

ILM Definition and Scope

An ILM Framework

<http://www.snia.org/dmf>



Information Lifecycle Management Initiative

Version 2.3
July 28, 2004

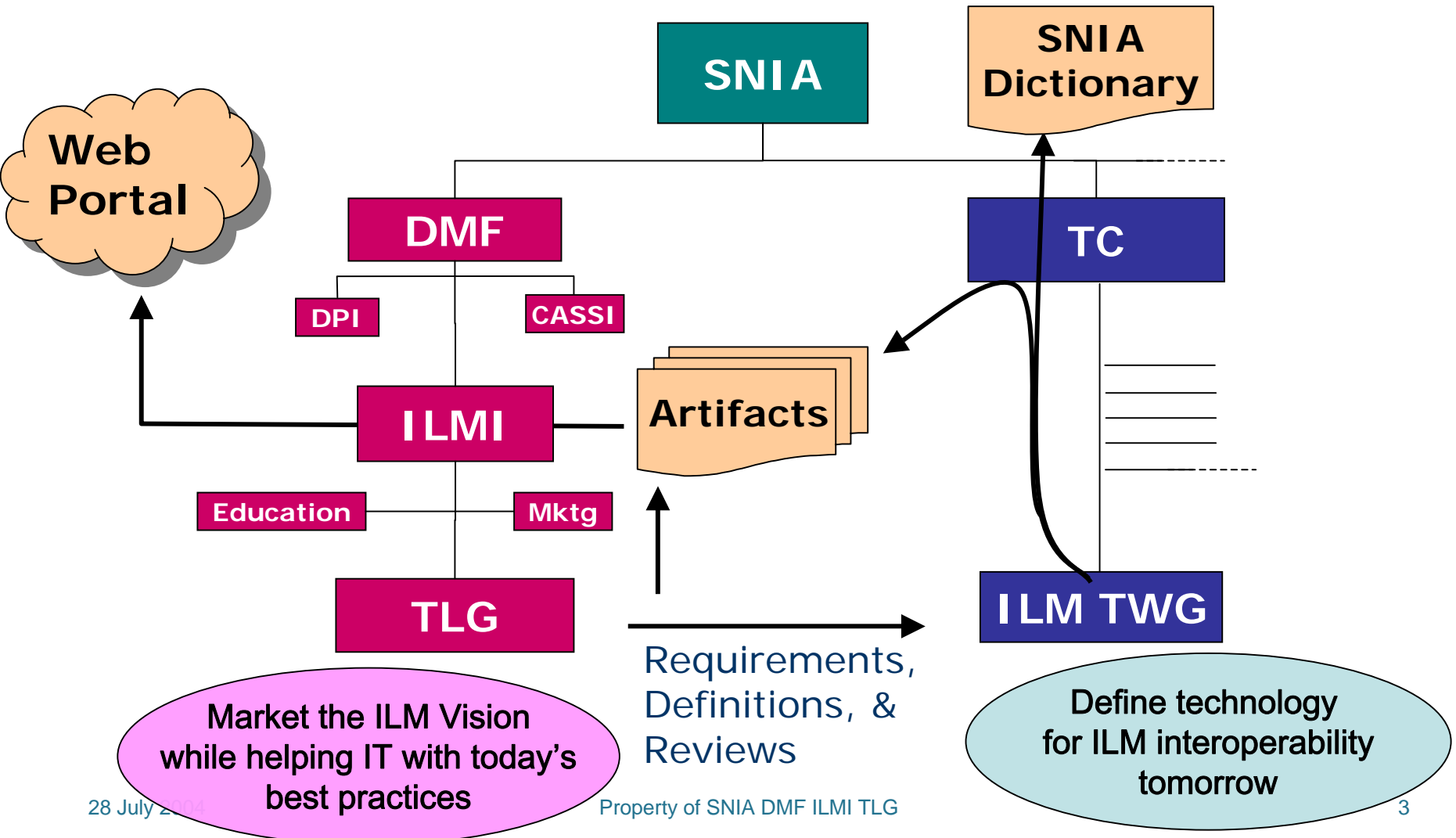
Data Management Forum

The SNIA Data Management Forum is a cooperative initiative of IT professionals, vendors, integrators, and service providers formed to address two primary goals:

