NETPUMP

ENHANCED NETWORK PERFORMANCE

Introduction to Netpump Data

FEBRUARY 2023

COMMERCIAL IN CONFIDENCE

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Netpump's Patented Software Helps Businesses Get The Maximum Performance From Their Network Infrastructure By Significantly Reducing Data Transfer Time And Cost

INTRODUCING NETPUMP DATA

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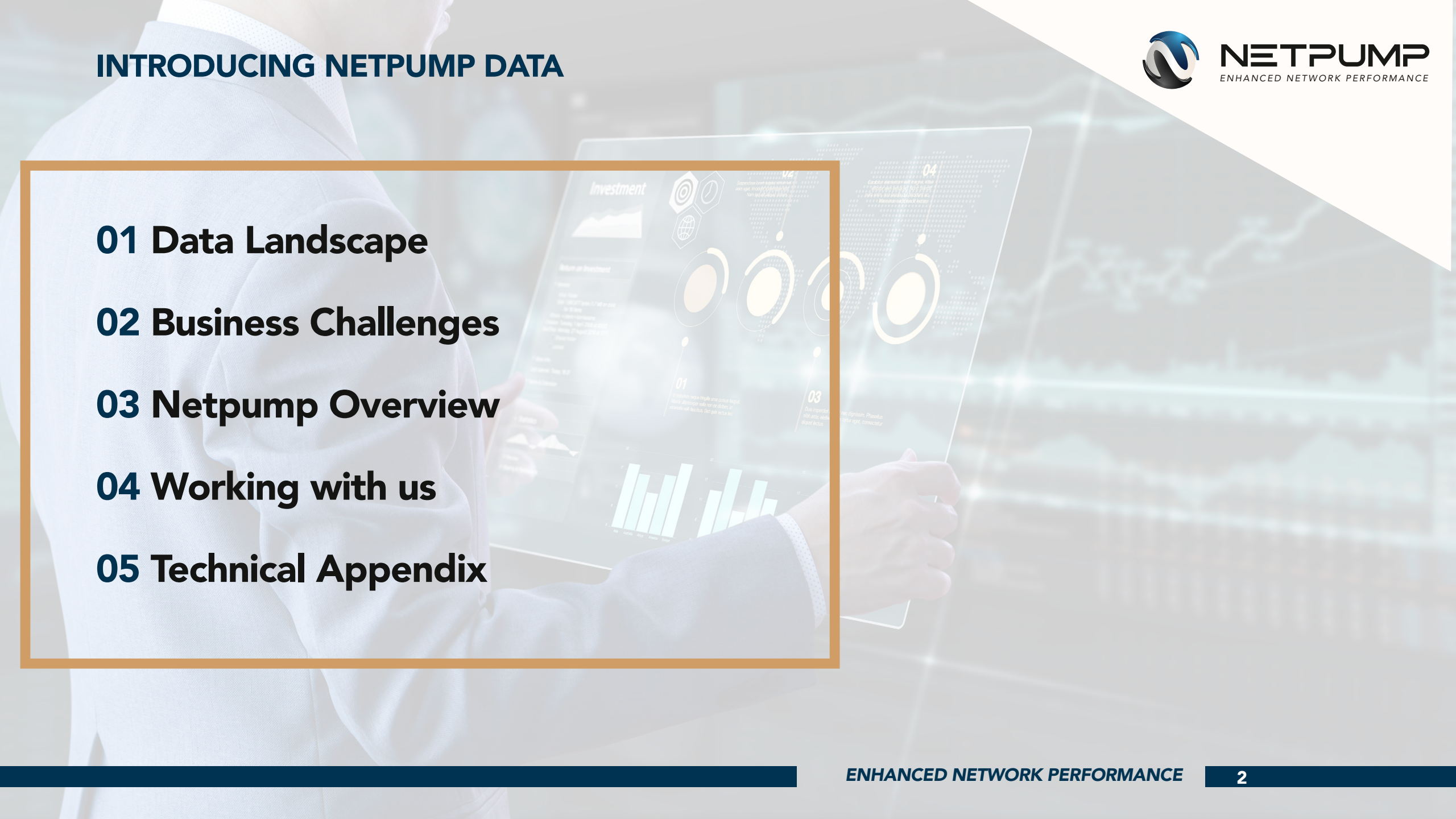

