How Data Loss Prevention Helps Safeguard Sensitive Information Across Your Organization

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In brief

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Data security presents some of the most important challenges to organizations. As companies grow and scale, they have that much more data to manage and much greater exposure to accidental and or intentional negligence. How To Prevent Data Loss? Data leakage prevention is vital to securing sensitive data to help your business run. It serves as a protective shell that enables organizations to monitor, find and prevent unauthorized sharing or loss of confidential information.

Importance of Data Loss Prevention

A hallmark of a DLP application is the ability to prevent loss of data through a variety of measures, including data encryption and ability to block data based on this being the last line of defense. This involves safeguarding customer data, financial information, intellectual property and sensitive communication between businesses. Increased regulations and data privacy laws mean you can’t roll the dice with data protection. Any one of them reveals and blows the whistle on just how the company is confounding its most basic privacy promises in a way that can add up to millions of dollars in fines, hundreds of millions in reputational damage or even a catastrophic destruction of customer trust.

DLP solutions are a source of hope and a solution to these threats, applying policies and controls to observe data in use, travel, or rest. In other words, whether workers are sending emails, irresponsibly copying files onto a hardware device, or storing data in cloud platforms, DLP technologies are used to keep sensitive data from escaping.

Elements of Effective Data Loss Prevention strategies

Developing a successful data loss prevention strategy requires a combination of technology, policies, and employee awareness. It all starts by determining which data requires protection. This typically entails categorization of data as to its level of sensitivity and business impact. After sensitive data types are recognized, businesses can develop their DLP policies.

A bank, for instance, may care most about guarding its customers’ account numbers, transaction data and other PII. Patient medical records and HIPAA (Health Insurance Portability and Accountability Act) compliance might be of greater importance to a healthcare organization. And no matter the vertical, any DLP strategy is grounded on the basic premise of knowing what data is the most important and where it is located within the organization.

Solutions DLP involves implementing technology to prevent loss of data. DLP modern tools have functionalities such as content inspection, contextual security, and policy enforcement in endpoints, networks and the cloud. With these solutions, security teams can identify attempts to exfiltrate sensitive data to unauthorized channels, such as email, cloud storage, or removable media.

In-Monitoring of Data and Unauthorized Transfer Prevention

One of the biggest areas of vulnerability for that data to slip out the door is in transit from point A to point B. Data in motion is data that flows from one system to another or over networks. This includes: emails, instant messages, file transfers, and the like. These communication channels are monitored by DLP solutions to detect potential policy violations.

For example, if an employee attempts to email a file containing credit card numbers to an outside address, the DLP system can automatically prohibit the action, or demand further authorization. This realtime monitoring and response, is critical to mitigate the threat of inadvertent data exfiltration due to human fallibility.

DLP tools can also encrypt sensitive data prior to its transmission so if the data lands in the wrong recipient’s hands, it is unreadable. This level of security is also a must for companies that process financials, personal health information, or sensitive research information.

Secure Data at Rest on Organization Systems

Data at rest is the information from digital systems recorded to storage media in any digital format. This may consist of files stored on individual employee workstations, on company servers, or on third-party storage services. DLP takes aim at these environments by monitoring stored data and applying security policy.

Data discovery tools are offered in several DLP solutions to aid organizations in finding where sensitive information resides on their storage systems. This page allows organizations to make proactive decisions, such as encrypting files, applying controls around access or moving sensitive items to a more secure location.

If, for instance, an old spreadsheet containing employee social security numbers is located on a network drive that is accessible to several departments, then the discovery would enable the DLP to automatically flag and alert in order to remediate the alert immediately. Organizations minimize risk of insider threat, accidental exposure and non-compliance by keeping tabs on data at rest.

Controlling Insider Threats and Human Error for Better People Security

Much less exciting and "juicy" than getting hacked by some outside entity to be sure, but insider threats can be just as devastating to security. Insider threats are nefarious (such as an employee surrendering proprietary trade secrets to a competitor), but such malfeasance can also be unintentional (like an employee mistakenly firing off a sensitive document to the wrong recipient). Both vectors of threat can be addressed by a DLP solution and 24/7 monitoring accompanied by solid data policies.

More sophisticated DLP tools that have behavioral analytics can also detect when a user behaves abnormally. If an employee were to start downloading tons of sensitive data, or try to work around security measures, the system could issue an alert or simply shut the activity down completely. They are also able to respond to likely threats with zero impact.

You can also use this as an opportunity to teach your employees good hygiene around your data protection and incorporate DLP policies into their day to day tasks, which would ultimately help in fostering responsibility and awareness. That reduces the potential risk for costly mistakes that could lead to data breach.

Ensuring Compliance with Regulatory Requirements

And then there is the compliance with data protection. So, laws like those which underpin GDPR, HIPAA and CCPA place strict limits on the things that companies can actually do with personal data when they have it. Violating these laws can result in substantial fines and other legal penalties.

DLP products and services are used to control the levels of content that can be transacted and, in cases necessary, allow the capability to stop a sensitive data transaction before it even occurs. In a nutshell, DLP tools may even demonstrate that its shared information is protected with adequate reports and audit trails as evidence to regulators.

For instance, with the GDPR, companies are now expected to secure personal data and disclose when a breach happens within certain time frames. In application, a properly configured DLP system can offer a way to quickly recognize policy violations, create reports useful for ensuring compliance, and offer an information technology (IT) staff another tool to promptly address any issues.

In areas such as finance and health, where data security is vital, data loss prevention should be the number one thing that anyone in risk management should be reading.

