DADDS Training

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DCS Web Training Topics

- **PDT Field Test**
  - Platform data is available outside of the user login.

- **Message Filters**
  - Review message filter dialog and conditions
  - Manual and automatic DateTime filter examples.

- **Saving Filters**
  - Store filters in the database for future use

- **Netlist Filters**
  - Create custom filters from existing netlist files or a filter

- **Reset/Forgot Password**
  - Review reset password sources, emails and process
  - An additional way to reset an account password.

Field Test Feature

- Created to help technicians in the field quickly check the status of a platform.

- Returns historical message data and platform information.

- Accessible via a link located on DCS website login pages or by browsing directly to URL https://dcs1.noaa.gov/Account/FieldTest.

Field Test Form

- The form requires two inputs
  - Platform's DCP address
  - Number of hours to look back

- The query has 2 outputs
  - Platform channel & timing info
  - Table based view of any message data found.

- Clicking the 'RETRIEVE' button submits the query.

PLATFORM FIELD TEST

DCP ADDRESS (REQUIRED)

[DCP ADDRESS]

GO BACK [X] **HOURS**

RETRIEVE

PLATFORM FIELD TEST

DCP ADDRESS (REQUIRED)

FD0008B8

GO BACK 12 **HOURS**

RETRIEVE

Field Test Output

PLATFORM FIELD TEST

DCP ADDRESS (REQUIRED)

