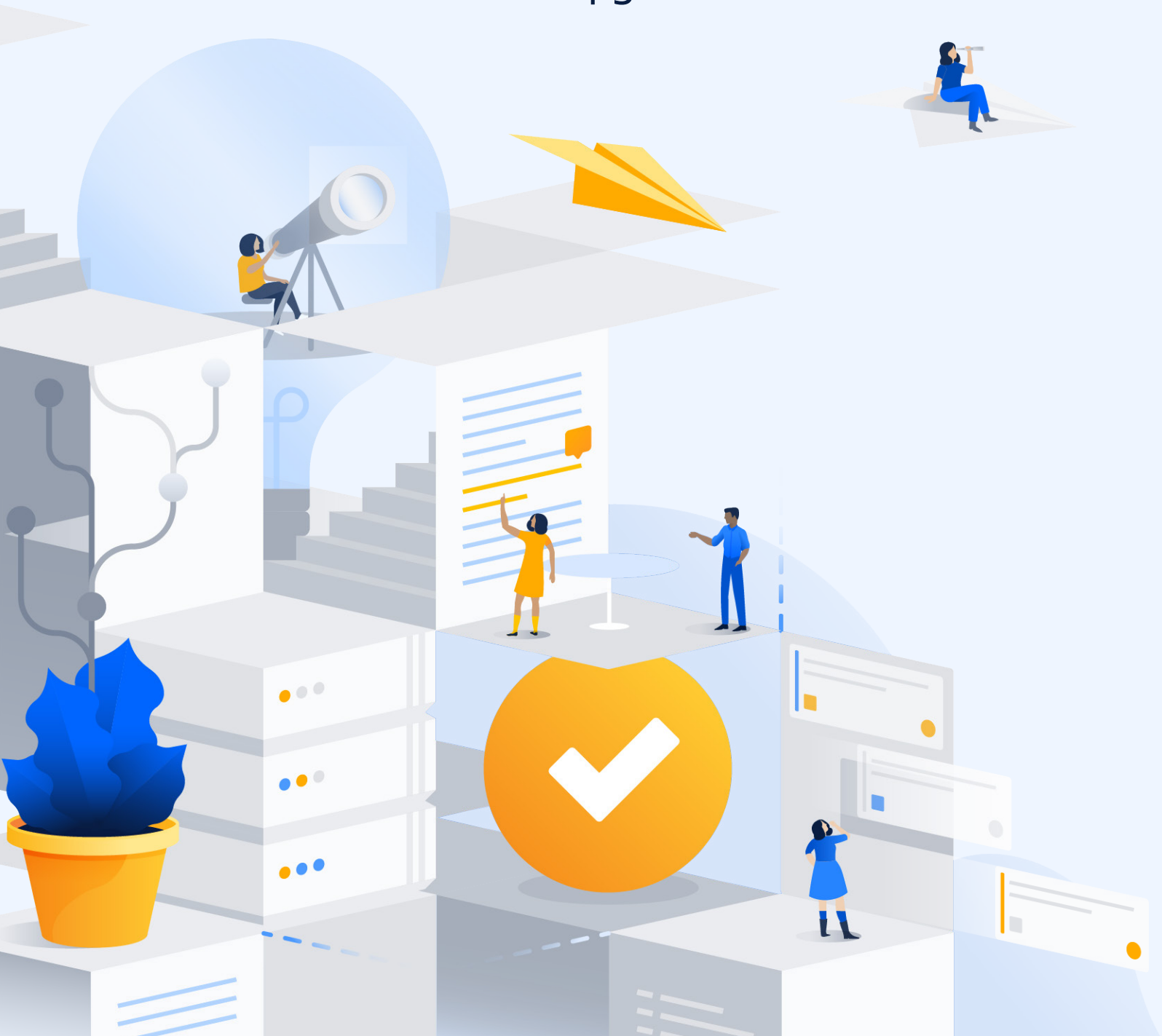# ATLASSIAN

The ultimate guide to Atlassian Data Center

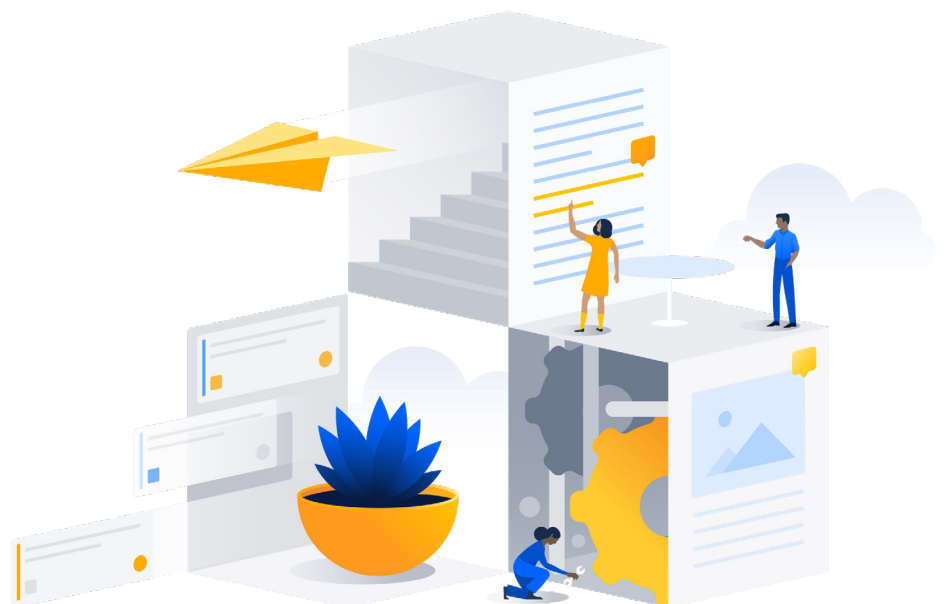From feature overview to upgrade

Introduction

As an organization, your needs and requirements change as you grow. For example, finding an enterprise-grade solution that scales may be a top priority because you have more users accessing your applications. You may already be experiencing application downtime or performance degradation and lack the ability to scale your applications. We refer to this as the "tipping point." When you've hit this point, it's important that you find a solution that not only scales to meet your user demand, but one that's reliable.

But it might not just be about scaling. Security and compliance may be your largest concern. With more users accessing your applications, remaining in compliance and being aware of potential security concerns becomes more difficult. Your organization needs something that shows how users are using your application, while also building off of industry standards and software that is already available in your tech stack.

We built Atlassian Data Center, our self-managed enterprise edition, to support you, our Server customers, in the next stage of your organization's journey. This guide will give you everything you need to get up to speed on Data Center and how it can support you as you scale. You'll get a deep dive into Data Center features and a rundown on what it takes to prepare for and successfully upgrade to Data Center.

Contents

What comes with Data Center products?

Atlassian Data Center, enterprise edition, provides features and capabilities in the following areas:

- **Compliance, governance, and security**
- **User management and controls**
- **Infrastructure and operations**
- **Scale, performance, and availability**
- **Apps and extensibility**

Compliance, governance, and security

As your organization grows, the number of regulations that your organization has to comply with increases. Data Center products help you gain insight into your organization, maintain compliance, and identify potential risks. Two key features that Data Center products offer are:

- Advanced Auditing
- Allow listing / Block listing

Advanced auditing

Bitbucket   Jira Software

Tracking and logging actions in an instance can help you demonstrate compliance, improve security, and better manage risk, while also giving your admins the visibility they need to monitor the state of the business.

