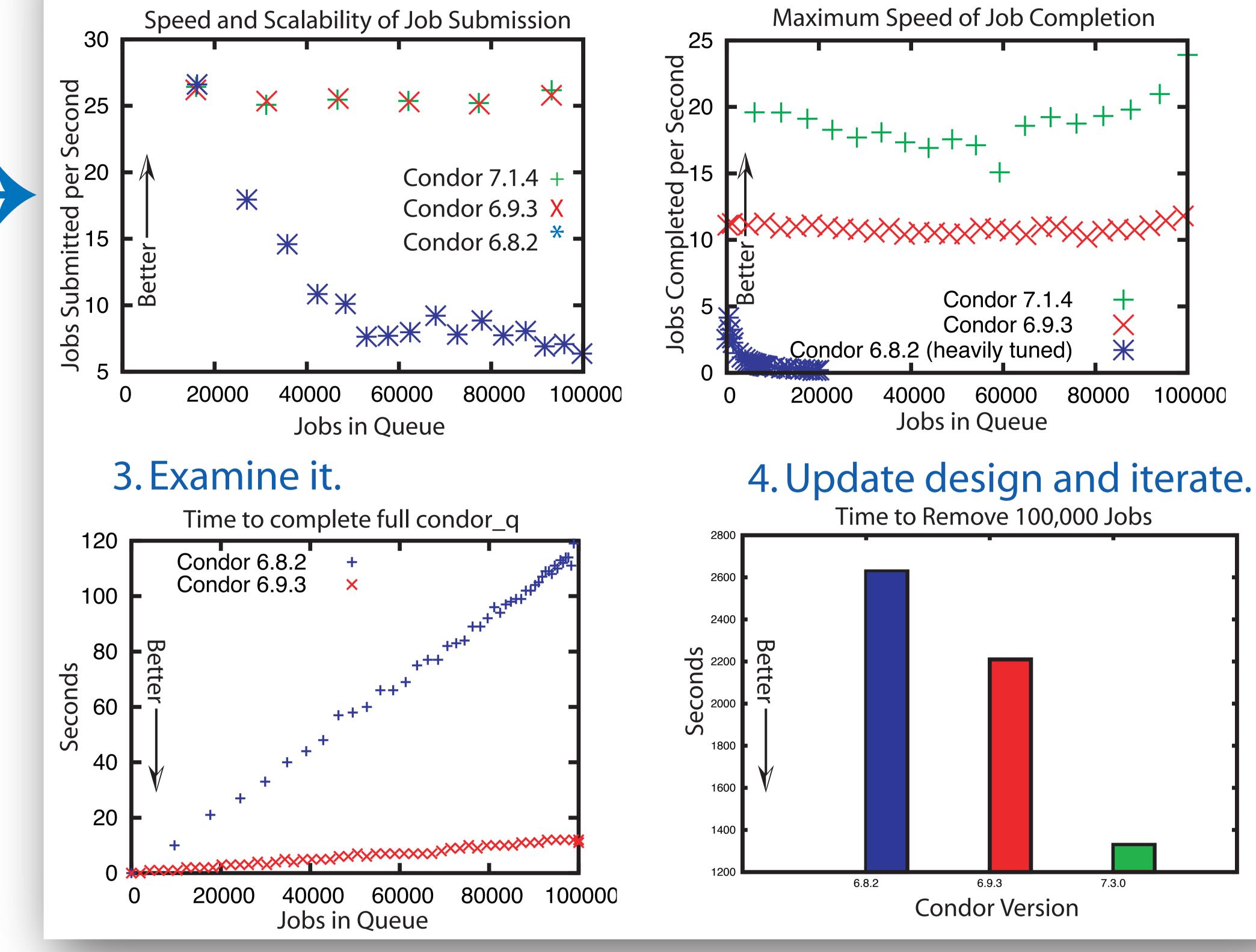
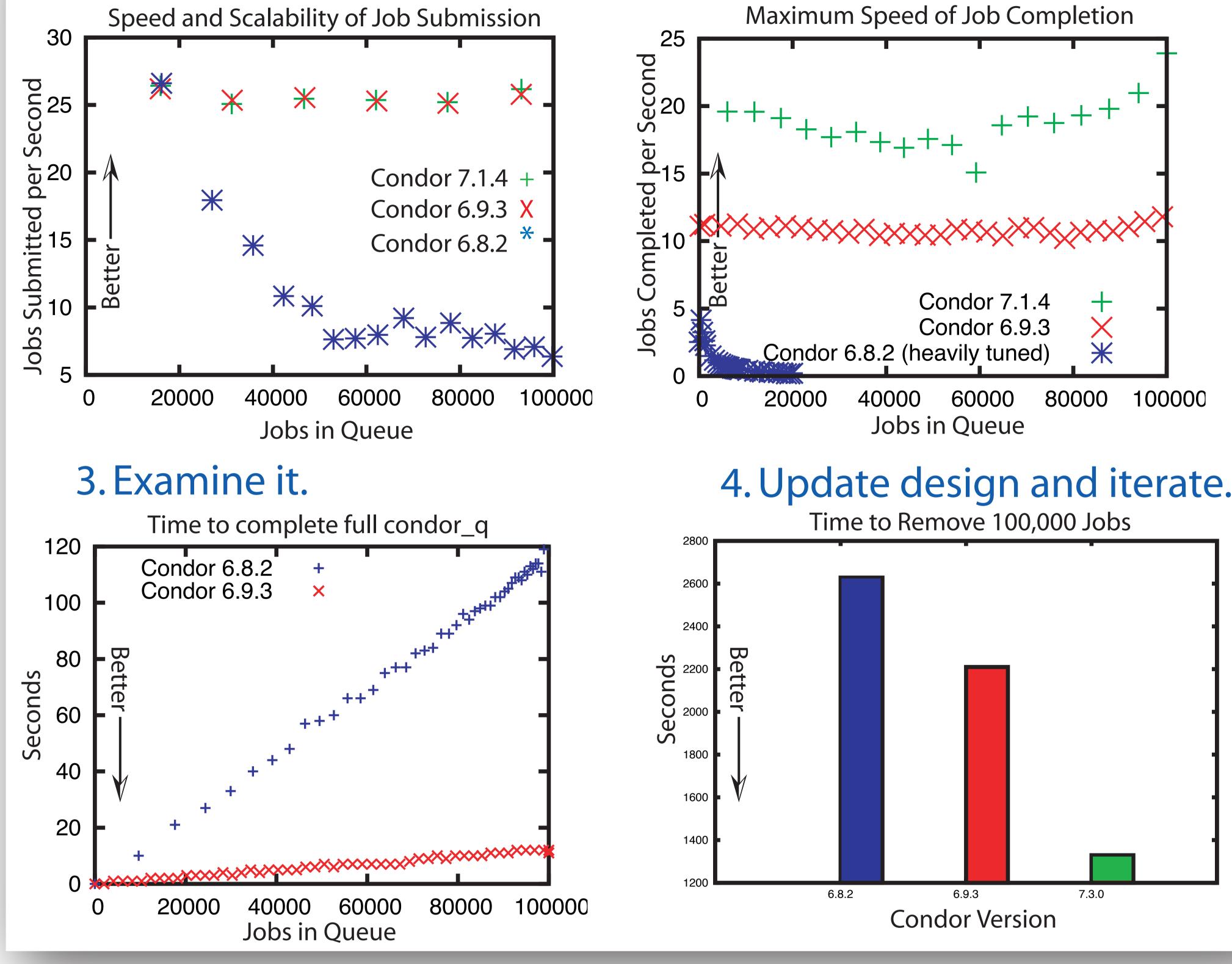
# **Condor Enhancements for a Rapid-response Adaptive Computing Environment for LHC**

