IBM Cognos TM1 on Cloud
Solution scalability with rapid time to value

Cloud-based deployment for full performance management functionality

Highlights

- Reduced IT overhead and increased utilization rates with less hardware.

- Accounting benefits from shifting costs from capital to operating expenses.

- Best-practice data security, with SOC 2-compliant data centers and SAML2-compliant user authentication.

Overview

With IBM Cognos® TM1® on Cloud, users enjoy the same planning, budgeting, forecasting, scorecarding and analysis capabilities as they do with the on-premise version of Cognos TM1, but in a subscription-based pricing model that accelerates time-to-value and lowers adoption costs. Cloud-based software deployment (also known as Software-as-a-Service or SaaS) is a delivery model in which the software is owned and managed remotely by the cloud provider and delivered to users via the Internet.

Benefits of on-cloud deployment

With Cognos TM1 on Cloud, organizations and users can take advantage of the full breadth of capabilities of Cognos TM1—planning, budgeting, forecasting, scorecarding and what-if profitability analysis—but with the freedom and flexibility of a cloud-based solution. The availability of on-cloud deployment enables organizations to choose the best delivery mechanism for their corporate environment—without sacrificing capabilities or limiting future deployment options. When you deploy on the cloud, you can add users as needed while minimizing the costs related to capital equipment, software licenses and IT infrastructure. Cognos TM1 on Cloud offers many benefits, including:

- *Lower cost of ownership:* Cloud deployment enables organizations to reduce IT overhead and increase utilization rates using less hardware.
- *Faster time to value:* Cloud-based solutions enable the rapid deployment of planning, budgeting, forecasting, scorecarding and analysis capabilities, so that users can make productive use of the software more quickly.
- *Scalability:* Organizations can add users as needed without worrying about procuring new hardware and other infrastructure components.
- *Less strain on IT resources:* Because your internal IT organization does not need to install or operate the cloud-based solution, you can reduce or bypass any IT backlog.
- *Cost accounting:* With an on-cloud solution you can eliminate up-front expenditures and ongoing costs for capital equipment, software licenses, and IT infrastructure and resources. Organizations gain by shifting costs from capital to operating expenses.

How Cognos TM1 on Cloud is delivered

With Cognos TM1 on Cloud, your implementation is hosted by SoftLayer, an IBM company that maintains 13 data centers globally. The IBM Cloud Operations team deploys, maintains and updates the environments, including data backups, disaster recovery and monitoring. The Cloud Operations team also provides help-desk support via service tickets through normal IBM support channels.

Each Cognos TM1 on Cloud deployment is in a single tenant, virtual environment, which runs on a multi-tenant physical infrastructure. The single tenant deployment architecture isolates each client's data from all other clients, so that data stores are not shared among tenants. Each tenant has separate instances of application software, middleware, and data storage. Single tenancy provides isolation, security, reliability and solution upgrade flexibility, while multi-tenancy at the physical level provides high availability, performance and geographic and infrastructure flexibility.

