



# Advanced Management for Tableau Server

Manage, secure, and scale  
mission-critical analytics



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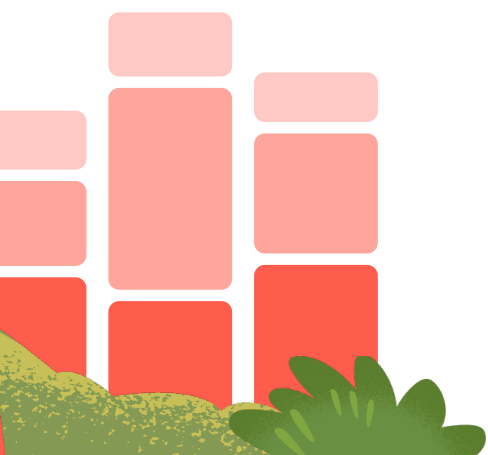


## Introduction

Many organizations are facing shifting business priorities and accelerated digital transformation initiatives, alongside increased volumes of data and the demand for it. As a Tableau deployment grows across an organization and serves more users and use cases, Tableau transitions from an application that is used in small workgroup scenarios, to a business-critical enterprise platform that is managed and governed by IT. Additional controls, security, and governance measures must be implemented to support the platform as an enterprise-wide service.

[Advanced Management for Tableau Server](#) makes it easier to manage, secure, and scale mission-critical analytics. With Advanced Management, you can proactively support the changing needs of your business, save time by streamlining the management process, and ensure the delivery of true self-service to everyone in your organization.

Advanced Management for Tableau Server is separately licensed for Tableau Server or bundled with Data Management as part of the Enterprise Subscription Plan, providing enhanced security, manageability, and scalability capabilities. The offering brings together additional cluster configuration options, agent-based cluster monitoring, and content migration capabilities to meet specific deployment and workflow requirements.

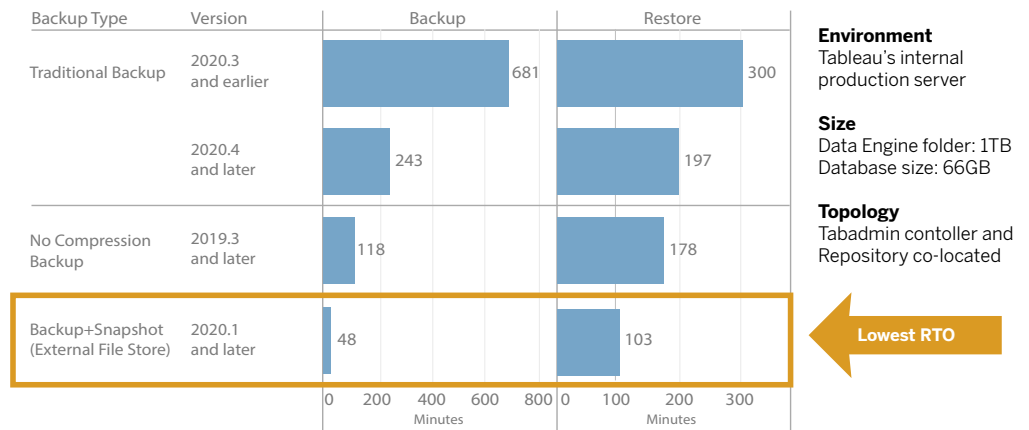


## Configuration management

Advanced Management for Tableau Server delivers deeper integration with AWS, Azure, GCP, and on-premises deployment types, allowing you to further leverage your technology investments and expertise. The table below shows the capability and corresponding cloud service or on-prem infrastructure that it uses.

|                     | AWS                       | Azure                         | GCP                      | On-Premises         |
|---------------------|---------------------------|-------------------------------|--------------------------|---------------------|
| External File Store | Amazon EFS or FSx         | Azure File Store              | Google Filestore         | NAS                 |
| External Repository | Amazon RDS for PostgreSQL | Azure Database for PostgreSQL | Cloud SQL for PostgreSQL | PostgreSQL database |
| Key Management      | AWS KMS                   | Azure Key Vault               |                          |                     |
| Independent Gateway | AWS EC2                   | Azure VM                      | Google Compute Engine VM | Additional node     |

