Subject	**Type**	Standard
Network Integration Diagrams	**Identifier**	S–5056
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	Revision No.	

Approval C E Fitzgerald

CISSCO Program Director

A. PURPOSE

This standard specifies the format and conventions to be used in developing Network Integration Diagrams.

B. APPLICABILITY

This standard applies to all projects that use Network Integration Diagrams.

Some of the graphic conventions defined in this standard may not be supported on automated workstations. If feasible, tailor the workstation conventions for consistency with this standard. Otherwise, obtain a waiver to replace the affected conventions with those that can be accommodated on the workstation.

C. REFERENCE PUBLICATIONS

The following publications contain related information:

- *SDLCM Methodology Handbook*, Component 4, Engineer the Solution
- SDLCM Methodology Standard S–5051, Tactical Integration Plan

D. STANDARD

Develop a set of network diagrams that depict the support required by the logical design of the system. These diagrams include one or more of the following as determined by the size and complexity of the system being developed or enhanced:

- Logical Overview Diagram
- Logical Detail Diagram
- Network Architecture Block Diagram
- Site Overview Diagram (Central Site)
- Site Overview Diagram(s) (Remote Sites)

Simple block diagrams will suffice for each of these diagrams, but tool-specific symbols (usually more complex symbols) may be used if they can be easily understood by the unsophisticated reviewer.

Identify the following types of network and system support hardware in these diagrams:

- Network topologies. These include bus, ring, point-to-point, star, and multiconnected topologies.
- Network protocols. These include TCP/IP, IPX/SPX, SNA, and NetBios.
- Interface devices. These include bridges, routers, multiplexors, hubs, and switches.
- Server devices. These include LAN servers, WAN servers, and Gateways.
- User-interface devices. These include workstation, hand-held terminals, printers, and scanners.
- System-support devices. These include file servers and database servers.
- Host processors. These include super servers, minicomputers, and mainframes.

D.1 Logical Overview Diagram

Use a Logical Overview Diagram to graphically depict all enterprise locations and interconnections. If appropriate, simplify the diagramto depict only those that locations and interconnections that are applicable to the project. Use the Logical Overview Diagram as a high-level reference to guide to the Logical Detail Diagrams that follow.

Figure 5056–1 illustrates a simple Logical Overview Diagram.