FD0008B8

GO BACK 12 HOURS

RETRIEVE

PDT INFORMATION

ADDRESS	FD0008B8
GROUP	FLODOT
P–CHAN	111
S–CHAN	121
FIRST	00:06:50
PERIOD	01:00:00
WINDOW	00:00:10

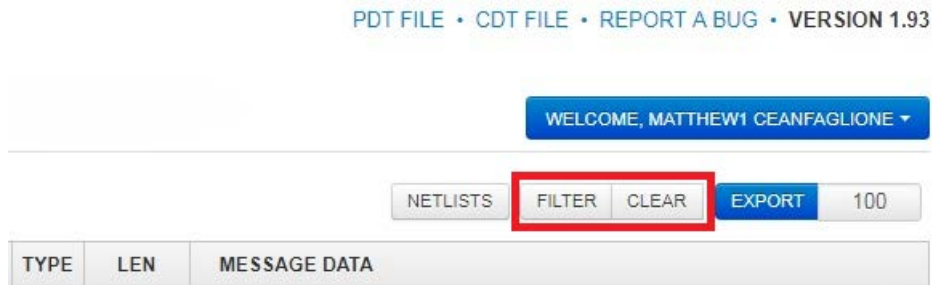| ADDR	CHAN	BAUD	SIGNAL	PHASE	QUAL	FREQ	CARRIER	END	ARM	SCID	TYPE	LEN	DATA
FD0008B8	111	300	41.8	3.27	98.9	16.1	9/7/2017 16:06:53	9/7/2017 16:06:57	G	13	CS2	105	`@r@rAF@r@r@rBRBNBUBSB\BX@J@T@J@T@J@N@L@J@N@Z@OBVBLC\BVB`BVB OBKBTBdBYBb@T@^@^@J@T@J@K@O@J@O@G@Ims@^~QEk
FD0008B8	111	300	42.3	3.57	98.6	14.6	9/7/2017 15:06:53	9/7/2017 15:06:57	G	13	CS2	105	`@|@h@|@|AF@rB\BRBKBVB[BK@T@J@J@A@J@M@R@M@N@Q@MB`AdBVB`CRBLB [BRBNBPBYBN@J@J@T@J@J@T@H@Q@K@M@F@Ims@^~QE\
FD0008B8	111	300	42.3	3.62	98.4	13.1	9/7/2017 14:06:53	9/7/2017 14:06:57	G	13	CS2	105	`@h@|@r@|@|@hBUBQBNBRBRBQ@J@T@T@J@T@T@P@J@M@I@L@OAnBjB`BVBjBLB PBTBMBOBYBO@J@J@J@J@A@M@C@K@L@H@Kms@^~PEE
FD0008B8	111	300	42.2	3.35	99.3	-6.2	9/7/2017 13:06:53	9/7/2017 13:06:57	G	13	CS2	105	`@h@h@^@h@^@hB[BRBKBWBLBO@J@T@J@J@J@V@P@M@M@N@OAnBLAZBBAnAxB mBQBLB`BJBK@T@J@T@J@^@^@S@I@K@H@O@Oms@^~QDg
FD0008B8	111	300	42.3	3.41	98.2	-8.1	9/7/2017 12:06:53	9/7/2017 12:06:57	G	13	CS2	105	`@T@h@h@^@h@hBOBLBNBKBKBS@J@J@J@J@J@M@M@L@M@N@YAFAdBLAZAxAnB NBLBOBMBQBN@J@J@J@^@J@J@K@L@I@J@E@Pms@^~RDV
FD0008B8	111	300	42.6	3.36	98.0	-8.5	9/7/2017 11:06:53	9/7/2017 11:06:57	G	13	CS2	105	`@^@^@T@T@T@JBKBLBLBPBKBL@J@J@J@J@J@@@N@M@L@M@MAdAZ@r@|@|@TB LBLBLBNBKBM@T@^@J@J@J@@@L@L@L@L@L@Kms@^~RDV
FD0008B8	111	300	42.4	3.33	98.0	-8.6	9/7/2017 10:06:53	9/7/2017 10:06:57	G	13	CS2	105	`@T@T@J@T@T@TBJBJBLBOBIBO@J@J@@@@@J@@@N@M@L@N@MAF@|@h@rAF@|B JBJBOBKBJBL@J@J@J@J@J@M@N@H@O@M@Mms@^~RDV
FD0008B8	111	300	41.9	3.48	98.2	-9.0	9/7/2017 09:06:53	9/7/2017 09:06:57	G	13	CS2	105	`@^@^@T@T@^@^BKBJBLBQBMBJ@J@J@J@J@M@N@M@I@M@NAFAn@rAPAdAnB KBJBKBUBMBJ@T@^@J@J@@@T@L@M@M@B@J@Mms@^~RDS
FD0008B8	111	300	42.0	3.33	98.0	-10.4	9/7/2017 08:06:53	9/7/2017 08:06:57	G	13	CS2	105	`@^@T@T@T@TBMBMBQBZBNBU@J@J@J@@@@@J@M@M@R@G@L@IAdAZAP@|@rAFB QBLBMB_BKBV@T@J@J@@@J@J@J@M@N@D@N@Ims@^~SDQ
FD0008B8	111	300	42.1	3.65	97.5	-12.3	9/7/2017 07:06:53	9/7/2017 07:06:57	G	13	CS2	105	`@^@T@^@^@T@JBKBNBNBMBPBK@J@J@J@J@J@@@N@K@K@K@R@MAF@|APAd@|@^B LBQBNBPBHBI@J@J@J@T@J@K@F@J@H@T@Oms@^~TDL
FD0008B8	111	300	41.8	3.71	95.7	-15.2	9/7/2017 06:06:53	9/7/2017 06:06:57	G	13	CS2	105	`@J@J@J@T@J@JBN@g@g@c@i@h@@@@@@@@@@@@@@R@M@K@H@N@P@^@^@h@|@^@^B K@i@f@d@j@J@J@@@J@J@O@N@I@I@N@Oms@^~UDS
FD0008B8	111	300	42.6	3.16	99.1	-14.8	9/7/2017 05:06:53	9/7/2017 05:06:57	G	13	CS2	105	`@T@T@T@^@h@T@g@Z@K@SB[BN@@@@@J@J@T@J@K@G@I@I@R@L@r@rAFAZB`AP@ h@T@H@KBTBR@@@@@@@J@^@J@L@F@F@I@M@Gms@^~RD`

Message Filters

- Used to view and/or export message data from a user's platforms.

- Also used to debug platform issues related to platform configuration issues and interference.

- Filter parameters for all available fields including
  - DateTime (Carrier/End Time)
  - Platform Information (Address, Group, ect)
  - Statistics (Sig Strength, Phase, ect.)

- Can be stored in the database for future use and accessed using existing saved filter controls.

Filter Buttons

- Filtering controls are located to the left of the export controls on most website tabs. The messages tab controls are shown below.

PDT FILE · CDT FILE · REPORT A BUG · VERSION 1.93

WELCOME, MATTHEW1 CEANFAGLIONE ▾

NETLISTS | FILTER | CLEAR | EXPORT | 100

TYPE | LEN | MESSAGE DATA

- Clicking the 'Filter' button will open the associated filter dialog for the tab. This training will review basic message filtering.
- Clicking the 'Clear' button will remove any filters that are currently applied, and restore the default data set which for messages is all available data.

Filter Dialog

- The dialog for filtering message and other data contains the following controls used to define specific filters.
  - Apply Filter button to submit the query to the server
  - Link to select 'All' (and) or 'Any' (or) option for the condition.
  - Add new condition button (blue arrow icon, top left) used to add additional conditions
  - Add new condition link provided to add an additional condition to the filter.

