opentext™

ChangeMan ZMF

OFM Getting Started Guide

8.3

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1. About this Guide

The Online Forms Manager (OFM) is a selectable option of ChangeMan® ZMF that provides customer-defined online forms to manage non-component tasks that are required to implement a change to your production environment.

Before You Begin

See the ReadMe file for the latest updates and corrections for this manual.

Objective

This guide provides information for installing and using the ChangeMan ZMF OFM. It also describes the ISPF user interface to the ChangeMan ZMF OFM Option.

After reading this guide, you should be able to:

- Understand the OFM features.
- Create and maintain forms.
- Use forms in change packages.

Audience

This manual is intended for ChangeMan ZMF system administrators responsible for installing, administering, and managing the change management system and for end users responsible for using forms in change packages.

Guide to ChangeMan ZMF Documentation

The following sections provide basic information about ChangeMan ZMF documentation.

ChangeMan ZMF Documentation Suite

Manual	Description
Administrator's Guide	Describes ChangeMan ZMF features and functions with instructions for choosing options and configuring global and application administration parameters.
Customization Guide	Provides information about ChangeMan ZMF skeletons, exits, and utility programs that will help you to customize the base product to fit your needs.
Db2 Option Getting Started Guide	Describes how to install and use the Db2 Option of ChangeMan ZMF to manage changes to Db2 components.
ERO Concepts	Discusses the concepts of the Enterprise Release Option (ERO) of ChangeMan ZMF for managing releases containing change packages.
ERO Getting Started Guide	Explains how to install and use ChangeMan ZMF ERO to manage releases containing change packages.
ERO Messages	Describes system messages and codes produced by ChangeMan ZMF ERO.
ERO XML Services User's Guide	Documents ERO functions and services available for general customer use. These services are also known as the "green" services and provide mostly search and query functions.
High-Level Language Exits Getting Started Guide	Explains how to configure and call the high-level language exits.
IMS Option Getting Started Guide	Provides instructions for implementing and using the IMS™ Option of ChangeMan ZMF to manage changes to IMS components.
INFO Option Getting Started Guide	Describes two methods by which ChangeMan ZMF can communicate with other applications: Through a VSAM interface file and through the Tivoli® Information Management for z/OS product from IBM®.
Installation Guide	Provides step-by-step instructions for initial installation of ChangeMan ZMF. Assumes that no prior version is installed or that the installation will overlay the existing version.
Java / zFS Getting Started Guide	Provides information about using ZMF to manage application components stored in USS file systems, especially Java® application components.
Load Balancing Option Getting Started Guide	Explains how to install and use the Load Balancing Option of ChangeMan ZMF to connect to a ZMF instance from another CPU or MVS™ image.
M+R Getting Started Guide	Explains how to install and use the M+R Option of ChangeMan ZMF to consolidate multiple versions of source code and other text components.

Manual	Description
M+R Quick Reference	Provides a summary of M+R Option commands in a handy pamphlet format.
Messages	Explains messages issued by ChangeMan ZMF, SERNET, and System Software Manager (SSM) used for the Staging Versions feature of ZMF.
Migration Guide	Gives guidance for upgrading ChangeMan ZMF from versions 7.x and 8.x to version 8.2 Patch 6.
Online Forms Manager (OFM) Option Getting Started Guide	Explains how to install and use the OFM option of ChangeMan ZMF.
REST Services Getting Started Guide	Getting Started Guide for ZMF REST Services.
SER10TY User's Guide	Gives instructions for applying licenses to enable ChangeMan ZMF and its selectable options.
User's Guide	Describes how to use ChangeMan ZMF features and functions to manage changes to application components.
XML Services User's Guide	Documents the most commonly used features of the XML Services application programming interface to ChangeMan ZMF.
ZMF Quick Reference	Provides a summary of the commands you use to perform the major functions in the ChangeMan ZMF package life cycle.
ZMF Web Services User's Guide	Documents the Web Services application programming interface to ChangeMan ZMF.

Using the Manuals

Use Adobe® Reader® to view ChangeMan ZMF PDF files. Download the Reader for free at get.adobe.com/reader/.

This section highlights some of the main Reader features. For more detailed information, see the Adobe Reader online help system.

The PDF manuals include the following features:

- **Bookmarks**. All of the manuals contain predefined bookmarks that make it easy for you to quickly jump to a specific topic. By default, the bookmarks appear to the left of each online manual.

- **Links**. Cross-reference links within a manual enable you to jump to other sections within the manual with a single mouse click. These links appear in blue.

- **Comments**. All PDF documentation files that Serena delivers with ChangeMan ZMF have enabled commenting with Adobe Reader. Adobe Reader version 7 and higher has commenting

features that enable you to post comments to and modify the contents of PDF documents. You access these features through the Comments item on the menu bar of the Adobe Reader.

- **Printing**. While viewing a manual, you can print the current page, a range of pages, or the entire manual.

- **Advanced search**. Starting with version 6, Adobe Reader includes an advanced search feature that enables you to search across multiple PDF files in a specified directory.

Searching the ChangeMan ZMF Documentation Suite

There is no cross-book index for the ChangeMan ZMF documentation suite. You can use the Advanced Search facility in Adobe Acrobat Reader to search the entire ZMF book set for information that you want. The following steps require Adobe Reader 6 or higher.

1. Download the ZMF All Documents Bundle ZIP file and the ZMF Readme to your workstation from the My Downloads tab on the Serena Support website.

2. Unzip the PDF files in the ZMF All Documents Bundle into an empty folder. Add the ZMF Readme to the folder.

3. In Adobe Reader, select Edit | Advanced Search (or press Shift+Ctrl+F).

4. Select the **All PDF Documents** in option and use **Browse for Location** in the drop down menu to select the folder containing the ZMF documentation suite.

5. In the text box, enter the word or phrase that you want to find.

6. Optionally, select one or more of the additional search options, such as **Whole words only** and **Case-Sensitive**.

7. Click **Search**.

8. In the **Results**, expand a listed document to see all occurrences of the search argument in that PDF.

9. Click on any listed occurrence to open the PDF document to the found word or phrase.

Online Help

Online help is the primary source of information about ChangeMan ZMF. Online help is available as a tutorial, through Help screens, and in ISPF error messages.

Online tutorial

ChangeMan ZMF includes an online tutorial that provides information about features and operations, from high-level descriptions of concepts to detailed descriptions of panel fields.

To view the tutorial table of contents, select option T from the Primary Option Menu, or jump to it from anywhere in ChangeMan ZMF by typing =T and pressing ENTER.

Press PF1 from anywhere in the Tutorial for a complete list of Tutorial navigation commands and PF keys.

Online Help Screens

If you have questions about how a ChangeMan ZMF panel works, you can view a help panel by pressing PF1 from anywhere on the screen.

Online Error Messages

If you make an invalid entry on a ChangeMan ZMF panel, or if you make an invalid request for a function, a short error message is displayed in the upper right corner of the panel.

Press PF1 to display a longer error message that provides details about the error condition.

Remember that the long message does not display automatically. Request the long message by pressing PF1.

Typographical Conventions

The following typographical conventions are used in the online manuals and online help. These typographical conventions are used to assist you when using the documentation; they are not meant to contradict or change any standard use of typographical conventions in the various product components or the host operating system.

Convention	Explanation
italics	Introduces new terms that you may not be familiar with and occasionally indicates emphasis.
bold	Indicates panel titles, field names, and emphasizes important information.
UPPERCASE	Indicates keys or key combinations that you can use. For example, press ENTER.
`monospace`	Indicates syntax examples, values that you specify, or results that you receive.
`monospace italics`	Indicates names that are placeholders for values you specify; for example, `filename` .
`monospace bold`	Indicates the results of an executed command.

Convention	Explanation
vertical rule	Separates menus and their associated commands. For example, select File

2. Introduction

The Online Forms Manager (OFM) is a selectable option of Serena® ChangeMan® ZMF that provides customer-defined online forms to manage non-component tasks that are required to implement a change to your production environment.

Uses for Online Forms

Tasks that you might manage with online forms in a change package might include:

- Reservation of DASD storage space
- Changes to ACS routines in DFHSMS
- GDG builds
- Changes to security authorization for data sets or privileged functions
- Changes to the production schedule
- Changes to standard operating procedures
- Changes to report distribution
- Changes to application end user procedure

Online forms in the OFM Option are often used to notify other departments in your data center about tasks that they must perform to prepare for a software change.

Online Forms Life Cycle

Online forms in the OFM Option have a life cycle that fits within the ChangeMan package life cycle between create package and freeze package. Each form has a pre-defined lead time that determines how long before package freeze the form must be approved. This separate life cycle reflects the need to have certain tasks performed, or at least acknowledged and added to work schedules, before your production environment is altered by package installation.

Roles in Online Forms

This table shows the roles played by different groups in configuring and using forms in the OFM Option.

Role or Group	OFM Option Ativities
ChangeMan Administrator	With the assistance of Technical Support, defines ISPF panels for online forms, variables for fields on the forms, the lead time for form approvals before package freeze, and the automatic notifications for forms approvers. May also create skeletons that create batch jobs that are executed when a form is approved.
Security Administrator	Defines a security entity and permits the ChangeMan Administrator to authorize them to create and maintain forms in the OFM Option. Defines an approval entity for each form and permits TSO IDs or groups to give them authority to approve the form.
ChangeMan ZMF User	Selects forms from those defined by the Administrator and adds them to a change package. Edits the form online to enter data in form fields. Submits the form when it is finished.
Form Approver	Approves the form when the requested task is completed or added to a work schedule to be coordinated with the installation of the change package.

