Flash Media Server Loading Simulator 工作原理

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什么是Loading Simulator

- 目前处于Prerelease状态
- 针对Flash Media Server
- 独立工具
- 测试FMS性能
- 将支持GUI和command-line
- 通过XML Playlist加载播放列表
- 支持FLV,F4V/MP4,MP3
- 支持RTMP协议

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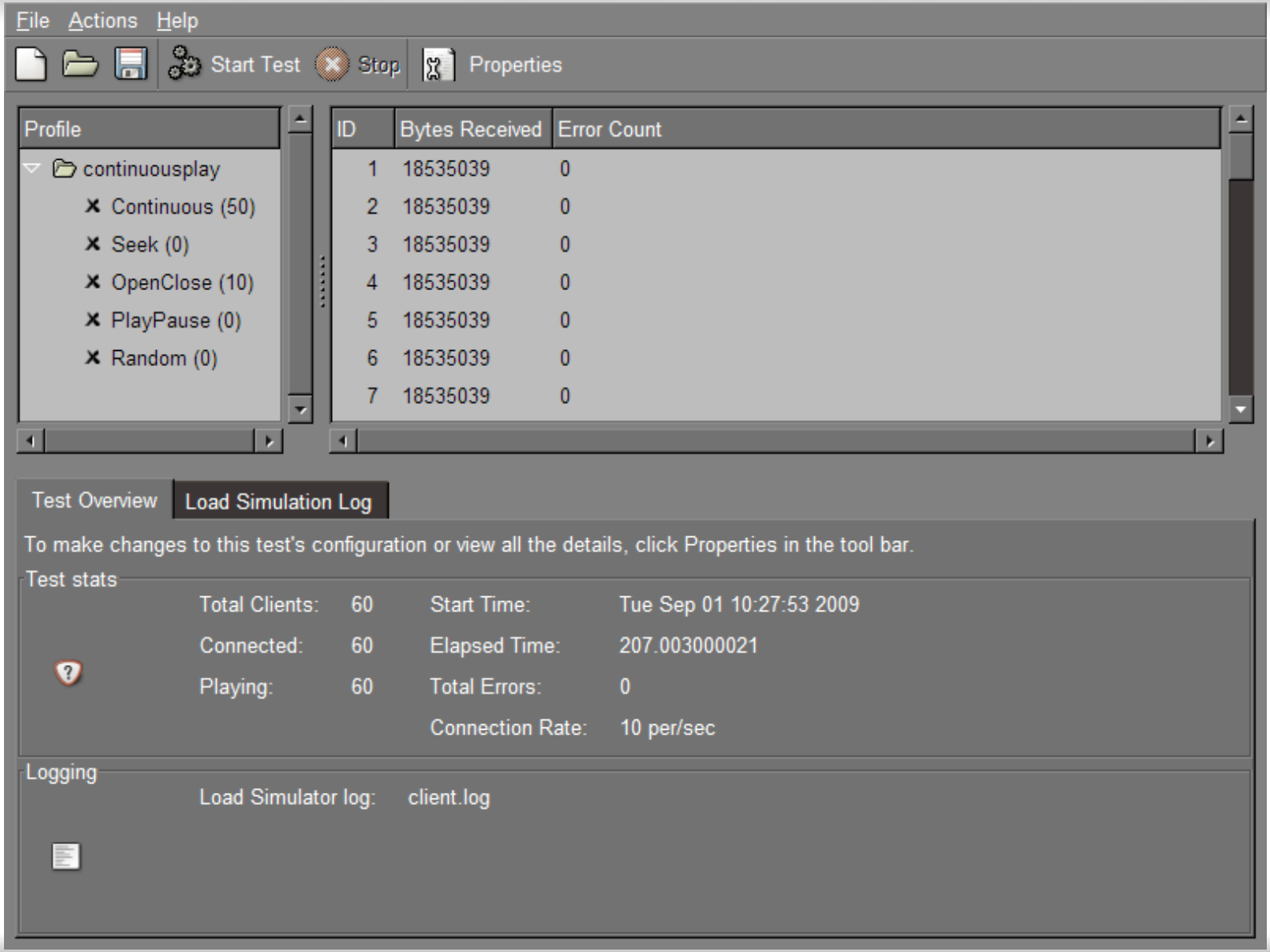
谁可能需要Loading Simulator

