

## Open CAD Files Faster Across Your WAN with Riverbed®

**Problem:** Architectural, Engineering, and Construction firms have to use File Transfer Protocol (FTP) sites, collaboration portals, and emails to distribute data to remote offices and remote project teams. This creates multiple drawing versions and does not provide quick collaboration as the information cannot be updated until every designer re-posts the information back to the data transfer portal.

**Testing:** A series of AutoCAD® and MicroStation® files are stored at the data center server (through a Virtual Private Network [VPN] connection) as well as on the local workstation of the machine running applications. Testing is performed on the initial open from the data center server (“cold”), second open (“warm”), and also from the local hard drive.

**Equipment Used:** On the server side, a Riverbed® Steelhead® 510 device is installed. This device is two generations old and “feeds” data out at a capacity of 512 Kb per second. Steelhead Mobile client software is used on the remote side. AutoCAD 2010 and MicroStation V8 XM are the applications used and a Hewlett-Packard® Elitebook 8530w Mobile Workstation runs the software.

### Timed Testing

#### **AutoCAD 2010 .dwg file (6.9 MB)**

Cold open from data center server (VPN connection)	10.08 seconds
Warm open from data center server (VPN connection)	7.69 seconds
Open from data center server without Riverbed	58.17 seconds
Open from local hard drive	5.66 seconds

#### **MicroStation V8 XM .dgn file (4.7 MB )**

Cold open from data center server (VPN connection)	21.97 seconds
Warm open from data center server (VPN connection)	9.71 seconds
Open from data center server without Riverbed	32.73 seconds
Open from local hard drive	8.18 seconds

## Riverbed, AutoCAD & MicroStation Performance Brief (continued)

**Conclusion:** Riverbed technology has a significant impact on sharing Revit models across a WAN and/or VPN. It is important to note that Riverbed technology does not change the Autodesk recommended workflow, it simply allows remote office teams and trusted partners to follow the same workflow and process as Local Area Network (LAN) users.

Once data has been opened by anyone at the remote office or automatically pre-populated to create a “warm” hit for everyone the first time, the user experience at the remote office is virtually identical to opening from the local hard drive. Due to similarity in speed, we can put all remote office data back at the data center and remove remote storage servers and data transfer sites. This saves time and money without losing productivity.

▶ **Test the Riverbed solution on your own network through our no-risk, onsite *Proof of Concept* program! Contact ModernTech AEC Solutions at 877.531.6090.**

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