

**S1000D CONTENTA  
USER'S GUIDE FOR**

**NAVAL SURFACE WARFARE CENTER  
PANAMA CITY DIVISION**

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## FOREWORD

This user's guide is intended to assist personnel working in NSWC PCD S1000D Contenta. This guide supplements the Contenta S1000D 2.1 User's Guide published by XyEnterprise. Questions or comments about this document should be forwarded to NSWC Panama City, Code A24, 110 Vernon Ave., Panama City, FL 32407.



# CHAPTER 1

## INTRODUCTION

### **1.1 PURPOSE**

This guide provides some of the lesson's learned from working in S1000D Contenta. It will hopefully enable a user to successfully produce an S1000D IETM from the NSWC PCD Contenta system. This guide is produced by NSWC Panama City Division and is intended for users of the NSWC Panama City Division S1000D Contenta system. For simplicity in this guide the NSWC Panama City Division S1000D Contenta system will be referred to as Contenta.



## CHAPTER 2

### GETTING STARTED

#### 2.1 GENERAL

Before you can start working in Contenta there are a number of actions that must be done first. This chapter will lay out the preliminary requirements to start using Contenta. With Contenta being housed in Philadelphia, for security purposes, a number of extra layers are present in our system. The data base is housed on the JCALS servers behind a Citrix layer for security.

#### 2.2 COMMON ACCESS CARD

Everyone accessing the Contenta system must first get a Common Access Card (CAC). Contractors should contact their COR to get a CAC.

#### 2.3 NAVLOGTD HOME PAGE

Access to the NAVLOGTD Home Page is provided only to those users that have a valid DoD email certificate. To access the site, go to <https://navlogtd.navsses.navy.mil/> . Please ensure that you select your DoD email certificate or an error will be displayed.

There are three selections:

CITRIX Login – Select to gain access to NAVLOGTD. (You must already have an account.)

Request Access – Select this page to request access to NAVLOGTD. For more information, refer to paragraph 2.4.

My Certificate Changed – Select this if you already have an account, but your certificate has changed.

#### 2.4 REQUEST ACCESS PAGE

Selecting Request Access located on the Home Page will display a new window. Enter information in all required fields. You do not need to select PMS View or EOSS View. **You must select “Show Advanced Options” and select the Panama City Data Base.** After completion, select “Submit” to begin processing the application. Select “Cancel” to end the transaction.

#### 2.5 SOFTWARE

**2.5.1 Contenta Software** For your updates to be loaded into Contenta, you must have some software loaded on your computer. A CD with the software and the instructions to install it is available from NSWC PCD. If you are upgrading from Arbortext Editor 5.1 to 5.3 you will need to get an updated CD from NSWC PCD.

**2.5.2 If You Get A New Computer** If you get a new computer you must install the software described in paragraph 2.5.1 before you attempt to connect to Contenta.

**2.5.3 Configuring Internet Explorer to Upload Content** The XyEnterprise user’s guide talks about configuring internet explorer to upload data into Contenta. Because our system is behind the Citrix layer, we do not need to do this. The server in Philadelphia is configured to upload data, so you don’t need to make the changes to your computer.

#### 2.6 CONTENTA ACCOUNT

Your Contenta account will be set up by the NSWC PCD Contenta system administrators. Your project manager should contact Ken Waringa ([kenneth.waringa@navy.mil](mailto:kenneth.waringa@navy.mil)) or Jay Atkins ([james.e.atkins@navy.mil](mailto:james.e.atkins@navy.mil)) to request a Contenta account be set up. They should list the projects you will be working on and if you need a project manager or writer desktop.

#### 2.7 LOGGING INTO CONTENTA

The Contenta log is pretty quick and easy.

- a. Insert your CAC then go to <https://navlogtd.navsses.navy.mil/>. When is asks for your certificate **YOU MUST SELECT YOUR EMAIL CERTIFICATE** or an error will be displayed.
- b. Accept the user agreements.

- c. Select the Citrix Login button.
- d. When you get to the applications select the TM PCB Editor icon. This will take you to your Contenta desk top.

## CHAPTER 3

### BEGINNING YOUR PROJECT

#### **3.1 GENERAL**

Before you start working in Contenta you should receive training on the basics of working in the data base.

#### **NOTE**

All new projects should use issue 3.0 of the specification and the 3.0 data modules.

