



Jump-Start the Enterprise Journey to the Cloud



Executive Summary

In the pre-1880 era onsite power generation was the norm for factories. When the central power stations were built, these factories outsourced their power generation. Cloud infrastructure presents a similar opportunity for organizations wishing to outsource their IT infrastructure. **Cloud is to IT, as central power stations were to industries.**

Cloud Adoption is inevitable.

This is evident from recent examples of diverse companies – Netflix, Intuit, and Juniper – moving almost 100% of their IT infrastructure into the cloud.

The key reasons for cloud adoption, contrary to common understanding, have been better performance, improved service delivery, improved agility, and easier administration. **Saving money was merely a by-product!**

Data is at the core of a modern organization's competitive advantage, and CIOs are expected to enable their global workforce with agility, performance, tools, and analytics.

According to a 2014 survey of CIOs conducted by Gartner, cost savings account for only 14% of the reasons for organizations' use of the public cloud.

8 reasons why CIOs are adopting the cloud:

1 APPLICATION AND DATA CENTER CONSOLIDATION
Consolidate worldwide data centers for centralized administration and shared cost.

2 SCALE-UP PERFORMANCE AND AGILITY
On-demand scaling for peak loads, without the need to over-plan and over-invest in expensive infrastructure.

3 SUPPORT FOR THE MOBILE WORKFORCE
Cloud services make access to data efficient and ubiquitous for global enterprises and the mobile workforce.

4 DATA SECURITY AND GOVERNANCE
Enterprise security and governance can be enhanced through centralized security policies, role based access, and auditing.

5 ANALYTICS AND INTELLIGENCE
The cloud supports analytics and BI tools that enable the enterprise to maximize the value of the data access.

6 SANDBOXING AND TESTING
Use on-demand cloud for sandboxing and testing, to avoid cost and complexity of building an IT setup for a short-temp project.

7 LOWER TCO
Cloud based services eliminate administrative and cost overheads to lower TCO

8 OPEX VS CAPEX
Subscription pricing frees up capital for more important investments and lowers the barrier to switch vendors.

Gartner recommends enterprises “invest in private cloud not only to deliver a rapid return on investment, but also to enable sourcing model and architectural evolution over time.”

According to Gartner, “the cloud is a technology discontinuity that, within the next 10 years, is likely to dramatically change IT organizational missions, structures, roles, skills and operations. To put it another way, the cloud will change IT as nothing before it has.”

Jump-Start the Enterprise Journey to the Cloud

A typical enterprise has 3 types of data – production data, legacy data, and test data. This data is growing at an alarming rate, with material impacts on business performance. Data growth management is one of the top problems faced by Enterprise IT teams.

However, **60%-80% of this enterprise data is either inactive, static, or within legacy applications.** This provides enterprises an excellent opportunity to start their journey to the cloud with three simple steps:

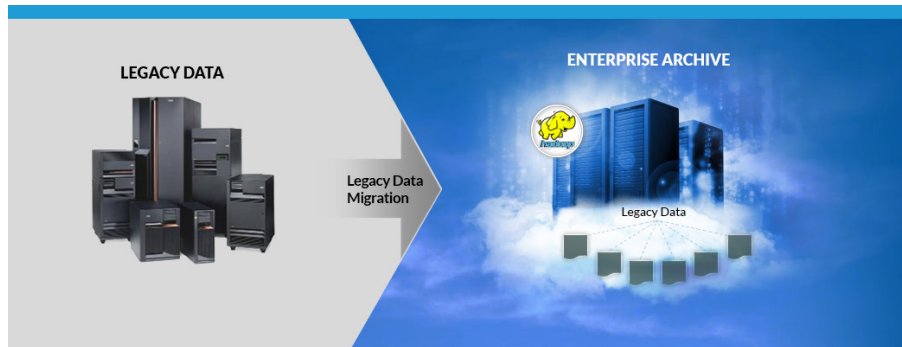


According to Gartner, data growth is the No. 1 infrastructure challenge for data centers.

Step 1: Migrate Legacy Applications into the Cloud

Experts estimate that up to 40% of applications are candidates for retirement. Migrating these legacy applications to the cloud can improve IT efficiency and reduce cost.

