

# Virtual Shelf

User Guide 23 May 2020

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Click link and the hold 'CTRL' key to follow link

### FOREWORD

This guide does not replace or amend any Department of Defense (DoD) instructions, regulations, and/or policies. The Product Data Reporting and Evaluation Program's (PDREP) Virtual Shelf is designed to work in concert with existing DoD and DON policies and processes. Its purpose is to assist users with the functionality of the PDREP- Virtual Shelf application and to facilitate compliance with DoD and Navy policy.

Refer to the appropriate service instructions and/or manuals for more information about DoD and Navy contracting program processes and requirements.

### REFERENCES

- 1. Commonality Handbook
- 2. NAVSEA Instruction 4120.8A
- 3. NAVSEA NSWCPD MOU

### INTRODUCTION

This document is intended to guide DoD personnel in the use of Product Data Reporting and Evaluation Program – Automated Information System (PDREP-AIS) and in the process of Virtual Shelf.

The PDREP application is accessible via the Product Data Reporting and Evaluation Program home page: <u>https://www.pdrep.csd.disa.mil/</u>

First time PDREP users will need to submit a User Access request form. Instructions are available on the PDREP home page as linked above. Click on <u>User Access Request</u> for instructions on filling out an access request form. Follow additional directions on the form itself to submit the request for access to the PDREP team.

Existing PDREP users can submit an access change request. To do this, log into the PDREP-AIS and hover over '[Your Name] 'in the upper right corner of the page and click 'Access Change Request'. Update access request as desired. Enter a narrative to describe your change request and click submit account change request button.

Requests for assistance, improvement, or changes to any of the PDREP applications or the NSLC Detachment Portsmouth PDREP home page should be submitted to:

#### **Online in the PDREP Application**

If you are already a PDREP User, log on to PDREP: https://www.pdrep.csd.disa.mil/

Hover over 'Help' link at the top of the home page. Select the first option on the fly out to 'Contact Help Desk with comment, question, or feedback.'

If you wish to provide suggestions to change Virtual Shelf or other PDREP-AIS modules, from the same Help menu, select the 'Suggest a Change' option. The Customer Service Request (CSR) form will open. Instructions for completion are located at the top of the form.

Also, visit our <u>FAQ Page</u> – your question(s) may be easily answered there.

NSLC Portsmouth Help Desk Commercial Phone: (207) 438-1690 / DSN 684-1690 FAX: (207) 438-6535 / DSN 684-6535 E-Mail: <u>WEBPTSMH@navy.mil</u>

> Mailing Address Naval Sea Logistics Center Portsmouth Bldg. 153, 2nd Floor Portsmouth Naval Shipyard Portsmouth, NH 03804-5000

### **1 VIRTUAL SHELF ACCESS**

Access Level	Description
No Access	Access to Virtual Shelf is prevented. If no other Virtual Shelf permissions are granted, then the Virtual Shelf application link does not appear on the Main Menu; otherwise, the application link will appear on the Main Menu. Record deletion is not permitted.
Virtual Shelf Government User	Provides access to Virtual Shelf. Allows the user to View Virtual Shelf Parts, View Virtual Shelf Specifications, Create Virtual Shelf Parts Feedback Report, and View Standard Parts Catalogs (SPC) and Common Parts Catalogs (CPC). Record deletion is not permitted.
Virtual Shelf Contractor User	Provides access to Virtual Shelf. Allows the user to View Virtual Shelf Parts, View Virtual Shelf Specifications, Create Feedback Attributes, and View SPC Part Catalogs. Record deletion is not permitted.
Total Ownership Cost Analyst	Provides access to Virtual Shelf. Allows the user to Edit Total Ownership Cost models, Create and Edit Variant Trees, View Virtual Shelf Parts, View Virtual Shelf Specifications, Create Virtual Shelf Parts Feedback Report, View SPC Part Catalogs, View CPC Part Catalog. Record deletion is not permitted.
Virtual Shelf Administrator	Provides access to Virtual Shelf. Allows the user to Edit Total Ownership Cost Models, Create and Edit Variant Trees, Edit Virtual Shelf Parts, Edit Virtual Shelf Specifications, Create Virtual Shelf Parts Feedback Report, and Edit SPC Part Catalogs. Record deletion is permitted.

NOTE: Common Parts Catalogs (CPC) refers to PSNS Parts Catalog and NNSY Parts Catalogs Standard Parts Catalogs (SPC) refers to the Virtual Shelf Parts Catalog categories.

### 2 ACCESSING THE VIRTUAL SHELF MODULE

Once the user has logged in, the PDREP Home page will display as shown in **Figure 2.1**. Depending on the user's access level, not all of the options may be listed.

#### \*Please refer to PDREP User Access Request and Login Procedures.



Figure 2.1

### 2.1 SELECTING VIRTUAL SHELF

Hover your mouse pointer over the Virtual Shelf (VSF) located on the upper left portion of the screen and click the link to the application (See **Figure 2.2**). After clicking the link, the VSF main page will open (See **Figure 2.3**).

FOUD A PDREP Product Data Reporting and	UNCLASSIFIED FOUO
Welcome, USER GUIDE         Home • Help ▶         APPLICATIONS         ADMIN Links ▶         Batch Upload ▶         Contract Award and Delivery Data (CAD) ▶         Contract Award and Delivery Data (CAD) ▶         Contract Award and Delivery Data (CAD) ▶         Controlled Industrial Material (CIM) Search ▶         Customer Service Request (CSR) ▶         Engineering Referral System (ERS)         Material Inspection Record (MIR) ▶         Product Quality Deficiency Report (PQDR) ▶         QALI/Letter of Delegation (LOD) ▶         Receipt Inspection Management System (RIMS)         Special Quality Data (SQD) ▶         Supplier Audit Program (SAP) ▶         Supply Discrepancy Report (SDR) ▶         Survey (Pre/Post Award) ▶         Test Decords ▶         Virtual Shelf (VSF)         Warranty ▶         SEARCHES         CAGE ▶         DODAAC ▶         DUNS ▶         External Links ▶         FSC ▶         GIDEP ▶         Level 1/Subsafe Search ▶         NSN ▶         PDREP Search         Qualified Product List ▶         Requisition ▶         Routing Identifier Code ▶         UII Search	Last Logen: JAN 27, 2020 11:06 AM <u>Becond Porting &gt; Logent</u> Record Type       Record Control Number         Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number       Last Accessed Date/Time         Image: Control Number <td< th=""></td<>
PDREP-AIS N Phone : (20	/ersion : 5.7.100, Build Date : 01/22/2020 (7) 438-1690 Email Technical Support

Figure 2.2

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Virtual Shel	Virtual Shelf										
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			Welcor	me to the Virtual She	elf Work Space	•					
	If you have any questions regarding the Virtual Shelf workspace, please contact Technical Support at webptsmh@navy.mil.										
Commonality Handbook Guidance Documents NAVSEA Instruction 4120.8A								NAVSEA NSWCF	D MOU		
	PDREP NAVSEALOGCEN PORTSMOUTH, NH. Version : 5.7.100, Build Date : 01/22/2020 Phone : (207) 438-1690 <u>Email Technical Support</u> January 27 <sup>th</sup> , 2020										

Figure 2.3

# **3 GENERAL FUNCTIONALITY**

The Virtual Shelf Module is a commonalty tool that assists shipyards (private and government) in locating common parts used across hull classes and the fleet. Virtual Shelf allows users to search for parts by category and specification. Additionally, Virtual Shelf provides reporting metrics on several fiscal levels: Logistics support, Obsolescence, Maintenance and Repair, and Operating costs.

The commonality team from NSWC Philadelphia perform deep-dive analysis on all parts categories verifying data points are current and up to date. They gather data from shipyards and import into the module; analysis is performed within the Virtual Shelf. This data is then published for view for all Virtual Shelf users. All users have access to this information via the Virtual Shelf Parts and Specifications tabs.

There are many benefits for utilizing the Virtual Shelf. Time savings are realized because of reduction in time spent performing Deep Dive analysis. Cost analysis can be done in conjunction with commonality searches; providing synergies between shipyards. Advanced filtering allows the user to tailor information based on their immediate information needs.

#### 3.1 GRID VIEW

- A. Many grid views are present throughout the Virtual Shelf application, and they tend to share several characteristics in how the user may interact with them. Many of the grid's controls (including grid refresh, clearing filters, etc...) appear at the top of the grid with an associated button that is activated with a single left-click.
- B. Immediately beneath the controls are the column names that tend to be specific to each individual grid, and these column names can often be sorted alphabetically by left clicking them once. One click will sort the rows alphabetically by that column, two clicks will sort them in descending order, and a third click will restore the grid to its original state.
- C. The column names with labels typically have a filtering feature in the row beneath them, designated by either a text box, a dropdown list, or a checkbox (See Figure 3.1). This feature is expanded upon in the paragraph.



Figure 3.1

- D. The middle section of the grid depicts all the data present in the database for a grid. They are broken up into rows and columns, with the rows representing individual items and the columns representing the attributes that describe that item.
- E. Some of the grids on the Virtual Shelf require, and others require rows to be changed individually.
- F. When altering data on a batch-editing grid, the user is able to edit any number of fields currently being displayed on the grid, and in order to commit the changes the user must click on the 'Save Changes' button present at the top of the grid.
- G. When updating data in a grid that requires individual editing, the user will click on the 'Edit' button for that row and update the desired fields. Clicking 'Update' will commit the changes and return the grid view to normal.
- H. The filtering feature in the grid view gives the user the ability to exclude rows by inputting a value for the column and selecting an option. Some options include 'Contains,' 'Starts With,' 'Equal To,' 'Greater Than,' 'Is Null,' etc. If the user, for example, types in a value in the filter textbox and then selects 'Contains,' the grid will automatically retrieve all rows where the inputted value is an exact match to at least part of the text in that column (See **Figure 3.2**).

