

# EspMenu

## User Manual





---

## **READ ME FIRST**

### **Copyright Reserved ©**

This document contains proprietary information that is protected by copyright law. All rights are reserved. No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language in any form or by any means, that is electronic, mechanical, magnetic, optical, chemical, manual or otherwise, in whole or in part, without the prior written consent of Cronus Consulting (Pty) Ltd.

### **Disclaimer**

Cronus Consulting (Pty) Ltd hereby disclaims any and all guarantees and warranties for the correct use and application of the ESP software.

Cronus Consulting (Pty) Ltd reserves the right to revise and make changes to the software and the content of this document from time to time without obligation to notify any person of the changes.

### **Ownership**

The ESP products suite is developed and fully owned by Cronus Consulting (Pty) Ltd.



## TABLE OF CONTENTS

<b>READ ME FIRST .....</b>	<b>2</b>
<b>1. INTRODUCTION .....</b>	<b>4</b>
1.1 PURPOSE .....	4
1.2 PRODUCT OVERVIEW .....	4
<b>2. DEFINITIONS AND SECURITY .....</b>	<b>5</b>
2.1 ACCESSING ESPMENU .....	5
2.2 USER EXITS.....	7
<b>MENU OVERVIEW AND FUNCTION SELECTION .....</b>	<b>8</b>
<b>3. FUNCTION OVERVIEW .....</b>	<b>12</b>
3.1 MA001 MAINTAIN - ESPMENU SETUP .....	12
3.2 MA002 MAINTAIN - USERS.....	14
3.3 MA003 MAINTAIN - FUNCTIONS .....	16
3.4 MA004 MAINTAIN - MENUS .....	18
3.5 MA011 LINK - MENUS TO MENUS .....	19
3.6 MA012 LINK - MENUS TO USERS/GROUPS .....	20
3.7 MA013 LINK - FUNCTIONS TO USERS/GROUPS.....	22
3.8 MA014 LINK - FUNCTIONS TO USERS/GROUPS (MENU TREE) .....	24
3.9 MA021 VIEW - USERS/GROUPS LINKED TO OWNER.....	26
3.10 MA022 VIEW - USERS/GROUPS LINKED TO MENU .....	27
3.11 MA023 VIEW - USERS/GROUPS LINKED TO FUNCTION .....	28
3.12 MA024 MENUS/FUNCTIONS LINKED TO A USER/GROUP.....	29
3.13 MA031 VIEW - UNUSED MENUS .....	30
3.14 MA032 VIEW - UNUSED FUNCTIONS .....	31
3.15 MA033 VIEW - INACTIVE USERS/GROUPS.....	32
3.16 MA034 VIEW - MENUADM USERS/GROUPS.....	33
3.17 MA035 VIEW - FUNCTIONS BY ACCESS DATE/EXECUTE COUNT .....	34
3.18 MA036 VIEW - FUNCTIONS WITH INVALID PROGRAM .....	35
3.19 MA037 VIEW - FUNCTION AUDIT TRAIL .....	36
3.20 MA038 VIEW - FUNCTION TREE STRUCTURE .....	37
3.21 MA041 DELETE - FUNCTION ACCESS AUDIT TRAIL.....	38
3.22 MA051 VIEW - AUDIT TRAIL BY USER ID.....	39
3.23 MA052 VIEW - AUDIT TRAIL BY USER ID AND FUNCTION.....	40
3.24 MA100 REPORT - FUNCTIONS LINKED TO USERS/GROUPS .....	41
3.25 MA101 REPORT - AUDIT TRAIL BY USER ID .....	42
3.26 MA102 REPORT - AUDIT TRAIL BY USER ID AND FUNCTION.....	43



---

## 1. INTRODUCTION

### 1.1 Purpose

To provide users system access in a controlled and secure manner.

### 1.2 Product Overview

**EspMenu** is the **Cronus** menu system that provides secure and controlled access to the ESP product suite. **EspMenu** has embedded security on menu, function, and option level. Allocation of menus and functions to individual users or groups can easily be done using the **EspMenu** administrator account (**MENUADM**).

Multiple users can be assigned to one or more groups thus simplifying the task of granting user access.

There is no limitation to the number of levels of menus. Security is provided down to program option level. A maximum of 20 options can be defined at function level.

Security at function level is provided in a hierarchical manner. The top-level user (**MENUADM**) has access to all menus, functions, and their respective options. This top-level user can assign menus and functions to other users/groups. A user/group can then distribute those menus and functions allocated to him/her to other users/groups of whom he/she is the owner.

All multiple-choice fields are validated using a help-and-fill facility. If an entered field is incorrect a window is displayed with the possible values. The value selected from the list is pulled into the corresponding field value.

#### **EspMenu provides the following functionality:**

- Access to ESP product suite and user defined functions.
- Security based on user and O/S (operating system) groups.
- Online printer definitions.
- Dynamic generation of menus and functions provided that the standard ESP flowerbox is used.



## 2. DEFINITIONS AND SECURITY

### 2.1 Accessing EspMenu

The **EspMenu** system is invoked by typing "**FAST**" on the Natural command line in library **ESPSOFT**.

Menu structures are dynamically generated based on the access granted by the menu administrator. The menu administrator has unrestricted access to all the defined menus and functions.

User access to menus and functions is controlled based on the O/S groups that the user belongs to. A user has access to all menus, functions and options that have been assigned to his/her User Id and any of the operating system groups that he/she belongs to.

To access **EspMenu** as the administrator one of the following must be true:

- User belongs to operating system group **cronus**.
- User belongs to the admin group defined using function **MA001 Maintain - EspMenu Setup**. In addition, the user or any of the groups that he/she belongs to must have the **MENUADM Account** set to 'Y' on function **MA002 Maintain - Users/Groups**.

Additional security exists at function level where certain users do not necessarily have full access to all the options for a specific function.

