Cloud for Government:
A Transformative Digital Tool to Better Serve Communities

cbts

From state to local agencies, government organizations crave access to the same cloud-based tools enabling digital transformation across the private sector. These tools hold the promise of delivering IT services with greater speed, flexibility, agility, and economy than traditional data center technologies. In addition, cloud services can help governments improve public services while reducing costs—satisfying the imperative to make the best use of taxpayers' money.

CBTS has decades of industry experience and skills to help government agencies transform their infrastructure and applications into a cloud environment, while also addressing the cloud-driven challenges specific to the public sector.

This eBook explores how cloud-based tools address these challenges in five essential ways:

Security and compliance. A CBTS deployed cloud solution follows stringent methods of monitoring data, and upholding cybersecurity.

Budget restrictions. Moving organizational processes to the cloud allows agencies to shift from a capital expense to an operational expense, providing predictable payments and reducing initial investment costs.

Let's survey these difficulties more closely.

Advancement. Cloud solutions give governments access to cutting-edge technologies, from machine learning to artificial intelligence.

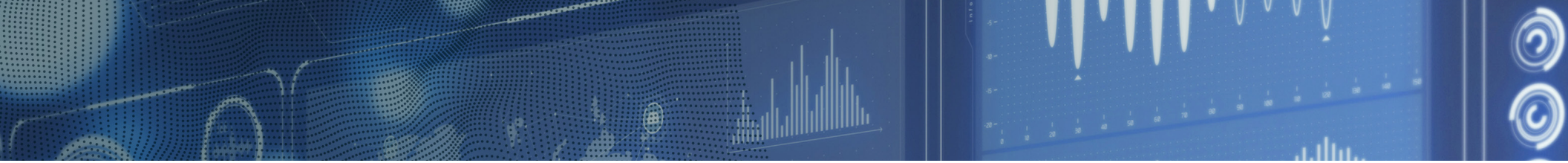
Productivity. Regulating, integrating, simplifying, and automating IT operations improves efficiency.

Backup and recovery. The use of domestic data centers optimizes critical real-time services and reduces the risk of downtime.

Security and compliance

The CBTS domestic data centers keep essential government data safe and within the country's borders. While on-premise data centers are still the most sheltered location for classified and sensitive data, the cloud offers secure storage for your information and ensures full encryption 24x7x365.

While the responsibility is ultimately up to the customer to protect the personal data they accumulate, privacy standards such as ISO/IEC 27001 and the SOC framework are written directly into our contracts.



In addition, our cloud-based tools implement a large number of security measures:

Controlled access. Define and control user access while managing various identities.

Encryption. Encrypt your data before pushing it to the cloud, and store keys in your on- premise data center. Our tools use state of the art procedures to encrypt data during transport, and while at rest.

VPN. We can harden your network and infrastructure security with a single WAN link or a site-to-site VPN.

Flexibility. We tailor solutions to meet your precise needs while handling millions of customers in real-time. With a multi-tenant landscape, the cloud helps you prevent unauthorized or unintentional data transfer between sites, using:

- VLAN isolation
- Access control lists (ACLs)
- Load balancers
- IP filters
- Traffic flow policies
- Network address translation (NAT), distinguishing between internal and external IP addresses.

Physical security. Our data centers employ multi-measure security structures. With full perimeter fencing, video cameras, security staff, key card entrances, and 24x7x365 real-time emergency communication systems.

Monitoring. Our software and cybercrime professionals monitor servers, networks, and applications for evidence of wrongdoing. These measures include:

- Intrusion detection
- Distributed DDoS attack prevention
- Penetration testing
- Behavioral analytics
- Anomaly detection
- Machine learning
- Anti-malware software

Major cloud providers typically have stronger security than the clients who hire them. As a third-party managed cloud solutions provider, we understand the vital importance of protection for your organization. Our reputation depends on the effectiveness of our security, and system breaches are not acceptable.

Economic prudence

Cloud computing significantly diminishes hardware costs, while allowing a shift from capital expenditures to a scalable, operational cost-model where you pay only for the resources you use.

Older equipment becomes increasingly expensive to maintain as it ages. This poses a problem for public enterprise leaders who continue to utilize legacy hardware long past its expiration date. With each passing year of using outdated equipment, organizations run an increased risk of total system failure, and therefore the loss of IT-based public services. Regardless of age, data centers require substantial land, climate control costs, and IT staff to maintain, repair, and replace hardware and software. These expenses can quickly topple a government's budget, and cause increased scrutiny from its' taxpayers.

Cloud computing offers predictable, usage-based monthly fees instead of the high premiums involved in building a data center.

