Creating File Update Functions

Use DICT.BUILD to create the file and dictionaries. If the file structure is not too complex, DICT.BUILD can create update and show functions.

1. Type **DICT.BUILD** to create a new file called *FAMILY*
    A. Select option ***1) Create a New Data File***
    B. Enter the Name of the Data level: **FAMILY**
    C. Account name for the data section: **<Enter>**
    D. Name of the Dictionary Level: **<Enter>**
    E. Account name for the Dictionary: **<Enter>**
    F. Do you want to Create Std Dicts: **<Enter>**
    G. Change Which Field: **END**
    H. Click the ***OK*** button for the *Creation Complete – To Continue* message
2. Set the properties on the File Information Maintenance 1 screen
    A. Short Description: **Contact Family Information**
    B. Description: **END**
    C. Home Module: **CLS**
    D. Is this file available for IEP processing: **<Enter>**
    E. Enter File Type: **P**
    F. Enter the Demonstration Data Reload Code: **IGN**
    G. Change Which Field: **11**
    H. Enter the Copy Code File Name where this resides: **CLASS.LAYOUTS**
    I. Enter the Short Copy Name: **FAM**
    J. Change Which Field: **20**
    K. Is this file available for EOT processing: **Y**
    L. Change Which Field: **END**
    M. Should this file information item be marked as custom: **<Enter>**
    N. Type **END** until reaching the DICT.BUILD Menu screen
3. Create the dictionaries
    A. Select option ***6) Data Dictionary Maintenance***
    B. Create the dictionaries as follows (accepting the defaults for all prompts not specified):

Screen 6 – Main Dictionary Maintenance

Dictionary Item ID	Atr	Conv	Fmt	Single/ Multi	Val File	Set Name	Add Set	Set Desc	Controlling Item	Data Type
ID	0 (zero)		3L	S						I
FIRST.NAME	NEXT		20L	S						A
LAST.NAME	NEXT		30L	S						A
MARRIED	NEXT		1L	S						B
CUST.NBR	NEXT		10R	S	CM					I
C.G	NEXT		1L	M		FAM	Y	Family Members	Y	A
NAME	NEXT		15L	M		FAM				A
SEX	NEXT		1L	M		FAM				A
BIRTH.DATE	NEXT	D2-	8R	M		FAM				D

Screen 7 – XML Dictionary Help

Dictionary Item ID	Category Code	Desc Source File	Desc Source Dict	Standard Desc
ID	NA			ID
FIRST.NAME	NA			USER.DEF
LAST.NAME	NA			USER.DEF
MARRIED	NA			USER.DEF
CUST.NBR	NA	CM	CUST.NBR	
C.G	NA			USER.DEF
NAME	NA			USER.DEF
SEX	NA			USER.DEF
BIRTH.DATE	NA			USER.DEF

Screen 8 – Maintain Valid Data Values

Dictionary Item ID	Data Value	Value Description	Value for Null in XML	Past Dates
ID				
FIRST.NAME				
LAST.NAME				
MARRIED			N	
CUST.NBR				
C.G	C	Child		
	G	Grandchild		
NAME				
SEX	F	Female		
	M	Male		
BIRTH.DATE				Y

   C. Type **END** until the *Dictionary Item ID* prompt is reached
   D. Repeat the above steps for the other dictionaries

4. After all dictionaries have been added, type **END** until the DICT.BUILD Menu screen is reached
5. Fix Scrolled Set Defaults as follows
   A. Enter Desired Selection: **11**
   B. Change Which Field: **4.1**
   C. Change Which Field: **9**

D. Enter the Scrolled Set Maximum Number of Entries: **999**
E. Change Which Field: **11**
F. Enter the Scrolled Set Sort Sequence: **AL**
G. Type **END** until the DICT.BUILD Menu screen is reached

6. Generate a maintenance function
   A. Enter Desired Selection: **16**
   B. Enter Function Name to Use: **FAMILY.MAINT**
   C. Enter the Required/Optional prompt flags as follows when prompted

