyberLink My Music My Pictures My Received Files	WARNING DEVELOP			
Cook in: Look in: Cook in: My Documents My Computer	Raw Survey Data Closing Er My Documents Cam Files CyberLink My Music My Pictures	WARNING DEVELOP			
Cook in: Look in: Recent Desktop My Documents My Computer	Raw Survey Data Closing E My Documents Cam Files CyberLink My Music My Pictures My Received Files My Videos My Webs	WARNING DEVELOP			
pen Look in:	Raw Survey Data Closing E My Documents Cam Files CyberLink My Music My Pictures My Received Files My Videos My Webs	WARNING DEVELOP			
pen Look in:	Raw Survey Data Closing E My Documents Cam Files CyberLink My Music My Pictures My Received Files My Videos My Webs	WARNING DEVELOP			
Pen Look in:	Raw Survey Data Closing E My Documents Cam Files CyberLink My Music My Pictures My Received Files My Videos My Webs	WARNING DEVELOP			
A Cook in: Look in: Recent Desktop Desktop My Documents My Computer My Network Places File I	Raw Survey Data Closing E My Documents Cam Files CyberLink My Music My Pictures My Received Files My Videos My Webs				



Select the ASCII file you wish to import in this case we have selected the file 'Demo Data.asc'

Open																? ×
Look jn:	🛅 DNA ASC	icii f	≕iles								~)	- 📬	$ \times$		•
My Recent Documents Desktop Documents My Computer My Network Places	CII Arch	ta		′d And ľ	Measure	re										
	File <u>n</u> ame:						 	 	 	 			~			
	Files of <u>type</u> :	A	sc Files										~	-		
Tools 🔻												Qr	en		Car	ncel

If the ASCII file that you have selected does not contain Leica DNA / SPRINTER data then the following prompt will appear.

Invalid	File 🔀
8	This is not a valid Leica DNA03 file please select another.
	Cancel

If 'OK' is selected then you will be returned to the previous 'Open File' dialogue box. If 'Cancel' is selected then you will be returned to the 'Survey Properties' sheet.

C					Leica Suite Ve	r 0.16.16 Beta.xls	[Compatib	vility Mode] - Micro = 🖘 🗙
P		$\begin{array}{c c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \\ \end{array} \end{array} \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $			Conditional For	nat Cell In ble * Styles *	sert Dejete f	10 1: 27 A
Clip	board % Font		Alignment 🕞 Nu	mber G	Styles		Cells	Editing
	E5 • 💿	f _x	-		F			
1	A B C	D	E		F	G		HIJ
		YOU	R LOGO	D	IA Import	Sprinter Ir	nport	
2								
3		Survey	/ Properties	Me	rge Lines	Clear Lir	ies	
5		Project Name						
7		Remarks]
9 10		Operator		Da	te / Time]
11		Instrument Number		Numb	er Of Lines]
13		Imported Document		Check &	Adjust Sheet]
14		Installation Path]
16 17	Survey Properties	Raw Survey Data / Closing E	WARNING DEVELOPI	ERS VERSION	© D*M*S*	(Data Manageme	nt Software)	
Rea	dy 🛅							10 100% 🕤 🛛 (†



Back Up File Prompt



If you select 'Yes' to back up the raw data the following dialogue box will be displayed.

Save As																1	2×
Save in:	🛅 ASCII Ard	chive	Files								*	¢	- 🗋		×	2	•
My Recent Documents																	
🚱 Desktop																	
Documents																	
My Computer																	
My Network Places																	
Places																	
	File <u>n</u> ame:	Der	no Data	a_Bak	 	 	 						1	1			
	Save as <u>t</u> ype:	Exc	el Files:											•			
Tools 🔹											ſ	<u>5</u> a	ve	h		Cance	3

Select the folder you wish to save the raw data into; in this case we have selected the directory 'ASCII Archive Files' provided. Then click 'Save'. The file will be saved with the original file name plus '_Bak'. In this case the file 'Demo Data.Asc' would be renamed as 'Demo Data_Bak.Xls'. Once you have selected the appropriate directory click 'Save'. The back up file will be saved and the data import will commence.

If you opt to not save a back up of the file the dialogue box will close and the data import will commence.



When you import your DNA data a progress bar will be displays letting you know how far it is thought the import and processing procedure.



Once complete the total time taken will be displayed.

Process	ing Complete 🛛 🛛 🔀	
(į)	Line data processed in 22.06 seconds	;
	(OK	

Drop Down Menu

The drop down menu bar allows access to the features displayed on the screen as well as further features e.g. DNA print set up

Excel 97 - 2000







Survey Properties Sheet

Once the data has been imported and converted you will see additional information about the project in the Survey Properties sheet.



Raw Data Sheet

The following sheet 'Raw Data' is formatted version of the imported ASC file.

≱ Cut Là Copy ダ Format Painter	Arial B / U	- 10 -		* = <mark>=</mark> 4 * = = 4		ap Text rge & Center *	General	Condition	al Format g = as Table = !	Cell In	ert Dele	e Format	∑ AutoSun	Sort & F
lipboard G		Font	6		Alignment	6	Number	G	g * as table * : Styles	styles *	Cell	5		Fifter* 5
C51 •	• (9	fx												
B C	D	E	F	G	н	1	J	K	L	M	N	() P	Q
	urveys : Tel:) e : Demo	XXX - XXXXXX	XXX Digit	al Lovel Mea	surement Rep	iort	Your	Logo He	re					
Operator DNA03 Remarks Date/Tim	: Instr.Nr.:	RING TASK	540											
Check &	Adjust													
Line : C	hek&Adj 3.03.2009	Method: A > Time : 11:3 aff2:										-		
Line : C Date : 2	hek&Adj 3.03.2009	Time : 11:3	5:11		Red.Level	Distance	Remarks	No. Obs	Stan.Dev					
Line : C	hek&Adj 3.03.2009 St	Time : 11:3 aff2:	5:11		Red.Level 1.00000 1.00000	Distance 14.66 14.59 2.35 2.82 32.06	Remarks	No. Obs 4 4 4 4 4	Stan Dev 0.00002 0.00002 0.00001 0.00001 0.00001					
Line : C	hek&Adj 3.03 2009 St Pt.ID A1 B1 B2 A2	Time : 11:3 aff2: Backsight 1.68912	5:11	Foresight 1.31494 1.13106	1.00000	14.66 14.59 2.35 2.82	Remarks	4	0.00002 0.00002 0.00001 0.00001					
Line : C Date : 2 Staff1: Line Lew	hek&Adj 3.03.2009 St Pt.ID A1 B1 B2 B2 A2 elling	Time : 11:3 aft2: Backsight 1.68912 1.50941 Method: BF	5:11 InterSight	Foresight 1.31494 1.13106 1.13516	1.00000	14.66 14.69 2.35 2.82 32.06	Remarks	4 4 4 4	0.00002 0.00002 0.00001 0.00001 0.00003					



Chek&Adj

This sheet is derived from the data downloaded from the Leica DNA / SPRINTER. The Check and Adjust sheet shows 4 readings, if the operator has taken more than four reading then the last 4 are displayed.

Arial	- 10 -	Δ [*] Δ [*]	- Wrap	Text	neral				Σ
						Conditional Form	at Cell Inse	rt Delete Format	Sort & Fir
BIU					· % · (.0 →	Formatting * as Tab			∠ Filter * Sel
i)[Font	R.	Alignment	G I	Number	Styles		Cells	Editing
	- (° f;		-						
A	В	С	D	E	F	G	H I	JК	L M
	Level Run Loca	ition					Surveyor	HS	
	Method	A x Bx			Time	10:53	Date	06.01.2009	
	Method				Time	10.55	Date	00.01.2005	
	Instrument	DNA03	Serial Number	330883	Staff 1		Staff 2		
	Point ID	Back sight	Intermediate	Foresight	Distance	Remarks	No Obs	Stan.Dev	<u> </u>
	A1	1.09419		4.00060	22.38 22.50		3		
	B1 B2			1.80968 1.48413	3.22		3		
	A2	0.76743		1.40410	48.19		3		
	First Set up	A1	1.09419	Second Set up	A2	0.76743			
	That Set up	B1	1.80968	Second Set up	B2	1.48413			
		Diff 1	-0.71549		Diff 2	-0.71670			
	Result	Diff 1 Diff 2	0.71549 0.71670						
		DIT 2	-0.00121	Over	44.88	Meters			
			-0.00121	Over	44.00	Meter 3			
	A1	1.04289			22.58		3		
	B1			1.75844	22.32		3		
	B2	0.0005.4		1.54671	3.86		3		
	A2	0.83054			48.83		3		
	First Set up	A1	1.04289	Second Set up	A2	0.83054			
		B1	1.75844		B2	1.54671			
		Diff 1	-0.71555		Diff 2	-0.71617		l	
	Result	Diff 1	0.71555						
	resure	Diff 2	0.71617						
			-0.00062	Over	44.90	Meters			



Line Sheets

Home	Insert Page Layout F	Formulas Dat	a Review View	Developer					· - •
	Commen		Show Ink	mments	otect Protect Shar eet Workbook Workb	Allow Users to e Strack Changes	Edit Ranges		
Proof			Comments			Changes			
B17			-	-	-		N	14	
A	В	С	D	E	F	G	H I	ј к ј	M
Export Data		Your Lo	go				Your Addre	SS	
	LEVELLING		IG SHEET -		02		Jo	b Name : Demo	
	Level Run Locati	ion	DEMO VERSI	ON ONLY	From	BM01	Start Height	26.01700	
	Date	23.03.2009	Surveyor	TEST	То	BM01	Close Height	26.01700	
	Date Closing Error	23.03.2009 0.00015	Surveyor Actual Close	TEST 26.01685	To Distance (km's)	BM01 0.130	Close Height Staff Type	26.01700 GPCL2	
				26.01685					
	Closing Error	0.00015	Actual Close	26.01685	Distance (km's)	0.130	Staff Type	GPCL2	
	Closing Error Error Factor (m)	0.00015	Actual Close Number of Set-ups	26.01685 5	Distance (km's) Instrument	0.130 DNA03	Staff Type Serial Number	GPCL2 12345	1
	Closing Error Error Factor (m) Point ID	0.00015 0.004 Back sight	Actual Close	26.01685	Distance (km's) Instrument Collimation	0.130 DNA03 Reduced level	Staff Type	GPCL2 12345 Adjusted Level]
	Closing Error Error Factor (m) Point ID BM01	0.00015 0.004 Back sight 1.69836	Actual Close Number of Set-ups	26.01685 5 Foresight	Distance (km's) Instrument Collimation 27.71536	0.130 DNA03 Reduced level 26.01700	Staff Type Serial Number	GPCL2 12345 Adjusted Level 26.01700	
	Closing Error Error Factor (m) Point ID BM01 CP1	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set-ups	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 Reduced level 26.01700 26.72543	Staff Type Serial Number	GPCL2 12345 Adjusted Level 26.01700 26.72546	
	Closing Error Error Factor (m) BM01 CP1 SP01	0.00015 0.004 Back sight 1.69836	Actual Close Number of Set-ups Intermediate	26.01685 5 Foresight	Distance (km's) Instrument Collimation 27.71536	0.130 DNA03 Reduced level 26.01700 26.72543 26.35126	Staff Type Serial Number	GPCL2 12345 Adjusted Level 26.01700 26.72546 26.35132	
	Closing Error Error Factor (m) BM01 CP1 SP01 1001	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set-ups Intermediate 1.22108	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 Reduced level 26.01700 26.72543 26.35126 26.76916	Staff Type Serial Number	GPCL2 12345 Adjusted Level 26.01700 26.72546 26.3512 26.76922	
	Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set-ups	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 Reduced level 26.01700 26.2543 26.35126 26.76916 26.77589	Staff Type Serial Number	GPCL2 12345 26 01700 26 7246 26 35132 26 7595	
	Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set.ups	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 26.01700 26.72543 26.35126 26.76916 26.77589 26.78640	Staff Type Serial Number Remarks	GPCL2 12345 26 01700 26 72546 26 35132 26 7595 26 7595 26 76846	
	Closing Error Error Factor (m) BIM01 CP1 SP01 1001 1002 1003 1004	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set-ups Intermediate 1 22108 1 21435 1 20384 1 20632	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 Reduced level 26.01700 26.2543 26.2542 26.76916 26.7768 26.776840 26.78352	Staff Type Serial Number Remarks A1 A1 A1	GPCL2 12345 26.01700 26.72546 26.35132 26.75595 26.77595 26.77595 26.78398	
	Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1004	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set-ups Intermediate	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 26.01700 26.72543 26.72543 26.76916 26.77699 26.78540 26.78540 26.78540	Staff Type Sorial Number Remarks A1 A1 A1	GPCL2 12345 26 01780 26 01780 26 7546 26 35132 26 7692 26 7795 26 7895 26 7896 26 7899 26 7539	
	Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1004 1005	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set-ups Intermediate 1 22108 1 21435 1 20384 1 20632 1 23721 1 25216	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 26.01700 26.01700 26.72543 26.35126 26.76516 26.77589 26.78540 26.78392 26.7309	Staff Type Serial Number Remarks A1 A1 A1 A1 A1 A1	GPCL2 12345 26.01700 26.7246 26.7546 26.7692 26.7692 26.7692 26.7695 26.7899 26.7394	
	Closing Error Error Factor (m) BM01 CP1 5P01 1001 1002 1003 1004 1005 1006	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set.ups Intermediate 1 22108 1 21435 1 20384 1 20532 1 23721 1 25216 1 26922	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 Reduced level 26.01700 26.72543 26.76916 26.77589 26.76916 26.77589 26.76916 26.78592 26.75303 26.73008 26.73008 26.70102	Staff Type Serial Number Remarks A1 A1 A1 A1 A1 A1 A1 A1	GPCL2 12345 26,01700 26,72446 26,35132 26,7595 26,7595 26,7595 26,7595 26,7394 26,73914 26,73014	
	Closing Error Error Factor (m) Polint (D) 1001 1002 1003 1004 1005 1006 1006	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set.ups Intermediate I 22108 I 22108 I 221435 I 20034 I 20632 I 20522 I 225216 I 22526 I 226456	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 Reduced level 26.01700 26.72643 26.35126 26.7589 26.7589 26.7589 26.7303 26.7303 26.7303 26.7302 26.7303 26.7302 26.7303 26.7302 26.7303 26.7302 26.7303 26.7253 26.7303 26.7303 26.7303 26.7303 26.7303 26.7303 26.7303 26.7303 26.7303 26.7303 26.7258 26.7258 26.7303 26.7303 26.7303 26.7303 26.7258 26.7258 26.7258 26.7258 26.7258 26.7258 26.7258 26.7258 26.7258 26.7258 26.7258 26.75588 26.7558 26.7558 26.7558 26.7558 26.75588 26.75	Staff Type Serial Humber Remarks A1 A1 A1 A1 A1 A1 B1	GPCL2 12345 26 01700 26 72545 26 55132 26 77965 26 77965 26 77965 26 77965 26 77965 26 73964 26 73959 26 7394 26 7394 26 7394 26 7394 26 7394	
	Closing Error Error Factor (m) Bil011 CP1 1001 1002 1003 1004 1005 1005 1005 1007 1009	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set.ups Intermediate 1 22108 1 21435 1 20384 1 20632 1 23721 1 25216 1 28522 1 28526 1 24552	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 26.01700 26.72643 26.35125 26.7569 26.7569 26.7583 26.7583 26.73008 26.73008 26.73008 26.73008 26.7262 26.74052	Staff Type Serial Humber Remarks A1 A1 A1 A1 A1 A1 B1 B1 B1	GPCL2 12346 Adjusted Level 26 5150 26 5152 26 5152 26 5152 26 5152 26 5152 26 5152 26 5152 26 5152 26 5153 26 5159 26 5159 26 5159 26 57514 26 5759 26 57514 26 5759	
	Closing Error Error Factor (m) BN01 CP1 1001 1002 1003 1004 1005 1007 1009 1009 1009	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set.ups Intermediate I 22108 122108 121435 120324 120532 120344 120532 12054 120522 126406 124532 126653	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 Reduced level 26.01700 26.72643 26.37263 26.77639 26.7859 26.7859 26.7859 26.7859 26.7300 26.7300 26.7300 26.7300 26.7302 26.7459 27.7459 26.7459 27.7459 26.7459 27.7459 26.7459 27.7459 26.7459 27.7459 26.7459 26.7459 26.7459 26.7459 26.7459 26.7459 26.7459 26.7459 26.7459 26.7459 26.72161 2	Staff Type Serial Humber Remarks A1 A1 A1 A1 A1 A1 A1 B1 B1 B1	CPC12 12345 Adjunted Level 28 01700 26 7246 26 5752 26 7795 26 7795 27 7795 26 7795 26 7795 26 7795 26 7795 26 7795 26 7795 26 7795 2	
	Closing Error Error Factor (m) Bill/11 CP1 1002 1003 1004 1005 1005 1005 1005 1006 1007 1009 1010	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set ups Intermediate 122103 122103 122103 12052 12052 12052 12052 12052 12052 12052 12052 12053 12053 120533	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 Reduced level 26.01700 26.72543 26.51526 26.76916 26.76916 26.76916 26.76959 26.76959 26.76959 26.76959 26.76959 26.76959 26.75303 26.73008 26.71002 26.72528 26.74052 26.74052 26.72543 26.72545 26.70121 26.72545 26.72545 26.7010 26.72545 26.72555 26.7255 26.7255 26.7255 26.7255 26.72555 26.75	Staff Type Serial Humber Remarks A1 A1 A1 A1 A1 A1 A1 A1 B1 B1 B1 B1 B1	GPCL2 12346 Adjusted Level 28 51700 26 57546 26 57692 26 57692 26 57692 26 57692 26 57692 26 57692 26 57692 26 57814 26 57090 26 57246 26 57246 26 57247	
	Closing Error Error Factor (m) BM01 CP1 1001 1002 1003 1004 1005 1007 1007 1009 1009 1009 1009	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Setups Intermediate I22108 I21435 I2034 I2062 I25216 I25216 I25256 I25266 I24592 I26663 I26963 I37778	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	9,130 DRA03 26,01700 26,72643 26,57616 26,77689 26,776916 26,77699 26,77892 26,77892 26,73903 26,7705 26,77555 26,77555 26,77555 26,77555 26,77555 26,775555 26,7755555 26,7755555555555555555555555555555555555	Staff Type Serial Humber Remarks A1 A1 A1 A1 A1 A1 A1 B1 B1 B1 B1 B1	GPC12 12345 28 01700 28 01700 28 07546 28 53512 28 77955 28 77957 28 77957 28 77957 28 77957 28 77957 28 77957 28 77957 28 77957 28 77977 28 779777 28 779777 28 7797777777777777777777777777777777777	
	Closing Error Error Factor (m) Bill/11 CP1 1002 1003 1004 1005 1005 1005 1005 1006 1007 1009 1010	0.00015 0.004 Back sight 1.69836 1.21799	Actual Close Number of Set ups Intermediate 122103 122103 122103 12052 12052 12052 12052 12052 12052 12052 12052 12053 12053 120533	26.01685 5 Foresight 0.98993	Distance (km's) Instrument Collimation 27.71536 27.94342	0.130 DNA03 Reduced level 26.01700 26.72543 26.51526 26.76916 26.76916 26.76916 26.76959 26.76959 26.76959 26.76959 26.76959 26.76959 26.75303 26.73008 26.71002 26.72528 26.74052 26.74052 26.72543 26.72545 26.70121 26.72545 26.72545 26.7010 26.72545 26.72555 26.7255 26.7255 26.7255 26.7255 26.72555 26.75	Staff Type Serial Humber Remarks A1 A1 A1 A1 A1 A1 A1 A1 B1 B1 B1 B1 B1	GPCL2 12346 Adjusted Level 28 51700 26 57546 26 57692 26 57692 26 57692 26 57692 26 57692 26 57692 26 57692 26 57814 26 57090 26 57246 26 57246 26 57247	

