Cleo Secure File Sharing

Cleo Unify™
Cleo Trust™

Cleo
Move View Act™

ABOUT THIS PAPER

In today's business, people need to share all types and sizes of files with colleagues, customers, and suppliers. Too many business users are using non-sanctioned, consumer-grade tools to share company files, mixing them with personal data, and bringing them outside of the corporate IT infrastructure. This prevents the ability to track, much less control the data. Many businesses have responded by attempting to block access to consumer tools at the corporate firewall, yet more and more rogue consumer-grade file shares spawn URLs creating an endless game of cat and mouse.

Cleo Unify™ Cleo Trust™

Deliver Ease of Use While Maintaining Total Control of Your Data

One of the most common reasons knowledge workers use cloud file sharing services is the Ease of Use. Knowledge workers are able to exchange large files with critical business partners to improve their productivity without having to spend time with their business partners explaining how to log in and exchange large and or sensitive files. In most cases, these workers believe they are helping the company by finding new and innovative ways to get their job done faster. Unfortunately this often occurs without the authorization of IT and exposes the organization to loss of IP, data leaks, loss of data control and potential organizational reputation degradation.

Many IT departments struggle with the question of why the approved solutions never obtain user adoption, despite constant reminders and training. In almost all cases the answer is related to solution complexity. This is why many analysts have been touting the concept of Consumerization of IT. If you can make a product easy to use with little to no learning curve and it solves a critical problem, you can deliver a solution that will go viral within your organization. If the solution also allows IT to maintain control of the data and provides complete auditability, you have a win-win scenario between the business and IT.
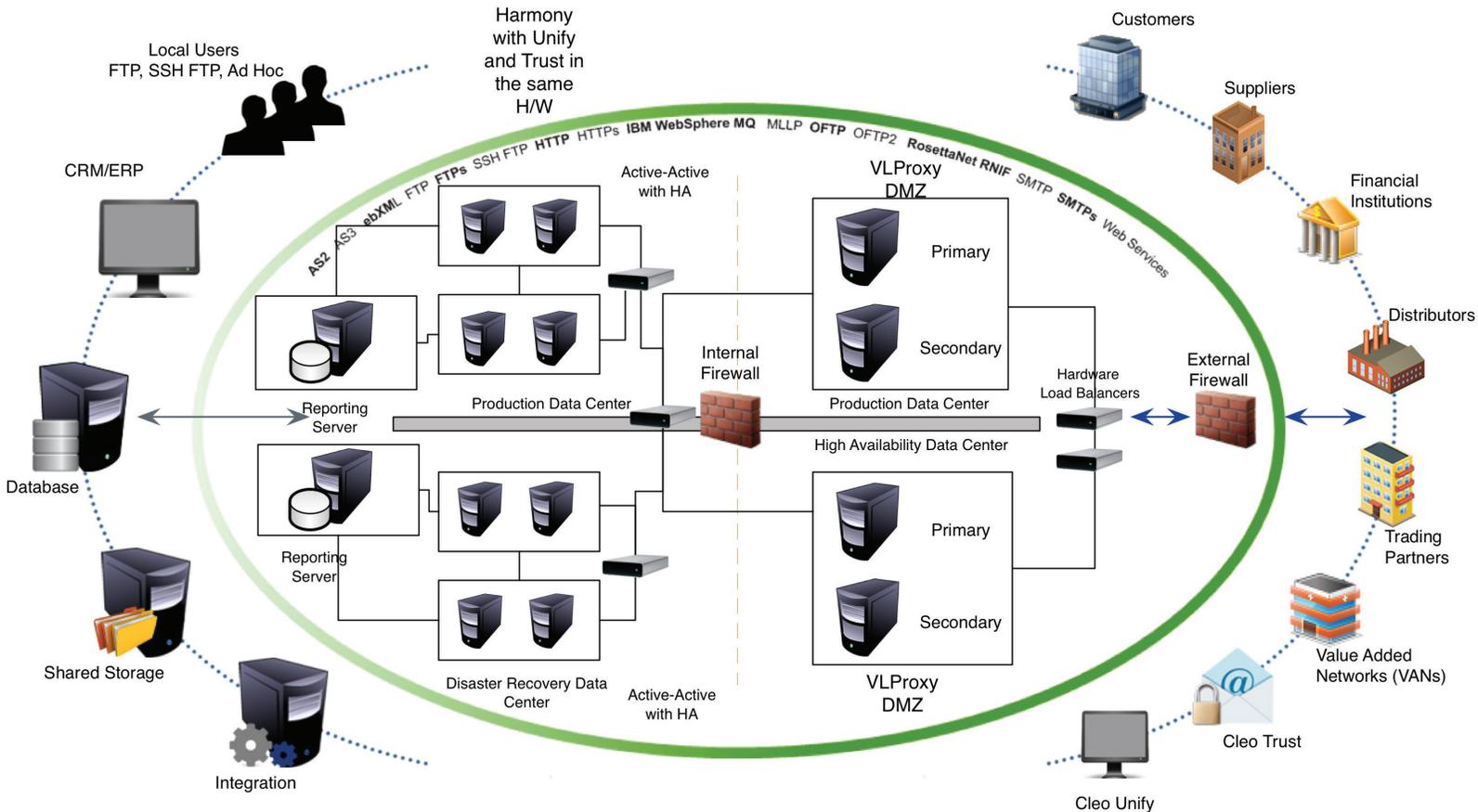
With the Cleo Secure File Sharing solution, you can:

- Empower your users to self-manage their file exchanges with complete auditability
- Integrate into any back-end system with powerful automation capabilities
- Extend basic workflow orchestration functionality
- Support multi-protocol file sharing
- Allow any type or size file to be easily shared
- Allow data storage on premise or in public or private clouds
- Offer a full audit trail of all file transfer activity

- Provide business users with an easily accessible and easy-to-use secure solution
- Share files securely without reconfiguring firewall settings
- Enable data loss prevention (DLP) and anti-virus (AV) protection
- Scale to meet enterprise-wide requirements with a fail-safe redundant architecture.
- Eliminate the need for Java applets for large files
- Truly collaborate on files without having to download them

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Most secure file sharing solutions in the marketplace focus exclusively on ease of use, often lacking the IT control necessary to manage critical IP data. With the Cleo Secure File Sharing solution, you also get the ability to view and act on the data that your knowledge workers need in order to increase efficiency and eliminate downtime. You can monitor and track performance metrics from both an IT and business perspective, as well as act on data via reports and dashboards based on your business needs. Leadership in today's information-overload mode of business requires the ability to quickly filter the right information, detect changing conditions, and predict outcomes. By putting the Move View Act™ power to work in your company, you are enabling faster and more informed decision-making to be a critical success factor.

Infrastructure Future State
with Cleo Secure File Sharing

Local Users
FTP, SSH FTP, Ad Hoc

Harmony with Unify and Trust in the same H/W

Customers

Suppliers

CRM/ERP

Financial Institutions

AS2 AS3 ebXML FTP FTPs SSH FTP HTTP HTTPs IBM WebSphere MQ MLLP OFTP OFTP2 RosettaNet RNIF SMTP SMTPs Web Services

Active-Active with HA

VLProxy DMZ

Primary

Secondary

Distributors

Internal Firewall

Production Data Center

External Firewall

Database

Reporting Server

Production Data Center

Hardware Load Balancers

Trading Partners

High Availability Data Center

Reporting Server

Primary

Value Added Networks (VANs)

Shared Storage

Secondary

Cleo Trust

Disaster Recovery Data Center

Active-Active with HA

VLProxy DMZ

Integration

Cleo Unify

Adapt to Business Needs

The global market is increasingly competitive and chaotic. The Cleo Secure File Sharing solution can help provide the adaptability you need to support current and future growth opportunities by enabling a long-term, sustainable infrastructure for both enterprise and multi-enterprise integration. Whether supporting human to human interaction or human to system data exchanges the Cleo Secure File Sharing solution provides the management, security, visibility, and control required to ensure that your business is always ready and able to handle new requirements.

Enable Secure Messaging and Secure Collaboration

The Cleo Secure File Sharing solution provides a secure file collaboration solution as well as a secure messaging interface. This helps drive 100% organizational adoption by allowing your users to interact with their internal and external recipients the way they want to, all while providing an approved IT solution. The Cleo Secure File Sharing solution is based on our enterprise-grade managed file transfer (MFT) technology. With more than 35 years' experience in managing data, Cleo is the optimal choice for extending automation, multi-protocol access, secure file sharing, and visibility, all in a single solution.

Secure Interface

Whether you are using our mobile app, our Microsoft Outlook plug-in or our web interface, your interactions will be 100% secured. Our web interface utilized HTML 5 so it provides the greatest compatibility without requiring Java add-ons to manage large file transfers. All file exchanges are logged along with activity and IP addresses. Quickly identify who did what, when!

The Reliability You Need

100% uptime is now the expectation rather than the goal. In order to ensure the availability and reliability required by your business and extended ecosystem, the Cleo Secure File Sharing solution supports high availability and load balancing to ensure the system is "always on." It also includes Cleo System Monitor to enable you to monitor system and data health as data moves through your infrastructure.

CLEO SECURE FILE SHARING SOLUTION SUMMARY

Business Benefits, Drivers	Cleo Secure File Sharing Capabilities	Additional Details
Ease of Use	• Use of HTML5 means no annoying Java installs for your users or business partners • Outlook plug-in provides easy access for secure messaging • Mobile apps for iOS and Android • Drag and drop functionality • Multi-protocol support • Automation and integration capability • Single integrated solution for user management/visibility • Multi-LDAP/AD integration • Server-based document editing for MS Office documents • Complete and easy branding capability	A single platform provides ease of use, complete control, security, end-user authentication, and visibility with reporting and system monitoring.

