

A Fresh Look at the Mainframe

Keep Your Business Running When Disaster Strikes

What Are ODI's Needs?

- ODI is a worldwide insurance company
- In times of disaster ODI has to be very visible and reliable
- ODI must have its systems continuously available at all times

I can't afford to lose any data, and I want to be online in one hour after a disaster

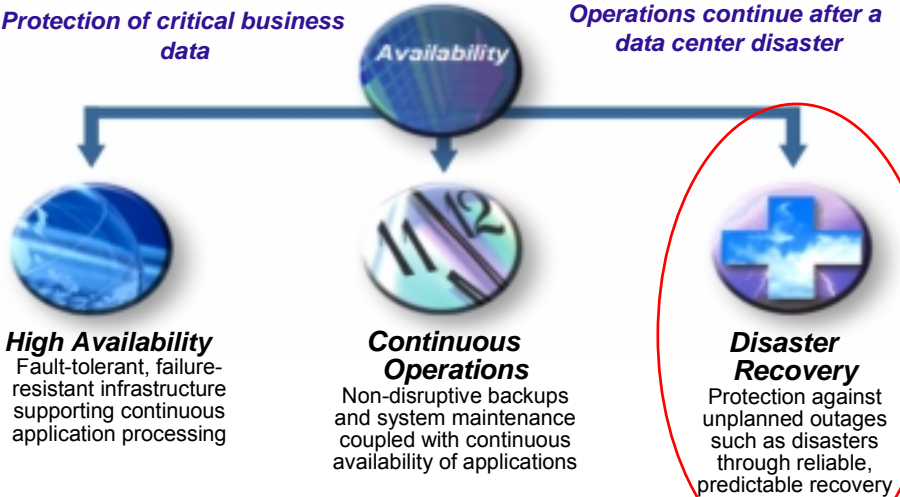


On Demand Insurance
CIO

Aspects of Availability

Protection of critical business data

Operations continue after a data center disaster



Recovery and costs are predictable, manageable, and reliable

07 - Disaster Recovery v3.9.ppt

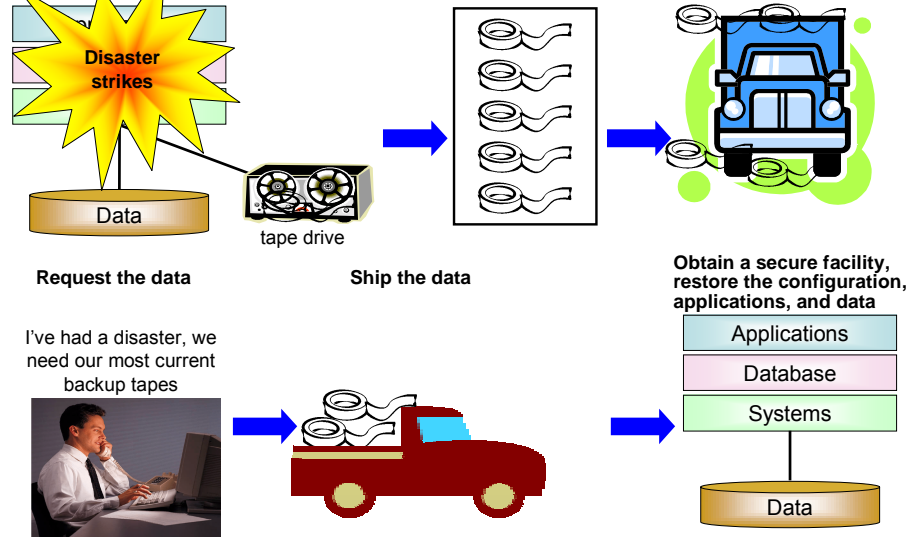
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Pick-up Truck Access Method (PTAM)

Dump the data to tape every 24 hours

Tapes waiting to travel

Shipping data (tapes)



0 hrs

>72 hrs

A Better Solution - GDPS

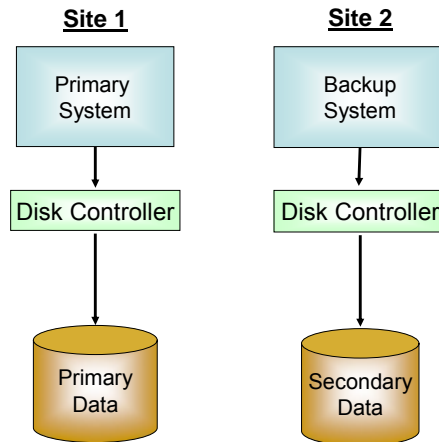
- GDPS is a software capacity to fail over to an alternate (backup) site
- It has been ushered in by an increase in the number of security breaches, regulatory requirements, and unfortunately by the events of 9/11/2001 and others around the world
- With GDPS, customers can be up and running within one hour following a disaster, with no data loss

