ChangeMan® ZMF for Eclipse 8.2 Patch 1 Readme

27 March 2019

This Readme file contains information you should know before you install or use ChangeMan ZMF for Eclipse 8.2 Patch 1. The information in this Readme file is cumulative with ChangeMan ZMF for Eclipse 8.2, 8.1.4, 8.1.3, 8.1.2, 8.1.1.01, 8.1.1, 8.1.0.01, and 8.1. Change bars in the left margin mark the information that is new with ChangeMan ZMF for Eclipse 8.2 Patch 1.

General Information

ChangeMan® ZMF for Eclipse is an integrated development environment (IDE) plugin for the open-source ECLIPSE™ Workbench and for IBM® Rational® Developer for z Systems®/IBM® Developer for z Systems® (RDz/IDz), which is built on Eclipse. ChangeMan ZMF for Eclipse enables developers to use the software change management functions of ChangeMan ZMF directly from within these desktop application development environments.

> **IMPORTANT!** If you are currently using Oracle® Corporation's JDK/JRE, please be advised that Micro Focus supports AdoptOpenJDK as a JDK/JRE environment. Micro Focus does not embed or ship AdoptOpenJDK with its products. However, we recommend that you install the AdoptOpenJDK, as we have tested and certified our products against this JDK.
>
> Do not reconfigure products that run on the mainframe and use IBM's mainframe-based JRE or an IBM product such as WebSphere®, which is bundled with IBM's JRE. These products will work with ChangeMan ZMF and ZMF for Eclipse without reconfiguration.

Release Summary

You must upgrade your ZMF for Eclipse client to version 8.2 Patch 1 before you can use it with a ChangeMan ZMF 8.2 Patch 1 or Sernet Server 8.2 Patch 1 started task.

You must also install the 8.2 Patch 1 version of ZMF Web Services, which are available with the ZMF Client Pack 8.2 Patch 1 product from the Product Updates area of the Micro Focus SupportLine website.

Refer to "Installation Considerations" on page 27 for information about installing the ZMF for Eclipse client and the ZMF Web Services.

The chief features of ZMF for Eclipse 8.2 Patch 1 are summarized in "New Features in ChangeMan ZMF for Eclipse 8.2 Patch 1" on page 3.

Customer Support

- **Online Support** — The Micro Focus SupportLine website at http://supportline.microfocus.com provides an easy way for customers to manage their support cases, download software patches, or search the Knowledgebase for the latest technical information about our products at any time.

- A user ID and password are required to access the Micro Focus SupportLine website. To obtain a user ID and password, sign up online or contact Customer Care by email or telephone.

- **Telephone Support** — Telephone contact numbers for Customer Care are posted by region at the following URL:

    https://www.microfocus.com/serena/support/

  No password is needed to access Customer Care contact information.

- **Email Support** — Customers can send support requests by email to customercare@microfocus.com.

- **Authorized Support Representative** — Some support contracts specify that support calls will be centrally managed within the customer organization. This practice enables related issues to be aggregated across multiple customer sites or functional groups, and it ensures accountability for the satisfactory resolution of open issues. You should determine whether you have such a support contract before contacting Customer Care. If you do have such a contract, submit your support request to the designated support manager within your organization and arrange for that person to contact Customer Care.

Third-party Tools

For more information regarding third-party software copyrights and license information, refer to the following location (login required): https://supportline.microfocus.com/licensing/attributionreport.aspx.

New Features and Fixes

This section describes the new features included in ChangeMan ZMF for Eclipse 8.2 Patch 1, 8.1.4, 8.1.3, 8.1.2, 8.1.1, 8.1.0.01, and 8.1.

Fix logs for each release are maintained in the Knowledgebase on the Micro Focus SupportLine website at

https://supportline.microfocus.com/Knowledgebase.aspx

A link to the fix log for ChangeMan ZMF for Eclipse 8.2 Patch 1 is provided in the section titled "Fixes in ChangeMan ZMF for Eclipse 8.2 Patch 1" on page 4 below. You can browse the full text for each fixed issue online at any time.

> **NOTE** You must have a user account to view items in the Knowledgebase. Register online for a free account if you do not already have one. See "Customer Support" on page 2.

New Features in ChangeMan ZMF for Eclipse 8.2 Patch 1

Default Value Remembered For Displaying BAS And D/A Packages In Component History Displays.

Provided the ability to default the value for displaying BAS and D/A packages in component history displays. The value used last time is remembered and used again next time selected.

Relink is available for reserved library type name of LCT

Client Pack now supports relinks being generated / initiated from an LCT.

The Checkout View Does Not Display Failed Checkouts

Checkout failures will no longer be shown in Checkouts View

User Preference Available to Show Changes After Edits

A user preference has been created to enable/disable this feature. The new preference option is displayed as "Display Comparison Report after Component Edit". When this is set, a comparison report will be displayed when the editor is closed using the standard Eclipse Comparison tool.

ZDDOPTS EOPTIONS Now Contains The Browselisting Option

The new Browselisting Option can be used to enable multiple LISTING lib types to be associated to a SRC lib type.

Checkouts To Staging (Non-personal) Now Included In The Checkout View

Checkouts view now will include staging checkouts.

Option To Allow Freeze To Issue Notification When JCL Build Complete

A new option has been added to the Freeze process to enable monitoring of the Install JCL Build process. This will notify the user when the process is completed via a message window reporting that the package installation build service completed.

A Second Checkout For Same Component In A Package Now Available

If a second checkout for a component in a given package is requested, then the user will be prompted to confirm the checkout if an overlay situation exists (if the confirm overlay flag is set).

Easier to define USS files

It is now easier and more intuitive to filter the name under USS files, and an example for users is shown. We now offer the user a choice of filters to use, and now using the filters it is much easier to define new USS files.

Fixes in ChangeMan ZMF for Eclipse 8.2 Patch 1

You can access a list of defects that have been fixed in ChangeMan ZMF for Eclipse 8.2 Patch 1 at the following location on the Micro Focus SupportLine website:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=CMZDD_8.2_Patch_1_RESOLVED&channel=DEFECTS&token=0dfb08892323462589a923383764ab3b

New Features in ChangeMan ZMF for Eclipse 8.2

ZMF for Eclipse Now Supports Multi-Factor Authentication

If you have enabled IBM's Multi-Factor Authentication (MFA) to process user logons, ChangeMan ZMF and the ChangeMan ZMF Client Pack (ChangeMan ZDD and ChangeMan ZMF for Eclipse) will support it. This support is transparent to the ZMF, ZDD, or ZMF for Eclipse user.

