Critical Data Management Protocols in Contact Centres

Understanding the risk and impact of data loss - and what your contact centre can do to stay protected.

Hostcomm

Business VoIP Solutions

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About the Author

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Chris is founder and Managing Director of hosted telephony provider Hostcomm. The business was one of the first of its kind in the UK and today offers an unrivalled VoIP network infrastructure. Chris's 20 years' experience in voice and data networking and pursuit of innovative new technologies ensure Hostcomm's services are stable, cost-effective and continuously evolving.

Executive summary

As we move further into the digital age, our dependence on data grows. Data is held on servers that may be located onsite or in a remote location.

In contact centres this data largely comprises customer contact details and call recordings. These are linchpins of day-to-day business, not to mention valuable and often confidential.

The consequences of data loss and downtime are huge. Organisations suffer significant financial and reputational damages in the event of data loss. Interruptions to service result in agents with nothing to do, unhappy customers and unachievable campaign targets.

Data Loss And Downtime Cost The UK £10.5 Billion Per Year

Source: http://www.techweekeurope.co.uk/e-innovation/data-loss-downtime-costs-uk-10-5-billion-per-year-156762#aPd1vuJWDsQGohse.99

As a result, most of us take steps to secure, back up and protect our data or, at the very least, trust our service providers to do so. Sometimes, things go wrong and we have to resort to a backup. In many cases it's possible to revert to a nightly backup and get back to business fast. But what if the information you need to access was from today? What if your nightly backup is missing and the most recent one you have is now a week out of date? Who is responsible for making your backups and what should they be doing to keep your critical data available and ready to use?

78% of UK organisations are not confident that they can fully recover after a disruption

Source: http://www.techweekeurope.co.uk/e-innovation/data-loss-downtime-costs-uk-10-5-billion-per-year-156762#aPd1vuJWDsQGohse.99

Establishing the best critical data management protocols in your contact centre isn't easy. It takes a careful balance of costs and risks to understand the right solution, both now and in the future. And it takes a clear picture of the options available to you.

Two types of critical data

Planning an appropriate data management strategy for your contact centre begins with a better understanding of the data that you need to back up.

While every contact centre is different, there are two common types of data that every critical data management protocol should cover.

Call recordings

Call recordings have an important role to play in agent training, compliance, and maintaining the best standards of customer service. However, in terms of raw data they present some very specific challenges.

File size. For every second that passes, 100Kb of voice data is transferred. When you record your calls, this creates a file size of around 6Mb a minute - 360Mb an hour for every agent.

With that in mind your backup strategy must consider the scale of call recording data. If your data is not managed correctly, files and databases soon reach unwieldy, hard - to - manage sizes. This also poses a risk of memory exhaustion on your central call centre server.

Customer contact data

Usually stored in a relational database, customer contact data is the heart of everything your contact centre does. Potentially you could be collecting and recording a wide range of data including:

- Personal data (names, telephone numbers, identifiers, addresses)
- Customer data (sales histories, preferences, marketing segments)
- Notes and agent records
- Payment, delivery, and sales information

In addition, some of this data may come with a fixed cost when you purchase a database of leads from a third-party supplier. If this data is lost, the financial impact could be instant - you have paid for a list that you no longer have.

It is important to understand what data your contact centre cannot be without, while understanding the financial, productivity and customer service impacts of server failure. This allows you to see the true cost of data loss, how it can happen and how to avoid potential data loss scenarios with data backups.

4 data loss scenarios to avoid

A busy call centre can generate millions of database records and call recordings per week. Data loss from failure to back up becomes a real issue and can damage operational efficiency, customer service and profitability.

It's important to have the right data management and backup protocols in place to recover from any potential data loss. Here are four fundamental scenarios to avoid.

1. Loss of contact information

The loss of a contact information database can mean different things to different organisations. For many, the loss of customer contact data can mean lost agent productivity. This can go hand in hand with the risk of not being able to deliver the customer service your clients are used to. Back up your data to ensure that any loss of contact information can be restored.

2. Loss of call recording history

Retaining call detail records is a mandatory requirement for Ofcom compliance - if they are lost that's a breach. Much like the loss of contact information, the loss of a call recording history database can have further implications depending on how you chose to utilise these recordings. For example, providing evidence of business or ensuring compliance with regulatory procedures.