With advanced auditing, you can opt into different levels of coverage (off, base, advanced, full) on a per coverage area basis. This means you can select what is right for you, your organization and it's scale. Each different logging level enables you to gain different a more in-depth insight into events that occur within your instance.

Any logs that are generated by advanced auditing are temporarily stored on your database for short term storage. Admins can quickly diagnose what's changed recently within their instances and projects. Database storage is limited by a retention period and has a cap of 10 million records so that it doesn't cause performance issues, but you can customize your database retention period.

As a long term storage solution, advanced auditing is also built with file externalization. File externalization allows you to integrate with your third-party monitoring tools, such as Splunk. Copies of your logs are then sent to your monitoring software and stored there for long term storage. This means that your team can leverage tools that you already have.

Allow-listing / Block listing

ALLOW LISTING   Bitbucket   Confluence   Crowd   Jira Service Desk   Jira Software

BLOCK LISTING   Confluence   Jira Software

Your data is valuable and requires additional considerations to make sure that it's secure. Data security isn't just about protecting it from a security threat. You also want to make sure that the correct people are seeing the data, while also reducing the number of people with access to the data who don't need to see it. With the rate limiting capability, you can develop rules around what users you want to allow access to your data by using allow-listing. You can also adjust user limits based on the roles and workflows of individuals in your organization. In Jira or Confluence, you can define which people you want to block from accessing your data.

Here are some product-specific features that we've added to our Data Center products to support your security and compliance needs:

Confluence
- Advanced Permissions
  Reduce overhead with granular permissions controls like auditing, bulk editing, and troubleshooting.

Crowd
- Delegated Administration
  Eliminate bottle necks and save time by assigning group level administrators to add or remove users to groups.

- Centralized License Visibility
  View the actual license consumption of all the Atlassian products in your environment.

- Microsoft Azure Active Directory User Filtering
  Filter users by group membership for Azure AD to reduce unnecessary license consumption and increase efficiency.