New Detach/Attach Package Dialog

A new **Detach/Attach Package** dialog enables you to move an ZMF Enterprise Release Option (ERO) package from one release to another release.

New Test Package Integrity Option

A new Test Package Integrity option is available. From a list of packages, right click on the desired package and select the Test Package Integrity option from the list of choices.

This function compares change package component meta-data and the physical contents of the staging libraries, and detects out-of-sync meta-data with members such as meta-data and no member or member and no meta-data.

This function is also executed when the audit process is executed. Integrity failures are reported by the appropriate audit error messages in that case.

Component Query Enables Additional Operations Against Listed Components

If you select a component from a list, more processing operations are available than in previous releases.

ZDDOPTS List Validation Is Now Available

A List function for SRC members is now provided within ZDDOPTS.

A Data Validation Option Has Been Added to Preferences

A Data Validation preference has been added to ZMF for Eclipse to validate code pages during download/upload. If this preference is set, the data stream is validated for download and upload processing. If the data cannot be returned to the originating code page, a message is issued and the file is marked as read-only.

ZMF for Eclipse Supports the Global Notification File Facility

The ability to view the Global Notification File has been added at the server Level. Additionally, if the administrator has set the flag to force users to read the global notification file during signon to ZMF, the file is displayed after the user successfully connects. ZMF for Eclipse keeps track of the update date/time of the notification file and only displays the file when it has been updated.

ZMF for Eclipse Supports Additional Data Translation Options

Data translation options can now be defined in a new ZDDOPTS member CODEPAGE. CODEPAGE applies only to ZMF for Eclipse.

Displays of Eclipse Properties Have Been Improved

Many of the property views have been updated. Categories have been set up to make the displays easier to read.

Package Component List Wizard Now Includes the Package Approvers List

Approval List is now displayed, in read-only mode, for all packages.

You Can Now Recompile a Source Component Listed for a Package

A *Recompile* option has been added to the list of functions available when you select a source component that is listed for a package. This enhancement permits you to change the *Recompile* option to be either from baseline 0 or from a valid promotion level.

Component Check-Out Location Is Now Displayed in Check-Out Views

The location from which a component has been checked out (that is, baseline, promotion, package, or release area) is now given on check-out view displays.

ZMF for Eclipse Supports the MFS Editor

All ZmfFileStreams are now written to local files before edit. You can now successfully use many editors (XML, HTML, MFS Editors) that did not process Eclipse File System (EFS) resources properly in earlier releases.

You Can Now Set a Preference To Display ZDDOPTS Parsing Errors in a Dialog

In previous releases and in ZMF for Eclipse 8.2 as well, a message is written to the Eclipse error log for any errors encountered during the processing of a ZDDOPTS member. An option can now also be set through Eclipse Preferences to notify you by means of a dialog when a ZDDOPTS error is encountered.

ZDDOPTS Member EOPTIONS Is Enhanced To Support ChangeMan ZMF Exit CMNEX035

This enhancement permits ZMF4ECL to honor the processing defined in ChangeMan ZMF exit CMNEX035. This processing disables command processing for the selected library type. (You can still use the ZDDOPTS LIBTYPE member to control the display of library types.)

The ZDDOPTS EOPTIONS member has been updated to permit you to disable CMNEX035 with the EXIT35=N option. CMNEX035 is enabled by default:

EXIT35 Setting	Meaning
EXIT35=Y	Check the CMNEX035 specifications to determine how to process library types in ChangeMan ZMF for Eclipse. EXIT35=Y is the default if this option is not specified.
EXIT35=N	Do not check the CMNEX035 specifications to determine how to process library types in ChangeMan ZMF for Eclipse.

Preference To Set LRECL Validation Is Now Available

A new Preferences setting is available to advise you if records uploaded to a mainframe data set are longer than the LRECL defined for that data set. To turn this preference on or off:

- Bring up the Preferences dialog.

- Select ZMF/Eclipse.

- Select Data Validation.

- Select (or deselect) the Validate Editor LRECL checkbox.

All ZMF for Eclipse Processes Now Use Eclipse Command Infrastructure

In previous releases, ZMF for Eclipse used a mix of Eclipse "Actions" and "Commands" to implement various processes. In ZMF4ECL 8.2, all of these processes are implemented as Eclipse "Commands".

This enhancement provides consistency across views. That is, the various views now display the same options for displayed content. For example in the Serena Explorer view, a Package will have a number of options displayed on the context menu. The Package Query view will now display the exact same context menu.

Eclipse defines many common commands (for example, New, Delete, Rename) that ZMF4ECL now uses. For example, ZMF4ECL now implements the New command for many resources (including packages, data sets, and components).   Key bindings are inherited so that CTRL-N (for New) is displayed on any context menu and this key sequence will execute the New command without the context menu being displayed.

This consistency extends to key bindings, context menu displays, and ZMF4ECL commands. Use Eclipse Preferences to map shortcut keys to various Eclipse commands:

- Bring up the Preferences dialog.

- Select Keys.

ZMF for Eclipse Now Includes Dialogs To Display the Reasons for Backout, Reject, and Revert Operations

A Backout Reasons, Reject Reasons, and Revert Reasons option has been added to all package displays. If you select one of these options, the reason for the selected operation is displayed.

The Compare-to Baseline/Promotion Function Has Been Enhanced

In past releases, you could not compare a component to baseline or promotion image unless the component resided in a staging library. You can now perform the compare operations for components that reside in a personal or staging data set, as appropriate.

In the comparison display, the target baseline-0 or baseline-1 levels; or target promotion level, site, and library name are also displayed. You can also compare the data set image that resides in the target baseline with the target promotion library image.

The Definition and Use of the V*nn* User Variables Has Been Standardized

ZMF4ECL honors the settings for the Package User Variables and Component User Variables that are selected in ZMF global administration on the target server.

ZMF4ECL Now Has a Batch Freeze Option

ZMF4ECL now provides a batch freeze option and supports the FREZ0002, FREZ0102, FREZ00UV, and FREZ01UV High-Level Language Exit (HLLX) points in ChangeMan ZMF.

The Number of Components You Can Check Out with ZMF4ECL at One Time Is Limited

This enhancement enables you to set limits on the number of components that can be checked out at the same time with ZMF4ECL. These limits are defined in the CHECKOUT member of ZDDOPTS. The CHECKOUT member of ZDDOPTS has the following new element:

```
<components warn="50" max="100" />
```

The <components> element is a direct child of the <options name="CHECKOUT"> element, and applies globally, regardless of which profile is selected.