Line data is imported from the Leica in to separate sheets i.e. Line00001, Line00002 etc.

The naming convention is taken directly from the Leica DNA / SPRINTER.

All data in the header area is drawn from the downloaded information except for the Level Run Location and Weather fields

The 'From' and 'To' fields have been compiled from the first and last point on the survey line. These can be changed by editing the cells, if for instance you have assigned temporary names when in the field



At the end of the last page of each line an additional footer is added for quality assurance purposes.



Amending Cells within Levelling Booking Sheets

The following shows the cells that can and can not be amended.

- Fields that can not be amended
- Fields that can be amended

LEVELLIN	g Bookin		Job Name : Demo				
Level Run Locat	ion	DEMO VERSION ONLY			BM01		26.01700
Date	23.03.2009	Surveyor	TEST	То	BM01	Close Height	26.01700
Closing Error	0.00015	Actual Close	26.01685	Distance (km's)	0.130	Staff Type	GPCL2
Error Factor (m)	0.004	Number of Set-ups	5	Instrument	DNA03	Serial Number	12345
Point ID	Back sight	Intermediate	Foresight	• Collimation	• Reduced level	Remarks	• Adjusted Level
BM01	1.69836			27.71536	26.01700		
DIVIUI							
CD1			0.00002				26.01700
CP1	1.21799		0.98993	27.94342	26.72543		26.72546
CP1 SP01 1001		1.22108	0.98993 1.59216				
SP01	1.21799	1.22108 1.21435		27.94342	26.72543 26.35126		26.72546 26.35132
SP01 1001	1.21799			27.94342	26.72543 26.35126 26.76916	A1	26.72546 26.35132 26.76922
SP01 1001 1002	1.21799	1.21435		27.94342	26.72543 26.35126 26.76916 26.77589	A1 A1	26.72546 26.35132 26.76922 26.77595
SP01 1001 1002 1003	1.21799	1.21435 1.20384		27.94342	26.72543 26.35126 26.76916 26.77589 26.78640		26.72546 26.35132 26.76922 26.77595 26.78646
SP01 1001 1002 1003 1004	1.21799	1.21435 1.20384 1.20632		27.94342	26.72543 26.35126 26.76916 26.77589 26.78640 26.78392	A1	26.72546 26.35132 26.76922 26.77595 26.78646 26.78398
SP01 1001 1002 1003 1004 1005	1.21799	1.21435 1.20384 1.20632 1.23721		27.94342	26.72543 26.35126 26.76916 26.77589 26.78640 26.78392 26.75303	A1 A1	26,72546 26,35132 26,76922 26,77595 26,78646 26,78398 26,75309



Levelling Book – Record and Measure

1 17	🔍 🚽 🔐 🚱 🔛 🖻 Insert Page Layout	Formulas Data		Developer			Ver 1.80.xls [Compatibili		🕜 🗕 t
Proof		int	Next Show All Co Show All Co Show Ink	omments	otect Protect Shar eet Workbook Workb	Protect and Sr I Allow Users to ook Track Changes Changes	Edit Ranges		
C9	• (* <i>f</i> *	С	D	E	F	G	H I	JК	U M
	1	U U	0	L.		0		M	
Export Data		Your Log	jo				Your Addre	SS	
	LEVELLIN	g Bookin	IG SHEET -	LINE0000)1 Rec&Meas	5	Jo	ob Name : Demo)
							Course Hartanka		
	Level Run Loca	tion	DEMO VERS	ION ONLY	From	BM01	Start Height	Input Height	
	Date	30.04.2009	Surveyor	TEST	То	BM01	Close Height	Input Height Input Height	
	Date Closing Error	30.04.2009 Requires Close	Surveyor Actual Close	TEST 0.00000	To Distance (km's)	BM01 0.376	Close Height Staff Type	Input Height	
	Date	30.04.2009 Requires Close	Surveyor	TEST 0.00000	То	BM01	Close Height		
	Date Closing Error	30.04.2009 Requires Close	Surveyor Actual Close	TEST 0.00000	To Distance (km's)	BM01 0.376	Close Height Staff Type	Input Height	
	Date Closing Error	30.04.2009 Requires Close	Surveyor Actual Close	TEST 0.00000	To Distance (km's)	BM01 0.376	Close Height Staff Type	Input Height	D
	Date Closing Error Error Factor (m) Point ID BM01	30.04.2009 Requires Close 0.007 Back sight 1.70147	Surveyor Actual Close Number of Set-ups	TEST 0.00000 5 Foresight	To Distance (km's) Instrument	BM01 0.376 DNA03	Close Height Staff Type Serial Number	Input Height	
	Date Closing Error Error Factor (m) Point ID BM01 CP1	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Set-ups	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	- - - -
	Date Closing Error Error Factor (m) Point ID BM01 CP1 SP01	30.04.2009 Requires Close 0.007 Back sight 1.70147	Surveyor Actual Close Number of Set-ups	TEST 0.00000 5 Foresight	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	-
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Set-ups	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	· · ·
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Set.ups Intermediate	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	- - - - - - - - - - - - - - - - -
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Set-ups Intermediate	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	· · · · · ·
	Pate Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1004	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Setups Intermediate 1.21496 1.2083 1.19767 1.2003	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	· · · ·
	Date Closing Error Error Factor (m) BM01 CP1 CP1 1001 1002 1003 1004 1005	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Set-ups Intermediate 121486 12083 119767 12003 123126	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	· · · · · ·
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1004 1005 1006	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Setups Intermediate 1,21486 1,2083 1,119767 1,20033 1,23126 1,24603	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	· · ·
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1004 1006 1007	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Set-ups Intermediate 1.21486 1.2083 1.19767 1.20033 1.23126 1.24603 1.24603 1.24203	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	· · · · · · · · · · · · · · · · · · ·
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1006 1007 1008	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Setups Intermediate 121486 12083 1.19767 120033 1.2023 122126 124603 1.28272 125867	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1004 1005 1006 1008 1009	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Setups 1.21486 1.2083 1.19767 1.2003 1.23126 1.24603 1.24603 1.28272 1.25867 1.24327	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Set-ups Intermediate 121486 12083 119767 12003 12003 12003 12003 12003 122026 124603 128272 125867 124327 126253	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1004 1005 1006 1009 1008 1000 1010	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Set-ups Intermediate 1 21486 1 2003 1 13767 1 2003 1 23126 1 24603 1 24603 1 24272 1 26867 1 24327 1 26253 1 27683	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	
	Date Closing Error Error Factor (m) BM01 CP1 SP01 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010	30.04.2009 Requires Close 0.007 Back sight 1.70147 1.22202	Surveyor Actual Close Number of Set-ups Intermediate 121486 12083 119767 12003 12003 12003 12003 12003 122026 124603 128272 125867 124327 126253	TEST 0.00000 5 Foresight 0.99292	To Distance (km's) Instrument	BM01 0.376 DNA03 Reduced level	Close Height Staff Type Serial Number	Input Height 12345 Adjusted Level	

Levelling Book – No Close

	Home Home	Insert	Page Layout	Formulas Dat	Show/Hide	Developer Comment mments	e Cal	Protect and Sh	are Workbook Edit Ranges	bility Mode] - Microsoft Excel	_ 5 X @ _ 5 X
	Proo	fing			Comments			Changes			
	C9	-									×
1	A Export Data	•	В	c Your Lo	go	E	F	G	Your Addr	и к µ ress	M
2			LEVELLIN	IG BOOKII	NG SHEET -	LINE0000	1		•	Job Name : Demo	
4			Level Run Loca	ation	DEMO VERS	ION ONLY	From	SP02	Start Height	25.94600	
2 3 4 6 7 8 9			Date	23.03.2009	Surveyor	TEST	То	1	Close Height	Input Height	_
8			Closing Error	Requires Close	Actual Close	25.94594	Distance (km's)	0.033	Staff Type	GPCL2	_
10 11 12			Error Factor (m) 0.002	Number of Set-ups	2	Instrument	DNA03	Serial Number	12345	_
12 13											_
15			Point ID	Back sight	Intermediate	Foresight	Collimation	Reduced level	Remarks	Adjusted Level	_
17			SP02	1.63842	interineulate	Toresign	27.58442	25.94600	TEMP RO	25.94600	
18			BM01	1.60974		1.56785	27.62631	26.01657	WALL CNR	23.34000	
19			1			1.68037		25.94594			
20											_
21											_
22 23											
23											
25											_
26											
27											
28											
29 30							+				
31											
32											_
33											
Ř.+→	N Survey	y Proper	ties 🏑 Raw Surve	y Data 🖉 Chek&	Adj LINE00001 LI	NE00002 / LINE	E00003 / LINE00004	Closing Error Grap	h / 🞾 /	п <u>п</u>	
Ready	2									# 100% C) 🔍 🕀



Change Start / Close Height & Point ID's

If either the start height or close height are missing the following message will appear when the line sheet is opened.

LINE00002: Please En	ter Close Height 🛛 🛛 🔀
Start Height	
PID E20620259	Height 25.30400
Close Height	
150	Height Input Height
ок	Cancel

At this point you can change any of the fields displayed. If you do not wish to enter the missing info at this stag then click Cancel. To access this dialogue box at any other time just click on either the start or close height fields.

To change any other PID then select the PID to change, enter the new details and RTN, the following dialogue box will appear to confirm the change.

Please Confirm PID Cha	inge 🛛 🔀
Old PID 3	New PID 300
ок	Cancel

If there are multiple occurrences of the PID you wish to change the following dialogue box will appear.

Multiple References :	Multiple References :									
There are multiple references too PID 74 within LINE00002 Do you wish to replace all references too PID 74 with PID 740 within LINE00002										
Replace All	Replace Highlighted Cell Only	Replace None (Cancel)								

If to replace all occurrences select Replace All to replace only the one you selected select Replace Highlighted Cell Only to cancel select Cancel.