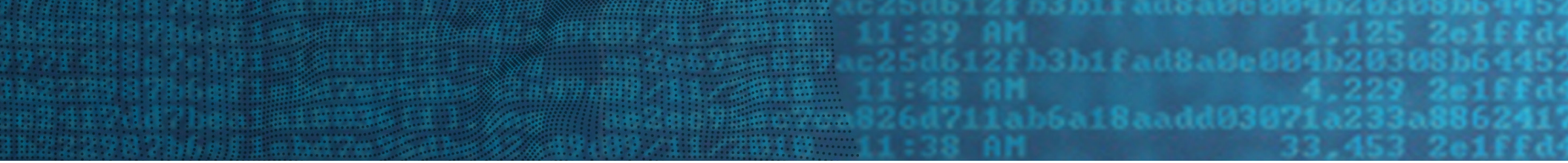
Innovation

When your organization chooses to migrate to the cloud, the responsibility of configuring, updating, and supporting data center technologies is placed solely on the cloud provider. This is why it is imperative for cloud vendors to run at optimum efficiency by standardizing, automating, and investing in the latest, most innovative equipment and solutions.

In partnering with CBTS, your organization can leverage our deep understanding of AI, machine learning, and data science to further improve and update the services it provides. Our analytics software lets agencies analyze all the data traveling to and from the cloud host. Sophisticated measurement of application usage, traffic patterns, bandwidth demand, and unstructured data can uncover waste and inefficiencies.

Cloud-based applications help organizations manage their operating environment via universal sensors found in smart devices. AI and machine learning are allowing agencies to analyze video footage in real time, improving their ability to identify potential threats and facilitate traffic safety.

As these devices evolve predictive capabilities, agencies will be able to preemptively address risks before they transform into costly issues.



Simplified IT operations

Government branches typically have siloed communication systems that make it difficult to collaborate across departments. Operating in a public cloud can get multiple agencies and organizations to work with the same technology, and streamline IT processes, erasing years of confusing and complex structures.

Migrating to the cloud makes it easier to unify your technology applications, as government organizations are often heavy users of backend systems. Operating these apps in the cloud ensures constant maintenance and upgrades, allowing your IT staff to focus on your organizations high priority initiatives.

CBTS cloud software enables you to monitor all operations in real time and configure alerts to flag issues before they become significant problems. All of these advantages help government agencies better serve their constituents and remain agile with the ever-changing demands of technology solutions.

Backup and disaster recovery

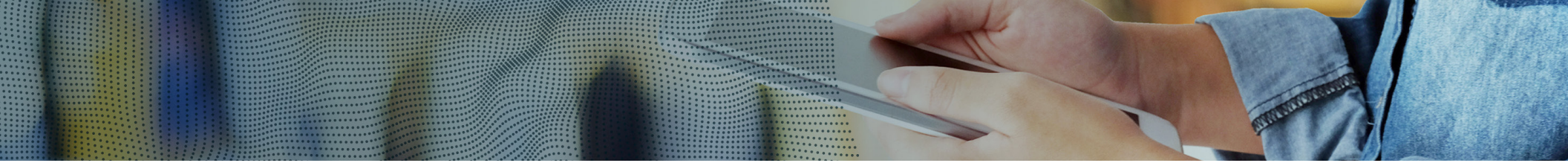
The cloud's infinite storage capability makes the perfect solution for backup and disaster recovery. Partnering with CBTS enables you to build a reliable backup solution without having to invest in additional hardware that drives up operational costs.

With full backup abilities, government agencies can reduce downtime, ensure delivery of emergency assistance, and keep vital first-responder services functioning in a crisis. Robust backup-and-recovery operations also protect against cyber attacks that take down IT systems.

Domestic data centers help agencies back up their data to sites far enough away to avoid outages caused by regional disasters, but not so far as to disrupt the efficiency of their servers. With the power and agility gained from integration with many different operating systems, you decide which data to send to the cloud, and which to keep on-premise.

Partnering with CBTS

Migrating IT resources to the cloud is an involved process that should not be attempted without a thorough understanding of in-house systems and close attention to detail. Many cloud-based tools streamline migration processes, but most agencies require the assistance of a third-party integrator. These integrators must have experience working with government organizations to ensure successful cloud transformation.



CBTS has spent more than two decades working with government organizations while thoroughly learning each new surge of cloud-based technology. Our IT team understands the intricacies of the many cloud tools and the rigidness of government compliance laws.

We understand that most agencies will require a hybrid cloud that deploys data and IT workloads where they make the most sense while keeping some operations on-premises. Our broad experience and wealth of IT professionals will work diligently to ensure your new system meets the requirements of your organization while serving the greater needs of your community.

CBTS awarded best state-level ICT implementation

After partnering with CBTS to implement a Next-Generation Telephony System (NGTS), the State of Ohio CIO and team were recognized by the National Association of State CIOs (NASCIO) with the first-place award for "Information Communications Technology (ICT) Innovations."

This national award recognized the CBTS NGTS platform as the country's best state-level ICT implementation.

Why CBTS

CBTS has over 30 years of experience in designing, constructing, implementing, and overseeing data centers for clients throughout North America. We partner with pioneering technology companies including Cisco, HPE, Oracle, and Microsoft. Our client-centered approach ensures effective deployment of our cloud applications and services, each tailored to your precise business needs.

To get started: Visit cbts.com or contact your CBTS account executive.