- 流媒体网站管理员
- Flash流媒体应用开发人员
- Flash Media Server运营工程师
- Flash流媒体应用测试人员

Loading Simulator目前不能支持

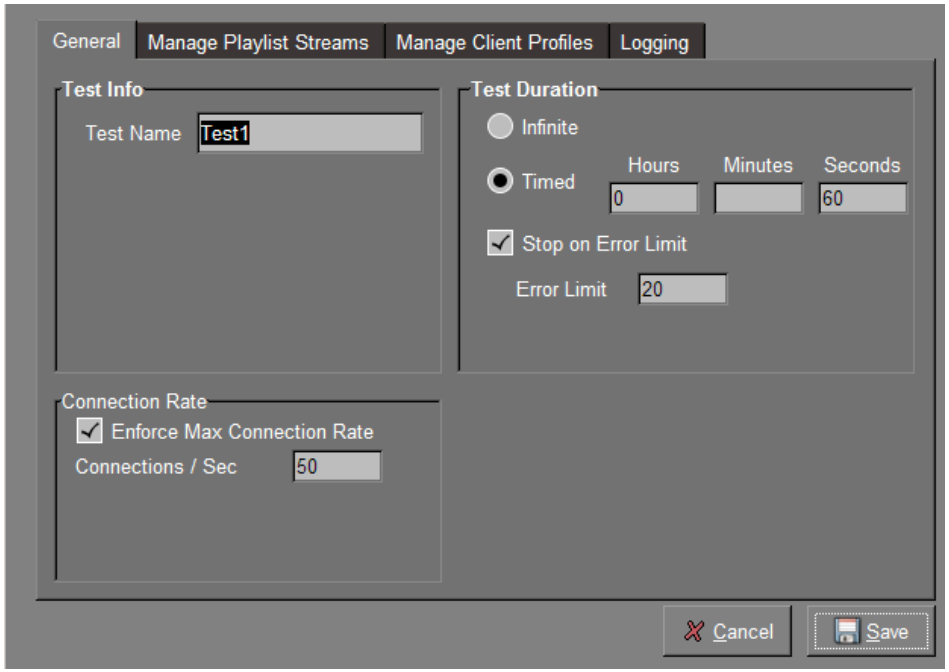
- 动态媒体 Dynamic streaming（多比特率流媒体）
- 服务器端验证
- DVR Streaming
- Shared objects
- RTMPE,RTMPS,RTMPT和RTMPTE

