2024

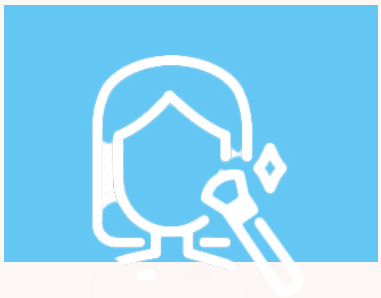
ISSUE 10

QUARTERLY JOURNAL OF VERYANT AND isCOBOL

veryant NEWS

THIS ISSUE

GIFE MAKEOVER



Gife is isCOBOL's Graphical Indexed (and Relative) File Editor. Though usually used to read and modify Jisam file's, it will also give you access to other indexed file formats and even relational databases!

BIG CHANGES

2024R1 GIFE looks very different, with an updated look as well as a lot more functionality with support for multiple 01 levels and a searchable and filterable fast-loading list of records.

Try it now. It's included in isCOBOL Evolve, both the SDK and the IDE.

2024 R1

Extend your Reach with 2024R1 isCOBOL

Veryant's newest version, 2024R1 was released in March. It includes support for Java 21 and Jakarta EE, updates the Eclipse version under our IDE, and improves performance for batch processes in Oracle and DB2

By adding support for Java 21, Veryant's products are now certified with all of Oracle's LTS (Long Term Support) versions.

The isCOBOL Evolve's IDE runs on a newer Eclipse base, version 2023-09(4.29). This adds support for multiple selection in all the text editors, UTF-8 file encoding in Windows, and Microsoft's default dark themed title-bar.

JakartaEE is the newest Java API Framework, used in servlet containers like Tomcat 10 and Glassfish 6. isCOBOL 2024R1 supports both JEE and JakartaEE to give our customers more options for deploying their COBOL servlets, WebServices, WebDirect and WebClient applications. WebDirect also has its own installation setup to keep the install process of both the SDK and WebDirect streamlined.

An SQLJ generator has been added to the ESQL handler in 2024R1. Adding SQLJ code for your Embedded SQL bypasses the JDBC connection to improve your batch performance. Other additions and improvements include Auto Boxing, XML Data maps, logfile and Gife improvements. These are just some of the improvements included in 2024R1. Read the Release Overview or watch the video to learn more.

Veryant's Dynamic Participation in G5+2 Meeting and 2024 Smart City Summit & Expo

We are thrilled to share two significant milestones in our ongoing commitment to technological innovation and international collaboration: Veryant's Contributions at the G5+2 Meeting and 2024 Smart City Summit & Expo.

Strategic Collaboration at the G5+2 Meeting

On March 15, 2024, Veryant joined industry leaders at the G5+2 meeting, a key event that brought together top global IT companies and strategic partners, CIJ and SYSCOM. This meeting was an invaluable opportunity to address the current challenges and opportunities in the IT sector.

Showcasing Innovation at the 2024 Smart City Summit & Expo

From June 19-22, 2024, Veryant participated in the 2024 Smart City Summit & Expo in Taipei, one of the most influential events for smart city solutions. Our presence at the expo highlighted our dedication to driving forward smart, sustainable urban development.

Our participation in the G5+2 meeting and the 2024 Smart City Summit & Expo underscores Veryant's commitment to responsible innovation, partnership with industry leaders, and sustainable development. These events have set the stage for future advancements and stronger industry standards.

Looking Forward

We are excited about the opportunities ahead and will continue to drive forward our vision of creating impactful solutions that enhance the way we live and work.

We'll keep you updated on the progress of these exciting initiatives. Stay tuned for more insights and developments as we continue to collaborate with our global partners to drive innovation and excellence.

For more information, please visit our website or contact us.

Thank you for being a part of our journey towards a smarter, more connected future.

