# Demo overview notes

**C**apability going to use:

**Visual Analytics**, reporting & exportation environment

* Web based
* Scalable
* Fast, easy development environment
* End user focused
* Share results with others

**Enterprise guide:** analysts tool, may want to manipulate data, add in additional information

* Perform more detailed Analytics
* Integration with office capabilities

**VA HUB:**

* Description of the hub and capabilities..
* Select JN\_QLA\_Report – view mode
* Front screen – links to tabs, other reports and analyses

**Dashboard tab:**

* + High level view of all test results, summarised to show which tests have broken any SPC rules , can select product and also individual parameters tested
  + Allows us to understand if there are any issues that need to be investigated
  + Can see issues in Feb & May for Product B and in May for Product A

**Standard Tab:**

* This tab allows you to see standard reports, so you can see if there are any specific issues that need addressing
* If we consider
* **Product B and Parameter: Attribute 2:** 
  + **For 11th – 25th June**, we can see that the value is well below the lower limit expected for batches 194, 198 and 202
  + If we swap to attribute 3 we can see that its values are higher than the expected average for these batches, we know these attributes are linked so it looks like we could amend the process to lower attribute 3 values and hence bring up the values for attribute 2.
  + So we can easily investigate potential interactions between parameters
  + Can see any measure that I want
* If we now consider an earlier time period for product B
* **Product B, staying with Attribute 3** 
  + But looking at **1st-28 February** now
  + Can see dips in value for batches 34, 43 and 55, but if we flip to attribute 2, there is no obvious issues here. However if we stay with attribute 3, we can consider the impact of other factors
  + Double click on the ‘no of batches’ value in the table to be taken through to the ‘interactions’ tab

**Interactions Tab:**

* Here we can see, the plots split by a number of factors,
  + the lab where the tests were carried out
  + the manufacturing line
  + and the lab analyst
* When we look at the lab analyst we can see there seems to be an issue with analyst 34. Maybe there is a problem with their test equipment or a training issue

May want to investigate issues further and we could do this using VA Explorer, use link from front page of report or via the hub

**QLA Exploration:**

**This has visualisations already created if you want to use them, detailed below are how**

* Show auto chart capability, using batch and then date, then forecasts
* Filters on product, parameters
* Lets investigate **Product B, attribute 3** further – create filters
  + Select Line chart, drag on **value, upper and lower limit by batch**
  + Filter on 1-28 Feb
  + Add **lab analyst as lattice column**
  + This shows an alternative way of looking at the interactions
* Lets know consider, start a new visualization and select box plot,
  + create filters for **Product B, Attribute 2**  and also date: 11-24 June
  + category = Batch,
  + measure = value
  + lattice rows = mfgline
  + this allows us to again look at interactions
* if we want the data to highlight the important factors than could use the decision tree capability, an example of this is in the explorations
* also talk about use of drill down, example exploration has been created for this
* This data doesn’t really lend itself to scenario analysis or correlations, so want to use generic data

**QC based analysis:**

* As VA doesn’t support SAS/QC capability, EG is used to illustrate this capability and then the stored processes are accessible from the front screen of the VA report.
* They could also be run within EG and office
* Enterprise Guide – explain interface
* QC process flow, shows how we can create the specific QC charts that may be required and how the output from this can be used to feed the dashboard tab of VA ( which batches have failed the different SPC tests)
* It was also used to create the stored processes – just need to talk to this
  + Discuss use of prompts
  + Packaging up analytical capability etc
* Open the 2 stored processes that have been created

**Scatter plot:**

* Select Product A, attribute 1, time period 1-23rd may, with additional factor – Input

**XR chart:**

* Select Product B, Attribute 3, time period 1-28 February, additional factor – Lab