

## Business Continuity with babyTEL SIP/T.38 Trunking

### What is Business Continuity?

“**Business continuity** is the activity performed by an organization to ensure that critical business functions will be available to customers, suppliers, regulators, and other entities that must have access to those functions. These activities include many daily chores such as project management, system backups, change control, and help desk. Business continuity is not something implemented at the time of a disaster; Business Continuity refers to those activities performed daily to maintain service, consistency, and recoverability.” *Wikipedia*

### What is High Availability, Infrastructure Redundancy, Fail Over or Hot Standby?

Redundancy, Fail-Over and Hot Standby are elements used to implement High Availability critical functions to support your Business Continuity requirements.

**High Availability** - High availability is a system design approach and associated service implementation that ensures a prearranged level of operational performance will be met during a contractual measurement period. - *Wikipedia*

**Redundancy** - Redundancy is the 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 fail-safe. - *Wikipedia*

**Fail-Over** – Fail-over is the automatic switching to a redundant or standby computer server, system, hardware component or network upon the failure or abnormal termination of the previously active application, server, system, hardware component, or network. – *Wikipedia*

**Hot Standby** - A hot standby is used as a fail-over 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. More generally, a hot standby can be used to refer to any device or system that is held in readiness to overcome an otherwise significant start-up delay. - *Wikipedia*

### What architecture is suitable for Business Continuity requirements?

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 will you get your business 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 a SIP/T.38 Trunking service provider like babyTEL talking about Business Continuity?**

One of the biggest differences between the SIP/T.38 Trunking world and the traditional telephony world (PRI, Analog lines) is that SIP/T.38 Trunking allows for simple and economic telephony solutions for Business Continuity. Traditional telephony assumed that telephone systems had to be localized, making the re-direction of telephone calls very difficult and expensive.

With SIP/T.38 Trunking, IP-PBX's and fax servers can now have a dual-homed architecture so that if one site is down, then another site 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?**

babyTEL has incorporated within its architecture a mechanism that allows for real-time secure and encrypted communication between your device (IP PBX, Fax Server, etc) and our network edge where state of the art Session Border Control (SBC) elements protect all IP call traffic within our network. For enterprises that are required to respect regulatory laws that mandate encryption, babyTEL's real-time encryption mechanism, coupled with its High Availability architecture, provides the ideal solution.

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

babyTEL recommends two general architectures, depending on the synchronization abilities of the backend systems, IP PBX's or Fax Servers. Please note that all implementations are customized and there can always be a mix of implementations to serve the requirements of the business. Two examples are given below:

**Active/Active** – A financial services company has two locations in New York and 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 and the SIP/T.38 Trunking is set up so that both systems are receiving/sending fax calls based on the availability of the fax channels

on each system. Effectively, all the fax server channels are 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 would be used, one active, placed at the facility and another passive at a data centre as backup. babyTEL SIP/T.38 Trunking would be set up so that if there was a failure in the active server, all the 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, this type of automated re-direction would be cost prohibitive. In the SIP/T.38 Trunking world, this is ordinary and insures the continuity of business processes.

### **Okay, I’m sold on this Business Continuity stuff, doesn’t it cost an “arm and a leg”?**

Traditionally it was the technical setup and monthly cost that made these 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.

Now with babyTEL SIP/T.38 Trunking, these implementations are cost effective and allow you to distribute or virtualize your architecture and lower your business risks. The new telephony network over the Internet allows multiple sites to be linked, regardless of the geographic distance. Virtualization, economic babyTEL SIP/T.38 services and high Internet availability reduces 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 your authorized babyTEL Agent. The babyTEL Agent can outline the high availability options and design a road map that insures that you have business continuity in the event that there is a disruption to your operation.

To find an authorized babyTEL Agent, please contact babyTEL at the coordinates below:

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