

# duo>key

Double Your Security,
Double Your Peace of Mind
Microsoft 365

Introducing DuoKey for Office 365 Double Key encryption. Take your data protection to the next level with our advanced security solution

**DUOKEY.COM** 

#### Safeguarding Against the Risks of Data Leakage

In today's digital landscape, the adoption of Office 365 tools has reached unprecedented levels, providing organizations with powerful productivity and collaboration capabilities. However, with this widespread usage comes the inherent risk of data leakage.

The sensitive information stored within Office 365 applications, such as emails, documents, and files, is susceptible to unauthorized access and potential breaches. Protecting this data has become a critical priority for businesses, necessitating robust security measures that go beyond traditional encryption.

With DuoKey for Office 365 Double Key encryption, you can fortify your data security defenses and ensure that your sensitive information remains confidential, mitigating the risks of data leakage and preserving the trust of your stakeholders.

#### Threats and attacks vector environment. in Office 365 environments

Those are typical attacks vector when running in a Office 365 environments:

- Phishing attacks targeting Office 365
- Password attacks (brute force, credential stuffing)
- Malware and ransomware attacks via email attachments or malicious links
- Account compromise through social engineering techniques
- Unauthorized access to sensitive data or documents
- Insider threats or data leakage by disgruntled employees
- Exploitation of vulnerabilities in Office 365 applications or infrastructure
- Business email compromise (BEC) scams targeting Office 365 accounts
- Data interception or eavesdropping on communications within Office 365
- Denial-of-Service (DoS) attacks disrupting Office 365 availability
- Third-party integrations or add-ons with security vulnerabilities

#### Securing Office 365: BYOK, **Customer Key and DKE**

Microsoft offers several layers of security for data protection within Microsoft 365 environments.

Bring Your Own Key (BYOK) allows organizations to generate and control their encryption keys, providing additional control over their data.

The Customer Key feature provides further control by enabling customers to manage the lifecycle of encryption keys used to encrypt their data at rest in Microsoft's data centers.

For highly sensitive data, Microsoft introduces Double Key Encryption. This method uses two keys for data encryption: one controlled by Microsoft and one by the customer. The data can only be accessed when both keys are used together, offering an added level of security.

This multi-layered approach ensures robust data protection, allowing organizations to meet their unique security and compliance needs within the Microsoft 365

## The Need for DuoKey in **Enhancing Microsoft 365** Security

innovative solution for encryption key soft. Leveraging the power of Multi-Party Computation (MPC), DuoKey's solution ensures robust and resilient key management. Each encryption key is split into multiple parts, each held by a different party, meaning that no single entity has full access to the encryption key. This reduces the risk of key compromise and enhances the security of your data.

DuoKey's solution integrates seamlessly with existing security measures within Microsoft 365 environments such as BYOK, Customer Key, and Double Key Encryption. This ensures that your data is protected at all stages, from creation to storage and sharing. By adding DuoKey's MPC-based key management to these security layers, you can achieve an even higher level of data protection.

#### Microsoft Office 365 vulnerability leaves data in the cloud open to ransomware attacks

According to a Tech Monitor report, a vulnerability in Microsoft Office 365 was exploited by cybercriminals to distribute ransomware. The attack targeted organizations using Office 365, allowing the attackers to gain unauthorized access and encrypt files, demanding a ransom for



This incident underscores the importance of implementing strong security measures and regularly updating Office 365 to protect against vulnerabilities and potential data breaches. Organizations should stay vigilant, employ multi-layered security strategies, and educate employees about cybersecurity best practices to mitigate such risks.

source: TechMonitor- June 2022

Moreover, DuoKey's solution is designed This is where DuoKey steps in, offering an with scalability and flexibility in mind, making it suitable for organizations of all management that builds on and enhances sizes. Whether you're a small business or a the security measures provided by Micro- large enterprise, DuoKey's encryption key management solution can help you maintain the confidentiality, integrity, and availability of your data in Microsoft 365.

> DuoKey's advanced security offering, combined with its ability to integrate seamlessly with existing systems, makes it an indispensable tool for organizations seeking to enhance their data security in Microsoft 365 environments.

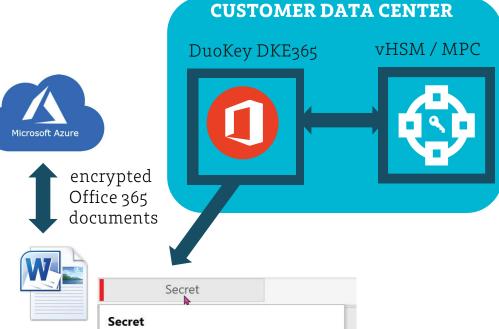




- Protect your sensitive document in Office 365 with a Double Key Encryption via AES 256 bit key which is encrypted with a RSA 2048 key.
- Encrypt Microsoft Office documents and email (WORD, EXCEL, PPT, OUTLOOK) using innovative MPC
- Threshold encryption Integrate with Microsoft purview with sensitive label and Double Key Encryption
- Respect and comply with strict regulation and compliance rules (FINMA, HIPAA, GDPR, LIPAD ...)



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formelle de son propriétaire

#### Highly secure, always keep your sensitive data private

- Always client-side encryption is performed
- No third-party can ever access your data
- Keep control of your own keys
- Dedicated tenant and vault for storing your keys powered via MPC or HSM



DuoKey's Double Key Encryption integrates with certified MPC-based key management, providing a secure foundation for protecting sensitive customer keys



Replacing Microsoft's HYOK, DuoKey allows customers to provide their own cryptographic keys in real time. Our solution empowers organizations to maintain total control over the double key generation process, eliminating dependence on Microsoft's infrastructure







#### **Audit Access**

DuoKey enables customers to specify who can access keys and decrypt content, ensuring data stored either on-premises or in the cloud remains unreadable to Microsoft



## On-premise or SaaS

DuoKey's Double Key Encryption is container based and supports a hybrid model, functioning effectively whether your infrastructure is on-premise, in the cloud, or a combination of both. This is possible as our MPC node can be deployed in a multi-cloud setup without depending on one cloud provider.







# DuoKey's Advanced Encryption Solutions for Microsoft 365

DuoKey's Double Key Encryption for Microsoft Purview (MIP) is engineered to empower enterprises in safeguarding their most critical content in Microsoft 365.

- DuoKey's solution integrates with certified MPC-based key management to establish a trusted root for protecting sensitive customer keys.
- The tools and software afford enterprises total ownership and control of the process that underlies double key generation, with no reliance on Microsoft's infrastructure within the customers' environment.

#### How DuoKey Can Help

Double Key Encryption, provided by DuoKey, enables organizations to leverage hybrid-computing environments with enhanced layers of protection, control, and assurance. As part of the Microsoft Purview offer, DuoKey's solution empowers enterprise customers to designate permissions for accessing associated keys and decrypting content. Enterprises can store encrypted data either on-premises or in the cloud, ensuring it remains inaccessible to Microsoft.

Instead, customers are enabled to supply their own cryptographic keys in real time, with DuoKey's innovative MPC-based key management.



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