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EMS Telnet User Guide

Part I: The Basics

Introduction

This document provides information pertaining to the Telnet, or character-based version of EMS. Questions and recommendations for this manual should be directed to Sue Smith, Anchorage Statewide Equipment Fleet (SEF). The Telnet version of EMS is available to employees of SEF. EMS is also available in a graphical user interface (GUI) version allowing users a “point and click” method for operating the software. A separate User Guide is available if using the GUI version.

SEF Contacts

<table>
<thead>
<tr>
<th>EMS System Administrator</th>
<th>Provides statewide user support and System Administration for EMS software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerry Harper - EMS Systems Analyst and Programmer</td>
<td>Provides analysis and system programming for EMS</td>
</tr>
<tr>
<td>Phone – 269-0794</td>
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</tr>
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<td></td>
</tr>
<tr>
<td>Brad Bylsma - Fleet Parts Manager</td>
<td>Provides back up EMS support along with the management of parts inventory, office managers, and contracts</td>
</tr>
<tr>
<td>Phone – 269-5974</td>
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<tr>
<td>Email – brad.bylsma</td>
<td></td>
</tr>
</tbody>
</table>

This guide is not intended to replace any policies or procedures currently established. Examples are intended for the purpose of software training only. SEF Policies and procedures can be found at the SEF website: http://www.dot.state.ak.us/sef/index.shtml.

EMS User Accounts/Log-on Credentials

Telnet user’s must set-up their log-on credentials for EMS prior to accessing the system. To request an account, the EMS Access Form is available on the SEF website: http://www.dot.state.ak.us/sef/ems.shtml. New users can also contact the EMS System Administrator for assistance. Once the log-on credentials have been established and EMS accounts set-up, users will have access to EMS.

The Username and password are case sensitive. The Username will consist of the users State employee number preceded by a lower case “u”. Passwords are specific for each user and must be five (5) characters in length. Users will have three (3) attempts at entering the log-on credentials before the account is locked out. Users can backspace and overtype characters entered as needed. If you are locked out, contact the EMS System Administrator to reset your account. Ref- Log On for graphic instructions.
EMS stands for Equipment Management System. Most industries and large private sector companies have computerized systems to track their assets and inventory.

The State of Alaska uses EMS for the State Equipment Fleet and is used to identify vehicles and equipment, track costs, bill customers, maintain inventory, calculate rates, and store historical information about our equipment. This tracking also provides cost information for budgeting and forecasting.

EMS data is divided into several main areas:
- Asset Management
- Work Orders
- Fuel
- Time Posting
- Parts inventory
- Billing

Menus have been developed for users depending on their job descriptions. Menus are as follows: Accounting Staff, Foremen/Mgrs/ and Superintendents, Office Manager, Parts Managers, and a General Inquiry Menu.

For every Menu, additional lower menus are available that supply additional information.
**Navigation: Toolbars and Icons**

**Function Key Mapping**

<table>
<thead>
<tr>
<th>Function</th>
<th>Key or Key Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Help</td>
<td>F1; also used to <strong>Acknowledge Delete</strong></td>
</tr>
<tr>
<td>Option Help</td>
<td>Ctrl + F1</td>
</tr>
<tr>
<td>Scan</td>
<td>F2</td>
</tr>
<tr>
<td>Select Access Path</td>
<td>F3</td>
</tr>
<tr>
<td>Set Item Attributes</td>
<td>Ctrl + F3</td>
</tr>
<tr>
<td>Previous Image</td>
<td>F4</td>
</tr>
<tr>
<td>Next Record</td>
<td>F5</td>
</tr>
<tr>
<td>End</td>
<td>F8 or Esc or Ctrl + E</td>
</tr>
<tr>
<td>Cancel</td>
<td>Ctrl + F8 or Ctrl + Esc</td>
</tr>
<tr>
<td>Add Mode</td>
<td>F9</td>
</tr>
<tr>
<td>Delete Mode</td>
<td>F10</td>
</tr>
<tr>
<td>Confirm Delete</td>
<td>Ctrl + F10</td>
</tr>
<tr>
<td>Inquire Mode</td>
<td>F11</td>
</tr>
<tr>
<td>Change Mode</td>
<td>F12</td>
</tr>
<tr>
<td>Move To End of Item</td>
<td>End</td>
</tr>
<tr>
<td>Move to Begin of Item</td>
<td>Home</td>
</tr>
<tr>
<td>Show Messages</td>
<td>Ctrl + M</td>
</tr>
<tr>
<td>Page Up</td>
<td>Page Up</td>
</tr>
<tr>
<td>Page Down</td>
<td>Page Down</td>
</tr>
<tr>
<td>Scroll Rpt to First Page</td>
<td>Ctrl + Page Up</td>
</tr>
<tr>
<td>Scroll Rpt to Last Page</td>
<td>Ctrl + Page Down</td>
</tr>
<tr>
<td>Scroll Rpt Up 1 Line</td>
<td>Alt + Page Up</td>
</tr>
<tr>
<td>Scroll Rpt Down 1 Line</td>
<td>Alt + Page Down</td>
</tr>
<tr>
<td>Pan Rpt Left/Right 1 Cell</td>
<td>Shift + Arrow Key (← or →)</td>
</tr>
<tr>
<td>Pan Rpt Left/Right 1 Block</td>
<td>Ctrl + Arrow Key (← or →)</td>
</tr>
<tr>
<td>Pan Rpt to Left/Right Margin</td>
<td>Alt + Arrow Key (← or →)</td>
</tr>
<tr>
<td>Enter</td>
<td>Enter</td>
</tr>
<tr>
<td>Tab</td>
<td>Tab</td>
</tr>
<tr>
<td>Back Tab</td>
<td>Shift + Tab</td>
</tr>
<tr>
<td>Copy</td>
<td>Ctrl + C</td>
</tr>
<tr>
<td>Cut</td>
<td>Ctrl + X</td>
</tr>
<tr>
<td>Paste</td>
<td>Ctrl + V</td>
</tr>
</tbody>
</table>
Keyboard Definitions

