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EDUCATION

Using ILM to Leverage Business Continuity and Disaster Recovery at the "Acme Anvil"

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Using ILM to Leverage Business Continuity and Disaster Recovery at the "Acme Anvil"

The Acme Anvil is a hypothetical company that is undergoing rapid growth, and is experiencing considerable pain in terms of data and storage management. The CFO just read a blog claiming that ILM programs solve disaster recovery and business continuity problems without spending a ton of cash; so, we've been told to "make it so!" This case study will provide a step-by-step analysis of the issues and how they were solved. The Acme Anvil is a fictional company; however, you should expect to see real life issues and solutions applied to this case study that you can use for yourself.

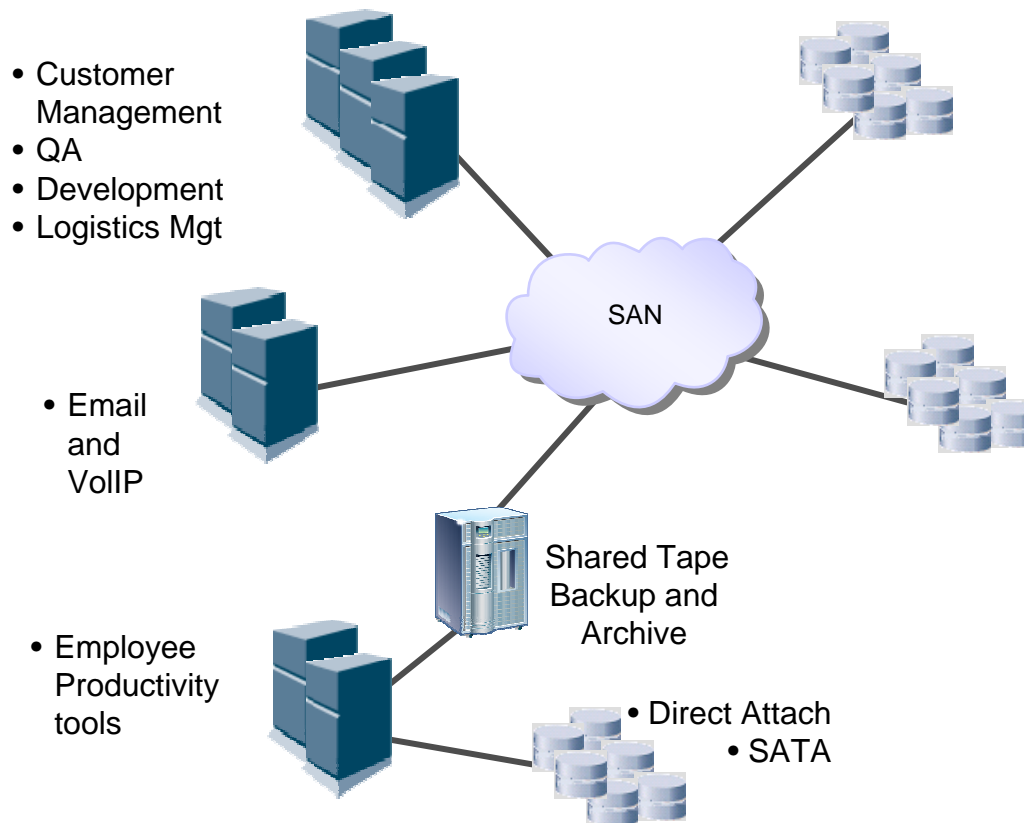
Issues to be addressed include:

- Crafting a plan for time-critical applications
- Disaster preparedness and the "sphere of influence"
- The relationship of outage duration to criticality

About the Acme Anvil

- Worldwide supplier of high quality anvils
- Sales reps and mgt rely on CRM system
- Integrated logistics to pre-position finished product and provide just-in-time inventory
- New product in beta using depleted uranium (“glovils”)
- QA is testing new release of in-house developed metallurgical test software

Current Configuration



Our tasks

- Work with Acme Anvil line of business owners to evaluate service level requirements
- Work with Acme Anvil line of business owners to assess threats and vulnerabilities
- Develop a business continuity plan for Acme Anvils
- Itemize hardware and software shortfalls

Identify Business Applications

- 1,000's of software products deployed across Acme Anvil
- What is important is the business application
 - CRM
 - Logistics management
 - Technical support services
 - SMTP
 - VoIP

Determine Application Value

- Interview process
 - CFO (budget)
 - Corporate Council (compliance)
 - Line-of-Business Owners (business value)
 - IT Management
- ROI tools
 - Value Chain Analysis

Assessment

- Threats
- Vulnerabilities
- Countermeasures

Threats

- Natural disasters
 - Hurricane
 - Tornado
 - Meteor shower
- Man-made disasters
 - Power failure
 - Terrorist attack
- Human Nature
 - Theft

Vulnerabilities

- Measurable risk associated with a threat
- For example:
 - 100 year flood plains
 - Mean Time Between Failure
 - Contingency site affected by same threat

