Welcome to NAU (Ver 2.0) – VPRMS

“Vessel Performance Monitoring and Measurement”
Purpose of the system: ........................................................................................................... 3
Login Screen: .......................................................................................................................... 3
Section definitions and their use: .............................................................................................. 5
  a)  Compact Dashboard: ......................................................................................................... 5
  b)  Benchmark table and other important entries for a vessel: .................................................. 5
  c)  Alert System: ..................................................................................................................... 8
  d)  Performance & analysis: .................................................................................................... 11
    i)  Alerts: .......................................................................................................................... 11
    ii) Vessel Performance: ...................................................................................................... 13
    iii) Emission: ..................................................................................................................... 15
    IV) Distance & Consumption: ........................................................................................... 15
    V) Voyage reports: ............................................................................................................ 16
    VI) Periodical Data: ........................................................................................................... 19
  e)  Selecting vessel for viewing Particulars and historic reports: ............................................. 20
  f)  Sea and Port reports for the selected: ................................................................................. 21
Other Alerts & notification: ....................................................................................................... 22
  a)  Alert for not receiving any report in the last 48 Hrs. ............................................................ 22
  b)  Alert for Missing Export files, .......................................................................................... 22
  c)  Missing engine parameter, ................................................................................................. 22
  d)  Daily email consolidated report for vessel Performance.................................................... 23
1. **Purpose of the system:**

As the name suggests vessel performance monitoring & measurement, this software is designed to analyze the performance of the vessel by generating various reports. Also, the system sets the benchmark for the alert system which comply with various other reports in the system. 01 Record must be submitted of the parameters.

2. **Login Screen:**

![Login Screen](image)

3. **Initial Screen After Login:**

![Initial Screen](image)
Introduction to the Menus:

Compact Dashboard provides information for the ongoing Leg of the vessel with Departure port and destination port/country along with ETA and agent’s details as reported by the vessel.

Set the Fuel, Speed, FW, Lubes parameters for measurement against the same.

All the alerts generated are maintained and managed (closed) through this section. The section shows total Alerts and the reported value of each aspect against the set parameter.

Analysis and trends of the Generated alerts, Fleet-wide for admin or for the assigned vessels with Drill Down for the user, the Potential savings can be calculated by input of the Costs here.

Data shows for the selected vessels for all the Legs covered during the selected period. The graphical representation of the data for measuring / comparing multiple vessels at any time.

Sox, NOx, CO2 emissions and efficiency for the selected vessels & period, along with EEOI.

Total distance and consumption over the selected period for one or multiple vessels.

Consolidated Consumption and Steaming performance Laden/Ballast legs and single Leg summary report for any desired Leg during the selected period.

Periodical Sea and Port data with reports.

Measure vessel performance versus Sea Trial data.

Vessel Particulars of the Selected Vessel

Vessel Reports for all the Legs.
Section definitions and their use:

a) Compact Dashboard

Compact Dashboard provides information for the ongoing Leg of the vessel with Departure port and destination port/country along with ETA and agent’s details as reported by the vessel.

b) Benchmark table and other important entries for a vessel:

The benchmark table is the start point the Alert system along with other important aspects.
for each vessel and has to be managed by the fleet groups for their respective vessels and will bear the following:

- The list of parameters defined for the vessel basis which the alerts will be generated.
- This table will be aligned for entering all other including; pitch, Email ids.

i) Form for setting Benchmark parameters:

CLICK <<BENCHMARK<<CLICK EDIT (FIRST COLUMN)

The following parameters can be set using the benchmark Form:

1. Speed
2. IFO & MDO consumption
3. Cylinder Oil consumption
4. Fresh water Generation
5. Other may be added as per requirement.

For 1 & 2 above, CP is Chosen by default but can be set otherwise also.

Other Important Inputs (one time & others):

1. Superintendent’s email;
2. Year Built,
3. Vessel Category,
4. Vessel Type,
5. Pitch,
6. Flow Meter; Y or N,
7. Torque Meter; Y or N,

ii) Benchmarking history:

This table maintains the historic Records for the changes made to the Vessel Benchmark parameters, with the date & time.

iii) Important dates:

Date vessel was taken over, last Dry docking, hull cleaning & propeller polishing.
iv) **Sea trial data:**

Input available for Sea Trials carried out in Laden/Ballast conditions and for various BF scale value as applicable.

