



Welcome

NASCIO's Disaster Recovery Webinar Series

**Moderator: Drew Leatherby, NASCIO
Issues Coordinator**



Asking Questions

- Please use the Question & Answer feature to ask questions at any time
- All questions will be addressed at the end of the presentation
- Responses to any questions not answered on the call will be distributed to all participants via email after the event



Technical Support

If you need technical assistance at any time:

- **Dial *0 (if you have joined by phone)**
- **Call Raindance Tech Support at 1-888-966-8686 (if you have selected the Webcasting option)**



How Software Can Help You Better Manage Your Information Availability Program

Cathy Hartke

SunGard Availability Services

November 27, 2007

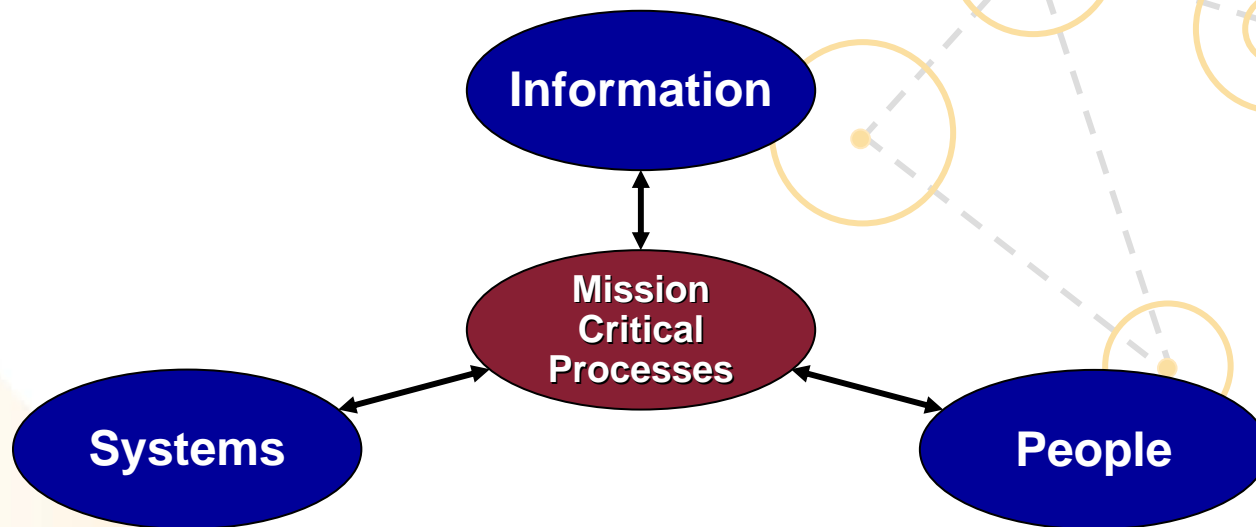
Today's Discussion

- What is Information Availability?
- Trends impacting CIOs and their organizations
- Challenges facing CIOs and their organizations
- How software can help you manage your program
- Future developments in software tools

Information Availability

Convergence of IT Strategy & Business Strategies

Organizations need to to attain uninterrupted access to mission critical **information, systems, people, and processes**



IA and Traditional Concepts

- DR – technology – data centers, servers, applications, networks, telecom
- BC – business processes and functions, people, facilities
- IM – crisis or incident management
- Reactive → Proactive
- Focus on production environment



Today's Challenging Environment

- An information explosion
- Always-on infrastructure
- Complexity within and among organizations
- Regulatory pressures
- Constant change



NASCIO 2007 Data Center Survey

- Enterprise Data Center Consolidation in the States: Strategies and Business Justification – Aug. 2007
- Trend: Consolidation into secure, central facilities
- Trend: Remote facilities for backup and DR/BC
- Trend: Reducing the number of disparate data centers
- 52% in progress or completed
- 41% proposed/planned

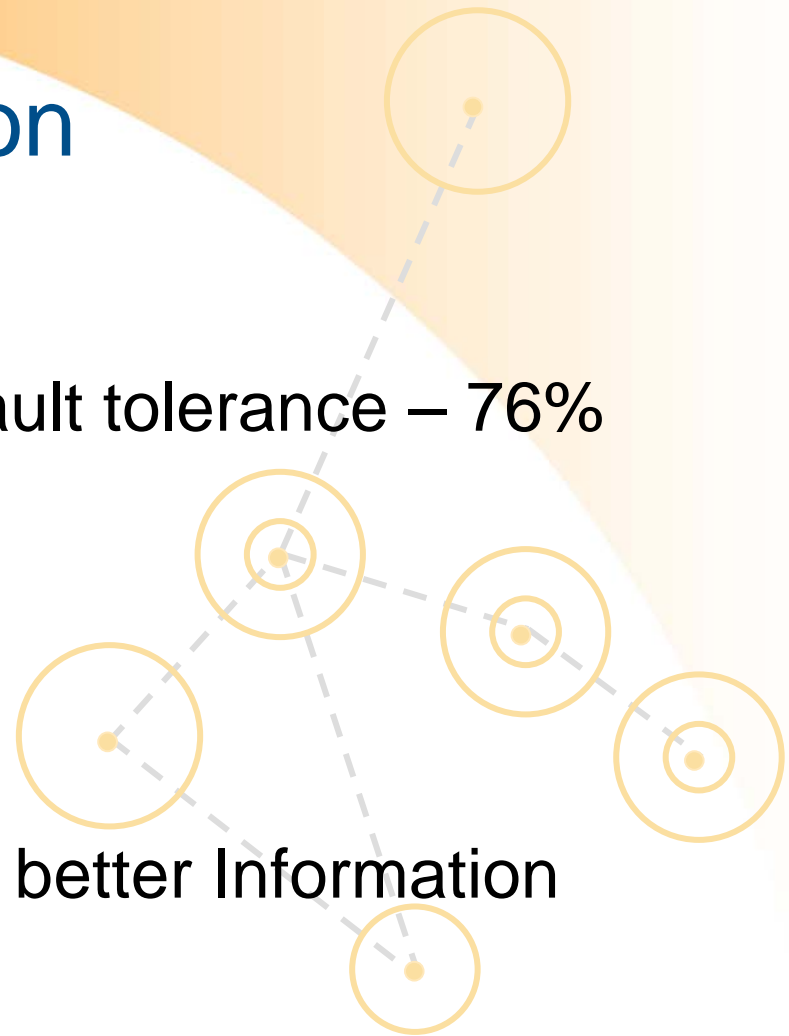
★ The infrastructure you need to protect is changing

