



INTERNATIONAL ATOMIC ENERGY AGENCY
UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION
INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS
I.C.T.P., P.O. BOX 586, 34100 TRIESTE, ITALY, CABLE: CENTRATOM TRIESTE



H4.SMR/585-3

**FIRST INTERNATIONAL SCHOOL ON COMPUTER
NETWORK ANALYSIS AND MANAGEMENT**

(3 - 14 December 1990)

Digital/IBM Interconnect

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DIGITAL / IBM Interconnect

*Products and Strategies for
Distributed Data Processing*

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Products and Strategies for Distributed Data Processing



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DIGITAL / IBM Interconnect and Distributed Data Processing

Agenda :

- Strategy*
- Transport Products*
- Access Products*
- Added Value Applications*
- Directions*

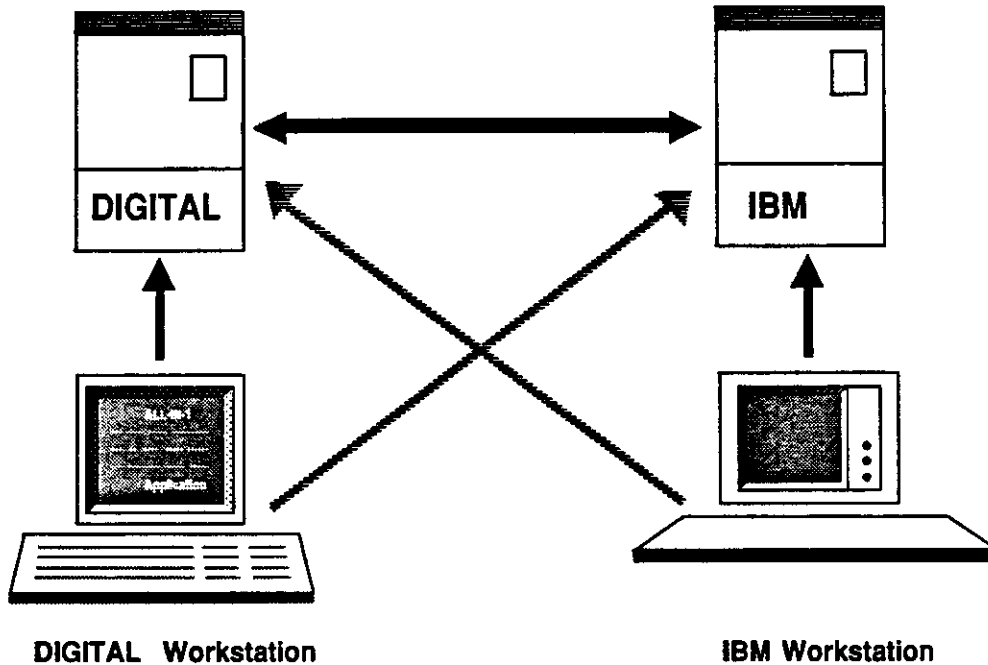


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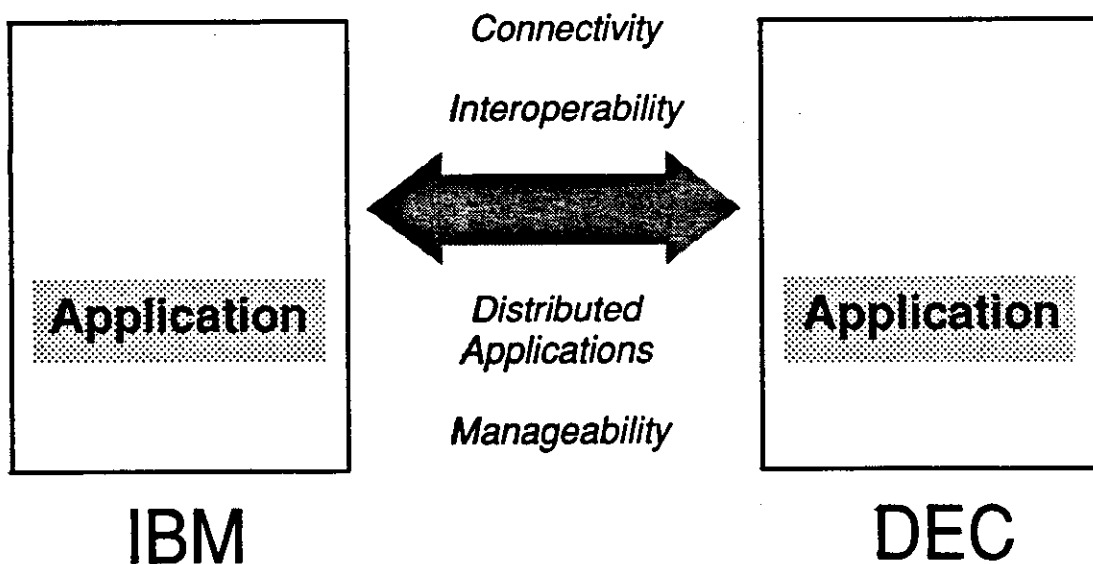
DIGITAL's Strategy

Transparency

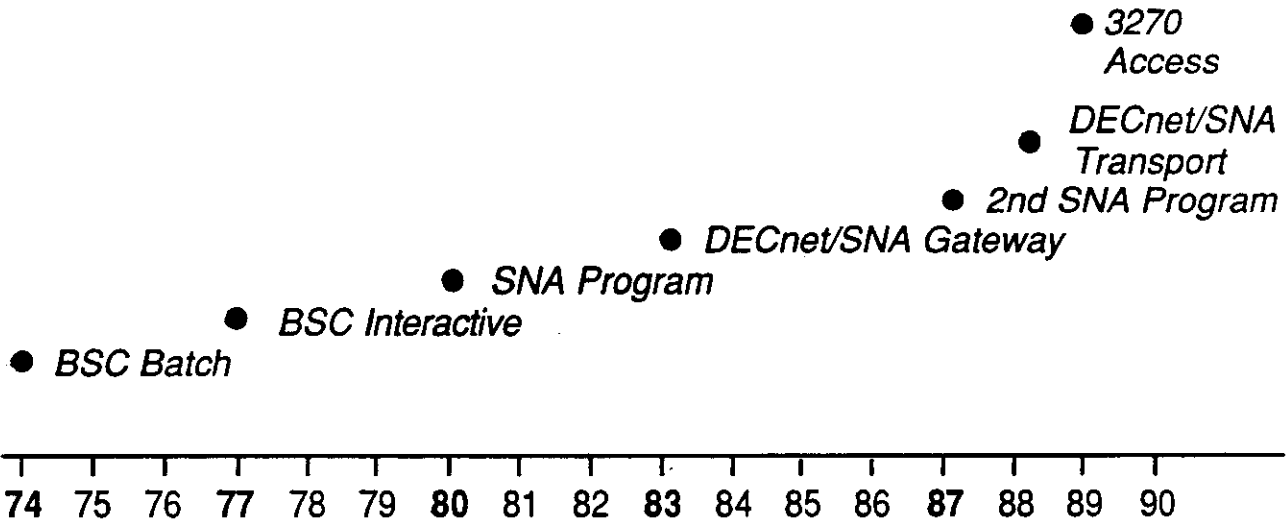


DIGITAL's Strategy

Bi-Directional



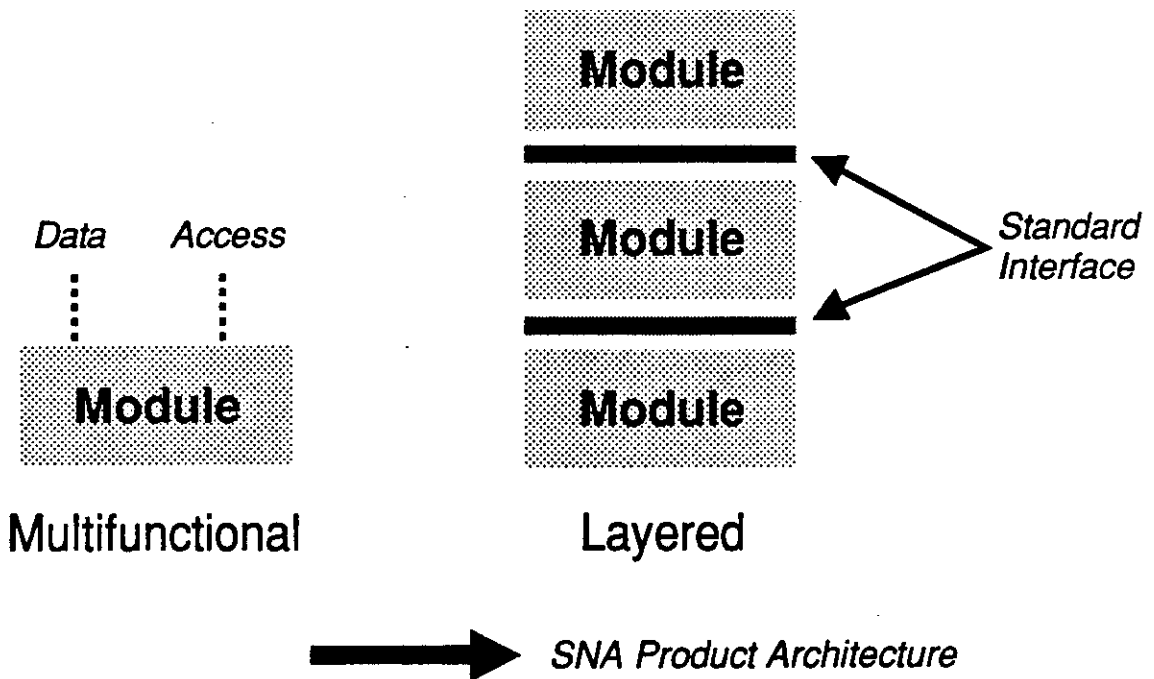
Based on Experience, Continuity of Support