- Single sign-on support for multiple Idps
  Manage single sign-on across multiple domains.

👥 User management and controls

Users access multiple applications daily to do their job. It's critical that they are able to sign into these applications securely. As your organization grows, managing the usernames and passwords of everyone in your organization who accesses those applications becomes increasingly difficult. Data Center products support two different types of user management authentication methods:

- SAML
- OpenID Connect

SAML

Bitbucket   Confluence   Crowd   Jira Service Desk   Jira Software

Each of our core Data Center products includes support for SAML, which allows each application to connect to an IdP to provide single sign-on (SSO). To grant access to your applications or authorizations, such as verifying that users belong to the correct groups or roles, you can use either your user directory or applications. We currently perform tests with the following identity providers:

OpenID Connect (OIDC)

Bitbucket   Confluence   Jira Service Desk   Jira Software

Each of our core Data Center products includes support for SAML, which allows access to an authentication layer on top of the OAuth 2.0 authorization framework. OIDC is quickly emerging as a standard for SSO and identity provisions.

OIDC is an identity layer on top of the OAuth 2.0 framework that verifies user identities based on the authentication performed by the authorization server. This authorization gathers basic user profile information. For example, if you log on to a site and you're given the option to login using your Google account, that's OIDC. The site will contact the Google authentication server to collect your credentials.

This is different than SAML, which relies on an explicit trust between the site and the identity provider (IdPs). Let's say you wanted to use your corporate intranet to connect to Salesforce. SAML uses an XML-based standard to exchange authentication and authorization data between the site and trusted IdPs. Thus, it's independent of OAuth 2.0.

🗄️ Infrastructure and operations

You have a lot of choices to make when it comes to building out the infrastructure of your organization. Data Center products give you the flexibility you need to deploy them in an environment that meets your organizations requirements. Here are two key areas that Data Center offers infrastructure automation and flexibility:

- Infrastructure choices
- Docker images
- Amazon Aurora support

Infrastructure choices

Bitbucket   Confluence   Jira Service Desk   Jira Software

We are finding that more and more of our customers are choosing to deploy Atlassian tools using infrastructure as a service (IaaS) providers. In fact, 45% of those customers are running on a cloud provider. You have the option to deploy Atlassian Data Center using Amazon Web Services (AWS) or Microsoft Azure.

These vendors also provide a number of managed services out-of-the-box with your Data Center instance and automatically handle all the configuration and maintenance.

Docker container images

Bitbucket   Confluence   Crowd   Jira Service Desk   Jira Software

As your teams become more distributed, creating a consistent environment becomes incredibly important. Traditional software upgrades can take time and sometimes cause something in your environment to break. With container images, everything required to upgrade your application is included in the file and upgrading is as simple as a download. With Data Center, you can replicate your application nodes across any hardware by leveraging Docker container images. This gives you the flexibility to add additional nodes that match the nodes that you've already built. We maintain official container images that you can deploy in virtually identical environments across architectures — allowing you to seamlessly replicate your nodes across any of your available hardware.

Amazon Aurora support

Bitbucket   Confluence   Jira Service Desk   Jira Software

Data Center products support Amazon Aurora, a highly-available database, which provides an additional layer of resilience across your full application stack. Amazon Aurora leverages a distributed database cluster for higher fault tolerance. The increased uptime from Amazon Aurora enables a reliable experience for your end-users, optimized workflows for your admins, and durable infrastructure built to easily manage loads as your team grows over time.

Here are some product-specific features that we've added to help you manage the infrastructure of your Data Center products:

Jira and Jira Service Desk

- Zero Downtime Upgrades cluster-only
  Eliminate downtime by upgrading one node at a time - letting end users continue to work without interruption throughout the entire upgrade process when deployed in a clustered environment.

Confluence

- Read-Only Mode
  Minimize downtime and give your team access to content during maintenance or upgrades by turning on read-only mode.

Bitbucket

- Zero Downtime Backups cluster-only
  Back up your instance as frequently as you need to without locking it for maintenance or inconveniencing your users and build agents with frequent downtimes.

🔗 Scale, performance, and availability

One of the most important things that people look for in an enterprise or enterprise-grade solution is its reliability and it's ability to scale. and perform, especially as your organization becomes globally distributed. As your organization grows, that need becomes much more urgent. You can't have your applications down for extended periods of time, disrupting your team's work. To provide enhanced scale, performance, and availability, our Data Center products are built with the following capabilities:

- Clustering for high availability
- Clustering for horizontal scaling
- Disaster recovery
- Content Delivery Network (CDN)
- Rate limiting

Clustering for high availability `cluster-only`

Bitbucket   Confluence   Crowd   Jira Service Desk   Jira Software

Ensuring high availability is especially critical when your teams rely on Atlassian tools to get their work done. Incidents happen. Whether it's as a result of natural or human-induced circumstances, downtime causes productivity and revenue losses. Avoiding any potential downtime is critical to success. With Atlassian Data Center's active-active clustering model, you can ensure your teams always have access to the tools they need to do their job.