Dict Name	R/O
FIRST.NAME	R
LAST.NAME	R
MARRIED	O
CUST.NBR	R
C.G	O
NAME	O
SEX	O
BIRTH.DATE	O

   D. Select ***File|Exit*** from the menu for the Error Message window (We will fix this error in the screen)
   E. Do you wish to Continue with the Compile: **Y**
7. Enter the new function in Function Build (FN.BUILD)
   A. Enter the Function Type: **F**
   B. Enter the Module: **CLS**
   C. Description: **Contact Family Information**
   D. Type **END** until FN.BUILD is exited
   E. Should this function information item be marked as custom: **Y**
   F. Type **END** until FN.BUILD and DICT.BUILD are exited

Fix Screen Edits, Past Dates and Add Up Casing

Note the Options on the Shortcuts Menu in SCREEN.BUILD.

1. Type **SB FAMILY.MAINT CLS**
   A. Enter Option, DO to Display Options: **DO**
      i. Note that Option 2 is for Main Prompt Control Details (with a shortcut of C1)
      ii. Select or type **2**
2. Fix the Edits for the ID prompt
   A. Enter Prompt Number: **1**
   B. Change Which Field: **14**
   C. Conversions/Edits: ***** (to clear the field)
   D. Change Which Field: **END**
3. Add Up Casing to the Married prompt
   A. Enter Prompt Number: **4**
   B. Change Which Field: **21**
   C. Enter Case Conversion: **U**
   D. Change Which Field: **END**
4. Add Up Casing to the Child/Grandchild prompt
   A. Enter Prompt Number: **6**

   B. Change Which Field: **21**
   C. Enter Case Conversion: **U**
   D. Change Which Field: **END**
5. Add Up Casing to the Sex prompt
   A. Enter Prompt Number: **8**
   B. Change Which Field: **21**
   C. Enter Case Conversion: **U**
   D. Change Which Field: **END**
   E. Enter Prompt Number: **END**
6. Remove the restriction for Past Dates
   A. Enter Option, DO to Display Options: **C2**
   B. Enter Prompt Number: **9**
   C. 2nd Display Text: **END**
   D. Change Which Field: **11**
   E. Enter X.DATA.1 (processing parameters for host pgms): **ALLOW.PAST.DATES**
7. Type **END** until SCREEN.BUILD is exited

Test the New Function

1. Type **FAMILY.MAINT**
2. Add records to the file
   A. Enter the ID: **1**
   B. Type appropriate data at each prompt
   C. Type **??** at the Cust Nbr prompt and select one
   D. Change Which Field: **END**
3. Repeat the above steps (incrementing ID each time) for multiple entries
4. Type **END** to exit FAMILY.MAINT

Using Manage 2000 Web Wizards

Using TRANS.MASTER.MAINT

TRANS.MASTER.MAINT defines the Business Transaction Object. The Required/Optional flag defines if the record must be on file when the transaction is processed. The Read Only flag indicates that the record won't be written to file and is just being sent for display purposes only. The Retain original record flag indicates if the original data should be sent. Standard subroutine names that exist for this transaction are listed. Additional Comments are available for you to document what the transaction is for, how it processes the data, etc.

1. Set up the *FAMILY* file as a transaction
   A. In PWS, type **TRANS.MASTER.MAINT**
   B. Enter the transaction name: **NEW;ADD**
   C. Enter the transaction name: **FAMILY**
   D. Enter the description: **Contact Family Information**
   E. Enter the file name: **FAMILY**
   F. (R)equired or (O)ptional: **R**
   G. Is the file read only: **N**
   H. Retain original record: **Y**
   I. Type **END** until TRANS.MASTER.MAINT is exited
2. Test the new transaction
   A. In PWS, type **GENXML**

B. Transaction Name: **FAMILY**
C. Transaction Key: **1**
D. Change Which Field: **END**
E. Select ***File|Exit*** to close the output window
F. To Continue: **<Enter>**
G. Transaction Name: **END**

Using the Dataset Utility

The Dataset Utility is installed on the Web Server. It is a Windows program which generates a dataset assembly from a BTO for use by .NET.