If you select to change all occurrences of the PID then the following dialogue box will appear informing you of the number of replacements made in that line.





Merge Lines

This allows the user to merge a number of lines together in any order they wish.

Merge Lines		×
Instructions Please enter the line Reference Numbers, from the list on the right, that you wish to merge. Lines will be merged in the order that you have entered them. i.e. if you enter 1,3,2 the lines will be merged as	Line Reference Detials Ref Line ID From To 1: LINE00001 SP02 1 2: LINE00002 BM01 BM01 3: LINE00003 BM01 BM01 4: LINE00004 BM01 BM01	×
follows LINE00001 to LINE00003 to LINE00002 Use only numeric characters and comas i.e. 1,3,2	Displays the lines in current project, along with the 'From' and 'To' references. Allowing the user to merge the lines in the correct order	
Input Line Ref No.s Separated By Coma's 2,3,4 OK Cancel	Lines numbers that you wish to merge, in the order you wish to merge them	

Once processed the information is displayed in the Levelling Booking Sheet which will also display the lines that have been merged in the order that they have been merged.

	BM01 B	C Your Log IG BOOKI	ю + а + (е) go NG SHEE ie00003 - LINEOC	L Σ β 90% Ε Τ - MERGE	• • • • • • • • • •	≝ * 日日 G Si Yi W	heet Name ou can merg	e as may sheets as ge sheet will be give	
7 •	BM01 B BM01 B B B B B B B B C C C C C C C C C C C	C Your Log IG BOOKI	ю + а + (е) go NG SHEE ie00003 - LINEOC	L Σ β 90% Ε Τ - MERGE	SHEET	C SI Yi W SL	heet Name ou can merg ish each mer uffix of 1, 2, 3	e as may sheets as y ge sheet will be give	M you
7 •	BMD1 B B LEVELLIN Lines Merged - Level Run Locati	C Your Lo IG BOOKI	go NG SHEE IE00003 - LINEOC	T - MERGE	SHEET	G SI W SL	heet Name ou can merg ish each mer Iffix of 1, 2, 3	e as may sheets as y ge sheet will be give etc	M you
A	B LEVELLIN Lines Merged -1 Level Run Locati	Your Log IG BOOKI	go NG SHEE 1600003 - LINEOC	T - MERGE	SHEET	Si Yu su	ou can merg ish each mer uffix of 1, 2, 3	e as may sheets as ge sheet will be give	you
	LEVELLIN Lines Merged - I Level Run Locat	Your Log IG BOOKI	go NG SHEE 1600003 - LINEOC	T - MERGE	SHEET	Si Yu su	ou can merg ish each mer uffix of 1, 2, 3	e as may sheets as ge sheet will be give	you
Export Data	Lines Merged - I	IG BOOKI	NG SHEE' IE00003 - LINEOC			Yu	ou can merg ish each mer uffix of 1, 2, 3	ge sheet will be give	
	Lines Merged - I	LINE00002 - LIN	1E00003 - LINEOC			BM01	Start Height	26.01700	
		ion	K	<u></u>	From	BM01	Start Height	26.01700	
	Date		Supremor						
	Date			N TEAT	T -	DMOA	Chara Uninte	20.04700	
			Surveyor	TEST	То	BM01	Close Height	26.01700	
	Closing Error	0.00023	Actual Close	28 01677	Distance (km's)	1,224	Staff Type		
	Error Factor (m)	0.013	Number of S		ne lines that l			12345	
	Point ID	Back sight	Intermedi	in the orde	r that they have	ave been m	erged 😽	Adjusted Level	
	BM01	1.69836						26.01700	
	CP1	1.21799						26.72545	
	SP01	1.63898		1.33619	61.00024	20.33120		26.35129	
	1001		1.22108			26.76916	A1	26.76919	
	1002		1.21435			26.77589	A1	26.77592	
	1003		1.20384			26.78640	A1	26.78643	
	1004		1.20632			26.78392	A1	26.78395	
	1005		1.23721			26.75303	A1	26.75306	
	1006		1.25216			26.73808	B1	26.73811	
	1007		1.28922			26.70102	B1	26.70105	
	1008		1.26496			26.72528	B1	26.72531	
	1009		1.24932			26.74092	B1	26.74095	
	1010		1.26863			26.72161	B1	26.72164	
	1011		1.28303			26.70721	01	26.70724	
	1012		1.37878			26.61146	C1	26.61149	
	1013 1014		1.26362			26.72662 26.72186	C1 C1	26.72665 26.72189	
	vey Data / Chek&Ad						01	26.72189	



Export Lines

To Export data select the Export Data button.

	9 - (2 - 1	s 🔊 🖌 🔊	* • • • •	1 🔁 🙆) 🛅 🧐 🖞	
Hom	ne Insert	Page Layou	t Formulas	Data	Review	Viev
Paste	Arial B I U				Wra	
Clipboard 🖻		Font	Fa .	Alig	gnment	
B17		• (•	BM01			
	Α	В	С		D	
Expo	rt Data	[E	Export Data Butto			

The Export sheet has been updated to show, the exported data along side a summary of the data exported.

The summary includes the Point ID along with each reading for that ID the Average, Standard Deviation and Remarks of the Readings taken.

Individual lines can be exported in this case LINE00002 or

Exported Data LINE00002		E00002		Averages And Standard Deviation LINE00002									
oint ID	Reduced level	Adjusted Level	Remarks	Point ID	Reading 1	Reading 2	Reading 3	Reading 4	Reading 5	Average	Stan, Dev	Remarks	
)7		20.83071	US TBM	134	22.47781	Contractor and				22.47781			
18		19.09682	DS TBM	135	21.54532					21.54532		NRABM,	
;	20.93726	20.94379	E5 VTRMEADS VR	136	22.47780					22.47780		· ·	
	20.01277	20.01936		137	21.55798					21.55798			
	20.09615	20.10280		138	23,29055					23.29055		Ρ.	
1		20.07300	P33 P33	139	23.20684					23,20684			
)	21,13869	21,14545		140	23.54717					23.54717			
	21.81080	21.81762		141	23.80074					23.80074		E5 GOAT BRDGE	
2	20.89904	20.90591		142	23.54732					23.54732			
3	22.14107	22.14800		143	23.20706					23.20706			
ł		22.04586		144	22.83254					22.83254			
5	21.92274	21.92978	P?	145	23,18672					23,18672			
6	21.44801	21,45511		146	23,53999					23,53999			
7	21.83379	21.84094		147	23.73507					23.73507		Ρ.	
8	22.45336	22.46057	IC P24	148	24.40856					24.40856		•	
)	23,10044	23.10771	P23	149	24,70899					24,70899			
0	23,18099	23.18831		150	25,30400					25,30400			
		22.36341		1001	22.88243	17.97801	14.59791	23.76869		19,80676	4.30632	OSBM, US BM, US TBM, U/S TBM,	
2	23.28297	23.29041		1002	24.00752	20.83287	17.91693	14.22567	23.57867	20.11233	4.09816	OSBM PH, US BM, DS BM, DS TBM, D/S TBM,	
3	21.55055	21.55804	P	1003	23.77078	19.09909	17.84371	16.73609		19.36241	3.09338	US BM, DS BM, NRA BM, US TBM,	
4	22.47026	22.47781		1004	23.58126	15.99553				19.78839	5.36392	DS BM, DS TBM,	
5	21.53771	21.54532	NBABM	1005	17.97750					17.97750		US TBM.	
6	22.47014	22.47780		1006	17.91666					17.91666		DS TBM,	
7		21.55798		1007	20.83071					20.83071		US TBM.	
B	23.28278	23.29055	P	1008	19.09682					19.09682		DS TBM,	
9	23.19901	23.20684		E2062025	25.30400					25.30400		EACSE2	
0	23.53928	23.54717		E5	14.52545					14.52545		E5,	
		23.80074	E5 GOAT BRDGE										
D1	23,76075	23,76869	U/STBM						•				
02		23,57867	D/S TBM										
2		23.54732		1									
3		23.20706		1									
ł		22.83254		1									
5	23.17855	23.18672		1									
5	23.53177	23.53999		1									
7		23,73507	P	1									
8	24.40022	24.40856		1									
9		24.70899		1									
0	25.29555	25.30400		1									
				1									

Merged line sheets can also be exported.

Ex	ported Data MEF	RGE SHEET		Avera	ges And Sta	ndard Devi						
Point ID	Reduced level	Adjusted Level		Point ID	Reading 1	Reading 2	Reading 3	Reading 4	Reading 5	Reading 6	Average	Stn Dev
BM01	 26.01700	26.01700		1001	26.76916	26.76918	26.76888	26.76888			26.76903	0.00017
CP1	26.72543	26.72545		1002	26.77589	26.77576	26.77556	20.70000			26.77574	
SP01	26.35126	26.35129		1002	26.78640	26.78629	26.78610				26.78626	
1001	26.76916	26.76919		1003	26.78392	26.78379	26.78358				26.78376	
1002	26.77589	26.77592	1	1005	26.75303	26.75290	26.75269				26.75287	
1003	26.78640	26.78643		1006	26.73808	26.73792	26.73780				26.73793	
1004	26.78392	26.78395		1007	26.70102	26.70090	26.70077				26,70090	
1005	26.75303	26.75306	1	1008	26.72528	26.72513	26.72496				26.72512	
1006	26.73808	26.73811	1	1009	26.74092	26.74076	26.74061				26.74076	
1007	26.70102	26.70105	1	1010	26.72161	26.72140	26.72129				26.72143	0.00016
1008	26.72528	26.72531	1	1011	26.70721	26.70703	26.70695				26.70706	0.00013
1009	26.74092	26.74095	1	1012	26.61146	26.61131	26.61117				26.61131	0.00015
1010	26.72161	26.72164	1	1013	26.72662	26.72643	26.72633				26.72646	0.00015
1011	26.70721	26.70724]	1014	26.72186	26.72172	26.72161				26.72173	0.00013
1012	26.61146	26.61149		1015	26.65851	26.65834	26.65822				26.65836	0.00015
1013	26.72662	26.72665		1016	26.64294	26.64280	26.64269				26.64281	0.00013
1014	26.72186	26.72189		1017	26.59954		26.59922				26.59937	0.00016
1015	26.65851	26.65854		1018	26.64380		26.64357				26.64368	
1016	26.64294	26.64297		1019	26.62603		26.62584				26.62592	0.00010
1017	26.59954	26.59957		1020	26.59916		26.59893				26.59904	
1018	26.64380	26.64383		1021	26.58584		26.58561				26.58572	
1019	26.62603	26.62606		1022	26.56958		26.56937				26.56945	
1020	26.59916	26.59919		1023	26.56663		26.56641				26.56649	
1021	26.58584	26.58587		1024	26.56112		26.56092				26.56098	
1022	26.56958	26.56961		1025	26.54872		26.54844				26.54856	
1023	26.56663	26.56666	l	BM01	26.01700	26.01685	26.01679	26.01677			26.01685	
1024	26.56112	26.56115		CP1	26.72543	26.72535	26.72529	26.72530	26.72526	26.72527	26.72532	
1025	26.54872	26.54875	l	SP01	26.35126		26.35118	26.35125	26.35118	26.35118		0.00004
Z1	26.54251	26.54254		Z1	26.54251	26.54241	26.54228				26.54240	
Z2	26.58814	26.58817		Z2	26.58814	26.58802	26.58791				26.58802	0.00012
SP01	26.35123	26.35128										

Once the data has been exported the use has the ability to cut, paste and copy this data into any other application that they wish.

The exported file will be saved in the Exported Data folder.

F:\Leica Software\DNA Software\Working Folder Demo Version							
File Edit Yiew Favorites <u>T</u> ools <u>H</u> elp							
🕒 Back 🝷 💿 🕤 🏂 🔎 Search 🄀 Fold	ers 🚺 🕇						
ddress 📴 F:\Leica Software\DNA Software\Working Fol	ler Demo Version				💌 🄁 Go		
Name 🔺		Size	Туре	Date Modified			
File and Folder Tasks 🔹 📄 🛅 DNA ASCII F	iles		File Folder	29/06/2009 13:08			
Rename this folder	ta		File Folder	29/06/2009 13:13			
Manual Manual			File Folder	23/06/2009 17:17			
Move this folder			File Folder	27/06/2009 06:42			





Printing

When you select the print preview screen only the cells containing data will be displayed or printed. If the number of cells containing data does not add up to one whole page, the software will insert the correct amount of cells complete the page.

	(C. º 1 II I I I I I I I I I I I I I I I I	A 03 Import Tool Ver 1.2 Demo for Excel 20	107 [Compatibility Mode] - Microsoft Excel 🛛 🗕 🕾 🗴
Print Zoom Preview Preview			
	YourLogo	Your Address	
	LEVELLING BOOKING SHEET - LINE00002	Job Name : Demo	
	Annii Ros Loodine Review JRBNO, USBROL (DNY	BJ 01 Close Hey M 28.01700 0.130 Blaff Type GPCL2	
		Reduced land Remarks Adjusted Land 56 0700 2601700 2601700 56 73840 2672446 2672446 56 3738 2635102 2637892 56 78949 2678622 2637892	
	%02 12145 %03 12084 %04 10082 %05 12024 %07 12062 %07 12062 %09 12064	10:7788 26:7789 10:7789 26:77995 10:87840 26:7394 10:87850 A1 26:7396 10:87850 A1 26:7396 10:87850 A1 26:7396 10:73936 A1 26:7394 10:87000 A1 26:7098 10:87000 A1 26:7098 10:87828 89:26:7284	
	1009 1.2492 1010 1.2493 1011 1.2403 1011 1.2403 1013 1.2493 1014 1.2588 1014 1.2588 1014 1.2588	26.74/06 81 26.74/06 26.74/06 81 26.72/07 26.74/07 81 26.70/07 26.67/46 81 26.81/62 26.74/68 C1 26.71/68 26.74/68 C1 26.71/62 26.66/67 C1 26.71/62	
	016 1.242 017 1.367 018 1.2444 019 0.1541 019 0.1541 021 1.4644 022 1.42695	26.8424 C1 26.8420 26.8954 C1 26.89860 26.8954 C1 26.8436 26.4430 C1 26.8436 26.4430 C1 26.8436 26.4440 C1 26.85960 26.8584 C1 26.85860 26.8584 C1 26.85864 26.85864 C1 26.85864	
	1022 1.42361 1024 1.42361 1055 1.4452 21 1.0212 101 1.4473 1001 1.4473 1001 1.4473 1001 1.4473 1001 1.4473 1001 1.4276 1202 27.8956	26 5660 E1 26 5691 26 5671 E1 26 5671 26 5671 E1 26 5671 26 5472 E1 26 5472 26 5423 E1 26 5472 26 54247 26 5427 26 5427 26 5421 E1 26 5427 26 5421 26 5427 26 5427 26 5421 26 5427 26 5427 26 5423 E1 26 5427 26 5425 26 7255 26 7257	
	BU01 1 80244	28.0150	
	Quality Assurance Checked By Signed By	Date	
	Repet of 1		
Preview: Page 1 of 1			Zoom In 100% 😑 🥌 🕀

Please note that the Print Preview and Print facilities are not available in the Demo version of this software.