Benefits

- Allows fast, interactive creation and testing of forms.

- Forms are available for use immediately after creation.

- No assembly, compilation or linkage editing required.

- Allows full use of the ISPF Dialog Manager panel definition language.

- Form authorizations maintained in your security system.

3. Preparing to Use the OFM

Online forms in the OFM Option are defined as ISPF Dialog Manager panels which are stored in your ChangeMan ZMF custom panels library. Variable definitions for online form fields and form approver notification information are stored in the ChangeMan ZMF package master file in global records. Your ChangeMan ZMF Administrator uses ISPF panels in the OFM Option to create and manage online form panels, variables, and notifications.

Introduction

Forms are opened in a change package by a developer or someone else with update authority in the application. They enter required data in fields on the form, then submit the form. Whoever was specified by the administrator in the form notification receives an MVS send message or an e-mail telling them the form is ready for their review and action. Data for forms opened in a change package are stored in the ChangeMan ZMF package master file in package records.

When the recipient of the form has taken the appropriate action, they approve the form to end the life cycle of the form. All forms in a change package must be approved before the package is frozen.

Forms in a frozen package can be selectively unfrozen and refrozen. Other actions that can be taken for a form are deactivate, reject, and comment.

Hardware and Software Requirements

Requirements for installing and using the ChangeMan ZMF OFM Option are the same as the base ChangeMan ZMF product. See the *ChangeMan ZMF Installation Guide* for a detailed description of hardware and software requirements.

Installing the OFM

Components for all ChangeMan ZMF selectable options are included with ChangeMan ZMF components delivered in the ZMF installer. When you run the installer, then download the XMIT files to the mainframe and expand them into PDS libraries, components necessary to run selectable options like the OFM Option are in the CMNZMF and SERCOMC libraries that you create.

Apply OFM Option License

If you license the OFM Option at the same time that you license ChangeMan ZMF, the license for the option is applied when you apply the license for the base product. You do not have to take further action to enable the OFM Option.

If you license the OFM Option after you apply licenses for ChangeMan ZMF and other selectable options, use the SER10TY™ License Manager to add a license for the option. See the *SER10TY User Guide* for instructions on how to apply a license. The load modules, JCL, and other components that you need to run SER10TY are included in the SERCOMC libraries in the ZMF installer.

After you apply a license, shut down the SERNET started task where ChangeMan ZMF runs and restart the task.

To verify that the license for the OFM is properly applied, look for this option on the Primary Option Menu.

> OFMlist - Online Forms package list

If you select Option O on the Primary Option Menu and press Enter, short message NO GLOBAL OFM displays. If you press PF1, this long message displays:

```
CMN4700A - No Global Online Forms are defined in the Package Master
```

Define OFM Option Administrator Security Entity

Define security entities to authorize your ChangeMan ZMF Administrator to create and maintain OFM Option forms. Have your security administrator perform these tasks in your security system.

1. In your security system under the resource class for ChangeMan ZMF, create the following profile with no access (UACC NONE):

   ```
   CMN*x*FORM
   ```

   where *x* is the subsystem ID of the ChangeMan instance that will use the OFM Option. If you use a null subsystem ID, the profile name is CMNFORM.

2. Permit the TSO ID of the ChangeMan Administrator UPDATE access to the new profile with UPDATE access.

Copy OFM Global Definition Records

Copy global definition records into the package master file from the CMNZMF SAMPLES library unloaded from the ZMF installer.

1. Shutdown the SERNET instance running ChangeMan ZMF.

2. Create a batch job with the following IDCAMS step.

```
//IDCAMS EXEC PGM=IDCAMS

//SYSPRINT DD SYSOUT=\*

//SYSUT1 DD DSN=somnode.CMNZMF.VvRrMn.SAMPLES(FORMS),

// DISP=SHR

//SYSUT2 DD DSN=somnode.CHGMAN.CMNPMAST,

// DISP=SHR

//SYSIN DD \*

REPRO IFILE(SYSUT1) OFILE(SYSUT2) REPLACE
**a** Change SYSUT1 to point to the SAMPLES library unloaded from the ZMF installer.

**b** Change SYSUT2 to point to the package master VSAM file for your ChangeMan ZMF instance.
```

3. Submit the job, and see a return code RC=00.

4. Start the SERNET instance that runs ChangeMan ZMF.

5. Verify that the Global OFM records are properly copied to the package master file. Select Option O on the Primary Option menu and press Enter. The Online Forms Package Parameters *(CMNOLST0)* panel displays.

```
CMNOLST0----------------- ONLINE FORMS PACKAGE PARAMETERS --------------------
COMMAND ===>

SPECIFY SELECTION CRITERIA:
FORM ID              ===>              (Full name or pattern; blank for list)
FORM STATUS          ===>              (ACTIVE,SUBMITTED,APPROVED,REJECTED)

PACKAGE ID           ===>               (Full name or pattern; blank for list)
PACKAGE STATUS       ===>               (DEV, FRZ, APR, REJ, DIS, INS,
                                          BAS, BAK, TCC or DEL)
CREATOR'S TSO-ID     ===>
WORK RQUEST ID       ===>
DEPARTMENT           ===>
PACKAGE LEVEL        ===>              (1-Simple, 4-Participating)
PACKAGE TYPE         ===>              (Planned or Unplanned)
PACKAGE TIME SPAN    ===>              (Permanent or Temporary)
FROM INSTALL DATE    ===>              (YYYYMMDD)
  TO INSTALL DATE    ===>              (YYYYMMDD)
FROM CREATION DATE   ===>              (YYYYMMDD)
  TO CREATION DATE   ===>              (YYYYMMDD)


Press ENTER to process: Enter END command to exit.
```

Copy Forms Panels

Sample form panels for the OFM are delivered in the CMNZMF PANELS library unloaded from the ZMF installer.

Copy members CMNZ*nnnn*, where nnnn is a four-digit number, from the delivered CMNZMF PANELS library to your CUSTOM PANELS library.

Specify the OFM Panel Library

Specify the library where your OFM Option panels reside.

1. Select A (Admin) from the Primary Option menu. Press Enter.
2. Select G (Global) from the Administration Options menu. Press Enter.
3. Select O (Options) from the Global Administration Options menu. Press Enter.
4. Select Option 4 (OFM) from the Global Selectable Options menu. Press Enter. The Online Forms Options menu (CMNGOOFM) displays.

```
CMNGOOFM ------------------- ONLINE FORMS OPTION ------------------------------
OPTION ===>

   1. Maintain - Create or update Online Forms
   2. Library - Specify panel library dataset name

Press ENTER to process: Enter END command to exit.
```

5. Select Option 2 (Library) from the Online Forms Options menu. Press Enter. The Online Forms Panel Dataset *(*CMNGOOF2*)* panel displays.

```
CMNGOOFM ----------------- ONLINE FORMS PANAL DATASET -------------------------
COMMAND ===>

PANAL DATASET NAME ===>

Press ENTER to process: Enter END command to exit.
```

6. Type the name of your CUSTOM PANELS library in the Panel Dataset Name field on the Online Forms Panel Dataset (CMNGOOF2) panel. Press Enter. You are returned to the Online Forms Options menu.
7. Have your security administrator grant UPDATE access for the custom PANELS library to the SERNET started task where ChangeMan ZMF runs and to the administrator who will create and maintain forms in the OFM Option.

Verify OFM Form Availability

1. Select Option 1 (Maintain) on the Online Forms Options menu (CMNGOOFM). Press Enter. The Online Forms Maintenance (CMNZFRM) panel displays.

```
CMNZFRM ------------------- ONLINE FORMS MAINTENANCE --------------- Row 1 to 10 of 10
COMMAND ===>                                                  SCROLL ===> HALF

Line commands: I  - Insert,  R - Repeat,    U - Update,        D - Delete
               Pn - Panels,  V - Variables, N - Notificiations,  S - Sample

Press ENTER to process: Enter END command to exit.

   FORM                                    LEAD   ALLOW   ALLOW
     ID    FORM DESCRIPTION                TIME   ACCESS  SUBMIT
.... 010    Build GDG Request                0    YES     YES
.... 030    DASD Dataset Space Request       7    YES     NO
.... 070    Problem Summary                  7    YES     NO
.... 100    Report Distribution Information  7    YES     NO
.... 110    Standards & Guidelines Revision  7    YES     NO
.... 120    Tape Retention Register          7    YES     NO
.... 130    Standards Exemption Request      7    YES     NO
.... 140    Security Information             7    YES     NO
.... 160    Scheduler JCL Update             7    YES     NO
.... 170    Scheduler Update                 7    YES     NO
**************************** Bottom of data ****************************************
```

2. Type P1 in the line command for form 010. Press Enter. Panel member CMNZ0101 in your custom PANELS library should be presented in an edit session.

Restrictions

The OFM Option is subject to the following implementation restrictions:

- Maximum of 1,000 forms per system.

- Maximum of 9 panels per form.

- Maximum of 200 variables per form.

- Maximum of 3,072 bytes total variable lengths per form.

- Maximum of 10 notification entries per form.

