Survey of software for structured text

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Introduction

This survey describes software for texts whose structure is in machine-manipulatable form. These kind of texts are often called structured texts. We do not call this survey a survey for SGML software, because we have accepted a broader set of software.

An older version of this document in English is 'Systems for structured text' which is a part of the report published in Finnish as a technical report of the Department of Computer Science and Applied Mathematics, University of Kuopio, Finland in 1994.

It was difficult to decide which systems we should consider in this survey. The first obvious distinction would be between SGML and non-SGML systems. Because this criterion would ignore many interesting systems and prototypes we decided to include all kinds of systems for structured documents although they were not able to input and/or output SGML documents. After this, our next question was what is considered as a "program for structured text". As the users of the Web notice, our list does not contain HTML editors or browsers. Our criterion has been that the program must be able to accept any structure given by the user. However, there is an exception to this rule: we have accepted conversion programs, that change documents from one format to another. The reason for this decision was that many users are interested, if they are able to convert their documents made by a text processing system into SGML documents, or back into a document accepted by their text processing system.

We have also included XML, DSSSL tools and database front-ends in this report. These were not available when the earlier version of this report was published. XML stands for 'Extensible Markup Language' and it defines a simple dialect of SGML to enable generic SGML to be served, received, and processed on the Web. XML FAQ pages can help the users to clarify the difference between SGML and XML. DSSSL stands for Document Style Semantics and Specification Language and it is also an ISO standard related to SGML. DSSSL specifications define how an SGML document can be formatted for printing and viewing.

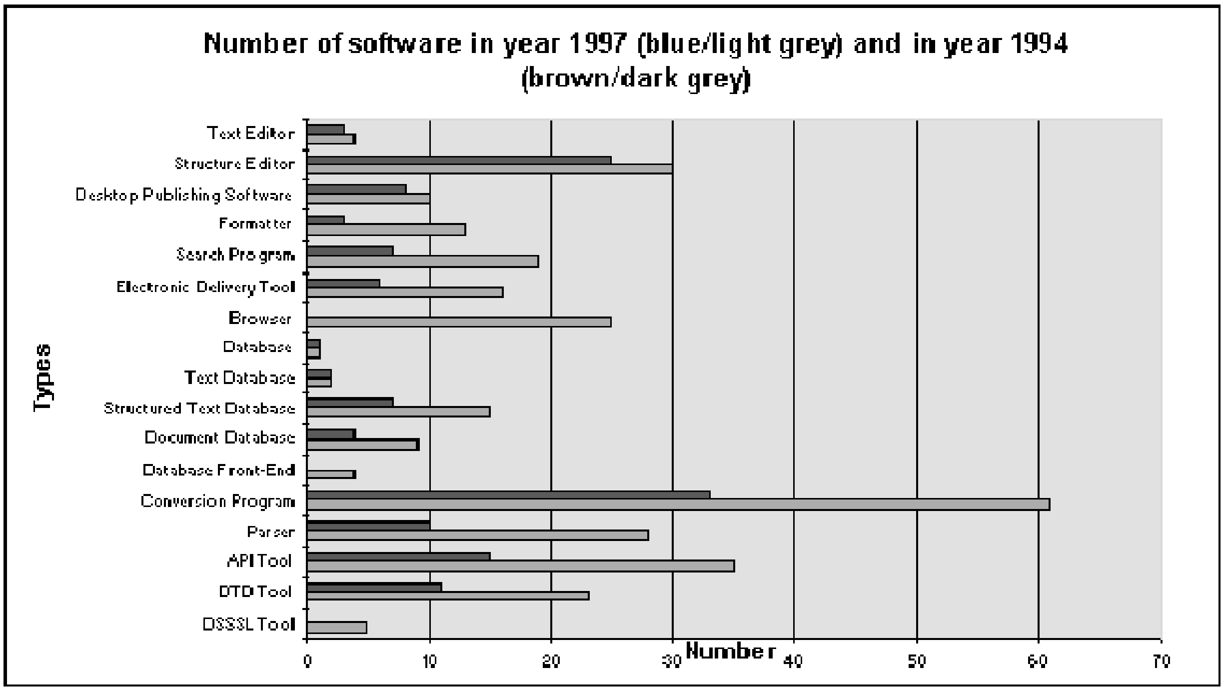
The list containing more than 200 programs is definitely not complete. Certainly all of free programs are not mentioned here, new programs are developed constantly. The descriptions of programs are made by reading brochures, research articles and bibliographies of SGML products. Some of the information has been received from vendors or from users of these programs. The source material is mentioned in the description of every program. We have also tested as many programs as possible.

Software from different viewpoints

There are many programs to process structured documents as this list shows. The processing of SGML documents is not under the control of the SGML standard, but an SGML application is defined in the standard as a text processing application, which is a related set of processes performed on documents of related types. This definition has lead to many different interpretations therefore the terminology here is quite loose: environment, implementation, system, installation or even application is used. In this survey we use the term implementation and we mean by that a set of tools that is capable of processing the structured documents from capturing and creation to the composition and layout of documents. An implementation can take many forms: it can be a parser executed from the operating system's command-line or it can be very automated publishing system with databases as central storages for document fragments.

Types of programs section describes a theoretical implementation for structured documents with different types of software used in such implementations. Existing programs do belong to many categories, thus their classification is almost impossible. Instead of categorizing the software using only perhaps their main purpose we have given *a type or more often many types* for the programs: a type describes a function or functions which the program typically has in an implementation. These types are explained in detail later in this survey.

The following picture represents figures of the different types of the programs in years 1994 and in this survey. It shows how the number of software available has increased although 24 programs were removed from the list for different reasons (embedded to other programs, production or development has been ceased, or the company was not found anymore).



If you have a certain amount of money to invest in your software, then maybe the *categorization by price* given in the following table is interesting. Not all software is expensive, there are a lot of sensibly priced or even free software, which can be considered. Although it it important to realize that price is certainly not the only criterion to purchase software: training, help desk and other similar services are very important in most cases. We have the approximate prices in ECUs, where 1 ECU = 1.1 $ (or 1 ECU = 5.95 FIM). Notice that there is a large group of software, whose price we do not know.

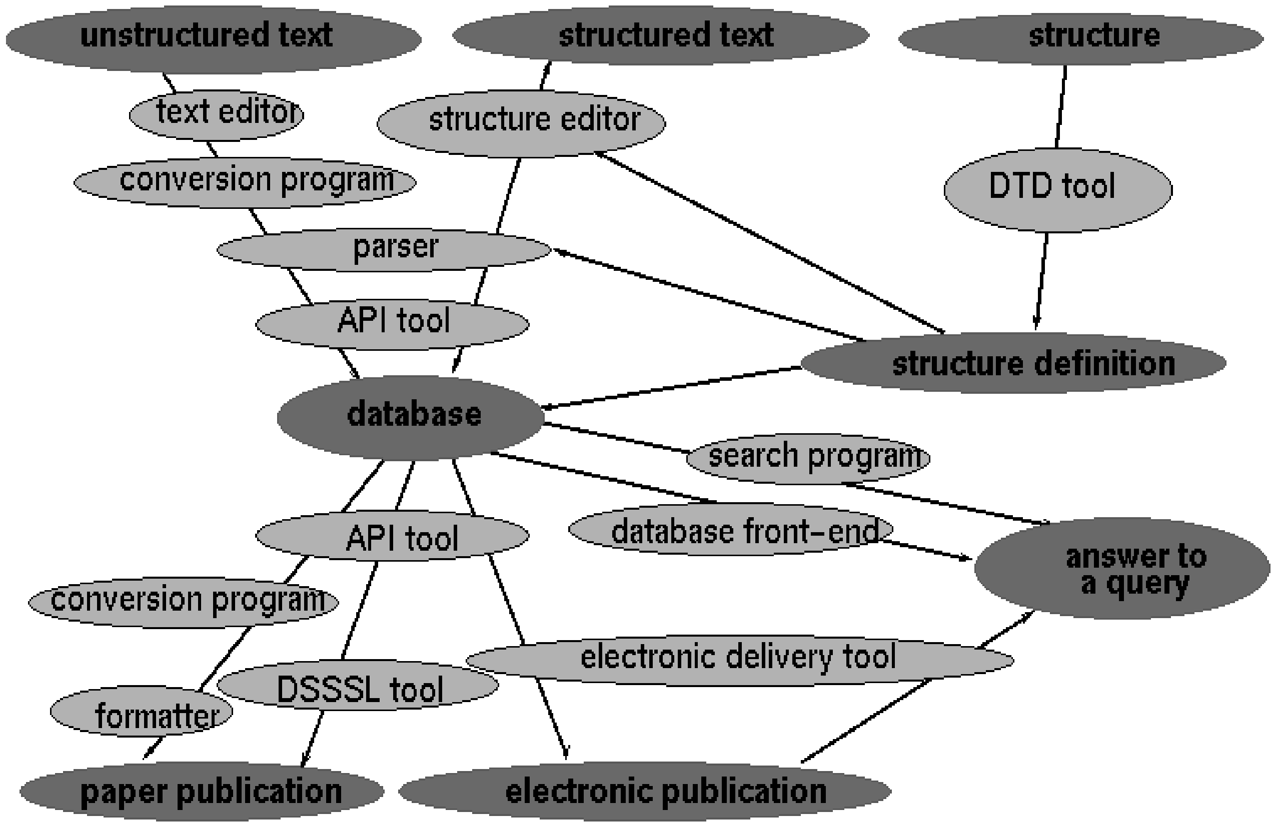
Classification of programs by their prices

Price category	Number	Software
Free	69	ASP-SGML, ARC-SGML, Babble, Bison tools, carthage, CoST: Copenhagen SGML Tool, costwish, dpp, DSSSL Developer's Toolkit, dtd.pl, dtd2html, dtddiff, dtdtree, DTDParse, dtdview, EasyDTD, Fred, GDO (Generalized Document Objects), gf, Grove Toolkit, HyMID, IADS: Integrated Authoring and Display System, Inside & Out, Jade, JSPI Toolkit, Jumbo, Lark, MU: Forms Assisted SGML Markup, MtSgmlQL, NORMDTD, nsgml, nsgmls, Normalised SGML Library (NSL) (academic), NXP, OmniMark, panodssl.pl, perlSGML, PSGML, psgml-dsssl, qweb, qwertz/FORMAT, Rainbow Makers, RATFINK, SARA, SEgrep, SENG/DSSSL Environment, sggrep, SGML Companion DTD Browser, SGMLTools, sgml.pl, SGML2TeX, SGMLC-Lite, SGMLS, SGMLS.pm, sgrep, simple, simpleq, SP, SPWizard, SplitVision Lite Builder, STIL, stripsgml, SYNDOC, tei2latex, Thot, XML (academic), YADE, YASP
0 - 1000 ECU	19	Duxbury Braille Translator, EditTIME, Folio Views, GBook, InContext, Multidoc Pro, Near & Far Author, PanoramaPublisher, PanoramaViewer, RulesBuilder, Sculptor, sdc, SGML Author for Word, SGML Companion, SGML Tagger, SGML TagWizard, stilo, TagPerfect, WordPerfect Suite
1001 - 5000 ECU	12	ADEPT*Editor, ADEPT*Publisher, Author/Editor, Balise, Documentor, FrameMaker+SGML, GBook, Grif SGML Editor, GrifSGMLNotes, Near & Far Designer, S4-desktop, SGMLC
5001 - 10 000 ECU	6	Balise, Explorer, Grif Application Builder, Grif SGML Active Views, INSIGHT into Information, SQml-Publisher
10 001 - 20 000 ECU	4	ActiveServer, Dynatext (contains DynaTag), DynaText SDK, GTI Publisher
20 001 - 30 000 ECU	2	Information Manager, Information Product Assembler (IPA)
30 001 - 40 000 ECU	3	Astoria, Information Product Assembler (IPA), SynexViewPort SDK

Not known	90	3B2<SGML>, ADEPT Series, ADOC/ADIC, Alchemy, Automated Conversion System (ACS), BASIS Document Manager, BASIS SGMLViewer, CAPS - Computer Automated Publishing System, CheckQ, Context-Wise, CSW Parser Plus, CSW Viewer, Curo Document Manager (CDM), DBtag, DeskTopPro SGML Publisher, DL Composer, Document*Architect, DSSSL Syntax Checker, EasyTag, EdiBase<SGML>, EditTIME SDK, ExpertBook, FastTag, Folio Views SGML Toolkit, GEM, Genera, Grif SGML Application Toolkit (GATE), GroveMinder, HST, HyBrowse, HyMinder, HyperTag, IDM (Intelligent Document Manager), Impact, Interleaf 6 SGML, Interleaf 6 SGML Toolkit, Interleaf World View, IPSI - OASYS, Lector, Life*CDM, LivePAGE SGML Edition, Mark-It (contains Write-It), MarkMinder, MegaDots, MetaMorphosis, MIPS, ModuleMaster, Near & Far Lite, OLIAS Browser, OmniMark, Panorama Publisher, Parlance Document Manager (PDM), PassageHUB, PassagePRO, PAT, POET Wildflower, Proof-It, QuickPaste, Roustabout, SAW - SID Assembly Workbench, SGDIFF, SGML Autoformer, SGML Hammer, SGML Instance Imager, SGML Kernel, SGML Smart Editorial System, SGMLbase, SigmaLink, SIM, SplitVision, SplitVision Builder, SplitVision Lite, Symposia doc+, Synergy, T/RDBMS, TEXIS, Textriever, TOMS, Topic, TranSID, TRIP, Ventura, Vital/Alchemist, Waterloo Rita for Windows, Wazir, WebWriter, WorkSMART, WriterStation, XML Developers Toolkit, XML Parser, XyVision Production Publisher (XPP)
Not for sale	1	EnLIGHTeN

Types of programs

An implementation for structured documents usually uses different kinds of programs in the way shown in the following picture. DTD tools are used to write structure definitions, editors and structure editors are used to key in the content. Parsers are used to check the validity and page layout programs and DSSSL tools to produce a printed version. Search programs, databases, database front-ends and electronic delivery tool allow the user to query and retrieve documents. Integration of programs can be done by API tools.



We give a short description of each one to give an idea about the main use of the program.

- **text editor**
  Text editors are usually programs that are only able to input, update and output an ASCII text with the help of human user. In our list, however, all common text processing systems such as WordPerfect or Word are classified also as text editors.
- **structure editor**
  A program that is used to write text. The structure of the text is defined to the program before the user can key in the text. The program will check that the text is conforming to the given structure definition. In a paper from SGML Finland '96, we have a list of 11 features of a good structure editor. Herwignen (Practical SGML, 1994) gives a list of 12 features that he considers necessary for structure editors. Today's structure editors have most of these features, but unfortunately, every program has different features.
- **desktop publishing software**
  These programs are used for producing page layout for paper and electronic documents. The common features for this software are generated lists, many columns, graphics etc. The

difference between the text processing systems and desktop publishing programs is very vague because many text processing systems are gradually shifting towards desktop publishing software.

- **formatter/page layout program**
  A program to generate a formatted form of a text for printing. The text is made with the use of a text editor. The text contains formatting codes that the formatter can interpret. Editing of the text is performed separately from formatting. A formatter obviously means something different nowadays; they are programs that produce the formatted layout from an SGML document. In SGML documents there are no codes for formatting except SGML tags.
- **search program**
  The search program usually preprocesses a text in order to improve the search process. Different preprocessing methods are used. These programs contain a query language and a search engine. The query language is used to express the queries and the search engine processes the query and produces an answer. Query languages for structured text usually contain the following expressions as their basic components:
  - `search "program"`
    a character string `program` is searched anywhere.
  - `search "program" inside element "description"`
    a character string `program` is searched inside a structure element `description`.
  - `search "program" inside "description" whose "type"-attribute is "editor"`
    a character string `program` is searched inside a structure element `description` that has an attribute whose name is `type` and whose value is `editor`.

  Depending on the query language it is possible to form more complicated queries from these basic query components. For example, wild cards or regular expressions are allowed in the string, or the queries can be joined by Boolean operators.
- **electronic delivery tool**
  Electronic delivery tools are used to define the display layout of structured texts. They also allow text to be searched. The output of these programs is often called an electronic publication.
- **browser**
  Browsers are programs that are used to browse different kinds of files, e.g., SGML files, DTDs. Browsers operate either on the file system or they can show data given by Web servers.
- **database**
  In relational databases the data is modelled by relations and the operations on the data are modelled by relational algebra or relational calculus. The query language is the SQL (Structured Query Language) ISO standard. In practice there are many dialects of the SQL. Database management programs typically can manage updates for many simultaneous users, can control the integrity of the database, can manage the rights for many user groups and can recover data in exceptional situations.
- **text database**
  A database management program for text. Data models and query languages vary. The text can be to some extent structured, documents can be subdivided into parts.
- **structured text database**
  This group contains very different kinds of programs whose implementation can be based on a relational database, a text database or an object-oriented database. The common feature for these programs is that it is possible to add text into the database conforming to any kind of structure definitions and to query the structured text. Many such features that are typical for relational database management systems are missing in these programs. Basic requirements for structured text databases are:

1. the user must be able to add any structure definition and documents conforming to it,
2. queries that are typical for search programs must be possible,
3. different versions of elements and documents must be maintained,
4. management of simultaneous updates must be possible, and
5. Application Programmer‘s Interface (API) tools must be contained.

The viewing of documents is not a responsibility of these programs. Usually viewing and editing is made by structure editors that are integrated with the program using the API tools.

- **document database**
  The queries of document databases will return only whole documents. Search for parts of documents is not possible. In addition to documents some classification information (author, keywords, creation date, etc.) are filed. The documents can be retrieved also using this information.
- **database front-end**
  Programs that are used for viewing and sometimes also for editing the information stored in the database.
- **conversion program**
  Programs or language interfaces that are used to make conversion programs from one text format to another. Most languages are data or event driven. Actions or character strings in the input select a conversion rule.
- **parser**
  A program that parses the text confirming to a grammar. Because SGML does not involve a specified grammar but can be used to describe texts for different kinds of grammars, SGML parsers are actually meta parsers. They take as input a grammar and generate a parser for this grammar.
- **API (Application Programmer‘s Interface) tool**
  Mostly a set of functions or procedure libraries that are used to allow a program to interface with other programs.
- **DTD tool (structure design tool)**
  Programs to process (create, edit, show) document type definitions (DTD’s) for structured documents.
- **DSSSL tool (layout design tool)**
  A DSSSL tool contains functions to create and edit DSSSL specifications, to check their correctness or/and to apply specifications to SGML documents to output formatted texts.

Fields used in descriptions

The listing of programs contains following features in addition to a short description. Only relevant and available features are mentioned for a single program.

- **Name and version**
  Full name and the version which we have considered.
- **Contact information**
  Vendor information, importer into Finland, telephone, fax, email and URL.
- **References**
  Articles, manuals, brochures or persons that are used as an information source.
- **Price**
  Prices for different operating systems. The price is given in ECUs.
- **Operating System**
  Computer system the program operates on.
- **Type**
  The classification of the program.
- **Other programs**
  Other products in the same product family, those products are usually also described in the list.
- **SGML support**
  The ability to process DTDs, SGML and XML documents, and DSSSL specifications.
  "DTD in/out" means that the program can read, write and process SGML DTDs,
  "SGML in/out" means that the program can read, write and process SGML tagged text,
  "XML in/out" means that the program can read, write and process XML tagged text.
  "DSSSL in/out" means that the program can read, write and process DSSSL specifications or process SGML tagged text.
- **Search/replace**
  The ability of the program to search text, replace text, search elements or replace elements.
- **Views**
  The ability of the user to select elements and their formatting on screen, and to save these definitions for the future. If the system does not have this ability a predefined view has to be used.
- **Printing**
  How the program produces the printed output.
- **Description**
  A short decription of the features of the program.
- **Note**
  Some special information about the program.
- **Screen shot**
  A link to a screen shot if available.

Lists of programs

The main list of software is represented in alphabetical order. To help the user to find programs of a particular type the other list shows the names of software grouped by their types. Earlier in this survey there is also a list of programs by their prices.

Software by their types

Text Editor (4)
HST, MegaDots, SGML Author for Word, SGML Tagger

Structure Editor (30)
3B2<SGML>, ADEPT*Editor, ADEPT*Publisher, ADEPT Series, ADOC/ADIC, Author/Editor, Documentor, EasyTag, EditTIME, FrameMaker+SGML, Grif SGML Active Views, Grif SGML Editor, Grif SGML Notes, IADS: Integrated Authoring and Display System, InContext, Near & Far Author, PSGML, psgml-dsssl, SGML Author for Word, SGML Smart Editorial System, SGML TagWizard, SigmaLink, stilo, Symposia doc+, SYNDOC, Thot, Waterloo Rita for Windows, WebWriter, Write-It, WriterStation

Desktop Publishing Software (10)
3B2<SGML> ADEPT*Publisher, ADEPT Series, , FrameMaker+SGML, Grif SGML Editor, Interleaf 6 SGML, Symposia doc+, Ventura, WordPerfect Suite

Formatter/Page Layout Program (13)
CAPS, DeskTopPro SGML Publisher, DL Composer, Documentor, Genera, IADS: Integrated Authoring and Display System, Jade, qwertz/FORMAT, SENG/DSSSL Environment, STIL, Ventura, XyVision Production Publisher (XPP), YADE

Search Program (19)
Dynatext, Explorer, GBook, Grif SGML Active Views, Impact, Multidoc Pro, MtSgmlQL, Normalised SGML Library (NSL), Panorama Publisher, Panorama Publishing Suite, PAT, SEgrep, SENG/DSSSL Environment, sggrep, SGML Smart Editorial System, sgrep, SYNDOC, Textriever, Topic

Electronic Delivery Tool (16)
Dynatext, EnLIGHTeN, ExpertBook, Explorer, GBook, Grif SGML Active Views, GTI Publisher, INSIGHT into Information, Interleaf World View, Lector, Multidoc Pro, OLIAS Browser, Panorama Publishing Suite, Panorama Publisher, SplitVision Builder, SplitVision Lite Builder

Browser (25)
Babble, Dynatext, EnLIGHTeN, ExpertBook, Explorer, GBook, Grif SGML Active Views, GTI Publisher, HyBrowse, HyMID, HyperTag, INSIGHT into Information, Interleaf World View, Jumbo, Lector, MIPS, Multidoc Pro, OLIAS Browser, Panorama Publishing Suite, Panorama Publisher, Panorama Viewer, qweb, SplitVision, SplitVision Lite, Symposia doc+

Database (1)
MarkMinder

Text Database (2)
TEXIS, TRIP

Structured Text Database (15)
ActiveServer, Astoria, BASIS Document Manager, EdiBase<SGML>, Folio Views, HST, Information Manager, IPSI - OASYS, Life*CDM, LivePAGE SGML Edition, POET Wildflower, SARA, SGML Smart Editorial System, SigmaLink, T/RDBMS

Document Database (9)
ADOC/ADIC, Curo Document Manager (CDM), GEM, GroveMinder, ModuleMaster, Parlance Document Manager (PDM), PassagePRO, SIM, WorkSMART

Database Front-End (4)
BASIS SGMLViewer, CSW Viewer, SGMLbase, SQml-Publisher

Conversion Program (61)
ADEPT Series, Alchemy, Automated Conversion System (ACS), Balise, CAPS, CheckQ, Context-Wise, CoST: Copenhagen SGML Tool, costwish, DBtag, Duxbury Braille Translator, DynaTag, EasyTag, FastTag, Folio Views SGML Toolkit, Fred, GDO

(Generalized Document Objects), gf, Grif Application Builder, HST, IDM (Intelligent Document Manager), Information Product Assembler (IPA), Interleaf 6 SGML, Interleaf 6 SGML Toolkit, Jade, Lector, Mark-It, MegaDots, MetaMorphosis, MU: Forms Assisted SGML Markup, MtSgmlQL, Normalised SGML Library (NSL), OmniMark, OmniMark LE, PassageHUB, perlSGML, QuickPaste, qwertz/FORMAT, Rainbow Makers, RATFINK, Roustabout, SAW - SID Assembly Workbench, sdc, SEgrep, SENG/DSSSL Environment, SGML Author for Word, SGML Autoformer, SGML Hammer, SGML Instance Imager, SGMLTools, SGML2TeX, sgrep, STIL, stripsgml, SYNDOC, Synergy, TagPerfect, tei2latex, TranSID, Vital/Alchemist, Wazir

Parser (28)

ASP-SGML, Balise, EasyTag, JSPI Toolkit, Jumbo, Lark, Mark-It, MarkMinder, nsgml, nsgmls, Normalised SGML Library (NSL), NXP, perlSGML, Proof-It, PSGML, psgml-dsssl, SGML Hammer, SGMLKernel, SGML Tagger, SGML TagWizard, sgml.pl, SGMLS, SGMLS.pm, SP, XML, XML Developers Toolkit, XML Parser, YASP

API Tool (35)

ActiveServer, ADEPT*Editor, ADEPT*Publisher, ADEPT Series, ARC-SGML, Astoria, BASIS Document Manager, Bison tools, CSW Parser Plus, DSSSL Developer's Toolkit, DynaText SDK, EditTIME SDK, Grif SGML Application Toolkit (GATE), Grove Toolkit, HyMinder, IDM (Intelligent Document Manager), Information Manager, MarkMinder, MIPS, Normalised SGML Library (NSL), panodssl.pl, S4-desktop, Sculptor, SENG/DSSSL Environment, SGML Hammer, SGMLC, SGMLC-Lite, simple, simpleq, SPWizard, SynexViewPort SDK, TOMS, WorkSMART, XML, XML Developer's Toolkit

DTD Tool (23)

carthage, Document*Architect, dpp, dtd.pl, dtd2html, dtddiff, dtdtree, DTDParse, dtdview, EasyDTD, Fred, Inside & Out, Interleaf 6 SGML Toolkit, Near & Far Designer, Near & Far Lite, NORMDTD, perlSGML, RulesBuilder, SGML Companion, SGML Companion DTD Browser, stilo, Ventura, WebWriter

DSSSL Tool (5)

DSSSL Developer's Toolkit, DSSSL Syntax Checker, Grove Toolkit, JSPI Toolkit, psgml-dsssl

Other (1)

SGDIFF

Software in the alphabetical order

1. ## 3B2<SGML>

Name and version number: 3B2<SGML> Version 2.0
Contact information:
- Advent Publishing House, "3B2" House, 12 Bath Road, Old Town, Swindon, Wiltshire SN1 4BA, United Kingdom, Tel: +44 (1793) 511432, Fax: +44 (1793) 536616, Email: info@3b2.com, URL: http://www.3b2.com
References:
- Sales information
Price: Not known
Operating System: MS-DOS, Mac, Unix
Type: Structure editor, Desktop publishing software
Other programs: SP
SGML support: DTD in, SGML in/out
Graphics support: Major formats
Search/replace: Search/replace for text
Views: SGML text, formatted text. Not user definable
Printing: Normal File..Print action
Description: 3B2<SGML> is a structure editor with two views: SGML text and formatted text. The program has SP parser built-in, and the errors are shown in the SGML text. The program has also publishing software capabilities to produce formatted layout.

