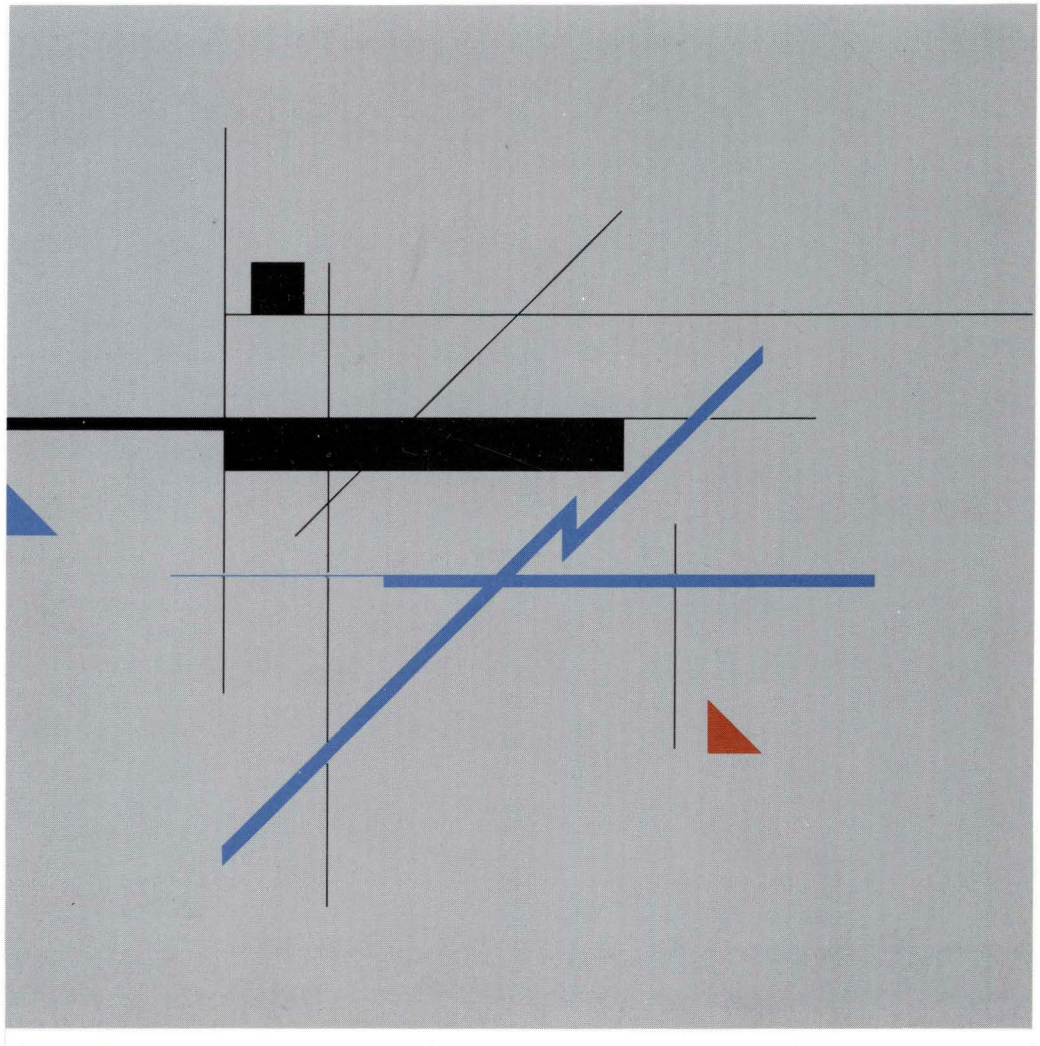
Systems Network Architecture

GC30-3438-01

Guide to SNA Publications



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Note

Before using this document, read the general information under "Notices" on page v.

Second Edition (May 1992)

This edition obsoletes and replaces GC30-3438-00.

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IBM	Systems Application Architecture

About This Book

This guide lists and describes those IBM publications that define IBM's Systems Network Architecture (SNA) and related architectures. It includes only those publications that document the architectures; it does not include the many books that describe product implementations of these architectures, installation of networks containing such products, or other topics not directly related to the architectures.

