

using Visio

in the [OGO 1.2 project \(2004-2005\)](#)

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what is Microsoft Visio?

- a very powerful diagram editor
- you can use predefined diagram techniques:
- “stencils”, “templates”, “solutions”
- you can define your own diagram techniques

Visio support for diagram techniques: shape properties

- Visio can be used to draw shapes (vector-based)
- shapes have many properties
- some properties control a shape's *appearance*
- some properties control a shape's *behaviour*
- some properties define extra right-click actions
- pages and documents have properties, too

Visio support for diagram techniques: stencils and templates

- Visio documents (***.vsd**) contain shapes
- shapes can be collected in stencils
- stencils can be saved as documents (***.vss**)
- Visio documents can be opened together with stencil documents
- a template (***.vst**) is an example document

Visio support for diagram techniques: solutions

- Visio can be made to “understand” a diagram technique:
- arbitrary program code (*macros / addins*) can be associated with Visio documents, stencils and templates
- a Visio “solution” = stencil(s) + template(s) + (optionally) code
- File->New-> lists available Visio solutions

Visio support for OGO 1.2: conceptual models

- you can draw “Silberschatz” ER models with Visio
- I have a “solution” (stencil) to help with this (not yet available online, URL will be published)
- *warning*: work on paper until you have a reasonably detailed diagram, or you waste a lot of time redoing the layout in Visio
- *warning*: work on the layout in Visio until it prints nicely on A4, Visio’s automatic layout function doesn’t work

Visio support for OGO 1.2: logical models

- Visio offers several solutions for logical (relational) database models
- File -> New -> Database -> ER Source Model
separate database model
- File -> New -> Database -> Database Model Diagram
to integrate several ER Source models
- only [Visio 2000 Enterprise !!](#) can generate
MS Access databases

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Visio support for OGO 1.2: logical models

features and caveats:

- a complete relational database can be defined
- you must error check it to spot all problems
- Visio maintains an abstract database model
- the diagram displays a *subset* of the model
- strange error messages are usually caused by objects not being displayed in the diagram