I. Users can also apply filters to any number of columns to narrow down the results even further, but only one filter may be applied to a column at a time.





J. Grid navigation and information about the data in the grid is available in the bottom strip. It includes the total number of pages, the page size, and the total number of items represented in the grid. On the left-hand side, the user has the ability to go from one page to the next by clicking on the arrow buttons. The 'greater than' arrows send you forward in the grid pages and the 'less than' arrows achieve the opposite. Clicking on the left-most arrow will send the user to the first page, with the right-most arrow sending the user to the last. By default, the number of rows in a grid is set to 25, but users also have the option of setting that value to 50 using the dropdown list next to the 'Page size:' text (See **Figure 3.3**).

✓ Edit	T Delete	011589956	08/10/2015 10:18 AM	8	Create Feedback Report		0	INSERT,SCR THREAD	STEEL COMP 303 OVERALL	STEEL	303	STEEL COMP 303 OVERALL	0.281 IN( NOMINA IN. DIA S 303 (mor
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Figure 3.3

### 3.2 DATA IMPORTS

Virtual Shelf administrators can import data into the system. Selecting one of the options will load the page designed to import that type of data (See **Figure 3.4**). The user can then select a template file with added data to import, and upload it to the server. The system will load the contents of the file and copy the data into the appropriate tables within the Virtual Shelf database, making the data accessible to authorized users (based on user roles) through the Virtual Shelf site. The page will display the number of records created during a successful import, or an error message if the process fails. Details about the error are found in the Virtual Shelf log file after a failed import.



Figure 3.4

- A. **Import BOM:** this import option allows the user to import a Bill of Materials (BOM). The BOM file is a spreadsheet containing the name of the vessel, a parts listing, and other details. The import process will copy the relevant BOM data into the BCA portion of the Virtual Shelf database. The specific formatting for the input file is based on a template BOM provided. Deviations from the template BOM format are not supported.
- B. **Import Shelf Selection Tool:** The Shelf Selection Tool is a spreadsheet template (saved as Open XML) containing the attribute data for parts that need to be added to the Virtual Shelf.

The specific import process depends on which of the two legacy Shelf Selection Tool formats is used. This worksheet, Attribute Filters, (See **Figure 3.5**) requires an APL column, a NIIN column, and one column for each attribute specific to this part category (e.g., Motors) The spreadsheet also contains an Attribute Definitions (See **Figure 3.6**) worksheet, used to assign a definition for each attribute name.

	А	В	С	D	E	F	G
1	APL NIIN		Attribute 1	Attribute 2	Attribute 3	Attribute 4	Attribute 5
2		{9 digits with no dashes}					
3							
4							
5	There can be <b>NO</b> extra rows, hidden columns, or changes in order to Columns A and B.						
6	Attributes beyond Columns A & B can added or removed for each upload the Definitions should be updated to reflect						
7	со	lumn headers on Attribute	Filters (Columr	ns C thru ZZ). N	IIN must be a v	alid NIIN.	

Figure 3.5

	A	
1	Attribute	Definition / UOM / Common Choices
2	Element	

Figure	3.6
--------	-----

The Fastener spreadsheet format (See **Figure 3.7**) is similar, except that the NIIN column is renamed NSN and the Deep Dive column is removed. Instead of a Deep Dive column, the worksheet containing the parts data must have its name set to the type of Fasteners being imported (See **Figure 3.8**). This is used to construct the Virtual Shelf Parts category name for Fasteners.

	А	В	С	D
1	NSN	NAME	FAMILY	TYPE
2		e.g. NUT, PLAIN, HEXAGON	NUT	e.g.HEX
3		e.g. NUT, PLAIN, LOCK	NUT	e.g.LOCK
4			NUT	
5			NUT	





Figure 3.8

NOTE: The successful import of the spreadsheet will display the total number of parts added to the Virtual Shelf database (See Figure 3.9).

• 332 - LIGHTING FIXTURES_SHELF SELECTION TOOL.XLSX has been imported with 70 records successfully inserted and 0 failed records.							
Excel File Upload (M) File to Upload: (Max 50 char) (*.xls.*.xlsx)							
	Upload						

Figure 3.9

- C. **Import Part Catalogs:** The Standard Parts Catalog (SPC) for the Norfolk Naval Shipyard, referred to as NNSY and the Puget Sound Naval Shipyard, referred to as PSNS are databases containing parts data within single tables. The SPC data is imported into the new Virtual Shelf database to facilitate the mapping of Virtual Shelf parts to SPC parts and establishing commonality linkages.
- D. Import TOC Data: This page allows the administrator to upload a spreadsheet (saved as Open Xml) containing baseline TOC data for user with the Commonality Cost Model functionality. The import process will also assign default values to some standard logistics costs while creating the baseline. Spreadsheet requirements are as follows:
  - 1. All worksheet names (e.g., Configuration) must match the exact names used in the template (See **Figure 3.10**).

Continuellas
Configuration
Non-Configuration
RipOut Installation
Non-Recurring Log. Supp.
Non-Recurring Other
Obsolescence
Disposal
Maintenance & Repair
ISEA
Operating
Recurring Log. Supp
Recurring Other
Raw Configuration Data
Raw Logistics Query
NIIN Count
Tech. Manuals

Figure 3.10

- 2. Columns must be arranged in the exact order found in the template (See **Figure 3.11**).
- 3. Any Extra columns, like the Capacity column in the template, are ignored by the importer and must be added after the columns used by the application (since a specific column order is expected).

- 4. The category name will be the first non-empty value in the 4th column of the Configuration worksheet. If no value exists, then a default name with a timestamp will be used.
- 5. The Configuration worksheet is used to create all missing UICs, Toc Units, and configuration records; it is best to define all hull/Unit combinations there. The importer will add new units and hulls if encountered on other worksheets. Worksheets featuring hulls and units not found in the Configuration tab will have the quantity field examined when creating the new records. This value is skipped whenever the importer already has a quantity for these combinations. If a worksheet does not list a quantity value, then the importer will use a default quantity of 1 for that record.
- 6. Use NA if you want to leave a numeric field blank.

	Α	В	С	D	E	F	G
1	APL	Nomenclature	Manufacturer	Unit Cost	Year Procured	Spare Cost	NIIN Qu
2	088880031	nomen 1	Naval Sea Systems Command	\$359,228.00	NA	NA	75
3	080080007		Parker-Hannifin Corporation	\$0.00	NA	NA	49
4	08A140001		Parker-Hannifin Corporation	\$86,025.00	NA	NA	29
5	08A090005		Parker-Hannifin Corporation	\$84,375.00	NA	NA	47
6	08A090006		Parker-Hannifin Corporation	\$21,774.00	NA	NA	36
7	08A060010		Parker-Hannifin Corporation	\$154,574.00	NA	NA	47
8	08A060008	nomen 2	Agua-Chem Inc	\$93,229.00	NA	NA	26

Figure 3.11

- 7. If no data exist for a worksheet, delete all rows except the header row.
- 8. Delete rows that contain only empty cells.
- 9. Paste Value into all cells to ensure no formulas are present.

### 3.3 DATA EXPORTS

This functionality is currently not operational.

### 4 VIRTUAL SHELF GOVERNMENT USER

### 4.1 VIRTUAL SHELF PARTS

Use the drop down to select a category of parts to review (See Figure 4.1).

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Home •	Help 🔻						L	Jser Profile:	USER GUID	E • Logout
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				Select a Categ	ory to View Parts -Select-		•			
				PDREP NAVSEALOGC Ph	EN PORTSMOUTH, NH. Versi one : (207) 438-1690 Email Te January 27 <sup>th</sup> , 2020	on : 5.7.100, Build Date chnical Support	: 01/22/2020			

Figure 4.1

All Virtual Shelf part data can be viewed, edited, added, and removed using this grid (See **Figure 4.2**). The user can search the Virtual Shelf parts and initiate feedback reports from a category or a specific part from this page by clicking on the 'Feedback Report' link associated with each part entry. Each Virtual Shelf part record will also indicate if the part is listed in the Standard Parts Catalog (SPC) and provides a link to view that SPC data where matches exist. The virtual shelf parts grid requires rows to be edited individually.

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					VIRTUAL SHEL	F PARTS				
			Select a	Category to View Parts	074 - Welding and Fabric	ation There are no	parts in this category.			
4	Add New	Virtual Shelf P	Part Change Att	ibute Preferences	Y Clear All Filters	Refresh				
			NIIN Rollover NIN to view Mir par	nu Last Updated	Published	Feedback Report	NNSY Match	PSN	IS Match	
			T		is true $\bigcirc$ is false $\bigcirc$		is true $\bigcirc$ is false $\bigcirc$	is tru	ue 🔘 is false 🔘	
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				PDREP NAVSEALOG	CEN PORTSMOUTH, NH. hone : (207) 438-1690 Er	Version : 5.7.100, Build Dat nail Technical Support	e : 01/22/2020			
					January 27th	, 2020				

Figure 4.2

# 4.2 VIRTUAL SHELF SPECIFICATIONS

Specification Data capabilities allow the Gov't User to view Deep Dive information for a specification-based Deep Dive (See **Figure 4.3 and Figure 4.4**). This content is stored under a standard Category 'classification' and allows the user to see any descriptive entries for each file stored.

The system presents a link to <u>ASSIST</u> which is an online repository of specifications that may be used as reference material for any stored information.