You may be asking yourself, what is a cluster? Well, in terms of Data Center, we're referring to a clustered architecture. In a clustered architecture, your applications sit behind a load balancer. You can then add multiple nodes, each with an instance of your application that can run independently if needed.

Clustering for horizontal scaling `cluster-only`

Bitbucket   Confluence   Crowd   Jira Service Desk   Jira Software

Beyond high availability, Data Center also allows you to scale. With Data Center, if you've deployed your Data Center products in a clustered environment, you can grow a cluster horizontally by adding more nodes. The load balancer routes and distributes incoming traffic across the nodes in the cluster, depending on availability, allowing the instance to support more concurrent users.

Disaster recovery `cluster-only`

Bitbucket Confluence Jira Service Desk Jira Software

Applications that help your teams run are mission-critical and you should create a disaster recovery plan for every tool your organization relies on. A disaster recovery plan describes how your organization can continue to work without reducing further interruption and who can help mitigate any further risk in the event of a disaster. With the Data Center, your team can set up cold standby instances in the event of a disaster. As long as you have an active Data Center license, you will not need to purchase additional or separate licenses to start up your Data Center products or instances on a cold standby instance.

To get started, your team will need to create a standby system without starting it up. Then, you'll need to implement a data replication strategy. Replicating data to your standby location is crucial to a cold standby strategy. You don't want to failover to your standby instance and find that it's out of date or that it will take many hours to re-index your database(s).

Content delivery network (CDN)

Bitbucket Confluence Jira Service Desk Jira Software

As the teams in your organization become more spread out as you grow, people can become geographically further away from your servers. This can cause them to experience delays when trying to load applications. Data Center supports a content delivery network (CDN). A CDN is a globally distributed network of servers that helps to minimize the delays that occur when you try to load content by reducing the physical distance between a server and your team. A CDN helps to speed up response times to different teams in your organization by distributing the static assets of these actions.

Rate limiting

Bitbucket Confluence Jira Service Desk Jira Software

An increase in the amount of incoming and outgoing traffic to and from your network can affect the stability of your system. Data Center products offer rate limiting, which allows you to control the maximum number of requests that can be sent or received. With rate limiting enabled, you can establish a better flow for your data and gain additional security protection by mitigating DDoS attacks.

Here are some product-specific features that we've added to enhance the reliability of your Data Center products:

Jira Software and Jira Service Desk

- Project Archiving
  Reduce clutter in Jira and optimize performance by cleaning out irrelevant, outdated projects in just a few clicks.

- Issue Archiving
  Improve performance and free up additional space by archiving issues individually or in bulk.

- Custom Fields Optimizer
  Scan your instance for custom fields that are hindering performance and remove their global contexts with just one click.

Confluence

- External Process Pool
  Handle memory-intensive tasks separately and minimize interruptions.

Bitbucket

- Smart Mirrors [cluster-only]
  Improve Git clone speeds for distributed teams working with large repositories by setting up live mirror nodes, which are copies of repositories in remote locations.

- Smart Mirrors Farms [cluster-only]
  Improve Git clone speeds by setting up a cluster of mirrors to cover the load in a local region when you deploy in a clustered environment.

⚙️ Apps and extensibility

Your apps are just as mission-critical as your organization's tools. If your apps aren't working the right way, then your team can't get work done. To ensure that you get the enterprise-grade experience that you expect from your apps, we do the following:

- App development and testing criteria for Data Center
- APIs for marketplace partners to build enhanced capabilities in DC apps

App development and testing criteria for Data Center

Bitbucket   Confluence   Crowd   Jira Service Desk   Jira Software

Before an app is approved for Data Center use, Marketplace vendors are required to build and test their apps to a more rigorous standard. This includes testing how they handle cache operations, whether they support required databases, if you can implement locking and availability in clustered environments, manage event handlers, and much more. Data Center apps are tested on one, two, and four nodes to make sure that they can work in a clustered environment. All test results must be submitted to Atlassian for a complete review and verification. Only the apps that have met these requirements will receive a "Data Center" listing on the Atlassian Marketplace.

> **Check out** out our Data Center app performance toolkit.

Data Center only API for marketplace partners and vendors

Bitbucket   Confluence   Crowd   Jira Service Desk   Jira Software

To help develop enterprise abilities into their Data Center apps, Marketplace vendors and partners can leverage our Data Center API. By using our API and testing their apps through our testing program, Data Center apps provide an enterprise-grade experience.