Print Settings

DNA Print Settings can be accessed via the drop down menu and allows the user to change the amount of lines printed on the first and last pages of the reports, in case the footer on these pages over runs the bottom of the sheets.

It will also allow you to actively reformat the sheets without the need to reload the data.

Ľ	NA Print Setup	
	Instructions If you are experiencing formating problems. Use the Up - Down arrows to change the amount of lines per page. line values can be changed between +/- 20 lines If the footer is spaning two pages then reduce the number of lines per page. If you require to move the footer further down the page then increase the number of lines per page If you select Save the line data will clear and you will have to reload the data If you select Re-Format Lines all currently loaded lines will be reformat as per settings. These setting will not be saved unless you select Save	Current Settings First Page 71 Last Page 71 Adjust Settings Adjust Settings Adjust First Page 0 ÷ Adjust Last Page 0 ÷
	Re Format Sheets Save Cancel	Reset Defaults

In Fig 1 the footer does not quite fit the page in Fig 2 the number of lines on the page has been reduced and the footer now fits exactly.





Scanned Copy Of Printed Levelling Booking Sheet

Your Logo					Your Address Job Name : Demo			
Date	23.03.2009	Surveyor	TEST	То	BM01	Close Height	26.01700	
Closing Error	0.00015	Actual Close	26.01685	Distance (km's)	0.130	Staff Type	GPCL2	
Error Factor (m)	0.004	Number of Set-ups	5	Instrument	DNA03	Serial Number	12345	
Point ID	Back sight	Intermediate	Foresight	Collimation	Reduced level	Remarks	Adjusted Level	
		mermediate	roreargin	27.71536	26.01700	Normania	26.01700	
BM01 CP1	1.69836		0.98993	27.94342	26.72543		26.72546	
SP01	1.63898		1.59216	27.99024	26.35126		26.35132	
1001		1.22108			26.76916		26.76922	
1002		1.21435			26.77589		26.77595	
1003		1.20384			26.78640	A1	26.78646	
1004		1.20632			26.78392 26.75303	A1	26.78398 26.75309	
1005		1.23721 1.25216			26.73808	A1 A1	26.73814	
1006 1007		1.28922		-	26.70102	A1	26.70108	
1007		1.26496			26.72528	B1	26.72534	
1009		1.24932			26.74092	B1	26.74098	
1010		1.26863			26.72161	B1	26.72167	
1011		1.28303			26.70721	B1	26.70727	
1012		1.37878			26.61146 26.72662	B1 C1	26.61152 26.72668	
1013 1014		1.26362			26.72186	C1	26.72192	
1014		1.33173			26.65851	C1	26.65857	
1016		1.3473			26.64294	C1	26.64300	
1017		1.3907			26.59954	C1	26.59960	
1018		1.34644			26.64380	D1	26.64386	
1019 1020		1.36421 1.39108			26.62603 26.59916	D1 D1	26.62609 26.59922	
1020		1.4044			26.58584	D1	26.58590	
1022		1.42066			26.56958	D1	26.56964	
1023		1.42361			26.56663	E1	26.56669	
1024		1.42912			26.56112	E1 E1	26.56118 26.54878	
1025 Z1		1.44152 1.44773			26.54872 26.54251	E1	26.54257	
Z1 Z2		1.4021			26,58814	E1	26.58820	
SP01	1.60432		1.63901	27.95555	26.35123		26.35132	
CP1	0.97194		1.2302	27.69729	26.72535		26.72547	
BM01			1.68044		26.01685		26.01700	
Quality A	ssurance							
Check	ked By		Si	gned By			Date	

36


Closing Error Graph

This sheet takes the closing error from each line and represents it on the graph as a quick reference tool to highlight any lines which you may wish to double check.



Update Graph

Once any closing heights that are missing on the Line sheets, have been entered then the graph will automatically update to reflect these changes



Clear Data

To clear all data that has been imported into the Digital Levelling Suite click here.

P	0	- (° - 🙆	r 🙉 🎍	4 🕓 🖏	er if 🙊 .	1 7	9 🗈 🔮	1 🗉 🛃 🖓 1	3 🔮 🗉	L 🗄 🖨	₹ Leica Suite Ve	r 0.16.16 Beta.xls [Comp	atibility Mode] - Micro 🗕 🖻 🗙
	annal Page Page Reak Custom Full										le III Synchronous Sci hide III Reset Window P Window	To clear all imported data from application click here	
1			U			YOU	R LOG			D	NA Import	Sprinter Import	
2 3 4					Su	ırvey	Prope	rties			erge Lines	Clear Lines	Ī
5				P	roject Name					Test	Data		
7					Remarks				CT-03	98 T	EST CONTROL		
9 10					Operator			HS		D	ate / Time	05.01.2009 / 17:34:2	9
11 12				Instr	ument Num	ber		330883		Num	ber Of Lines	2	
13				Impo	rted Docum	ient	Demo D)ata Multiple Adjusts.asc		Check	& Adjust Sheet	Yes	
14				Ins	tallation Pa	th		F:\Leica Sof	tware\Sp	rinter Soft	ware\Leica Sprii		
16 17	→ H Su	rvey Prope	rties /	Raw Sun	vev Data 🖉 O	hek&Adj	LINE000			RS VERSION		(Data Management Softwa	re)
	dy 🛅	in the second seco	- chub /	.arr our	10,000 2 0		2 - 211 2000		- <u>_</u>	ing circle orap		•	

Data cleared

9) 🖬 🤊	- (° - 🙆	r 🙊 🕨	😫 🕑 🎽	er 19 (g.	1 🗟) 🛅 🐴 🕯		i 🖓 🛛	3 😬 🗈	<u>)</u>	•	Leica Suite V	er 0.16	.16 Beta.xls [Compati	bility M	ode] - N	licro	- • ×
	Home	Insert	Pag	e Layout	Formulas	Data	Review	View	Dev	eloper	Add-Ins							0	- = x
			E		Ruler		rmula Bar eadings	9	100				Sp Hi		View Side by Side			25	
Norr	nal Page	Page Break Preview	Custor	n Full Screen	Message		aunys	Zoom	100%	Zoom to Selection	New Window	Arrange	Freeze		he Reset Window Posit		Save	Switch Windows *	Macros
		Vorkbook Vie			S	how/Hide			Zoom						Window				Macros
	E5		(•	f_{x}															*
1	A	В	С		D	_		E					F		G	Н	1	J	
						YOUF		0				DNA Ir	mport		Sprinter Import				
2			r											-		1			
					Si	urvey	Prope	rties				Merge	Lines		Clear Lines				
3			L								_			-		J			
			[D.	roject Nam											-			
5			l		oject Nalin														
6			[Remarks											1			-
7			L													_			
9					Operator							Date	/ Time						
10						_					-			-		-			
11 12				Instr	ument Num	iber					N	lumber	Of Lines						
12			ſ											_		7			
13				Impo	rted Docun	nent					Che	eck & A	djust Sheet						
14			ſ													٦			
15				Ins	tallation Pa	ith													
16													© D°M 'S'	(Data	Management Software)			
17	► H Su	rvev Proper	rties /	Raw Sun	vey Data	Closing Erro	or Graph		ARNING	DEVELOP	RS VERS	ON					ī	4	×
	y 🛅	, rroper	Lines /			allowing all	. anapri Z									• • •	100% 🥃)	•



Upgrading your product:

If you have purchased either the Sprinter Only or DNA Only version and you wish to upgrade to the full Digital levelling suite then please contact your supplier, they will issue you with a product upgrade code.

To upgrade your product select Full Suite Upgrade from the Levelling Suite Menu

(D a) 🖬 🤊 - (ຯ -) 🖀 👰 🕊 💁	🍟 🐨 🐨 🛞	· 🛕 🗟
	99	Home Insert Page Layou	it Formulas	Data
E	L	evelling Suite -		
		Merge Lines		
		Clear Lines		
L		Update Graph		
		Print Setup	c	
		Save Workbook	D	
		Administrators Only		
		Full Suite Upgrade		VOU
		About the Digital Levelling Suite		YOU
2	2			

The following dialogue box will appear.

U	Jpgrade 🔀
ſ	Thank you for choicing to upgrade your version of the Digital Levelling Suite Please enter the Security Code supplied by your distributor in the box below.
	If you do not have this code in your possession please use the ABOUT option on the Levelling Suite menu to get detials of your distributor.
	OK Cancel

Enter the product code you have received from you supplier and select OK.



The following dialogue box will appear informing you that the following tasks will be performed.

C	Congratulations 🛛 🗙	J
	You have successfully upgraded to the full Digital Leveling Suite. The application will now perform the following tasks. 1: Save Application 2: Send Confirmation Mail Message To Distributors 3: Close Application Please relauch application after close to complete upgrade.	
	ОК	

Select OK the application will then perform the following tasks.

- 1. Save
- 2. Send confirmation email to your supplier
- 3. Close

Once the application has been re-launched you will have access to all the features of the full suite.



Appendix A: Customisation

We can customize the following sheets to reflect your company identity, on screen and on the printed documents.

We would require a copy of your logo in either Bit Map of Jpeg format. If this is not available we can scan in your logo from your headed paper, however the quality may be diminished.

One customisation is included in the cost of the application. Any further modification in the future would be chargeable, please email support for quote.

Survey Properties Sheet

		2 🖗 🔟 🖄 📽 🕬 🖓 🔥 🚺	🞦 🕾 🐒 🐹 🐼 🖏 🛍 🛍	🛕 🚍 🤀 🍷 Leica Suite Ve	r 0.16.16 Beta.xls [Compatib	ility Mode] - Micro 😑 🗢 🗙						
	Home Inser	Page Layout Formulas Data	Review View Developer	Add-Ins		🥥 _ 🗗 X						
Company Logo	Page Brea Preview Vorkbook	k Custom Full Views Screen Message Bar	nula Bar Idings Zoom 100% Zoom to Selection Zoom	New Arrange Freeze Unit	 Init Synchronous Scrollin 	Save Switch Workspace Windows - Macros						
		→ (news snow/mide	200m		window	Matros 🕹						
	A		E	F	G	H I J 🗮						
			LOGO	DNA Import	Sprinter Import							
	2			, ————————————————————————————————————								
	3 4	Survey F	Properties	Merge Lines	Clear Lines							
	5	Project Name				=						
	7	Remarks										
	9	Operator		Date / Time								
	11	Instrument Number		Number Of Lines								
	13	Imported Document		Check & Adjust Sheet								
	15	Installation Path										
	16		© D'M'S" (Data Management Software)									
	17	erties / Raw Survey Data / Closing Error	WARNING DEVELOPERS VERSION Raw Survey Data / Closing Error Graph / 💬 /									
	Ready 🔚					100% 🕘 💎 🕂 🕂						

Raw Data Sheet

Window Marces C17 Image: Comparison of the second	Hame Insert H NN Page Page Break Layout Preview	Page Layout P Custom Full		Data Review A R Formula Bar Headings	Zoom 100% 2		rrange Freeze All Panes - U		Side by Side tronous Scrollin Window Positi			ipany Logo
B C D E F G H I J K L M N Term Dem:Striveys' Tel X000-X00000000Dight Level Measurement Report		~ .	Sho	w/Hide	Zoom			Window	N	_/		Macros
Adv name: Definition Operator: 1:52:1 Diversition: 1:1:1:1:1:1:1:1:1:1:1:1:1:1:1:1:1:1:1:		· · · · ·	E	F	G	н	1	J	К	/	М	N
Line ::Desk5.dij Method: A x Bx Date ::20.02.000 Time ::1135:11 Start:: Start:: The ::Desk5.dij Backsight No. Obs Start:: Start:: Start:: No. Obs Start:: Start:: Start:: Start:: Start:: Start:: Start:: No. Obs Start:: No. Obs Start:	Job name : D Operator : TE DNA03 : Ins Remarks : M	emo ST str.: 12345 ONITORING TASK		evel Measurement Rep	ort							=
PLD Backsight Herright Foresight Red.Level Datacco Remmins No. Obs Stan.Dev A1 1.69912 1.31464 1.0000 14.66 4 0.0002 B2 1.31464 1.0000 14.65 4 0.0002 B2 1.31464 1.0000 2.53 4 0.0002 B2 1.13516 2.82 4 0.0001 A2 1.5041 22.06 4 0.0003 Line Leveling	Check & Alius		7:40									
B1 1.3144 1.0000 1459 4 0.0002 B2 1.3106 2.35 4 0.0001 B2 1.3516 2.82 4 0.0001 A2 1.5041 32.06 4 0.0003 Line LiveStood Method BF Line :LiveStood Method BF	Line : Chek&A Date : 23.03.2 Staff1:	t .dj Method: A : 009 Time : 11: Staff2:	x Bx									
Line :LNE00001 Method: BF Date :22.02.2009 Time : 11:49:36	Line : Chek8.4 Date : 23.03.2 Staff1:	it .dj Method: A 1 .009 Time : 11: Staff2:	x Bx 35:11					Remarks	No. Obs	Stan.Dev		
Date: 123032009 Time: 1114936	Line : Chek&A Date : 23:032 Staff1: Pi A1 B1 B2 B2	it .dj Method: A 1 .009 Time : 11: Staff2:	x Bx 35:11 Backsight 1.68912		Foresight 1.31494 1.13106	Red.Level 1.00000	Distance 14.66 14.59 2.35 2.82	Remarks	Nc. Obs 4 4 4 4 4 4	0.00002 0.00002 0.00001 0.00001		
	Line : Chet&A Date : 23.03.2 Staff1: P A1 B1 B2 B2 A2	it .dj Method: A 1 .009 Time : 11: Staff2:	x Bx 35:11 Backsight 1.68912		Foresight 1.31494 1.13106	Red.Level 1.00000	Distance 14.66 14.59 2.35 2.82	Remarks	No. Obs 4 4 4 4 4 4	0.00002 0.00002 0.00001 0.00001		
	Line : Chei&A Date : 23.03.2 Staff: P R A1 B1 B2 B2 B2 A2 Line Leveling	t .dj Method: A 3 0009 Time : 11: Staff2: D	x Bx 35:11 Backsight 1.69912 1.50941		Foresight 1.31494 1.13106	Red.Level 1.00000	Distance 14.66 14.59 2.35 2.82	Remarks	No. Obs 4 4 4 4 4	0.00002 0.00002 0.00001 0.00001		