4. Creating and Maintaining Online Forms

Accessing the Online Forms Options Menu

To access the Online Forms Options menu:

1. Select Option A (Admin) from the Primary Option menu. Press Enter.

2. Select Option G (Global) from the Administration Options menu. Press Enter.

3. Select Option O (Options) from the Global Administration *Options* menu. Press Enter.

4. Select Option 4 (OFM) from the Global Selectable Options menu. Press Enter. The Online Forms Options menu (CMNGOOFM) appears:

```
CMNGOOFM ------------------- ONLINE FORMS OPTION -------------------------------
OPTION ===>

   1. Maintain - Create or update Online Forms
   2. Library - Specify panel library dataset name

Press ENTER to process: Enter END command to exit.
```

Maintaining Online Forms

When you select Option 1 (Maintain) from the Online Forms Options Menu and press Enter, the Online Forms Maintenance panel (CMNZFRM) appears.

```
CMNZFRM ------------------- ONLINE FORMS MAINTENANCE ---------------- Row 1 to 10 of 10
COMMAND ===>                                              SCROLL ===> CSR
Line commands: I  - Insert,  R - Repeat,    U - Update,        D - Delete
               Pn - Panels,  V - Variables, N - Notificiations,  S - Sample

Press ENTER to process: Enter END command to exit.

    FORM                                      LEAD   ALLOW   ALLOW
     ID    FORM DESCRIPTION                   TIME   ACCESS  SUBMIT
.... 010    Build GDG Request                  0     YES     YES
.... 030    DASD Dataset Space Request         7     YES     NO
.... 070    Problem Summary                    7     YES     NO
.... 100    Report Distribution Information    7     YES     NO
.... 110    Standards & Guidelines Revision    7     YES     NO
.... 120    Tape Retention Register            7     YES     NO
.... 130    Standards Exemption Request        7     YES     NO
.... 140    Security Information               7     YES     NO
.... 160    Scheduler JCL Update               7     YES     NO
.... 170    Scheduler Update                   7     YES     NO
***************************** Bottom of data ****************************************
```

The Online Forms Maintenance panel displays a table of all existing form definition rows and provides access to all the functions that are necessary for creation, modification, or deletion.

> 💡 **Note**
>
> Notifications specified at this panel are used to notify users of a pending form approval.

The following table describes the fields on the Online Forms Maintenance panel (CMNZFRM).

Field	Explanation
Line Commands	**I - Insert** Displays the Online Forms Creation panel for creating a new form definition.
	R - Repeat Displays the Online Forms Creation panel for cloning an existing form definition.
	D - Delete Displays the Online Forms Deletion panel for deleting an existing form together with all associated panels, variables, and notifications.
	U - Update Displays the Online Forms Update panel for updating an existing form definition.
	P - Panels Invokes Panel Editor, allowing you to select a panel.
	Pn - Panels Invokes the Panel Editor, allowing you to select a specific panel member name for editing.
	V -Variables Displays the Define Form Variables panel, allowing you to define the form variables.
	N - Notifications Displays the Define Form Notifications panel, allowing you to define the form notifications for pending forms approval.
	S - Sample Displays the form panels in the end-user mode.
Form ID	Type a three-digit numeric number to be associated with the form used both for identification of forms by users and internally for the creation of panel member names, form entity names for security purposes, and as part of the key of all package master file records relating to the form.
Form Description	Type a free-format description or name for the form.
Lead Time	Type the number of days the approver requires to process the form to enable ChangeMan ZMF to display the days remaining before the form must be submitted for approval in relation to the change package install date.
Allow Access	Type an indicator to allow or prevent display of the form in the Online Forms Selection panel to control end user access to the form.

Field	Explanation
Allow Submit	Type an indicator to allow job submission at the time of form approval. The skeleton must be manually maintained in a library in the ISPSLIB concatenation. Refer to the skeletons provided with the sample forms for examples of use. The creation and maintenance of approve job skeletons is not a function of the OFM and it is recommended that the ChangeMan ZMF File Tailoring Assistance function be used for this purpose. If the form is in use by another user, a message displays and the command is aborted. Approve job skeleton naming conventions. Skeleton member name: CMNZ*nnn*A, where *nnn* is the form ID. Skeleton table name: OFMTABLE (applies only to forms for which table variables are defined)

Creating Forms

To access the Create Form panel, do the following from the Online Forms Maintenance panel.

1. Type I (to Insert a new form) or R (to Repeat an existing form) in the line command field of the selected form, and press Enter. The Create Form panel (CMNFRMC) displays.

```
CMNZFRMC ------------------- CREATE FORM ------------------------------
COMMAND ===>

Press ENTER to process; Enter END command to exit.

FORM ID        ===> ____
DESCRIPTION    ===> _____
LEAD TIME      ===> ____    (in days)
ALLOW ACCESS   ===> ____    (Y/N)
ALLOW SUBMIT   ===> ____    (Y/N)
```

The following table describes the fields on the Create Form panel.

Field	Explanation
Form ID	Type a unique, three-character form ID.
Form Description	Type the form description.
Lead Time	Type the minimum number of days before package installation date that the form can be submitted for approval. A lead time of zero suppresses checking of the install date when the form is accessed.
Allow Access	Type YES to allow access to the form from the Online Forms Selection panel; otherwise, type NO.
Allow Submit	Type YES to allow submission of the associated skeleton at the time of form approval; otherwise, type NO.

2. Press Enter.

Updating Forms

To access the Update Form panel, follow these steps on the Online Forms Maintenance panel.

1. Type U in the line command field of the selected form and press Enter. The Update Form panel (CMNFRMU) appears.

```
CMNZFRMU ------------------- UPDATE FORM ------------------------------
COMMAND ===>

Press ENTER to process; Enter END command to exit.

FORM ID:
FORM DESCRIPTION ===> _____
LEAD TIME        ===> ____    (in days)
ALLOW ACCESS     ===> ____    (Y/N)
ALLOW SUBMIT     ===> ____    (Y/N)
```

The following table describes the fields of the Update Form panel.

Field	Explanation
Form Description	Type the form description.
Lead Time	Type the minimum number of days before package installation date that the form can be submitted for approval. A lead time of zero suppresses checking of the install date when the form is accessed.
Allow Access	Type YES to allow access to the form from the Online Forms Selection panel; otherwise, type NO.
Allow Submit	Type YES to allow submission of the associated skeleton at the time of form approval; otherwise, type NO.

Deleting Forms

To access the Delete Form panel (CMNFRMD), follow the steps from the Online Forms Maintenance panel.

1. Type D and press Enter. The Delete Form panel (CMNZFRMD) appears.

```
CMNZFRMD ------------------- DELETE FORM ------------------------------
COMMAND ===>


Press ENTER to process; Enter END command to exit.


FORM ID:
DESCRIPTION:
LEAD TIME:      days
ALLOW ACCESS:
ALLOW SUBMIT:
```

2. Inspect the form to make certain that you want to delete it, and press Enter.

   Your form definitions are removed permanently from the package master file on completion of the delete function.

Defining Form Panels

From the Online Forms Maintenance panel (CMNZFRM), take the following steps:

1. Type P*n* (where *n* is the panel suffix) or P in the line command field of the selected form, and press Enter. The editor member selection panel displays, if any panels currently exist.

2. Type S in the line command field of the selected member and press Enter. The Panel Editor similar to the following appears:

```
ISREDDE - PROD99.CMNZMF.CUSTPANL(CMNZ0101) - 01.00 ------------ COLUMNS 001 072
COMMAND ===>                                            SCROLL ===> CSR
****************************** TOP OF DATA ******************************
000001 )ATTR
000002 # TYPE(OUTPUT)
000003 @ TYPE(&XATTR) CAPS(ON) PAD('''') JUST(LEFT) INTENS(HIGH)
000004 { TYPE(&XATTR) CAPS(ON) PAD('_') JUST(LEFT) INTENS(LOW)
000005 )BODY EXPAND(!!)
000006 %!-! &XMODE BUILD GDG REQUEST !-!
000007 %COMMAND ===>_ZCMD ! ! %SCROLL ===>_AMT +
000008 +
```

```
000009 +    PACKAGE ID:#XPKGNAME   +   STATUS:#Z   +     INSTALL DATE:#Z
000010 +
000011 +Press%ENTER+to process; Enter%END+command to exit.
000012 +
000013 %    INDEX                                        ENTRIES  DELETE  EMP
000014 )MODEL
000015 @XCMD+{INDEX                                      +{Z +    {Z  +   {Z
000016 )INIT
000017  .ZVARS = '(XPKGSTAT,XPKGDATE,ENTRIES,DELETE,EMPTY)'
000018  IF (&XATTR = OUTPUT)
000019     .CURSOR = ZCMD
000020  &XCMD = \&Z
000021 )REINIT
000022  IF (.MSG ¬= &Z)
000023     REFRESH(ZCMD,AMT,XCMD,INDEX,ENTRIES,DELETE,EMPTY)
000024     .AUTOSEL = YES
000025 )PROC
000026 &TCMD = TRUNC(&ZCMD,1)
000027 IF (&TCMD ¬= '+')
000028    &ZCMD = TRANS(TRUNC(&ZCMD,1) C,CANCEL R,REFRESH *,*)
000029    VER (&ZCMD,LIST,CANCEL,REFRESH,MSG=CMNZ001)
000030    IF (&ZCMD ¬= CANCEL,REFRESH)
000031       IF (&ZTDSELS ¬= 0000)
000032          &DELETE = TRANS(TRUNC(&DELETE,1) Y,YES N,NO *,*)
000033          &EMPTY = TRANS(TRUNC(&EMPTY,1) Y,YES N,NO *,*)
000034          &XCMD = TRUNC(&XCMD,1)
000035          &XCMDCNT = .TRAIL
000036          VER (&XCMD,LIST,I,R,D,MSG=CMNZ002)
000037          VER (&XCMDCNT,NUM,MSG=CMNZ003)
000038          IF (&XCMD ¬= D)
000039             VER (&INDEX,NB,DSNAME)
000040             VER (&ENTRIES,NB,NUM)
000041             VER (&DELETE,NB,LIST,YES,NO)
000042             VER (&EMPTY,NB,LIST,YES,NO)
000043 )END
****** *************************** BOTTOM OF DATA ***************************
```

Panel Format Restrictions

The OFM imposes the following panel format restrictions:

- The name of the command variable must be ZCMD.