Drivers for Consolidation

1. Disaster Recovery – 83%
2. Replication, recovery, and fault tolerance – 76%
3. Cost savings – 66%
4. Security – 62%



1, 2, and 4 reveal a push for better Information Availability

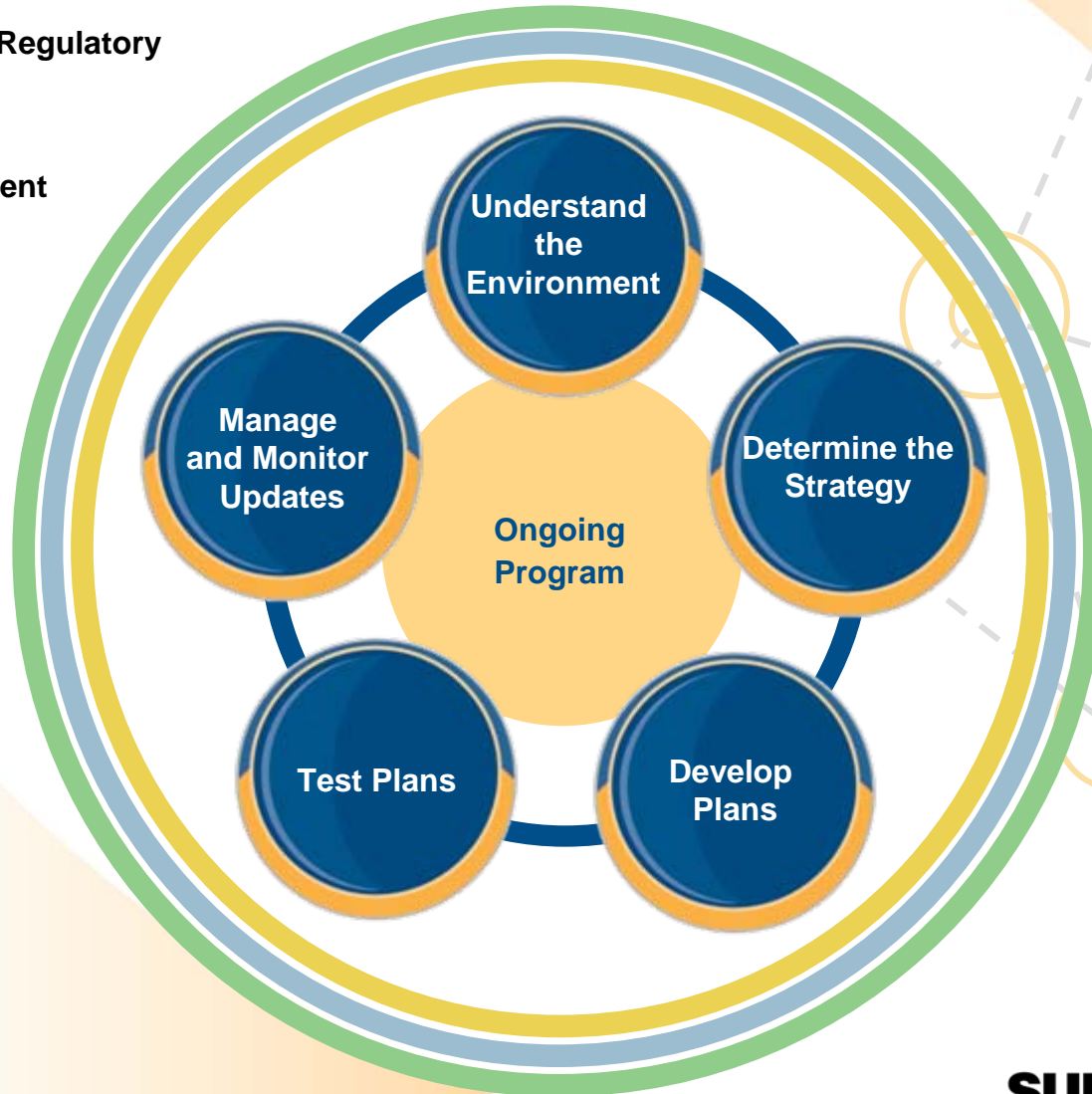


A Strategic Discussion

● Decision Support/Regulatory
Compliance/Audit
Assistance

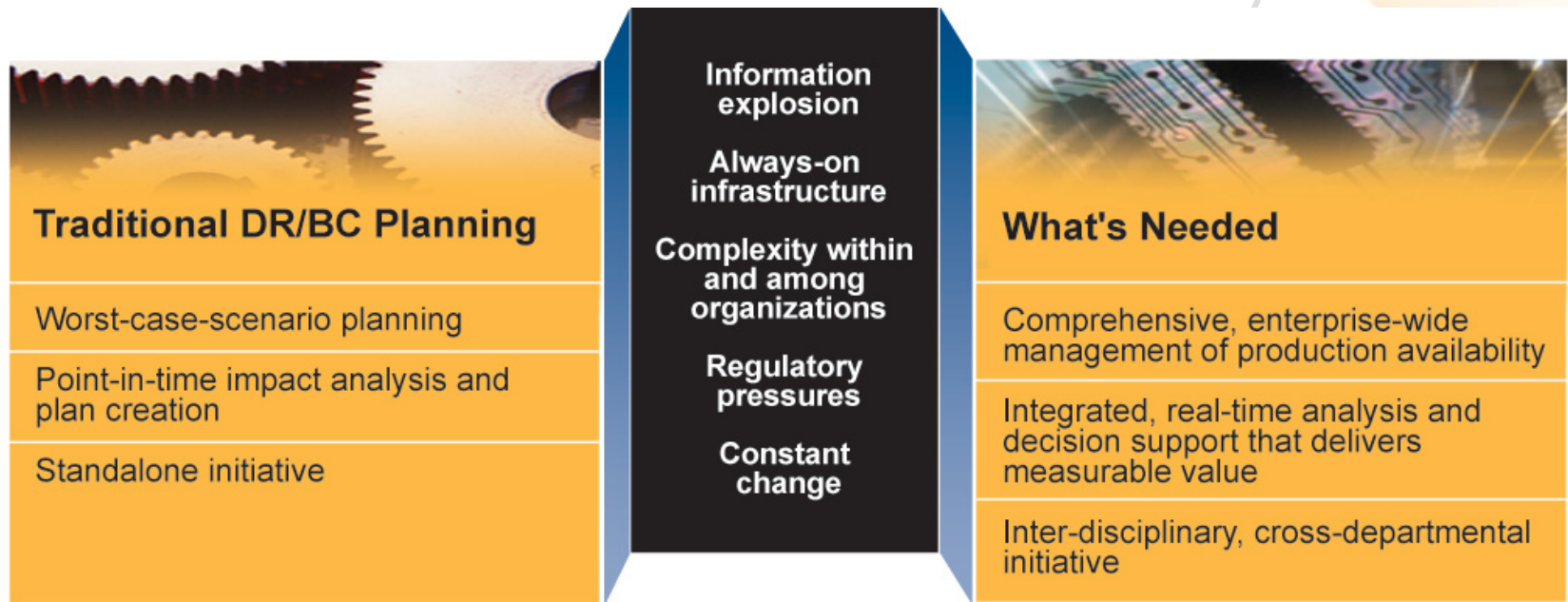
● Incident Management

● Notifications

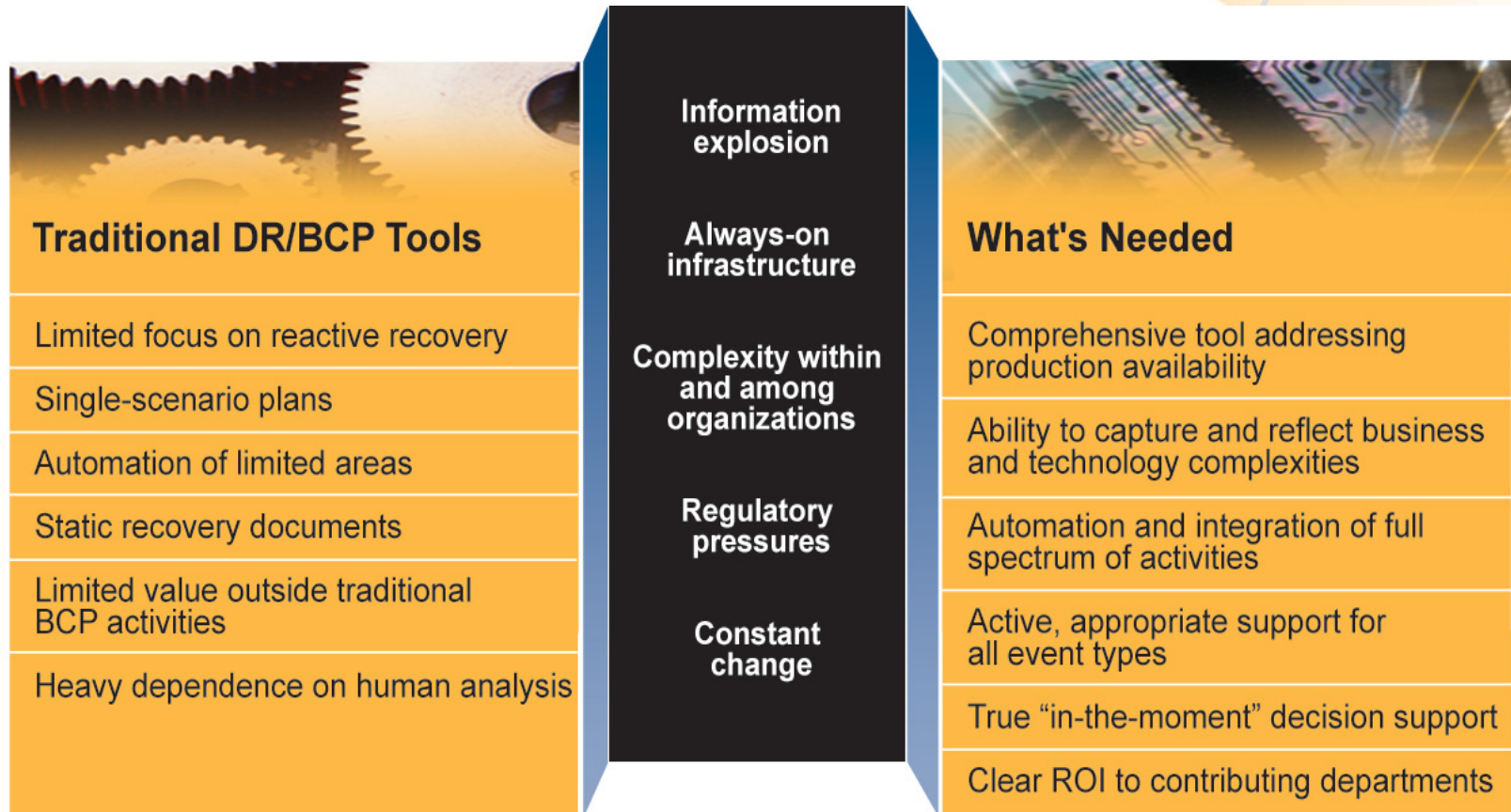


- Easy to use
- Secure and always Available
- Consistent
- Customizable reporting
- Multi-linguaged
- Flexible
- Best-practices-based

