

# Fast, High-Quality Technical Support in the Cloud: **Reality** or Pipe Dream?

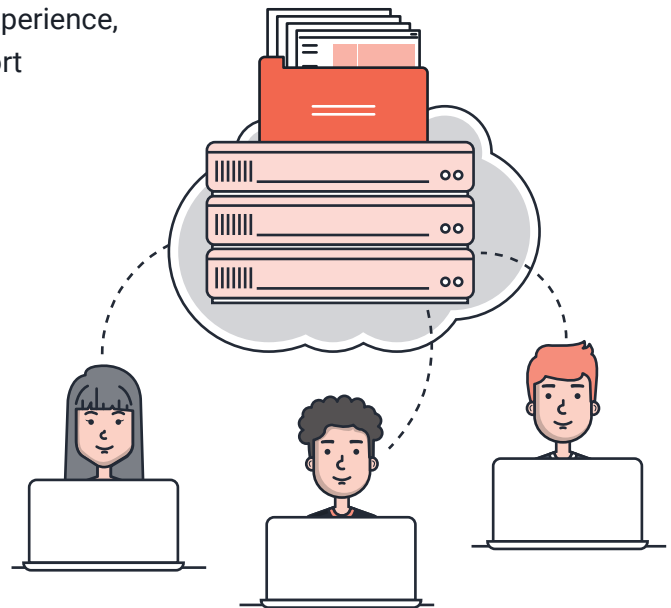


# The Critical Role of Customer Support in Customer Success

Customer support is a key differentiator in today's highly competitive enterprise software market. Because of their deep technical and mission-critical roles, technical support teams often have the closest relationships with your customers; and their results have a direct effect on customer satisfaction, experience, and retention. If your technical support service falls short of customer expectations, it can negatively affect your company's revenues. As such, many companies understand that they should focus their strategies and resources on providing quick, high-quality support to their demanding enterprise customers.

While most companies are taking advantage of cloud-based technologies to improve their help desk processes, not everyone is doing the same for their crucial Tier 2 and Tier 3 services.

**This document will address the main challenges faced by technical support teams and how the right cloud platform can solve them, maximizing the results and productivity of your technical support team and positively impacting your business.**



# While There Is a Skills Shortage, There's No Lack of Challenges

With a shortage of technical skills in the market, it is more important than ever that a software vendor's technical support team work as efficiently as possible. With the difficulty finding additional support engineers and the high cost if you do, it's important for technical support teams to make the best use of everyone's time.

Increasingly complex software products as well as the growing complexity and connectivity of customer environments, mean that software support teams face unprecedented challenges recreating issues. In fact, according to a 2016 survey by the International Customer Management

Institute (ICMI), 73 percent of customer service managers said the complexity of tech support calls is increasing as customers have become more technologically sophisticated and can resolve simpler issues on their own.

In spite of their best intentions, software support teams face major hurdles that can slow response times and consume resources before they can even begin troubleshooting customer issues. And let's not forget that these challenges are not the sole domain of on-premises software vendors—SaaS companies often face the same issues with private, on-premise versions of their products.

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Here are some of the most common challenges that can impact the productivity, speed and quality of resolutions of your Tier 2 and Tier 3 technical support teams.

## Preparing and Configuring Environments

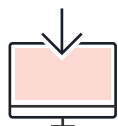
The continuously growing complexity of software products and customer environments means more and more of your support team's time is spent on non-core tasks, such as:



Re-creating an offline version of the environment for safely troubleshooting and running tests



Configuring different operating systems and third-party applications to test common scenarios



Installing the correct version of the product to be tested



Travelling to the customer sites to work on their sandboxing areas



Accurately replicating and configuring multiple copies of that environment for multiple team members

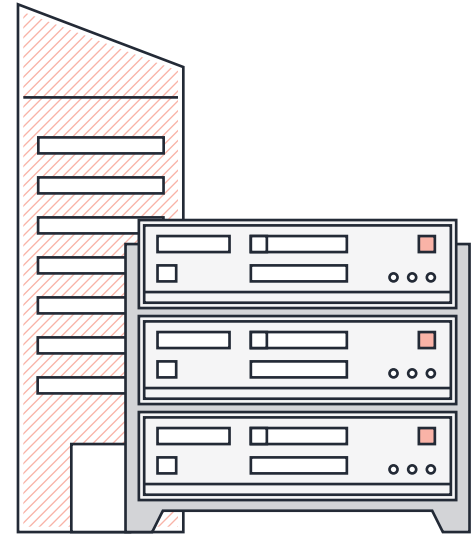
All of these non-core tasks lengthen issue response and resolution times, directly impacting customer satisfaction and the overall experience.

