



POPKIN
S O F T W A R E

System Architect

FSA-EAF

Network

WORLD CLASS TRAINING

Introduction

This column is concerned with the geographic distribution of the enterprise's activities. Row one is simply a listing of the places where the enterprise does business. At row two, this becomes a more detailed communications chart, describing how the various locations interact with each other. Row three produces the architecture for data distribution, itemizing what information is created where and where it is to be used. In row four, this distribution is translated into the kinds of computer facilities that are required in each location, and in row five, these facilities requirements are translated into specification of particular computers, protocols, communications facilities, and the like.

The following diagrams and definitions represent the products that collectively make up this view:

- Row 1 - Scope** (Planner Perspective)
- Logical Node Definition (where Type=Location)
 - Technical Standards Guide
- Row 2 – Enterprise Model** (Owner Perspective)
- Communications Map

All diagrams and definitions in this view can be accessed through the Framework Browser. To access the various diagrams and definitions the user should navigate to the Network column, and select the desired perspective.

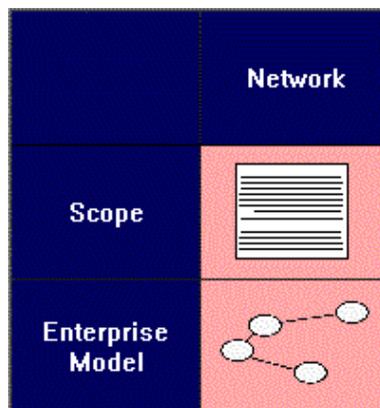


Figure 1 Network Focus of the FSA-EAF Framework



Navigate to the Framework Browser and explore the **Network** Focus of the FSA-EAF Framework.

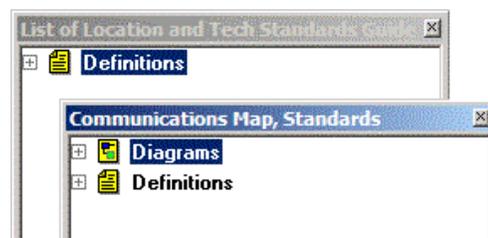


Figure 2 People Browsers

- Expand the Definitions label and then Logical Node. View the list of Logical Node definitions.
- Note the **<Logical Node Type>** suffix to the name, allowing the user to distinguish Logical Nodes of type **Location** from other node types in the list.



Figure 3 List of Logical Nodes <Location>

Technical Standards Guide

This presents a conceptual framework that describes and discusses actual and proposed systems within a specific domain. It serves as a roadmap for consistent system and technology solutions, evaluations selections and development.

Definitions

All items within the Technical Standards Guide are definitions. The available definitions describing the Technical Standards Guide in System Architect are listed below.

- **Standards Profiles**
- **Service Areas**
- **Service**
- **Products**
- **Standards**

Note the breakdown of → Standards Profiles, Service Areas, Service, Products and Standards

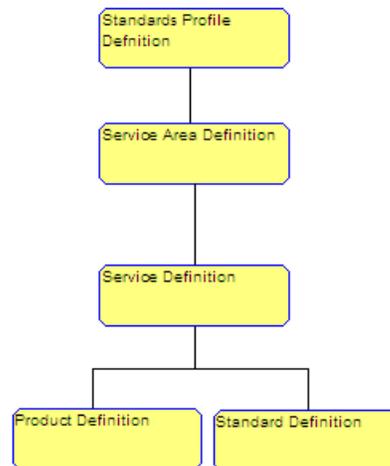


Figure 4 Definition Hierarchy



Review the meta-model diagram below to help grasp the relationships between the definitions mentioned previously.