What does your team need to move to Data Center?

The only component that you're required to have to upgrade to Data Center is a database. Odds are you'd be able to use the same database configuration in Data Center that you're currently using with your Server instance. For a complete list of databases that are supported by Data Center, see Atlassian Support.

By upgrading to Data Center using just a database and the license key, you'll deploy your Data Center products in a non-clustered environment. Want to deploy Data Center in a clustered environment? You'll need a few additional components:

- Load balancer
- Application nodes
- File system

The load balancer is the first thing that your users' requests hit if you've deployed in a cluster. Requests come into the load balancer and the load balancer then distributes each request to the application nodes. Data Center supports both hardware and software-based load balancers. For both software and hardware solutions, the load balancer should be connected to the application cluster using a high-speed LAN connection to ensure high bandwidth and low latency. All software load balancers should run on dedicated machines.

Add an extra layer of protection and prevent the load balancer from becoming a single point of failure by adding redundancy to your load balancing solution. You can do this by setting up two load balancers in an active-passive configuration, using a virtual IP address across both load balancers. If the active load balancer fails, it will failover to the passive load balancer.

Pro Tip: Data Center applications assume that each user's request will go to the same node during a session. If requests go to different nodes, users may be unexpectedly logged out, and they could even lose information stored in their session. Therefore, it is required to bind a session to the same node by enabling cookie-based "sticky sessions" (or session affinity) on the load balancer. When using cookie-based sticky sessions, you can use the cookie issued by the Atlassian application, or you can use a cookie generated by the load balancer.

APPLICATION NODES

Application nodes are where the actual Atlassian application lives. Each node in your Data Center cluster must run on the same version of the application and be located in the same physical location. These nodes should be configured in a cluster, acting as one, to serve the application to your users. The number of nodes in your cluster depends on your needs and how you configure your application. Typically, we find that between 2-4 nodes are sufficient for most clusters, but use our node sizing guides to help you make the right decision.

Important Note: *Confluence requires an additional application node specifically dedicated to Synchrony, the engine that powers collaborative editing in Confluence, and Bitbucket requires an additional application node specifically dedicated to Elasticsearch, which enables code search.*

FILE SYSTEM

The shared file system is where all the underpinnings of the product are stored. This is where things like your attachments, icons, user information, apps, and source code live.

In a Data Center environment, you need to set up your shared file system as its own node. You can use any NFS based NAS or SAN program for your shared file system. Just be sure to stay away from distributed protocols like DFS, as these are not supported.

How do I upgrade to Data Center?

When you finally decide it's time to move to Data Center, you'll need to put together an upgrade plan. You'll want to front-load as much staffing, planning, and decision-making as possible to manage problems as they arise throughout the process. It's important to remember, however, that not every upgrade is the same, so some steps may not apply to your organization.

To make things easy, we've put together a reference of an in-place upgrade plan to help you develop your own.

If you're planning on deploying Data Center in a clustered architecture, check out our guide on preparing to upgrade Server to Data Center to make sure you complete all the necessary steps.

> **Check out** our Data Center migration checklist to make sure you complete all the necessary steps to upgrade to Data Center.

1 Build a project team

Enlist the right team members

One of the most important parts of upgrading to Data Center is assembling the right team as early as possible.

When assembling your team, it's important to keep in mind that every organization is like a snowflake: unique but with similar patterns. We see many different team configurations based on staff availability, skill sets, staff seniority, and organizational structure. You may find that one person can cover multiple areas of expertise, or that you need to extend your team. While there's no definitive answer to which roles and how many roles should be included, you can use this as a guide to help you determine the right people in your organization for the project.
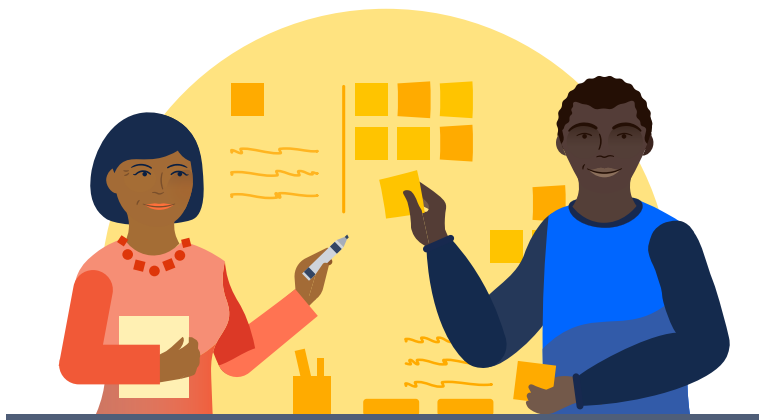
Application Admin

The Application Admin handles the day-to-day administration. They have in-depth knowledge of the product, care about performance, reliability, and evaluate and maintain Marketplace apps. They may also work closely with end users to understand their needs and provide assistance or training.