HIGHLIGHTS FROM THE G5+2 MEETING

- **Emerging Technologies**; Focus on AI, BlockChain, IoT and the need to harness these technologies for better business solutions
- **Cybersecurity**; We made commitments made to safeguard data and infrastructure
- **Sustainability**; Explored sustainable practices in IT to minimize environmental impact through efficient operations and green technologies
- **Future Collaboartions;** All pledged ongoing collaboration with Veryant, CIJ, and SYSCOM playing leading roles.

HIGHLIGHTS FROM THE SMART CITY SUMMIT & EXPO

- **Smart City Solutions**; We showed how Veryant solutions are designed to enhance urban environments.
- **Industry Insights**; Discussions of the role of innovative technology in shaping urban landscape
- **Networking Opportunities**; We connected with key stakeholders who share our vision for a smarter, more sustainable future
- **Interactive Demos**; Smart city solutions showing the practical applications of our technology in real-world scenarios.

A New Layout for your COBOL Application

The architecture of Swing is designed so that you may change the Look & Feel (LAF) of your application's GUI. "Look" refers to the appearance of GUI components and "feel" refers to the way the components behave.

The LAF to be used is specified by a configuration property, swing.defaultlaf, that can be set on the command line. The property specifies the name of the main class of the LAF implementation.

There are several LAF implementations available: a couple of them are included in your JRE, other ones can be downloaded from the internet and added to your application as external libraries.

In this article we're going to explore a specific LAF that allows you to easily implement the dark mode feature in your application. It also gives a modern layout to the GUI. Its name is FlatLaf.

The keys for a successful result are:

- Use the J$GETFROMLAF library routine to retrieve the fonts and colors for your controls.
- Set the configuration property iscobol.gui.native_style to true in the configuration so that the framework will not override any LAF style.

The following code honors the first rule and therefore is particularly suitable for our test:

```
working-storage section.
   copy "iscobol.def".
77 k special-names crt status pic 9(5).
   88 esc value 27.
77 win handle of window.
77 win-bg pic s9(9).
77 win-fg pic s9(9).
77 gd-hbg pic s9(9).
77 win-font handle of font.
77 wk-user pic x(32).
77 wk-pwd  pic x(32).

screen section.
01 screen-1.
   03 label transparent
      title "Username:"
      line 3, col 3, size 10 cells
      .
   03 entry-field
      line 3, col 15, size 21 cells
      value wk-user
      .
   03 label transparent
      title "Password:"
      line 5, col 3, size 10 cells
      .
```

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ADD MULTIPLE LANGUAGE SUPPORT

With isCOBOL you can have the same program in a different language by using a resource file.

Step 1: Where you use strings in your program, write the text between brackets, add an "r" before the string, and change all spaces with a different character, for example "_".

Original code:

```
Move "Hello World" to var1
```

Code with resource:

```
Move r"hello_world" to var1
```

Step 2: Create a text file with the name of the resource and the value of the string in the language required. For instance a file called resource_en for English and resource_de for German might have these lines.

English:

```
hello_world=Hello World
```

German:

```
hello_world=Hallo Welt
```

For more information check our multilanguage sample under ***sample\multilanguage*** folder.

WHAT YOU CAN (AND CAN'T) DO WITH CONTROL PROPERTIES

Most of isCOBOL's graphical control properties can be specified at the display of the control, inquired with an INQUIRE statement and changed with a MODIFY statement.

However, some properties can't be changed after the control has been displayed, other ones can't be inquired and a few can be used only through a MODIFY statement.

The documentation includes a summary where all the properties are listed along with the operations that are permitted. This summary can be found in Table 5 at

isCOBOL Evolve/Appendices/ Graphical Control List, Table 5.