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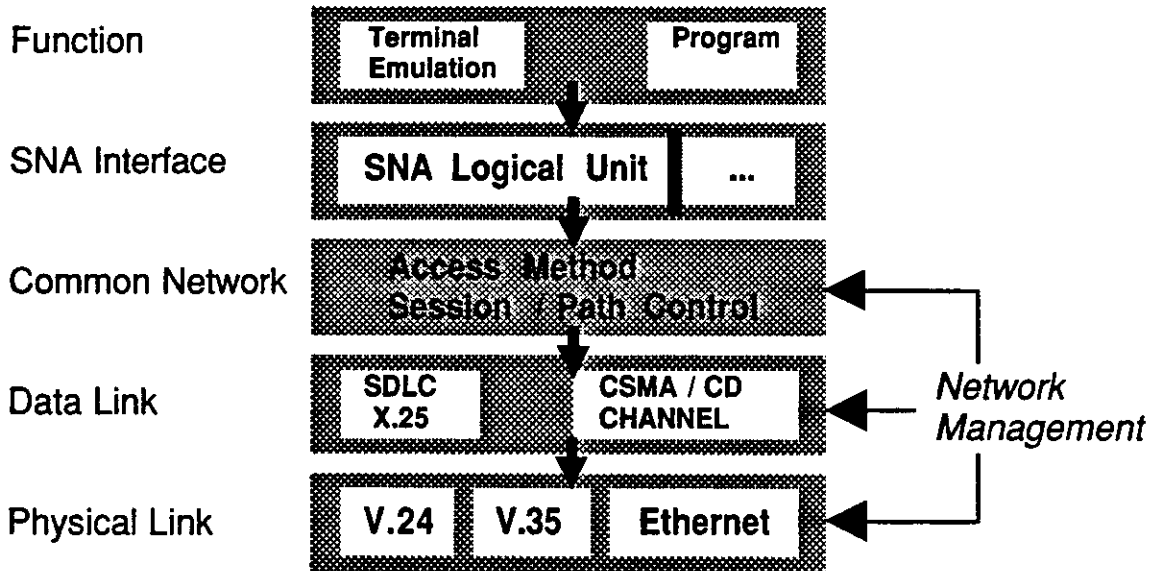
DIGITAL Product Development Goals



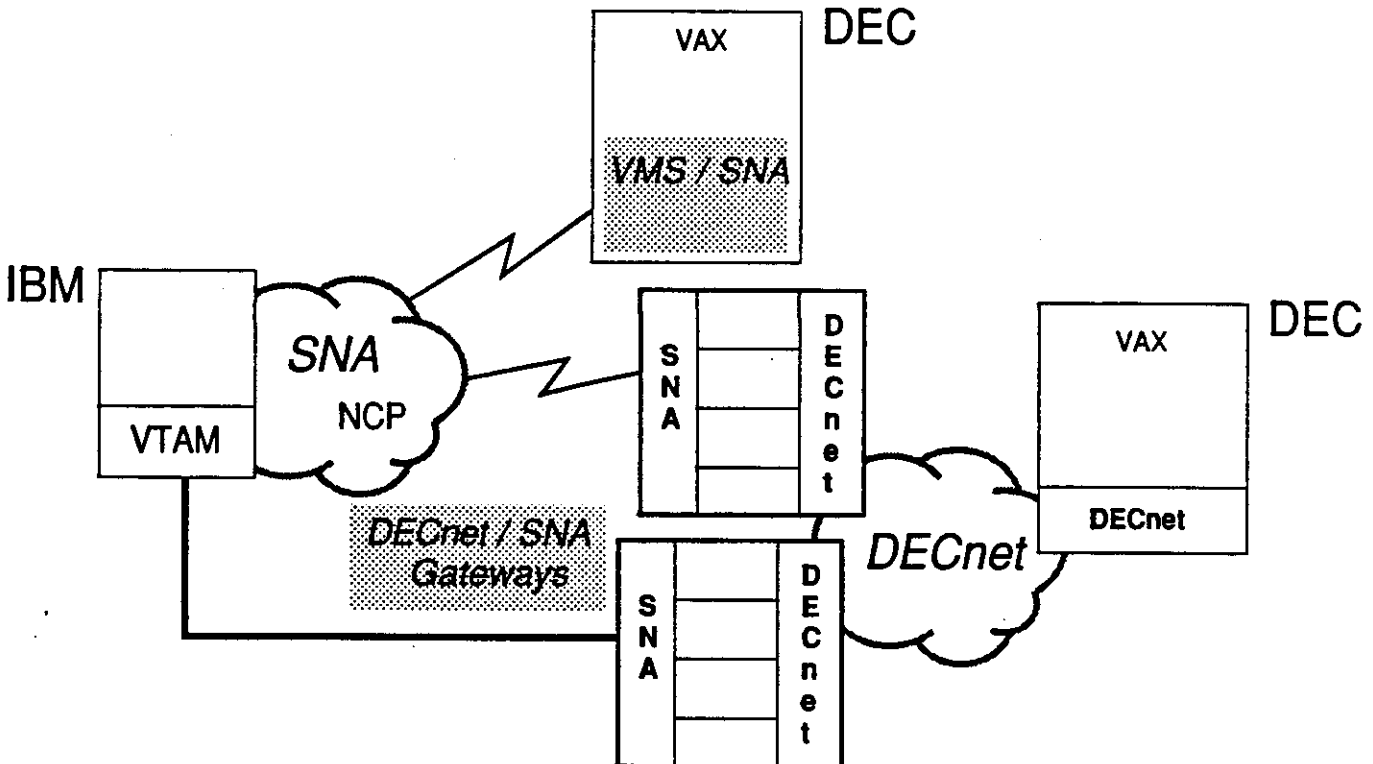
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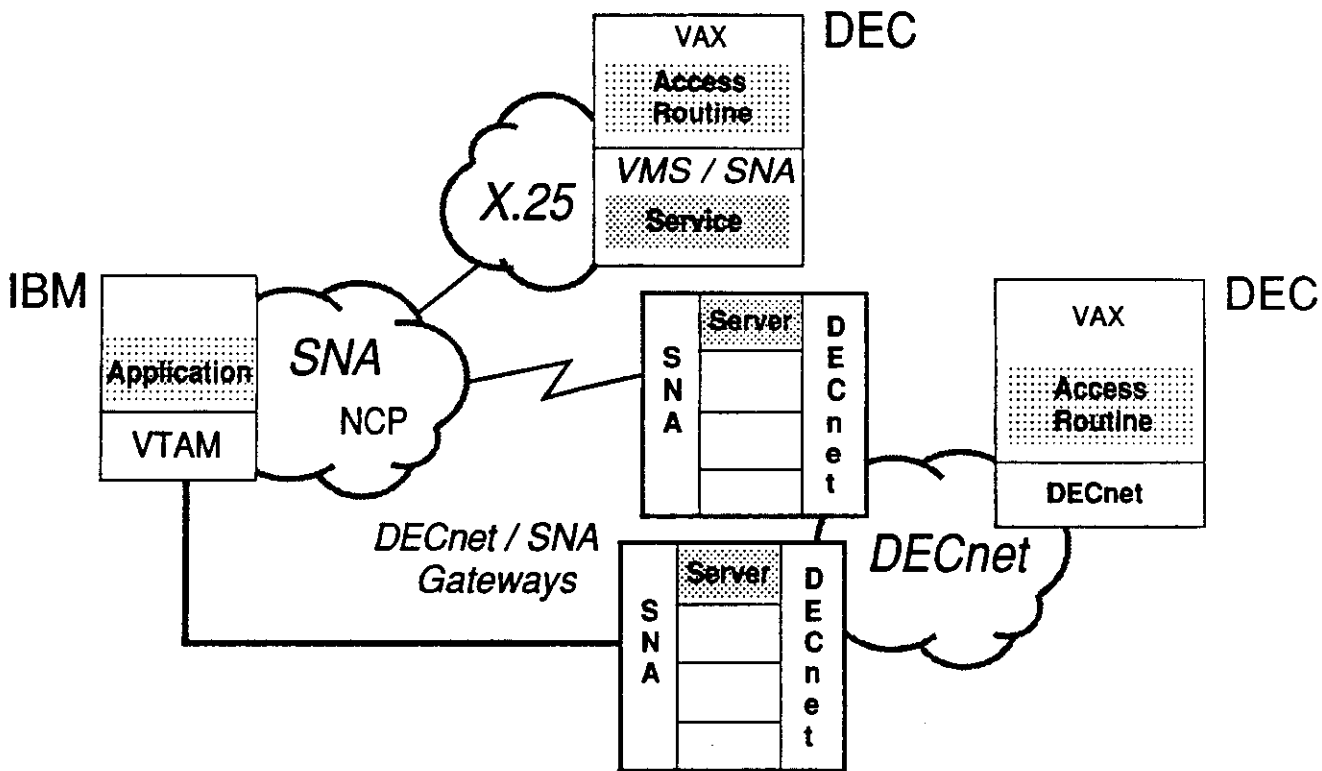
SNA Product Architecture



