RPO – Recovery Point Objective

- How much data loss can we tolerate?
- What past point-in-time do we need to recover our data to?
- How frequently should we backup our data?
- How much data are we willing to give up should backups be required to get things operational?
- What is the maximum acceptable time between backups?

- Focused on just data – data risk.
- Data loss potential before significant harm to the organization.
- Considers how often your data changes.
- Lower value means more frequent backups / replication.
- Listed in time from seconds to days.
- Lower RPO means higher costs to implement.
- Measure back in time from a potential event.
- A 4-hour RPO does not necessarily mean you lose 4-hours of data.
  A 1:00am event may mean 1-hr effort in 4-hrs of data lost.
  A 1:00pm event may mean 16-hrs effort in 4-hrs of data lost.
- Typically range from 24-hrs, to 12-hrs, to 8-hrs, to 4-hrs, to seconds.

Acceptable amount of lost data.

Time BEFORE event

Month Week Day Hour Minute Second

Month Week Day Hour Minute Second

HDD DVD SSD

Asynchronous Synchronous

Replication Active-Active Cloud

Tape Drive

VITA Draft Discussion Document // Jun-6-2019

PURPOSE: To depict the differences between RTO and RPO in support of disaster recovery planning.

RTO – Recovery Time Objective

- How fast do we need to recover after a failure?
- How long can we go without service after a failure?
- How much disruption can we have after a failure?
- How long until a service should be restored?
- What is our target time to recovery post failure?
- How long can you afford to be in-the-dark?

- Focused on the organization as a whole.
- Represents downtime until fully resume service operations.
- Clock starts at time of the event/disaster.
- The recovery window measured forward in time from the incident.
- Agency’s mission essential functions (MEF) drive this value.
- Should be specific (72-hrs) – not a range of time (24-hrs to 48-hrs).
- Is large scale and concerned with applications and systems.
- MEF’s should be prioritized by RTOs.
- Goal is to calculate how quickly you need to recover.
- Helps inform development of a DR strategy.
- May be more important than RPO in certain situations.

Acceptable amount of downtime.

Time AFTER event

Second Minute Hour Day Week Month

Hot Site Days / Hours

Cold Site

Days / Hours

Weeks

This view is intended for a minimum 11x17 printer paper.