## Quality and Scarcity

If your support team uses on-premise labs for problem resolutions, then more challenges arise. When you have multiple physical labs, chances are they are not exactly identical as those labs keep getting manually configured over time. Hence, they “drift.” Because they are not exactly the same, some issues might appear to be resolved correctly in one lab but not in another or simply not reproducible in multiple labs.

In addition, with on-premise labs requiring expensive capital investment, you may not have enough resources for all team members to work in parallel. With a limited number of labs, engineers have to wait for others to finish their tasks before they can begin theirs. Thus another inefficient use of your team's time.

These issues impact both your time to resolution and the quality of your fixes.



## Round-the-Clock Support and Team Collaboration

Many global companies make use of globally dispersed support teams to provide localized service and to provide customers with the benefits of true round-the-sun 24/7 support. This requires close collaboration between teams.

If your teams are able to share the exact state of the issue they are working on before they leave for the day, the team in the next time zone can continue working where they left off. Conceivably you can provide remote access to your on-prem labs, but in addition to possible performance issues, what happens if someone goes off on a wrong tangent and you want to revert back to the original status? Or to revert and double test that your solution actually works?

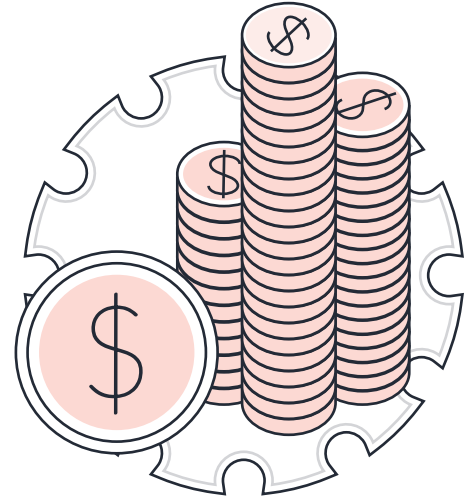
In addition, you want your global teams to be able to access and share the resources they need for testing common issues. That means not only your product versions and customer environments, but the many alternative scenarios that you commonly need to test, such as alternate operating systems (e.g. Windows and Linux), optional server components such Active Directory, and more. If these are all readily accessible and quick to spin up from any place at any time, your team gains speed and agility.



## Cost Control and Management

While not directly related to time to resolution and customer experience per se, you don't operate in a vacuum. Budgets need to be considered. This is business after all, you need practicality and ROI.

As discussed earlier, on-premise labs are expensive to build and maintain, and significant time is required to bring additional resources. Cloud-based IT labs enable you to spin up the resources you need, when you need them - without the hardware investment. But that doesn't solve all your cost concerns. You need to make sure that you can easily manage all your environments and not pay for unused resources that someone forgot to breakdown.



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So, understanding the importance of highly productive technical support teams and the challenges that must be overcome, it's now time to examine if finding an affordable and easy to use solution is realistic or merely a pipe dream.

# Software Support Teams Should Leverage the Cloud, but Not Just Any Cloud

Given the cloud's potential for virtually infinite resources available on-demand, support managers readily agree that a cloud-based IT labs solution makes sense. In fact, many begin by looking at the giant public cloud providers like AWS or Azure only to find that they cannot replicate their product or their customer environments without rearchitecting them. But if this isn't a roadblock they are often surprised by hidden costs that spiral out of control.

Here, we will explore the features to look for to make sure a cloud-based virtual IT lab solution will enable your software support teams to quickly resolve complex customer issues and gain customer trust and satisfaction while also keeping your cloud costs under control.