- The name of the scroll variable must be AMT.

- Primary commands Cancel and Refresh must be validated and returned in the system variable ZCMD.

- If the form contains table variable definitions, the name of the line command variable appearing in the model section must be XCMD and must be truncated to one character by the TRUNC command. The associated variable containing the line command iteration factor must be XCMDCNT and must be set to .TRAIL resulting from the TRUNC command.

Defining Form Variables

Create a form variable definition row for each symbolic variable referenced in the form panels for which user data is to be stored. The definition of one or more table variables results in the creation and display of an ISPF Dialog Manager table when the form is accessed from the Online Forms Selection panel. A table variable value is stored for each row created and saved by the user. Table variables can also be defined as key variables in order to prevent the form user from saving rows of data having duplicate values for those variables.

The variable definitions are used define the variables to Dialog Manager and map the variables to user data in package master records. Changes to variable definitions after a form has been put into use produce incorrect mapping of existing user data unless consideration is given to the position, length and type of the variables in the definition requiring change. As with conventional record definitions, it is possible to reserve space for future use with "filler" variables.

To access the Define Form Variables panel (CMNZVRB), take the following steps:

1. Type V in the line command field of the selected form and press Enter. The Define Form Variables panel (CMNVRB) appears.

```
CMNZVRB ------------------- DEFINE FORM VARIABLES ------------- ROW 1 TO 13 OF 15
COMMAND ===>                                               SCROLL ===> CSR

        FORM ID: 010 DESCRIPTION: Build GDG Request

Press ENTER to process;
Enter END command to save changes and exit;
Enter CANCEL command to cancel changes and exit.

        VARIABLE      VARIABLE      VARIABLE      TABLE        KEY
          NAME         FORMAT        LENGTH      VARIABLE     VARIABLE
''''     INDEX___     CHAR_____       44__        YES          NO_
''''     ENTRIES_     CHAR_____       3___        YES          NO_
''''     DELETE__     CHAR_____       3___        YES          NO_
''''     EMPTY___     CHAR_____       3___        YES          NO_
''''     _____     _____       ____        ___          ___
''''     _____     _____       ____        ___          ___
''''     _____     _____       ____        ___          ___
''''     _____     _____       ____        ___          ___
''''     _____     _____       ____        ___          ___
''''     _____     _____       ____        ___          ___
''''     _____     _____       ____        ___          ___
''''     _____     _____       ____        ___          ___
''''     _____     _____       ____        ___          ___
```

The following table describes the fields of the *Define Form Variables* panel.

Field	Explanation
Line Commands	**I - Insert** Inserts a new form variable row.
	R - Repeat Repeats an existing form variable row.

Field	Explanation
	D - Delete Deletes the form variable row.
Variable Name	Type a unique one- to eight-character symbolic variable name following Dialog Manager conventions. Names beginning with X, Y, or Z are reserved for internal use and as such may not be defined. Both ISPF and Online Forms pre-defined variables (see *Appendix C, "," on page 51*) may also appear in panel definitions as required.
Variable Format	Type CHAR (Character string - data is left-justified and padded on the right with blanks) or FIXED (Fixed binary integer - variables with a length of 4 are signed allowing entry of a leading minus sign).
Variable Length	Type the variable length in the range 1-3072 for format CHAR or 14 for format FIXED.
Table Variable	Type Y if the variable is to be displayed in table format in a scrollable part of the associated panel; otherwise, type N.
Key Variable	Type Y if the variable is to be checked for a unique value within the table; otherwise, type N.

Defining Form Notifications

The Define Form Notifications panel (CMNNTF) allows you to access the notification function to send messages by the started task to notify approvers when a form is submitted that requires their approval.

To access the Define Form Notifications panel, take the following steps:

1. Type N in the line command field of the selected form and press Enter. The Define Form Notifications panel (CMNZNTF) appears.

```
CMNZVRB ------------------- DEFINE FORM NOTIFICATIONS-------- ROW 1 TO 10 OF 10
COMMAND ===>                                              SCROLL ===> CSR


        FORM ID: 010 DESCRIPTION: Build GDG Request

Press ENTER to process;
Enter END command to save changes and exit;
Enter CANCEL command to cancel changes and exit.


        VEHICLE    USERIDS  TO  NOTIFY  (separate with commas)
        MVSSEND_   CMNUSER8,CMNUSER9_____
'''''   _____   _____
'''''   _____   _____
'''''   _____   _____
'''''   _____   _____
'''''   _____   _____
'''''   _____   _____
'''''   _____   _____
'''''   _____   _____
************************** BOTTOM OF DATA *********************************
```

Notifications specified at this panel notify users of a pending form approval.

The following table provides a description of the Define Form Notification panel (CMNZNTF).

Field	Explanation
Line Commands	**I - Insert** Inserts a new form variable row.
	R - Repeat Repeats an existing form variable row.
	D - Delete Deletes the form variable row. A maximum of 10 rows are allowed.
Vehicle	Type a Notification Vehicle that is enabled in Global Administration Parameters.
User IDs	Type one or more TSO userids or e-mail addresses separated by commas.

2. Complete a row for each notification you want to define for the form, then issue the End command.

Defining OFM Option Form Security Entity

Your security administrator must define security entities for each OFM Option form to grant authorization to approve and to reject the form. Use the following procedure for each form you create:

1. In your security system under the resource class for ChangeMan ZMF, create the following profiles with no access (UACC NONE):

CMN*s*Z*fff*

CMN*s*R*fff*

where **s** is the subsystem ID of the ChangeMan instance that will use the OFM Option and *fff* is the 3-character form number. If you use a null subsystem ID, the profile names are CMNZ*fff* and CMNR*fff*.

2. Permit the TSO ID of the form approver (or a group) UPDATE access to profile CMN*s*Z*fff*.

Permit the TSO ID of the form rejecter (or a group) UPDATE access to profile CMN*s*R*fff*.

Under the resource class for ChangeMan ZMF, permit the TSO ID of the form approver and rejecter (or groups) READ access to the security entity for the ChangeMan application where the form will be used in change packages.

If form reject entity CMNsRfff is not defined, behavior depends on how your security system is configured for undefined entities. With default configuration, where RACROUTE REQUEST=AUTH issues return code 4 for undefined entities (unprotected resources), ZMF then checks the CMNsZfff entity for authority to reject the form. Thus, CMNsZfff controls access to both approve and reject functions. If your security system is configured to deny access to undefined entities (E.G. using PROTECTALL), entity CMNsRfff MUST be defined to grant authorization to reject the form.

Example - Creating a New Form by Copying an Existing Form

This example shows how you can create a new form by using a similar existing form as a model. The new form will be 020 Dataset Allocation Request and the form to be used as a model is 010 Build GDG Request.

1. Select Option A (Admin) from the Primary Option menu. Press Enter.

2. Select Option G (Global) from the Administration Options menu. Press Enter.

3. Select Option O (Options) from the Global Administration Options menu. Press Enter.

4. Select Option 4 (OFM) from the Global Selectable Options menu. Press Enter.

5. Select Option 1 (Maintain) from the Online Forms Options menu and press Enter. The Online Forms Maintenance panel (CMNZFRM) appears.

```
CMNZFRM ------------------- ONLINE FORMS MAINTENANCE --------------- Row 1 to 10 of 10
COMMAND ===>                                                         SCROLL ===> CSR

Line commands: I  - Insert,  R - Repeat,    U - Update,        D - Delete
               Pn - Panels,  V - Variables, N - Notificiations,  S - Sample

Press ENTER to process: Enter END command to exit.

    FORM                                      LEAD    ALLOW   ALLOW
      ID    FORM DESCRIPTION                  TIME    ACCESS  SUBMIT
.... 010    Build GDG Request                   0     YES     YES
.... 030    DASD Dataset Space Request          7     YES     NO
.... 070    Problem Summary                     7     YES     NO
.... 100    Report Distribution Information     7     YES     NO
.... 110    Standards & Guidelines Revision     7     YES     NO
.... 120    Tape Retention Register             7     YES     NO
.... 130    Standards Exemption Request         7     YES     NO
.... 140    Security Information                7     YES     NO
.... 160    Scheduler JCL Update                7     YES     NO
.... 170    Scheduler Update                    7     YES     NO
**************************** Bottom of data ****************************************
```

6. Type R (Repeat) in the line command area of the form to be repeated and press Enter. The Create Form panel (CMNFRMC) appears.

```
CMNZFRMC ---------------------- CREATE FORM -----------------------------------
COMMAND ===>
Press ENTER to process; Enter END command to exit.
FORM ID         ===> 010
DESCRIPTION     ===> Build GDG Request_____
LEAD TIME       ===> 0__ (in days)
ALLOW ACCESS    ===> YES    (Y/N)
ALLOW SUBMIT    ===> YES    (Y/N)
```

7. Modify Form ID to the new forms ID.

Modify Form Description to the new description.