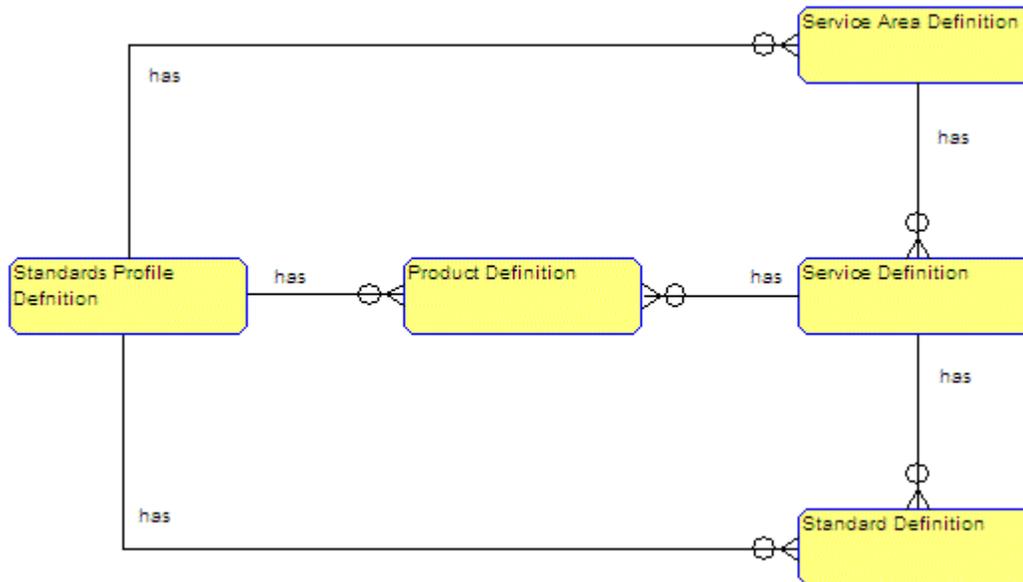


Figure 5 Technical Standards Guide Definition Relationships

Technical Standards Guide Example



Take a look at the following lists of **Service Areas** and **Services**. Add a selection of your choice to the encyclopedia, relating the two definitions types where appropriate.

Service Area Definitions

- Application Development
- Applications Services
- Data Interchange
- Distributed Computing
- Enterprise Data Management
- Network Services

Service Definitions

- Access Control
- Application Design
- Application Server
- Application Specific
- Application Testing
- Audio Graphic Conferencing
- Authentication
- Business Services
- Code Management
- Component Broker
- Computer Telephony Integration
- Configuration Management
- Content Management
- Data Acquisition
- Data Modeling
- Data Warehouse
- Database Management
- Database Security Services
- Desktop Tools
- Digital Certificate Server Services



Have a go at relating some of these **Products** to Services, where appropriate.

- DNS
- Edge Server
- EDOCS
- Ethernet
- FSA PIN
- HTTP
- Microsoft Windows 98
- FTAM
- FTP
- Genesys
- HEAT
- Hewlett Packard HP/UX
- HTML
- Microsoft Windows NT
- Microsoft Internet Explorer
- Microsoft Office Professional
- Microsoft Outlook
- Microsoft SQL Server
- Microsoft Windows 2000
- Microsoft Windows 2000



Remember that Services can also be related to Standards.



Try to come up with 5 **Standards** that might be enforceable on any of the Service definitions defined so far. Add those if applicable.

The Standard and Product definitions include technology forecast tabs. A forecast is used to compare weighted scores of various technology architecture packages against evaluation criteria based upon architecture models, principles and best practices. Forecasts contain predictions about the availability of emerging standards and the likely obsolescence of existing standards in specific timeframes and confidence factors for the predictions. This helps to match predictions for the market acceptance of standards and overall risk assessment associated with using the standard. The benefit is in the decision making with the development of transition and objective architectures.



Then close all definitions and return to the Framework Browser.

Communications Map

The Communications Map diagram shows the location of various systems' clients and the major communication links (Needlines) among FSA locations and external drivers (Logical Nodes). The diagram provides a macro view of infrastructure support for delivery of services and information.

Each needline is represented by an arrow (indicating the direction of information flow), which is annotated to describe the characteristics of the data or information. Examples of characteristics include its substantive content, media (voice, imagery, text and message format, etc.); frequency of transmission; security or classification level; priority; and requirements for information system interoperability. Information-exchange characteristics are shown selectively, or in summarized form through the grid option.

It is important to note that the arrows on the diagram represent *needlines* only. Each arrow indicates that there is a need for some kind of information transfer between the two connected nodes. There is a one-to-many relationship between needlines and information exchanges; that is, a single needline arrow on the diagram is a rollup of multiple individual information exchanges.

The System Architect diagram type used to construct a Business Context diagram is the **Node Connectivity**. Upon the creation and naming of a new Node Connectivity diagram the user is asked to specify the nature of the diagram, **Business Context** or **Communications Map**. The latter choice pertains to a diagram type used elsewhere in the Framework.

Once the Diagram Type been designated it becomes **Read-Only** meaning it is not possible to change the nature of an existing Node Connectivity diagram.

Click the cell at the **Enterprise Model / Network** intersection of the Framework.

Elect to create a new diagram of type **Node Connectivity**. Name the diagram **FSA Regional Offices**. Designate the **Diagram Type** as **Communications Map** and click OK.

