

Manage And Anticipate The Challenges Of Biodata

Nephos Smartdata Bio

Mapping the human genome initially took 13 years and \$1bn in public funding. Today it can be done in 24 hours for \$3,000. We're processing vast quantities of biodata faster than ever before – and share them with researchers globally. How can you store, manage, process and provide access to these exabytes of data properly, to ensure data integrity?

Enabling the future of science and medicine

Since the human genome was first mapped in 1990, bio information technology (bio IT) has exploded into an exciting, fast-growing field. Access to biodata by third party researchers is enabling advances in medicine, research and science like never before.

If your bioinformatics organisation wants to make your data available, how can you ensure its integrity, and store it centrally to avoid replication? Managing this can be daunting and expensive.

Can you answer these questions?

Vendors have been delivering largely unchanged bio IT storage solutions for almost 20 years. These solutions were great at launch, but weren't designed for 100+ petabyte file systems or for storing, indexing and accessing exabytes worth of data. Organisations need to handle vast amounts of data today – and be able to scale up their capacity easily for tomorrow.

Fortunately, new and disruptive technologies are coming to market from a fresh wave of innovative solution providers whose products are designed specifically for the hyper-scale, hyper-performance needs of bio IT – both now and in the future.

What benefits can you expect from SmartData Bio?

- **Cost savings**
Save up to 49% compared with your legacy environment costs
- **Predictable pricing**
No huge jumps in spend. Pay only for what you need.
- **Achieve value faster**
Deliver twice as many genome sequences in half the time
- **Easier access for third parties**
As all data is live, it is easier for researchers to interrogate the entire file system (140+ petabytes).

The SmartData Bio approach



THOUGHTFUL STRATEGY

After working with you to understand your business, technical and commercial requirements, we scour the market to find the most appropriate solution for your needs.



LOW-RISK BUILD

We build and manage your genomics platform infrastructure in-house, reducing the risk of deploying new applications on top of your existing environment.



DATA-AS-A-SERVICE

Nephos has proven experience managing the roll-out of an entire genomics platform roll-out and moving the service across from the legacy solution. You're in safe hands.



MANAGED SERVICE

You and your team can focus on delivering the applications and business requirements; we de-risk your purchasing decisions by managing the environment for you.

NEPHOS TECHNOLOGIES

16 Great Newport Street, London, WC2H 7JE | +44 (0)2039508313 | sales@nephostechnologies.com

 www.nephostechnologies.com

 @NephosTech

Beyond simple storage and HPC

Nephos SmartData Bio looks for solutions that address all these needs to deliver a truly turnkey solution for our bioinformatics clients.

In today's world, real-time data access is expected – and requests from internal and external key stakeholders are often both spontaneous and urgent. Making sure your data is trusted and well-managed is vital in safeguarding against irregularities and wasted effort.

Case study

Genomic research organisation

Objective:

To support 5 million genomes over the next 5 years.

Results:

- ✓ 3.7x reduction in read average
- ✓ 17x reduction in write average
- ✓ 69% savings over 5 years
- ✓ 44% more usable capacity for 9% less capital spend.

Your SmartData Bio solution components



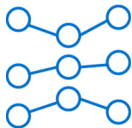
**DATA AS A SERVICE
PLATFORM**



DATA MANAGEMENT



DATA GOVERNANCE



**DATA ANALYTICS
PLATFORM**



DATA VIRTUALISATION



HYBRID CLOUD ENABLED

Why trust Nephos?

Nephos takes a holistic view of the business, technological, financial and operational contexts of your data. Our independence means we are not tied to recommending certain vendors – instead we provide the most appropriate advice and best possible value to our clients.

Our team of data solution experts are obsessed with their field, and have the knowledge and experience to come up with innovative ways of wrangling and optimising your company's data. From day one, Nephos has had a single focus: solving our clients' data problems.

You may also be interested in:

Nephos SmartData Strategy

Identify and get the most from your company's valuable data by storing and using it smartly. SmartData Strategy helps you turn your data challenges into opportunities and competitive advantages.

Nephos SmartData Governance

This governance-as-a-service tool simplifies your organisation's data security and compliance. You'll be able to guarantee and enforce compliance across multiple data stores, easily and affordably.

Ready to take control of your data? Contact us today.

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