1. Refresh the Java Scheduler
   A. Click on the shortcut for ***Google Chrome*** in the taskbar
   B. Click on the button in the Bookmarks bar for ***JavaScheduler Admin***
   C. Click on the ***Sign In*** button
   D. Click on the **<** after *Accounts* to expand
   E. Click on the ***Refresh*** button after *CLASS_TRAIN* to restart the account
2. Run the Dataset Utility for the FAMILY file
   A. Click on the shortcut for the ***DataSet Utility*** in the taskbar
   B. Click the ***Configure*** button
   C. Select **WOW 64 bit Profile** from the *Profile* dropdown
   D. Accept the default of **C:\inetpub\wwwroot\CLASS.TRAIN** for Web Site Directory
   E. Type **FAMILY** for Transaction Name(s)
   F. Click the ***OK*** button
   G. Click the ***Run*** button
   H. Click the ***Exit*** button

Using the BTO Update Wizard

The BTO Update wizard will generate a web function that includes all the plumbing necessary to pull and post data from the BTO framework. This is a great time saver when creating a web function that provides a writeable business object view of ERP data.

There are many business objects and there are many different flavors of business objects. The wizard is not intended to produce a satisfactory finished function from any business object. Complex multi-file business objects with server procedure call components such as those used in ItemActivity should probably be approached manually by experienced developers and with some caution.

In all cases using the wizard to produce a reasonably simple prototype and then manually developing in Visual Studio from the prototype is the recommended approach.

1. Click on the shortcut for ***Visual Studio 2012*** in the taskbar
   A. Select ***File|New Project*** from the menu
   B. Select ***Web*** under *Templates|Visual Basic* in the navigation tree on the left
   C. Click on the **M2k 8.1.3 BTO Posting** icon
   D. Type **FamilyMaint** for *Name*
   E. Type (or browse to) **C:\inetpub\wwwroot\CLASS.TRAIN\CLS** for *Location*
   F. Uncheck the box for Create directory for solution if it is checked
   G. Click the **OK** button
   H. The Connection Profile Editor will start automatically
      i. Make sure that ***Class Train*** is selected in the *Profile* dropdown
      ii. Connection information will default

iii. Make sure the Default Connection box is checked

I. Click the **OK** button for the *Connection Profile Editor* dialog

2. Set the values in the Manage 2000 Posting Function Parameters dialog
   A. Transaction Name: **FAMILY** (type or select from the dropdown list)
   B. Key Prompt Base File: **FAMILY** Type (type or select from the dropdown list)
   C. Key Prompt Base Date: **ID** (type or select from the dropdown list)
   D. Transaction File: **FAMILY** (type or select from the dropdown list)
3. Add fields from the transaction to be included in the web function
   A. With the *Col 1* radio button selected, ***double click*** on **First_Name, Last_Name, Married** and **Cust_Nbr** to add the fields
   B. Change the ***Title*** of *Tab 1 Single Values* to **Personal Info**
   C. ***Double click*** on **Fam Family_Members** under *Available Sets* to add it to the page
   D. Click the **OK** button
4. A new web project is created which will read and update records in the FAMILY file
   A. **Right click** *FamilyMaint.aspx* in the Solution Explorer and select **Set as Start Page**
   B. **Double click** *FamilyMaint.aspx* in the Solution Explorer to view the web page Source
   C. Click the **Design** button in the bottom left corner to view the web page in Design mode
   D. Extra div panels can be selected and deleted
      i. Click after “Caption”
      ii. Click on the div# tab that appears to select the div
      iii. Press the Delete key
   E. **Right click** on the web page and select **View Code** to see the code that has been added
5. Select ***Debug|Start Debugging*** from the menu to test the new web function
   A. Type the following for the CLASS_TRAIN Login prompts
      i. User ID: student
      ii. Password: Student (with a capital S)
   B. Type **1** or another record key you created above and click the ***Go*** Button
   C. Test changing and adding data on the Personal Info panel
   D. Expand the ***Fam*** panel and test changing children and grandchildren
      i. Click the Edit link on the row you are changing
      ii. Type ? when you are in a Row prompt to see help
      iii. After the changes are made, click the Update link
   E. Test deleting children and grandchildren
      i. Click the Delete link on the row you are deleting
   F. Test adding children and grandchildren
      i. Click the Add Fam Item button
      ii. Add the new information
      iii. Click on the Update link to retain the new entry
   G. Save all changes by clicking the Ok button
6. Select ***File|Exit*** to stop debugging