Countermeasures

- Physical
- Alternative electrical service
- Alternate sites
- Failover systems

- Application
Boundaries/Characteristics/Dependencies
- Interviews
 - Architects
 - Line of Business Owners
 - IT Management
 - Documentation
 - EA models, CASE tools, etc

Service Level Objectives

- Negotiate
- Confirm
- Validate

Service Level Objectives

- Characteristics
 - Availability
 - Retention
 - Residency
 - Security
 - Performance
- Standard operating environment
- Exception conditions
- Non-compliance considerations
- Duration

Availability

- Recovery Time Objective
- Recovery Point

BC Requirements

- 24 hour technical support needs
 - Archived metallurgical QA data for every anvil shipped for warranty support
 - CRM access
 - SMTP, FTP, and HTML access to interact with customers

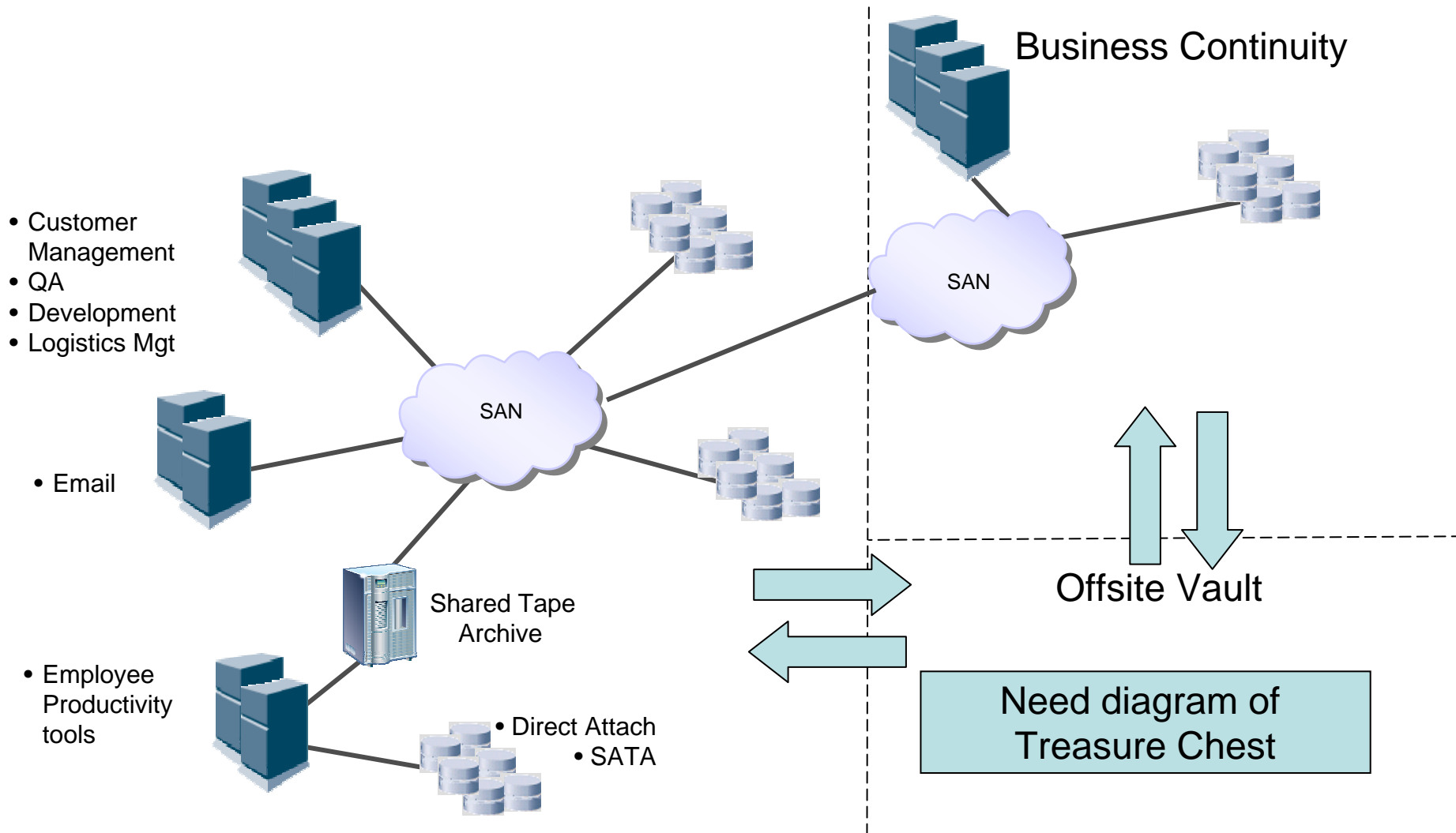
Fault-Tolerant Requirements

- Cluster systems support process control and robotic systems because of foundry hazards