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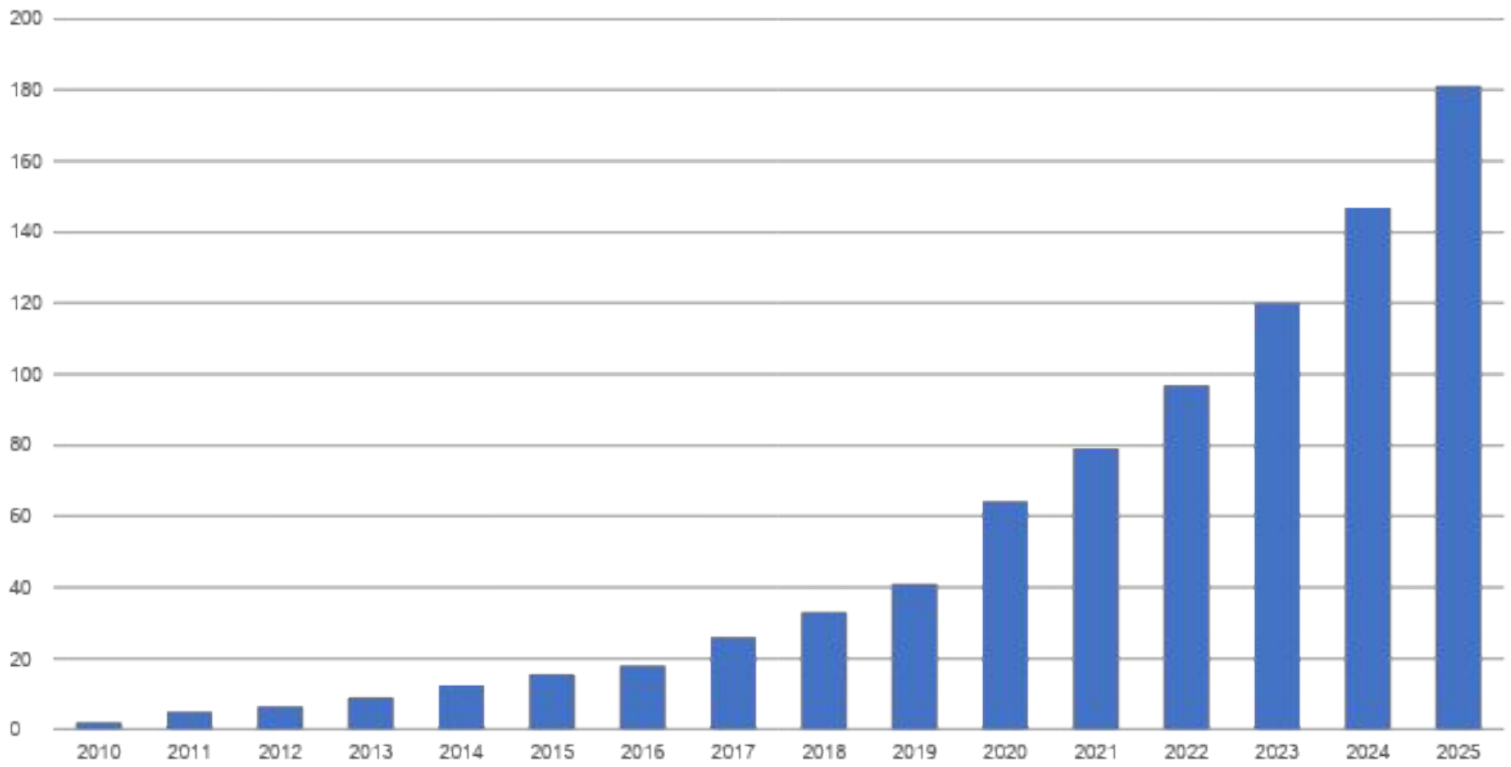
The volume of data created and consumed continues to grow exponentially



Source: Statista, June 2021

BUSINESS CHALLENGES

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The surge in data use is leading to expanding business challenges