There are two limits:

- Warn

  If you exceed this limit, you get a warning prompt when you press the "Finish" button, and you have to confirm the check out.

- Max

  If you exceed this limit, the check-out operation is diagnosed and not allowed.

The <components> element is optional, as are both the "warn" and "max" attributes. If "warn" or "max" is not specified, there is no limit.

The "warn" value is ignored if it is greater than or equal to the "max" value.

You Can Now Set a Preference To Open a Component for Edit When You Double Click on It

The following Preferences option is now available:

___ Open for EDIT on Double Click (Staging only)

If you select this option, a component is opened in edit mode if you double click on it. You can also choose the default action to take if Edit is not available:

Edit not available action:

You can select one of the following choices:

- Browse

- Notify

- Ignore

You Can Now Launch the Build Process upon Closing the Editor

The following new option is available under ZMF/Eclipse > Settings:

___ Launch Build on Editor Close

If selected, the Build process is initiated automatically after you close the editor.

If this setting is not selected, the target component is saved and the editor is closed, but the Build process is not automatically initiated.

ZMF4ECL Now Returns Details of a Local File Checkin to HLLX BULD0102

ZMF4ECL now returns the details of a local file check-in operation in the following variables of High-Level Language Exit (HLLX) BULD0102:

BULD0102 Variable	Description
inputDataset	Name of the local file.
inputDSorg	Organization of the local file.

Fixes in ChangeMan ZMF for Eclipse 8.2

You can access a list of defects that have been fixed in ChangeMan ZMF for Eclipse 8.2 at the following location on the Micro Focus SupportLine website:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=CMZDD_8.2_RESOLVED&channel=DEFECTS&token=7a359cd986774beab9015d3ac25fab9e

New Features in ChangeMan ZMF for Eclipse 8.1.4

You Can Now Configure JOB Card Parameters

You can now configure the parameters for JOB cards in the ZMF for Eclipse plugin. Access the Preferences > ZMF/Eclipse > Jobcard Options dialog.

You Can Now Display the Encryption Status of a Data Set

IBM has introduced a data set encryption facility in z/OS 2.3. You can now display the encryption status of a data set in ChangeMan ZMF for Eclipse 8.1.4.

The Data Sets Properties dialog has been updated to include the Encrypted property. The Encrypted property value will be displayed as either Y (yes) or N (no).

ZMF4ECL Supports PDSE Version 2 Data Sets

The Data Set Properties dialog now displays the PDSE type (V1 or V2).

The Data Set Allocation dialog permits you to specify PDSE V2 and MaxMemberGenerations. Additionally, the dialog verifies the max generations against the max value that your installation has specified for this feature.

PDSE V2 will be disabled if your installation has disabled the feature.

You Can Update Component User Options for Like-Other Library Types

You have been able to display user options in earlier ChangeMan ZMF for Eclipse releases. With release 8.1.4, you can now update the user options as well. See the Build User Variables dialog. For example:

Fixes in ChangeMan ZMF for Eclipse 8.1.4

You can access a list of defects that have been fixed in ChangeMan ZMF for Eclipse 8.1.4 at the following location on the Micro Focus SupportLine website:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=CMZDD_8.1.4_RESOLVED&channel=DEFECTS

New Features in ChangeMan ZMF for Eclipse 8.1.3

HLLX Functions Are Enhanced

ZMF for Eclipse 8.1.3 has added the following support for the High-Level Language Functional Exits (HLLX) that are defined for the target ZMF server:

- The Component Delete dialog has been updated to call HLLX exit BULD01DL. BULD01DL will be called for every component selected. The Build wizard is also generally enhanced to accommodate the functioning of all the HLLX Build function exit points.

- Scratch and Rename Component dialogs have been updated to call HLLX SCRN0101, SCRN0102, and SCRN0105 exits.

- The check-in process was updated to use a new check-in wizard. As part of this process calls are made to the following HLLX exit points: BULD0002, BULD0102, BULD0103, BULD0004, BULD0104, BULD0005, BULD0105, BULD00US, and BULD01US.

New Method Is Used To Determine the Editor To Use with a ZMF Component

The new LANGMAP member of the ZDDOPTS library provides a mapping of ZMF language names to Eclipse File extensions. This mapping identifies the editor to be invoked to process a given component.

The facility can be enabled or disabled through the Preferences dialog. The facility is enabled by default.

Smart Editing Can Now Be Applied to Browsing Sessions

Smart editing sessions can now be opened to browse a component with an editor that is appropriate for the component source language. A new preference on the Smart Editor Integration page is available to turn on this support.

Selected ZDDOPTS Members Have a New Name Attribute

The <profile> element in the following ZDDOPTS members have new "name" attribute:

- AUDIT

- CHECKOUT

- PKGCREAT (used for both Package Create and Package Update)

- PROMOTE

- DEMOTE

Attribute	Description	Multiple Values	Value
name	Profile name, enclosed in quotation marks	No	Value, enclosed in quotation marks. Values are not case sensitive.

The "name" attribute can be used by an HLLX exit to select a specific profile. Multiple profiles can have the same name, in which case the first matching profile will be selected. For example, assume the following profiles are defined:

<profile name="Profile1" application="DEMO TEST">

<profile name="Profile1" application="*">

<profile name="Profile2" application ="DEMO">

<profile name="Profile2" application ="TEST">

<profile name="Profile2" application ="*">

If an HLLX exit sets the "optsProfile" to "Profile2", the third profile is selected if the application is "DEMO", the fourth profile is selected if the application is "TEST", and the last profile is selected if the application is anything else.

A profile that contains no "name" attribute will match any name. ChangeMan ZMF for Eclipse always selects the first matching profile. Therefore, unnamed profiles should always be placed after the named profiles.

The profile name can be set from one of the user options HLLX preprocessing exit points, *00PU or *00UV.   Any change to the profile name from the HLLX post-processing exit points, *01PU or *01UV, will be ignored.