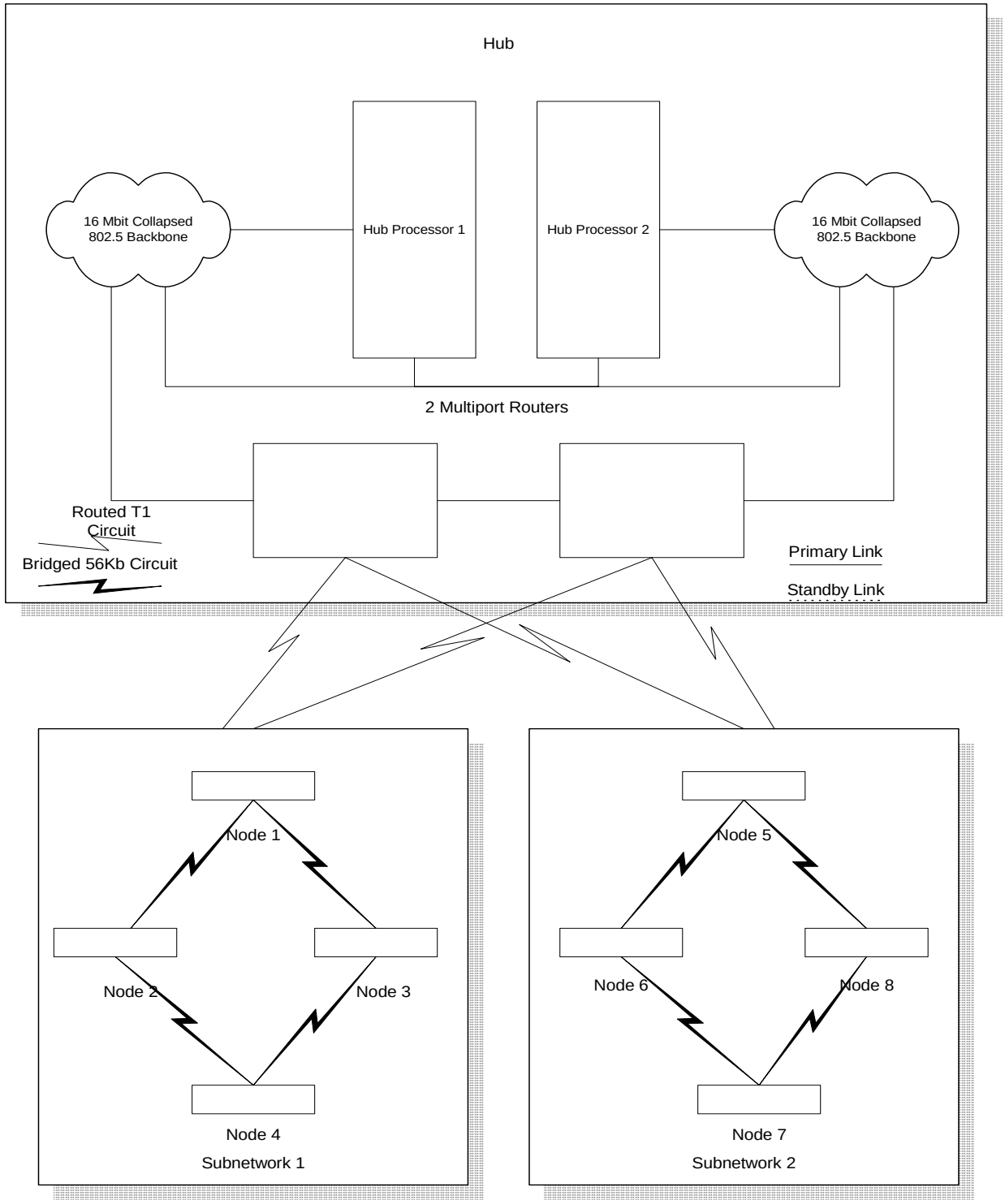

Figure 5056–1. Logical Overview Diagram

D.2 Logical Detail Diagram

Document the network structure (that is, the major hardware components and their interconnections) for a given location or location type using a Logical Detail Diagram. Figure 5056–2 illustrates a simple Logical Detail Diagram that uses available icons from the Visio Technical Drawing Tool for some of the hardware components. Simple blocks, labeled with the components, may be substituted for these icons.