- Controls are the same for all website filter dialogs, with the only difference being the list of conditions available, which is determined by the dataset (grid) being filtered

FILTER DATA

APPLY FILTER

SELECT RECORDS WHERE ALL OF THE FOLLOWING APPLY
[CLICK HERE TO ADD NEW CONDITION]
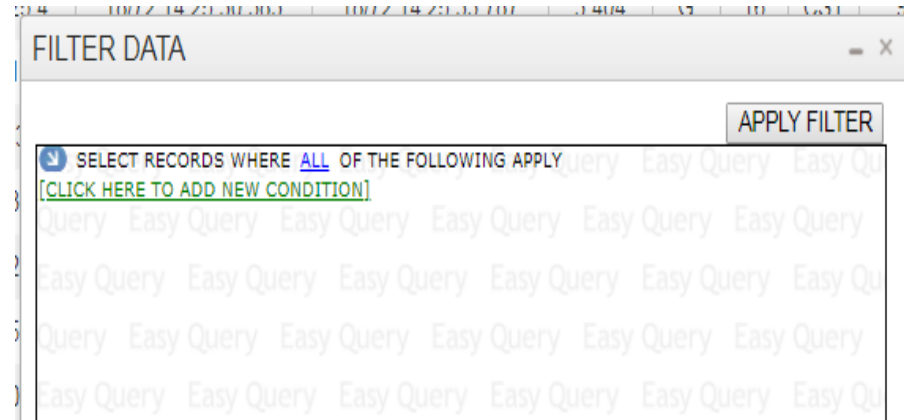
Conditions

- Available conditions depend on the current data being worked on

- List of conditions normally contains an item for each field displayed in the grid

- Operators determined by input type
  - String
    Starts, Not Starts, Contains, Not Contains, Equal, Not Equal
  - Number
    Equal, Not Equal, Between, Not Between, Greater, Less
  - DateTime
    Between, Is Equal, Greater, Less
  - Select List
    Is Equal, Is Not Equal

FILTER DATA

SELECT RECORDS WHERE **ALL** OF THE FOLLOWING APPLY
[CLICK HERE TO ADD NEW CONDITION]

MESSAGE	ADDRESS
	GROUP
	CHANNEL
	BAUD RATE
	SIGNAL STRENGTH
	PHASE NOISE
	MESSAGE QUALITY
	FREQUENCY DEVIATION
	CARRIER TIME
	CARRIER TIME (BY DAY)
	END TIME
	END TIME (BY DAY)
	MESSAGE TIME
	ARM
	SATELLITE ID
	TYPE
	DATA LENGTH

All/Any Operator

FILTER DATA

SELECT RECORDS WHERE ALL OF THE FOLLOWING APPLY
[CLICK HERE TO ADD NEW CON...
ALL
ANY
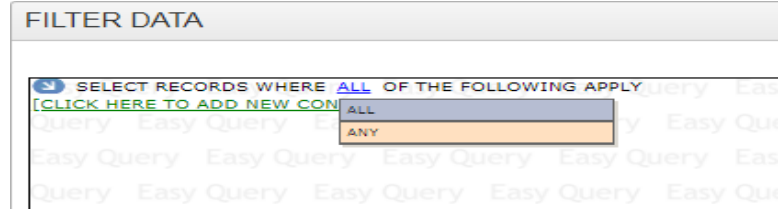
- Advanced feature used to create complex queries. Default selection is 'ALL', and is used for majority of filters.
- Accessed by clicking the blue highlighted 'ALL' (or 'ANY') link to the right of the add condition button (blue arrow)
- Determines how boolean operators are applied to the filter condition when generating the query to the database
  - 'ALL' selection is analogous to the boolean 'AND' operator, and the filter only returns data that meets all specified conditions.
    'Return all messages found on channel X and channel Y and belongs to group USGS01'
  - 'ANY' selection is analogous to the boolean 'OR' operators and the filter returns data that meets any specified condition.
    'Return all messages found on channel X or channel Y or belongs to group USGS01