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PRC	DUCT DATA REPORTING AND EVALUATION PROGRAM (PDREP)			
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	VIRTUAL SHELF			
	Home Virtual Shelf Parts Virtual Shelf Specifications			
	VIRTUAL SHELF SPECIFICATIONS			
Select a	Category to View Specifications -Select-	•		
Fo	r more information on specifications, visit https://assist.dla.mil.			
PDREP NAVS	EALOGCEN PORTSMOUTH, NH. Version : 6.0.18.63, Build Date : 06/0 Phone : (207) 438-1690 <u>Email Technical Support</u> June 9 <sup>th</sup> , 2020	09/2020		

Figure 4.3

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	Select a Cat	egory to View Specifications 3	11 - Electric Motors 🔹			
Specification Documents	Specifications					
O Refresh	<b>O</b> Refresh					
Document Name (Click to View)	Specifications	Description	Spec Drawing Links (Click to View)	Related Li	nks (Click to View)	
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Figure 4.4

### 4.3 PART CATALOGS

The NNSY part catalog (See **Figure 4.5**) and PSNS catalog (See **Figure 4.6**) are represented by a read-only grids. The data in these grids comes from the import process described in <u>Section 3.2</u>. There are two columns in the grid that provide a unique filtering feature; they are labeled 'VS Part Match' and 'VS Spec Match.' Both columns, respectively, give the user the ability to filter the grid based on where 'part' or 'spec' matches exist or do

not exist on the Virtual Shelf. The filters provide the user with insight on where there is overlap on the Virtual Shelf and the NNSY and PSNS parts catalogues.

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid. It is important to note that each Catalog has different upload and reporting values.

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				NORFOLK N	AVAL SHIPYARD (NNSY) - ST	ANDARD PARTS CATALO	3		
					Clear All Filters	]			Refresh
VS Part Match	VS Spec Match	ID		BR_ID	MTL_NO	MTL_CAT	NOUN_NM_CD	NNM_CD	SZ_CD
is true $\bigcirc$ is false $\bigcirc$	is true $\bigcirc$ is false $\bigcirc$		T	<b>T</b>	<b>•</b>	<b>T</b>	<b>T</b>	T	T
		133		MCHRY	700369	VENT	AIC	SC-	030000
		134		MCHRY	700368	VENT	AIC	SC-	050000
		135		MCHRY	700367	VENT	AIC	SC-	070005
		136		MCHRY	401530	FILTR,AIR	AIF		310000
		137		MCHRY	401524	FILTR, AIR	AIF		311000
		138		MCHRY	401525	FILTR, AIR	AIF		312000



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							V	IRTUAL SHELF								
		Home	Administrat	or 🔻 Techni	cal Warrant H	lolder 🔻 👘	Commonalit	y Cost Model 🔻	Virtual She	of Parts	Virtual Shelf Specifications	Part C	atalogs 🔻			
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								Clear All Filters								Refresh
VS Part Match	VS Spec Match	STD_IND	DEX	NOMEN		NSN		DESCR1			DESCR2		REQT1		REQT2	
is true 🔾 is false 🔾	is true 🔾 is false 🔾		T		T		T			T		T		T		
			do	NotShowToolT	īp	×	•	ADHESIVE					LATEX			
		100-0015	STRL	PAI		01285132	9	PAINT, ZINC M	MOLYBDATE		FORMULA 84 (PRIMER)					
		100-0105	STRL	PAI				PAINT, EPOX	Y-POLYAMID	E	FORMULA 150					
		100-0115	STRL	PAI				PAINT, EPOX	Y-POLYAMID	E	FORMULA 151					
		100-0205	STRL	PAI		01344508	9	ENAMEL, CHI RESIN	LORINATED-	ALKYD	FORMULA 124, SOFT W	HITE				
		100-0325	STRL	PAI		01356294	1	ENAMEL, SIL	ICONE ALKY	D	GRAY DECK, COLOR #2	5231				
		100-0335	STRL	PAI		01356293	8	ENAMEL, SIL	ICONE ALKY	D	DULL BLACK COLOR #3	7038				
	•	100-0405	STRL	PAI		01344532	0	ENAMEL, SILI COPOLYMER	ICONE ALKY	D	BLACK DECK COLOR #2	7038				

Figure 4.6

## **5 VIRTUAL SHELF CONTRACTOR USER**

### 5.1 VIRTUAL SHELF PARTS

A selection is made with the drop down to select a category of parts to review (See **Figure 5.1**).

FOUO		PRO	ODUCT DA	UNCLAS TA REPORTING AND E	SIFIED EVALUATION PROGRAM (PL	REP)		FOUO
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			Home	Virtual Shelf Parts	Virtual Shelf Specifications			
				VIRTUAL SH	ELF PARTS			
		S	Select a Ca	tegory to View Parts	Select-	v		
		PDREP NAVS	SEALOGCE Ph	EN PORTSMOUTH, NH Ione : (207) 438-1690 <u> </u> June 9 <sup>th</sup>	. Version : 6.0.18.63, Build Da Email Technical Support , 2020	ite : 06/09/20	020	

Figure 5.1

All Virtual Shelf part data can be viewed and filtered using this grid (See **Figure 5.2**). The user can search the Virtual Shelf parts and initiate feedback reports from a category or a specific part from this page by clicking on the 'Feedback Report' link associated with each part entry. Each Virtual Shelf part record will also indicate if the part is listed in the Standard parts Catalog (SPC) and provides a link to view that SPC data where matches exist. The virtual shelf parts grid requires rows to be edited individually.

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			Home Virtual She	If Parts Virtual Shelf	Specifications				
			VIR	TUAL SHELF PARTS					
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NIN Ration With the case Mr. or	Last U	pdated 1	Feedback						
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		ř.	VIRT	UAL SHELF PARTS					
		Se	lect a Category to View P	arts 311 - Electric Mot	ors •				
Y. Clear Al	Filters O Ketresh								
NHN Pattoor Wilt is new	Last Updated	Feedback Report	NNSY Match	PSNS Match	APL	Application Ty	Speed Type	Voltage	
T			is true 🕥 is false 🖓	is true 🕘 is false 🖯	T	T	T	T	
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000454586	02/17/2016 02:04 P	M Create Feedback Begad	≥ NNSY View	2 PSNS View	174720649	Fan	Single	440 VAC	¢
	65 U C 2020 42 47 10	Create Feedback			20200515 BETA		Circle .		

Figure 5.2

# 5.2 VIRTUAL SHELF SPECIFICATIONS

Specification Data capabilities allow the storage and retrieval of Deep Dive information for a specification-based Deep Dive (See **Figure 5.3**). This content is stored under a standard Category 'classification' and allows the view descriptive entries for each file stored and specifications impacted (See **Figure 5.5**).

The system presents a link to <u>ASSIST</u> which is an online repository of specifications that may be used as reference material for any stored information.

FOUO		ASSIFIED	250		FOUO
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	Home Virtual Shelf Part	Virtual Shelf Specifications			
	VIRTUAL SHEL	F SPECIFICATIONS			
	Select a Category to View Specification	S -Select-	•		
	For more information on specif	cations, visit https://assist.dla.n	nil.		
	PDREP NAVSEALOGCEN PORTSMOUTH, Phone : (207) 438-169 June	NH. Version : 6.0.18.63, Build Dat <u>Email Technical Support</u> 9 <sup>th</sup> , 2020	e : 06/09/2020		

# Figure 5.3

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		VIRTUAL SHELF S	PECIFICATIONS			
	Select a Categ	ory to View Specifications 31	11 - Electric Motors			
	For me	are information on specificat	tions, visit https://assist.dla.mil.			
Specification Documents	Specifications					
<b>O</b> Refresh	O Refresh					
Document Name (Click to View)	Specifications	Description	Spec Drawing Links (Click to View)	Related Links (C	lick to View)	
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1 - 1 of 1 items						

Figure 5.4

#### 6 TOTAL COST OF OWNERSHIP ANALYST

#### 6.1 COMMONALITY COST MODEL

A. **Baseline:** It is necessary to select a parts category prior to viewing any data tabs (See **Figure 6.1**).

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			PRODUCT DA	TA REPORTING AND EVALUA	TION PROGRAM (PDI	REP)				
Home • Help ▼								User Profile:	USER GUIDE *	• Logout
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	Home	Administrator <b>v</b>	Technical Warrant Holder 🔻	Commonality Cost Model <b>▼</b>	Virtual Shelf Parts	Virtual Shelf Specifications	Part Catalogs ▼			
				COMMONALITY COST MODEL	- BASELINE					
			Select C	ategory Demo Baseline	▼ Create New					

Figure 6.1

Excluding the sections related to the 'Variant Tree' and certain aspects of the 'Total Ownership Cost (TOC),' 'Obsolescence,' and 'Disposal' tabs, all the subsections below utilize grid views that have many characteristics in common. These grids also have a 'Batch Update Null Values' feature to make it easier to update all null values at once so that the user does not have to update each field individually (See **Figure 6.2**). The 'Batch Update Null Values' button is located in the top strip of the grid, and upon left clicking the button, a new window pops up that presents a list of all the writable fields in any given grid. The user can update all the null values in any desired field by inputting a value in the text box and left-clicking 'Perform Batch Update.' This will commit the value to all null fields in the chosen column and refresh the grid. Clicking the 'Cancel' button will close the window without making any changes to the data.

	T	\$	Manufacturer		
			Unit Cost	\$0.00	•
C	DGI	\$3	Year Procured	1900 🔶	
			Spare Cost	\$0.00	•
0	DGI	\$3	Niin Quantity	0	•
			Tech Manual Cost	\$0.00	•
			Tech Manual Page Quantity	0	•
C	GI	58	Document Quantity	0	•
			MRC Quantity	0	•

Figure 6.2

1. **Home Tab:** Contains several distinct areas used to capture and display data related to a baseline. From this tab, the baseline metadata can be edited and viewed (See **Figure 6.3**).