Traditional Strategies are Not Enough



Traditional Tools Don't Meet the Need



Challenges to Address With Software

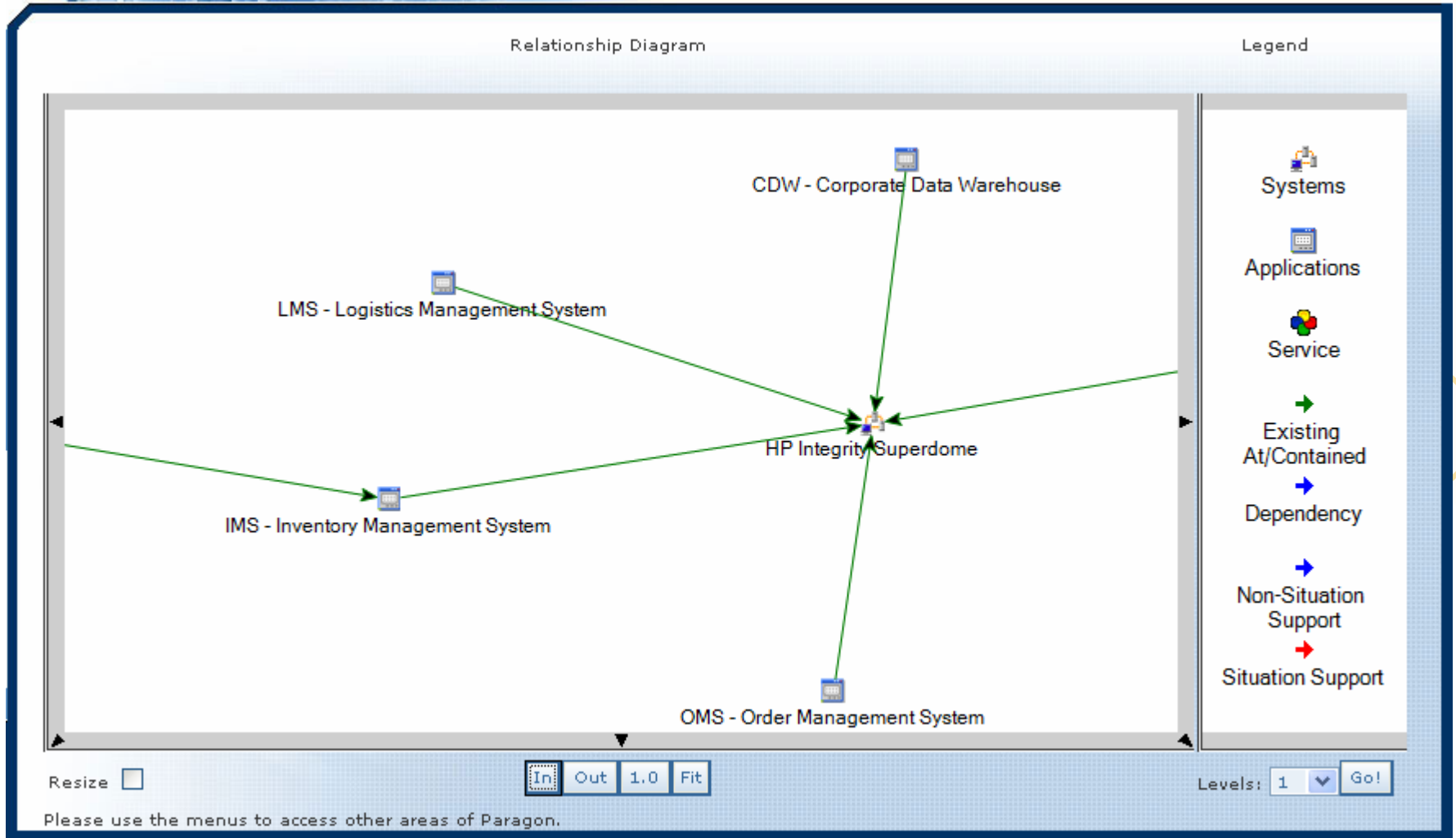
- Mastering the Changing Environment
- Bridging the Gap – between IT and Operations
- Worst-Case-Scenario Plans
- Keeping Plans Up to Date
- Making Plans Usable in a Crisis
- Proactive and Planned Response
- Closed-Loop Crisis Communication
- Making Better Decisions



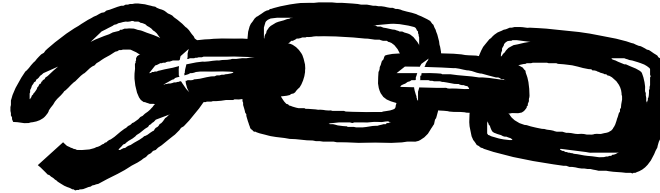
Mastering the Changing Environment

- Environment = your infrastructure + external dependencies: technology partners, outsourcing, suppliers, constituents
- Understand dependencies
- Understand multiple types of dependencies
- Identify points of greatest vulnerability
- Centralized data centers: better DR for individual systems, greater impact of center-wide events

Living Picture of Your Environment



Bridging the Gap – IT and Operations



Operations:
“We’re okay with
one hour of downtime.”

- Identify key processes
- Define dependencies
- Identify critical staff
- Determine priorities
- Measure impacts
- Identify needed applications
- Determine desired recovery time

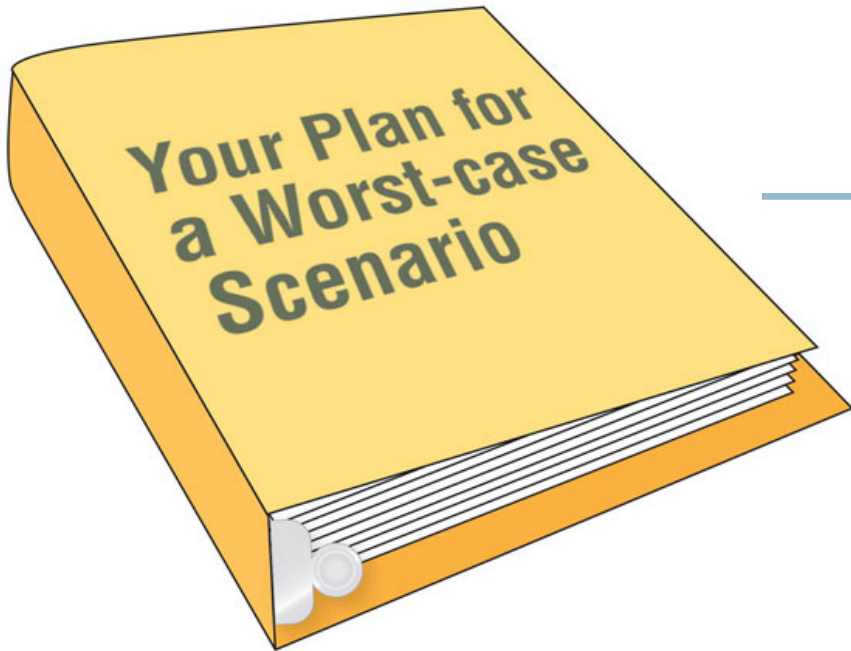
IT:
“We can get you back up
and running in two days.”

- Identify critical technology
- Identify vulnerabilities
- Define strategies
- Justify strategies against impacts
- Implement strategies
- Commit to actual recovery time

Worst-Case-Scenario Plans

- Printed binders – worst-case-scenario
- Inflexible for less-than-worst-case, planned events (upgrades, data center consolidation)
- *“Nobody reads text during a disaster.”*
- Online plans can be Dynamic and Response-Based
- Carve worst-case-scenario into targeted scenarios
- Pinpoint the right teams, people, resources, and tasks

The Right Information for the Incident



Technology	Workplace	Workforce
<ul style="list-style-type: none">- Data center- Distributed systems- Network	<ul style="list-style-type: none">- Headquarters<ul style="list-style-type: none">- Plant- Call center	<ul style="list-style-type: none">- Headquarters team- Field service team

Keeping Plans Up to Date

- Word-based plans – harder and harder to maintain
- Loss of consistency, stale information
- Create flexible update schedules
 - Personnel updated quarterly
 - Resources semi-annually
 - Policies and procedures annually
- Email reminders
- Approval process



Making Plans Usable in a Crisis



- Printed plans can be unwieldy
- Printed plans may be unavailable in a disaster
- Printed plans represent a significant investment
- Online incident management
 - Focus plan information into actionable format
 - Anytime, anywhere access over the Web
 - Each team member sees assignments
 - Automated notifications as tasks are completed
 - Team members log requests and issues

Proactive and Planned Response



- Response-based plans more flexible and focused
- Online incident management is more flexible and simplified
- Traditional DR was recovery after the fact
- Plans can be applied to anticipated events:
 - Application and system upgrades
 - Server staging
 - Data center restructuring
- Greater return on program investment

