

TEST AUTOMATION USING MTM (MICROSOFT TEST MANAGER)

The client is a leading healthcare enterprise from Europe providing services to healthcare practitioners, healthcare institutions, mutual insurance organizations and government. Their expertise in e-Health integration and project management areas for healthcare IT-projects have made them the most sought after provider in this segment.

Situation Analysis

The client's application was functional and deployed at multiple sites. Since the application was running in the real-time environment, it was making manual testing naturally very tedious and highly time consuming eating up company resources.

Moreover, manual testing was challenging for two reasons – First, to ensure the perfect working of the existing application and second, for the delivery of application adhering to quality expectations set by the end users.

The on-going hurdle for the client was to ensure that the existing application does not break, and also gets delivered with the best quality. Furthermore, implementing a new feature or fix and pushing the upgrades on the production without affecting the quality of the application was a biggest challenge.

Also, since the application was available in various languages, it was important to ensure the multiple fixes do not affect the quality of the product for end users using other languages.

To avoid this, the client looked for a quick and permanent fix to this problem. To bring this vision to reality they partnered with e-Zest.

Challenges

- Transition related challenges: The test cases were written by client's team and hence understanding them and converting them to automated scripts, and at the same time meeting the deadline was a challenge.
- Knowledge transfer: Since the application was developed for different languages, it was critical to get client inputs for various languages to write the scripts. The multi-language app posed the challenge

for smooth and descriptive knowledge transfer. In this scenario, automate the scripts adhering to the timeline was a challenge.

- Sustenance challenges: Client required the scripts to be written ensuring easy maintainability with no dependency on e-Zest in future. Microsoft Test Manager tool was new to the client. To write the scripts in a way client does not find any difficulty, considering their inexperience in this tool and was a challenge.

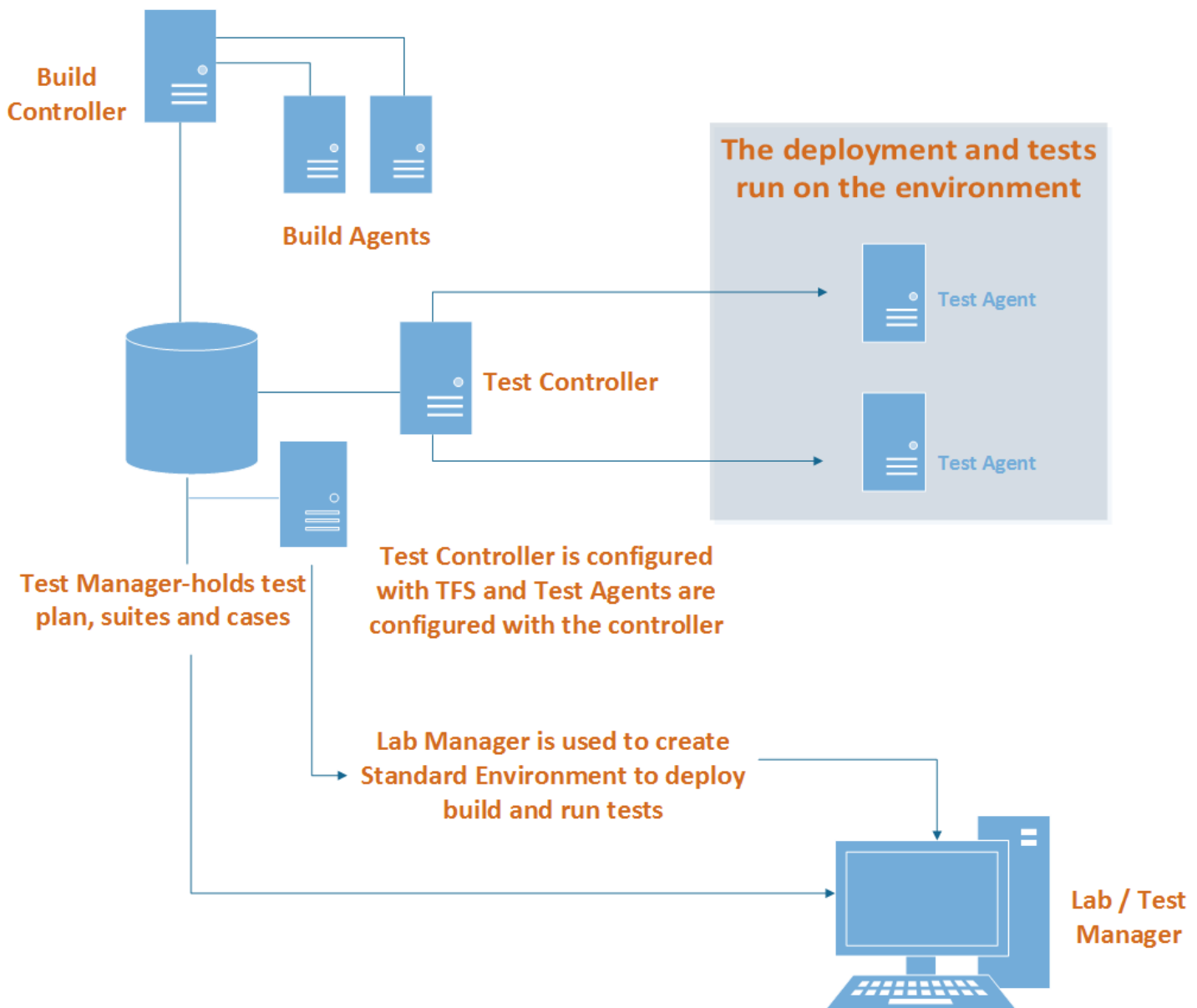
Solution

The team at e-Zest, pondered on these challenges and came out with a solution of automating the application which would fix the problem not only for now but also for the future. After having detailed study of the application environment and recent logs, our testers chose MTM (Microsoft Test Manager) as a tool to automate the scripts.

Apart from the other critical factors, what made MTM the best choice was its compatibility with .NET. As the application was developed in .NET, a Microsoft tool made a best choice. This also meant the scripts could be automated to maximum extent with lesser technical problems.

A team consisting of a test lead with experience in MTM and a senior test engineer were deployed at the client location. Their aim was to focus on automating the application and making it less error prone while in regression phase.

The objective for the team was to write scripts which would take the language as a parameter and can be executed multiple times for different languages ensuring full coverage while in testing.



Business Benefits

- Our work connected various clients' teams across their organization bridging information and data stored in various sections
- Improved client's business processes by automated workflow
- Easily manageable code helped the client to maintain the scripts in case of enhancements
- Client got a highly flexible business model wherein they could ramp up and ramp down their team based on the change requests and manageability needed towards it

Conclusion

After the scripts were automated, the task of verifying the stability whenever a new feature was deployed on the existing application became very simple and fast. Now, the only primary function was to simply turn the scripts on any environment and ensure all the scripts passed, making sure the quality bench mark is maintained.

During the project execution, e-Zest delivered value to the client by resolving their concerns and taking complete project ownership and responsibility. Furthermore, e-Zest offered a flexible business model wherein the client could expand or shrink down the team. This also covered the change requests and manageability needed towards it.

e-Zest's competence in testing delivered a highly automated workflow improving the client's business process significantly.