Manage 2000 REPORT.BUILD

Creating the Report

1. Create a Contact Family Report
   A. Type **REPORT.BUILD**
   B. Enter Report Id, REBUILD, S, SHOW: **FAMILY.RPT**
   C. Enter Report Library Code: **CLS**
   D. No Report Found: **CREATE**
   E. Enter the File you wish to print: **FAMILY**

F. Type the following dictionaries at the Enter a Field to print prompt
   i. For each field, accept the defaults for Minimum Report Width and Go To Column Options Screen
   ii. Click ***OK*** whenever the message box for *Print length exceeds maximum for 80 character reports* appears

Dict Name
ID
FIRST.NAME
LAST.NAME
MARRIED
CUST.NBR
NAME
C.G
SEX
BIRTH.DATE

G. Enter a Field to print: **<Enter>**

2. Sort by Customer Number and add a line break
   A. What Fields do you want to Sort on: **CUST.NBR**
   B. Enter sort Sequence: **A**
   C. Type of Break wanted: **<Enter>**
   D. What Fields do you want to Sort on: **<Enter>**
3. Add links on the Cust_Nbr field
   A. Change Which Field, IDESC: **7.5**
   B. Wrap data with quotes for Excel: **Y**
   C. Link Function: **CustomerPortal**
   D. Enter the Link Query Parameter Name: **CustNbr**
   E. Enter the Field Name to use as the value: **Cust_Nbr**
   F. PWS Link Function: **CUST.WB**
   G. Change Which Field: **END**
   H. Print length of 105 exceeds maximum for 80 character reports: **<OK>**
4. Add a Selection Criteria for Cust Nbr
   A. Change Which Field, IDESC: **END**
   B. Enter name to compare: **CUST.NBR**
   C. Enter the Operator: **EQ**
   D. Enter the Selection Type: **P**
      i. Enter the text to display on the screen: **<Enter>**
      ii. Question to ask: **Enter the Customer Number, ALL**
      iii. Enter the Case Conversion of the Data being Entered: **<Enter>**
      iv. Allow "ALL" as an answer to this prompt: **Y**
      v. Enter other answers allowed: **<Enter>**
      vi. Enter a default answer to the prompt: **ALL**
      vii. Enter Row Filter (DictName=value): **END**
      viii. Change Which Field: **END**
   D. Enter Connective Logic (AND/OR): **END**
   E. Change Which Field: **END**
5. Save the report
   A. Title: **Contact Family Report**

   B. Title: **END**
   C. Do you want a printed report: **TERM**
   D. Enter Report Type: **ECL**
   E. Suppress Detail on the Report: **END**
   F. Change Which Field: **END**
   G. Print length exceeds maximum for 80 character reports: **<OK>**
   H. FamilyRpt added as a web version of FAMILY.RPT: **<OK>**
6. Test the report in REPORT.BUILD
   I. Enter the Customer Number, ALL: **ALL**
   J. Change Which Field: **END**
   K. Test the Double Click events
      i. Double click on the Cust Nbr Column to bring up CUST.WB for that customer
      ii. Double click on any other column to bring up FAMILY.MAINT for that Id
   L. Type **END** until CUST.WB is exited and the report is displayed
   M. Select ***File|Exit*** from the viewer menu to close the report
   N. Enter Report Id, REBUILD, S, SHOW: **END**

Update the Description of the Web Report

1. Type **FN.BUILD**
   A. Function Name: **FamilyRpt**
   B. Enter Sub Section to Process: **1**
   C. Change Which Field: **4**
   D. Description: **Web Contact Family Report**
   E. Change Which Field: **END**
2. Note how the web function is set up
   A. Enter Sub Section to Process: **2**
   B. Change Which Field: **10**
   C. Note the following
      i. ***Web URL*** in prompt 5
      ii. ***Web Query Parameters*** in prompt 7
      iii. ***Web Query Values*** in prompt 8
   D. Type **END** until FN.BUILD is exited
   E. Should this function information item be marked as custom: **Y**

Test the Web Report

1. Type **FamilyRpt**
2. Click the ***Submit*** button
3. Click on any Customer Number link to navigate to the Customer Portal