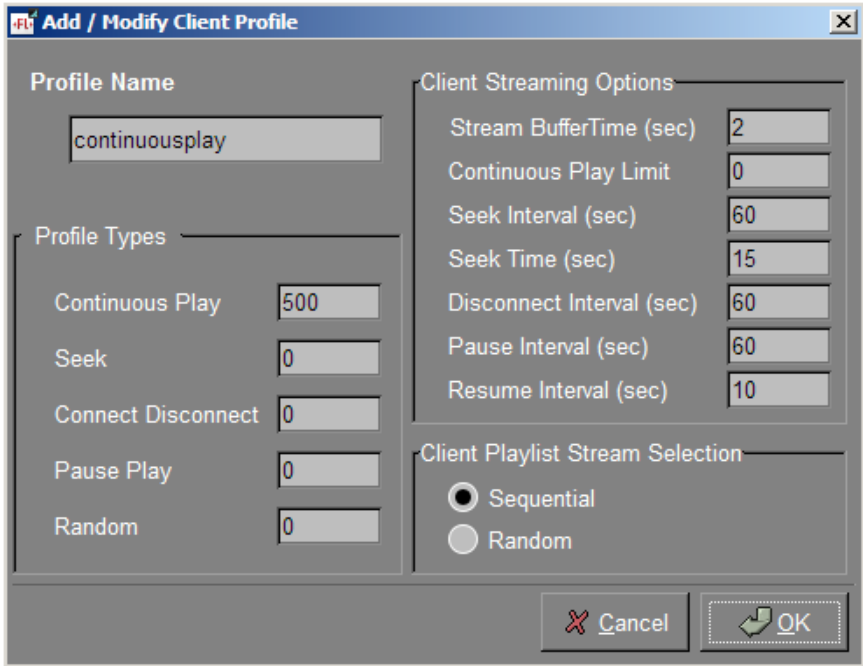
Loading Simulator工作界面



Loading Simulator XML配置

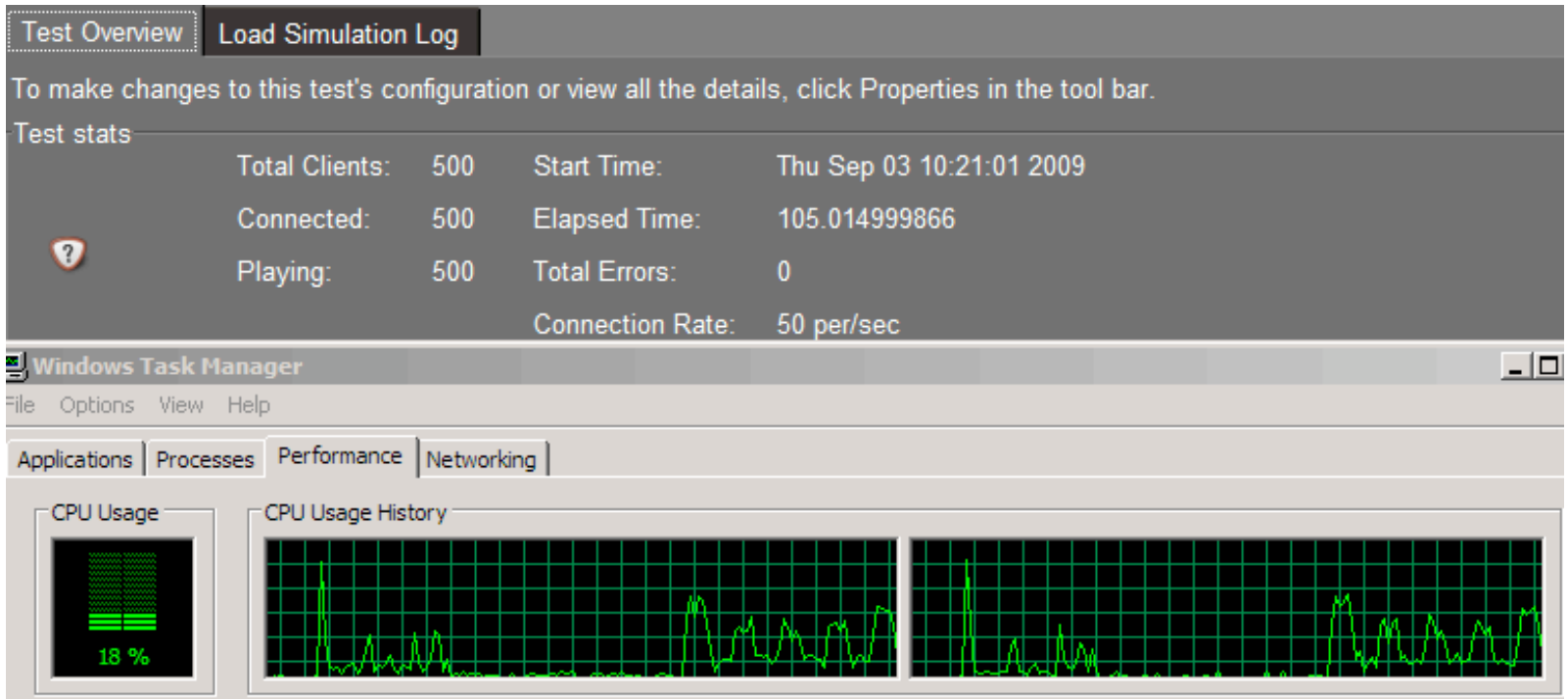
- GUI调整测试时间和并发连接以及NetStream数量





实时监控（Win)