9. Press Enter.

The Online Forms Maintenance panel (CMNZFRM) displays with a message indicating that the new form has been created.

```
CMNZFRM ------------------- ONLINE FORMS MAINTENANCE ---------------- Row 1 to 10 of 10
COMMAND ===>                                                          SCROLL ===> CSR

Line commands: I  - Insert,  R - Repeat,    U - Update,         D - Delete
               Pn - Panels,  V - Variables, N - Notificiations,  S - Sample

Press ENTER to process: Enter END command to exit.

    FORM                                        LEAD    ALLOW    ALLOW
      ID    FORM DESCRIPTION                    TIME    ACCESS   SUBMIT
.... 010    Build GDG Request                      0    YES      YES
.... 030    DASD Dataset Space Request             7    YES      NO
.... 070    Problem Summary                        7    YES      NO
.... 100    Report Distribution Information        7    YES      NO
.... 110    Standards & Guidelines Revision        7    YES      NO
.... 120    Tape Retention Register                7    YES      NO
.... 130    Standards Exemption Request            7    YES      NO
.... 140    Security Information                   7    YES      NO
.... 160    Scheduler JCL Update                   7    YES      NO
.... 170    Scheduler Update                       7    YES      NO
**************************** Bottom of data ****************************************
```

10. Type P1 (Panel number 1) in the line command field of the new form.

11. Press Enter to invoke the Panel Editor.

```
ISREDDE - PROD99.CMNZMF.CUSTPANL(CMNZ0201) - 01.00 ----------- COLUMNS 001 072
COMMAND ===>                                                    SCROLL ===> CSR
******************************** TOP OF DATA ********************************
000001 )ATTR
000002 \# TYPE(OUTPUT)
000003 @ TYPE(&XATTR) CAPS(ON) PAD('''') JUST(LEFT) INTENS(HIGH)
000004 { TYPE(&XATTR) CAPS(ON) PAD('_') JUST(LEFT) INTENS(LOW)
000005 )BODY EXPAND(!!)
000006 %!-! &XMODE BUILD GDG REQUEST !-!
000007 %COMMAND ===\>_ZCMD ! ! %SCROLL ===>_AMT +
000008 +
000009 +    PACKAGE ID:#XPKGNAME +      STATUS:#Z   +       INSTALL DATE:#Z
000010 +
000011 +Press%ENTER+to process; Enter%END+command to exit.
000012 +
000013 %    INDEX                                ENTRIES    DELETE      EMP
000014 )MODEL
000015 @XCMD+{INDEX                             +{Z +       {Z  +       {Z
000016 )INIT
000017    .ZVARS = '(XPKGSTAT,XPKGDATE,ENTRIES,DELETE,EMPTY)'
000018    IF (&XATTR = OUTPUT)
000019        .CURSOR = ZCMD
000020    &XCMD = &Z
000021 )REINIT
000022    IF (.MSG ¬= \&Z)
000023        REFRESH(ZCMD,AMT,XCMD,INDEX,ENTRIES,DELETE,EMPTY)
000024        .AUTOSEL = YES
```

```
000025 )PROC
000026  &TCMD = TRUNC(&ZCMD,1)
000027  IF (&TCMD ¬= '+')
000028     &ZCMD = TRANS(TRUNC(&ZCMD,1) C,CANCEL R,REFRESH *,*)
000029     VER (&ZCMD,LIST,CANCEL,REFRESH,MSG=CMNZ001)
000030     IF (&ZCMD ¬= CANCEL,REFRESH)
000031          IF (&ZTDSELS ¬= 0000)
000032             &DELETE = TRANS(TRUNC(&DELETE,1) Y,YES N,NO *,*)
000033             &EMPTY = TRANS(TRUNC(&EMPTY,1) Y,YES N,NO *,*)
000034             &XCMD = TRUNC(&XCMD,1)
000035             &XCMDCNT = .TRAIL
000036             VER (&XCMD,LIST,I,R,D,MSG=CMNZ002)
000037             VER (&XCMDCNT,NUM,MSG=CMNZ003)
000038             IF (&XCMD ¬= D)
000039                 VER (&INDEX,NB,DSNAME)
000040                 VER (&ENTRIES,NB,NUM)
000041                 VER (&DELETE,NB,LIST,YES,NO)
000042                 VER (&EMPTY,NB,LIST,YES,NO)
000043 )END
*********************************** BOTTOM OF ******************************
```

12. Modify the panel title to the new title.

13. Remove references to variables INDEX, ENTRIES, DELETE, and EMPTY.

14. Add references to variables DATA SET, VOLUME, and TRACKS.

   References to variables in the REINIT and PROC sections of the panel must be reviewed when
   removing or adding variables.

```
ISREDDE - PROD99.CMNZMF.CUSTPANL(CMNZ0201) - 01.00 -------------- COLUMNS 001 072
COMMAND ===>                                                  SCROLL ===> CSR
******************************** TOP OF DATA ********************************
000001 )ATTR
000002    # TYPE(OUTPUT)
000003    @ TYPE(&XATTR) CAPS(ON) PAD('''') JUST(LEFT) INTENS(HIGH)
000004    { TYPE(&XATTR) CAPS(ON) PAD('_') JUST(LEFT) INTENS(LOW)
000005 )BODY EXPAND(!!)
000006 %!-! &XMODE DATASET ALLOCATION REQUEST !-!
000007 %COMMAND ===>_ZCMD ! ! %SCROLL ===>_AMT +
000008 +
000009 +   PACKAGE ID:#XPKGNAME   +   STATUS:#Z   +     INSTALL DATE:#Z
000010 +
000011 +Press%ENTER+to process; Enter%END+command to exit.
000012 +
000013 % DATASET                                      VOLUME      TRACKS
000014 )MODEL
000015 @XCMD+{DATASET                                 +{Z    +   {Z +
000016 )INIT
000017    .ZVARS = '(XPKGSTAT,XPKGDATE,VOLUME,TRACKS)'
000018    IF (&XATTR = OUTPUT)
000019       .CURSOR = ZCMD
000020    &XCMD = &Z
000021 )REINIT
000022    IF (.MSG ¬= \&Z)
000023       REFRESH(ZCMD,AMT,XCMD,DATASET,VOLUME,TRACKS)
000024       .AUTOSEL = YES
```

```
000025 )PROC
000026  &TCMD = TRUNC(&ZCMD,1)
000027  IF (&TCMD ¬= '+')
000028     &ZCMD = TRANS(TRUNC(&ZCMD,1) C,CANCEL R,REFRESH *,*)
000029     VER (&ZCMD,LIST,CANCEL,REFRESH,MSG=CMNZ001)
000030     IF (&ZCMD ¬= CANCEL,REFRESH)
000031         IF (&ZTDSELS ¬= 0000)
000032             &XCMD = TRUNC(&XCMD,1)
000033             &XCMDCNT = .TRAIL
000034             VER (&XCMD,LIST,I,R,D,MSG=CMNZ002)
000035             VER (&XCMDCNT,NUM,MSG=CMNZ003)
000036             IF (&XCMD ¬= D)
000037                 VER (&DATASET,NB,DSNAME)
000038                 VER (&VOLUME,NB)
000039                 VER (&TRACKS,NB,NUM)
000040 )END
********************************* BOTTOM OF DATA ***************************
```

15. Enter the End command to save changes and exit. The Online Forms Maintenance panel
    (CMNZFRM) appears.

```
CMNZFRM -------------------- ONLINE FORMS MAINTENANCE -------------------FORM CREATED
COMMAND ===>                                                   SCROLL ===> CSR

Line commands: I  - Insert,  R - Repeat,    U - Update,         D - Delete
               Pn - Panels,  V - Variables, N - Notificiations,  S - Sample

Press ENTER to process: Enter END command to exit.

    FORM                                       LEAD    ALLOW   ALLOW
     ID     FORM DESCRIPTION                   TIME    ACCESS  SUBMIT
.... 010    Build GDG Request                    0     YES     YES
.... 030    DASD Dataset Space Request           0     YES     NO
.... 070    Problem Summary                      7     YES     NO
.... 100    Report Distribution Information      7     YES     NO
.... 110    Standards & Guidelines Revision      7     YES     NO
.... 120    Tape Retention Register              7     YES     NO
.... 130    Standards Exemption Request          7     YES     NO
.... 140    Security Information                 7     YES     NO
.... 160    Scheduler JCL Update                 7     YES     NO
.... 170    Scheduler Update                     7     YES     NO
*************************** Bottom of data *****************************************
```

16. Type V in the line command field of the new form.

17. Press Enter. The Define Form Variables panel (CMNZVRB) appears.

```
CMNZVRB -------------------- DEFINE FORM VARIABLES ------------- ROW 1 TO 13 OF 15
COMMAND ===>                                               SCROLL ===> CSR

FORM ID: 020 DESCRIPTION: Dataset Allocation Request

Press ENTER to process;
Enter END command to save changes and exit;
Enter CANCEL command to cancel changes and exit.
        VARIABLE     VARIABLE     VARIABLE      TABLE       KEY
          NAME        FORMAT       LENGTH      VARIABLE    VARIABLE
''''    INDEX___    CHAR____        44__         YES         NO_
''''    ENTRIES_    CHAR____        3___         YES         NO_
''''    DELETE__    CHAR____        3___         YES         NO_
''''    EMPTY___    CHAR____        3___         YES         NO_
''''    _____     _____        ____         ___         ___
''''    _____     _____        ____         ___         ___
''''    _____     _____        ____         ___         ___
''''    _____     _____        ____         ___         ___
''''    _____     _____        ____         ___         ___
''''    _____     _____        ____         ___         ___
''''    _____     _____        ____         ___         ___
''''    _____     _____        ____         ___         ___
''''    _____     _____        ____         ___         ___
```

18. Modify the variable entries to suit the variables now defined in the form panel.

```
CMNZVRB -------------------- DEFINE FORM VARIABLES -------- ROW 1 TO 13 OF 14
COMMAND ===>                                           SCROLL ===> CSR
     FORM ID: 020 DESCRIPTION: Dataset Allocation Request

Press ENTER to process;
Enter END command to save changes and exit;
Enter CANCEL command to cancel changes and exit.

     VARIABLE VARIABLE VARIABLE    TABLE       KEY
       NAME    FORMAT   LENGTH   VARIABLE   VARIABLE
'''' DATASET_ CHAR____  44__       YES        NO_
'''' VOLUME__ CHAR____  6___       YES        NO_
'''' TRACKS__ CHAR____  4___       YES        NO_
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
'''' _____ _____ ____        ___        ___
```

19. Enter the End command to save changes and exit. This displays the Online Forms
    Maintenance panel. The new form is ready for use.

