

6 Reasons Big Data Requires Rethinking Your Middleware

IDC estimates that the amount of digital information in the world is more than doubling every two years.* The proliferation of process automation, sensor networks, user-generated content, machine-to-machine connections and mobile computing are driving the far-reaching trend commonly referred to as “big data.”

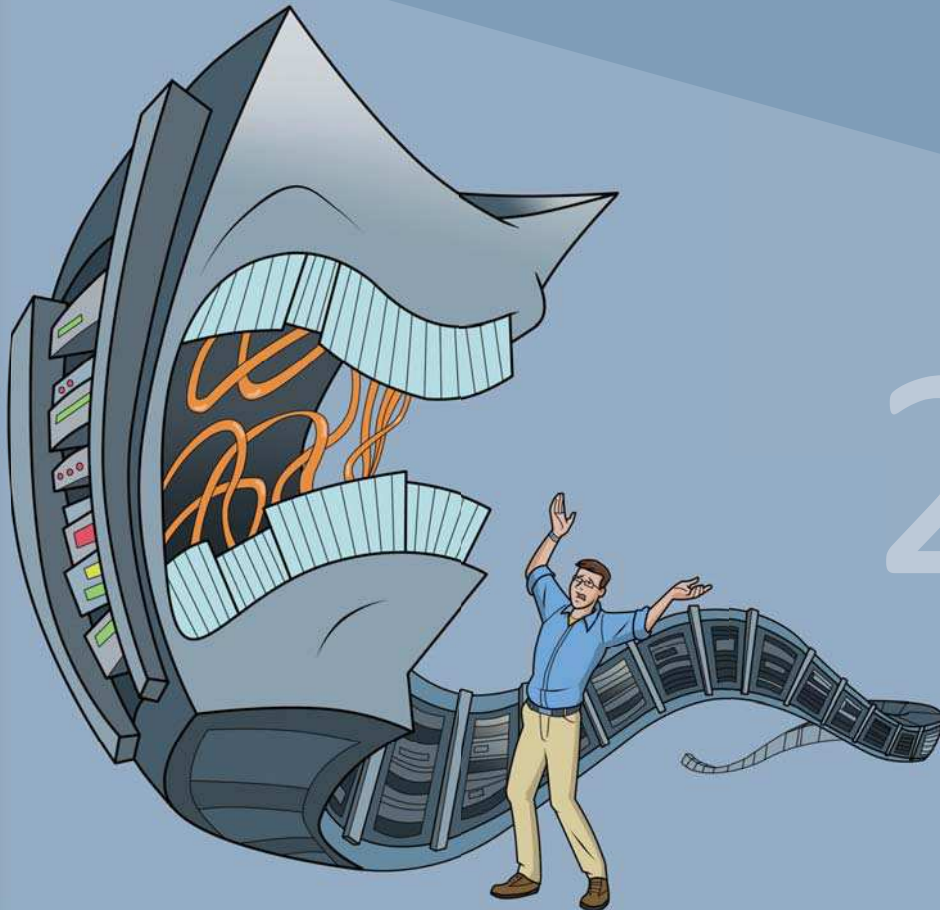
It takes new tools and techniques to collect, process and distribute this enormous amount of information. Let’s look at how to overcome six of the challenges you’ll face as you strive to capitalize on big data.



**The 2011 Digital Universe Study:
Extracting Value from Chaos
IDC, June 2011*

1

Elastic scalability isn't just for storage and processing power. Big data creates unpredictable data flows that can quickly overwhelm your existing application infrastructure, and overbuilding to accommodate peak conditions wastes money and capacity. **Your middleware needs to be as dynamically scalable as the rest of your big data architecture.**



2

If you try to support big data volumes by horizontally scaling yesterday's middleware your datacenter will spiral out of control in terms of robustness, rack space, power consumption and complexity. **Your infrastructure needs to scale without sacrificing reliability or spurring datacenter sprawl.**



3

The flood of information big data enables can be hard to handle, especially by consumers that are linked by slower networks, can't keep up with bursts of data, or only connect periodically to retrieve updates. **You need to elegantly handle the delayed delivery of messages to slow consumers without affecting those that can consume the full real-time feed.**

4

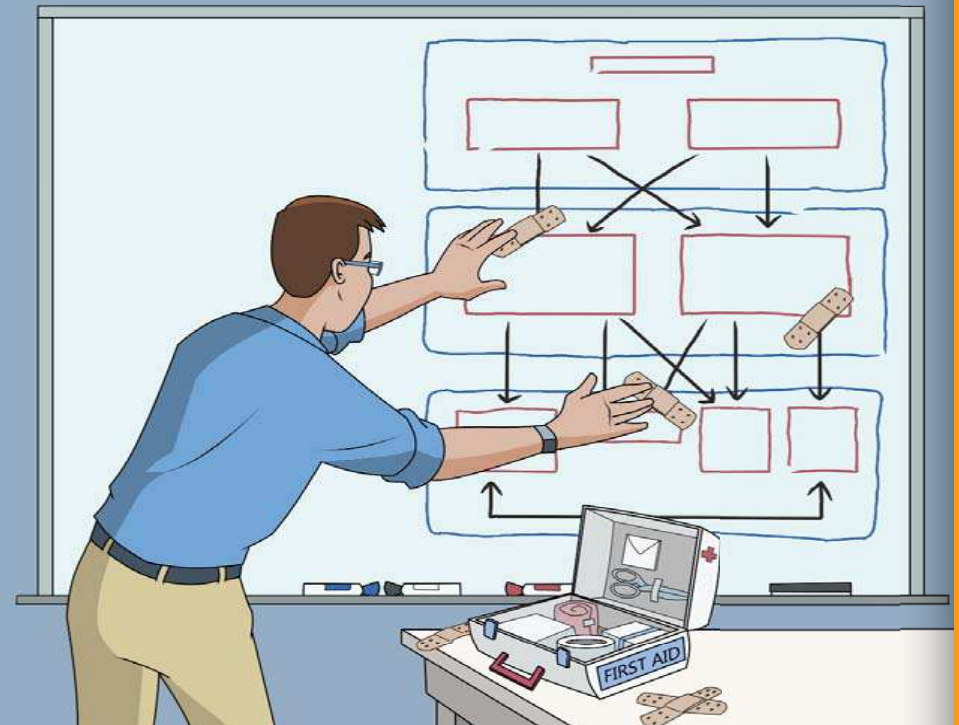
Big data doesn't just live wherever your Hadoop or Cassandra clusters are running, it's generated and consumed by applications and users around the world. **Your middleware must be able to efficiently distribute real-time data globally via wide area networks, the internet and mobile apps.**



5

Continuously patching your infrastructure to keep up with growing data volumes and changing requirements inevitably leads to a complicated and fragile system.

Your middleware should be based on a simple, stable architecture that's easy to adapt as your needs evolve.



6

Big data applications demand truly 24x7x365 availability even through natural disasters and other unforeseen circumstances. **Your infrastructure needs to automatically recover from a wide range of system faults and even datacenter-level outages.**

It takes a new breed of middleware to capitalize on big data. Solace's middleware appliances offer 10-30 times more throughput than software alternatives, with superior robustness and scalability, all for a fraction of the cost.



To see how leading companies like yours are using Solace to accelerate and reduce the complexity of their big data initiatives, visit solacesystems.com/bigdata

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