

Configuration of the Axis Hydrocarbon Accounting Solution.

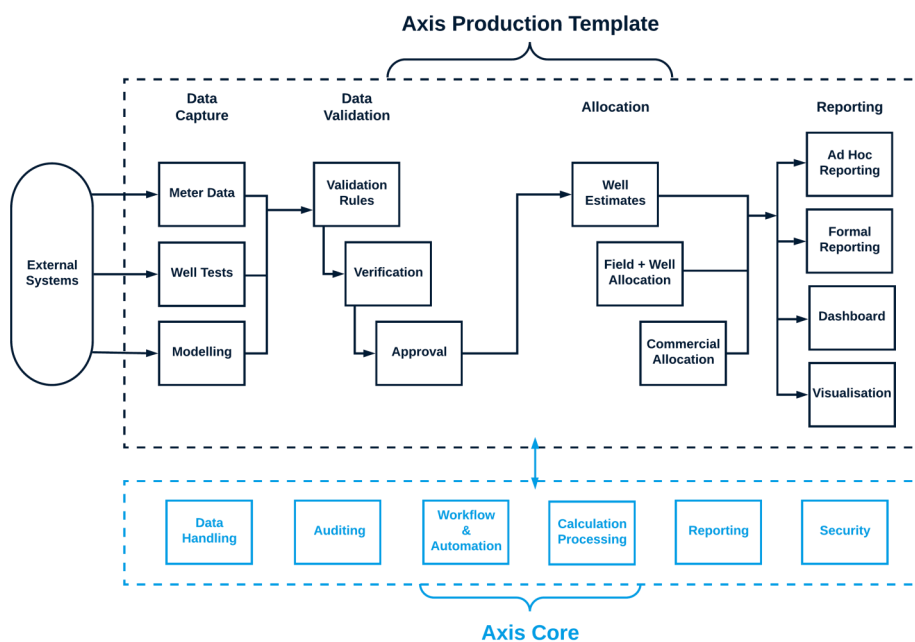
Fully configurable hydrocarbon accounting.

Hydrocarbon accounting is a business-critical function, but one which presents a particular challenge, since each operator's requirements are unique. There is no "one size fits all" solution for hydrocarbon accounting. For this reason, operators need a system that can be configured to their exact requirements. And for maximum flexibility, it needs to be fully configurable by end-users, or by an independent system integrator.

Axis has hydrocarbon accounting expertise built-in.

Axis is based on a technical design that enforces a true separation between Axis Core, which contains the generic functionality required by all hydrocarbon accounting applications, and Axis configurable templates, which implement functions specific to each business area.

Our portfolio includes specific Axis templates tailored to meet the business requirements for oil production allocation (Axis Production), oil storage and offtake (Axis Tanker), commercial gas management (Axis Gas) and liquefied natural gas processing (Axis LNG).

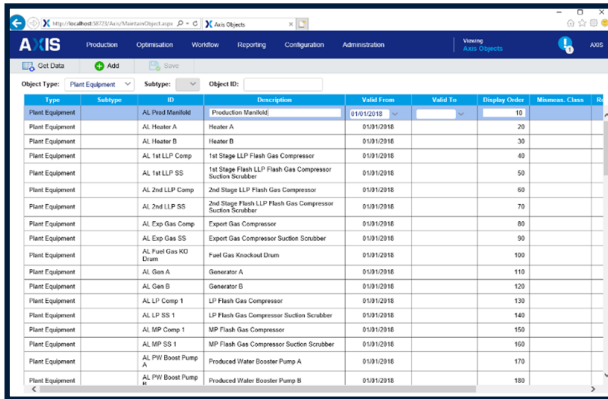


Axis Production

The efficient Axis design enables rapid implementation.