Product Implementation

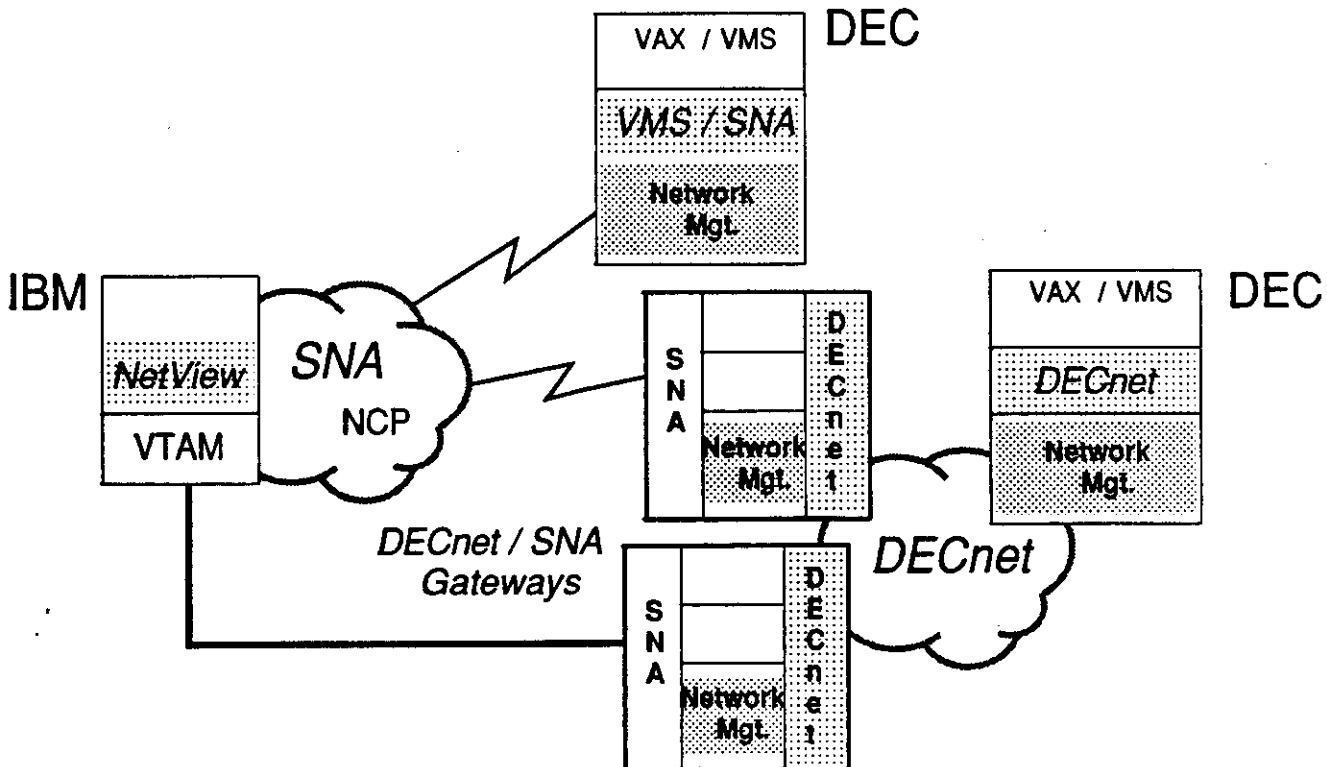


Servers (Services) and Access Routines



DIGITAL / IBM Interconnect - Transport Products

Network Management (DECnet)



DECnet/SNA Access Products

Terminal Emulation:

- . 3270 Terminal Emulations [TE]
- . Distributed Host Command Facility [DHCF]
- . 3270 Terminal Option [CXM04]

Other Emulation:

- . Printer Emulation (3287) [PrE]
- . SNA Remote Job Entry [RJE]
- . DISOSS Document eXchange Facility [DDXF]

DECnet/SNA Access Products

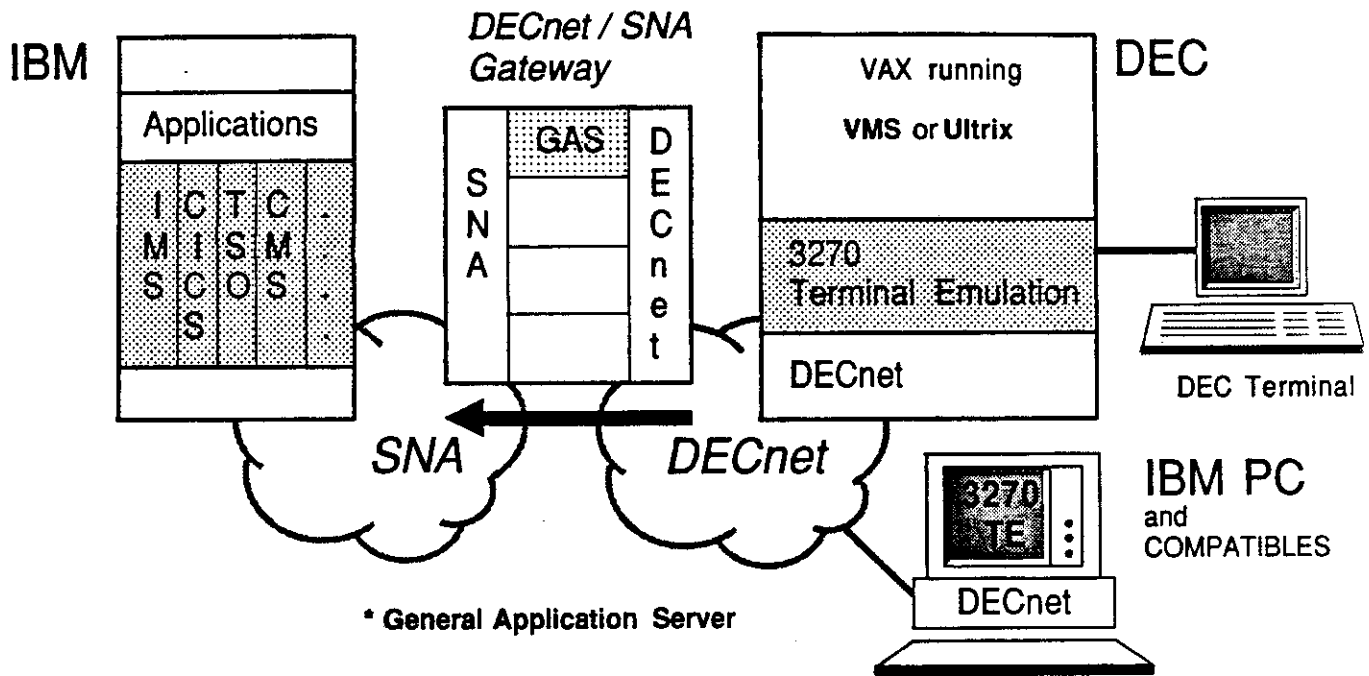
Information Access/Exchange:

- . Data Transfer Facility [DTF]

Application Programming Links:

- . 3270 Datastream [3270DS]
- . Application Programming Interface [API]
- . APPC / LU 6.2

