Web100 at SLAC

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Presented at the J-T Web100 BOF, Lincoln NE, May 2001
• Bulk transfer.
• Expect to transfer 200TB of BaBar data to IN2P3 in France this year.
• Double every year.
• Currently manually configure ftp-like programs with larger windows and multiple streams.
Bulk data throughput SLAC IN2P3

Patchchar: pipe 451kBytes, bottleneck 21Mbits/s

Window size (kBytes)

Parallel streams

Thruput (Mbits/s)

<table>
<thead>
<tr>
<th>Color</th>
<th>Thruput Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>purple</td>
<td>20-25</td>
</tr>
<tr>
<td>light blue</td>
<td>15-20</td>
</tr>
<tr>
<td>yellow</td>
<td>10-15</td>
</tr>
<tr>
<td>red</td>
<td>5-10</td>
</tr>
<tr>
<td>light purple</td>
<td>0-5</td>
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</tbody>
</table>
Expectations

• Web100 will …
  – take out the guess work
  – maintain optimal parameters
  – improve throughput

• Web100 is **NOT** expected to solve all our problems
Connections and Services

• Epaphus.slac.stanford.edu
  – Currently GKW kernel, would like module
  – 100BT

• WAN Connections
  – OC3, OC12, OC48

• Services
  – Iperf
  – sshd
Issues

- Doug will give a view from the trenches at the workshop.
- Installation
  - SMP
- Operation
  - Apparent conflicts with SLAC tayloring?
  - RTO Bug
Any Questions?