

### TimeDesign Version 1

Version 1 was written in Visual Basic. It was an extremely rudimentary system and would only allow simple groups. The solving method was simply to sort the groups by educator and then fill up the tables as much as possible. It would accomplish about 85% of the solution only. I placed it on our website for anyone who might be interested to possibly continue with it. The program sat dormant for about year or two.

### TimeDesign Version 2

With the ever increasing availability of the Internet, I did a bit of research into timetabling. I looked at Bin Packing algorithms, Genetic Algorithms, Partical Swarm Optimisation, Tabu Search to name a few, but could never get quite what I wanted. So the simple solution was to design my own solving method. For lack of a better name I call it the Hierarchical Contention Method. I rewrote the complete system in Delphi since I found Visual Basic to be extremely limiting with Object Orientated Programming - You had to create 'wrappers' for even the simplest forms of inheritance. Three Months later, TimeDesign Version 2 was born.

### TimeDesign Version 3

As Version 2 started making it's rounds, I started getting feed-back on problems and possible improvements. I also had some after-thoughts, Version 2 had been a steep learning curve, and I am the last to admit that I know everything about timetables and OO programming and had seen quite a lot of spots in the program that I would have liked to improve on. I was comfortable I had a fairly strong solving engine, I was comfortable with the layout style I had used, so keeping this in mind, I developed TimeDesign 3 from the ground up, the most important changes internally where related to the Timetable Object. These changes allowed me to improve the way the solving engine works. Adding extras became a breeze, and the benefits where immediate. Rooms, period blocking, and exclusions where among the new features added.

### TimeDesign Version 3.3

This was a special release exclusively for use with Deved Trust's EdusolSAMS School administration package, The two go hand in hand together where the EdusolSAMS package creates the initial Educators, Classes, Subjects and Groups within a timetable template and then all information is transferred to TimeDesign 3.3 for solving.

**This version was fully donated to DEVED Trust in 2005 and has not been upgraded since.**

### TimeDesign Version 4

To cater for extra features, like multiple undo, autosave, multiple languages, as well as the potential of Third Party School Administration programs wanting to take advantage of TimeDesign's excellent solving engine, TimeDesign 4 came into being. On the surface, most of the program looks the same as Version 3, but extensive changes have taken place within. Once again, the Timetable Object came under fire, extras added to cater for the teacher substitution, room pooling, conflict and combing charts. The multi-language feature, still currently under testing and development(September 2005) should be completed soon and a maintenance upgrade will be available from [Onyx Computer Systems](#) .