Closed-Loop Crisis Communication

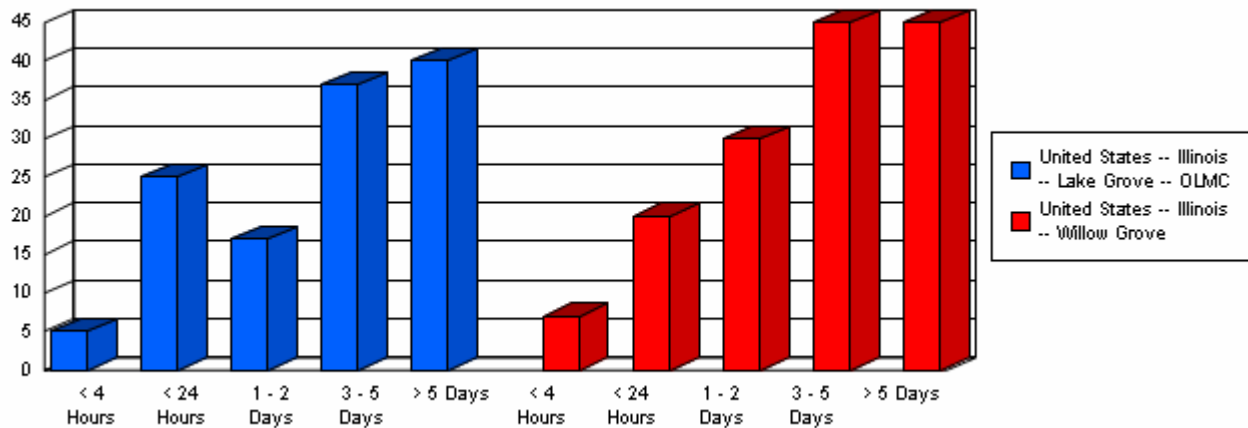
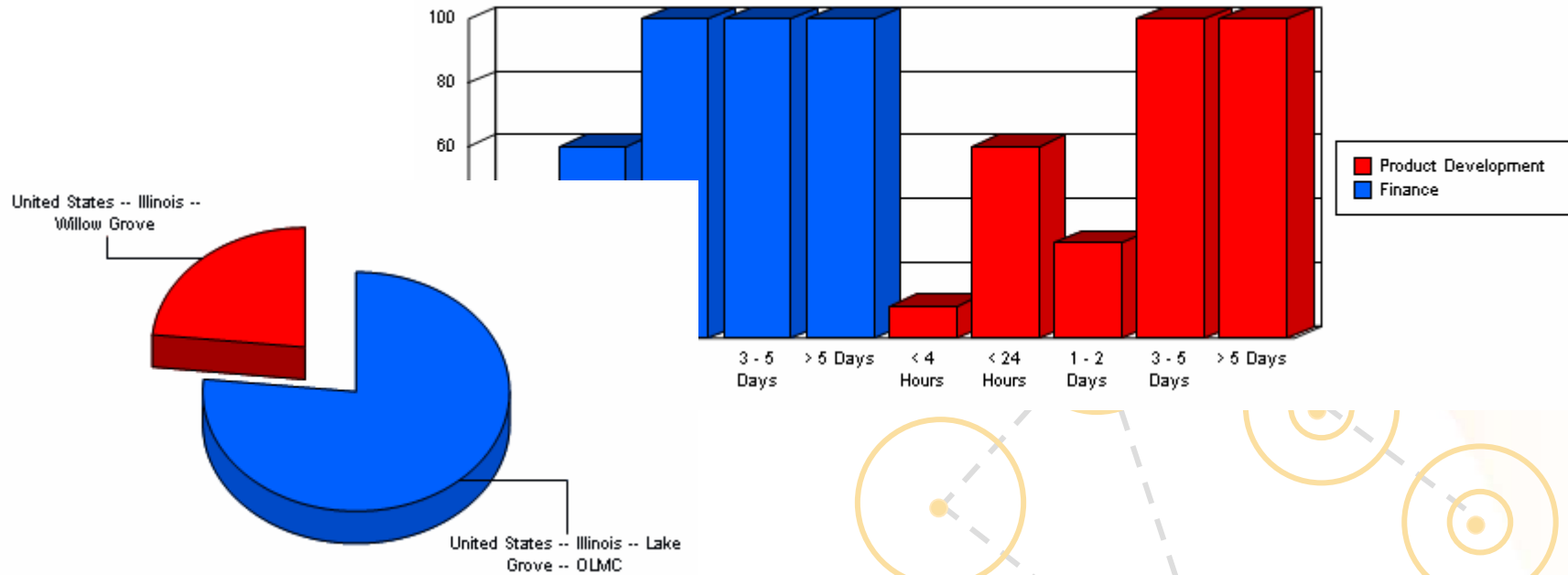


- Instead of many hands dialing phones, use automated notification
- Integrate call tree and plan information with messages and delivery
- Flexible delivery: broadcast, round robin, different devices at different times of day
- Not just outgoing communication, but closed-loop
 - Collect responses or status
 - View summary and detailed responses
- Your expert staff focus on recovery, not calling

Making Better Decisions

- Goal: more real-time information for in-the-moment decision
- Traditionally: painstaking analysis after the fact
- Decide:
 - How do we tier our systems based on impact?
 - Where do we add resources in order to meet our timeline?
 - Has the scope of the problem changed?

Better Analysis to Support Decisions



Better Statusing to Support Decisions

POTENTIAL HURRICANE

User Commander: master

Situation Status: Active

Scenario Name: P

ID	Milestone	Timeline					
		9:00AM	10:00AM	11:00AM	12:00PM	1:00PM	2:00PM
1	Actual Situation Start	◆					
2	Prepare Systems HP Integrity Superdom				◆		
3	Recovery of HP Integrity Superdome HP					◆	

LEGEND

- ◆ Milestone - Inactive
- ◆ Milestone - Active
- ◆ Milestone - Late
- ◆ Milestone - Completed

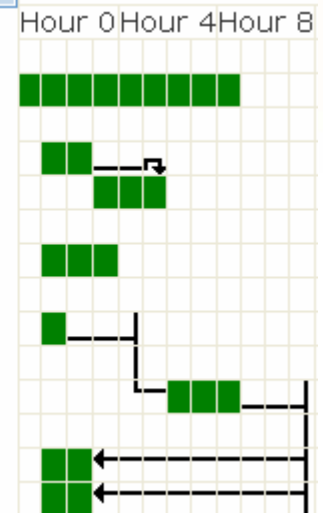
SCALE

1 Hour(s)

START DATE

12/16/2004 9:00

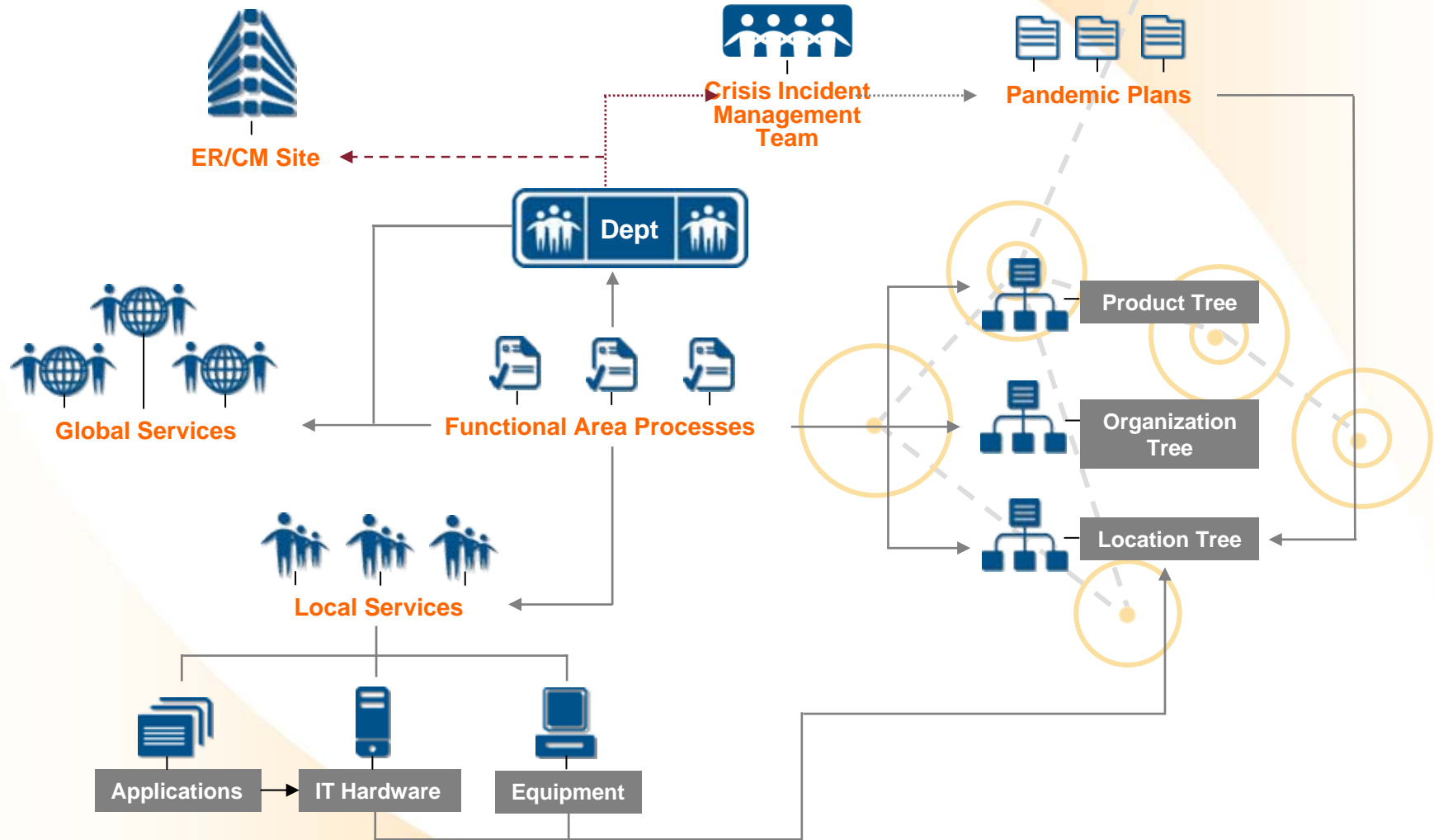
- **1. Pending Crisis**
 - 1. Pending crisis
- **2. Immediate Response**
 - 1. Organize first alert notification
 - 2. Prepare systems for incident
- **3. Establish Crisis Management Center**
 - 1. Establish Command Center
- **4. Conduct Preliminary Assessment**
 - 1. Activate damage assessment
- **5. Declaration Decision**
 - 1. Declaration decision
- **6. Notification**
 - 1. Notify Executives
 - 2. Notify Team Members