5. Using Online Forms

Online forms selection is an end user function from within a selected change package. This function allows you to select available forms for:

- Entry and modification of the form data.

- Approval and subsequent approval or rejection.

- Access to form comments and a form print utility.

  You can also use an extension of the ChangeMan ZMF Package Freeze/Unfreeze function to selectively Freeze or Unfreeze individual forms within a change package.

Accessing Online Forms Selection

The Online Forms Selection panel displays a table of all available forms within the change package and provides line commands for Edit, Browse, Submit, Deactivate, Approve, Reject, Comment, and Print functions.

To access the Online Forms Selection panel:

1. Select Option 1 (Build) from the Primary Option menu. Press Enter.

2. Select Option 3 (Custom) from the Build Options menu. Press Enter.

3. Complete the package ID on the Create/Update Online Forms panel. Press Enter.

   or -

4. Select Option 5 (List) from the Primary Option menu. Press Enter.

5. Complete the parameters on the Package List Parameters panel. Press Enter.

6. Type OF next to a package ID on the Change Package List panel. Press Enter.

   or -

7. Select Option Q (Query) from the Primary Option Menu. Press Enter.

8. Select Option P (Package) from the Query Options Menu. Press Enter.

9. Complete the parameters on the Query Package Parameters panel. Press Enter.

10. Type S next to a package ID on the Query Package List panel. Press Enter.

11. Type S next to Custom Forms on the Package Information Categories panel. Press Enter.

    or -

12. Select Option O (OFMlist) from the Primary Option Menu. Press Enter.

13. Complete the parameters on the Online Forms Package Parameters panel. Press Enter.

14. Type S next to a package ID on the Online Forms Package List panel and press Enter. The Update Online Form Selection panel (CMNZMGR) appears.

```
CMNZMGR -------------- UPDATE: ONLINE FORMS SELECTION --------------- ROW 1 TO 10 OF 10
COMMAND ===>                                                  SCROLL ===> CSR

        PACKAGE ID: TEST000001     STATUS: DEV     INSTALL DATE: 940601

Line commands: E - Edit,       B - Browse,     S - Submit,     D - Deactivate,
               A - Approve,     R - Reject,     C - Comment,    P - Print

Press ENTER to process; Enter END command to exit.

   FORM                                         LEAD    DAYS          LAST
     ID FORM DESCRIPTION                        TIME    LEFT STATUS    USERID
'''' 010 Build GDG Request                      0       44   ACTIVE    CMNUSER1
'''' 030 DASD Dataset Space Request             7       37
'''' 070 Problem Summary                        7       37
'''' 100 Report Distribution Information        7       37
'''' 110 Standards & Guidelines Revision        7       37
'''' 120 Tape Retention Register                7       37   REJECTED  CMNUSER2
'''' 130 Standards Exemption Request            7       37
'''' 140 Security Information                   7       37
'''' 160 Scheduler JCL Update                   7       37
'''' 170 Scheduler Update                       7       37
****************************** BOTTOM OF DATA ***************************************
```

Use the following line commands to access forms or change the form status as required.

> 💡 **Note**
>
> The available line commands depend on the package status, form status, remaining days, and user access rights. |

Field	Explanation
Line Commands--	**E - Edit** Displays the form in edit mode and sets the form status to ACTIVE when exiting with the End command.
	B - Browse Displays the form in browse mode.
	S - Submit Sets the form status to SUBMITTED and notifies all defined form approvers, specified with Global OFM panel (CMNZNTF) of a pending forms approval.
	D - Deactivate Clears the form status but retains any form data and form comments.
	A - Approve Sets the form status to APPROVED and optionally submits the approve job skeleton, as well as notifying the user specified in the Notify user field of the forms approval through MVSSEND.

Field	Explanation
	R - Reject Sets the form status to REJECTED and displays the Form Comments panel, as well as notifying the user specified in the Notify user field of the forms rejection through MVSSEND.

Editing Forms

To access an Online Form in edit mode, do the following from the Online Forms Selection panel:

1. Type E (Edit) in the line command field of the selected form. (Sample form 010 - Build GDG Request was selected for this example.)

2. Press Enter. The Edit Build GDG Request panel (CMNZ0101) appears and locks the form to prevent update by another user. If the form is in use by another user a message displays and the command is aborted.

```
CMNZ0101 ------------- EDIT: BUILD GDG REQUEST -------------ROW 1 TO 13 OF 13
COMMAND ===>                                          SCROLL ===> PAGE

        PACKAGE ID: TEST000001      STATUS: DEV       INSTALL DATE: 19971230

Press ENTER to process; Enter END command to exit.

     INDEX                              ENTRIES    DELETE     EMPTY
'''' TEST.DATASET.NAME01_____ 10_       YES       NO_
'''' TEST.DATASET.NAME02_____ 10_       YES       NO_
'''' TEST.DATASET.NAME03_____ 10_       YES       NO_
'''' TEST.DATASET.NAME04_____ 10_       YES       NO_
'''' _____ ___       ___       ___
'''' _____ ___       ___       ___
'''' _____ ___       ___       ___
'''' _____ ___       ___       ___
'''' _____ ___       ___       ___
'''' _____ ___       ___       ___
'''' _____ ___       ___       ___
'''' _____ ___       ___       ___
'''' _____ ___       ___       ___
**************************** BOTTOM OF DATA ******************************
```

3. Use an Online Form in edit mode.

An Online Form consists of single or multiple panels containing table and non-table variables. Forms using multiple panels allow navigation using Enter to display the next panel (if all validation for the panel is passed) and the End command to return to the previous panel. If a form contains table variables, then the first panel contains scrollable rows with a line command input area for each row. This line command area allows I, R, and D commands and, if the form contains multiple panels, the S command to display the next panel. Exiting from the form with the End command always saves the form data in the package master file. The form status is set to ACTIVE and the last user ID field is updated. If no data exists (all form variables contain null values) then the form status and last user ID fields are cleared. To avoid

updating the last user ID field when no changes have been made to the form data, use the Cancel command.

Form Locking

This function incorporates a locking facility that locks the form on entry and unlocks the form on exit preventing update by more than one user at a time. Attempts to use an update function on a form currently locked by another user results in an error message and the command is aborted. A form can remain locked when the user is unable to exit normally due to a system failure or session time-out. The OFM allows access to the form if the current user ID is the same as that under which the form was previously locked or if the current user ID has local or global administrator rights.

Browsing Forms

To access an Online Form in browse mode, do the following from the Online Forms Selection panel:

1. Type B (Browse) in the line command field of the selected form.

2. Press Enter. The Browse Build GDG Request panel (CMNZ0101) appears.

```
CMNZ0101 -------------- BROWSE: BUILD GDG REQUEST ------------------ ROW 1 TO 4 OF 4
COMMAND ===>                                                   SCROLL ===> PAGE

         PACKAGE ID: TEST000001      STATUS: DEV         INSTALL DATE: 19971230

Press ENTER to process; Enter END command to exit.

       INDEX                          ENTRIES         DELETE       EMPTY
''''    TEST.DATASET.NAME01_____ 10_             YES          NO_
''''    TEST.DATASET.NAME02_____ 10_             YES          NO_
''''    TEST.DATASET.NAME03_____ 10_             YES          NO_
''''    TEST.DATASET.NAME04_____ 10_             YES          NO_
***************************** BOTTOM OF DATA **********************************
```

3. Use the Online Form in browse mode.

   An Online Form consists of single or multiple panels containing table and non-table variables. Forms that use multiple panels allow navigation using Enter to display the next panel (if all validation for the panel is passed) and the End command to return to the previous panel. If a form contains table variables, then the first panel contains scrollable rows with a line command input area for each row. This line command area allows the S command to display the next panel if the form contains multiple panels.

Submitting Forms for Approval

To use the Submit function, do the following from the Online Forms Selection panel.

1. Type S (Submit) in the line command field of the selected form.

2. Press Enter.

   This changes the form status to SUBMITTED and updates the last user ID field. A message is sent to all user IDs in the notification definition that the form is waiting for their approval. If the form is in use by another user, a message displays and the command is aborted.

