



# isCOBOL™ Evolve

## isCOBOL Evolve 2011 Release 3 (R3) Overview

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## **isCOBOL Evolve 2011 R3 Overview**

### **Introduction**

Veryant is pleased to announce the latest release of isCOBOL™ Evolve, isCOBOL Evolve 2011 R3. isCOBOL Evolve provides a complete environment for the development, deployment, maintenance, and modernization of COBOL applications. isCOBOL 2011 R3 includes a new product (Veryant ODBC) and several enhancements including the addition of isCOBOL File Server and isCOBOL Graphical Terminal.

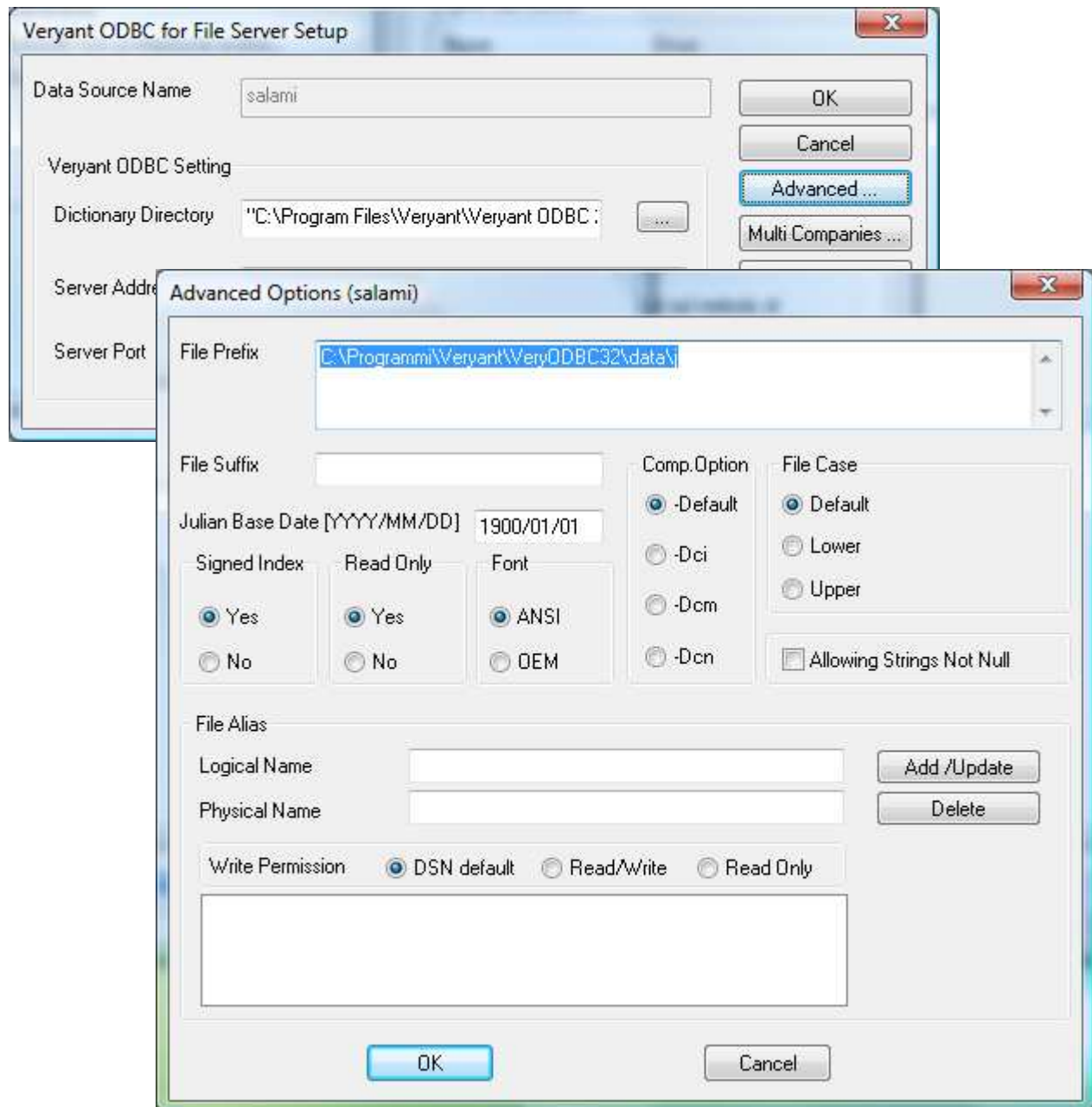
Details on these enhancements and other new features are included below.

### **isCOBOL 2011 R3 Enhancements**

#### Veryant ODBC

The Veryant ODBC product includes a Windows driver that provides SQL access to ISAM indexed data files for all supported file systems including Veryant JISAM and the Micro Focus® Vision file system (formally Acucorp Vision file system). The Veryant ODBC interface enables organizations to benefit from modern PC productivity tools without having to change existing data files.

Based on the Open Database Connectivity (ODBC) standard, Veryant ODBC lets developers retrieve and update indexed data files from many Windows-based applications, including Microsoft Word, Excel, Access, MS Query, Crystal Reports, and any ODBC compliant programming language. These applications can access files whether they reside on the same Windows PC, on a different computer in an enterprise network, or on a Linux®, UNIX®, or Microsoft® Windows® server in a client/server configuration.