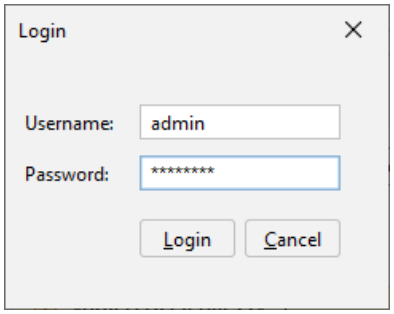

```
       03 entry-field secure
          line 5, col 15, size 21 cells
          value wk-pwd
          .
       03 push-button title "&Login"
          line 7.5, col 15, size 10  cells
          exception-value 100
          .
       03 push-button title "&Cancel"
          line 7.5, col 26, size 10 cells
          cancel-button
          .
procedure division.
main.
    call "J$GETFROMLAF" using jget-laf-color
                        "Panel.background"
                        win-bg.
    call "J$GETFROMLAF" using jget-laf-color
                        "Panel.foreground"
                        win-fg.
    call "J$GETFROMLAF" using jget-laf-font
                        "Label.font"
                        win-font.
    display floating graphical window
            title "Login"
            lines 10, size 40
            control font win-font
            background-color win-bg
            foreground-color win-fg
            handle win.
    display screen-1.
```

By running the program with the default system LAF, the GUI appears like this:

After downloading the FlatLaf library (flatlaf-3.4.jar at the time this article is written) and copying it to the jars directory of the isCOBOL SDK, we can run the program as follows:

```
iscrun -J-Dswing.defaultlaf=com.formdev.flatlaf.FlatLightLaf -J-Discobol.gui.native_style=1 LOGIN
```

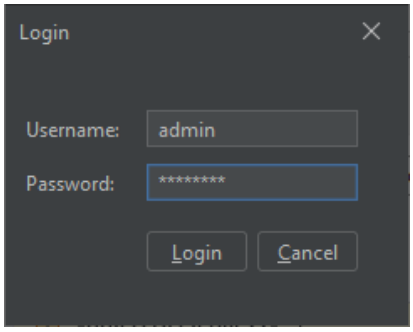
The command will produce the following GUI:



We see a more modern look and the active text field border colored in blue.
And now, let's switch to the dark mode by just changing the LAF class name in the command:

```
iscrun -J-Dswing.defaultlaf=com.formdev.flatlaf.FlatDarkLaf -J-Discobol.gui.native_style=1 LOGIN
```

The command will produce the following GUI:



For more information on the FlatLaf Look & Feel and to download the libraries, refer to the official website https://www.formdev.com/flatlaf/

Have You Seen This?

New Knowledge Base (KB) Articles

Managing the order of the alternate keys in an indexed file
How to add helpful options to the Status-Bar control
How to get information about the end user in a WebClient connection
How to read QR codes

New YouTube Videos

2024R1 New Features

Evolution, without revolution

Contact Us

For supported customer email us at **support@veryant.com**

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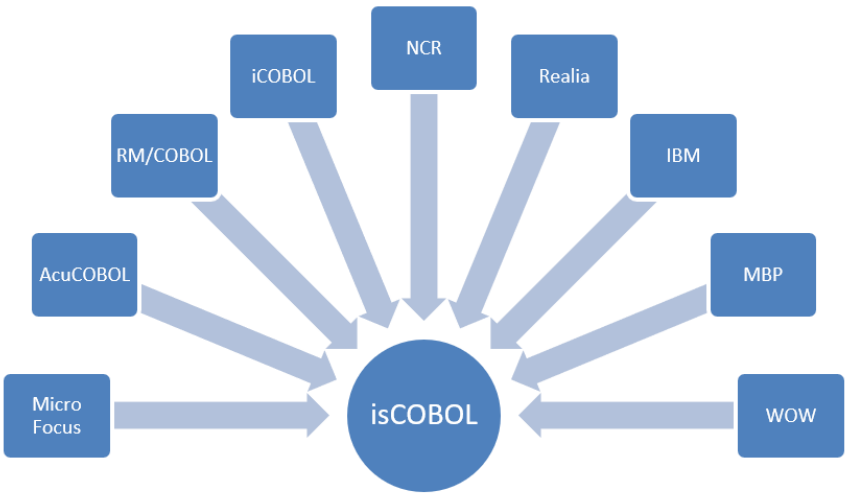
As always, 2024R1 contains multiple compatibility additions – as we continue to make your conversion process as smooth, quick, and pain-free as possible.



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