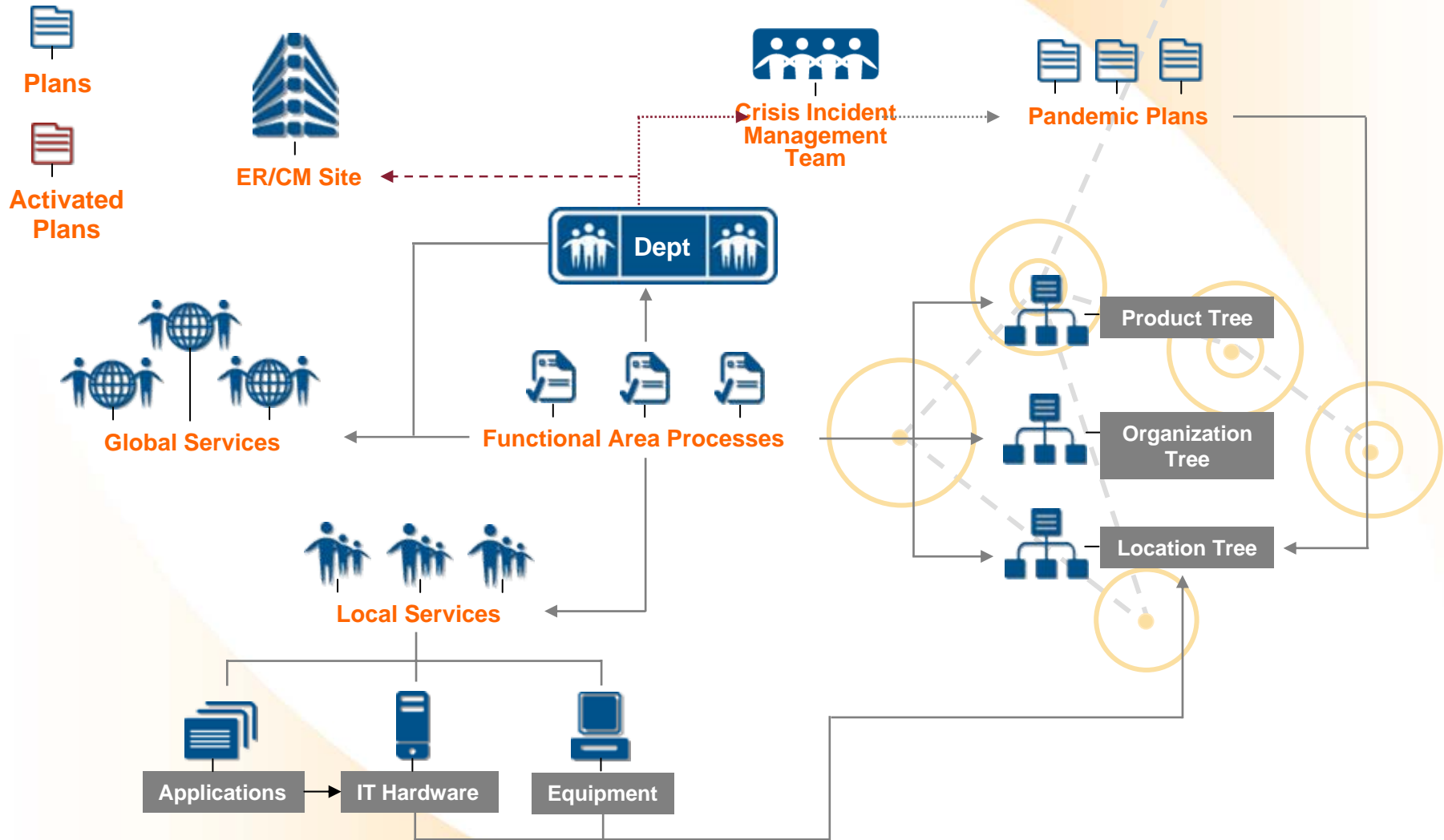
Dependencies Between Plans

- Plans have dependencies between them
- Knowledge contained in heads of expert staff
- With software: dependencies between plans understood
- Dependencies change automatically as plans are updated
- During an incident, the software indicates required plans and suggested plans

