

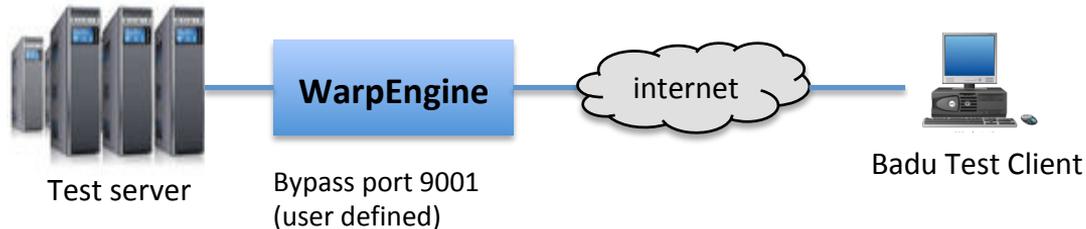


Periodic testing



Monitoring WarpTCP Benefit With the Badu Networks Performance Test Tool

- Make accurate periodic measurements of WarpTCP benefit
- Server supports multiple client connections
- Simple .CSV output
- Easily configured Measurement period
- Command line and UI interfaces



Deployment Steps –Server

Basic

1. Install test server on a Linux or Windows server
 1. Test tool bundle: www.badunetworks.com/testing/
2. Start the test server on two ports
 1. `./BaduTestServer 9000 &`
 2. `./BaduTestServer 9001 &`

Advanced: (Watchdog setup)

- Windows
 - See the “Windows Watchdog instructions.pdf” in the download
- MAC OS
 - See “MACOS watchdog client instructions.pdf”
- Linux
 - Add the following to crontab, using the command: `crontab -e`

```
***** /path/to/BaduTestWatchdog.sh >/dev/null 2>&1
```

 - This should run every minute



Deployment Steps – Basic Client

Basic

1. Install the test client at each desired monitoring point
2. Define tests on the client tool

Advanced:

- Windows: See BaduNetworks-PeriodicClient.pdf
- MAC OS and Linux:
 1. Save the test configuration: tests.js
 2. Run the test client using the command line
 1. `./BaduTestTool --run /path/to/tests.js`
 3. Add the following to crontab for periodic measurements using the command: `crontab -e`
 - `* * * * * /path/to/BaduTestTool --run /path/to/tests.js >/dev/null 2>&1`
 - Example for hourly repeat: `0 * * * * /path/to/BaduTestTool --run /path/to/tests.js >/dev/null 2>&1`



Test Configuration (on the client)

Test Control



Batch: 1/1
Test: 10/10
Estimated time left: < 1 min

Test server IP + test ports

Server	IP:Port or URL
WarpTCP	13.54.195.116 : 9000
TCP	13.54.195.116 : 9001

Test results path

Path to CSV file to append to:
/Badu/testresults

Delay between test batches

Number of times to repeat tests: 100
Time between tests: Days: 1 Hours: 0 Minutes: 0 Seconds: 0

Test Statistics

Number of Tests (Upload + Download):	40
Total Transmit Bytes:	0 B
Total Receive Bytes:	22 MB
Average WarpTCP Upload:	0.0 bps
Average WarpTCP Download:	0.0 bps
Average TCP Upload:	0.0 bps
Average TCP Download:	0.0 bps

Download Output CSV

Tests to run each batch

Size in Bytes (M, k)	Iterations	Mode	Upload	Download	Average Download WarpTCP/TCP (Mbps)			Average Upload WarpTCP/TCP (Mbps)			
					WarpTCP	TCP	Benefit	WarpTCP	TCP	Benefit	
1M	20	Alternating	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7.5	2.0	269.9%	0.0000	0.0000	%	<input checked="" type="checkbox"/>
100K	20	Alternating	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0000	0.0000	%	0.0000	0.0000	%	<input checked="" type="checkbox"/>

Add

Save this configuration to test.js