**Tab** – Tab; moves cursor to next modifiable field to right of current position. The numeric keypad “-“ is also defined as a Tab key.

**Back tab** - <shift> Tab; moves cursor to first modifiable field to left of current position.

**Backtick** - ~- the backtick key is located to the left of the numeral 1 key (above the Tab key).

**Delete Character** – Delete key; deletes character at cursor position.

**Delete to Item End** – Home Delete; pressing Home key, then Delete key results in all text, from current cursor position to end of field, being deleted.

**Vertical Tab** – Numeric Keypad +; positions cursor at first modifiable field on next line (bypass all modifiable fields on current line).

**Refresh Screen** - <ctrl> w; redraws screen contents in event screen “looks funny” or contains operating system messages.

**Show Message** – Home m; if multiple informational/warning/error messages are generated, you will be prompted with ‘-- more --’. By pressing Home key, followed by the letter m, the additional messages will be displayed. When finished with the display, simply press <enter> to return to the original input screen.

**Toggle Print** – Backtick 4; press and release the Backtick key (above the Tab key) and then the number 4 key will toggle the print flag when running reports/lists.

**Scan.** Allows you to look up information from a file when you do not know or can’t remember specific key values.
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Select Access Path. Allows you to view records in a file in alternate key sequences. Assets are normally viewed in asset id sequence. However, you may wish to view them by spec class, license number, shop id, etc. By pressing F3, all available access paths will be displayed. Position the cursor next to the desired path and press <enter>.

End. This option “takes you back” to the previous process (screen or menu).

Cancel. This option also causes you to exit the current process. Selecting the “Home” key followed by “End” key will cancel a process.
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Accessing the System

Log On

1. On your desktop, use your mouse to select the Secure CRT Icon

2. Enter your Username and Password. Your Username is your SOA employee number preceded by a “u”
   Enter your Password and select “OK”
   The Server should default to “viper.dot.state.ak.us”
   The Server Port should default to “8060”

3. The Opening Menu Screen will display and default to your menu. Menus are assigned to EMS users based on their job descriptions.
   The example here is for the Foremen/Managers/Superintendents Menu.

4. To change your password, select the designated option in order to access the screens necessary to change your password. Passwords must be five (5) characters in length and are case-sensitive. Call the EMS office if your password needs to be reset.
Logging Off

1. When logging off EMS, it is important to exit properly. PF keys associated with exiting or directions to select “END” are available on all screens. The “End” button will normally be found on the keyboard, right hand side, above the arrow keys.

Exiting instructions are not the same for every screen but instructions for exiting should be available. By selecting “END” throughout the process, users will be able to exit.

An example from the Work Order Processing Menu. The instructions ask that you enter to Return to the Foremen Main Menu. Once there, instructions are to select function 16 (shift, 6) to Logoff.

2. An example of exit directions from the Asset Inquiry Screen and Asset Inspections. By selecting the “END” key and following the subsequent instructions, users will exit properly.

Exit or Logoff until you reach the main screen. At this point, when you select “End”, you have properly ended your session.

If you happen to use the “X” button located on the upper right hand side of the screen, you will exit out but it may cause an error. There is no need to notify anyone as the exiting
procedure is a recommended procedure to follow within the software.

If you try to log back on to EMS and receive an error, notify the EMS office.
**Multiple EMS Sessions**

Users can run up to five multiple sessions of EMS. This allows you to multi-task; inquire different windows at any given time.