See your IBM representative or your local IBM branch office to obtain any of these publications or to enter an SLSS[1] subscription. SLSS subscriptions are described in *Entering an SLSS Subscription*, G320-1561.

How Publications Are Listed

Publications are listed within the categories given under "What Is New in This Edition" on page viii. Each entry for a publication contains the following elements:

- The title
- The order number
- SLSS profile information
- An abstract.

Where profile information is shown (for example, ////5743-SNA), the profile is represented in five fields, which correspond to the five sections B/C/D/F/E on the SLSS subscription form:

- System or processor
- Communications mode indicator
- Subject code
- Machines
- Program number.

Introductory and General SNA Publications

You may receive these introductory SNA publications by ordering the bill-of-forms number GBOF-1742:

- *SNA Concepts and Products*, GC30-3072
- *SNA Technical Overview*, GC30-3073

You may receive these general SNA publications by ordering the BOF number 5743-SNA:

- *SNA Concepts and Products*, GC30-3072
- *SNA Technical Overview*, GC30-3073
- *SNA Sessions between Logical Units*,[2] GC20-1868
- *SNA Formats*, GA27-3136
- *SNA Transaction Programmer's Reference Manual for LU Type 6.2*, GC30-3084

No program license is necessary to enter 5743-SNA on your SLSS order form.

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1 Systems Library Subscription Service

2 other than LU Type 6.2

SNA Reference Manuals Library

The most detailed publications about SNA are the reference manuals. These describe the detailed logic of the architecture and are of interest mainly to designers who need to implement SNA formats and protocols in their products. These manuals are available as a group under a bill-of-forms number: SBOF-1743.

Order No. Subscription Only

The words "Order No. Subscription Only" after "SLSS" in the listing for a publication mean that the publication is not available under any SLSS profile, and must be specified by order number on the SLSS subscription form.

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What Is New in This Edition

This edition lists and describes several publications that have become available since the prior edition was published. Also, the publications are now grouped under the following categories to help you find the appropriate ones.

- General
- Formats
- Transaction Services Layer
- Application Program Interfaces and Logical Units
- Nodes and Gateways
- Data Link Controls and Standards

Systems Network Architecture and Related Communications Publications

General Publications

SNA Concepts and Products

Order Number: GC30-3072

SLSS: //// 5743-SNA

Abstract: This publication introduces Systems Network Architecture (SNA) to people who need to know about its basic concepts, its potential benefits, and the products it supports. It is the basic publication about SNA for customer executives, information systems managers, system designers, programmers, and other information systems personnel who are evaluating their approach to information systems and communications.

SNA Technical Overview

Order Number: GC30-3073

SLSS: //// 5743-SNA

Abstract: This publication provides a technical overview of Systems Network Architecture (SNA). IBM hardware and software products implement the SNA functions that allow network users to be independent of the network's characteristics and operation. This publication explains what those functions are and how they provide for communication between network users. This is the basic SNA publication for system programmers and other information system personnel responsible for defining SNA networks. It covers hierarchical (subarea) network configurations and peer-oriented (Advanced Peer-to-Peer Networking) configurations. System programmers should be familiar with the system generation process.

SNA Introductory Information Library

Order Number: GBOF-1742

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Abstract: This bill of forms contains: *Systems Network Architecture Concepts and Products* (GC30-3072) and *Systems Network Architecture Technical Overview* (GC30-3073).

Formats

SNA Formats

Order Number: GA27-3136

SLSS: //// 5743-SNA 5735-SC3

Abstract: This publication describes the SNA formats used between subarea nodes and peripheral nodes and between Type 2.1 nodes using peer-to-peer protocols. It is intended for system programmers and program support personnel.

