Maintaining, Developing and Testing GIS Software - Interview with Melvin Lindsay

Carl Hancock talks to Aligned Assets' new testing and support manager, Melvin Lindsay, who explains what goes on behind the scenes in software maintenance, development, testing and debugging.

Carl Hancock: Firstly, congratulations on your new role. How are you finding it so far?

Melvin Lindsay: It's been an "enjoyable challenge" I'd say. Just prior to me taking up the role, Aligned Assets had one of their support technicians move on to pastures new so, although I'd not expected to be hands-on straight away, my background as a first line support engineer proved very useful.

What was great about doing this was that I could really get involved in the support process. I've been able to implement improvements in response times that I might not have been able to do had I simply been looking down from a management level.

Staffing issues I'd expected, but the biggest challenge has come from taking over GeoStore from Pitney Bowes Software (PBS). Although it's a well-established product, it was completely new to Aligned Assets, so there has been a lot of overtime working to get up to speed.

CH: You mention testing but just how difficult is it to achieve bug-free software?

ML: Just like Microsoft and other large vendors, we do everything we can to ensure that our software is the best it can be. However, as the software is constantly being developed and is expected to work in different environments, the reality is that sometimes things do get missed. Consequently, what's important is how quickly we can provide a workaround or even a patch to resolve an issue or bugs when they do occur.

Achieving this necessitates the whole team working closely together. The support team holds daily meetings with the developers and testers so that everyone knows what people worked on yesterday, what they'll be working on today and what issues are preventing them achieving their targets.

If something in the software changes, then the testers can update their test scripts to cover the alterations in the code. If a bug is reported to the support team, then it can be fed back to the developers.

CH: In terms of customer service, how do you ensure that the highest possible levels are maintained?

ML: Customer service is vital and, although we have contractual service level agreements, I never forget that a simple support issue to us can be of vital importance to the customer relying on our software to do their job.

Of course, we have standards for logging new issues, responses and resolving them, which we constantly work to improve. I strongly believe that the customer benefits from high levels of transparency and visibility - people like to know what's going on!

We therefore created a web portal where customers can track the current status of their issue, see who is responsible and see all correspondence between both parties. A user forum informs customers of all the latest news about relevant products and encourages liaison within the community and the sharing of best practice.

CH: Can you tell me a bit more about GeoStore?

ML: GeoStore is a spatial data warehouse, which acts as a central repository for spatial and non-spatial data. Instead of having data scattered in departmental silos across an organisation, GeoStore facilitates the storage, management and publication of all data from one place, as well as providing the option to convert data from one format to another, e.g. MapInfo Tab files into ESRI Shape files etc.

GeoStore came to Aligned Assets as part of a technology transfer from PBS in March 2013. The procedures we have in place for our gazetteer software have been copied for GeoStore and feedback thus far has been positive.

We recently held a user group webinar to ascertain users' thoughts on the product and how it might be improved. From this listening

process, we've been able to define a clear product roadmap containing the majority of the requested features. The next release will see INSPIRE compliance and a more user-friendly installation process, with larger projects such as compatibility with open source databases scheduled for subsequent releases.

CH: As a final thought, do you ever think you'd rather be out there demonstrating the finished software?

ML: No... I prefer making sure people are happy with our products and that their issues are resolved.

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