This data consists of the baseline name, description, type (part or system based) and the projected life of parts/systems.

The home tab is also the location where cost values that apply to the entire baseline are entered. Examples of these types of cost values are NIIN Maintenance Cost and Ship's Force Labor Rate.

It is also from the home tab where the Total Ownership Cost is calculated. Clicking the 'Save Category/Calculate TOC' button will save any changes to the baseline metadata or cost data entered on the home tab. It will also perform a TOC calculation for the baseline. Once a TOC calculation has been performed, the home tab will display information about the Total Ownership cost. It will display as text date the TOC calculation was performed and the TOC per year for the entire baseline. Additionally, the TOC per year will be displayed graphically in the form of a pie chart with each section representing the TOC amount for the various cost areas that comprise the baseline.

For additional information about the cost data grid, refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.



Figure 6.3

2. **Total Ownership Cost (TOC):** The Total Ownership Cost tab contains a read-only grid view that includes basic information that relates to the final TOC calculations for a category. The 'Total Ownership Cost Per Year' field (See **Figure 6.4**) will not have any data in it until all the relevant information in the cost tabs have been filled out and the user has calculated the TOC on the baseline 'Home' page.

The TOC can be recalculated at any time to reflect changes made in the other cost tabs, and once the TOC has been calculated the date and time of the calculation is reflected in the 'Total Ownership Cost Per Year' column header.

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							COMMONALIT	Y CO	ST MODEL - BASELINE							
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Home	Total Output	wahin Cost Vo	niand Tree	Non-Configuration	Re Outly	Non-Decuri	ne Logistics Su	mont	Non-Becurring Other	Obsciencence	Discosal	Maintenance and Denair	ISFA	Operation	Recurring Logistics	Same 1
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Ship Hull		APL		Nomenclature		Quantity			Total Ownership Cost Pe	r Vear						
	T		T		T		1 T								0 T	
C0.47		1						1								
CG 48		2						1								
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Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

Figure 6.4

3. Variant Tree: Variant Trees are constructed by the Total Ownership Cost Modeling Tool to provide a comprehensive view of the amount of variance inside a deep dive, and to ultimately indicate whether the deep dive candidate has much potential for TOC savings. Variant trees are accessible in the first subtab under the 'Variant Tree' baseline tab.

The four buttons at the top of the variant tree page include the 'Attribute Management' button, the 'Part/System Management' button, the 'Create Range Attribute' button, and the 'Upload Variant Tree' button. After the attribute hierarchy has been set via the 'Attribute Management' button (See **Figure 6.5**), the user can generate a variant tree at any point by clicking on the 'Generate Tree' button. When the 'Open New Window' button is checked, generating a tree will spawn in a separate window (See **Figure 6.6**).

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ne•	Help 🔻			PRO	DOCT DAT	KEFORI		ALUATION	TROGR	DAM (FDREF)	User Profile:	VIRTUAL (BE	TA) USER (	GUIDE 🔻	• <u>Log</u>
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					CC	MMONALI	TY COST MO	DDEL - BA	SELINE						
					Select Cat	egory DA\	/ITS	•	Create	New					
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			Variant Tree	Attribute Ma	anagement	Part/Sys	tem Manage	ment (	Create Ra	inge Attribute	Upload Varian	t tree			
					+ Add ne	w record	✓ Variant 1	Tree Attrib	ute Prefe	rences					
		Attribute Name			Attrib	ute Descipti	on								
				<b>T</b>									•	T	
		Ship Hulls													
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		# of davits per h	null												
		# of Boats per D	Davit												
		Location													
		Manfacturer													
		Constant Tensio	on Functionality												
		# of Hoist Points	s												
		Davit Hook Type	e												
		Integrated RCS	Design												-

Figure 6.5

							Select Cate Motors Test	Create New	1					
Home	Total Ownership Cost	Variant Tree	Non-Configuration	Rip Out/Installation	Non-Recurring Logis	tics Support Non-Re	curring Other Obsolesce	nce Disposal	Maintenance and Re	epair ISEA	Operating	Recurring Logistics Support	Recurring Ot	her
					Variant Tree	Attribute Manageme	ent Part/System Manage	ment Create	Range Attribute Up	load Variant tree				
							Generate	Tree						
				Service										
				Noise										
				Special		COTS								
				Application Type		 Auxiliary							 Auxiliary	
				Voltage		440 VAC							440 VAC	
				Duty		Continuous						Continuous		
				Mounting		Horizontal						Horizontal		
				Motor Type		В		A					B	
											Г			
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				Unique Part Coun	¢	3 Parts	1 Part		1 Part		1 Pa	art	1 Part	2 P
Sel	act a fill color: White 🔻	Save as PDF	Remove Node	Redraw Tree Cent	er Tree							Tot	al Variants: 28	Total Population of Parts R

Figure 6.6

When viewing a completed variant tree, the user has a few ways in which they may interact with it.

Zooming in and out is achieved by scrolling forward or backward inside the window, and panning is done by holding the [Shift] key, clicking, and dragging towards the destination inside the window.

The default color for all the items in the tree is transparent, but the user has the ability to highlight attribute values and branches with various colors by selecting a color from a dropdown menu in the bottom-left. This highlighting feature is exercised simply by left clicking on an input field. Once a field is selected, the application changes the value's fill color to the color indicated, and will fill in the connected values above that value to the specified color. Selecting a shape will only affect that single value.



Figure 6.7

The fill color dropdown box also includes an option labeled 'Remove.' When this option is selected, clicking on a shape causes the shape to fill in with a black background. The application will then fill in every attribute item connected to the clicked shape beneath it with the black fill color and every shape above that has no other non-black shapes connected beneath it. In other words, the fill above stops occurring once a shape is encountered that has multiple shapes connected beneath it and at least one of those items does not have a black fill color. This is designed to prevent the default behavior of the system from breaking any necessary connections once the items are removed from the tree. Removal of these items is achieved by clicking on the 'Redraw Tree' button. When that button is clicked, the application looks for any items in the tree that have a black fill color and removes all shapes and connections associated with it. Once they are removed, the tree will automatically contract in size for the viewer, and if an entire tree is deleted the associated attribute labels (items with red font) are also removed from the tree. The 'Total Variants' and 'Total Population of Items Represented' values in the bottom-right corner indicate, respectively, the total amount of branches in the tree and the total population of actual items being graphically depicted in the tree (See **Figure 6.7** and **Figure 6.8**). These values are both updated upon redrawing the tree so that they reflect the items that have been removed.



Figure 6.8

Users can also export the tree as a PDF or PNG file using the two respective buttons located under the window. Clicking on the 'Center Tree' button will recenter the tree in the visible window.

i. Variant Tree Attribute Selection: After a variant tree has been uploaded to the database, the user is able to begin the tree initialization process by clicking on the 'Change Attributes' button present on the 'Variant Tree' subtab. As this button is clicked, a new window pops up that displays the various attributes present in the category (See Figure 6.9).

Within the 'Change Attributes' screen, there are two opportunities for editing: one is for editing attributes on the variant tree, and the other is to delete attributes. Deleting attributes permanently removes them from the database. They are not replaced until a new upload occurs that contains them. The order of the attributes on the variant tree mirrors the exact order of the attributes listed in the Attribute Management. These 'variance' values can be compared to the 'Total Population of Parts/Systems' count that is generated in the bottom-left corner of the window.



Figure 6.9

#### ii. Variant Tree Attribute Management:

The attribute management subtab (See **Figure 6.10**) in the Variant Tree allows the administrator and Total Ownership Cost Analysts to add new attribute fields used to store data in the Variant Tree. The Variant Tree attribute management grid requires rows to be edited individually.

•	Help *					User Profile:	VIRTUAL (BETA) USER G	
				VIRTUAL SHELF				
		Home Technical Warrant Holder	Commonality Cost	Model • Virtual	Shelf Parts Virtual	Shelf Specifications	Part Catalogs *	
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_						Y		
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			+ Add new record	El vanant free	Auribule Preferences			
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	_	Ship Hulls						_
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		Acquisition Cost						
		# of davits per hull						_
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		Location						
		Manfacturer						
		Constant Tension Eurodionality						
		Constant rension Functionality						
		# of Hoist Points						
		Davit Hook Type						*

Figure 6.10

iii. Variant Tree Part/System Management: The part/system management subtab (See Figure 6.11) in the Variant Tree allows the Total Ownership Cost Analysts to add new part/system fields used to store data in the Variant Tree. The Variant Tree part/system management grid requires rows to be edited individually.

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					COMMO	NALITY COST	MODEL - BASELINE					
				Se	elect Category	DAVITS	• Create	New				
Home	Total O	wnership Cost	Variant Tree	Non-Configu	ration Rip	Out/Installation	Non-Recurring Lo	gistics Support	Non-Recurrin	g Other Obsol	escence Dispo	sal
			Variant Tree	Attribute Mana	gement Pa	art/System Man	agement Create R	ange Attribute	Upload Varian	t tree		
						+ Add ne	w record					
Ship Hulls		APL	A	cquisition Cost	# of day	its per hull	# of Boats per Davit	Location	Manf	acturer	Constant Tension	
	-		-			-	-					
	<u> </u>	-			-			-				
NEW HU	JLL	APL		\$\$\$\$\$								-
LHD 1, 2,	5	OGI-Fixed Overhang	d 5 jing1		2		1	Port	OGI		Passive	1
LCS 2		NotAvaila	ble3 5		2		0	Not Available	Not A	vailable	Not Available	
LHD 3,4,6	5	56A08000	03 10	546333	2		1	Port	Welin	Lambie	Active	1
LHD 7 & 8	8	56A04001 56888004	16, 11 87	73818	2		1	Stbd	Allied	Systems	Active	
LHD 7 & 8	8	OGI-Fixed Overhang	d 5 jing2		2		1	Port	OGI		Passive	
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4. **Non Configuration:** The Non-Configuration tab contains data that pertains to the acquisition costs related to parts or systems in a category. It is the only grid view in the baseline tabs that is not configuration based; any changes made in this grid will ripple through all configurations that contain the modified NIIN or APL in this grid (See **Figure 6.12**).