Without backups of your invaluable call records you could lose out on critical learning and development opportunities to hone customer service. You also run the risk of losing call recordings, which you may need to prove accountability or evidence of business. Don't run the risk of losing precious data, always ensure you have a suitable back up option for call records.

3. Server runs out of memory

A busy call centre can generate millions of database records and call recordings per week. The main VoIP codec used today is G711, which runs at around 100kbps. A recording at this speed reaches a file size of 360mb per hour, per agent. It is therefore very important to stay on top of your data in terms of strategy to move it and back it up. If a server fails due to lack of memory it becomes a real possibility that you will not be able to store new data and risk losing invaluable information.

4. No back up

If you don't have a back up available, customer histories and relationships can be jeopardised and the ability to deliver exceptional customer service will become a new challenge. That is why having the right back up protocol in place is crucial to ensure operational efficiency. Reduce the risk of a data loss disaster that could seriously impact your customer service.

In the event of a lost database and unavailable customer contact information, loss of call recording or even running out of server memory to store new data, you jeopardise customer service. Agents aren't able to access customer contact information to make important calls or schedule call-backs.

A loss of call recordings takes away any accountability you may have as an organisation. This is especially important if this information is needed as a reference at a later data. If your server runs out of memory and new or existing customer information cannot be stored, you risk new and current relationships. Improving customer experience and satisfaction can be secured by having the right back ups and protocols in place.

Research conducted by The Diffusion Group, who surveyed SMEs, revealed that 60% of companies that lose their data close down within six months of the data loss and a total of 72% shut down after 24 months.

Knowing who is responsible and a proactive approach can ensure that you are best protected against data loss.

60%
OF COMPANIES THAT LOSE THEIR DATA CLOSE DOWN WITHIN SIX MONTHS OF THE DATA LOSS

72%
OF COMPANIES THAT LOSE THEIR DATA SHUT DOWN AFTER 24 MONTHS

Research conducted by The Diffusion Group

Know your responsibilities

Do you know who's responsible for your data backups? Whether your servers are on premise or you use a hosted provider for a cloud contact centre, you need to make sure responsibilities are clearly outlined and your data backups are happening.

Think ahead to avoid data disasters, which could have a big impact on your contact centre operations. For peace of mind and to secure your data, make sure you are aware of what you need to do.
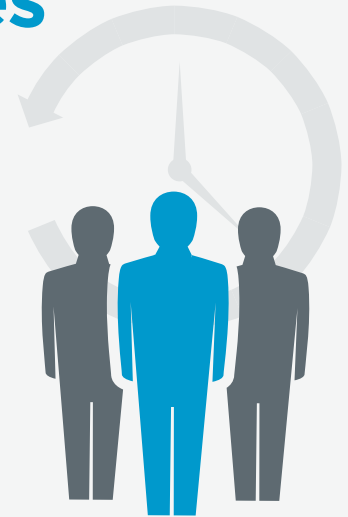
1 Know your responsibilities and configure additional options (if required)

 ⊕ Do you have to request backups or do they happen as part of your SLA?
 ⊕ Do you have to download data from your admin interface?

2 Know your service provider's responsibilities

 ⊕ Where is your data stored?
 ⊕ What data is stored – are all uploaded lists, call records, campaign settings, call-back details, client details and notes covered by your provider?
 ⊕ How is data security ensured?

3 Consider additional paid options to provide the exact backup protection your contact centre needs

 ⊕ Do you require instant access to up-to-date data?
 ⊕ How quickly does data need to be restored if lost?
 ⊕ What data is mandatory to maintain for compliance reasons?
 ⊕ Do you need on-going, uninterrupted visibility of your call recordings?

8 ways to reduce the likelihood of server failure or data loss

Understanding how much data you can afford to lose and how much you can spend are all important factors when identifying the right data management solution.

Here are 8 ways to reduce the impact on your business of an inbound / outbound call centre server failure:

1 **Regularly changing servers -** this ensures the hardware always has a reasonably long "shelf life".

2 **RAID arrays -** this mirrors the data over two or more disk drives so that if a drive fails the others can instantly take over. Hardware RAID is required not software RAID which requires too much server resource.

3 **Server clustering -** this spreads the server components over several physical machines meaning there is no single point of failure.

4 **Remote database backup -** having a remote (offsite) backup protects against a disaster relating to the server or data centre.

5 **Master / Slave database set up -** this mirrors the database to another local machine which is ready to take over if the main server fails.