The following message is displayed when a user attempts to access **EspMenu** and does not have an **EspMenu** user account.

At this point the user can continue with available defaults (menus and functions allocated to the O/S group(s) he/she belongs) or press **PF9** to automatically generate a user account and define online printers.

```
User ID: CRONUS

You are not defined on EspMenu

Using available default account access

Press <ENTER> to Continue using defaults or
<PF9> to define default printer information
and generate User ID
```



The information message displayed, is contained in the user-exit program **ESPUDEF** and can be modified for a specific site installation.

If no Menus/Functions have been assigned to the user and groups that he/she belongs to the following message is displayed after which the Natural session is terminated. The display is limited to the first 8 operating system groups that the user belongs to.

```
      EspMenu
      User ID: EDWARD
      There are no Functions defined for
      your User ID or active Group(s)
      Groups: SAG
              SYSTEM
      Press <ENTER> to Continue
```

For the purpose of this document, we assume that the user has administrator access.



---

## 2.2 User Exits

All user exits are located in Natural library ESPSOFT.

### **ESPUDEF:**

ESPUDEF is invoked from the **EspMenu** startup program **ESPSETUP**. **ESPUDEF** can be customized to define default user settings such as printers and online work files.

### **ESPUX001:**

This user exit is invoked from EspMenu by pressing function key **PF2 (Uexit)**. It should contain code that transfers the user to the correct system location after exiting EspMenu. Access to this user exit can be disabled by setting the value of "Enable User Exit" to **No** using function **MA001 Maintain - EspMenu Setup**.

### **ESPUX005:**

This user exit is invoked at the startup of EspMenu and each time a function is executed. It should be used to populate site/function specific global variables.



## MENU OVERVIEW AND FUNCTION SELECTION

Once a user has logged on to the **EspMenu** system – the main system menu will be displayed with all menus/functions that the user has access to.

The following information is displayed on the menu screen:

```

160.119.253.52 - PuTTY
MAP901          *** Cronus Consulting - DEV *** V7.1.3          06:11:37.4
MAM901          - Real Time System Menu -                    2021/01/11

CC      EspControl - Change Control System (I.S.R)
CJ      EspConvert - Convert JCL to SCL
CN      ESPConnect - Con-nect Main Menu -
JS      EspBatch  - Job Scheduler
MA      EspMenu   - Menu Administration
UT      EspUtils  - EspSoft Utilities

*** End of Data ***
Printer.: PRT01
Function: █ Data:
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                                PgDn  SetPr          Logof
  
```

### Screen Layout:

- Top line - Object name, main heading, product version and system time.
- Second line - Object name, menu name and system date.
- Lines 4 to 18 - Available menus/functions.
- Line 20 - Default Printer (If the user has not specified a default printer, then the value of Printer 1 defined on **JS002 Maintain - EspBatch Codes** with Code Type/Value **REPORT/DEFAULTS** is displayed).  
The User Id of the current user. **MENUADM** is displayed if the user has administrator privileges.
- Line 21 - Function selection area.
- Line 22 and 23 - Available function keys.





The users default printer(s) can be updated by pressing function key **PF9**, this will open a window where online printers 1 to 30 can be specified (where printer nn corresponds to the output (nn) statement in your natural source). Only printers that have been defined using EspBatch function **JS004 Maintain - EspBatch Printers** may be specified.

The setup of online printers by a user can be restricted by setting “**Allow Printer Change**” to “**N**” on function **MA002 Maintain – Users**.

```
----- User Defined Printers (Online) -----
01 Laser1  02 _____ 03 _____ 04 _____ 05 _____
06 _____ 07 _____ 08 _____ 09 _____ 10 _____
11 _____ 12 _____ 13 _____ 14 _____ 15 _____
16 _____ 17 _____ 18 _____ 19 _____ 20 _____
21 _____ 22 _____ 23 _____ 24 _____ 25 _____
26 _____ 27 _____ 28 _____ 29 _____ 30 _____
```



Partial list of functions when menu **MA (EspMenu - Menu Administration)** is selected.

```

160.119.253.52 - PuTTY
MAP902          *** Cronus Consulting - DEV *** V7.1.3          06:12:45.8
MAM902          - MA : EspMenu      - Menu Administration -    2021/01/11

MA001          Maintain - EspMenu Setup
MA002          Maintain - Users/Groups
MA003          Maintain - Functions
MA004          Maintain - Menus
MA011          Link      - Menus to Menus
MA012          Link      - Menus to Users/Groups
MA013          Link      - Functions to Users/Groups
MA014          Link      - Functions to Users/Groups (Menu Tree)
MA021          View      - Users/Groups linked to Owner
MA022          View      - Users/Groups linked to Menu
MA023          View      - Users/Groups linked to Function
MA024          View      - Menus/Functions linked to a User/Group
MA031          View      - Unused Menus
MA032          View      - Unused Functions
MA033          View      - Inactive Users/Groups
                ** Start of Data **
Printer.: PRT01
Function:  Data:
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11--PF12---
                Quit          PgDn  SetPr          Logof
  
```

#### Function keys:

- PF2 - Invoke user exit **ESPUX001**. This user exit can be customized for your environment. It should contain code that transfers the user to the correct system location after exiting EspMenu. Function key is enabled if **“Enable User Exit”** is set to **Yes** using function **MA001 Maintain - EspMenu Setup**.
- PF3 - Return to Main/Previous Menu
- PF7 - Page Backward
- PF8 - Page Forward
- PF9 - Set up default printers
- PF12 - Logoff

#### Function / Menu selection can be done as follows:

- All menu and function selection are cursor sensitive and can be accomplished by positioning the cursor on the line containing the desired menu or function and then pressing <ENTER>.
- Typing the menu or function name in the function selection area. Parameters required by the function can be typed in the data area, which will be passed to the function.



```

160.119.253.52 - PuTTY
MAP002
MAM002
Available Options
07:02:54.5
2021/01/15
Option Description
A Add User/Group
C Change User/Group
D Delete User/Group
E View User/Group
*Option....
*User/Group
Name.....
*Owner User
Status....
Allow Prin
MENUADM Ac
E-Mail Add
Job Title.
Telephone
User Depar
User Locat
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit
  
```

Once a function is selected that contains an OPTION field, the user will be required to enter a valid option, the option entered by the user will be validated against the predefined access set up for that user, thus only allowing the user to perform actions at function level according to his/her security profile. If the option field is omitted and the <ENTER> key is pressed, a window containing valid options will be displayed allowing the user to choose the desired option. Option selection can be accomplished by marking the desired option or by placing the cursor in the line containing the option and pressing <ENTER>.