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			Home	Administrator  Techn	ical Warrant Holder *	Commonality Cost Model	<ul> <li>Virtual Shelf Parts</li> </ul>	Virtual Shelf Specifica	tions Part Catalogs *		
					0	MINORALITY COST INC	ALL BASELINE				
			_		Select Cate	ogory DAMITS	Create New				
Home	Total Ovnershi	p Cost Variant	Tree Non-Co	nfguration Rip Outlins	tallation Non-Recurring	g Logistics Support Ni	on-Recurring Other O	bsolescence Disposal	Maintenance and Repa	ir ISEA Operating	Recurring Logistics S +
Q Add New	APL Save o	hanges 🖗 Bato	th Update Null Va	lues Y Clear All Filters	Ó Refresh						
	APL	Nomenciature	Manufacturer	Unit Cost	Year Procured	Scare Cost	NIN Quantity	Tech Manual Cost	Tech Manual Page	Document Quantity	MRC Quartity
× Delete	560270029		OGI	\$300,000.00	2012	\$20,000.00	49	\$98,537.00	200	100	24
Edit APL X Delete	560270051		ogi	\$300,000.00	2012	\$20,000.00	138	\$98,537.00	200	100	27
Edit APL X Delete	560270069		001	\$875,000.00	2012	\$20,000.00	219	\$98,537.00	200	100	27
Edit APL × Delete	562000002		Allied Systems	\$300,000.00	2012	\$20,000.00	95	\$96,537.00	200	100	24
Edit APL X Delete	568880034		ogi	\$438,007.00	2012	\$20,000.00	0	\$96,537.00	200	100	27
Edit APL × Delete	568880040A		ogi	\$438,007.00	2012	\$20,000.00	200	\$96,537.00	200	100	27
Edit APL X Delete	568880041		Allied Systems	\$253,818.00	2012	\$20,000.00	96	\$96,537.00	200	100	21
Edit APL X Delete	568880045		Vesidavit	\$312,810.00	2012	\$20,000.00	91	\$98,537.00	200	100	22
Edit APL × Delete	56000047		Vesidavit	\$312,810.00	2012	\$20,000.00	0	\$96,537.00	200	100	22
Edit APL X Delete	56A000002		Vestdavit	\$330,801.00	2012	\$20,000.00	215	\$98,537.00	200	100	22
Edit APL × Delete	564020001		Vesidavit	\$312,810.00	2012	\$20,000.00	0	\$98,537.00	200	100	22



When the user left clicks either 'Add New NIIN/APL' or the edit button in a row, a new window pops up (See **Figure 6.13**) with a list of hulls that can be applied to the item. When editing an existing NIIN or APL, the hulls that have already been included for that item are checked off, along with the associated quantity. The user has the option of deselecting any desired hulls, increasing or decreasing the quantity, or adding new hulls for new configurations. Changes are committed by clicking on the save button; alternatively, any changes are discarded by clicking cancel.

APL					×
		1	APL		
Hull			Quantity		
	AGF 3			0	
	AO 177			0	
	AO 178			0	
	AO 179			0	
	AO 180			0	
	AO 186			0	
	AOE 1			0	-
	APL:	56027002	9		
	_	_		_	

Figure 6.13

Outside of modifying NIIN/APL configurations, batch updating is utilized to modify all data in the grid.

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

5. **Rip Out/Installation:** The Rip Out/Installation tab (See **Figure 6.14**) contains the cost information related to removing and installing parts or systems. The grid displays each configuration in the baseline and will allow for the number of man-hours to be entered for each configuration. The number of man-hours is multiplied by the Ship's Force Labor Rate to calculate the Rip Out/Installation cost for a given configuration.

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						COMMONALITY COST	MODEL - BAS	ELINE							
					Select C	Category DAVITS	• (	Create New	d						
Home	Total Ownership Cost	Variant Tree N	on-Configuration	Rip Out/Installation	Non-Recu	ming Logistics Support	Non-Recurri	ng Other	Obsolescence	Disposal	Maintenance and Repair	ISEA	Operating	Recurring Logisti	cs S 🔹
✓ Save cha	anges Satch Update	e Null Values 9 Cie	ar All Filters	Refresh											
Ship Hull		APL		Nomenclature		Quantity		Number	Man Hours						
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DDG 53		560270069					1	1						100	00
DDG 54		560270069					1	1						100	00
000 55		560270069					1	1						100	00
DDG 56		560270069					1	1						100	00
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#### Figure 6.14

6. **Non-Recurring Logistics Support:** The Non-Recurring Logistics Support tab (See **Figure 6.15**) contains the cost information related to the one-time logistics costs for each configuration. The grid displays each configuration in the baseline and will allow the logistics data to be entered for each configuration. The logistics data consists of training data such as the number of trainings, hours per training, sailors per training, and instructors per training. These values are combined with baseline cost data entered on the home tab to calculate the Non-Recurring Logistics Support cost for a given configuration.

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Figure 6.15

7. **Non-Recurring Other:** The Non-Recurring Other tab (See **Figure 6.16**) contains the cost information related to the one-time costs for each configuration that do not fall into any of the other cost categories. The grid displays each configuration in the baseline and will allow the other cost data to be entered for each configuration.

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

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CG 47			560270051							1			\$423,529.41	1



8. **Obsolescence:** Obsolescence data (See Figure 6.17) is represented by a read-only grid that contains the 'Obsolescence Percentage' as it relates to a configuration. The 'Obsolescence Percentage' value is a cost rating that is ultimately expressed as a fraction of the configuration's acquisition cost. To edit this value, the user must either click on the edit button for a row (the pencil in the first column), or the 'Set Default Obsolescence' button at the top of the grid. 'Set Default Obsolescence' will overwrite all 'Obsolescence Percentage' values for that category, while clicking on a single row will only modify the value for one configuration. When either button is clicked, a 10x10 matrix pops up in a new window. The 'Obsolescence Percentage' is determined by adding an item's 'Maturity Rating' and 'Complexity Rating' together. Both 'Complexity Rating' and 'Maturity Rating' are rated by the user on a scale of one to ten, with higher values indicating a greater cost. The user alters these values by left clicking a square in the matrix and then left clicking the 'Save Obsolescence' button. Clicking 'Cancel' will close the window without altering the 'Obsolescence Percentage.'

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Figure 6.17

9. **Disposal:** Disposal data (See **Figure 6.18**) is represented by a read-only grid that contains the 'Disposal Percentage' as it relates to a configuration. The 'Disposal Percentage' value is a cost rating that is ultimately expressed as a fraction of the configuration's acquisition cost. To edit this value, the user must either click on the edit button for a row (the pencil in the first column), or the 'Set Default Disposal' button at the top of the grid. 'Set Default Disposal' will overwrite all 'Disposal Percentage' values for that category, while clicking on a single row will only modify the value for one configuration. When either button is clicked, a 10 x 10 matrix pops up in a new window. The 'Disposal Percentage' is determined by adding an item's 'Reparability Rating' and 'Degree of Risk' together. Both 'Reparability Rating' and 'Degree of Risk' are rated by the user on a scale of one to ten, with higher values indicating a greater cost. The user alters these values by left clicking a square in the matrix and then left clicking the 'Save Disposal' button. Clicking 'Cancel' will close the window without altering the 'Disposal Percentage.' Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

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Figure 6.18

Maintenance and Repair: The Maintenance and Repair tab (See Figure 6.19) contains the cost information related to the maintenance and repair costs for each configuration. The grid displays each configuration in the baseline and will allow for the maintenance and repair data to be entered for each configuration. The maintenance and repair data consists of data such as

the projected MRC hours, I Material Cost, D Average and Unplanned Average. These values are combined with baseline cost data entered on the home tab to calculate the maintenance and repair cost for a given configuration.

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

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Figure 6.19

11. **ISEA:** The ISEA grid (See **Figure 6.20**) contains editable configuration data related to ISEA costs that are utilized to calculate total ownership costs for a category. This grid is being used as a placeholder as it is not currently being used in the TOC calculation.

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

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Figure 6.20

12. **Operating:** The Operating tab (See **Figure 6.21**) contains the cost information related to the operating costs for each configuration. The grid displays each configuration in the baseline and will allow the operating data to be entered for each configuration. The operating data consists of data such as the Operational Rate, Operational Hours, Fuel Cost Per Hour, Hours Fuel Operation, Fuel Consumption and Power. These values are combined with

baseline cost data entered on the home tab to calculate the operating cost for a given configuration.

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

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Figure 6.21

13. **Recurring Logistics Support:** The Recurring Logistics Support tab (See **Figure 6.22**) contains the cost information related to the recurring logistics costs for each configuration. The grid displays each configuration in the baseline and will allow the logistics data to be entered for each configuration. The logistics data consists of training data such as the number of trainings, hours per training, sailors per training, and instructors per training. These values are combined with baseline cost data entered on the home tab to calculate the Recurring Logistics Support cost for a given configuration.

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	Number Instructors Per Training	
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Figure 6.22

14. **Recurring Other:** The Recurring Other tab (See **Figure 6.23**) contains the cost information related to the recurring costs for each configuration that do not fall into any of the other cost categories. The grid displays each configuration in the baseline and will allow the other cost data to be entered for each configuration.