New Name and Function Attributes Are Available for the BUILD Profile

The <profile> element of the BUILD member of the ZDDOPTS library has two new attributes:

Attribute	Description	Multiple Values	Value
name	Profile name	No	1-8 characters
function	Build functions	Yes	For example, "Build" "Recompile" "Relink"

The values are not case sensitive. An example:

<profile name="Profile1" function="Build Recompile">

The function attribute can be used to select different profiles based upon the type of build operation (Build, Recompile, Relink). You can specify more than one function for a profile, if it is to be used for more than one type of build operation. If no function attribute is specified, the profile can be selected for any type of build operation. Multiple values should be separated by spaces.

The name attribute can be used by an HLLX exit to select a specific profile. Multiple profiles can have the same name, in which case the first matching profile is selected.   For example, given the following profiles:

<profile name="Profile1" language="ASM">

<profile name="Profile1" language="COB">

<profile name="Profile2" language="ASM">

<profile name="Profile2" language="COB">

<profile name="Profile2" language="*">

If an HLLX exit sets the "optsProfile" to "Profile2", the third profile is selected if the language is "ASM", the fourth profile is selected if the language is "COB", and the last profile is selected if the language is anything else.

If the profile contains no name attribute, it will match any name. The ZMF for Eclipse client always selects the first matching profile. Therefore, unnamed profiles should always be placed after the named profiles.

An HLLX exit can set the profile name at any point prior to the display of the Other Options page.

Changes to the profile name from one of the user options post-processing exits BULD01US or BULD01UV will be ignored. At that point, the user has already pressed Finish, and changing profiles after the fact would serve no purpose.

New User Options Check Boxes Have Been Added to the Build Wizard

The Build Settings page of the Build wizard has two new check boxes that can be used to display or suppress display of user options and variables:

Check Box Text	Description	HLLX Tag
Display other options	Displays userOption* fields	extUserVars
Display user variables	Displays userVariable* fields	userVariables

You can use these check boxes to limit what is included on the Other Options page of the Build wizard. If neither box is checked, the Other Options page is not displayed.

Both check boxes will be unchecked and disabled (grayed out) if there is no ZDDOPTS BUILD member.

The check boxes are initially checked or unchecked according to their state the last time you used the Build wizard. Their state is remembered so that you do not have to check or uncheck them every time you use the Build wizard.

If the check boxes are enabled, the corresponding HLLX elements can be used to override the initial check box settings from an HLLX preprocessing exit.

Changes to the HLLX extUserVars and userVariables fields are ignored for post-processing exits on the Build Settings page.

There is also a ZMF Global Administration option that can be used to enable or disable the extended component user options. This option can be set in ISPF with option A.G.1 (part 5). The option is labeled Enable Component User Variables. If the option is disabled, the fields named UserOption0101 – UserOption7205 will not be included in the list on the Other Options page.

Selected Wizards Can Now Display User Variables

Wizards that have an "Other options" page for user variables have a new check box that can be used to show or hide the user variables page:

Check Box Text	Description	HLLX Tag
Display user variables	Displays userVariable* fields	userVariables

The following wizards have this check box:

Wizard	Associated ZDDOPTS Member
Audit	AUDIT
Check Out	CHECKOUT
Promote	PROMOTE
Demote	DEMOTE

If box is not checked, the "Other options" page is not displayed.

The check box will be unchecked and disabled (grayed out) if there is no corresponding ZDDOPTS member: user variables cannot be displayed without information from that associated ZDDOPTS member.

For Check Out, user variables are displayed for batch check out only. If a batch check out is not being performed, the check box is unchecked and disabled.

The check box is initially checked or unchecked according to its state the last time you used the wizard. Its state is remembered so that you do not have to check it or uncheck it every time you use the wizard.

The HLLX userVariables field can be used to override the initial check box settings from an HLLX preprocessing exit if the exit is enabled.

New Check-In Wizard Supports HLLX

In previous releases, the check-in function of ZMF for Eclipse was enabled with different dialog boxes depending on the type of check-in operation. In ZMF for Eclipse 8.1.3, the following check-in operations are handled with a single wizard:

- Check-in/stage from staging library member

- Check-in action from data set member

- Check-in from HFS file

- Check-in from a local file to package

- Check-in from remote file (remote systems explorer)

- Check-in from RDz data set member

A separate "Other options" wizard page displays the check-in user options (UserOption0101 – UserOption7205).   A new ZDDOPTS member, CHECKIN, defines how the user options are displayed, and what the validation rules are.

A check box is used to display or suppress the display of this page:

Check Box Text	Description	HLLX Tag
Display other options	Displays userOption* fields	cmpntUserVars

Notes:

- If the check box is not checked, the "Other options" page is not displayed.

- The check box is unchecked and disabled (grayed out) if ZDDOPTS does not have a CHECKIN member.

- An admin option labeled "Enable component user variables" (option A.G.1, part 5) of the target ZMF server is used to enable or disable the extended component user options. If that option is disabled, the check box is unchecked and disabled (grayed out).

- If the component being built is a source component, the Build wizard will display its own "Other options" wizards page, which is linked to the extUserVars and userVariables HLLX tags.)

The check box is initially checked or unchecked according to its state the last time you used the wizard. The state is remembered so that you do not have to check or uncheck the check box each time you use the wizard.

 The HLLX cmpntUserVars field can be used to override the initial check box settings from an HLLX preprocessing exit, if the exit is enabled.

You Can Now Check Out Components from Another Package

ZMF for Eclipse 8.1.3 has added the capability for you to check out components from another package.

You Can Now Check In Binary Files

You can now check in a local file as a binary file (without any data translation).

ZMF for Eclipse Can Now Use the PACKAGE SYSLIB SERVICE

ZMF4ECL will use the new ZMF PACKAGE SYSLIB SERVICE by default. The SYSLIB member of ZDDOPTS is updated with the following attributes at the <options> level:

ZDDOPTS SYSLIB Member Attribute	Description
useZmfService	Indicates whether ZMF4ECL should use the PACKAGE SYSLIB SERVICE or use traditional ZDDOPTS SYSLIB processing. Values can be YES or NO. YES is the default.
userSelectable	Indicates whether you can override the value for useZmfService. Values can be YES or NO. If set to YES, ZMF4ECL looks at the user preferences page for the useZMFService value. NO is the default.

ZMF for Eclipse Supports 8-Character Log-On User IDs

The ZMF4ECL log-on dialog (and ZMF Web Services) now support the 8-character user IDs that z/OS 2.3 supports.

A Lock Indicator Is Now Displayed for Packages if the Installation Date Has Passed

A resource decorator is supplied for package resources. If the ZMF4ECL Decorator is selected in Preferences, a lock icon is displayed next to packages if the package installation date has passed. Component editing will not be permitted.

