

Fast, simple and secure e-invoicing: Digital Planet relies on Entrust to protect its e-invoicing service



Digital Planet Technology, headquartered in Turkey, is a pioneer in e-invoicing integration systems, digital transformation and customer communication management services to large enterprises as well as small and medium sized businesses. Working through a specialized partner network, it delivers these services to top tier financial services, insurance and telecommunications companies. It also has offices in the United Kingdom, the United States and the Middle East, from where it conducts its international operations.

Digital Planet's NET Invoice system is a customized e-invoicing solution that can be integrated with nearly all ERP systems. Using a fully web-based cloud application, NET Invoice manages the whole range of invoicing processes such as delivery, receipt, storage and presentation without requiring any installation within the organization and in a manner that is fully compliant with data security and confidentiality regulations. Customers for its services include DHL, Glaxo Smith Kline, Huawei, Inditex Group, Mercedes, Red Bull, TFI - TAB Food Investments (Burger King, Sbarro, Popeyes, Arbys), Turk Telecom Group, Vodafone and more than 17,000 other small and medium enterprise customers.

We have many high profile, high volume customers, so we need extremely reliable HSMs to support our service. We simply can't afford for our service to go down. That's why we chose Entrust nShield HSMs, and that's why we recommend them to our customers who purchase our on-premises solution. It's also imperative that we have good support, and the support we have received from Entrust has been world class.

- Evren Demirbasoglu, Deputy General Manager, Digital Planet



NET Invoice is the number one e-invoicing system in Turkey and offers the following benefits:

- Reduces costs by consolidating billing data from multiple work centers
- Eases billing procedures for suppliers with vast networks of sellers
- Digitally stores billing data in its original format to enable instant access for legal use
- Provides the ability to schedule the legal declaration for a specific time with a detailed logging mechanism for tracking the transfer and data preparation process
- Is fully compliant with e-invoicing standards

BUSINESS CHALLENGE

Digital Planet was faced with creating a nimble e-invoicing solution that would:

- Help companies adopt e-invoicing without changing their invoicing flows
- Ensure e-invoices have the same legal standing as paper invoices
- Meet Turkish government and global standards for electronic invoicing
- Manage billions of transactions annually

TECHNICAL CHALLENGE

Digital Planet's key technical challenge was to develop a solutionthat would:

- Issue and manage certificates to manage the identity of users and devices
- Protect and safely store the data collected with encryption technology
- Secure the keys used to create digital signatures and encrypt data
- Support a cloud-based service to manage more than four billion transactions annually

Meeting government requirements

General government standards and cryptographic best practices require hardware security modules (HSMs) be deployed in electronic invoicing systems. HSMs are hardened, tamperresistant hardware devices that secure cryptographic processes by generating, protecting, and managing keys used for encrypting and decrypting data and creating digital signatures and certificates. HSMs are tested, validated and certified to the highest security standards including FIPS 140-2 and Common Criteria.

SOLUTION

Digital Planet worked with Entrust partner Verisoft, a technology company with more than 30 years' experience in delivering electronic payment systems, to design a system that would be:

- Quick and responsive to customer invoicing needs
- Meet all regulatory requirements for electronic-invoicing trusted service providers (TSPs)
- Implement best practices for signing and encryption key storage to meet the needs of Digital Planet's customers and to maintain Digital Planet's reputation

As evolving business models become more dependent on electronic interactions requiring online authentication and compliance with stricter data security regulations, next generation business applications have become more reliant on public key infrastructure (PKI) to guarantee high assurance.

Digital Planet's electronic invoicing uses a PKI to generate the digital signatures that ensure the authenticity and integrity of the transmitted data.



- Mursal Sonmez, General Coordinator, Digital Planet

PKI is the foundation that enables the use of technologies, such as digital signatures and encryption, and delivers the elements essential for a secure and trusted business environment for e-commerce. By adding Entrust nShield® HSMs to the PKI to secure the most sensitive keys and business processes, Digital Planet created a high-assurance foundation for the digital security of its e-invoicing solution.

Big data is no longer big!

In addition to its e-invoicing solution Digital Planet also offers customers a data compression service, CUTU, through its subsidiary 4EVR TECH. Digital transformation is producing huge amounts of data, especially in the telecommunications, financial services and healthcare industries - invoices. credit card statements, contracts, policies, healthcare records including medical imaging documents and other personalized documents. These types of documents need to be stored for a long time, but it is also imperative they are secure and they cannot be tampered with. It is also important that they can be accessed quickly and easily when required.

CUTU compresses any file type by up to 80%, efficiently, securely and reliably. The documents are encrypted when stored and decrypted when retrieved and in use. Entrust nShield HSMs integrate with CUTU to safely store and manage the encryption keys, ensuring the security and integrity of the data. CUTU enables companies to save time, operational and storage costs while helping meet regulatory data security mandates.

Mursal Sonmez, General Coordinator, Digital Planet notes, "In order to be licensed by the government to provide electronic invoicing, it's mandatory that we use HSMs. But when we're processing billions of transactions each year, we require an HSM that is best in class – one that can handle the enormous volume and that is extremely reliable. That's why we chose Entrust nShield HSMs, and that's why we recommend them to our customers when we install a system for them.

"One of the great advantages of Entrust nShield HSMs is that we've successfully integrated nShield Security World architecture in to CUTU.



Digital Planet

Business need

- Meet government and global standards for electronic invoicing
- Manage billions of transactions annually
- Safely store encrypted data

Technology need

- Security, speed, reliability
- Best practice encryption and key management deployment

Solution

- Entrust nShield Connect 6000 HSMs
- Entrust nShield Security World architecture
- 4EVR TECH CUTU compression, encryption and archive application

Result

- Number one e-invoicing solution in Turkey and top three e-invoicing company in Europe
- Processed four billion transactions in 2019
- 100% business growth in 2019

Among other things, this enables us to simplify the key management process and maximize the capabilities of our deployed Entrust nShield HSM estate. The unique nShield Security World architecture enables us to manage risks and preserve resiliency and scalability. We can map our security policies to the hardware protection infrastructure and achieve comprehensive lifecycle management of our enterprise keys and cryptographic policies."

RESULTS

Digital Planet's electronic invoicing service has been up and running for over a decade now. In 2019, it processed some four billion transactions, one billion of which were invoices.

Evren Demirbasoglu, Deputy General Manager, Digital Planet notes "We have many high profile, high volume customers, so we need extremely reliable HSMs to support our service. We simply can't afford for our service to go down. That's why we chose Entrust nShield HSMs, and that's why we recommend them to our customers who purchase our on-premises solution. It's also imperative that we have good support, and the support we have received from Entrust has been world class."

ABOUT ENTRUST

Entrust keeps the world moving safely by enabling trusted identities, payments and data protection. Today more than ever, people demand seamless, secure experiences, whether they're crossing borders, making a purchase, accessing e-government services or logging into corporate networks. Entrust offers an unmatched breadth of digital security and credential issuance solutions at the very heart of all these interactions. With more than 2,500 colleagues, a network of global partners, and customers in over 150 countries, it's no wonder the world's most entrusted organizations trust us.