SNA Reference Manuals Library

Order Number: SBOF-1743

SLSS: Order No. Subscription Only

Abstract: This bill of forms contains the following:

- *Systems Network Architecture Formats* (GA27-3136)
- *Systems Network Architecture Sessions between Logical Units* (GC20-1868)
- *SNA/Distribution Services Reference* (SC30-3098)
- *Systems Network Architecture Format and Protocol Reference Manual: Architectural Logic* (SC30-3112)
- *Systems Network Architecture Format and Protocol Reference Manual: Architecture Logic for LU Type 6.2* (SC30-3269)
- *Systems Network Architecture LU 6.2 Reference: Peer Protocols* (SC31-6808)
- *Systems Network Architecture Format and Protocol Reference Manual: SNA Network Interconnection* (SC30-3339)

Transaction Services Layer

SNA/Management Services Reference

Order Number: SC30-3346

SLSS: Order No. Subscription Only

Abstract: This publication provides a comprehensive description of the functions and services associated with Systems Network Architecture/Management Services. It is intended for product developers, system programmers, and others who need such detailed information in order to develop or adapt a product or program to attach to an SNA network. It is intended to complement individual product publications, but not to describe product implementations of the architecture.

SNA/Management Services: Alert Implementation Guide

Order Number: GC31-6809

SLSS: Order No. Subscription Only

Abstract: This publication introduces the use and construction of generic alerts as defined by SNA/Management Services. It is meant as supplementary material (used in addition to *SNA Formats* and *SNA/Management Services Reference* for those persons implementing generic alerts for a product.

SNA/Distribution Services Reference

Order Number: SC30-3098

SLSS: Order No. Subscription Only

Abstract: This publication defines Systems Network Architecture/Distribution Services (SNA/DS). It is intended to complement individual product publications, but not to describe their implementations of the architecture. SNA/DS provides a general-purpose, connectionless communication service to applications. It allows application programs to communicate without requiring that they be active simultaneously. The service is provided by a network of distribution service units interconnected by LU 6.2 conversations. Each distribution service unit consists of a collection of SNA service transaction programs.

SNA/File Services Reference

Order Number: SC31-6807

SLSS: Order No. Subscription Only

Abstract: This publication defines Systems Network Architecture/File Services (SNA/FS). It is intended to complement individual product publications, but not to describe their implementations of the architecture. SNA/FS, a component of SNA's transaction services layer, defines services for managing files in an enterprise-wide network of distributed information systems. SNA/FS provides facilities for identifying an enterprise's files in a structured, location-independent manner, and fetching these files from, moving them among, and storing them at nodes in an SNA network. The SNA/FS functions are performed in an environment provided by SNA/Distribution Services (SNA/DS). SNA/FS and SNA/DS services can be used by application programs such as the change management category of SNA/Management Services (SNA/MS).

Application Program Interfaces and Logical Units

SNA LU 6.2 Reference: Peer Protocols

Order Number: SC31-6808

SLSS: Order No. Subscription Only

Abstract: This is one of two books that describe, at the implementation level, the Systems Network Architecture (SNA) logical unit (LU) type 6.2 protocols. (The second book [*SNA LU 6.2 Reference: Peer Protocols*, SC31-3269] concerns the SSCP-dependent LU 6.2 protocols.)

This book concerns the SSCP-independent LU 6.2 protocols (that is, peer protocols not requiring mediation by a system services control point during LU-LU session initiation).

SNA Transaction Programmer's Reference Manual for LU Type 6.2

Order Number: GC30-3084

SLSS: //// 5743-SNA

Abstract: This publication presents detailed information on the functions that SNA logical unit type 6.2 provides to system and application programs. It describes the protocol boundary for LU 6.2. The protocol boundary functions are represented by an architectural description of verbs and parameters forming a generic application programmer's interface for LU 6.2.

The publication is written for individuals who design application programs for use in an implementation of SNA LU type 6.2.

This publication does not describe any specific IBM product; it is intended to be used with IBM product publications.

SNA Format and Protocol Reference: Architecture Logic for LU Type 6.2

Order Number: SC30-3269

SLSS: Order No. Subscription Only

Abstract: This is one of two books that describe, at the implementation level, the Systems Network Architecture (SNA) logical unit (LU) type 6.2 protocols. (The second book [*SNA LU 6.2 Reference: Peer Protocols*, SC31-6808] concerns the SSCP-independent LU 6.2 protocols.)

This book concerns the SSCP-dependent LU 6.2 protocols (those protocols involving mediation by a system services control point during LU-LU session initiation).

