

# Telecommunications Compliant Data Retention and Analysis

## Capture and analyze all CDRs and logs

### Business Challenges

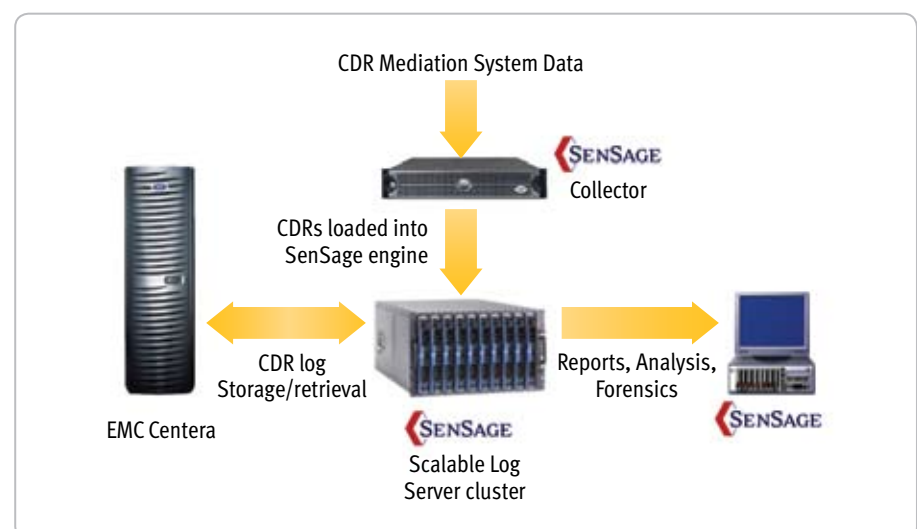
Telecommunications service providers generate hundreds of millions of event records daily. The event records include every phone call placed, connected, or disconnected in addition to IP voice or data events. Regulatory and business drivers now require telecommunications providers to capture and retain years of this data for multiple purposes, including:

- Operations troubleshooting and root-cause analysis
- Fraud detection
- Forensics and investigations
- Anti-terror information requests
- Regulatory compliance

Enacted in March 2006, the European Union Retention Directive sets mandatory requirements for telecommunication providers regarding the collection, retention, and retrieval of communication transaction records. Specifically, the following data elements need to be captured and retained for six to 24 months:

- Wireline/wireless Call Detail Records (CDRs)
- SMS Logs
- E-mail Logs
- Proxy Server Logs
- DHCP Assignment Logs

The data must be retained in an accessible repository so that organizations can respond to information requests from competent authorities “without undue delay.” Furthermore, organizations must be able to extract the relevant records from the repository upon request.



## Solution Description

To manage these requirements, typical approaches using tapes and DVDs to archive records and normal database storage and analysis aren't sufficient to meet the scalability and retrieval expectations of regulatory and law enforcement authorities. EMC and SenSage have created an entirely new approach that combines the EMC® Centera® robust and efficient software and hardware platform with SenSage's powerful event data management and analysis platform. The EMC-SenSage Telecommunications Compliant Data Retention and Analysis bundle offers the following benefits:

- Captures all CDR and log records from relevant sources
- Stores years of compressed data online offering immediate access to all retained data
- Provides full data analysis capability—easy to extract the exact records of interest
- Offers high-speed data loading and exceptional querying performance

The solution ships in three scalable configurations and includes the SenSage event data management system, EMC Centera® storage, and one SenSage telco compliance analytics package, as well as maintenance and support. This feature-rich combination offers unparalleled performance and a scalable means for organizations to centrally aggregate, efficiently analyze, dynamically monitor, and cost-effectively store massive volumes of event log data. Customers can rapidly expand performance and capacity by simply adding related SenSage or EMC Centera nodes. High availability is further automated through EMC Centera with the option of supporting disaster recovery and business continuity scenarios that take advantage of EMC Centera replication.

Solution features include:

- Compressed CDR data retention (typical ratio is 2:1) which is immediately accessible online.
- Powerful log analysis and retention engine purposely built for large-scale storage and analysis of event data; no additional relational database management overhead needed such as indexing, rollback, temp tables, system tuning, etc.
- Configuration uses unique clustered server architecture for extremely fast CDR data insert and query rates and (virtually) unlimited scalability.
- SenSage event data analytics provide immediate ad hoc query features and can deliver scheduled reports to support audit and deep investigation functions.

## Solution Value

- Leverage content-addressed storage to yield enterprise-class compliance analytics
- Manage volumes of event data with appropriate data access controls, protection, and query requirements
- Streamline CDR data integration, segregate storage, and automate audit processes
- Accelerate inquiry response and address data retention guidelines
- Reduce event data management storage, archive, administration, and growth costs
- Readily expand capacity, performance, and availability with appliance-like deployment convenience
- Quickly and cost-effectively support regulatory compliance guidelines



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### Take the next step

To learn more about implementing the Telecommunications Data Retention and Reporting Solution, contact your local EMC Centera sales representative or SenSage representative or visit [https://crm.emc.com/OA\\_HTML/emc\\_pvlCdPartnerProfile.jsp?partnerName=SENSAGE&sb=az&partnerId=11814760&partyNumber=4093971](https://crm.emc.com/OA_HTML/emc_pvlCdPartnerProfile.jsp?partnerName=SENSAGE&sb=az&partnerId=11814760&partyNumber=4093971).