Deactivating Forms

To use the Deactivate function, do the following from the Online Forms Selection panel:

1. Type D (Deactivate) in the line command field of the selected form.

2. Press Enter.

   This clears the form status and last user ID fields. All form data and form comments are retained. The form may be edited subsequently and the status reset to ACTIVE. If the form is in use by another user, a message displays and the command is aborted.

Approving Forms

To use the Approve function, do the following from the Online Forms Selection panel.

1. Type A (Approve) in the line command field of the selected form.

2. Press Enter.

   If the form allows submit at approval, the Job Statement Information panel (CMNJOBCD) is displayed.

```
CMNJOBCD                       Job Statement Information
COMMAND ===>

Job Statement Information

 _//USER001    JOB (0000),'CHANGE MAN',_____
 //            CLASS=A,MSGCLASS=X,NOTIFY=USER001_____
 //*_____
 //*_____
```

3. Enter valid job statement information and press Enter.

   This sets the form status to APPROVED and, if the form allows submit at approval, invokes processing of the approve job skeleton which submits the output job stream for execution.

Upon successful completion, a *jobname(jobnumber)* submitted message is received from the ChangeMan ZMF started task. Any errors detected during skeleton processing are indicated by standard ISPF Dialog Manager messages. (Press `PF1` for the long message text.)

> 💡 **Note**
>
> You must have authorization to a security entity created by your security administrator to approve a form.
>
> Your application administrator may prohibit approving packages and forms for packages you created. (Application Administration Parameters: Package creator cannot approve)
>
> Your application administrator may prohibit approving packages and forms for packages in which you worked on a component. (Application Administration Parameters: Package worker cannot approve.)

Rejecting Forms

To use the Reject function, do the following from the Online Forms Selection panel.

1. Type R (Reject) in the line command field of the selected form.
2. Press Enter.

   This changes the form status to REJECTED and updates the last user ID field. If the form is in use by another user, a message displays and the command is aborted.

Commenting Forms

To access the Form Comments panel, do the following from the Online Forms Selection panel.

1. Type C (Comments) or R (Reject) in the line command field of the selected form.
2. Press Enter. The Form Comments panel (CMNZCMT) appears and locks the form to prevent updates by another user. If the form is in use by another user, a message displays and the command is aborted.

```
CMNZCMT -------------------- FORM COMMENTS -------------------------------
COMMAND ===>

    PACKAGE ID: TEST000001      STATUS: DEV        INSTALL DATE: 19971230


    FORM ID: 120    DESCRIPTION: Tape Retention Register

Press ENTER to process; Enter END command to exit.
COMMENTS:
===> Rejected due to non-standard dataset name - MWS 9/18/1997
===>
===>
===>
===>
===>
===>
===>
===>
```

Using the Form Comments Panel

Type comments into unused comments lines as required. Non-blank comment lines are protected from input in order to maintain a log of comments. Intervening blank lines are removed when the data is saved. Terminate comments with the id of the author and the date and time.

Form Locking

This function incorporates a locking facility that locks the form on entry and unlocks the form on exit preventing update by more than one user at a time. Attempts to use an update function on a form currently locked by another user results in an error message and the command is aborted. A form can remain locked when the user is unable to exit normally due to a system failure or session time-out. The OFM allows access to the form if the current user ID is the same as that under which the form was previously locked or if the current user ID has local or global administrator rights.

Printing Forms

To print Online Forms, do the following from the Online Forms Selection panel:

1. Type P (Print) in the line command field of the selected form.

2. Press Enter.

   The Job Statement Information panel (CMNJOBCD) is displayed.

```
CMNJOBCD                         Job Statement Information
COMMAND ===>


Job Statement Information

  //USER001___JOB_(0000)_,_'CHANGE MAN',_____
  // _____CLASS=A,MSGCLASS=X,NOTIFY=USER001_____
  //*_____
  //*_____
```

3. Enter valid job statement information and press enter.

   This invokes the print job skeleton that submits the output job stream for execution. Upon successful completion, a *jobname(jobnumber)* submitted message is received from the ChangeMan ZMF started task. Any errors detected during skeleton processing are indicated by standard ISPF Dialog Manager messages. (Press `PF1` for the long message text.)

Online Forms Freeze/Unfreeze

The Online Forms Selection panel displays a table of all available forms within the change package and provides access to all the functions necessary for selectively freezing and unfreezing individual forms.

To access the Online Forms Freeze/Unfreeze panel:

1. Select Option 2 (Freeze) from the Primary Option menu. Press Enter.

2. Select Option 3 from the Freeze Options menu. Press Enter.

3. Type S in the line command field next to Custom Forms in the Selective Freeze/ Unfreeze panel. Press Enter.

   This displays the Online Forms Freeze/Unfreeze panel (CMNZUNF).

```
CMNZUNF ---------------- ONLINE FORMS FREEZE/UNFREEZE -----------------------------
COMMAND ===>                                                  SCROLL ===> PAGE
           PACKAGE ID: TEST000002  STATUS: DEV       INSTALL DATE: 19971230


Line commands:  F-Freeze,   U-Unfreeze


Press ENTER to process; Enter END command to exit.

   FORM                                   LEAD DAYS                   LAST
    ID     FORM DESCRIPTION               TIME LEFT STATUS            USERID
f''' 120      Tape Recovery Form          10   6    ACTIVE            USER85
```

Use the following line commands to freeze or unfreeze the forms as required. If the form is in use by another user, a message displays and the command is aborted.

```
| Field         | Explanation                                                              |
|---------------|--------------------------------------------------------------------------|
| Line Commands | **F - Freeze** Freezes the form.  |
|               | **U - Unfreeze** Unfreezes the form.|
```

6. Predefined Variables

The following symbolic variables are defined by the OFM for the user defined panels.

Refer to the sample form panels for examples of use.

Name	Format	Length	Description
XATTR	char	6	Access attribute (INPUT/OUTPUT)
XCMD	char	4	Line command
XCMDCNT	fixed	4	Line command suffix
XFRMID	char	3	Form identifier
XFRMDESC	char	40	Form description
XMODE	char	7	Access mode (EDIT:/BROWSE:)
XPKGDATE	char	6	Package install date
XPKGNAME	char	10	Package name
XPKGSTAT	char	3	Package status

7. Messages and Codes

Code	Message	Explanation
8201A	Primary command not valid for this panel.	The command entered in the primary command area is not a valid choice for this panel.
8202A	Primary command not valid for this panel.	The command entered in the line command area is not a valid choice for this panel.
8203A	Line command suffix must be numeric.	The command entered in the line command area contains a nonnumeric suffix iteration factor.
8204I	Changes saved in the Package Master.	An END command was processed; your changes were saved in the package master file.
8205I	Changes canceled at user request.	A CANCEL command was processed and your changes were discarded.
8206A	Line command not allowed for this form.	The command entered in the line command area is not valid for the selected form based upon the package status, form status, and days left.
8207A	Access denied - see administrator.	You do not have sufficient access rights for the requested function. **Solution:** See your administrator.
8208A	Package {package_ID} not found in the Package Master.	The requested package cannot be found in the package master file.
8209A	Package {package_ID} is memo deleted.	The requested package was found in the package master file but has been marked for deletion and is not available for use.
8210A	Duplicate rows not allowed for this form.	The form contains one or more variables defined to ensure that duplicate data is not saved.
8211A	Variable names beginning with X, Y, or Z are reserved.	An attempt was made to save variable definitions containing a variable name having a first character of X, Y, or Z. Variable names beginning with these characters are reserved for internal use.
8212A	Form data record not found - retry command.	The form data record could not be found in the package master file. An administrator may have deleted the record while you were using it, or the package master file may be damaged.
8213A	Form data record not found - see administrator.	The form definition record could not be found in the package master file. An administrator may have deleted the record while you were using it, or the package master file may be damaged.

Code	Message	Explanation
8214A	Form data must not exceed 32,767 bytes.	An attempt was made to save form data that has a length exceeding 32,767 bytes. **Solution:** Delete sufficient rows from the form to reduce the length to \<=32,767 bytes and retry the operation.
8215A	Form ID must be numeric.	The form ID field contains nonnumeric characters.
8216A	Form description must not be blank.	The form description field must not be blank.
8217A	Lead time must be numeric.	The lead time field must contain all numeric characters.
8218A	Variable name contains an invalid character.	The variable name field contains one or more invalid characters. Alphanumeric characters A-Z, 0-9, #, $, or @ can be used in the name, but the first character cannot be numeric.
8219A	Variable format must be CHAR or FIXED.	OFM currently supports only the ISPF Dialog Manager variable formats of CHAR and FIXED.
8220A	Variable length must be in range 1-3072 (CHAR) or 1-4 (FIXED).	The variable length field must be within the range 1-3072 for a CHAR variable format or 1-4 for a FIXED variable format.
8221A	Table variable must be YES or NO.	The table variable field must contain a value of YES or NO.
8222A	Key variable must be YES or NO.	The key variable field contains a value other than YES or NO.
8223A	Number of variables must not exceed 200.	An attempt was made to save more than 200 form variable definitions.
8224A	Total of variable lengths must not exceed 3,072.	An attempt was made to save form variable definitions with a total length that exceeds 3,072 bytes.
8225A	Notification vehicle must be MVSSEND.	OFM currently supports only the MVSSEND notification vehicle.
8226A	Notification vehicle undefined.	The requested notification vehicle has not been defined to ChangeMan ZMF in the Global Parameters.
8227A	Notification user IDs must not be blank.	The notification user IDs field was blank.
8228A	Notifications must not exceed 10 rows.	OFM currently supports a maximum of 10 rows of notification definitions.
8229A	Approve/reject authorization denied - see administrator.	You do not have sufficient security access rights for the approve and reject line commands.