DateTime Filters

- DateTime conditions allow users to create queries that restricts the resulting data to a defined time frame
- For message filters, the message carrier and end time can be used to add a DateTime condition to the query.
- Two ways to add a carrier or end time condition to the filter
  - Default -> Manual entry in Julian format (DD/YYY HH:MM:SS)
  - By Day -> Automatically entry from date picker selections
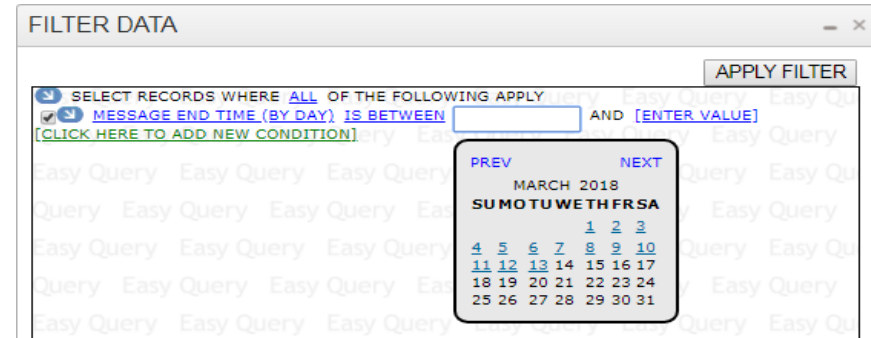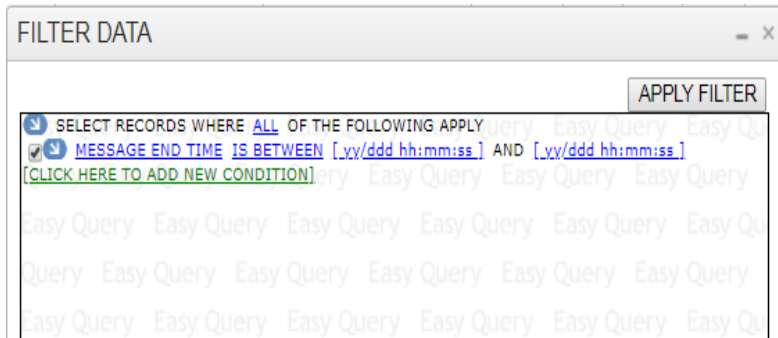
DateTime Example #1

- The following example demonstrates how to create a message filter representing the statement below using the default (manual) DateTime entry method

'Return messages with end times from March 1ˢᵗ 2018 between hours 13z and 14z'

1) Browse to the messages tab, clear any existing filters, and open the filter dialog

2) Click the 'Add New Condition' link and select 'End Time' from the condition list

3) Enter the Julian date and time for the lower limit (left text box)   -> '18/060 13:00:00'

4) Enter the Julian date and time for the upper limit (right text box) -> '18/060 14:00:00'

5) Verify entries match Julian format exactly, and click the 'Apply Filter' button to submit the query

FILTER DATA   — ×

APPLY FILTER

SELECT RECORDS WHERE ALL OF THE FOLLOWING APPLY
☑ MESSAGE END TIME IS BETWEEN 18/060 13:00:00 AND 18/060 14:00:00
[CLICK HERE TO ADD NEW CONDITION]

DateTime Example #2

- The following example demonstrates how to create a message filter representing the statement below using the 'by day' (date picker/automatic) DateTime entry method

  'Return messages with end times between days March 1st 2018 and March 3rd 2018'

  1) Browse to the messages tab, clear any existing filters, and open the filter dialog.

  2) Click the 'Add New Condition' link and select 'End Time (By Day)' from the condition list.

  3) Click the left-most text box and select March 1st from the date picker control to set the lower limit.

  4) Click the right-most text box and select March 3st from the date picker control to set the lower limit.

  5) Entries are automatically entered and formatted. Click the 'Apply Filter' button to submit the query.

All/Any Example

- The following example demonstrates how to use the 'All/Any' operators to create a message filter that represents the statement below by changing how individual filter conditions are linked together in the overall query
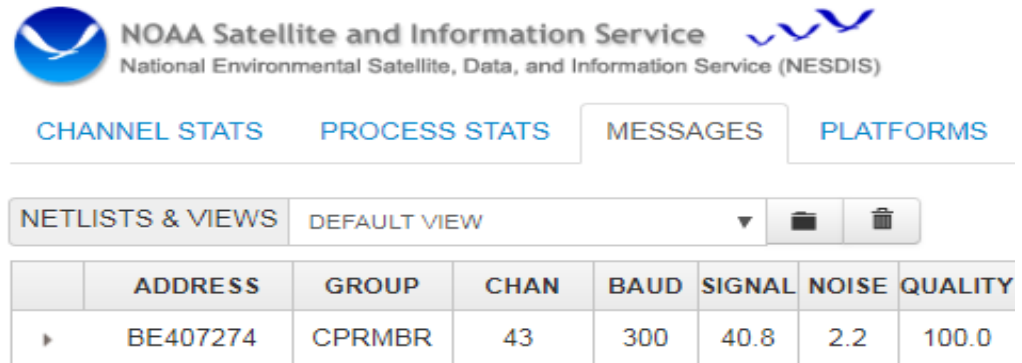
  "*Return all messages on channel 183 and have an ARM code 'G' or '?' "*

1) Browse to messages tab, clear filters, and open the filter dialog.