#### **3.2 PROCESS TO CREATE AN S1000D DOCUMENT**

Creating a document in S1000D is not much different than creating a legacy technical document. The primary difference is that instead of working with the whole document, you are working with small pieces of information that will eventually make up the whole document. The output styles are dictated by our publishing system, so authors only need to worry about content. The basic process follows:

- a. Break your data into data modules. Think about reusing the data. If data could be referenced in another part of the document, make it a data module. There is no rule that says how much data makes up a data module.
- b. Create your data module list. Then, make up your data module code. The standard numbering system in the specification will not fit all applications. Document how you determine the data module code you are using. In the DMRL, break your data modules into the appropriate chapter they will populate with publication modules. Remember, the DMRL may change as you start developing the data modules. Keep your DMRL up to date as you progress.
- c. Populate a few data modules with your data.
- d. Ask for a review of the DMRL and data modules to be sure they are correct and compatible with the common source data base.
- e. Populate about 30% of your data modules and have a review. (30% IPR)
- f. Finish populating your data modules.
- g. Have another review. (60% IPR)
- h. Create your publication modules and finish the last details of your data modules.
- i. Have a final review before VAL/VER. (90% IPR)
- j. VAL/VER. You're program will dictate what media will be used for VAL/VER. One method is to produce PDFs of each data module and use these to do the VAL/VER. These can be marked up as necessary and TMERs produced as necessary.
- k. Incorporate VAL/VER comments and change data module status to verified.
- l. Import data modules, publication modules and graphics into the common source data base.
- m. Produce the IETM from the common source data base.

#### **3.3 DATA MODULE LIST**

The data module list is just a list of data modules that will make up your document. the data module list will remain an in-process document through out the total project. A data module list can also be loaded into Contenta to create data module shells with a lot of the basic information already filled in. A template of the required format for the data module list can be obtained from NSWC PCD.

#### **3.4 CREATING YOUR PROJECT**

Once you are ready to start loading data into Contenta you must have a project set up to work from. Contact NSWC PCD to set up your project. Once the project is set up it will be forwarded to a workpool. A workpool allows all the users assigned to a project to have access to the data modules, publication modules, and graphics. If an individual checks out a data module, the data module will be locked in Contenta to prevent two people working on one data module at the same time.



## CHAPTER 4

### WORKING IN CONTENTA

#### **4.1 CONTENTA USER'S GUIDE**

The XyEnterprise Contenta User's guide should be used for most procedures unless there is a difference in how we work because of the Citrix layer. Where there are differences they will be documented in this guide.

#### **4.2 UPLOADING DATA**

You must have project manager permissions to upload data into Contenta.

- a. In Contenta, select the "Library" tab.
- b. Click on "S1000D".
- c. Click on "Tools" to the left of S1000D.
- d. Select "S1000D Upload". A new window will open. If you get error warnings, just click on OK.
- e. In the new window click on "Open Windows Explorer Window" in red at the top of the screen. A new window will open.
- f. In the new window copy "file:///V:/ and past it into the address bar, then click Go.
- g. This will open the explorer window to your desktop. You can now navigate to the directory you have your data in to be uploaded. Just select the data and drag it into the gray window on the S1000D Upload page.

When you are uploading data it is advisable to create a special directory on your computer to put the data into. If you have more than 20 - 30 files to be uploaded you may want to create a second directory to hold the extra data in. We recommend not uploading more than about 30 files at a time. We create a "Waiting" directory and an S1000D Import directory. If we have 100 graphics to upload, we'll put them all into the waiting directory, then cut about 20 - 30 and paste them into the S1000D Import directory. Drag the files from the S1000D Import directory into the gray window and go through the process described in the XyEnterprise User's guide to upload them. After they are uploaded, delete the files from the S1000D Import directory and cut some more from the Waiting directory and paste them into the S1000D Import directory. Repeat this process until all your data is uploaded.

#### **4.3 PREPARING CONTENTA FOR UPLOADING A DATA MODULE LIST**

If you are going to import a data module list for Contenta to create the data modules you must first create the MNS and then add the program. The XyEnterprise Contenta User's guide tells you how to create an MNS. After you create the MNS you must add a program. The XyEnterprise Contenta User's guide tells you how to create a program. Now you should be ready to upload your data module list.

#### **4.4 UPLOADING A DATA MODULE LIST**

You can upload a DMRL created in Excel. Before you upload your DMRL you should create templates for your project.

##### **4.4.1 Creating Data Module Templates**

- a. Click on Templates, then click on the tools to the left of Templates.
- b. Select New Object, then select Model. Name the new model the same as the Model ID for your project.
- c. Select the tools next to the type of data module you want to create, and select manage object. when the manage object window opens click on S1000D at the top, then select Templates.
- d. In the Paste into Container window select your project then click on Copy. A window will open with the new name, just click OK. For the import to work properly the name must remain the same.

- e. You can then use Epic Checkout to fill in the Status and ID section of the data module.

**4.4.2 Uploading the DMRL** In order for data module list to import correctly it must be formatted correctly. You should request an example from NSW PCD. After you've created your data module list in Excel you must save each worksheet as a CSV file. In Excel select "Save As" and in the Save As window open the Save as Type and scroll down until you see CSV (comma delimited) and select it. **NOTE:** After you save the file as a CSV file do not reopen it in Excel or you will delete the leading 0 in your data module code which will cause problems when you import the data module list. Repeat this for all your worksheets, then perform the following:

- a. Upload the DMRL as described in paragraph 4.2.
- b. Run the DMRL Manager tool and use it to create the data modules from templates.
- c. Select your project from the drop down.
- d. Select all of the available SNS codes from the multi-select box.
- e. Select all of the data modules that show up on the right hand side (use the check box in the header row).
- f. Choose "Create Data Modules" from the Actions drop down.
- g. You should now have shells for all your data modules in the stable data section of Contenta. Before you can start populating the data you need to put it into your project.

