



## System Development and Life-Cycle Management (SDLCM) Methodology

<b>Subject</b> External Systems Interface Diagrams	<b>Type</b>	Standard
	<b>Identifier</b>	S-3164
	<b>Effective Date</b>	February 2002
	<b>Revision No.</b>	2

Approval

CISSCO Program Director

### A. PURPOSE

This standard specifies the format and content of an external systems interface diagram.

### B. APPLICABILITY

An external systems interface diagram is prepared and maintained for all Projects that are developed using the SDLCM Methodology. It is developed as an output of Component 3, Design the Solution. It takes into consideration information contained in the Project Definition and Analysis Document and the Logical Design Document. If needed, it may be embedded within the Physical Design Document. For transition of a legacy system, an external systems interface diagram may alternatively be embedded within the As-Built System Documentation as a product of Component 6.

The Technical Project Manager and members of the Development Team responsible for system or software architecture use this standard for documenting the interfaces between the system under development and external agents or systems.

### C. REFERENCE PUBLICATIONS

The following publications contain related information:

- *SDLCM Methodology Handbook*, Component 1
- *SDLCM Methodology Handbook*, Component 3
- *SDLCM Methodology Handbook*, Component 6
- *Systems Development CASE Tool Guidelines*, Systems Development and Integration Branch (SDIB) Office of Information Resources Management (OIRM), September 12, 1995

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- *Standards and Conventions*, SDIB OIRM, August 28, 1995
- SDLCM Methodology Standard S-3051, Project Definition and Analysis Document
- SDLCM Methodology Standard S-3151, Data Models
- SDLCM Methodology Standard S-3163, Data Flow Diagrams
- SDLCM Methodology Standard S-3171, Logical Design Document
- SDLCM Methodology Standard S-3172, Physical Design Document
- SDLCM Methodology Standard S-4151, As-Built System Documentation

#### D. STANDARD

An external systems interface diagram is a high-level data flow diagram that shows an application with its interfaces to existing or new computer systems or agents. It has these object types:

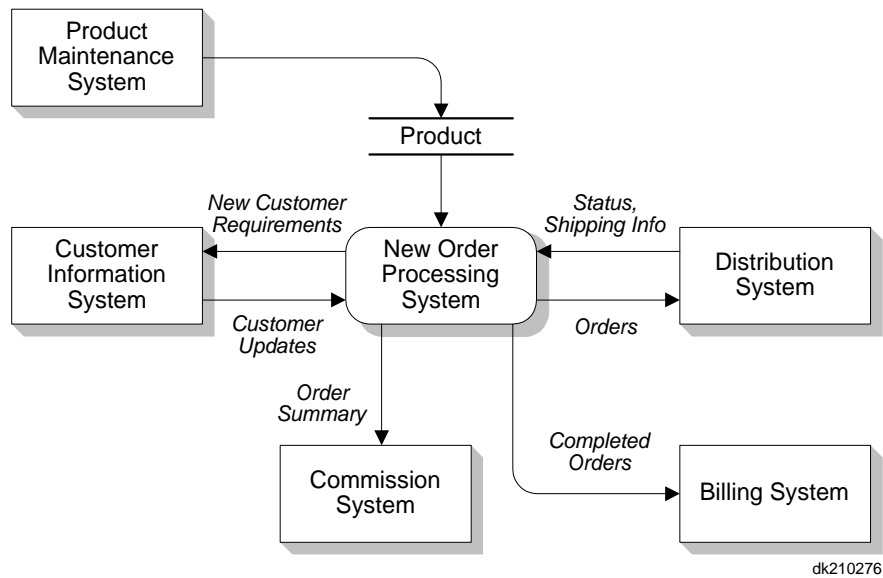
- **Process.** All processes within the scope of the application release are included in one central process, whose name is the same as the application.
- **External agents.** External agents are outside the scope of the application but interface with it in some way. An external agent could be another system within the enterprise, an external regulatory agency, or another company, such as a customer or a supplier.
- **External interfaces.** These are data flows between an external agent and the enterprise. They may be implemented as files, messages, parameters, or a shared database with an external agent.
- **Shared external databases.** This is a special case of an interface with an external agent using a common database that is outside the application.

Interfaces are shown as either:

- **Interfaces** (data flows) between the system and an external agent representing an external system
- **Shared external databases** referenced by both the new system and the external agent

An example of an external systems interface diagram is shown in Figure 3164-1.

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*Note: Product is a shared external database.*

**Figure 3164–1. Sample External Systems Interface Diagram**