If desired, customers can start with the Cognos TM1 on Cloud base offering and then, should their needs dictate, they can purchase an available premium-level single-tenant option for greater capacity. The IBM Cognos Single Tenant on Cloud Premium subscription provides a private, dedicated, single-tenant environment. The base offering includes up to 64GB of RAM on the database tier, while the premium option provides up to 512GB of RAM.
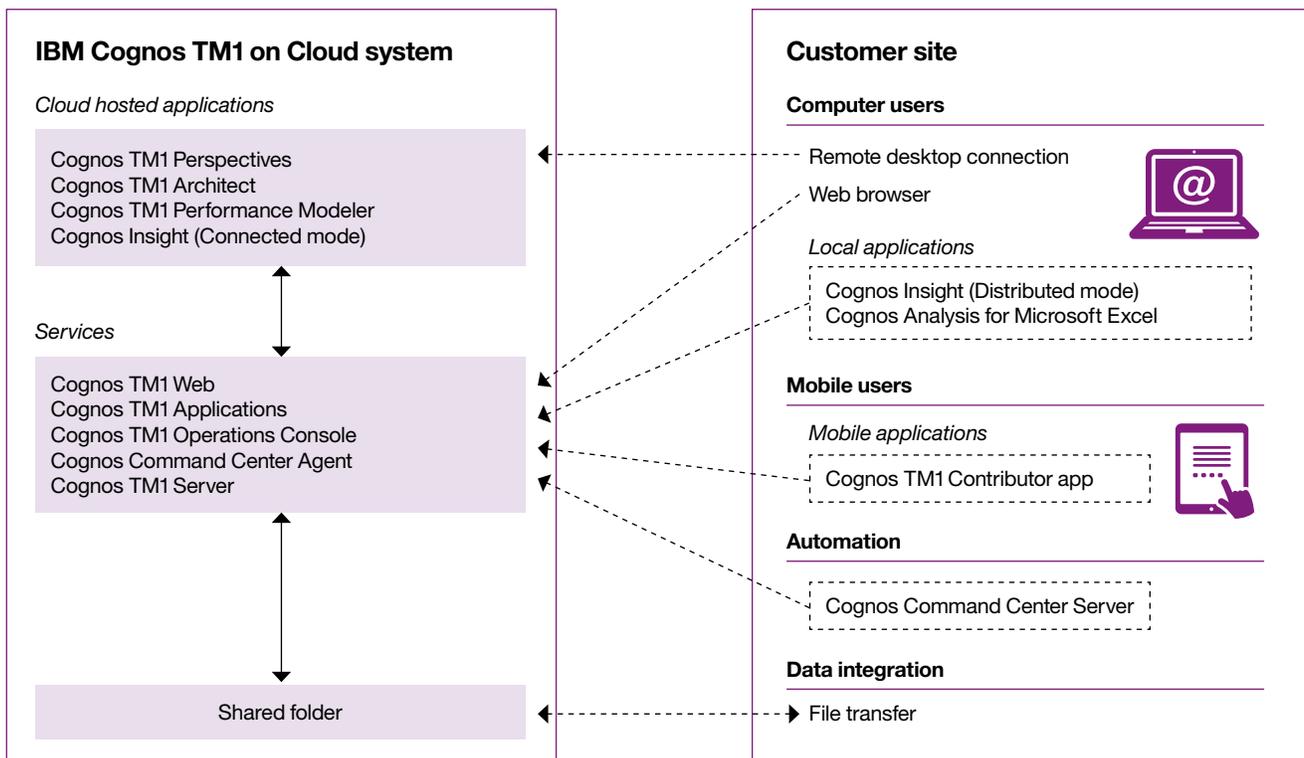

Figure 1: IBM Cognos TM1 on Cloud system overview

Security and infrastructure

Data security is a critical concern for any organization and it arises in any discussion of cloud computing. IBM has extensive internal security and compliance policies for all of its cloud-based solutions. Internal IBM policies are aligned with industry best practices, such as those of the National Institute of Standards and Technology (NIST), Control Objectives for Information Technology (COBIT), the ISO 27002 standard of the International Organization for Standardization (ISO), the Open Web Application Security Project (OWASP), Center for Internet Security (CIS) Benchmarks and more. The Business Analytics division of IBM also has a dedicated cloud compliance team that conducts regular internal and third-party security audits. In addition, IBM contracts with external parties to perform annual penetration tests and SSAE 16 audits (Statement on Standards for Attestation Engagements).

SOC 2-compliant data centers

The data centers that host Cognos TM1 on Cloud deployments are all SOC 2 compliant. SOC 2-compliant (Service Organization Control) hosting is based on standards from the American Institute of Certified Public Accountants (AICPA) and confirms that the data-hosting environment follows best practices and employs internal controls to verify security, availability, processing integrity, confidentiality and privacy.

Data center redundancy

The Cognos TM1 on Cloud solution includes a fully redundant data center environment with both primary and disaster recovery locations. The disaster recovery data center is geographically separate, on a separate power grid and not reliant in any way on the availability of the primary site. The data centers are individually robust facilities (Tier 3+) and all infrastructure equipment (firewalls, servers, storage, etc.) is built with N+1 redundancy. There are multiple disparate Internet connections utilized by the solution. In addition, each shift on the Cloud Solutions team network operations center (NOC) includes primary and backup personnel. Full disaster recovery and business continuity plans are also in place.