#### **4.5 GETTING DATA INTO A PROJECT**

To edit data or publication modules they must be in a project.

- a. Select the top level (Model) of the data or publication modules you want to get into your project.
- b. Select the tools next to the Model you selected.
- c. Select "Manage Object".
- d. On the left side, select the project you want the data in.
- e. Select the select the container in the window (Data Modules, Publication Modules, Graphics) and then click the REUSE button. Your data should now be in the project.

If you cannot move data into your project check to be sure one of the containers in the tree you are trying to move the data into is not read only. After your project is set up with data in it, if you check a new data module into Contenta it will change one of the objects in your project to become read only. It may be the System, Subsystem, or Subsubsystem. If an object is read only you can not move data into it. You can select the read only object and then tools and try to use the "Get Latest" tool to update the object. If this tool works your new data modules should be moved into the project automatically. If you have problems moving data into a project should contact NSW PCD for assistance.

#### **4.6 GETTING DATA OUT OF CONTENTA**

There are a couple different ways to get data out of Contenta.

**4.6.1 Epic Check Out/In** These tools are used to check data or publication modules out of Contenta that you need to edit. When you check data out using Epic Check Out, Contenta writes code into the data module so the system knows where it belongs when you check it back into the system. If you need to create new data modules, do not use data modules checked out the Contenta with this tool as a template. The extra code written into the data modules will cause problems.

**4.6.2 Epic Fetch** This tool should be used to pull a data or publication module out of Contenta that you just want to look at or to just copy data from this data module into another data module. If you use Epic Fetch you can not check the data module back into Contenta with changes, you must use Epic Check Out for that. Epic Fetch can be used to create a new data module from an old one. When you use Epic Fetch the object is brought out as "read only" so you must save it as something else if you want to edit it.

**4.6.3 Content Fetch** This tool is used to download binary objects, like a graphic or zip file. When you select the Content Fetch tool a new window will open and ask if you want to Open, Save, or Cancel. Select

Save and another window will open that looks like it's going to put it on your desktop. This is the desktop of the server, you must select the down arrow in the little top window so you can select C: your computer (V on the server).

## **4.7 PUBLISHING**

There are two methods of publishing an IETM, from a project and from stable data. All project managers should be able to publish from their projects. Only users with sysadmin privileges can produce an IETM from stable data.

**4.7.1 Publishing From A Project** When you publish from a project, the system will use data and publication modules from the project first, then if they don't exist in the project, the system will pull them from stable data.

- a. You need to select the project you want to publish from. You can do this by selecting the Library tab, then Work In Progress (WIP), then your project, or on the My Assignments tab, select the project you want to publish.
- b. Select the publication module in the project you want to publish.
- c. In the Actions column, next to your configuration, click Tools.
- d. In the Run Tool window, click S1000D Publish.

### **NOTE**

A list of saved collections already exists as a drop down and can be chosen when applicable. Step 5 through 14 may be skipped and proceed to step 15 if a collection name already exists.

- e. From the PUBLISH window, PUBLISHING SELECTIONS box, select the publication module you want to publish.
- f. In the FORMATS box select ContentaView.
- g. In VERSION box select 3.6.
- h. Enter a unique name for the CD-ROM. **This name cannot have a dash (-) or space in it.** If you need to separate names use an underscore (example: NSWCPCLCSMM).
- i. Enter a collection name. **This name cannot have a dash (-) or space in it.** If you need to separate names use an underscore (example: NSWCPCLCSMM).
- j. Select a skin, NAVSEA or NAVAIR.
- k. In CGM viewer select IsoView.
- l. To publish, select the Make Web Accessible box only. Ensure no other boxes are checked. If Import Zip is selected the publish will not work.
- m. Fill in publishing authority, NAVSEA or NAVAIR.
- n. After all your selections are made you can save the settings by filling in the SAVE SETTINGS TO box at the top. Once you save the settings you can select your saved settings from the saved settings box and then publish.
- o. Each time you publish a new IETM you should select the Clean Collection box and then select publish. This will ensure you only get the IETMs you want published. This publish will only take a few seconds, all this does is clean the collection from the server. When it finishes unselect the Clean Collection box, then you can publish the IETM as described above.
- p. After all your settings are made ensure the Make Web Accessible box is the only box checked. Then select the Publish button to begin the publishing process.
- q. When publish is finished you will select "VIEW LOG". This is where you will find warnings that identify graphics or data modules that couldn't be found. The log file is also where you will download the .zip file.