![Sea Trials Data](image)

**c) Alert System:**

To start the Alert system, the FG has to notify the system Admin / Orion Marine to start/stop the alerts for a vessel.

Once activated by the admin the Parameters have to be Set/Submitted on the Benchmark table for the alerts to trigger.

The alert system is based on an auto run exe which is scheduled for every morning.

The alert service runs once a DAY for the vessels and sends this email to the Superintendent and/or the Fleet Group and further the Hierarchical chain as per the resolution time setting and the Vessel as notification.

The email bears:

1. **ONLY the vessels which have generated the latest Alerts**,  
2. **Total number of Open Alerts on the system**,  
3. **Link to go online to the Alert Management section to resolve the alerts.**
The alert system has been set to three levels;

**LEVEL – 1 Alert:** an alert on email to the Superintendent and the Vessel with the details of the vessel which has generated the alert and the affected parameter.

The alert bears a link called; “RESOLVE ALERTS”, click on the same to take to the online area for recording reason for the Alert and closing the same.

**LEVEL – 2 Alert:** Incase the Superintendent doesn’t close the alert in 3 days the LEVEL 2 alert is generated to the Fleet Group Manager notifying the same.

Similar email but with multiple ships incase there are other vessels with active alerts.

**LEVEL – 3 Alert:** Incase the Alert remains active for more than 7 days, the Senior management is notified of the same in the similar email.

The alert bears a link called; “RESOLVE ALERTS”, click on the same to take to the online area for recording reason for the Alert and closing the same.
STEP BY STEP GUIDELINES TO HANDLE VESSEL ALERTS:

STEP 1: Generation of email alert for under performance.

STEP 2: Click on Resolve Alert to go to the online alert panel to view & manage alert.

STEP 3: Enter remarks & reason, change the status and close the alert.
Alert Management area;

- the status of their Vessels alerts in order to remark accordingly and proceed to Close by selecting Resolve or can select other option of Need More Time
- Effected Parameters list the RIGHT SIDE Blue Values indicate the BENCHMARK values and Left are the reported values.
- List shows the number of days in which the Alert was marked as resolved/running counter till resolved.
- Level field shows values of “0” and “1” for the various hierarchy, depicting to which level the mail was sent, 0 for not sent, 1 for sent, above case 1 showing TOP Management was not Alerted and the lower record shows all parties were alerted.

**d) Performance & analysis:**

**I) Alerts:**
Fleet Group Analysis towards Total Alerts vs. Open Alerts and their Average.

*Click on the desired Fleet Group Bar to drill down to Each Vessel status.*
### Quantifying Alerts to Potential Savings

- Chart representing Percentage value of the contributing factors for the alerts.
- The Table represents totaled results from the Alerts and basis inputs on the latest average Cost Value for each header, the system converts the Alert results consolidated into Money and thereby presenting total potential savings.

**VESSEL ALERT STATUS & OVERALL TRENDS:**
VESSEL ALERT:
- Fleet Group Analysis towards Total Alerts vs. Open Alerts and their Average.
- Click on the desired Fleet Group Bar to drill down to Each Vessel status.

TRENDS:
Trend of the Alerts for the Fleet towards each Parameter calculated for the Quarters and annually.

ii) Vessel Performance:

The vessel performance report can be utilised to measure the vessel performance against the other vessel bases fleet group & size.

Select the data from the drop down menu to view the reports.