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Figure 6.23

- **B. ANALYSIS** 
  - 1. Analysis Main Grid View: On the analysis home page, grids are viewed first by selecting a category from the dropdown list. If the user needs to create a new category, left-clicking the 'Create New...' button will initiate a pop-up (See Figure 6.24) that gives the user the ability to create a new analysis based on TOCs that were calculated in the baseline. The 'Analysis Name' and 'Baseline' fields are both required to create an analysis. The 'Analysis Name' field must be unique, and the 'Baseline' field consists of a drop-down list of baseline categories that exist in the database.

Create New Analy	sis		×
Analysis Name * Analysis Description	C		
Baseline *	-Select-	•	11
Cr	reate Analysis	Cancel	

Figure 6.24

The main grid view comes up after an analysis has been selected from the dropdown list. The grid (See **Figure 6.25**) represents each configuration present in the category and the APL or NIIN that fits in that configuration. The 'Current' fields represent the data that has been pulled out of the baseline, and the 'Alternate' fields represent items that have been selected as a replacement for those items. All financial data contained in this grid is pulled from Total Ownership Costs that were calculated in the 'Baseline' portion of the deep dive. The majority of the fields in this grid are read-only, with the exceptions being the fields titled 'Ship Hull,' 'Quantity,' 'Alternate APL/NIIN,' 'Implementation Year,' and 'Decommission Year.' The user also has the option to delete individual configurations by clicking on the 'x' in the first column. All the subsections described are accessible from the top of this main grid view. When the user left-clicks any of the corresponding buttons, a new window pops up. This grid utilizes batch editing.

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

					An	Select Analysis alysis Test 2 🔹 Cri	eate New	~	Charts	VS Transfer
+ /	Add New Configu	ration 📳 S	Save Changes 🧪 Ed	lit Analysis Details	🥒 Edit APL	List 🏾 🏋 Clear All Filte	rs 🕐 Refresh	0		·•-
	Ship Hull	Quantity	Current APL	Current Nomencla	ature	Current Yearly Cost	Alternate APL	Alternate Nomenclat	Alternate Yearly Cost	Alternate One Time
	<b>T</b>	<b>T</b>	<b>T</b>		T	<b>•</b>	<b>T</b>	<b>T</b>	<b>•</b>	<b>\$</b>
	AGF 3	1	2			\$36.00	1		\$13.46	\$9.28 ^
	AGF 3	1	1			\$13.00	1		\$13.46	\$9.28
	AO 177	1	2			\$36.00	1		\$13.46	\$9.28
	AO 177	1	2			\$36.00	1		\$13.46	\$9.28
	AO 177	25	1			\$13.00	1		\$13.46	\$9.28
	AO 178	2	2			\$36.00	1		\$13.46	\$9.28

Figure 6.25

2. Add Configuration Window: The Add Configuration Window (See Figure 6.26) provides the functionality to allow a new configuration to be added to an analysis. A new configuration is the combination of a ship hull and a part/system. It will also capture additional information such as quantity, implementation year and decommission year. By utilizing this functionality, the analysis can include configurations that were not present in the original baseline data. This improves the flexibility of the system by preventing an analysis from being limited only to baseline configurations.

Analysis Configuration		×
Ship Hull*		*
Quantity*		
Current Unit*		•
Alternate Unit		•
Implementation Year*		
Decommission Year*		
Add	Configuration Cancel	

Figure 6.26

3. Edit Analysis Details Window: The Edit Analysis Details Window (See Figure 6.27) provides the functionality required to edit the metadata for an analysis. The metadata includes information such as the analysis name, a description of the analysis, the analysis type (part or system based) and the projected life of the parts/systems included in the analysis.

Analysis Name*	Analysis Test
Analysis Description	^
	~
laseline	Analysis Test
īype*	System-based ○ Part-based
Projected Life (In Ye	ears)*
	7 9 11 13 15 17 19 21 23 25 27 29

Figure 6.27

4. Edit APL List Grid: The Edit APL/NIIN List Grid (See Figure 6.28) provides functionality that allow for the addition of new parts/systems, editing of parts/systems and removal of parts/systems from an analysis. By utilizing this functionality, the analysis can include parts/systems that were not present in the original baseline data. This improves the flexibility of the system by preventing an analysis from being limited only to baseline parts/systems. Parts/Systems that were included in the baseline data can also be edited to adjust their cost data if needed.

+ Add	New APL Save Chan	ges 🕅 Clear All Filters 🖉 Refre	esh	
	APL	Nomenclature	One Time Cost	Recurring Cost
	<b>T</b>	Ţ	<b>•</b>	<b>•</b>
1	ADD HERE		\$0.00	\$0.00
	1		\$9.20	\$13.00
	2		\$12.00	\$16.50

Figure 6.28

5. **Break Even Chart:** The break-even chart is accessed by left clicking a button in the controls in the analysis grid (See **Figure 6.29**).

						Sele	ect Analysis					
						Analysis Test 2	Create Nev	v		$\sim$		
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+	Add New Configur	ation 🖹 Save C	hanges 🖉 Edit .	Analysis Details 🖉 🖋 Ed	it APL List 🕅 🌾 Clear A	Filters O Refres				Break-Even	×	
	Ship Hull	Quantity	Current APL	Current Nomencia	Current Vearly Cost	Alternate APL	Alternate Nome	Alternate Yearly Cost	Altern	Cost Comparison	nt tion Year	Decommission Year
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Ē	AO 177	25	1		\$13.00	1		\$13.46	\$9.2	8 \$13.00	2017	2037
Ĥ	AO 178	2	2		\$36.00	1		\$13.46	\$9.2	8 \$13.00	2017	2037
ŧ.	AD 179	1	2		\$36.00	1		\$14.16	\$9.2	8 \$13.00	2022	2030
Î	DDG 60	20	1		\$13.00	1		\$13.49	\$9.2	8 \$13.00	2016	2035
Ť.	DDG 76	45	2		\$36.00	1		\$13.46	\$9.2	8 \$13.00	2017	2037



To generate a chart, the user must select an option from the dropdown list to the right of the text that reads 'Filter Data By.' Users have the option of selecting 'Hull,' 'Class,' or 'Fleet' (See **Figure 6.30**).

Filter Data By:	Hull	×	•	-Select-	×	•	
	-Select-						
	Hull						
	Class						PL
	Fleet						

#### Figure 6.30

If the user selects 'Fleet,' a break-even line chart will be generated in the space below that represents cost data for the entire fleet in that category. If the user selects either 'Hull' or 'Class,' then a new dropdown box will appear to the right of the first dropdown box and the user will need to refine the filter again to create a chart. The list generated in this dropdown box represents all the hulls or classes that are present in this category. This gives the user the option to view break-even cost data as it relates to specific classes or hulls.



Figure 6.31

The break-even chart (See **Figure 6.31**) will automatically generate in the space below the controls once the appropriate filters are selected. The y-axis represents the total ownership cost and the x-axis represents the active years that are relevant for that category.

The years listed on the x-axis are determined by the earliest implementation year and the latest decommission year (See **Figure 6.32**) in the population of parts/systems for the category.

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	AQE 3	3	57A040002			\$139,429.76	54111111A		\$115,432.00	\$750.000.00	\$65,432.00	2019	2034
	AGE 3	2	L560270057			\$579,865.97	\$7A040002		\$197,936.99	\$877,608.44	\$139,429.76	2019	2034
	AGE 3	1	568880041			\$80,962.52						2017	2047
	AO 177	1	560270069			\$312,153.21	560270051		\$100,459.44	\$835,649.05	\$138,676.98	2017	2047
	AO 178	1	560270069			\$312,153.21	560270051		\$180,459.44	\$835,649.05	\$138,676.98	2017	2047
	AO 179	1	560270069			\$312,153.21	560270051		\$180,459.44	\$835,649.05	\$138,676.98	2017	2047
	AO 180	1	560270069			\$312,153.21	560270051		\$180,459.44	\$835,649.05	\$138,676.98	2017	2047
	AO 186	1	560270069			\$312,153.21	560270051		\$180,459.44	\$835,649.05	\$138,676.98	2017	2047
	AOE 1	1	568880041			\$80,962.52	56A070003		\$104,714.12	\$692,165.47	\$70,105.85	2017	2047
	AOE 2	2	568880041			\$80,962.52	56A070003		\$104,714.12	\$892,165.47	\$70,105.85	2017	2047
	AOE 3	2	568880041			\$80,962.52	L560270057		\$630,502.11	\$1,012,722.67	\$579,865.97	2017	2047
	AOE 4	2	568880041			\$80,962.52	56A990001		\$317,912.74	\$1,527,195.33	\$241,552.97	2017	2047
	CG 47	1	\$6A00002			\$144,799.18	\$6A070003		\$104,714.12	\$692,165.47	\$70,105.85	2016	2046

Figure 6.32

The graph calculates TOCs related to three series: 'Baseline' (blue), 'Alternate' (red), and 'Avoidance' (green). The series are listed in the bottom center of the window, just under the graph. Hovering over a series label highlights the series (See **Figure 6.33**).



Figure 6.33

Left clicking on the series name will remove that series from the graph entirely. Left clicking the series name again will display the series once more.



Figure 6.34

Hovering the mouse over a shape in any of the lines will display the cumulative TOC for that series on that year.



Figure 6.35

Baseline costs are typically lower than alternate costs at the outset because the baseline only takes into account annual recurring costs. Whenever an alternate is chosen as a replacement for what already exists on the baseline, the item will in incur a one-time acquisition cost on its implementation year along with its yearly recurring cost.

The avoidance series shows the user how many years need to pass to see savings given the configurations set up in the analysis. . In **Figure 6.36**, savings are no longer realized after June 2020 Hull AO 179.



Figure 6.36

Left clicking on the 'Export Image' or 'Export PDF' buttons at the top will download an image or a PDF of the chart. If no chart is being displayed, clicking these buttons will do nothing.