- r. From the log file, click the highlighted text (example: [MAJOR SECTION] You can download the NSWCPCLCSMM.zip here). Save to the v:/ drive, which will bring it to your C:/ drive.

**4.7.2 Publication Module Properties** Before you publish you should check the top level publication module properties. Just select the Edit Properties tool for the top level publication module. The PM Number in the properties should be the TMIN for the publication you are producing. This has to be entered manually. Also, if you check the publication module out to edit it, after you check it back in you must reenter the TMIN in the properties.

**4.7.3 Data Restrictions** You must have the data restriction entered in the top level publication module for them to show on the cover page when the IETM is opened. Data restriction include you distribution statement, export restrictions and destruction instructions.

#### **4.8 GRAPHICS**

All graphics, except HAZMAT symbols, must have an ICN assigned.

#### **4.9 HAZMAT SYMBOLS**

There are numerous HAZMAT symbols in our Contenta system and the symbols already in the system should be used. If nothing in the system will support your HAZMAT item you should submit your symbol to NSW PCD for inclusion in the system. we are trying to keep our symbols as generic as possible. The primary purpose of the HAZMAT symbol is to alert the sailor of a hazard. So long as the name of the symbol is close to the substance you need and the icons are correct you can use what's already in the system. If you need Adhesive MII-XXX, but the adhesiverubbergenpur.jpg symbol that's already in the system has the same icons, use the one in the system. We're trying to make these as generic as possible and keep away from the specialized one that no one else will understand. After all, the main point is the have to correct icons to alert the user of the hazard. You can still use the specific hazard name in your document along with the generic symbol.

## CHAPTER 5

### LESSONS LEARNED

#### 5.1 INTRODUCTION

Since we started working in Contenta we've learned a few things that, hopefully, will make your job easier.

#### 5.2 CONTENTA REQUIREMENTS

When you import a data module or publication module Contenta creates the name from the data module code or publication module code in the XML, not the name you put on the file. If you are loading new data and get an error that says it already exists in Contenta you might want to be sure the DMC in your XML is correct. It's real easy to copy ID/Status from one data module and paste it into a new data module and forget to update the DMC.

Data Modules must be saved as DMC-(applicable data module code).  
DMC-LCSMM-A-P0-00-00-00A-012A-A

Publication Modules must be saved as PMC-(applicable publication module code).  
PMC-LCSMM-61331-CH002-00

Illustrations must be saved as ICN-(applicable illustration control number).  
ICN-LCSMM-A-P00000-N-61331-00006-A-01-1

#### 5.3 WORKING IN DATA MODULES

Each data module type has different rules for how you enter data. Some of these differences may be obvious to some, but they confused me (easily done) at first. I found it was easiest to create one data module of a certain type, say descriptive, then use it as your template for the next data module. I create and populate a descriptive data module. I save it as the DMC. I then start adding the data for the next data module into the original data module and use save as to save it to the new DMC. This saves you having to fill in the ID/Status section each time, you do it once then just update the AVEE and title.

**5.3.1 Descriptive Data Module** You are very limited where you can place WARNINGS and CAUTIONS. If you have a procedure that involves steps, use a procedural data module. You can not put steps in the descriptive data module, only para tags.

**5.3.2 Procedural Data Module** Procedural Data Modules can only contain steps, no para0 are allowed. Procedural data modules must be used for all directive procedures.

**5.3.3 Illustrated Parts Data** This one was a real pain to figure out. The tagging is not readily apparent. "csn" is the catalog sequence number, the ind attribute is the indenture and the item attribute is the call-out number from your figure.

**5.3.3.1 Attaching Parts** To add attaching parts, after the "pas" tag hit enter and select "cbs". Inside the "cbs" tag hit enter and select "asp". Open the attributes for "asp" and select 1 in the asp attribute. This will add the asterisk for used on.

**5.3.3.2 Usable On Code** To add the Usable on Code, after the pas tag or the cbs tag if you added attaching parts, hit enter and select "cbs". This will bring up the Usable on code assembly and you can just type in your information.

**5.3.3.3 Graphics** Some IPDs require multi-sheet graphics. You can only add one figure to a IPD data module, so after you insert the "figure" tag and title, put your cursor after the title tag and hit enter. Select "sheet", then add your graphic. After the graphic tag hit enter again and select "sheet". You continue this until you have all your graphics in place. Now you have the problem of identifying the different sheets in the list of parts. We just add a "csn", in the "csn" attributes just put "Sheet 1 of 2" in the "item" attribute and leave the remaining "csn" data blank. This causes a blank line in your parts data with just "Sheet 1 of 2" on it. So the user can tell which graphic the following parts relate too.

## **5.4 TABLE JUSTIFICATION**

The default Contenta justification in tables is centered. If you want something else you must add a @align=center attribute to the <tgroup> element. This attribute can also be set to "left" although "right" is not currently supported.