### 3. FUNCTION OVERVIEW

#### 3.1 MA001 Maintain - EspMenu Setup

This function is used to define global values that are used throughout EspMenu and should not be assigned to all users.

```

160.119.253.52 - PuTTY
MAP001          *** Cronus Consulting ***          07:03:57.0
MAM001          Maintain - EspMenu Setup          2021/01/15

*Option.....: E

Main Heading.....: *** Cronus Consulting ***
Admin Group.....: system
Enable User Exit...: Y (ESPUX001)
Terminal/Process ID: P
EspSoft Version....: V7.1.3
Installation User..: EY712

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit

```

#### Function Options:

- C** - Change Setup
- E** - View Setup

#### Parameters:

- **Main Heading:** Main heading displayed at the top of all EspSoft menus and functions. After modifying the current session must be terminated for the change to take effect.
- **Admin Group:** Administrator group for menu access. This group must be defined on the Unix/Linux O/S level, users that are linked to this O/S group will have administrator access if the user or any of the groups that they belong to have **MENUADM Account** set to 'Y' on function **MA002 Maintain - Users/Groups**.



- 
- **Enable User Exit:** Valid values are **Yes** and **No**. If **yes** is specified function key **PF2** is enabled which invokes user exit **ESPUX001**.
  - **Terminal/Process ID:** Valid values are **Terminal ID** or **Process ID**. The set value determines if the terminal id or operating system process id must be displayed beneath the User ID on the menu screen. Note that **Process ID** must be selected if you are running **EspMenu** via **Applinx**.
  - **EspSoft Version:** Displays the current EspSoft version no. This parameter is not modifiable.



### 3.2 MA002 Maintain - Users

This function is used to maintain user/group accounts. After selecting this function, the required option and user/group id must be supplied. Field are validated using a help-and-fill facility.

```

160.119.253.52 - PuTTY
MAP002          *** Cronus Consulting ***          09:21:19.6
MAM002          Maintain - Users/Groups          2021/01/15

*Option.....: E
*User/Group ID: MENUADM_ *Copy from User/Group ID: _____

Name.....: Menu Administrator_____
*Owner User/Group ID.: MENUADM_ Menu Administrator

Status.....: 1 ( 1 - Active    9 - Suspended )
Allow Printer Change: Y
MENUADM Account.....: Y

E-Mail Address.....: info@cronus.co.za_____
Job Title.....: _____

Telephone Number....: _____
User Department.....: _____
User Location.....: _____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit                               SetPr

```

#### Function Options:

- A** - Add User/Group
- C** - Change User/Group
- D** - Delete User/Group
- E** - View User/Group

When adding a user/group an existing users/groups profile can be copied by entering the user/group id in the “**Copy from User/Group ID**” field. If an invalid user/group id is specified a list of available users/groups will be displayed and the desired user/group can be selected.



## User/Group Information:

### Required Fields

- Copy from - When creating a new user/group an existing user/group id can be specified (The new user/group will inherit all menu(s) and function(s) assigned to the user/group specified in the Copy from field). You may only specify your user/group id or the user/group id of your children unless you have administrator privileges.
- Name - The users/groups name or a description of the user/group.
- Owner - This is the owner of this user/group id. (Normally MENUADM). You may only specify your user/group id or the user/group id of your children unless you have administrator privileges.
- Status - 1 – Active  
9 - Suspended
- Allow Printer Change - This option will allow the user/group to change his/her default printer(s) by pressing **PF9**.
- MENUADM Account - If the user/group belongs to the admin group specified on function **MA001 Maintain - Maintain - EspMenu Setup** and the user/group id or one of the groups that it belongs to has the "**MENUADM Account**" value set to **Yes** then the user/group will be assigned administrator privileges.

### Optional Fields

- E-Mail Address - Users/Groups e-mail address.
- Job Title - Users/Groups job title.
- Telephone Number - Users/Groups telephone number.
- User Department - Users/Groups department
- User Location - Users/Groups location.
- Default Printer(s) (**PF9**) - Assignment of default printer(s) for a user/group. Printers are maintained with function **JS004 Maintain - EspBatch Printers**.

## Group Access Control

Access to **EspMenu** can be controlled by using O/S groups. A user/group will have access to all menus and functions allocated to its user/group and the O/S groups that it belongs to.

If a user/group belongs to the O/S group **cronus** it will be granted administrator privileges within **EspMenu**.