2) Click the 'Add New Condition' link, select 'Channel' from the list of conditions and enter 183.

3) Click 'Add New Condition' button and then 'Open New Bracket' to add new condition set. Default option is 'Any' (boolean OR).

4) In new bracket, change default condition to 'ARM', and select 'Good Msg (G)' from the ARM values list.

5) Click the 'Add New Condition' button for the ARM condition in the new bracket, and select 'Add New Condition After Current' from the list to add a new condition.

6) Change new 'Any' bracket condition to 'ARM' and select 'Parity Msg (?)' from the ARM values list.

7) Click the 'Apply Filter' button to submit the query.

FILTER DATA

SELECT RECORDS WHERE ALL OF THE FOLLOWING APPLY
MESSAGE CHANNEL IS EQUAL TO 183
ANY OF THE FOLLOWING APPLY
MESSAGE ARM IS EQUAL TO GOOD MSG (G)
MESSAGE ARM IS EQUAL TO PARITY ERROR (?)
[CLICK HERE TO ADD NEW CONDITION]

Stored Filters

- Filters can be stored in the database for future use for message and platform data sets only

- Once a filter has been saved, it is referred to as a 'view' within the website terminology

- Prevents frequently used filters from having to be re-created every time a user wishes to filter data in that manner

- Controls located next to 'VIEWS' label at top left of the 'Messages' and 'Platforms' grid.

  - Select list for loading

  - Folder button for saving

  - Trash button for deleting

NOAA Satellite and Information Service
National Environmental Satellite, Data, and Information Service (NESDIS)
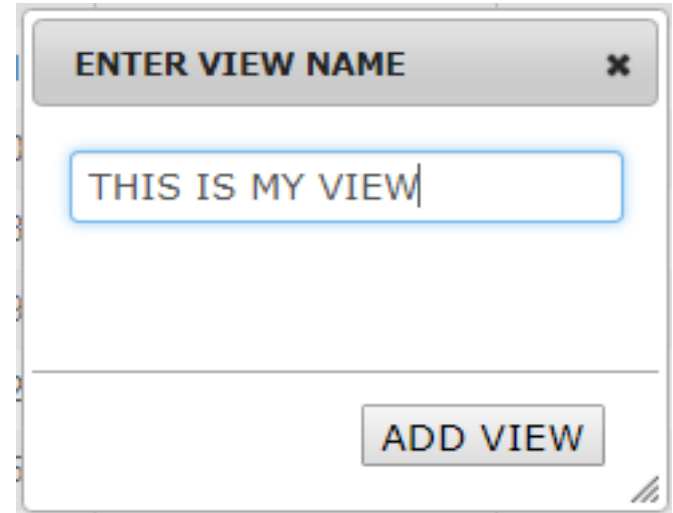
| CHANNEL STATS | PROCESS STATS | MESSAGES | PLATFORMS |

| NETLISTS & VIEWS | DEFAULT VIEW ▼ | 🗁 | 🗑 |

	ADDRESS	GROUP	CHAN	BAUD	SIGNAL	NOISE	QUALITY
▸	BE407274	CPRMBR	43	300	40.8	2.2	100.0

Creating Views
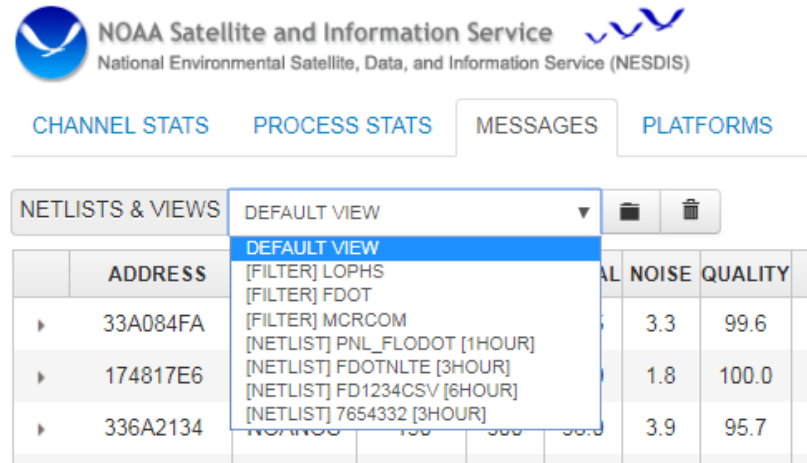
- The first step in creating a saved view is to create and apply the desired filter to the grid data.

- Once the filter has been applied, click the 'Folder' icon/button to open the 'Save' dialog where the view is given a friendly name.

- On the dialog, enter the desired view name in the text box and click the 'Add View' button.