1. At the Menu Bar, select the Icon representing a file folder.

2. A dialogue box will open allowing you to connect to an additional session.

3. Once you select “Connect”, log on as normal by entering your Password.

4. To navigate between the sessions, select the tabs underneath the menu bar. Whichever screen you were on will be displayed. If you are entering data, be sure to save your record prior to navigating to additional screens.
Field Definitions

**Asset Numbers**
Asset Numbers, Equipment Numbers and Vehicle Numbers are unique numbers assigned to equipment. Many of us use the three terms interchangeably. We find this useful in confusing most of our customers. Asset Numbers is the desired term as it correlates to the fields within EMS. Asset numbers are assigned regardless if the item is a Police vehicle, Plow truck, or Farm tractor.

**Attachments**
Attachments are purchased at the time of the original piece of equipment and are recorded as an “Asset Component”. An Asset number is not assigned but the Mfg, Model, and S/N are included. Components are categorized by a “component class”.

**Shop Codes**
Shop Codes and Location Codes are assigned to the geographic location of the shop where the Asset will be serviced.

**Financial Codes**
Normally refer to the Collocation Codes assigned to each Asset.

**Specification Class Code (Spc Class)**
A classification assigned to similar equipment for establishing work management protocols.

**Bill Class**
A classification assigned to similar equipment for establishing billing.

**Bill Status**
A method to determine what charges an Asset will receive based on the maintenance service a customer selects, i.e. W07, NN.

**Billing Life**
The expected life, in years, of an Asset. The Bill Status along with the Billing Life combine to establish replacement rates for the equipment.

**Database Fields**
Many of the terms used above are incorporated into the database as fields. Database fields are included into multiple tables and are integrated into multiple panels that you may query. A field has certain defining characteristics.

  - **Name**: every field has a name that uniquely identifies the field within a table.
  - **Data type**: determine the information to be stored, i.e. dates, currency, text.
Size: how many characters are stored, how much storage space is to set aside for each value.
Properties: defines multiple attributes of the field such as formatting.

Relational Database
Simply put, this term is used to describe a database that relates to multiple areas. The database fields are linked to each other within the system programming. In EMS, the Asset Number could be considered one of the core fields. The Asset Number relates to multiple areas such as work orders, parts issues, and billing documents to name a few. The goal is to extract the information into something useful for analysis and forecasting.

Reports
Reports are a product of the fields within a relational database. Once the fields are understood, users can identify the requirements for their reporting. Reports represent a snapshot in time of the information that has been extracted. Reports allow users to customize their information into data that is useful for making business decisions.
Creating Reports

General Information

**Logic Field**

*Logic* answers the question *Yes* or *No* and is usually represented by a checkbox. Appx allows you to click the checkbox and toggle it to represent *Yes* or *No*.

A check mark ✅ means *Yes*.

A blank checkbox ❌ means *No*.

A question mark ⏰ means that you do not know the answer yet (blank value, not *Y* and not *N*).

Some logic items require you to set the checkbox to *Yes* or *No*. Others may allow you to specify a question mark value. Also, logic fields may sometimes be seen as a single character field with values of *Y* or *N* to represent *Yes* and *No* respectively.

**Query Images**

Users should be aware that the Query Record Select, Sort Select and Selection Expression images do not contain the buttons normally associated with input images. The user must either simply press the Enter key (or other keyboard equivalent of desired function) or use the icons provided by Appx, either in the top right-hand corner of the image or the icons provided in the Appx Tool bar (Enter and Cancel icons at top left-hand corner of the image).

Refer to Section III, *Running Reports*, for a detailed discussion of the Record Selection, Sort Order and Expression Selection screens associated with a Query process. Included in the discussion is a listing of the various relational operators (EQ, GE, etc.) and a brief description of their meaning. A more detailed discussion is provided for the two “regular expression” relations, RI and RS.

**Creating PDF Output**

With Appx version 4.2, the user has the option to create a pdf format report. The pdf report can be saved to your local C drive (or other available drive) and then subsequently printed on a local printer (doesn’t have to be a network printer). The user may also email the pdf report to one or more individuals. The email recipients can then print the pdf report on his/her printer and/or save it to his/her local C drive or other available shared drive.

All printing of pdf documents is controlled from the Adobe Reader window, i.e., the Appx Print PDF image has no effect on printing of pdf documents.
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To create a pdf report, simply run any EMS report. When presented with the Disposition image:

- Change Format to PDF
- Select appropriate Form Id (typically PDF-60L132 for landscape printing)
- Press or Click Enter to continue

The system will then display the report in an Adobe Reader window. The system also generates an image, **PDF Print on Screen Dialog**, informing the user that a separate Adobe Reader window has been opened containing the report file. However, this image is obstructed by the Adobe Read window.

