



Metadata and DataSpecs®

Let's start at the beginning. What is metadata and why is it important?

Put simply, metadata is data *about* the enterprise, not the data itself. If stored and managed in a coherent and usable way, metadata will allow stakeholders in an enterprise to understand the data being managed, how the various data elements of a system interrelate, and perhaps most importantly make good decisions about the use of the data and justify the decisions made.

DataSpecs® is ESP's metadata dictionary software. DataSpecs has been used in over half of the nation's state education agencies (SEAs) and the U.S. Department of Education during the past two decades for metadata repository development and/or data governance. ESP currently supports 11 education agencies using DataSpecs for metadata applications. DataSpecs meets those agencies' Section 508 access requirements, security requirements, and directory requirements in both locally and ESP-hosted environments.

Because DataSpecs® documents and manages an education agency's metadata, this enables the agency, among many other benefits, to:

- Improve the overall quality of the organization's data,
- Increase the proper interpretation and use of data,
- Increase the availability of data to decision makers in a timely manner and in a usable format, and
- Enhance the value of a longitudinal information system by ensuring that it is sustainable and extensible.

In general, these benefits are realized through processes that ensure all applications, software products, and databases align and comply with the organization's enterprise data standards. In addition, DataSpecs creates and maintains documentation and reports that organize, manage, and communicate the complex activities associated with an organization's information. These activities fall into the realm of governing the periodicity of the official statistics of the organization.

DataSpecs® and ISInsight™

Once the metadata are organized within DataSpecs, ESP offers a comprehensive data and technology map called ISInsight™. ISInsight is used to map out your entire information ecosystem and the movement of data between systems, so that anyone in your agency can see the big picture at any time. An ISInsight map of the agency's current architecture is essential for proper maintenance, upgrades, and planning for a new data system.

ESP focuses on the overall documentation of current information systems, including:

- High-level depiction of all identified information systems and data repositories
 - Administrative level and program office
 - Data sharing and alignment
 - Data entry and access
- Profiles of key components
 - Data collection processes
 - Data repositories
 - Reports/data outputs

The diagrams on the next two pages illustrate how DataSpecs and ISInsight are used.

Why DataSpecs® ?

- *Users can run reports with ad hoc queries to learn what's in their data repositories.*
- *User's can generate reports showing the relationship of data elements from where they are collected, stored, and reported.*
- *Importantly, the reports attribute those collections, repositories, and outputs/reports to the people and offices responsible for them. In this way, DataSpecs reveals the official mandate that justifies the data.*



DataSpecs

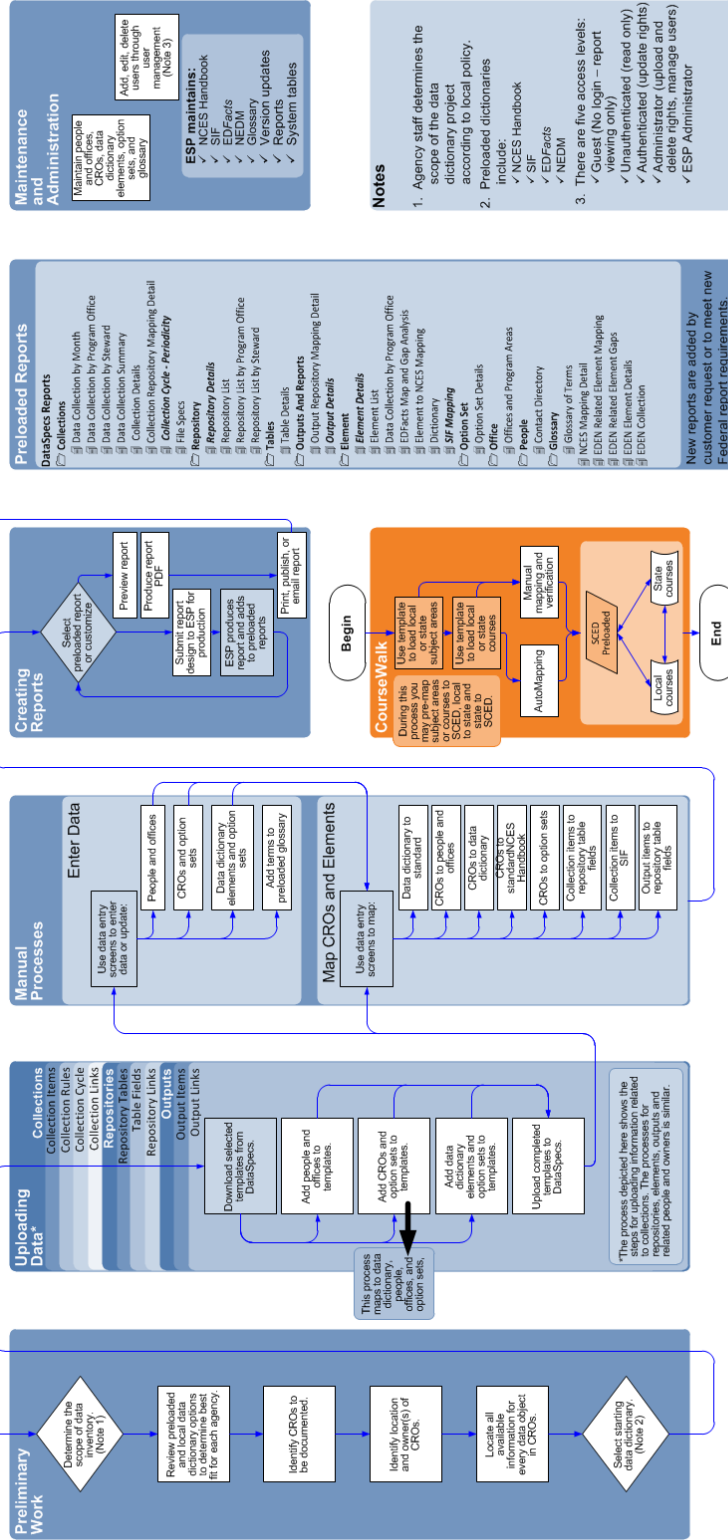
DataSpecs will support the SEA in their efforts to standardize data elements, indicators, naming conventions, definitions, codes, and formats for improved data quality and increased reliance on data-driven decision making.