Levelling Booking Sheet

pany Logo	Hom Hom Normal Page		Ruler Gridlines Message		Vie Co Zoor Zoor			iit ∴ View Side I se ia‡ Synchrono Unhide ia Reset Wind Window	us Scrolling	e = × x X X X
party Logo		- () fx	BM01							×
		A B	С	D	E	F	G		К	L M 🖃
	<u>Expor</u>		Your Lo			×		Your Addres	ss b Name : I	
	2	LEVELLI	NG BOOKI	ING SHEET -	LINEUUU	03		~ ~	b Name . I	Demo
	2	LEVELLI	NG BOOKI	ING SHEET - I	LINEUUU	03			in Maine . I	Demo
	2			ING SHEET - I	LINEUUU		D101			
	4	LEVELLI		ING SHEET -		From	BM01	Start Height	26.017	
	4 6 7			Surveyor	TEST		BM01 BM01			00
	4 6 7 8	Level Run Loca Date	tion 23.03.2009	Surveyor	TEST	From To	BM01	Start Height Close Height	26.017	00
	4 6 7 8 9	Level Run Loca	ition			From		Start Height	26.017	00
	4 6 7 8 9 10	Level Run Loca Date	tion 23.03.2009 0.00006	Surveyor	TEST	From To	BM01	Start Height Close Height	26.017	00 00 2
	4 6 7 8 9 10	Level Run Loca Date Closing Error	tion 23.03.2009 0.00006	Surveyor Actual Close	TEST 26.01694	From To Distance (km's)	BM01 0.403	Start Height Close Height Staff Type	26.017	00
	4 6 7 8 9 10 11 12 13	Level Run Loca Date Closing Error Error Factor (m	tion 23.03.2009 0.00006 1) 0.008	Surveyor Actual Close Number of Set-ups	TEST 26.01694 5	From To Distance (km's) Instrument	BM01 0.403 DNA03	Start Height Close Height Staff Type Serial Number	26.017/ 28.017/ GPCL 123	99 99 2 Banner colour o
	4 6 7 8 9 10 11 12 13 15	Level Run Loca Date Closing Error Error Factor (m Point ID	tion 23.03.2009 0.00006 1) 0.008 Back sight	Surveyor Actual Close	TEST 26.01694	From To Distance (km's) Instrument Collimation	BM01 0.403 DNA03 Reduced level	Start Height Close Height Staft Type Serial Number Remarks	26.017 26.017 GPCL 123 Adjuster	Banner colour of modified to fit
	4 6 7 8 9 10 11 12 13 15 15	Level Run Loca Date Closing Error Error Factor (m Point ID BM01	tion 23.03.2009 0.00006 0.0008 Back sight 1.65033	Surveyor Actual Close Number of Set-ups	TEST 26.01694 5 Foresight	From To Distance (km's) Instrument Collimation 27.66733	BM01 0.403 DNA03 Reduced level 26.01700	Start Height Close Height Staff Type Serial Number	26.017/ 26.017/ GPCL 123 Adjuster 26.01	Banner colour of modified to fit
	4 6 7 8 9 10 11 12 13 15 17 18	Level Run Locz Date Closing Error Error Factor (m Point ID BM01 CP1	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DN403 Reduced level 26.01700 26.72544	Start Height Close Height Staft Type Serial Number Remarks	26.017 26.017 9PCL 123 Adjuster 26.0 26.0 26.7	99 99 2 Banner colour o
	4 6 7 8 9 10 11 12 13 15 17 18 19	Level Run Loca Date Closing Error Error Factor (m Point (D) BM01 CP1 SP01	tion 23.03.2009 0.00006 0.0008 Back sight 1.65033	Surveyor Actual Close Number of Set-ups	TEST 26.01694 5 Foresight	From To Distance (km's) Instrument Collimation 27.66733	BM01 0.403 DNA03 Reduced level 26.01700 26.72544 26.35133	Start Height Close Height Staff Type Serial Humber Remarks START	26.017 28.017 GPCL 123 Adjuster 26.01 26.07 26.3	Banner colour of modified to fit company identi
	4 6 7 8 9 10 11 12 13 13 15 15 17 18 19 20	Level Run Locz Date Closing Error Error Factor (m Point ID BM01 CP1 SP01 1001	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups Intermediate	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DNA03 Reduced level 26.01700 26.72544 26.35133 26.76933	Start Height Close Height Staft Type Serial Number Remarks START	26.017 26.017 GPCL 123 Adjuster 26.01 26.76 26.34 26.36 26.36	Banner colour o modified to fit company identi
	4 6 7 8 9 10 11 12 13 15 15 17 18 19 20 21	Level Run Loca Date Closing Error Error Factor (m BM01 CP1 SP01 1001	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups Intermediate	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DNA03 26.01700 26.72544 26.35133 26.76933 26.77591	Start Height Close Height Staff Type Serial Number START A1 A1 A1	26.017/ 26.017/ CPCL 123 26.01 26.07 26.72 26.37 26.37 26.37 26.37 26.37 26.37 26.37	Banner colour of modified to fit company identi
	4 6 7 8 9 10 11 12 13 15 15 17 18 19 20 21	Level Run Locz Date Closing Error Error Factor (m Point ID BM01 CP1 SP01 1001 1002	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups Intermediate	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DNA03 26.01700 26.01700 26.72544 26.35133 26.7693 26.7693 26.77691 26.76644	Start Height Close Height Staft Type Serial Number Remarks START A1 A1 A1 A1 A1	26.017/ 26.017/ CPCL 123 26.01 26.75 26.33 26.769 26.776 26.786 26.776	Banner colour o modified to fit company identi
	4 6 7 8 9 10 11 12 13 15 17 18 19 20 21 22 23	Level Run Loca Date Closing Error Error Factor (m BM01 CP1 SP01 1001 1002 1003 1004	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups Intermediate	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DNA03 26.01700 26.72544 26.35133 26.77591 26.76933 26.77591 26.76944 26.78394	Start Height Close Height Staff Type Serial Number START A1 A1 A1 A1 A1 A1 A1	26.017 26.017 26.017 123 26.01 26.07 26.72 26.36 26.75 26.76 26.76 26.76 26.76 26.76 26.76 26.76 26.76 26.76 26.76 3	Banner colour of modified to fit company identi
	4 6 7 8 9 10 11 12 13 15 17 18 19 20 21 22 23	Level Run Loca Date Closing Error Error Factor (m BM01 CP1 SP01 1001 1002 1003 1004	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups Intermediate 1.17284 1.16626 1.15573 1.15923 1.15924	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DNA03 26.01700 26.01700 26.72544 26.35133 26.77591 26.76933 26.77591 26.7694 26.76394 26.76305	Start Height Close Height Staft Type Serial Number Remarks START A1 A1 A1 A1 A1 A1 A1 A1	26.017/ 26.017/ 123 26.01 26.72 26.75 26.75 26.75 26.75 26.753 26.753	Banner colour o modified to fit company identi
	4 6 7 8 9 10 11 12 13 15 17 18 19 20 21 22 23	Level Run Loca Date Closing Error Error Factor (m BM01 CP1 SP01 1001 1002 1003 1004 1005	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups Intermediate 1.17294 1.16626 1.15573 1.16623 1.16823 1.18912	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DNA03 26.01700 26.72544 26.35133 26.77591 26.77694 26.7894 26.7894 26.75305 26.7534	Start Height Close Height Staff Type Serial Number Staff Type Staff Type Athenation Athe	26.017 26.017 26.017 123 26.017 26.017 26.37 26.37 26.37 26.37 26.76 26.76 26.76 26.76 26.76 26.76 26.76 26.73 26.73	Banner colour of modified to fit company identi
	4 6 7 8 9 10 11 12 13 15 17 18 19 20 21 22 23	Level Run Loca Date Closing Error Error Factor (m BM01 CP1 SP01 1001 1002 1003 1004 1005 1006 1007	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups Intermediate 1.17284 1.16626 1.15573 1.15922 1.20410 1.24112	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DNA03 26.01700 26.01700 26.72544 26.37693 26.77591 26.7694 26.7694 26.7505 26.7394 26.7394	Start Height Close Height Staft Type Serial Number Remarks START A1 A1 A1 A1 A1 A1 B1 B1 B1 B1	28.017/ 28.017/ 28.017/ 123 123 123 123 123 123 123 123 123 123	Banner colour of modified to fit company identi
	4 6 7 8 9 9 101 111 12 13 15 15 17 18 19 20 21 21 22 23 24 25 26 27	Level Run Loca Date Closing Error Error Factor (m BM01 001 1002 1003 1004 1005 1006	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups Intermediate 117294 1.16626 1.15573 1.16623 1.16912 1.20410 1.24112 1.21699	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DNA03 26.01700 26.72544 26.35133 26.77691 26.77591 26.77694 26.75905 26.7594 26.75905 26.75305 26.75305 26.75305	Start Height Close Height Staff Type Serial Number Staff Type Af1 Af1 Af1 Af1 Af1 Bf1 Bf1 Bf1	28.017 28.017 28.017 28.017 28.01 28.01 28.75 28.75 28.75 28.75 28.75 28.75 28.75 28.75 28.75 28.75 28.75 28.75 28.75 28.75 28.75 28.75	Banner colour modified to fit company identi
	4 6 7 8 9 10 11 12 13 15 17 18 19 20 21 22 23	Level Run Loca Date Closing Error Error Factor (m BM01 CP1 SP01 1001 1002 1003 1004 1005 1006 1007	tion 23.03.2009 0.00006 0.0008 Back sight 1.18537	Surveyor Actual Close Number of Set-ups Intermediate 1.17284 1.16626 1.15573 1.15922 1.20410 1.24112	TEST 26.01694 5 Foresight 0.94189	From To Distance (km's) Instrument Collimation 27.66733 27.91081	BM01 0.403 DNA03 26.01700 26.01700 26.72544 26.37693 26.77591 26.7694 26.7694 26.7505 26.7394 26.7394	Start Height Close Height Staft Type Serial Number Remarks START A1 A1 A1 A1 A1 A1 B1 B1 B1 B1	28.017/ 28.017/ 28.017/ 123 123 123 123 123 123 123 123 123 123	Banner colour of modified to fit company identi

Levelling Booking Sheet Quality Assurance Footer





Closing Error Graph



Print and Print Preview





Save Workbook

Save Workbook is access from the dropdown menu.

Save Inf	ormation 🛛 🔀
٩	Be aware saving will disable the following functions within this workbook. Import Lines Clear Lines
	To process further lines please relaunch the DNA Import Tool application again.

This will first open the dialogue box above notifying the you that certain features will be disabled in the saved version.

The reason behind this is to remove any dependencies within the application and the data you are about to save.

This will enable the you to save the workbook and then Email this file to some one that does not have the application loaded on their machine.

Certain features are still enabled i.e. Merge Lines, Print Set-up etc. The only features disabled in the saved version are Import and Clear. Import has been disabled due to it dependence on the application and clear has be disabled so that a user does not accidentally clear all the data from a save report.

Once the you have selected OK on the above form the Save Dialogue box opens

Save As			? 🛛
Save in:	C New Improved Version	+ 🗈 🔍 🖄 🖆 🛛	🏥 🕶 Tools 🗸
History History My Documents Desktop Favorites	Name Adobe Files Archive DNA ASCII files Exported Data Exported Forms VB Manual New Versions Templates Test Sheets DNA Import Tool New Ver 1.95.xls DNA Import Tool New Ver 1.96 Demo.xls DNA Import Tool New Ver 1.96 Demo.xls DNA Import Tool New Ver 1.96.xls	2344 KB Microso	Modified 07/09/2009 12:33 20/09/2009 15:47 20/09/2009 15:47 20/09/2009 15:25 20/09/2009 12:12 17/09/2009 12:12 20/09/2009 12:12 20/09/2009 13:15 20/09/2009 13:15 20/09/2009 13:16 20/09/2009 13:30 oft Offic 20/09/2009 14:02 oft Offic 20/09/2009 19:36 oft Offic 20/09/2009 19:25
My Network Places	File name: Demo Save as type: Excel Files (*.xls)		Save Cancel

The File Name box is automatically propagated with the project name in this case 'Demo'



Appendix C: Known Issues

Initialising Folders

If you received the message Initialising Folders when the Open File dialogue box has been opened and then the Open File dialogue box freezes. Close the Open File dialogue box by clicking on Cancel, then re launch it. This is a known problem with Excel 2007 and is caused by having Disconnected Network Drives. For further details visit support at www.microsoft.co.uk.

Open													2 🗙
Open Look in: My Recent Documents Desktop My Documents Wy Computer My Network Places	My Docur My Music My Picture: My Receive My Videos	s ed Files									×		
	File <u>n</u> ame: Files of <u>t</u> ype:	Asc File:	5		 	 	 			•			
Too <u>l</u> s 🔻									<u>O</u> pei	n		Canc	el





Appendix D: Macro Security Settings

Changing Macro Security Settings in Excel 2007

If you receive the security warning 'Data Connections Have Been Disabled' when you start the DNA application, then your macro security settings in Excel are set to 'High'. This means that no macros will be able to run in Excel 2007. To change these setting follow the instructions below.







