

**<Application Name>**

**Disaster Recovery Plan**

**Last Update: mm-dd-ccyy**

**Plan Updates**

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| **Revision Date** | **Revision Number** | **Author** | **Description** |
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# Purpose

This plan will provide the necessary information and tasks the Recovery Team will need to perform the restoration of the application and/or platform, to an operational state similar to a point in time prior to the disaster.

# Scope

This manual will supply the necessary information required by the application and/or platform team and the various suppliers to completely restore the application or platform. Upon completion of these steps in this plan, customers will be able to access the application, to perform their normal functions unless otherwise noted.

# Distribution

Every member of the Application recovery team and critical staff should receive two copies of the manual. A softcopy should be kept readily available off-site and another kept at their work area.

# User Guide

Please reference the Disaster Recovery User Guide in completing your plan.

# Definitions

## The Recovery Point Objective (RPO)

* Describes that point in time, preceding the interruption, that data must be available and correct to allow business functions to resume operations, following the interruption.
* Usually, the recovery point objective is the point synchronized backup data is available.
* The recovery objective is to minimize the amount of data and/or the number of transactions lost as a result of an interruption

## The Recovery Time Objective (RTO)

* Describes the maximum acceptable length of time that can elapse before the lack of a business function severely impacts the business entity.
* An RTO is comprised of two components: the time before the declaration and the time to perform the tasks (as documented in their plan) to the point of business resumption.
* An RTO is based upon the level of projected financial exposure, over time that would be acceptable to senior management.

## Classifications

**High Availability**: Dedicated Hardware, pre-configured at a JCI alternate Enterprise Data Center (EDC) using approved EC Technology

**Mission Critical**: Shared Hardware with higher Service Level Agreement (SLA) at the Recovery Location

**Critical**: Shared Hardware at Recovery Location

**Essential**: Application recovery after a new JCI data center has been established and provisioned

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| --- | --- | --- | --- | --- |
| **Recovery Point Objective (RPO)** | **Recovery Time Objective (RTO)** | | | |
|  | < 12 Hours | 12 < 24 Hours | 24 Hours <= 7 Days | 45+ Days |
| 30 Minutes < 4 hours | High Availability | Mission Critical | NA | NA |
| 4 hours < 24 Hours | High Availability | Mission Critical | Critical | NA |
| 24+ Hours | NA | NA | Critical | Essential |

# Plan Summary

The plan summary provides a snap shot view of the application being documented, the **principle** business function supported by the application and the recovery requirement of the application.

|  |  |
| --- | --- |
| **Application Name** |  |
| **Business Unit (AE, BE, GA, PS)** |  |
| **Application Description** |  |
| **Department Name** |  |
| **BU IT Application Subject Matter Expert (SME)**  ***(IT Contact)*** |  |
| **BU IT Application Management**  ***(IT Manager)*** |  |
| **Business Process Subject Matter Expert (SME)**  ***(BU Contact)*** |  |
| **Business Process Owner**  ***(BU Manager)*** |  |
| **Production Data Center Location (BDC, HDC, MDC)** |  |
| **Recovery Time Objective (RTO)** |  |
| **Recovery Point Objective (RPO)** |  |
| **Disaster Recovery Classification** |  |

# Signature Page

I have reviewed the following Disaster Recovery Plan and, to the best of my knowledge, believe it to be complete, accurate, and up to date. I further certify that per the Johnson Controls Disaster Recovery Charter, this Plan will be reviewed annually and revised upon any significant change to the production environment or recovery process.

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**Name:**

**BU IT Application Management Date**

I have reviewed the plan summary section and acknowledge that the information provided on this page is accurate and complete.

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**Name:**

**Business Process Owner Date**

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**Name:**

**BU DR Coordinator Date**

# Recovery Strategy

*(Insert a statement explaining the recovery strategy for this specific application/product.)*

e.g. This application is running production in the ABC Data Center with a fail over to the DEF Data Center in the event of a true disaster or recovery exercises.

# Infrastructure Requirements

This section refers to any hardware, packages or other special requirements to recover this application in a real disaster, disaster recovery rehearsal and/or return home scenario.

## Servers

Identify each server that must be recovered for this application (All information is mandatory).

