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**Fighting disasters with
Amagi's cloud-backed
disaster recovery
solutions**

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Must-have combat tools for broadcasting networks

Natural or man-made disasters can pose a severe threat to broadcasting networks. Apart from seriously affecting the broadcast quality and end-user experience, they can lead to a massive loss in revenue.

Since these catastrophes are unavoidable and unpredictable, broadcasting networks like yours need to be fully equipped to handle them anytime.

How disasters can disrupt your broadcast flow

One of the primary reasons that put traditional broadcast set up at a high risk of disruption is the potential damage that can be caused to its physical infrastructure. For instance, a snowstorm hits your station and causes a lot of damage to your physical equipment. Unfavorable weather conditions make it impossible for your teams to reach the location and fix the damage. As a result of this catastrophe, your network sees sizeable downtime.

Disaster recovery is a big challenge for traditional broadcasters

Traditional broadcasters often experience a hard time tackling disasters. To keep their networks up and running, they need to repair/replace the damages caused to their physical infrastructure. This often burns a hole in their pockets, thus leading to ***high expenditure with a questionable ROI.***

The physical damage caused to the broadcasting infrastructure also puts their channels at a higher risk of losing the signal, ***negatively affecting the viewing experience.***

Cloud-based disaster recovery solutions to the rescue

Whether you are a big name in the broadcasting world or a smaller one, you need to invest in a robust disaster recovery solution.

A cloud-backed disaster recovery solution enables you to run your channel seamlessly without having anything on-premises. Its distributed architecture lets you manage the entire broadcasting flow remotely from anywhere.

Cloud-based solutions are disaster-proof. Some salient features include:

- ❖ Cost-effectiveness due to elimination of hardware
- ❖ Full remote access enabling multi-region capability

Apart from its advantages with respect to disaster recovery, cloud technology has also seen a phenomenal adoption rate among broadcasting networks due to perks like:

- ❖ Scalable infrastructure
- ❖ Flexibility and security
- ❖ Ability to extend delivery to OTT platforms

Hot, warm & cold: Disaster recovery sites

Your disaster recovery plan is incomplete without disaster recovery sites. These are essentially recovery sites that work at different capacities to manage data recovery when a primary feed fails.

Hot, warm, and cold—these terms have slightly different meanings depending on whether they are used in a traditional or cloud-based disaster recovery setup.

Traditional disaster recovery

- ❖ **Hot:** Replica of the data center with all hardware and software operating systems running parallel to the primary feed.
- ❖ **Cold:** No hardware equipment, just a space reserved to act as a data center, if needed.
- ❖ **Warm:** This lies somewhere between hot and cold sites in terms of hardware and software system deployment.

Cloud-based disaster recovery

- ❖ **Hot:** When you use a cloud-powered disaster recovery solution, 'hot' refers to a DR that runs 24/7 and can be engaged automatically through a switcher. Here, playout happens simultaneously and redundantly from two different sources.
- ❖ **Warm:** Cloud plays a significant role here. Here, a broadcaster might have content prepped and ready to go from the cloud but not start playout on the channel until disaster strikes. The playout server comes up based on the need, whereas the automation (media management & playlist management) is always running. The playout server is, in general, the largest cost component.
- ❖ **Cold:** Cloud has no role to play here. When a disaster occurs, the whole system is orchestrated to come up via some trigger automatically. It might take some time to fetch the assets, playlist, and so on, and once ready; it starts playing out the channel. It's a low-cost option as nothing needs to be running 24/7 on the cloud.

Weather the storm with Amagi's cloud-based & customized disaster recovery solutions

When choosing the right cloud-backed disaster recovery solution, one size doesn't fit all. We understand the varying needs of different broadcasting networks and have developed two customized disaster recovery solution models to help.

1. 24/7 solution powered by Amagi CLOUDPORT

Amagi's cloud playout platform Amagi Cloudport works as an effective disaster recovery module.

- ❖ Prepare your entire broadcast workflow for disasters
- ❖ Automatically sync content and playout with high content availability

One of the common use cases it supports is a traditional broadcaster having its complete playout setup on-premises but employs Amagi Cloudport on the cloud to avoid disruption during an electricity outage or any natural disasters.