## **5.5 TAG IDS**

The business rules for NAVSEA require tag IDs for S1000D data modules. Putting an ID in a tag takes more time, but is required if that tag is ever referenced.

Tags are required for Para0, subpara1, subpara2, subpara3, step1, step2, and step 3. I don't normally put an ID on subpara4/step4 or lower unless I know they will be referenced. All figures and tables must have an ID. Warnings, Cautions and Notes that will be reused should be made into a descriptive data module with information code 012. These can then be referenced numerous times by placing a refdm inside the WARNING, CAUTION, or NOTE tags. If a WARNING, CAUTION or NOTE is only going to be used once I don't assign an ID to it. IDs must be unique within a data module. An ID can be reused in different data modules within the same IETM. Prior to finishing a data module do a completeness check to ensure no IDs are used more than once and the data module complies with the DTD requirements.

There is no required format for an ID except it must start with a letter. In the various publications I've worked on, it seems every author has their own method of applying IDs. Most I've seen just use i100, i101, i102, etc. I've started using ch01 for chapter 1, ch01p1 for chapter 1 paragraph 1, ch02s3 for chapter 2 step 3, etc. This way when I'm further down the document and I need to xref a paragraph or step I don't need to go find out which ID I applied, it just goes with the paragraph number or step number. Data modules are a bit different; I just leave off the ch01, ch02, etc. With all IDs, if you go back and insert a new step, paragraph or anything, it throws your numbering off, and I don't know any way to prevent this. I don't renumber everything after I insert something new, and there is no requirement to renumber all IDs, just insert a new unique ID. For figures I was using ch01f1, ch01f2, etc. In data modules I just use f1, f2, etc for figures and t1, t2, etc for tables. Remember, an ID is only for cross referencing within that data module. If you need to reference one data module from another you just use a refdm and take the user to the data module. If you want to target a specific step in the referenced data module just put the appropriate ID in the target attribute of the refdm tag.

## **5.6 XREF**

When you make an xref, make sure the xidtype attribute is populated. I'm not sure if it's an Authorpro issue or what, but when Contenta creates the IETM, if that field is blank you don't get anything. If a step should read: "Repeat step 1 through step 9 for the right side" where step 1 and step 9 are xrefs and the xidtype is blank the sentence will read: "Repeat through for the right side".

## **5.7 REFDM**

When you reference a data module you must add the data module title as well as the avee. If you do not reference the data module title, it will not show it in your IETM, and the data module code by itself won't help the sailor.

Any data module referenced must also be included in the publication module. If a data module is referenced, but not included in the publication module, your link will not work and you will get an error that the target can't be found.

## **5.8 PUBLISHING FROM A PROJECT**

If you import a data module over one that already exists in Contenta, it will not show when you publish from a project. When you import a new data module it goes into the stable data area of Contenta, and the data module in your project goes to read only, with the little eyeglasses showing it is out of date. When you publish from a project, the system looks to the project for the data first, then if it doesn't find it in the project, it looks to stable data. In this case where you uploaded a data module to overwrite the existing data module, the one in stable data will be the latest and the one in the project will be out of date. There are two ways to fix this, either use the get latest tool to pull the updated data module from stable data into your project or post all the changes into stable data then reuse the data back into the project again. This last option can only be done if the IETM has not been officially published.

## **5.9 GRAPHICS**

When you associate graphics to a data module you must ensure the entity in the data module exactly matched the file type of the graphic. An example is a .tif or .tiff file. If you graphic is called xyz.tif and the entity in the XML says xyz.tiff the graphic will not show.

## **5.10 APPLICABILITY**

Applicability allows you to distinguish between different equipment configurations in one IETM. If you determine you want to use applicability in your IETM you must use S1000D issue 3.0 or higher. If you are going to use applicability contact NSWC PCD for guidance before you start your project. You must create an Applicability Cross Reference Table (ACT) to define the applicability. An example of an ACT is available from NSWC PCD. Depending on the complexity of your applicability you may also need a Product Cross Reference Table (PCT) and/or a Conditions Cross Reference Table (CCT). Applicability is not easy and can be pretty complicated depending on many configurations you must use.

## **5.11 REFERENCING PDF AND EXTERNAL PUBLICATIONS**

Contenta has been updated so it will automatically publish the data module title when doing a refdm. However if you reference a PDF file or any other external publication you need to populate the title in your reference. In these type files there is no title element for Contenta to pull the name from. To reference a PDF file you should use the multimedia tag available in issue 2.3 or higher. Your PDF must have an ICN assigned so the multimedia reference can find it. Be sure you populate the title of the PDF file in your reference. When the link is selected in the IETM a separate window will open with Adobe Reader to view your PDF.

## **5.12 USING FLASH FILES**

If you have flash files to use in your IETM you insert them exactly the same as any other graphic. You use the figure element and then point to the flash file to populate the graphic board.