Deployment responsibilities

- Verifies functionality and performance during testing to ensure that the Data Center application is operating properly

- When upgrading, determines which apps will be included, and decides whether or not to keep apps that are not Data Center certified

- Ensures that the users and permissions are maintained, or changed, correctly throughout the transition

Sysadmin

The Sysadmin handles everything from the infrastructure to the application's interface. They are concerned with backups, storage, network, and performance.

Deployment responsibilities

- Gathers the hardware (physical or virtual) needed.

- Performs the actual installation of the Data Center application.

- Ensure that, if you choose to deploy in a cluster, that all the components are working properly. This includes configuring the load balancer, making sure that the database can connect to multiple nodes, and setting up the file system.

- Pipes logs from on-disk to log aggregator

Project Lead

The Project Lead has a deep relationship with the business and knows how and why the application is used to meet company objectives. They also know how to make the right tradeoffs to maintain governance across applications.

Deployment responsibilities

- Keeps the project on track with key milestones and estimated dates to achieve them

- Owns the schedule, ensures task completion, and resolves cross-functional issues

- Communicates project updates to stakeholders and announcements to end users

- Works with a procurement representative who performs the purchasing of Data Center

Executive Sponsor

Given the scope of upgrading to Data Center, it will be useful to have executive buy-in for the project.

Deployment responsibilities

- Ultimate decision maker in the event of roadblocks

- Facilitates budget approvals for the proof of concept and rollout on production

AREAS OF EXPERTISE

In addition to these roles, there are also some other areas of expertise you may want members of your team to cover. Depending on what products or deployment architecture you are upgrading to in Data Center, you may need some (or all) of the following:

Networking Engineering

Networking provides the connections between the different pieces of the Data Center architecture. Optimizing these connections will ensure you have a well-tuned deployment.

Database Management

Database experts ensure the database is running smoothly. They understand the complexities and tuning required to operate Data Center at scale.

Site Reliability

Site Reliability experts ensure that each application is running at peak performance. They help ensure uptime and bring systems back online in the event of an outage.

Security

It's advantageous, and often required, to test and audit your system from a security perspective. Those who have expertise in security practices will make sure that the system is safe and up to regulation.
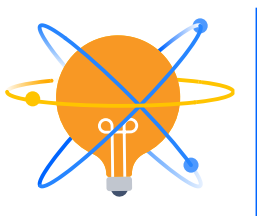
Tip: Form a steering committee. Steering committees consist of key power-users and end-user stakeholders who can provide feedback on how the product is used at the individual and team level. They can give the thumbs-up on upgrades, sign off on governance changes, or help prioritize requests for new customizations, apps, and more.

SET GOALS AND ALIGN YOUR TEAM

Once you assemble your project team, it's important to have all members aligned on the business, functionality, and performance goals for the upgrade. Aligning stakeholders upfront ensures a smoother installation, testing, and release process so that your team can confidently deploy Data Center to production.

Don't forget to agree upon a target go-live date. You may have a business initiative that requires you to be live by a certain date, or a time-sensitive budget request that requires you to make your purchase in a specific quarter. As you keep this in mind, communicate

and build your timeline based on the agreed-upon target date.

2 Review your existing Server environment

Don't forget to agree upon a target go-live date. You may have a business initiative that requires you to be live by a certain date, or a time-sensitive budget request that requires you to make your purchase in a specific quarter. As you keep this in mind, communicate and build your timeline based on the agreed-upon target date.

BENCHMARK YOUR SERVER APPLICATION

Take a baseline measurement of your system's existing functionality and performance. That way, throughout testing, you can measure the improvements you should expect from upgrading to Data Center in comparison to your original Server instance.

FINE-TUNE YOUR SERVER APPLICATION

Even if you plan on immediately taking advantage of our capabilities (like archiving and Custom Field Optimizer) to cool your instance down, you should fine tune your Server applications before you upgrade. Look at your current Server applications and take the time to identify and correct any suboptimal configurations. Spending this time early on will help set up a stronger foundation for your Data Center instance.

ASSESS AND UPDATE GOVERNANCE

How users interact with the application also affects application performance. Before deploying Data Center, assess these usage characteristics and determine whether you need to establish any restrictions on things like scripts that make REST calls or other integrations to protect performance.

REVIEW INSTALLED MARKETPLACE APPS

Using a large number of apps may degrade application performance. It's critical that you audit and remove apps that aren't crucial to system functionality to increase overall system performance. You'll also want to make sure your apps are compatible with Data Center, as your apps will need to be upgraded to a Data Center version if one is available.

