

# ECWP Winch Data Collection



WOODS HOLE  
**OCEANOGRAPHIC**  
INSTITUTION



# Introduction

The why

# Goals

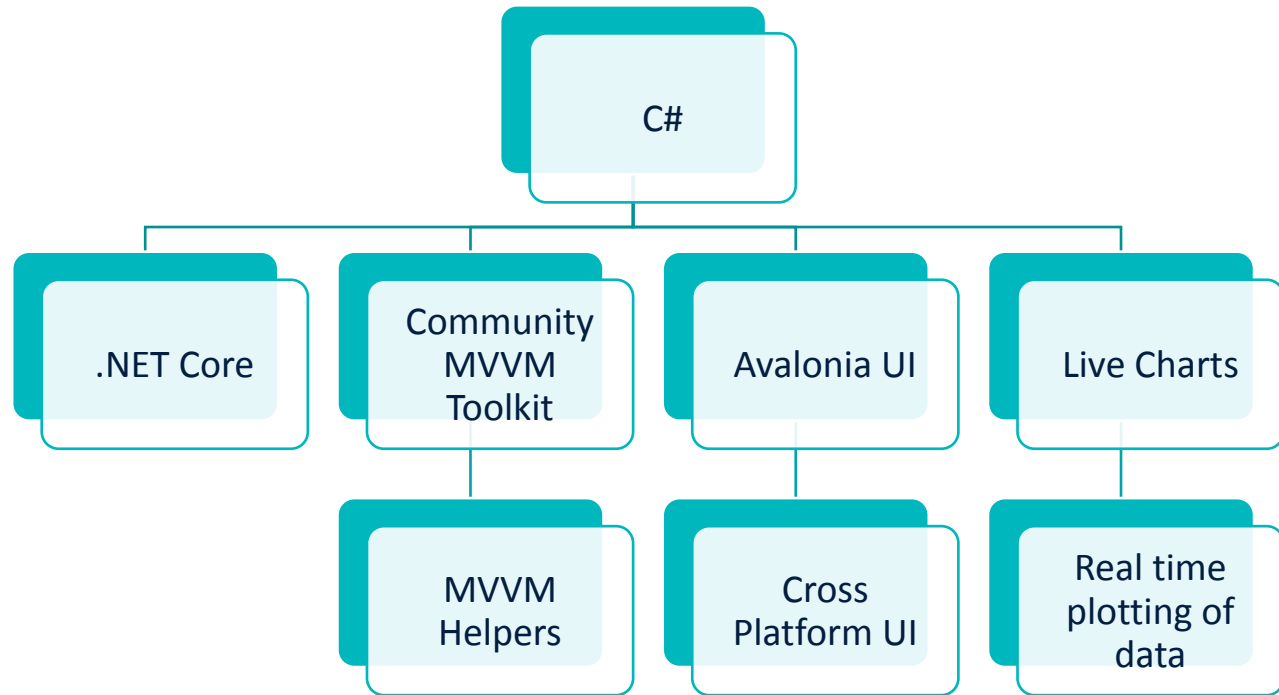
**1** Access ECWP Winch Data

**2** Process Data

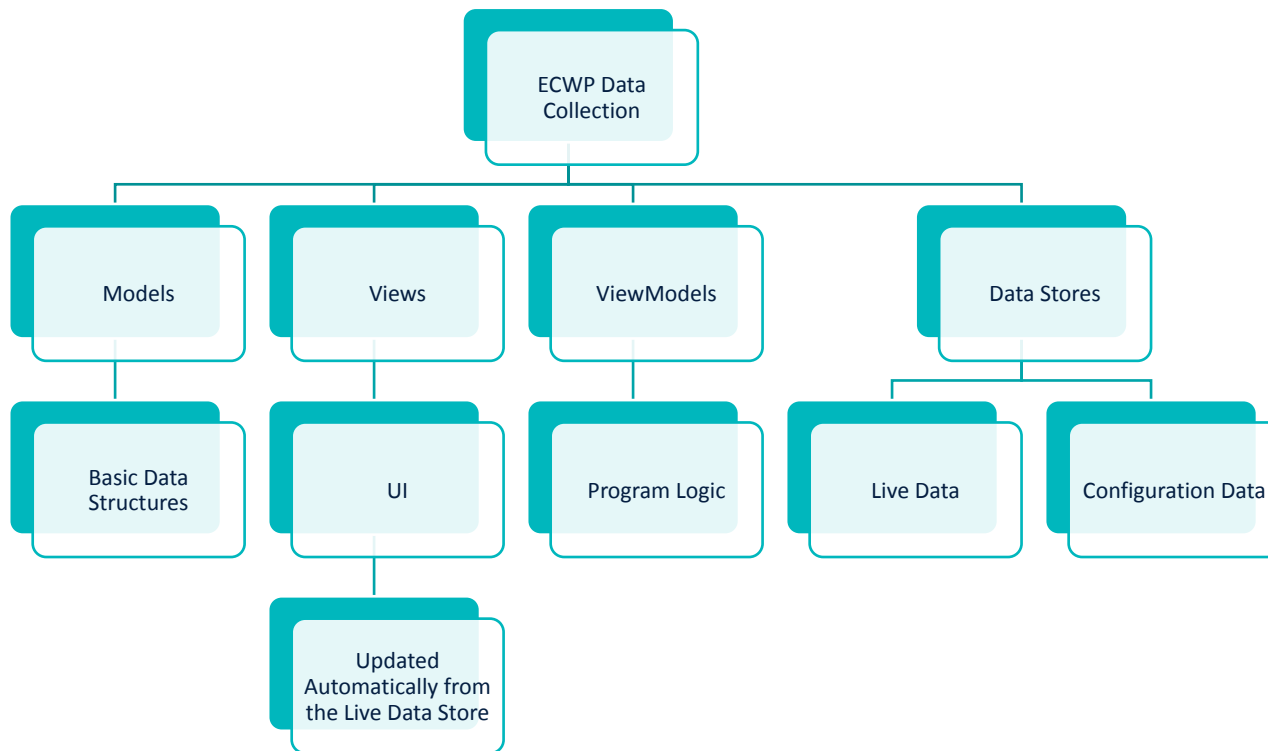
**3** Ease of Use

# Introduction

## Building Blocks



# Introduction



## Program Structure

## Data Formats

Field	Description	Type	Example
1	Feed Identifier	String	RD
2	Date/Time	String	20160621T23:59:59.050
3	Tension	Float	1500.5
4	Speed	Float	60
5	Payout	Float	3000
6	Checksum	Float	1234

## Example

RD,20160631T23:59:59.050,1500.5,60.0,3000.0,1234<CR><LF>

# UNOLS String

## Data Formats

Field	Description	Type	Example
1	Feed Identifier	String	\$WIR
2	Date	String	20160621
3	Time	String	23:59:59.050
4	Tension	Float	1500.5
5	Speed	Float	60
6	Payout	Float	3000
7	TM Warnings	Byte	00000000
8	TM Alarms	Byte	00000000
9	Checksum	Float	3381

## Example

\$WIR,20160631,23:59:59.050,12000.5,100.0,10000.0,00000000,00000000,3381<CR><LF>

## Data Formats

Field	Description	Type	Example
1	Feed Identifier	Binary	??
2	Date	Binary	??
3	Time	Binary	??
4	Tension	Binary	??
5	Speed	Binary	??
6	Payout	Binary	??
7	TM Warnings	Binary	??
...	...	...	...
49	Checksum	Binary	??

Example

Messy





**2**

## **Features**

What can it do? Or why would you use it?