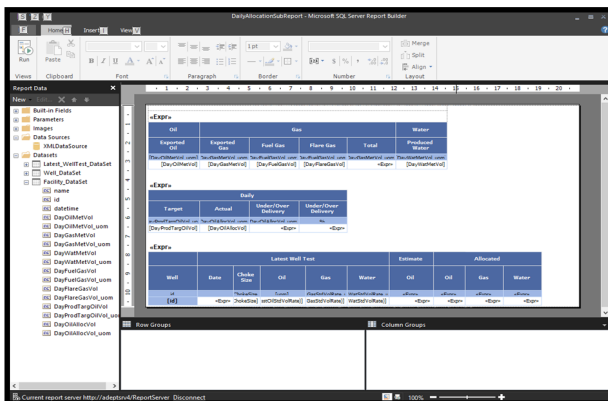
Time and again, Axis has been successfully implemented to meet unique and complex requirements. It is consistently delivered in timescales much shorter than the industry norm.

To achieve these outcomes the Axis templates are configured to match to a client's requirements. Data Objects, Screens, Calculation Processes and Reports can all be configured. Each of these configuration tasks can be done by Adept; by the client themselves or independently by a 3rd Party System Integrator.



Type	Subtype	Description	Valid From	Valid To	Display Order	Minimum Class
Plant Equipment	AL Prod Manhole	Production Manhole	01/01/2018		13	
Plant Equipment	AL Heater A	Heater A	01/01/2018		29	
Plant Equipment	AL Heater B	Heater B	01/01/2018		30	
Plant Equipment	AL 1st LLP Comp	1st Stage LLP Flash Gas Compressor	01/01/2018		40	
Plant Equipment	AL 1st LLP SS	1st Stage Flash LLP Flash Gas Compressor Section Scrubber	01/01/2018		50	
Plant Equipment	AL 2nd LLP Comp	2nd Stage LLP Flash Gas Compressor	01/01/2018		60	
Plant Equipment	AL 2nd LLP SS	2nd Stage Flash LLP Flash Gas Compressor Section Scrubber	01/01/2018		70	
Plant Equipment	AL Exp Gas Comp	Export Gas Compressor	01/01/2018		80	
Plant Equipment	AL Exp Gas SS	Export Gas Compressor Section Scrubber	01/01/2018		90	
Plant Equipment	AL Fuel Gas KO Drum	Fuel Gas Knockout Drum	01/01/2018		100	
Plant Equipment	AL Gas A	Generator A	01/01/2018		110	
Plant Equipment	AL Gas B	Generator B	01/01/2018		120	
Plant Equipment	AL LP Comp 1	LP Flash Gas Compressor	01/01/2018		130	
Plant Equipment	AL LP SS 1	LP Flash Gas Compressor Section Scrubber	01/01/2018		140	
Plant Equipment	AL MP Comp 1	MP Flash Gas Compressor	01/01/2018		150	
Plant Equipment	AL MP SS 1	MP Flash Gas Compressor Section Scrubber	01/01/2018		160	
Plant Equipment	AL PW Boost Pump A	Produced Water Booster Pump A	01/01/2018		170	
Plant Equipment	AL PW Boost Pump B	Produced Water Booster Pump B	01/01/2018		180	

Objects such as platforms, fields, wells, meters are configured using the Axis Objects Screens.



Oil	Gas	Fuel Gas	Water
Expended	Expended	Flare Gas	Produced Water
Target	Actual	Unburnt/Over	Unburnt/Over
		Delivery	Delivery

Well	Estimate	Allocated
Oil	Oil	Water
Water	Oil	Water

Reports are created using the Microsoft SSRS report tool.

Find out more.

