
FIVE SITUATIONS THAT ARE A GOOD FIT FOR ON-DEMAND SOFTWARE TESTING (AND TWO THAT AREN'T)

On-Demand Software Testing is Applicable in these General Situations:

1. Temporary fill-in while searching for a permanent placement
2. Project rescue and/or address a temporary demand to get a project out the door
3. Small projects without assigned testers
4. Special testing requirements
5. Agile development and Agile testing

What is On-Demand Software Testing and How Does it Work?

On-Demand Software Testing is the process of quickly delivering trained, experienced and managed test engineers within one business days' notice with the result of producing daily test cases, defect reports and test plans.

1.

On-Demand Testing Prior to a Permanent or Contract Placement

The primary problem in this situation is the total amount of time and resources it takes to fill the position. The secondary problem is the amount of time it takes a new hire to ramp up and be effective. The key risk to be managed in this situation is the expected long-term need to keep this position filled.

The typical time from the moment a software testing recruiting need is identified until the person hired walks in the door for their first day of work is approximately 4 weeks.

The amount of time spent in the total recruiting process of writing and posting ads, screening hundreds of resumes, phone screening dozens of candidates, scheduling and conducting several interviews is almost incalculable – **and nobody likes it**. Additionally, hiring new talent is extraordinarily risky. All the while, the software testing need is going unmet and the project is accelerating which makes the software testing need even more urgent.

One option is to contact a staff augmentation firm. The only part of the permanent recruiting process you avoid with this approach is the writing and placement of the ad – and you still have to give the contract placement firm a detailed enough description so that they can produce

candidates. You still have to screen, phone and interview them! You may save a couple hours' time with this approach.

Another option is contact a contract recruiter. Again, this is probably not going to save you much time and the costs tend to range from very high to exorbitant. While this approach is great for executives and specialized skill sets, it is seldom efficient or cost effective for software testing.

We propose using On-Demand Software Testing in this situation. Here's why:

- Time to Hire -We can have a trained, experienced and managed Test Engineer working for you tonight and producing test cases and defects tomorrow morning.
- Time to Ramp-up -It only takes about an hour of your time to get us started producing real software testing results.
- Long Term Need – Our On-Demand Software Testing Engineers can work for you for as few as 5 days.

2.

On-Demand Testing for Project Rescue

The primary problem in this situation is the urgency and time needed to get a solution. The secondary problem is the experience and effectiveness of the software tester to solve an urgent problem quickly. The key risk to be managed in this situation is the duration of the need relative to solving the problem at hand.

Research shows that most late software projects have a sort of death spiral of features and defects. Urgency exacerbates this problem as software developers work harder and longer to fix defects and add the features committed to in the scope. This typically results in an increasing number of regression defects as new features are added quickly.

The key to halting this death spiral is prioritization of the testing activities and rapid regression testing. This results in a halt of the downward quality spiral and increases the productivity of the software developers.

Here's how it works. An experienced software testing engineer and QA manager work closely together to identify the most appropriate testing activities given the current situation, development activities and quality issues. Nightly regressions are completed along with new feature validation. Each new build brings an increasing level of stability, quality and developer productivity.

We propose using On-Demand Software Testing in this situation. Here's why:

- Urgency -We can have a trained, experienced and managed Test Engineer working for you tonight and producing test cases and defects tomorrow morning.
- Software Testing Experience – Our On-Demand Software Testing Engineers have many years of experience working across a wide variety of software projects and can bring a wealth of knowledge and best practices to your project.
- Duration of the Need -Our On-Demand Software Testing Engineers can work for you for as few as 5 days.

- Efficiency -The cost of fixing a defect increases exponentially as the defect ages. When our On-Demand Software Testing Engineers find the defects immediately, the effort and duration it takes for a software developer to fix it is decreased significantly.

3.

On-Demand Testing for Small Projects

The primary problem in this situation is filling a short-term need. The secondary problem is the experience and effectiveness of the software tester to be self-directed. The key risk to be managed in this situation is the testing methodology.

Small software projects are numerous. They range in scope from pilots or demos to quick and dirty business productivity applications to meet an urgent business opportunity. They frequently arise quickly, have a very short duration and require a substantial amount of self-direction on the part of the team.

Applying software testing to a small project is usually an after-thought – when a problem occurs.

Adding software testing to a small project can have a tremendous impact on both the quality of the results as well as the speed of delivery. Research shows that a dedicated software testing engineer can increase the quality of a software developers work by as much as 50% and their speed of delivery by as much as 60%.

We propose using On-Demand Software Testing in this situation. Here's why:

- Short Term Need -Our On-Demand Software Testing Engineers can work for you for as few as 5 days.
- Self-Direction – Our On-Demand Software Testing Engineers all come with a built-in team backing them up. The team consists of a U.S.-based QA Manager, a Team Lead/Manager, a System Administrator and a backup team of technical specialists. Additionally, each of our On-Demand Software Testing Engineers have worked on numerous solo projects and understand exactly how to deliver a full range of software testing results by themselves.
- Testing Methodology -Our On-Demand Software Testing Engineers have many years of experience working across a wide variety of software projects and can bring a wealth of knowledge and best practices to your project.