External File Store streamlines your deployment topology by centralizing the File Store on your enterprise-class storage system, eliminating the need to run local File Stores on multiple nodes in a Tableau Server cluster, and reducing network traffic during replication across nodes. If you are experiencing disk space constraints or high network traffic from node-to-node replication, you should consider implementing External File Store. For more information, see [Tableau Server External File Store](#).



External Repository provides increased scalability and high availability for organizations with large amounts of Tableau metadata by separating the PostgreSQL database from the default, local PostgreSQL database installation. With this configuration, you can manage it outside of Tableau with your other database maintenance processes. AWS, Azure, and GCP configurations offer enhanced scalability, reliability, high availability and security leveraging the speed and scale of the cloud. For on-premises deployments, you can implement External Repository using a self-managed PostgreSQL instance. For more information, see [Tableau Server External Repository](#).

With Key Management, you can centralize your key management efforts and unlock more advanced security and compliance scenarios. This provides enhanced security by removing the master encryption key from the Tableau Server file system and storing it in the AWS or Azure platforms' secure key management solution. For more information, see [Key Management System](#).

The Independent Gateway is a Tableau Server native reverse proxy and load balancer solution that can be installed in a network DMZ. The Independent Gateway is managed by TSM meaning it is part of your Tableau Server installation so it is fully supported by Tableau. Additionally, because the Independent Gateway is a part of your deployment, it is fully aware of your Tableau Server topology. As a result, you no longer need to manage and update a separate reverse proxy server any time your Tableau Server topology changes. For more information, see [Tableau Server Independent Gateway](#).

## Disaster recovery

Utilizing external storage enables administrators to take snapshot backups of Tableau data if the storage device supports hardware snapshotting. This significantly reduces the time it takes to do a Tableau backup and restore. The result is a lower Recovery Time Objective (RTO) for disaster recovery.

Because backup is also a recommended part of the upgrade process, you will also achieve faster upgrades. Using one illustrative data point, Tableau's internal Tableau Server deployment with a 1TB Data Engine folder and 66GB Repository completed a backup in less than 20% of the time it took with the default configuration, enabling an entire upgrade to be completed in less than 4 hours. For more information, see [Backup and Restore with File Store](#).

## Workload management

When your background jobs increase as the number of extract refreshes and subscriptions grow, you may see job queueing. As a result, your users may not have access to the most current data, and they could experience delayed subscription delivery. Advanced Management for Tableau Server enables you to configure node roles so that you can optimize backgrounder workload management by dedicating specific cluster resources to each type of job.

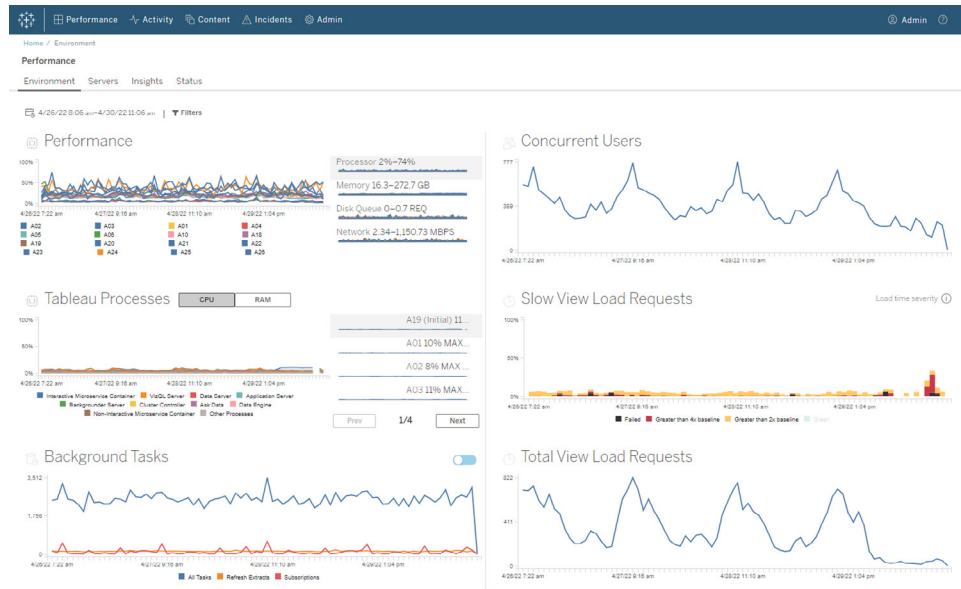
Backgrounder node roles for extract refreshes, subscriptions, and any combination related to extract refreshes and subscriptions, alongside flow-only nodes with Tableau Data Management for flow execution, provide greater control over workloads. By isolating these workloads to specific nodes, it's easier to scale your deployment to the needs of your organization. For more information, see [Workload Management through Node Roles](#).