- Customers, staff and partners are all intolerant of data delivery delays
- Cost to serve has increased. The opportunity cost arising from poor network conditions may be even greater
- Growing energy consumption from data movement means a bigger carbon footprint
- Data acceleration tools are expensive, require skilled labour to operate and rely on cumbersome workflows

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Netpump unlocks the potential of any TCP/IP connection with a purely software-based solution

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Netpump Data is a transfer protocol with market-leading performance

- Operates by encoding data to optimally sized segments to ensure that packets always move at their peak capacity
- Works with existing infrastructure and requires no end-user training at all
- Data agnostic: Will transfer **any** binary file, including all forms of encrypted data
- Compatible with all TCP/IP enabled network and software environments. Improves SD-WAN, IBN and Edge computing.
- Can accelerate private cloud workflows without relying on third party servers that may compromise network security

NETPUMP DATA OVERVIEW

Netpump Data provides a fast, sustainable and secure solution to data transfer that significantly lowers costs

- Reduce file transfer time by around 70%* to deliver productivity gains and an enhanced end-user experience
- Will significantly lower network infrastructure spend (SD WAN, Gbps line and data acceleration) as **pricing starts at just $0.02/GB**†
- Serves sustainability goals by using 50% less energy during data transfer
- Invisible to the end user, other than improved network performance, with no changes to existing workflows

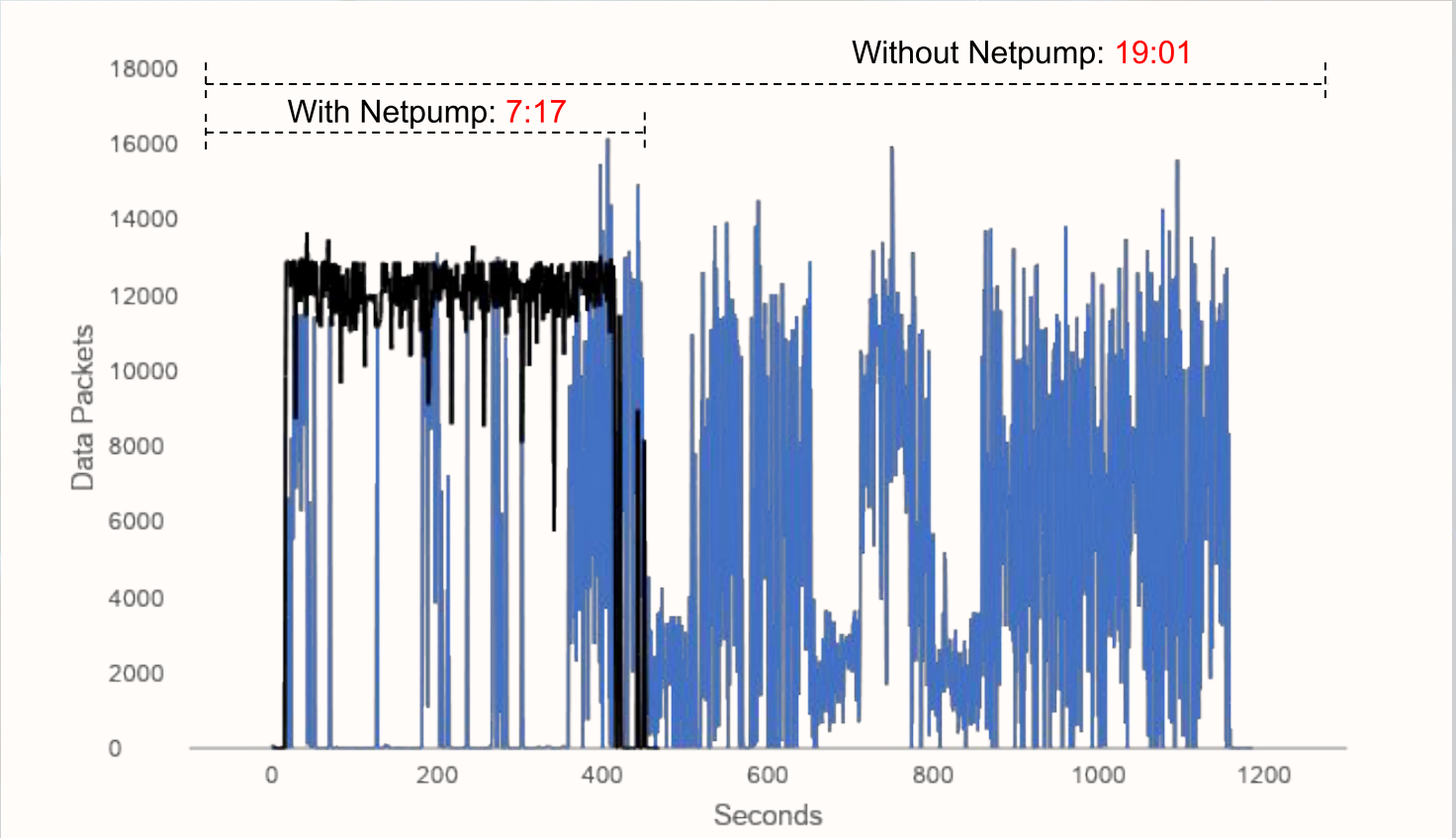
* Independent testing by Interactive; Full report available here.
† Min 50TB annually; Please see full terms and conditions.

