

Disaster Recovery Plan

Disaster Recovery Planning

PURPOSE

- The Disaster Recovery Plan (DRP) documents how backups will be maintained, tested, and restored in the event a disaster occurs.
 - Preventing the loss of the organization's resources such as hardware, data, and physical IT assets
 - Minimizing downtime related to IT
 - Keeping the business running in the event of a disaster
- The DR Plan is separate from the Business Continuity Plan (BCP), but is an essential part of the Business Continuity Plan.

Disaster Recovery Planning

DEFINITION OF A DISASTER

- One or more critical systems are non-functional
- The building is not available for an extended period but all systems are functional within it
- The building is available, but all systems are non-functional
- The building and all systems are non-functional

Disaster Recovery Planning

KEY TERMS

- MTD - Maximum Tolerable Downtime
 - The amount a time the business can tolerate an outage
- RTO - Recovery Time Objective
 - The maximum time period a business process must be restored
- WRT - Work Recovery Time
 - Remaining time of MTD - RTO used to restore data, test, and return to production
- RPO - Recovery Point Objective
 - The acceptable amount of data loss measured in time
- MTTR - Mean Time To Restore (Repair)
 - The expected amount of time to bring the impacted system online

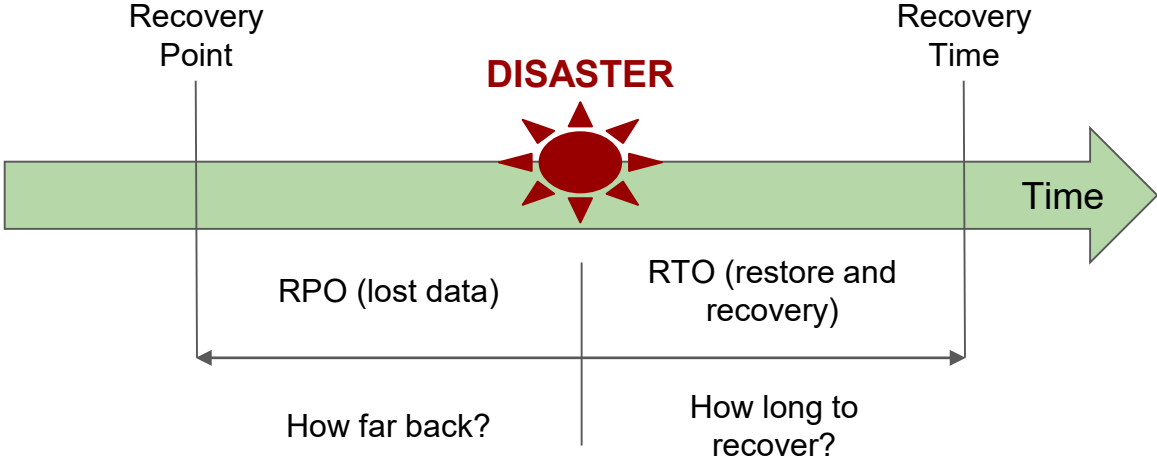
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CREATE A BACKUP STRATEGY

- Identify Asset(s)
- Perform Risk Assessment
- Determine Maximum Tolerable Downtime (MTD)
- Define Recovery Point Objective (RPO)
- Define Recovery Time Objective (RTO) (Return To Operation)
- Define Retention Policy
 - How many and long long do we retain backups?
- Select Backup Methods/Technology

