

# Federal Data Center Consolidation

## The Need for Efficient IT Infrastructure

Traditionally, federal government computing resources have been deployed at geographically distributed headquarters, data centers, and field offices to ensure end user performance. The downsides are the inefficient use of energy and computing resources, as well as the expense and the difficulty of managing a large number of data centers. IT consolidation projects allow civilian, military and intelligence organizations to reduce the number of data centers to cut costs, promote green IT, increase security posture, shift IT funds to more efficient computing platforms, and boost productivity. The trick is to consolidate without hurting performance for government employees and war-fighters.

Specific government initiatives like the US Federal Data Center Consolidation Initiative (FDCCI) lay out best practice guidelines and objectives for departments and agencies to follow as the plan IT strategy for their own service requirements. This is further supported by the “25 Point Implementation Plan to Reform Federal Information Technology Management” and efforts around Defense base realignment and closure (BRAC.)

Although data center consolidation may reduce operation costs and improve data security, it often causes performance problems that make users frustrated about application performance across a wide area network (WAN.) Optimizing network infrastructure to compensate for problems that will be induced by “chatty” protocols operating over long distances BEFORE data centers are consolidated can prevent application performance problems and avoid end-user complaints and objections to the initiatives. Understanding IT assets and their dependencies before, during, and after consolidation can reduce risks and prevent unforeseen outages during consolidation.

## Three Ways Riverbed® Helps Government Consolidation Initiatives:

- 1. Identify service dependencies and targets for consolidation.** Riverbed Cascade® products map IT environments worldwide to reduce risk of data center migrations and network outages by highlighting application dependencies. This speeds up your data center consolidation efforts, arming you a current and accurate view.
- 2. Optimize the number and cost of data centers.** With Riverbed solutions agencies can reduce the number of distributed data centers and relocate distributed IT infrastructure like file and email servers, disk and tapes to more efficient centralized data centers while preserving performance and increasing the security posture. The Steelhead® product family makes this possible by reducing network traffic by up to 95% and speeding applications to near LAN-like speeds of up to 100x.
- 3. Leverage public cloud infrastructure:** Riverbed solutions enable the adoption of public cloud computing alternatives to offload data center space, increase energy efficiency, and reduce operational and capital expenditures. Where security and operational requirements permit, Riverbed products reduce data transfer costs, minimize latency challenges, and accelerate performance of cloud applications, servers and storage.

## BENEFITS

- Compliance with FDCCI targets for a reduction in number of data centers globally
- Awareness of application dependencies for reduced risk of data center migrations
- Significantly reduced capital and operating expenses for hardware, software, energy consumption, support, and administration
- Local-like application performance for workers and warfighters around the globe to meet Service Level Agreements (SLAs)
- Increased security through reduction of distributed sites hosting sensitive data

## Additional Riverbed Benefits for Consolidation Initiatives

**Gain Visibility and Control.** Riverbed Cascade conducts discovery and dependency mapping of applications and servers to simplify consolidation planning, significantly reducing the time to understand what should be consolidated. It also helps to ensure the availability, performance, and security of mission critical applications throughout the consolidation process and beyond.

**Data Migration.** Riverbed solutions can reduce the time required for migration of data to new consolidated data center sites, improving availability, reducing security risk during transportation, and reducing bandwidth requirements.

**Cost Savings.** By accelerating applications and optimizing bandwidth utilization organizations can achieve significant cost savings through consolidation. These substantial savings come from lowered IT support costs, the elimination of distributed infrastructure, improved resource utilization, and reduced energy consumption.

**Simplified Management.** By eliminating the previous barriers to consolidation, systems are patched, upgraded, and maintained more frequently. Because systems are located where the majority of IT staff is located and there is more flexibility in delivering services, it is much easier to schedule regular maintenance of systems. This means less down time and the most up-to-date security, applications and services for users.

**Improved Collaboration.** Collaboration with other offices is simplified because all-important data is located in one place and users do not have to struggle to locate information across a multitude of servers. Revision control problems are also all but eliminated as users from different locations can all access a single central resource at LAN like speeds thanks to the Riverbed solution.

**Enhanced Data Security.** Consolidation reduces the risk of data loss through theft or insufficient data protection. This loss could otherwise result in federal or local regulatory non-compliance auditing, negative press, and a loss in confidence in meeting service objectives and requirements.

**Optimized Disaster Recovery and COOP.** The Riverbed solution can help government organizations save money and protect mission critical data more frequently and more reliably by accelerating backup and replication operations for disaster recovery, while cutting bandwidth requirements at the same time.

---

*With Riverbed, the US Defense Contract Management Agency consolidated from eighteen data centers down to two, winning an InfoWorld IT Project of the Year Award*

---

---

*“WAN optimization technology can help reduce the pain of migrations so they are completed faster and cost less. Using WAN optimization, users can finish migrations faster and return to productivity sooner.” — Terri McClure, Senior Analyst, ESG*

---

---

## About Riverbed

Riverbed delivers performance for the globally connected enterprise. With Riverbed, enterprises can successfully and intelligently implement strategic initiatives such as virtualization, consolidation, cloud computing, and disaster recovery without fear of compromising performance. By giving enterprises the platform they need to understand, optimize and consolidate their IT, Riverbed helps enterprises to build a fast, fluid and dynamic IT architecture that aligns with the business needs of the organization. Additional information about Riverbed (NASDAQ: RVBD) is available at [www.riverbed.com](http://www.riverbed.com).



**Riverbed Technology, Inc.**  
199 Fremont Street  
San Francisco, CA 94105  
Tel: (415) 247-8800  
[www.riverbed.com](http://www.riverbed.com)

**Riverbed Technology Ltd.**  
One Thames Valley  
Wokingham Road, Level 2  
Bracknell, RG42 1NG  
United Kingdom  
Tel: +44 1344 401900

**Riverbed Technology Pte. Ltd.**  
391A Orchard Road #22-06/10  
Ngee Ann City Tower A  
Singapore 238873  
Tel: +65 6508-7400

**Riverbed Technology K.K.**  
Shiba-Koen Plaza, Bldg. 9F  
3-6-9, Shiba, Minato-ku  
Tokyo, Japan 105-0014  
Tel: +81 3 5419 1990