Adding Images

Add an Image Rotator to the FAMILY.MAINT Function

1. Add an Image Rotator to the FAMILY.MAINT screen
   A. Type **SB FAMILY.MAINT CLS**
   B. Type **DO** to view the SCREEN.BUILD Options
      i. Note that Option 24 is for the Image Rotator control (with a shortcut of capital i)
      ii. Select or type 24
   C. Fill out the properties for the Image Rotator

   i. Unique Rotator Identifier: **PHOTOS**
   ii. Item Description: **Photos for the FAMILY file**
   iii. Tool Tip Text: **Click to Add a Photo**
   iv. Title: **Family Photos**
   v. Row: **10**
   vi. Column: **54**
   vii. Height: **10**
   viii. Width: **20**
  D. Type **END** until reaching the *Enter Option, DO to Display Options* prompt
  E. Enter Option, DO to Display Options: **S** (to show the screen)
  F. Enter Option, DO to Display Options: **END**
2. Test by running FAMILY.MAINT and adding images
  A. Look for images in the *C:\NETWORK\CLASSTRAIN\PUBLIC\CONTACTS* folder
  B. Change the description for the image if you want
  C. Click the ***OK*** button
  D. Type **END** until FAMILY.MAINT is exited
  E. Type LIST OBJECT.IDX WITH F2 = FAMILY
   i. Note Attribute 18 with the path to the image

Add an Image to FamilyRpt

When run from the web, REPORT.BUILD displays are capable of rendering hyperlinks and in-line media such as jpg images and video clips.

1. Create an I-descriptor to display the images
  A. In PWS, type REPORT.BUILD
  B. Enter Report Id, REBUILD, S, SHOW: **FAMILY.RPT**
  C. Enter Report Library Code: **CLS**
  D. Enter Sub Section to Process: **1**
  E. Click on the ***Create or Update I-Descriptors*** button
   i. Enter the I-descriptor name: **IMAGE.URL**
   ii. Change Which Field: **6**
   iii. I Descriptor: **\EDP**
   iv. Type **SUBR("AttachmentsByType","FAMILY",@ID,"Y","N","Y","")**
   v. Select ***File|Save*** from the menu
   vi. Change Which Field: **8**
   vii. Format Code: **65L**
   viii. Change Which Field: **9**
   ix. Heading: **Image URL**
   x. Click the ***Make Permanent*** button
   xi. Save as: **Image_Url**
   xii. File FAMILY, Field Image_Url, Item Added: **OK**
   xiii. Change Which Field: **END**
   xiv. Enter the I-descriptor name: **END**
   xv. Change Which Field: **END**
2. Add Image_Url to the report
  A. Change Which Field: **4.10**
  B. Enter a Field to print: **Image_Url**
  C. Accept the defaults until the *Change Which Field, IDESC* prompt is reached
  D. Type **END** until REPORT.BUILD is exited
3. Change the I-Descriptor Data Type for Image_Url
  A. Type **DICT.BUILD**

   B. Enter Desired Selection: **6** (Main Dictionary Maintenance)
   C. Enter the file name desired: **FAMILY**
   D. Dictionary Item ID: **IMAGE.URL**
   E. Change Which Field: **20**
   F. Enter the Data Type Code: **IMG**
   G. Type **END** until DICT.BUILD is exited
4. Type **FamilyRpt** to test the image on the web report

Add an Image to FAMILY.RPT

Use the Double Click Event of the EOTViewer to run the Redirect function. Create a dictionary that constructs the Absolute Url parameter value that the Redirect function needs on the Query String.

