IDOL

Software Version 12.10

Linux

FIPS Enablement Technical Note



Document Release Date: October 2021 Software Release Date: October 2021

Legal notices

Copyright notice

© Copyright 2015-2018 Micro Focus or one of its affiliates.

The only warranties for products and services of Micro Focus and its affiliates and licensors ("Micro Focus") are as may be set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Micro Focus shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

Documentation updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

To check for updated documentation, visit https://www.microfocus.com/support-and-services/documentation/.

Support

Visit the MySupport portal to access contact information and details about the products, services, and support that Micro Focus offers.

This portal also provides customer self-solve capabilities. It gives you a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the MySupport portal to:

- · Search for knowledge documents of interest
- Access product documentation
- · View software vulnerability alerts
- Enter into discussions with other software customers
- · Download software patches
- · Manage software licenses, downloads, and support contracts
- · Submit and track service requests
- Contact customer support
- · View information about all services that Support offers

Many areas of the portal require you to sign in. If you need an account, you can create one when prompted to sign in. To learn about the different access levels the portal uses, see the Access Levels descriptions.

IDOL (12.10) Page 2 of 9

Contents

| Introduction | 4 |
|-----------------------------|-----|
| Prerequisites | 5 |
| Install IDOL | 6 |
| Configure IDOL | . 7 |
| Verify FIPS Mode | 8 |
| Send documentation feedback | 9 |

IDOL (12.10) Page 3 of 9

Introduction

This technical note describes how to set up and run Micro Focus IDOL in a Federal Information Processing Standard (FIPS) compliant system.

IDOL uses a cryptographic module which complies with Federal Information Processing Standard 140-2 (FIPS 140-2). This standard defines the technical requirements that Federal Agencies must use for cryptographic-based security systems that protect sensitive or valuable data.

To comply with FIPS 140-2, Micro Focus IDOL:

- integrates validated and NIST-certified third party cryptographic modules, and uses the modules as the only providers of cryptographic services.
- · uses FIPS-approved cryptographic functions.
- uses FIPS-approved and NIST-validated technologies
- uses security controls defined in NIST 800-53 (or applicable security controls such as DoD 8500.2), prescribed for cryptographic modules by FIPS 140-2 and applicable for Micro Focus IDOL design, implementation, and operation.

Micro Focus IDOL FIPS mode is available only on FIPS-enabled Red Hat Enterprise Linux (RHEL) 7 and RHEL 8 platforms.

When using SSL in FIPS mode, all encrypted ACI communication between all IDOL components and HTTPS traffic between IDOL and third parties (where SSL is supported by the third party) is secured using the FIPS validated OpenSSL Module.

The following sections describe how to install IDOL and enable FIPS mode in your system.

IDOL (12.10) Page 4 of 9

Prerequisites

This section describes the prerequisites for installing IDOL in a FIPS-compliant system.

RHEL 7

You must install the FIPS version of IDOL on a Red Hat Enterprise Linux 7 platform that has FIPS mode enabled. For information about how to enable FIPS in RHEL7, see the following section of the Red Hat documentation:

https://access.redhat.com/documentation/en-US/Red_Hat_Enterprise_Linux/7/html/Security_Guide/chap-Federal_Standards_and_Regulations.html

RHEL 8

You must install the FIPS version of IDOL on a Red Hat Enterprise Linux 8 platform that has FIPS mode enabled. For information about how to enable FIPS mode, refer to the Red Hat documentation.

You must also install the package compat-openss110. You can do this by running the following command:

yum install compat-openssl10

IDOL (12.10) Page 5 of 9

Install IDOL

To install and use IDOL in FIPS mode, you must download the FIPS-enabled version of the installer or component ZIP package. The packages have a file name of the form:

Product_Version_LINUX_X86_64_RHEL7FIPS.[exe|zip]

Where *Product* is the product name, and *Version* is the version number.

For details of how to install your IDOL components, refer to the *IDOL Getting Started Guide*, or the documentation for the component that you want to install.

IDOL (12.10) Page 6 of 9

Configure IDOL

After you install the FIPS-enabled IDOL components, you must configure each component to use FIPS mode, and configure SSL communications for IDOL.

NOTE: Even after you install the FIPS-enabled version of the component, you must explicitly configure FIPS mode to enable the functionality.

You can use the following procedure for any IDOL component for which a FIPS-enabled package is available.

To configure IDOL in FIPS mode

- 1. Open the component configuration file in a text editor.
- 2. Find the [Service] section, and add the FIPSMode parameter, set to True. For example:

[Service]
FIPSMode=True

 Configure SSL for your IDOL platform. You must configure SSL for incoming connections, and for connections between your IDOL components. All connections between your servers must be SSL encrypted (that is, you must configure SSL for both incoming and outgoing communications, where applicable).

For details of how to configure SSL, refer to *IDOL Expert*, or the Administration Guide for your product. For example:

[Server]
SSLConfig=SSLOptions

[SSLOptions]
SSLMethod=TLSV1.2
SSLPrivateKey=/path/to/privatekey
SSLCertificate=/path/to/certificate
SSLCheckCommonName=True
SSLCACertificate=/path/to/certificate.authority.certificate

- 4. Save and close your configuration file.
- 5. Restart the component for your changes to take effect.

IDOL (12.10) Page 7 of 9

Verify FIPS Mode

After you install and configure your IDOL components, you can start the servers.

After the servers have started, you can verify that the component is running in FIPS mode by checking the application log. By default, this file is in the logs subdirectory of your component directory, with the file name application.log.

For example:

/opt/IDOL/IDOLServer-12.0.0/content/logs/application.log

When the component is successfully running in FIPS mode, this log has the following information line:

Running with FIPS mode active

IDOL (12.10) Page 8 of 9

Send documentation feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on Micro Focus IDOL 12.10 FIPS Enablement Technical Note

Add your feedback to the email and click **Send**.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to swpdl.idoldocsfeedback@microfocus.com.

We appreciate your feedback!

IDOL (12.10) Page 9 of 9