Independent testing shows that Netpump Data reduces data transmission time by around 70%

Interactive performed comprehensive independent testing across several connection types and hosting environments – the full report may be accessed **here**.

Netpump enabled around 50% more data per second throughput on low latency localized networks and up to 10x accelerated delivery speed on high latency public networks.

Data transferred: 4.39GB
Network Speed: 80 Mbps
Latency: 19ms
Origin: Windows Server 2016 VM
Destination: Windows 8.1 Pro



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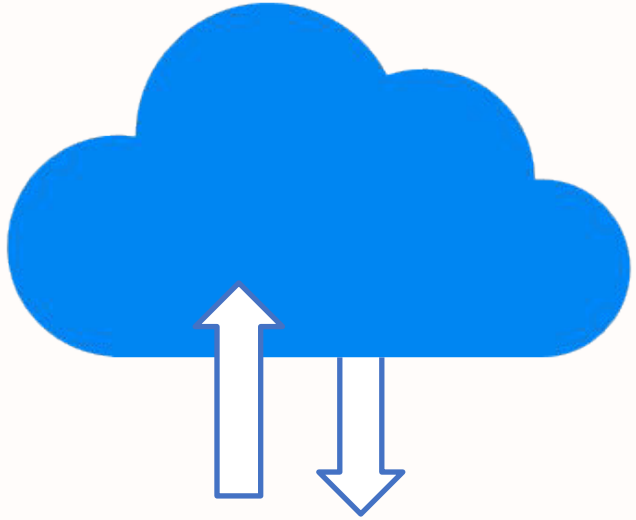
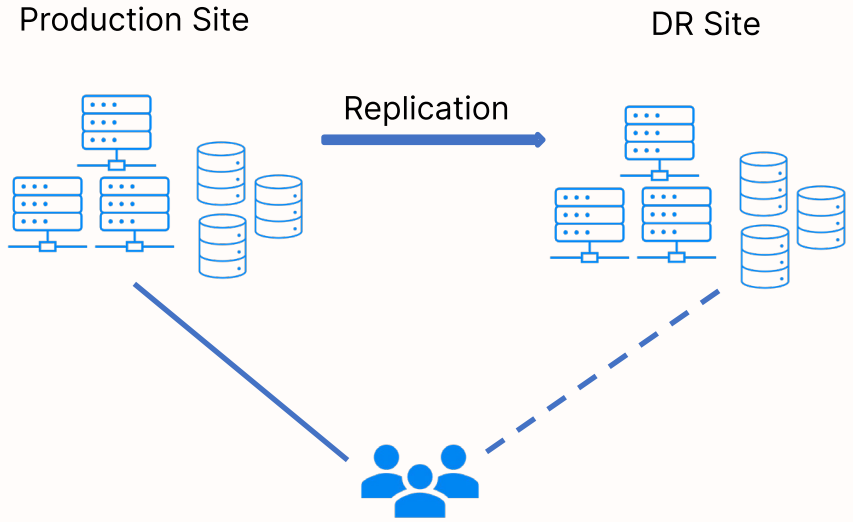
Key Use Case Illustrations: Netpump reduces the time needed for cloud migrations and disaster recovery



Cloud migrations

Speed up cloud transformation projects by moving data from on-premises servers to the cloud more efficiently.



