

# Products from ESB Consultancy

As of 8 October 2001

## For Borland VCL & Win32 Development

### ESBPCS™ for VCL

**ESB Professional Computation Suite (ESBPCS)** is a collection of over 6000 routines/methods and over 150 classes/components in over 1000 units for Borland Delphi 4, 5 & 6 and C++ Builder 4 & 5, which are aimed at making Data Entry & Manipulation Easier for you and your users.

**Our components are designed to do more of the work for you.**

Powerful Data Specific **Edit and DbEdit controls** with:

- Alignment which maintains whilst Editing
- Read Only Colouring
- On Focus Colouring
- Disabled Colouring
- Positive/Negative Colouring where appropriate
- Flat Option with Mouse Over Effects
- A plethora of data specific properties and methods make using MaskEdit a thing of the past.

**Edits** include – “Plain” Edit, Positive Integer Edit, Integer Edit, Positive Float Edit, Float Edit, Scientific Float Edit, Percentage Edit, IP Address Edit, Hexadecimal Edit, Complex Number Edit, Fraction Edit, Date Edit, Time Edit, Year Edit, Date/Time Edit, Month Edit, Day of Week Edit, and Currency Edits.

We also have **CalcEdits** that join Float Edits with our Popup Calculator, which can also be used as a Component by itself. Calendar Edits, known as **CalEdits**, join Date Edits with our Popup Calendar which includes Holiday control.

**SpinEdits** are included with all the above Edit Features for Integer, Floats, Years, Month and Day of Week.

**Vector & Matrix Edits** are included to allow easy entry and display of Vectors and Matrices.

**ComboBoxes** include many of the above edit features including optionally being “Flat”. ESBPCS also supplies “filled” ComboBoxes for Months, Day of Week, European Currencies, Time Zones and Country details. These also include data specific methods and properties.

**CheckBoxes** that have the Enhanced Colourings and features of ESBPCS are included and are **RadioButtons**.

**GroupCtrls** such as **RadioGroups** and **CheckGroups** are included which allow enhanced control of spacings, appearance and colours. Also individual items can be disabled.

**Labels** include the ability optionally have a “raised” or a “sunken” look, as well as to become “hot” when the Mouse passes over. Specialised Labels also developed for URL’s; displaying of Math Formulae; and displaying of Date & Times with Time Zone Info.

**Non Visual Components** include the aforementioned Calculator & Calendar plus Unit Conversion, Descriptive Statistics, Hypothesis Analysis & Linear Regression.

Our ever-growing **Huge Routine Collection** covers:

- Extended Currency Types & Manipulation
- Date & Time Manipulation
- Trigonometry
- Statistics
- Linear Regression
- Probability Distributions
- Special Functions
- Optimised Math
- Vectors & Matrices
- Equation Solving
- Fractions
- Business Math & Accounting
- Complex Numbers
- Geometry
- Unit Conversions
- Misc File and Registry Operations
- Plus much more!

**Data Aware Versions** - most of the components have Data Aware versions and we are working on more. These components allow formatting from the control rather than playing with Field Settings or Masks.

Grab a Trial Version and Check out the Demos at:

<http://www.esbconsult.com.au/esbpcs2>

## **ESBPCS™ “LITE” for VCL**

This is a “reduced” and hence more economical version of **ESBPCS**. The main difference is that the “Lite” version does not include the Data Aware Components and Routines.

## **ESBRoutines** <sup>TM</sup>

**ESBRoutines** is a collection of miscellaneous Routines for Borland Delphi 4 and above covering Strings, Block Manipulation, Conversions, Bit Lists and more. Freeware. Includes full Source and Help File.

<http://www.esbconsult.com.au/downloads.html>

*Similar and improved functionality included in **ESBPCS***

## **ESBMaths** <sup>TM</sup>

**ESBMaths** is a collection of Math and Stats Routines for Borland Delphi 4 and above. It includes a unit for manipulation of Delphi 4 and above Dynamic Arrays (i.e. Vectors). Freeware. Includes full Source and Help File.