If there currently isn't a Data Center version of your app, you can continue to use your Server app, but you will be required to upgrade once one becomes available.

For detailed information on marketplace apps for Data Center, see Data Center Approved Apps.

3 Document current processes

After application tuning, it's time to document your Server environment. This documentation can help guide configuration decisions in your Data Center deployment, influence process modifications, and determine whether issues found after deployment are new or already existing.

4 Evaluate technology decisions

Getting ahead of the technology decisions will speed up the design of a production-ready environment for your Data Center products that is tailored to your organization's needs. Whether you're going to deploy your Data Center products in a clustered or non-clustered environment, look at the infrastructure you're currently using to run your applications and consider if it makes sense for you to deploy on AWS, Azure, or your own hardware. If you decide to deploy in a clustered environment, you'll need to start assessing the additional components you will need, such as a load balancer, file system, and application nodes. Take a moment to determine what you have available or what you may have to purchase.

Choosing a Data Center deployment architecture that works for you

With Data Center, you have the flexibility to deploy our Data Center products in either a clustered or non-clustered environment. If you decide to deploy on a non-clustered environment, it's as simple as entering a license key because the infrastructure of a non-clustered Data Center environment is the same as your Server infrastructure. A single application node sits between your network and your database and file system. By upgrading your Server license to Data Center, you can leverage key Data Center features while continuing to use the same infrastructure that your Server applications are already using, thus reducing the amount of time and some of the additional upfront cost you would spend upgrading.

You can also deploy Data Center products in a clustered environment. In a clustered environment, Data Center products sit behind a load balancer. Each node in your cluster can operate as an active instance of whichever Data Center application you're using. If a node fails, the load balancer will automatically failover sessions and direct new requests to any remaining active nodes in the cluster. This can minimize downtime or potentially

avoid it completely. And, since there's no limit to the number of nodes you can run in a cluster, your environment can scale as your business grows and the demands on your Atlassian applications increases.

SERVER → **NON–CLUSTERED DATA CENTER**

Neither deployment option is better than the other. In both architectures, you can still access Data Center's enterprise-grade features. The deployment architecture you choose depends on what your organization needs. If you are still in the planning phases, moving to a non-clustered Data Center environment gives you access to several key features, while also giving you the opportunity to investigate if deploying in a clustered environment would ultimately be better as your organization scales. If you know your tools are mission-critical and you can't afford any downtime, upgrading your Server applications to a clustered Data Center deployment may be the right choice.

No matter what requirements your organization has, you can deploy Data Center in a way that works for you and your teams.

NON–CLUSTERED DATA CENTER → **CLUSTERED DATA CENTER**
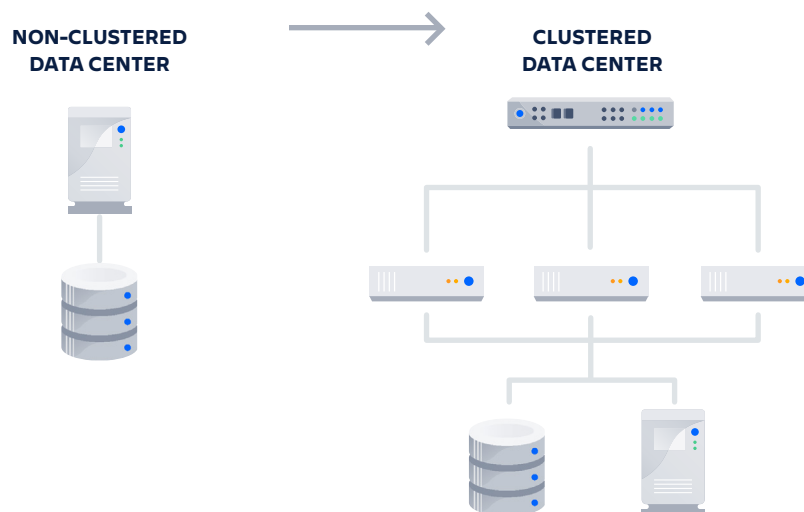
Tips on which Data Center deployment architecture might work best for you

We recommend considering the following when deciding which deployment architecture works best for your Data Center products:

Non-Clustered	• you don't need Data Center features that don't rely on clustering, such as zero time upgrades • you're happy with your current Server infrastructure, and want to upgrade to Data Center without adding any additional hardware components • high availability isn't a strict requirement
Clustered	• your Atlassian applications are mission-critical, and you require high availability and disaster recovery support • you need to access Data Center features that rely on clustering

While non-clustered Data Center is the simplest architecture option, it has some limitations. Just like a Server installation, you'll still have the application server as a single point of failure, so it can't support high availability or disaster recovery configurations.

