Jira Data Center vs. Cloud

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Introduction

Atlassian has done an outstanding job in showcasing the benefits of Jira Cloud. The '*pros*' information is well documented and readily accessible within the Atlassian Confluence database.

This document will primarily focus on highlighting the lesser-known or often-overlooked disadvantages of migrating from Jira Data Center to Jira Cloud.

Jira Data Center – available key aspects

Data Center is used to meet unique organizational needs for those that have flexibility in choices of infrastructure and controls. Data Center is equipped with built-in features to meet complex demands and combines the powerful tools of Jira service management and software by supporting them with the following properties.

High availability

Active clustering of critical applications ensures uninterrupted access to all users. In the event of unexpected hardware failure, it uses industry-standard shared file systems, load balancing, and database clustering to minimize downtime.

Performance at scale

Nodes are added to the Data Center clusters to increase the concurrency of user capacity and improve the response rate in growing user activity.

Load Balancer

The load balancer handles the distribution of requests from the user to the cluster nodes. The critical reason for use is that it detects the failure when the cluster node is down. It automatically directs the requests to other present nodes and ensures data flow efficiency. Any load balancer can be used, but it must support session affinity.

Jira Data Center vs Jira Cloud -- Critical differences

Jira DC	Jira Cloud
Deployment and administration	
Users have full control over the database, which means complete authority over administration and customization.	Less administration for installation and configuration.
Robust admin controls to help you maintain high performance, security, and compliance in a self-managed environment	Atlassian's generic approach to all cloud customers
Can be deployed as a single node or clustered, on your own physical hardware or IaaS.	Cloud Apps are limited in power compared with Jira Server. Hardware power increase comes with a price
Upgrades	

On premises	By Atlassian Cloud's "you get what you're given" software can be really bad for some people, especially when an overnight change can be a incredibly disruptive
Direct access to the database	
Full Access	ACCESS REMOVED
Access to the Jira Logs and infrastructure	
Full Access	User does not have direct access to modify the file system, database structure, or other server infrastructure. Some access available via rest api
Cleanup features to help you optimize the data you want to bring to Cloud in the future	No access
UI	
Intuitive	A lot of users are very unhappy with Cloud's counter-intuitive UI (it seems to be dreadful for the full range of users - old hands hate it, completely new people can't find anything, and waste vast amounts of their admins time with "but where is?")
Scripting / Customisation	
Full Script runner functionality. Available file system scripting, and versioning control like gitlab	Limited Script runner functionality. All scripts are inline scripts, control is not available
Java API	ACCESS REMOVED
Powerfull custom pluging development infrastructure, allows to fully customize and control Jira, add custom REST API end points, not available in out of box Jira DC.	Mostly limited to frontend js proprietary development tool forge, involving complex setup including Docker, Node.js, *ux, forge, npm, git, vs.
Full access to Jira database programmimg, including dbase triggers, stored procedures etc.	ACCESS REMOVED
Access to file system and full set of jira logs. Access to Server settings, including connectors and valves.	ACCESS REMOVED
Full control and availability of fixing complex introduced problems.	Loosing control over groing underlying set of problems, like duplicated issues keys, bulk fixes, administratoirs- and project managers-induced errors.

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