### 3.3 MA003 Maintain - Functions

This function is used to maintain functions within **EspMenu**. After selecting this function the required option and function id must be supplied. Field are validated using a help-and-fill facility.

```

160.119.253.52 - PuTTY
MAP003          *** Cronus Consulting ***          09:50:49.1
MAM003          Maintain - Functions              2021/01/15

*Option..: E
*Function: MA012__

EspMenu Flowerbox: _ Used Menu/Function ID specified in flowerbox
FUSER Path.....: /opt/softwareag/Natural/fuser_esp
*Menu ID.....: MA_____
Description.....: Link      - Menus to Users/Groups _____
Library Name.....: ESPSOFT_
Program Name.....: MAP012__
Suspend.....: _

Last Access Date.: 20210316
Access Count.....: 5_____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit

```

#### Function Options:

- A - Add Function
- C - Change Function
- D - Delete Function
- E - View Function

#### Function Attributes:

- EspMenu Flowerbox: Valid values are **Yes** and **No**. If **Yes** is specified the flower box of the program specified in the "**Program Name**" field which resides in library specified in the "**Library Name**" field will be scanned to determine the menu id, function id, description, and available options.
- FUSER Path: Location of the Natural FUSER file. The library and program name specified must reside in the specified FUSER.
- Menu ID: The id of the menu to which the function must be added. Menu id may only be specified if "**EspMenu Flowerbox**" is set to **No**.





- **Description:** Function description that will be displayed. If “**EspMenu Flowerbox**” is set **Yes**, the description will be obtained from the program’s flowerbox.
- **Library Name:** The name of the library in which the functions program resides.
- **Program Name:** The name of program that the function executes.
- **Suspend:** Valid values are **Yes** and space. If **Yes** is specified the function is still displayed on the relevant menu, but the function description is replaced by “**SUSPENDED**” and cannot be executed.
- **Last Access Date:** Date that the function was last executed.
- **Access Count:** Number of times that the function has been executed.

#### Format of EspMenu Flowerbox:

```

*****
* NAME           : MAP002                               *
* AUTHOR         : Copyright: Cronus Consulting         *
* DESCRIPTION    : Maintain - Users/Groups             *
* MENU LINK      : MA                                   *
* FUNCTION       : MA002                               *
* OPTIONS        :                                       *
*                A - Add User/Group                   *
*                C - Change User/Group                 *
*                D - Delete User/Group                 *
*                E - View User/Group                   *
* END-OPTIONS    :                                       *
*****

```

When a function is added, the function is automatically added to user “**MENUADM**” under the specified menu. Use function **MA013 Link - Functions to Users/Groups** to grant users/groups access to the new function.



### 3.4 MA004 Maintain - Menus

This function is used to maintain menus within **EspMenu**. After selecting this function the required option and menu id must be supplied. Field are validated using a help-and-fill facility.

A screenshot of a PuTTY terminal window titled "160.119.253.52 - PuTTY". The terminal displays the following text:

```
MAP004          *** Cronus Consulting ***          09:58:11.7
MAM004          Maintain - Menus                    2021/01/15

*Option.....: E
*Menu ID:...: MA_____

Description: EspMenu - Menu Administration_____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit
```

#### Function Options:

- A - Add Menu
- C - Change Menu
- D - Delete Menu
- E - View Menu

#### Function Attributes:

- Description: Menu's description

When a menu is added, the menu is automatically added to user "**MENUADM**". Use function **MA012 Link - Menus to Users/Groups** to grant users/groups access to the new menu.



### 3.5 MA011 Link - Menus to Menus

This function allows you to link sub menus to menus. The user/group id and menu id are required to which the menu must be linked. These values can be selected from the help-and-fill facility.

```

160.119.253.52 - PuTTY
MAP011          *** Cronus Consulting ***          10:35:19.2
MAM011          Link      - Menus to Menus        2021/01/15

User ID: MENUADM_ Menu Administrator          Owner: MENUADM
Menu ID: CC_____ EspControl - Change Control System (I.S.R)

  Menu      Seq  Description
X CC500    100  ISR Control and Profiles
X CC501    101  ISR Transfer
X CC502    102  ISR Maintenance
X CC503    103  Display ISR Information
X CC504    104  ISR Return and Restore
- CJ        ___  EspConvert - Convert JCL to SCL
- CN        ___  ESPConnect - Con-nect Main Menu
- CN101     ___  Cabinet Maintenance
- CN102     ___  ESPConnect Codes
- CN103     ___  Document Maintenance
- CN104     ___  Calendar

                                ** Start of Data **
Restart at Menu: █ _____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11--PF12---
                                Quit                                PgDn

```

After the user/group id and menu id is entered a list of menus that the user/group has access to will be displayed.

This function allows for the creation of sub menus that can be grouped to suit user requirements. MA A sequence number allows for a specific order in which the menus will appear for a given user/group.

#### Linking Menus:

- Menu - A menu can be linked by entering an "X" in the preceding column next to the menu id. To unlink a menu, remove the "X"
- Sequence - The sequence number determines in which order the linked menus will be displayed. By default, menus are displayed in ascending alphabetical order.



### 3.6 MA012 Link - Menus To Users/Groups

This function is used to link menus to a user/group. If the user/group id is omitted a list of valid user/group id's will be displayed.

```

160.119.253.52 - PuTTY
MAP012          *** Cronus Consulting ***          10:38:16.8
MAM012          Link      - Menus to Users/Groups    2021/01/15

User/Group ID: MENUADM_ Menu Administrator          Owner: MENUADM

  Menu      Main  Children  Description
X CC        Y      -        EspControl - Change Control System (I.S.R)
X CC500     -      -        ISR Control and Profiles
X CC501     -      -        ISR Transfer
X CC502     -      -        ISR Maintenance
X CC503     -      -        Display ISR Information
X CC504     -      -        ISR Return and Restore
X CJ        Y      -        EspConvert - Convert JCL to SCL
X CN        Y      -        ESPConnect - Con-nect Main Menu
X CN101     -      -        Cabinet Maintenance
X CN102     -      -        ESPConnect Codes
X CN103     -      -        Document Maintenance
X CN104     -      -        Calendar
                                ** Start of Data **

Restart at Menu: █

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11--PF12---
                                Quit                                PgDn

```

After selecting the user/group id, a list of previously assigned menus will be displayed. Only menus that have been assigned to the user/group by its parent are displayed.