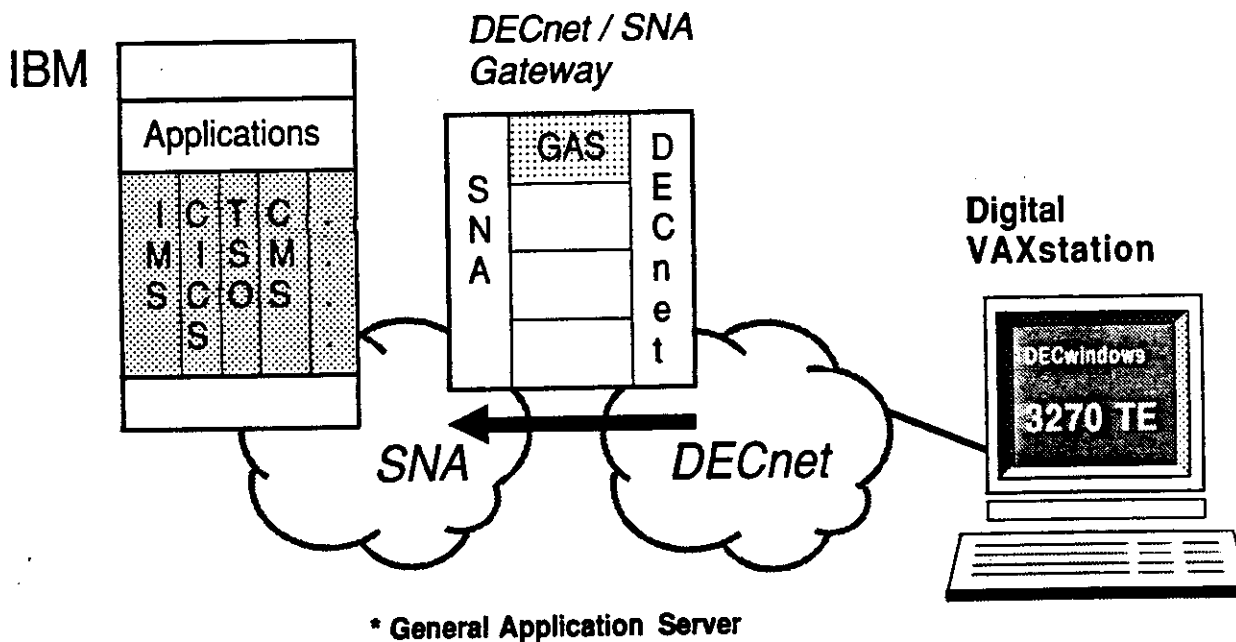
3270 Terminal Emulations



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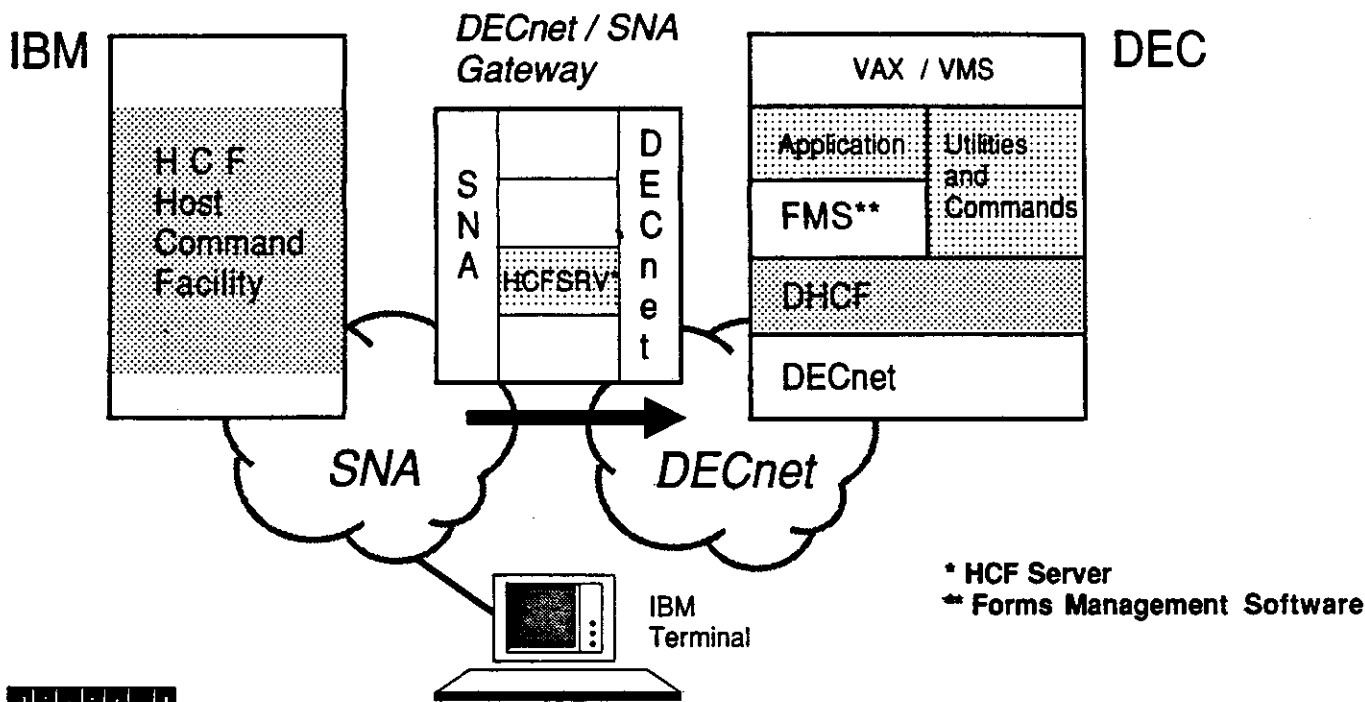
3270 Terminal Emulations



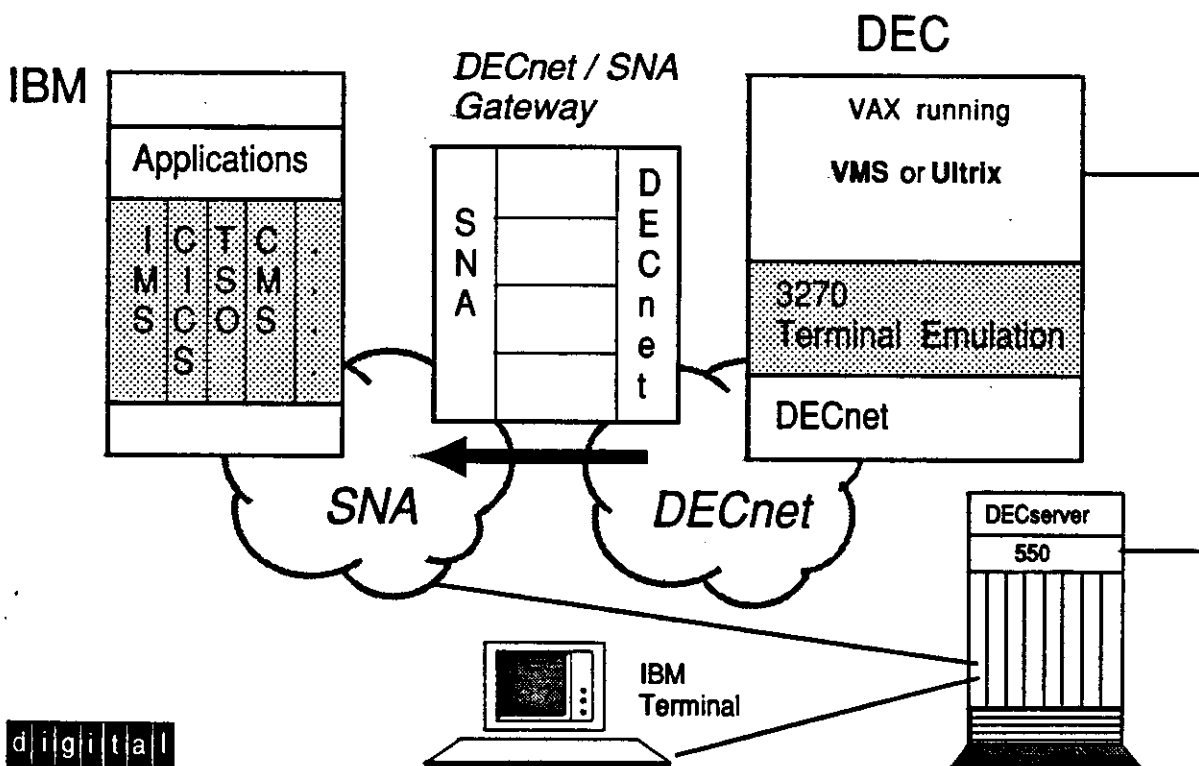
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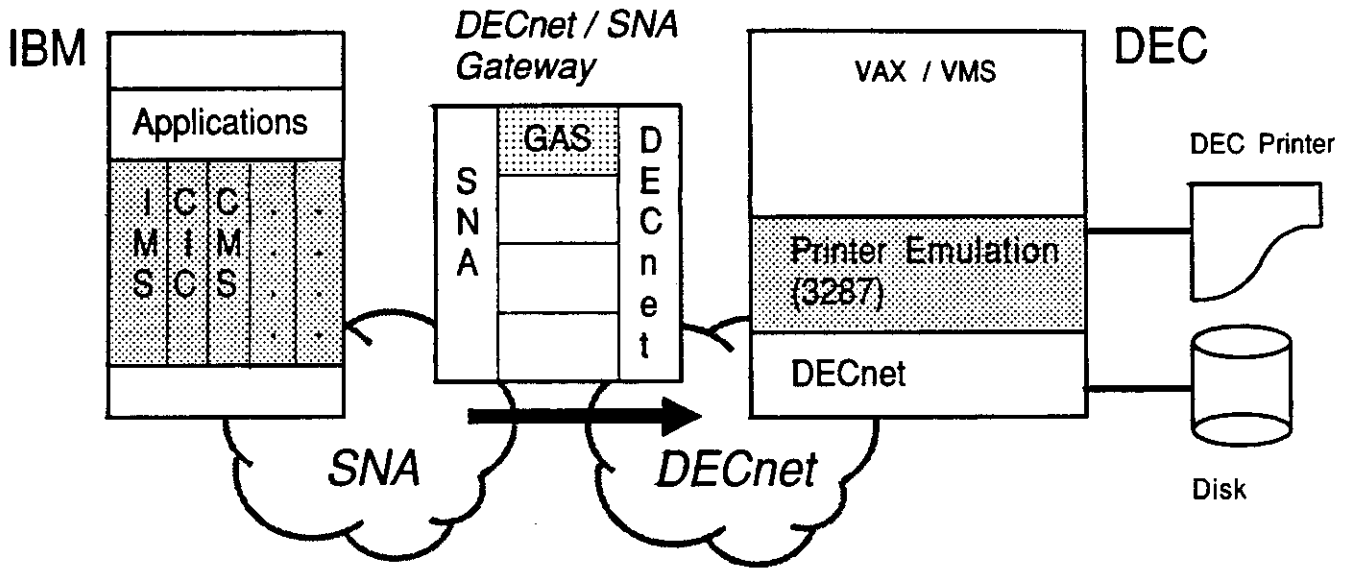
Distributed Host Command Facility (DHCF)