- 通过Windows Task Manager



Load Simulator 结果分析

- access.xx.log

```
#Version: 1.0
#Start-Date: 2009-09-01 09:16:10
#Software: Adobe Flash Media Server 3.5.1 r516
#Date: 2009-09-01
#Fields: x-category     x-event date    time    x-pid   c-ip    cs-bytes        sc-bytes        x-sname sc-stre
#Date: 2009-09-01
#Fields: x-category     x-event date    time    x-pid   c-ip    cs-bytes        sc-bytes        x-sname sc-stre
session connect 2009-09-01      09:16:13        12440   127.0.0.1       3073    3073    -       -       -
session connect 2009-09-01      09:16:13        12440   127.0.0.1       3073    3073    -       -       -
stream  play    2009-09-01      09:16:13        12440   127.0.0.1       3160    3451    sample2_1000kbps.f4v
stream  stop    2009-09-01      09:16:13        12440   127.0.0.1       3222    449185  sample2_1000kbps.f4v
stream  play    2009-09-01      09:16:13        12440   127.0.0.1       3222    449185  sample2_1000kbps.f4v
stream  stop    2009-09-01      09:16:13        12440   127.0.0.1       3222    451278  sample2_1000kbps.f4v
stream  play    2009-09-01      09:16:13        12440   127.0.0.1       3284    451494  sample2_1000kbps.f4v
stream  stop    2009-09-01      09:16:57        12440   127.0.0.1       3284    6154599 sample2_1000kbps.f4v
stream  play    2009-09-01      09:17:00        12440   127.0.0.1       3395    6154852 sample2_1000kbps.f4v
stream  stop    2009-09-01      09:17:01        12440   127.0.0.1       3457    6511527 sample2_1000kbps.f4v
stream  play    2009-09-01      09:17:01        12440   127.0.0.1       3457    6511527 sample2_1000kbps.f4v
session disconnect      2009-09-01      09:17:30        12440   127.0.0.1       3073    3410    -       -
stream  stop    2009-09-01      09:17:31        12440   127.0.0.1       3483    11241663        sample2_1000kbp
session disconnect      2009-09-01      09:17:31        12440   127.0.0.1       3483    11241663        -
session connect 2009-09-01      09:17:31        12440   127.0.0.1       3073    3073    -       -       -
