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# IETM VIEWER

## *Installation Guide And Preparation for Use*

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## Table of Contents

<b>1.0</b>	<b>PURPOSE .....</b>	<b>3</b>
<b>2.0</b>	<b>SOFTWARE PREREQUISITES.....</b>	<b>3</b>
2.1	INSTRUCTIONS FOR INSTALLING JAVA.....	3
2.2	INSTRUCTIONS FOR INSTALLING SAXON.....	4
<b>3.0</b>	<b>PREPARING FILES FOR THE IETM VIEWER.....</b>	<b>4</b>
3.1	PREPARING THE XML FILES .....	5
3.1.1	<i>Edits to Main XML File .....</i>	<i>5</i>
3.1.2	<i>Edits to Declared Non-graphic Files (file entity declarations).....</i>	<i>6</i>
3.2	GENERATING THE HTML FILES .....	6
<b>4.0</b>	<b>CONSIDERATIONS WHEN PREPARING A MANUAL FOR THE IETM VIEWER.....</b>	<b>9</b>
4.1	<HOW-TO-USE-ETM> VS. <INTROWP>.....	9
<b>5.0</b>	<b>NAVIGATING THROUGH THE VIEWER.....</b>	<b>9</b>

## 1.0 Purpose

The purpose of this document is to explain the necessary steps a User must perform to prepare their desktop environment to run the *IETM Viewer* software. The software kit is located on one CD, titled "IETM Viewer".

This document also details the sequential steps the User must perform to prepare a Technical Manual for use with the *IETM Viewer*; this includes edit standards to follow for preparing a Technical Manual's XML files and generating HTML files.

Steps contingent on a prior step completing successfully, are noted within each section of the document. Following is an outline of the sequential steps:

1. Check software environment, install Java and/or Saxon if needed (typically performed once).
2. Confirm Manual's XML files parse without errors.
3. Perform edits to Manual's XML files, i.e., main XML file and non-graphic work package XML files.
4. Generate HTML files for the Viewer.

## 2.0 Software Prerequisites

The *IETM Viewer* requires the following software products:

- Java 1.4.X
- Saxon

When installing software, in most cases, D:\ is the letter used for the CD drive. If your CD drive is another letter, make note.

### 2.1 Instructions for Installing Java

Java 1.4.X programming software must be installed for the Saxon software to run.

First, determine if your desktop currently has Java version 1.4.X or higher installed by following these steps:

1. **Start → Program → Accessories → MS-DOS Prompt (or c:\ Command Prompt).**
2. At the C:\ command prompt type the following command:

```
C:\> java -version
```

If Java is currently installed, an example of what you will see is:

```
java version "1.4.1_01"
java™ 2 Runtime Environment, Standard Edition (build 1.4.1_01-b01)
Java HotSpot™ Client VM (build 1.4.1_01-b01, mixed mode)
```

Second, if you've found that your desktop DOES NOT have the required version of Java software installed, determine if you need the minimum Java set-up (required to run the Saxon XSLT processor for the *IETM Viewer*), or the full Java Runtime environment. Most users require the minimum amount of set-up.

Perform the following steps to install the minimum amount of set-up required for the *IETM Viewer*:

1. Insert the provided *IETM Viewer* CD in your D:\ drive.
2. Click on **MY Computer** desktop ICON, next, double click on **D:\** drive, Compaq Disc.
3. Double click on "**JAVA INSTALLATION FILES**"
4. For the minimum amount of set-up required for the *IETM Viewer*, double click on **j2re-1\_4\_1\_01-windows-i586**, an application type file.

The installation will proceed with pop-up windows, stating "extracting files", then "install shield wizard."

(If the installation finds, that you already have Java 1.4.1\_01 installed, a message will be Displayed, "You already have the Java 2 Runtime Environment, Se v1.4.1\_01 installed on this machine. Would you like to uninstall it?" Select [cancel]).

5. Follow the instructions displayed on the screen to complete the installation.

If you need the full Java development environment, then perform steps 1-3 above, and for step 4 select the application type file titled, **j2sdk-1\_4\_1\_01-windows-i586** and follow the instructions displayed on the screen.

## 2.2 Instructions for Installing Saxon

The Saxon software package is a collection of tools for processing XML documents. Once Java is installed, completing the steps below will provide the minimum amount of set-up required in order to run the Style Sheet translator (Saxon).

1. Insert the provided *IETM Viewer* CD in your D:\ drive.
2. Click on **MY Computer** desktop ICON, next, double click on **D:\** drive, Compaq Disc.
3. You will see two folders, **JAVA INSTALLATION FILES, PROJECTS**
4. Open up a second **MY Computer** window, double click on Local Disk(C:)
5. Click and drag from one window to another:
  - a. Copy D:\PROJECTS to C: drive\your directory.
6. Check to ensure that the directories copied are not protected for read-only. If so, change.
  - a. Highlight C:\your directory\PROJECTS folder, right click or mouse-button-3 (MB3), properties, uncheck attribute box for "read-only, [ok], "x" toggle switch "apply changes to this folder, subfolders and files", [ok].

