

Local Disaster Recovery Site

INTRODUCTION

Disaster recovery has been a popular topic in the past several years, especially since the events of 9/11. However, despite much talk on the subject, very few organizations have actually implemented a disaster recovery plan beyond taking a backup tape off-site. Why? Because it is generally difficult, time consuming and expensive - especially for something everyone hopes will never be used. Also, there are security and reliability issues surrounding the use of IP networks - especially the public networks.

However, there is a quick simple and easy way to implement a disaster recovery site if your company has two locations within 10 km of each other. In this case, each facility can mirror data to the other site using a direct Fibre Channel connection. The Fibre Channel cable has to be run from one site to the other so it works best in campus situations where the enterprise owns or operates several buildings in a local area. If a fire or other catastrophe destroys one building, then the data may be intact and up-to-date in another building several blocks away. This simple solution covers many disasters except a major regional disaster that could affect both buildings. It represents an excellent compromise between something that will never be done and remaining completely unprotected.

WHY LOCAL DISASTER RECOVERY SITE

- Customer convenience
- Protect against single building disaster
- Reliable
- Simple to set up
- Low Cost

REQUIREMENTS

- Alternate site within 10 km
- Direct Fibre Channel link
- Replication software

TYPICAL ENVIRONMENTS

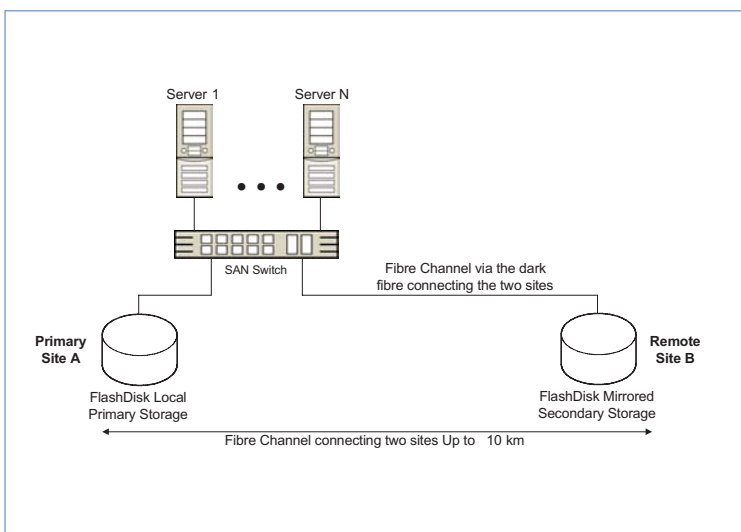
- High cost of data replacement
- High cost of downtime
- Financial
- Manufacturing
- Engineering
- Government
- Retail
- Other

BENEFITS

- Data security
- Disaster recovery

HOW IT WORKS

In a campus setting, or wherever the ability to run a cable is present, one or several Fibre Channel cables are run between the buildings that are to be connected. Once this connection is established, one site can easily mirror data to the alternate site using standard host-based mirroring software or data replication services such as DoubleTake. On the primary site using mirroring, the applications write data to the local storage and remote storage as if they were local mirror copies. The data storage at the remote site, when connected via Fibre Channel, appears to be local storage despite the distance. Both copies of the data are written and confirmed before the application advances. Thus, in the event of a disaster, the secondary site is completely up-to-date. The secondary site may just store the data or it can have duplicate servers to take over operation immediately upon failure. Finally, two sites can mutually record data to the other becoming in effect both a primary site and a secondary site simultaneously.



In this illustration, two sites are mutual disaster recovery sites for one another. Each site mirrors data to the other site. In the event of a disaster at one site, the other site has up-to-date information. Using Fibre Channel technology as a direct link, the sites may be located up to 10 km apart.