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2. ## ActiveServer

Contact information:
- Active Systems, 11 Holland Avenue, Suite 602, Ottawa, Ontario K1Y 4S1, Canada, Tel: 613 729-2043, Fax: 613 729-2874, URL: http://www.activesystems.ca
References:
- Sales information
- Emails from Silvia Wadasinghe (Active Systems) containing updated information
Price: 10150 ECU (for Unix), 10150 ECU, (Developers Kit), 1520 ECU (Developers Training), 305 - 405 ECU (for Windows)
Operating System: Server: Unix, Client: MS-Windows
Type: Structured text database, API tool
SGML support: DTD in, SGML in/out
Search/replace: Search/replace for text/element
Description: ActiveServer is an object-oriented database management system, which has Object Query Language as the query language. The query language contains add, update, delete and search commands for documents and its parts. An extracted document or a part of it has always an optimized DTD with it.

The system has tools to change a DTD to a database schema automatically. It is possible to define rights to documents or parts of documents for different users and different user groups. The system has also version management and API tool for the C language.
Note: earlier name OfficeSmith

3. ADEPT*Editor

Contact information:
- ArborText Inc., 1000 Victors Way, Suite 400, Ann Arbor, MI, USA, 48108-2700, Tel: +1 313 996-3566, Fax: +1 313 996-3573, Email: info@arbortext.com, URL: http://www.arbortext.com
- Texcel AB, Valborgsmässoväg 11, 12637 Hägersten, Sweden, Tel: +46 8 708 8015, Fax: +46 8 708 8014, Email: sales@texcel.no, URL: http://www.texcel.no
- Karl Ny, Texcel AB
- In Finland: Software Engineering Center (SEC), Piispanportti 5, PL 11, FIN-02241 Espoo, FINLAND, Tel: +358 (0)9 8045 1354, Fax: +358 (0)9 8045 1333, Email: sec@sec.fi, URL: http://www.sec.fi
- Heimo Hänninen (Email: heimo.hanninen@sec.fi)

References:
- Sales information
- Karl Ny, Texcel AB, URL: http://www.texcel.no
- Laurie Olson, lao@arbortext.com
- Emails from Heimo Hänninen (heimo.hanninen@sec.fi) containing updated information

Price: Fixed 1670 ECU + annual maintainance fee 305 ECU; Floating 2510 ECU + annual fee 380 ECU
Operating System: MS-Windows 3.1/95/NT, OS/2, Unix
Type: Structure editor, API tool
Other programs: Document*Architect, ADEPT*Publisher, QuickPaste
SGML support: DTD in/out, SGML in/out, Market Sections, Text and file entities, SUB DOC
Graphics support: Major formats
Search/replace: Search/replace for text, element and attributes, within selected element
Views: SGML text, formatted text. Other views: see Document*Architect.
Printing: Draft printing available, Final printout made by ADEPT*Publisher
Description: ADEPT*Editor is a structure-oriented SGML editor with built-in tools for table and equation handling. The SGML-tagged information is imported, edited and exported without conversion. Tags can be shown in All Tags, Partial Tags or Hidden Tags mode. The main window is a WYSIWYG text window, where the user can get the tags with attributes visible. Beside the main window the user can have the Hyper TOC window which helps author to navigate through a document at heading levels. Bookmarks can be added to help the navigation. The text can be hidden and expanded on the user's request. Elements can be defined protected, which means that the text in them cannot be changed. An empty document is a template with required tags. The users can fill in the template in any order and the program reports of still missing elements. During a cut/paste operation the editor can automatically adjust the tags for the new position. The parser can be turned off. A thesaurus and dictionary for English are included. Other languages are supported as optional libraries. DTD is shown in a separate window as a tree.
Screen shot: At URL: http://www.arbortext.com/images/aefull.gif

4. ADEPT*Power Paste

Note: New name QuickPaste

5. ADEPT*Publisher

Name and version number:
Contact information:
- ArborText Inc., 1000 Victors Way, Suite 400, Ann Arbor, MI, USA, 48108-2700, Tel: +1 313 996-3566, Fax: +1 313 996-3573, Email: info@arbortext.com, URL: http://www.arbortext.com
- Texcel AB, Valborgsmässoväg 11, 12637 Hägersten, Sweden, Tel: +46 8 708 8015, Fax: +46 8 708 8014, Email: sales@texcel.no, URL: http://www.texcel.no
- Karl Ny, Texcel AB
- In Finland: Software Engineering Center (SEC), Piispanportti 5, PL 11, FIN-02241 Espoo, FINLAND, Tel: +358 (0)9 8045 1354, Fax: +358 (0)9 8045 1333, Email: sec@sec.fi, URL: http://www.sec.fi
- Heimo Hänninen, Email: heimo.hanninen@sec.fi

References:
- Sales information
- Karl Ny, Texcel AB, URL: http://www.texcel.no
- Laurie Olson, lao@arbortext.com
- Emails from Heimo Hänninen (heimo.hanninen@sec.fi) containing updated information

Price: 3730 ECU + annual maintainance fee 1140 ECU
Operating System: Unix
Type: Structure editor, Desktop publishing software, API tool
Other programs: Document*Architect, ADEPT*Editor, QuickPaste
SGML support: DTD in/out, SGML in/out, Market Section, text and file entities, SUB DOC
Graphics support: Major formats
Search/replace: Search/replace for text, element, attributes
Views: A user can define new views for SGML document with the use of Document*Architect.
Description: ADEPT*Publisher includes the ADEPT*Editor and a style editor for defining the formatted output for SGML documents as FOSI's (Formatting Output Specification Instance). The formatting uses existing formatters and the final output is previewed on the screen and is printed as PostScript.

6. ADEPT Series

Name and version number: ADEPT Series 6
Contact information:
- ArborText Inc., 1000 Victors Way, Suite 400, Ann Arbor, MI, USA, 48108-2700, Tel: +1 313 996-3566, Fax: +1 313 996-3573, Email: info@arbortext.com, URL: http://www.arbortext.com
- Texcel AB, Valborgsmässoväg 11, 12637 Hägersten, Sweden, Tel: +46 8 708 8015, Fax: +46 8 708 8014, Email: sales@texcel.no, URL: http://www.texcel.no
- Karl Ny, Texcel AB
- In Finland: Software Engineering Center (SEC), Piispanportti 5, PL 11, FIN-02241 Espoo, FINLAND, Tel: +358 (0)9 8045 1354, Fax: +358 (0)9 8045 1333, Email: sec@sec.fi, URL: http://www.sec.fi
- Heimo Hänninen, Email: heimo.hanninen@sec.fi

References:

- Sales information
- Karl Ny, Texcel AB, URL: http://www.texcel.no
- Laurie Olson, lao@arbortext.com
- Emails from Heimo Hänninen (heimo.hanninen@sec.fi) containing updated information

Price: Not known
Operating System: Unix
Type: Structure editor, Desktop publishing software, Conversion program, API tool, HTML gateway for Arbortext DTDs
Other programs: Document*Architect, ADEPT*Power Paste, ADEPT*Publisher, QuickPaste
SGML support: SGML in/out, DTD in/out
Graphics support: Major formats
Description: ADEPT Series is a package of ADEPT Editor, ADEPT Publisher, Document-Architect, Quick Paste.

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7. ADOC/ADIC

Name and version number: ADOC/ADIC
Contact information:
- Aerospatiale Aeronautique, Systems and Services, 316 route de Bayonne, 31060 Toulouse, Cedex 03, France, Tel: +33+561-93-69-70, Fax: +33+561-93-58-15, Email: valerie.vincent@avions.aerospatiale.fr, URL: http://www.aerospatiale.fr

References:
- Web information

Price: Not known
Operating System: Windows 3.1, Unix, OS/2
Type: Document database, Structure editor
SGML support: DTD in, SGML in/out
Description: ADOC is a document management system and ADIC a system for consulting ADOC-managed data. The system is designed to store and manipulate SGML documents. ADOC accepts arbitrary DTDs without any specific database schema definition. The system has integrated editors for SGML and graphics.

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8. Alchemy

Contact information:
- Zandar Corporation, 117 South Williams, Burlington, Vermont 05401, USA, Tel: 802-862-8005, Fax: 802-862-7913

References:
- Steve Pepper’s list

Price: Not known
Type: Conversion program
SGML support: SGML out
Description: Alchemy converts non-SGML texts to SGML format.

---

9. ApplicationBuilder

Note: New name Sculptor

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10. ASP-SGML

Name and version number: Amsterdam SGML Parser
Contact information:
- Jos Warmer: J.Warmer@klasse.nl, jwarmer@nl.ibm.com, ftp: ftp.uio.no (/pub/SGML/ASP-SGML), info.ex.ac.uk (pub/SGML)
References:
- J. Warmer and S. Van Egmond: The Implementation of the Amsterdam SGML Parser, Electronic Publishing 2(2), (65-90), July 1989.
- J. Warmer, H. van Vliet: Processing SGML Documents, Electronic Publishing 4(1), (3-26), March 1991.
- text files included in the program package
Price: Free
Operating System: Unix
Type: Parser
SGML support: DTD in, SGML in/out
Description: ASP-SGML is developed on top of LLgen, an extended LL(1) parser generator, which generates recursive descent parsers. From a DTD definition a document parser is generated. The document parser checks an SGML document instance and produces a correct and complete document, complete in the sense that all tags and entities are expanded.

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11. ARC-SGML

Contact information:
- SGML Users Group SGLMUG, ftp: sgml1.ex.ac.uk (/pub/SGML/arcsgml)
- The SGML Project, Paul Ellison University of Exeter, North Park Road, Exeter, EX4 4QE, UK, Tel: +44-392-263946, P.A.Ellison@exeter.ac.uk, URL: http://www.ex.ac.uk/SGML/
References:
- Text files included in the program package
Price: Free
Operating System: DOS, Mac, Unix
Type: API tool
Other programs: VM2
SGML support: DTD in, SGML in/out
Description: ARC-SGML is a toolkit of programs for building SGML parser and applications. The DOS version has the VM2 parser and API definitions for editors written in C or REXX language.
Note: The programs were originally written to test the SGML standard in 1983.

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12. Astoria

Name and version number: Astoria 2.0
Contact information:

- Chrystal Software, 10875 Rancho Bernardo Road, San Diego, CA 92127-2116, USA, Tel: +1 619 676 7700, Fax: +1 619 676 7710, Email: info@chrystal.com, URL: http://www.chrystal.com
- European Operations: Key West, 53-61 Windsor Road, Slough, Berkshire, SL1 2EE, England, Tel: +44 1753 550022, Fax: +44 1753 511955
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- Sales information
- URL: http://www.chrystal.com
- Emails from Index Information Technologies containing updated information

Price: 33100 ECU
Operating System: Unix, Windows NT 3.5.1 or 4.0, Client Windows NT 3.5, 3.5.1 or 4.0, Network TCP/IP
Type: Structured text database, API tool
Other programs: InContext
SGML support: DTD in/out, SGML in/out
Search/replace: Search for text/elements/attributes
Description: Astoria is a structured text database, which uses Object Store's database. DTDs can be imported and the locking level of structure can be specified by the user. Documents and portions of documents can be validated. The database keeps revision histories for components at the lowest level. InContext and ADEPT*Editor has been integrated to the database. The system has also a "graphical" query language for end users to search in the database. These searches can be used to collect information on an element for consistency checking. Unstructured documents can also be stored. Users can point to external files like graphics files, video clips etc.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/astoria.gif

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13. Author/Editor

Name and version number: SoftQuad Author/Editor 3.5 and 3.1
Contact information:
- SoftQuad Inc., 20 Eglinton Ave. West, 12th Floor, P.O.Box 2025, Toronto, Canada, M4R 1K8, Tel: +1 416 5449000, Fax: +1 416 5440300, URL: http://www.sq.com
- SoftQuad (UK) Limited, Kinetic Centre, Theobald Street, Borehamwood, Herts, WD6 4PJ, England, Tel: +44 181 3874110, Fax: +44 181 3874121
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- Sales information: Author/Editor 3.5
- Emails from Index Information Technologies containing updated information

Price: 1500 ECU(Windows,Mac), 2400 ECU (Unix)
Operating System: MS-Windows, Mac and Unix version 3.1, and Windows-95/NT version 3.5
Type: Structure editor
Other programs: RulesBuilder, Panorama, Sculptor
SGML support: No DTD (see RulesBuilder), SGML in/out

Graphics support: Major formats
Search/replace: Search/replace for text, for element and for element with an attribute
Views: SGML text, formatted text. Not user definable
Printing: Normal File..Print action
Description: Author/Editor is a very pure structure editor which validates the document all the time. Also non-valid documents can be edited if the parser is turned off. The main window is a QUASIWYG representation of text, a structure view and a context view are also available. The structure view shows tags intended, the context view shows paths in the same way. An element list is used to pick up an element to insert. The representation on screen is done with a style editor, which generates style files. The program has many DTDs with it, but new DTDs are imported by RulesBuilder, which converts a DTD to a structure definition required by Author/Editor. There is an English thesaurus and a dictionary for spell checking.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/authoreditor.gif

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14. Automated Conversion System (ACS)

Contact information:
- Lockhead Martin Information Systems, 5203 Leesburg Pike, Suite 1501, Falls Church, VA 2201, USA, Tel: +1(703)671-307, Fax: +1(703)671-3620, Email: lmc-iss-pm@ccmail.orl.lmco.lmcocom, URL: http://www.iss.external.lmco.com

References:
- Web information

Price: Not known
Operating System: Unix
Type: Conversion program
SGML support: SGML out
Description: ACS converts to MIL-D-87269 format.
Note: No further information on the Web page.

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15. Babble

Name and version number: Babble version 1.1.2
Contact information:
- URL: http://www.iath.virginia.edu/babble/

References:
- Institute for Advanced Technogy in the Humanities, University of Virginia in Charlottesville, USA, wURL: http://jefferson.village.Virginia.EDU
- Web information at URL: http://www.iath.virginia.edu/babble/

Price: Free
Operating System: MS Windows 95/NT, Unix
Type: Browser
SGML support: SGML in
Search/replace: Search for text/element
Views: User definable by style sheets
Description: Babble allows multilingual texts, also SGML, to be displayed and searched simultaneously. Text can be linked for scrolling and searching. It uses UNICODE character set standard. SGML tags can be hidden.

Screen shot: At URL: http://www.iath.virginia.edu/babble/tile.gif

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16. Balise

Name and version number: Balise 3.0
Contact information:
- AIS - Software Sales Department, 15-17 rue Remy Dumoncel, F-75014 Paris, France, Tel: +33 (1) 40644300, Fax: +33 (1) 40644310, Email: info@balise.com, URL: http://www.balise.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- Sales information
- Emails from Index Information Technologies containing updated information

Price: 6800 ECU (Unix), 3400 ECU (Windows) (4/97)
Operating System: MS-DOS, Windows 3.1/95/NT, Unix
Type: Conversion program, Parser
SGML support: DTD in, SGML in/out
Description: Balise is a programming environment with an SGML parser (as default the SP parser) and an interpreter and a compiler for the Balise script language. The language is a data/event driven language like awk, but the events depend on ESIS (Element Structure Information Set) tree. For example, start and end actions for an element **title** as a child of an element **chapter** is define as follows:

```
ELEMENT title WHEN [IN chapter]
        on start {...actions...}
        on end {...actions...}
```

It works in three modes: event-driven mode using ESIS tree, in random access mode using tree navigation and query, tree manipulation and tree traversal mechanisms. Mixed mode is a combination of previous modes.

Using Balise Software Developer's Kit integration is possible with any third-party software through C-level APIs.

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17. BASIS Document Manager

Contact information:
- Information Dimensions Inc, 5080 Tuttle Crossing Blvd, Dublin, OH 43017-3569, USA , URL: http://www.idi.oclc.org
- In Finland: ID Application Oy, Jaakonkatu 2, 01620 Vantaa, Finland, Tel: +358 9 8785240, Fax: +358 9 8785210

References:
- Sales information
- Web information
- Emails from Index Information Technologies containing updated information

Price: Not known

Operating System: Server: Unix, DEC/VMS, Client: Unix, DEC/VMS, MS-Windows
Type: Structured text database, API tool
Other programs: BASIS SGML Viewer
SGML support: DTD in, SGML in/out
Graphics support: Not known
Views: See BASIS SGMLViewer
Description: BASIS Document Manager is a structured text database management system based on the BASISplus database. SGML DTDs must be converted to HyperDoc models with the Document transformation language. The HyperDoc separates the document into content components and properties. The structure is given by a grammar including the classification of the components. The documents stored in the database are validated on import. The results of queries are represented with a virtual table of content, which is a list of elements corresponding to the query. The OpenAPI is a C-library that provides the client access to database servers.
Note: Probably Viewer and Server has been integrated to Document Manager

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18. BASIS SGMLViewer

Contact information:
- Information Dimensions Inc, 5080 Tuttle Crossing Blvd, Dublin, OH 43017-3569, USA, URL: http://www.idi.oclc.org
- In Finland: ID Application Oy, Jaakonkatu 2, 01620 Vantaa, Finland, Tel: +358 0 8785240, Fax: +358 0 8785210

References:
- Sales information: Document DBMS - New Tools for New Problems, IDI, 1994, The HyperDoc Database Model, IDI, 1993.
- Seybold Publications 1994

Price: Not known
Operating System: Server: Unix, DEC/VMS, Client: Unix, DEC/VMS, MS-Windows
Type: Database front-end
Other programs: BASIS Document Manager
SGML support: SGML in/out
Graphics support: Major formats
Search/replace: Search for text/element
Views: Can be modified by user
Printing: Normal File..Print action
Description: BASIS SGML Viewer is graphical user interface to BASIS SGML databases. It supports searching, displaying, printing, annotating of documents and their components.

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19. Bison tools

Name and version number:
Contact information:
- URL: http://ftp-tei.uic.edu/pub/tei/sgml/grammar/bison/

References:
- ftp-tei.uic.edu/pub/tei/sgml/grammar/README
- Michael Sperberg-McQueen, University of Illiois at Chicago

Price: Free
Operating System: Unix
Type: API tool
SGML support: DTD in/out, SGML in/out
Description: Bison tools is a set of files containing Bison and Flex grammars for SGML DTD (p2bnf.y, p2bnflex.l), SGML documents (p2doc.y and p2doclex.l) and SGML declarations (p2decl.y and p2declex.l) validated by Bison compiler.

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20. CAPS - Computer Automated Publishing System

Contact information:
- Chrystal Software, A Xerox New Enterprise Company, 10875 Rancho Bernard Road, San Diego, California 92127, USA, Tel. (1) 619 676 7700 URL: http://www.chrystal.com

References:
- Sales information

Price: Not known
Operating System: Unix
Type: Desktop publishing software, Formatter, Conversion program
Other programs: Astoria
SGML support: SGML in
Printing: Normal File..Print action
Description: CAPS is a composition and pagination software with a conversion program (Global Translator), pagination and layout editors (Design Editor, Layout Editor), and a formatter. The system has its own internal form of structure definitions and documents. DTDs and SGML document instances must be converted to CAPS. In the future they may have tools for customers to make the conversion. The system has normal generation for indexes, table of contents, control of widows and orphans, hyphenation etc.
Note: Chystal supports existing installations, but they do not sell the product.

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21. carthage

Contact information:
- URL: http://ftp-tei.uic.edu/pub/tei/sgml/grammar/carthage/

References:
- ftp-tei.uic.edu/pub/tei/sgml/grammar/carthage/README, 1996
- Michael Sperberg-McQueen, University of Illiois at Chicago

Price: Free
Operating System: Unix
Type: DTD tool
Other programs: sgmls
SGML support: DTD in/out
Description: Carthage parses SGML DTDs. It is developed using yacc/lex. During the analysis of a DTD the program can be set to keep or drop market sections, give a warning of double specification of entities, keep or drop parameter entity declarations, delete elements from a content model, list specified elements, or keep or drop comments.

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22. CheckQ

Contact information:
- Eidon GmbH, Am Weichselgarten 7, D-91058 Erlangen, Germany, Tel: +49 9131 691151, Fax: +49 9131 691111, Email: info@eidon.de, URL: http://www.eidon.de/.
References:
- Web information
- Sales information
Price: Not known
Operating System: Windows 95/NT, Unix
Type: Conversion program
Other programs: SGMLbase
SGML support: DTD in, SGML in/out
Search/replace: Search for elements
Description: CheckQ is a tool for extracting elements and attributes of SGML and Interleaf documents. Any parser can be used to validate extracted parts of documents.

---

23. Context-Wise

Name and version number:
Contact information:
- U.S. Lynx, 853 Broadway, New York, NY 10003, USA, Tel: +1(212)6733210, Fax: +1(212)6735261, Email: elvis@uslynx.com, URL: http://www.uslynx.com
References:
- Steve Pepper's list
Price: Not known
Operating System: Windows
Type: Conversion program
Note: Web pages do not have any information about the program.

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24. CoST: Copenhagen SGML Tool

Name and version number: CoST version 2.1
Contact information:
- Klaus Harbo, Klaus.Harbo@euromath.dk, ftp: info.ex.ac.uk, URL: http://www.art.com/cost/

References:
- Klaus Harbo: CoST v. 0.2 Copenhagen SGML Tool, University of Copenhagen, 1993
- Joe English: CoST 2 Reference Manual, 1996, URL: http://www.art.com/cost/manual.html
- Web information
Price: Free
Operating System: Windows 95/NT, Unix
Type: Conversion program
Other programs: SGMLS, Tcl
SGML support: DTD in, SGML in/out
Description: CoST is a conversion tool for SGML files. The system needs SGMLS parser and TCL - Tool Command Language interpreter. The SGMLS produces an event stream

which is actually a list of parsing events done. An event interpreter maintains a stack from the event stream, and a CoST program controls the stack and actions applied to the objects. For example, the start and end actions of an element **A** are defined as follows

```
element A {
        startAction {
              actions
        }
        endAction {
              actions
        }
}
```

---

25. costwish

Name and version number: costwish
Contact information:
- URL: http://www.venus.co.uk/omf/costwish/
References:
- Web-information
Price: Free
Operating System: Unix
Type: Conversion program
Other programs: CoST and Tcl/tk
SGML support: SGML in
Description: Costwish is used to postprocess or render the output of CoST conversion program using existing Tcl/Tk scripts.

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26. CSW Parser Plus

Contact information:
- CSW Information Ltd., Oxford Centre for Innovation, Mill Street, Oxford, OX2 0JX, UK, Tel: +44/0 1865 794 789, Fax: +44/0 1865 205 008, Email: info@csw.co.uk, URL: http://www.csw.co.uk/info/
References:
- Web information
Price: Not known
Operating System: MS-Windows 95/NT
Type: API tool
SGML support: DTD in, SGML in/out
Description: CSW Parser Plus is a graphical front-end for the SP parser. With CSW Parser Plus it is possible to set up the options for the SP parser and process SGML files one at a time, or a batch of files.