## 3.0 Preparing Files for the IETM Viewer

Prior to generating the HTML files for the IETM viewer, section 3.2, the User needs to confirm the following:

- Successful completion of the software prerequisites. (First time Users refer to section 2.0 Software Prerequisites.)
- The XML Manual/Checklist is completed with no parsing errors.

### 3.1 Preparing the XML Files

Using an ASCII/Text Editor, Notepad or WordPad, the XML file(s) that constitute one manual must be prepared for the *IETM Viewer* environment. This section details the required edits to the main XML file and to non-graphic xml files. Once the edits are completed, your XML files can then be prepared for the *IETM Viewer*.

Special note: After editing is completed for a 3001 Manual, the individual non-graphic xml files, work packages, may no longer be opened up in Epic. This is because of the commented out DOCTYPE Statement. However, the entire manual can be opened in Epic, but if opened and saved by Epic, then the System Identifier "*system-id*" will have to be modified again, see section 3.1.1 Edits to Main XML File.

#### 3.1.1 Edits to Main XML File

1. Open the Main XML file with Notepad or WordPad.
  - I.e. highlight 250Manual, xml document type, right click or mouse-button-3 (MB3), Open with, Notepad.
2. Review the DOCTYPE declaration. It must contain a *public identifier* AND *system identifier*. If the XML file was prepared using an XML editor/publisher, then the *public identifier* is probably correct; however it's likely that the *system identifier* will NOT be correct.

The DOCTYPE Declaration must be in the following format:

```
<!DOCTYPE name PUBLIC "public-id" "system-id"
  [
    (Graphic entity declarations, if applicable)
    (File entity declarations, if applicable)
  ]>
```

Match the public identifier ("*public-id*") in the XML file and then either append the system identifier ("*system-id*") or correct it to the proper directory path by changing the "\ " backslashes to "/" forward slashes:

- "-//USA-DOD//DTD MIL-STD-3001-1 TM Assembly Draft XML V2 05112004//EN" "/your directory/PROJECTS/catalog/3001 XML V2/Milstd1.dtd"

3. Delete the entity declaration, <!ENTITY #DEFAULT "">, if found.
4. Save the file.

Note: The main XML file must also contain all the graphic file entity declarations declared in work packages (non-graphic file entities). This is a cut and paste process, performed in step 3 of section 3.2.3 Edits to Declared Non-graphic Files.

### 3.1.2 Edits to Declared Non-graphic Files (file entity declarations)

For a 3001 DTD formatted manual, each non-graphic file entity, Work Package, listed in the main XML file's DOCTYPE Declaration must be edited, as follows:

1. Open the declared file with Notepad or WordPad.
2. If the file contains a DOCTYPE declaration, place comments ( <! --, -- > ) before and after the declaration. For example:

```
<!--
    <!DOCTYPE maintim PUBLIC "-//USA-DOD//DTD MIL-STD-3001-1 TM Assembly Draft XML
    V2 05112004//EN"
    "manual 3001 xml v2.dtd"
    [
        (Graphic entity declarations, if applicable)
    ]>
-->
```

3. Within this newly commented-out DOCTYPE declaration, if there are graphic entity declarations, they must be copied to the main XML file. So with two Notepad/WordPad edit windows open, select the graphic entity declaration, copy, and then paste into the DOCTYPE declaration of the main XML file.
4. Save both the main XML file and the non-graphic file.
5. Perform steps 1-4 for each of the non-graphic file entity declarations listed in the main XML file.

## 3.2 Generating the HTML Files

The following instructions detail the procedure for generating the HTML files for the IETM Viewer.

Prior to generating the HTML files the edit preparation of the XML Files, section 3.1, must be completed.

1. Create a directory within **C:\your directory\PROJECTS**

**Right click or mouse-button-3 (MB3) -> New -> folder -> newfoldername**

The **newfoldername** should represent the contents, such as, "HTML for TM-xyz". This folder is where the HTML files will be generated, for a specific manual.

2. Copy (do not move) the XML files comprising one manual/checklist into the newly created directory.
3. Open a DOS Command prompt window on your computer and set default to the new directory.

**Start -> Programs -> Accessories -> MS-DOS Prompt** or **c:\ command prompt**

At the command prompt, type:

C:\> **cd** \your directory\PROJECTS\newfoldername and press ENTER.

NOTE: If you are not using the c: drive you must edit the makeit script and change two places where c: is specified to your drive.