The user can simply make the Adobe Reader window the active window (should occur by default) and perform the desired action: print the report, save it to disk, etc. Click *File* on the Title bar to view available options provided by Adobe Reader. After printing the file, email it, and/or save it to disk, simply press the △ in the top right-hand corner of the Adobe Reader window, or select Exit or Close from the *File* option on the Title bar.

Then click on the Continue button on the Appx Print PDF image.

**Note:** If you press the Cancel button on the Appx Print PDF image, regardless of action taken on the Adobe Reader window (and the Display On Screen and Prt Hardcopy settings on Appx Disposition screen), the print file will be retained in the print directory. Since you have no access to this directory, it is recommended you not select this option.

Creating Standard Output

The following discussion pertains to the creation of standard output documents, not pdf documents.

Once the report file is displayed on the screen, you will see the following Report Tool bar at the bottom of the screen. You will also see the standard Appx Tool bar options (Enter and Cancel) on the top of the screen. However, only the Cancel icon and the X on the top-right hand corner of the image have any effect.

Creating Excel Spreadsheet

EMS provides the opportunity to create tab-delimited ascii files (e-file) which can be ftp’d to a user’s account on one of the DOT ftp servers. The user then logs into the ftp server, retrieves the e-file and saves it on his/her PC (or other action).

Use of the character-based system via telnet software requires the user submit a request to EMS support staff. The EMS support staff must then create the required account records in EMS, as well as request the creation of an ftp account for the user.
This e-file creation is currently limited to:

- Projected Agency FY Cost Report
- Projected Agency FY Rate Report
- Depreciation Report
- Fuel Consumption Report
- FTP Asset Data
- FTP MMS Data

However, this capability can be expanded to any other EMS report. Contact EMS support staff for more information.

With the advent of the desktop client (gui), the process is streamlined and gives the user much more flexibility. When executed via the gui client, there is no requirement for the user to have an ftp account on the ftp server, since the gui client does not utilize ftp software to make the e-file available to the user. It simply uses client-server technology to open up Microsoft Excel.

When running a report that is e-file enabled, the user must place a Y in the FTP Data File field on the Disposition screen. This can be accomplished by simply clicking on the box for that field. **If it is not set to Y, an e-file will not be generated.**

When the report is run, the user will be presented with a dialog screen containing information regarding the creation of an e-file. The user should make sure the specified temp directory exists before proceeding with the EMS report.

When presented with the report Disposition screen, check the FTP Data File box and press Enter to continue.

After the report is displayed, click the Close button on the report screen. The hardcopy report will print, if the Hardcopy flag is set to Y.

Regardless of the disposition of the hardcopy report, when the report screen is exited, the system will automatically run Excel and present the user with a spreadsheet containing the report data. The user can then simply exit Excel and the spreadsheet is saved in the directory location and file name specified in the initial e-file informational dialog. Alternately, the user may save the spreadsheet in another location by using the File option of the Excel Tool bar. The spreadsheet is always saved to the temp directory, regardless of the user saving the spreadsheet to another location.

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1 This is a temporary patch for a known bug in Appx software. The software is supposed to open up a standard dialog box asking the user to specify the destination location of the e-file, but does not work exactly as designed. If the user actually attempts to specify the file name to be used, the user’s gui session is terminated without warning.
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To exit, simply click the button in the top right-hand corner of the Excel window or use the File option on the Excel Tool bar to exit.

Sending a Report as E-Mail

The following instructions are valid when running EMS from a telnet session (character-based session) or gui session. However, if running from a gui session, it is recommended you create pdf output and email the report via the Adobe Reader window rather than from Appx. If emailed from Appx (regardless of session method), when you print the report, you will print the email header information (Subject, From, Date, To) as well as any Comments you may have added at the beginning of the report.

When viewing a report on screen, you can elect to email it to another user. Be sure to select Print on Screen? on the Report Disposition screen, otherwise this feature will not be available to you. Select this field by simply clicking the box next to the field descriptor; a check mark will appear in the box.

After the report runs and is displayed on your screen, select OPTION 7 (press the backtick key, then the number 7 KEY). The Send Report as E-Mail overlay, shown below, appears and you can define recipient and subject information. Be careful when entering email addresses, there are no edit/validation routines. It simply sends the report to the email addresses as entered.

You can add comments by selecting the ADD COMMENTS button. When selected, the E-Mail Comments overlay appears. Enter comments and select ENTER (check mark in top right-hand corner of the dialog box). You will now be returned to the Send Report as E-Mail overlay.
To email the report, select **ENTER** until the report display reappears. Note that this feature is only available on UNIX installations that function as, or interface to, a Mail Server.