- Be the world-wide authority and resource on data management infrastructure and information lifecycle management in a storage context
- Work with ILMTWG to establish interoperability among ILM solutions and data services

www.snia.org/dmf www.ilm-info.org www.dp-info.org www.cas-info.org

ILM's DMF/TWG Relationship



ILM Vision:

“A new set of management practices based on aligning the business value of information to the most appropriate and cost effective infrastructure”

ILM Defined:

Information Lifecycle Management: the policies, processes, practices, services and tools used to align the business value of information with the most appropriate and cost effective infrastructure from the time information is created through its final disposition. Information is aligned with business requirements through management policies and service levels associated with applications, metadata, and data.

Information Lifecycle Management Principles

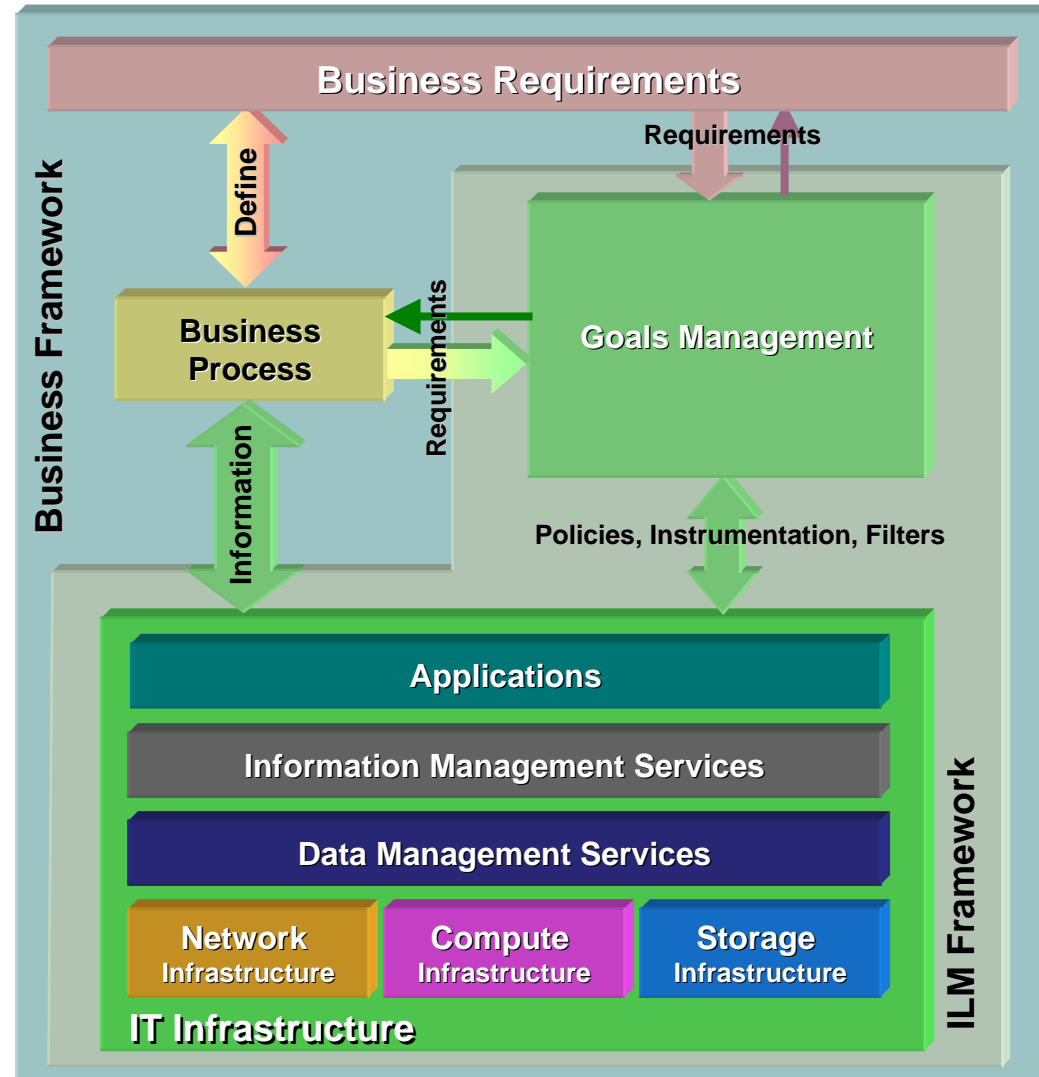
- Information is data that is exchanged, expressed, or represented within a context such as an application or a process.
- ILM aligns business processes with IT solutions through definition of appropriate service levels and policies.
- ILM spans data management and information management services.
- ILM spans the storage, compute, and network infrastructures.