4. Next, at the command prompt, type for 3001:

```
C:\> ..\makeit main_xml_manual_name.xml ..\XSL\3001-build.xsl temp.html -v [ENTER]
```

5. Confirm that the **makeit** script completed successfully. Upon success, you will have many files in your **newfoldername** with the file extension of .HTML.
6. If the **makeit** script completed with errors, this means that you must correct the XML file. Review the log file generated from the **makeit** script and using the XML Editor (Epic) correct the error. Make sure you run a 'completeness check'. Save the file.

After saving your file, using Epic, the system DOCTYPE contains backslashes. This is an Epic bug in v. 4.3. Using Notepad or WordPad change the backslashes to forward slashes and save the file.

NOTE: You may see 'warnings' if you have duplicated graphic entities declared. For QA purposes, these should be investigated.

7. To launch the *IETM Viewer*, double click on the file **\_StartFrameset.html**.

## 3.2.1 POTENTIAL MAKEIT ERRORS

### 3.2.1.1 Can not find the path specified

“external entity not found....”, “The system cannot find the path specified”

When the original XML file is edited using the EPIC Editor, the path in the DOCTYPE statement is saved with backslashes in the path name VS forward slashes. See section 3.1.1 Edits to Main XML File.

To correct the Makeit error:

1. Notepad edit the main XML file.
2. In the DOCTYPE statement, where the DTD path is specified, change the “\” to “/”  
For example:

#### BEFORE:

```
<!DOCTYPE manual PUBLIC "-//USA-DOD//DTD MIL-STD-3001-1 TM Assembly Draft XML V2  
05112004//EN" "\catalog\3001 XML V2Milstd1.dtd" [
```

#### AFTER:

```
<!DOCTYPE manual PUBLIC "-//USA-DOD//DTD MIL-STD-3001-1 TM Assembly Draft XML V2  
05112004//EN" "/catalog/3001 XML V2/Milstd1.dtd" [
```

## 4.0 Considerations when Preparing a Manual for the IETM Viewer

### 4.1 <how-to-use-etm> vs. <introwp>

When you have a paper-oriented manual, you usually include an Introduction Work Package. This Work Package is traditionally where you make references to the Alphabetical Work Package/Part Number Index. The strategy with the Viewer is to display <how-to-use-etm> information in lieu of the <introwp><intropara>.

The Viewer is set up to display this <how-to-use-etm>, but if it is not found in the manual, then the <introwp><intropara> elements will be accessible from the List of Contents screen. So, if you have cross references to the Alphabetical Work Package/Part Number Index inside your Introduction Work Package and you do not have a <how-to-use-etm>, you should either tag a <how-to-use-etm> section (which is suppressed in the PDF version) that is displayed in lieu of the Introduction, or else do not tag the <xref> elements to the Alphabetical Index or Part Number Index.

The functionality of the Viewer displaying <how-to-use-etm> in lieu of the <intropara> from within the <introwp> is an issue. The strategy PBM has is that most of the text found in the Introductory WP is paper-based and not applicable to the Viewer. Introductory Information that **is** applicable to the Viewer should be tagged as <how-to-use-etm> (and thus would be suppressed by the FOSI in the PDF output). If users do not tag <how-to-use-etm>, then the Introduction WP **will** be accessible from the List of Contents. This is a function that has been built into the Viewer.

## 5.0 Navigating Through the Viewer

On the upper left side of the Viewer window is a Guidepost. The choices here are as follows:

Front Matter	Subjects
List of Graphics	IPBs
Part Numbers	Revision Summary
Ref. Designators	

1. Under the selection for Front Matter is a listing of whatever pieces are included in the front part of the manual. Possible choices are:

- 1.1 How to Use this IETM
- 1.2 List of Technical Publications Deficiency Reports Incorporated
- 1.3 Materials Required
- 1.4 Reference Material
- 1.5 Support Equipment Required
- 1.6 Title Page
- 1.7 Warnings Applicable to Hazardous Materials

2. The Subjects is a Table of Contents listing of work packages, sorted by system name, and grouped by work package functionality, i.e., Maintenance, Descriptive, Operation, etc.

There are different navigation methods for different types of information. Selecting one of these work packages provides a list of work package contents in the right pane.

2.1 Procedural-type work packages provide navigation only to the top "task" level element.

Once you launch one of the tasks, the contents of it are brought into a new window where steps/procedures within a task may be navigated.

2.2 Descriptive type work packages provide navigation (via right pane) to all hierarchical levels of the work package.

3. List of Graphics is an alphabetical listing of all figures and foldouts by title.

4. IPBs is an alphabetical listing of all of the Illustrated Parts Breakdowns, including their figure title and showing it along with its corresponding GAPL.

5. Part Numbers is an ordered listing of all Part Numbers found in all GAPLs throughout the manual.

6. Revision Summary is a specific part of the front matter showing the changes that are part of this revision to the manual.

7. Ref. Designators is an ordered listing of all Reference Designators found in all GAPLs throughout the manual.