6. **Cost Comparison Chart:** The cost comparison chart (See **Figure 6.37**) is accessed by left clicking a button in the controls in the analysis grid (See **Figure 6.29**). To generate a chart, the user must select an option from the dropdown list to the right of the text that reads 'Filter Data By'.



#### Figure 6.37

Users have the option of selecting 'Unit,' 'Hull,' 'Class,' or 'Fleet' (See **Figure 6.37**). If the user selects 'Fleet,' a cost comparison chart will be generated in the space below that represents cost data for the entire fleet in that category.

When 'Unit' is selected, the user gets a simple view of the APLs or NIINs that exist in the analysis with a cost breakdown (See **Figure 6.38**).



#### Figure 6.38

If the user selects either 'Hull' or 'Class,' then a new dropdown box will appear to the right of the first dropdown box and the user will need to refine the filter again to create a chart. The list generated in this dropdown box represents all the hulls or classes that are present in this category. This gives the user the option to view cost comparison TOC data as it relates to specific classes or hulls (See **Figure 6.39**).



Figure 6.39

In the top right corner is a dropdown box that gives users the ability to select how to sort the items once a chart is generated (See **Figure 6.40**). The options are 'Alphabetically,' 'Savings,' 'Baseline,' and 'Alternate'.

Sorting items by 'Savings' looks at a comparison of the baseline and the alternate TOCs for each entry and organizes the information based on the potential for savings.

The 'Baseline' and 'Alternate' options sorts based on the numerical value of their respective series, and 'Alphabetically' looks at the name of the entry (hull or class) and sorts alphabetically that way. The checkbox all the way to the right determines whether the items in the graph will be sorted in ascending or descending order. 'Ascending' is always checked by default but left clicking this button will sort everything in descending order. When any of these controls are altered, the window automatically generates the graph again with the desired effect. The cost comparison chart will automatically generate in the space below the controls once the appropriate filters are selected. The y-axis represents the total ownership cost and the x-axis represents either an individual hull or a class for that category, depending on which option the user chose. Units are only represented on the x-axis when 'Units' was chosen, and likewise classes are only represented when 'Class' was chosen. Otherwise, each item will be labeled with a hull name. The graph calculates TOCs related to two series: 'Baseline' (blue), and 'Alternate' (red).



Figure 6.40

The series are listed in the bottom center of the window, just under the graph. Hovering over a series label highlights the series in the graph, and left clicking on the series name will remove that series from the graph entirely. Left clicking the series name again will display the series once more (See **Figure 6.40**). Hovering the mouse over a bar will display the TOC for that series and entry. The baseline series only retrieves the recurring cost for all the configuration's active years and calculates the TOCs based on this data. The alternate series does the same, except it also takes into account one-time acquisition costs for every item that is selected to replace an existing configuration on the baseline.

Left clicking on the 'Export Image' or 'Export PDF' buttons will download an image or a PDF of the chart. If no chart is being displayed, clicking these buttons will do nothing.

7. Configuration Clusters Bubble Chart: The configuration clusters bubble chart (See Figure 6.41) is accessed by left clicking a button in the controls in the analysis grid. To generate a chart, the user must select an option from the dropdown list (See Figure 6.29) to the right of the text that reads 'Filter Data By.' Users have the option of selecting 'Hull,' 'Class,' or 'Fleet.' If the user selects 'Fleet,' a bubble chart will be generated in the space below that depicts the configuration clusters for the entire fleet in that category.



Figure 6.41

If the user selects either 'Hull' or 'Class,' then a new dropdown box will appear to the right of the first dropdown box and the user will need to refine the filter again to create a chart. The list generated in this dropdown box represents all the hulls or classes that are present in this category. This gives the user the option to view configuration clusters as they relate to specific classes or hulls (See **Figure 6.42**).



Figure 6.42

The requirements for being able to use a variant tree attribute in this context are somewhat stringent. Guidelines for utilizing this analysis feature are:

- i. Analysis is dependent on the user having included a unit id (APL or NIIN column) when the variant tree was uploaded in Virtual Shelf.
- ii. The values in the attribute must consist strictly of numerical values; these values determine the y-axis within the Configuration Cluster.
- iii. Multiple unit ID's with inconsistent data will be disregarded in the Configuration Cluster analysis; systematically there is no discernable way for the VS to differentiate.

The configuration clusters bubble chart will automatically generate in the space below the controls once the appropriate filters are selected. The x-axis represents individual unit ids, identified by a unique nominal integer generated dynamically; and the y-axis value is 'Yearly Cost'. The graph renders the clusters (See **Figure 6.43**) as they relate to two series: 'Baseline' (orange) and 'Alternate' (green).



Figure 6.43



Figure 6.44

Hovering over a series label highlights the series in the graph, and left clicking on the series name will remove that series from the graph entirely (See **Figure 6.44** and **Figure 6.45**). Left clicking the series name again will display the series once more.



Figure 6.45

Hovering the mouse over a bubble will display the information for that entry. This includes the unit id, the y-axis value, the number of configurations, and the source (baseline or alternate). The number of configurations is visually represented by the size of each bubble, but to get an exact number the user must hover over the item in question.

Left clicking on the 'Export Image' or 'Export PDF' buttons will download an image or a PDF of the chart. If no chart is being displayed, clicking these buttons will do nothing.

### 6.2 VIRTUAL SHELF PARTS

Use the drop down to select a category of parts to review (See Figure 6.46).

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	VIRTUAL SHELF PARTS										
				Select a Categ	ory to View Parts	-Select-		•			
	PDREP NAVSEALOGCEN PORTSMOUTH, NH. Version : 5.7.100, Build Date : 01/22/2020 Phone : (207) 438-1690 <u>Email Technical Support</u> January 27 <sup>th</sup> , 2020										

Figure 6.46

All Virtual Shelf part data can be viewed, edited, added, and removed using this grid. The user can search the Virtual Shelf parts and initiate feedback reports from a category or a specific part from this page by clicking on the 'Feedback Report' link associated with each part entry (See **Figure 6.47**). Each Virtual Shelf part record will also indicate if the part is listed in the SPC and provides a link to view that SPC data where matches exist. The Virtual Shelf system administrator has the ability to designate which Virtual Shelf part records will be 'published' by editing the 'Published' field. The virtual shelf parts grid requires rows to be edited individually.

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		s	Select a Cate	gory to View Pa	074 - Welding and Fa	brication 👻 Th	here are no parts in this category.			
+ Add New	Virtual Shelf	Part Char	nge Attribute	Preferences	Y Clear All Filters	C Refresh				
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					January	27 <sup>th</sup> , 2020				

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

Figure 6.47

### 6.3 VIRTUAL SHELF SPECIFICATIONS

Specification Data capabilities allow for the storage and retrieval of Deep Dive artifacts for a specification-based Deep Dive (See **Figure 6.48**). This content is stored under a standard Category 'classification' and allows the user to add descriptive entries for each file stored. The system allows the user to enter a value for Specifications impacted (See **Figure 6.49**, **Figure 6.50** and **Figure 6.51**). This value, if found to match a specification value in any part listing will allow the user to link to the specification documents stored on the virtual shelf.

The system presents a link to <u>ASSIST</u> which is an online repository of specifications that may be used as reference material for any stored information.

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					VIRTUAL SHELF	SPECIFIC	ATIONS					
	Select a Category to View Specifications -Select-											
				For more inf	ormation on specific	ations, vi	sit https://assist.dla.n	nil.				
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# Figure 6.48

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Figure 6.49

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Save Close				

Figure 6.50

		Add New Document	×
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Figure 6.51

# 6.4 PARTS CATOLOG

A. Norfolk Naval Shipyard (NNSY): The NNSY part catalog is represented by a readonly grid (See Figure 6.52). The data in this grid comes from the import process described in <u>Section 3.2</u>. There are two columns in the grid that provide a unique filtering feature; they are labeled 'VS Part Match' and 'VS Spec Match.' Both columns, respectively, give the user the ability to filter the grid based on where 'part' or 'spec' matches exist or do not exist on the Virtual Shelf. The filters provide the user with insight on where there is overlap on the Virtual Shelf and the NNSY part catalog.

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		138		MCHRY		401525		FILTR, AIR		AIF				312000		

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

Figure 6.52

B. Puget Sound Naval Shipyard (PSNS): The PSNS part catalog is represented by a read-only grid (See Figure 6.53). The data in this grid comes from the import process described in <u>Section 3.2</u>. There are two columns in the grid that provide a unique filtering feature; they are labeled 'VS Part Match' and 'VS Spec Match.' Both columns, respectively, give the user the ability to filter the grid based on where 'part' or 'spec' matches exist or do not exist on the Virtual Shelf. The filters provide the user with insight on where there is overlap on the Virtual Shelf and the PSNS part catalog.

