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Simulation Using SLX™

A Reference Manual and Introductory Textbook for SLX

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Foreword

SLX is a product of Wolverine Software Corporation. SLX comprises a discrete event simulation language and its development and run-time environments. The SLX language is a relatively compact, but extremely powerful language that can be used as a general-purpose programming language as well as for simulation.

The name SLX stands for Simulation Language with eXtensibility. SLX is a layered system in which each layer is designed to be as small as possible, but also as general as possible. SLX contains highly innovative and extremely powerful mechanisms for building new custom components on top of lower layers of the software.

This book is a reference manual for SLX. It includes many tutorial examples and is therefore highly useful for learning how to develop and debug SLX programs. It is focused on practical, rather than theoretical aspects of simulation. For example, it contains very little tutorial information on statistics, but contains extensive material on the mechanical aspects of statistics, such as random variate generation, statistics collection, and elementary output analysis.

The precursor to this book was Dr. Thomas Schulze's *Simulation Needs SLX*, also known as the SLX Handbuch. It was originally written in German, translated into English by Maunsell Australia, and edited and augmented by Jim Henriksen, the principal developer of SLX.

We wish to thank Professors Thomas J. Schriber, Ingolf Stahl, and Peter Lorenz for their advice, inspiration and suggestions. Special thanks goes to the audiences of the lectures on SLX, the SLX pioneers such as Joe Brill, Thomas Fliess, Christoph Wagner, Marco Schumann, Steffen Straßburger and Gunter Lantzsch. We also thank Mr.Kurt Potschka of Wiener Neustadt. His initiatives, suggestions, and revisions contributed greatly to this book.

All fundamental SLX constructs are illustrated by concise examples that are designed to convey maximal insight while consuming minimal space. All examples can be run under Student SLX.