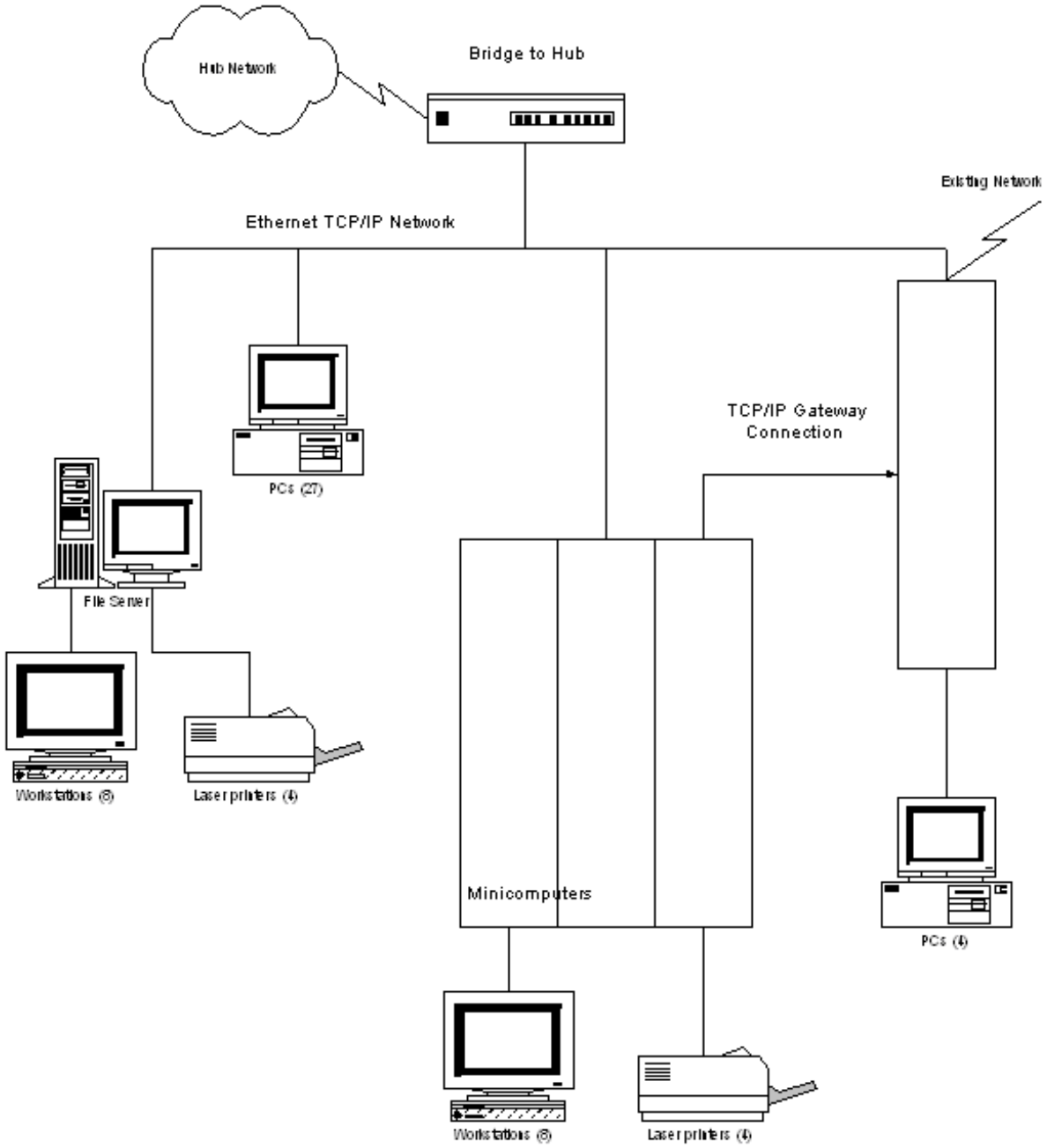

Figure 5056–2. Logical Detail Diagram

Depending on the complexity of the network infrastructure, supplement this basic diagram with one or more of the optional diagrams described below:

D.3 Network Architecture Block Diagram

Graphically depict the major hardware components for each location type and their interconnections in a Network Architecture Block Diagram. Indicate bus, ring, point-to-point, star, or multiconnected topology for each local area network (LAN).

Figure 5056–3 illustrates a Network Architecture Block Diagram.

Note that this diagram represents a logical topology. A logical bus topology like Ethernet or a ring topology like Token Ring can be physically implemented using a central hub.