High-Level ILM Scope

An ILM Framework for the Datacenter

The **ILM Framework** provides management and control of the **IT Infrastructure** abstracted in terms that are relevant to **Business Requirements** in the management of **Information** used by a **Business Process**. To this end, the **Business Framework** defines what the goals are in the management of **Applications** and **Information**.

Goals Management provides the abstraction and the transformation of these goals into policies that it implements in the **Network, Compute, and Storage Infrastructures**, and through **Data Management and Information Management Services**. Goals Management provides feedback to the business regarding the costs, risks, and status.



High-Level ILM Scope

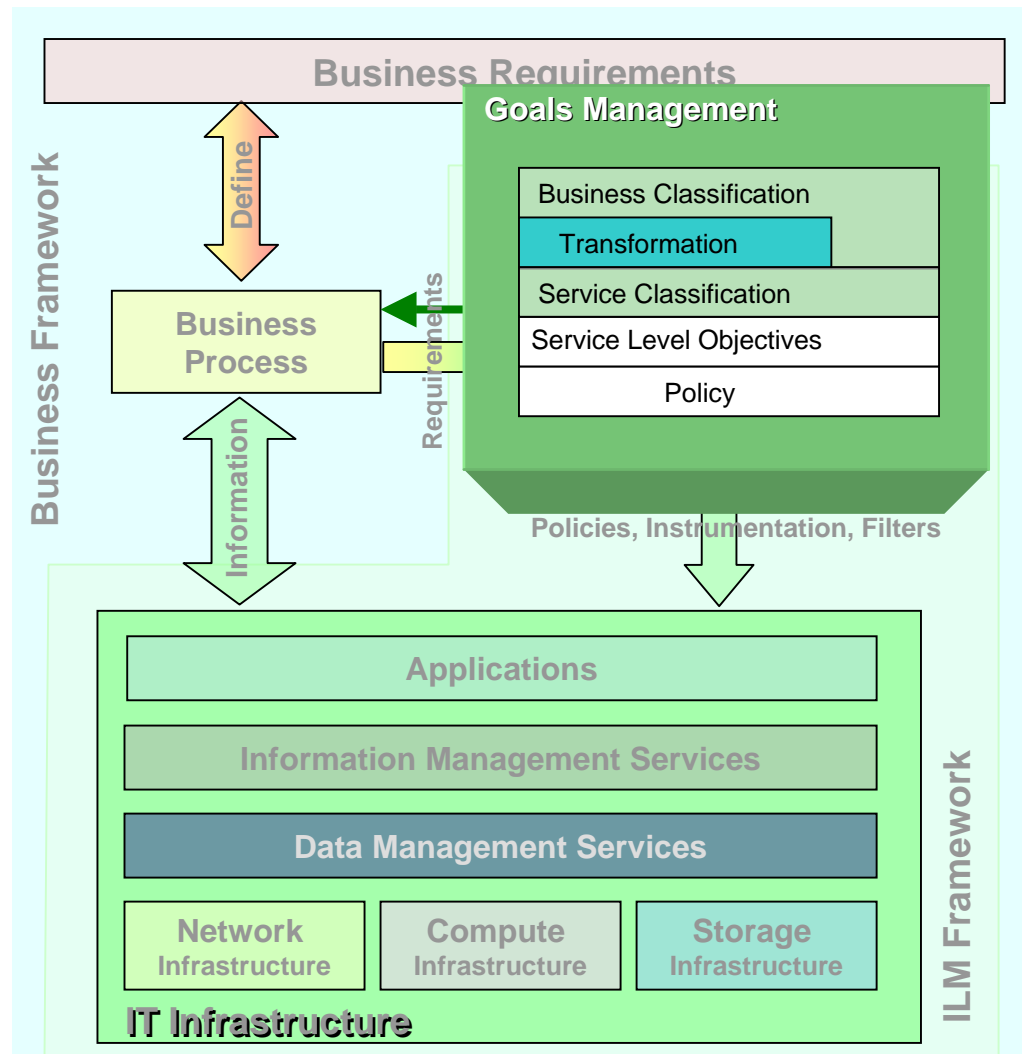
Goals Management

Business Classification: This classification is expressed in business terms. E.g., “retention must be HIPAA-compliant”, or non-technical requirements (dept ownership/allocation of resources). Business Classification may incorporate Service Classifications, depending on the particular solution. The perspective of business classification is at the application level. It is vendor-specific.

Transformation: vendor-specific algorithms for changing Business Classifications into vendor-neutral Service Classifications.

Service Classification: Service description terms that provide processing and control-related requirements. This is not the definition of a technology solution, but of a desired level of service. A Service Classification is expressed in terms of SLOs and Policies which is vendor-neutral. The perspective of service classification is at one or more aggregates of data that are used by an application.

Service Level Objectives: An SLO is a facet, or dimension, of data management capabilities to be provided at a specified, measurable, level. This level is specified with one or more attributes.