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27. CSW Viewer

Contact information:
- CSW Information Ltd., Oxford Centre for Innovation, Mill Street, Oxford, OX2 0JX, UK, Tel: +44/0 1865 794 789, Fax: +44/0 1865 205 008, Email: info@csw.co.uk, URL: http://www.csw.co.uk/info/
References:
- Web information
Price: Not known
Operating System: MS-Windows 95/NT
Type: Database front-end
Other programs: Astoria
SGML support: SGML in/out
Views: SGML text, text
Printing: Normal
Description: CSW Viewer is used to display SGML documents stored in Astoria database. The user can view tags, attributes or text content without setting up any style sheets as well as elements with multiple ancestries and reused elements.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/cswviewer.gif

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28. Curo Document Manager (CDM)

Name and version number: Curo Document Manager 2.3
Contact information:
- Tier Two Systems, Inc., 15444 NE 95th Street, Redmond, WA 98052, USA, Tel: +1(425)558-1800, Fax:(425)558-4121, Email: support@tier2.com, URL: http://www.tier2.com
References:
- Sales information
- Emails from Gary Samaniego, Senior Technical Support Engineer
Price: Not known
Type: Document database
Note: Web pages do not have any information about the program.

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29. DBtag

Contact information:
- Eidon GmbH, Am Weichselgarten 7, D-91058 Erlangen, Germany, Tel: +49 9131 691151, Fax: +49 9131 691111, Email: info@eidon.de, simon@firwiss.uni-erlangen.de, URL: http://www.eidon.de/
References:
- Sales information
- Web information
Price: Not known
Operating System: Windows 95/NT
Type: Conversion program
Other programs: SGMLbase
SGML support: SGML out
Description: DBtag is used to convert the answer of an SQL query in a relational database to

produce SGML documents automatically. It is used with SGMLbase.

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30. DeskTopPro SGMLPublisher

Contact information:
- Penta Software, Inc., 107 Lakefront Drive, Hunt Valley, MD 21030, USA, Tel: +1(10)7718973, Fax: +1(10)7714020, Email: sales@penta.com, URL: http://www.penta.com
References:
- Web information
Price: Not known
Operating System: Unix
Type: Page layout program
SGML support: DTD in, SGML in
Views: User definable using style sheets
Description: DeskTopPro SGMLPublisher allows the user to interactively format SGML elements, attributes and entities using graphical AutoTag Style Sheet Editor. Formatting codes for an element are defined both in a context or without any context.

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31. DL Composer

Contact information:
- Datalogics, Inc. 101 N. Wacker Drive, Suite 18000, Chicago, IL 60606, USA, Tel: +1(312)-8538200, Fax: +1(312)-8538282, URL: http://www.datalogics.com/
References:
- Web information
Price: Not known
Operating System: Unix, DEC/VMS
Type: Formatter, Page layout program
Other programs: WriterStation
SGML support: DTD in, SGML in, (FOSI in)
Graphics support: Major formats
Printing: PostScript output for printing and viewing
Description: DL Composer validates SGML DTDs and document instances by the built-in parser. The layout information is given as FOSI definitions. DL Composer produces Postscript pages according to these definitions. Automatic generation of table of contents, list of tables, list of figures, and indices is also available.

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32. Document*Architect

Contact information:
- ArborText Inc., 1000 Victors Way, Suite 400, Ann Arbor, MI, USA, 48108-2700, Tel: +1 313 997 0200, Fax: +1 313 997 0201, Email: info@arbortext.com, URL: http://www.arbortext.com
- Texcel AB, Storsätragränd 12, 127 39 Skärholmen, Sweden, Tel: +46 8 708 8015, Fax: +46 8 709 0042, Email: sales@texcel.no, URL: http://www.texcel.no
References:

- Sales information
- Web information

Price: Not known
Operating System: MS-Windows 3.1/95/NT, OS/2, Unix
Type: DTD tool, FOSI tool
Other programs: ADEPT*Editor, ADEPT*Publisher, QuickPaste
SGML support: DTD in/out, (FOSI in/out)
Description: Document*Architect is a program to create valid DTDs and specify layout for SGML documents. The program generates a default layout both for screen and paper. The menus for ADEPT*Editor can be customized for given DTD. ADEPT*Editor or ADEPT*Publisher is needed.

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33. Documentor

Contact information:
- EXCOSOFT AB, Electrum 420, S-16440 KISTA, Sweden, Tel: (+46 8) 703 91 90, Fax: (+46 8) 703 94 90, Email: info@excosoft.se, URL: http://www.excosoft.se

References:
- Sales information
- Web information
- Demo information by Excosoft

Price: 1100 ECU (PC), 2286 ECU (Unix)
Operating System: Unix, PC
Type: Structure editor, Page layout program
SGML support: DTD in, SGML in/out
Graphics support: not known
Search/replace: Search for text, search for element
Views: Formatted text, SGML text. Not user definable.
Printing: Normal File..Print action.
Description: Documentor reads documents and DTDs withoyt any compilation or conversion. Content can be edited using formatted or structured representation. The parser using a given DTD checks the valitidy of the document but it can be turned off. Document layout is defined by style sheets.

---

34. dpp

Contact information:
- URL: http://www.uic.edu/~cmsmcq/tech/

References:
- URL: http://www.uic.edu/~cmsmcq/tech/dppman.html

Price: Free
Operating System: Unix
Type: DTD tool
Other programs: sgmls
SGML support: DTD in/out
Description: Dpp parses SGML DTDs and can make simple operations to DTDs.

---

35. DSSSL Developer’s Toolkit

Contact information:
- Copernican Solution Inc., 1313 Fifth Street SE, Suite 311, Minneapolis, MN 55414, USA, Tel: +1 (612) 379 3608, URL: http://www.copsol.com
- downloading at URL: http://www.copsol.com/products/dsssldev/downloadreq.html
References:
- Web information
Price: Free
Operating System: Ms-Windows 95/NT, Unix
Type: API tool, DSSSL tool
Other programs: SENG DSSSL Environment, Grove Toolkit, JSPI Toolkit
SGML support: DTD in, SGML in, DSSSL in
Description: The DSSSL Developer’s Toolkit (dsssltk) contains three Java packages: dsssl.engine, dsssl.grove, and dsssl.flowobject to implement the processing of SGML documents according to the DSSSL standard.

dsssl.engine is used to compile DSSSL expressions into Java objects.

dsssl.grove is used to generate parsers which take as its input groves (sets of trees).

dsssl.objectflow is used to output DSSSL based formatted documents.

Available is an application called JSPI Toolkit (Java SGML Parsing Interface) for parsing SGML documents to produce groves to be shown in a Java environment.
Note: The toolkit was developed as part of development of the SENG/DSSSL engine

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36. DSSSL Syntax Checker

Name and version number: DSSSL Syntax Checker (DSC) 1.0
Contact information:
- Language Technology Group, 2,Buccleuch Place, Edinburgh EH8 9LW, UK, Tel: +4(131)650 4426, Fax: +44(131)650 587, Email: M.Moens@ed.ac.uk, URL: http://www.ltg.ed.ac.uk
References:
- Web information
Price: Not known
Operating System: Unix
Type: DSSSL tool
Other programs: Normalised SGML Library (NLS), XML, SP parser
SGML support: DSSSL in/out
Description: DSSSL Syntax Checker checks DSSSL style and transform specifications and serves as a preprocessor for any Scheme-embedded DSSSL implementation. It is build on top of SP parser.

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37. dtd.pl

Name and version number: dtd.pl version 2.4.0
Note: dtd.pl is a program in the perlSGML package.

---

38. dtd2html

Name and version number: dtd2html version 1.5.1
Note: dtd2html is a program in the perlSGML package.

---

39. dtddiff

Name and version number: dtddiff version 1.2.1
Note: dtddiff is a program in the perlSGML package.

---

40. dtdtree

Name and version number: dtdtree version 1.3.1
Note: dtdtree is a program in the perlSGML package.

---

41. DTDParse

Name and version number: DTDParse 0.95
Contact information:
- URL: http://www.ora.com/homepages/dtdparse
References:
- Web information
- Norman Walsh (Email: norm@ora.com)
Price: Free
Operating System: MS Windows, Unix
Type: DTD tool
SGML support: DTD in
Description: DTDParse reads a DTD and contructs a repository of its contents. From the repository the user can view parents and children of elements, generate manual pages for DTD (dtd2man), and convert a DTD to HTML (dtd2html).

With the package comes conversion definitions to HTML to CALS Table DTD, DocBook 3.0 DTD, HTML 3.2 DTD, ISO12083 DTD and Tei Lite 1.6 DTD.

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42. dtdview

Name and version number: dtdview version 0.5.1
Note: dtdview is a program in the perlSGML package.

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43. Duxbury Braille Translator

Name and version number: Duxbury Braille Translator v10
Contact information:
- Duxbury Systems, Inc., 435 King Street, P.O.Box 1504, Littleton, MA 01460, USA, Tel: +1(508)86-9766, Fax: +1(508)486-9712, Email: info@duxsys.com, URL: http://world/std.com/~duxbury/

References:
- Web information

Price: 460-700 ECU
Operating System: Windows 3.1/95/NT, Unix, Mac
Type: Conversion program
SGML support: SGML in/out
Description: Braille is a system of tactile dot patterns for blind readers. Braille translator is a translation and editing software to produce texts for blinds from printed sources.

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44. DynaTag

Contact information:
- Inso Corporation, The Old Telephone Exchange 12 Compton Road, Wimbledon SW19 7QD, England, URL: http://www.inso.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 95259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- Sales information
- Emails from Index Information Technologies containing updated information

Price: Part of DynaText SGML Publisher
Operating System: MS-Windows
Type: Conversion program
Other programs: DynaText, DynaText SDK, InSted Style Sheet Editor
SGML support: SGML out
Description: DynaTag is a conversion program for end users. Users map formatting styles to so called "output objects" which are actually elements. The program makes a DTD from the conversion rules used. The user can follow the conversion interactively and get information of it. The program can read files in MS Word, WP, Frame MIF, or Interleaf ascii formats.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/dynatag.gif

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45. DynaText

Contact information:
- Inso Corporation, The Old Telephone Exchange 12 Compton Road, Wimbledon SW19 7QD, England, URL: http://www.inso.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 95259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:

- Sales information
- Index Information Technologies
- Manuals: DynaText Publisher Guide, EBT
- Testing
- Emails from Index Information Technologies containing updated information

Price: 12300 ECU (including: browsers, DynaTag, Indexer, InStEd)
Operating System: Unix, MS-Windows, Mac
Type: Search program, Electronic delivery tool, Browser
Other programs: DynaTag, DynaText SDK, InSted Style Sheet Editor
SGML support: DTD in (not necessary), SGML in
Graphics support: Major formats.
Views: Views are done by InSted Style Sheet Editor.
Printing: Normal File..Print action.
Description: DynaText is used for electronic delivery of SGML material. The input is an SGML document instance and possibly a DTD for it. The program indexes the source, and the outlook of the electronic book is defined by a styles editor called InStEd editor. The editor saves the styles in a file in SGML format. For queries there is a query language, or query forms can be defined for the end user. The user can annotate the material with his/her own comments.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/dynatext.gif

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46. DynaText SDK

Contact information:
- Inso Corporation, The Old Telephone Exchange 12 Compton Road, Wimbledon SW19 7QD, England, URL: http://www.inso.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 95259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- Sales information
- Emails from Index Information Technologies containing updated information

Price: 10700 ECU (one platform), 16310 ECU (all platforms)
Operating System: Unix, MS-Windows, Mac
Type: API tool
Other programs: DynaTag, DynaText, InSted Style Sheet Editor
Description: DYnaText SDK is a C programming interface for changing the DynaText program.

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47. EasyDTD

Name and version number: EasyDTD 2.3
Contact information:
- URL: http://www.ensta.fr/internet/sgml/easydtd.html, FTP: ftp.ifi.uio.no/pub/SGML/EASYDTD/
- Norm Smith, smithn@orvb.saic.com

References:

- Instructions with the program.
- Web information

Price: Free
Operating System: MS-DOS, Unix
Type: DTD tool
SGML support: DTD in/out
Description: EasyDTD takes as an input a table of contents like description of a structure and outputs a DTD. A definition of

```
document
   title
   author
   date
   chapter
      section
         para
```

creates a draft DTD for further manipulation. The program handles also attributes and entities.

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48. EasyTag

Contact information:
- TetraSys SA, 162 Boulevard Haussmann, F-75 008 Paris, France, Tel: +33-01-5353053, Fax: +33 01 53530459, URL: http://www.tetrasys.fr

References:
- Web information at URL http://www.sgmlopen.org/sgml/docs/tetrasys.htm

Price: Not known
Operating System: MS-DOS, MS-Windows, Unix, Mac, OS/2
Type: Structure editor, Parser, Conversion program
SGML support: DTD in, SGML in/out
Description: EasyTag is an SGML editor which parses the document and may convert it to and from the RTF format and back again.

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49. EdiBase<SGML>

Name and version number: EdiBase<SGML> version 4.21
Contact information:
- Documensa, 801 Sherbrooke St East, Suite 65, Montreal, Quebec, H2L 1K7, Canada, Tel: +1(514)524-7722, Fax: +1(514)524-5441, Email: marketing@documensa.com, URL: http://www.documensa.com

References:
- Web information

Price: Not known
Operating System: MS-Windows 3.1/95/NT, Unix, Mac
Type: Structured text database
SGML support: SGML in
Description: EdiBase<SGML> is a search and retrieval engine to store, browse and view SGML documents. The program is used to create a bibligraphy database on CD.

50. EditTIME

Name and version number: EditTIME 2.00.10
Contact information:
- T.I.M.E. LUX, 61 Avenue de la Gare, 1611 Luxembourg, Belgium, Tel: +352 40 53221, Fax: +352 40 5009, Email: sales@timelux.lu, URL: http://www.timelux.lu
References:
- Sales information
- Web information
- Tests
Price: 890 ECU (standard), 1770 ECU (Formex V2 and V3), 1770 ECU (Chinese/Japanese/Korean)
Operating System: MS-Windows 3.11/95/NT
Type: Structure editor
Other programs: EditTIME SDK
SGML support: DTD in, SGML in/out
Graphics support: no support
Search/replace: Search for element or marked section
Views: SGML text, text. Not user definable
Description: EditTime processes SGML documents encoded according to ISO 10646, better known as UNICODE, character sets as well as single byte encoded documents. Several files, even with different DTD's, may be opened at the same time with no size limitation. The parser assigns a color to each element to describe the validity: green for valid, red for invalid, purple for incomplete and blue for tags being edited in both views. Parser gives the list of valid elements or generates all required tags. The user can edit several versions of the same document in many languages and to synchronize most of the actions into all documents.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures.edittime.gif

51. EditTIME SDK

Name and version number: EditTIME Software Development Toolkit
Contact information:
- T.I.M.E. LUX, 61 Avenue de la Gare, 1611 Luxembourg, Belgium, Tel: +352 40 53221, Fax: +352 40 5009, Email: sales@timelux.lu, URL: http://www.timelux.lu
References:
- Web information
Price: Not known
Operating System: MS-Windows 3.11/95/NT
Type: API tool
Other programs: EditTIME
Description: EditTime SDK allows the user to integrate EditTIME SGMl editor into large systems. It contains libraries to be used with C/C++, Java and Visual Basic.

52. EnLIGHTeN

Name and version number: EnLIGHTeN-2
Contact information:
- High Text S.A.R.L., 5 rue d'Alsace, F-75010 Paris, France, Tel: +33 1 42059315, Fax: +33 1 42059248, URL: http://www.hightext.com
- High Text, Michel Biezunski, Email: michel@hightext.com,
References:
- Web information
- Emails from Michel Biezunski containing requested information
Price: Product is not for sale. Licence for technology available.
Operating System: Windows 95, Windows NT, Unix
Type: Electronic delivery tool, Browser
SGML support: DTD in, SGML in/out
Graphics support: not known
Search/replace: Search for text, search for elements
Printing: Normal File..Print action.
Description: EnLIGHTeN supports a file system independent linking in a user interface to navigate heterogenous electronic information. It contains a set of tools to facilitate links, indexes, glossaries, thesauri and catalogues. It is based on a Topic Navigation Maps, which is an international standard under development.
Note: Contains the public domain SP parser (by James Clark) and Jade (James Clark's DSSSL Engine).

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53. ExpertBook

Contact information:
- Eidon GmbH, Am Weichselgarten 7, D-91058 Erlangen, Germany, Tel: +49 9131 691151, Fax: +49 9131 691111, Email: info@eidon.de, URL: http://www.eidon.de
References:
- Sales information
- Web information
Price: Not known
Operating System: Windows 95/NT
Type: Electronic delivery tool, Browser
SGML support: SGML in
Description: ExpertBook allows the user to create online documents.

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54. Explorer

Name and version number: SoftQuad Explorer
Contact information:
- SoftQuad Inc, 56 Aberfoyle Crescent, Suite 810, Toronto, Ontario, M8X 2W4, Canada, Tel: 416-239-4801, Fax: 416-239-7105, Email: mail@sq.com, barb@sq.com (Barbara Burrows), URL: http://www.softquad.com
- Synex Information AB, Stora Nygatan 20, S-11127 Stockholm, Sweden, Email:sales@synex.se
References:
- Sales information

- Pamela Gennusa, Yuri Rubinsky: The SGML World Report/Year in Review, comp.text.sgml
Price: 8700 ECU
Operating System: MS-Windows
Type: Search program, Electronic delivery tool, Browser
Other programs: Author/Editor, RulesBuilder, Sculptor
SGML support: DTD in, SGML in/out
Graphics support: Supports graphics
Search/replace: Search for text/elements, logical operators
Views: User definable
Description: Explorer makes an indexed eletronic document of an SGML source. The outlook and view definition are also included. Adding own annotations is also possible.
Note: earlier name SGML Darc
Screen shot: At URL: http://www.sq.com/images/explorer.gif

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55. FastTag

Contact information:
- Interleaf, Inc., 62 Fourth Ave., Waltham, Massachusetts 02154, USA, Tel: +1(617)-290-0710, Fax: +1(617)-290-4943, Email: i-direct@interleaf.com, URL: http://www.avalanche.com
- In Finland: Häkkinen Aki Oy, Järvensivuntie 3 B, 33100 Tampere, Finland, Tel: 03-213 00200, Fax: 03-213 00900

References:
- Sales information
- Demo program
- Web information

Price: Not known
Operating System: MS-Windows, Unix, HP-UX
Type: Conversion program
Other programs: SGML Hammer
SGML support: SGML in/out
Graphics support: not known
Description: In FastTag the conversion is based on visible clues, for example a title can be found in the text by looking for rows with bold text centralized in the middle. Conversion by styles is also possible. Tools are available for handling of FrameMaker MIF, Interleaf ASCII, RTF, SGML, HTML, and WordPerfect formats by extra charge. It can also be configured to add electronic tags to document during the conversion. Supports most major European languages.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/fasttag.gif

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56. Folio Views

Name and version number: Folio Views 4.1 (Professional Infobase Development Kit)
Contact information:
- Folio Corporation, 5072 North 300 West, Provo, Utah 84604-5652, USA, Tel: +1 800 543 6549, Fax: +1 801 229 6790, Email: jfiore@folio.com, URL: http://www.folio.com

References:
- Sales information
- Web information
Price: 270 ECU
Operating System: MS-Windows 3.x/95/NT
Type: Structured text database
Other programs: Folio Views 4.1. SGML Toolkit
Graphics support: Not supported
Search/replace: Search for text
Description: Folio Views is a set of infobase production tools (Infobase Manager, Bind, Create, Filters, Search and Replace) which allow the converting of data and building of INFO Infobase files by compressing and indexing. The system has also rights management.

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57. Folio Views SGML Toolkit,

Name and version number: Folio Views 4.1 SGML Toolkit
Contact information:
- Folio Corporation, 5072 North 300 West, Provo, Utah 84604-5652, USA, Tel: +1 800 543 6549, Fax: +1 801 229 6790, Email: jfiore@folio.com, URL: http://www.folio.com
References:
- Sales information
- Web information
Price: Not known
Operating System: MS-Windows 95/NT, MS-Windows 3.x
Type: Conversion program
Other programs: Folio Views 4.1.
SGML support: SGML in
Description: Folio Views SGML Toolkit includes SGML Driver, a DLL file, that enables to create or append SGML data into Folio Infobase format. System comes with OmniMark software giving possibility to validation and conversion of SGML data. There are several filters for standard DTDs available.

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58. FrameMaker+SGML

Name and version number: FrameMaker+SGML 5.1
Contact information:
- Adobe Systems Inc., 1585 Charleston Road, P.O.Box 7900 Mountain View, CA 94039-7900, USA, URL: http://www.adobe.com
- Adobe Systems Europe Ltd., Mid New Cultins, Edinburgh EH11 4DU, United Kingdom, Tel: +44(0)131 4532211, Fax: +44(0)131 4534422
- Frame Technology Corporation, 1010 Rincon Circle, San Jose, California 95131, USA, Fax: 1-408-433-1928, Email: comments@frame.com, URL: http://www.frame.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi
References:
- Sales information

- Manuals: Using FrameMaker+SGML, Adobe
- Manuals: FrameMaker+SGML Developer's Guide, Adobe
- Testing
- Emails from Index Information Technologies containing updated information

Price: 4220 ECU (Unix shared), 2120 ECU (Unix personal), 1510 ECU (MS-Windows, Mac)
Operating System: Unix, MS-Windows 95/NT, Mac
Type: Structure editor, Desktop publishing software
Other programs: FrameMaker, Frame Developers Kit
SGML support: DTD in/out, SGML in/out
Graphics support: Imports graphics
Search/replace: Search and replace for text, search for element, search for attributes
Views: Formatted text, tree representation. Not user definable. The outlook can be changed by importing a new EDD.
Printing: Normal File..Print
Description: FrameMaker+SGML is a structure editor with all the publishing capabilities of FrameMaker. The main window is a formatted text window, the structure window shows a tree of a document. Elements are picked up from an element window. The element boundaries can be visible in the main window as square brackets or tags. The tree presentation of the document shows only a few characters of the text belonging to the element. The document can be written in any order, missing elements or elements in wrong places are shown in the tree presentation. An element with its subtree can be hidden or expanded in the structure window. The main window shows allways all of the text.
The structure definitions are written in the same way as other structured documents.

The structure definition is started by choosing Structure..New EDD from the menus or importing an existing DTD to an EDD. The program then guides the writing. The structure definition is called Frame element definition document (EDD), and it has also the Frame style names or inherited formatting properties used for formatting the elements. The styles are defined in the same way as in FrameMaker. It is possible to import a new EDD to a document, but the process is not able to correct the old documents to obey the new definition. It is mainly used to introduce new elements.

Unstructured documents can be structured by defining a table for the conversion of styles to elements. The tool can be used by end users having no experience in programming.
Note: Earlier Frame Builder
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/framemakersgml.gif

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59. Fred

Contact information:
- Keith Shafer, OCLC Online Computer Library Center, 6565 Frantz Road, Dublin, Ohio 43017-3395, Tel: 1 614 7646000, Fax: 1 614 7646096, Email: oclc@oclc.org, URL: http://www.oclc.org/fred

References:
- Sales information
- Manual: FRED: A System for Manipulating Tagged Text
- Emails from Keith Shafer (shafer@oclc.org)
- Keith Shafer: Creating DTDs via the GB-Engine and Fred
- Keith Shafer, Roger Thompson: Introduction to Translating Tagged Text via SGML

Document Grammer Builder Engine, available at URL:
http://www.oclc.org/fred/docs/translation/intro.html
- Tests
- Web information
Price: Free for non-commercial use.
Operating System: Unix
Type: DTD tool, Conversion program
SGML support: DTD in, DTD out when used as a DTD tool, SGML in/out
Views: SGML text, DTDs SGML text and context-free grammars
Printing: Normal File..Print action
Description: Fred consists of a set of SGML tools. It has a built-in parser, editor and structure editor. SGML coded texts without a DTD can be analysed and Fred gives a DTD for text. DTDs and document instances can be redefined and corrected by the tools. Transformation is based on mappings defined for tag names, attributes and structure. Movements of text within tree and several other manipulation features are possible. The system can also define how data is built into Newton databases (OCLC proprietary). Other databases can be built by writing own Fred scripts. An interface editor for building tty or X interfaces is also included.
Comments: uusi 1.7.1996 EN, Merja Ek 27.5.1995, Valmis 8.7., tuotteen saa kirjoittamalla Keithille kirjeen, kts.www.osoitteesta tarkemmin, lopullinen 30.7., viimeistelty 7.8.97., uusittu 24.8.1997 EN

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60. GBook

Name and version number: GBook 3.0
Contact information:
- Green Book International Corp., 15 Emery Court, Nepean, Ontario, K2H 7W2, Canada, Tel: +1 613 7266565,Fax: +1 613 8208299, Email: sales@greenbook.com, URL: http://www.greenbook.com
References:
- Web information
Price: 286 ECU (GBook Personal) - 2535 ECU (GBook Enterprise)
Operating System: Mac OS
Type: Electronic delivery tool, Browser, Search program
SGML support: SGML in/out
Graphics support: Image and special effect support
Search/replace: Search for text
Description: GBook indexes files, which can be imported through filters. The program makes an electronic book of the files and has a built-in browser for viewing. The outlook can be defined by style sheets.