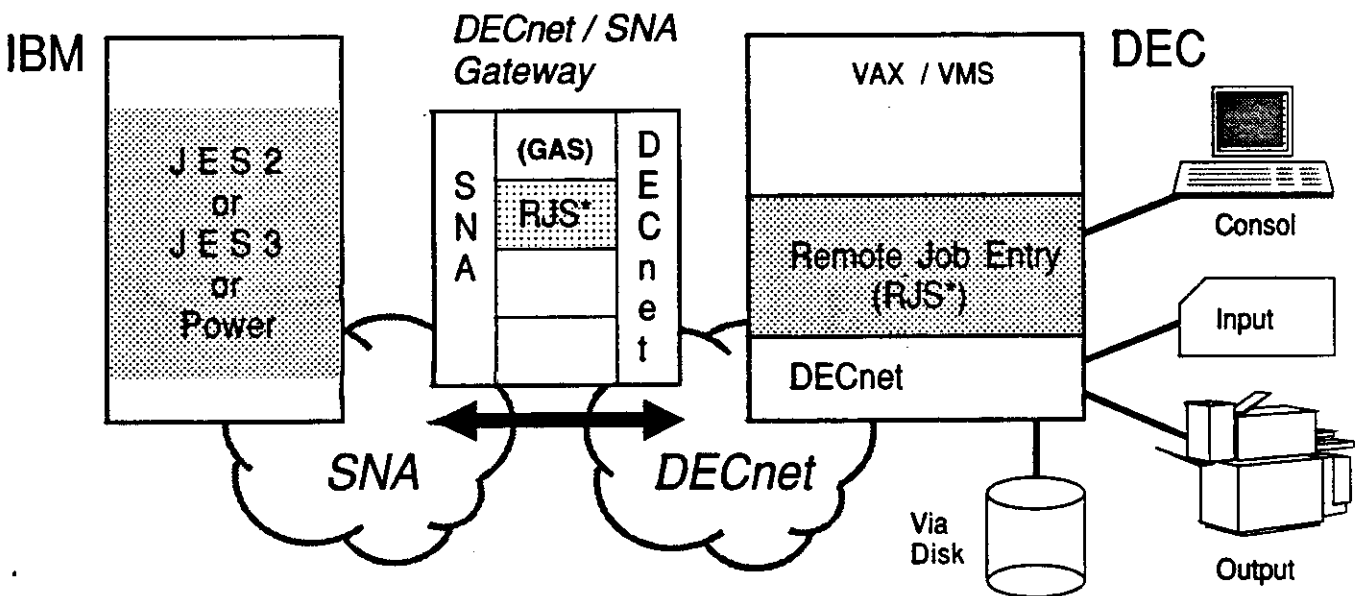
3270 Terminal Option Card



Printer Emulation



Remote Job Entry

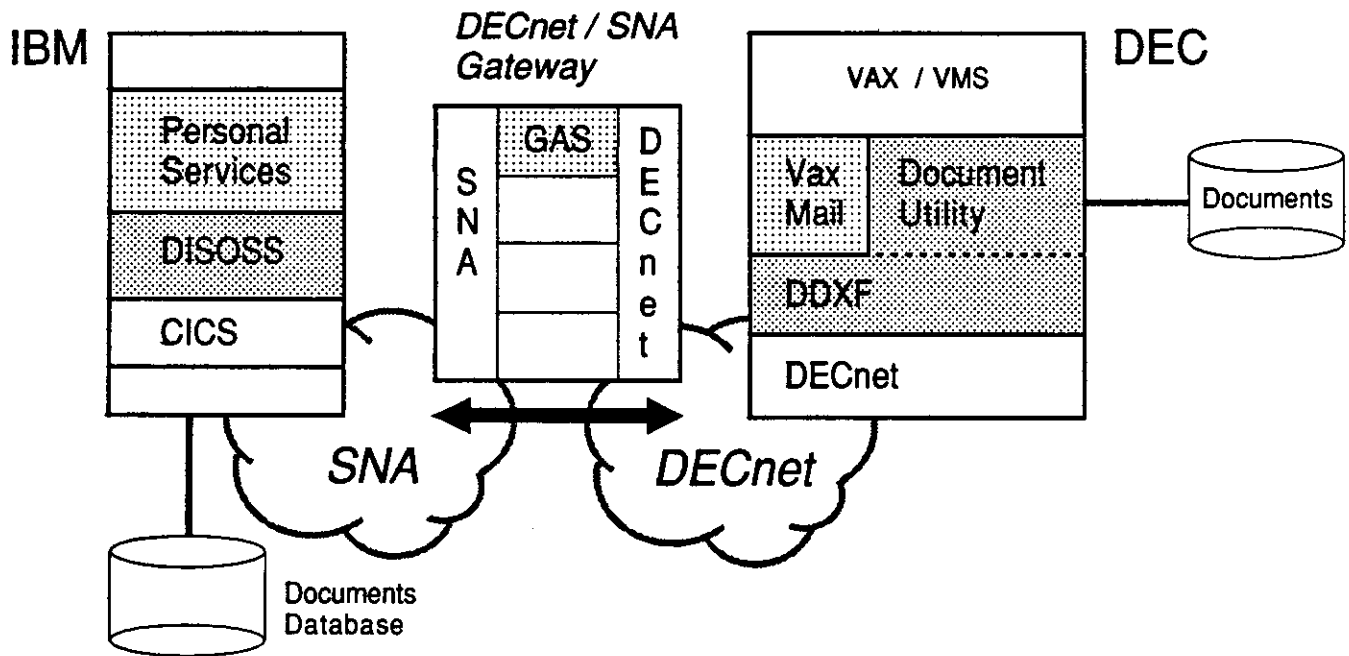


* Remote Job Entry Server

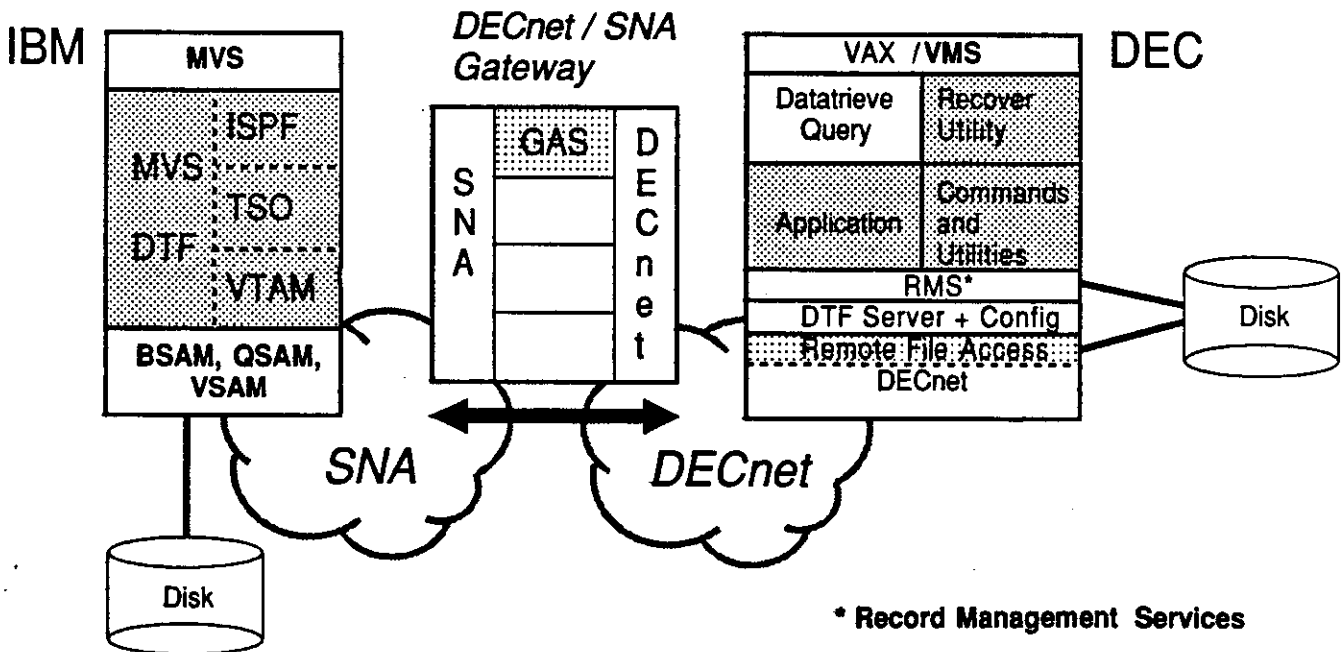


DISOSS Document eXchange Facility

(DDXF)