1. Create an I-Descriptor for Image_Absolute_Url
   A. In PWS, type **DICT.BUILD**
   B. Select Option **6**) Main Dictionary Maintenance
   C. Enter the file name desired: **FAMILY**
   D. Dictionary Item ID: **Image_Absolute_Url**
   E. Is this a Custom dictionary item?: **Y**
   F. Enter the Type Code: **I**
   G. I Descriptor: **‘AbsoluteUrl=’:Image_Url**
   H. I Descriptor: **<Enter>**
   I. Conversions: **<Enter>**
   J. Format Code: **65L**
   K. Single, Multi or Multi with Sub Values: **S**
   L. Should this I Descriptor be available for EOT Processing: **END**
   M. Enter the Data Type Code: **A**
   N. Do you wish to ‘Graph By’ this field: **<Enter>**
   O. Type **END** until DICT.BUILD is exited
   P. Enter the Category Code, NA, S(how): **NA**
   Q. Enter the Standard Description: **USER.DEF**
2. Add Image_Url to the report
   A. In PWS, type **REPORT.BUILD**
   B. Enter Report Id, REBUILD, S, SHOW: **FAMILY.RPT**
   C. Enter Report Library Code: **CLS**
   D. Enter Sub Section to Process: **1**
   E. Change Which Field: **4.11**
   F. Enter a Field to print: **IMAGE.ABSOLUTE.URL**
   G. Enter minimum report width required to use field (80, 132, 255): **80**
   H. Go to Column Options Screen: **Y**
      i. Wrap data with quotes for Excel: **<Enter>**
      ii. Link Function: **<Enter>**
      iii. PWS Link Function: **Redirect**
   I. Print length exceeds maximum: **<Enter>**
   J. Type **END** until REPORT.BUILD is exited
3. Type **FAMILY.RPT** to test
   A. Enter the Customer Number, ALL: **ALL**
   B. Change Which Field: **END**
   C. Test the **Double Click** event on the ***Image Absolute Url*** column
   D. Select ***File|Close*** to close the image
   E. Select ***File|Exit*** to close the report

Adding Attachments

Adding Attachments to PWS Functions

Attachments are automatically a part of MT500 functions. They may be supported by application code in other Manage 2000 functions.

1. Type **FAMILY.MAINT**
2. Enter a record ID
   A. Select ***Attachments|Show Attachments Button Bar*** from the menu (if needed)
   B. Click the ***Attachments*** button and select ***Photograph or Other Image*** to see the images that have already been added to the Image Rotator
   C. Click ***Add Note*** button to add a new note
      i. Add additional notes in order to see the Note Summary below
   D. Click to ***Note Summary*** button to see the display

Adding Attachments to Web Functions

Attachment functionality for a web function should be enabled by setting the Attachments Enabled property on the roiTextBox to true. A paperclip icon will be displayed by the edit box when attachments are enabled. Attachments should be kept in a folder on the network that is accessible to the web functions. Attachments will also have to be enabled using the Web Preference hierarchy in WEB.CONSTANTS, CNT.SYSTEM.REFS and CONTACTS.

1. Type **WEB.CONSTANTS**
   A. Enter Sub Section to Process: **3**
   B. Note the Preference Codes for ***Enable Attachments*** and ***Enable Notes***
   C. Type **END** until WEB.CONSTANTS is exited
2. From Visual Studio, open the FamilyMaint function created above
3. Enable Attachments for the ID textbox
   A. ***Right click*** on the *edtID* textbox and select ***Properties***
   B. Set the ***AttachmentsEnabled*** property to **True**
   C. Select ***Debug|Start Debugging*** from the menu to test
   D. Type **1** or another record key you created above and click the ***Go*** button
   E. Click on the paper clip to display the Attachments options
   F. Test viewing existing Attachments/Notes and adding new ones
   G. Test the Notes Summary option after multiple notes have been added

Modifying Web Navigation

Create a Web Function Definition for FamilyMaint in FN.BULD

1. Type **FN.BUILD**
   A. Function Name: **FamilyMaint**
   B. Enter the Function Type: **W**
   C. Enter the Module: **CLS**
   D. Description: **Web Contact Family Maintenance**
   E. May this function be stopped by the SET.STOP.FLAG function: **END**
   F. Change Which Field: **END**
   G. Extended Description: **END**
   H. Web URL: **../../CLASS.TRAIN/CLS/FamilyMaint/FamilyMaint.aspx**
   I. Type **END** until FN.BUILD is exited
   J. Should this function information item be marked as custom: **Y**

2. Type **FamilyMaint** to test

Modify the Global Shortcuts/WelcomePortal Quick Links Menu

Note that PWS functions can NOT be run from the web, so web menus may only include web functions. Records in CNT.SYSTEM.REFS that are flagged as a Web User Role will specify Web Preference Codes that apply to a web user in that particular role. These Web Preferences include several options for assigning menus for a web role: Shortcut Menu, Sitemap Menu and Mobile Menu. The contents of the Shortcut Menu also show up on the Welcome Portal as quick links.