Excel Options	?	
Popular Formulas	Change the most popular options in Excel.	2
Proofing Save Advanced Customize Add-Ins Trust Center Resources	Top options for use Select 'Popular' Show Mini To Enable Live Preview Show Developer tab in the Ribbon () Always use ClearType Golor scheme: Blue ScgeenTip style: Show feature descriptions in ScreenTips Create lists for use in sorts and fill sequences: Edit Custom Lists When creating new workbooks Use this fogt: Body Font Font size: 11 Default yiew for new sheets: Normal View Include this many gheets: Jser name: WinXP Choose the languages you want to use with Microsoft Office Language Settings	
	OK Cance	<u>ا</u> ا

Excel Options	
Popular Formulas	Change the most popular options in Excel.
Proofing Save Advanced Customize Add-Ins Trust Center Resources	Top options for working with Excel Show Mini Toolbar on selection ① Enable Live Preview ① Show Developer tab in the Ribbon ① Always use ClearType Color scheme: Blue ♥ ScreenTip style: Show feature descriptions in ScreenTips Create lists for use in sorts and fill sequences: Edit Custom Lists
	When creating new workbooks Use this font: Body Font Font size: 11 Default yiew for new sheets: Normal View Include this many sheets: 3 Personalize your copy of Microsoft Office
	User name: WinXP Choose the languages you want to use with Microsoft Office: Language Settings
	OK Cancel



Developer Tab

Home Insert Page	🔓 🕄 📽 📑 🗊 🔊 🧥 : Layout Formulas D		ew Developer	DNA03	
Cut Copy Paste Clipboard	 ▼ 11 ▼ A A ■ ▼ ■ ▼ ■ The 'Develope displayed in the transformation of the trans	r' Tab will now be e 'Ribbon'		eneral ■ → % → (*.00 - Number	
Security Warning Data connect	Security Warning Data connections have been disabled Options				
D5 🗸 💿	$f_{\rm x}$				
A	CD		E		
Home Insert Page Layout Formulas Data Review View Developer					
Visual Macros Basic Use Relative References	Insert Design Mode 🕄 Run Dialog	Source A Refresh Data			
Code	Controls	XML			
Security Warning Data connections Then Select 'Macro Security'		ty'	Select the 'Developer' Ta	ab	
D5 🗸 🌔 f 🖈					
A B C	D	E	F		

Trust Center		? 🛛
Trusted Publishers	Macro Settings	
Trusted Locations Add-ins ActiveX Settings Message Bar External Content Privacy Options	Macro Settings For macros in documents not in a trusted location: Disable all macros with notification Disable all macros except digitally signed macros Imable all macros (not recommended; potentially dangerous code can run) Peveloper Macro Settings Trust access to the YBA project object model Select 'Macro Settings'	
	ОК С	Cancel









Once the DNA application has re-opened the following 'Security Message' will appear 'Some active content has been disabled'

😱 🖌 ㅋ - ୯ - 약 👰 🗹 양 약 약 약 위 🖓 🙆 🖄 🧐 🖬 👔 🧐 👔	DNA03
Home Insert Page Layout Formulas Data Review View Developer	
Image: Second Macro Image: Second Macro Visual Macros Image: Second Macro Visual Macros Macro Security	Export
Code Controls XI Select 'O	ptions
Security Warning Some active content has been disabled. Options	
A B C D E	
Microsoft Office Security Options	? 🔀
Security Alerts - Multiple Issues	
Macros & ActiveX Macros and one or more ActiveX controls have been disabled. This active conte might contain viruses or other security hazards. Do not enable this content unle you trust the source of this file.	
Warning: It is not possible to determine that this content came from trustworthy source. You should leave this content disabled unless the content provides critical functionality and you trust its source.	
More information	
File Path: C:\Program Files\Leica\DNA Import Tool\DNA03 Import Tool Ver x.x:	x.xls 📃
 Help protect me from unknown content (recommended) Enable this content 	
Data Connection	
Data connections have been Select 'Enable This Content' ata connections your computer may no longer the source of this file.	· · · · · · · · · · · · · · · · · · ·
File Path: C:\Program Then select 'OK' t Tool\DNA03 Import Tool Ver x.x:	x.xls
Help protect me from unknown content (recommended)	
Open the Trust Center OK	Cancel

This will then launch the application with all the relevant Macros running.

.

For further information concerning macro security please refer to the Microsoft Help file.



Changing Macro Security Settings in Excel 97 - 2003

If you can not activate the 'Click Here To Import RAW DNA Data' button then your macro security settings in Excel are set to 'High'. This means that no macros will be able to run in Excel. To change these setting follow the instructions below.

Microsoft Excel - DNA03 Import Tool Demo Ver	1.30.xls
Eile Edit View Insert Format Tools Data Window	Help
S <u>h</u> are Workbook	: 는 누 📰 의 ㄴ 떼 기 🖓 🛍 🔟 ↓ 🚥 🔟 옷 🔚
D 🖙 🖬 🎒 🗟 💞 🐰 🛍 Protection	- 🕺 🗵 🏂 🤶 🚛 🛍 🦺 100% 🔹 🕄 🗸 🛛 Arial 🔹
D5 = Macro	Macros Alt+F8
KCustomize	<u>R</u> ecord New Macro
Select 'Tools'	Security
×	Alt+F11
	Microsoft Script Editor Alt+Shift+F11
Select 'Macro'	
	Select 'Security'
2	

Security ? 🔀			
Security Level Trusted Sources			
 High. Only signed macros from trusted sources will be allowed to run. Unsigned macros are automatically disabled. 			
C Medium. You can choose whether or not to run notentially unsafe macros.			
Low (not recommended). You are not protected from potentially unsafe macros. Use this setting only if you have virus scanning software installed, or you are sure all documents you open are safe.			
Select 'Medium'			
Virus scanner(s) installed.			
OK Cancel			









Once you have re-opened the DNA application the following security warning will be displayed.

Microsoft Excel				
C:\Program Files\Leica\DNA Import Tool\DNA03 Import Tool Ver x.xx.xls contains macros.				
	Select 'Enable Macros'			
Macros may contain viruses. It is always safe to disable macros, but if the macros are legitimate, you might lose some functionality.				
[Disable Macros More Info			

This will then launch the application with all the relevant Macros running.

M 🔀	licrosoft Excel - Leica Suite	Ver 0.16.16 Beta.xls					PX
		<u>T</u> ools <u>D</u> ata <u>W</u> indow <u>H</u> elp Levellir					_ 8 ×
Aria			%, % 🕫 律 🖽 • 🕭 •				
	🖻 🖬 🔒 🎒 🖏 💖 👗	🖹 🛍 ダ 🗵 🛪 🖌 🍓	$\Sigma f_{\mathbf{x}} \stackrel{\text{A}}{=} \begin{bmatrix} \mathbf{z} \\ \mathbf{A} \end{bmatrix} \stackrel{\text{A}}{=} \begin{bmatrix} \mathbf{u} \\ \mathbf{A} \end{bmatrix} \stackrel{\text{A}}{=} \begin{bmatrix} \mathbf{u} \\ \mathbf{A} \end{bmatrix} \stackrel{\text{A}}{=} \begin{bmatrix} \mathbf{z} \\ \mathbf{A} \end{bmatrix} \stackrel{\text{A}}{=} \begin{bmatrix} \mathbf{u} \\ \mathbf{A} \end{bmatrix} \stackrel{\text{A}}{$	🖕 Security 👌 🔛 👋 🖄	后当当道 副 01 0	비 바 우 바 타	•]- »
	E5 🔽 =	_	_	-			
1	A B C	D	E	F	G	H I J	_
2	YOUR LOGO			DNA Import	Sprinter Import		
3		Survey	/ Properties	Merge Lines	Clear Lines		
4 5 6		Project Name					
7		Remarks]	
9 10		Operator		Date / Time]	
10 11 12		Instrument Number		Number Of Lines]	
13		Imported Document		Check & Adjust Sheet]	
15		Installation Path]	
16 17 18	7 WARNING DEVELOPERS VERSION					Ţ	
		Raw Survey Data 🖌 Closing Err	or Graph_/ 🕭 🕶 🏒 🕶 📥 📻 🚍 💕 .			•	
Rea	P					NUM	
-	· · · · · · · · · · · · · · · · · · ·				10 Y		

For further information concerning macro security please refer to the Microsoft Help file by selecting Help from the tool bar or select F1.

Appendix E: Support

For support issues please call:

Main Distributors:



Midlands & North

Paul Challis

Opti-Cal Survey Equipment Ltd 28 Huntley Cresent Campbell Heights Campbell Park Milton Keynes MK9 3FZ

Mob:07798710140 Tel:01908 606464

paul@surveyequipment.com

South West

Doug Murphy

Opti-Cal Survey Equipment Ltd Orpheus House Calleva Park Aldermaston Reading RG7 8TA

Mob:07876507941 Tel:01189 820500

doug@surveyequipment.com

London & South East

Doug Cashman

Opti-Cal Survey Equipment Ltd 3 The Pavilions Brighton Road Pease Pottage Crawley RH11 9BJ

Mob:07860751029 Tel:01293 538730

dougcashman@surveyequipment.com

Appendix F: End User Licence Agreement (EULA)

End User License Agreement (EULA) Digital Levelling Suite Full & Demo Versions

Digital Levelling Suite Full and Demo Versions Copyright 2009 David Prater, David Monaghan and Monaghan Surveys Ltd Adobe 7 Copyright 1984-2004 Adobe Systems Incorporated and its licensors. All rights reserved. DNA / SPRINTER Import Tool encompasses DNA / SPRINTER/10, DNA / SPRINTER 10, DNA / SPRINTER Import Tool Demo, DNA / SPRINTER/10 Import Tool Demo, DNA / SPRINTER Import Tool Demo Version, DNA / SPRINTER/10 Import Tool Demo Version and any other combination of the above.

SPRINI ERVIO Import 100 Demo Version and any other combination of the above. DNA / SPRINTER/10 Import Tool Demo and Full Versions The, DNA / SPRINTER/10 Import Tool Demo and Full Version, software has been provided for use on pc's that meet the minimum requirements stated with the user manual and installation instruction

Installation instruction All references to Leica, Leica DNA / SPRINTER/10 the Leica Logo and any other references direct or indirect to Leica products are copy right of © Leica Geosystems 2009 - Part of Hexagon Group You may not reverse engineer, de-compile, or disassemble the Product

This software will not be copied, resold, or lent without the express consent of David Prater, David Monaghan, Monaghan Surveys Ltd

Acknowledgements:

Template Design And Template Formula's By David Monaghan © 2009

VBA Code And System Formula's Designed By David Prater © 2009

Copyright 1984-2004 Adobe Systems Incorporated and its licensors. All rights reserved.

Protected by U.S. Patents 4, 667, 247; 4,837,613; 5,050,103; 5,185,816; 5,200,740; 5,233,336; 5,237,313; 5,255,357; 5,546,528; 5,625,711; 5,634,064; 5,729,637; 5,737,599; 5,754,873; 5,781,785; 5,819,301; 5,832,530; 5,832,531; 5,835,634; 5,860,074; 5,929,866; 5,930,813; 5,943,063; 5,995,086; 5,999,649; 6,028,683; 6,049,339; 6,073,148; 6,185,684; 6,205,549; 6,275,587; 6,289,364; 6,324,555; 6,385,350; 6,408,092; 6,411,730; 6,415,278; 6,421,460; 6,466,210; 6,507,484; 6,515,675; 6,563,502; 6,604,105; 6,639,593; 6,678,410; 6,701,023; 6,711,157; 6,720,977; 6,748,111; 6,754,382; 6,771,816; U.S. Patent Design 337,604; 338,907; 371,799; 454,582; Patents Pending.

Adobe, the Adobe logo, Acrobat, the Adobe PDF logo, Distiller and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other

Size optimization of Adobe Reader performed using FEAD(R) technology licensed from Netopsystems AG, Berlin, Germany. All rights reserved.

Portions include technology used under license from Verity, Inc. and are copyrighted.

Portions utilize Microsoft Windows Media Technologies. Copyright (c) 1999-2002 Microsoft Corporation. All Rights Reserved.

Portions are the result of a cooperative development process by Adobe Systems Incorporated and Microsoft Corporation.

Combined PostScript Drivers are a result of a cooperative development process by Adobe and Microsoft.

Portions Copyright Right Hemisphere, Inc.

This software is based in part on the work of the Independent JPEG Group

Portions Copyright (c) 1996-2002 PalmSource, Inc. or its affiliates. All rights reserved.

Pool.c_Copyright 1987 - NeXT, Inc. and Graphics.c_Copyright 1988 NeXT, Inc. as an unpublished work. All Rights Reserved

e_Db is a licensed Product from Simple Software Solutions,

This software contains the RSA Data Security, Inc. MD5 Message-Digest Algorithm.

This product includes software developed by the Center for Software Science at the University of Utah.

Portions developed by the University of California, Berkeley,

This software was developed in part by the University of Southern California, Information Sciences Institute

Portions based in part on the work of the FreeType team.

Portions (C) 1994 Symbol Technologies, Inc

Portions licensed from Apple Computer, Inc. under the terms of the Apple Public Source License, Version 2. The source code version of these portions and the license are available at http://www.opensource.apple.com/apsl.

Portions include software under the following terms:

The TWAIN Toolkit is distributed as is. The developer and distributors of the TWAIN Toolkit expressly disclaim all implied, express or statutory warranties including, without limitation, the implied warranties of merchantability, noninfringement of third party rights and fitness for a particular purpose. Neither the developers nor the distributors will be liable for damages, whether direct, indirect, special, incidental, or consequential, as a result of the reproduction, modification, distribution or other use of the TWAIN Toolkit.

Copyright 1991 by the Institute of Technology Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this appear in an copies and that both that obyright holde and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) 1998-2000 The Apache Software Foundation. All rights reserved. The following can be placed in any end user documentation (User Guide, ReadMe, About Box)

Redistributions in binary form must reproduce the above Apache copyright notice and license in the documentation and/or other materials provided with the distribution.
 The end User documentation included with the redistribution, if any, must include the following acknowledgement: "This product includes software developed by the Apache Software Foundation (http://www.apache.org)." Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear.

Copyright 1990, David Koblas

Copyright 1990, David Robias. Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. This software is provided "as is" without express or implied warranty warrant

Copyright (c) 1995 Netscape Communications Corporation, all

Created: Jamie Zawinski <jwz@netscape.com>, 24-Dec-94

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright 1989 by the Massachusetts Institute of Technology

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of NLT. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. MLT. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) 1996-1997 Sam Leffler Copyright (c) 1996 Pixar

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that (i) the above copyright granted without ree, provided that (i) the above copyright notices and this permission notice appear in all copies of the software and related documentation, and (ii) the names of Pixar, Sam Leffler and Silicon Graphics may not be used in any advertising or publicity relating to the software without the specific, prior written permission of Pixar, Sam Leffler and Silicon Compting Silicon Graphics.

THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT THE SOFTWARE IS PROVIDED AS-IS AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL PIXAR, SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Copyright (c) 1994

Hewlett-Packard Company

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Hewlett-Packard Company makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

This product includes cryptographic software written by Eric Young (eay@cryptosoft.com).

This product includes software written by Tim Hudson (tjh@cryptosoft.com).

Copyright (C) 1995-1997 Eric Young (eay@mincom.oz.au) All

This package is an SSL implementation written by Eric Young (eay@mincom.oz.au). The implementation was written so as conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution including RC4, RSA, Ihash, DES, etc... The SSL documentation included with this distribution is covered by the same copyright terms except the holder is Tim Hudson (tjh@cryptosoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
 Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
 All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product indudes cryptographic software written by Eric Young (eay@cryptsoft.com)". The word 'cryptographic' can be left out if the routines from the library being used are not cryptographic related :-).

related :-).

4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING BUELGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

Copyright (c) 1988-1997 Sam Leffler Copyright (c) 1991-1997 Silicon Graphics, Inc.

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that (i) the above copyright notices and this permission notice appear in all copies of the software and related documentation, and (ii) the names of Sam Leffler and Silicon Graphics may not be used in any advertising or publicity relating to the software without the specific, prior written permission of Sam Leffler and Silicon Graphics.

THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

IN NO EVENT SHALL SAM LEFELER OR SILICON IN NO EVENT SHALL SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Copyright (c) 1996-1997 Sam Leffler Copyright (c) 1996 Pixar

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that (i) the above copyright notices and this permission notice appear in all copies of the software and related documentation, and (ii) the names of Software and relates upd/uniteritation, and (iii) the hames of Pixar, Sam Leffler and Silicon Graphics may not be used in any advertising or publicity relating to the software without the specific, prior written permission of Pixar, Sam Leffler and Silicon Graphics

THE SOFTWARE IS PROVIDED *AS-IS* AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL PIXAR, SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY



THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Copyright (c) 2000 Cass Everitt Copyright (c) 2000 NVIDIA Corporation All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaime

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution

The names of contributors to this software may not be used to endorse or promote products derived from this software withou specific prior written permission.

