

# Disaster Recovery Workbook

DR PLAN FOR:

AUTHOR(S): \_\_\_\_\_

CREATED ON: \_\_\_\_\_

LAST UPDATED: \_\_\_\_\_



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***Instructions:** take the guidance in each section and fill out the related information with as much detail as possible. Mirazon also recommends a companion document, the DR Runbook, which is the step-by-step instruction manual to getting back up and running in DR scenarios.*

## Executive Summary

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Explain the purpose of this document: to define RTO and RPO for various services, identify discrepancies between expectations and current capability, define the different types of services and outages, centralize information needed for recovery.

*Insert a high-level summary of current DR environment.*

### **CRITICAL DISASTER RECOVERY DISCREPANCIES**

*Insert a description of critical discrepancies between expectations and current status of RPO/RTO among business-critical applications or infrastructure.*

# Reference and Contact Information

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## DEFINITION OF TERMS

- RTO (Recovery Time Objective):** The amount of time needed to recover from a failure.
- RPO (Recovery Point Objective):** The age of the data when a system is recovered from a failure.
- SLA (Service Level Agreement):** A contract defining the expected service levels from a service provider.

## CONTACT INFORMATION

For individual contact information, we suggest you include that in a DR runbook and direct to it.

## NOTIFICATION AND UPDATES OF OUTAGE

This is a section for a description of how the stakeholders are notified there is a significant problem, and then how the ongoing updates happen with those stakeholders. This section should also include details about how the rest of the company is notified of issues. Include a frequency and a means (remember, IT is down).

## OWNERSHIP

Who all has the authority to declare a disaster has occurred and start the emergency recovery mechanisms:

- 1
- 2

Which parties can own the recovery process itself:

- 1
- 2

# Disaster Recovery Plan (Environment)

Here define an environmental-level failure, including areas where there is no redundancy or there is a single point of failure.

Identify your failover scenarios/set thresholds for outages to trigger your failover action.

## LIST OF SINGLE DEVICES THAT CAN CAUSE AN ENVIRONMENTAL FAILURE:

## IF AVAILABLE, LENGTH OF OUTAGE ALLOWED BEFORE FAILOVER TO BACKUP SITE IS TRIGGERED:

**HOURS:**

ENVIROMENT	RPO (CURRENT)	RPO (EXPECTED)	REASONS FOR DISCREPANCY	APPROVED BY

ENVIROMENT	RTO (CURRENT)	RTO (EXPECTED)	REASONS FOR DISCREPANCY	APPROVED BY

## RECOVERY MECHANISMS FOR ENVIRONMENT FAILURE

Document the high-level summary of product/means of the recovery, the details will be in the DR run book.

# Disaster Recovery Plan (Single Server or Device)

Define what a single device DR scenario looks like. Be sure that this single device's failure wouldn't constitute an environmental disaster in the event that it is a single point of failure.

SERVER OR DEVICE	RPO (CURRENT)	RPO (EXPECTED)	REASONS FOR DISCREPANCY	APPROVED BY

SERVER OR DEVICE	RTO (CURRENT)	RTO (EXPECTED)	REASONS FOR DISCREPANCY	APPROVED BY

## RECOVERY MECHANISMS FOR SINGLE SERVER FAILURE

Document the high-level summary of product/means of the recovery, the details will be in the DR run book.

# Disaster Recovery Plan (Single File or Service)

Define the DR scenarios involved with a single file or service. Keep in mind that outages limited in this respect may still have a large impact.

FILE OR SERVICE	RPO (CURRENT)	RPO (EXPECTED)	REASONS FOR DISCREPANCY	APPROVED BY

FILE OR SERVICE	RTO (CURRENT)	RTO (EXPECTED)	REASONS FOR DISCREPANCY	APPROVED BY

## RECOVERY MECHANISMS FOR A SINGLE FILE OR SERVICE FAILURE

Document the high-level summary of product/means of the recovery, the details will be in the DR run book.

# Disaster Recovery Plan (SAAS)

Many cloud services are completely out of the control of the organization. Due to this fact, it is important that there are realistic expectations when outages occur based on the vendor’s SLA and recovery mechanisms.

*The first table is for backups performed by the IT organization of cloud data. RTO is hard to define, because it depends on the cloud being up again to re-import the data, so it is excluded from here. The SLA will cover all recovery done by the SAAS provider.*

SERVICE	RTO (CURRENT)	RTO (EXPECTED)	REASONS FOR DISCREPANCY	APPROVED BY

SERVICE	SLA

## RECOVERY MECHANISMS FOR A SAAS FAILURE

Document the high-level summary of product/means of the recovery, the details will be in the DR run book.



# Disaster Recovery Plan (Connectivity and Power)

This section deals with outages of items like Internet connectivity, SIP trunks, leased lines, MPLS, POTS, UPS and power, etc. Much like SAAS, many of these services involve SLA's. This section should also call out where redundancies and automatic failovers are available.

SERVICE	RTO (CURRENT)	RTO (EXPECTED)	REASONS FOR DISCREPANCY	APPROVED BY

SERVICE	SLA

## RECOVERY MECHANISMS FOR A CONNECTIVITY AND POWER FAILURES

Document the high-level summary of product/means of the recovery, the details will be in the DR run book.

# Dependencies

The section deals with service dependencies.

Dependencies are also important in reference to RTO/RPO requirements. Multiple failures in systems that are interdependent may negatively affect both recovery time and recovery point.

## UNIVERSAL DEPENDENCIES

Universal dependencies would be items that all or most systems are dependent upon (e.g. Active Directory or Power).

SERVICE THAT IS UNIVERSALLY DEPENDED UPON

## EXCEPTIONAL DEPENDENCIES

The exceptional dependencies section describes dependencies that affect many systems but perhaps not one or two critical systems (e.g. everything is dependent upon Active Directory except for the public website and the SAN infrastructure).

SERVICE	EVERYTHING IS DEPENDENT ON SERVICE EXCEPT:

## EXPLICIT DEPENDENCIES

Finally, explicit dependencies describe direct items (e.g. the VMware infrastructure depends upon the SAN infrastructure).

SERVICE	EVERYTHING IS DEPENDENT ON: