**Disaster Recovery – Definitions - Backup and recovery**:

Disaster Recovery (DR) is the process and set of procedures undertaken to restore critical systems, applications, and data after a significant disruptive event, such as a natural disaster, cyberattack, or hardware failure. The primary goal of disaster recovery is to minimize downtime, restore operations, and mitigate the impact of the event on the organization.

Definitions:

1. Disaster Recovery Plan (DRP):

* A Disaster Recovery Plan is a documented set of policies, procedures, and guidelines that outline the steps and strategies to be followed in the event of a disaster or disruptive incident.
* The DRP provides a roadmap for recovery, specifying the roles and responsibilities of individuals, identifying critical systems and data, and outlining recovery strategies and timelines.

1. Recovery Time Objective (RTO):

* RTO refers to the targeted timeframe within which systems, applications, or processes must be recovered and operational after a disaster.
* It represents the maximum acceptable downtime from the start of the disruption until the systems are fully restored and functional.

1. Recovery Point Objective (RPO):

* RPO represents the maximum acceptable amount of data loss measured in time.
* It defines the point in time to which systems, applications, or data must be recovered after a disaster.
* For example, an organization may have an RPO of 1 hour, meaning they can tolerate up to 1 hour of data loss.

Backup and Recovery:

1. Backup:

* Backup is the process of creating copies of critical data, applications, or systems to protect against data loss or system failures.
* Backup copies are typically stored in a separate location from the primary data or systems to provide redundancy and facilitate recovery.

1. Recovery:

* Recovery is the process of restoring data, applications, or systems from backups after a disruptive event or system failure.
* Recovery involves retrieving the backup copies and reestablishing the affected systems to their operational state.

1. Backup and Recovery Strategies:

* Backup and recovery strategies encompass the various methods and techniques used to protect and restore data and systems.
* Different strategies may include full backups (complete copies of all data), incremental backups (copying only changes since the last backup), or differential backups (copying changes since the last full backup).
* Additionally, organizations may employ different backup media, such as tapes, disks, or cloud storage, and utilize different backup frequencies based on the criticality of the data.

Backup and recovery are crucial components of a comprehensive disaster recovery plan. They help ensure the availability, integrity, and continuity of critical data and systems. By regularly backing up data and implementing efficient recovery strategies, organizations can minimize the impact of disruptions and expedite the restoration of operations.