You Can Now Export Samples of ZDDOPTS Members

A new plugin has been added to the ZMF for Eclipse installer that enables you to export samples of ZDDOPTS members:

1 From the Installer, select ChangeMan ZMF4ECL Samples.

2 Within ZMF4ECL, select File > Export.

3 When the Export dialog appears, select Serena ChangeMan ZMF4ECL > ZDDOPTS Sample Files.

4 When the ZDDOPTS Sample Export Wizard appears, select the desired ZDDOPTS member, and specify an output folder.

5 Click Finish. The selected ZDDOPTS members will be copied to the specified folder.

ZMF for Eclipse Supports the Migrated-to-Cloud Data Set Status

ZMF4ECL supports the DFSMS Transparent Cloud Tiering function of z/OS 2.1. ZMF4ECL treats migrated-to-cloud status the same as migration level 1 (migrated to disk).

Check-Out Message Is Displayed after Check-Out Process Completes

The check-out process has been enhanced to provide a list of all items checked out.   A preference is also available to prevent the check-out results from being displayed.

Build Box Is Disabled for Non-Buildable Components

During the check-in process, the Build box is disabled (grayed out) for non-buildable (non-source) components.

ZMF4ECL Now Issues Concurrent Development Warning Messages

The check-in/check-out wizard now displays component history so that you will know if the target components reside in more than one package.

Batch Checkout Is Now Supported

The check-out wizard is enhanced with a batch check-out option.

Reliance on the Use of Personal Libraries Has Been Removed

In earlier releases, you had to check components out to a personal library if you wanted to use the advanced capabilities of the LPEX editor. LPEX editor capabilities now work without the need to check components out to a personal library for editing. Thus, the reliance on personal libraries has been removed.

Related to this change, ZMF4ECL 8.1.3 has also been updated so that the new Checkout from Package functionality seen in the ISPF interface is now available from within ZMF4ECL. This, along with the removal of the general reliance on personal development libraries, means that the previous behavior of the ZMF4ECL Checkout from Package option to allow checkout of package components to different personal development libraries has been deprecated.

Fixes in ChangeMan ZMF for Eclipse 8.1.3

You can access a list of defects that have been fixed in ChangeMan ZMF for Eclipse 8.1.3 at the following location on the Micro Focus SupportLine website:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=CMZMFCP_Client_Pack_8.1.3_RESOLVED&channel=DEFECTS

New Features in ChangeMan ZMF for Eclipse 8.1.2

The following paragraphs describe the new features in ChangeMan ZMF for Eclipse 8.1.2.

Selective Promote Now Shows RESTAGE Status

When a component is promoted and then subsequently restaged, the component will show a status of RESTAGED.

Super and Complex Packages Subtree Is Now Displayed

There is now a subtree under super/complex packages that allows you to view and access associated participating packages.

Stage Name Is Available at Check-In Time

You may now input a stage name if desired, as in the z/OS interface, to allow specification of a name for the target of a checkin.

Migration Status Is Available on Data Set List

The status of data sets is now shown (either has **HSM Recall** or **H Recall from Tape**) if migrated to ML1 or ML2. If on ML2 (tape), you will be asked to confirm that you want to recall.

Advanced Editor Functions under RDz Are Now Available

The smart editor integration in RDz now allows use of additional advanced functions in the language-specific and LPEX editors.

The Folder/Filtering Process Has Been Extended and Improved

All folder/filtering options have been moved from the Server Properties page to the appropriate objects in Serena Explorer view. Folders are available for the following resources:

- Data Sets

- Jobs

- USS Files

- ZMF Applications (new)

- ZMF Packages (new)

The following functions are available for folders:

Function	Description
New Folder	On the appropriate container, select New Folder, and enter the folder name when prompted. There are options to set filters and define the folder order on the New Folder dialog.
Delete Folder	Select a folder and select Delete Folder. Press OK at the prompt to delete the folder.
Rename Folder	Select a folder and select Rename Folder. Enter the new folder name when prompted and press OK.

Function	Description
Folder Order	On the appropriate container, select Folder Order. The list of folders is displayed and buttons are available to move folders up and down.
Properties	Select a folder and select Properties. This action displays the filter associated with the folder and lets you update the associated filter. The filter that is displayed depends on the type of folder.

You Can Now Install ZMF Web Services with a Different Context Root

This enhancement enables you to install ZMF Web Services on either z/OS® Websphere® Application Server (WAS) or Apache® Tomcat® with a context root other than /zmfws.

For example, you can now run different versions of the ZMF Web Services within the same WAS *instance/port/profile*. For example, you might run one version in:

    http://st8503:9080/zmfws713/services/*

and a different version in:

    http://st8503:9080/zmfws811/services/*

To install ZMF Web Services on WebSphere with a different context root follow WAS instructions and enter the desired context root when prompted.

To install ZMF Web Services on Tomcat with a different context root, rename the zmfws.war file to the desired context root. For example, if you desire a context root of zmf812, rename the war file to zmf812.war.

The default context root setting in ZMF for Eclipse is /zmfws. You can change this default by specifying the desired context root on the Preferences page (select ZMF/Eclipse > Settings).

You can override the default setting on the ZMF Server Properties page.

CTRL+click and SHIFT+click Now Leave the Search Dialog Active

CTRL+click and SHIFT+click leave the search dialog active on member lists to enable you to search multiple members at once.

Refresh ZDDOPTS Option Has Been Provided

A new Refresh ZDDOPTS item has been added to the menu that appears if you select a server in the Serena Explorer view.

If one or more ZDDOPTS members have been changed on the server to which ZMF for Eclipse is connected, selecting this option reloads all ZDDOPTS member for that server.

Fixes in ChangeMan ZMF for Eclipse 8.1.2

You can access a list of defects that have been fixed in ChangeMan ZMF for Eclipse 8.1.2 at the following location on the Micro Focus SupportLine website:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=CMZMFCP_ZMF4ECL_8.1.2_RESOLVED&channel=DEFECTS

New Features in ChangeMan ZMF for Eclipse 8.1.1.01

ChangeMan ZMF for Eclipse 8.1.1.01 has no new features.

Fixes in ChangeMan ZMF for Eclipse 8.1.1.01

You can access a list of defects that have been fixed in ChangeMan ZMF for Eclipse 8.1.1.01 at the following location on the Micro Focus SupportLine website:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=CMZMFCP_8.1.1.01_RESOLVED&channel=DEFECTS

New Features in ChangeMan ZMF for Eclipse 8.1.1

The following paragraphs describe the new features in ChangeMan ZMF for Eclipse 8.1.1.