## **5.13 USING SEPARATE DATA MODULES FOR WARNINGS, CAUTIONS, AND NOTES**

S1000D allows you to put Warnings, Cautions and Notes that are reused throughout a document into separate data modules then just keep referencing them. An example is an Explosive Warning that is repeated in every data module dealing with handling an explosive item. You can create one data module with the warning, then just use refdm in the procedure to reference that data module. It's pretty easy, but there are some procedures that must be followed for it to work correctly.

**5.13.1 Warning, Caution, or Note Data Module** You must use a descriptive data module for the Warning, Caution, or Note. The data module code must have an information code of 012. You fill out the ID Status section the same as any other data module. In the content section the only thing you can have is a Warning, Caution, or Note with the text inside it.

```
<descript>
<warning>
<para> The Warning Text </para>
</warning>
</descript>
```

You can only have one Warning, Caution or Note per data module.

**5.13.2 Procedure Data Module** The data module referencing the Warning, Caution, or Note has a normal Warning, Caution, or Note element with a refdm inside the tags referencing the applicable Warning Caution, or Note data module. Remember, the refdm must have an info code of 012.

```
<warning>
<para>
<refdm>
Appropriate DMC
</refdm>
</para>
</warning>
```

If applicability is required on the Warning, Caution, or Note you must use the in-line applicability attribute in the Warning, Caution, or Note element.

## CHAPTER 6

# TROUBLESHOOTING

### 6.1 ERRORS DURING EDITS

**6.1.1 XY WARNING** If you can see the following at the top of your Data Module or Publication Module that you have checked out of Contenta refer to paragraph 2.5.

XY\_WARNING ="ERROR OCCURED IF YOU SEE THIS MESSAGE IN YOUR SGML/XML EDITOR. DO NOT EDIT. EDITS WILL BE LOST. REFER TO THE TROUBLESHOOTING SECTION OF THE Content@ USER GUIDE FOR YOUR EDITOR OR CONTACT YOUR SYSTEM ADMINISTRATOR.

**6.1.2 NOTEPAD EDITS** • When making changes to DMs in Notepad, in order to successfully check DM back into Contenta and trigger that the DM has been changed, the MODIFIED value below must manually be changed to YES.

```
xy_object id="-rw" name="USNBACS-A-HN3-02-01-00A-215A-A" objecttype="" modified="no"
access="write"
```

### 6.2 ERRORS DURING PUBLISH

When you get the following error highlighted in yellow in your publish log you can disregard it. This is saying you have a blank refdm in a data module. We normally put a blank refdm in the Brex, so it should show: “[WARNING]Cannot find in Contenta Database”.

### 6.3 GRAPHICS ERRORS

In order for graphics to show in your IETM they must be entered into the data module correctly. We have seen a lot of problems with the HAZMAT symbols not showing properly, caused by the graphics entity not being correct. If you need to add HAZMAT symbols to your documents you should pull the symbols out of Contenta, then point to them the same as you do any graphic. This will ensure the entities are correct.

To make it easier for everyone to download the symbols I create a dispatcher with all the symbols. A dispatcher is a zip file that contains data to export out of Contenta, in this case all the symbols. The dispatcher you want to download is named Symbols\_(date). Just select the one with the latest date, for example Symbols\_19Aug09. To download the symbols you go to the dispatch folder and click on Symbols\_date, and select tools; then select S1000D DDN Export. When the new window opens in the top, just right of center you’ll see “Prior DDN Exports” in red, click on it. Just scroll down the list until you see Symbols\_date, then select to download the zip. You should unzip the symbols and then when you need one in your data modules just point to the appropriate symbol.



## CHAPTER 7

### ISSUE 3.0 APPLICABILITY

#### 7.1 GENERAL

Applicability allows you to have one IETM for multiple configurations of equipment. When using Live Content you can reconfigure your IETM to the equipment options your user selects. Applicability is usually associated with the physical configuration of the Product but may include other aspects such as tool availability and environmental conditions.

This document gives examples of applicability tagging to make cakes. There are also data modules available to accompany this document. The data module package consists of a publication module, ACT, PCT, CCT, and two data modules. They can be downloaded from Contenta, in the CAKE project in the WIP folder or you can contact Ken Waringa at [kenneth.waringa@navy.mil](mailto:kenneth.waringa@navy.mil) for the modules.

Applying applicability to your IETM using issue 3.0 is not easy, it will take time to learn. Applicability in issue 3.0 must be defined before you start creating data for a project. You should layout what you need to apply applicability too on paper so you can visualize the requirements.

When you are ready to start authoring data I recommend you create your ACT, and PCT and/or CCT, if applicable. Create a couple data modules and a publication module for those data modules. Load this into Contenta and publish it so you can see if you're applicability is coded correctly. By only having a couple data modules, the publish and download will be quick. Review the published IETM to ensure the applicability is working correctly. Once you have this working you can code the rest of your data with a pretty high confidence it will work.