<http://www.esbconsult.com.au/downloads.html>

*Similar and improved functionality included in **ESBPCS***

## **ESBMathsLib for TAdvSpreadGrid**

**ESBMathsLib** is a plug-in for TMS Software's TAdvSpreadGrid – which is a superb Grid those offers Spreadsheet like functionality. Adds 46 Constants and 19 Functions to TAdvSpreadGrid. Plus ESBMathsLib is freely available to all users of TAdvSpreadGrid. Includes full Source.

<http://www.esbconsult.com.au/downloads.html>

*Similar and improved functionality included in **ESBPCSMathLib***

TMS Software: <http://www.tmssoftware.com/>

## **ESBPCSMathLib for TAdvSpreadGrid**

**ESBPCSMathLib** is a plug-in for TMS Software's TAdvSpreadGrid – which is a superb Grid those offers Spreadsheet like functionality. Adds 67 Constants and 30 Functions to TAdvSpreadGrid. Plus ESBPCSMathLib is freely available to all users of ESBPCS and TAdvSpreadGrid. Includes full Source.

<http://www.esbconsult.com.au/esbpcs2>

TMS Software: <http://www.tmssoftware.com/>

## **ESBDates**™

**ESBDates** is a Collection of over 200 Date/Time Routines covering Date Conversions, Time Conversions, Date Arithmetic, Easter Calculations, Time Zones, RFC822 Compliant Routines, ISO-8601 Compliant Routines, Week Numbers, and much more. Designed for Delphi 4 and above.

Includes Help File, GPTimeZone & Calendar FAQ.

<http://www.esbconsult.com.au/downloads.html>

*Similar and improved functionality included in **ESBPCS***

## **AMRandom**™

**AMRandom** is a translation of **Alan Miller's Random Module** for FORTRAN-90 into Borland Delphi. Includes Random Number Generators for Normal (Gaussian), Poisson, Binomial, Gamma, Beta, etc. Translation has been done with the permission of Alan Miller and is being made freely available to the Delphi Public. Requires Borland Delphi 4 or better. Original FORTRAN-90 code also included. Now includes a Test Utility. *Also included in **ESBPCS***

<http://www.esbconsult.com.au/downloads.html>

## **For Borland Cross Platform Development**

### **ESBMathsX**™

**ESBMaths for Cross Platform Development** is a collection of Math and Stats Routines for Cross Platform Development Borland Delphi 6 and Kylix. Freeware. It includes full Source and should work on Microsoft Windows 32 Platforms (that support Borland Delphi 6) and Linux Platforms (that support Borland Kylix).

<http://www.esbconsult.com.au/downloads.html>

### **AMRandomX**™

**AMRandom for Cross Platform Development** is a translation of **Alan Miller's Random Module** for FORTRAN-90 for Borland Delphi/Kylix. Includes Random Number Generators for Normal (Gaussian), Poisson, Binomial, Gamma, Beta, etc. Translation has been done with the permission of Alan Miller and is being made freely available to the Delphi Public. Freeware. It includes full Source and should work on Microsoft Windows 32 Platforms (that support Borland Delphi 6) and Linux Platforms (that support Borland Kylix). Original FORTRAN-90 code also included.

<http://www.esbconsult.com.au/downloads.html>

# Math & Stats Applications

## ESBPDF Analysis™

Provides everything needed for using Discrete & Continuous Probability Distributions in a single application. Most Tables and supplied functions (such as in MS Excel) give  $P(X \leq A)$  and using algebra other results can be found whereas **ESBPDF Analysis** handles all the Probability combinations for you.

Features include: Binomial, Poisson, Normal, Exponential, Student t, Chi Squared and F Distributions; Inverses of the Normal, Student t, Chi Squared and F Distributions; Lists of Binomial Coefficients, Factorials, Permutations; Fully Customisable; Integrated Help System which includes a Tutorial.

We also plan on adding many more Distributions and features. **ESBPDF** is ideal for the Math/Stats Student who wishes to understand Probability Distributions better, as well as the Math Buff who wants a well-designed calculating tool.

Fully Functional Trial version available from our web site:

<http://www.esbconsult.com.au/esbpdf.html>

## ESBStats™

Statistical Analysis & Inferences in MS Office 97/2000 style Environment.