Transport Layer Security (TLS) Is Supported

ChangeMan ZMF for Eclipse 8.1.1 now supports TLS encryption for secure communications with the server.

If TLS is enabled, the z/OS® server must also be configured to use TLS on all ports for the server, as well as all ChangeMan ports under the server. Likewise, if the z/OS server is configured to use TLS, the ChangeMan ZMF for Eclipse client must also be configured to use TLS. Connection to the server will fail if the TLS setting for ZMF for Eclipse does not match the TLS configuration on the z/OS server.

When TLS is selected for a server, all communications between ZMF4ECL and Web Services, Web Services and ZMF, and ZMF4ECL and ZMF will be encrypted using the highest TLS available.

IP Version 6 Is Supported

ChangeMan ZMF4ECL now supports Internet Protocol (IP) version 6 network communication.

Drop-Down List Processing for ZDDOPTS User Options Is Now Available

Simple validation and drop-down list processing has been added to the user options members AUDIT, DEMOTE, PROMOTE, BUILD, and PKGCREAT. ChangeMan ZMF HLLX Is Supported

Support for the following ChangeMan ZMF High-Level Language Exits (HLLX) has been added to ZMF4ECL:

- Checkout

- Promote/Demote

- Audit

- Freeze

You Can Now Tab Between Fields on User Options Dialogs

All user options dialogs now use the same layout and permit you to use the Tab key, Shift+Up, and Shift+Down, as well as the mouse to navigate through dialog fields.

Fields on the Main Package Create Dialog Are Now Validated

Fields on the package create / package properties dialog can now be validated if HLLX exits have been defined to do so.

Reliance on the Use of Personal Libraries Has Been Removed

In earlier releases, you had to check components out to a personal library if you wanted to use the advanced capabilities of the LPEX editor. LPEX editor capabilities now work without the need to check components out to a personal library for editing. Thus, the reliance on personal libraries has been removed.

Use of Editor Facilities on the RDz Platform Is Enhanced

A new ZMF4ECL option called Smart Editor Integration is available on the Preferences dialog. It enables additional editor functionality if you use a smart editor with ZMF components. You can set this option on or off on the Preferences dialog. If set on (the default), an updated process opens the component, permitting properties to be set on the resource. Editors use the properties for performing enhanced functions.

You Can Set LOCK COMPONENT Option Value with the Check-Out HLLX Exit

You can now use the HLLX Check-Out exit, if defined, to set the default value for the LockComponent element of the COMMAND member of ZDDOPTS. In earlier releases, the LockComponent default was specified in the COMMAND member of ZDDOPTS and the previously assigned LockComponent value was used when a new component was checked out or staged. You can now specify if the default value of the LockComponent element is YES, NO, or remembered from the previous setting.

You Can Now Bypass User Options Screens if No Variables Are Present

Wizards for Package Create, Build, Promote, Demote, and Audit that display user options have been updated to bypass the screen if no variables are present.

Help Text for User Options Is Improved

Help for each field is implemented with a text box in Eclipse. The text box name, value, and help fields are populated when you select a field on the screen. This enhancement is implemented in the AUDIT, DEMOTE, PROMOTE, BUILD, and PKGCREAT members of ZDDOPTS.

Tivoli WebSEAL

ZMF4ECL now supports ZMF Web Services running on IBM® Tivoli® Access Manager WebSEAL. Tivoli WebSEAL is a high-performance, multi-threaded Web server that applies fine-grained security policy to the Tivoli-Access-Manager-protected Web object space.

The Step Name Is Added to the Job Log Tree View

The job step name has been added on job log tree view output so that you can see the JCL job step name that produces the output.

Fixes in ChangeMan ZMF for Eclipse 8.1.1

You can access a list of defects that have been fixed in ChangeMan ZMF for Eclipse 8.1.1 at the following location on the Micro Focus SupportLine website:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=CMZMFCP_ZMF4ECL_8.1.1_RESOLVED&channel=DEFECTS

New Features in ChangeMan ZMF for Eclipse 8.1.0.01

The following paragraphs describe the new features in ChangeMan ZMF for Eclipse 8.1.0.01.

ChangeMan ZMF for Eclipse Adds Support for Parallel Development

Multiple users are now able to edit the same component with ZMF4ECL, with appropriate messages and processing options presented to the users upon checkin.

After the first user starts an edit, any subsequent users will get a warning message indicating that the component is being edited by another user and a diff report. The subsequent users would then be responsible for merging their changes in.

ChangeMan ZMF for Eclipse Adds Expanded Web Service Tracing Options

A session trace option has been added to allow administrators to trace web services to permit multi-threaded applications additional debugging capabilities.

Fixes in ChangeMan ZMF for Eclipse 8.1.0.01

You can access a list of defects that have been fixed in ChangeMan ZMF for Eclipse 8.1.0.01 at the following location on the Micro Focus SupportLine website:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=CMZMFCP_ZMF4ECL_8.1.0.
01_RESOLVED&channel=DEFECTS

New Features in ChangeMan ZMF for Eclipse 8.1

The following paragraphs describe the new features in ChangeMan ZMF for Eclipse 8.1.

ChangeMan ZMF for Eclipse Supports ChangeMan ZMF High-Level Language Exits

ChangeMan ZMF for Eclipse 8.1 supports the High-Level Language Exit (HLLX) facility, which is new in ChangeMan ZMF 8.1. In this release, this facility provides central high-level language exit services to the Package Create, Package Update, and Component Build (including Stage, Recompile and Relink) functions.

The high-level languages that are supported include any Language Environment (LE)-supported language (for example, COBOL, PL/I, C, C++) and REXX.

The same customer-supplied exit code will be executed regardless of which client is used (ISPF, ZDD, or ZMF for Eclipse), which will allow you to have a consistent experience in any selected client.

> **NOTE** You must be running a ChangeMan ZMF 8.1 server to enable this functionality in ChangeMan ZMF for Eclipse 8.1.

ChangeMan ZMF for Eclipse Now Supports ChangeMan ZMF ERO

ChangeMan ZMF for Eclipse now supports the release management functions of the ChangeMan ZMF Enterprise Release Option (ERO). For example, you can:

- View releases and release areas that have been defined in ChangeMan ZMF ERO.

- Attach a package to a release at package-create time.

