Rodney Interview – Tauranga Software Test Professionals Meetup - 8th August 2023

- Hi Rodney. Thanks for taking on the commitment to talk to the community about the Risk Based Approach that Tauranga City Council is taking for your SAP-based based testing. Before we get into the details, can you tell us about yourself. What is your role and how long have you been at Tauranga City Council?

  No problem, hello everyone my name is Rodney I am the senior Test Analyst at Tauranga City Council I have worked at Tauranga Council for 10 years now I started in the Helpdesk and Network infrastructure teams for the first 3 years then moved into Testing for the last 7.

- Awesome. Thank you. And what about Tauranga City Council – what can you tell us about what Tauranga City Council do?

  We serve our community by providing a range of services such as Animal control for the 15,219 known dogs, Handing noise complaints, Building consents applications, Parks maintenance Roading/infrastructure, Property and leasing as well as offering facilities such as the airport and library to around 155,000 residents across around 56,000 homes.

  To support all of this we have a Capital expenditure of 4.5 billon over the next 10 years based on the results of the 2021 LTP.

- Thanks Rodney. And what about the Council's use of SAP? Can you tell us a little bit about where the Council is using SAP and the history of SAP within the Council?

  Sure, we started our SAP journey in 2022 with the migration of Accounts Payable and Finance modules out of our legacy ERP Ozone with the plan to eventually move everything out of Ozone and into SAP since Ozone was very old and had a lot of limitations.
  Since then we have gone through a Major version upgrade and numerous Patches/Snotes.

  And just last month we finished our Second migration of the Property and leasing modules into PSCD in SAP.

  And we are currently in the middle of migrating our contacts into SAP and also our HR system into Success Factors.

  Then looking forward to the future we are starting works on what will be involved for moving the Rates & Property/Parcel information which will likely start early next year.

  Then everything else after that like Dogs/Build Consents/Accounts receivable etc until we are fully out of Ozone.

- Sounds like a very extensive use of SAP. How frequently do you upgrade SAP at the Council?
  We are on the N-2 policy means that we are required to be at least 2 versions from the Latest, so we have a Major upgrade every 2 years and smaller Patches/S-notes as and when required. Our next Major version upgrade will towards the end of next year.

  Thank you. And testing? What typically has been the approach to testing and how long has it taken to complete / how many people has it required and what impact has it had on the business?
  The approach we have typically taken has been a risked based one trying to focus effort and resource on high-risk items that could have a financial or reputation impact or business critical processes this can be done either at a breadth or a depth method depending on the project/deliverable.

The time is takes to complete can vary depending if it is an upgrade or a Patch typically Major upgrades will go through several Test Phases like System Testing / UAT Where each phase will typically run from 2-4 weeks.

Again how many people depends on the Scope of type of release Systems testing is Handled within our sprint teams which normally consists of around about 9 people give or take where UAT is handled by the business which often involves a lot of people from different business units, our last Major upgrade involved around 25 users from the business.

- What have been some of the concerns with the approach and work effort involved with the SAP testing.

The biggest concern we typically have is trying to get all the testing completed within the given time frames and resource and on top of that the flow on impact on the business especially around UAT taking them away from their BAU workloads.

- I understand that Tauranga City Council looked at options for reducing the scope of testing for SAP – without impacting the risk of not testing the key areas. Can you tell us what Tauranga City Council have done in this area?

Historically have had our SAP support vendor do some analysis on the impact of Major version upgrades and give us back a report on their findings and suggested areas that we should focus on.
And on top of that we have also purchased LiveCompare to help identify areas that we should prioritise our testing effort on.

You mentioned SAP LiveCompare. Can you tell us what it does and how it works?

We have used LiveCompare for both Major upgrade and Smaller patches /technical upgrades or snotes.

There are a lot of things it can do and we are still on a learning journey however our main use of it at the moment is to do analysis on the impact that the Change will have on our SAP system.

We do this by running Smart impact analysis reports which basically means we can load apply the changes to one of our Dev/QA environments then run a report that will analysis the transports used in Dev/QA against our production system and return back a report that will show us the impacted Apps/Functions/Tables etc and associate a Risk to each item based on stuff like How much change has occurred, how many other objects does it touch, how often is it used, is it a business critical process etc and the results will either be High/Medium/Low.
Then along with this it can scan your Testcase repository and return back a list of tests that are linked the impacted objects.
We then took it one step further and integrated it into our Test Tool Azure Devops to create a new Testplan with all of the identified Testcases so that we can easily know what we need to test and assign them to the team or run them through our automation framework for execution.

- How long has Tauranga City Council had SAP LiveCompare?

For just over a year now.

- What has been the impact of SAP LiveCompare at Tauranga City Council? How has it changed the approach to SAP testing? How do you use it within Tauranga City Council?

  We used it to help reduce testing scope for our last upgrade from the initial SAP deployment we had around 415 Testcases after reviewing the LiveCompare reports focusing just on the High and Medium severity items we got this down to 231 so about a 45% Reduction.

- Thanks Rodney. Without SAP LiveCompare, what do you think your testing would be like at Tauranga City Council?

  It would be a lot longer as historically we would just test everything as we wouldn't know what was actually impacted or changing with the upgrade so more time more resources more money.

- Having used tools like SAP LiveCompare, what is your view on Risk Based Testing? Is it something you would like to extend to other applications that the Council operates?

  I think in terms of value and efficiency a risk-based approach is ideal especially when dealing with large or complex projects, tight deadlines, limited resources which from personal experience is nearly every project.
  You can ensure that the effort you are putting in is testing the Highest priority items based on Risk to the business or the complexity of the change.

  I think it provides a good view of the testing phases to managers to make informed decisions if for example timelines cannot be meet or a lot of defects are found then we can provide a clear picture of the remaining risk associated.
  That's not to say it should be the only type of testing method used depending on your project but it is efficient one if you have the issues mentioned above around timelines resources etc.

- And the future of testing at Tauranga City Council? What plans does the Council have for testing and test management for the next one to 2 years?

  We are constantly working on improvements in both the way we work and tooling, we have a fortnightly test chapter meeting where we discuss pain points and work on how we can improve the process we also do TPI Next reviews to benchmark our testing efforts against our Agile Process at council again to highlight where we can make improvements.
  Trying to work on standardizing the way testing is done at council even when there might not be an actual tester within the team.

  Also, as we continue our migration into SAP and hosted services and with some major pieces coming up shortly such as moving the property and rates module I would like to continue to improve upon our automation framework to reduce the amount of manual testing efforts

  Make more use of LiveCompare to leverage off some of the additional reports.