#### Linking Menus:

- Menu - By removing the "X" in the preceding column next to the menu id the menu will be removed from the specified user/group and its children.
- Main - Valid values are: **Y**es and space. If **Y**es is specified, the menu is displayed on the main menu.
- Children - Valid values are: **M**enu and **F**unctions. If **M**enu or **F**unctions is specified a selection window is displayed providing options to copy the menu/functions to a given child or level (**N**ext or **A**ll). Specify **M**enu if you only want to copy the specified menu or



Functions to copy the menu and all menus/functions that are linked to it.

```
Copy Functions to Children
Menu ID: CC
Copy to Child ID: █
Level.....: _ (N)ext or (A)ll
```

If a user/group id is specified in the “**Copy to Child ID**” field the level may not be specified. If **Next** is specified, then the menu/function(s) are copied to the users/groups direct children. If **All** is specified, then the menu/function(s) are copied to all the users/groups children.



### 3.7 MA013 Link - Functions To Users/Groups

This function is used to link functions to a user/group. If the user/group id or menu id is omitted a list of valid user/group id's and/or menu id's will be displayed.

```

160.119.253.52 - PuTTY
MAP013          *** Cronus Consulting ***          10:45:37.2
MAM013          Link          - Functions to Users/Groups      2021/01/15

User/Group ID: MENUADM_ Menu Administrator          Owner: MENUADM
Menu ID.....: MA_____ EspMenu          - Menu Administration

  Function  Seq  Ch  Options          Description
X MA001    100  -   CE              Maintain - EspMenu Setup
X MA002    100  -   ACDE            Maintain - Users/Groups
X MA003    100  -   ACDE            Maintain - Functions
X MA004    100  -   ACDE            Maintain - Menus
X MA011    100  -   _____     Link - Menus to Menus
X MA012    100  -   _____     Link - Menus to Users/Groups
X MA013    100  -   _____     Link - Functions to Users/Groups
X MA014    100  -   _____     Link - Functions to Users/Groups (Menu
X MA021    100  -   _____     View - Users/Groups linked to Owner
X MA022    100  -   _____     View - Users/Groups linked to Menu
X MA023    100  -   _____     View - Users/Groups linked to Function

          ** Start of Data **

Restart at Function: █

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11--PF12---
          Quit                               PgDn

```

After selecting the user/group id, a list of previously assigned functions will be displayed. Only functions that have been assigned to the user/group by its parent are displayed.

#### Linking Functions:

- Function - By removing the "X" in the preceding column next to the function id the function will be removed from the specified user/group and its children.
- Seq - The sequence number determines in which order the linked functions will be displayed. By default, functions are displayed in ascending alphabetical order.
- Ch - Valid values are: Yes. If Yes is specified a selection window is displayed providing options to copy the function to a given child or level (**N**ext or **A**ll).



```
Copy Function to Children
Menu ID....: MA
Function ID: MA001
Copy to Child ID: █
Level.....: _ (N)ext or (A)ll
```

If a user/group id is specified in the “Copy to Child ID” field the level may not be specified. If **N**ext is specified, then the function is copied to the users/groups direct children. If **A**ll is specified, then the function is copied to all the users/groups children.

- Options - Displays a list of available options for the function. If an option is removed it will also be removed from all the users/groups children.



### 3.8 MA014 Link - Functions to Users/Groups (Menu Tree)

This function is used to link functions to a user/group. If the user/group id is omitted a list of valid user/group id's will be displayed. If a function is assigned to a user/group the relevant menu tree structure is automatically added if the user did not previously have access to it.

```

160.119.253.52 - PuTTY
MAP014          *** Cronus Consulting ***          10:50:57.9
MAM014      Link      - Functions to Users/Groups (Menu Tree)  2021/01/15

User/Group ID: MENUADM_ Menu Administrator          Owner: MENUADM

  Function Seq Ch Options      Description
X CC001   100  -      _____ Maintain ISR Control Variables
X CC002   100  -  ACDE      _____ Maintain ISR Profiles
X CC010   100  -  ACDE      _____ ISR Code Maintenance
X CC025   100  -      _____ ISR Profile Enquiry
X CC030   100  -  ACE       _____ ISR Request Capture
X CC035   100  -  ACE       _____ ISR Request and Approval
X CC040   100  -  CELU      _____ IT Request Maintenance
X CC050   100  -      _____ Select Objects for Transfer
X CC051   100  -      _____ Transfer an ISR
X CC053   100  -      _____ Mark Objects for Return to Previous Environm
X CC054   100  -      _____ Copy to an ISR
                                     ** Start of Data **

Restart at Function: █ _____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11--PF12---
                               Quit                               PgDn

```

After selecting the user/group id, a list of previously assigned functions will be displayed. Only functions that have been assigned to the user/group by its parent are displayed.

#### Linking Functions:

- Function - By removing the "X" in the preceding column next to the function id the function will be removed from the specified user/group and its children.
- Seq - The sequence number determines in which order the linked functions will be displayed. By default, functions are displayed in ascending alphabetical order.
- Ch - Valid values are: Yes. If Yes is specified a selection window is displayed providing options to copy the function to a given child or level (**N**ext or **A**ll).





```
Copy Function to Children
Menu ID....: CC500
Function ID: CC001
Copy to Child ID: █
Level.....: _ (N)ext or (A)ll
```

If a user/group id is specified in the “Copy to Child ID” field the level may not be specified. If **N**ext is specified, then the function is copied to the users/groups direct children. If **A**ll is specified, then the function is copied to all the users/groups children.

- Options
  - Displays a list of available options for the function. If an option is removed it will also be removed from all the users/groups children.