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61. GDO (Generalized Document Objects)

Name and version number: gdo version 0.4
Contact information:
- URL: http://ftp.uu.net/vendor/bitsko/gdo/
References:

- Ken Macleod: README-gdo, 1996
Price: Free
Operating System: MS-DOS, Unix
Type: Conversion program
Other programs: SP
SGML support: DTD in, SGML in
Description: GDO is used for assembling and formatting of structured documents. It uses SP parser to validate SGML documents or parts of them. Transformation specifications are ready made for DocBook DTD, TEI Lite DTD, SGMLTools/qwertz DTD and Snafu DTD.

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62. GEM

Name and version number: GEM (Global Event Manager)
Contact information:
- Information Strategies Inc., 1810 Robert Fulham Drive, Suite 400, Reston, VA 20191, USA, Tel: +1 (703) 648 1799, Fax: +1 (703) 716 3021, Email: infoisi@strategies.com, URL: http://www.strategies.com
References:
- Web information
Price: Not known
Operating System: Server: MS-Windows NT, Unix, Client: MS-Windows 3.1/95/NT, Unix
Type: Document database
SGML support: SGML in
Views: With the use of ATEX, ADEPT Publisher, Quark Xpress or XyVision XPP.
Printing: With the use of ATEX, ADEPT Publisher, Quark Xpress or XyVision XPP.
Description: GEM manages the flow of content, activities of users and completion of tasks through control system interface. It may also provide the front-end for other systems (for example Parlance Document Manager) to control and manage editorial activities based on a "work group" model.

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63. Genera

Contact information:
- Miles 33, Miles House, Old Bracknell Lane West, Bracknell, Berkshire, RG12 7AE, England, Tel: +44 1344 861133, Fax: +44 1344 860224, Email: info@miles33.co.uk, URL: http://www.miles33.co.uk
References:
- Web information
Price: Not known
Operating System: Unix
Type: Page layout program
SGML support: SGML in, DTD in
Search/replace: Search for text
Views: Formatted text
Printing: Normal File..Print action
Description: Genera is a publishing software that enables the user to re-order and sort, translate, hyphenate, justify, paginate and output SGML data in the standard PostScript or

Adobe Acrobat PDF files.

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64. gf (general formatter)

Name and version number: gf version 0.46
Contact information:
- URL: http://www.sil.org/sgml/gf0.46-readme.txt
- Gary Houston, Email: ghouston@actrix.gen.nz
References:
- Gary Houston: gf.readme
Price: Free
Type: Conversion program
Other programs: NSGMLS parser
SGML support: DTD in, SGML in
Description: Gf converts SGML documents into LaTeX, ASCII, RTF and Textinfo, and HTML. It requires NSGMLS parser to be installed.

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65. Grif Application Builder

Contact information:
- GRIF S.A., 2, boulevard Vauban, BP266, 78053 St Quentin en Yvelines Cedex, France, Tel: +33 1 30 121430, Fax: +33 1 30640646, Email: grif@grif.grif.fr, URL: http://www.grif.fr
References:
- Sales information
- Tests
- DTDBuilder Guide, DTDC Reference, Grif S.A., March 1994
- Web information
Price: 7700 ECU / single user + 1100 ECU annual maintainance (contains Grif Editor)
Operating System: MS-Windows 3.1/95/NT, Unix
Type: Conversion program, View definition program
Other programs: Grif SGML Active Views, Grif Application Toolkit Environment (GATE), Grif SGML Editor, Grif Notes, Symposia doc+, Thot
SGML support: DTD in
Description: Grif Application Builder is used to define the presentation models for documents of different document types. A presentation model defines the formatting of the document in the screen, and also views available to the user. These definitions are in "P" and "S" languages which resemble the Pascal programming language. The definitions can be further edited and changed. The program is a collection of tools which can be used separately.
Screen shot: At URL: http://www.grif.fr/images/capbuild.gif

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66. Grif SGML Active Views

Name and version number: Grif SGML Active Views
Contact information:
- GRIF S.A., 2, boulevard Vauban, BP266, 78053 St Quentin en Yvelines Cedex, France, Tel: +33 1 30 121430, Fax: +33 1 30640646, Email: grif@grif.grif.fr, URL: http://www.grif.fr

References:
- Sales information
- Web information

Price: 3300 ECU/single user + 440 ECU annual maintainance
Operating System: Unix, MS-Windows 3.1x/95/NT
Type: Structure editor, Search program, Electronic delivery tool, Browser
Other programs: Grif Application Builder, Grif Application Toolkit Environment (GATE), Grif SGML Editor, Grif Notes, Symposia doc+, Thot
SGML support: SGML in
Graphics support: Major formats
Search/replace: Search for text/elements, also with regular expressions
Views: Formatted text and table of contents. User definable views with the use of Grif Application Builder
Printing: Final printing in PostScript
Description: Active Views formats tables, mathematical equations and images for displaying on-screen and printing in PostScript. Hypertext Navigation Tools allow the user to jump to specific locations, keep a record of the different locations and insert bookmarks anywhere in the document. Bookmarks can be saved.
Screen shot: At URL: http://www.grif.fr/images/capav.gif

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67. Grif SGML Application Toolkit Environment (GATE)

Contact information:
- GRIF S.A., 2, boulevard Vauban, BP266, 78053 St Quentin en Yvelines Cedex, France, Tel: +33 1 30 121430, Fax: +33 1 30640646, Email: grif@grif.grif.fr, URL: http://www.grif.fr

References:
- Sales information
- Web information

Price: Not known
Operating System: Unix, MS-Windows
Type: API tool
Other programs: Grif SGML Active Views, Grif Application Builder, Grif SGML Editor, Grif Notes, Symposia doc+, Thot
Description: Grif SGML Application Toolkit (GATE) is a collection of 130 C functions to be used by application programmers.

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68. Grif SGML Editor

Contact information:
- GRIF S.A., 2, boulevard Vauban, BP266, 78053 St Quentin en Yvelines Cedex, France, Tel: +33 1 30 121430, Fax: +33 1 30640646, Email: grif@grif.grif.fr, URL: http://www.grif.fr

References:
- Sales information
- Tests
- Composition and Editing of SGML documents, Grif S.A., March 1994.
- Grif Languages, Grif S.A., 1991.
- Web information

Price: 4000 ECU/single user + 660 ECU annual maintainance
Operating System: Unix, MS-Windows
Type: Structure editor, Desktop publishing software
Other programs: Grif SGML Active Views, Grif Application Builder, Grif Application Toolkit Environment (GATE), Grif Notes, Symposia doc+, Thot
SGML support: no DTD (see Application Builder), SGML in/out
Search/replace: Search and replace for text and elements.
Views: The user can edit view definitions. View definitions are made with SGML Appication Builder.
Printing: Normal File..Print action, prints also views.
Description: Grif SGML Editor is an orthodox structure editor provided with document type definitions for book, chapter, slide, letter, and sheet with their default views. GRIF allows multiple views for a document, and all of them can be used in editing. Anyone of the views can be printed. A user can to some extent change the look of the view, but definition of new views are made by the Application Builder.

A document is either valid or incomplete. An incomplete document is a document where not all the elements and their contents are written. The parsing cannot be turned off.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/grif.gif

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69. Grif SGML Notes

Contact information:
- GRIF S.A., 2, boulevard Vauban, BP266, 78053 St Quentin en Yvelines Cedex, France, Tel: +33 1 30 121430, Fax: +33 1 30640646, Email: grif@grif.grif.fr, URL: http://www.grif.fr

References:
- Sales information
- Web information

Price: 1700 ECU/single user + 220 ECU annual maintainance
Operating System: Unix, MS-Windows
Type: Structure editor
Other programs: Grif SGML Active Views, Grif Application Builder, Grif Application Toolkit Environment (GATE), Grif SGML Editor, Symposia doc+, Thot
SGML support: SGML in/out
Printing: not possible
Description: Grif SGML Notes is like Grif SGML Editor, but the program is not able to show graphics or print.

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70. Grove Toolkit

Name and version number:
Contact information:
- Copernican Solution Inc., 1313 Fifth Street SE, Suite 311, Minneapolis, MN 55414, USA, Tel: +1 (612) 379 3608, URL: http://www.copsol.com

References:
- Web information

Price: Free

Operating System: MS-Windows 95/NT, Unix
Type: API tool, DSSSL tool
Other programs: SENG/DSSSL Environment, DSSSL Developer's Toolkit, JSPI Toolkit
SGML support: DTD in, SGML in, DSSSL in
Description: Grove Toolkit is an implementation of DSSSL Developer's Toolkit's dsssl.grove package. The user can create 'in-memory' groves (set of parse trees) for formatting.

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71. GroveMinder

Contact information:
- TechnoTeacher Inc, P.O.Box 23795, Rochester, New York 14692-3795, USA, Tel: +1 716 271 0796, Fax: +1 716 217 0129, Email: info@techno.com, URL: http://www.techno.com.

References:
- Web information.

Price: Not known
Operating System: MS-Windows 95/NT, Unix
Type: Document database
Other programs: MarkMinder, HyMinder, HyBrowse
SGML support: SGML in
Views: Using other programs (Web browsers, Microsoft Office, Lotus Notes)
Printing: Using other programs connected through the use of plug-ins.
Description: GroveMinder manages relationships between information objects such as documents, document components, databases, records, images, etc. Object are called groves (set of parse trees) and generated, for example, by other Minder applications (MarkMinder, HyMinder, CGIMinder, DBMSMinder). Data is stored under database management systems (for example, OSMOS from Unisys).
Screen shot: At URL: http://www.techno.com/graphics/gmall.gif

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72. GTI Publisher

Name and version number: GTIPublisher Version 2.0
Contact information:
- Jouve, S.I. 11, Bd Sápastopol, BP 2734, 75027 Paris Cedex 01, France, Tel: +33 1 44768600, Fax: +33 1 44768610, Email: gtipub@jouve.fr, URL: http://www.jouve.fr

References:
- Sales information

Price: 13730 ECU
Operating System: Windows 3.1/95/NT,MS-DOS, Mac, Unix
Type: Electronic delivery tool, Browser
SGML support: SGML in, DTD in
Search/replace: Search for text, elements and attributes
Views: User definable by style sheets
Description: GTI Publisher consists of two parts: PubMaker to format, index and add links to the SGML documents for storing into CD-ROM and PubUser to navigate and search throughout the document.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/gti.gif

73. HST

Contact information:
- Heikki Mannila, Dept. of Computer Science, University of Helsinki, Finland, Email: mannila@cs.helsinki.fi, FTP: hydra.helsinki.fi, URL: www.cs.helsinki.fi/research/rati/rati.html

References:
- Kilpeläinen et al.: A structured document database system, EP90, Proceedings of the International Conference on Electronic Publishing, Document Manipulation & Typography, R. Furuta (ed.), The Cambridge Series on Electronic Publishing, Cambridge University Press, 1990, 139-151.
- Kilpeläinen et al. : The Data Model and Query Language of the Helsinki Structured Text Database System, Department of Computer Science, University of Helsinki,
- E. Nikunen: Views in structured text databases, Phil.Lic. Thesis, Department of Computer Science, University of Helsinki, Report C-1990-60, 1990.
- updated information from Pekka Kilpeläinen

Price: Not known
Operating System: Sun OS 4.x
Type: Editor, Structured text database, Conversion program
SGML support: DTD no, SGML in/out
Views: The user can define views, the definition is based on SDTS (Syntax Directed Translation Schema).
Description: HST is a prototype for structured text database system based on the p-string data model. The system is able to handle also attributes and there is a query language for the system. An editor is included for editing the documents. The database is implemented in C using a relational database system. Multiple views can be defined for a document, the document structure and view definitions are given by context-free grammars.
Note: Research prototype

74. HyBrowse

Name and version number: HyBrowse HyTime Browser, version 1.1
Contact information:
- TechnoTeacher Inc, P.O.Box 23795, Rochester, New York 14692-3795, USA, Tel: +1 716 271 0796, Fax: +1 716 217 0129, E-mail: info@techno.com, URL: http://www.techno.com.

References:
- Web information.

Price: Not known
Operating System: MS-Windows 95/NT
Type: Browser
Other programs: MarkMinder, GroveMinder, HyMinder
SGML support: SGML/HyTime in
Graphics support: Major formats
Description: HyBrowse can display a set of documents with HyTime location-independent links. Style sheets define formatting of documents. The program allows the users to format element’s layout using the hyperlink types and anchor roles. One anchor can automatically be rendered inline at the site of another anchor. SGML markup can be shown or hidden.

Screen shot: At URL: http://www.techno.com/graphics/gmall.gif

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75. HyMID

Contact information:
- URL: http://navycals.dt.navy.mil/mid/midprod.html#reader

References:
- Web information

Price: Free
Operating System: MS-Windows 95/NT
Type: Browser
SGML support: SGML/HyTime in
Description: HyMID allows the user to browse Metafiles for Interactive Documents (MID), a standard for portable interactive electronic documents. HyMID needs an HyTime engine with SGML parser. The browser interprets MID scripts and gets data from various sources and renders it for the presentation.

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76. HyMinder

Contact information:
- TechnoTeacher Inc, P.O.Box 23795, Rochester, New York 14692-3795, USA, Tel: +1 716 271 0796, Fax: +1 716 217 0129, E-mail: info@techno.com, URL: http://www.techno.com.

References:
- Web information.

Price: Not known
Operating System: MS-Windows 95/NT, Unix
Type: API tool
Other programs: MarkMinder, GroveMinder, HyBrowse
SGML support: SGML/HyTime in, XML in/out
Description: HyMinder is a C++ library to create, update and validate HyTime features of documents. It is implemented as a part of GroveMinder System and requires MarkMinder program.
Screen shot: At URL: http://www.techno.com/graphics/gmall.gif

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77. HyperTag

Contact information:
- TetraSys SA, 162 Boulevard Haussmann, F-75 008 Paris, France, Tel: +33-01-5353053, Fax: +33 01 53530459, URL: http://www.tetrasys.fr

References:
- Web information at URL www.sgmlopen.org/sgml/docs/tetrasys.htm

Price: Not known
Operating System: MS-Windows
Type: Browser
SGML support: SGML in
Search/replace: Search for text

Description: HyperTag allows the user to browse documents using HyTime links to text, graphics and personal notes as well as full-text search for the content.

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78. IADS: Integrated Authoring and Display System

Name and version number: IADS: Integrated Authoring and Display System version 2.4.1
Contact information:
- U.S. Army Missile Command (MICOM), URL: http://shodan.redstone.army.mil/iads/iads.htm

References:
- Web information (shodan.redstone.army.mil/iads/iads.htm)

Price: Free
Operating System: MS Windows 3.1
Type: Structure editor, Page layout program
SGML support: DTD in, SGML in/out
Search/replace: Search for text
Views: Formatted text
Printing: Normal File..Print action
Description: IADS is divided in two modules: AUTHOR and READER. AUTHOR provides tools for the creation of hypertext documents from SGML documents (possiple made by any editors). READER displays documents in formatted form. Graphics can be shown inside the text or in another window. Documents are validated using SGMLS parser and a special LinkVerifier program.

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79. IDM (Intelligent Document Manager)

Name and version number: IDM Personal Edition, IDM Professional Edition
Contact information:
- Digitome Lmd., 13 Herbert Street, Dublin 2, Ireland, Tel: +353-1-6621499, Fax: +353-1-6621056, Email: info@dogitome.com, URL: http://www.digitome.com.

References:
- Web information

Price: Not known
Operating System: MS-DOS, MS-Windows 3.x/95/NT
Type: API tool, Conversion program
Description: IDM is a C++ library to develop document production systems for SGML documents. The system can transform and format documents for various document processing systems (add-on products are, for example, for Folio Views, Lotus Notes).

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80. Impact

Name and version number:
Contact information:
- Auto-Graphics, Inc., 3201 Temple Avenue, Pomona, CA, 91768, USA, Tel: +1(909)595-720, Fax: +1(909)595-3506, Email: info@auto-graphics.com, URL: http://www.auto-graphics.com

References:
- Web information
Price: Not known
Type: Search program
SGML support: SGML in
Search/replace: Search for text
Views: Formatted text
Description: Impact is a search and retrieval software to process SGML documents.

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81. InContext

Name and version number: InContext 2
Contact information:
- InContext Systems, 2 St. Clair Avenue West, Suite 1600, Toronto, Ontario, CANADA M4V 1L5, Tel: 1 - 416 - 922 0087, Fax: 1 - 416 - 922 6498, URL: http://www.incontext.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi
References:
- Sales information
- Emails from Kate Atherley (InContext) containing updated information
- Emails from Index Information Technologies containing updated information
- Web information
Price: 440 ECU
Operating System: MS-Windows 3.1/95/NT
Type: Structure editor
SGML support: DTD in, SGML in/out
Search/replace: Search and replace for text, search for element, search for attribute of an element
Views: Tree representation, "formatted" text. Not user definable.
Printing: Normal File..Print action
Description: InContext is a structure editor with two windows, a structure window and a text window. The two windows are shown side by side. In editing the program allows a document to be not valid. The user can ask for validation and the erroneous spots can be corrected. A part of a document can be extracted to a scratch-pad where arbitrary edits are allowed. An element with its text can be hidden. Table editing is done with Microsoft Excel.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/incontext.gif

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82. Information Manager

Contact information:
- ArborText Inc., 1000 Victors Way, Suite 400, Ann Arbor, MI, USA, 48108-2700, Tel: +1 313 996-3566, Fax: +1 313 996-3573, Email: info@arbortext.com, URL: http://www.arbortext.com
- Texcel AB, Valborgsmässoväg 11, 12637 Hägersten, Sweden, Tel: +46 8 708 8015, Fax: +46 8 708 8014, Email: sales@texcel.no, URL: http://www.texcel.no
- In Finland: Software Engineering Center (SEC), Piispanportti 5, PL 11, FIN-02241 Espoo,

FIinland, Tel: +358 (0)9 8045 1354, Fax: +358 (0)9 8045 1333, Email: sec@sec.fi, URL: http://www.sec.fi
- Heimo Hänninen, Email: heimo.hanninen@sec.fi
References:
- Sales information
- Karl Ny, Texcel AB, URL: http://www.texcel.no
- Laurie Olson, lao@arbortext.com
- Emails from Heimo Hänninen (heimo.hanninen@sec.fi) containing updated information
Price: 25 300 ECU (4 concurrent user license)
Operating System: Server: Windows NT, Unix, Client: Windows 95/NT, Unix
Type: Structured text database, Groupware software, API tool
SGML support: DTD in/out, SGML in/out
Search/replace: Search for text/element/attribute
Views: Views are made with the use of other programs.
Description: Texcel Information Manager(TIM) consists of Repository Manager, multi-user SGML data server based on a scalable object-relational database. The Repository Manager interacts with end-user application for workflow, SGML editing, collaborative authoring, electronic review, and document assembly. Applications communicate with the Repository Manager through the Application Manager. The system comes with ADEPT*Editor. Tracking of documents can be done like in groupware software. The system has version control at element level, and administration of users and their privileges. Documented APIs are available to customize the system.

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83. Information Product Assembler (IPA)

Name and version number: Information Product Assembler (IPA) 3.0
Contact information:
- Microstar Software Ltd., 3775 Richmond Road, Nepean, Ontario, Canada K2H5B7, Tel: +1 613 596 2233, Fax: +1 613 596 5934, Email: intsales@microstar.com, URL: http://www.microstar.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi
References:
- Sales information
- Information Product Assembler (IPA) User Manual, Microstar Software, 1993.
- Emails from Index Information Technologies containing updated information
Price: 29000 ECU (Win), 33800 ECU (Unix)
Operating System: Windows NT/95, Unix
Type: Conversion Program, Structured Text Assembler
Other programs: Near & Far Designer, Near & Far Author - Manager’s Edition, Near & Far Author - Author’s Edition
SGML support: SGML in/out, DTD in/out
Description: IPA is a tool for the dynamic assembly of SGML documents from fragments contained within other SGML source instances.

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84. Inside & Out

Name and version number: Inside & Out version 0.9
Contact information:
- FTP: ftp.igd.fhg.de/pub/iout/
- H.H.Ruth, U von Engelberg, Conputer Graphics Center (ZGDV), Darmstadt, Germany, Email: iout@igd.fhg.de
References:
- ftp.igd.fhg.de/pub/iout/readme.txt
Price: Free
Operating System: MS-Windows 3.1/95/NT
Type: DTD tool
SGML support: DTD in/out
Printing: Not possible
Description: Inside & Out is a graphical editor to build SGML DTDs interactively. The presentation is a railroad diagram. Every element and parameter is represented in a single diagram. The root element is marked with an anchor icon. Some parts of the program are not yet implemented.

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85. INSIGHT into Information

Name and version number: INSIGHT into Information version 3.5
Contact information:
- Enigma Information Retrieval Systems, 245 Winter Street Suite 20, Waltham, MA 0215, USA, Tel: (888)ENIGMA-I, +1(617)290-0080, Fax: +1(617)290-5858, Email: info@enigmainc.com, URL: http://www.enigmainc.com
References:
- Web information
Price: 6200 ECU
Operating System: MS-Windows 3.x/95/NT, Mac
Type: Electronic delivery tool, Browser
SGML support: SGML in
Graphics support: supports graphics
Search/replace: Search for text
Description: INSIGHT contains four modules. The CREATOR is used to create a database from documents. The ADMINISTRATOR helps the author to incorporate documents into the database. The PUBLISHER enriches the database with links, graphics elements and annotations. The RETRIEVER operates the search engine. The created document can be read across multiple platforms or can be distributed in the Web, intranet or CD.

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86. Interleaf 6 SGML

Contact information:
- Interleaf Inc., Prospect Place, 9 Hillside Avenue, Waltham, Massachusets 02154 USA, Tel: (617) 290-0710, Email: i-direct@interleaf.com, URL: http:// www.ileaf.com/
- In Finland: Aki Häkkinen Oy, Järvensivuntie 3 B, 33100 Tampere, Finland, Tel: 03-2130020, Fax: 03-2130090
References:
- Sales information

- Aki Häkkinen
Price: Not known
Operating System: Unix
Type: Desktop publishing software, Conversion program
Other programs: Fast Tag, Interleaf 6 SGML Toolkit, SGML Hammer
SGML support: DTD in, SGML in/out
Graphics support: Includes graphics filters
Search/replace: Search and replace for text, search for element.
Views: A user can define different kinds of views in the formatted text window
Printing: Normal File..Print action.
Description: Interleaf 6 SGML Toolkit structure editor whose main window is formatted text. The left side of the window shows the beginnings of the elements. The end tags of the elements can also be shown. Inserting of elements is done by choosing from a list. The program allows also documents that are not valid, parsing can be done at any time during editing or upon completion. When the document is saved, it is parsed and the user is expected to correct the errors. The normal Interleaf formatting and publishing features are available. The program shows the DTD in a separate window using a tree format.

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87. Interleaf 6 SGML Toolkit

Contact information:
- Interleaf Inc., Prospect Place, 9 Hillside Avenue, Waltham, Massachusets 02154 USA, Tel: (617) 290-0710, Email: i-direct@interleaf.com, URL: http:// www.ileaf.com/
- In Finland: Aki Häkkinen Oy, Järvensivuntie 3 B, 33100 Tampere, Finland, Tel: 03-2130020, Fax: 03-2130090
References:
- Sales information
- Aki Häkkinen
Price: Not known
Operating System: Unix
Type: Conversion program, DTD tool
Other programs: Fast Tag, Interleaf6 SGML, SGML Hammer
SGML support: DTD in
Description: Interleaf 6 SGML Toolkit creates templates from a DTD to the form of the Interleaf structure editor and adds the formatting information to the elements. It provides extensible programming tools to create, modify and install customised DTDs and SGML applications.

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88. Interleaf WorldView

Name and version number: WorldView, version 2.1
Contact information:
- Interleaf Inc., Prospect Place, 9 Hillside Avenue, Waltham, Massachusets 02154 USA, Tel: (617) 290-0710, Email: i-direct@interleaf.com, URL: http:// www.ileaf.com/
- In Finland: Aki Häkkinen Oy, Järvensivuntie 3 B, 33100 Tampere, Finland, Tel: 03-2130020, Fax: 03-2130090
References:

- Sales information
- Aki Häkkinen
Price: Not known
Operating System: MS Windows 3.1/NT, Unix, Mac
Type: Electronic delivery tool, Browser
Other programs: Fast Tag, Interleaf6 SGML, SGML Hammer
SGML support: No support
Description: WorldView allows the user to assemble many different types of data and transform them into an electronic collection containing index and hyperlinks. Annotations can be added to documents.