Disaster-Recovery Requirements

- OSHA safety records for foundry operations
- Financial data for public company SEC filings
- Regular backups for off-site storage

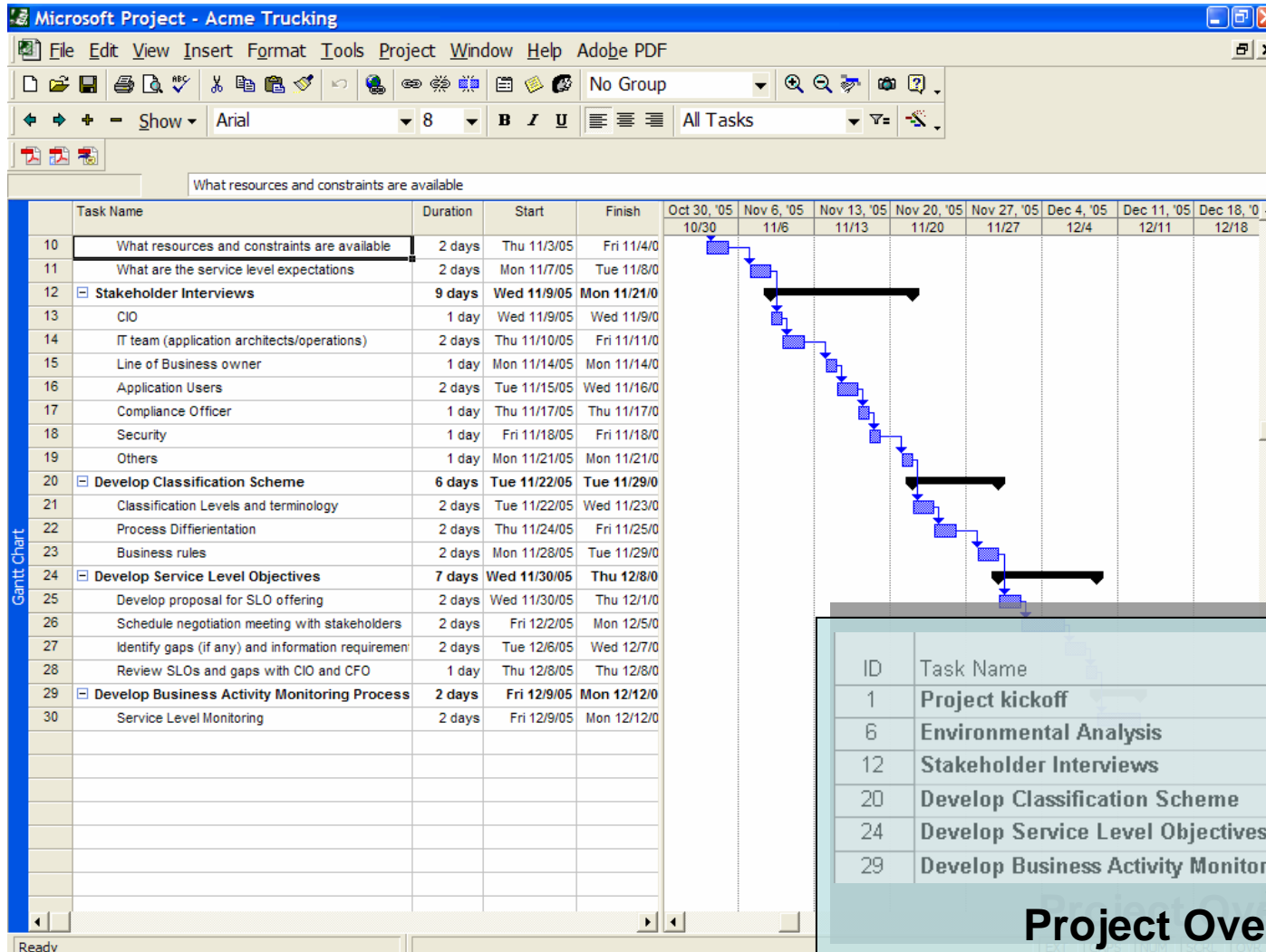
Proposed Configuration



Why Have a Third Location?

- Increases likelihood of survival
- Archival storage
- Even test and development work eventually becomes mission-critical

Project Plan



ID	Task Name	Duration
1	Project kickoff	0.13 days
6	Environmental Analysis	12 days
12	Stakeholder Interviews	9 days
20	Develop Classification Scheme	6 days
24	Develop Service Level Objectives	7 days
29	Develop Business Activity Monitoring Process	2 days

Project Overview

Summary

- Not all data are equal
- Conserve resources and protect “high value” or “high consequence” applications
- Segregate work or be capable of identifying business applications
- ILM is about management – not simply tiered storage!

Q&A / Feedback

- Please send any questions or comments on this presentation to SNIA: track-datamgmt@snia.org



Visit the Data Management area to see classification at work.



This exercise is based on the work of the
Data Management Forum
ILM Initiative