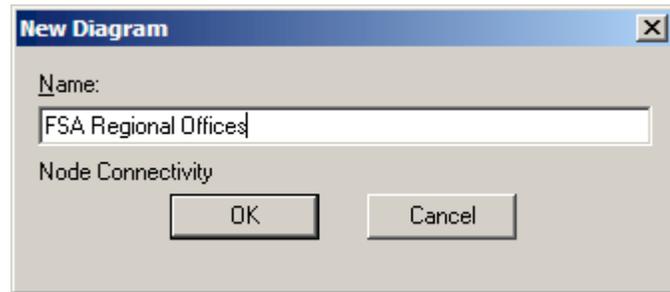


Figure 6 New Node Connectivity Diagram

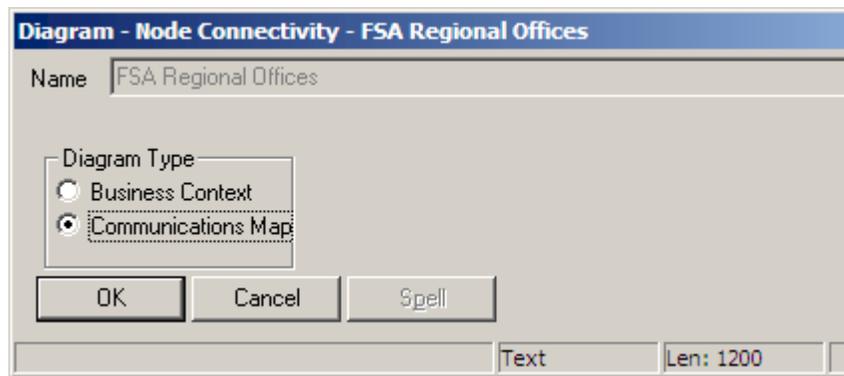


Figure 7 Designated as Communications Map

Select **Logical Node** as the symbol type to draw, either from the Draw Toolbar or the Draw menu.

Place seven Logical Node symbols on the diagram and set their definition **Type** property as follows:

Hint: Use Diagram Choices to drag and drop FSA onto the diagram.

- **FSA** Organization
- **New York NY** Location
- **Utica NY** Location
- **Boston MA** Location
- **Philadelphia PA** Location
- **San Francisco CA** Location
- **Washington DC** Location

Resize the symbols if necessary.

Add a Description to Utica NY; **Call Center**



Complete the diagram by connecting the Logical Node symbols with Needlines. Experiment with different Line Styles.

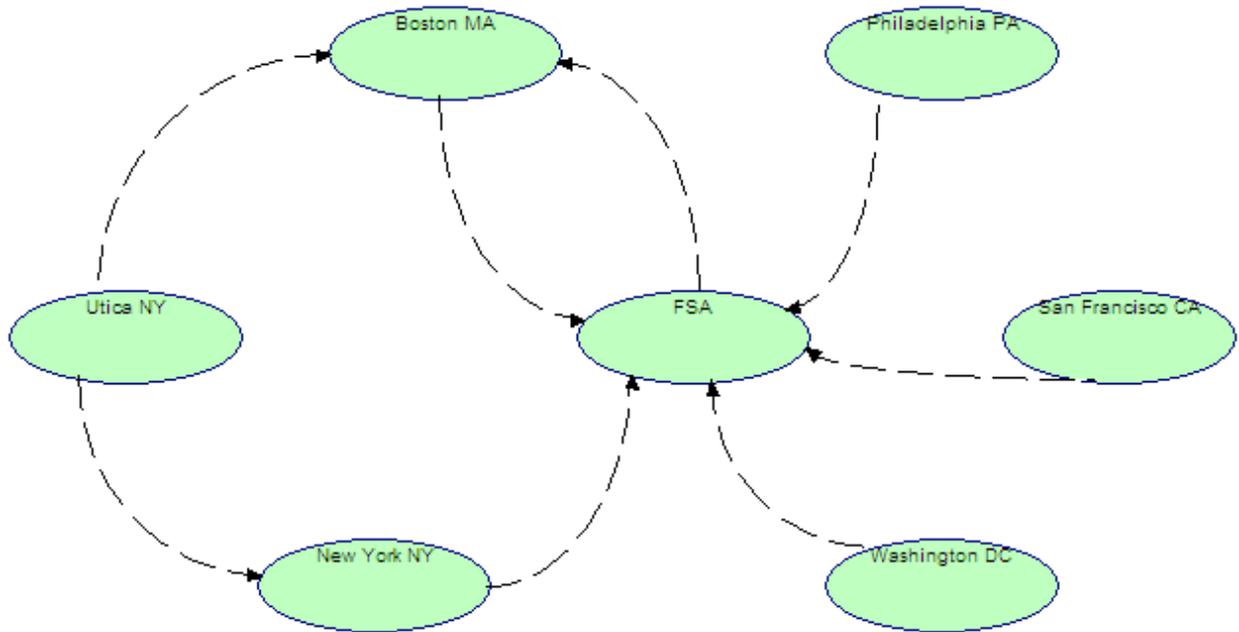


Figure 8 Example Communications Map Diagram



Note that upon returning to the browser the name of the diagram is suffixed with the **<Diagram Type>**.



This is very important in distinguishing between Business Context and Communications Map diagram types as they are both built with the Node Connectivity diagram.



Figure 9 Diagram Type suffix



Explore the **Needline** definitions. See if you can form further architectural relationships using the information we currently have in the encyclopedia.



Save and close the diagram. Return to the Framework ready for the next chapter.