

# RIVERBED STEELSCRIPT

## GET MORE OUT OF YOUR RIVERBED INVESTMENT

### BUSINESS CHALLENGE

Modern IT environments are heterogeneous, and applications need to be customized to provide a competitive edge for the business. At the same time, IT is under pressure to automate as many processes as possible in order to gain operational efficiencies.

In order to automate in heterogeneous environments, IT needs API access to infrastructure, including infrastructure used for application performance. But API access alone doesn't support the developer efficiency that's required to justify taking advantage of APIs. With developer tools like software development kits and application frameworks, IT can quickly build the logic to query data and metrics from across their IT environment, process that data, and present it in a web-based or other format.

*"The network will evolve into an automated system that requires APIs and SDKs to stitch together the constituent parts."*

- "Networking predictions for 2013," Andre Kindness, Forrester, July 2012

### THE RIVERBED SOLUTION

Riverbed® SteelScript™ is the open APIs and developer tools to customize and automate application performance infrastructure from Riverbed. Open APIs facilitate programmability, interoperability, and intelligence across the Riverbed platform and partner ecosystem so that customers can automate the analysis and resolution of performance issues across their IT infrastructure and for their unique business needs.

#### STEELSCRIPT IS COMPRISED OF THREE ELEMENTS:

**Open APIs:** Riverbed Open APIs give developers access to metrics and configuration controls of Riverbed application performance infrastructure, including SteelCentral™ NetShark, SteelCentral™ NetProfiler, and SteelApp™ Traffic Manager.

**SteelScript for Python:** SteelScript for Python is a software development kit (SDK) built on Riverbed's Open APIs. You can use the popular Python scripting language to make calls into Riverbed's application performance infrastructure. The SDK takes care of many low-level details for you so you can concentrate on the details specific to your use case.

**SteelScript Application Framework:** SteelScript Application Framework is based on Django and builds upon the SteelScript for Python SDK. It provides the foundation for a web application that can query, process, and display customized metrics and analysis using Riverbed's Open APIs and other data sources.

You know powerful data and metrics exist in your Riverbed infrastructure. SteelScript makes it easier to use those metrics according to your business needs.

### KEY BENEFITS

#### Flexibility

Customize how you consume metrics and automate configuration.

#### Open APIs

With Riverbed Open APIs, you can access metrics and configuration controls of Riverbed application performance infrastructure, including:

- Exporting indexed packets from SteelCentral NetShark for custom analysis
- Customizing your view of network traffic data from SteelCentral NetProfiler alongside IT ticketing data
- Automating the configuration of pool of virtual servers with SteelApp Traffic Manager

## KEY BENEFITS (CONTINUED)

### Community

Use skills, scripts, and resources from thousands of Python developers.

#### SteelScript for Python

Since many developers already know and use Python, SteelScript for Python makes it easier to use Riverbed Open APIs.

With SteelScript for Python, you can:

- Get started quickly based on example scripts
- Develop applications faster by leveraging the vast number of modules available for Python
- Build upon shared code samples from the Riverbed and Python communities

#### Riverbed Online Community

Solutions, code samples, and discussion forums can be found on the SteelScript community forum, at

<http://splash.riverbed.com/community/product-lines/steelscript>.

## API FEATURES

### SteelCentral NetShark

The NetShark RESTful API provides programmable access to virtually all of the functionality implemented by NetShark, including:

- Applying views and obtaining view output
- Enumerating and examining packet data sources on the appliance (interfaces, capture jobs, trace clips, and files)
- Creating trace clips, uploading
- Extracting packet data from the appliance
- Extracting and modifying system configuration, including user configuration, capture job management, basic system configuration, etc.
- Access system version information and apply updates

### SteelCentral NetProfiler

The following information can be accessed via the API:

- Reporting data (traffic data, service data, event list data, and user data)
- Information about network devices
- Control over SDN virtual network settings (SDN virtual network settings are a licensed feature)
- Information about system users

## ABOUT RIVERBED

Riverbed at more than \$1 billion in annual revenue is the leader in Application Performance Infrastructure, delivering the most complete platform for Location-Independent Computing. Location-Independent Computing turns location and distance into a competitive advantage by allowing IT to have the flexibility to host applications and data in the most optimal locations while ensuring applications perform as expected, data is always available when needed, and performance issues are detected and fixed before end users notice. Riverbed's 25,000+ customers include 97% of the Fortune 100 and 95% of the Forbes Global 100.

Learn more at [www.riverbed.com](http://www.riverbed.com).

### Developer Efficiency

Avoid duplicated effort with the express-lane kit for developers.

#### SteelScript Application Framework

With SteelScript Application Framework, you can build web applications that consume Riverbed's Open APIs faster, with features including:

- Virtual machine to quickly install and run the application
- Web-based configuration to connect the application to your Riverbed infrastructure
- Several pre-built widgets that query data from SteelCentral NetProfiler and SteelCentral NetShark

### SteelApp Traffic Manager

Developers and operations staff can use the RESTful API to automatically and remotely:

- Trigger a prioritization rule to scale back non-business-critical traffic if an external monitor detects that a service is overloaded
- Add or remove server and application instances from a load-balanced pool when they are started and stopped, by implementing a call-out to the traffic manager's REST interface
- Proactively respond to failures by implementing an application exception handler that calls out to the traffic manager and deregisters the application instance
- Gradually migrate traffic from one application instance to another when a new application version is published
- Dynamically control AIB testing by managing how SteelApp Traffic Manager partitions the test populations to drill down to the optimal solution
- Modify the set of nodes in a pool or tune their relative load-balancing weights in response to infrastructure redeployments
- Prepare a node to be taken offline by draining connections and sessions from it before it is shut down, then reactivate it once it is ready to receive traffic
- Remotely update blacklists or whitelists for access control in response to external traffic scans or changes in user status