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		120-023STRL	INU	002738706	ADHESIVE		LATEX	*
10		100-0015TRL	PAL	012851329	PAINT, ZINC MOLYBDATE	FORMULA 84 (PRIMER)		
9		100-010STRL	PAI		PAINT, EPOXY-POLYAMIDE	FORMULA 150		
4		100-011STRL	PAJ		PAINT, EPOXY-POLYAMIDE	FORMULA 151		
		100-020STRL	PAI	013445089	ENAMEL CHLORINATED-ALKYD RESIN	FORMULA 124, SOFT WHITE		
		100-0325TRL	PA	013562941	ENAMEL, SILICONE ALKYD COPOLYMER	GRAY DECK, COLOR #26231		
4		100-0335TRL	PAJ	013562938	ENAMEL, SILICONE ALKYD COPOLYMER	DULL BLACK COLOR #37938		
2		100-0405TRL	PAI	013445320	ENAMEL, SILICONE ALKYD COPOLYMER	BLACK DECK COLOR #27030		
n		100-043STRL	PAI		ENAMEL SILICONE ALKYD COPOLYMER	HAZE GRAY, COLOR #26270		

Figure 6.53

# 7 VIRTUAL SHELF ADMINISTRATOR ACCESS

# 7.1 ADMINISTRATOR TAB

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	Attribute Man	agement				
	Category Man	agement				
	Export Shelf Sel	ection Tool				
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	Import Sar	nples				
	Import B	OM				
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	Import Shock Qu	alifications				
	Import TOC	Data				48
NAVETEA						10
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		Welcom	e to the Virtual Sh	elf Work Spa	ce	
	If you ha	ve any questions regarding the	Virtual Shelf workspace, pleas	e contact Technical Su	pport at webptsmh@navy.mil.	
			Cuidanas Desur	h.		
Commonality Handbook			Suidance Docum	ents		
Santa Transpoor			Instants Instruction 412	20042		

Figure 7.1

A. Attribute Management: The attribute management functionality allows the administrator to define, describe, edit and delete attribute fields used to store Virtual Shelf data (See Figure 7.2). The attribute management grid requires rows to be edited individually. These attributes are included in the upload of the shelf selection tool. The occasional misspelling or incorrectly placed attribute is able to be modified with this capability. Deletion of an attribute in the Attribute Management tab removes it completely from the Virtual Shelf; however, it can be added back in with the re-upload of that specific parts shelf selection.

	Α	TTRIBUTE MANAGEMENT										
	Select a Category to View Attributes 438 - Ship Controls											
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	Attribute Name ↑	Attribute Description										
	Ţ		T									
<pre> ✓ Edit   X Delete</pre>	APL											
<ul><li>✓ Edit</li><li>× Delete</li></ul>	Comments											

Figure 7.2

The category management functionality allows the administrator to define, describe, edit and delete parts categories within the Virtual Shelf (See **Figure 7.3**). The category management grid requires rows to be edited individually. These are the same categories that are loaded into Virtual shelf thru the Shelf Selection tool. The occasional misspelling or incorrectly placed category name / description is able to be modified with this capability. Deletion of a category here in this tab removes it completely from the Virtual Shelf; however, it can be added back in with the re-upload of that specific parts shelf selection.

					VIRTUAL SHELI	F	
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				T			
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<b>∕</b> Edit	X Delete	075 - Fasteners	(Cap Screws)				
<b>∕</b> Edit	X Delete	075 - Fasteners	(Close Tolerance Screws)				
<b>∕</b> Edit	× Delete	075 - Fasteners	(Hex Nuts)				
	X Delete	075 - Fasteners	(Lock Nuts)				
<pre></pre>	× Delete	075 - Fasteners	(Machine Bolt)				
✓ Edit	× Delete	075 - Fasteners	(Machine Screws)				
<pre> ✓ Edit</pre>	X Delete	075 - Fasteners	(Non Metallic Grommets)				
✓ Edit	× Delete	075 - Fasteners	(Nuts (Non Nuts))				



B. **Import BOM:** Please refer to <u>Section 3.2.A</u> for a description of this functionality.

- C. **Import Shelf Selection Tool:** Please refer to <u>Section 3.2 B</u> for a description of this functionality.
- D. **Import Parts Catalogs:** Please refer to <u>Section 3.2.C</u> for a description of this functionality.
- E. Feedback Attribute Management: The Feedback Attribute Management functionality provides a mechanism to include specific Virtual Shelf part attributes on the Feedback Report form. When a Feedback Report is submitted, information provided by the submitter is captured and later made available to the reviewer. One of the sections on a Feedback Report form is the Virtual Shelf part attribute information. This section can be customized by choosing which of the Virtual Shelf part attributes to include (See Figure 7.4). The Feedback Report form can include any combination of available attributes. This may result in either all, some, or none of the attributes being shown on the form depending on what is desired. Feedback Attribute Management is conFigured on a Virtual Shelf category by category basis. By default, no part attributes are included on the Feedback Report for a given category.

		VIRTUAL SH	ELF	
Home	Technical Warrant Holder 🔻	Virtual Shelf Parts	Virtual Shelf Specifications	Part Catalogs 🔻
	FEEDBACK	REPORT ATTRIB	JTE MANAGEMENT	
	31 Select the attributes	Select a Catego 1 - Electric Motors that will be included	on the Feedback Report form.	
		Save Change	5	
	NOT Included	Ind Sp Vo Fr Ov AF Ap Du Se HB HB	uded peed Type equency utput Speed PL oplication Type uty ervice P1 P2 pise pupling	

Figure 7.4

F. **Import TOC Data:** Please refer to <u>Section 3.2.D</u> for a description of this functionality.

### 7.2 COMMONALITY COST MIODEL

Please refer to <u>Section 6.1</u> for description of this functionality.

# 7.3 VIRTUAL SHELF PARTS

Use the drop down to select a category of parts to review (See Figure 7.5).

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	VIRTUAL SHELF PARTS													
				Select a Categ	ory to View Parts -Select-		•							
	PDREP NAVSEALOGCEN PORTSMOUTH, NH. Version : 5.7.100, Build Date : 01/22/2020 Phone : (207) 438-1690 <u>Email Technical Support</u> January 27 <sup>th</sup> , 2020													

Figure 7.5

All Virtual Shelf part data can be viewed, edited, added, and removed using this grid. The user can search the Virtual Shelf parts and initiate feedback reports from a category or a specific part from this page by clicking on the 'Feedback Report' link associated with each part entry (See **Figure 7.6**). Each Virtual Shelf part record will also indicate if the part is listed in the Standard Parts Catalog (SPC) and provides a link to view that SPC data where matches exist. The virtual shelf parts grid requires rows to be edited individually.

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						VIRTUAL SHEL	F PARTS				
			s	elect a Cate	gory to View Parts	074 - Welding and Fabric	ation 👻 There are no	parts in this category.			
+	Add New	Virtual Shelf	Part Chan	ge Attribute	Preferences	Y Clear All Filters	Refresh				
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Figure 7.6

# 7.4 VIRTUAL SHELF SPECIFICATIONS

Specification Data capabilities allow the storage and retrieval of Deep Dive information for a specification-based Deep Dive (See **Figure 7.7**). This content is stored under a standard Category 'classification' and allows the user to add descriptive entries for each file stored. The system allows the user to enter a value for Specifications impacted (See **Figure 7.8** and **Figure 7.9**). This value, if found to match a specification value in any part listing will allow the user to link to the specification documents stored on the virtual shelf (See **Figure 7.10**).

The system presents a link to <u>ASSIST</u> which is an online repository of specifications that may be used as reference material for any stored information.

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Figure 7.7

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Figure 7.8

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Figure 7.9

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Figure 7.10

### 7.5 PARTS CATALOGS

#### A. Norfolk Naval Shipyard (NNSY):

The NNSY part catalog is represented by a read-only grid (See **Figure 7.11**). The data in this grid comes from the import process described in <u>Section 3.2</u>. There are two columns in the grid that provide a unique filtering feature; they are labeled 'VS Part Match' and 'VS Spec Match.' Both columns, respectively, give the user the ability to filter the grid based on where 'part' or 'spec' matches exist or do not exist on the Virtual Shelf. The filters provide the user with insight on where there is overlap on the Virtual Shelf and the NNSY part catalog.

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		133		MCHRY	700369	VENT	AIC	SC-	030000			
		134		MCHRY	700368	VENT	AIC	SC-	050000			
		135		MCHRY	700367	VENT	AIC	SC-	070005			
		136		MCHRY	401530	FILTR,AIR	AIF		310000			
		137		MCHRY	401524	FILTR, AIR	AIF		311000			
		138		MCHRY	401525	FILTR, AIR	AIF		312000			

Refer to <u>Section 3.1</u> for a description of how to use basic features of the grid.

Figure 7.11

#### B. Puget Sound Naval Shipyard (PSNS):

The PSNS part catalog is represented by a read-only grid (See **Figure 7.12**). The data in this grid comes from the import process described in <u>Section 3.2</u>. There are two columns in the grid that provide a unique filtering feature; they are labeled 'VS Part Match' and 'VS Spec Match.' Both columns, respectively, give the user the ability to filter the grid based on where 'part' or 'spec' matches exist or do not exist on the Virtual Shelf. The filters provide the user with insight on where there is overlap on the Virtual Shelf and the PSNS part catalog.

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		100-001STRL	PAI	012851329	PAINT, ZINC MOLYBDATE	FORMULA 84 (PRIMER)								
		100-010STRL	PAI		PAINT, EPOXY-POLYAMIDE	FORMULA 150								
		100-011STRL	PAI		PAINT, EPOXY-POLYAMIDE	FORMULA 151								
		100-020STRL	PAI	013445089	ENAMEL, CHLORINATED-ALKYD RESIN	FORMULA 124, SOFT WHITE								
•		100-032STRL	PAI	013562941	ENAMEL, SILICONE ALKYD COPOLYMER	GRAY DECK, COLOR #26231								
		100-033STRL	PAI	013562938	ENAMEL, SILICONE ALKYD COPOLYMER	DULL BLACK COLOR #37038								
		100-040STRL	PAI	013445320	ENAMEL, SILICONE ALKYD COPOLYMER	BLACK DECK COLOR #27038								

Figure 7.12

#### 8 SUMMARY

This concludes the Virtual Shelf instruction. The NSLC Portsmouth Help Desk is available to answer additional questions or to assist in data changes or exception processing and, can be contacted as follows:

E-Mail: <u>webptsmh@navy.mil</u> Commercial: (207) 438-1690 DSN: 684-1690 Fax: (207) 438-6535