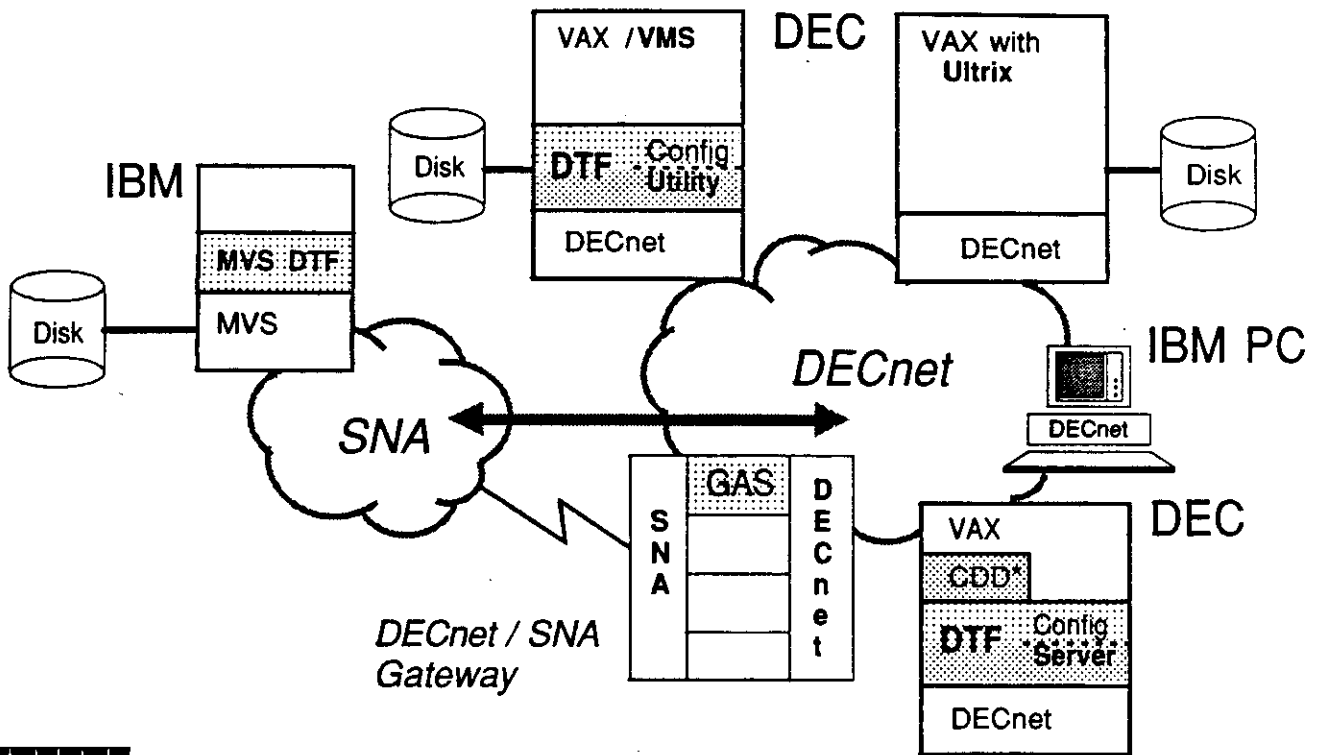


Data Transfer Facility (DTF)



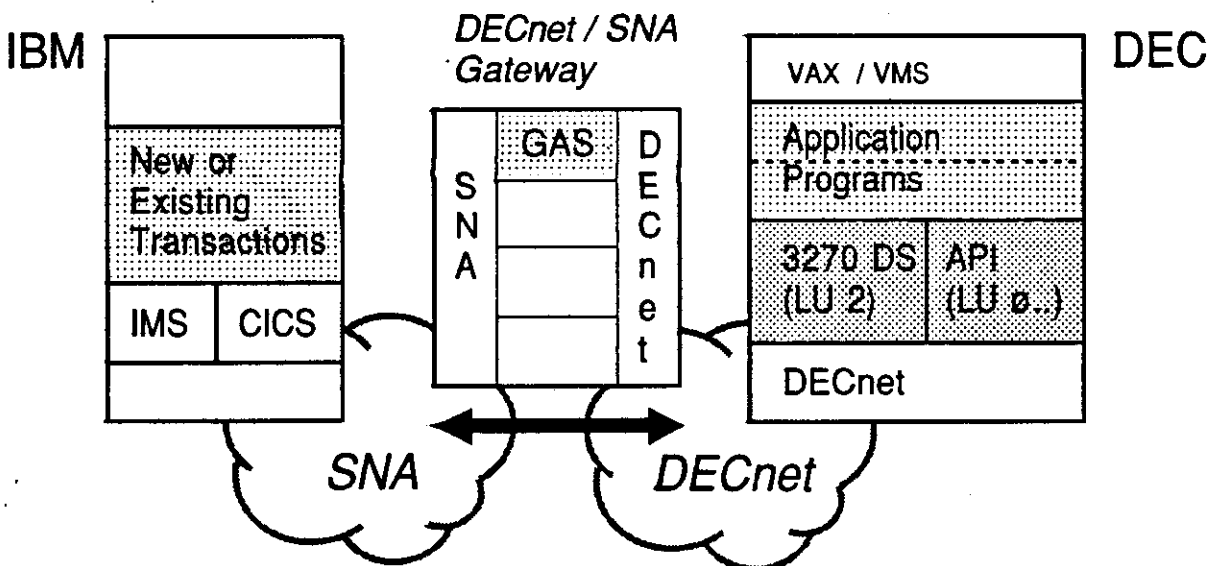
* Record Management Services

Data Transfer Facility (Cont.)



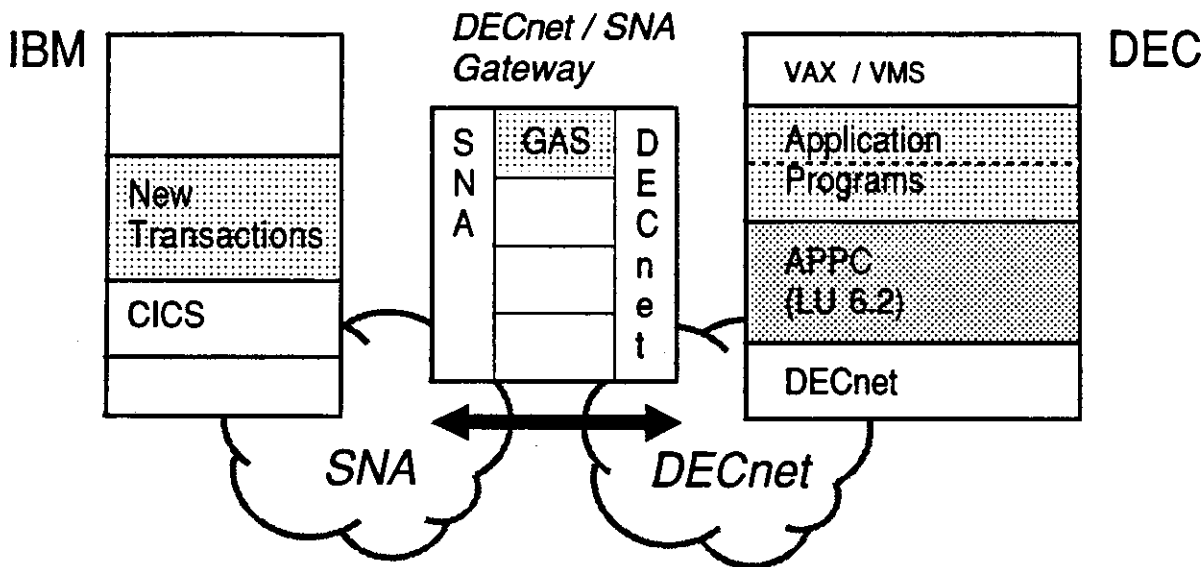
DIGITAL / IBM Interconnect - Access Products : Application Links

3270 Data Stream (3270 DS) PI Application Programming Interface



APPC / LU 6.2 PI

(Advanced Program to Program Communication)



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Digital / IBM Interconnect - Access Products : Dependencies

IBM Operating System Support

	MVS	VM	DOS/VSE
3270 TERMINAL EMULATIONS	yes	yes	yes
PRINTER EMULATION	yes	yes	yes
REMOTE JOB ENTRY	JES 2/3	n/a +	POWER
DHCF	HCF	n/a	HCF
DDXF (EDE with IBM DISOSS)	DISOSS	n/a	#
DATA TRANSFER FACILITY	MVS/DTF	n/a +	n/a
3270 DATA STREAM PROGRAM INTERFACE	yes	yes	yes
APPLICATION PROGRAM INTERFACE	yes	yes	yes
APPC / LU6.2 PROGRAM INTERFACE	CICS/VTAM	#	CICS
MESSAGE ROUTER / S	DISOSS	n/a	#
MESSAGE ROUTER / P	n/a	PROFS	n/a

not certified yet

n/a not applicable

+ NJE available Third-Party

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DECnet/SNA Applications

- using the Access Routines -

- DDXF : . EDE with IBM DISOSS

- 3270DS : . VAX-IBM Data Access (VIDA with IDMS/R)
 . VAX Videotex

- LU 6.2 : . VAX VTX Application Link Utilities
 . VAX Message Router / S Gateway
 . VAX-IBM Data Access (VIDA with DB2)

- API : . VAX Message Router / P Gateway



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EDE with IBM DISOSS

- . Menu - Driven (VAX/FMS based)

- . All-In-1 Integration provided for
 - User Interface
 - Document Cabinet Access

- . Revisable Form WPS-PLUS Document transformation for
 - Document Distribution (Electronic Mail)
 - Library Services (Archiving)