Data encryption

All in-flight data is encrypted using Secure Sockets Layer (SSL) with at least 128 bits. All data disks are securely erased and destroyed when they are de-commissioned.

Privacy compliance

Multiple data centers are located in the USA, Europe and Asia to accommodate regional privacy and data storage requirements. For global applications, additional production environments can be used to store data in compliance with differing national and regional regulations.

Authentication

Dedicated Cognos TM1 administrator user accounts are assigned to provide native authentication. Transmission security is provided through 128-bit (SSL), with secure RDP (remote desktop protocol) and FTPS (secure file transfer protocol). In addition, Cognos TM1 on Cloud natively supports authentication through SAML 2.0 (Security Assertion Markup Language), automatically authenticating users who have a SAML2-compliant credentialing resource.

Support and updates

Cognos TM1 on Cloud customers are supported in the same manner as users of the on-premise solution. Help-desk support is provided via service tickets through normal IBM support channels and requested resources such as additional memory, disk space and CPU capacity can be provided within one day. Issues are raised with IBM Support and escalated to the Cloud Operations team if they are related to the cloud environment. Product issues are escalated to the product team.

Availability, backup and retention

Data and transaction logs for Cognos TM1 are stored on a RAID SAN (redundant array of independent disks—storage area network), which is a method of configuring drives for high availability and high performance. In the event of a problem, tiers are restored to another instance by the Cloud Operations team. Backup and restore services are performed to or from the storage area network (SAN) and to or from another data center for disaster recovery. Restore service can be requested through a support ticket.

Update process

The Cloud Operations team will coordinate all software patches with customers. A predetermined maintenance window will be used by the team to apply critical patches and perform password maintenance. Customers may have the option to defer a patch for a period of time, depending on the nature of the patch.

For significant updates, such as Cognos TM1 refresh packs or version updates, Cloud Operations will notify users of migration windows and help users migrate and test content. Cloud Operations will deploy the updates to a new environment and allow customers to test it with their own data (development and production). Users may also choose to skip upgrades and remain on specific versions of the software for longer periods as required.

In addition, if an organization is currently using IBM Cognos Planning, migration to Cognos TM1 can be performed faster and cheaper by choosing Cognos TM1 on Cloud.

Cognos TM1 and IBM Concert—The perfect pair for cloud-based performance management

IBM Concert is a cloud-based solution that "wraps around" Cognos TM1 and has the ability to dramatically improve the speed and quality of team-based decision-making. IBM Concert offers guided business processes, personalized task lists and a highly graphical user interface that enables decision makers to share Cognos TM1 performance data through their mobile devices.

IBM Concert helps users prioritize tasks at a glance and offers activity streams that alert users to changes in important metrics as they occur. It helps team members share insights so that high-priority tasks can be acted upon quickly. Users can access reports containing Cognos TM1 data at any time from any location. They can monitor progress on plans and forecasts through both Android and Apple smartphones. Notifications sent directly to their mobile devices enable users to focus on alerts or changes and drill down into the details of key metrics. And the same interface offers access to questions, comments and ongoing discussion with other participants in the decision-making process.

Conclusion

Cloud computing is quickly evolving as the software delivery model of choice for many organizations of all sizes and in all industries. IBM Cognos TM1 on Cloud is designed to meet all of your enterprise planning and analytics needs. It offers visibility into plans and forecasts, rapid what-if scenario modeling, scorecarding and profitability analysis. And, because it is deployed in the cloud, it delivers these capabilities in a manner that suits the needs of many organizations in areas of cost structure and flexibility.

About IBM Business Analytics

IBM Business Analytics software delivers data-driven insights that help organizations work smarter and outperform their peers. This comprehensive portfolio includes solutions for business intelligence, predictive analytics and decision management, performance management, and risk management.

Business Analytics solutions enable companies to identify and visualize trends and patterns in areas, such as customer analytics, that can have a profound effect on business performance. They can compare scenarios, anticipate potential threats and opportunities, better plan, budget and forecast resources, balance risks against expected returns and work to meet regulatory requirements. By making analytics widely available, organizations can align tactical and strategic decision-making to achieve business goals. For further information please visit **ibm.com**/business-analytics

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