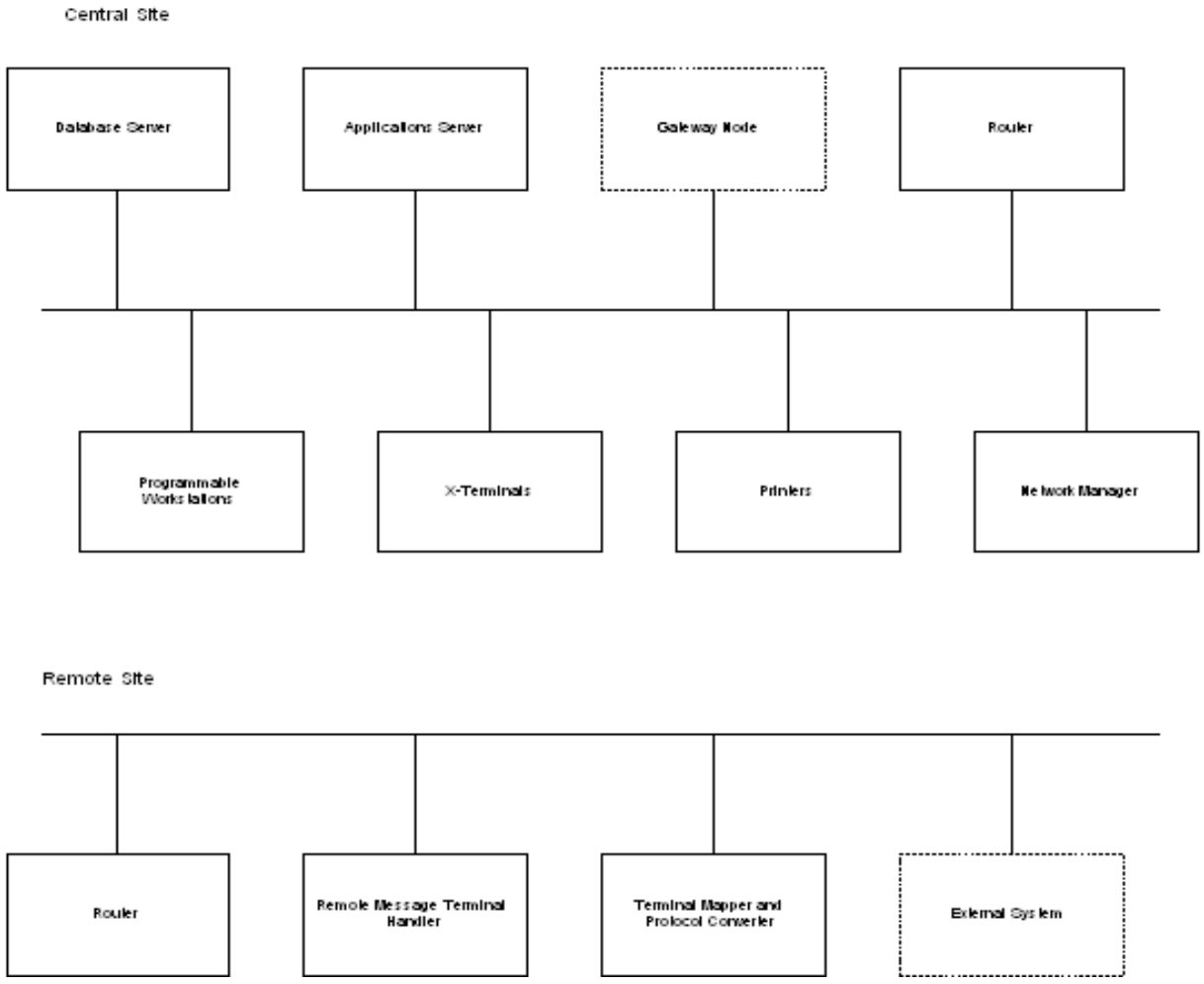

Figure 5056–3. Network Architecture Block Diagram

D.4 Site Overview Diagrams (Central and Remote Sites)

Use a Site Overview Diagram to show in graphical form the intended software stack for each hardware platform. This provides a breakout of the Network Architecture Block Diagram and indicates the software required to implement the communications protocol for the site. Figure 5056–4 illustrates a Site Overview Diagram for a central site and Figure 5056–5 illustrates the diagram for a remote site.