SNA: Sessions Between Logical Units

Order Number: GC20-1868

SLSS: //// 5743-SNA

Abstract: This book describes Systems Network Architecture (SNA) as it relates to sessions between logical units (LUs). LUs are the ports through which application programs, terminals, and terminal operators communicate across an SNA network. LU-LU sessions support communication between these end users. This book describes the structure of an LU and defines five types of LU-LU sessions (types 1 through 4 and type 6.1). It also describes the data streams that are valid for each type of LU-LU session. This book does not describe any specific equipment or programs that may implement SNA, nor does it describe any implementation subsets or deviations from the architecture.

This book is intended for system programmers and others who need detailed information about SNA in order to develop or adapt a product or program to function within an SNA network.

Nodes and Gateways

SNA Type 2.1 Node Reference

Order Number: SC30-3422

SLSS: Order No. Subscription Only

Abstract: This manual defines the protocols and operation of a Systems Network Architecture (SNA) Type 2.1 Node (T2.1 node). A T2.1 node can attach to another T2.1 node or to a subarea node with Boundary Function (BF).

The following groups of protocols exist:

- T2.1—T2.1 protocols for which one T2.1 node is a low-entry networking (LEN) or advanced peer-to-peer networking (APPN) end node and the other is an APPN network node. These protocols are the primary focus.
- T2.1—T2.1 peer protocols involving two end nodes directly attached to one another are defined.
- T2.1—T2.1 protocols involving two APPN network nodes are dealt with in Chapter 1, *APPN Overview*, and incidentally in later chapters.
- T2.1—BF protocols not involving SSCP mediation of LU-LU session initiations (that is, for independent LUs) are the same as the T2.1—T2.1 protocols except for minor differences in the XID3 formats exchanged; these are also described.

SNA Format and Protocol Reference Manual: Architectural Logic

Order Number: SC30-3112

SLSS: Order No. Subscription Only

Abstract: This is an in-depth reference publication intended for use by implementers of SNA-defined functions. It covers in detail the formats and rules for the architecture related to subarea nodes and type 2.0 peripheral nodes.

SNA Format and Protocol Reference: SNA Network Interconnection

Order Number: SC30-3339

SLSS: Order No. Subscription Only

Abstract: This publication is intended for product developers, system programmers, and others who desire detailed information about SNA Network Interconnection formats and protocols.

Data Link Controls and Standards

Synchronous Data Link Control Concepts

Order Number: GA27-3093

SLSS: 3031 3032 3138 3148 4361 4381 8150 3090 3195 3115 3033 3155 3165 3145 3135 3158 3168 3125 8130 8140 4331 4341 3081 4321 3083 3084 // 09 //

Abstract: This publication describes the procedures that make up Synchronous Data Link Control (SDLC). It includes a brief communications overview, a basic description to familiarize the reader with the terminology and concepts of SDLC, and some representative examples of the uses of SDLC. Appendixes describe the operation of cyclic redundancy checking (CRC) and its use in the SDLC frame check sequence, and explain the relationship between SDLC and data link control standards.

This publication does not provide instructions for implementing SDLC, nor does it describe any specific equipment or programs that may be needed to implement SDLC. For specific information about an IBM SDLC implementation, refer to the appropriate IBM publication for that machine or system.

Token-Ring Network Architecture Reference

Order Number: SC30-3374

SLSS: Order No. Subscription Only

Abstract: This publication describes in detail the architecture of the IBM Token-Ring Network. This reference is for product designers and developers, system programmers, and others who need information about the architecture of the IBM Token-Ring Network, including the physical layer and the data link control layer. This publication does not describe specific equipment that connects to the IBM Token-Ring Network or specific programs that implement this architecture.

The X.25 Interface for Attaching SNA Nodes to Packet-Switched Data Networks General Information Manual

Order Number: GA27-3345

SLSS: //// 5743-SNA

Abstract: This publication describes the elements, including optional user facilities, of CCITT Recommendation X.25 (Geneva, November 1980) selected by IBM to support both SNA-to-SNA and SNA-to-non-SNA connections using packet-switched data network (PSDN) virtual call or permanent virtual circuit services, or both.