- . EDE Users need to be defined in Host based DISOSS (HUP)

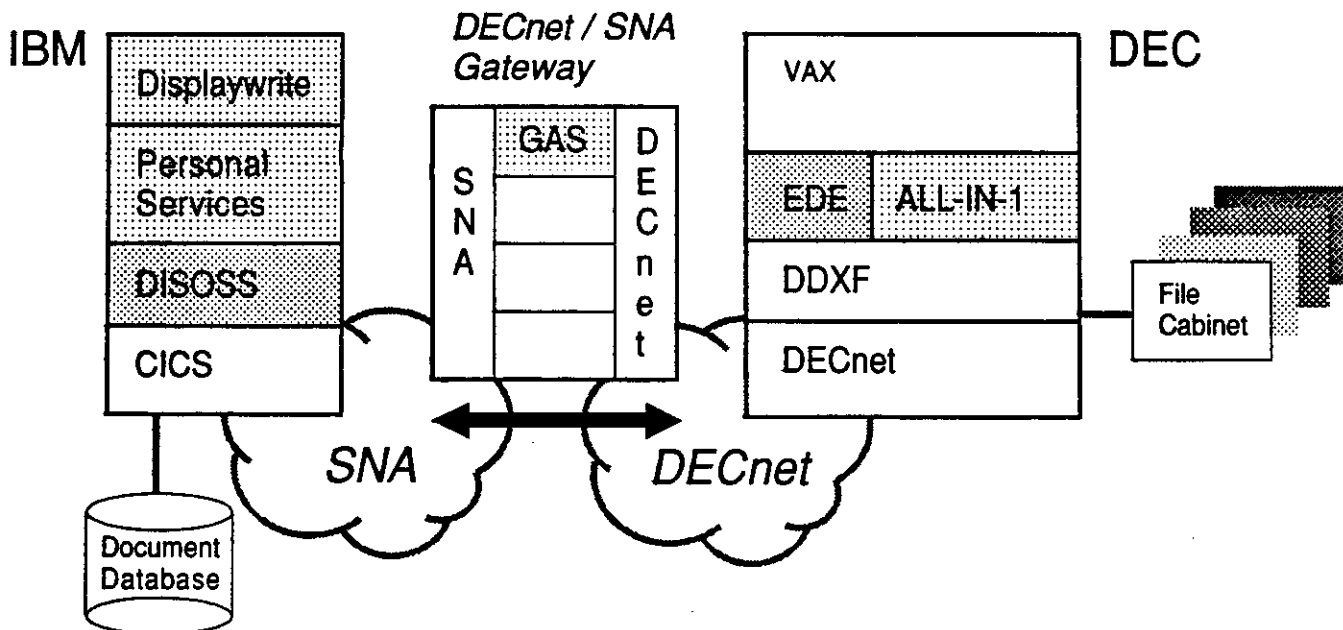


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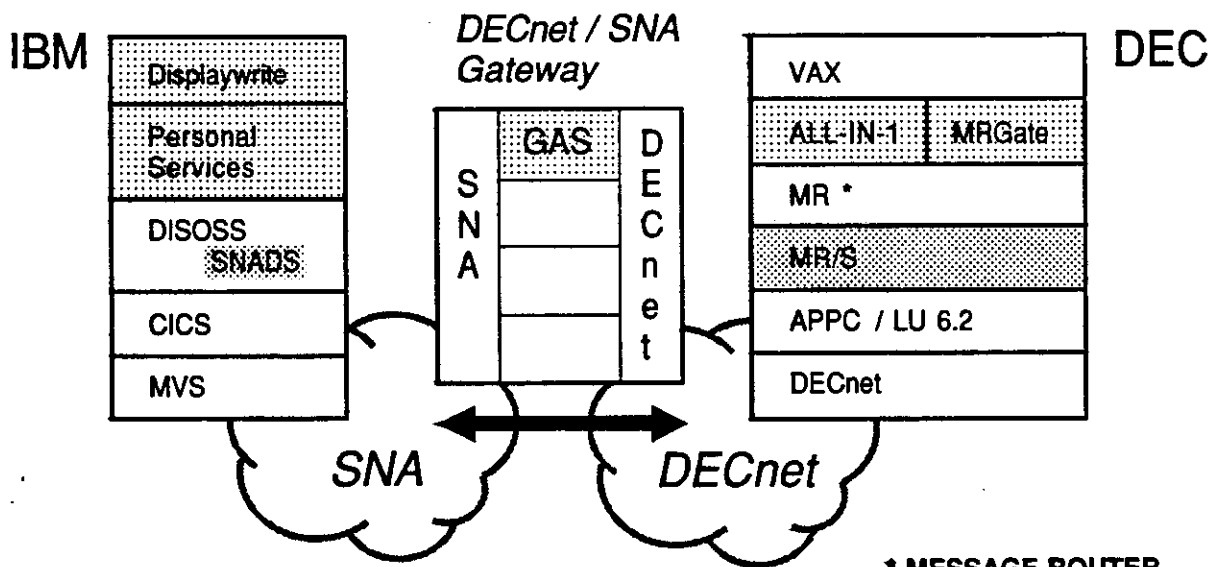
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EDE with IBM DISOSS

(External Document Exchange)

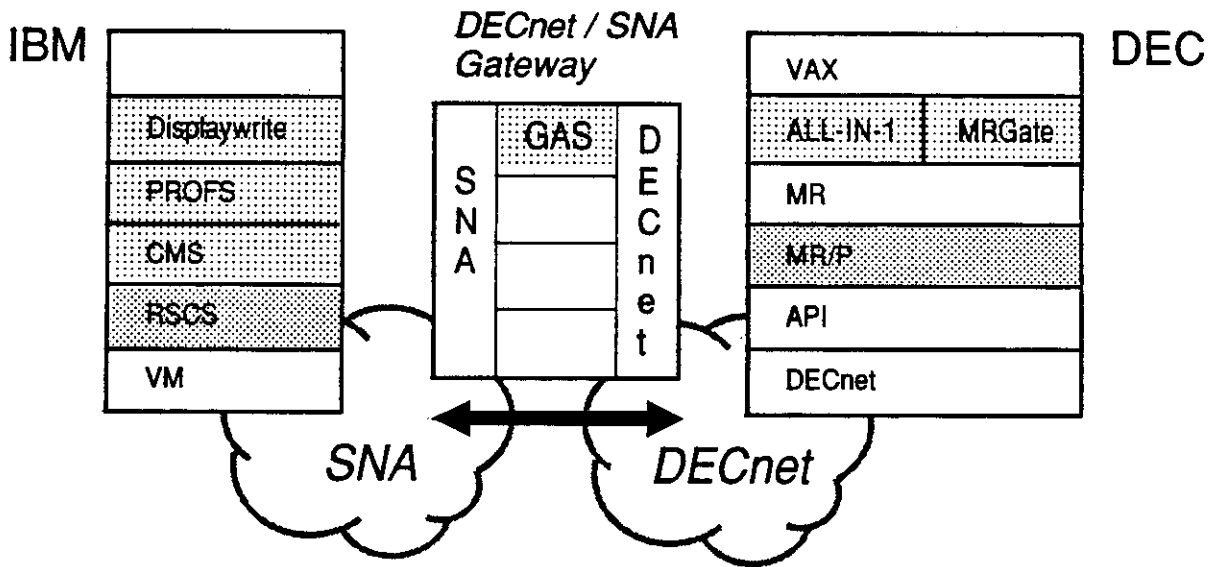


Message Router / S Gateway with IBM SNADS (SNA Distribution Services)



* MESSAGE ROUTER

Message Router / P Gateway with IBM PROFS



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Digital / IBM Interconnect - Added Value Applications

VAX Videotex (VTX)

- . Inhouse Publishing based on VTX Standard CCITT F.300
- . Distributed Application (based on DECnet)
- . Large Base of Terminal Access Protocols supported