Disaster recovery (DR)

Speed up the replication of data from production to DR site. Netpump is agnostic and is able to transport encrypted and compressed data without any problems

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Netpump provides a usage-based software solution to reduce transfer time, operating costs and energy consumption

IMPLEMENTATION OVERVIEW

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Working with us is simple

Pricing starts at $0.02/GB and diminishes with volume. No lock in contracts: Only pay for what you use.

Easy deployment with reliable ongoing support. No need for hardware upgrades or end-user training

24/7 onshore support from dedicated account managers with robust SLA standards provided by Pacbyte and Interactive.

Please contact us to arrange a free demonstration.

"Netpump has a over its hardware-based competitors as operational and management costs for hardware-based solutions add substantially to solution costs."

Jason Smith, Enterprise Architect at Interactive

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Thank-you for your time.

We look forward to discussing how we can **add value** to your network.

For further technical information, visit:
www.netpump.com/faqs/

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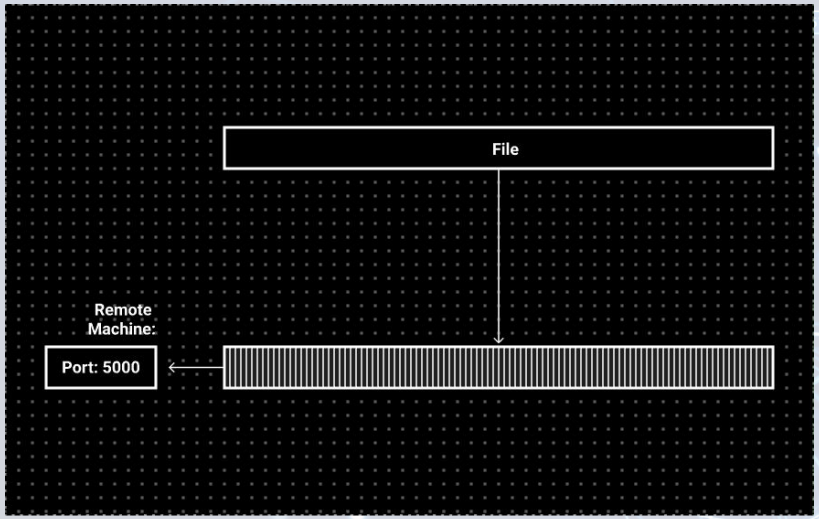
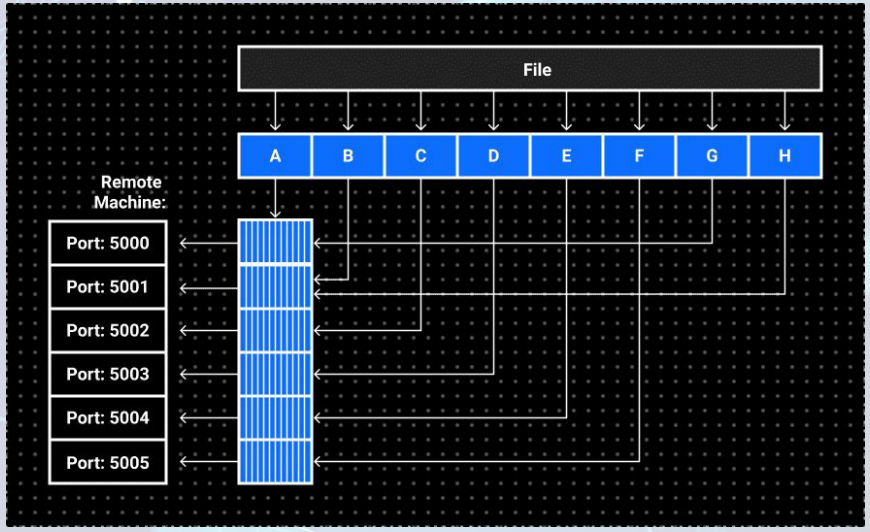
Netpump's protocol is much more resilient to packet transfer error



Ordinary TCP/IP uses contiguous transfer and is fragile to packet transfer error

When packets are received with an error over TCP/IP, a request for re-transmission is sent and until an error-free packet is received, transfer time is cut in half to allow re-transmission. This problem gets worse with each successive error.