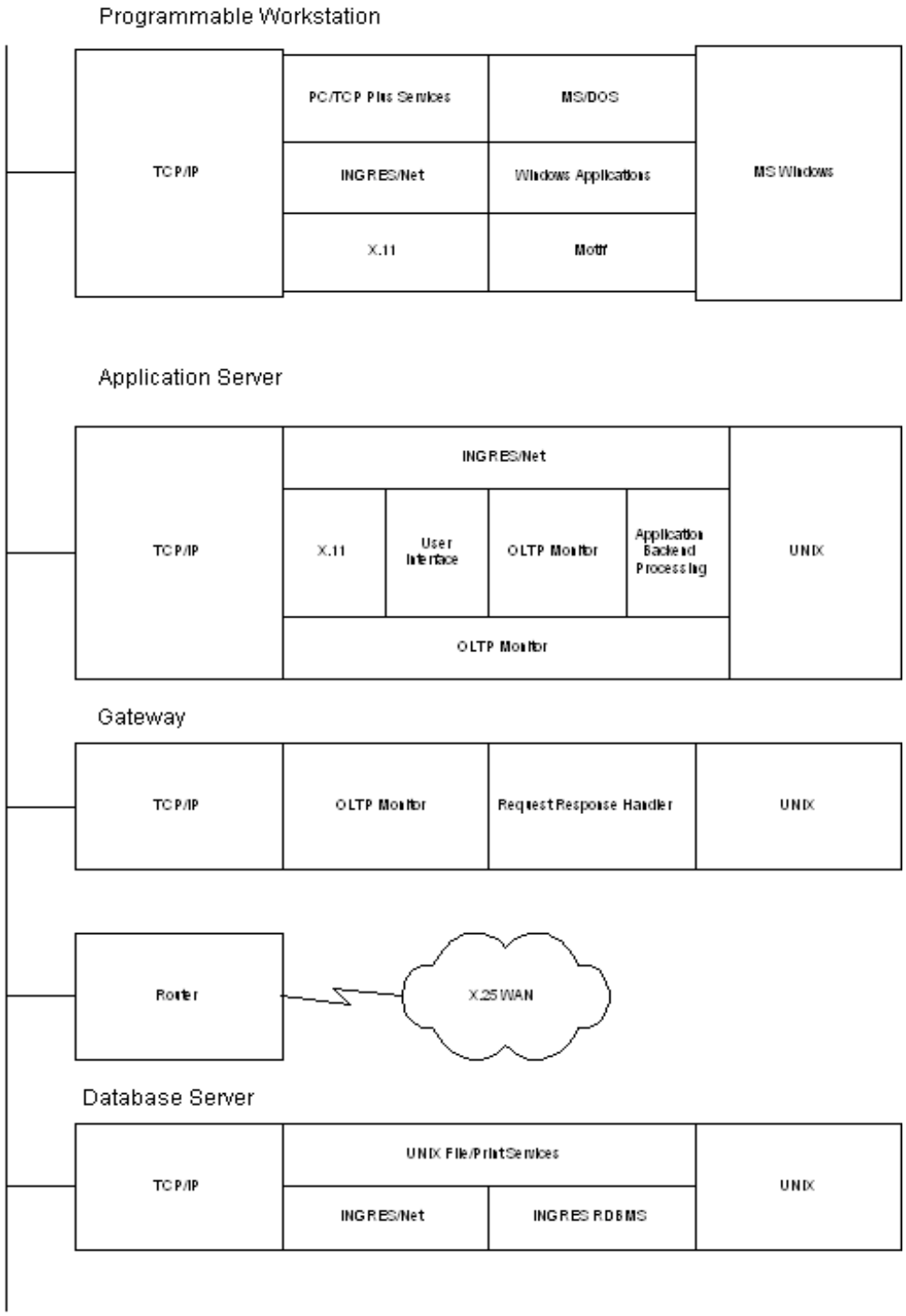

Figure 5056–4. Example of Site Overview Diagram (Central Site)