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RPO & RTO METRICS IN USE



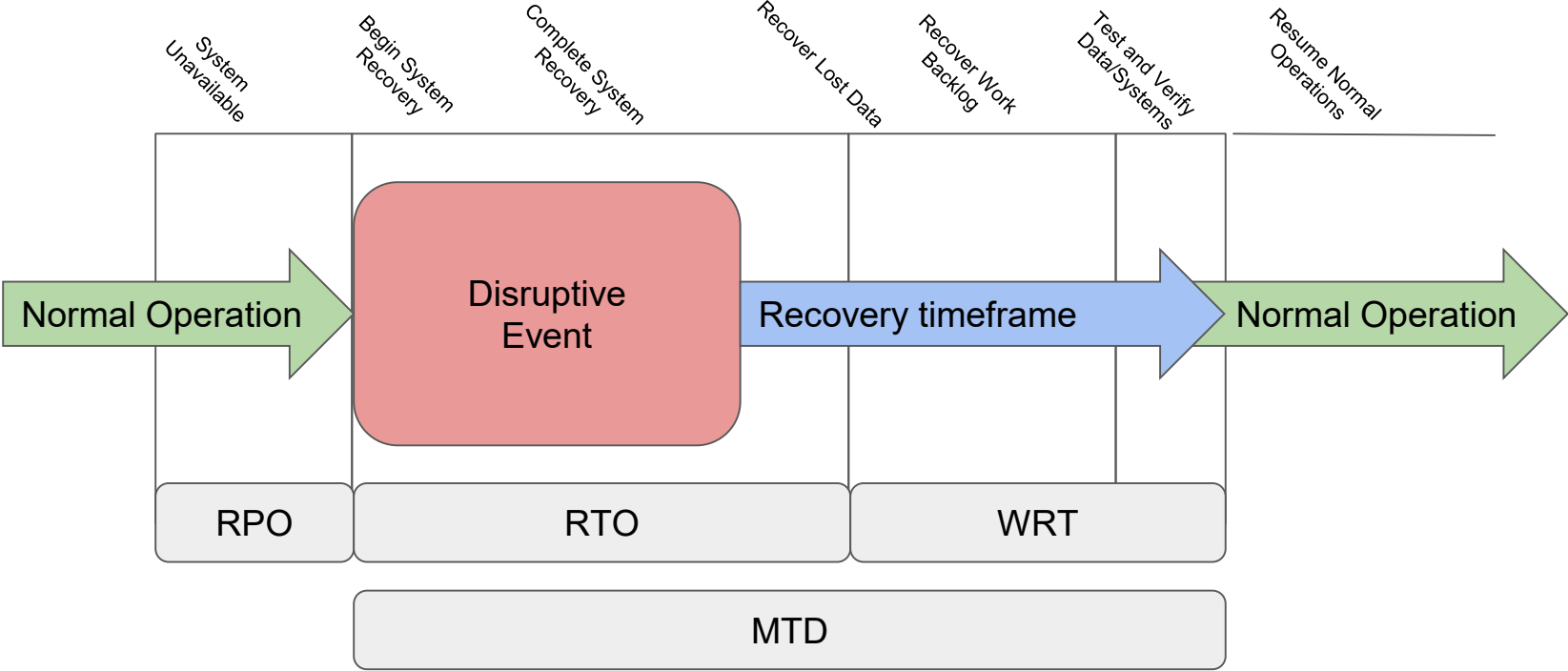
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RPO and RTO Examples

Data Type (Impact)	RPO (Acceptable Data Loss)	RTO (Time to Restore)
Mission Critical (High)	Continuous to 1 Minute	Instantaneous to 2 Minutes
Business Critical (Medium)	1 Hour	2 Hours
Business Essential (Low)	24 Hours	48 Hours

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Sample DR Event Timeline



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SELECT BACKUP METHODS / TECHNOLOGY

- File Level Backup
- Server Snapshotting
- Server Replication
- Database Backup
- Database Replication
- **Offsite Backups**
- Site Replication
 - Cold Site - Location Identified, but NO equipment or data
 - Warm Site - Location with equipment, but NO or STALE data. Restore Data Here
 - Hot Site - Location with equipment and LIVE data.
- Other?

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DOCUMENT BUSINESS CRITICAL SYSTEMS & RESOURCES

Application / System	Server	Impact *	RPO	RTO	MTD	Retention Policy
<ERP>	<ERP Server>	<1-5>	1 Hr	2 Hr	3 Hr	Hourly - X Hours AND Daily - X Days AND Weekly - X Weeks AND/OR Monthly - X Months AND/OR Yearly - X Years

* See Risk Assessment for Impact (1-5) Definitions

Disaster Recovery Planning

NEXT STEPS

- Establish an Emergency Response Team (ERT)
 - Maintains and Executes DR Plan
- Identify Critical Vendors
- Identify Critical Assets and Perform Risk Assessment
- Develop DR Strategy to Protect Critical Assets
- Document the DR Plan
- Test and Maintain the DR Plan
 - Review Periodically
 - Update following any significant change to the Environment

Questions & Answers