Netpump encodes data to optimally sized segments to ensure packets always move at peak capacity

Optimised data segmentation and non-contiguous transfer greatly reduces the risk of access congestion, enables accelerated delivery, and accesses the latent capacity of available bandwidth.

See US Patent: 8,510,459
See US Provisional : 16/338990

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Netpump Data uses multi-threaded data segment transmission to outperform its peers

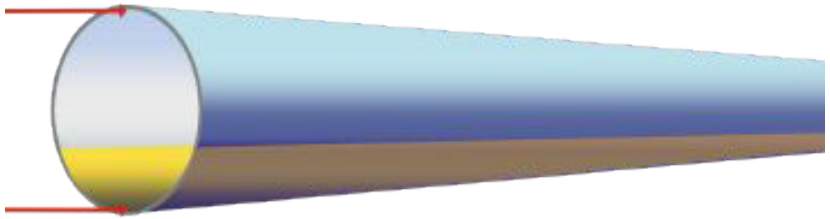
Competitors use TCP acceleration or FASP which rely on dedicated servers but they do not improve the underlying error packet retransmission.

Netpump's protocol segments data differently so that error packets that would otherwise be lost are transmitted successfully.

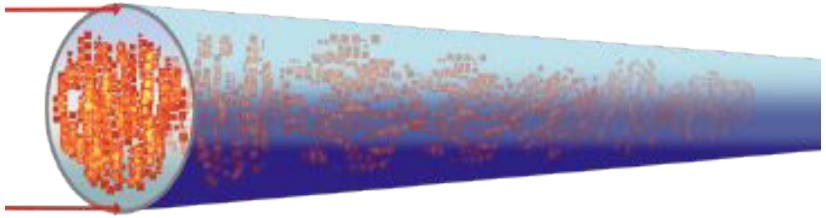
These performance gains do **not** depend on servers and will occur on any TCP connection.

100Mbps Connection speed example

Download speed on a congested line *without* Netpump at 46 Mbps



Download speed on a congested line *with* Netpump is 98 Mbps



IMPLEMENTATION OVERVIEW

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Use your existing administration tools to install Netpump (or we can do it for you)

On the **Client Side**, an application is installed to run the Netpump service using a supplied script (e.g., desktops or laptops)

Can be installed and configured using your existing administration tools e.g., Microsoft SSCM, Jamf

Easily incorporated onto your enterprise disk image for automatic provisioning on new machines

NETPUMP
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Use your existing administration tools to install Netpump (or we can do it for you)

On the **Server Side**, Netpump is installed as a service using a supplied script

Works with your existing server administration tools e.g. Windows Admin Centre

Install Netpump on your gateway server for immediate performance gains prior to deployment to all clients

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Compared To Our Peers
NetpumpData
Is Faster, Less Expensive And More Versatile

WAN accelerator completition matrix

	Netpump	IBM Aspera	Signiant	Data Expedition
Starting Price (Lowest Volume Tier)	$0.02/GB	$1.00/GB	POA	$2,000 PER SERVER FOR 3 MONTHS
Delays Further Capital Costs	YES	NO	NO	NO
100% Pure Software	YES	NO	NO	NO
Protocol Type	TCP	FACP	UDP	UDP
Requires Third-party Infrastructure Or Hardware	NO	YES	YES	YES
Closed Or Air Gapped Network Capabilities	YES	NO	NO	NO
Requires Change Of Protocol On Smart Devices	NO	YES	YES	YES
Requires Cdn Or Other Provider Servers	NO	YES	YES	YES
Data Transmission Method	UNIQUE	TRADITIONAL	TRADITIONAL	TRADITIONAL