

“Planning for DR before the D.”  
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Any Interruption could become a DISASTER.

An interruption/outage can become a DISASTER if you are not prepared.

How will you RECOVER?

Catastrophic Disasters.

Experience with Call Centers or Service Centers.

Disasters can be Physical or Logical.

Physical:

NO physical access.

Facilities – A/C, Heating, Electrical, Environmental.

Local and Remote locations.

Communications – dial-in, dial-out, LAN, “- mail”.

Disasters can be Physical or Logical.

Logical:

Functional Business unavailability – LAN or PC access, passwords.

“bad” data – ad-hoc “fixes” or updates.

Unintentional loss of data – ad-hoc deletion.

Data corruption – database errors.

Database capacity issues.

Inability to recover or “restore” data from backup media.

“lost” output – can you reprint or rerun production?

Define your CRITICAL Business Functions.

What specific functions are required to keep your business **operational**?

What are the **critical** business functions?

Can you operate only with lookup or read capability?

Can you process manually and update at a later time?

Can you run abbreviated production processing?

What are your internal and external deliverables?

Is today a “key” day of the week, day of the month, day of the year?

Business Functions:

On-Line Transaction Processing - new  
updates  
lookups/inquiry.

Financial , Accounting, Procurement, Business Configuration.

hard copy outputs (reports, documents, printed stock)

Production Processing (scheduled, ad-hoc, user initiated)

Special Processing Requirements – end of week, month-end, quarter-end

Department/Customer/Client deliverables (Upload and Download capability).

Outsourcing.

What is your infrastructure?

Servers, workstations, and PC's.

Communications – inbound and outbound.

What supports the business functions – servers, telecommunications, LAN's, printers?

What else is used – BBS systems, voice mail, e-mail, internet, area printers, scanning?

WHO is needed – business staff, IT/IS staff?

Infrastructure:

Business Servers, Network Servers

Telecommunications, Data Communications

FTP servers, Bulletin Board Systems

E-mail systems, Voice mail systems

Laser Jet and Line printers

FACILITIES and Supplies

Scanning or Imaging.

Internet and Intranet.

Functional Business staff.

IS/IT staff.

System Requirements:

Total disk/disc space requirements

CPU utilization

Network bandwidth

Network functionality.

Number of available network connections.

IP address list – servers, printers, PC's.

Number of network connections on each server.

Max number of logical connections for each server.

Bandwidth Issues.

Upload and Download capability.

Number of workstations and desktops.

Software:

Operating System, patches, software 'packs'

Application software, 3<sup>rd</sup> Party software, utility software.

Proprietary software "gotchas".

Emulation software (version, number of copies)

Login/logon/start-up macros, scripts, routines.

Current software validation codes/keys and contact info.

Facilities

Power - UPS capacity.

Mini UPS's for workstations and desktops.

Physical Lighting and flashlights.

Tool kits and Spares.

Local communications – "walkie talkie"

"Restore" - Media & Files.

Is the current backup media readily available?  
How current is the backup media (previous day, previous week)?  
What files need to be “restored”:  
    operating system.  
    Configuration info.  
    Application software.  
    Databases and data files.  
    Scripts, commands, routines.  
    3<sup>rd</sup> Party and utility software.

“Restore” - Considerations.  
    STEP-by-STEP “restore” and recovery instructions.  
    How much time to “restore” and verify?  
    How will you validate/verify the “restore”?  
    How do verify the integrity of media.  
    Backup software compatibility issues.  
    If the “restore” fails - punt?  
        retry?

“Time Zone”  
    Total Time required to prep DR systems.  
    Total Time required to “restore” production environment to DR systems.  
    Time for Data Verification and Data Validation.  
    Unit Testing (applications, utilities) and System Testing.

Define your DR objectives.  
How much does downtime cost your company?  
How much downtime is acceptable?  
What are the critical business function?  
What will be the total cost – money and resources?  
Business Functions + Required Infrastructure = \$ Cost.

Your DR Objectives.  
    Provide 20-30 minutes of uptime.  
    Provide 45-60 minutes of server availability.  
    Provide server availability.  
Are the objectives: Feasible?  
                    Reasonable?  
                    Practical?  
How current is your backup?

Contacts Lists.  
    A list of primary and alternate contacts that -  
        can PERFORM the required functions?  
Hardware Vendors, Software Vendors, Outsourcing.  
The contact method(s) - pager, cell phone, home phone, message center.  
A list of additional contacts – internal and external.

Accessibility.  
    Does the staff know where to go?  
    How will the staff be transported?  
    Will the alternates have the current login/logon id's and passwords.

Provide current Dial-in and Dial-out access passwords.  
Provide current special access passwords - network, servers.  
Provide a current list of modem phone numbers.  
Card Key/electronic and door keys.  
Physical access information.

#### Your PLAN

Current Documentation.  
Activity List and realistic Time Line.  
Walkthroughs and results.  
Escalation instructions.  
Update and revise your plan.

#### Will your DR plan work?

Practice, practice, practice.  
Recover from mini-disasters.  
Update and revise your plan.  
Could your neighbor understand your plan?

#### INFO and LISTS

Network configuration.  
Server configurations.  
Server-based network configuration.  
Printer configurations.  
Disk/disc utilization.  
Modem configurations.  
Application software configurations.  
Software validation keys/codes and contact info.  
IP address list with logical server names.  
Logins/logons and ALL passwords.  
Special logical mappings  
Total disk/disc space requirements  
Hardware Vendors, Software Vendors, Outsourcing.  
Login/logon/start-up macros, scripts, routines.  
Who's Who list.  
The contact method(s) - pager, cell phone, home phone, message center.

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