4.

On-Demand Testing for Special Technical Requirements

The primary problem in this situation is the very specialized technical skills and tools needed to solve the problem. The secondary problem is the time required to find a person with a skill, tool and experience match. The key risk to be managed in this situation is the frequency and visibility of the deliverables.

Software projects are frequently in need of very specialized technical skills and tools to address a particular software testing need. Examples include test automation, load and performance testing, cross browser/operating system matrix testing and multi-language validation.

Specialized technical skills and tools typically require several years of experience to master. Finding that person available, at a competitive wage, on the open market is quite a challenge – if they are available at all. Technical specialists tend to be rare and find a comfortable home where they can hone their skills and can be quite difficult to lure away. They seldom find themselves looking for work.

The risk with specialized tools tends to be in the validation and management of the deliverables. It is quite common to see work activity but no result for days or even weeks. In this situation, it can be very difficult to accurately measure progress and synchronization with the work of the rest of the team.

We propose using On-Demand Software Testing in this situation. Here's why:

- **Specialized Skills & Tools** -Our On-Demand Software Testing Engineers have experience with a wide variety of software testing tools. In many cases, we've already purchased a license for the tool you need and can use it for you. If you've already licensed the tool then we probably have someone experienced in its proper use.
- **Time to Hire** – We can have a trained, experienced and managed Test Engineer working for you tonight and producing test cases and defects tomorrow morning. Even in the case where a specialist is needed, we can often have them working for you the next day.
- **Frequency & Visibility of Deliverables** – Our On-Demand Software Testing Methodology produces daily results – no matter what tool or method we're using. We also bring a toolbox of commonly used tools to support this daily delivery or we can work with the software development and testing management tools that you may already be using.

5.

On-Demand Testing for Agile Development Teams

The primary problem in this situation is understanding and working within the various Agile Development methodologies. The secondary problem is managing the frequency and visibility of the results required for Agile Development to be successful. The key risk to be managed in this situation is the effective management of the regression testing without falling behind on new feature validation.

Agile Development methodologies frequently have issues with Agile Testing. The velocity and volume of work produced using Agile does not lend itself to easy testing. In fact, testing becomes even more critical in an Agile methodology. Additionally, there are more than a few flavors of Agile and each one has typically been modified to some degree to fit the culture of the development team and company implementing it. Finally, while most Agile methodologies discuss the development process in detail, seldom is regression testing addressed except to say “It should be automated”. A great idea but more than a little challenging to implement effectively – in fact, automated regression testing is worthy of its own Agile Methodology just for itself. It is not uncommon to find an Agile team where the testing simply cannot keep up with the development.

Most Agile methodologies promote the idea of very frequent deliverables – daily if possible but seldom more than weekly. Delivering software testing results on a daily basis requires a special approach to planning, management and execution – one that most test engineers are not familiar with.

We propose using On-Demand Software Testing in this situation. Here's why:

- Agile Testing -Our On-Demand Software Testing Engineers have a lot of experience with different Agile Development methodologies. We've even been asked, on several occasions, to lead a team through the process of converting to an Agile Development methodology.
- Frequency & Visibility of Deliverables – Our On-Demand Software Testing Methodology produces daily results – no matter what tool or method we're using. We also bring a toolbox of commonly used tools to support this daily delivery or we can work with the software development and testing management tools that you may already be using.
- Management of Regression Testing – Our Test Planning and Management System allows us to easily forecast and deliver the appropriate amount of regression and new feature testing so that the testing team is always in synch with the development team. In fact, our Smoke Testing Process which insures we always have a testable build, is typically one of the first things we implement.

When On-Demand Testing Isn't the Right Answer

There are two situations in which on-demand testing is not well-suited.

1. Any technology that requires deep contextual knowledge - medical devices/software, deep financial calculations, for example.
2. Any situation that needs test engineer continuity across several phases of the project. At TESTCo- we have that one pretty much handled. Our on-demand testing customers have a 95%+ chance of getting the same test engineer for each phase.

Will On-Demand Software Testing Work for Me?

We hope this article has been helpful to you and your decision process. Please contact us if you have a testing project, or just have questions.

In closing, here's what one of our On-Demand Software Testing clients said recently –

“TESTCo was crucial to meeting our testing goals and deadlines. Even though I was too busy to provide proper direction to the testing team, they were able to get started on their own, create test plans based on what I wanted and deliver results from day one. As the testing needs of the project grew, TESTCo was easily able to grow with us. They continued to build requirements themselves and they were able to manage the testing process in a way that worked for us, not against us. Bringing in TESTCo is a huge win for any software engineering project.” -Apaar