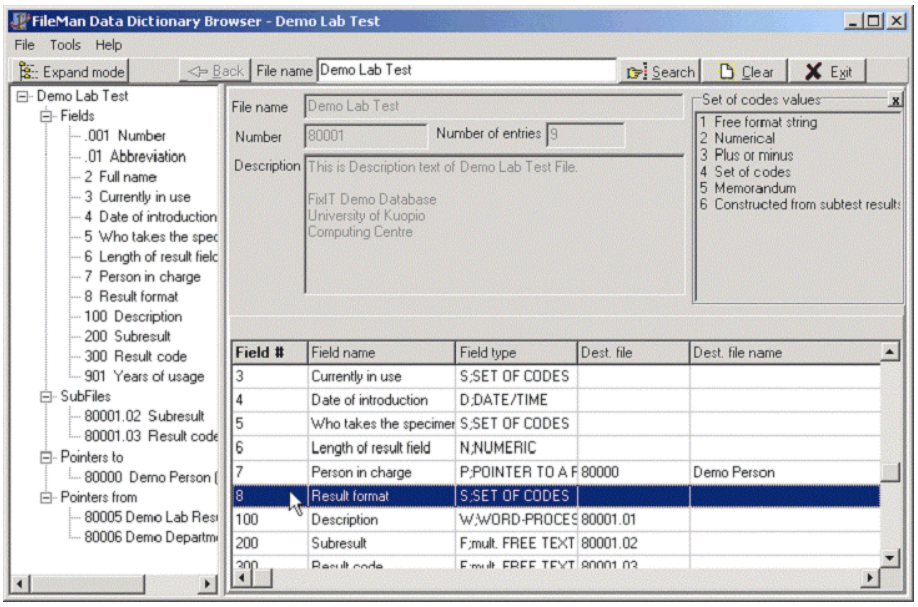
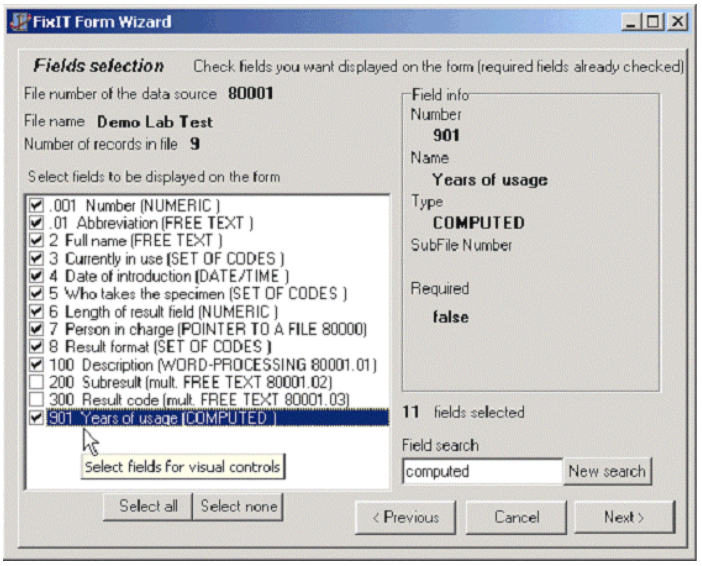
FixIT: Free FileMan-Delphi/Java/web server system development toolkits Aug 2 2001

FixIT is a set of system development toolkits for client/server and web applications. Tools are based on VA's **FileMan** Data Base Management System at the server and currently on Inprise's development tools at the client. The client-server communication is based on VA's Remote Procedure Call Broker. There are three complementary toolkits: **Delphi-FixIT** for building **Windows** client/server applications, **Web-FixIT** for building **Java** applets and applications and **e-FixIT** for building **web** applications with HTML front-ends.

FixIT is particularly intended for modernizing existing departmental information systems in hospitals, as well as for developing new ones.



The FixIT tools **reduce greatly the need of coding** of client/server and web applications for FileMan databases. Due to the generalized functionality, all basic file entry operations are handled automatically by visual components connected to a data source component. All operations can be handled by means of the data source also, without visual components. The data source also contains developer configurable messages to the user, as well as many advanced methods for developer's more advanced needs.



Using the **Form Wizard**, a basic form for a FileMan file, ready to be executed, can be constructed in a matter of minutes. The form contains all fields the developer has selected, basic functionality (for modifying, inserting and browsing file entries) with the necessary buttons for database operations, automatic help (hint texts, help form upon clicking F1), basic print capabilities, record history, user messages etc. **without writing a single line of code**.

The toolkits have been used successfully in a number of projects modernizing FileMan-based applications as well as in building new ones in Finland since 1997 (Delphi-FixIT) and have been continuously developed and enhanced further since. FixIT tools are also used as a basis in a related research & development project, **Component-FixIT**, which is developing a migration strategy, architecture and tools for applications based on reusable business components.