# Capabilities

Real Time Plotting

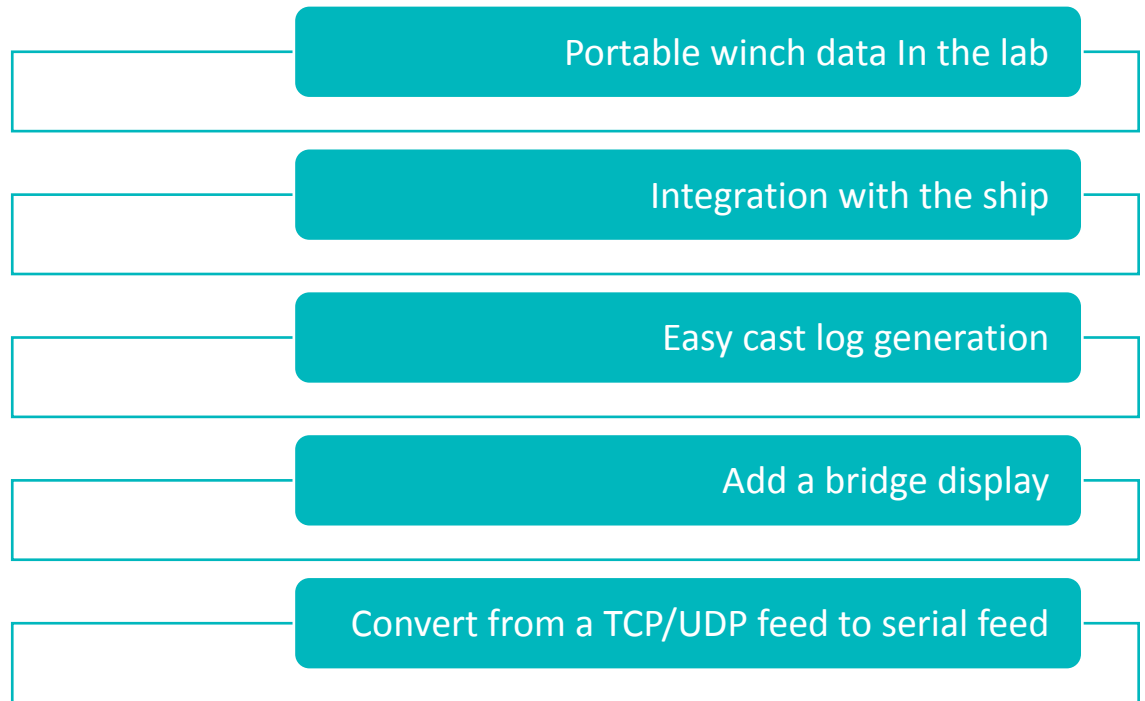
Logging Data

Generating Cast Logs

Remote Display

Winch Feed Conversion

# Uses





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## Use

How do we use it?