SPECIIC prof written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS 'AS IS' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 1998-2001 Greg Roelofs. All rights reserved.

This software is provided "as is," without warranty of any kind express or implied. In no event shall the author or contributors be held liable for any damages arising in any way from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

 Redistributions of source code must retain the above copyright notice, disclaimer, and this list of conditions.
 Redistributions in binary form must reproduce the above copyright notice, disclaimer, and this list of conditions in the entation and/or other materials provided with the distribution

3. All advertising materials mentioning features or use of this software must display the following acknowledgment:

This product includes software developed by Greg Roelofs and contributors for the book, "PNG: The Definitive Guide," published by O'Reilly and Associates.

(C) Copyright 1990-1999 by Autodesk, Inc

Permission to use, copy, modify, and distribute this softw object code form for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies and that both that copyright notice and the limited warranty and restricted rights notice below appear in al supporting documentation

AUTODESK PROVIDES THIS PROGRAM "AS IS" AND WITH ALL FAULTS. AUTODESK SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. AUTODESK, INC. DOES NOT WARRANT THAT THE OPERATION OF THE PROGRAM WILL BE UNINTERRUPTED OR ERROR FREE.

Use, duplication, or disclosure by the U.S. Government is subject to restrictions set forth in FAR 52.227-19 (Commerci Computer Software - Restricted Rights) and DFAR 252.227-7013(c)(1)(ii) (Rights in Technical Data and Computer Software), as applicable.

Copyright (c) 1998-2001 The OpenSSL Project. All rights

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

 Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution

All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Projec for use in the OpenSSL Toolkit. (http://www.openssl.org/)"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software

developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

Toolkit (http://www.openssl.org/)*
THIS SOFTWARE IS PROVIDED BY THE OpenSSL
PROJECT **A IS' AND ANY EXPRESSED OR IMPLIED
WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
IMPLIED WARRANTIES OF MERCHANTABILITY AND
FITNESS FOR A PARTICULAR PURPOSE ARE
DISCLAIMED. IN NO EVENT SHALL THE OpenSL
PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY
DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY,
OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR
BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON
ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,
STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE
OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, Ihash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the copyright

notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

 All advertising materials mentioning features or use of this 3. All dovertusing initiations internorming retaines or use or use software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eav@cryptsoft.com)" The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic

the rouines from the library being used are not cryptographic related :-). 4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OF SERVICES. LOSS OF USE DATI SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

Copyright (c) 2000-2003 The Apache Software Foundation. All rights reserved.

 Redistributions in binary form must reproduce the above Apache copyright notice and license in the documentation and/or other materials provided with the distribution. 2. The end User documentation included with the redistribution, 2. The end User documentation included with the redistribution if any, must include the following acknowledgement: "This product includes software developed by the Apache Software Foundation (http://www.apache.org)." Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear.

Copyright (C) 1995, 1996, 1997, 1998, 1999, 2001 WIDE Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above

copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above

copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

with the distribution. 3. Neither the name of the project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission

THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS 'AS IS' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR BUSINESS INTERRUPTIONHOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING INANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 1996 - 2003, Daniel Stenberg, <daniel@haxx.se>.

All rights reserved.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITHESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of a copyright Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to prom the sale, use or other dealings in this Software without prior written authorization of the copyright holder. mote

Copyright (c) 1992-2003 by P.J. Plauger. ALL RIGHTS RESERVED. Consult your license regarding permissions and restrictions.

This file is derived from software bearing the following

Copyright (c) 1994 Hewlett-Packard Company

Permission to use, copy, modify, distribute and sell this Permission to use, copy, modity, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Hewlett-Packard Company makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

(C) Copyright 1999 by Autodesk, Inc.

Permission to use, copy, modify, and distribute this software in object code form for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies and that both that copyright notice and the limited warranty and restricted rights notice below appear in all evenencies decomposition. supporting documentation

AUTODESK PROVIDES THIS PROGRAM "AS IS" AND WITH ALL FAULTS. AUTODESK SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. AUTODESK, INC. DOES NOT WARRANT THAT THE OPERATION OF THE PROGRAM WILL BE UNINTERRUPTED OR ERROR FREE.

Use, duplication, or disclosure by the U.S. Government is subject to restrictions set forth in FAR 52.227-19 (Commerci Computer Software - Restricted Rights) and DFAR 252.227-7013(c)(1)(ii) (Rights in Technical Data and Computer Software), as applicable. rcial

Copyright (c) 1995-2003 International Business Machines Corporation and others. All rights reserved.

rmission is hereby granted, free of charge, to any persor obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, provided that the above copyright notice(s) and this permission notice appear in all copies of the Software and that both the above copyright notice(s) and this permission notice appear in supporting documentation

THE SOFTWARE IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. EXPRESS OR IMPLIED WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLIDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

Mach Operating System





Copyright (c) 1991,1990,1989 Carnegie Mellon University All Rights Reserved

Permission to use, copy, modify and distribute this software and its documentation is hereby granted, provided that both the copyright notice and this permission notice appear in all copies of the software, derivative works or modified versions, and any portions thereof, and that both notices appear in supporting documentation.

CARNEGIE MELLON ALLOWS FREE USE OF THIS SOFTWARE IN ITS 'AS IS' CONDITION. CARNEGIE MELLON DISCLAIMS ANY LIABILITY OF ANY KIND FOR ANY DAMAGES WHATSOEVER RESULTING FROM THE USE OF THIS SOFTWARE.

Carnegie Mellon requests users of this software to return to

Software Distribution@CS CMU EDU Software Distribution Coordinator

Software Distribution Coordi School of Computer Science Carnegie Mellon University Pittsburgh PA 15213-3890

Any improvements or extensions that they make and grant Carnegie Mellon the rights to redistribute these changes.

Copyright (c) 1997-1999 Silicon Graphics Computer Systems, Inc.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Silicon Graphics makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software in do permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ITTLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE OR LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE. OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. THE SOFTWARE IS PROVIDED "AS IS" WITHOUT

(c) Copyright 1993, 1994, Silicon Graphics, Inc. ALL RIGHTS RESERVED

Permission to use, copy, modify, and distribute this software for Permission to use, copy, modily, and distribute tims software to any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both the copyright notice and this permission notice appear in supporting documentation, and that the name of Silicon Graphics. Inc. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

THE MATERIAL EMBODIED ON THIS SOFTWARE IS PROVIDED TO YOU "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN O EVENT SHALL SILCON GRAPHICS, INC. BE LIABLE TO YOU OR ANYONE ELSE FOR ANY DIRECT, SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER, INCLUDING WITHOUT LIMITATION, LOSS OF PROFIT, LOSS OF USE, SAVINGS OR REVENUE, OR THE CLAIMS OF THIRD PARTIES, WHETHER OR NOT SILCON GRAPHICS, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS, HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE POSSESSION, USE OR PERFORMANCE OF THIS SOFTWARE.

US Government Users Restricted Rights Use, duplication, or disclosure by the Government is subject to restrictions sel forth in FAR 52.227.19(c)(2) or subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227.7013 and/or in similar or successor clauses in the FAR or the DOD or NASA FAR Supplement. Unpublished-rights reserved under the copyright laws of the United States. Contractor/manufacturer is Silicon Graphics, Inc., 2011 N. Shoreline Blvd., Mountain View, CA 94039-7311.

Copyright 1996 Massachusetts Institute of Technology

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that both the above copyright notice and this permission notice appear in all copies, that both the above copyright notice and this permission notice appear in all supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the

software without specific, written prior permission. M.I.T. makes no representations about the suitability of this soft for any purpose. It is provided "as is" without express or implied warranty.

Impleed wairany. THIS SOFTWARE IS PROVIDED BY M.I.T. 'AS IS'. M.I.T. DISCLAIMS ALL EXPRESS OR IMPLIED WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, INO EVENT SHALL M.I.T. BE LABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE. EVEN IF ADVISED OF THE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright 1987, 1988, 1994, 2002 by the Massachusetts Technology. All Rights Reserved

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

export to obtain such a license before exporting. WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Furthermore if you modify this software you must label your software as modified software and not distribute it in such a fashion that it might be confused with the original M.I.T. software. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright 1998-2000 by the Massachusetts Institute of Technology. All rights reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Furthermore if you modify this software you must label your software as modified software and not Intust rader your software as intended software and indu-distribute it in such a fashion that it might be confused with the original MIT software. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Individual source code files are copyright MIT, Cygnus Support, OpenVision, Oracle, Sun Soft, FundsXpress, and others.

Project Athena, Athena, Athena MUSE, Discuss, Hesiod, Kerberos, Moira, and Zephyr are trademarks of the Massachusetts Institute of Technology (MIT). No commercial use of these trademarks may be made without prior written permission of MIT.

"Commercial use" means use of a name in a product or other Commercial user means use of a name in a product of orner for-profit manner. It does NOT prevent a commercial firm from referring to the MIT trademarks in order to convey information (although in doing so, recognition of their trademark status should be given).

Copyright (c) 1990, 1993 The Regents of the University of California. All rights reserved. (c) UNIX System Laboratories, Inc. All or some portions of this file are derived from material licensed to the University of California by American Telephone and Telegraph Co. or Unix System Laboratories, Inc. and are reproduced herein with the permission of UNIX System Laboratories Inc. Laboratories, Inc.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

 Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer

bopying in folded, that all of certains and the terms and the second disclaimer:

 Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
 All advertising materials mentioning features or use of this software must display the following acknowledgement: This product includes software developed by the University of California, Berkeley and its contributors.
 Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND

ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY,

OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright 1996 1995 by Open Software Foundation, Inc. 1997 1996 1995 1994 1993 1992 1991 All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation.

OSE DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR

IN NO EVENT SHALL OSF BE LIABLE FOR ANY SPECIAL, INDIRECT. OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN ACTION OF CONTRACT, NEGLIGENCE, OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Copyright (c) 1993 The University of Utah and the Computer Systems Laboratory (CSL). All rights reserved

Permission to use, copy, modify and distribute this software and its documentation is hereby granted, provided that both the copyright notice and this permission notice appear in all copies of the software, derivative works or modified versions, and any portions thereof, and that both notices appear in supporting documentation.

THE UNIVERSITY OF UTAH AND CSL ALLOW FREE USE OF THIS SOFTWARE IN ITS "AS IS" CONDITION. THE UNIVERSITY OF UTAH AND CSL DISCLAIM ANY LIABILITY OF ANY KIND FOR ANY DAMAGES WHATSOEVER RESULTING FROM THE USE OF THIS SOFTWARE.

CSL requests users of this software to return to csl-dist@cs.utah.edu any improvements that they make and grant CSL redistribution rights.

Copyright (c) 1994 The University of Utah and the Computer Systems Laboratory at the University of Utah (CSL). All rights reserved.

Permission to use, copy, modify and distribute this software is hereby granted provided that (1) source code retains these copyright, permission, and disclaimer notices, and (2) redistributions including binaries reproduce the notices in supporting documentation, and (3) all advertising materials mentioning features or use of this software display the following acknowledgement: "This product includes software developed by the Computer Systems Laboratory at the University of Utah."

THE UNIVERSITY OF UTAH AND CSL ALLOW FREE USE OF THIS SOFTWARE IN ITS "AS IS" CONDITION. THE UNIVERSITY OF UTAH AND CSL DISCLAIM ANY LIABILITY OF ANY KIND FOR ANY DAMAGES WHATSOEVER RESULTING FROM THE USE OF THIS SOFTWARE.

CSL requests users of this software to return to csl-dist@cs.utah.edu any improvements that they make and grant CSL redistribution rights.

Copyright 1997,1998 Julian Elischer. All rights reserved. julian@freebsd.org

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following

without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

with the distribution. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICLAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 1997 Jonathan Stone and Jason R. Thorpe. All rights reserved.

This software is derived from information provided by Matt

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above

copyright notice, this list of conditions and the following disclaimer.

 Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution

with the distribution. 3. All advertising materials mentioning features or use of this software must display the following acknowledgement: This product includes software developed by Jonathan Stone and Jason R. Thorpe for the NetBSD Project. 4. The names of the authors may not be used to endorse or promote products derived from this software without specific order without specific

prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 1999 John D. Polstra All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

 Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer

ausciaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution

With the distribution. THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 1999,2000,2001 Jonathan Lemon <jlemon@FreeBSD.org> All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above

copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS 'AS IS' AND ANY EXPRESS OR IMPLIED WARRANTES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND

Copyright (c) 1994 Adam Glass All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following

Redistributions are met:
 Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

disclaimer. 2. Redistributions in binary form must reproduce the above copyright noice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. 3. All advertising materials mentioning features or use of this offence meru directly the following adversided pencet. This

software must display the following acknowledgement: This product includes software developed by Adam Glass. 4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR

A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c)1999 Citrus Project, All rights reserved

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
 Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials prov with the distribution.

With the distribution. THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR BUSINESS INTERRUPTION/HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISIG IN ANY WAY OUT OF THE USE OF OTHER VISE) ARISIG IN ANY WAY OUT OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 1993 Christopher G. Demetriou All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following

conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution

 The name of the author may not be used to endorse or promote products derived from this software without specific prior written pe mission

THIS SOFTWARE IS PROVIDED BY THE AUTHOR 'AS IS' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION, HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TOTI (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THE SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. POSSIBILITY OF SUCH DAMAGE

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provide with the distributions. with the distribution.

with the distribution. 3. All advertising materials mentioning features or use of this software must display the following acknowledgement: This product includes software developed by Theo de Raadt. 4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISIN IN ANY AVO UT OF THE USE OF NIESS INTERRUPTIOS IN ANY WAY OUT OF THE USE THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS"

Portions licensed from Apple Computer, Inc. under the terms of the Apple Public Source License, Version 2. The source code



Copyright (c) 2001 by Andrei Alexandrescu This code accompanies the book: Alexandrescu, Andrei. "Modern C++ Design: Generic Programming and Design Patterns Applied". Copyright (c) 2001. Addison-Wesley. Permission to use, copy, modify, distribute and sell this software for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice appear in all copies and that both that copyright notice appear in supporting documentation. The author or Addison-Welsev Lonoman make no representations about the suitabilit Welsey Longman make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) 1991-2004 Unicode, Inc. All rights reserved. Distributed under the Terms of Lise in http://www.unicode.org/copyright.html

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and associated documentation (the "Data Files") or Unicode software and associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear in all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT. NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE. THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS".

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

Unicode and the Unicode logo are trademarks of Unicode, Inc., and may be registered in some jurisdictions. All other trademarks and registered trademarks mentioned herein are the property of their respective owners.