Data Loss Prevention -Integrates with Other Security Tools

Data loss prevention isn’t a silo approach. It’s most effective when complemented with other cybersecurity tools and technologies. The integration of DLP with threat detection systems, endpoint protection platforms and cloud security solutions offers a more rounded defense of data leaks.

For instance, when integrated with a Security Information and Event Management (SIEM) system, DLP tools can provide richer context about potential threats.If you can get a SIEM solution to alarm/alert on an anomalous logon from the country of origin, AND at that same moment the DLP product is monitoring odd data transfer, now as a business have a clearer idea of the threats that are in front.

Similarly, DLP working in conjunction with endpoint detection and response solutions further protects devices from malware and ransomware that may attempt to extract sensitive information. This layered approach enhances an organization’s security standing even further.

Enabling Remote Work and Cloud Collaboration Securely

The pressure on data protection is coming as remote work and cloud-based collaboration become the norm. Workers frequently access critical data from home networks or personal devices, widening the target for cybercriminals. DLP and its role in securing distributed workforces DLP is a key component in protecting business information within distributed workforces.

Cloud-native DLP solutions can read and control data moving in and out of the cloud apps like Microsoft 365, Google Workspace and other SaaS products. Organizations can reduce the chances of sharing information with unauthorized users, accidentally uploading files, or exposing data outside of the company through cloud-based policies for data management.

Remote work and more endpoints that live outside the corporate network are other contributors. "For organizations who deploy DLP agents on endpoints, (they can) enforce DLP policies for laptops, tablets, and mobile phones so that sensitive information is protected no matter where people work."

For companies that are embracing a hybrid work-from-anywhere workforce, DLP provides that visibility and control they need to find the right balance between productivity and security.

Enhancing Visibility with Centralized Reporting and Analytics

Visibility is also central to good security hygiene. And without insight into how sensitive information is being used, moved and shared inside and outside the company, enterprises can't manage risk effectively or respond to threats. Centralized dashboards and reporting available in DLP tools enable security teams to get a holistic view of resource consumption.

These dashboards will reflect the movement of policy violations, attempts for breach and the movement of data itself. The security team can use this information to help surface trends, fine-tune DLP policies and address new risk.

For instance, if reports come in showing a surge in policy violations through USB transfers, the company could temporarily disable USB ports or conduct employee training. This proactive strategy for using data can help organizations stay out in front of potential threats as well as help refine how they protect their data over time.

This is expanded with advanced analytics that allow organisations to measure the effectiveness of their DLP efforts, and monitor how that data is being accessed over time. Businesses quantify this ROI by tracking outcomes like number of incidents avoided or time to react to an alert.

Meeting The Hurdles of Deploying Data Loss Prevention

The benefits of data loss prevention are easy to understand, but creating a DLP plan that actually works is easier said than done. One of these is the conflict between security and the ability for users to get stuff done. Over-broad DLP policies can create obstacles for employees to work. The answer is that companies require careful policy and should have among them proactive business leaders in the decision-making.

Another challenge is dealing with false positives. This approach makes it likely that DLP systems require an accurate detection of sensitive data, provided they are not over-reporting on not sensitive data. Fine-tuning content-inspection rules and allowing the built-in machine learning to set policy, while continually reviewing policy effectiveness means organizations can escape the endless cycle of false alarms and let their security staff focus on true threats.

Budget and resource restraints and impact on DLP deployment It also has been reported that budget and lack of manpower also have constrained organisation on DLP implementation but especially for SMEs. If so, having a phased go lives strategy in which you target at risk pockets for launch will allow of quick wins and ability to grow.

Additionally, utilizing mature DLP vendors and consulting partners will ease deployment and overcome common obstacles encountered by businesses. When choosing a system that may match the company's size, type and compliance needs is paramount to longevity.

Developing a strong culture of data protection

Technology in of itself will not prevent data loss. Strong data protection culture at the organization is key in supporting the power of DLP tools and policies. This would include: continuous staff training, regular policy updates and employer support for data protection.

Raising awareness of the significance of data loss prevention for the company and showing employees how their behavior affects company security makes them a stakeholder in preventing accidental data leaks. Educational programs explaining what is and what is not safe data handling, with recent breach examples and easy reporting avenues for security worries are empowering employees to be the solution.

Frequent policy updates mean that DLP strategies adapt to the business, as well as to new threats and regulations. The executive leadership are defining the tone for data protection with some support of deciding allocation of resources and promoting security-based decision-making.

A Preview of the Future in Data Loss Prevention

DLP is maturing by adapting to changes in technology and in the business environment. DLP tools are getting a lot smarter, thanks to AI and ML, in identifying these higher level threats and reducing the number of false positives. Adoption of cloud native security platforms continues as enterprises move towards a multi-cloud world.

Emerging trends include predicting insider threats edged with Behavioral Analytics and relying on Risk-based vulnerability management to prioritize mitigations. These improvements continue to enhance data loss prevention for protecting sensitive data in any scenario across the enterprise.

The more rapidly we march into digital transformation and the more data that there is to process, the more crucial it will become to have iron-clad DLP policies. These that continue to invest in DLP today, are able to protect their assets, Achieve and maintain user confidence and meet future compliance requirements.

So on the overview, the lesson of the lost data is one of the basic 101 courses in modern cyber security. Thanks to strong DLP change controls, state-of-the-art technology, and knowing what it means to be a responsible data steward, companies can manage the proliferation of sensitive data, and reduce their vulnerability to expensive and costly data breaches.

References

1. mimecast.com - content / data-loss-prevention-software-and-tools - https://www.mimecast.com/content/data-loss-prevention-software-and-tools/

2. ibm.com - think / topics - https://www.ibm.com/think/topics/siem