- DataSpecs maintains a comprehensive inventory of existing data elements in a custom metadata dictionary.
- DataSpecs locates data elements in collections from which they are being gathered, repositories where they are maintained, and outputs where they are provided.
- DataSpecs allows certified users to enter, modify, and track elements as they appear throughout the agency in collections, repositories, and outputs (reports).
- DataSpecs assigns each collection, repository, or output (CRO) to a data steward – an office or person who is the owner of the metadata and responsible for its maintenance.



Metadata are literally "data about data." They are information that describe data.

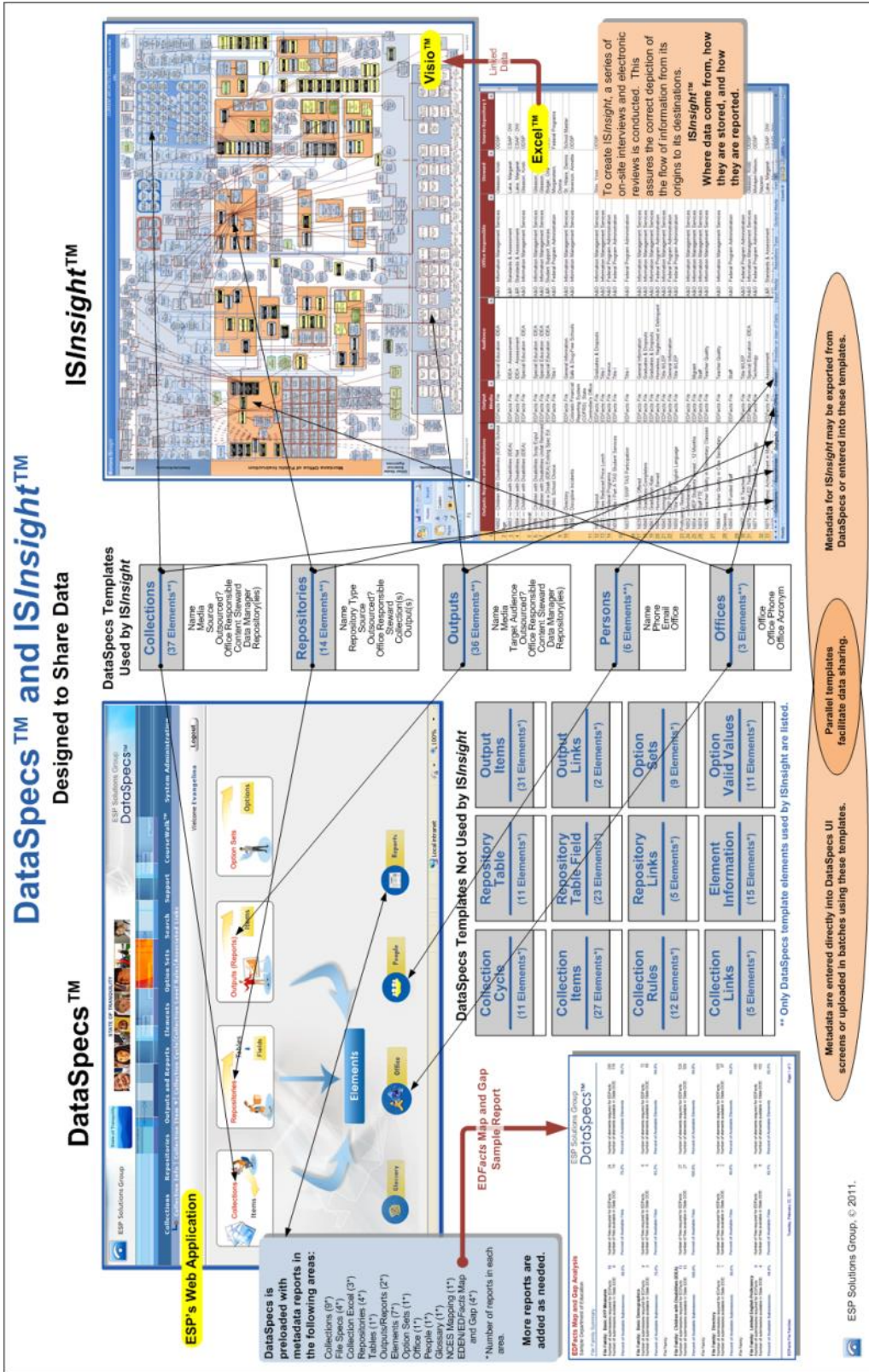
DataSpecs does not contain your data, it is a map to your data.



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The process for creating, maintaining, and using a data dictionary system utilizing DataSpecs.

For more information on ESP Managed Service Products, please visit www.espsolutionsgroup.com, call 512-879-5300, or email info@espsg.com.



This metadata dictionary is used to populate the ISInsight data model, document the system, and provide an on-going management tool.

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