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89. IPSI - OASYS

Name and version number: OASYS (Open Adaptive Information Management System)
Contact information:
- IPSI (Integrated Publication and Information Systems Institute), Dolivostrasse 15, 64293 Darmstadt, Germany, URL: http://www.darmstadt.gmd.de/IPSI/
References:
- Böhm, K., Aberer, K., Klas, W.: Buiding a Hybrid Database Application for Structured Documents, Accepted for publication in Multimedia - Tools and Applications, 1997.
- Volz, M., Aberer, K., Böhm,K.: An OODBMS-IRS Coupling for Structured Documents, Bulletin of the Technical Committee on Data Engineering, 19(1), 1996, pp. 34-42
- Web information
Price: Not known
Operating System: Unix
Type: Structured text database
SGML support: DTD in, SGML in/out
Search/replace: Search for text/elements, regular expressions allowed
Description: OASYS is an SGML/HyTime database application which is built using the object-oriented DBMS VODAK developed by IPSI. It can manage documents of arbitrary types. Documents are parsed when inserted and modified using any SGML editor.
Note: Earlier DIMSYS (Distributed Multimedia Information System)

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90. Jade

Name and version number: Jade James' DSSSL Engine version 0.8
Contact information:
- URL: http://www.jclark.com/jade/
References:
- Program documentation
- Web information
Price: Free
Operating System: Unix, MS-Windows 95/NT
Type: Conversion program, Page layout program
SGML support: DTD in, SGML in/out, XML in/out, DSSSL specifications in
Description: Jade is a command-line application of the DSSSL style language. It takes as input an SGML document and the DSSSL specification and outputs the grove (a set of parse

trees) conforming to a DSSSL specification. It uses the SP parser for parsing DSSSL specifications. For formatting it contains four backends, that generate RTF, SGML, XML and TeX format from the grove. The program does not implement the DSSSL transformation language but makes a simple structure transformations using a non-standard extension of the DSSSL style language.

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91. JSPI Toolkit

Name and version number: Java SGML Parsing Interface Toolkit
Contact information:
- Copernican Solutions Inc., 1313 Fifth St. SE, Suite 311, Minneapolis, MN, 555414, USA, Tel: -+(612)379-3608, Email: sales@copsol.com, support@copsol.com, URL: http://www.copsol.com/products/jspi/
References:
- Web information
Price: Free
Operating System: MS-Windows 95/NT, Unix
Type: Parser, DSSSL tool
Other programs: DSSSL Developer's Toolkit, SENG/DSSSL Environment, Grove Toolkit, SP
SGML support: DTD in, SGML in/out, DSSSL in
Description: JSPI Toolkit is a platform specific parsing component for a Java environment. SGML documents are parsed using SP parser and DSSSL groves are generated using DSSSL Developer's Toolkit's grove.dsssl pacakge.

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92. Jumbo

Name and version number: Jumbo (Java Universal Markup Browser for Objects)
Contact information:
- URL: http://www.vsms.nottingham.ac.uk/vsms/java/jumbo
References:
- Web information
Price: Free
Operating System: MS-Windows 95/NT, Unix, Mac
Type: Parser, Browser
SGML support: DTD in/out, XML in
Views: Tree representation, formatted text, list of attributes
Description: Jumbo parses an XML document (using Lark, NXP or any parser producing ESIS tree) and displays it using various views. It allows the user to control the presentation of elements and navigate through the document. Jumbo has been used to implement Technical Markup Language or Chemical Markup Language.
Screen shot: At URL: http://www.vsms.nottingham.ac.uk/vsms/java/jumbo/w3_jumbo1.gif

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93. Lark

Contact information:

- Textuality, 321-3495 Cambie Street, Vancouver, BC, V5Z R3, Canada, Tel: -+(604)708-9592, Email: tbray@textuality.com, URL: http://www.textuality.com/Lark
References:
- Web information

Price: Free
Operating System: MS-Windows 95/NT, Unix, Mac
Type: Parser
SGML support: DTD in, XML in/out
Description: Lark is a non-validating XML parser written in Java.

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94. Lector

Contact information:
- University of Waterloo, Centre for the New OED Waterloo, Ontario, N2L 361, Canada.

References:
- Open Text Corporation, Product Line Technical Overview, 1994.
- Darrell R. Raymond: Flexible Text Display with Lector, Computer, August 1992, (49-60).

Price: Not known
Operating System: Unix, MS-Windows
Type: Electronic delivery tool, Browser, Conversion program
Other programs: PAT
SGML support: SGML in
Views: User definable
Description: Lector displays SGML tagged text on the screen. The program can show text received from another program, or directly from a file. The tags and attributes are associated with display definitions. Several different displays can be defined for the same data, and users can switch between these views.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/lector.gif

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95. Life*CDM

Contact information:
- Corena AS, P.O.Box 1024, N-3600 Kongsberg, Norway, Tel: +47 32 73 74 33, Fax: +47 32 73 68 77, Email: sales@corena.no, URL: http://www.corena.no/

References:
- Sales information
- Web information

Price: Not known
Operating System: Unix
Type: Structured text database
SGML support: DTD in, SGML in/out
Graphics support: Stores graphics
Views: Using external programs (ADEPT Editor, Grif SGML Editor)
Description: Life*CDM contains three components: Life*CMD Repository, Life*CMD Revision Shell and Life*CMD Composer. Resitory stores documents (content, DTD and layout definitions) in an Oracle database. Revision Shell updates the database and maintains the user interaction using APIs of other programs. Composer formats documents for viewing

and printing.

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96. LivePAGE SGML Edition

Contact information:
- Inforium, 158 University Avenue West, Waterloo, Ontario, Canada, N2L 3E9, Tel: 519-885-2181, Fax: 519-746-7362, Email: info@livepage.com, URL: http://www.inforium.com.

References:
- Sales information
- Web information
- Emails from Rich Crowley (rcrowley@inforium.com)

Price: Provides on a quote basis
Operating System: MS-Windows 3.x/95/NT
Type: Structured text database
SGML support: SGML in
Search/replace: Searching is based on editor capabilities. Links and word-based queries for information retrieval.
Views: LivePAGE Browser shows two windows: table of contents and the final document.
Printing: Normal
Description: LivePAGE SGML Edition contains LivePAGE Browser, Builder, Updater, Style Editor and Administrator to allow information such as text, graphics and multimedia objects to be stored using a relational database. The relational database can be Microsoft SQL Server, Oracle, Sybase, or Watcom SQL database. The system adds a record per each defined unit and preserves the structural hierarchy by means of references to ancestor and sibling sequence pointers. Browser allows to view, search, select, extract and print documents in a database. Any text editor or SGML editor can be used to update the contents of checked out fragments of documents. Style Editor creates and maintains style files to format SGML elements of the text. Administrator creates, deletes, extracts, and validates and normalizes SGML documents stored in the database. This information can then be published in a variety of media including corporate intranet, WWW, electronic document and CD-ROM.
Screen shot: At URL:
http://www.livepage.com/api-bin/dbc30n.dll/LivePAGE/gra,graphics$2Fstyledit.gif

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97. Mark-It

Contact information:
- SEMA Group Belgium, Rue de Stallestraat 96, B-1180 Brussels, Belgium, Tel: +32 - 2 333 5324, Fax: +32-2 333 5522, Email: info-markit@sema.be, URL: http://www.sema.be.

References:
- Sales information

Price: Not known
Operating System: Unix, MS-DOS, VAX/VMS
Type: Parser, Conversion program
Other programs: Write-It, Proof-It, MIPS
SGML support: DTD in, SGML in/out
Description: Mark-It is a conversion program with a SGML parser. It contains facilities to

support markup minimization, SHORTREF features, link types, concurrent document types, subdocuments and multiple character sets. It uses regular expressions and macros to to process various formats (RTF, SGML, WP, database reports). Output format can be RTF, WP, SGML, HTML, TeX and PostScript. It is delivered as a stand-alone program or as a function library.
Note: Earlier name Sobemap parser.

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98. MarkMinder

Contact information:
- TechnoTeacher Inc, P.O.Box 23795, Rochester, New York 14692-3795, USA, Tel: +1 716 271 0796, Fax: +1 716 217 0129, E-mail: info@techno.com, URL: http://www.techno.com.

References:
- Web information

Price: Not known
Operating System: Unix
Type: Parser, API tool, ISAM database
Other programs: SP, HyMinder, GroveMinder, HyBrowse
SGML support: DTD in, SGML in/out, XML in
Description: MarkMinder is a "Do it yourself" set of tools for those who want to make their own object-oriented SGML-applications. There is a set of C++-library for document handling, and an SGML-parser based on the SP-parser. The vendor integrates the system with any database management system on a contract basis.

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99. MegaDots

Contact information:
- Raised Dot Computing, 08 South Baldwin St., Madison, WI, 53703, USA, Tel: (800)347-9594, +1(608)257-9595, Fax: +(608)257-4143, Email: info@rdcbraille.com, URL: http://www.rdcbraille.com

References:
- Web information

Price: Not known
Operating System: MS-DOS, MS Windows
Type: Conversion program, Editor
SGML support: SGML in/out
Search/replace: Search and replace for text
Views: Shows both braille and ASCII letters
Description: MegaDots is used to create, edit and format ink-print and braille (dot letters for blind people). Braille can be created by keystrokes or voice. The program contains a spell checker and it can import and export about 50 different kinds of file formats.

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100. MetaMorphosis

Name and version number: MetaMorphosis version 2.2
Contact information:

- Ovidius GmbH, Dircksenstrasse 47, D-10178 Berlin, Germany, Tel: +49 (30) 283089-0, Fax: +49 (30) 283089-25, Email: info@ovidius.com, URL: http://www.odivius.com
References:
- Web information

Price: Not known
Operating System: Unix, VAX/VMS, MS-Windows 3.1/95
Type: Conversion program
SGML support: DTD in, SGML in/out
Description: MetaMorphosis is a modular transformation program containing source tree generator, tree transformer, tree annotator and output processor. It takes its input from the NSGMLS or SGMLS parser. A declarative programming language is used to specify transformations and annotations. The rule

```
artwork
   []
   r.child[gid=="GRAPHIC"],
   <|grtitle|>r.child[gid=="TITLE"];
```

specifies that all the nodes with the identifier **artwork** in the target tree are to receive the following children: the node GRAPHIC which is to be copied from the source tree and a node named **grtitle** which will be a copy of the node TITLE in the source tree. The language contains embedded a query language for accessing nodes in the tree. The system features various output modules: ASCII text, SGML, Emacs outline format for debugging.

---

101. MIPS

Name and version number: MIPS - Multimedia Information Presentation System
Contact information:
- SEMA Group Belgium, Rue de Stallestraat 96, B-1180 Brussels, Belgium, Tel: +32 - 2 333 5324, Fax: +32 - 2 333 5522, Email: info-markit@sema.be, URL: http://www.sema.be

References:
- Web information
- Email from Pascale Leblanc, Sema Group Belgium

Price: Not known
Operating System: Unix
Type: API tool, Browser (HyTime)
Other programs: Mark-It, Write-It, Proof-It
SGML support: DTD in, SGML in/out
Views: tree presentation
Description: MIPS contains an SGML Engine, a HyTime engine, a HyTime-compliant DTD, a Presentation Subsystem and a Web Builder. The SGML engine is a C++ library to manipulate SGML documents as trees for navigation. Documents are parsed by Mark-It parser and stored in ObjectStore database. The HyTime engine, also a C++ library, supports the addressing and hyperlinking facilities for browsing HyTime documents made of a set of SGML documents. It is implemented above the SGML Engine. The Presentation Subsystemm, containing Web Builder, is able to show SGML Engine documents.

---

102. ModuleMaster

Contact information:
- LSC GROUP, Consept House, 10a, Victoria Road, TAMWORTH, Staffordshire, B79 7HL, UK, Tel: +44 (0) 1827 59364, Fax: +44 (0) 1827 59338, Email: group@lsc.co.uk, URL: http://www.lsc.co.uk
References:
- Web information
Price: Not known
Operating System: Unix, MS-Windows
Type: Document database
SGML support: DTD in, SGML in
Description: ModuleMaster reads in SGML tagged documents, stores the files into the Common Source DataBase (AECMA 1000D / DEF STAN 00-60) and extracts some of the SGML tagged information to enable the documents to be retrieved later.

---

103. MU: Forms Assisted SGML Markup

Name and version number: MU: Forms Assisted SGML Markup version 2.1
Contact information:
- URL: http://jefferson.village.virginia.edu/mu/
References:
- Web information
Price: Free
Operating System: Unix
Type: Conversion program
SGML support: SGML out
Description: MU (implemented in Perl) uses forms to markup a file with SGML tags.

---

104. Multidoc Pro

Name and version number: Multidoc Pro 2.0
Contact information:
- Citec Information Technology, Silmukkatie 2, P.O.Box 109, FIN-65101 VAASA, FINLAND, Tel: +358-6-324 0700, Fax: +358-6-324 0800, Email: sales@sitec.fi, URL: http://www.citec.fi
References:
- Sales information
- Web information
Price: 162 ECU (Publisher) + 41 ECU (Browser)
Operating System: MS-Windows 3.1x/95/NT
Type: Electronic delivery tool, Search program, Browser
Other programs: Synex ViewPort
SGML support: DTD in, SGML/HyTime in
Graphics support: major formats
Search/replace: Search for text/elements/attributes. Logical operators.
Views: Formatted text, table of contents and a tree for navigation. Elements for the view can be selected according to a condition (for example an attribute value).
Printing: Normal File..Print action

Description: Multidoc Pro containing Synex ViewPort SGML/HyTime browser engine can view and print SGML documents without preprocessing. Documents are combined with separate style sheets for the formatter. Style sheets can specify content hiding, autonumbering, rulers, change bars or CALS tables. The system contains style editor tool to create user-defined style sheets for any DTD. Elements can be defined as navigational elements into an table of contents view. Anchors and links can be defined for the Web. Anchor can contain annotations or serve as a bookmark. Style sheets, navicational and web definitions are stored as SGML documents. The program contains built-in support for externally stored data (graphics, audio, video). The program can display multiple documents in the same main window. The program can also display a document in different views.

---

105. MtSgmlQL

Contact information:
- CNRS & Universite de Provence, 29 Avenue Robert Schuman, 13621 Aix-en-Provence Cedex 1, France, Tel: +33 42953634, Fax: +33 42595096, Email: multext@lpl.univ-aix.fr, URL: http://www.lpl.univ-aix.fr/projects/multext/MtSgmlQL/
- Downloading from URL: http://www.lpl.univ-aix.fr/projects/multext/MtSgmlQl/MQL1.html

References:
- Web-information

Price: Free
Operating System: Unix
Type: Conversion program, Search program
SGML support: SGML/HTML in
Search/replace: Search/replace for text/element/attribute
Description: The SgmlQL language is a functional language based on SQL (a query language for relational databases) i.e. all data and program statements are expressions, which are recursively evaluated. SgmlQL works on normalised SGML, for example on output of nsgmls parser. MtSgmlQL is an interpreter for the SgmlQL language. For example, if the user wants to find the first DATE element in file $myfile, she or he specifies the query

```
first DATE within file $myfile;
```

A sample answer could be:

```
<DATE>
 16 July 1991
</DATE>
```

SgmlQL was developed in the MULTEXT project whose goals are to develop standards and specifications for the encoding and processing of linguistic corpora.

---

106. Near & Far Author

Name and version number: Near & Far Author 2.0
Contact information:
- Microstar Software Ltd., 3775 Richmond Road, Nepean, Ontario, Canada K2H 5B7, Tel: +1 613 596 2233, Fax: +1 613 596 5934, Email: intsales@microstar.com, URL:

http://www.microstar.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- Sales information
- Near & Far Author User Manual, Microstar Software, 1993, Microstar Web Site
- Web information
- Emails from Index Information Technologies containing updated information

Price: 410 ECU (Author's Edition), 885 ECU (Manager's Edition)
Operating System: MS-Windows 3.x/95/NT
Type: Structure editor
Other programs: Near & Far Designer, Near & Far Lite
SGML support: DTD in, SGML in/out
Views: Formatted text, tree representation
Description: Near & Far Author turns Microsoft Word (All European Language versions of MS-Word 6.0 & MS-Word 7.0) into an SGML document authoring tool. There are available Author's Edition and Manager's Edition. The Author's edition enables authors to create and modify documents based on any DTD. Documents can be saved as Word documents or SGML documents. Manager's Edition lets users to create templates for elements and documents.

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107. Near & Far Designer

Name and version number: Near & Far Designer for Windows 2.0 - Near & Far Designer for Unix 1.21
Contact information:
- Microstar Software Ltd., 3775 Richmond Road, Nepean, Ontario, Canada K2H 5B7, Tel: +1 613 596 2233, Fax: +1 613 596 5934, Email: intsales@microstar.com, URL: http://www.microstar.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- Sales information, Demo program
- Near & Far User Manual, Microstar Software, 1993
- Emails from Index Information Technologies containing updated information
- Web information

Price: 1700 ECU
Operating System: MS-Windows 3.x/95/NT, Solaris 2, Sun OS 4, HP-UX 800
Type: DTD tool
Other programs: Near & Far Author, Near & Far Lite, Information Product Assembler (IPA)
SGML support: DTD in/out
Description: Near & Far Designer offers a graphical environment for developing DTDs. No prior knowledge of the SGML language is required. A document's structure is displayed as a tree, allowing users to visualize the way a document's elements fit together. The interface includes a toolbar for quick access to often used objects, a shelf for intermediate work, and an informative dynamic status bar. An on-line help facility provides quick access to the details of

operation. The program also provides reporting facilities including cross references of attributes, entities, elements, and terminals.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/nearfar.gif

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108. Near & Far Lite

Contact information:
- Microstar Software Ltd, 3775 Richmond road, Nepean, Ontario, Canada K2H 5B7, Tel: +1 613 596 2233, Fax: +1 613 596 5934, Email: cade@microstar.com, URL: http://www.microstar.com
- Norsys Technology AB, Findlandsgatan 12, Box 1239, S-16428 Kista, Sweden, Tel +46(8)750 7575, Fax: +46(8)703 9272
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- News group: comp.text.sgml, 1994
- Emails from Index Information Technologies containing updated information
- Web information

Price: Not known
Operating System: MS-Windows 3.x/95/NT
Type: DTD tool
Other programs: Near & Far Designer, Near & Far Author
Description: A simplified version of the Near & Far Designer.

---

109. NORMDTD

Contact information:
- URL: ftp://ota.ox.ac.uk/pub/ota/TEI/software/normdtd1.exe

References:
- URL: http://www.sil.org/sgml/normdtd.html

Price: Free
Operating System: MS-DOS
Type: DTD tool
SGML support: DTD in/out
Description: NORMDTD reads a valid DTD and generates a normalized version of it.

---

110. nsgml

Note: A program in Normalised SGML Library (NSL).

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111. nsgmls

Contact information:

- URL: http://www.jjclark.com/sp/nsgmls.htm
References:
- Web information made by James Clark, Email: jjc@jclark.com
- Tests
Price: Free
Operating System: Unix, MS-DOS, MS-Windows 95/NT, OS/2
Type: Parser
Other programs: sgmls, SP
SGML support: DTD in, SGML in/out
Description: Nsgmls is a successor of sgmls parser. It parses and validates SGML documents and prints a simple text representation of Element Structure Information Set (ESIS) on the standard output.

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112. Normalised SGML Library (NSL)

Name and version number: Contains programs: nsgml, unknit, sggrep, sgmltoken, sgmlseg, sgmlsb, sgmls, textonly, simple, simpleq
Contact information:
- The University of Edinburgh, 7-11 Nicholson Sr., Edinburgh EH8 9YL, Scotland, United Kingdom, Tel: +44 0 131 6502247, Fax: +44 0 131 6504587, Email: marc@cogsci.ed.ac.uk, URL: http://www.ed.ac.uk (Marc Moens)
References:
- Web information (URL: http://www.ltg.ed.ac.uk/software/nsl)
- User guide
Price: Academic researchers can have a free copy for personal research purpose, Commercial Licenses
Operating System: Unix
Type: API tool, Parser, Search program, Conversion program
Other programs: sgmls
SGML support: DTD in, SGML in/out
Description: NSL is a development environment for SGML-based text processing. Language Technology Group (LTG) has developed an integrated set of SGML tools and a developer's toolkit, including the C-based API. The tools and toolkit use SP parser and process the Normalized SGML (NSGML) format, a restricted and slightly modified version of the SGML document format. Initial version of the NSL library were developed during the MULTEXT and ILD projects.

The library contains
- **nsgml** to parse and convert arbitrary SGML documents into NSGML format.
- **unknit** to create hyperlink SGML files from NSGML format.
- **sggrep** to search a file using regular expressions like grep but being aware of the tree structure of SGML documents.
- **sgmltoken** , a tokeniser,
- **sgmlseg** , a toy segmenter being a perl program,
- **sgmllsb** , sentence boundary finder,
- **sgmls** , a simple version of the original sgmls parser.
- **textonly** to output all the text from NSGML format.
- **simple** , **simpleq** to be a starting point for application developers. They demonstrate how to write C programs using the NSL API.

113. NXP

Name and version number: Norbert's XML Parser version 0.97
Contact information:
- Norbert H. Mikula, Email: nmikula@edu-uni-klu.ac.at, URL: http://www.edu.uni-klu.ac.uk/~nmikula/NXP/

References:
- Web information

Price: Free
Operating System: Unix
Type: Parser
SGML support: DTD in, XML in/out
Description: NXP is a validating XML parser to be used in XML browsers, editors and databases. It's lexer and parser modules are generated using recursive-descent parser generator to keep the interface to external programs as generic as possible.

114. OLIAS Browser

Contact information:
- Fujitsu Limited, 9-18 Shinyokohama 2-Chome, Kohoku-Ku, Yokohama 222, Japan, Tel: +81(45)474-1927, Fax: +81(45)474-1954, Email: olias@yk.fujitsu.co.jp, URL: http://www.fujitsu.co.jp

References:
- Web information: URL: http://www.baker.com/the-baker-reports/IW94-sp/report/exhibits/hal/olias.html

Price: Not known
Operating System: MS-Windows, Unix
Type: Electronic delivery tool, Browser
SGML support: SGML in
Search/replace: Search for text
Description: OLIAS Browser lets the user to view a collection of SGML documents. They are preprocessed by OLIAS Build Tool (to compile SGML documents into a library), Remote Information Broker (to build the access to Web documents) and Filter Development Kit (for migration of legacy documents into SGML) for viewing and searching.

115. OmniMark

Name and version number: Omnimark version 3
Contact information:
- Omnimark Technologies Corp., 400-1545 Carling Avenue, Suite 404, Ottawa, Ontario, K1Z 8P9, Canada, Tel: +1(613)722-1700, Fax: +1(613)722-5706, Email: info@omnimark.com, URL: http://www.omnimark.com

References:

- Study project on SGML (in Finnish), University of Jyväskylä, Finland, Tel: 014-603045
- OmniMark Sampler, OmniMark Quick Reference Guide, Exoterica Corporation, 1993.
Price: Not known
Operating System: MS-DOS, MS-Windows, Unix, Mac, OS/2, DEC/VMS, IBM CMS/MVS

Type: Conversion program
SGML support: DTD in, SGML in/out
Description: Omnimark is a programming language specialized in text processing, including SGML texts. The language is data/event driven. For example, in the next lines of code

```
ELEMENT title WHEN PARENT IS chapter {...actions...}

FIND (BLANK*"#"ANY-TEXT+"%n" = comment)
OUTPUT "%x"(comment),
```

the first one recognizes the elements **title,** when they are inside **chapter** elements and the second two lines output comments of a AWK program. There is also Exoterica's SGML parser included.

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116. OmniMark LE

Name and version number: Omnimark LE version 3R1
Contact information:
- Omnimark Technologies Corp., 400-1545 Carling Avenue, Suite 404, Ottawa, Ontario, K1Z 8P9, Canada, Tel: +1(613)722-1700, Fax: +1(613)722-5706, Email: info@omnimark.com, URL: http://www.omnimark.com
References:
- Study project on SGML (in Finnish), University of Jyväskylä, Finland, Tel: 014-603045
- OmniMark Sampler, OmniMark Quick Reference Guide, Exoterica Corporation, 1993.
Price: Free
Operating System: MS-DOS, MS-Windows, Unix, Mac, OS/2, DEC/VMS, IBM CMS/MVS

Type: Conversion program
SGML support: DTD in, SGML in/out
Description: Omnimark LE is the free version of Omnimark.

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117. panodssl.pl

Name and version number: panodssl.pl version 0.2
Contact information:
- URL: http://www.falch.no/people/geirog/panodssl/
References:
- Web information by Geir Ove Gronmo, Falch Infotek (URL: http://www.falch.no/people/geirog/panodssl/index.html)
Price: Free
Operating System: Unix
Type: API tool
Other programs: Panorama, SGMLS.pm

SGML support: DSSSL out
Description: panodssl.pl converts Panorama style sheets to DSSSL specifications. It is used with SGMLS.pm.

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118. Panorama Publishing Suite

Name and version number: SoftQuad Panorama Publishing Suite
Contact information:
- SoftQuad Inc, 20 Eglington Ave West, 12th Floor, P.O.Box 2025, Toronto, Ontario, M4R 1K8, Canada, Tel: 1-416-544-9000, Fax: 1-416-544-0300, Email: mail@sq.com, barb@sq.com (Barbara Burrows), URL: http://www.sq.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi
References:
- SoftQuad's home page
- Web information
- Emails from Index Information Technologies containing updated information
Price: 230 ECU
Operating System: MS-Windows 95/NT (Panorama Viewer) and MS-Windows 3.x/95/NT (Panorama Publisher)
Type: Electronic delivery tool, Search program, Browser (Web)
Other programs: Panorama Publisher, Panorama Viewer, Synex ViewPort
SGML support: DTD in, SGML in
Graphics support: Major formats
Description: Panorama Publishing Suite contains Panorama Publisher and Panorama Viewer.