---

**Voyage Based Data**

**Voyage Based DATA (From: 01/01/2015 To: 03/31/2015)**

<table>
<thead>
<tr>
<th>Voyage ID</th>
<th>Distance (NM)</th>
<th>Stowing Time (Days)</th>
<th>Avg Speed/Day (Kts)</th>
<th>ME Coms (RTs)</th>
<th>AE Coms (RTs)</th>
<th>Boiler Coms (RTs)</th>
<th>Total Engine Distance (NM)</th>
<th>Total Engine Time (Days)</th>
<th>MEPR (RPM)</th>
<th>Total Ave RIH</th>
<th>Ave RIH/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 914-B</td>
<td>1521.5</td>
<td>6.04</td>
<td>32.57</td>
<td>108.4</td>
<td>21.5</td>
<td>13.9</td>
<td>2.76</td>
<td>1669.9</td>
<td>5.04</td>
<td>67.12</td>
<td>26.96</td>
</tr>
<tr>
<td>46 DALX024-B</td>
<td>331.8</td>
<td>10.96</td>
<td>12.62</td>
<td>245.6</td>
<td>22.43</td>
<td>32.9</td>
<td>3</td>
<td>2903.7</td>
<td>10.4</td>
<td>67.41</td>
<td>25.68</td>
</tr>
<tr>
<td>47 DALX028-B</td>
<td>411</td>
<td>1.42</td>
<td>12.95</td>
<td>30.2</td>
<td>25.35</td>
<td>4.5</td>
<td>3.18</td>
<td>582.8</td>
<td>1.42</td>
<td>0.0001</td>
<td>45.76</td>
</tr>
</tbody>
</table>
GRAPHICAL REPRESENTATION OF THE ABOVE DATA IS AS UNDER:

The various parameters like: Speed (KTS), Tons/miles, SFOC (g/bhph), slip (%), HFO (MTs) can be viewed on clicking on individual parameter after selecting other options from the drop down menu.

Below you can see the graphical representation of the above mentioned parameters.
iii) Emission:
This report is generated to help you to analyse the level of various gases released by the vessel namely NOX, CO2, SOX & EEOI Emission.

Similar graphical reports are generated for other gases:

IV) Distance & Consumption:
Consolidated report to overview distances, steaming time, consumption & other:

STEP 1: select values from the drop down

STEP 2: select values from the time field:
STEP 3: you will see a search timer on the screen like this:

Similarly the reports can be viewed for other parameters as well.

V) Voyage reports:

Contains leg summary report about consumption & performance report, steaming performance for the vessel, combined charts & Avg consumption report for laden and ballast.

The voyage report is generated by following the following steps:

Step 1: login<<performance & analysis <<click voyage reports
Step 2: select the data from the drop down panel.

Step 3: click on the time field as per your requirement.

Step 4: the report is now generated:

The entire summary can be viewed, kindly scroll down on your screen to see more reports:
### VOYAGE COMPLETE LEG SUMMARY

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vessel Name</td>
<td>Riverside</td>
</tr>
<tr>
<td>Voyage No.</td>
<td>56-14</td>
</tr>
<tr>
<td>Voyage Type</td>
<td>B</td>
</tr>
<tr>
<td>Departure Port</td>
<td>ROTTERDAM</td>
</tr>
<tr>
<td>Date/Time of Departure</td>
<td>01/23/2015 01:24</td>
</tr>
<tr>
<td>Port of Arrival</td>
<td>SKAGEN</td>
</tr>
<tr>
<td>Date/Time of Arrival</td>
<td>01/24/2015 14:54</td>
</tr>
<tr>
<td>Total Cargo Onboard</td>
<td>0</td>
</tr>
<tr>
<td>Lost/Three Cargoes</td>
<td>1) JET A1</td>
</tr>
<tr>
<td></td>
<td>2) NAPTHA</td>
</tr>
<tr>
<td></td>
<td>3) DFC CONDENSATE</td>
</tr>
</tbody>
</table>

Screenshots of some more reports:
VI) Periodical Data:

Port consolidation report for quarterly/yearly.
Login<<performance & analysis<<periodic data
screenshots from the periodical data:
e) Selecting vessel for viewing Particulars and historic reports:

Step 1: select vessel from the Drop down for which you wish to see the data.
Step 2: click on vessel particulars to view the data.

