

Solution Overview: totemodata®

Business processes are driven by data. However, if this data gets into the wrong hands, this can cause great financial damage - not to speak of the suffering company image. Still data is exchanged freely and totally unsecured in most company networks. For neither the IP protocol nor the FTP servers that are popular for the exchange of large files meet current security standards. Moreover, email attachments tend to get bigger and bigger – which is another insecure way to exchange company data.

totemodata® is an easy-to-use solution for secure managed file transfer that guarantees data confidentiality, integrity, originality as well as origin in any scenario for organizations in any industry. All data movements between internal and external communication partners, between different systems within the company network as well as communication processes in business networks and processes are monitored and logged. This makes them completely transparent, which in turn enhances compliance with current regulations such as SOX, HIPAA, PCI and privacy legislation. With **totemodata®**, any organization is ready for audits and reviews.

totemodata® is platform-independent, supports all established data exchange protocols and seamlessly integrates into any existing IT infrastructure. The product offers complete security by encrypting both data and transfer protocols, sources out large email attachments on secure servers and is fully cloud-compatible. Its scalability makes **totemodata®** the ideal solution for companies and organizations of any size.

Administrators need neither programming skills nor insight into the communication protocols. The workflows and applications can be easily defined with the help of the graphic user interface of the administration console. Thus **totemodata®** offers a highly automated environment for secure managed file transfer.

Supported Types of Data Exchange

Human to Human

totemodata® makes secure spontaneous file transfer from human to human possible via email integration or the web-based virtual file system.

As an alternative, **totemo** offers the intuitive desktop or web app **totemodata®** SendIt for secure ad hoc data exchange. It is as easy to use as a standard email client and does not require additional software nor plugins on either communication side.

Human to System

Files and folders in the virtual data system can be made available to as many colleagues and external partners as necessary. This considerably enhances collaboration on projects. For all users with access rights are notified when another user uploads a new file to a folder.

System to System

totemodata® broadly covers the business needs of data security and control even on a large scale. File transfers up to several GB can be processed both within the company network or over several networks. Since the solution supports all established protocols, **totemodata®** can also be used as a data hub between different systems.

With **totemodata®**, data can for instance be easily and securely synchronized or backed up between different network zones or geographically separate locations. It also enables regular monitored data transfers to external authorities or business partners. These data flows to the recipient system can be triggered by an administrator or via an automatized workflow.

How It Works

totemodata® is a strategic platform for all data exchange processes. The solution monitors and secures the data flow within the company network and beyond. With the help of a web-based graphic Workflow Engine integrated into the administration console, these processes can be easily configured and automatized.

The Workflow Engine makes it possible to use **totemodata®** for secure managed file transfer in almost any scenario. Central administration combined with a close connection to LDAP and Active Directory results in efficient and granular management of access rights and privileges. Users and administrators always keep full control over the data flow and can optionally be informed about defined processes via automatic notifications. With the help of the Workflow Engine, data can be encrypted, moved and - if a critical size is reached - copied into a Windows Share Network or an FTP server when a predefined event occurs.

Key Facts

Automatized Certificate and Key Management

totemodata® offers automatized key and certificate management. It automatically encrypts and decrypts the transfer protocols as well as the data stored on

the gateway. The files and their integrity are also checked automatically. Moreover, the solution centrally generates digital signatures and automatically enrolls and manages users.

Administration via Graphic User Interface

With the integrated Workflow Engine, security guidelines and workflows are centrally defined and automatically implemented in accordance with the company's needs. Thus there is almost no room for inadvertent mistakes. Thanks to the graphic user interface of the Engine, administrators can define complex workflows even if they have no programming skills. Companies can thus rapidly integrate new applications into **totemodata**[®]. Access rights to files and folders, users and user groups can be granularly defined and managed. Administrators can also set up email, SMS or SNMP notifications for given events.

High Availability & Maximum Security

totemodata[®] can be run in clustered environments and is protected against system failure by load balancing, redundancy and failover. The solution does not store any data in the DMZ, which in turn gets no access to the internal network. The easy integration of third-party products via the standard interfaces ensures the protection of data against viruses, Trojans and loss. **totemodata**[®] also supports a large number of authentication mechanisms (e.g. LDAP, digital signatures, Shared Secrets, RSA SecurID etc.).

Enhanced Observance of Compliance Standards

totemodata[®] logs all actions and events in relation to the storage and transfer of data. Data movements over the internet as well as administrator and user activity are transparently and centrally monitored, secured and logged to fulfill the requirements for internal and external audits.

Benefits

Organization

- Flexible and secure data exchange with internal and external partners
- Automatized observance of company security guidelines and compliance standards for each file transfer
- Encryption prevents unauthorized access to virtual data system
- Cost efficiency and enhanced productivity through high level of automation
- Investment protection and strategic freedom through numerous standard interfaces

Administration

- Flexible and quick integration into existing infrastructure as well as third-party systems and applications
- Easy definition of workflows via the graphic user interface of the administration console
- No installation of plugins or extra software for users
- Granular access management
- No user training necessary thanks to transparent handling

User

- Secure data exchange with internal and external partners as easy as email via **totemodata**[®] SendIt
- No additional plugins or software necessary
- Easy Dropbox-like collaboration
- Consistent observance of corporate security guidelines and compliance standards

Modules

The **totemodata**[®] functionality can be extended by adding different modules.

Add-on Email Integration

totemodata[®] extracts email attachments of a pre-defined size and makes them available for instance via a download link. Thus even files of several MB can be securely exchanged without filling the recipient's inbox. For ad hoc file transfer, **totemodata**[®] SendIt is a handy alternative.

Add-on File Exchange-Proxy

totemodata[®] can work as a proxy between any internal user and any download site in the internet. Thus, central data flow control, logging and monitoring as well as temporary storage in case of multiple transfers of the same data can be ensured. These functions are available even for encrypted connections since the respective transfer protocol is centrally decrypted and - if necessary - transformed into another protocol.

Architecture

totemodata[®] consists of the Secure Data Exchange Server and the Protocol Server. Both components can be run on a single host, but two separate machines are recommended for greater security.

The Secure Data Exchange Server is responsible for data storage, user and workflow management, reports and auditing functionalities. Moreover, it provides all interfaces for data storage in the company network.

The Protocol Server is installed as a perimeter in the company DMZ. It augments the security of the entire environment and processes the authentication and authorization of external partners. It also ensures that the recipients get the data via their preferred

protocol. In order to do so, the Secure Date Exchange Server pushes the required data on the Protocol Server where it is only located during the transfer.