stream  play    2009-09-01      09:17:31        12440   127.0.0.1       3236    10981   sample1_150kbps.f4v
stream  stop    2009-09-01      09:17:32        12440   127.0.0.1       3619    520247  sample1_150kbps.f4v
stream  play    2009-09-01      09:17:32        12440   127.0.0.1       3619    520247  sample1_1500kbps.f4v
stream  stop    2009-09-01      09:17:32        12440   127.0.0.1       3619    520247  sample1_1500kbps.f4v
stream  play    2009-09-01      09:17:32        12440   127.0.0.1       3619    520247  sample1_1500kbps.f4v
stream  stop    2009-09-01      09:17:32        12440   127.0.0.1       3619    547043  sample1_1500kbps.f4v
stream  play    2009-09-01      09:17:32        12440   127.0.0.1       3729    547259  sample1_1500kbps.f4v
stream  stop    2009-09-01      09:17:34        12440   127.0.0.1       4031    1832706 sample1_1500kbps.f4v
```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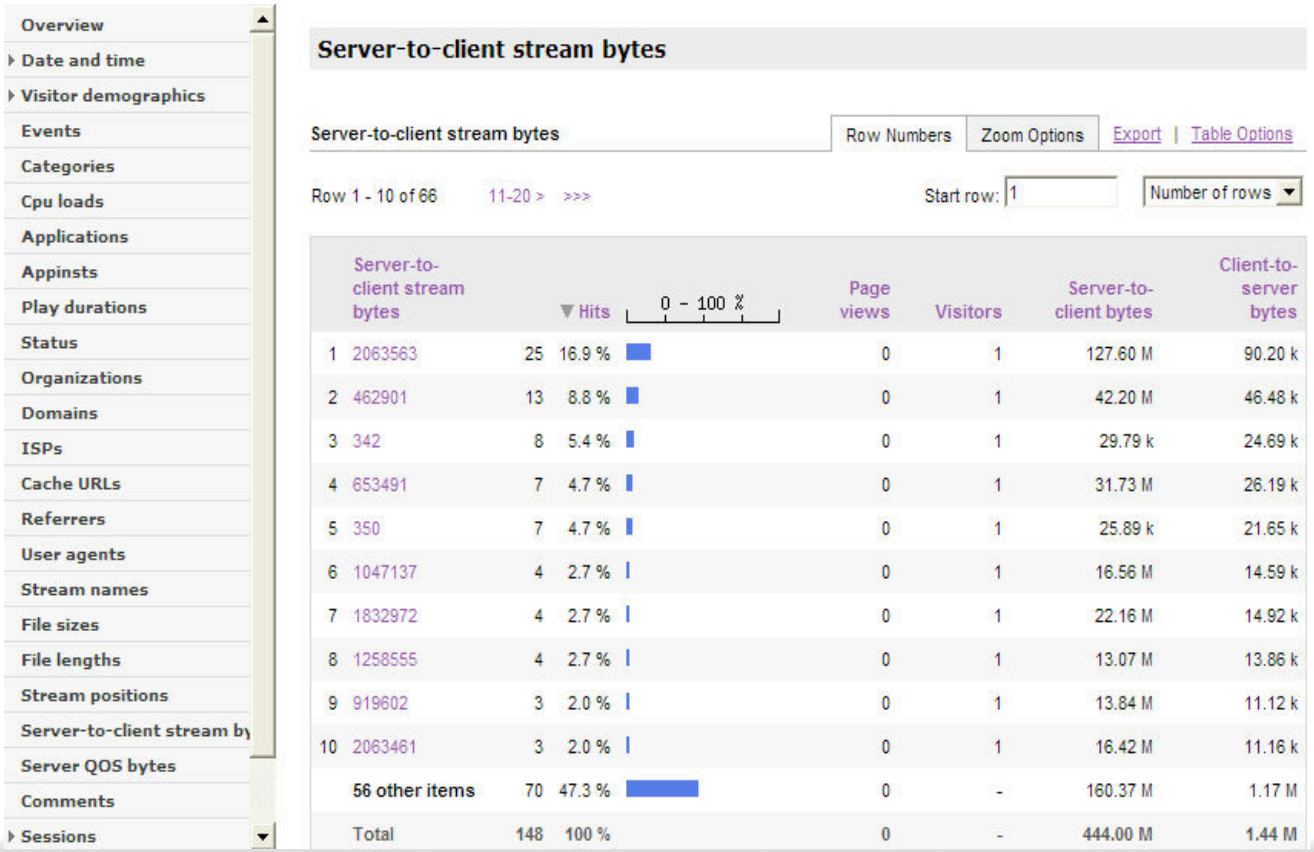
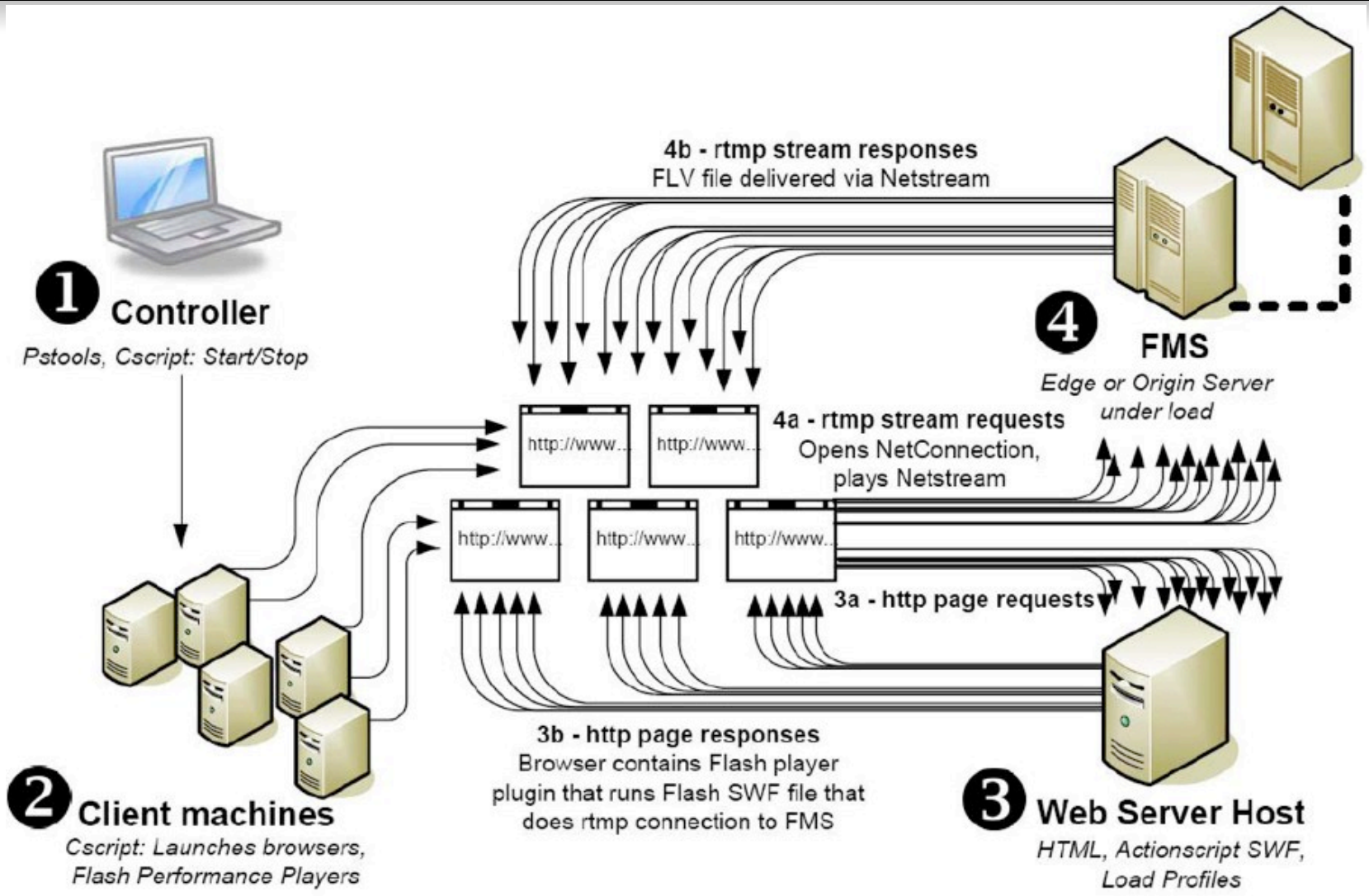
Load Simulator的最强搭档