NOTE: Please list all servers to be recovered into sequential order. Add additional rows as required.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Recovery Sequence No** | **Server / Host**  **Fully Qualified Domain Name** | **Recover in Disaster Recovery rehearsal Yes/No** | **Recovered By** | **Platform** | **PRD, QA, DEV, SBX, TEST** | **Description/Comments** |
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## Package names

Identify each package that must be recovered for this application: (All information is mandatory)

NOTE: Please list all packages to be recovered into sequential order. Add additional rows as required.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Recovery Sequence No** | **Package Name (Fully Qualified Name)** | **Recover in Disaster Recovery Rehearsal Yes/No** | **Server / Host (primary node)** | **Recovered By** | **Description/Comments** |
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## Data/File Systems

Identify each file system that must be recovered for this application including empty files systems: (All information is mandatory)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **File System** | **Description** | **Host** | **Recover in Disaster Recovery Rehearsal Yes/No** | **Recovery Method** | **Recovered By** |
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## Application DNS Entries

Identify all application infrastructure related DNS/IP addresses or Firewall rule information needed to recovery this application.

Add additional rows as required.

|  |  |  |  |
| --- | --- | --- | --- |
| **Primary DNS Names (host, package)** | **Alias** | **Firewall/ DMZ configuration required?** | **Description / Comments** |
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## Special Equipment / Requirements

This section is used to describe all required non server or network equipment, located in the JCI Data Centers, required for successful recovery of an application. Examples are MAC Address, Modems, PC systems, dongles, etc. (All information is mandatory). The recovery requirements below must be coordinated with the server and connectivity teams for the recovery for this application.

NOTE: Enter all special equipment used by your production environment. Add additional rows as required.

|  |  |  |  |
| --- | --- | --- | --- |
| **Equipment / Requirement Type** | **Responsible to provide equipment/ requirement** | **Required at Disaster Recovery Site (Yes/No)** | **Description of Equipment/ Requirement (ie. Usage, Model Type, Model Number)** |
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# Application Requirements

## Application Firewall/DMZ Requirements

Your application most likely requires firewall rules if any of the following are true:

-Your application is accessible from the Internet

-You have external vendors/partners that need to access your servers or vice versa

-Your application is accessible through the employee portal

Also keep in mind that the rules you require for a recovery rehearsal may be different than what you might need in a real disaster.

This may change based on your discussion with IT Security.

Please also complete the DR Connectivity Worksheet located in the Disaster Recovery Plan eRoom. We use this information when performing rehearsal exercises.

**Describe the DMZ Application Requirements below:**

## Application Dependencies

Identify all dependencies for your application to assist in the creation of the recovery sequence. Please provide a diagram showing all dependencies.

| **Application** | **This application has a dependency of the plan application in regards to what needs to be required first. Explain in detail to insure accuracy in planning.** |
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## Authentication

Identify all authentication methodology(s) for your application, and whether it represents input to, output from, or both for your application.

| **Authentication** | **Yes, No** |
| --- | --- |
| LDAP - Enterprise Siteminder |  |
| ADAM/Active Directory |  |
| BE B2E Site Minder |  |
| BE B2B Site Minder |  |
| AE Siteminder |  |
| <insert additional items here> |  |
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## Infrastructure Recovery Requirements

Application recovery requirements are the results of discussion between IT application owners, DBAs and GI Teams. Describe the Infrastructure requirements that need to be in place for you to begin your application recovery.

## Application Recovery Procedures

Describe in detail the steps incl. sequence, responsibility and required skills necessary to recover the application.

Including Startup/shutdown requirements on application/database level.

## Application Validation Procedures

Describe in detail the steps incl. sequence, responsibility and required skills necessary to validate the application functionality. User Acceptance Testing (UAT) are a good source for this area.

## Application Team Members

This notification procedure is used when the communication of an exercise or an actual event has occurred and team members are needed to recover and support an application.

**Application Team Members**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **First Name** | **Last Name** | **Role, coordinator, team etc.** | **Call Sequence** | **Cell Phone** | **Work Phone** | **JCI Internet Mail Address** | **Alternate Email Address[[1]](#footnote-1)** | **Alternate Phone Number** |
|  |  |  | 1 | CCCC - AAA.PPP-NNNN | CCCC - AAA.PPP-NNNN |  |  | CCCC - AAA.PPP-NNNN |
|  |  |  | 1 | CCCC - AAA.PPP-NNNN | CCCC - AAA.PPP-NNNN |  |  | CCCC - AAA.PPP-NNNN |
|  |  |  | 2 | CCCC - AAA.PPP-NNNN | CCCC - AAA.PPP-NNNN |  |  | CCCC - AAA.PPP-NNNN |
|  |  |  | 2 | CCCC - AAA.PPP-NNNN | CCCC - AAA.PPP-NNNN |  |  | CCCC - AAA.PPP-NNNN |
|  |  |  | 2 | CCCC - AAA.PPP-NNNN | CCCC - AAA.PPP-NNNN |  |  | CCCC - AAA.PPP-NNNN |