For this example we are going to keep it simple, our project will make a cake. Using applicability we can generate a recipe from a single cook book for the exact variation of cake we want. We will make a white, yellow or chocolate cake. Then we need to determine which frosting; chocolate, vanilla or cream. This creates quite a variety of different combinations we can make. To add to this we are going to add some optional fillings as conditions, with none being the default.

| Cake Type | Frosting  | Filling    |
|-----------|-----------|------------|
| White     | Chocolate | None       |
| Yellow    | Vanilla   | Cherry     |
| Chocolate | Cream     | Strawberry |
|           |           | Blueberry  |

Now we have our applicability variables defined, how do we code it in S1000D? The first thing you need to create is an Applicability Cross-reference Table.

#### 7.2 APPLICABILITY CROSS REFERENCE TABLE

The Applicability Cross-reference Table (ACT) data module is used to declare product attributes. A product attribute is a property of the Product that has an effect on the applicability of technical data. The ACT is a data module type in issue 3.0. This DM will define all applicability in your IETM. Like all data modules, it has an ID and Status section that should be completed the same as any other DM. This ACT will be referenced in every data module that has applicability. The info code in the data module code for an ACT is 00W. If used, the Product Crossreference Table and the Conditions Cross-reference Tables must be referenced in the ACT.

```
<content>
<act>
<productattributes>
<prodattr id="Cake">
<name>Cake being made</name>
```

```

<description>Flavor of cake being baked</description>
<enum actvalues="White|Yellow|Chocolate"/>
</prodattr>
<prodattr id="Frosting">
<name>Kind of frosting</name>
<description>This is the kind of frosting you are using</description>
<enum actvalues="Chocolate|Vanilla|Cream"/>
</prodattr>
</act>
</content>

```

### 7.3 **PRODUCT CROSS-REFERENCE TABLE**

The Product Cross-reference Table (PCT) defines the exact combinations of product available and offers them to the user in a drop down window when they open the IETM. The PCT is a data module type in issue 3.0. The ID Status section should be filled out like normal. The PCT will reference your ACT. There is also an entry referencing your PCT in the ACT. The info code for a PCT is 00W.

```

<content>
<pct>
<product id="White_Chocolate">
<assign actidref="Cake" actreftype="prodattr" actvalue="White"/>
<assign actidref="Frosting" actreftype="prodattr" actvalue="Chocolate"/>
</product>
<product id="White_Vanilla">
<assign actidref="Cake" actreftype="prodattr" actvalue="White"/>
<assign actidref="Frosting" actreftype="prodattr" actvalue="Vanilla"/>
</product>
<product id="White_Cream">
<assign actidref="Cake" actreftype="prodattr" actvalue="White"/>
<assign actidref="Frosting" actreftype="prodattr" actvalue="Cream"/>
</product>
<product id="Yellow_Chocolate">
<assign actidref="Cake" actreftype="prodattr" actvalue="Yellow"/>
<assign actidref="Frosting" actreftype="prodattr" actvalue="Chocolate"/>
</product>
</product>
<product id="Yellow_Vanilla">
<assign actidref="Cake" actreftype="prodattr" actvalue="Yellow"/>
<assign actidref="Frosting" actreftype="prodattr" actvalue="Vanilla"/>
</product>
<product id="Yellow_Cream">
<assign actidref="Cake" actreftype="prodattr" actvalue="Yellow"/>
<assign actidref="Frosting" actreftype="prodattr" actvalue="Cream"/>
</product>
</product>
<product id="Chocolate_Chocolate">
<assign actidref="Cake" actreftype="prodattr" actvalue="Chocolate"/>
<assign actidref="Frosting" actreftype="prodattr" actvalue="Chocolate"/>
</product>
</product>
<product id="Chocolate_Vanilla">
<assign actidref="Cake" actreftype="prodattr" actvalue="Chocolate"/>
<assign actidref="Frosting" actreftype="prodattr" actvalue="Vanilla"/>
</product>
<product id="Chocolate_Cream">
<assign actidref="Cake" actreftype="prodattr" actvalue="Chocolate"/>

```

```

<assign actidref="Frosting" actreftype="prodattr" actvalue="Cream"/>
</product>
</pct>
</content>

```

## 7.4 **CONDITIONS CROSS-REFERENCE TABLE**

The Conditions Cross-reference Table (CCT) data module is used to declare any condition that can affect applicability of data. Conditions may be technical, operational, environmental, or any other type that can affect technical data. The CCT is a data module type in issue 3.0. The ID Status section should be filled out like normal. The CCT will reference your ACT. There is also an entry referencing your CCT in the ACT. The info code for a CCT is 00Q.

```

<content>
<cct>
<conditiontypelist>
<conditiontype id="Filling">
<name>Filling</name>
<description>Kind of filling being used</description>
<enum actvalues="None|Cherry|Strawberry|Blueberry"/>
</conditiontype>
</conditiontypelist>
<conditionlist>
<condition condtyperef="Filling" id="Filling">
<name>Filling</name>
</condition>
</conditionlist>
</cct>
</content>