Automation	• Support for multiple protocols
	  - HTTP/HTTPS
	  - FTP/SFTP/FTPS
	  - SMTP
	  - Ability to extend other protocols
	• Create automation commands for any directory/file
	  - Put or Get Files from any location
	  - Execute local system commands
	  - Set or Clear file properties
	  - Copy/Move/Replace/Delete files
	  - Run SLA checks for files
	  - Execute a custom script
		The Cleo Secure File Sharing Solution is based on Cleo's enterprise-class managed file transfer (MFT) technology. Automation and multi-protocol support have been extended to provide a single platform for both human-to-human and human-to-system interactions.

Monitoring and Alerting	• Web-based UI level access control for all users • System health monitoring views for application- and server-level KPIs • SNMP traps for network operations center ticketing and alerting • SNMP versions 1, 2, and 3 supported • Email and text-based alerting for operations teams • Track all system-level schedules and actions from the web UI • Perimeter-level visibility for proxy application • Protocol and network connection level monitoring • Ability to view historic data for trend analysis	The Cleo Secure File Sharing solution provides the monitoring modules and web-based user access out of the box with pre-built libraries that can be configured to business needs with out-of-the-box controls. Cleo monitoring assists with 99.95% application uptime as well as ensuring optimal application resource utilization for business-critical applications. This enables proactive issue resolution.
Issue Resolution	• Configurable monitoring and alerting • Centralized log aggregation and support incident tracking within the product • Centralized patch update process with customer specific patch release management • Enable business-level SLAs for all file transfers, including static files and directories • 92% issue resolution during tier 1 analysis	The Cleo Secure File Sharing solution enables enterprise-class issue identification mechanisms and patch update methods from the application UI. The product also enables non-invasive upgrades.

Business Benefits, Drivers	Cleo Secure File Sharing Capabilities	Additional Details
Security	• Encryption at rest and encryption in motion • Complete audit log of all activity • IP-based tracking • Configurable session time-out • Time-based access controls • Configurable user-level permissions • User-level document tracking • Perimeter layer security model with Cleo VLProxy • Highly varied algorithm support for any platform compatibility • Connection pool-based system with support for forward, reverse, and forward-reverse proxy • Multi-protocol support for proxy integration	Award-winning support model with best-in-class security model in a single-platform solution. **Support for Certificate Algorithms and Formats** • RSA • DSA • X.509 (CER, DER) • PKCS #7 (P7B) • PKCS #8 (PEM, P8) • PKCS #12 (P12) **Data Integrity Algorithms** • MD2 • MD5 • RIPE-MD-160 • SHA-1 • SHA-2 (256, 384, 512) • CRC-32 **Security Features** • Data encryption for all protocol transmissions and files at rest • No open inbound ports from the DMZ • No data stored in the DMZ • TLS and SSL connection security **Encryption Algorithms** • RC2 (40, 60, 128) • Blowfish • CAST5 • DES • TripleDES • AES (128, 192, 256) • Twofish • RC4 (40, 60, 128) **Validations** • Validated to FIPS 140-2
Business Continuity Models	• Intelligent proxy model with capabilities to route traffic based on application availability • Application with intelligence to manage high-availability requirements internally with automatic synchronization • Application with intelligence to manage disaster recovery requirements internally	Advanced support for high availability and disaster recovery that will enable completely automated synchronization with synchronization monitoring. The core application layer enables data loss prevention with event handling that is distributed across the synchronized application pools. *(Continued on Page 6)*

CLEO SECURE FILE SHARING SOLUTION SUMMARY

Business Benefits, Drivers	Cleo Secure File Sharing Capabilities	Additional Details
	▪ Out-of-the-box active/active configuration synchronization without third-party replications ▪ Application availability model in case database downtime or failure ▪ Load balancer integration for the proxy components to enable global load balancing of application ▪ Intelligent routing to enable connection redundancies	The high-availability model enables redundancy in the proxy layer for network connections. The proxy and the core application are tightly coupled, which enables seamless HA and DR models to enable stringent business continuity SLAs.

TECHNICAL SPECIFICATIONS

Hardware
- Dual core or higher processor
- 2GB RAM minimum, 4GB RAM recommended
- 100Mbit network connection (Gigabit recommended)
- Internet connection
- Minimum default file system size is 100GB
- Minimum of 1GB of disk space for the Secure File Sharing application and associated files (2GB recommended)
- Minimum of 100MB of temporary space

Supported Operating Systems

All operating systems must 64-bit; 32-bit operating systems are not supported.
- Windows 2008 R2 SP1 and later
- Red Hat Enterprise Linux 5, 6 AS, ES, WS
- UBUNTU 10.04, 12.04 Server
- CentOS 5, 6

Supported Virtual Environments
- VMware (vSphere Hypervisor) ESX/ESXi
- Microsoft Hyper-V

Web UI Requirements
- Internet Explorer versions 10 and 11; Firefox version 24 or above; the latest version of Chrome; the latest version of Safari for Mac OSX.
- Minimum screen resolution of 1024 x 768 is highly recommended

Supported Databases
- MySQL 5.1 up to MySQL 5.6
- Microsoft SQL Server 2005, 2008, and 2012
- Oracle 11g and 12c

Optional Included Modules
- Cleo VLProxy
- Cleo Audit and System Monitor Server

Mobile Support
- The Cleo Unify app is available for download in the Apple App Store and Google Play for iOS and Android devices.

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