Possible use cases

1. Primary playout on-prem; DR on-prem
2. Primary playout on-prem; DR on-cloud
3. Primary playout on-cloud; DR on-prem
4. Primary playout on-cloud; DR on-cloud
5. Some parts of the primary or DR can be either on-prem or cloud-based on the architecture deemed best by the customer. Here, the DR Cloudport, orchestrated end-to-end, shall spin up automatically and start providing the output feed wherever required. The switch from primary playout to Amagi's cloud could be through a switch, either automatic or manual.

Workflow overview

- ❖ Media from the primary playout is mirrored
- ❖ The media and playlist ingest is decided based on the customer's current workflows
- ❖ To ensure smooth operations, the recovery playout runs in parallel with the primary playout
- ❖ The delivery setup is always ready to load and comes into action as soon as the disaster strikes
- ❖ 24/7 phone and email support systems are provided for cloud infrastructure monitoring

Benefits

Effective media asset management:

Flawlessly manage your broadcast-related assets despite the failure of your physical data center

Seamless channel delivery:

Despite the failure of your entire primary infrastructure, you can deliver your channel via other methods such as fiber and satellite

Better accessibility:

Maintain broadcast readiness for playout and media assets



2. On-demand solution powered by Amagi CLOUDPORT

This serves as an extremely cost-effective method to keep a standby system in the cloud: ready to start when you need it; dormant when you do not. For many, cloud-based disaster recovery serves as a good, practical first experience of media in the cloud.

- ❖ Activate disaster recovery on a short notice
- ❖ Eliminate the need to replicate secondary broadcast feed

Workflow overview

- ❖ Media from the primary playout is mirrored
- ❖ The media and playlist ingest is decided based on the customer's current workflows
- ❖ Before the disaster occurs, the playout & delivery spin-up chains are fully set up, tested, and shut down
- ❖ It takes up to 5 minutes for the primary playout to run in case of a disaster
- ❖ 24/7 phone and email support systems are provided for cloud infrastructure monitoring

Benefits

- ❖ **Automated import & remote deployment:** Be playout ready by auto-syncing content, playlists & graphics from anywhere in the world
- ❖ **Pay per use model:** Unlike the traditional setup, you can pay as per usage, making it cost-effective

Amagi CLOUDPORT cloud playout: system features

- ❖ PaaS-based playout platform
- ❖ Pay as you go
- ❖ Rich overlay graphics for an enhanced viewing experience
- ❖ Spin up channels instantly
- ❖ Live IP contribution and streaming delivery

How a leading media house ensured business continuity with Amagi's linear playout disaster recovery solution

About the client

A famous media network that runs some of the world's most popular channels across genres such as original content, movies, drama, and so on. It also is home to a 24-hour cable network that focuses on mystery.

Business requirements

The customer sought uninterrupted content delivery in case of a natural calamity that could potentially affect the playout/uplink facility.

The media brand's primary playout is outsourced to a third-party vendor that leverages traditional hardware-based playout and also provides the satellite uplink facility. So, their main concern was: How to continue delivering service in the face of a natural calamity or disaster that results in issues in the playout facility or the uplink facility?

The customer sought an effective DR solution that can take over either playout or uplink or both at the same time. After evaluating our DR capabilities through simulated testing of our playout and uplink service, they chose Amagi as their DR tech partner.

Amagi solution summary

We provided a disaster recovery solution with the satellite uplink facility, collaborating with our carrier partner Tata Communications. We also handled three of their channels for the East Coast and generated two channels for the West Coast as delayed feeds using Zixi. We built business continuity for the customer's traditional, terrestrial channel delivery with our linear playout DR solution.

Key challenges addressed – cloud and latency

Coordinating with the primary output vendor, we were able to ensure low latency. The streams are played a few seconds earlier to ensure timely delivery.

Amagi impact

- ❖ Reliability of delivery and business continuity through playout and uplink redundancy
- ❖ Quick resolution of playout issues through 24/7 monitoring
- ❖ 100% automation with no additional manual effort from the customer
- ❖ High resiliency for critical workflows





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Thrive with us!

Get ready to face disasters with Amagi's cloud-powered solutions. Reach out to us at cloudandme@amagi.com

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