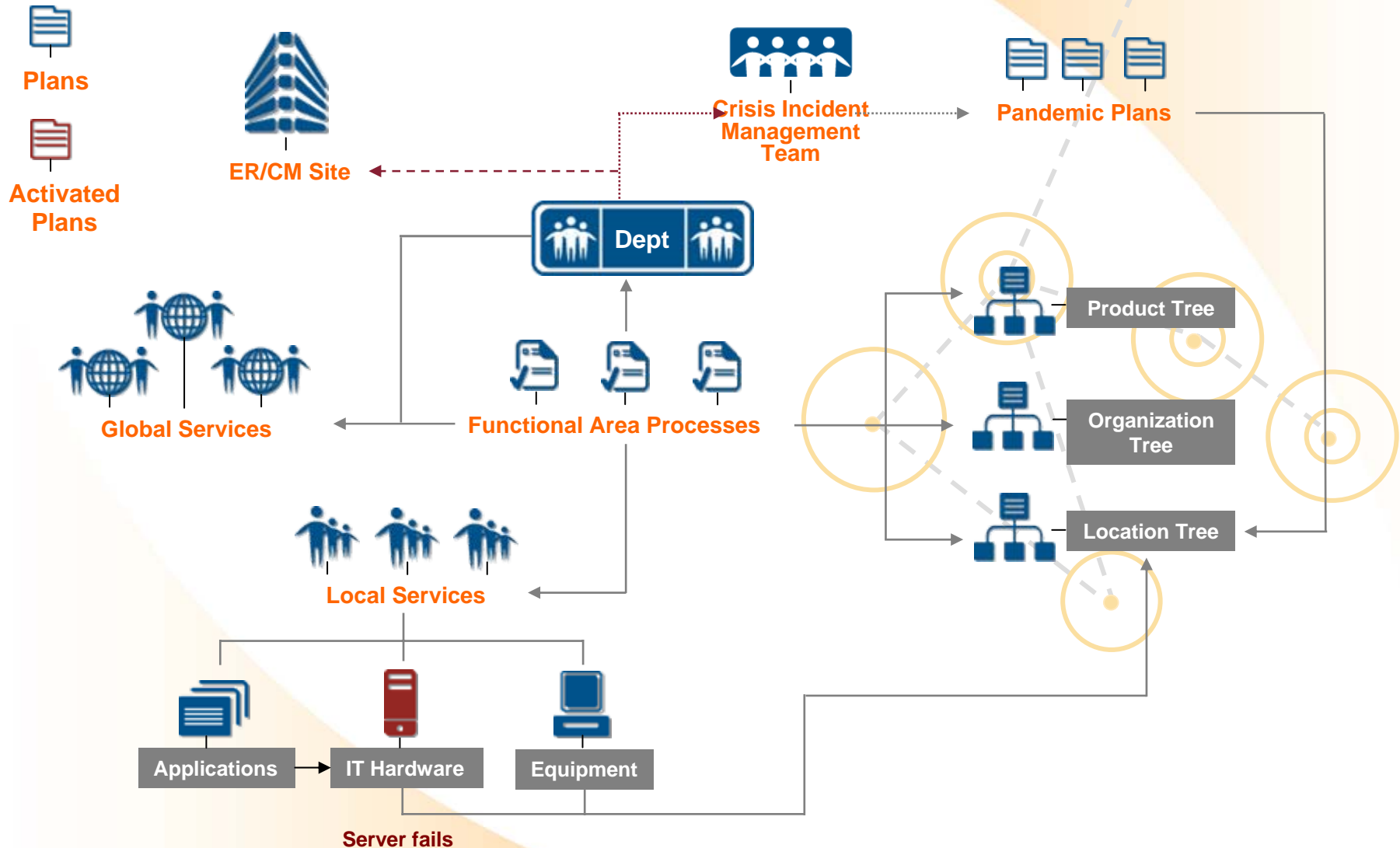
Impact of a Technology Outage



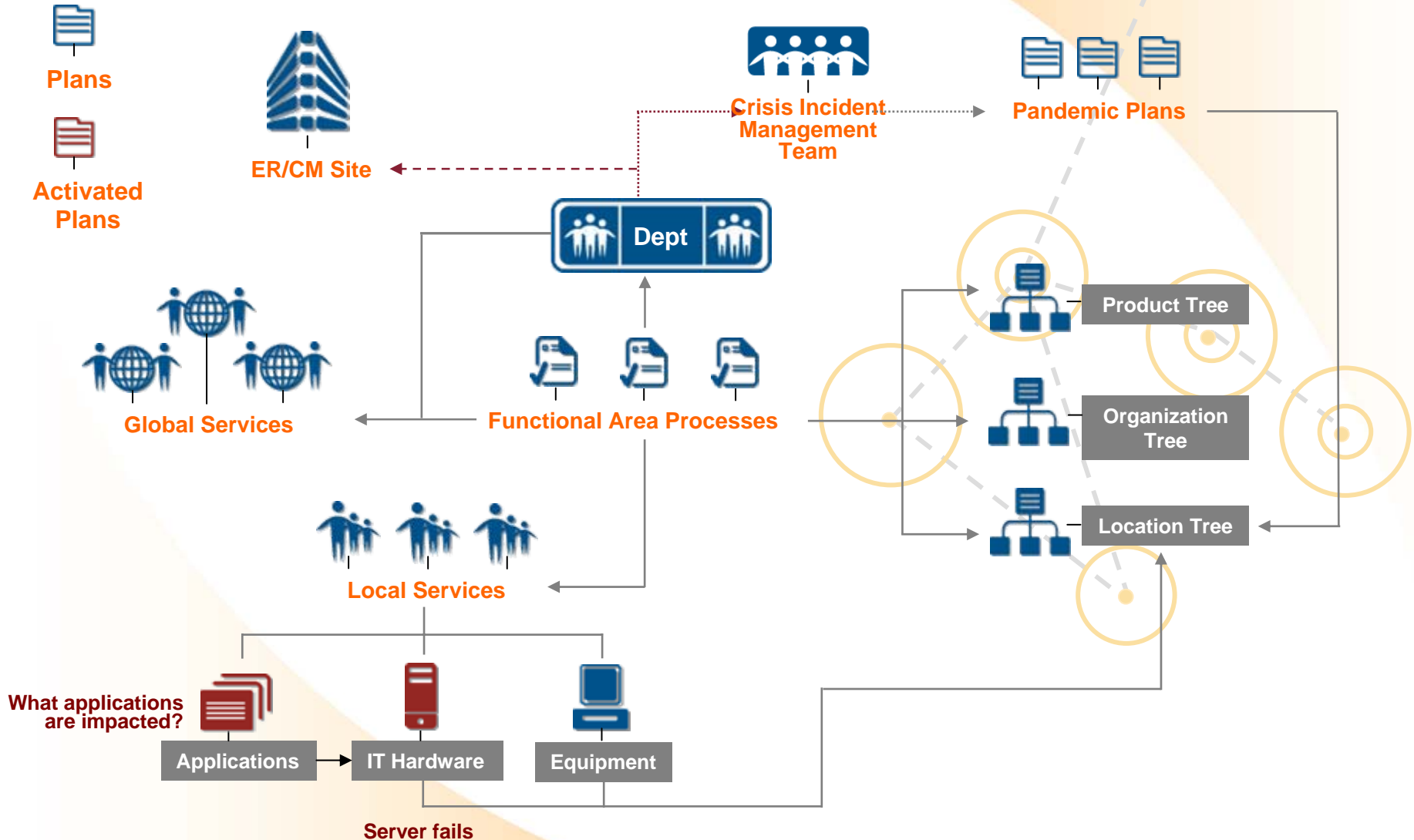
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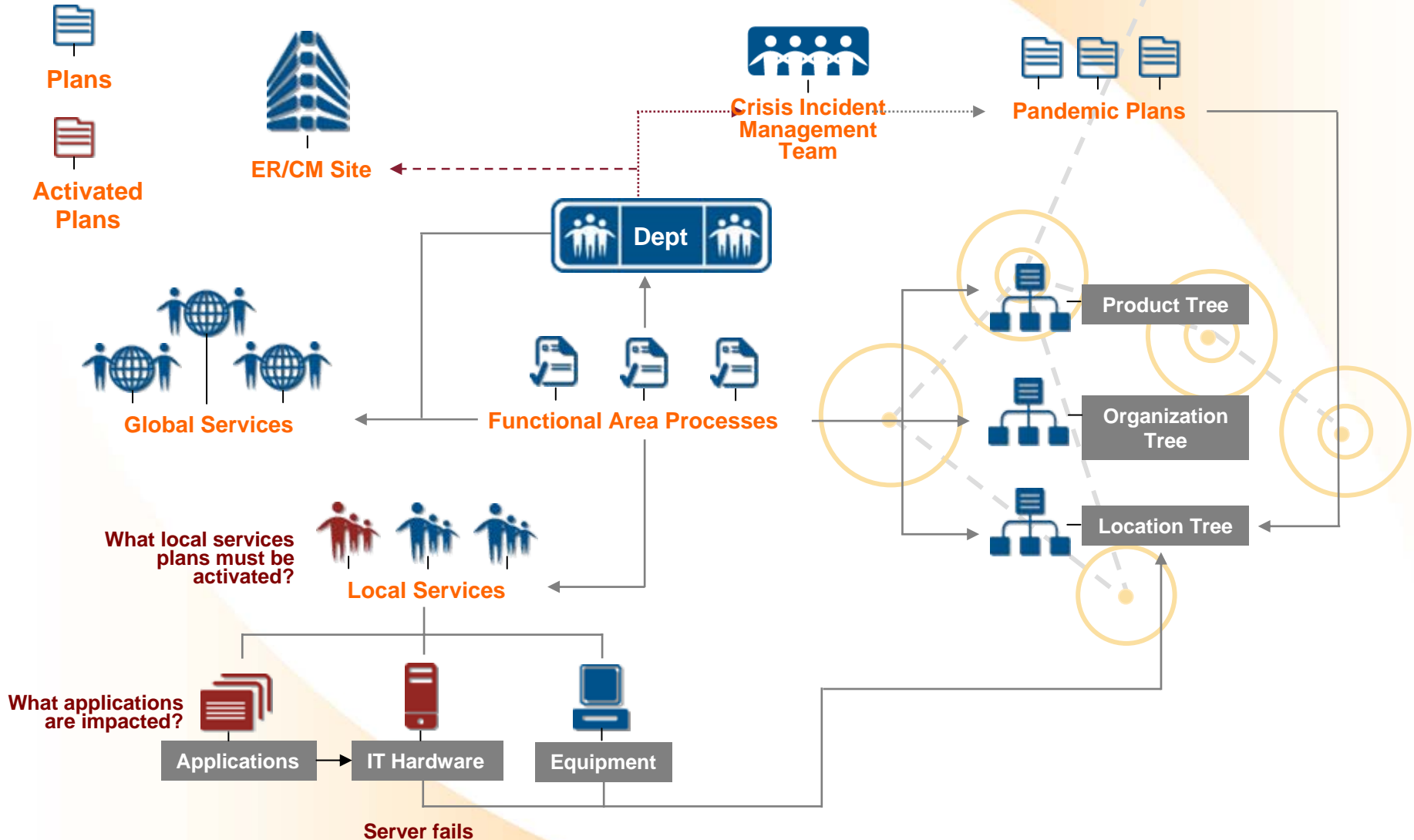
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