- Attach or detach a package during package properties processing.

> **NOTE** You must be running a ChangeMan ZMF 8.1 server to enable this functionality in ChangeMan ZMF for Eclipse 8.1.

Sorting Is Enhanced

Sorting functions have been enhanced in ChangeMan ZMF for Eclipse 8.1. For example:

- You can click on a column heading in a table display to sort the entries in the column. Click on the column heading a second time to sort the entries in reverse order.

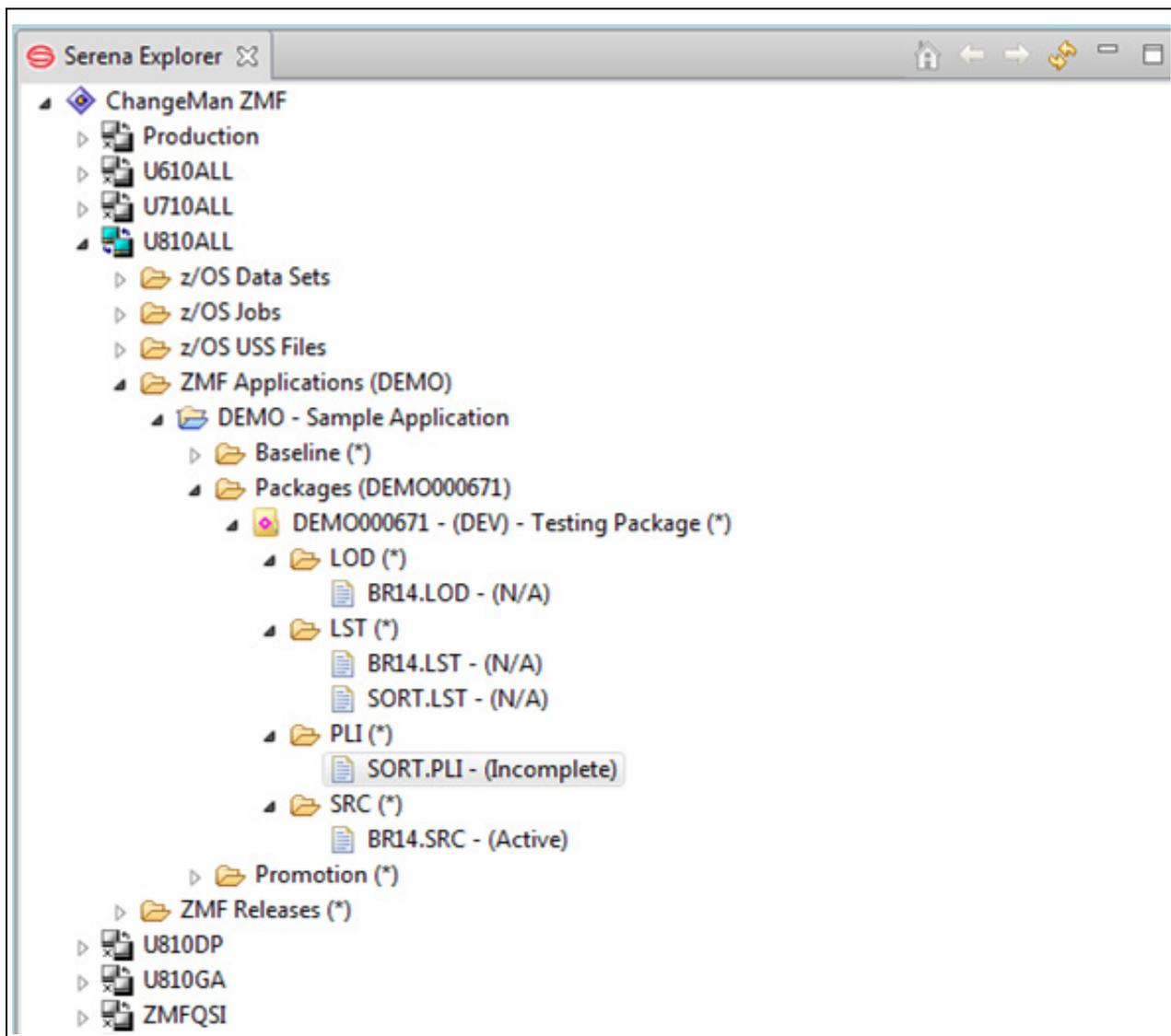- Library types appear in ascending sequence in all ZMF for Eclipse drop-down list displays.

- Initial display of rows on the Package Approval dialog is in ascending sequence by approver sequence number. You can click on the heading of any column to sort entries in ascending sequence by the selected column's value. The display sequence is reversed if you click again on the column heading.

Description Field Is Limited to 35 Characters for Components Checked In with SSV Enabled

The text that you enter in the Description field is truncated to 35 characters for components with Save Staging Versions (SSV) enabled if you check them in from a personal library under either the Serena Explorer view or the z/OS Projects view. In previous releases of ChangeMan ZMF for Eclipse, an error message was issued if the Description text for components checked in under the z/OS Projects view exceeded 35 characters.

Component Status Is Now Displayed When Libtype Is Expanded Under the Serena Explorer View

The status of a component (for example, Checkout, Active, Incomplete) is now displayed if the user expands a libtype for a package in the tree structure of the Serena Explorer view. The status N/A is displayed for components that do not have a status (for generated components, for example). Excerpt from a sample display:

Package Information Is Now Displayed in Addition to Package ID

The Package ID, Status, and Package Title (for example, DEMO000001 - DEV - Demo Package) is now displayed in the Serena Explorer view for all packages.

Blank Line Removed from the Displayed List of DB2® Subsystems

The blank line at the top of the drop-down list of DB2 subsystems has been removed. This blank line used to appear in the Build Parameters dialog when you staged a component. This enhancement prevents you from inadvertently selecting a blank DB2 subsystem name.

Complex Packages Can Now Be Closed or Deleted

You can now right click on the name of a complex package and find Close and Delete in the list of actions that you can perform on the selected complex package.

Fields that Are Renamed in ChangeMan ZMF Global Administration Appear on ChangeMan ZMF for Eclipse Dialogs and Reports

If panel fields such as Work Request and Department have been renamed in ChangeMan ZMF global administration, the renamed fields appear in ChangeMan ZMF for Eclipse dialogs and reports. Refer to global administration functions in the *ChangeMan ZMF Administrator's Guide* for information about renaming fields in ChangeMan ZMF.

