group 2000

Lima®

ARCHITECTS
IN SAFETY AND
INTELLIGENCE

We efficiently store all communication data for regulatory retrieval

LIMA DATA RETENTION

Integrated Compliance Solution. Single web-based user interface for all regulatory services.

Robust. Cost effective. Modern database architecture on commodity hardware.

Reduce Operational costs & risks. Disclosure Management facilitates data retrieval requests.

INTRODUCTION

LIMA Data Retention for regulatory compliance is a solution with unique characteristics. Our LIMA products are designed with scalable characteristics in mind and yields a cost-effective and sustainable solution. Many other systems fail to do so and often render a solution for which replacement eventually is unavoidable due to unacceptable maintenance costs, sometimes even after just a few years.

International laws require Telecom Operators and ISPs to retain metadata for investigation purposes. The number of records generated on a daily basis combined with a retention time of 6 to 36 months, pose considerable technical challenges to such Data Retention systems. Rates of a few hundred million records of metadata each day and storage of tens or hundreds of TBs are far from uncommon.

A LIMA Data Retention system is able to cope with this amount of metadata, analyzing and storing it in near real-time. Searching for information in a store that comprises billions of records and terabytes of data will not take more than a few minutes. An even more important aspect of LIMA Data Retention is its ability to adapt to change. As networks and services change over time, so does the information that needs to be stored. LIMA Data Retention stores these new types of records without compromising the integrity of existing data or the performance of the system. It is just as important to make changes possible at a fair cost without requiring a redesign of the system or re-indexing of the existing data.

Group 2000 incorporates these aspects in LIMA Data Retention. LIMA Data Retention is a telco-grade solution that supports Telecom Operators, ISPs and Governments around the world in fulfilling their Data Retention obligation. It consists of a highly scalable Retention store, a flexible collection and transformation module and optionally a broker functionality that complies with international standards. These functions are controlled by LIMA Disclosure Management, a plug-in module for the LIMA Management System used for various types of regulatory services.

LIMA Disclosure Management

LIMA Disclosure Management allows users to enter disclosure requests with specific parameters in order to retrieve the requested information from a number of available data sources and to deliver the right results. The data retrieval process may consist of multiple consecutive data queries at different data sources in order to construct the required data set. After retrieving the data, the results may be validated and converted into the required format. These results are available for the operator who may verify them and send them to the requesting authority. To cater for customer specific process flows and to support teams as opposed to single operators, LIMA Disclosure Management can be extended with workflow management based on a standards-based Business Process engine.

One LIMA Disclosure Management system can administer and segregate many different networks to enable managed service models, for support of multi-tenant networks like MVNO's, and multi-country networks.

Collection and Transformation

Information that needs to be retained by LIMA Data Retention usually resides in a variety of systems. This data needs to be retrieved and processed before it can be stored. Examples of processing steps are normalization, enrichment or correlation of information from various sources. LIMA Data Retention includes a collection and transformation module that is able to process any type of data. Supported information sources include files, databases and LIMA Monitors from which data can be collected. The transformation module includes an Extract Transform Load (ETL) component that optionally enables data-flow design via nontechnical, business-oriented graphical views. Data-flow processes are built by dropping library components and connectors onto the workspace, drawing connections and relationships between them and setting their properties. LIMA Data Retention also contains a tool to convert the data to all kinds of data types like XML, CSV, and ASN.1.

Retention

Retaining a huge amount of historical data in a way that it can be efficiently queried but also removed when outdated, poses some real challenges to the underlying storage mechanisms. Using a standard database product as the basis for a Data Retention system often yields an inefficient solution which is difficult to maintain.

By using a storage mechanism specifically designed to the characteristics of historical data, LIMA Data Retention becomes far more efficient.

LIMA Data Retention uses techniques like de-duplication and compression, reducing the required storage needs. Other advantages are the fact that specific database design, indexing, and tuning are not required. The same is true for database maintenance which is an important factor in driving down the total cost of ownership of a LIMA Data Retention system.

Other specific features are immutability and data encryption to ensure the information's integrity and the confidentiality of the data. And a legal hold feature to facilitate directives to preserve relevant evidence.

LIMA Data Retention is based upon a NoSQL database management system designed to handle large amounts of data across many standard commodity servers (COTS), providing high availability with no single point of failure. This cost-effective setup can accommodate any amount of storage requirements, offering a future-proof and a truly scalable solution.

Broker

The broker functionality of LIMA Data Retention handles the aspects of receiving and fulfilling disclosure requests. The Graphical User Interface is fully integrated into the LIMA Management System enabling operators to make use of one single interface for Lawful Interception and Disclosure requests.

The broker functionality supports a variety of request types which will suit any request issued by a legal authority. Each request can be entered manually or electronically (E-warrant). The platform will manage and audit all incoming requests.

The result of the request can be retrieved manually or automatically (after optional approval) send to the requesting agency.

LIMA Data Retention provides authority management, disclosure history, auditing, user account and privilege management as well as disclosure type management.

Integration of an existing Data Retention system with LIMA Mediation is also possible, creating a single entry point for all disclosure requests.

| BENEFITS	
	Collects communication data and subscriber data from any telecommunication network with ingestion rates of 100+ million records/day
	Retains large amounts of data in a powerful and secure data store
	Very fast search and query in billions of data records
	Highly scalable and cost effective solution based upon commodity servers (COTS)
	Integrated Disclosure Management and Workflow Management and broker options
	Features typical DRS requirements - Legal Hold, Expiration, Encryption, immutability, logging, alarming

OUR COMPLIANCE SOLUTIONS
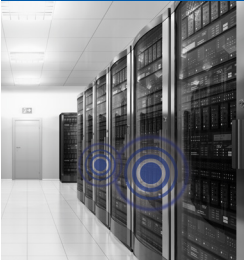
LIMA COMPLIANCE PORTFOLIO

Comprehensive solutions for service providers, enterprises, law enforcement, and intelligence agencies.

- LIMA Lawful Intercept
  - Warrant Management
  - Provisioning and Mediation
  - Location enrichment
  - Passive and active IP interception
  - E-mail monitors
  - VoIP monitors
  - Mobile data monitors
  - Workflow support

- LIMA Data Retention
  - LIMA Disclosure Management
  - LIMA Data Retention store
  - Workflow support

- LIMA Élite
  - Lawful Interception End 2 End validation
  - Test LEMF functionality

LIMA NETWORK MANAGEMENT AND SENSING PORTFOLIO

For more information about Group 2000's Network Management and Sensing solutions, please visit www.group2000.com.

ARCHITECTS IN SAFETY AND INTELLIGENCE

- Group 2000 is an independent global solutions provider of interception and intelligence solutions
- Group 2000 delivers and preserves essential and reliable interception knowledge
- Group 2000 has global experience in the public and telecommunication domain
- Group 2000 minimizes complexity delivering end to end solutions
- Group 2000 has technology partnerships with leading suppliers
- Group 2000 is an active member of ETSI
- Group 2000 LIMA solutions are modular and scalable to support the largest networks