

Riverbed Solutions for Government

Riverbed Enables IT Consolidation and Green IT Initiatives for Government Customers

IT equipment and software purchases are the largest portion of U.S. federal IT spending an estimated \$26 B in fiscal 2009. Because of the potential magnitude of savings involved, there are several federal initiatives encouraging agencies to pursue IT consolidation projects. For example, the General Services Administration (GSA) is leading an initiative for the U.S. government's 23 largest agencies to find common systems and applications that can be consolidated to standardize operations and cut costs. Consolidating distributed IT assets such as email servers, file servers, and tape backup into one location can produce immediate cost savings, which is particularly important as agencies are asked to do more with less.

The importance of IT consolidation is also evident in the allocation of the U.S. federal IT budget. Forrester estimates that IT funds not being spent on war-related projects will be dedicated primarily to IT consolidation and disaster recovery projects, with 28% of federal decision-makers indicating that cutting IT spending is a top priority.

Beyond the cost-cutting benefits of consolidation, there are also significant environmental benefits. Governments are placing an increasing emphasis on green IT, with several mandates in place to reduce energy use and the environmental impact of operations. For example, the GSA is encouraging more energy-efficient federal data centers, which account for 1.5 percent of total energy consumption in the U.S. The Energy Star program, managed by the Energy Department and the Environmental Protection Agency, provides specifications for IT equipment to be considered energy efficient. Consolidating IT infrastructure helps agencies comply with these green initiatives by reducing the amount of energy they consume.

A Joint Solution by Riverbed and



BENEFITS

- Consolidate IT resources into the data center, which cuts costs and reduces power consumption
- Simplify branch infrastructure with the Riverbed Services Platform (RSP), which reduces further the number of local servers required
- Reduce their environmental footprint by using less energy, creating less waste, and reducing facilities costs through improved employee mobility

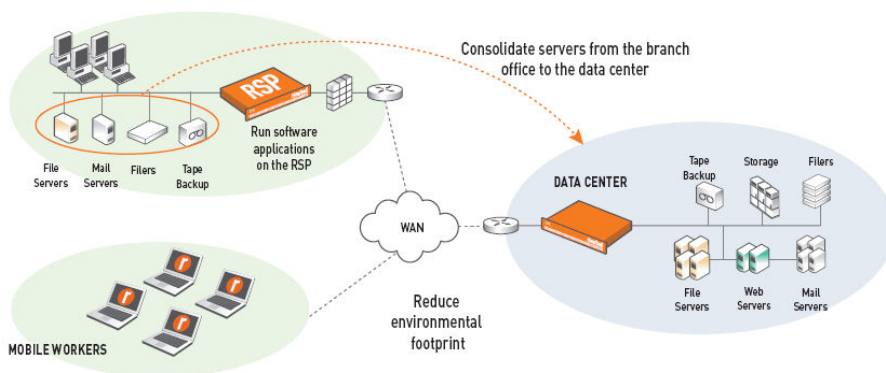


Figure 1. With Riverbed Steelhead products, government agencies can consolidate IT assets and reduce their environmental footprint

Overview of Riverbed Steelhead Products

Riverbed® Steelhead® products enable LAN-like performance of applications across a wide area network (WAN), and deliver the best performance improvements across the broadest range of applications. The Riverbed approach accelerates all TCP-based applications across a range of environments, including high latency satellite networks.

Riverbed Steelhead products use a three pronged approach to accelerate applications: 1) data streamlining, which removes 65–95% of redundant data from the WAN; 2) transport streamlining, which addresses TCP chattiness and latency; and 3) application streamlining, which addresses chattiness and latency in the applications themselves. The combined effect of this technology is that WAN bandwidth use is reduced 65–95%, and applications are accelerated over the WAN from five to 50x, even up to 100x in some cases.

How do Riverbed Steelhead Products Enable IT Consolidation and Green IT?

Consolidate IT resources to the data center

Many agencies have placed servers at remote sites to deliver consistent application performance to remote users. However, provisioning of servers at remote sites is expensive and the resources are often underutilized. Worse, all those servers have to be managed, backed-up, repaired, and patched.

The benefits of centralizing servers are clear — fewer servers, less software to buy and maintain, and lower electricity bills. However, application performance over the WAN is the main stumbling block to centralizing servers in the data center. Riverbed solutions remove this performance problem and enable organizations to centralize their IT resources while providing LAN-like performance to users in branch locations.

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For example, the U.S. Defense Contract Management Agency (DCMA), a federal agency with 10,000 employees that manages contracts valued at more than \$1.1 trillion, deployed Riverbed Steelhead products at 47 sites to enable consolidation of IT resources and reduce the number of data centers from 17 to two. At the beginning of the project, DCMA upgraded WAN bandwidth in an effort to avoid application performance problems. However, these bandwidth upgrades were not sufficient because they did not address chatty protocols and network latency; response times were low and users were unhappy. Once Steelhead products, however, were installed, DCMA was able to provide LAN-like performance for users, reverting to pre-consolidation performance levels within one day. According to the CIO: “Our users are much happier now. Users don’t notice nor do they care anymore that we’ve consolidated our data centers.”

Simplify branch infrastructure

In addition to consolidating remote office equipment into the data center, agencies can further simplify IT in their branch locations with the Riverbed Services Platform (RSP). The RSP is a protected partition on a Steelhead product on which customers can deploy virtualized third party software applications. This enables customers to deliver local services such as printing and IP address management without having to deploy separate servers. The RSP brings the concept of a true “serverless” branch location one step closer, allowing agencies to consolidate IT further and reduce costs.

The RSP can also help deployed military units maintain a light IT footprint. SkipWare®, the industry-leading SCPS implementation, from Global Protocols, Inc., is available on the RSP for use in military satellite networks. With SkipWare on the RSP, mobile units who need a SCPS-compliant solution but also want best-of-breed WAN optimization functionality can have the best of both solutions, without having to deploy multiple products in the field.

Reduce environmental footprint

With Riverbed solutions, agencies can also significantly reduce their environmental footprint. By consolidating IT infrastructure, agencies can cut energy use significantly. In addition, agencies can immediately see up to 5x or sometimes 10x more bandwidth simply by adding Steelhead products. This means that existing routers and switches can be used for potentially many more years. Therefore, IT creates less waste while meeting the agency's needs.

Riverbed can also significantly impact the way people work on an agency-wide basis. With Riverbed, users anywhere can collaborate from different agency locations and share documents as if they were in the same office. In addition, Steelhead Mobile software provides LAN-like application performance for mobile employees. This can help agencies successfully comply with Telework mandates, which in turn can reduce commuting requirements, resulting in less air pollution. Increased mobility can also reduce the need for office space, which can drive down costs for lighting, heating, and cooling as well.

Finally, Riverbed has implemented methods to ensure that their products are environmentally sensitive. These methods include RoHS compliance, WEEE procedures, and working with ISO 14001-certified manufacturers.

About Riverbed

Riverbed is the IT performance company. WAN optimization solutions from Riverbed liberate businesses from common IT constraints by increasing application performance, enabling consolidation, and providing enterprise-wide network and application visibility – all while eliminating the need to increase bandwidth, storage or servers.



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