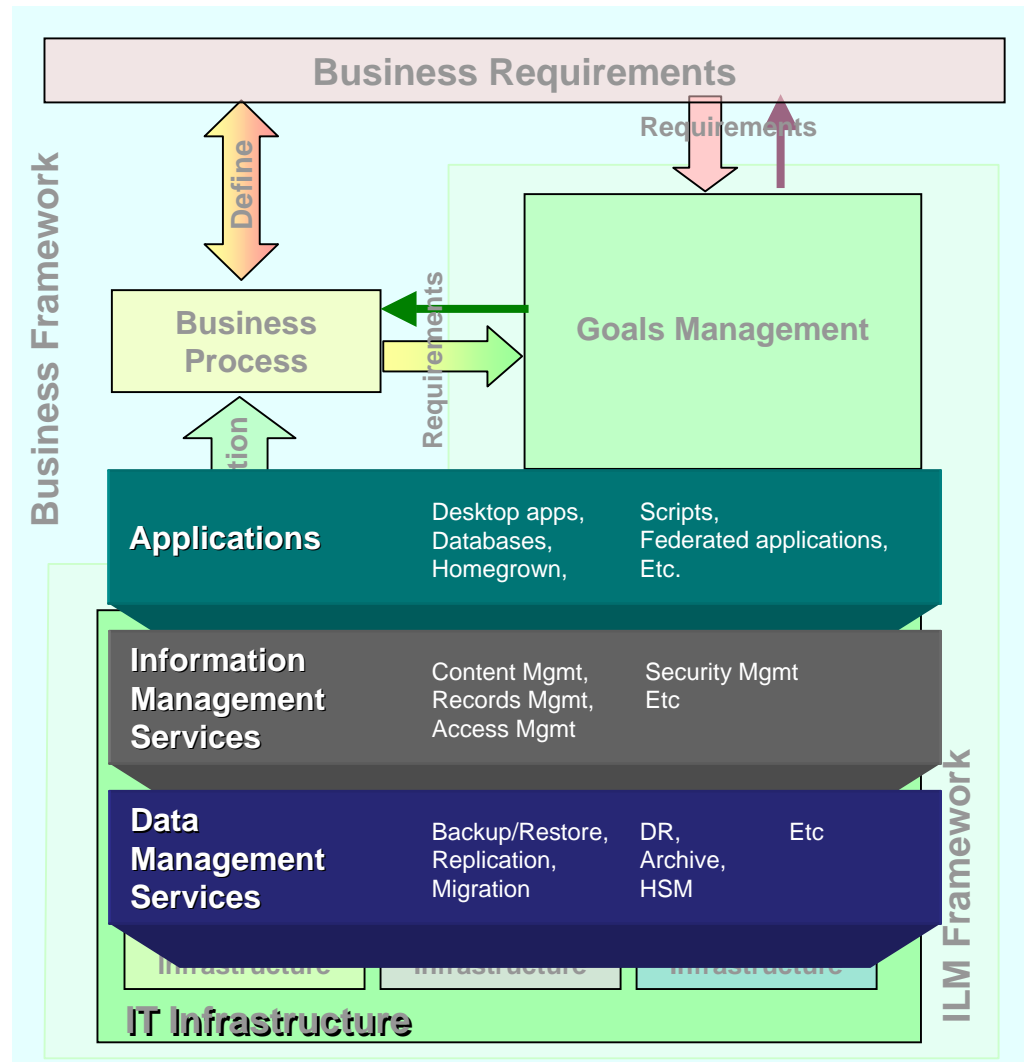
High-Level ILM Scope

Applications and Services

Applications: Applications are any and all processes that can transform data from the IT infrastructure into Information used by a Business Process. Applications can scale from programs such as Adobe Acrobat to federated applications spanning multiple databases and file systems throughout the enterprise. Future applications *could* have the ability to influence policies and service levels associated with information in order to assist in managing the information's lifecycle. These applications would be termed "ILM-aware applications".

Information Management Services: The processes associated with guiding information and records through various states associated with a Business Process. This service may use content information or metadata in decision making, and may utilize data management services or any of the infrastructures in execution of its policies. Some Business Processes may not require the use of any Information Management Services. Examples include records management and content management applications.

Data Management Services: The control of data from the time it is conceived until it no longer exists. Data Management Services are not in the data path; rather, they provide control of, or utilize, data in the delivery of their services. This includes services such as data movement, data redundancy, and data deletion.