Fixes in ChangeMan ZMF for Eclipse 8.1

You can access a list of defects that have been fixed in ChangeMan ZMF for Eclipse 8.1 at the following location on the Micro Focus SupportLine website:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=CMZMFCP_ZMF4ECL_8.1_RESOLVED&channel=DEFECTS

Installation Considerations

IMPORTANT Please be aware that non-US environment data translation processing has been changed, and you should look at solution S140158 if it is used - ***Installing Base Product Web Services (zmfws.war) in International Environments.***

You must install the products that you have licensed in the following order, as appropriate:

- ZMF 8.2 Patch 1 Web Services

- ZDD, and/or ZMF for Eclipse Clients

- ZMF P sites

- ZMF D, DP and ALL sites

Upgrading to ChangeMan ZMF 8.2 Patch 1 Web Services

- ZMF Web Services must be upgraded to version 8.2 Patch 1 and are available from the ZMF Client Pack 8.2 Patch 1 download area of the Micro Focus SupportLine website. If you are running customized ZMF Web Service-based applications, you should rebuild those applications using the ZMF 8.2 Patch 1 Web Services, regardless of the release from which you are upgrading, and redeploy your applications in production prior to or alongside updating your ZMF Server software.

- Customers installing the Web Services distributed in the `zmfws.war` file for use in non-US environments may need to take additional steps to complete installation. Refer to solution S140158 "Installing Base Product Web Services (zmfws.war) in International Environments" using the following link:

    http://knowledgebase.serena.com/InfoCenter/index?page=content&id=S140158&actp=search&viewlocale=en_US&searchid=1389615806464

Installing the ZMF4ECL Plugin

The installation files for ZMF for Eclipse 8.2 Patch 1 contain the complete ZMF for Eclipse product. You can simply install ZMF for Eclipse 8.2 Patch 1 over your existing installation without uninstalling your existing installation first.

You have two choices for installing the ChangeMan ZMF for Eclipse 8.2 Patch 1 plugin:

1 You can download the installation files from the Micro Focus SupportLine website. If you choose this method, please read Chapter 2, "Installing ZMF for Eclipse" in the *ChangeMan ZMF for Eclipse Installation and Configuration* guide before proceeding with the installation.

2 You can invoke the Eclipse Installer from the Eclipse workbench.

- Point the installer to the following URL:

    http://help.serena.com/eclipseplugin/ZMF4ECLUpdateSite

NOTE! You can access this URL only from the Eclipse Installer in the Eclipse workbench. You cannot access this URL from your browser.

ZMF Host Considerations

- ChangeMan ZMF for Eclipse 8.2 Patch 1 can be used with all currently supported versions of the ChangeMan ZMF server.

- ChangeMan ZMF for Eclipse is a separately licensed option of ChangeMan ZMF 8.2 Patch 1. Contact Customer Care for information about obtaining a license. The license is applied to ChangeMan ZMF on the host, not to ZMF for Eclipse on the client. This enables the same ZMF for Eclipse Integrated Development Environment (IDE) to work with multiple versions of ChangeMan ZMF on a network.

   To activate the ZMF license for ChangeMan ZMF for Eclipse, refer to the startup JCL for ChangeMan ZMF, as described in the *SER10TY User's Guide*.

Software Compatibility Requirements

For a complete list of software requirements and product compatibility, refer to the Platform Matrix for ChangeMan ZMF Client Pack 8.2 Patch 1 at the following location on the Micro Focus SupportLine website:

> https://supportline.microfocus.com/prodavail.aspx

The information in the Platform Matrix supersedes any compatibility requirements that may appear in the *ChangeMan ZMF for Eclipse Installation and Configuration* documentation.

z/OS Server Environment

For each z/OS server that you wish to access from the workbench using ZMF for Eclipse, note the following requirement in addition to the information provided in the Platform Matrix:

- **TCP/IP**--Three-way connectivity among the machines that are running the z/OS server, the web application server, and the Eclipse client is required.

Web Application Server Environment

ZMF for Eclipse requires connectivity to a web application server that supports Version 1.4 of the Apache® Axis SOAP library. The web application server may reside on the same system where ZMF for Eclipse is installed or elsewhere.

> **NOTE** Axis Version 1.4 is not the same as Axis2 Version 1.4.

Web application servers that support Axis 1.4 include Adobe Cold Fusion, Apache® Tomcat®, IBM WebSphere® Application Server (WAS), Oracle® WebLogic, Red Hat® JBoss®, Sun Microsystems Java System Application Server (JSAS), and many others.

> **IMPORTANT!** ZMF for Eclipse has not been tested with all the available servers that support Axis. It is possible the client will not work with some servers.

Workbench Environment

ZMF for Eclipse requires the prior installation of an Eclipse-based workbench as the IDE for working with ChangeMan ZMF software assets. The workbench need not be installed on the same system where the Web application server software resides.

Known Issues

No known issues exist in ChangeMan ZMF for Eclipse 8.2 Patch 1.

Documentation Updates

Refer to "New Features in ChangeMan ZMF for Eclipse 8.2 Patch 1" on page 3 and "Fixes in ChangeMan ZMF for Eclipse 8.2" on page 9 of this Readme file for a description of the enhancements that have been made and the defects that have been fixed in ChangeMan ZMF for Eclipse 8.2 Patch 1.

The *ChangeMan for Eclipse Installation and Configuration* guide and *User's Guide*, both dated September 2016, are the latest user manuals available for ChangeMan ZMF for Eclipse. Check the Micro Focus SupportLine website to obtain documentation updates when they become available.

Accessing the Documentation

All ChangeMan ZMF Client Pack documentation is provided in Adobe® Portable Document Format (PDF) and may be downloaded from the Micro Focus SupportLine website at:

https://www.microfocus.com/support-and-services/documentation/

Adobe® Reader® is available for free download at http://get.adobe.com/reader/. Version 9 or higher is recommended.

Updated manuals may be published online between product releases. These documents are published on the SupportLine website with the rest of the documentation for the product release. Updated documents are flagged with an **Updated** date in the file name or description.

> **NOTE** Change bars in the left margin of ChangeMan ZMF4ECL documentation identify substantive changes from the last published version, unless otherwise noted.

Searching the Documentation

There is no cross-book index for the ChangeMan ZMF4ECL documentation suite. You can use the Advanced Search facility in Adobe Reader to search all ZMF4ECL manuals in the same or subordinate folders for information that you want. See the "Welcome to..." chapter of each manual for details.