## Complex Networking Support

The public cloud giants were created as platforms for cloud native applications, thus they lack critical features, such as promiscuous mode support and instance networking, that enable providers of complex applications, such as cyber security vendors, to bring their applications to the cloud unchanged.

Specialty cloud providers that have been focused on helping on-premise providers leverage the cloud early and easily have built the technology to make cloud migration possible without re-architecting topologies or applications. So, if you want to truly benefit from cloud-based virtual IT labs, you need to be able to replicate your complex application and your customers' complex environments on the cloud. You're well-advised to check to see whether the complex network configurations and custom architectures employed are supported.



## Large Library of Fully Licensed Template Resources

Public cloud providers focus on providing the most up-to-date infrastructure, operating systems, and other enterprise applications and components. While this is good, don't forget that many of your customers still work with legacy systems. You want to make sure that templates are available for legacy machines and systems so that they are available for your troubleshooting needs.



## Ease of Use and Collaboration

Another import feature that is sometimes overlooked is ease of use. While it may appear as only “nice to have”, intuitive and friendly translates into time saved. Every minute your team can focus on troubleshooting instead of administrative and configuration issues adds to their productivity.

Virtual IT labs should enable your team to use pre-built templates, quickly import custom VMs and enterprise applications, and create custom templates. These should be saved in a central repository where they are always available for quick spin-up. Look for a user-friendly interface that provides easy access to machine templates, environment blueprints, and allows for spin-up of whole environments with the push of a button.

Virtual IT labs also make synergy between support engineers much smoother. The central template repository should be available to all team members who can use them to quickly spin-up environments, regardless of their physical location. Team members should be able to take and share snapshots of the exact state of a customer issue, and revert when needed. Better collaboration between support engineers increases your team's agility and speeds time to resolution.



## Cost Control

Often the cloud cost model means that you pay for what you provision, whether you use it or not. This can lead you to incur inflated cloud costs from idle environments that are left on through nights or weekends, or that are simply forgotten entirely. That’s why it’s important that your virtual labs come with cost control policies, which ensure efficient utilization of cloud resources and prevent inflated bills.

You should be able to set policies for provisioning environments only for the period of time during which they’re needed, and benefit from auto-sensing capabilities that automatically suspend or shut down idle or unused environments, so you only get charged for actual usage.



## Visibility and Management

Support managers should be able to understand the usage of their labs at all times. Dashboards and deep analytics make a difference in being able to manage environments and resources effectively and prove your ROI. If you need to get your professional services and IT teams involved to create the reports you need, chances are it won’t happen. Make sure your virtual IT labs provider has pre-built dashboards and reporting capabilities that are easy for you to use and gain the insight you need to maximize your success and prove your value.

# MuleSoft Case Study: The Reality

The provider of the leading platform for building application networks, MuleSoft, uses CloudShare to improve customer support for its global customer base.



The nature of MuleSoft's business is connecting multiple systems, on-premise and in the cloud—such as CRMs like Salesforce, ERP systems like Oracle, and other enterprise software like SharePoint.

The variety of systems that MuleSoft can connect presents a challenge to its support team, who look to reproduce customer issues in order to solve them quickly.

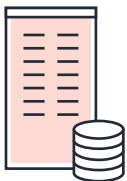
MuleSoft uses CloudShare's virtual IT labs for three main support instances:



**Ad hoc use cases**, where MuleSoft's support reps need to provision a system on the spot, whether it is just the operating system to test the RID or to provision a full system with enterprise software quickly in the cloud. The team will choose one of CloudShare's prebuilt templates or provision its own using CloudShare's VM import capabilities. The support team is able to provision entire systems in the cloud—including SharePoint, Oracle, and more—for easy testing. This allows them to quickly and efficiently connect all applications in a single environment for a multi-system solution.



**Complex configurations** when customers employ complex configurations like cluster configurations or other unique configurations. MuleSoft uses CloudShare to create templates of these complex configurations that it can configure once and reuse in the future.



**On-premise solutions** for customers with complex on-premise configurations. CloudShare allows MuleSoft to create an exact replica of each environment in the cloud and save them as blueprints. This way, when issues arise, MuleSoft is able to spin up the environment quickly, recreate the problem, and provide the customer with a solution without travelling to the customer's site or taking hours to do a full install of the system.