1. Type **CNT.SYSTEM.REFS**
   A. Enter the system reference code: **SYSUSER**
   B. Note the *Preference Code* for ***ShortCut Menu***
   C. Click on the value of ***SysUserShortCuts***
   D. Type **\MNT** to bring up MENU.BUILD
2. Add new functions to the SysUserShortCuts menu
   A. Change Which Field: **2**
   B. Is this a custom menu (Y/N): **Y**
   C. Change Which Field: **I** (capital I for insert)
   D. Insert before which line: **7.1**
   E. Enter command, “Menu”, “Space” or “Text”: **FamilyRpt**
   F. Enter command, “Menu”, “Space” or “Text”: **FamilyMaint**
3. Type **END** until MENU.BUILD and CNT.SYSTEM.REFS are exited
4. Test the change
   A. Type **WelcomePortal**
   B. Click on the link for ***Announcements*** to collapse this area (if needed)
   C. Click on the link for ***Web Contact Family Report*** to test
   D. Click on the ***Welcome*** link in the local menu to return to the Welcome Portal
   E. Click on the link for ***Web Contact Family Maintenance*** to test
5. Click on the ***View in Mobile Style*** link at the bottom of the page and try running Contact Family Report and Contact Family Maintenance in mobile mode

Add the New Web Function and Web Report to the PWS Shortcuts Menu for Student

Note that web functions CAN be run from the web, so PWS menus may include web functions.
A Shortcut menu in PWS can be designed or assigned in USER.OPTIONS.

1. Type **USER.OPTIONS**
   A. Enter the Login ID: **STUDENT**
   B. Enter Sub Section to Process: **1**
   C. Change Which Field: **7.5**
   D. Menu Level: **F**
      i. Text to Print: **Custom Functions**
   E. Menu Level: **D**
      i. Menu Type F – Function, T – Text, M – Menu: **F**
      ii. Function Name: **FAMILY.RPT**
   F. Menu Level: **D**
      i. Menu Type F – Function, T – Text, M – Menu: **F**
      ii. Function Name: **FAMILY.MAINT**
   G. Menu Level: **D**
      i. Menu Type F – Function, T – Text, M – Menu: **F**
      ii. Function Name: **FamilyRpt**
   H. Menu Level: **D**

        i. Menu Type F – Function, T – Text, M – Menu: **F**
        ii. Function Name: **FamilyMaint**
    I. Type **END** until USER.OPTIONS is exited
2. Test the change
    A. Type **M** to bring up the GUI menu if needed
    B. Click on the ***Short Cuts*** button to display the Short Cuts menu if needed
    C. Double click on the ***Custom Functions*** header
    D. Test running the functions by clicking on them

Modifying Web Content

Using the PageViewFilter Web Tool

Role filters can be used to control what content is displayed on a page to users in a particular role. They can also be used to set up default values and to change the styling of a label, textbox, button, and so forth. The role filters for a page, which are defined in XML files, can be found in the same directory as the page (such as FamilyMaint_CM_RoleFilter.xml).

To help set up the role filter, click on the icon under the Global Menu for ***Display WebControl Properties as Tooltips*** and hover over a component. WebControl Properties will be displayed as Tooltips. The component name is the value for ID.

