

# Notio and Ossa

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Notio is an API for constructing CG tools. It consists of a Java class library which roughly mirrors the abstract syntax used in the draft ANSI standard for conceptual graphs. It has been used in several research projects by various groups. The Notio API itself is the specification of an interface that could be implemented many different ways. At present, the only implementation of the API is the reference implementation which has been used in developing the specification. It is a “pure” Java implementation available under the GNU LGPL license.

At present the API provides functionality for constructing and manipulating CG’s. It also provides graph-matching capabilities. Notio can import and export CGIF, and was among the earliest pieces of software to do so. It is probably fair to say that this implementation provided validation and feedback for early CGIF proposals. It was also among the earliest attempts to directly reflect the standardized abstract syntax in software.

Ossa is a conceptual modelling tool, built using an early version of the Notio API. It is a prototype designed to provide powerful conceptual modelling facilities for use in virtual reality (VR) projects. Most VR tools focus on presentation (i.e. graphics and sound) or interfaces. The comparatively unexplored conceptual modelling aspect of VR has received the most attention in internet-based, multi-user, text-based, virtual worlds, commonly known as MUDs. These MUDs favour object-oriented modelling approaches. Ossa was built to try an alternate, declarative approach that uses a production system to model world dynamics and conceptual graphs to represent facts and rules about the world. However, the applicability of Ossa extends beyond the domain of VR and should be flexible enough to handle many different modelling tasks.

A paper on Ossa will be presented at ICCS’01 and appear in the conference proceedings. Ossa is still at the prototype stage and is not currently available to the public.

A paper on Notio is available in the proceedings from ICCS’99. Both papers and extensive resources for the Notio software are available from our website<sup>1</sup> and on the CGTools’01 CD. Go to the website or open the “index.html” file from the CD in a web browser. Click on the link marked “Browsable Online Documentation and Publications” and from there choose the documentation to explore (“Getting Started With Notio” is a good first choice).

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<sup>1</sup><http://backtrack.uwaterloo.ca/CG/projects/notio>