```

## 7.5 **AUTHORING DATA**

Now that the easy part is done you need to start authoring. When you author you must be very careful of where you put graphics, tables and xrefs. When you first start you should create your ACT and if necessary PCT and CCT. Then author two or three data modules and create a publication module for just those few data modules. Do a publish and see if your applicability is working correctly. *When CV Preview is fixed in Contenta I've been told you will be able to use it to test your applicability, but currently, when using applicability it's not working properly.*

## 7.6 **DATA MODULE ID STATUS SECTION**

In the ID Status section of your DM you must reference your ACT. After the ACT reference you must define what applicability applies to this data module. If you have more than one variable you must use the evaluate element. This allows you to evaluate for "and" or "or". Most of the data modules I've authored so far have used the "and" evaluator. If an option is not being used in a procedure you do not need to list it in the applicability.

This is the reference to the ACT:

```

<actref<>refdm<>avee<>modelic>CAKE</modelic<>sdc>A</sdc><chapnum>00</chapnum<>section>0</section>
<discodev>A</discodev><incode>00W</incode><incodev>A</incodev><itemloc>A</itemloc></avee></refdm><

```

If all the applicability options were allowed in a DM the applicability would look like this:

```

<applic>
<displaytext>White, Yellow or Chocolate Cake with Cherry, Strawberry, Blueberry or no
filling</displaytext>
<evaluate operator="and">
<assert actidref="Cake" actreftype="prodattr"
actvalues="White|Yellow|Chocolate"></assert>
<assert actidref="Frosting" actreftype="prodattr"
actvalues="Chocolate|Vanilla|Cream"></assert>
<assert actidref="Filling" actreftype="condition"

```

```

actvalues="None|Cherry|Strawberry|Blueberry"></assert>
</evaluate>
</applic>

```

If a DM only applied to white cake with chocolate frosting and filling options of None or Blueberry the applicability would look like this:

```

<applic>
<displaytext>White Cake with Chocolate Frosting and Blueberry or no filling</displaytext>
<evaluate operator="and">
<assert actidref="Cake" actreftype="prodattr"
actvalues="White"></assert>
<assert actidref="Frosting" actreftype="prodattr"
actvalues="Chocolate"></assert>
<assert actidref="Filling" actreftype="condition"
actvalues="None|Blueberry"></assert>
</evaluate>
</applic>

```

After the applicability you must define any in-line applicability you plan to use. These are in-line applicability's that can be referenced in the procedure. In our examples one data module mixes the cake and another one makes the frosting. The in-line applicability for the DM that makes the cake looks like this:

```

<inlineapplics>
<applic id="White">
<displaytext>White Cake</displaytext>
<assert actidref="Cake" actreftype="prodattr" actvalues="White">
</assert>
<applic id="Yellow">
<displaytext>Yellow Cake</displaytext>
<assert actidref="Cake" actreftype="prodattr" actvalues="Yellow">
</assert>
<applic id="Chocolate">
<displaytext>Chocolate Cake</displaytext>
<assert actidref="Cake" actreftype="prodattr" actvalues="Chocolate">
</assert>
</applic>
</inlineapplics>

```

If only the White Cake with Chocolate frosting is in a data module it will look like this:

```

<inlineapplics>
<applic id="White_Chocolate">
<displaytext>White Cake with Chocolate Frosting</displaytext>
<evaluate operator="and">
<assert actidref="Cake" actreftype="prodattr" actvalues="White"></assert>
<assert actidref="Frosting" actreftype="prodattr" actvalues="Chocolate"></assert>
</inlineapplics>

```

## 7.7 DATA MODULE CONTENT SECTION

There are two ways to apply applicability in a data module. You can use the applic element at the step, para, xref, etc; or you can use the refapplic attribute of a step, para, etc. IF USING CONTENTA AND LIVE CONTENT DO NOT USE REFAPPLIC IN AN XREF. There is a problem in the program that will prevent your data module from showing in the IETM if you use refapplic with an xref. It can be used with other elements, just not xref.

**7.7.1 Applic Element** The following example shows how to code a step using the applic element. In this case the step applies to white or chocolate cake only.

```

<step2>

```

```
<applic>
<displaytext>White or Chocolate Cake</displaytext>
<evaluate operator="or">
<assert actidref="Cake" actreftype="prodattr" actvalues="White"></assert>
<assert actidref="Cake" actreftype="prodattr" actvalues="Chocolate"></assert>
<evaluate>
<applic>
<para>Preheat oven to 350°F.</para>
</step2>
```

**7.7.2 In-Line Applicability** The in-line applicability references an ID you created in the ID Status section. The refapplic is an attribute of the various elements. This type of applicability can be applied to just about all the elements. In this example the step applies to yellow cake only.

```
<step2 refapplic="Yellow">
<para>Preheat oven to 375°F.</para>
</step2>
```