### isCOBOL File Server

Included with the isCOBOL Runtime Environment, isCOBOL File Server provides access to files on a remote server for all supported file systems include Veryant JISAM and Micro Focus Vision. This feature can be used with Veryant ODBC to access files on a Linux or UNIX machine, or a remote Microsoft Windows server.

The File Server daemon can be started with the following command:

```
iscserver -fs [-fsport FSPORT] [-hostname host] [-as] [-port ASport] [-force]
```

The following command starts the File Server on the local PC on the default port 10997:

```
iscserver -fs
```

A correct startup will produce a similar output:

```
Application Server (file services) started and listening on port 10997
```

In order to access remote files, client programs must assign their indexed files to the class "com.iscobol.io.DynamicRemote". For example,

```
iscobol.file.index=com.iscobol.io.DynamicRemote
```

Client programs are made aware of the File Server through the configuration properties `iscobol.file.remote.host` and `iscobol.file.remote.port`.

### isCOBOL Graphical Terminal

isCOBOL Graphical Terminal, included with the isCOBOL Runtime Environment, enables users signing in with a terminal emulator such as PuTTY to launch graphical applications from the command line without an X Server or X Desktop client software. With Veryant Graphical Terminal, applications have access to a user's environment variables and home directory, and can use the terminal emulator for stdin, stdout and stderr. Additionally, calls to `SYSTEM` and `C$SYSTEM` run in the terminal emulator. This means that applications can call terminal-based utilities and even full screen terminal-based applications. Character screens display as usual but can also be incrementally graphically enhanced by adding menubars, toolbars, tabs, push-buttons, status bar, and more.

isCOBOL Graphical Terminal can be used by setting the following environment variable after signing in to a UNIX or Linux account with a terminal emulator:

```
export ISCOBOL_DISPLAY=X
```

Then you can run any COBOL program regardless of whether the user interface is graphical or character-based by using the standard command:

```
iscrun PGMNAME
```

To set up the isCOBOL Graphical Terminal, start the isCOBOL Server on a Linux or UNIX machine, and on the client machine run the following:

```
iscclntd
```

A correct iscclntd startup will produce output similar to the following:

```
Starting client listener on hostname: localhost, on display port: 10998, AS port : 10999
```

### Productivity enhancements

#### *Skip to line or paragraph in the debugger*

The ability to skip (or jump) to source code lines while using the isCOBOL Debugger has been added in isCOBOL 2011 R3. The jump command emulates a GO TO statement. To use this feature, programs must be compiled with -dx. The syntax for the jump command in the debugger is:

```
JUMP line-number [file-name] or
```

```
JUMP paragraph-name
```

Ctrl-J can be used to bring up a dialog to select the line or paragraph to jump to.

#### *Pause feature in the debugger*

The Pause feature offers the ability to temporarily pause program execution and break into the debugger during program execution. The syntax for the pause command in the debugger is:

```
PAUSE
```

### *isCOBOL IDE Enhancements*

The isCOBOL IDE now includes a generate button on the toolbar to quickly and conveniently generate a program. Additionally, the isCOBOL IDE also now has been enhanced to read a user's initial workspace settings from a file and gives the user the option to save workspace settings when existing or switching workspaces.

### *Embed COPY statement*

For improved compatibility with other COBOL compilers, the ability to embed a COPY statement in the middle of a source code line in the data division is now available. For example,

```
01 ITEM-1 COPY 'itemldef.cpy'. SYNC
```

### Micro Focus® extend® compatibility

Additional compatibility with Micro Focus® extend® (formerly ACUCOBOL-GT) to further simplify transitions to the isCOBOL platform was added in isCOBOL 2011 R3, including:

- Support for ACUCOBOL-GT compatible KEISEN library routines for adding ruled lines around text fields to mimic the appearance of business forms with characters. This feature improves localization support for Asian markets.
- Support for OPEN (BULK-ADDITION) syntax. This feature improves performance by streamlining the process of writing keys to a file when a record is added.
  - The isCOBOL Compiler supports BULK-ADDITION as option on OPEN and the isCOBOL framework will pass this flag to any supported file system.
- Enhanced Micro Focus AcuBench® / Totem capabilities for importing programs with GUI screen control properties into the isCOBOL IDE.
- The ability to specify cell size and "prompt on program exit" functionality with programs imported into the Import Wizard.
- The ability to preprocess the source file through regular expressions by setting `iscobol.compiler.regexp` property.

Example:

```
iscobol.compiler.regexp="\$ *SET *SOURCEFORMAT *\\\"FREE\\\"""\n\n">>SOURCE FORMAT FREE" \
```



```
"\\$ *END" ">>END-IF" \  
"\\$" ">>"
```

### Improved performance

Up to 60% performance improvement when calling COBOL from other languages such as C, C++ and C#.

### New Library routine support

Support for new libraries routines such as CBL\_CHECK\_FILE\_EXIST, CBL\_DIR\_SCAN\_END, CBL\_DIR\_SCAN\_READ, CBL\_DIR\_SCAN\_START and CBL\_RENAME\_FILE to improve Micro Focus COBOL compatibility.

### Set iscobol.gui.native\_style

The set iscobol.gui.native\_style=true option now more closely matches the native look and feel of Java applications during runtime.

### MOUSE-WHEEL-SCROLL

A new property, MOUSE-WHEEL-SCROLL on paged List-Box and paged Grid is available to configure how many next/previous events are generated by mouse wheel.

### iscobol.menu.altkey\_default

A new configuration property, iscobol.menu.altkey\_default=0, is available to activate menu items without children using ALT+keyletter.