The X.25 1984/1988 Interface for Attaching IBM SNA Nodes to Packet-Switched Data Networks—General Information Manual

Order Number: GA27-3761

SLSS: Order No. Subscription Only

Abstract: This publication describes the elements, including optional user facilities, of CCITT Recommendation X.25 (Melbourne, November 1988) selected by IBM to support SNA-to-SNA, SNA-to-non-SNA, and OSI.N connections using packet-switched public data network (PSPDN) virtual call or permanent virtual circuit services, or both. It also describes the protocols, formats, and procedures for the logical link control elements employed by IBM SNA X.25 (1984/88) DTEs on both SNA-to-SNA and SNA-to-non-SNA connections.

The IBM X.25 1984/1988 Interface for Attaching IBM SNA Nodes to Packet-Switched Data Networks—Architecture Reference

Order Number: SC30-3409

SLSS: Order No. Subscription Only

Abstract: This publication describes the protocols, formats, and procedures for the three layers—physical, link, and packet—of the X.25 DTE/DCE interface, as well as the logical link controls employed by SNA X.25 DTEs on both SNA-to-SNA and SNA-to-non-SNA connections.

IBM Implementation of X.21 Interface: General Information

Order Number: GA27-3287

SLSS: Order No. Subscription Only

Abstract: This publication describes the CCITT Recommendation X.21 Interface to public data networks (PDNs) as implemented by IBM. It includes:

- A brief overview of X.21
- Information on X.21 functional, mechanical, and electrical characteristics
- Information on the operation of X.21 using both circuit-switched and leased-circuit networks.

CallPath Services Programmer's Reference

Order Number: GC31-6824

SLSS: Order No. Subscription Only

Abstract: This manual describes the functions CallPath Services provides to programs on computers that need to communicate with a telephone switch. The CallPath Services functions are presented to programs in the form of an application programming interface (API).

This publication is written for those who design programs for use on an implementation of CallPath Services. It provides a general description of CallPath Services functions. The information in this manual applies to all IBM products that implement CallPath Services, not to any specific product.

Integrated Services Digital Networks Data Link Control: Architecture Reference

Order Number: SC31-6826

SLSS: Order No. Subscription Only

Abstract: This publication describes the data link controls for Integrated Services Digital Networks (ISDN). It is intended for system programmers and engineers involved in the design of communication networks involving ISDN services. The content represents IBM's interpretation of CCITT Recommendations Q.921 and Q.922, the ISDN user-network/user-user interface data link layer.

This publication gives an overview of ISDN and explains ISDN terminology; explains the concepts of the architectural model of ISDN DLC (IDLC); gives the detailed format fields and octet and bit-level definitions required for protocol element

execution; describes the detailed procedures executed for IDLC; and includes a rigorous specification, in structured prose, of the protocol and procedural elements.

Integrated Services Digital Networks Circuit-Switching Signaling Control: Architecture Reference

Order Number: SC31-6827

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Abstract: This publication provides a description of the layer-3 call control signaling functions for Integrated Services Digital Networks (ISDN). It is intended for system programmers and engineers involved in the design of communication networks that use ISDN services. The content represents IBM's interpretation of CCITT Recommendations Q.930 and Q.931, the ISDN user-network layer-3 interface.

This publication gives an overview of ISDN and explains ISDN terminology; familiarizes readers with the ISDN environments; gives an overview of the level-3 signaling functions; defines the states that individual calls may have for the user and network sides of the interface; describes message contents and information elements; describes the sequence of messages and procedures associated with control of circuit-switched connections across the user-network interface; describes the timers used on the user and network sides of the interface; and describes additional procedures associated with control of circuit-switched connections.

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Publication No. GC30-3438-01

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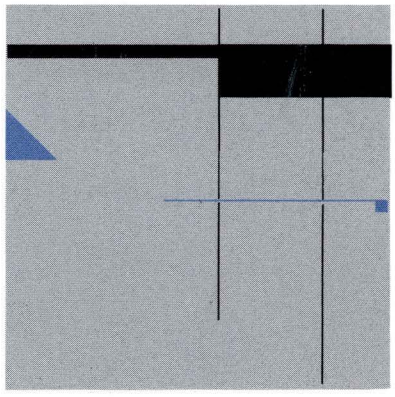

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