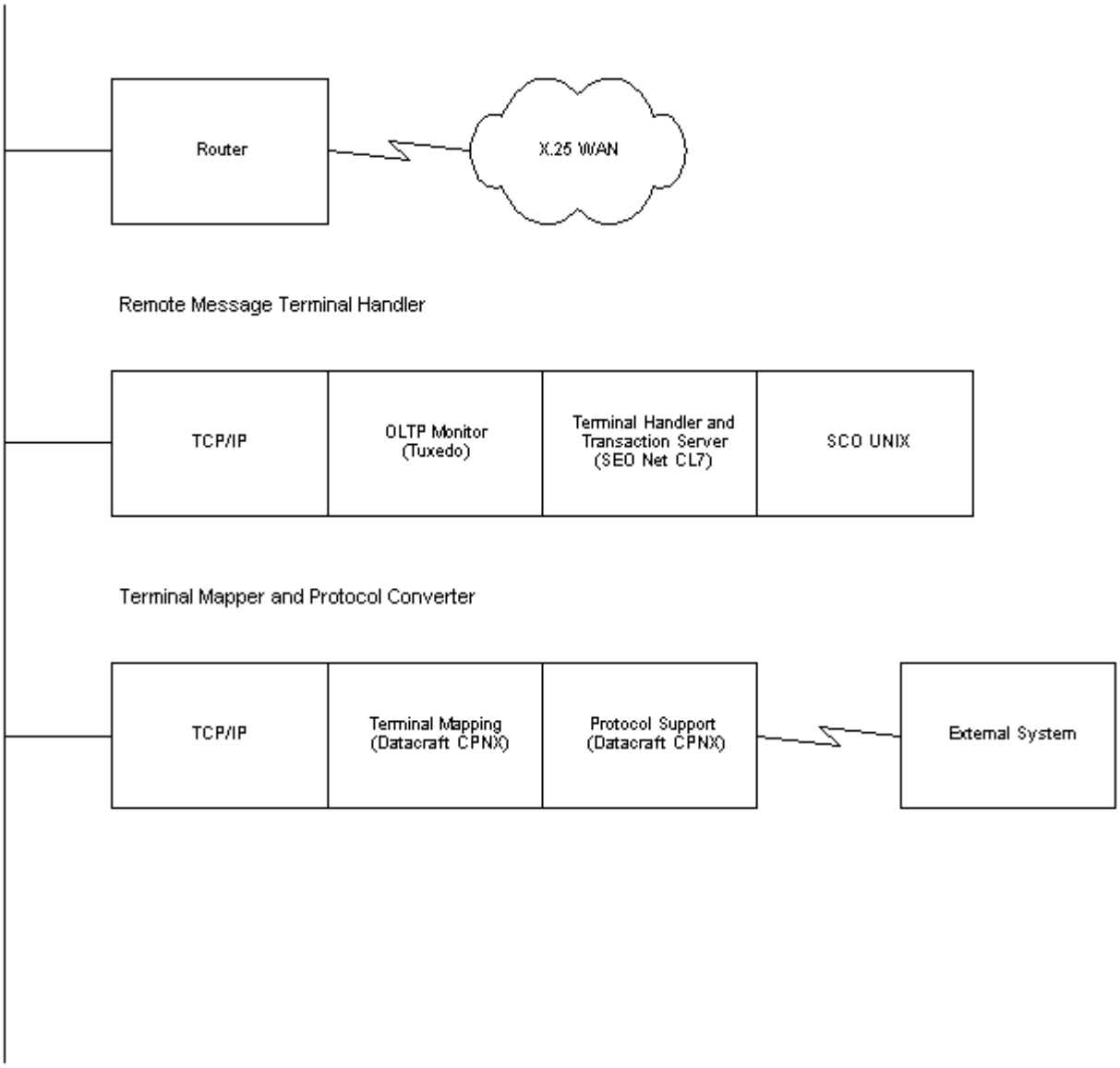

Figure 5056–5. Example of Site Overview Diagram (Remote Site)