

Server vs. Data Center – What’s right for you?

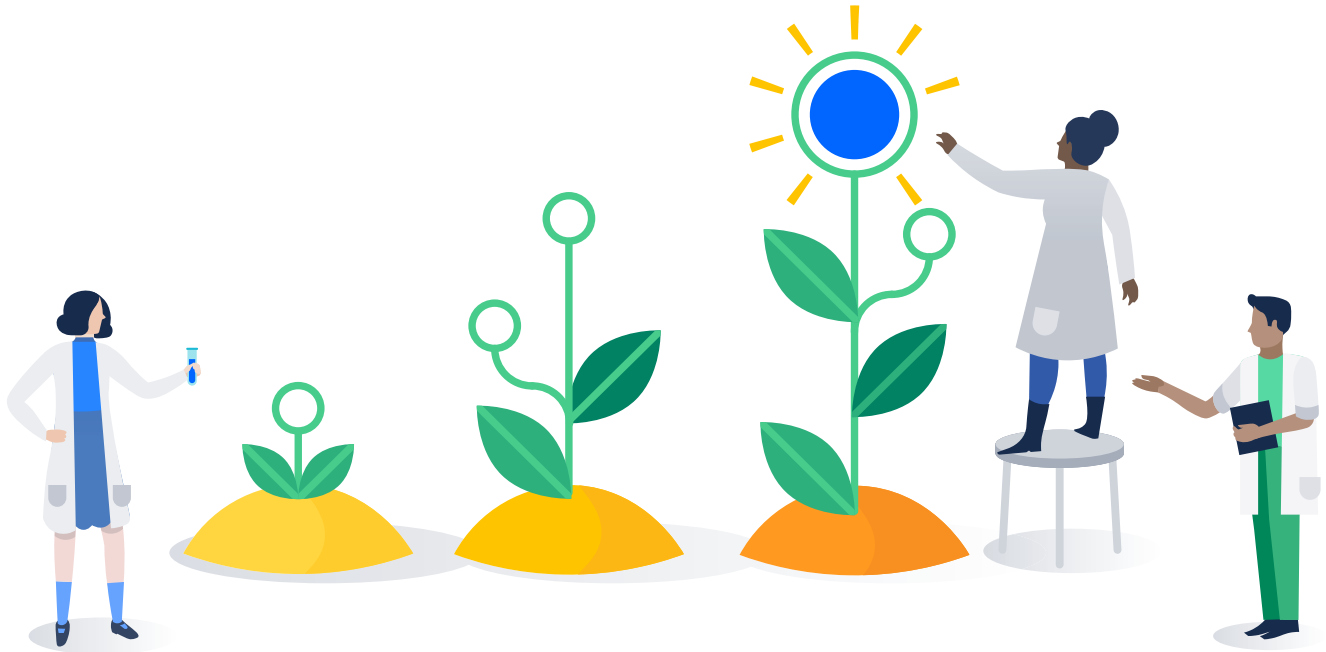


Many people choose the server deployment option for their Atlassian products because they want - or need - control over their data and infrastructure. But did you know that Atlassian offers another option for customers to deploy on their own servers?

This alternative is called **Data Center** and is designed for customers with mission-critical needs such as high availability, performance at scale, deployment flexibility, and administrative control. Read on as we explore the differences between Server and Data Center and provide you ways to determine which option works best for you.

What's the deal with Server and Data Center?

Let's start with the basics. Both deployment options provide you with control over your data and infrastructure, but what is the difference? Server runs on a single node with internalized data stores, while Data Center provides you the ability to run on multiple nodes with externalized data stores.



Who is Data Center designed for?

Many of our customers run in mission-critical environments and depend on Atlassian to get work done. For some of our customers, growth becomes too much for a single server to handle. We also notice that many of our customers are adopting more and more Atlassian products, making Atlassian even more essential to their daily work. For these customers, uptime and performance are a prerequisite. The harder it is for their users to access and use Atlassian, the slower the rate their teams are able to accomplish their work.

Atlassian built Data Center with these customers in mind.

Data Center provides organizations with a variety of key features including high availability, performance at scale, instant scalability, deployment flexibility, disaster recovery, SAML, and infrastructure control. You can deploy Data Center behind your firewall using a host of technologies like VMWare or bare metal, or you can run it on IaaS like AWS (Amazon Web Services), allowing you to reduce administrative costs of your infrastructure, but still maintain control over your data.

When should you consider Data Center?

Here's a quick checklist to help you decide whether Server or Data Center is the right deployment option for you:



Users

How many users do you have accessing your Atlassian applications each day? Is this number growing? We have found that JIRA Software, Confluence and Bitbucket customers typically need more stability between 500 – 1,000 users. 45% of current Data Center customers have upgraded to this offering at the 500 or 1,000 user tier. For JIRA Service Desk, we found that 50% of Data Center customers upgrade when they reach 50 agents. Your team's growth rate is also a good indicator of which option you should choose.



Performance

As you scale, do you still get the same level of performance? Performance degradation usually happens under high load or peak times for larger customers.

Many global companies experience this when their teams in multiple geographic locations are online at the same time. In addition to concurrent usage, other running jobs like API calls and queries, can also impact performance. Evaluate your number of concurrent users and the impact that your global offices are having on overall system performance to determine if you need performance at scale.



Downtime

Do you know what an hour of downtime costs you? We think we can all pretty much agree that downtime is unacceptable.

There are typically two primary causes of downtime: Application and Server-side. Application issues are often caused by JVM errors. Most commonly, application failure is caused when memory dedicated on the server for running the application gets too full or when the database's connection is overloaded by requests. Server disruption or crashes can be caused by a variety of things including planned maintenance, unplanned upgrades or installations, or resources such as CPU, RAM, or storage on the server being overwhelmed.

Any type of outage results in lost productivity from your employees being unable to work. It is important to consider how many of your employees rely on Atlassian products to get their jobs done and what that hour of downtime may cost you.



Administration

How are you trying to streamline your administrative processes? Some of you may be using a federated environment or trying to meet your needs on a single server. However, your job quickly becomes more complicated when your single server is overloaded or your federated servers aren't working together the way you would like. Are you spending too much time managing simple tasks like password reset requests? Our Data Center offerings aim to simplify your job by giving you the tools you need to maintain optimal performance, avoid downtime, and manage your continued growth.



Support your organization as it scales

Data Center is more than just the sum of its parts. It is a new deployment option built to continually meet the needs of organizations where Atlassian products are mission critical. Data Center is focused on supporting and continually delivering value to large and rapidly growing teams that can't afford to lose access to Atlassian.

Smart Mirroring

One example of how Data Center meets these needs is [smart mirroring](#) in Bitbucket Data Center. As development teams grow and expand, their number of repos quickly increases. For distributed teams, this can cause slower clone times between the main instance and their remote teams. Built to support the needs of these distributed and quickly growing development teams, smart mirroring makes read-only copies of repos available on a nearby mirror in a remote location, reducing clone and fetch times from hours to minutes, and giving users what they need to do their job faster.

Zero Downtime Upgrades

Another example of this is [zero downtime upgrades](#) in JIRA Software Data Center, which allows you to run your nodes in a clustered environment when they are on different versions of JIRA Software. You can upgrade one JIRA instance, while your other nodes provide uninterrupted service to your users.

As you can see, there are many factors that make Data Center a great option for Server customers as their needs grow and change over time



To learn more about Atlassian Data Center, contact your Atlassian Solution Partner today.