THE 2011 IDC DIGITAL UNIVERSE STUDY

sponsored by EMC

# 1.8 ZETTABYTES

1.8 trillion gigabytes of information will be created and replicated in 2011 - enough every US-based person to fill a stack 2 miles high!

Last year WE cracked the 1 zettabyte barrier for the first time!

**1.2 ZETTABYTES OF INFORMATIED AND REPLICATED IN 2010**

While **75%** of the information in the digital universe is generated by individuals, enterprises have some liability for

**80%** of information in the digital universe at some point in its digital life.

Over the next decade, the number of **"files,"** or containers that encapsulate the information in the digital universe **.... will grow by**

# 75x

while the pool of **IT staff** available to manage them **will grow only**

# 1.5x slightly.

Less than **1/3** of **the information** in the digital universe can be said to have at least minimal security or protection

# 1/2

**the information** that should be protected is protected.

## A gigabyte

of stored content can generate a **petabyte** or more of transient data that we typically don't store (e.g., digital TV signals we watch but don't record, voice calls that are made digital in the network backbone for the duration of a call).

So, like our physical universe, the digital universe is something to behold-

# 1.8 trillion gigabytes

**in 500 quadrillion "files"**

and more than doubling every two years. That's nearly as many bits of information in the digital universe as stars in our physical universe.

**2011, the cost of creating, capturing, managing, and storing information is down to**

# 1/6

of what it was in 2005.

Since 2005, the investment by enterprises in the digital universe has increased

# 50%

to **$4 trillion**

**— money spent to create, manage, store and derive revenues from the digital universe.**

# A DECADE OF DIGITAL UNIVERSE GROWTH

THE DIGITAL UNIVERSE PARADOX:

# FALLING COSTS & RISING INVESTMENT

Over the next decade, **the number of servers (virtual and physical) worldwide** will grow by **10 times.**

The **amount of information managed** by enterprise datacenters will grow by **50 times.**

The **number of files** the datacenter will have to deal with will grow by **75 times** at least.

Meanwhile, the **number of IT professionals** in the world **will grow by** less than **1.5 times.**

## the Cloud

And while cloud computing accounts **for less than 2%** of IT spending today,

IDC estimates that by 2015 **nearly 20%** of the information will be "touched" by cloud computing service providers

Meaning that somewhat at a 5x/x journey from origination to disposal it will bestored or **processed in a cloud.**

Perhaps **as much as** will be maintained in a cloud. **10%**

**Much of the current movement to cloud architectures is being enabled by pervasive adoption of virtualization. Last year was the first year in which more virtual servers were shipped than physical servers.**

IDC estimates that today **nearly 10%** of the information running through servers is doing so on virtualized systems.

IDC estimates that it will take longer to grow to **more than 20%** in 2015.

This percentage increases along with the size of the organization. Some **larger environments** today operate with **100%** virtualized systems.

THE DIGITAL UNIVERSE AND THE PUBLIC CLOUD, 2015