

## CASE STUDY Healthcare and Insurance

## HOSPITAL USES DATIPHY DATIDNA™ PLATFORM TO PROTECT DIGITAL ASSETS

Modern hospital IT professionals depend on sophisticated infrastructure to maintain daily operations. As more technologies and application services are added, the complexity of the systems increase. Many database transactions occur when a patient visits the hospital -- registrations, payments, appointments, health records, lab work and reports, prescriptions, surgeries, hospital stays, referral to specialists, transfer to different units, paperwork for insurance companies or public health authorities, and etc. Due to the aforementioned intricacies, hospitals need specialized healthcare information systems that must also comply with strict compliance regulations when processing patient data. In order to maintain operational efficiency, their hardware and software require timely updates and protection. If the IT system breaks down, not only could the hospital suffer revenue and reputation loss, it could be a matter of life and death.

Our customer is a large-scale hospital with comprehensive services spanning many aspects of healthcare and is currently averaging up to three billion database transactions per day. Because the databases hold a myriad of critical data, executives have mandated a scheduled backup of transactions every 10 minutes.

## **KEY BENEFITS:**

- Auto-discovery and record keeping of all database items
- Real-time email, SMS, syslog, and SNMP alerts
- Configurable script execution for network or database management
- Complete and independent record of database status
- Instant queries and intelligence for heterogeneous environments

During one software upgrade, a junior database administrator (DBA) deleted one of the required tables in error. The mistake was not noticed when the system was brought back online because the missing table is not used in every transaction. The system performance started to degrade due to latency and crashed after several hours. IT staff had difficulty identifying the root cause of the database shutdown and logs were not immediately available. They also had difficulty deciding which backup to run, having more than twenty copies to choose from at their disposal.

As a result, the team decided a conservative approach was paramount and used a previous backup that far outdated when the incident occurred. Diagnosis of the problem was slow and the restoration of the database required a step-by-step process. The entire hospital was put on hold for twenty-four hours, leaving patients without adequate care.

After this mishap, the hospital chose to adopt Datiphy's platform to manage their digital assets. Following another similar incident, IT staff at the hospital was able to restore normal operation within twenty minutes with the Datiphy DataDNA Platform.

Let's examine how Datiphy was able to significantly reduce the MTTR (Mean Time To Repair). - before, during, and after the attack.

BEFORE	Without Datiphy	With Datiphy
Auditing	Difficulty tracking digital assets in heterogeneous environment	Auto-discovery and record keeping of all database items

Different departments often have their own databases making it a challenge to keep track of any dispersed changes. Datiphy DatiDNA runs out-of-band and covers nearly all relational databases currently serving the market, providing the staff with a clear view of isolated digital assets.

DURING	Without Datiphy	With Datiphy
Alerting	Limited alerting and logging capabilities from databases or applications	Real-time email, SMS, syslog, and SNMP alerts
Action	Limited capability or logging of database or application activity	Configurable script execution for network or database management

Without Datiphy, the deletion or alteration of critical tables by privileged users can go unnoticed whether done intentionally or by mistake. DatiDNA sends out alerts in real-time and can execute a pre-configured script to prevent possible loss or damages.

AFTER	Without Datiphy	With Datiphy
Forensics	Database logs unavailable or hard to read	Complete record independent of database status
Analytics	Time consuming even if logs are available - difficult in heterogeneous environment	Organized for instant queries; instant intelligence for cross-platform heterogeneous environments

When troubleshooting similar database problems, Datiphy DatiDNA can quickly show suspicious database transactions, expediting the DBA's ability to pinpoint the root cause and restore input/output capabilities using the most relevant backup. Maintaining customers' reputation, reducing compute downtime, and preventing financial or human loss is the main goal of Datiphy deployments. After analyzing comprehensive records provided by Datiphy DatiDNA, teams can rapidly establish new policies to prevent similar incidents quaranteeing maximum database efficiency.

In summary, Datiphy DatiDNA is based on technological innovation that provides flexible scalable solutions for digital asset management. Besides offering complete behavior analysis, compliance, forensics and security, it can also help customers significantly reduce their database downtime as shown in the example above.

For more information or to download a trial please contact info@datiphy.com or visit www.datiphy.com