Check out the short video introduction to Axis Production on YouTube

<https://www.youtube.com/watch?v=yuS5PwcfXo>

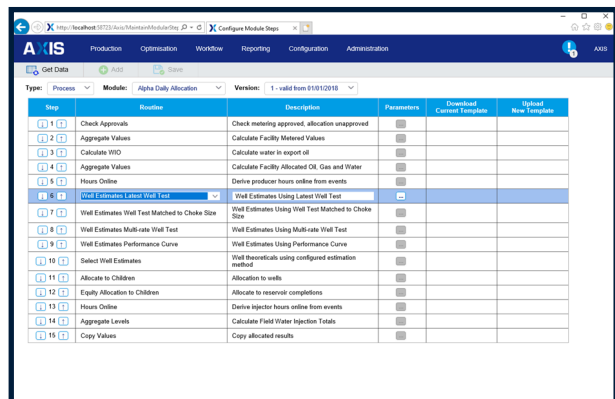
Contact.

Steve Penman—Client Director

steve.penman@adeptsolutions.co.uk

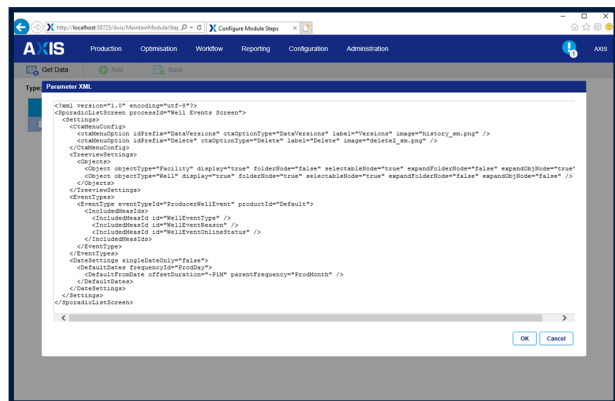
Adept Solutions, Citypoint, 11 Chapel Street Aberdeen, AB10 1SQ

Tel: +44 (0)7841 602477



Step	Module	Description	Parameters	Download Custom Template	Upload New Template
1	Check Approvals	Check meeting approved allocation unapproved			
2	Aggregate Values	Calculate Facility Metered Values			
3	Calculate WRO	Calculate water in export oil			
4	Aggregate Values	Calculate Facility Allocated Oil, Gas and Water			
5	Hours Online	Derive producer hours online from events			
6	Well Estimates Latest Well Test	Well Estimates Using Latest Well Test			
7	Well Estimates Well Test Matched to Choke Size	Well Estimates Using Well Test Matched to Choke Size			
8	Well Estimates Multi-rate Well Test	Well Estimates Using Multi-rate Well Test			
9	Well Estimates Performance Curve	Well Estimates Using Performance Curve			
10	Well Reservoirs using configured estimation method	Well Reservoirs using configured estimation method			
11	Select Well Estimates	Allocation to wells			
12	Allocate to Children	Allocate to reservoir completions			
13	Hours Online	Derive injector hours online from events			
14	Aggregate Levels	Calculate Field Water Injection Totals			
15	Copy Values	Copy allocated results			

Calculation Processes are configured using Axis Modular Processing steps. Processes are created using Axis built-in functions; Excel calculations or Web Services.



```
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  <steps>
    <step id="1">
      <name>Check Approvals</name>
      <description>Check meeting approved allocation unapproved</description>
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    </step>
    <step id="2">
      <name>Aggregate Values</name>
      <description>Calculate Facility Metered Values</description>
      <parameters></parameters>
    </step>
    <step id="3">
      <name>Calculate WRO</name>
      <description>Calculate water in export oil</description>
      <parameters></parameters>
    </step>
    <step id="4">
      <name>Aggregate Values</name>
      <description>Calculate Facility Allocated Oil, Gas and Water</description>
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    <step id="5">
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      <description>Derive producer hours online from events</description>
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      <description>Well Estimates Using Latest Well Test</description>
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    </step>
    <step id="7">
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    <step id="8">
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    <step id="10">
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    <step id="11">
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      <description>Allocation to wells</description>
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    <step id="12">
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    <step id="15">
      <name>Copy Values</name>
      <description>Copy allocated results</description>
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    </step>
  </steps>
</process>
```

Additional Screens and menu functions can be created via an XML driven interface.