Compared to a non-clustered architecture, clustering requires additional infrastructure, and a more complex deployment topology, which can take more time and resources to manage. You can help mitigate this complexity by deploying on public cloud infrastructure, such as AWS or Azure.

5 Implement and test your deployment process

We're done with the planning. Now it's time for action. Before you deploy, make sure you've evaluated and determined the team, technology, and other key factors we've already mentioned.

If you've chosen to deploy your Data Center applications in a clustered environment, you'll need to build your cluster before you can upgrade.

BUILD YOUR CLUSTER

It's time to build your Data Center cluster. In addition to setting up each of the various components in your cluster (application nodes, load balancer, database, file system), you also need to size the application nodes in your cluster based on your performance requirements.

We've put together some sample configurations you can reference. Atlassian does not endorse, approve, or recommend any specific vendors or configurations. These are provided as a reference. If you'd like more hands on guidance around configuring your optimal environment, see if working with a Technical Account Manager or Premier Support is right for you.

| FILE SHARE DIRECTORY | LOAD BALANCER | FIRST NODE | ADDITIONAL NODES |

INSTALL THE PRODUCT

Are the hosts for your cluster all set up? It sounds like you're ready to upgrade. Depending on what product you plan to install, we suggest you read one of the following guides:

🔷 Bitbucket   ✖ Confluence   🎧 Crowd   ⚡ Jira Service Desk   🔷 Jira Software

MONITOR AND SCALE YOUR DATA CENTER ENVIRONMENT

Finally, in order to confidently deploy Data Center to production, you should run through an iterative set of functional tests, integration tests, and performance tests to vet your Data Center installation. Be prepared for the future and take the right steps now to maintain and scale your environment down down the line.

TESTING

Testing your application helps determine whether your infrastructure is capable of supporting adequate performance levels under typical loads. You'll need to predict realistic usage patterns and load to conduct useful tests. We've created several performance testing frameworks to not only help you conduct your own tests, but also provide you insights on how we test our own Data Center applications.

- Atlassian Performance Testing Framework (Bitbucket and Confluence Data Center)
- Atlassian performance testing examples (Bitbucket, Confluence, Crowd, and Jira Data Center)

MONITORING

To keep your instance healthy, you need to monitor it regularly. To do that, you need to know which metrics to track, create alarms for critical thresholds, and make plans for when you hit them. Do it right, and your Data Center application will continue performing at an optimal level.

Every deployment is different, so we've provided you with guidelines to help you develop a performance monitoring plan that best suits your environment.

- Getting started with Data Center monitoring
- Tools for monitoring your Data Center application
- How Atlassians monitor their enterprise deployments

SIZING

After your initial deployment, it's important that you continue to assess if you're using the right hardware and configurations to support your evolution, as things change and the size of your instance grows.

Need help? We've got you covered!

Think you need additional help preparing for or during your upgrade? Don't worry, we have a number of resources available to help you out!

CUSTOMER SUCCESS MANAGER

Looking for help achieving your team goals and business needs? As a new Data Center customer, you have access to a dedicated Customer Success Manager as an ongoing resource throughout your first year. Get in touch here.

TECHNICAL ACCOUNT MANAGERS

Think of a Technical Account Manager as your strategic partner for all things Atlassian. They'll help guide your journey by providing expertise and asking the questions that you wouldn't think to ask yourself.

PREMIER AND PRIORITY SUPPORT

Atlassian Premier Support provides fast 24/7 support for any issues the team may experience during the deployment. Premier Support can also help review the current Server installation and validate whether it's ready for a move to Data Center.

Atlassian Priority Support provides mission-critical coverage for support tickets, routed directly to our most senior Support Engineers.

For the first 180 days of your subscription, we're giving you access to Atlassian Priority Support. This means when you submit a request to Atlassian Support, your high priority issues will route directly to our most Senior Engineers committed to delivering higher SLAs, faster triage, and faster resolutions.

SOLUTION PARTNERS

Solution Partners conduct hands-on system integrations, deployments, and upgrades. They'll also work with your team to customize Atlassian software to your specific needs. Solution Partners are a great option for organizations with complex requirements or are looking for onsite help. Visit our Partner Directory to find a Partner that's right for you.

ATLASSIAN COMMUNITY & USER GROUPS

The Atlassian Community has got your back! Stay connected by joining the enterprise community group, a place to share stories, tips, and best practices for using Atlassian products at scale. If you'd like to swap stories with other Atlassian customers in your area, the Atlassian User Group community has over 40,000 people in more than 30 countries! Join a local user group today!

Ready to get started?

Download any of our Data Center products today to try it for free!

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- Crowd Data Center
- Confluence Data Center
- Jira Service Desk Data Center
- Jira Software Data Center

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