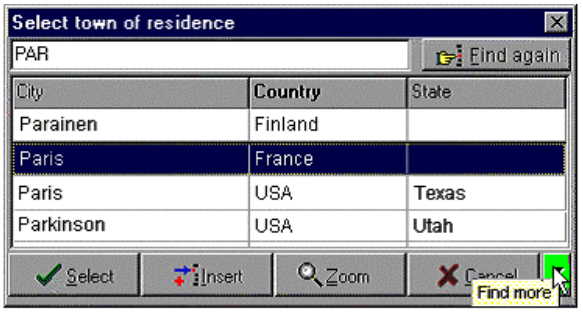
FixIT software is freely available through **http://www.hardhats.org** and FixIT web pages. The tools include hands-on **developer's guide** and **form templates** for quick start as well as a context-sensitive developer **help file** with all components, methods and properties. Additional support is available on the web through the **Hardhats web pages**, Free FixIT **mailing list** and FixIT **faqs**.

FixIT on the web

FixIT web pages: http://www.uku.fi/atkk/fixit/english.html
Free FixIT mailing list and download pages: http://www.uku.fi/atkk/fixit/download/
Web-FixIT demo: http://www.uku.fi/atkk/fixit/web/demo/
e-FixIT demo: http://kettinki.uku.fi/edemo/demo.jsp

The FixIT toolkits include:

- ***Data source component*** *to present any FileMan file with standardized functionality*
  - Automatic, configurable messages, methods like Save, SaveAs, First, AskForSave, GotoHistoryRecord, SetFieldValue etc.
- *A set of data-aware* ***visual components*** *for different FileMan field types, linked to the data source*
  - Selection of components for text, pointer, date/time, set of codes, word processing fields, action buttons etc.
  - Automatic validation of data, checking required fields, enabling fields and operations automatically according to user access etc.
- *Specialized components for* ***file entry look-up and selection, pointer fields etc.***
  - Automatic, configurable look-up windows with a number of developer-defined fields (identifiers etc.), user-defined sorting etc.
- *Support for the* ***LAYGO paradigm*** *of FileMan databases*
  - Insert and Zoom functionality via pointer fields for adding/viewing/modifying records in the pointed-to file
- *Support for* ***hierarchical and logical subfiles*** *(multiple-valued fields and pointing-to files)*
  - A grid display of subfile entries, automatic linking to the master entry (=pointed-to entry in master file) for logical subfiles etc.



- *A specialized set of components for* ***reporting***
  - Support for FileMan's print templates and hard-coded M print routines, print preview, components for selecting the client or server printers, directing the print to a file, a spreadsheet or a word processor
- *A database* ***Form Wizard*** *for fast creation of database forms*
  - Define basic user interface ready to be executed for FileMan files in a matter of minutes without writing a single line of code.
- *Timed database entry* ***locking*** *upon modifying an entry*
  - Automatic locking of an entry when the user starts modifying it, developer-defined timeout to prevent permanent locks
- *Support for FileMan's* ***file-level*** *orKernel's* ***security key-based access control*** *in addition to RPC Broker Sign-on*
  - Read/browse/write/insert/delete access, FMAccessUsed property, KeyCheck method
- *Database definitions and metadata used during* ***design-time*** *and* ***runtime***
  - Property editors connect to the database e.g. to retrieve a list of files or fields, automatic definition of required fields and set of code values, automatic display of identifier fields in configurable messages etc.
- *Methods for* ***checking, moving or deleting pointing-to entries*** *upon deleting a pointed-to file entry*
- *Automatic* ***database-driven field-level and file-level help*** *for applications*
  - Hint texts of visual components, help form for automatic or developer-defined help
- *FileMan's* ***Dialog file*** *utilized for all messages and captions of toolset*
  - Different languages in the Dialog file to create applications with different languages
- *Support for* ***different character sets*** *(8-bit, 7-bit) at the server, automatic conversion to/from the client*

The system requirements for FixIT:

At the server:
FileMan 21 or 22, Kernel 8, RPC Broker Server 1.1 with patches
At the developer workstation (Delphi-FixIT):
Delphi 5, RPC Broker Client software, RPC Broker Developer package
At the developer workstation (Web-FixIT and e-FixIT):
JBuilder 3.5 or higher or another Java JDK 1.1 (JDL 1.3 preferred) compliant development tool, IDE preferred
At the user workstation:
Windows 95, 98, ME, 2000 or NT (Delphi-FixIT)
Java JDK 1.1 compliant browser (Netscape 4.06, IE 4.0 or higher) (Web-FixIT)
HTML compliant browser (e-FixIT)
At the web server (e-FixIT):
Java 2 Enterprise Edition (J2EE) runtime environment

For more information, visit:
http://www.uku.fi/atkk/fixit/english.html
http://www.hardhats.org
Contact:
Juha.Mykkanen@uku.fi (Delphi-FixIT)
Marko.Sormunen@uku.fi (Web-FixIT, e-FixIT)
Hellevi.Ruonamaa@uku.fi (server)
Mikko.Korpela@uku.fi (project management)

University of Kuopio
Computing Centre
P.O.B. 1627
FIN-70211 Kuopio
FINLAND