

# Business Continuity with Cloudli

## What is Business Continuity?

It's the activity performed by an organization to ensure critical business functions are available to key stakeholders like customers, suppliers, regulators, and other entities that need access to those functions. These activities may include project management, system backups, change control, help desk, and call centers. Business continuity refers to daily functions that are performed to maintain service, consistency, and recoverability.

## What is High Availability, Infrastructure Redundancy, Failover and Hot Standby?

Redundancy, Failover and Hot Standby are elements used to implement High Availability that enable critical functions to support Business Continuity requirements.

### **High Availability:**

System design approach and associated service implementation that ensures a prearranged level of operational performance is met during a specific period.

### **Redundancy:**

Duplication of critical components or functions of a system with the intention of increasing reliability of the system, usually in the case of a backup or fall back.

### **Failover:**

Automatic switching to a redundant system upon the failure or termination of the previously active application, server, system, hardware component, or network.

### **Hot Standby:**

Used as a failover mechanism to provide reliability in system configurations. The hot standby is active and connected as part of a working system. When a key component fails, the hot standby is switched into operation. A hot standby can be a device or system that is ready to overcome significant start-up delays.

## What architecture is suitable for Business Continuity requirements?

A Business Continuity architecture is always customized to the distinct requirements of the company.

## **We haven't had any major outages or disruptions, why should I think about Business Continuity?**

You should be thinking about Business Continuity because the real question is not **if** a catastrophic event will happen, but **when it will happen**, and how fast you can get your business back up and running. If you stop doing business unintentionally, you may quickly end up out of business. The objective of Business Continuity is to design a system whereby your business functions are minimally affected by a catastrophic event.

## **Why is Cloudli talking about Business Continuity?**

One of the biggest differences between IP communications and traditional telephony is that IP enables simple and economic business continuity solutions. Traditional telephony assumed that telephone systems had to be localized, making the re-direction of telephone calls very difficult and expensive.

With SIP Trunking, IP-PBXs and fax servers can now have a dual-homed architecture so that if one site is down, another can take over the responsibilities with minimal interruption. This is the concept of High Availability. One example of this type of architecture is an active/active implementation.

## **I like this Business Continuity architecture, but having my communication run over the Internet makes me feel uneasy. Can't hackers now listen in on my conversations or intercept my faxes?**

Cloudli incorporated a mechanism in its architecture that allows for real-time encrypted communications between devices (IP PBX, fax server, etc.) and our state-of-the-art Session Border Control (SBC) elements to protect all IP call traffic within our network. For enterprises that are required to respect regulatory laws that mandate encryption, Cloudli's real-time encryption mechanism, coupled with its High Availability architecture, provides the ideal solution.

## What are some examples of a Business Continuity implementation?

Cloudli recommends two general architectures, depending on the synchronization abilities of the backend systems, IP PBXs or fax servers. Please note that all implementations are customized and, and businesses can mix implementations to serve their unique requirements. Here are two examples:

### Active/Active

A financial services company has two locations – one in New York and one in San Francisco - and wants to be able to send and receive faxes 24/7 through a fax server. Fax is considered an essential part of their business process. A fax server is placed in each location with fax-conditioned SIP Trunks, also known as T.38, so that both systems can send/receive fax calls based on the availability of the fax channels on each system.

Effectively, the fax server channels are all part of the same “Hunt Group”, and the system is automatically “Load Balanced”. This means that if one server fails, the other automatically carries the load until the failed server can be brought into production again. If this type of architecture was implemented with traditional telephony, the monthly cost would be prohibitive.

### Active/Passive

A large healthcare facility is required to receive patient records by fax 24/7. Once again, two fax servers are used: one active (placed at the facility) and the other passive (placed at a data centre as a backup).

Cloudli SIP Trunks are set up so that if there is a failure in the active server, all inbound faxes would automatically be directed to the fax server in the data centre. In this scenario, the backup is only used if necessary. In the traditional telephony world, the cost for this type of automated redirection would be, once again, prohibitive. Cloudli SIP Trunks make business continuity affordable and accessible for all types of businesses, large and small.



## **Okay, I'm sold on Business Continuity. How much will it cost?**

Traditionally, the technical setup and monthly cost made business continuity architectures economically challenging. The traditional architecture required a PRI redundancy setup that is only technically possible when the dual sites are within a limited geographic distance from each other. Even then, it is a complex setup that carriers are often unable to properly support.

With Cloudli SIP Trunks, these implementations are cost effective and allow you to distribute or virtualize your architecture while lowering your business risks. The new telephony network over the Internet allows multiple sites to be linked, regardless of the geographic distance.

Cloudli's virtualization of communication infrastructures, economical SIP Trunking services, and high Internet availability reduce the cost to such a degree that Business Continuity can now be part of the corporate business strategy.

## **How do I get started on Business Continuity?**

The best place to start is by contacting our Cloudli sales team who will outline the high availability options and design a road map for your organization's business continuity in the event that there is a disruption to your operations.