Live Data Cast Processing Winch Config Update Check

Cruise Name

Select Winches

Set Save Location

Update Config File

Help

Select Winch

Winch Name

Communication Parameters

IP Address

Port Number

Source Type

Hawboldt Protocol

Logging Parameters

Log 20Hz Data

Log Max Data

Use Computer Time

Chart Time Span  s

Speed Unit

Payout Unit

Tension Unit

Warning Tension  lbf

Alarm Tension  lbf

ABL  lbf

Send UDP Data

Send Serial Data

- Add/Update Winch
- Remove Winch
- Help

Select Winch



Winch Name

Enter Name

Communication Parameters

IP Address

Ex: 192.168.103.21

Port Number

Ex: 50505

Source Type

TCP Server



Hawboldt Protocol

Logging Parameters

Log 20Hz Data

Select Winch



Winch Name

Enter Name

Communication Parameters

IP Address

Ex: 192.168.103.21

Port Number

Ex: 50505

Source Type

TCP Server



Hawboldt Protocol

Logging Parameters

Log 20Hz Data



## Logging Parameters

Log 20Hz Data

Log Max Data

Use Computer Time

Chart Time Span  s

Speed Unit

Payout Unit

Tension Unit

Warning Tension  lbf

Alarm Tension  lbf

ABL  lbf

## Logging Parameters

Log 20Hz Data

Log Max Data

Use Computer Time

Chart Time Span  s

Speed Unit

Payout Unit

Tension Unit

Warning Tension  lbf

Alarm Tension  lbf

ABL  lbf

Send UDP Data

Send Serial Data

Add/Update Winch

Remove Winch

Help

Live Data Cast Processing Winch Config Update Check

Select Winch

Winch Name

Communication Parameters

IP Address

Port Number

Source Type

Hawboldt Protocol

Logging Parameters

Log 20Hz Data

Log Max Data

Use Computer Time

Chart Time Span  s

Speed Unit

Payout Unit

Tension Unit

Warning Tension  lbf

Alarm Tension  lbf

ABL  lbf

Send UDP Data

Send Serial Data

Add/Update Winch

Remove Winch

Help

Live Data Cast Processing Winch Config Update Check

Select Winch

Winch Name

Communication Parameters

IP Address

Port Number

Source Type

Hawboldt Protocol

Logging Parameters

Log 20Hz Data

Log Max Data

Use Computer Time

Chart Time Span  s

Speed Unit

Payout Unit

Tension Unit

Warning Tension  lbf

Alarm Tension  lbf

ABL  lbf

Send UDP Data

Send Serial Data

Add/Update Winch

Remove Winch

Help

Live Data Cast Processing Winch Config Update Check

Source Type

Hawboldt Protocol

Model

Logging Parameters

Log 20Hz Data

MTNW Format

UNOLS Format

Auto Log

Log Max Data

Use Computer Time

Chart Time Span  s

Speed Unit

Payout Unit

Tension Unit

Warning Tension  kg

Alarm Tension  kg

ABL  kg

Send UDP Data

Data Destinator

IP Address

Port Number

MTNW Format

UNOLS Format

Send Serial Data

Winch Name: Moe  
 Data Type: TCP Server  
 IP Address: 192.168.1.141  
 Port: 50505  
 Computer Time: True  
 Chart Time: 30  
 Log 20Hz: False  
 Log Max: True  
 False  
 Speed Unit: m/min  
 Payout Unit: m  
 Tension Unit: lbf  
 Tension Warning Threshold: 4000  
 Tension Alarm Threshold: 5000  
 Assigned Breaking Load: 10000  
 UDP Output: False  
 Serial Output: False

Winch Name: LCI  
 Data Type: TCP Client  
 IP Address: 192.168.1.103  
 Port: 50505  
 Computer Time: True  
 Chart Time:  
 Log 20Hz: False  
 Log Max: True  
 False  
 Speed Unit: m/min  
 Payout Unit: m  
 Tension Unit: lbf  
 Tension Warning Threshold: 120  
 Tension Alarm Threshold: 200  
 Assigned Breaking Load: 10000  
 UDP Output: False  
 Serial Output: False

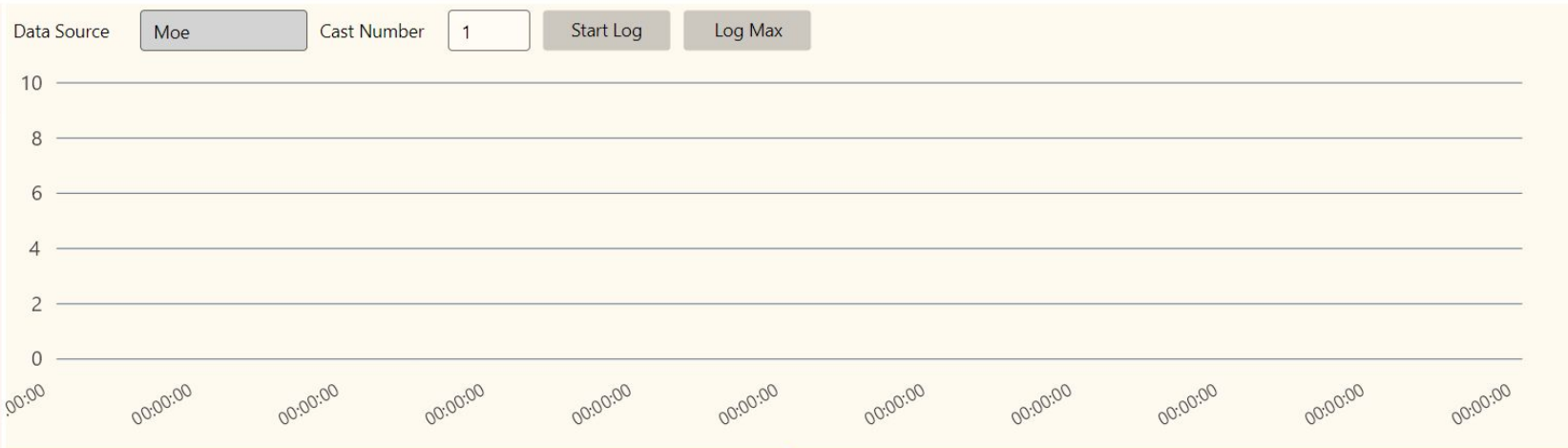
Winch Name: Larry  
 Data Type: TCP Server  
 IP Address: 192.168.1.109  
 Port: 50505  
 Computer Time: True  
 Chart Time: 30  
 Log 20Hz: False  
 Log Max: False  
 False  
 Speed Unit: m/min  
 Payout Unit: m  
 Tension Unit: lbf  
 Tension Warning Threshold: 4000  
 Tension Alarm Threshold: 5000  
 Assigned Breaking Load: 10000  
 UDP Output: False  
 Serial Output: False