- If successful, the page will re-load, and the new view will be available in the select list control.

ENTER VIEW NAME ✖

THIS IS MY VIEW

ADD VIEW

Loading Views

- Views are applied to the messages or platform grid after they have been selected in the view drop down list.

- To load a view, simply click the drop down control to expand the list of user views and select the desired option.

- The action will close the drop down list and apply the conditions in the save view to the grid data set.

- Select list containing user's views can have two view types

  ◦ Normal type, standard filter. View name prefaced with '[FILTER]'

  ◦ Netlist type, special filter. View name prefaced with '[NETLIST]'

Removing Views

- Views no longer needed can be easily removed from the user account.

- To remove a view, it must first be applied to the grid data set. This is done by loading the view to be deleted via the view select list control.

- Once the view has been applied, click the trash can icon button located to the right of the view select list and view folder icon button to initiate view removal.

- The page will refresh, with the view removed from the select list, and the view filter conditions cleared.
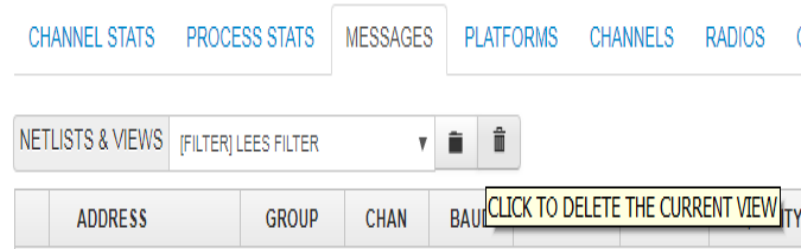
Netlist Filter

- A netlist filter is a type of message data filter created from a standard CSV file, an LRGS netlist file or a platform filter.

- They contain two query parameters
  - One or more platform addresses to filter on
  - How far back to look for the message data

- Stored in the database for future use, and accessed using existing saved filter controls.

Netlist Files

- ## LRGS '.nl' Files

  - Used by an LRGS client to determine what platforms it needs to retrieve data for.
  - Many users already have LRGS .nl files that define only the platforms for their organization.

- ## CSV Files

  - Comma Separated Value; An additional file format for users not familiar with LRGS netlist files.
  - Contains a comma separated string of platform addresses to be included in the website netlist filter.
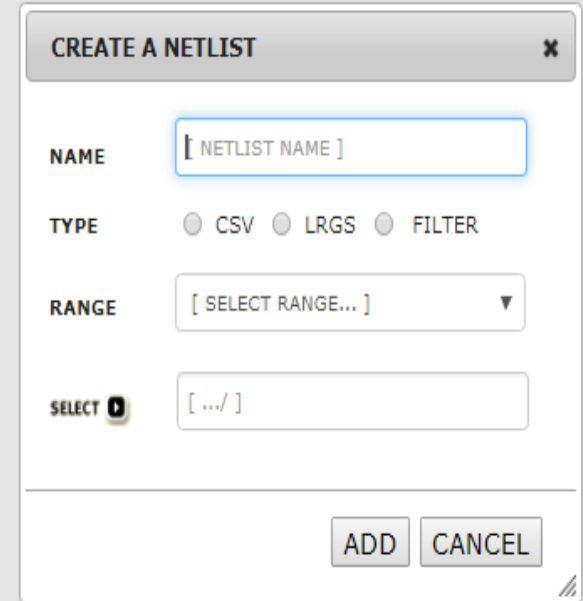
Netlist Dialog

- Netlist buttons are located to the left of the filter button on the 'Messages' and 'Platforms' website tabs.
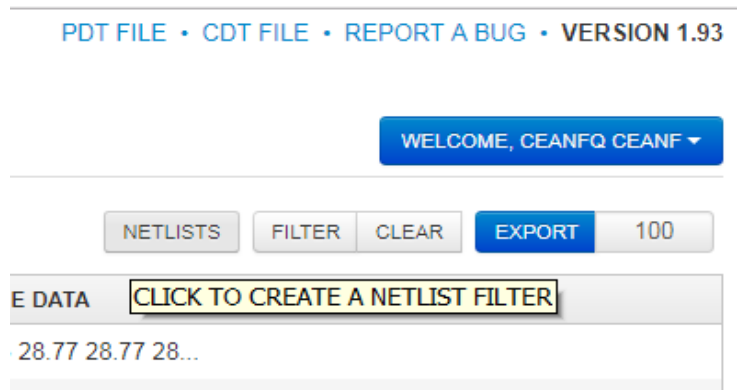
- Clicking a netlist button opens a dialog window used to create a netlist filter from an uploaded file or an applied platform filter.

