

Building*i* Brings Customers into Agile Development Process Using Skytap Virtual Lab

» Delivering business-critical software requires great teamwork from an application development team. But unless customers are also engaged in the development process, the end product is unlikely to meet expectations. The team at Building*i*, a software company that delivers solutions to actively manage real estate portfolios, has a strong customer-focused culture and a willingness to try new technology to improve its products. Building*i* recently adopted Skytap Virtual Lab for its development and test labs and discovered a new level of customer interaction was possible during their agile development process.

Situation

Founded in 2006, Building*i* is a fast growing software company that provides back office technology solutions and consulting to Fortune 1000 clients such as Microsoft, Washington Mutual and Hermanson. With 45 million square feet of facilities under management, there are high expectations for the software that Building*i* uses to manage clients real estate space. In addition to an Integrated Workplace Management Systems (IWMS) solution, Building*i* also specializes in building Web-based applications that solve real estate business needs using Microsoft® .Net. Given rapid business growth and frequent software updates, Building*i* relies on its software development team to deliver high quality software efficiently and predictably to clients.

Robert LeMoine, Building*i*'s software development team lead, was looking to move to a better virtualized platform for their software development and testing environments. Most of the developers were using virtual machines (VMs) on their individual development work stations, but this limited the ability to share environments across the team. In addition, enabling customers to access software for testing was still a very manual process which involved taking a new build and installing it on a physical server. Given the team didn't have spare hardware or manpower allocated to solve these problems, Le Moine started looking for a solution. His requirements for a new development and test lab included the ability to:

- Quickly set up and tear down multi-machine environments
- Snapshot entire systems and store them in a central library to enable more efficient bug replication by Building*i*'s regionally distributed development team
- Enable customers to access new software builds over the Web
- Minimize minimal capital outlay and administrative overhead

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» CUSTOMER PROFILE

Building*i* provides high-impact back office technology solutions to help Fortune 1000 clients actively manage their real estate portfolios.

» CHALLENGES

- Difficulty providing application builds to customers for testing
- Communication challenges across a distributed development team
- Lab capacity constraints
- Small IT operations staff

» SOLUTION

Building*i* adopted Skytap Virtual Lab as their .NET development and testing platform.

» BENEFITS

- Frequent customer user acceptance testing (UAT) using the Skytap cloud
- Reduced time to reproduce complex bugs (minutes vs. hours)
- Cut development iteration cycle time by 25%
- Improved set-up and tear-down of new test environments by 75% (2 hrs vs. 8+hrs day)
- Saved \$150K in capital expenses

» CUSTOMER HIGHLIGHTS

“As part of our development process we use Skytap Virtual Lab for staging customer proof-of-concept environments. Our customers have been impressed with the speed we can deploy new solutions and it has reduced our service/response cycle time by 25%.”

Bill Nolan, President, Building*i*

“Skytap gave us the equivalent of a SharePoint for developers. Not only does it allow us to collaborate on application builds easily over the Web, but it also brings customers into the development process, reducing our iteration times and the rework necessary due to change requests.”

Robert Le Moine, Lead Developer, Building*i*

Challenges

Le Moine initially looked into an on-site, packaged virtual lab management solution. He quickly discovered even a modest lab environment could cost well over \$150,000 in hardware, storage and lab management software, which was well beyond his budget of \$40,000. In addition, managing an internal lab would require significant IT administration which he was reluctant to add to the team's workload.

Le Moine's lab infrastructure requirements were not predictable from month to month. In some busy months, consulting projects would require significant lab resources for development and testing. In other months the team would be focused on Building*i*'s packaged software which could be handled by existing hardware. He didn't want to waste capital on peak usage hardware that wouldn't be used much of the time.

Finally, Le Moine wanted a Web-based solution so his team could isolate builds and publish them to customers. In his experience, giving customers early access to software for them to provide feedback saved hours of rework and change requests later in the development process. However, he couldn't find a simple way to achieve this goal without a costly virtual lab management application and specialized networking.

Solution

Le Moine had heard the industry buzz around cloud computing and the availability of 'virtual machines in the cloud'. "At first we explored Amazon EC2 and hoped that it would solve our problems. We loved the potential of EC2, but the fact it only offers Windows 2003 and no other Windows clients was a non-starter for our client-server solutions," said Le Moine. "In addition, the user interface was very limited and there was no workflow functionality to easily share entire application development stacks with customers or across the team."

After more research, Le Moine discovered Skytap's Virtual Lab. "Skytap satisfied all our requirements and was a fraction of the cost of an on-site solution", said Le Moine. The cloud-based delivery model was ideal for his lab environment, requiring no additional investments in hardware or software. Le Moine especially liked that he could upload the team's .NET applications unchanged into Skytap and that he could use his existing MSDN licenses for all variants of Windows. He also liked the rich, Web-based UI which allowed virtual environments to be built, deployed and shared within minutes.

"The Skytap's user interface and virtual automation features set it apart from its competitors," said Le Moine. "Everyone on the team has their own account and we can easily collaborate on application builds, regardless of where a team member is based. Replicating bugs is now much easier because a tester will just send a snapshot of an environment pointing to the issue. We use Skytap as a collaborative workspace – the equivalent of a SharePoint for developers."

Benefits

Since adopting Skytap for its developers and test lab, Building*i* has expanded usage to include customers, enabling rapid feedback on development iterations and more extensive User Acceptance Testing.

"Our developers and testers have become so much more productive using Skytap," said Le Moine. "Low value activities such as building out environments or trying to replicate bugs are a thing of the past. We can easily scale our lab based on the number of projects we are working on and these costs align with our revenue. And the best thing about Skytap is once a development build is ready for customer testing, we can just publish it with the click of a button."

Specific benefits Building*i* experienced with the Skytap Virtual Lab include:

- Deployed complete virtual lab solution in 2 days (including training)
- Saved \$150K in capital expenses
- Reduced time to reproduce complex bugs by 80%
- Cut development iteration cycle time by 25%
- Improved set-up and tear-down of new test environments by 75% (2 hrs vs. 8+hrs)
- Reduced time to deploy a customer user acceptance testing (UAT) environment from 6+hrs to a few minutes
- Facilitated collaboration across regionally distributed team using a shared virtual infrastructure

» To learn how Skytap can deliver value to your organization, contact a virtual lab expert at sales@skytap.com or call us at +1 (888) SKY-TAP8 (759-8278)