Winch Name: Godzilla  
 Data Type: UDP  
 IP Address: 192.168.0.1  
 Port: 50000  
 Hawboldt Model: SPRE-3464  
 Computer Time: True  
 Chart Time: 45  
 Log 20Hz: False  
 Log Max: True  
 False  
 Speed Unit: m/min  
 Payout Unit: m  
 Tension Unit: kg  
 Tension Warning Threshold: 120  
 Tension Alarm Threshold: 200  
 Assigned Breaking Load: 10000  
 UDP Output: False  
 Serial Output: False

Winch Name: Gloria  
 Data Type: TCP Server  
 IP Address: 192.168.1.11  
 Port: 50505  
 Computer Time: True  
 Chart Time: 30  
 Log 20Hz: False  
 Log Max: True  
 False  
 Speed Unit: m/min  
 Payout Unit: m  
 Tension Unit: lbf  
 Tension Warning Thresh  
 Tension Alarm Threshol  
 Assigned Breaking Load  
 UDP Output: False  
 Serial Output: False

Live Data Cast Processing Winch Config Update Check

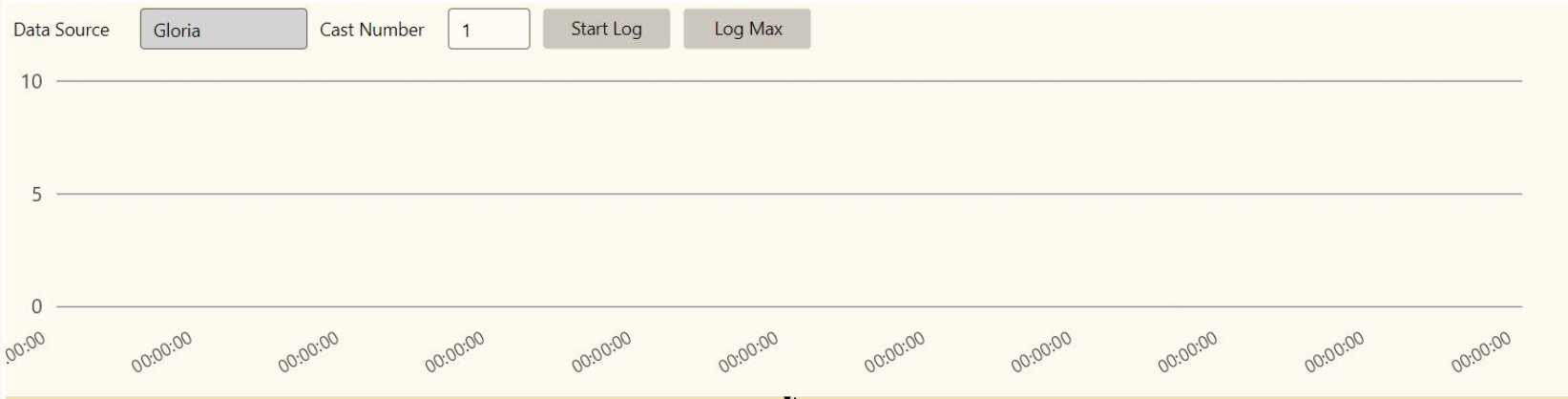
- Cruise Name  
shop
- Select Winches
- Moe
  - LCI
  - Larry
  - Godzilla
  - Gloria
  - Curly
  - Gloria Raw
  - Shemp



Tension      lbf Speed      m/min Payout      m

Max Tension      lbf Max Speed      m/min Max Payout      m

- Set Save Location  
Save Location
- Update Config File  
Update Configuration
- Help  
?



Tension      lbf Speed      m/min Payout      m

Max Tension      lbf Max Speed      m/min Max Payout      m

Live Data Cast Processing Winch Config Update Check

Select Winch:

Cruise Name:

Processed Filename: TestProcessed.txt

Combined Filename: TestCombined.txt

Directory: C:\Winch Pool\MASH\Log MASH2K-1\202308-Cowen\all

Number of Files:

Processing File:

Processing Line:

Minimum Payout:

Minimum Tension:



# Questions?



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