Netlist Dialog

- The netlist dialog has 4 fields
  - Name for the netlist filter.
  - Type of netlist filter being created; CSV, LRGS or an applied filter (PDT only).
  - Time range to determine how far the netlist filter looks back for data (from 1 hour to 30 days).
  - File upload control to select a netlist file for the CSV and LRGS types.

CREATE A NETLIST ✕

NAME [NETLIST NAME]

TYPE ○ CSV ○ LRGS ○ FILTER

RANGE [SELECT RANGE...] ▼

SELECT [.../]

ADD CANCEL

Creating Netlist Filters

- Perform the following steps to create a netlist filter from a platform filter

  - Create a filter with condition specifics such as group codes or individual platform addresses on the platforms tab.

  - Open the netlist filter dialog window.

  - Enter a friendly name in the 'Name' text box.

  - Select the 'Filter' option in the 'Type' radio group.

  - Select a look back period using the 'Frame' drop down list.

  - Click the 'Add' button to submit and save the netlist filter.

Creating Netlist Filters

- Perform the following steps to create a netlist filter from a CSV or LRGS netlist file

  - Open the netlist filter dialog window by clicking the 'Netlist' button on the messages or platforms tabs.
  - Enter a friendly name for the netlist filter.
  - Select the 'CSV' or 'LRGS' option in the 'Type' control depending on what file type is being used.
  - Select look-back period using the 'Frame' drop-down list.
  - Click the 'Select' button to open the file browser, and select the CSV or LRGS file to be uploaded.
  - Click the 'Add' button to submit and save the netlist filter.

Loading Netlist Filters

- Netlist filters are treated as a type of saved 'View' (filter).

- They are loaded into the 'Netlists & Views' drop down list located on the messages tab, and have the following text
  - Header text '[NETLIST]' before the friendly name.
  - Footer text specifying the range, for example '[3HOUR]'.

- To load a netlist filter, simply select the desired option from the drop down list.

- The website will submit a query to the database and apply the netlist filter to the message data.
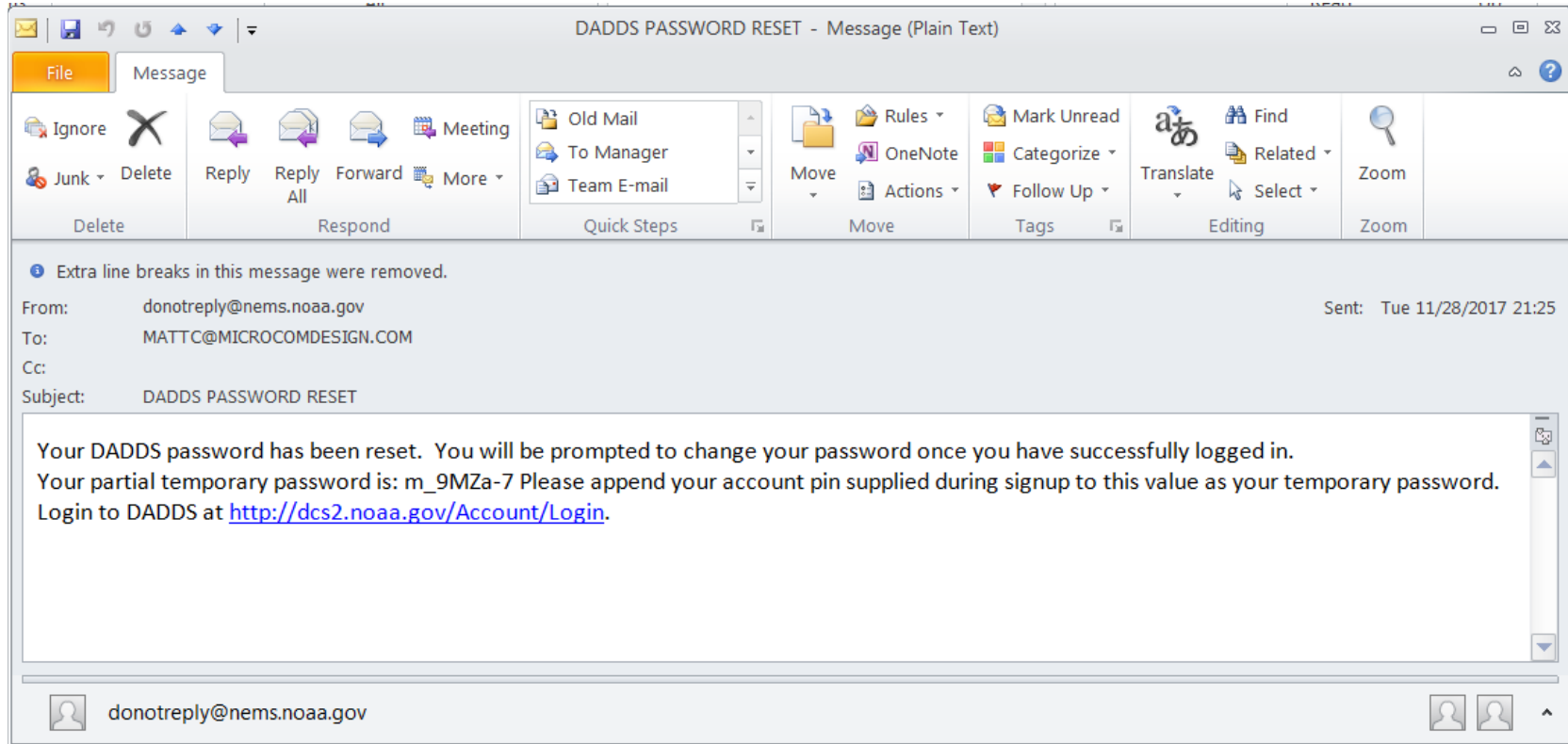
Password Reset