Hide the Customer Number Information for Web Users with the CM Role

1. From the PWS Short Cuts menu, click on the ***Web Contact Family Maintenance*** function
2. Hide the Cust Nbr textbox using the PageViewFilter tool
    A. Click on the icon under the Global Menu for the Page View Filter
    B. With the ***Role*** radio button selected for *Type of Page Filter*, click the ***Next*** button
    C. Select ***CM*** from the drop down for the Role whose view you wish to filter
    D. Click the ***Next*** button
    E. Click the ***Add Control*** button under *Controls to Filter*
    F. Click the ***Edit*** link
    G. Select **edtCustNbr** from the dropdown in the ID box
    H. Click the ***Update*** link
3. Hide the Cust Nbr label
    A. Click the ***Add Control*** button under *Controls to Filter*
    B. Click the ***Edit*** link
    C. Select **lblCustNbr** from the dropdown in the ID box
    D. Click the ***Update*** link
    E. Click the ***Save and Close*** button
4. Check for the PageViewFilter XML
    A. In Windows Explore, navigate to ***C:\inetpub\wwwroot\CLASS.TRAIN\CLS\FamilyMaint***
    B. Double click on ***FamilyMaint_CM_RoleFilter.xml***
    C. Select ***File|Exit*** from the menu after viewing the XML
5. Test your changes in the CM role
    A. From the Global menu select ***Shortcuts|Logoff***
    B. Click on the first *Web User Id* link for ***mjt*** (or any Web User Id with a CM Relation)
    C. Click on the ***Welcome*** link in the local menu to go to the Welcome Portal
    D. Click on the Quick Link for ***Contact Family Maintenance***
        i. Note that the Cust Nbr label and text box do not appear
    E. From PWS, type FamilyMaint
        i. Note that the Cust Nbr label and text box DO appear

Using MSOs on the Web

This is a new feature as of 8.1 sp3. Use MSOs to add display and navigation options for the user without customizing the application. Use pre-built standard MSO components or create your own.

1. Create the MSO
   A. Type **MSO.BUILD**
   B. Enter Software Object ID: **<Enter>**
   C. A new Software Object will be created using nnnnC as the Id: **OK**
   D. Enter Ext Desc: **Contact Family Information**
   E. Enter Ext Desc: **<Enter>**
   F. Enter the Object Type (E, G, O, F, RX, GX, B, I, D): **E**
   G. Enter Command: **LIST FAMILY WITH Cust_Nbr = &LK CM& First_Name Last_Name Married Fam COUNT.SUP HDR.SUP**
   H. Enter Command: **<Enter>**
   I. Enter Window Caption: **Contact Family**
   J. Enter the Object Category Group: **CNT**
   K. Enter Sub-Category: **INQ**
   L. Change Which Field: **END**
2. Assign the related function
   A. Enter the Related Function: **CustomerPortal**
   B. Type **END** until MSO.BUILD is exited
3. Test the MSO on the CustomerPortal page
   A. Type **CustomerPortal**
   B. Enter a customer number that has been assigned to one of the FAMILY file records
   C. Click on the ***Go*** button
   D. Click on the ***Paper Clip*** icon
   E. Hover over ***Related MSOs|Quick Displays***
   F. Click on **Contact Family**

Using News Feeds on the Web

Use the NEWS.FEEDS function to define an ATOM news feed and control the audience to whom the news feed is advertised. Users may have access to multiple feeds and feeds may serve multiple audiences. Feeds generally have multiple articles, and articles may belong to multiple feeds.

1. Create a News Article for the MSO created above
   A. Type **NEWS.ARTICLES**
   B. Enter the Id: **<Enter>**
   C. Enter the News Source: **MSO**
   D. Enter the MSO Id: **\LK**
   E. Accept the defaults for each prompt until ***10 Function Name*** is reached
   F. Function Name: **FamilyMaint**
   G. Accept the defaults for each prompt until ***12.1 Enter the Feeds*** is reached
   H. Enter the Feeds: **??**
   I. Double click ***STD_CM***
   J. Enter the Feeds: **<Enter>**
   K. Type **END** until NEWS.ARTICLES is exited
   L. New News Article Id Number Assigned: **<Enter>**
   M. Enter the Id: **END**
2. Test the News Article in the NewsReader page
   A. Type **NewsReader**
   B. Select ***Customer Oriented News*** from the *Channel Selector* dropdown
   C. Note the article for ***Contact Family***

3. Test the News Article in the CustomerPortal page
    A. From the Global menu select ***Manage 2000 Portals|Customer Information***
    B. Type **\LK** in the Customer Nbr textbox
    C. Click on the ***Summary*** label to collapse the panel of information
    D. Click on the ***Chart*** label to collapse the Sales By Month graph
    E. Scroll down in the News section and note the ***Contact Family*** information
    F. Click on the ***Contact Family*** link