
Y2K



***Contingency
Planning***

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What if...



**...Y2K failures occur
despite our best efforts?**

What do we do?



- Develop a *contingency* or fall-back plan
- "Contingency" means an event that's likely, but not certain to happen

Contingency bonus



- Contingency plans have a lifetime that exceeds the Y2K situation
- Opportunity for disaster planning

At DOE Hq.



- **Contingency plans required for mission-critical systems**
 - Final due 3/31 for non-compliant systems
 - Draft due 4/30 for compliant systems
 - www.cio.doe.gov/y2k for contingency plan template

For other systems



- **Prepare for worse-case scenario**
 - Desktops don't sync to servers
 - In-house applications die
 - Data exchange causes failures
 - Infrastructure failures occur
 - Etc.

Phase 1



List:

- **Every business process**
 - Cover both the organization and the individual
- **Every task**
- **Every dependency**

Phase 2



Create:

- **Contingency actions for each dependency**
 - Assume dependency will fail
 - How do you get the business task done without it?
 - Internal vs. external

Phase 2 (cont'd)



- **Contingency action includes:**
 - How to reduce the potential for failure
 - How to reduce the impact of failure
 - How to recover from failure

Phase 2 (cont'd)



- **Contingency action includes:**
 - Steps to be taken when failure occurs
 - Transition steps during down time
 - Steps to take when dependency is fixed or replaced

Questions to ask



- What can you do if computers/software don't work?
- Can you perform the process manually?
- What can you do without power?
- What can you do without telephones?
- How long can you work offline?
- How long can you do without the process?

Also think about...



- **Organizational responsibilities**
 - Policies (e.g., ease travel requirements around 1/1/2000, or early release on 12/30/99 to allow for system backups)
 - Contingency plan endorsement and leadership support

Two plan types



- **Bottom-up**
 - Focuses on the technology
- **Top-down**
 - Focuses on accomplishing the business objective
- **Example**
 - Changing a monthly newspaper ad

IT team role



- **Assess the probability of failure of hardware, software, and other ADP equipment**
- **Prepare failure recovery processes**
- **Prepare ADP infrastructure plans**

Process plans



- **Accelerate processes into 1999**
- **Postpone processes in 2000**
- **Day Zero Team**
- **Prepare for manual processing**
 - Output data
 - Data entry forms

Areas of concern



- **Desktop PCs**
- **Networks**
- **COTS software**
- **In-house applications**
- **Data exchange**
- **Infrastructure**

Desktop



- **Failure:**
 - PC won't time-sync to server
- **Solution:**
 - Before 12/31 distribute written instructions to users on how to manually reset PC clock

Network



- **Failure:**
 - Server won't roll over to new millennium
- **Solution:**
 - Replace with reserve server
 - Restore from backup tape

COTS software



- **Failure:**
 - Application returns incorrect date or crashes
- **Solution:**
 - Substitute another COTS program (WordPerfect for Word, etc.)
 - Perform task manually

Applications



- **Failure:**
 - Application returns incorrect date or crashes
- **Solution(s):**
 - Substitute COTS program
 - Perform task manually
 - Day Zero team

Data exchange



- **Failure:**
 - Application returns incorrect date or crashes when reading external data
- **Solution:**
 - Restrict use of external data to safe sources
 - Develop bridge programs

Infrastructure



- **Failure:**
 - Power outage
- **Solution:**
 - Perform tasks manually
 - Relocate
 - Wait until power restored

Recommendations



Next six months:

- **Create Y2K-contingency team and Day Zero team**
- **Develop contingency plan**
- **Identify likely points of failure**

Recommendations



Next six months:

- **Educate everyone on need to create contingency plans**
 - "If you don't have a computer, how would you get your job done?"

Recommendations



Before 1/1/2000

- **Full system backups**
 - Release employees early
- **Time-sensitive/all systems**
 - Bring down where possible to avoid 1999-to-2000 date calculation
- **Restrict IT leave; IT staff on call**

Recommendations



After 12/31/1999:

- **Shut down ALL servers and restart**
- **Verify Y2K rollover, reset manually if necessary**
- **Restart time-sensitive programs**

Recommendations



After 1/1/2000:

- **Test all production systems**
 - Now's the time for true end-to-end testing
 - Use real-life data
 - Run all your reports