Code	Message	Explanation
8230A	Form {form_ID} already exists in the Package Master.	An attempt was made to create a new form using a form ID that already exists in the package master file.
8231A	Form {form_ID} created in the Package Master.	The requested form has been successfully created in the package master file.
8232A	Form {form_ID} deleted from the Package Master.	The requested form was successfully deleted from the package master file.
8233A	Form {form_ID} updated in the Package Master.	The requested form was successfully updated in the package master file.
8234A	No panels defined for form {form_ID} - see administrator.	Either no panels were created for the specified form number or the panels are not available in the ISPF Dialog Manager ISPPLIB library concatenation.
8235A	Key variable must be table variable.	The key variable of YES is only valid for a variable that is also defined with a table variable of YES.
8236A	Form currently in use by user ID {User_ID}.	The requested form was locked by another user and is not available for use at this time. If the form remains locked due to a system failure or session time-out, only the last user or an administrator can unlock the form.
8237A	Allow access must be YES or NO.	The allow access field does not contain a value of YES or NO.
8238A	Allow submit must be YES or NO.	The allow submit field does not contain a value of YES or NO.
8239A	Form status changed by another user - use REFRESH command.	The form status was changed by another user since the current panel was entered or refreshed.
8240A	Skeleton {skeleton_name] not found in ISPSLIB.	The specified skeleton member name could not be found in the ISPF Dialog Manager ISPSLIB library concatenation.

8. Record Descriptions

The OFM maintains two types of records in the package master file: form definition records and form data records. The following sections describe the record formats and their use.

Form Definition Records

The following are attributes of Form Definition records:

- They contain the form descriptions.
- They exist at the global level.
- They are maintained by ChangeMan ZMF administrators.
- They are maintained using the Online Forms Maintenance function.

    The following table provides a description of the form definition records.

Offset	Length	Usage	Description	Contents
0	4	Character	Application	X'4B4B4B4B' = Global
4	4	Binary	Package Number	Zero = Global
8	1	Character	Record Type	X'80' = Online Forms
9	2	Binary	Record Sequence	Form Id
11	1	Character	Record Sub-sequence	X'00'
12	2	Binary	Record Data Length	(Record Length-12)
14	40	Character	Form Description	
54	4	Binary	Form Lead Time	
58	1	Character	Allow Form Access	'Y' - Yes 'N' - No
59	1	Character	Allow Job Submit	'Y' - Yes 'N' - No
60	78	Character	Unused	
138	520		10 Approvers (i=1 to 10)	

Offset	Length	Usage	Description	Contents
138+(52*(i-1))	8	Character	Approver Vehicle (i)	
146+(52*(i-1))	44	Character	Approver User IDs (i)	
658	3200		200 Variables (j=1 to 200)	
658+(16*(j-1))	8	Character	Variable Name (j)	
666+(16*(j-1))	2	Binary	Variable Length (j)	
668+(16*(j-1))	1	Character	Variable Format (j)	'C' - Char 'F' - Fixed
669+(16*(j-1))	1	Character	Table Variable (j)	'Y' - Yes 'N' - No
670+(16*(j-1))	1	Character	Key Variable (j)	'Y' - Yes 'N' - No
671+(16*(j-1))	3	Character	Unused	

Form Data Records

The following are attributes of Form Data records:

- They contain the form user data.
- They exist at the package level.
- They are maintained by ChangeMan ZMF users.
- They are maintained using the Online Forms Selection function.

  The following table provides a description of the form data records.

Offset	Length	Usage	Description	Contents
0	4	Character	Package Mnemonic	
4	4	Binary	Package Number	
8	1	Character	Record Type	X'80' = Online Forms
9	2	Binary	Record Sequence	Form ID
11	1	Character	Record Sub-sequence	X'00' thru X'09'
12	2	Binary	Data Length	(length of the form data)

Offset	Length	Usage	Description	Contents
14	8	Character	Form Entity	
22	720	Character	Form Comments	
742	1	Character	Form Status	X'00' = Null X'02' = Inactive X'04' = Unfrozen X'08' = Submitted X'10' = Frozen X'20' = Rejected X'40' = Approved X'80' = Selected
743	4	Character	Form Encryption	
747	8	Character	Form User ID	
755	8	Character	Lock User ID	
763	64	Character	Unused	
827	3269	Character	Form Data	

Form Variable Definitions

Form variables are defined using the Online Forms Variable Definition panel. These definitions map the location of form variable values in the form data records. The following Define Form Variable panel (CMNZVRB) shows the variable definitions for 010 - Build GDG Request.

```
CMNZVRB -------------------- DEFINE FORM VARIABLES -------------------- ROW 1 TO 4 OF 15
COMMAND ===>                                                  SCROLL ===> CSR

         FORM ID: 010    DESCRIPTION: Build GDG Request

Press ENTER to process;
Enter END command to save changes and exit;
Enter CANCEL command to cancel changes and exit.

      VARIABLE      VARIABLE      VARIABLE     TABLE    KEY
        NAME         FORMAT        LENGTH    VARIABLE VARIABLE
''''   INDEX___    CHAR____       44__        YES       NO_
''''   ENTRIES_    CHAR____       3___        YES       NO_
''''   DELETE__    CHAR____       3___        YES       NO_
''''   EMPTY___    CHAR____       3___        YES       NO_
```

The form variable definitions are stored in the form definition record as follows:

Offset	Length	Contents
658	8	INDEX

Offset	Length	Contents
666	2	44
668	1	C
669	1	Y
670	1	Y
671	3	
674	8	ENTRIES
682	2	3
684	1	C
685	1	Y
686	1	N
687	3	
690	8	DELETE
698	2	3
700	1	C
701	1	Y
702	1	N
703	3	
706	8	EMPTY
714	2	3
716	1	C
717	1	Y
718	1	N
719	3	
722	8	spaces

Variable names having 'table variable' set to N are stored before those set to Y in the form definitions, regardless of the original order of entry. The variable definitions are delimited by a variable name that contains all spaces.

Form Data Values

Form data records are created when processing an End command from an Online Form; that is, accessed using the Select command from the Online Forms Selection panel.

The following examples show how the contents of the form variables are saved in the form data records.

Example 1

This example demonstrates form data storage following the entry of three lines of data using the supplied sample form 010, resulting in the creation of one form data record.

```
CMNZ0101 ------------- EDIT: BUILD GDG REQUEST -------------------ROW 1 TO 13 OF 13
COMMAND ===>                                                 SCROLL ===> PAGE

        PACKAGE ID: TEST000001     STATUS: DEV           INSTALL DATE: 19971230

Press ENTER to process; Enter END command to exit.

      INDEX                                 ENTRIES      DELETE      EMPTY
''''  TEST.DATASET.NAME01_____ 10_          YES         NO_
''''  TEST.DATASET.NAME02_____ 10_          YES         NO_
''''  TEST.DATASET.NAME03_____ 10_          YES         NO_
''''  TEST.DATASET.NAME04_____ 10_          YES         NO_
''''  _____ ___          ___         ___
''''  _____ ___          ___         ___
''''  _____ ___          ___         ___
''''  _____ ___          ___         ___
''''  _____ ___          ___         ___
''''  _____ ___          ___         ___
''''  _____ ___          ___         ___
''''  _____ ___          ___         ___
''''  _____ ___          ___         ___
****************************** BOTTOM OF DATA ********************************
```

The form variable values are stored in the form data record as follows:

Offset	Length	Contents
827	44	TEST.DATASET.NAME01
871	3	10
874	3	YES
877	3	NO
880	44	TEST.DATASET.NAME02
924	3	10
927	3	YES

Offset	Length	Contents
930	3	NO
933	44	TEST.DATASET.NAME03
977	3	10
980	3	YES
983	3	NO

Example 2

This example demonstrates form data storage following the entry of 63 lines of data using the supplied sample form 010 resulting in the creation of 2 form data records.

```
CMNZVRB ------------------- EDIT: BUILD GDG REQUEST ------------ ROW 1 TO 62 OF 63
COMMAND ===>                                              SCROLL ===> PAGE

    PACKAGE ID: TEST000001  STATUS:  DEV    INSTALL DATE:  19971230

Press ENTER to process; Enter END command to exit;


        INDEX                             ENTRIES     DELETE       EMPTY
    ''''    TEST.DATASET.NAME01_____ 10__        YES          NO__
    ''''    TEST.DATASET.NAME62_____ 10__        YES          NO__
    ''''    TEST.DATASET.NAME63_____ 10__        YES          NO__
```

The form variables are stored in two form data records as shown in the following tables:

Form Data Record 1

Offset	Length	Contents
827	44	TEST.DATASET.NAME01
871	3	10
874	3	YES
877	3	NO
4060	36	TEST.DATSET.NAME63

Form Data Record 2

Offset	Length	Contents
827	8	
835	3	10

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Offset	Length	Contents
838	3	YES
841	3	NO
844	44	TEST.DATASET.NAME63
888	3	10
891	3	YES
894	3	NO

When form data is continued to subsequent records the contents of a variable can be split between two records, as in the previous example. Form data is considered as one string of data up to 32,767 bytes, saved in units of 3,269 bytes in each record.

Example 2   50

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