### 3.9 MA021 View - Users/Groups linked to Owner

This function displays all users/groups that are linked to the specified owner. If the owner is omitted a list of valid user/group id's will be displayed.

```

160.119.253.52 - PuTTY
MAP021          *** Cronus Consulting ***          11:00:18.7
MAM02101      View      - Users/Groups linked to Owner  2021/01/15

Owner ID: MENUADM Menu Administrator          Lvl: 1

  ID      Name      Status      MENUADM
  EY712   EY712 (Generated User)  Active      N
  GM712   EspSoft Install User  Active      Y
  HP712   EspSoft Install User  Active      Y
  SAG     EspSoft Install User  Active      Y
  SYSTEM  EspSoft Install User  Active      Y

*** End of Data ***
Restart at User/Group ID: █
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit                               PgDn

```

This function provides a drill down option whereby a user/group id can be selected by entering an "X" in the preceding column next to the user/group id. The current level is displayed next to the "Lvl:" field that is located at the top right.



### 3.10 MA022 View - Users/Groups linked to Menu

This function displays all users/groups that have access to the specified menu. If the menu is omitted a list of valid menus will be displayed.

```
160.119.253.52 - PuTTY
MAP022          *** Cronus Consulting ***          11:03:02.8
MAM022          View      - Users/Groups linked to Menu  2021/01/15

Menu ID: MA_____ EspMenu      - Menu Administration

User/Group Name          Status          MENUADM
MENUADM      Menu Administrator      Active          Y
SYSTEM       EspSoft Admin Group    Active          Y

*** End of Data ***
Restart at User/Group ID: █ _____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                Quit                          PgDn
```



### 3.11 MA023 View - Users/Groups linked to Function

This function displays all users/groups that have access to the specified function. If the function is omitted a list of valid functions will be displayed.

```

160.119.253.52 - PuTTY
MAP023          *** Cronus Consulting ***          11:05:29.4
MAM023          View          - Users/Groups linked to Function  2021/01/15

Function ID: MA003___ Maintain - Functions

  ID      Name                               Status    MENUADM
MENUADM  Menu Administrator                 Active    Y
SAG      SAG Admin Account                     Active    Y
SYSTEM   EspSoft Admin Group                       Active    Y

*** End of Data ***
Restart at User/Group ID: █
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                               Quit                               PgDn
  
```



### 3.12 MA024 Menus/Functions linked to a User/Group

This function displays all menus/functions that have been assigned to a user/group. If the user/group is omitted a list of valid users/groups will be displayed.

```

160.119.253.52 - PuTTY
MAP024          *** Cronus Consulting ***          11:06:04.7
MAM024          View          - Menus/Functions linked to a User/Group  2021/01/15

User/Group ID: SYSTEM__ EspSoft Admin Group

Menu ID  Menu/Function ID  Type  Description
MA       MA001             Maintain - EspMenu Setup
MA       MA002             Maintain - Users/Groups
MA       MA003             Maintain - Functions
MA       MA004             Maintain - Menus
MA       MA011             Link    - Menus to Menus
MA       MA012             Link    - Menus to Users/Groups
MA       MA013             Link    - Functions to Users/Groups
MA       MA014             Link    - Functions to Users/Groups (Menu Tre
MA       MA021             View    - Users/Groups linked to Owner
MA       MA022             View    - Users/Groups linked to Menu
MA       MA023             View    - Users/Groups linked to Function
MA       MA024             View    - Menus/Functions linked to a User/Gr

          ** Start of Data **
Restart at Menu ID: █ Menu/Function ID: █

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          Quit                               PgDn

```

The “Type” column can contain an “M” or a blank. An “M” indicates that the value displayed in the “Menu/Function ID” column is a menu.



### 3.13 MA031 View - Unused Menus

This function displays unused menus. Menus are deemed to be unused if they are not assigned to any users/groups.

The screenshot shows a PuTTY terminal window titled "160.119.253.52 - PuTTY". The terminal output is as follows:

```
MAP031          *** Cronus Consulting ***          11:08:44.8
MAM031          View      - Unused Menus          2021/01/15

Menu ID  Description
ED       EspSoft Demo

*** End of Data ***

Restart at Menu ID: █ _____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                Quit                               PgDn
```



### 3.14 MA032 View - Unused Functions

This function displays unused functions. Functions are deemed to be unused if they are not assigned to any users/groups.

```
160.119.253.52 - PuTTY
MAP032          *** Cronus Consulting ***          11:10:23.5
MAM032          View      - Unused Functions      2021/01/15

Function ID Description                               Library Program
ED001          Demo Online to Batch Submission      ESPSOFT  JSP017

*** End of Data ***
Restart at Function ID: █ _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit                               PgDn
```



### 3.15 MA033 View - Inactive Users/Groups

This function displays all inactive users/groups. A users/groups status can be updated using function MA002 Maintain - Users/Groups.

```
160.119.253.52 - PuTTY
*** Cronus Consulting ***                               11:12:23.2
MAP033                                                    View      - Inactive Users/Groups  2021/01/15

User/Group Name                                     Owner   MENUADM
ESPDEMO1  EspSoft - Demo User 1                    MENUADM Y
ESPDEMO2  EspSoft - Demo User 2                    MENUADM Y

*** End of Data ***
Restart at User/Group ID: █
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                               Quit                               PgDn
```





### 3.16 MA034 View - MENUADM Users/Groups

This function displays all admin users/groups (“MENUADM Account” specified as Yes). Use function MA002 Maintain Users/Groups to update admin users/groups.

```

160.119.253.52 - PuTTY
MAP034          *** Cronus Consulting ***          11:12:45.8
MAM034          View      - MENUADM Users/Groups    2021/01/15

User/Group  Name                               Owner      Status
ESPDEMO1   EspSoft - Demo User 1             MENUADM    Suspended
ESPDEMO2   EspSoft - Demo User 2             MENUADM    Suspended
GM712      EspSoft Install User              MENUADM    Active
HP712      EspSoft Install User              MENUADM    Active
MENUADM    Menu Administrator                 MENUADM    Active
SAG        SAG Admin Account                  MENUADM    Active
SYSTEM     EspSoft Admin Group                MENUADM    Active

*** End of Data ***
Restart at User/Group ID: █

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                               Quit                               PgDn
  
```



### 3.17 MA035 View - Functions by Access Date/Execute Count

This function provides audit access info per function. The number of times a given function has been executed and the last access date is displayed.