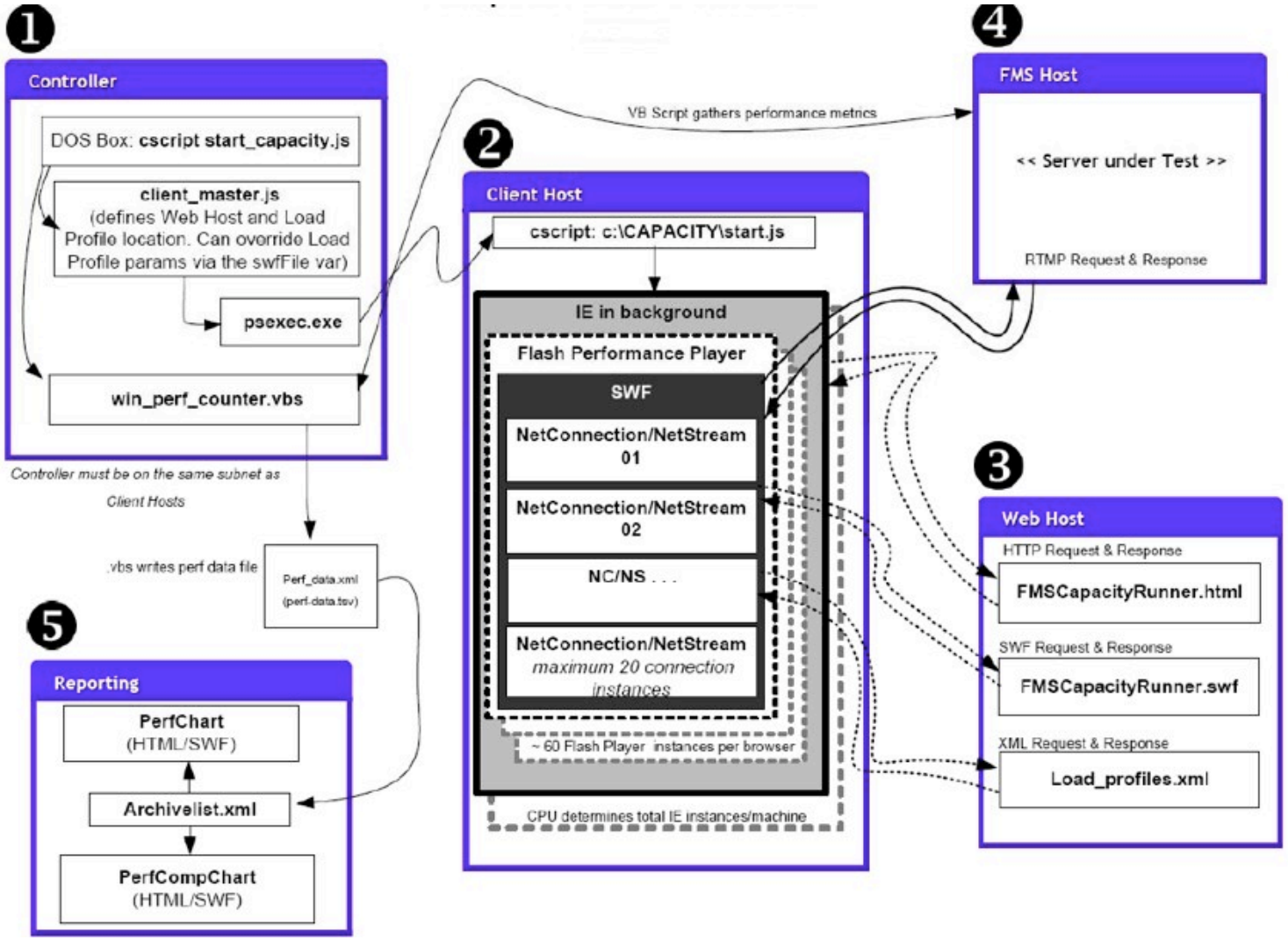
<Events>stop</Events>
<Fields>x-event;x-category;date;time;x-cpu-load;x-app;x-appinst;x-duration;x-status;c-ip;s-uri;c-referrer;c-user-agent;cs-bytes;sc-bytes;x-sname;x-file-size;x-file-length;x-spos;sc-stream-bytes;x-sc-qos-bytes</Fields>
<MaxSize>10240</MaxSize>