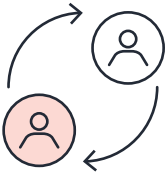
MuleSoft reports benefits including:



**Increased speed of support resolutions:** With CloudShare templates and provisioning, support reps gain access to systems much faster. **The reduced time involved in replicating systems enables reps to start on problem resolution in minutes instead of hours or days.**



**Cost control and ease of management:** By enabling environment policies out-of-the-box, CloudShare lets MuleSoft provision environments for a short time and provides peace of mind knowing that they will be automatically suspended or deleted as planned. This avoids unexpected overages and relieves MuleSoft from the need to manually manage each environment to control costs.



**Increased collaboration:** With CloudShare, MuleSoft support reps can access a central library of prebuilt and custom templates that can be spun up on the closest data center. Reps can save and share blueprints of a specific state of an environment in order to test and replicate a particular solution.



**Increased resolution quality:** CloudShare templates enable support reps to maintain exact copies of their different product versions, which can easily be reverted to their original state. If support reps modify them when trying a resolution, they can easily revert and double test their solution, providing quality control. This also keeps versions identical so additional errors are not introduced along the way.

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“Even if we use CloudShare once a week, the time savings and ROI are immense”

**Avi Karnon,**  
Senior Director of Global Support

MuleSoft's success proves that the benefits of virtual IT labs for technical support are real and attainable - not merely a pipe dream.

# Summary:

## Fast, High Quality Technical Support Can Be Your Reality

Customer satisfaction with technical support is an incredibly valuable contributor to the long-term success of enterprise software providers. However, the growing complexity of customers' software environments is creating an enormous strain on enterprise software support teams.

In order to begin the technical problem resolution process, support engineers need to create offline replicas of customer environments, on which they can troubleshoot, run tests, and break without affecting the customer's production system. As customer environments become more complex, support teams can find themselves spending excessive amounts of time (hours or even days) managing the setup and configuration of environments when they should be focusing on the main task at hand: troubleshooting and resolving customer issues.

While on-premise software support teams suffer the most from increasingly complex customer environments, SaaS companies are not immune to these same challenges. They often install private, on-premise versions of their software for institutional customers (e.g., financial, medical, and governmental clients), at which point their support teams are required to manage different versions of their software just like their on-premise counterparts.

Without an adequate solution, support teams will continue to bear the heavy burden of recreating increasingly complicated customer environments. The level of customer service will suffer, leading to decreased customer satisfaction and potential loss of clients.

Cloud-based virtual IT labs are a logical choice to help support teams and maintain customer satisfaction. They provide many advantages over on-premise IT labs including:

- Easier and faster replication of product versions and customer environments
- On demand resource availability
- Improved resolution quality
- Enhanced collaboration
- Greater cost control

However, not all virtual IT lab vendors are alike. When choosing the right virtual IT labs provider you should look for:

- Complex networking support out-of-the-box
- Intuitive user interface
- Large library of fully licensed templates for the most popular applications and operating systems
- Cost control policies
- Ease of management and insights

Take it from MuleSoft, support teams that use virtual IT labs can dramatically reduce environment setup times, providing a fast ROI even if used just a few times a week.

Talk to us to learn how CloudShare's virtual IT labs can lead your team to faster resolution times, higher-quality solutions, and increased customer satisfaction.

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## About CloudShare

Since 2007, CloudShare has been the leading supplier of virtual IT labs in the cloud, with specialized solutions designed to meet a wide variety of business needs – including training, sales enablement, and sandboxing for testing and support.

Offering unprecedented ease-of-use and efficiency, CloudShare's advanced technology and features turn cloud-based resources into true cloud solutions.

Trusted by worldwide industry leaders:

**SOPHOS**

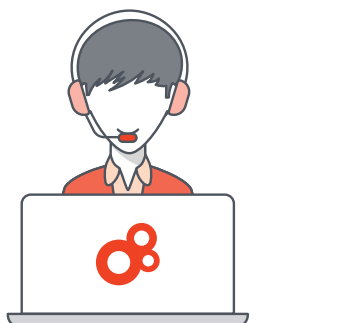
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