Big Data Solutions

Big data applications have big demands—massive storage, powerful computing resources, and on-demand scalability, to name a few. SoftLayer provides the high-performance, highly scalable modular infrastructure that big data requires.

With our platform you can choose from a wide range of servers—from customizable public cloud instances (ready in about five minutes) to enterprise-grade, high-powered, fully-customizable bare metal servers (ready in under two hours).

Our comprehensive storage offering provides options at all price points, and our advanced, high-speed global private network allows you to seamlessly integrate infrastructure residing in our data centers around the world. And to get your big data solution up and running faster, we even offer engineered servers with hardware configurations and OS optimizations specifically for various NoSQL database solutions.

Whether you’re building from the ground up, or looking for an out-of-the-box solution, we’ve got everything you need to meet big data challenges head-on.

**Typical Components**

- **Database Servers**
  - Dedicated servers with custom configurations give you the ideal performance for your specific database.

- **Web Servers**
  - Scale virtual cloud servers on-demand to meet site load requirements during traffic spikes.

- **Application Servers**
  - Power applications with robust dedicated servers for fast response times.

- **Cache Server**
  - Cache data and content with virtual cloud servers to reduce bandwidth demand, and increase data access.

- **Firewall**
  - Protect servers from malicious activity with high-grade firewalls provisioned on demand.

- **Storage**
  - Enterprise-grade solutions include Object Storage, SAN, NAS/FTP, iSCSI, EVault, and more.

**Challenges & Solutions**

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<tr>
<th>Challenge</th>
<th>Solution</th>
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<tr>
<td>Speeding up a NoSQL deployment for a large data set</td>
<td>Adding a bare metal server with a NoSQL application to an existing deployment will increase overall database performance and distribute compute demands.</td>
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<td>Creating a globally diverse NoSQL solution</td>
<td>SoftLayer bare metal servers running NoSQL applications are available at all of our 13 data centers around the world, from Singapore to Seattle. NoSQL servers are provisioned on demand and your NoSQL solution can scale at a moment’s notice to fit your NoSQL requirements as they change.</td>
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<td>Protecting sensitive information in a social media setting</td>
<td>All SoftLayer hardware firewalls are designed to prevent unauthorized access to your server. Our firewalls are provisioned on demand without service interruptions and are fully managed through the Customer Portal—giving you complete control of your systems’ protection settings.</td>
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<td>Upgrading to big data storage</td>
<td>Deploy new bare metal servers with larger disk capacity to handle new business requirements.</td>
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