This software is copyrighted by the Regents of the University of California, Sun Microsystems, Inc., Scriptics Corporation, and other parties. The following terms apply to all files associated with the software unless explicitly disclaimed in individual files.

The authors hereby grant permission to use, copy, modify, distribute, and license this software and its documentation for any purpose, provided that existing copyright notices are retained in all copies and that this notice is included verbatim in any distributions. No written agreement, license, or royally fee is required for any of the authorized uses. Modifications to this software may be copyrighted by their authors and need not follow the licensing terms described here, provided that the new terms are clearly indicated on the first page of each file where they apply.

IN NO EVENT SHALL THE AUTHORS OR DISTRIBUTORS BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE, ITS DOCUMENTATION, OR ANY DERIVATIVES THEREOF, EVEN IF THE AUTHORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE AUTHORS AND DISTRIBUTORS SPECIFICALLY DISCLAIM ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. THIS SOFTWARE IS PROVIDED ON AN 'AS IS' BASIS, AND THE AUTHORS AND DISTRIBUTORS HAVE NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS OR MODIFICATIONS.

GOVERNMENT USE: If you are acquiring this software on GOVERNMENT USE: If you are acquiring this software on behalf of the U.S. government, the Government shall have only "Restricted Rights" in the software and related documentation as defined in the Federal Acquisition Regulations (FARs) in Clause 52.227.719 (c) (2), If you are acquiring the software on behalf of the Department of Defense, the software shall be classified as "Commercial Computer Software" and the Government shall have only "Restricted Rights" as defined in Clause 252.227.7013 (c) (1) of DFARs. Notwithstanding the foregoing, the authors grant the U.S. Government and others acting in its behalf permission to use and distribute the software in accordance with the terms specified in this license.

This product includes PHP, freely available from http://www.php.net/

The PHP License, version 2.02 Copyright (c) 1999 - 2002 The PHP Group. All rights reserved. Redistribution and use in source and binary forms, with or

without modification, is permitted provided that the following conditions are met





1. Redistributions of source code must retain the above

- copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials
- provided with the distribution.
- 3. The name "PHP" must not be used to endorse or promote products
- oducts derived from this software without prior permission from the PHP Group. This does not apply to add-on libraries or tools that work in conjunction with PHP. In such a case the PHP name may be used to indicate that the product supports PHP
- 4. The PHP Group may publish revised and/or new versions of the
- license from time to time. Each version will be given a distinguishing version number. Once covered code has been published under a particular
- of the license, you may always continue to use it under the terms of that version. You may also choose to use such cove code under the terms of any subsequent version of the
- license published by the PHP Group. No one other than the PHP
- Group has the right to modify the terms applicable to covered code

under this License

5. Redistributions of any form whatsoever must retain the

Cholowing acknowledgment: "This product includes PHP, freely available from

- 6. The software incorporates the Zend Engine, a product of Zenc
- Technologies, Ltd. ("Zend"). The Zend Engine is licensed to the
- PHP Association (pursuant to a grant from Zend that can be found at http://www.php.net/license/ZendGrant/) for distribution to you under this license agreement, only as a part of PHP. In the event that you separate the Zend
- Cor any portion thereof) from the rest of the software, or (or any portion thereof) any portion thereof, your us
- modify the Zend Engine, or any portion thereof, your use of the separated or modified Zend Engine software shall not be
- governed by this license, and instead shall be governed by the license set forth at http://www.zend.com/license/ZendLicense/.

THIS SOFTWARE IS PROVIDED BY THE PHP

THIS SOFTWARE IS PROVIDED BY THE PHP DEVELOPMENT TEAM "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND

- DUE UND LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PHP DEVELOPMENT TEAM OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT. INDIRECT. INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
- OR OTHERWISE)

ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This software consists of voluntary contributions made by many individuals on behalf of the PHP Group.

The PHP Group can be contacted via Email at group@php.net

For more information on the PHP Group and the PHP project, please see http://www.php.net>.

This product includes the Zend Engine, freely available at http://www.zend.com

The Zend Engine License, version 2.00 Copyright (c) 1999-2002 Zend Technologies Ltd. All rights

Redistribution and use in source and binary forms, with or

modification, is permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer

- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3. The names "Zend" and "Zend Engine" must not be used to endorse

or promote products derived from this software without prior permission from Zend Technologies Ltd. For written permission, please contact license@zend.com.

4. Zend Technologies Ltd. may publish revised and/or new

of the license from time to time. Each version will be given a distinguishing version number. Once covered code has been published under a particular

- of the license, you may always continue to use it under the terms of that version. You may also choose to use such
- covered code under the terms of any subsequent version of the license published by Zend Technologies Ltd. No one other than
- Zend

Technologies Ltd. has the right to modify the terms applicable to covered code created under this License

- 5. Redistributions of any form whatsoever must retain the

 All advertising materials mentioning features or use of this software must display the following acknowledgment: "The Zend Engine is freely available at ttp://www.zend.com" http:

- THIS SOFTWARE IS PROVIDED BY ZEND TECHNOLOGIES LTD. 'AS IS' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND

THE IMPLIED WARKAN TIES OF MERCHAN TABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL ZEND TECHNOLOGIES LTD. BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SEDURGES LOSS OF

SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND

HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The OpenLDAP Public License Version 2.8, 17 August 2003

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1 Redistributions in source form must retain convright statements and notices,

Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and

3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license

or under the terms of any subsequent revision of the license. THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS 'AS IS' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INCIDENCT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER INCLUDING, BUSINESS INTERRUPTION) HOWEVER INCONTRACT, STRICT LIABILITY, OR TORT (INCLUDING DEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

OpenLDAP is a registered trademark of the OpenLDAP

Copyright 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to co and distribute verbatim copies of this document is granted. sion to copy

Copyright (c) 1993 Artificial Intelligence Applications Institute, The University of Edinburgh

Author: Julian Smart Date: 9-4-93

Permission to use, copy, modify, and distribute this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice, author statement and this permission notice appear in all copies of this software and related documentation.

5

THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL THE ARTIFICIAL INTELLIGENCE APPLICATIONS INSTITUTE OR THE UNIVERSITY OF EDINBURGH BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Copyright (c) 2000-02 Peter Dimov, Aleksey Gurtovoy

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) 200-2002 CrystalClear Software, Inc.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. CrystalClear Software makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) 1998-2000 Dr John Maddock

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and thi permission notice appear in supporting documentation. Dr John Maddock makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty. nd this

Copyright (c) Jeremy Siek 2000

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and appears in all copyright notice appear in supporting documentation. Silicon Graphics makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright 1993 by OpenVision Technologies, Inc

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of OpenVision not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. OpenVision makes no representations about the suitability of this software for any nurrose. It is enryided "as is "without express or implied purpose. It is provided "as is" without express or implied warrantv.

OPENVISION DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL OPENVISION BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS ANT DAWAGES WITH SOLVER RESULTING THOW LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Copyright (c) 2002 Beman Dawes Copyright (c) 2001 Dietmar K,hl, All Rights Reserved

Copyright (C) 1998 by the FundsXpress, INC.

All rights reserved

Permission to use, copy, modify, distribute and sell this software for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation. The authors make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of FundsXpress. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. FundsXpress makes no representations about the suitability of this software for any numene. It is provided 'as is' without

this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING



WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Copyright William E. Kempf and Beman Dawes 2001-2002. All

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. William E. Kempf makes no representations about the suitability of this suitability of this support. software for any purpose. It is provided "As Is" without express or implied warranty

Copyright (c) 2000 Cadenza New Zealand Ltd

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation. Cadenza New Zealand Ltd makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (C) 2002 Ronald Garcia

Permission to copy, use, sell and distribute this software is granted provided this copyright notice appears in all copies. Permission to modify the code and to distribute modified code is granted provided this copyright notice appears in all copies, and a notice that the code was modified is included with the copyright notice.

This software is provided "as is" without express or implied warranty, and with no claim as to its suitability for any purpose.

Copyright (c) 2002 David Abrahams, Aleksey Gurtovoy

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty. warranty

Copyright (c) 2000-2002 Joerg Walter, Mathias Koch

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. The authors make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

The authors gratefully acknowledge the support of GeNeSys mbH & Co. KG in producing this work.

Copyright (c) 2002 Eric Friedman

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both the copyright notice and this and the software of the permission notice appear in supporting documentation. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty

Copyright (C) 2001 William E. Kempf

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. William E. Kempf makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) 2000-02 Aleksey Gurtovoy and John R. Bandela

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice granted windouter, provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied

Copyright (c) 2002 Fernando Cacciola, Aleksey Gurtovoy

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) Jeremy Siek, Lie-Quan Lee, and Andrew daine 2000

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation. make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty. 10/0

Copyright (c) 1995, 1998, 1999 Berkeley Software Design, Inc.

All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following

conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following

disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

with the distribution. 3. Berkeley Software Design Inc's name may not be used to endorse or promote products derived from this software without specific prior written permission.

SPECIIC prof written permission. THIS SOFTWARE IS PROVIDED BY BERKELEY SOFTWARE DESIGN INC 'AS IS' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL BERKELEY SOFTWARE DESIGN INC BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright Theodore Ts'o, 1996. All rights reserved. Copyright (c) Andrew G. Morgan <morgan@linux.kernel.org>, 1996-8

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, and the entire permission notice in its entirety, including the disclaimer of warranties. 2. Redistributions in binary form must reproduce the above copyright notice, the list of conditions and the following the provident provides the source to provide the provident of the provident of the source of the following the provident provides the list of conditions and the following the provident provides the list of conditions and the following the provident provides the list of conditions and the following the provident provides the list of conditions and the following the provident provides the list of conditions are provident provides the provides the provident provides the provides

copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. 3. The name of the author may not be used to endorse or

promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION, HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THIS SOFTWARE IS PROVIDED "AS IS" AND ANY

Copyright 1998 Juniper Networks, Inc. All rights reserved

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above

copyright notice, this list of conditions and the following

accepting in following and the contraction and the following disclaimer: 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

with the distribution. THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS 'AS IS' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION; HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLOENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY (OF SUCH DAMAGE.

Copyright (C) 1999-2002 by OpenLink Software <iodbc@openlinksw.com> All Rights Reserved.

This software is released under the terms of the BSD License (see LICENSE.BSD).

While not mandated by the BSD license, any patches you make to the iODBC source code may be contributed back into the iODBC project at your discretion. Contributions will benefit the Open Source and Data Access community as a whole. Submissions may be made at:

http://www.iodbc.org

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following

 Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of OpenLink Software Inc. nor the name of its contributors may be used to endorse or promote products derived from this software without specific prior written permission

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS 'AS IS' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN O EVENT SHALL OPENLINK OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TOT (INCLUDING REGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. POSSIBILITY OF SUCH DAMAGE.

This product includes software developed by Brian M. Clapper bmc@clapper.org.

http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231

20021231 This work (and included software, documentation such as READMEs, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions.

Permission to copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications

The full text of this NOTICE in a location viewable to users of the redistributed or derivative work. Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software Short Notice should be included (hypertext is preferred, text is permitted) within the body of any redistributed or derivative code. Notice of any changes or modifications to the files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.) THIS SOFTWARE AND DOCUMENTATION IS PROVIDED 'AS IS, 'AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. The full text of this NOTICE in a location viewable to users of

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION.

The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the software without specific, written prior permission. Title to copyright in this software and any associated documentation will at all times remain with copyright holders.

This formulation of W3C's notice and license became active on December 31 2002. This version removes the copyright ownership notice such that this license can be used with materials other than those owned by the W3C, reflects that ERCIM is now a host of the W3C, includes references to this specific dated version of the license, and removes the ambiguous grant of "use". Otherwise, this version is the same at the previous version and is written as a to preserve the anticipous grant or use. Outerwest, into version is the same safthe previous version and is written so as to preserve the Free Software Foundation's assessment of GPL compatibility and OSI's certification under the Open Source Definition. Please see our Copyright FAQ for common questions about using materials from our site, including specific terms and conditions for packages like lib/www, Amaya, and Jigaw. Other questions about this notice can be directed to site-nolicy@wa.dom policy@w3.org

Copyright (c) 1992, Visual Edge Software Ltd.

ALL RIGHTS RESERVED. Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Visual Edge Software not be used in advertising or publicity pertaining to distribution of the software without specific, written pertaining to distribution of the software without specific, written prior permission. The year included in the notice is the year of the creation of the work.

Copyright (c) Jeremy Siek 2000

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and

this permission notice appear in supporting documentation. Jeremy Siek makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) Ronald Garcia, Jeremy Siek 2001

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Jeremy Siek makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) Jeremy Siek 2001, Marc Wintermantel 2002

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Silicon Graphics makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) Lie-Quan Lee and Jeremy Siek, 2001

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Silicon Graphics makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Portions copyright 1992, 1993 Simmule Turner and Rich Salz. All rights reserved.

Copyright (c) Jeremy Siek and Andrew Lumsdaine 2000

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation. We make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) 1999 by Secret Labs AB Copyright (c) 1999 by Fredrik Lundh

By obtaining, using, and/or copying this software and/or its associated documentation, you agree that you have read, understood, and will comply with the following terms and conditions:

Permission to use, copy, modify, and distribute this software and its associated documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies, and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Secret Labs AB or the author not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

SECRET LABS AB AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL SECRET LABS AB OR THE AUTHOR BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT. NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

(c) 2002 Aleksey Gurtovoy

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) 2001-03 Aleksey Gurtovoy, Jaap Suter

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright Herve Bronnimann, Guillaume Melquiond, Sylvain Pion 2002-2003

Permission to use, copy, modify, sell, and distribute this software is hereby granted without fee provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation.

None of the above authors nor Polytechnic University make any representation about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright Jens Maurer 2000

Copyright Herve Bronnimann, Guillaume Melquiond, Sylvain Pion 2002

Permission to use, copy, modify, sell, and distribute this software is hereby granted without fee provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation,

None of the above authors nor Polytechnic University make any representation about the suitability of this software for any purpose. It is provided "as is" without express or implied warrantv.

Copyright Jens Maurer 2000-2001 Permission to use, copy, modify, sell, and distribute this software is hereby granted without fee provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation,

Jens Maurer makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright Jens Maurer 2000, Guillaume Melquiond 2002-2003 Permission to use, copy, modify, sell, and distribute this software is hereby granted without free provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation.

None of the above authors nor Polytechnic University makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) Jeremy Siek and John Bandela 2000-2002

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyrigh totice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Jeremy Stek makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (c) John Bandela 2001

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Jeremy Siek makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (C) 2001

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Mac Murrett makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

We do not accept any responsibility for lose, damage or corruption of data, software or hardware, directly or indirectly, from the use of this software.

The End