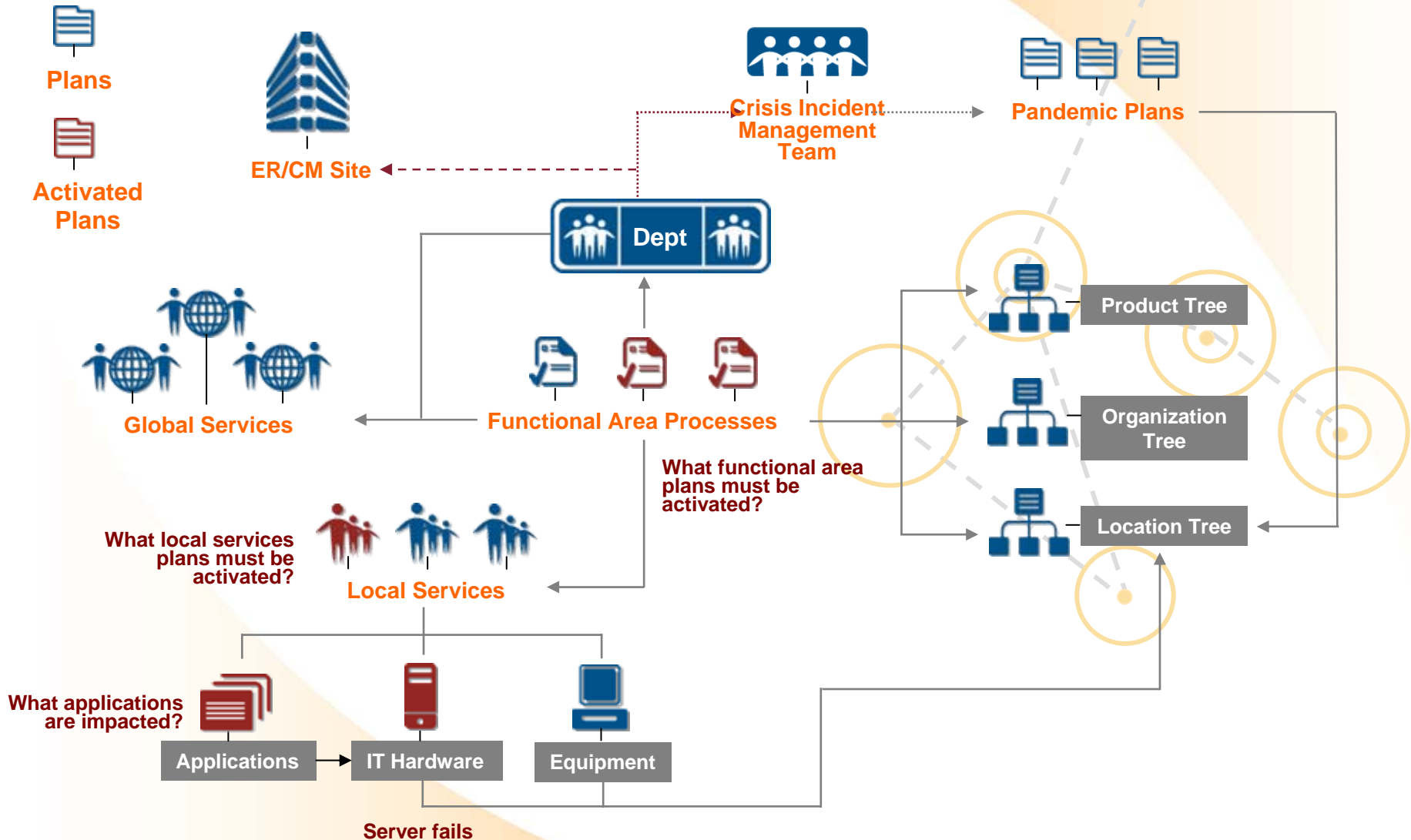
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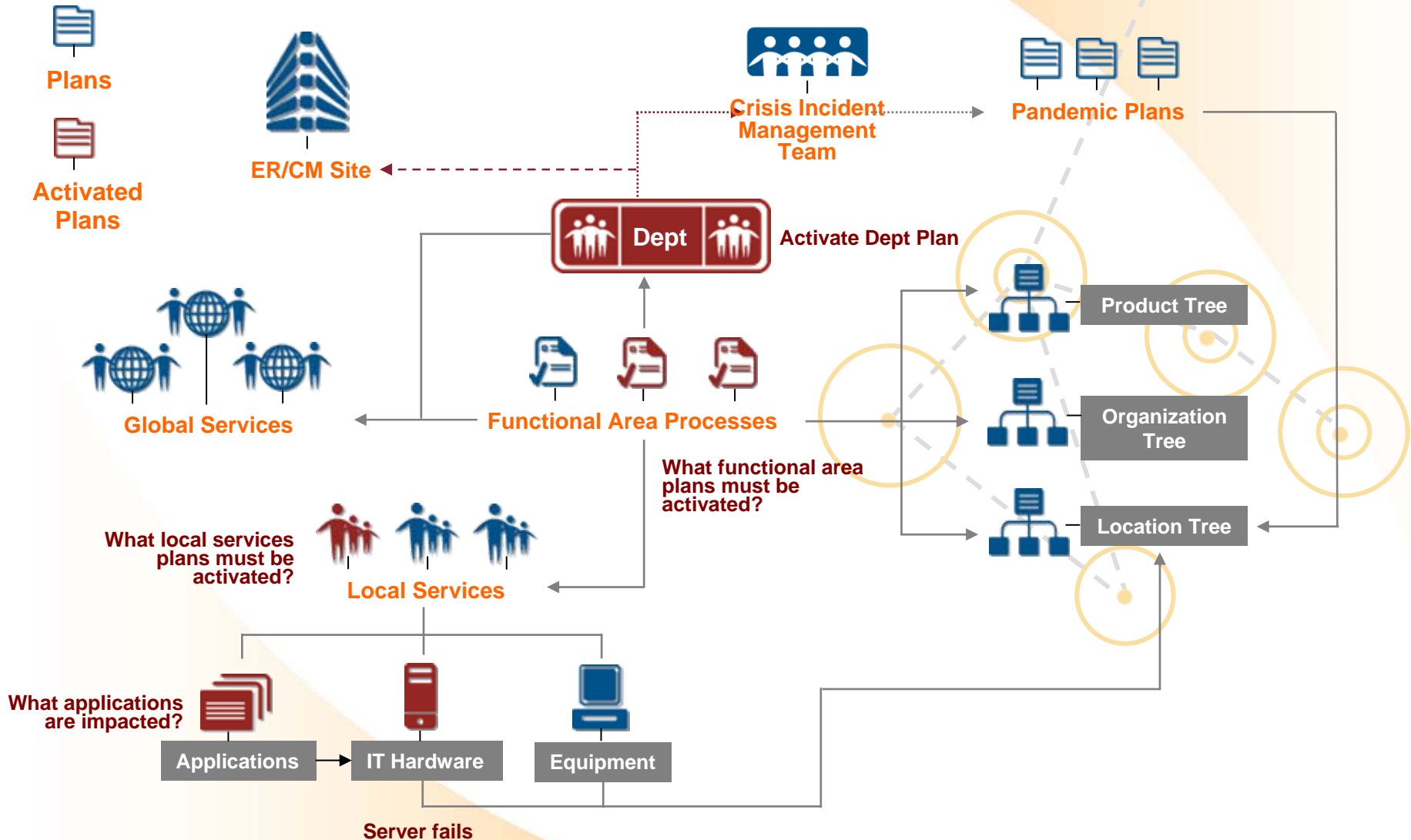
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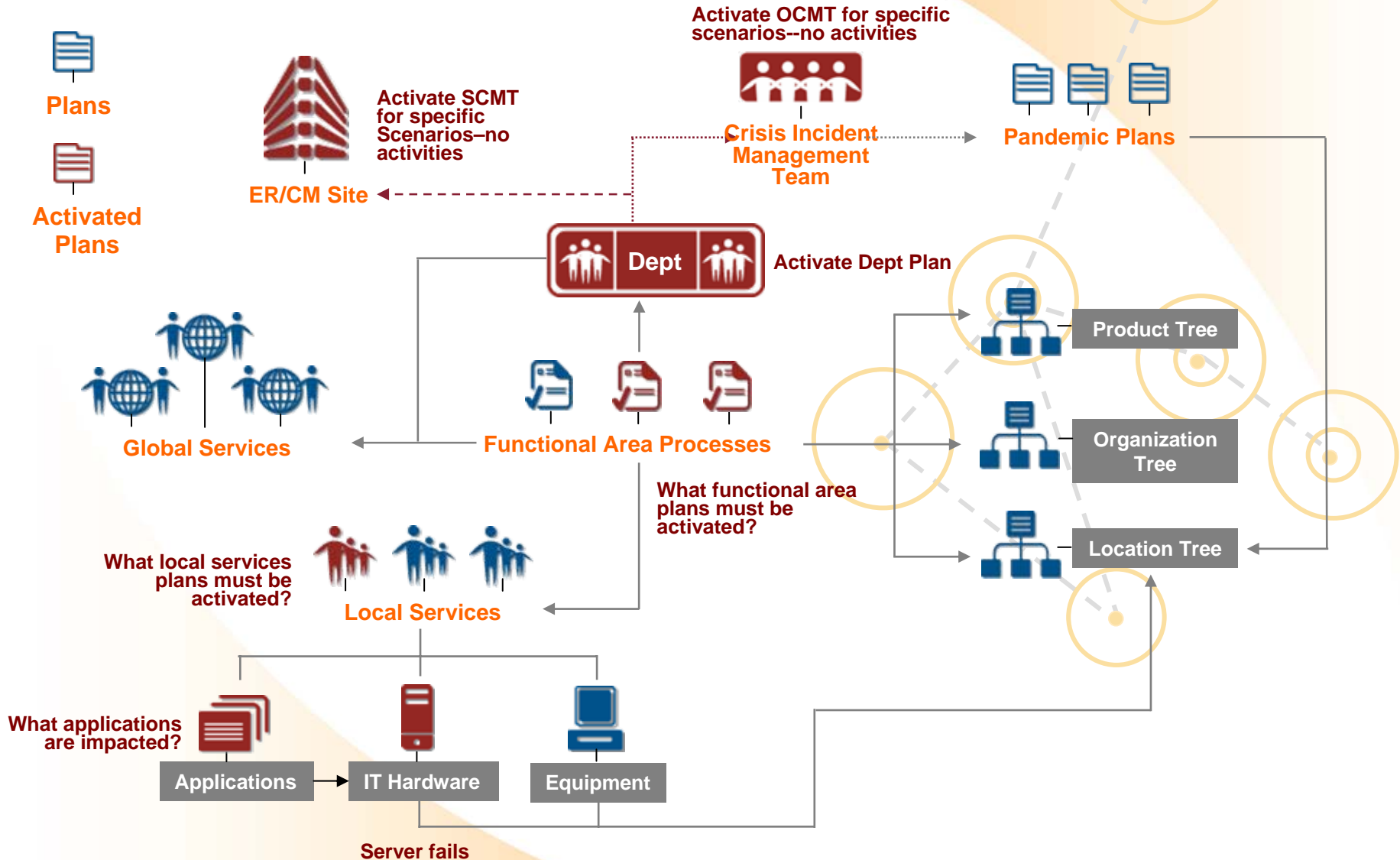
Impact of a Technology Outage