FIGURE 1 Migrate Legacy Applications into the Cloud



Source: Solix

As for the fear factor of data security, Gartner Research says, **“to date, there have been very few security breaches in the public cloud – most breaches continue to involve on-premises data center environments. Most cloud providers invest significantly in security technology and personnel and realize that their business would be at risk without doing so.”**

Step 2: Use Cloud Infrastructure for Sandboxing and Testing

Leverage cloud infrastructure for sandboxing, application development, testing, and quality assurance. Application load peaks during testing and upgrades, then falls dramatically. Dynamic scaling capabilities of the cloud infrastructure provides an optimal way to manage peak loads without incurring huge capital expense for temporary infrastructure. Use data subsetting and data masking solutions to create secure subsets of production data that can be moved into the public/private cloud.

FIGURE 2 Use Cloud Infrastructure for Sandboxing and Testing



Source: Solix

To support application testing and development, Gartner says, ***“adopt a bimodal IT sourcing strategy for cloud IaaS. Ensure that you meet the needs of developers and other technical end users who consume cloud IaaS, not just the needs of the infrastructure and operations organization.”***

Step 3: Archive Inactive Data from Production Applications before Moving them into the Cloud

According to most analysts, about 80% of data within production applications is inactive. Archive this inactive data from production applications to improve their performance and user experience; move these 80% leaner applications into the cloud. Furthermore, use the cloud infrastructure to manage the archived data.

FIGURE 3 Archive Inactive Data from Product Applications into the Cloud



Source: Solix

Starting the Cloud Journey with the Solix Big Data Suite

The Solix Big Data Suite is a cloud-ready Enterprise Archiving platform built on Apache Hadoop. Solix is certified on Cloudera CDH and Hortonworks and provides an out-of-the-box solution to accelerate enterprise archiving in to the cloud.

Currently, Solix supports Amazon AWS and Microsoft Azure as public cloud providers, but the solution can be deployed on any other vendor's cloud infrastructure – Google, Rackspace, Dimension Data, etc.

The Solix Big Data Suite provides an extensive ILM framework to create a unified repository to capture all enterprise data and optimally organize it for analytics tools offered through the Solix App Store.

The suite is highly scalable, with an extensible connector framework to ingest all enterprise data. The integrated suite allows seamless archiving, retirement, and flexible extract transform load (ETL) capabilities to improve the speed of deployment, decrease the cost, and optimize infrastructure. Solix also supports on-premise and cloud-based deployment on a variety of Hadoop distributions.

The Solix Big Data Suite harnesses the capabilities of Hadoop to create a comprehensive and efficient platform that provides unified and cost-effective ILM and BI infrastructures for all data, requiring smaller teams with fewer IT skills, while allowing quicker rollouts and faster results.

The Solix Big Data Suite includes:

- Solix Enterprise Archiving to improve enterprise application performance and reduce infrastructure costs. Enterprise application data is first moved and then purged from its source location according to ILM policies to ensure governance, risk, and compliance objectives are met.
- The Solix Enterprise Data Lake reduces the complexity and processing burden of staging enterprise data warehouse (EDW) and analytics applications and provides highly efficient, low-cost bulk storage of enterprise data for later use when it is needed. The Solix Data Lake provides a copy of production data and stores it “as is” in bulk for later use.
- The Solix App Store offers pre-integrated analytics tools for data within Enterprise Archiving and the Enterprise Data Lake.



Source: Solix

Recent Gartner research states that by 2017 enterprise archiving will represent 25% of the information governance efforts in enterprises. By 2016, 75% of enterprise archiving solutions will incorporate support for big data analytics.

Gartner analysts, Merv Adrian and Nick Heudecker, recommend CIOs “consider cloud deployment to minimize the cost of acquisition and operations (especially for test and development) and to support elastic scalability for unpredictable and infrequent use cases.”