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119. Panorama Publisher

Name and version number: Panorama Publisher
Contact information:
- SoftQuad Inc., 20 Eglinton Ave. West, 12th Floor, P.O.Box 2025, Toronto, Canada, M4R 1K8, Tel: +1-416-5449000, Fax: +1-416-5440300, URL: http://www.sq.com
- SoftQuad (UK) Limited, Kinetic Centre, Theobald Street, Borehamwood, Herts, WD6 4PJ, England, Tel: +44-181-3874110, Fax: +44-181-3874121
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi
References:
- Sales information
- Web information
- Emails from Index Information Technologies containing updated information
Price: Not known
Operating System: Windows 3.xx/95/NT
Type: Electronic delivery tool, Search program, Browser
Other programs: Panorama Viewer, Panorama Publishing Suite
SGML support: DTD in, SGML in

Graphics support: Major formats
Search/replace: Search for text/element
Views: Formatted text, table of contents, list of emphasized words, tree representation
Description: Panorama Publisher allows the user to create SGML documents for the World Wide Web. Documents can contain tables and mathematics. Multiple style sheets can be added to a document. Documents can be viewed with Panorama Viewer.

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120. Panorama Viewer

Name and version number: Panorama Viewer
Contact information:
- SoftQuad Inc., 20 Eglinton Ave. West, 12th Floor, P.O.Box 2025, Toronto, Canada, M4R 1K8, Tel: +1-416-5449000, Fax: +1-416-5440300, URL: http://www.sq.com
- SoftQuad (UK) Limited, Kinetic Centre, Theobald Street, Borehamwood, Herts, WD6 4PJ, England, Tel: +44-181-3874110, Fax: +44-181-3874121
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- Sales information
- Web information
- Emails from Index Information Technologies containing updated information

Price: 210 ECU
Operating System: Windows 95/NT
Type: Browser (Web)
Other programs: Panorama Publisher, Panorama Publishing Suite
SGML support: DTD in, SGML in
Graphics support: Major formats
Views: Formatted text, table of contents. Not user definable.
Description: Panorama Viewer is a browser plug-in that works with Netscape and Microsoft Internet Explorer and allows users to view SGML documents on the World Wide Web. Users can add notes and comments to their SGML documents with annotations. Documents formatted by Panorama Publisher can be viewed.

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121. Parlance Document Manager (PDM)

Contact information:
- XyVision, 101 Edgewater Drive, Wakefield, MA 01880, USA, Tel: +1(617)245-4100, Fax: +1(617)246-6209, Email: info@xyvision.com, URL: http://www.xyvision.com

References:
- Sales information
- Web information
- Judy Cox, Xyvision, Inc.

Price: Not known
Operating System: Unix, MS-Windows
Type: Document database
Other programs: XyVision Production Publisher

SGML support: SGML in, DTD in
Graphics support: not known
Search/replace: Search for text/element
Views: With the use of XyVision Production Publisher (XPP)
Printing: With the use of XyVision Production Publisher (XPP)
Description: Parlance Document Manager enables the author to manage information as objects in a relational database, share and reuse these objects in multiple documents (Informics, Oracle), and publish the same information an multiple formats. It has version control and workflow features. It uses OmniMark for conversions and XyVision Production Publisher (XPP) for page layout. Also other third-party applications (editors, desktop systems) can be linked to database.

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122. PassageHUB

Contact information:
- Passage Systems, Inc., 10596 N Tantau Ave, Cupertino, CA, USA, 95014, Tel: +1(408)366-0300, Fax: +1(408)366-0320, Email: info@passage.com, URL: http://www.passage.com, http://www.fulcrum.com/english/partners/vars/passage.htm

References:
- Web information

Price: Not known
Operating System: MS-Windows 3.x/95/NT, Unix
Type: Conversion program
Other programs: PassagePRO
SGML support: DTD in, SGML out
Description: PassageHUB transforms common text processing formats (RTF, MIF, IAF) into SGML or HTML documents.

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123. PassagePRO

Contact information:
- Passage Systems, Inc., 10596 N Tantau Ave, Cupertino, CA, USA, 95014, Tel: +1(408)366-0300, Fax: +1(408)366-0320, USA, Tel: +1(415)323-2222, Fax: 1(415)323-2252, Email: info@passage.com, URL: http://www.passage.com, http://www.fulcrum.com/english/partners/vars/passage.htm

References:
- Sales information
- Web information

Price: Not known
Operating System: Client and Server: Unix (SunSolaris, SunOS), Client: MS-Windows 3.x/95/NT
Type: Document database
Other programs: PassageHUB
SGML support: DTD in (not necessary), SGML in/out
Graphics support: Major formats
Description: PassagePRO is an object-oriented document management repository which provides check-in/check-out, lock/unlock, attribute and full-text query, history and other

capabilities found in database and configuration management systems. Information from different authors and documents can be reassembled or linked to provide more comprehensive and useful publications to end users.

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124. PAT

Contact information:
- University of Waterloo, Centre for the New OED Waterloo, Ontario N2L 361, Canada, URL: http://bluebox.uwaterloo.ca

References:
- Gaston H. Gonnet, Ricardo A. Baeza-Yates, Tim Snider: Lexicographical Indices for Text: Inverted files vs. PAT trees, OED-91-01.
- Darrell R. Raymond: Flexible Text Display with Lector, Computer, August 1992, (49-60).

Price: Not known
Operating System: Server: Unix, DEC/VMS, Client: Unix, MS-Windows, Mac, ASCII terminal
Type: Search program
Other programs: LECTOR, TTK (Transduction Toolkit) conversion program, API programmer's toolkit
SGML support: DTD in (not necessary), SGML in/out
Views: Views are defined with the use of LECTOR program.
Description: Very fast search program for large texts. The texts do not have to be SGML-coded, the structures can be recognized based on any kind of strings. The original text files are used, PAT builds only indexes, and uses the files. The complexity of a search is logarithmic to the size of the text to be searched.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/pat.gif

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125. perlSGML

Contact information:
- Earl Hood, Email: ehood@medusa.acs.uci.edu, URL: http://www.oac.uci.edu/indiv/ehood/perlSGML.html
- Download at URL: http://www.oac.uci.edu/indiv/ehood/tar/perlSGML.1996Oct09.tar.gz

References:
- Web information URL: http://www.oac.uci.edu/indiv/ehood/perlSGML.html

Price: Free
Type: Parser, DTD tool, Conversion program
SGML support: DTD in, SGML in/out
Description: PerlSGML is a collection of Perl programs and libraries for processing SGML documents. It contains

- **dtd.pl** for parsing DTDs,
- **dtd2html** for converting a DTD to HTML files for documenting the DTD and for navigating in the DTD,
- **dtddiff** for listing changes in a DTD,
- **dtdtree** for showing the DTD as a tree using ASCII characters,
- **dtdview** for querying for DTDs through a command-line interface to access content rules

and element attributes,
- **sgml.pl** for parsing SGML documents but not DTDs, and
- **stripsgml** for removing SGML markups and translating entities to ASCII characters.
Note: Under development

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126. POET Wildflower

Contact information:
- POET Software Corporation, 999 Baker Way, Suite 100, San Mateo, CA 94404, USA, Tel: +1 (415) 286 4640, Fax: +1 (415) 286 4630, Email: info@poet.com
- POET Software GmbH, Fossredder 12, D-22359 Hamburg, Germany, Tel: +49 (0) 4060 9900, Fax: +49 (0) 40603 9851, URL: http://www.poet.com, http://www.developer.poet.de
References:
- Web information
Price: Not known
Operating System: MS-Windows 3.x/95/NT, Mac, OS/2, Unix
Type: Structured text database
SGML support: DTD in, SGML in/out
Graphics support: not known
Search/replace: Search for text, set of documents or to specific section on version of these documents.
Views: SGML text, tree representation
Description: POET Wildflower is made of three major components: the POET Universal Object Server, the SGML Navigator, Wildflower programmer's C++ API. Documents are saved in the POET Universal Object Server, an object-oriented database. A document is verified for correctness based on the DTD with the use of SGML parser. The user can dynamically select the level of granularity most appropriate to his or her application, be it a document, a chapter, a subsection or a paragraph. If necessary, more than one level of granularity can be chosen for the same document. Also links are stored as object references within the database. The database contains the check-in/check-out of the structure conforming to the DTD and version control functions. A graphical user interface is provided for viewing and administrating the databases.The interface has full-text query interface to documents.

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127. Proof-It

Name and version number: Proof-It 1.0
Contact information:
- SEMA Group Belgium, Rue de Stallestraat 96, B-1180 Brussels, Belgium, Tel: +32 - 2 333 5324, Fax: +32 - 2 333 5522, Email: info-markit@sema.be, URL: http://www.sema.be
References:
- Web information
- Email from Pascale Leblanc, Sema Group Belgium
Price: Not known
Operating System: MS-Windows 95/NT
Type: Parser
Other programs: Mark-It, Write-It
SGML support: DTD in, SGML in/out

Views: SGML text
Description: ProofIt is an interactive parser based on Mark-It parser. Parsing errors are listed in a separate window and the user can correct them before reparsing.
Screen shot: At URL: http://www.sema.be/sgml-web/products/pitweb.gif

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128. PSGML

Name and version number: psgml 1.0.1
Contact information:
- URL: ftp://ftp.lysator.liu.se, pub/sgml
References:
- Lennart Staflin: Editing SGML with emacs and PSGML, Free Software Foundation, 1994.
- Web information
- Tests
Price: Free
Type: Structure editor, Parser
Other programs: psgml-dsssl, psgml-xml
SGML support: DTD in, SGML in/out
Graphics support: No
Search/replace: Search/replace for text, search for elements, regular expressions
Views: The user can in some extent edit output definitions of text and SGML tags.
Description: PSGML is an extension of Emacs, and it works with GNU Emacs 19.19 or Lucid Emacs 19.9 versions (and newer). Menus for processing various SGML functions are added to Emacs. There is Nsgmls parser included to validate SGML documents. Other SGML parsers could also be used. PSGML can be used without any structure definition, then it allows any tags, attributes and entities to be inserted. If there is a structure definition, the insertion of tags, attributes and entities are done selecting from the list of valid names. If the OMITTAG feature of SGML is not used, the program inserts both start and end tags. Also attributes and entities are given from a list. The main window is a text window with visible tags. Tags and attributes can be hidden and elements, sub-elements and regions folded.

---

129. psgml-dsssl

Contact information:
- URL: http://www.sil.org/sgml/megg-sgml-dsssl-el.txt
References:
- URL: http://www.sil.org/sgml/megginson-dsssl.html
- David Megginson, University of Ottawa
Price: Free
Operating System: Unix
Type: Structure editor, Parser, DSSSL tool
Other programs: psgml
SGML support: DTD in, SGML in/out, DSSSL out
Description: Psgml-dsssl is an extension to Emacs editor to create skeleton DSSSL specifications from DTDs of an SGML document. It is built on the top of Emacs and Psgml.

---

130. # QuickPaste

Contact information:
- ArborText Inc., 1000 Victors Way, Suite 400, Ann Arbor, MI, USA, 48108-2700, Tel: +1 313 997 0200, Fax: +1 313 997 0201, Email: info@arbortext.com, URL: http://www.arbortext.com
- Texcel AB, Storsätragränd 12, 127 39 Skärholmen, Sweden, Tel: +46 8 708 8015, Fax: +46 8 709 0042, Email: sales@texcel.no, URL: http://www.texcel.no
References:
- Sales information, URL: http://www.arbortext.com
- Johan Henrikson, Texcel, URL: http://www.texcel.no
- Web information
Price: Not known
Operating System: Unix, MS-Windows
Type: Conversion program
Other programs: Document*Architect, ADEPT*Publisher, ADEPT*Editor
SGML support: DTD in, SGML out
Description: QuickPaste is a conversion tool for converting text from an ASCII or RTF file into properly tagged and valid SGML. Works only within ADEPT*Editor.
Note: Earlier name ADEPT*Power Paste

---

131. # qweb

Name and version number: qweb 1.3
Contact information:
- URL: http://sunsite.auc.dk/qweb/
References:
- Web information
- Rests
Price: Free
Operating System: Unix
Type: Browser (Web)
SGML support: DTD in, SGML in
Graphics support: Major formats
Views: Formatted text, user definable by style sheets
Description: The program parses an SGML document and displays it according to a style sheet in the Web. The program comes with a set of DTDs and their style sheets. New formatting is defined using the style sheet editor. For example, style specification for an element PLAIN could be

```
PLAIN
{
     color:            blue
     display:          block
     font-family:      lucidatypewriter
     font-size:        18
     font-style:       normal
     font-weight:      bold
     text-decoration:  normal
     white-space:      pre
}
```

A bookmarks file is also supported.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/qweb.gif

---

132. qwertz/FORMAT

Name and version number: qwertz/FORMAT Version 1.4
Contact information:
- Tom Gordon, Institut for Applied Information Technology German National, Research Center for Computer Science (GMD), Schloss Birlinghoven, D-53754 Sankt Augustin 1, Germany, Email: thomas.gordon@gmd.de, URL: ftp://ftp.gmd.de/gmd/sgml, file name: sgml2latex-format.1.4.tar.gz

References:
- Tom Gordon: The qwertz SGML Document, Types (Version 1.2 Reference Manual), The qwertz Project Institute for Applied Information Technology, GMD, 1992

Price: Free
Operating System: Unix
Type: Conversion program, Formatter
Other programs: SGML-Tools
SGML support: SGML in
Description: qwertz/FORMAT is a conversion program with predefined structure definitions for articles, reports, books, letters, slides, short memorandums, Unix's manual pages and bibliographical references. Document instances belonging to these types can be converted to LaTeX format or nroff/troff format. Like in LaTeX philosophy, the system does not include an editor, you can use your favorite one. The program is used in SGML-Tools.
Note: SGMLS parser, TeX/LaTeX and/or nroff/troff formatters have to be installed for preview and print of documents. No longer being maintained or further developed.

---

133. Rainbow Makers

Contact information:
- URL: ftp://ftp.ebt.com/pub/nv/dtd/rainbow/

References:
- Information in the program package

Price: Free
Operating System: MS Windows 95/NT, Unix
Type: Conversion program
SGML support: DTD in, SGML in
Description: Rainbow Makers converts SGML documents conforming to Rainbow DTD to RTF, Interleaf and FrameMaker format.

---

134. RATFINK

Name and version number: RATFINK version 0.8
Contact information:
- URL: http://www.art.com/cost/ratfink/

References:
- Web information (URL: http://www.art.com/cost/ratfink/ratfink.html)
Price: Free
Operating System: Tcl, Cost application in MS Windows 95
Type: Conversion program
SGML support: SGML in
Description: RATFINK is a set of Tcl rutines for generating RTF files. Its application for SGML conversion is called Cost.

---

135. Roustabout

Name and version number: Roustabout Beta
Contact information:
- Apropos Toy & Tool Development, 577 Crawford St., Toronto, Ontario, M6G 3K1, Canada, Email: attd@attd.com, URL: http://www.attd.com
References:
- Web information
Price: Not known
Operating System: MS Windows 95, Unix, Mac
Type: Conversion program
SGML support: DTD in, SGML out
Description: Roustabout made in the Java programming language converts QuarkXpress formatted text into valid SGML. It replaces stylesheet manes with SGML tags and non-ASCII characters with general entities.

---

136. RulesBuilder

Name and version number: SoftQuad RulesBuilder
Contact information:
- SoftQuad Inc., 20 Eglinton Ave. West, 12th Floor, P.O.Box 2025, Toronto, Canada, M4R 1K8, Tel: +1 416 5449000, Fax: +1 416 5440300, URL: http://www.sq.com
- SoftQuad (UK) Limited, Kinetic Centre, Theobald Street, Borehamwood, Herts, WD6 4PJ, England, Tel: +44 181 3874110, Fax: +44 181 3874121
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi
References:
- Sales information
- Manual
- Emails from Index Information Technologies containing updated information
Price: 770 ECU
Operating System: Unix, MS-Windows, Mac
Type: DTD tool
Other programs: Author/Editor, Explorer, Panorama Pro, Sculptor
SGML support: DTD in
Description: RulesBuilder is used to create and update structure definitions for Author/Editor program.

137. S4-desktop

Name and version number: S4-DESKTOP V2.1
Contact information:
- Infrastructures for Information Inc., 344 Bloor Street West, Suite 400, Toronto, Ontario, M5S 3A7, Canada, Tel: +1 (416) 920-6489, Fax: +1 (416) 920-6493, Email: sales@i4i.org, URL: http://www.i4i.org
References:
- Web information
- Emails from Michel Vulpe, President and CEO, Infrastructures for Information Inc. (mvulpe@i4i.org)
Price: 1400 ECU Developers Licence Fee, 140 ECU RunTime - per seat, + shipping, handling and local taxes, The prices are double for Unix
Operating System: MS-Windows 3.x/95/NT, Unix
Type: API tool
SGML support: SGML in/out, DTD in
Description: S4-desktop is a real-time SGML language processor, and is delivered as "middleware". It provides the programmer with a set of high-level functions that allows the user to develop SGML-compliant applications of commercial software (Word, Oracle). The API in the S4-desktop implementation includes more than 70 function calls to support SGML tag searching and navigation, attribute searching and navigation, hypertext navigation, and content extraction. S4 Desktop gives the user two working domains - the content domain and structure domain. The content domain may be easily and powerfully manipulated by the structure domain, meaning that information objects may be viewed using multiple DTDs. The system comes with several sample programs.

138. SARA

Name and version number: SARA (SGML Aware Retrieval Application)
Contact information:
- British National Corpus, Oxford University Computing Services, 13 Banbury Road, Oxford, OX2 6NN, United Kingdom, Tel: +44 1865 273280, Fax: +44 1865 273275, Email: natcorp@vax.ox.ac.uk, URL: http://info.ox.ac.uk/bnc
References:
- Web information
- Emails from Claire Warwick (claire.warwick@oucs.ox.ac.uk)
Price: Free
Operating System: Client: MS-Windows 3.1/95, Server: Unix
Type: Structured text database
SGML support: SGML in (TEI DTD)
Search/replace: Search for text/element, regular expression
Description: SARA is a client/server software tool allowing SGML text to be queried by remote clients. The original motivation for its development was the need to provide a low-cost search-engine for the British National Corpus. The system was developed at Oxford University Computing Services.

The SARA index contains entries for each lexical token identified in the text, and also for each occurrence of an SGML start and end tag. The indexer does not record explicitly any information about the SGML document hierarchy. It has so far only been used with the BNC's DTD, a simplified version of TEI. SARA's corpus query language (CQL) is typical Boolean style retrieval language, but it contains additional features useful for corpus work.

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139. SAW - SID Assembly Workbench

Contact information:
- Pekka Kilpeläinen, Tietojenkäsittelytieteen laitos, Helsingin yliopisto, Email: kilpelai@cs.helsinki.fi, URL: http://www.cs.helsinki.fi/~kilpelai

References:
- P. Kilpeläinen, H. Ahonen, B. Heikkinen, O. Heinonen, J. Jaakkola, G. Linden: Design and Implementation of a Document Assembly Workbench, accepted to EP'98, Saint Malo, 1-4 April, 1998.

Price: Not known
Operating System: Unix
Type: Document assembly program, Conversion program
Other programs: TranSID
SGML support: DTD in, SGML in
Description: SAW is developed to assembly an SGML document conforming to a DTD from a collection of SGML documents (perhaps for different DTDs). The user selects, reorders and transforms documents fragments which are selected using TranSID language. The formatting of the target document can be made using SGML publishing systems. SAW has been implemented as a Web Server.
Note: Research prototype

---

140. Sculptor

Name and version number: SoftQuad Sculptor 1.0
Contact information:
- SoftQuad Inc, 56 Aberfoyle Crescent, Suite 810, Toronto, Ontario, M8X 2W4, Canada, Tel: 416-239-4801, Fax: 416-239-7105, Email: mail@sq.com, barb@sq.com (Barbara Burrows), URL: http://www.softquad.com

References:
- ApplicationBuilder - A Technology Brief, SoftQuad Inc.,
- SoftQuad - New Language/Platform, SGML User's Group Newsletter 19 (April 1991) 21

Price: 170 ECU
Operating System: Unix, MS-Windows, Mac
Type: API tool
Other programs: Author/Editor, Explorer, Panorama Pro, RulesBuilder
Description: Sculptor is an application programmer's interface in Lisp Scheme. The program includes Author/Editor and a programming language to change menus and add new features etc. in the Author/Editor.
Note: Earlier name Application Builder

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141. sdc

Name and version number: sdc version 1.8
Contact information:
- URL: http://www.inf.tu-dresden.de/%7Ejw6/doc/sdc/
References:
- Web information
Price: Free
Operating System: Unix
Type: Conversion program
SGML support: DTD in, SGML in
Graphics support: EPS format
Description: Sdc is used to convert SGML documents to LaTeX, PostScript, HTML, emacs Info files, Unix man pages and formatted ASCII. Source code can be written with any text editor using a given set of DTDs. The program uses the sgmls or nsgmls parser as a front-end.
Note: Earlier name typeset

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142. SEgrep

Name and version number: SEgrep, SGML + expressions
Contact information:
- Tarmo Rahikainen, Research Institute for the Languages of Finland, Sörnäisten rantatie 25, 00500 Helsinki, Tel: +358 9 7315282, Fax: +358 9 7315355
References:
- Outi Lehtinen, Jyrki Niemi, Erja Nikunen: SEgrep: Text search and views in SGML-coded texts, SGML Finland ’97, 9.-10.10.1997, Vaasa, Finland.
- Text files included in software package
- User’s guide
Price: Free
Operating System: Unix, OpenVMS
Type: Search program, Conversion program
SGML support: SGML in/out
Search/replace: Search for text/element/attribute, multiple patterns, regular expressions
Description: SEgrep can search for several patterns at the same time. The basic patterns are strings or regular expressions. These can be extented to SGML elements. The user can search for patterns which occur in an element, etc. Users can also use SGML attributes in queries: a pattern can be searched required that it occurs in an element which has certain value in a named attribute, etc. For example the following query looks for sentences which have words beginning with **sea** or **find**

```
segrep '{sea|find}/w/s'
```

---

143. SENG/DSSSL Environment

Contact information:

- Copernican Solution Inc., 1313 Fifth Street SE, Suite 311, Minneapolis, MN 55414, USA, Tel: +1 (612) 379 3608, URL: http://www.copsol.com
References:
- Web information
Price: Free
Operating System: MS-Windows 95/NT, Unix
Type: API tool, Conversion program, Page layout program, Search program
Other programs: DSSSL Developer's Toolkit, Grove Toolkit, JSPI Toolkit, XML Developer's Toolkit
SGML support: DTD in, SGML in/out, XML in/out, DSSSL in
Search/replace: search/replace text/element/attribute
Description: SENG/DSSSL Environment is used to format SGML documents in Java environment using DSSSL specifications. It compiles DSSSL query, transformation and style languages to Java. It also supports XML. SENG is a Scheme engine add-in for SP parser.

---

144. SGDIFF

Contact information:
- Palstar b.v., Winkelsteeg 5a, 7975 PV Uffelte, The Netherlands, Tel: +31(521)351077, Fax: +31(521)351078, Email: palstar@xs4all.nl
References:
- Steve Pepper's list
Price: Not known
Operating System: MS DOS, MS Windows 3/95/NT, Unix, Mac, OS/2,VMS
Description: SGDIFF tracks revisions between SGML documents.

---

145. sggrep

Note: A program in Normalised SGML Library (NSL).

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146. SGML Author for Word

Name and version number: SGML Author for Microsoft Word version 1.2
Contact information:
- Microsoft, URL: http://www.microsoft.com/msword/productinfo/sgml/add/default.htm
- In Finland: Microsoft Oy, Jaakonkatu 2, 01620 Vantaa, Finland, Tel: +358 9 525 501, Fax: +358 9 878 8778
References:
- Web information
- Emails from Brian Hodges
Price: 440 ECU
Operating System: Windows 95/NT
Type: Editor, Structure editor, Conversion program
SGML support: DTD in, SGML in/out
Graphics support: Import and export CGM, WMF and OLE objects.
Search/replace: Search/replace for text, element

Views: Formatted text
Printing: Normal File..Print action
Description: SGML Author for Word is an extension made to the Word 96 and Word 97 text processing software to be able to handle SGML documents. A Word document is transformed from Word styles to SGML tags when saved. The user can define a mapping between any DTD and Word styles using a point-and-click tool. The program can also parse the text and report on inconsistencies.

---

147. SGML Autoformer

Contact information:
- U.S. Lynx, 853 Broadway, New York, NY 10003, USA, Tel: +1(212)6733210, Fax: +1(212)6735261, Email: elvis@uslynx.com, URL: http://www.uslynx.com

References:
- Steve Pepper's list

Price: Not known
Operating System: Windows
Type: Conversion program
Note: The Web page does not have any information.