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Impact of a Technology Outage



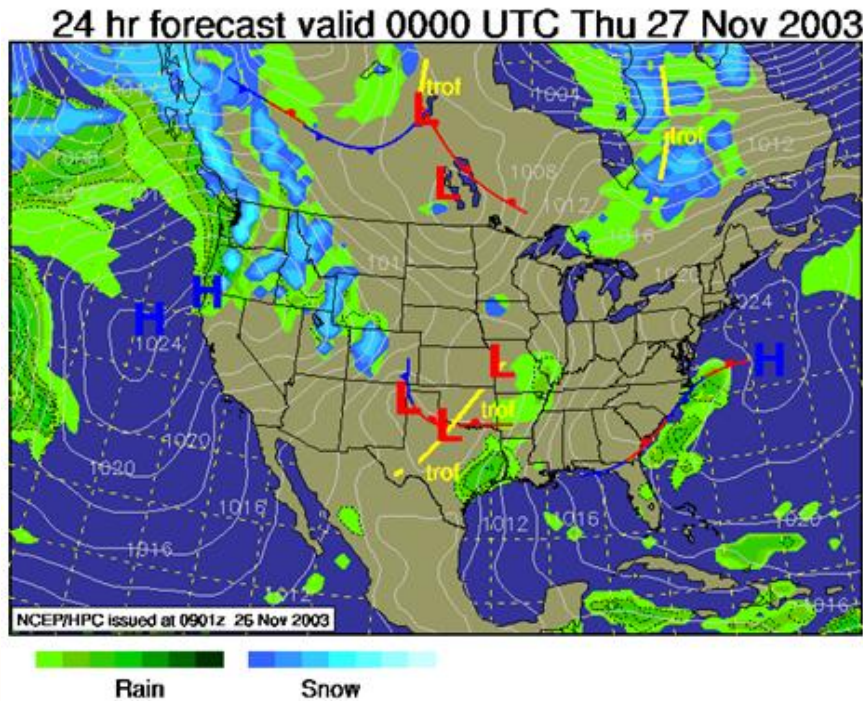
Future Ideas: GIS



- Geo-spatial mapping

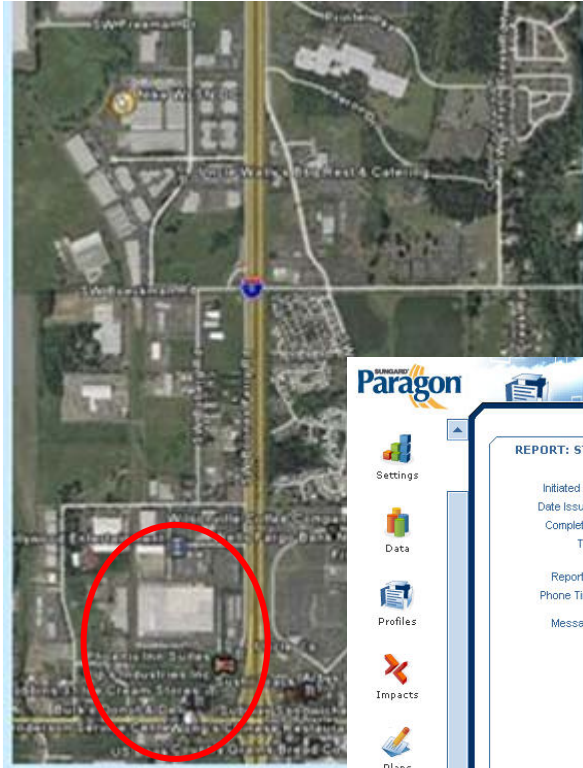
- Detailed geography of locations
- Evacuation routes
- Emergency facilities
- Satellite feeds of remote facilities

Future Ideas: Weather



- Geo-spatial mapping
- Environment/
weather monitoring
 - Approaching storm paths
 - Earthquakes
 - HAZMAT concerns

Future Ideas: GIS Notification



Paragon

REPORT: STATUS SUMMARY

Initiated By: Notification Administrator **Notification is Complete**
Date Issued: 1/4/2007 Time Issued: 01:44:06 PM
Completed: 1/4/2007 Completed: 01:44:42 PM
Title: A Test Team Activation Jan 4 2007 Type: Broadcast
Report ID: 2075 Priority: Standard
Phone Time: 00:00:28

Message: This is a test coming from the GCI Demo database. Your team has been selected to receive an activation test notification.

Response

1: I understood the message
2: I am confused by the message

Statistics

	Total Recipients:	Total Contacted:	Total Responded:
	00001	00001	00001

Responses	Percent	Total
Response 1:	100%	1
Response 2:	0%	0
No Response:	0%	0
Not Contacted:	0%	0
Total	100%	1

User: ann.pittman
Database: AnnP4-Dem
Database: v2.5.01
Application: v2.5.01

Cancel Export View Details

- Geo-spatial mapping
- Environment/ weather monitoring
- Automatic notifications from GIS information

Future Ideas: Scorecards and Metrics

Vital Record Elements	Line Of Business					
	Stores	Merch.	Catalog	Credit	Insurance	Corp.
Use of off-site storage vendors for data retention	●	●	●	●	●	●
Data protected through implementation of a mast	●	●	●	●	●	●

RECOVERY PLAN

RECOVERY PHASE	DALLAS	COLUMBUS	RENO	LENEXA	ITCC
Functional Restoration	●	●	●	●	●
Data Synchronization	●	●	●	●	N/A
Business Resumption	●	●	●	●	●
Miscellaneous Controls and Plan Components	●	●	●	●	●
Overall Assessment	●	●	●	●	●

- Geo-spatial mapping
- Environment/ weather monitoring
- Automatic notifications from GIS information
- Scorecards and metrics

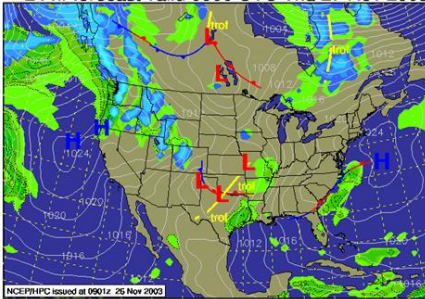
Future Ideas: Handheld Devices



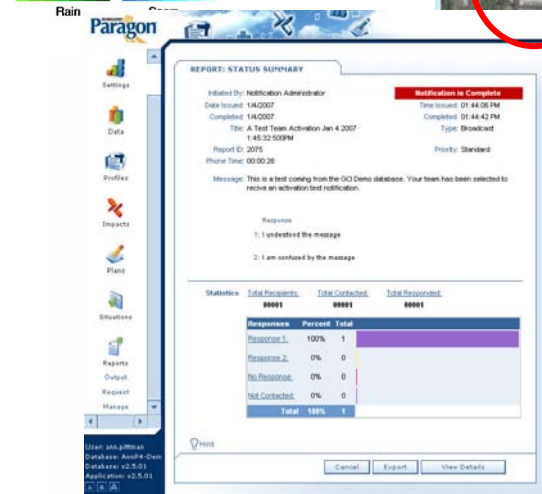
- Geo-spatial mapping
- Environment/ weather monitoring
- Automatic notifications from GIS information
- Scorecard and metrics
- Handheld device integration

Future Ideas: Customized Portals

24 hr forecast valid 0000 UTC Thu 27 Nov 2003



RECOVERY PLAN					
RECOVERY PHASE	DALLAS	COLUMBUS	RENO	LENEXA	ITCC
Functional Restoration	●	●	●	●	●
Data Synchronization	●	●	●	●	N/A
Business Resumption	●	●	●	●	●
Miscellaneous Controls and Plan Components	●	●	●	●	●
Overall Assessment	●	●	●	●	●



- Capabilities cannot exist as stand-alone islands of information.
- Each must have automated integration points into the other applications.
- On-demand definition and creation of the customized portal of your IA program.

For More Information

- <http://availability.sungard.com/paragon>
 - 10-minute video on SunGard® Paragon™
 - White Paper
- 1-800-468-7483
- Email: sas.governmentRFQ@sungard.com
- Contact:
 - Brian Blind, Director of Sales
 - 972-650-8531
 - brian.blind@sungard.com