**MUG UK-Ireland User Group Meeting, June 6th, 2018**

**Data Management Q&A**

**SRO Solutions LTD**

1. What is the level of Reliability of migrating configuration and customisation via Data Migration tools?
   1. Best Practice would be to either use Migration Manager to move from a development system into test / production systems
   2. Alternatively the customisation or configuration can be created directly in Maximo
   3. The data Migration tool should be used to only migrate data
2. What are the key data risks in moving between Maximo versions?
   1. Utilising the SRO Data Upgrade (SDU) tool will minimise risks, as the tool has been designed specifically to migrate data between versions of Maximo, and thorough tests have been taken, with the tool being used multiple times over the past 10 years
      1. Standard Maximo mappings have been created and tested to ensure accurate data migration from source to target
      2. Note that for each additional custom table or attribute that exists, mappings will need to be created accordingly, and thorough testing will need to be conducted
   2. For systems that have large amounts of custom tables and/or attributes, risks can be minimised by following a process of creating dummy data in the target system, logging each table that has had data written into it, then ensuring that the associated mappings take into account all of the data that has been written
3. What are the key points for ensuring Data is useful?
   1. Consider whether there are any reports / KPI’s that require the data to be present
      1. If there are any such reports, then ensure that the report is still valid / required by the business
   2. Find out if there are there any Rules and Regulations that require data to be available in a Live system
   3. Do not simply assume that because the data is “old” that the data will not be required – engage with Senior Management, thus ensuring that you have Management buy-in prior to making any changes
4. Are there any recommendations for Tools / Processes for Data Retention?
   1. Process: ensure that you look at any specific Rules or Regulations to ensure compliance
   2. Tools: Utilising the SDU tool allow for data cleansing / archiving / retention
      1. Rules would need to be created depending upon criteria as approved by the business
      2. The source database would then be retained as an archive
5. Archiving Tools / Best Practice for Data Archiving
   1. Using the SDU tool, a workable proposal would be to create a clean version of Maximo (which contains exactly the same configuration / customisation) then migrate the data from the original, create a series of mappings to then restrict the data according to a rule-set that is agreed, then load into the new Maximo system – this way only data that agrees to the rules would be migrated
      1. Proper analysis would need to be done to ensure that you have Business buy in
      2. Ensure that you have proper testing processes in place
   2. Typical types of cleansing would be to look at records in a status of COMP / CLOSE, or data that is older and not required anymore
6. Roughly how much percentage-wise should be devoted to Data Migration activities when compared to Configuration activities
   1. This would largely depend upon the quality of the data and how much cleansing / archiving would be required – and also if it is Maximo Upgrade (e.g. 7.5 – 7.6) of if from a New implementation from a legacy system to Maximo
      1. Maximo Upgrade
         1. If the data was known to be “clean” and the likelihood was that minimal additional mappings would be needed, then Data Migration should be roughly 25% of the Config activities
         2. If the data is known to be poor and the likelihood is that lots of additional mappings would be needed, then this should scale up to 50% - or perhaps even more
      2. New implementation from a legacy system to Maximo
         1. If the data was known to be “clean”, then Data Migration, which would entail building up each table mapping should be at least the same as the Configuration activities (100%)
         2. If the data is known to be poor and the likelihood is that lots of data cleansing is needed, then as well as building up each table mapping, there would be a need to have additional scripts to clean, then this should scale up to 150% - or perhaps even more
         3. The timeline on this should be seriously be considered – it takes a considerable amount of time and effort to get this right and to test thoroughly
7. Moving from custom system to Maximo – what is the best practice regarding the Data Structure
   1. SRO’s ETL Tool SDU, which was developed for Maximo Upgrades, can be reconfigured to take data from multiple sources (databases / Excel spreadsheets / etc…), mappings are then created for each Maximo table, with the ability to cleanse and archive data as needed
   2. Suggestion that a Business Analyst with a good knowledge of the source systems is used to assist in the process
   3. Note that this is a major undertaking, and a significant amount of time (and cost) will be required
8. How best to maintain Data Quality post project
   1. When setting up Maximo, best practice would be when possible for Domain lookups to be used, or links to associated tables – thereby ensuring that users select from a lookup as opposed to free text
   2. Ensure that required fields are set as mandatory
   3. Simplify the screens for the end users – grey out or preferably hide unwanted fields on each screen
   4. If there are too many optional fields for the user to fill in, very often either none will be populated, or poor data will be inserted
   5. Maximo allows for configuration to be done after a project has been completed, so spend time analysing what is being used well and what is not
   6. Discuss with the end users and look to see if improvements can be made to the system thereby improving buy in
   7. Bottom line is to keep things as simple as possible for the individuals who are using Maximo
9. How do you get people to buy into Change of Data when they say that Reports / KPI’s are linked to it, so it’s too much work to do
   1. The key thing here is Business Criticality – if it’s not critical to the business, then there are possibilities to make changes
   2. To assist in this process, you need to ensure you have Senior Management buy in, then the business as a whole should follow
   3. Are the Reports / KPI’s required? if not then the option for changing the data is then viable
10. Are there example of good Data Management for the purpose of good System Performance – and maintenance of the system
    1. Typically this would be related to the environmental side of things by ensuring regular health checks are performed at the database level by a DBA, plus ensuring adequate CPU / memory is available
       1. IBM can provide information related to system requirements
    2. Keeping databases lean / clean should assist in ensuring decent performance within Maximo
    3. Examples of what can be done in Maximo would be to ensure that Work Order records in a status of COMP are then changed to a status of CLOSE – this can be done manually after a Supervisor has reviewed the record, or it can be done automatically with a CRON task
    4. Additionally, have a look at queries that are used when pulling data into the list tab of applications – have a SQL expert look at the queries to ensure that they are properly structured, look at indexing on the database, etc…
11. GDPR Best Practice
    1. IBM have released a small add on for removing person data from Maximo systems to help clients comply with new EU GDPR rules
    2. This should then mean Maximo is compliant with GDPR regulations – however it is of course advisable to check with your Data Protection Officer