<table>
<thead>
<tr>
<th>Vessel</th>
<th>Fair_Sea</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMO Number</td>
<td>9405057</td>
</tr>
<tr>
<td>NT</td>
<td>32798.00</td>
</tr>
<tr>
<td>Year Built</td>
<td>2008</td>
</tr>
<tr>
<td>Ship Type</td>
<td>4538323564</td>
</tr>
<tr>
<td>Flag</td>
<td>MARSHALL ISLANDS</td>
</tr>
<tr>
<td>Classification</td>
<td>DNV</td>
</tr>
<tr>
<td>Length Over All (LOA)</td>
<td>249.99</td>
</tr>
<tr>
<td>Extreme Breadth (Beam)</td>
<td>16.917</td>
</tr>
<tr>
<td>Summer Displacement (MT)</td>
<td>14.917</td>
</tr>
<tr>
<td>Min Aft draft (in mts) for Prop, Immersion</td>
<td>900</td>
</tr>
<tr>
<td>Main Engine Model</td>
<td>STX B&amp;W 6960MC-C</td>
</tr>
</tbody>
</table>

f) Sea and Port reports for the selected:

The various reports in sea & port report can be extracted in pdf format:

[Image of Sea and Port reports]

Download Excel
Other Alerts & notification:

a) Alert for not receiving any report in the last 48 Hrs.

   **Content:** NAU _shore hour system says”no reports received for more than 48”.
   **Action:** Reports are to be submitted & exported every day. In case the vessel is in port, port consumption report must be submitted every day till departure.

b) Alert for Missing Export files,

   **CONTENT:** Export no_123.zip (number is only for ref.) has not been received.
   **ACTION:** the following action should be taken in case of export missing:
   1. How to Resend?
      Click on send & Receive tab<<go to sent item<<click infront of the missing file<<click send again button.
      *do not regenerate Zip, but send again.
      OR
   2. Alternatively: hosted computer C drive<<inetpub →NAU → Queue folder →Outgoing_Archive<<select the desired file, copy/attach & send on –email. Please do not move the file only copy/attach & send.

c) Missing engine parameter,

   **CONTENT:** Engine daily parameter report not found for the mentioned date.
   **ACTION REQUIRED:** Proceed to manage daily Engine parameter, ensure the mentioned date’s entry exists, if not submit the report for the required date.
   **NOTE:** The number of Noon Reports and 1 EOSP Report is not equal to number of MEP Reports.
   E.g. if there were 7 noon reports +1EOSP it is equal to 8. Hence there should be 8 records in the engine parameters.
   This includes occasions when the last noon report & EOSP report fall on the same date (even if after 30 Mins of the last noon report), for such cases there must be 2 engine daily parameters report with same dates.
d) Daily email consolidated report for vessel Performance

The Daily Report provides following to the Fleet Groups at a Glance;

### Noon Report

<table>
<thead>
<tr>
<th>Vessel Name</th>
<th>Voyage No</th>
<th>Date</th>
<th>CP Normal</th>
<th>Wind</th>
<th>Position</th>
<th>Speed</th>
<th>Compr</th>
<th>Dist.</th>
<th>Speed</th>
<th>Slip %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andros_Linda</td>
<td>004 B</td>
<td>4/10/15</td>
<td>12</td>
<td>S</td>
<td>25 14:44</td>
<td>154.6</td>
<td>5</td>
<td>276</td>
<td>9.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Logik Link</td>
<td>39 B</td>
<td>4/10/15</td>
<td>-</td>
<td>NE</td>
<td>29 13:15</td>
<td>5</td>
<td>296</td>
<td>259</td>
<td>19.7</td>
<td></td>
</tr>
<tr>
<td>Andros_Centurion</td>
<td>27 H</td>
<td>4/10/15</td>
<td>13.5</td>
<td>N</td>
<td>23 16:40</td>
<td>6</td>
<td>321</td>
<td>12.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andros_Chevalier</td>
<td>1501 L</td>
<td>4/10/15</td>
<td>12</td>
<td>S</td>
<td>26 13:55</td>
<td>5</td>
<td>327</td>
<td>12.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andros_Sartorius</td>
<td>M L</td>
<td>4/10/15</td>
<td>14</td>
<td>NE</td>
<td>164 09:10</td>
<td>4</td>
<td>341</td>
<td>13.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

End Document

---