RTO & Downtime Costs Calculator

Recovery Process

The recovery process represents the amount of time it takes to recover data either locally or from the cloud due to data loss (data loss could be the result of a virus, employee error, or some other type of system disruption).

CRITICAL SYSTEM DATA: X GB

Critical system data is the amount of data lost in a scenario resulting in employee downtime.

TIME BETWEEN BACKUPS: X DAYS X HOURS X MINUTES

The interval at which your backups take place. This is used to check the Recovery Point Objective.

RECOVERY PROCESS START: X DAYS X HOURS X MINUTES

The time it takes initiate a file or system recovery. This includes alerting a Managed Service Provider and configuring the recovery point.

ESTIMATE DOWNTIME: X DAYS X HOURS X MINUTES

The amount of downtime is determined by adding the **RECOVERY PROCESS START TIME** to the amount of time it takes to fully recover the data lost. The speed at which the lost data is recovered is determined by whether it's being restored locally or from the cloud.

Local Speed: The default local restore speed is based on a typical gigabit connection.

Cloud: The default cloud restore speed is based on the average internet connection speed of businesses in the U.S.

Since local recovery is faster than cloud recovery, local recovery will result in less downtime.

Example:
RECOVERY PROCESS START TIME + LOCAL RECOVERY TIME = DOWNTIME
1HR + (100GB / LOCAL SPEED) = DOWNTIME
1HR + (819200Mb / 700Mbps*) = DOWTIME
1HR + 1170s = DOWNTIME
DOWNTIME = 1HR 20MIN

** takes into consideration network traffic*

Downtime Costs

The cost of downtime is first determined by the total cost of each employees' time. This includes the employees' wage, overhead costs (subscription costs, benefits, etc.), and revenue lost as a result of the employees not working (sales opportunity loss). It could also include an ecommerce site that is down and no longer generating sales as a result of system downtime.

EMPLOYEES AFFECTED: 10
AVERAGE WAGE: $25/HR
OVERHEAD COSTS: $100/HR
REVENUE LOST: $250/HR
TOTAL COST: $600/HR

Example:
(EMPLOYEES * WAGE) + (OVERHEAD + LOST REV) = COST OF DOWNTIME
(10 * 25/HR) + (100/HR + 250/HR) = COST OF DOWNTIME
(250/HR) + (350/HR) = COST OF DOWNTIME
COST OF DOWNTIME = $600/HR

Total Cost to Business

The total cost to the businesses is determined by multiplying the amount of downtime by the cost of downtime.

Example:

DOWNTIME * COST OF DOWNTIME = TOTAL COST TO BUSINESS
1HR 20 MIN * 600/HR = TOTAL COST TO BUSINESS
1.33 * 600 = TOTAL COST TO BUSINESS
TOTAL COST TO BUSINESS = $798