



Aljex Software, Inc.

Business Continuity & Disaster Recovery Plan

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Introduction

In the event of a disruption in service, no matter how minor or catastrophic, Aljex Software, Inc. (Aljex) has created a comprehensive plan to maintain seamless service to its customers. This plan provides an overview of the steps necessary to protect this important part of our business.

Business Continuity

Employee Structure

Aljex has internal procedures which filters specific problems into categories. Employees are designated to each category based on their knowledge, experience, and capabilities. Below is an outline of these categories with responsible employees and emergency contact information.

Category 1 - High Level Problems

This category refers to problems involving a server. It is a pleasure to note that for the last three years, there have been no Category 1 problems and no unplanned downtime for any server.

Category 2 - Mid Level Problems

This category refers to problems involving programming.

Category 3 - Basic Problems

This category refers to day-to-day customer problems & inquiries.

In the event of a Category 1, the emergency contact steps are:

- 1) Call Aljex at (732) 357-8700, if there is no answer;
- 2) Select Ext. 0, if there is no answer;
- 3) Emergency contact personnel cell phone numbers:

Joe Hirschman (908) 875-1168

Tom Heine (908) 347-4567

Brian White (908) 553-5481

On-Site Disruption Procedures

In the event of a disruption, such as a power outage, Aljex staff is capable of remotely working off premises. The main office has a piped natural gas generator with automatic start. It automatically starts up twice a week and runs through its test sequence. If needed, the generator can run for up to a week before needing any maintenance. Aljex also has an always-on UPS battery power sufficient to run all the

network equipment and servers for at least 30 minutes. The UPS only needs to run for about 10 seconds until the generator is started.

In the event of a power outage, there would be no interruption in our customer's connectivity because all production servers and back-up servers are hosted in offsite data centers across the country.

Aljex will immediately post emergency phone numbers on www.aljex.com. A list of contact information is also available in the Employee Structure section of this plan. Additionally, Aljex will send out a blast E-mail to its customers with emergency contact information.

Disaster Recovery

Technical Structure

Hardware

Every production server incorporates redundancy in its major hardware parts. All production servers have fully redundant RAID 10 disk arrays. All disks are hotswappable and spare disks are on hand either at the server locations or at Aljex. All production servers have fully redundant and hot-swappable power supplies.

The cooling fans in the servers are all hot swappable. In most cases, if a disk, power supply or fan goes bad, the server will keep running and Aljex overnights a replacement part to the data center and the on-site staff installs the new part. This process is done without needing to stop or restart the server.

Connectivity & Power

All production servers are hosted in commercial data center which have fully redundant power and network connectivity. If a power circuit or Internet connection fails, the data center supplies UPS battery power and/or generator power and/or switches power to secondary power grids as necessary, and network connections likewise automatically re-route via other Internet connections.

Duplicate Server

For every production server, there is a complete duplicate server in a different physical location. Each duplicate server is an exact or better copy of the hardware, operating system, application code, user account information and all customer data. This mirror server is always on, always ready to go, and updated to match one production server twice per day, but is otherwise un-used. Its sole purpose is to be a full hot back-up of an entire server.

Back-Up Host

At least three (3) Aljex employees know how to perform the task of moving production from its current host to its back-up host in the event that the primary host becomes unavailable. This can be done in under an hour, generally in as little as a few minutes.

At least three (3) different Aljex employees would know how to find and then follow the notes in our in-house support database in the event none of the first three (3) people who would normally do this were available.

Data Centers

Since all production servers are physically hosted in remote data centers with their own 24/7 on-site staff, all physical aspects of server maintenance are performed by the on-site staff of those facilities. Because of this, there is no one at Aljex who, if missing, would stop maintenance of production or back-up servers. The same is true for network administration.

On-Site Security

All sites are commercial data centers with 24/7 on-site staff and standard data center security. Access to the server room is restricted to employees of the facility and any of their customers who have been issued an access badge. Usually only one person per account is allowed to get a badge, their ID then goes on file and they must sign forms making them liable for their actions, the same as all employees and anyone else allowed access for any reason. Within the server room, our servers are inside our own locked server rack that only we and the service provider have the key or combination to. Other customers who have access to the server room do not have access to our servers in any way that lets them retrieve data.

Disruption Procedures

Production Server Failure

In the event a customer's production server suffers for any reason. Aljex simply "activates" the back-up server and it becomes the production server. The users do not have to do anything special for this. Aljex performs a few small actions on the back-up server and changes where a DNS record points, then users just log in as normal using their normal icons and shortcuts.

Customer Data

Customer's data and related special configuration data such as user accounts are also synchronized to a separate back-up storage server at Aljex. In the event that both a customer's production server and back-up server are unavailable, all of the data necessary to set up the customer on a new server is also available on another back-up host. It takes approximately 30 - 60 minutes to restore this data to a stand-by server and set it up to run. There are four (4) employees who can perform this switch if needed.

All business data would be up and available to users. There may be brief interruptions with faxing, E-mailing, or EDI transactions. The users may also have to log in using new temporary user accounts instead of their normal accounts, which would be issued by Aljex staff.

Server Back-Ups

Each production server has its own back-up server that is located in a remote location separate from its production server. If an entire hosting facility becomes unavailable for reasons beyond our control, some of the production servers in that down facility will become back-up servers and no immediate action will need to be taken.

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Definitions

A hot swappable device is one which can be attached or detached from a computer or other electronic device without having to reboot the computer.

Production server is a web server that delivers what is often called the "live site." It is typically available to the entire web and houses the most recent version of its respective site.

RAID 10 (Redundant Array of Inexpensive Disks) is a technology that allowed computer users to achieve high levels of storage reliability from low-cost and less reliable PC-class disk-drive components, via the technique of arranging the devices into arrays for redundancy. When multiple physical disks are set up to use RAID technology, they are said to be in a RAID array. This array distributes data across multiple disks, but the array is seen by the computer user and operating system as one single disk. RAID can be set up to serve several different purposes.

Redundancy refers to building or designing in to the equipment a number of systems that can "take over" if one part of the system fails to work. Some people call that a built-in back up system.