- User account passwords can be reset via 3 methods
  - By administrator or manager within the website
  - By user via forgot password security questions
  - By user via forgot password last name & pin code
- All methods, when successful, will send an email to the address registered with the account containing a partial password and instructions on the completing the reset process
- To complete the reset process, a user must then login to a DCS server using the partial password from the reset email and their 4 digit pin code
- If the login is successful, the user is redirected to the forms that are used to update DCS account passwords

Password Reset

- Upon completion of one of the 3 account password reset methods, the DCS website automatically sends an email containing a partial password and further instructions

- To complete the reset process, browse to any of the DCS websites and login using the partial password from the email, followed by the account pin code

  ◦ When entering the partial password string, it is best to type the characters into the password textbox to ensure the value is copied correctly

  ◦ Copying and pasting the partial password can cause an additional space character to be included in the string, which will cause the reset action to fail

- If the a user has forgotten their 4 digit account pin code, they will have to contact DCS support and have them query the database for the pin code.

Password Reset

Password Reset

- After logging in with the partial password string and pin code, the user will be presented with the form used to change the account password

- On the password reset form, the following must be done
  - In the top most text box for the previous account password, enter the partial string and account pin code as was done at the login page
  - In the second text box below the previous password field, enter the new password for the account.
  - In the 3rd text box below the new password field, enter the new password again in the confirmation field.
  - Click the submit button at the bottom of the form to reset the password.
  - If successful, the user will be logged in and redirected to the messages tab
  - If an error occurs, a validation message will be shown indicating the cause

Forgotten Password

- As a result of new and urgent IT security directives from NOAA, two significant changes were made to the password reset mechanism.

  ○ Security questions containing personal identifying information, or PII, were replaced.

  ○ Security question answers are now stored in the database as encrypted text.
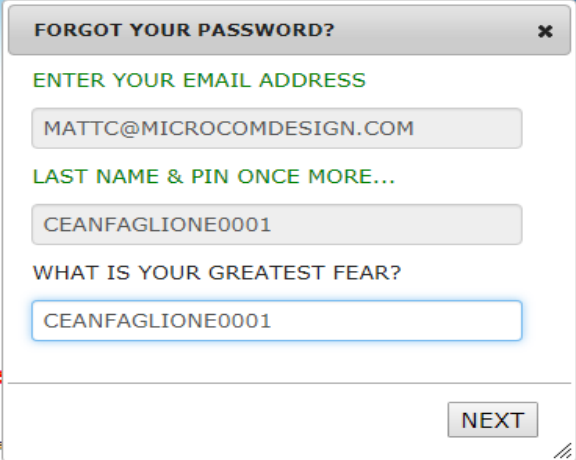
Forgotten Password

- The changes to the forgotten password feature would prevent users with security questions containing PII from resetting their password.

- Many users had security questions containing PII that were no longer in the system.

- As a result, a new way of resetting an account password needed to be implemented to help these users.

Forgotten Password

FORGOT YOUR PASSWORD? ✕

ENTER YOUR EMAIL ADDRESS

MATTC@MICROCOMDESIGN.COM

LAST NAME & PIN ONCE MORE...

CEANFAGLIONE0001

WHAT IS YOUR GREATEST FEAR?

CEANFAGLIONE0001

NEXT

- To mitigate any potential user issues an additional mechanism to reset an account password was put in place.

- Users can now initiate the password reset process by entering their last name plus their 4 digit pin code in both security answer fields.

  ◦ For example, 'Roberts1234' would be entered for a user whose last name is 'Roberts' and pin code is '1234'.