Loading Simulator模拟原理



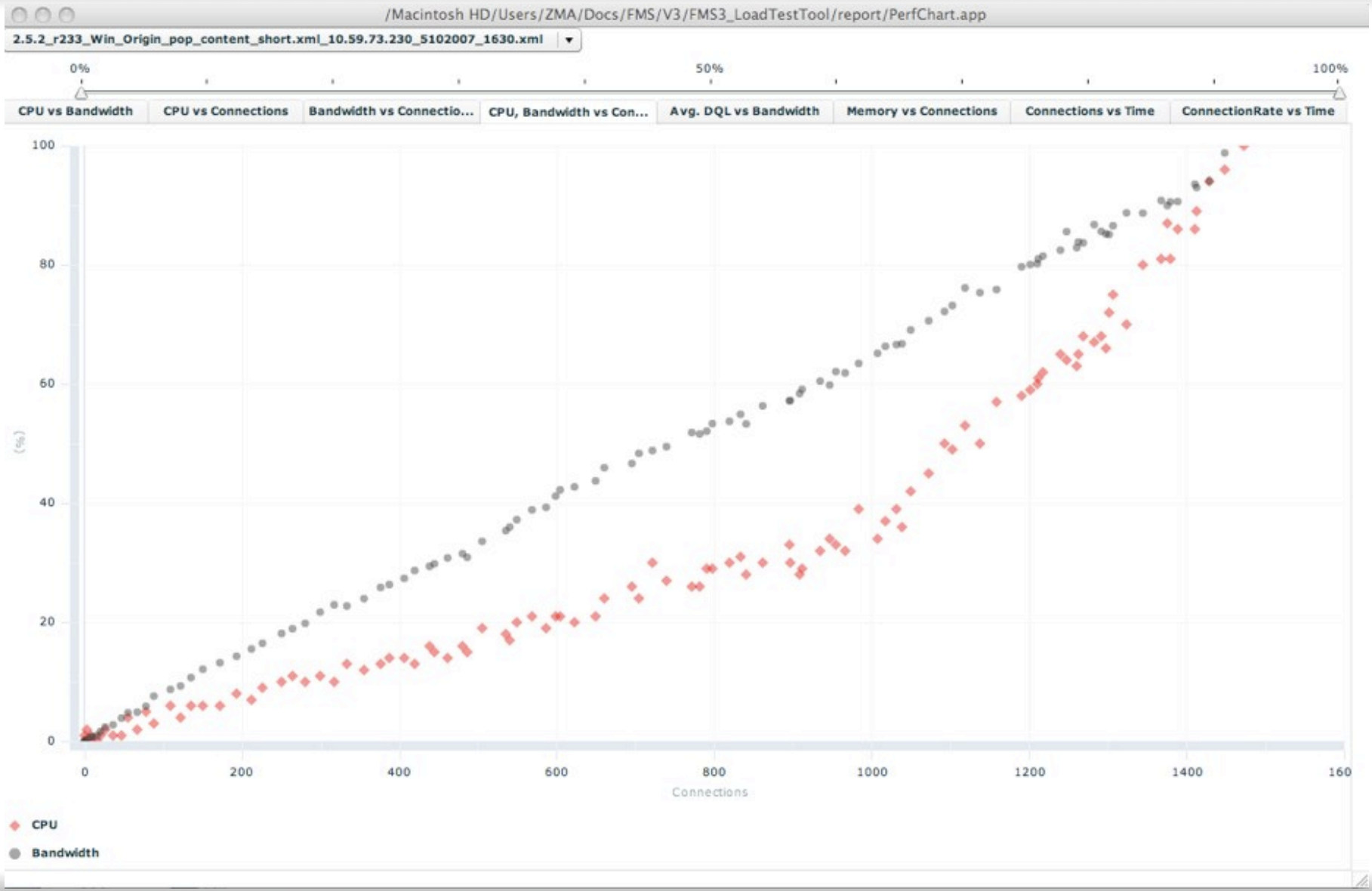
Loading Simulator强化实现



Loading Simulator监测数据

```
<RowData>
</RowData>
<RowData>
<Time>5</Time>
<DateTime>2008-3-27 20:33:52</DateTime>
<TotalCPU>3</TotalCPU>
<TotalMemory>709181440</TotalMemory>
<AvgDQL>0</AvgDQL>
<BandwidthIn>58176</BandwidthIn>
<BandwidthOut>53680</BandwidthOut>
<ConnectionsEstablished>14</ConnectionsEstablished>
<Connections>0</Connections>
<ConnectionRate>0</ConnectionRate>
<FMSCoreCPU>0</FMSCoreCPU>
<FMSCoreVirtualBytes>198582272</FMSCoreVirtualBytes>
<FMSCoreMemory>44097536</FMSCoreMemory>
<FMSCoreHandle>560</FMSCoreHandle>
<FMSCoreThread>93</FMSCoreThread>
<FMSEdgeCPU>0</FMSEdgeCPU>
<FMSEdgeVirtualBytes>95391744</FMSEdgeVirtualBytes>
<FMSEdgeMemory>10997760</FMSEdgeMemory>
<FMSEdgeHandle>341</FMSEdgeHandle>
<FMSEdgeThread>52</FMSEdgeThread>
</RowData>
<RowData>
```

Loading Simulator扩展图表



Q&A

THANKS

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