The Top Benefits of Using the Solix Big Data Suite for Archiving in the Cloud

	<h3>1. Application and Data Center Consolidation</h3> <p>The Solix Big Data Suite supports archiving of structured and unstructured data applications into a single scalable repository, consolidating all legacy applications and inactive data. Solix is built on an extensible platform that will continue to support current and future enterprise data sources.</p>
	<h3>2. Support the Mobile Workforce</h3> <p>The Solix cloud platform seamlessly supports data access from any device, anywhere in the world, by any authorized user on any platform.</p>
	<h3>3. Scale Up for Peak Performance</h3> <p>The Solix cloud platform provides dynamic scaling capabilities to support peak loads without any service deterioration. Additionally, archiving inactive data from production servers improves the performance of business applications.</p>
	<h3>4. Data Security and Governance</h3> <p>Solix provides a comprehensive ILM Framework for Governance – Retention Management, eDiscovery, and Legal Hold.</p>
	<h3>5. Analytics and Intelligence</h3> <p>Built on Apache Hadoop and Spark, Solix provides several integrations with BI and Analytics tools.</p>
	<h3>6. Sandboxing and Testing</h3> <p>Solix provides a comprehensive suite of tools for sandboxing and testing, such as subsetting, data masking, and test data management.</p>
	<h3>7. Lower the Total Cost of Ownership</h3> <p>With the cloud infrastructure organizations can eliminate data center overheads such as hardware, power, cooling, backups, disaster recovery, etc. This significantly decreases the Total Cost of Ownership (TCO)</p>
	<h3>8. OPEX vs. CAPEX</h3> <p>With the cloud based model, enterprises can leverage subscription pricing – freeing up capital for other immediate business needs.</p>

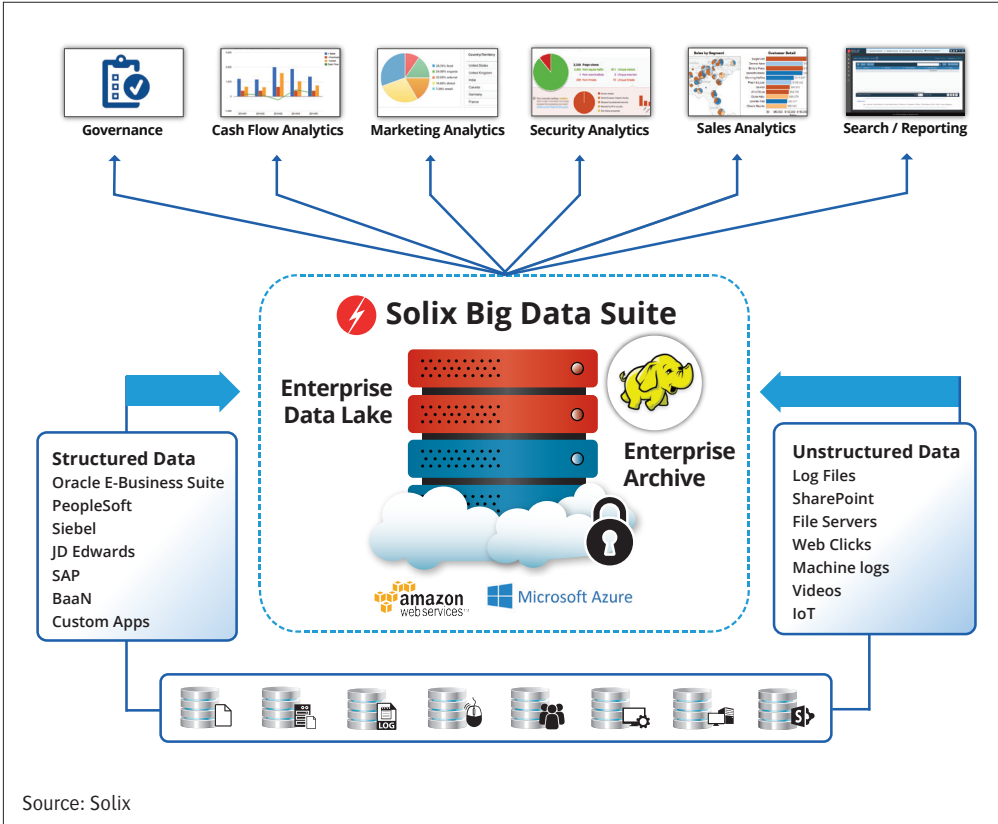
Conclusion

Cloud services are already playing a major role in IT. If your company is not using them today, it will be tomorrow.

- **Cloud adoption is inevitable**
- **60%-80% of inactive enterprise data provides a low-risk, high-value asset to migrate to the Cloud**
- **Solix Big Data Suite is the perfect platform to kick start the enterprise journey in the cloud**



Our advice to the CIO is to explore enterprise archiving as the first step in this journey to the cloud. This first step gives IT organizations experience working with a cloud service provider, making the cloud service a natural extension of existing operations.