Upon function selection a window is displayed that allows the user to specify their sort preference:

```

Sort Sequence
1. Functions by Last Access Date
2. Functions by Function ID
3. Functions by Execute Count

Sort Sequence: 2
  
```

```

160.119.253.52 - PuTTY
MAP03502          *** Cronus Consulting ***          11:15:20.3
MAM03502          View Functions by Last Access Date      2021/01/15

Function Acc Date                               Execute Count
JS300    20210312 Maintain - SCL's                  3598
JS302    20210216 Maintain - Control Cards (Stored in file ESP-  14
JS303    20210216 Scan - SCL's                        42
JS305    20210216 Copy - SCL's between Environments          3
JS306    20201201 Copy - Control Cards between Environments  1
JS310    20210217 Submit - SCL's                        94
JS314    20201209 Maintain - Import/Export/Scan EspBatch Codes  3
JS315    20210216 Maintain - Import/Export/Scan SCL's          102
JS316    20201202 Maintain - Import/Export Control Cards         3
JS317    20210209 Maintain - Import/Export/Scan SCL's (JSON)    160
JS320    20210225 Maintain - Security for SCL User Libraries     63
JS330    20210225 View - Workfiles per SCL Step                 17
JS400    20210308 Maintain - Base Calendars                    156
JS402    20210223 Maintain - EspAuto Dates                     37

** Start of Data **

Restart at Function ID:
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
Quit PgDn
  
```

The access date and execute count can be updated/reset with function **MA003 Maintain - Functions**.



### 3.18 MA036 View - Functions with invalid Program

This function displays all functions that execute a program that does not exist. The function must be run per library.

```

160.119.253.52 - PuTTY
MAP036          *** Cronus Consulting ***          11:19:53.8
MAM036          View          - Functions with invalid Program      2021/01/15

FUSER Path: /opt/softwareag/Natural/fuser_esp_____
Library...: ESPSOFT_

Function ID Name          Program
ED001      Demo Online to Batch Submission      EDP017

*** End of Data ***
Restart at Function ID: █ _____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          Quit          PgDn
  
```

When a function is added using function **MA003 Maintain – Functions** the specified library/program is validated, if the program is subsequently deleted/renamed and the function is not deleted/corrected it will be picked up by this function.



### 3.19 MA037 View - Function Audit Trail

This function provides an audit trail consisting of the user id, date, and time that a function was executed.

Upon function selection a window is displayed that allows the user to specify their sort preference:

```

      Sort Sequence
-----
1. User ID, Function ID, Inverse Date & Inverse Time
2. Function ID, User ID, Inverse Date & Inverse Time

Sort Sequence: 2
  
```

```

160.119.253.52 - PuTTY
MAP03702          *** Cronus Consulting ***          11:22:06.3
MAM03702      Function Audit Trail by Function, User, Date & Tim  2021/01/15

Function User ID Description Date Time
JS300 APX712 Maintain - SCL's 20200227 11:44:13.0
JS300 APX712 Maintain - SCL's 20191205 13:43:42.4
JS300 APX712 Maintain - SCL's 20191128 15:53:15.2
JS300 APX712 Maintain - SCL's 20191128 14:21:55.1
JS300 APX712 Maintain - SCL's 20191128 14:09:22.0
JS300 APX712 Maintain - SCL's 20191128 14:08:58.5
JS300 APX712 Maintain - SCL's 20191128 13:28:17.3
JS300 CLG712 Maintain - SCL's 20200523 20:51:29.0
JS300 CLG712 Maintain - SCL's 20200523 19:24:55.4
JS300 CLG712 Maintain - SCL's 20200427 02:55:26.6
JS300 CLG712 Maintain - SCL's 20200426 16:57:48.0
JS300 CLG712 Maintain - SCL's 20200426 16:57:30.4
JS300 CLG712 Maintain - SCL's 20200426 16:23:57.2
JS300 CLG712 Maintain - SCL's 20200426 16:19:56.4

** Start of Data **
Restart at Function ID: User ID: Date: Time:
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit PgDn
  
```

The audit history can be deleted with function **MA041 Delete - Function Access Audit Trail**.



### 3.20 MA038 View - Function Tree Structure

This function displays menu tree that a specified function is linked to. If the function is omitted a list of valid functions will be displayed.

```
160.119.253.52 - PuTTY
MAP038          *** Cronus Consulting ***          11:43:29.2
MAM038          View      - Function Tree Structure  2021/01/15

*Function: CC050___ Select Objects for Transfer

Level Menu ID Description
  2  CC501  ISR Transfer
  1  CC     EspControl - Change Control System (I.S.R)

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit
```



### 3.21 MA041 Delete - Function Access Audit Trail

This function allows for the deletion of function access audit trail history.

A screenshot of a PuTTY terminal window titled "160.119.253.52 - PuTTY". The terminal displays a menu for "Delete - Function Access Audit Trail" with the following options: "MAP041", "MAM041", "User/Group ID.: CRONUS\_\_", "Function ID...: JS050\_\_", "Access Date...: \_\_\_\_\_ (YYYYMMDD)", and "Retention Days: 30\_". At the bottom, there are function key options: "Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---" and "Quit". The time and date "11:23:19.1 2021/01/15" are shown in the top right corner.

```
160.119.253.52 - PuTTY
*** Cronus Consulting ***
MAP041
MAM041      Delete   - Function Access Audit Trail
11:23:19.1
2021/01/15

User/Group ID.: CRONUS__
Function ID...: JS050__
Access Date...: _____ (YYYYMMDD)
Retention Days: 30_

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit
```

#### Deletion criteria:

- User/Group ID: Specify user/group id or leave blank to delete for all users/groups.
- Function ID: Specify function id or leave blank to delete all function history.
- Access Date: Specify access date to delete all history prior to and including the date specified. Either “**Access Date**” or “**Retention Days**” must be specified.
- Retention Days: Specify the number of day’s history to retain. Either “**Access Date**” or “**Retention Days**” must be specified.