High-Level ILM Scope

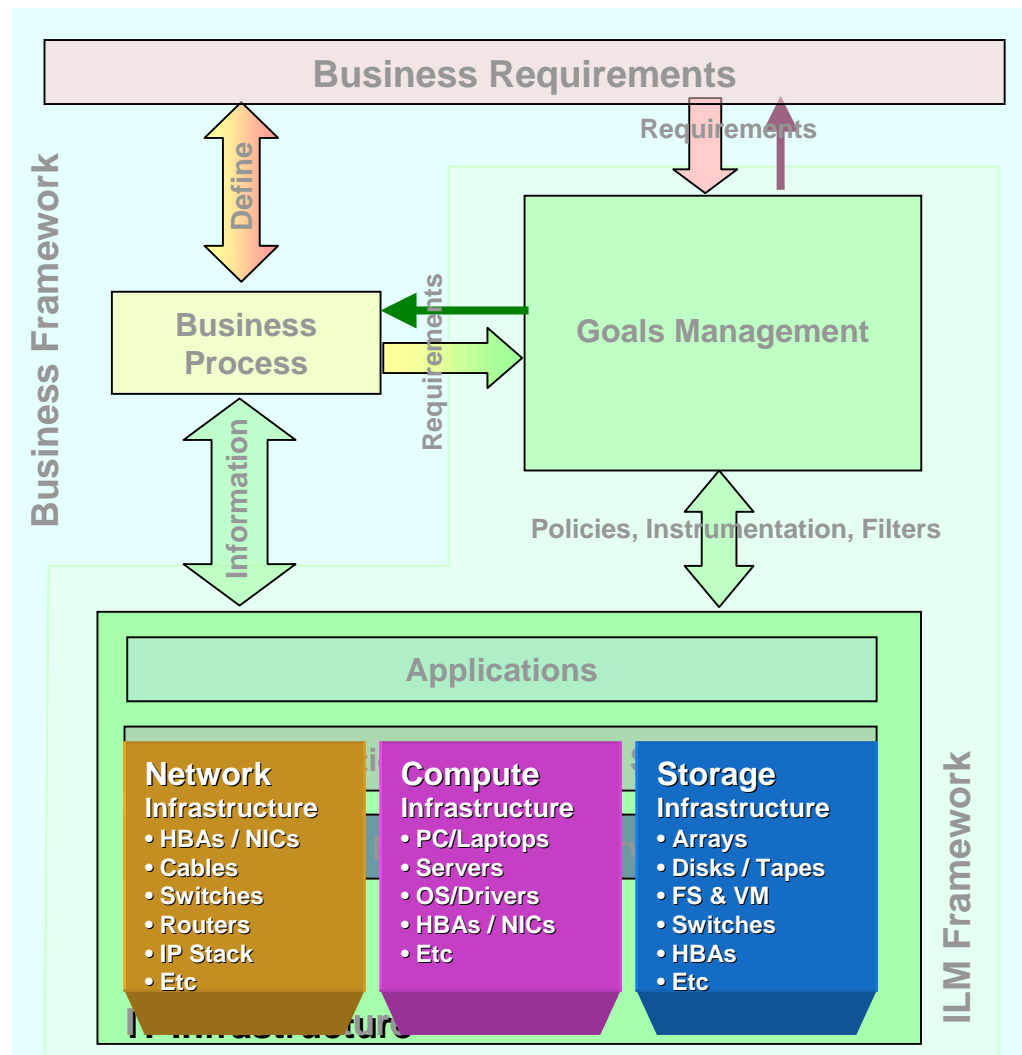
The Infrastructure

Network Infrastructure: The Network Infrastructure is comprised of hardware and software providing connectivity between elements of the Compute and Storage Infrastructures. These products include both LAN and SAN-related components, appliances, interface cards for servers, and associated software.

Compute Infrastructure: The Compute Infrastructure is comprised of hardware and software providing computational services. These products include servers from blades and laptops to mainframes, their respective operating systems, drivers and utilities.

Storage Infrastructure: The Storage Infrastructure is comprised of hardware and software providing storage services. These technologies include DAS, NAS, SAN, CAS, file systems, and volume managers. Essentially, any component that can be mapped onto the Storage Domain of the SNIA Shared Storage Model.

Note: Some entities may be managed as part of multiple infrastructures, depending on the management capabilities of the infrastructures.



- **The DMF ILM Initiative:**
 - Provide a conduit of ideas and practices to, and among, IT Professionals
- **SNIA/DMF Focus:**
 - Data Classification
 - Storage-related Information Management Services
 - Data Management Services
 - Storage Solutions
- **Collaborate with other industry and user groups:**
 - Database Management industry groups
 - Records/Content Management Services
 - Networking solutions
 - Compute/server solutions
 - Security Management

The logo graphic consists of three red 3D chevron shapes pointing downwards, arranged in a cluster. Below them are three teal 3D chevron shapes pointing upwards, also in a cluster. A large teal arc is positioned below the teal chevrons, resembling a smile or a wide opening.

SNIA

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