GDPS Disaster Recovery Solutions – Depending on Distance

GDPS/Metro Mirror	GDPS/Global Mirror
Synchronous. Application impact with distance	Asynchronous. No application. impact
Up to 100 km	Virtually unlimited distance
zSeries & Open Data	zSeries Data <ul style="list-style-type: none"> • z/OS • Linux on zSeries LPAR or Guest • VM, VSE (consistent data if 1 CU)
Single Sysplex spanning configuration	Requires additional MIPS on secondary site to support System Data Mover (SDMs)
Highly Scalable. Unlimited configuration	Highly Scalable. Up to 285 coupled SDMs

GDPS

- GDPS manages the application environment, and the consistency of data
- It providing full data integrity (across volumes, subsystems, operating system platforms and sites)
- It provides the ability to perform a normal restart in the event of a site switch, thus minimizing the duration of the outage



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GDPS Uses Restart to Improve Failover Time

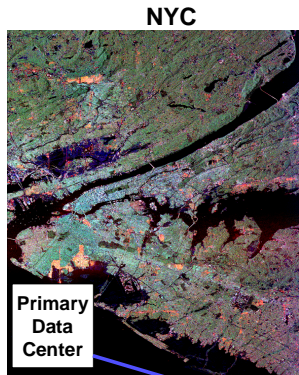
- **Achieve Application and Database Restart**
 - ▶ Consistent, repeatable, fast
 - ▶ Database Restart: To start a database application following an outage without having to restore the database
 - This is a process measured in minutes
- **Avoid Application and Database Recovery**
 - ▶ Unpredictable recovery time, usually very long and very labor intensive
 - ▶ Database Recovery:
 - Restore last set of Image Copy tapes and apply log changes to bring database up to point of failure
 - This is a process measured in hours or even days



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Data Centers



- The heartbeat of the primary system is listened to by the backup system or controlling system
- Remote data center in the Morristown, N.J. area which is approximately 80 kilometers from NYC

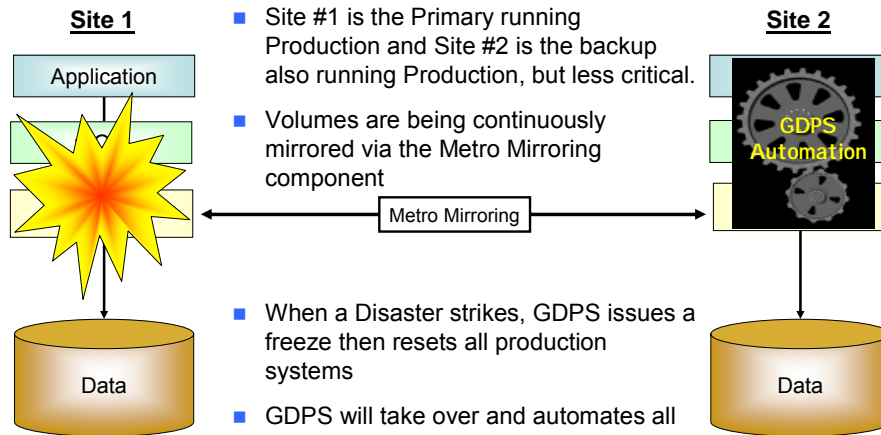
Morristown, N.J.

Remote Data Center

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GDPS – Switchover

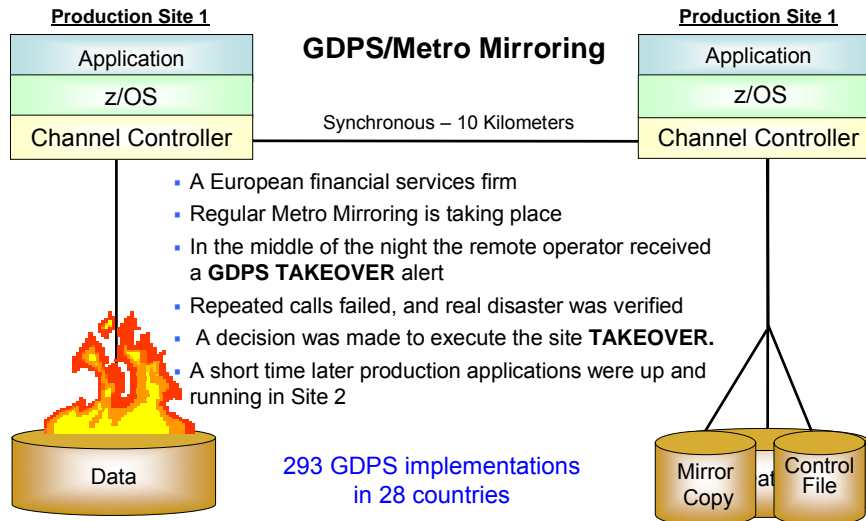


- Site #1 is the Primary running Production and Site #2 is the backup also running Production, but less critical.
- Volumes are being continuously mirrored via the Metro Mirroring component
- When a Disaster strikes, GDPS issues a freeze then resets all production systems
- GDPS will take over and automates all the steps for restart
- Site 2 is the production site

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GDPS – A Real Disaster – Fire



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