### 3.22 MA051 View - Audit Trail by User ID

This function provides an audit trail of users/groups that were added, deleted, and suspended. The Audit User, Date, Time, and Action is provided.

```

160.119.253.52 - PuTTY
MAP051          *** Cronus Consulting ***          11:32:38.2
MAM051          View      - Audit Trail by User ID  2021/01/15

  User ID  Audit Date  Audit Time  Audit Action  Audit User
- ESPDEMO1  20210115   11:11:28.9  Created      EY712
- ESPDEMO1  20210115   11:12:16.4  Suspended    EY712
- ESPDEMO2  20210115   11:11:43.8  Created      EY712
- ESPDEMO2  20210115   11:12:06.6  Suspended    EY712
- EY712     20190802   14:03:50.5  Created      EY712
- EY712     20210316   06:36:18.9  Deleted      EY712
- GM712     20190802   14:07:58.2  Created      GM712
- HP712     20190826   19:31:35.0  Created      HP712
- MENUADM   20190802   14:03:50.3  Created      EY712
- SAG       20190826   17:15:04.7  Created      HP712
- SAG       20190826   17:47:35.0  Deleted      HP712
- SAG       20190826   17:47:54.5  Created      HP712
- SAG       20190826   17:48:28.4  Deleted      HP712
- SAG       20190826   17:48:46.6  Created      HP712
          *** Start of Data ***
Restart at User ID: █ Date: _____ (YYYYMMDD) Time: _____ (HHMMSS)
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11--PF12---
          Quit                               PgDn

```



### 3.23 MA052 View - Audit Trail by User ID and Function

This function provides an audit trail of function that were added or deleted for a user/group. The Audit User, Date, Time, and Action is provided.

```

160.119.253.52 - PuTTY
MAP052          *** Cronus Consulting ***          11:39:19.0
MAM052      View  - Audit Trail by User ID and Function  2021/01/15

User ID  Function  Audit Date  Audit Time  Audit Action  Audit User
GM712    JS002    20190826   16:16:26.2  Created      EY712
GM712    JS003    20190826   16:16:26.2  Created      EY712
GM712    JS004    20190826   16:16:26.2  Created      EY712
GM712    JS007    20190826   16:16:26.2  Created      EY712
GM712    JS010    20190826   16:16:26.3  Created      EY712
GM712    JS011    20190826   16:16:26.3  Created      EY712
GM712    JS012    20190826   16:16:26.3  Created      EY712
GM712    JS013    20190826   16:16:26.3  Created      EY712
GM712    JS014    20190826   16:16:26.3  Created      EY712
GM712    JS015    20190826   16:16:26.3  Created      EY712
GM712    JS016    20190826   16:16:26.3  Created      EY712
GM712    JS050    20190826   16:16:26.3  Created      EY712
GM712    JS050    20190906   09:13:02.1  Deleted      MO712
GM712    JS060    20190826   16:16:26.4  Created      EY712

          ** Start of Data **
Restart at User ID: █ _____ Function: _____ Date: _____ Time: _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          Quit                               PgDn
  
```





### 3.24 MA100 Report - Functions linked to Users/Groups

This function produces a report of menus and functions that the specified user/group has access to.

The extract type determines whether the output is extracted to a comma delimited files, emailed or printed.

A screenshot of a PuTTY terminal window titled "160.119.253.52 - PuTTY". The terminal displays the following text:

```
MAP100          *** Cronus Consulting ***                11:45:44.7
MAM100      Report  - Functions linked to Users/Groups    2021/01/15

Start - User/Group ID: CRONUS__
End   - User/Group ID: CRONUS__

Extract Type.....: E (C)sv, (E)mail or (R)eport

Email Address.....: info@cronus.co.za

Sub System.....:
File Name.....:

Default Printer.....: laser

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit
```



### 3.25 MA101 Report - Audit Trail by User ID

This function provides an audit report of users/groups that were added, deleted, and suspended. The Audit User, Date, Time, and Action is provided.

The content of the audit report can be filtered by specifying values for the input fields provided.

```
160.119.253.52 - PuTTY
MAP101          *** Cronus Consulting ***          11:50:22.8
MAM10101        Report    - Audit Trail by User ID  2021/01/15

User ID.....: _____ (Blank for all)
Audit User ID: EY712_____ (Blank for all)
Audit Action.:  _          (Blank for all)
                                   (1 - Created)
                                   (2 - Deleted)
                                   (3 - Suspended)
                                   (4 - Re-Activated)
Start Date...: 20100101 (YYYYMMDD)
End Date....: 20210115 (YYYYMMDD)

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit
```



### 3.26 MA102 Report - Audit Trail by User ID and Function

This function provides an audit report of function that were added or deleted for a user/group. The Audit User, Date, Time, and Action is provided.

The content of the audit report can be filtered by specifying values for the input fields provided.

```
160.119.253.52 - PuTTY
MAP102          *** Cronus Consulting ***          11:55:59.8
MAM10201      Report - Audit Trail by User ID and Function  2021/01/15

User ID.....: _____ (Blank for all)
Function ID..: JS300_____ (Blank for all)
Audit User ID: _____ (Blank for all)
Audit Action.: _           (Blank for all)
                    (1 - Created)
                    (2 - Deleted)
Start Date...: 20200101 (YYYYMMDD)
End Date.....: 20210115 (YYYYMMDD)

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Quit
```