---

148. SGML Companion

Name and version number: SGML Companion 1.1
Contact information:
- Publishing Development AB, Torpvägen 10, S-17543 Järfälla, Sweden, Tel: +46-1818 5452, Fax: +46-1810 9200, Email: Marketing@pharmasoft.se, URL: http://www.pharmasoft.se/pubdev/prod01.htm

References:
- Web information

Price: 180 ECU (6/97)
Operating System: MS-Windows 3.1x
Type: DTD tool
Other programs: SGML Companion DTD Browser
SGML support: DTD in/out
Description: SGML Companion allows the user to create, import and maintain DTDs. It shows the DTD structure graphically either using tags or tag descriptions. Multiple file DTDs may be handled with the use of external parameter entities allowing common parts to be shared but not to be copied between different DTDs. From release 1.1 it is possible to use SGML TagWizard to interactively test a DTD on an instance (requires Microsoft Word 6.0 for Windows). The program comes with a set fo example DTDs (ISO 12083, MIL-M-38784C, J2008, HTML2).

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149. SGML Companion DTD Browser

Contact information:
- Publishing Development AB, Torpvägen 10, S-17543 Järfälla, Sweden, Tel: +46-1818 5452,

Fax: +46-1810 9200, Email: Marketing@pharmasoft.se, URL: http://www.pharmasoft.se/pubdev/prod01.htm
References:
- Web information
Price: Free
Operating System: MS-Windows 3.1x
Type: DTD tool
Other programs: SGML Companion
SGML support: DTD in
Description: SGML Companion DTD Browser is an evaluation version of SGML Companion for browsing. DTDs.

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150. SGML Hammer

Contact information:
- Interleaf, Inc., 62 Fourth Ave., Waltham, Massachusetts 02154, USA, Tel: +1(617)-290-0710, Fax: +1(617)-290-4943, Email: i-direct@interleaf.com, URL: http://www.avalanche.com
- In Finland: Häkkinen Aki Oy, Järvensivuntie 3 B, 33100 Tampere, Finland, Tel: 03-213 00200, Fax: 03-213 00900
References:
- Sales information
- Web information
Price: Not known
Operating System: Unix, MS-Windows
Type: Conversion program, Parser, API tool
Other programs: FastTag
SGML support: DTD in, SGML in/out
Description: SGML Hammer with an SGML parser can convert SGML files conforming to a DTD to conform to another DTD, the coding of a desktop publishing software (Word, WordPerfect, FrameMaker, Interleaf, HTML), or CD-ROM output format. It can be integrated with other applications using API.

---

151. SGML Instance Imager

Contact information:
- U.S. Lynx, 853 Broadway, New York, NY 10003, USA, Tel: +1(212)6733210, Fax: +1(212)6735261, Email: elvis@uslynx.com, URL: http://www.uslynx.com
References:
- Steve Pepper's list
Price: Not known
Operating System: Windows
Type: Conversion program
Note: Web page does not contain any further information.

---

152. SGML Kernel

Contact information:
- Omnimark Technologies Corp., 400-1545 Carling Avenue, Suite 404, Ottawa, Ontario, K1Z 8P9, Canada, Tel: +1(613)722-1700, Fax: +1(613)722-5706, Email: info@omnimark.com, URL: http://www.omnimark.com
References:
- Steve Pepper's list
Price: Not known
Operating System: MS-DOS, MS-Windows, Unix, Mac, OS/2, DEC/VMS, IBM CMS/MVS
Type: Parser
SGML support: DTD in, SGML in/out
Note: Web page does not contain any further information.

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153. SGML Smart Editorial System

Name and version number: SGML Smart Editorial System, version 5.4
Contact information:
- Auto-Graphics, Inc., 3201 Temple Avenue, Pomona, California 91768, USA, Tel: 800-776-6939, 909-595-7204, Fax: 909-595-3506, Email: info@auto-graphics.com, URL: http://www.auto-graphics.com
References:
- Web information: www.auto-graphics.com/publishing/SGML.html
Price: Not known
Operating System: MS-Windows NT
Type: Structure editor, Structured text database, Search program
SGML support: DTD in, SGML in/out
Search/replace: Search text/element, Boolean operators
Printing: Normal File..Print in the SMART Editor
Description: The SMART Editorial System supports functions of highly-structured, record-oriented databases. It combines IMPACT search and retrieval engine with SMART Editor system. Simultaneous editing of records in multiple databases is available through the multiwindowing capability.
Note: Earlier name SGML SMART Editor

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154. SGML Tagger

Contact information:
- Janet Caldwell, Customer Service Manager, Electronic Publishing, Oxford University Press, Walton Street, Oxford OX2 6DP, UK, Tel: (01865)556767, Fax: (01865)556646, URL: http://www1.oup.co.uk/cite/oup/E-P/Humanities/The_SGML_Tagger/
References:
- Sales information
- Web information
Price: 110 ECU (without VAT), 130 ECU (including UK VAT)
Operating System: MS-DOS
Type: Parser, Editor
SGML support: DTD in, SGML in/out
Description: SGML Tagger is a memory-resident program that can be requested from a word

processor at any time. The word processor has to be in DOS mode with a facility to convert documents to ASCII files. The user specifies the DTD. After the markup has been added, the document can be checked using the parser provided with the package.

---

155. SGML TagWizard

Contact information:
- NICE technologies, 55, rue Auguste Piccard, Technoparc Gessienne, F-01630 St. Genis-Pouilly, France, Tel: (33)45042 0223, Fax: (33)45042 0286, Email: info@nicetech.com, URL: http://www.nicetech.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- The SGML Wizard, V.1.3 User's Guide, Nice technologies, 1994.
- Emails from Index Information Technologies containing updated information

Price: SGML TagWizard Single User License 280 ECU (5/97), SGML TagWizard + TagPerfect, Single User License 550 ECU (5/97), TagPerfect "upgrade" to SGML TagWizard Single User License 330 ECU (5/97)
Operating System: MS-Windows
Type: Parser, Structure editor
Other programs: TagPerfect
SGML support: DTD in, SGML in/out
Graphics support: GIF format
Search/replace: Search is in Word text processing system.
Views: SGML text, formatted text
Description: SGML TagWizard is integrated with MS Word 6.0 through a series of macros. It works by using Word "quote fields" to store SGML tags. The parser is contained within a Windows DLL and the tags are inserted by macros that communicate with the DLL parser. SGML TagWizard is started by selecting File..Open..Autosgml Wizard. An initialization file <name>.ini containing a description of tags, formatting instructions, and the root element is attached to the <name>.dtd file. The main window is a normal Word text window where the tags can be visible if wanted.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/tagwizard.gif

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156. SGML-Tools

Name and version number: SGML-Tools 0.99.0
Contact information:
- Cees A. de Groot, URL: http://www.pobox.com/~cg.

References:
- Matt Welsh and Greg Hankins: SGML-Tools users guide, 1996
- Tests

Price: Free
Operating System: Unix
Type: Conversion program
Other programs: qwertz/FORMAT

SGML support: SGML in
Description: SGML-Tools, originally developed for the documentation of the Linux system, allows the user to produce a variety of output formats for an SGML document. Various programs contained in the system create plain text output (ASCII and ISO-8859-1), LaTeX, PostScript, HTML, GNU Info Output, LyX, and RTF output from a single SGML source file. They check SGML syntax and use qwertz/FORMAT DTD. The user defines mapping rules for SGML tags. The rules

```
<itemize>     + "\\begin\{itemize\}" +
</itemize>    + "\\end\{itemize\}" +
```

convert SGML tags to LaTeX codes. The system comes with a sample set of mapping files.

---

157. sgml.pl

Name and version number: sgml.pl version 1.0.0
Note: Sgml.pl is a program in the perlSGML package.

---

158. SGML2TeX

Name and version number: SGML2TeX version 0.95
Contact information:
- URL: http://www.ucc.ie/info/net/sgml2tex.html
References:
- Web information
- Documentation in the program package
Price: Free
Operating System: MS-DOS
Type: Conversion program
SGML support: SGML in
Description: SGML2TeX converts an SGML document to LaTeX/TeX source code. It is written in PCL, a language for Intel 8086 chips.

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159. SGMLbase

Contact information:
- Eidon GmbH, Am Weichselgarten 7, D-91058 Erlangen, Germany, Tel: +49 9131 691151, Fax: +49 9131 691111, Email: info@eidon.de, URL: http://www.eidon.de
References:
- Sales information
Price: Not known
Operating System: MS-Windows 95/NT, Unix
Type: Database front-end
Other programs: CheckQ, DBtag
SGML support: DTD in, SGML in
Search/replace: Search for text, search/replace for element

Views: Formatted text, tree representation
Description: SGMLbase is a tool to import and export SGML documents to and from the Basis relational database. Documents are checked against the given DTD. Query language is SQL (a query language for relational databases.

---

160. SGMLC

Name and version number: SGMLC Core Component version 1.2
Contact information:
- Email: bruce@sgml.dircon.co.uk (Bruce Hunter), URL: http://www.dircon.co.uk/sgml/
References:
- Web information
Price: SGMLC-Core Component free,
SGMLC-Pro 1600 ECU,
SGMLC-Ade 2000 ECU,
SGMLC-View 4600 ECU,
SGMLC-View Evaluation Version free
Operating System: MS-Windows 3.1/95/NT
Type: API tool
Other programs: SGMLC Lite
Description: SGMLC is an event-driven language for processing SGML documents. It is a C-library containing functions to open documents, to find start and end tags, to find entities, etc. It has been used to create transformation programs, parsers, layout programs and browsers. There is a Core Component and the following tools: SGMLC-Pro to be used to create conversion programs, SGMLC-Ade to create SGML applications, SGMLC-View to create SGML viewer applications, and SGML-View Evaluation Version to test applications.

Existing applications are AECMA 1000D Data Module and Manual Viewer, TEVCA Table and Equation Viewer, USAF "Coredoc" SGML Viewer, generic SGML Viewer, ISO Character Entity Viewer, HTML to RTF converter, SGML normalizer, and SGML Parser.

---

161. SGMLC-Lite

Contact information:
- Email: bruce@sgml.dircon.co.uk (Bruce Hunter), URL: http://www.dircon.co.uk/sgml/products.htm#sclite
References:
- Web information
Price: Free
Operating System: MS-Windows 3.1/95/NT
Type: API tool
Other programs: SGMLC
Description: SGMLC Lite is a free version of SGMLC, a language for processing SGML documents. It can be used only to create transformation programs.

---

162. SGMLS

Contact information:
- URL: ftp://sgml1.ex.ac.uk, program file: arcsgml-1.0jclark.tar.Z, James Clark (Email: jjc@jclark.com)
References:
- Program documentation
- Tests
Price: Free
Operating System: Unix, MS-DOS, Mac
Type: Parser
Other programs: nsgmls, NSL, SP
Description: SGMLS is a parser made with ARC-SGML toolkit. The parser takes a DTD and an SGML document instance as input, checks the DTD and parses the document. The output is a complete, augmented document. The program comes with two filters, rast and sgmlasp, that are used to change SGMLS output into Reference Application for SGML Testing format and Amsterdam SGML Parser format.

---

163. SGMLS.pm

Name and version number: SGMLS.pm version 1.03
Contact information:
- URL: ftp://ftp.funet.fi/pub/languages/perl/CPAN/modules/by-module/SGMLS
References:
- David Megginson: A Perl5 class library for use with the sgmls and nsgmls parsers, ftp.funet.fi/pub/languages/perl/CPAN/modules/by-module/SGMLS/SGMLSpm-1.03ii.readme

Price: Free
Operating System: MS Windows 3.1/95/NT, Unix, Mac, OS/2, DEC/VMS
Type: Parser
Other programs: sgmls, nsgmls
SGML support: DTD in, SGML in /out
Description: SGMLS.pm is a perl5 postprocessor for the output from sgmls and nsgmls parsers. A script, sgmls.pl, for formatting and processing SGMl documents is distributed with the software.

---

164. sgrep

Name and version number: sgrep 0.99
Contact information:
- Pekka Kilpeläinen, Tietojenkäsittelytieteen laitos, Helsingin yliopisto, Email: kilpelai@cs.helsinki.fi, URL: http://www.cs.helsinki.fi/~kilpelai
- URL: http://www.cs.helsinki.fi/~jjaakkol/sgrep.html
References:
- Kilpeläinen, P. and Jaakkola, J,: Using sgrep for querying structured text files. In Proceedings of SGML Finland 1996. Available also as Technical report C-1996-83, Department of Computer Science, University of Helsinki, Finland.
- Text files included in software package
- Man pages

- Tests
Price: Free
Operating System: Unix
Type: Search program, Conversion program
SGML support: SGML in/out
Search/replace: Search for text/element/attribute
Description: Sgrep is a tool for searching the contents of text files. The user can define how regions, which are fragments of text, can be identified. Sgrep has predefined macros which can be used in manipulating SGML codes files. For example a query

```
sgrep 'NAMED-ELEMS (S)
 containing
   (NAMED-ELEM (W) containing
  "find" OR "sea")
```

looks for sentences containing words which have a string 'find' or 'sea' inside.

---

165. SigmaLink

Name and version number: SigmaLink version 1
Contact information:
- STEP GmbH, Technogiepark Würzburg-Rimbar, Kettelstasse, Pavillon 7, D-97222 Rimbar, Germany, Tel: +49(9365)8062-0, Fax: +49(9365)8062-66, Email: marketing@step.de, URL: http://www.step.de
References:
- Web information
Price: Not known
Operating System: MS Windows 95/NT, Unix
Type: Structure editor, Structured text database
SGML support: DTD in, SGML/XML in
Graphics support: Major formats
Views: Using FOSI specifications
Description: SigmaLink is an editorial system to create documents, manage them, their versions, authorizations, users, roles, security, workflows (control, access) and various data formats, specially SGML. It is developed for the use of editors in a publishing house. The system consists of a server, which uses relational database, and a client (SigmaLInk Workbench), which has a selectable structure editor integrated.

---

166. SIM

Name and version number: SIM (Structured Information Manager)
Contact information:
- Ferntree Computer Corp., GPO Box 3000, Canberra, ACT 2601, Australia, Tel: +61(6)248-8488, Fax: +61(6)247-6773, Email: katarina_chirwin@ferntree.com.au, URL: http://www.ferntree.com.au/sim/
References:
- Web information
Price: Not known

Operating System: MS Windows 3.1/95, Unix
Type: Document database
SGML support: DTD in, SGML in/out
Search/replace: Search for text/element
Views: User-defined using style sheets
Description: SIM manages SGML documents in several databases (relational or object-oriented). The core SIM DBS is a database server to which the users communicate using clients, SIM CLI for Unix, SIM PCI for Windows or SIM WWW for Web gateway. SIM has an API tool (C functions), a formatter to create style sheets for viewing documents (for example in HTML), and an SGML parser. Tcl, a script language, is used to integrate various tools together.

---

167. simple

Note: A program in Normalised SGML Library (NSL).

---

168. simpleq

Note: A program in Normalised SGML Library (NSL).

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169. SP

Name and version number: SP1.1.1
Contact information:
- James Clark (URL: http://www.jclark.com/sp)
References:
- Web information(URL: http://www.jclark.com/sp/index.html)
Price: Free
Operating System: MS-DOS, MS-Windows 95/NT, OS/2, Unix
Type: Parser
Other programs: nsgmls, sgmls, sgmlnorm, spam
SGML support: DTD in, SGML in/out
Description: SP is an object-oriented toolkit for SGML parsing and entity management. It contains

- **nsgmls** , parser,
- **spam** , normalizer to add markup,
- **sgmlnorm** , normalizer to add markup, and
- **spent** , a program to print SGML entities.

---

170. SP Wizard

Name and version number: SP Wizard version 1.4.26
Contact information:

- URL: http://www.eccnet.com/sgmlug/spwizard
References:
- Web information
- Larry Roberts URL: http://www.eccnet.com/sgmlug/spwizard
Price: Free
Operating System: MS Windows 3.1/95/NT
Type: API tool
Other programs: SP, nsgmls, spam
SGML support: DTD in, SGML in/out
Search/replace: Search/replace for text
Printing: Prints an error report and files with no errors
Description: SP Wizard is a graphical front-end for SP written in Visual Basic. It allows the modification of command line parameters, parsing of multiple files at the one press of a button, displays clickable error messages. It points the cursor in the erroneous places and allows the correction of errors instantly.

---

171. SplitVision

Name and version number: SplitVision version 2.0
Contact information:
- Sörman Information AB, Box 3130, S-35043 Vaxjo, Sweden, Tel: +46(470)727000, Fax: +46(470)727001, Email: info@sorman.se, URL: http://www.sorman.se
References:
- Web information
- Press Releases from Splitvision
Price: Not known
Operating System: MS Windows 95/NT
Type: Browser
Other programs: SplitVision Builder, SplitVision Lite, SplitVision Lite Builder
SGML support: DTD in, SGML in/out
Views: User definable by SplitVision Builder
Description: SplitVision displays documents which are preprocessed using SplitVision Builder.

---

172. SplitVision Builder

Name and version number: SplitVision Builder version 2.1
Contact information:
- Sörman Information AB, Box 3130, S-35043 Vaxjo, Sweden, Tel: +46(470)727000, Fax: +46(470)727001, Email: info@sorman.se, URL: http://www.sorman.se
References:
- Web information
- Press Releases from Splitvision
Price: Not known
Operating System: MS Windows 95/NT
Type: Electronic delivery tool
Other programs: SplitVision, SplitVision Lite, SplitVision Lite Builder

SGML support: SGML/HyTime in
Description: SplitVision Builder contains a style sheet editor, a navigation editor and a Web editor to create documents for electronic delivery. Documents are viewed using SplitVision browser.

---

173. SplitVision Lite

Name and version number: SplitVision Lite version 1.33
Contact information:
- Sörman Information AB, Box 3130, S-35043 Vaxjo, Sweden, Tel: +46(470)727000, Fax: +46(470)727001, Email: info@sorman.se, URL: http://www.sorman.se

References:
- Web information
- Press Releases from Splitvision

Price: Not known
Operating System: MS Windows 95/NT
Type: Browser
Other programs: SplitVision, SplitVision Builder, SplitVision Lite Builder
SGML support: SGML in
Views: User definable by SplitVision Lite Builder.
Description: SplitVision Lite is a basic SGML browser for SplitVision.

---

174. SplitVision Lite Builder

Name and version number: SplitVision Lite Builder version 2.1
Contact information:
- Sörman Information AB, Box 3130, S-35043 Vaxjo, Sweden, Tel: +46(470)727000, Fax: +46(470)727001, Email: info@sorman.se, URL: http://www.sorman.se

References:
- Web information
- Press Releases from Splitvision

Price: Free
Operating System: MS Windows 95/NT
Type: Electronic delivery tool
Other programs: SplitVision, SplitVision Builder, SplitVision Lite
SGML support: SGML in
Graphics support: Major formats
Description: SplitVision Lite Builder is a free version of SplitVision Builder.

---

175. SQml-Publisher

Name and version number: SQml-Publisher 1.0
Contact information:
- Agave Software Design, Inc., 701 E Plano Pkwy, Suite 305, Plano, Texas, 75074-6700, Tel: +1(972)424-6662, Fax: +1(972)424-1644, Email: info@agave.com, URL: http://www.agave.com

References:
- Web information
Price: 9000 ECU
Operating System: MS Windows 95/NT, Unix
Type: Database front-end
SGML support: SGML out, XML out
Description: SQml language is a vehicle for embedding SQL (a query language for relational databases) query statements into SGML documents. The SQml processing elements are SGML elements in appearance and they have meaning only to the SQml parser of the SQml-Publisher. The system provides interfaces to Oracle, Informix, Sybases to access other databases.

---

176. STIL

Name and version number: STIL - SGML Transformations in Lisp, version 1.1
Contact information:
- URL: ftp://ftp.th-darmstadt.de/pub/text/sgml/stil/
References:
- Joahim Schrod (Email: schrod@iti.informatik.th-darmstadt.de): URL: fpt://ftp.th-darmstadt.de/pub/text/sgml/stil/README, 1995
Price: Free
Operating System: Unix
Type: Conversion program, Page layout program
SGML support: SGML in
Description: STIL is a style sheet language to format SGML documents. It does not use DTD or the original source document, but a tree representation of a document generated with an SGML parser (not included in the program package).

---

177. Stilo

Name and version number: Stilo SGML Document Generator
Contact information:
- Stilo Technology Ltd, Empire House, Mount Stuart Square, Cardiff Bay, Cardiff CF1 6DN, UK, Tel: +44 1222 483530, Fax: +44 1222 483530, Email: info@stilo.com, URL: http://www.stilo.com
References:
- Sales information
- Emails from Stephen Healey (sch@stilo.com)
- Web information
Price: 880 ECU for a single user licence (6/97)
Operating System: MS-Windows 3.1/95/NT, MacOS
Type: Structure editor, DTD tool
Other programs: WebWriter
SGML support: DTD in, SGML in/out
Search/replace: Search for text/element
Views: SGML text, formatted text, tree representation for DTDs
Description: Stilo contains a structure editor, a multiple-file document manager, a graphical

DTD viewer, and an interactive parser. The editor displays the current context. Attribute values can be set when elements are edited. Pressing Enter-key shows the next valid element. Where there is a choice of elements, the user may cycle around the choices using a keystroke command. A menu lists available elements before and after the current one. Stilo allows large documents to be divided into separate files and processed as external entities. The DTD viewer is provided with similar facilities like in Near&Far Designer.

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178. stripsgml

Name and version number: stripsgml version 1.0.0
Contact information:
Note: Stripsgml is a program in the perlSGML package.

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179. Symposia doc+

Name and version number: Symposia doc+ 3.0 beta
Contact information:
- GRIF S.A., 2, boulevard Vauban, BP266, 78053 St Quentin en Yvelines Cedex, France, Tel: +33 1 30 121430, Fax: +33 1 30640646, Email: grif@grif.grif.com, URL: http://www.grif.com

References:
- Sales information
- Web information

Price: Not known
Operating System: MS-Windows 3.x/95/NT, Unix
Type: Structure editor, Desktop publishing software, Browser (Web)
Other programs: Grif SGML Active Views, Grif Application Builder, Grif Application Toolkit Environment (GATE), Grif SGML Editor, Grif SGML Notes, Thot
SGML support: DTD in, XML in/out
Graphics support: Major formats
Views: Not user definable
Printing: Normal File..Print action
Description: Symposia doc+ contains a structure editor, a database publishing module and a graphical site manager to create and manage both static and dynamic XML documents in the Web. The user-defined style sheets using Cascading Style Sheets (CSS) mechasnism control fonts, colors, white spaces and other presentational aspects. The system includes Visual Web browser to select the modified page for modifications.

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180. SYNDOC

Contact information:
- University of Kuopio, Eila Kuikka, Dept. of Computer Science and Applied Mathematics, Kuopio, Finland, Email: Eila.Kuikka@uku.fi, URL: http://www.cs.uku.fi/~kuikka/
- Downloading URL: http://www.cs.uku.fi/~kuikka/Syndoc/

References:
- Eila Kuikka, Martti Penttonen: Designing a Syntax-Directed Text Processing System, Proc.

of the Symp. on Programming Languages and Tools, Eds. K. Koskimies, K.-J. Räihä, Tampere, Finland, 1991.
- Eila Kuikka, Martti Penttonen: Transformation of Structured Documents with the use of Grammar, Proc. of the Electronic Publishing'94 Conference, Electronic Publishing 6(3), 373-383, 1993.
- Eila Kuikka, Airi Salminen: Two-dimensional filters for structured text. Information Processing and Management, 33(1), 1997, pp.37-54.
- Eila Kuikka: Processing of Structured Documents Using a Syntax-Directed Approach, Ph.D. Thesis, University of Kuopio, Kuopio, Finland, 1996.
Price: Free
Operating System: Unix
Type: Structure editor, Search program, Conversion program
SGML support: SGML out
Search/replace: Search for text/element
Views: tree representation, formatted text
Printing: Formatted text views can be printed
Description: SYNDOC is a prototype for a structure editor. The structures of documents are defined by context-free grammars. A skeleton grammar defines the logical structure of a document, input grammars the input form, output grammars different views. On the screen a document is shown as a table of contents type tree. Documents can be transformed to have a new structure by a program that is generated from the new and old skeleton grammar. Documents are in files. The search of particular documents is made with the use of the structured filters. A filter defines conditions integrating structure and content and is genereted for a skeleton grammar.
Note: Research prototype implemented in Tcl/Tk and BinProlog. Under development
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/syndoc.gif

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181. Synergy

Contact information:
- ProText Systems AS, Hospitalslokkan 15, N-7012 Trondheim, Norway, Tel: +47(73)513050, Email: perosm@sn.no
References:
- Steve Pepper's list
Price: Not known
Operating System: MS-DOS, MS Windows 95/NT, Unix
Type: Conversion program
SGML support: SGML in
Description: Synergy is an SGML formatter.
Note: No further information available

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182. Synex ViewPort SDK

Name and version number: Synex ViewPort 1.40
Contact information:
- Synex Information AB, Stora Nygatan 20, S-111 27 Stockholm, Sweden, Tel: +46 8 791881, Fax: +46 8 7918889, Email: sales@synex.se, URL: http://www.synex.se

References:
- Sales information
- Synex Information AB: Synex ViewPort, A Technical Brief, 1996.
- Updated information by Hasse Haitto
- Web information

Price: 33 000 ECU
Operating System: MS-Windows 3.1/95/NT, Unix, Mac
Type: API tool
Other programs: Multidoc Pro, Panorama, Nereus, BASIS SGML Viewer, SplitVision
SGML support: DTD in, SGML in/out
Description: Synex ViewPort is a C API to SGML/HyTime browser engine for adding SGML support to any application. It is used in applications like Multidoc Pro, Panorama, Nereus, BASIS SGML Viewer, SplitVision.