## Monitoring and chargebacks

As more users are on-boarded and the use of analytics grows across your organization, Tableau becomes mission-critical for data-driven decisions. Without monitoring, a “set-it-and-forget-it” deployment can be met with inadequate resources that fail to support the workload of highly-engaged users. Ongoing, proactive monitoring is required to operate and support your deployment at scale and meet the expectations of your user community.

[Resource Monitoring Tool](#) is an agent-based monitoring solution that offers deep insights into the health and performance of a Tableau Server cluster by parsing and analyzing the logs generated by system usage and combining that with monitoring of physical system usage (CPU Usage, RAM, Disk I/O etc.). As an administrator, you can define threshold alerts from environment, performance, and workload data that is aggregated from all your Tableau Server environments, as well as trace activity down to the user or session-level to isolate issues faster. With increased visibility into hardware utilization, VizQL sessions, data source queries, backgrounder workloads and more, it's easier to manage the health of your Tableau Server deployment and precisely tune the performance of your server.





To manage and distribute analytics costs on your shared-infrastructure Tableau deployment within your organization, RMT includes chargeback modeling, which is especially useful if analytics is not handled through centralized accounting under one cost center. Chargeback reports show usage on a per-site or per-project basis.

The report is generated as a Tableau workbook, allowing you to modify the report or reuse the data as needed. The chargeback workbook shows a breakdown of various metrics based on site and/or project. This allows you to customize total cost to chargeback, adjust chargeback weight for each metric, and generate an invoice-style formatted view.

The screenshot shows a Tableau Server Usage Chargeback Breakdown report. The report is titled "Tableau Server Usage Chargeback Breakdown" and includes a "Total Cost to Chargeback" of \$350,000 for the date range 7/2/2017 to 7/31/2017. The report is broken down by Server, Site, and Project. The following table summarizes the data:

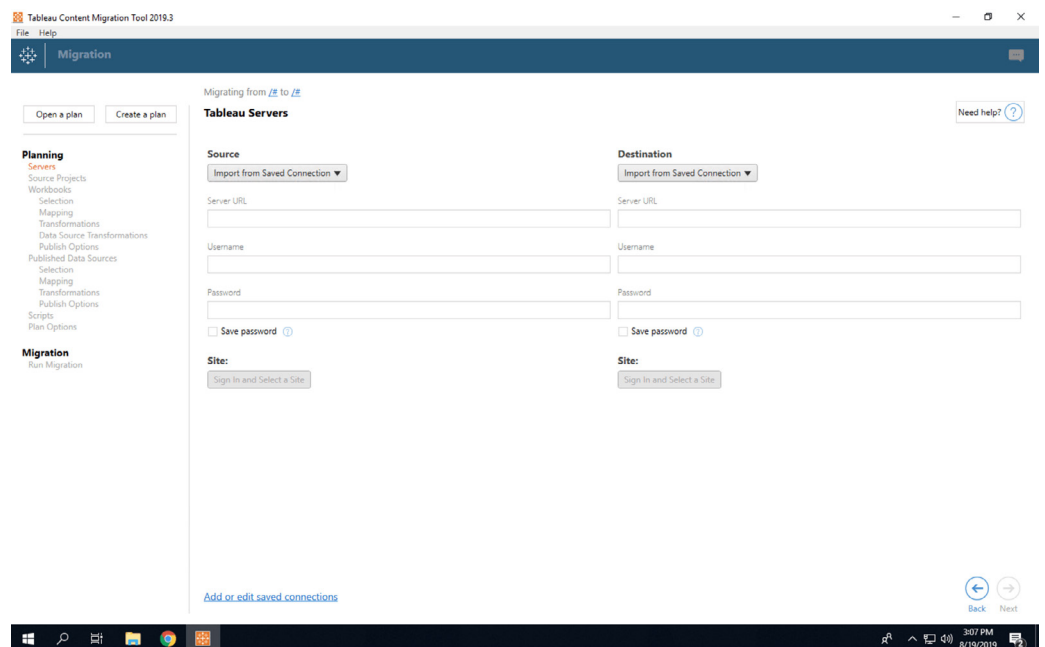
| Server | Site    | Project    | Extract Disk Space Usage (MB) | View Load Time (Minutes) | Extract Refresh Time (Minutes) | Total Chargeback |
|--------|---------|------------|-------------------------------|--------------------------|--------------------------------|------------------|
| Lab    | Default | Default    | 2,324                         | 0                        | 14,176                         | \$321,968        |
|        |         | Production | \$3                           | \$0                      | \$0                            | \$13,346         |
|        |         | Test       | \$16                          | \$0                      | \$0                            | \$13,204         |
|        |         |            | \$27                          | \$0                      | \$0                            | \$13,482         |

## Content management

Content management, which is part of your content governance practices, is key to enabling the effective use of data and analytics. Without content management, users will find it increasingly difficult to find what they need among irrelevant, stale, or duplicate workbooks and data sources. The Content Migration Tool automates tasks such as content promotion and archiving, supporting both traditional and modern workflows or anywhere in between.

With a codeless, streamlined, and repeatable migration plan, you can copy or migrate content between projects on a single Tableau Server installation, or if you have user-based licensing, between projects on separate Tableau Server installations (for example, from a development instance of Tableau Server to a production instance).

The Content Migration Tool User Interface walks you through the steps necessary to build a migration plan that you can use a single time or schedule for repeated migrations. In addition, you can remap data sources and perform other workbook transformations. For more information, see [Content Migration Tool](#) and [Content Migration Tool Use Cases](#).





## Summary

With Advanced Management for Tableau Server's highly configurable capabilities, administrators can meet specific requirements and leverage existing technology investments and expertise to optimize their deployments. Advanced Management brings together scalability, availability, manageability, and security capabilities that deliver enhanced value for customers running Tableau Server at scale or in business-critical use cases. This leads to increased agility and significant time savings for IT. Contact your Sales team to learn more.

## About Tableau

Tableau helps people and organizations become more data driven with the broadest and deepest analytics platform—complete with fully-integrated data management and governance, visual analytics with built-in AI, data storytelling, and collaboration. Whether on-premises or in the cloud, on Windows or Linux, Tableau leverages your existing technology investments and scales with you as your data environment evolves.

## Additional resources

### Tableau Data Management

Ensure trusted, up-to-date data is always used to drive decisions with integrated data preparation, cataloging, search, and governance. [Learn more →](#)

### Tableau Blueprint

Be more data-driven with our prescriptive, step-by-step methodology based on years of expertise and best practices from thousands of Tableau customers. [Learn more →](#)

### Tableau for IT

Discover more tools to help deploy, support, and scale Tableau analytics across your organization wherever you are in your data-driven journey. [Learn more →](#)





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