6 **FTP transfer -** transferring the database and call recordings overnight to a remote server.

7 **Portable drive backups -** this can be done if the data cannot be copied over an internet connection due to its size.

8 **Replicating to a CRM system -** thereby having two sources of live data.

Once you have identified your data backup options you can assess what protocols are best suited to your contact centre by looking at the true cost of data loss. Can you survive losing half a day or a day's worth of data. What would happen if all your data was lost, how would it cost your contact centre?

The cost of business continuity

Losing any amount of data isn't ideal - but what data is going to cause a real concern to your business performance if lost? Would it be data that you are legally required to maintain or maybe it would be the actions and tasks your agents will be carrying out, or customer history?

The list is broad and you need to identify which information is crucial to keep your wheels turning. And of course, knowing what information is crucial helps you to understand where you need to incur additional cost.

So what price should you pay to prevent data loss and have business continuity in your contact centre? We've outlined three potential forecasts for data loss, to help you consider your options and the costs associated with restoring data.

"UK firms will be forced to pay an average of £1.9 million a year, or £71 per record, for every instance of data loss they experience and this has increased year-on-year for the third year running." (Symantec in conjunction with the Ponemon Institute)

The study confirmed that in 2010, the most expensive data loss brought about costs of £6.2 million, a huge rise on the £3.9 million recorded the year before. These costs included the direct fallout after the data loss, such as the clearing up process and replacement of equipment, as well as investigations into the incident and the efforts to rebuild consumer trust. (http://net.workspace. co.uk/social/resources/opinion-what-is-the-true-cost-of-lost-dat a-to-bus/)

One day of lost data with nightly backups

With nightly database backups, in a few hours a database backup can be restored onto a new call centre system server and work can continue. This is why our minimum recommendation for any business is a nightly backup to a remote server, with FTP transfer of call recordings nightly - this is the least costly option.

However, call recordings cannot be restored as quickly as the data due to the size of the files. They would need to be re-added over the subsequent days from the backup source. So this needs to be taken into consideration when planning, even temporary data loss can delays core processes. If the outage happens at the end of the day and the database is restored from the previous night's backup then potentially an entire day can be lost if you are solely relying on nightly database backups.

Synchronising to a CRM for low impact of call centre system failure

Synchronising to a CRM system can reduce the impact of a call centre database failure. This can be set up to run automatically as a background task or can be done by the agents manually when a call record is "popped" to them. This method works well if raw data is kept on the call centre server, whilst human contact records are saved to the CRM system. This enables you to have two sources of live data in case of any issues or unexpected data loss. With CRM synchronisation business continuity is maintained by being able to access the data on your CRM in the event of a server failure and vice versa, in the event of a CRM failure.

No data lost with RAID arrays

Using RAID arrays to ensure that a faulty drive does not impact the system at all, in the event of a damaged drive is a strong backup option, as more than one drive mirrors the same data. If one goes down the other is there to seamlessly takeover.

However, there is a premium to be paid for a RAID system due to the increased cost for the hardware. Hostcomm recommends a RAID array and nightly backup to a remote database, which will offer maximum protection against data loss along with increased protection against additional drive failure.

To implement this the call centre system would require a main database server configured for RAID1 (the least resource intensive of the RAID types), which would be in a cluster and with a slave database. The chances of a sustained outage and data loss are reduced considerably if not eliminated.

By understanding the cost of business continuity you can understand how precious your data is to business operations. Once you've identified your needs you can weigh up the cost of implementing a data-backup procedure to the cost of data loss.

Conclusion

Establishing the best critical data management protocols in your contact centre isn't easy. It takes a careful balance of costs and risks to understand the right solution, both now and in the future. And it takes a clear picture of the options available to you.

Know your responsibilities, know your provider's responsibilities and the cost of data loss. With this knowledge, data disaster scenarios can be avoided by safeguarding critical data with adequate backup protection. If standard backup options aren't suitable for your business, get in touch with your provider and question them about premium level data backups.

About Hostcomm

Hostcomm is a leading provider of hosted contact centre solutions based on VoIP technology.

The organisation has over 300 servers within its network located in 5 data centres. Having this many servers gives Hostcomm good insight into the the likely causes of a server failure and possible data loss.

Understand the risk and impact of data loss - and what your contact centre can do to stay protected.

Learn more about Hostcomm hosted contact centre services:

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