Running isCOBOL Native Components on Linux Systems with Older glibc Versions

Overview

isCOBOL native components for Linux are built against specific glibc versions. Starting with isCOBOL 2024 R1, the 64-bit Linux native components require glibc 2.34.

This requirement applies to native executables and libraries included with isCOBOL, such as:

- trun (TurboRun)
- fscsc (c-tree file connector)
- rmc (RM file connector)
- libdyncall.so and libdyncall_n.so (libraries used to call C functions)

If the Linux system has an older glibc version, these components may fail to run or load.

glibc Requirements

The following table shows the glibc versions included in the corresponding Red Hat Enterprise Linux releases:

Linux Distribution	glibc Version
RHEL 7	2.17
RHEL 8	2.28
RHEL 9	2.34
RHEL 10	2.39

You can check the glibc version installed on your Linux system with:

ldd --version

Recommended Approach

The recommended approach is to use a supported Linux distribution with a glibc version that meets the requirements of the isCOBOL release being installed.

Upgrading the operating system is preferable to upgrading glibc independently, since glibc is a fundamental system library and changing it may affect other applications running on the server.

Workaround

If upgrading the operating system is not currently possible, an alternative is to use older versions of the affected native components from a previous isCOBOL release that is compatible with the installed glibc version.

For example, the trun executable from isCOBOL 2023 R2 can be used with an isCOBOL 2026 R1 application server. The older executable can be copied from the $ISCOBOL/bin directory of the previous installation into the newer installation.

The same approach may be considered for other native executables and libraries, provided their compatibility with the target isCOBOL installation has been verified.

Important considerations:

- This is a workaround, not a recommended or officially supported approach.
- Older components may contain issues or limitations that have already been fixed in newer releases.
- Compatibility should be verified individually for each component and target environment.
- Continuing to use an operating system that is no longer supported is not recommended. An operating system upgrade should be planned whenever possible.

Online URL: https://support.veryant.com/phpkb/article.php?id=364