A viewer-based application can process and display SGML data from any source, even in a single document: some parts may be retrieved from database, others from files, through network, or even created on demand, when needed. The engine accepts both SGML and an efficient pre-processed binary format designed for CD-ROM or network delivery.

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183. T/RDBMS

Name and version number: T/RDBMS (Text/Relational Database Management System)
Contact information:
- Centre for the New Oxford English Dictionary (OED) and Text Research, University of Waterloo, Waterloo, Ontario, Canada, URL: http:////bluebox.uwaterloo.ca/OED/trdbms.html

References:
- Blake, G.E., Consens, M.P., Kilpeläinen, P., Larson, P.-A., Snider, T., Tompa, F.W.: Text/Relational Database Management System: Harmonizing SQL and SGML, Proceedings of Applications of Databases (ADB-94), Vadstena, 1994, pp. 267-280.
- Blake, G.E., Consens, M.P., Davis, I.J., Kilpeläinen, P., Kuikka, E., Larson, P.-A., Snider, T., Tompa, F.W.: Text/Relational Database Management System: Overview and Proposed SQL Extensions, Department of Computer Science, University of Waterloo, Technical Report CS-95-25, 1995.
- Davis, I.: Adding Structured Text to SQL/MM Part 2: Full Text, Department of Computer Science, University of Waterloo, SQL/MM Change Proposal LHR-24, CAC WG3 N33R2, 1996.

Price: Not known
Operating System: Unix
Type: Structured text database
Other programs: Lector
SGML support: SGML in/out
Search/replace: Search for text/element
Views: using Lector and Netscape Navigator
Description: T/RDBMS is a text/relational database management system through which structured texts are accessed from a federated database environment containing both relational databases and text databases. The database agents to various databases (Oracle, DB2, Fulcrum, PAT) translate standard or extended SQL (a query language for relational databases)

queries into vendor-specific SQL dialects and text agents process text sub-queries on full-text search engines. Extended SQL allows to integrate the structure and content.
Note: research prototype

---

184. TagPerfect

Contact information:
- NICE technologies, 55, rue Auguste Piccard, Technoparc Gessienne, F-01630 St. Genis-Pouilly, France, Tel: (33)45042 0223, Fax: (33)45042 0286, Email: info@nicetech.com, URL: http://www.nicetech.com
- In Finland: Index Information Technologies Oy, PL 112, Sinikalliontie 6, 02631 Espoo, Finland, Tel: +358 9 5259 500, Fax: +358 9 5259 5030, Email: info@index.fi, URL: http://www.index.fi

References:
- Email from Dathan Greenwood: Dathan@Delta.pp.fi
- Emails from Index Information Technologies containing updated information
- Web information

Price: SGML TagWizard + TagPerfect, Single User License 550 ECU (5/97), TagPerfect "upgrade" to SGML TagWizard Single User License 330 ECU (5/97)
Operating System: Windows
Type: Conversion program
Other programs: TagWizard
SGML support: SGML out
Description: Tagperfect can change Word (version 2.0 and 6.0) documents to SGML documents using mapping rules between styles and DTD elements. The program adds missing DTD tags and comments if it fails to make valid SGML documents.
Note: For Microsoft Word (2.0 or 6.0)

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185. tei2latex

Name and version number: tei2latex version 0.1
Contact information:
- URL: ftp://ftp.lri.fr/LRI/soft/ihm/tei2latex-0.1f.tar.gz

References:
- URL: http://www.sil.org/sgml/tei2latex.html

Price: Free
Operating System: Ms-Windows 95/NT, Unix
Type: Conversion program
Other programs: NSGMLS, SGMLS.pm
SGML support: DTD in, SGML in
Description: Tei2latex transforms TEI Lite documents into LaTeX2e source code. It requires NSGMLS, SGMLS.pm for validating.

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186. TEXIS

Contact information:

- Thunderstone Software /EPI, Inc., P. Barton Richards, 11115 Edgewater Dr., Cleveland, Ohio 44102, USA, Tel: +1(216)631-8544, Fax: +1(216)281-0828, Email: bart@thunderstone.com, URL: http://www.thunderstone.com
References:
- Web information
Price: Not known
Operating System: MS Windows 95/NT, Unix as server, MS Windows NT, OS/2, Unix, Mac as clients
Type: Text database
SGML support: SGML in
Graphics support: PDF and EPS formats
Search/replace: Search for text/element
Description: TEXIS is a text database database management system using relational database. It loads structured and unstructured texts into database fields or alternatively leaves text within the operating system files in their native format. SQL (a query language for relational databases) queries may contain extended LIKE clauses. If SGML documents are imported the structure information must be described by the TEXIS-import facility.

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187. Textriever

Contact information:
- Forbes J. Burkowski, University of Waterloo Department of Computer Science Waterloo, Ontario, N2L 3G1, Canada
References:
- Forbes J. Burkowski: Textriever: A Retrieval Engine for Multimedia Databases, Proc. of the Int. Conf. on Multimedia Information Systes, Singapore, 1991, (71-76),
- Forbes J. Burkowski: An algebra for hierarchically organized text-dominated databases, Information Processing & Management 28(3), 1992, (333-348).
- Forbes J. Burkowski: Retrieval Activities in a Database Consisting of Structured Text, Proc. 0f the 15th Annual Int. ACM SIGIR Conf. on Research and Development in Information Retrieval, SIGIR Forum, June 21-24, 1992, (112-125).
Price: Not known
Operating System: MS-Windows
Type: Search program
SGML support: DTD in (not necessary), SGML in/out
Description: Textriever is a search program for structured texts and multimedia databases. The database contains tagged documents whose words are numbered. Documents are indexed. The index contains occurrences for words and structure elements. The query language can find documents by word, by a structure, or by a mixture of these.
Note: Research prototype
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/textriever.gif

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188. Thot

Name and version number: Thot 2.1b
Contact information:
- URL: http://opera.inrialpes.fr/thot/index.html

- Downloading at URL: http://opera.inrialpes.fr/thot/doc/thoteditor/SourceDist.html
References:
- V. Quint, H. Richy, C. Roisin and I. Vatton: The Thot User Manual, Thot version 0.9, 1995
- Web information
Price: Free
Operating System: Unix
Type: Structure editor
Other programs: Grif
SGML support: SGML in/out, no DTD (special S language for the structure)
Search/replace: Search/replace for text/element/attribute, regular expression
Views: Full text and table of contents views. The user can define more views (with P language)
Printing: Normal Print..File action, also for views
Description: Thot is a structure editor, which allows the user to create and modify SGML documents. Thot can produce documents into various output formats such as PostScript, LaTeX or HTML. A document can be valid or incomplete (not all the elements and their contents are written). The parsing can not be turned off. The editor has very powerful search and replace facilities.

The editor is capable to handle sheet, slide, bibliography, or report document types. The structures of new document types are written in S language and new views can be written in P language.
Note: Earlier the research version of Grif structure editor.
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/thot.gif

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189. TOMS

Contact information:
- University of Chicago, Center for Information and Language Studies
References:
- Scott C. Deerwester, Keith Waclena, Michelle LaMar: A Textual Object Management System, SIGIR Forum, June 21-24, (126-139), 1992.
Price: Not known
Operating System: Unix
Type: API tool
SGML support: No
Description: TOMS is a program library for developing structured text search environments. It enables the generation of scanners and parsers, and has tools for indexing and tagging. Applications can be made by C or other languages (Perl, Tcl, Alfonzo).
Note: Research prototype.

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190. Topic

Contact information:
- Verity, Inc, 894 Ross Drive, Sunnyvale, CA 94089, USA, Tel: -+(408)541-1500, Fax: +1(408)541-1600, Email: info@verity.com, URL: http://www.verity.com.
References:

- Web information
Price: Not known
Type: Search program
SGML support: HTML in
Search/replace: Search for text/element, Boolean operators
Description: Topic is a search engine applied to a variety collection of documents. The collection consists of a word index, pointers to actual locations and fields containing references to HTML tags. A tree-like query language (Verity Query Language) defines words, topics and phrases for the search. (Poistetaanko tämä vain HTML:ää syövana, pitäisi lukea mitä on, jäi meiltä epäselväksi.)

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191. TranSID

Contact information:
- Pekka Kilpeläinen, Department of Computer Science, University of Helsinki, Email: kilpelai@cs.helsinki.fi
- Jani Jaakkola, Email: jjaakkol@cs.helsinki.fi
- URL: http://www.cs.helsinki.fi/research/rati/

References:
- J. Jaakkola, P. Kilpeläinen, G. Linden: TranSID: An SGML Tree Transformation Language, The Fifth Symposium on Programming Languages and Software Tools, Jyväskylä, Finland, 1997, pp. 72-83. Available at URL: http://ftp.cs.helsinki.fi, directory: /pub/Reports/

Price: Not known
Operating System: Unix
Type: Conversion program
SGML support: DTD in, SGML in/out
Description: A tree-based transformation language TranSID targeted at SGML transformations has a full access to the entire parse tree of the source document. In the conversion the parse tree is processed in a bottom-up manner. Transformation program rules have the following form

```
ELEMENT "SECTION"
WHEN current.children.having(this.name == "TITLE").children.find("TranSII
BECOMES <"TRANSID_SEC">{current.children};
```

Note: Research prototype

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192. TRIP

Contact information:
- In Finland: TT-Tieto, Kutojantie 10, PL 33, 02631 Espoo, Finland, Tel: +358-9-5261, Email: pekka.hirvonen@tietogroup.com, URL: http://tietogroup.com

References:
- Sales information

Price: Not known
Operating System: Unix, DEC/VMS, MS-DOS
Type: Text database

SGML support: No
Search/replace: By Global Updating action it is possible to search and change text within an element.
Views: A user can define input, search and output forms.
Description: A TRIP database consists of records, which have fields, which can have subfields or paragraphs. The user names the fields. A DTD for the database is

```
<!ELEMENT db        -- (record+)>
<!ELEMENT record    -- (field+)>
<!ELEMENT field     -- (TEXTtype | OTHERtype)+>
<!ELEMENT TEXTtype  -- (para*)>
<!ELEMENT para      -- (sentence*)>
<!ELEMENT OTHERtype -- (subfield | PHRASEtype | NUMBERtype |
                           INTEGERtype | DATEtype | TIMEtype |
                           STRINGtype)*>
<!ELEMENT subfield  -- (PHRASEtype | NUMBERtype | INTEGERtype |
                           DATEtype | TIMEtype | STRINGtype)>
```

Output formats are defined by boxes (TEX's box and glue model). A box has a location and a size. Strings separating different fields can be defined, and text can also be generated.

User rights for users or user groups can be defined. The system can be used directly for keying in data, maintaining of data, and querying about data.

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193. Ventura

Name and version number: Corel Ventura 7 for Windows
Contact information:
- Corel Corporation, 1600 Carling Avenue, Ottawa, Ontario, K1Z 8R7, Canada, Tel: +1 613 7288200, Fax: +1 613 7289790
- WordPerfect Corporation, 1555 N. Technology Way, Orem, UT 84057-2399, USA, Tel: (800) 451-5151, Fax: (801) 222-5077

References:
- Web information
- Emails from Dallas Bowell (DallasP@corel.com)

Price: Not known
Operating System: MS-Windows 95/NT
Type: Desktop publishing software, Page layout program, DTD tool
Other programs: WordPerfect Suite
SGML support: DTD in, SGML out
Views: Formatted text
Printing: Printing Corel WordPerfect Suite for Windows SGML documents.
Description: Ventura allows the user to create, define layout and print SGML documents for arbitrary DTDs as well as define layout for imported WordPerfect documents. It contains DTD Compiler, Ventura Layout Designer, WordPerfect Suite 7 and Visual DTD Builder.

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194. VITAL/ALCHEMIST

Contact information:
- Greger Linden, Henry Tirri, Inkeri Verkamo, Department of Computer Science, University

of Helsinki, Finland, Email: {tirri,linden,verkamo}@cs.helsinki.fi
- URL: http://www.cs.helsinki.fi/research/rati/alchemist.html
References:
- G. Linden, H.Tirri, A.I. Verkamo: ALCHEMIST: A general Purpose Transformation Generator, To appear in Software - Practice and Experience. Also available as a technical report C-1995-43 at http://ftp.cs.helsinki.fi, directory: /pub/Reports/
- H. Tirri, G. Linden: Alchemist - an object-oriented tool to build transformations between heterogeneous data representations. Proceedings of the Twenty-Seventh Annual Hawaii International Conference on System Sciences (HICSS'94), Los Alamitos, IEEE Computer Society Press. Vol. II, pp. 226-235
Price: Not known
Operating System: Unix
Type: Conversion program
Description: In VITAL/ALCHEMIST the conversion is defined using tree transformation grammars (TT-grammars). TT-grammar rules are like syntax-directed translation schema rules but allow to associate a set of source grammar productions to a set of target grammar productions using user-defined nonterminal association. The conversion quarantees that when the input document conforms to the source grammar, the output document conforms the target grammar. The program is generated in the VITAL project.
Note: Research prototype

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195. Waterloo Rita for Windows

Contact information:
- Department of Computer Science and Computer System Group, University of Waterloo, Waterloo, Ontario N2L 361, Canada
References:
- D. D. Cowan, E. W. Mackie, G. M. Pianosi, G. de V.Smit: Rita - an editor and user interface for manipulating structured documents, Electronic Publishing, 4(3), 125-150, 1991
- G. de V. Smit: A formatter-Independent Structured Document Preparation System, Research Report CS-87-40, University of Waterloo, July 1987
- E. W. Mackie, G. M. Pianosi: Waterloo Rita For Windows, Tutorial and Reference, WATCOM Publications Limited, Waterloo, Ontario, Canada, 1992.
- G. M. Pianosi: Waterloo Rita Document Class Generator, Reference, WATCOM Publications Limited, Waterloo, Ontario, Canada, 1990
- Tests
Price: Not known
Operating System: IBM PS/2,MS-Windows
Type: Structure editor
Other programs: Waterloo Rita Document Class Generator
SGML support: SGML in/out
Search/replace: Search/replace for text, search for element.
Printing: Printing either in formatted form or with a formatter (for example LaTeX).
Description: Rite is a structure editor which checks the document for validness. The texts are parsed in loading, and invalid portions are saved with a special name in the parse tree.

The structures are defined by context free grammars. The definition is converted with Waterloo Rita Document Class Generator program. At least two other grammars are expected, they are used for views. The system has by default two views for a document, one for elements, and another for formatted text. The program comes with several predefined views for the most common document types. The text is edited in the text window, and structure in the structure window. The outlook resembles display.

Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/waterloorita.gif

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196. Wazir

Name and version number: Wazir 1.0
Contact information:
- OPEN Information Oy, Tekniikantie 17, 02150 Espoo, Finland, Tel: +358 9 4375 224, Fax: +358 9 455 3117, Email: info@openinformation.fi
References:
- Wazir 1.0, User Guide
- Sales information
Price: Not known
Operating System: MS-Windows 3.1/95/NT, Linux
Type: Conversion program
Description: Wazir is a graphical programming environment where events can be applied to nodes in parse trees. Events can be programmed in a C-like programming language.

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197. WebWriter

Name and version number: Stilo WebWriter
Contact information:
- Stilo Technology Ltd, Empire House, Mount Stuart Square, Cardiff Bay, Cardiff CF1 6DN, UK, Tel: +44 1222 483530, Fax: +44 1222 483530, Email: info@stilo.com, URL: http://www.stilo.com
References:
- Web information
Price: Not known
Operating System: MS Windows 95/NT
Type: Structure editor, DTD tool
Other programs: Stilo SGML Document Generator
SGML support: DTD in, XML in/out, SGML out
Views: Formatted text, tree representation
Description: WebWriter is the world’s first XML editor which is based on Stilo SGML Document Generator. Documents can be created without DTD in which case the DTD is built dynamically. If DTD is used it guides the editing but allows to modify the DTD. The program can generate DTD from the markup.

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198. WordPerfect Suite

Name and version number: Corel WordPerfect Suite 8
Contact information:

- Corel Corporation, 1600 Carling Avenue, Ottawa, Ontario, K1Z 8R7, Canada, Tel: +1 613 7288200, Fax: +1 613 7289790
- WordPerfect Corporation, 1555 N. Technology Way, Orem, UT 84057-2399, USA, Tel: (800) 451-5151, Fax: (801) 222-5077

References:
- Sales information
- Emails from Jussi Arovaara (jussia@corel.com)
- Emails from Dallas Bowell (DallasP@corel.com)
- Tests

Price: 420 ECU
Operating System: MS-Windows 3.1x/95/NT
Type: Desktop publishing software
Other programs: Ventura
SGML support: DTD in, SGML in/out
Search/replace: Search/replace for text, search for element
Views: SGML text, Formatted text
Printing: Final layout with the use of Corel Ventura 7 for Windows SGML import.
Description: The WordPerfect Suite 8 desktop publishing system contains DTD Compiler, Layout Designer, SGML editor and graphical viewer of document structure. It edits SGML documents for arbitrary DTDs in addition to normal WP documents. DTDs can be created using Corel Visual DTD Builder which is included in the Professional version of the program. The DTD is converted to separate file and the file is used for the validation and markup. Valid tags and attributes are shown as lists. The program allows invalid documents inserted and corrected. For tables CALS, HTML or generic table markup is possible. Alias names can be used for element names. Normal WordPerfect editing functions are supported. The WYSIWYG form can be created with the use of Laout Designer based on the selected DTD.
Note: Corel WordPerfect Suite 7 does not show the graphical view of the document structure. Corel WordPerfect Suite 7 and 8 Professional versions contain Corel Visual DTD Builder. Earlier Intellitag
Screen shot: At URL: http://www.cs.uku.fi/~kuikka/Systems97/Figures/wordperfect.gif

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199. WorkSMART

Name and version number: WorkSMART release 2.1
Contact information:
- Open Text Corporation, 180 Columbia Street West, Waterloo, Ontario, N2L SZ5, Canada, Tel:+1(519) 888-9910, Fax: +1(519)888-0677, Email: info@opentext.com, URL: http://www.opentext.com
- InfoDesign Corp., 7700 Leesburg Pike, Falls Church, VA, 22043, USA, Tel: +1(703)827-5541, Fax: +1(703)827-5548, Email: info@idc.com, URL: http://worksmart.opentext.com/corp/intro.html

References:
- Web information

Price: Not known
Operating System: MS Windows 3.1, Unix, Mac
Type: Document database, API tool
SGML support: SGML in
Description: WorkSMART consists modules which can be configured into a document and information management system.

200. Write-It

Name and version number: Write-It 1.2/2.0
Contact information:
- SEMA Group Belgium, Rue de Stallestraat 96, B-1180 Brussels, Belgium, Tel: +32 - 2 333 5324, Fax: +32 - 2 333 5522, Email: info-markit@sema.be, URL: http://www.sema.be
References:
- Web information
Price: Free with MarkIt parser
Operating System: version 1.2: MS-DOS, MS-Windows 3.1, Unix, version 2.0: MS-Windows 95/NT
Type: Structure editor
Other programs: Mark-It, Proof-It
SGML support: DTD in, SGML in/out
Search/replace: Search/replace for text/element
Views: SGML text
Description: WriteIt is a typical SGML editor with normal search, replace, copy, and cut functions. Elements can be entered from a list of valid elements or typed as character sequence. The visual presentation of elements can be configured by the user. The program uses Mark-It parser for validation and creates an error list with references to the document.
Screen shot: At URL: http://www.sema.be/sgml-web/products/witweb.gif

201. WriterStation

Name and version number: WriterStation v6.2
Contact information:
- Datalogics, Inc. 101 N. Wacker Drive, Suite 1800, Chicago, IL 60606, USA, Tel: +1(312)-8538200, Fax: +1(312)-8538282, URL: http://www.datalogics.com/
References:
- Web information
Price: Not known
Operating System: MS-Windows 95/NT, OS/2
Type: Structure editor
SGML support: DTD in, SGML in/out
Graphics support: Major formats
Search/replace: Search/replace for text
Views: SGML text
Description: WriterStation is a native SGML editor which prompts valid elements and attributes. The document can be parsed interactively or in batch mode. It supports start and end tag minimization. Tables are created adhering CALS standards. The user interface can be configured by the user.

202. XML

Name and version number: LT XML

Contact information:
- Language Technology Group, 2, Buccleuch Place, Edinbourgh EH89LW, UK, Tel: +44(131)650 4426, Fax: +44(131)650 4587, Email: M.Moens@ed.ac.uk, URL: http://www.ltg.ed.uk.ac
References:
- Web information
Price: Free for non-commercial purposes
Operating System: Unix
Type: Parser, API tool
SGML support: DTD in, XML in/out
Description: XML contains tools for searching, extracting, translating and sorting XML documents. Tools are pipelined to construct complex systems.(Compare with LT NSL tools).

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203. XML Developer's Toolkit

Contact information:
- Copernican Solution Inc., 1313 Fifth Street SE, Suite 311, Minneapolis, MN 55414, USA, Tel: +1 (612) 379 3608, URL: http://www.copsol.com
References:
- Web information
Price: Not known
Operating System: MS Windows 95/NT, Unix
Type: Parser, API tool
Other programs: SENG/DSSSL Environment, DSSSL Developer's Toolkit, Grove Toolkit, JSPI Toolkit,
SGML support: DTD in, XML in/out
Description: The XML Developer's Toolkit consists of a validating XML parser and APIs to load and access XML documents. The toolkit is implemented in Java and C++. The parsed document is presented as a grove (a set of trees) defined in the DSSSL standard.

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204. XML Parser

Name and version number: Microsoft XML Parser, Alpha 1.0
Contact information:
- Microsoft, URL: http://www.microsoft.com/msword/productinfo/sgml/add/default.htm
- In Finland: Microsoft Oy, Jaakonkatu 2, 01620 Vantaa, Finland, Tel: +358 9 525 501, Fax: +358 9 878 8778, URL: http://www.microsoft.com/standards/xml/xmlparse.htm
References:
- Web information
Price: Not known
Operating System: Unix
Type: Parser
SGML support: DTD in, XML in/out
Description: XML, implemented in Java, validates XML documents and outputs it as a tree. It needs Java Development Kit (JDK 1.0.2 or 1.1.1).

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205. XyVision Production Publisher (XPP)

Contact information:
- XyVision, 101 Edgewater Drive, Wakefield, MA 01880, USA, Tel: +1(617)245-4100, Fax: +1(617)246-6209, Email: info@xyvision.com, URL: http://www.xyvision.com

References:
- Sales information
- Emails from Judy Cox, Xyvision, Inc.
- Web information

Price: Not known
Operating System: Unix, Mac
Type: Page layout program
Other programs: Parlance Document Manager
SGML support: SGML in/out using OmniMark, DTD in
Graphics support: Major formats
Views: SGML text, Formatted text
Printing: Normal File..Print action
Description: XPP has a conversion facility to transform SGML (or any other format) documents to its proprietary form. It stores documents as individual pages whose layout can be interactively modified by au to 16 users. Layouts can be manipulated also in the batch mode. The system has hyphenating, spell checking, index and cross reference generating. The output can be PostScript, Adobe Acrobat PDF or HTML.

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206. YADE

Name and version number: YADE (Yet Another DSSSL Engine)
Contact information:
- URL: http://www.sil.org/sgml/yadeDesc.html
- N. Mikula, Email: nmikula@edu.uni-klu.ac.at, URL: http://www.edu.uni-klu.ac.at/~nmikula

References:
- Web information

Price: Free
Operating System: Ms Windows 95/NT, Unix
Type: Page layout program, Conversion program
Other programs: NXP
SGML support: DTD in, DSSSL in, SGML in/out
Description: YADE, implemented in Java) processes DSSSL specifications using Kawa Scheme engine. It uses NXP parser to validate SGML documents. It supports only the Java Abstract Window Toolkit (AWT) class library as a backend for page layout.

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207. YASP

Name and version number: Yorktown Advanced SGML Parser (YASP) 1.35
Contact information:
- URL: http://gopher.sil.org/sgml/publicSW.html#yasp
- downloading at URL: ftp://ftp.edf.fr/pub/SGML/YASP/, file: yasp-1.35.tar.gz

References:

- Program documentation

Price: Free

Operating System: MS-DOS, MS-Windows 3.11/95/NT, Unix, OS/2

Type: Parser

SGML support: DTD in, SGML in/out

Description: YASP is a C libarary to build either batch-oriented or interactive SGML applications. As a parser it produces an ESIS (Element Structure Information Set) tree from the document. Two sample applications are included to give ideas how to use the library.