## Vendors

Identify all vendor information that provides either a product or service to your application. (Note) Repeat tables as needed for additional vendors and individuals.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Vendor Company-Specific Information \*** | | | | | |
| **Account Number** | |  | | | |
| **Vendor Name** | |  | | | |
| **Address Line 1** | |  | | | |
| **Address Line 2** | |  | | | |
| **Address Line 3** | |  | | | |
| **City** | |  | | | |
| **State / Country** | |  | | | |
| **ZIP / Postal Code** | |  | | | |
| **Corporate Phone Number** | |  | | | |
| **Local / Regional Phone No.** | |  | | | |
| **Service Provided** | | Note: Provide instructions to receive appropriate support. | | | |
| **Vendor Representative Specific Information \*** | | | | | |
| **Contact name** | **e-mail** | | **Position** | **Work Phone Number** | **Mobile Phone Number** |
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## External Customers

Identify all external customer interfaces to your application, and whether it represents input to, output from, or both for your application. List individuals for this organization. (Note) Repeat tables as needed for additional Customers.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Customer Company-Specific Information** | | | | | |
| **Account Number** | |  | | | |
| **Customer Name** | |  | | | |
| **Address Line 1** | |  | | | |
| **Address Line 2** | |  | | | |
| **Address Line 3** | |  | | | |
| **City** | |  | | | |
| **State / Country** | |  | | | |
| **ZIP / Postal Code** | |  | | | |
| **Corporate Phone Number** | |  | | | |
| **Local / Regional Phone No.** | |  | | | |
| **Customer Representative Specific Information** | | | | | |
| **Contact name** | **Email** | | **Position** | **Work Phone Number** | **Mobile Phone Number** |
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## URL References

Many applications are accessed via browser using an URL link. Document those here.

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| --- | --- |
| **Description** | **Fully Qualified URL Address** |
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## Move Back to Production Procedures

Describe in detail the steps necessary to move the application back to its original production site.

# Glossary[[2]](#footnote-2)

**Application** - A product or technical service that enables the delivery of Johnson controls solutions offered to Clients

**Business Process Owner –** The Business Process Owner determines the recovery parameters of the application and has final approval of plan specifics and validation of application recovery testing.

**Business Process Subject Matter Expert (SME)** – This is the individual who defines, documents, and maintains the disaster recovery plans with the details regarding servers, DNS, alias information, packages, recovery procedures and any other unique requirements for the application recovery.

**Business Unit IT Application Management** – This is the individual in Business Unit who is responsible for providing the Business Process SMEs required throughout the application requirements discovery and creation of application recovery plans. They are also required for the participation in the planning, rehearsal and execution of each recovery plan during rehearsals. This individual provides the BU IT Application Management signature in the disaster recovery plan indicating the acceptance of the plan.

**Business Unit IT Application Subject Matter Expert** – This is the individual appointed by the Business Unit IT Application Management to integrate disaster recovery planning within the Business unit IT processes and procedures. They assist in the identification and prioritizing the sequence of the applications to be restored during a rehearsal and in the event of a true disaster.

**Detailed Recovery Procedures –** Step-by-step technical instructions to recover an application. These procedures should be detailed enough for any person with basic skills to follow and recover the application.

**Disaster Recovery Plan** – A document that provides information regarding an application, its business function, RTO/RPO, notification information, and recovery procedures which will be used in recovery exercises or in the event of a true disaster to restore an application.

**Infrastructure Requirements** - This section refers to any hardware, packages or other special requirements to recover this application in a real disaster, disaster recovery rehearsal and/or return home scenario.

**DR Program Team** – The principal responsibilities of the Disaster Recovery Program Team, working with the BU IT Application Management, is to facilitate the development of the applicable disaster recovery plans for their respective EDC locations and to assist the business unit IT Plan Owners and their management in the development and maintenance of production application recovery plans.

**Recovery Team Member** - personnel responsible for the recovery and restoration of the product in the event of a disaster declaration. This includes responsibilities for coordinating the necessary support by other teams to restore the product to the stated recovery point objective. Team may consist of one or more members depending on the product and the situation.

# Appendix A – Additional Information

This section can be used by the application team to add any other information, test scripts etc. used for the recovery of their application.

1. In the event of a real disaster JCI email and phone service will not be immediately available. The alternate fields are optional. [↑](#footnote-ref-1)
2. For a complete definition of roles and responsibilities in the disaster recovery program, please review the Program Charter located in the eRoom. [↑](#footnote-ref-2)