- Single, Dual (paired and unpaired) and Multiple Data Analysis.
- Data can be either for Sample or Population
- Data can be Time Based
- Data can be entered as Raw Data; Grouped Data; or as Summary Data
- Raw Data can be converted into Grouped Data
- Raw Data can have in-built Transformations applied to them
- Raw Data can have Custom defined Transformations applied to them
- Raw Data can have Random values meeting user defined criteria
- Data can be fully documented and stored in DataLists
- Standardisation of Data around given mean/standard deviation
- - DataLists are grouped together in Workbooks - one Workbook is opened at a time and can contain many DataLists
- ESB Statistical Workbooks (.esw) are Compound Documents like MS Word Documents and MS Excel Spreadsheets, thus they support the same properties in Explorer.
- Sample Size calculations
- Random Sampling Lists
- Statistical Summary including: mean, median, mode, variance, standard deviation, kurtosis, skew, etc.
- Comparison of Statistics for Raw and Grouped of the same Data.
- Graphs and Charts including: Histograms, Line Graphs, Pie Graphs, Ogives, Scatter Diagrams, etc

- Inference and Hypothesis Analysis of a Single Population - including the Mean, the Variance and Proportions.
- Inference and Hypothesis Analysis of Two Populations - including Difference of the Mean, Ratio of the Variance, Difference of Proportions.
- Analysis of Variance (ANOVA)
- Linear Regression with Transformations of the dependent variable
- Multiple Regression with Transformations of the dependent variables
- Custom defined Transformations for Dual Data and Multiple Data Analysis
- Moving Averages
- Trend Analysis of Time Series Data
- Curve Fitting - calculation of polynomials and splines
- Data Import and Export to Text, Comma Delimited and Tab Delimited
- Data Import and Export to Excel
- Data Import and Export to DBF
- Data Input and Export via ODBC to Databases such as MS Access, SQL Server and Oracle
- Saving of Charts and Graphs to BMP, WMF, EMF and JPG
- Saving of Summaries to RTF
- Sophisticated Reporting with Previewing
- HTML Output for integration into your Website
- Integrated Scientific Calculator also available as standalone
- Documentation Fields include Live Spell Checking like in MS Word
- Spell Checking and Thesaurus available on all Edit Fields
- Fully customisable interface
- Fully Integrated Help System
- On-line Tutorial

Available in 3 Editions: Lite, Standard and Professional  
Professional is still under development.

Fully Functional Trial version available from our web site:

<http://www.esbconsult.com.au/esbstats.html>

## **ESBCalc**™

A powerful **FREEWARE Scientific Calculator** that uses Infix notation and supports many functions including Trigonometry, Hyperbolic Functions, Logarithms (Base 10, Base 2 and Natural), and much more.

Grab a copy from:

<http://www.esbconsult.com.au/esbcalc.html>

Source to develop this sort of Calculator is included in **ESBPCS** and full source to the calculator is available to owners of **ESBPCS** and **LMD-Tools**.

LMD-Tools: <http://www.lmdtools.com/>

## **ESB Unit Conversion Utility**™

**ESBUnitConv** is a user-friendly Win32 FREE Utility to easily convert between units of measurement. Includes Units for Temperature, Distance, Mass, Area, Volume, Pressure, Velocity, Acceleration, Force, Energy, Power, Fuel Consumption, Flow and Torque.

*Developed in Borland Delphi. Full Delphi Source is included with our **ESBPCS**.*

<http://www.esbconsult.com.au/downloads.html>

## **ESB Country Editor**™

**ESBCountryEditor** is user-friendly Win32 FREE Utility to easily display & edit Country Info. Includes an XML file with Country Info gathered from ISO-3166 and other sources.

*Developed in Borland Delphi. Full Delphi Source is included with our **ESBPCS**.*

<http://www.esbconsult.com.au/downloads.html>

## **Coming Soon:**

- **ESBCalc Suite** – this will be a commercial product that will include **ESBCalc Pro**, **ESBUnitConvert Pro**, **ESBComplexCalc** and other calculators. We are hoping to have release later in 2001.

## **More Info:**

ESB Consultancy <mailto:info@esbconsult.com.au>  
<http://www.esbconsult.com.au/>