SOLVING THE DATA GROWTH CRISIS WITH HADOOP ENTERPRISE ARCHIVING & DATA LAKE

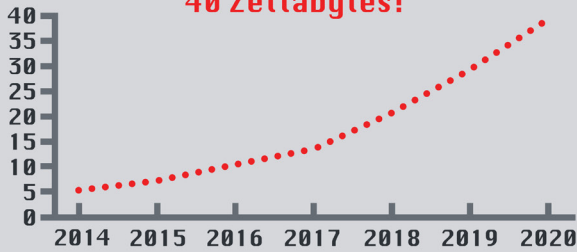
THE CRISIS

Did you know?

Data growth is the #1 infrastructure challenge for data centers.

Why?

The world is experiencing so much data growth, that by 2020, the amount of generated data is expected to be **40 Zettabytes!**

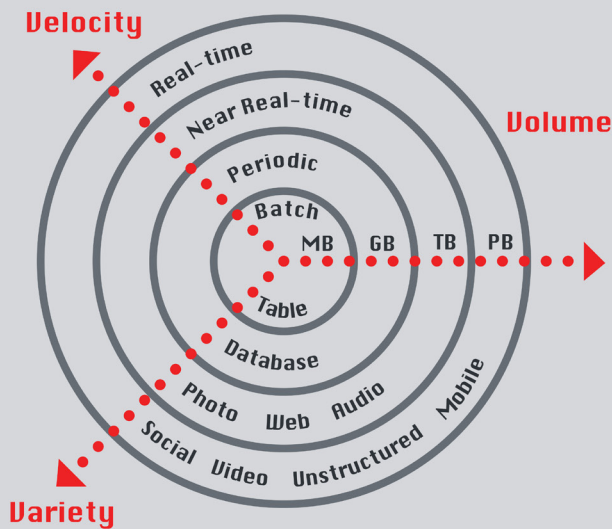


... That's roughly equivalent to **8.5 trillion DVDs**.
Almost enough to DVDs to reach Saturn!



Expansion

Big data is expanding on 3 fronts at an increasing rate.



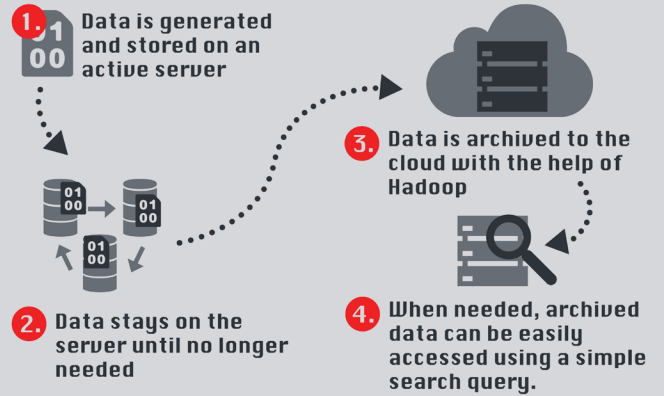
But...

80% Up to 80% of online data is inactive.

THE SOLUTION

Enterprise Archiving

How does it work?



The benefits

Enterprise archiving...

- Improves application performance
- Allows faster backups and minimizes downtime
- Eliminates infrastructure, maintenance & support costs
- Reduces operational complexity

The cost of archiving on Hadoop

\$1,080



The average cost to store 1TB of data on Hadoop*

\$60,022

US



The cost of 1TB of data in a production tier

* Based on \$30/month Amazon S3 Bucket pricing in December 2014, multiplied by three years - the average lifespan of a production tier.

The future of enterprise archiving



By 2016, 75% of enterprise archiving solutions will incorporate support for big data analytics.

By 2017, enterprise archiving will represent 25% of the information governance efforts in enterprises.



This Infographic was created by Solix Technologies, Inc., a leading provider of Enterprise Data Management (EDM) solutions. We help companies achieve compliance and reduce data storage costs. For more information, visit www.solix.com

About Us

Solix Technologies, Inc., the leading provider of Enterprise Data Management (EDM) solutions, is transforming information management with the first enterprise archiving and data lake application suite for big data: The Solix Big Data Suite. Solix is helping organizations learn more from their data with enterprise analytics and achieve Information Lifecycle Management (ILM) goals. The Solix Enterprise Data Management Suite (Solix EDMS) and Solix Enterprise Standard Edition (SE) enable organizations to improve application performance, meet compliance objectives and reduce the cost of data management across the enterprise. Solix Technologies, Inc. is headquartered in Santa Clara, California and operates worldwide through an established network of value added resellers (VARs) and systems integrators.

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