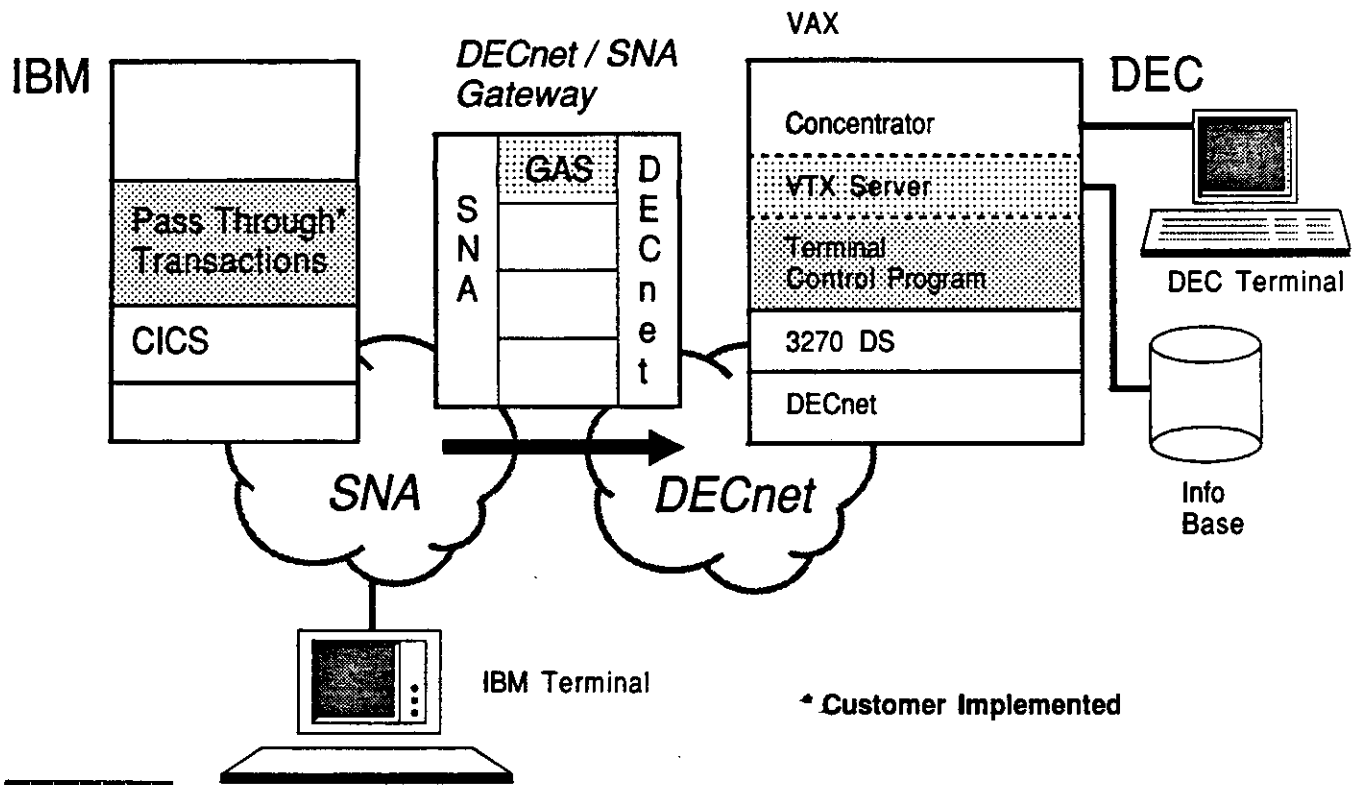
ACSII, CEPT, NAPLPS, PRESTEL, REGIS, VTX20, Minitel (France), VAXstation, X.25/X.29, All-In-1, and IBM 3270 Data Stream



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VAX Videotex (VTX)



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Digital / IBM Interconnect - Added Value Applications

VIDA with IDMS/R Cullinet

- . Data Access to IBM Host based VSAM and IDMS/R Data Bases through Cullinet Software (IDB)
- . Full relational Read Access (Relations [Tables], Records [Rows] and Fields [Columns])
- . Limited Write Access (Upload/Replace Rdb/VMS Tables or Views into the IDMS/R)
- . Interfaces to existing VAX Information Architecture (VIA) (ie VAX Teamdata, VAX SQL, VAX Datatrieve etc.)

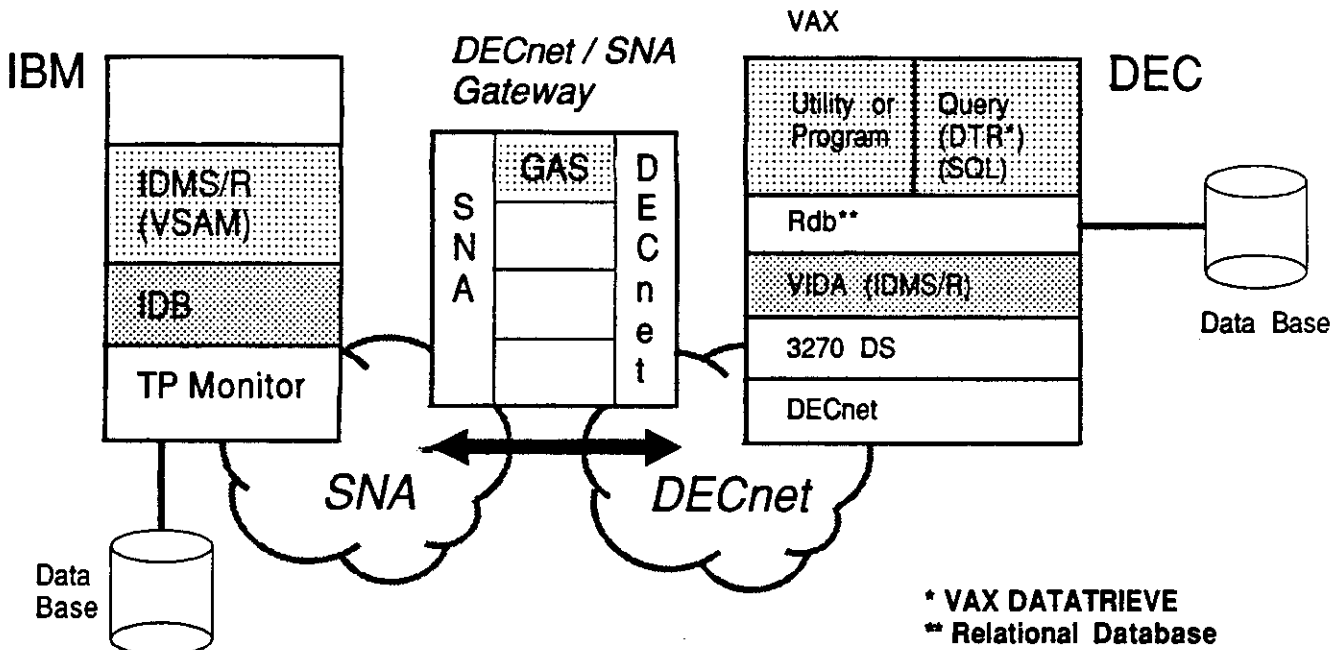
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VIDA with IDMS/R CULLINET

(VAX to IBM Data Access)



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Digital / IBM Interconnect - Added Value Applications

VIDA with DB2

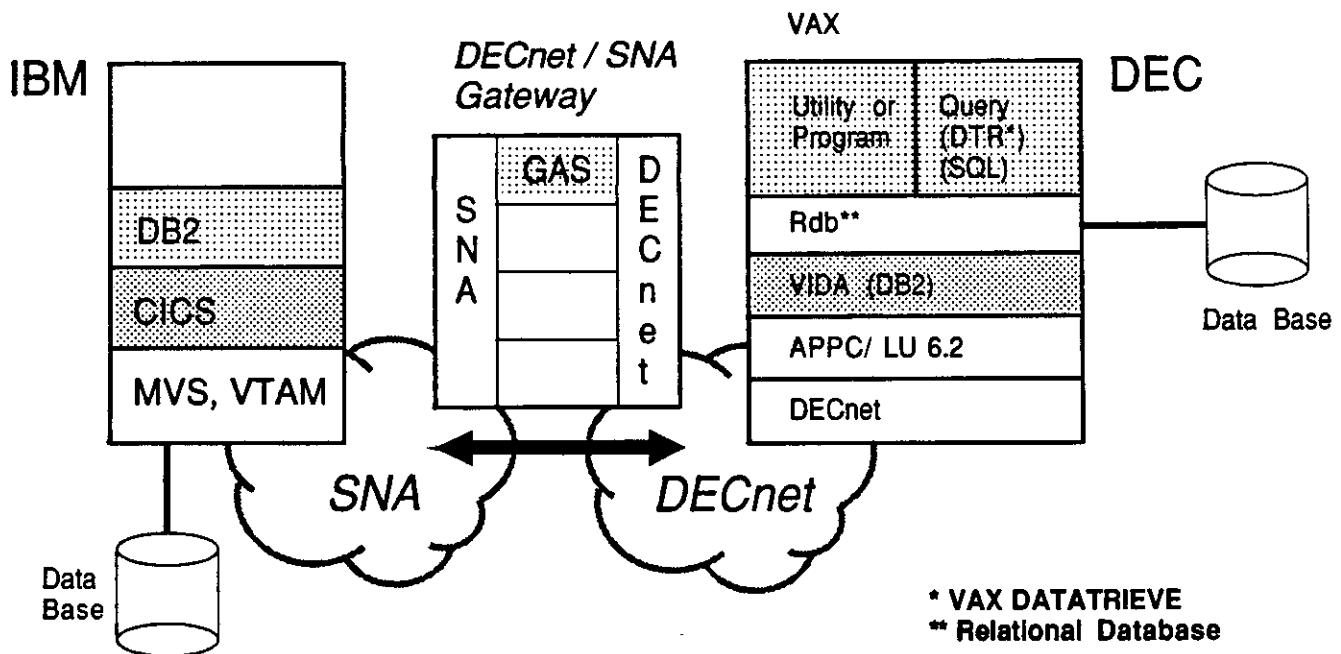
- Data Access to IBM Host based DB2 Data Bases in a CICS environment
- Full relational Read Access (Relations [Tables], Records [Rows] and Fields [Columns])
- Aimed at both ad hoc and bulk extract applications
- Interfaces to all existing VAX Information Architecture (VIA) products via the DSRI interface
- Utilises the APPC/LU 6.2 application programming link

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VIDA with DB2



IBM Interconnect Directions

- . Separate the Transport and Access Products
- . Add new capabilities (access/applications)
- . Build new transports
- . Protect existing investment
- . Form integral part of DNA/OSI integration

Emulation to Integration