D. Bradley, S. Dasu, M. Livny, A. Mohapatra, T. Tannenbaum, G. Thain University of Wisconsin - Madison

1. Submit a big workflow.



### 2. Let it run.



## Condor 7.0

Major Scalability Improvements

Focus on Security (e.g. privsep)

First Open Source Release!

More Robust

\* file transfer queueing, \* job commit retries, \* deadlocks removed, \* many fixed-length buffers

exterminated

Condor 7.2

Job Router

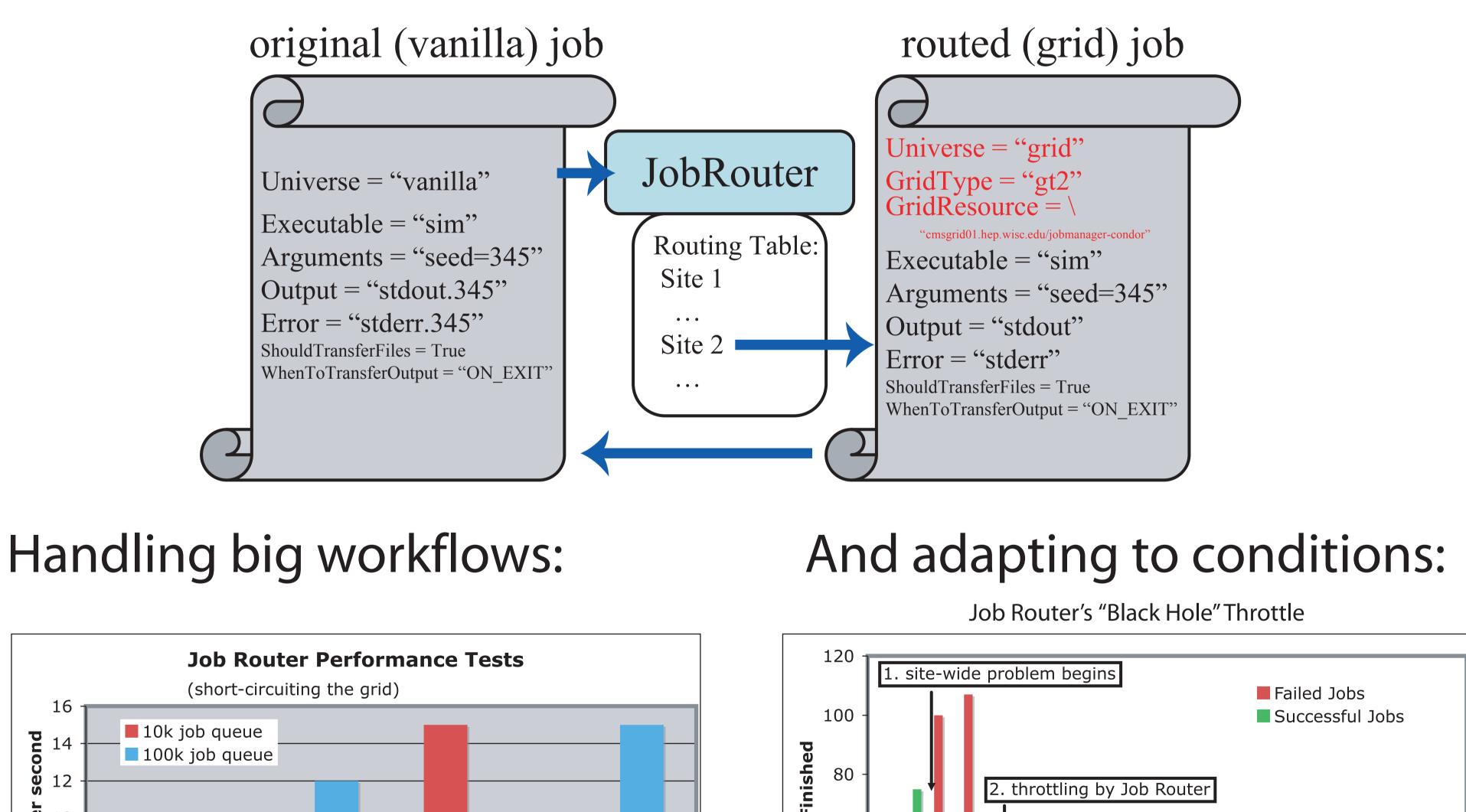
Big Glidein Scalability Improvement \* strong security over high latency networks

Also of Interest:

\* some support for multi-core jobs \* pluggable work-fetch in job executor

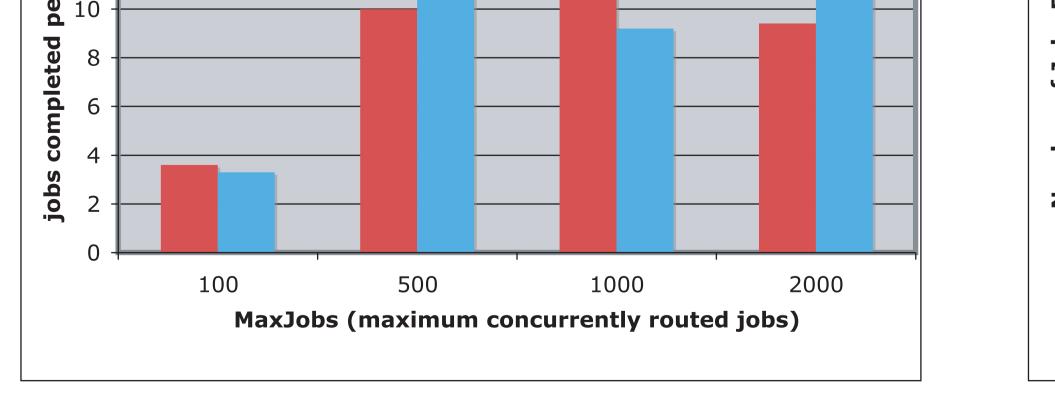
**Condor 7.3** (current development branch) More Glidein Scalability \* RAM per running job cut in half

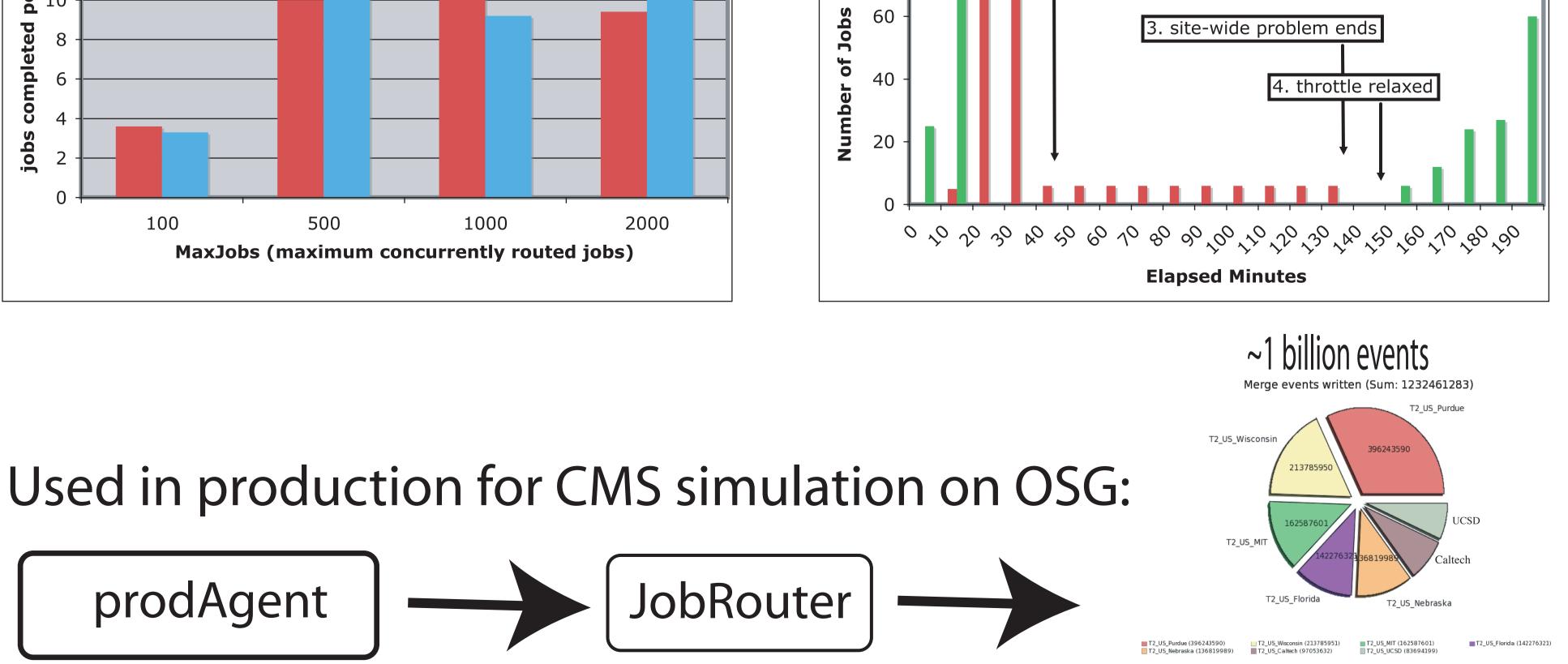
## Job Router: 1 input job queue $\rightarrow$ N destinations high-throughput, light-weight, adaptive



\* Sync to disk of job queue optimized

Improved Support for Private Networks Condor Connection Broker (CCB) is in Generic Connection Broker (GCB) is out \* broker failover, restart, reconnect \* strong security \* much simpler configuration and troubleshooting!





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