



THE ENTERPRISE MIDDLEWARE SOLUTION

BEA Connect

SNA

Release Notes

BEA Connect SNA 2.0, Volume 2
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BEA Connect SNA Release Notes

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BEA Connect SNA Release Notes

About BEA Connect SNA 2.0, Volume 2

BEA Connect SNA 2.0, Volume 2 adds to the previously released Domains-based SNA gateway by incorporating IBM CICS Inter-System Communications (ISC) functions with transactional two-phase commit support via the SNA LU6.2 protocol.

Sync-level 2 is now available to CICS systems and can be used for ISC/DPL and ISC/DTP as well as CPI-C applications. Sync-level 1 is only for ISC/DPL Sync-on-return. BEA Connect SNA 2.0, Volume 2 delivers sync-level 2 protocol support as a keyed license upgrade feature for ISC DPL communications.

Sync-level 2 applications can communicate with CICS using the ISC feature of CICS. Host applications can be written using the CICS or CPI-C programming interfaces. TUXEDO clients and servers will use the ATMI programming interface. The Connect SNA Gateway handles the mapping between the client and server applications. The Connect SNA Gateway also coordinates the CICS and TUXEDO commit protocols, providing full two-phased commit and recovery operations.

Capabilities/Functions

BEA Connect SNA 2.0, Volume 2 is a Domains-based product providing up to sync-level 2 connectivity between a UNIX-based TUXEDO application using ATMI or CICS application programming interfaces and the following:

- ◆ Host CICS applications using ISC, CPI-C, or EXEC CICS verbs
- ◆ Host LU6.2 applications using CPI-C verbs

Product Packaging

The base license enables sync-level 0 and sync-level 1 functions. The add-on license enables sync-level 2 functions. With TUXEDO, this supports a subset of ISC and APPC functions using the ATMI API.

With sync-level 0 and 1, BEA Connect SNA 2.0, Volume 2 supports bidirectional ATMI with the following:

- ◆ Host CPI-C and LU6.2 applications at sync-level 0
- ◆ CICS DTP applications at sync-level 0
- ◆ CICS DPL with SYNCONRETURN

With sync-level 2, BEA Connect SNA supports bidirectional ATMI with the following:

- ◆ CICS DTP observing ATMI commit protocol
- ◆ CICS DPL
- ◆ CICS-based CPI-C and LU6.2 applications

Supported Platforms

BEA Connect SNA 2.0, Volume 2 is supported on the following UNIX platforms with associated stacks:

- ◆ AIX 4.2.1 with or IBM Comm Server 5.0
- ◆ HP-UX 10.20 with HP SNAplus2 5.1 & v6.0
- ◆ HP-UX 11.00 with HP SNAplus2 v6.0
- ◆ Solaris 2.5.1 with Brixton 4.0.1.8, SUN Link 9.1, or SNAP-IX 6.0
- ◆ Solaris 2.6 with Brixton 4.0.1.8 or SUN Link 9.1

Summary of Changes in Volume 2

The following paragraphs summarize Volume 2 changes and enhancements to the Connect SNA 2.0 software and the *BEA Connect SNA User Guide*.

Stack Types Added

Two stack types have been added to support HP SNAplus 6.x and SNAP-IX 6.0 stacks. The additions occur in the DMCONFIG file `STACKTYPE` definition. The values `hp60` and `spx60` have been added to the definition as follows:

```
STACKTYPE={SUN91 | HP51 | HP60 | IBM51 | SPX60}
```

This option is used to indicate which vendor SNA stack is being used. It is also used to determine the names of specific Connect SNA system libraries. Because of this, it is essential that the value of this option be coded correctly. These values are mapped to the equivalent Connect SNA system library.

Cross-Platform Definitions Changed

The presentation of cross-platform definitions has been altered to reflect the additional stack types. The stack examples in the *BEA Connect SNA User Guide* Table 4-4, “Summary of Cross-Platform Definitions” (duplicated in the following table) have been separated into two categories, one for Brixton-based stack configurations and another for SNAP-IX based stack configurations. The stacks belonging to these categories are listed in footnotes to the following table.

Table 1 Summary of Cross-Platform Definitions

Item	Name	Originates In	Needed In
1.	SNA Network ID (e.g., SNANET1) and VTAM Host ID (e.g., VTAMHOST)	VTAM configuration	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN SNAP-IX based Stack Configuration: ² Example: fgcp_name=SNANET1.SPARC1 adj_cp_name=SNANET1.VTAMHOST fgplu_name=SNANET1.CICSSYN
2.	Mode Name (e.g.,SNA62)	VTAM-MODEENT definition	CICS Sessions Definition: Example: MODENAME(SNA62) Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN SNAP-IX based Stack Configuration: ² Example: fgcp_name=SNANET1.SPARC1 adj_cp_name=SNANET1.VTAMHOST fgplu_name=SNANET1.CICSSYN TUXEDO Domain Configuration: Example: *DM_SNA_LINKS MODENAME="SNA62"

Table 1 Summary of Cross-Platform Definitions

Item	Name	Originates In	Needed In
3.	Control Point Name CPNAME (e.g.,SPARC1)	VTAM-PU definition	<p>Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN</p> <p>SNAP-IX based Stack Configuration: ² Example: fgcp_name=SNANET1.SPARC1 adj_cp_name=SNANET1VTAMHOST fgplu_name=SNANET1.CICSSYN</p>
4.	Local LU Name (e.g.,L0F0024A)	VTAM-LU definition	<p>CICS CONNECTION definition: Example: NETNAME(L0F0024A)</p> <p>Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN</p> <p>SNAP-IX based Stack Configuration: ² Example: fgcp_name=SNANET1.SPARC1 adj_cp_name=SNANET1VTAMHOST fgplu_name=SNANET1.CICSSYN</p> <p>TUXEDO Domain Configuration: Example: *DM_SNA_STACKS LOCALLU="L0F0024A"</p>

Table 1 Summary of Cross-Platform Definitions

Item	Name	Originates In	Needed In
5.	CICS LU Name (e.g., CICSSYN)	VTAM-LU definition	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN SNAP-IX based Stack Configuration: ² Example: fgcp_name=SNANET1.SPARC1 adj_cp_name=SNANET1.VTAMHOST fgplu_name=SNANET1.CICSSYN TUXEDO Domain Configuration: Example: *DM_SNA_LINKS RLUNAME="CICSSYN"
6.	Terminal Identifier (e.g., 05DF0024)	VTAM (IDNUM+IDBLK)	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN SNAP-IX based Stack Configuration: ² Example: fgcp_name=SNANET1.SPARC1 adj_cp_name=SNANET1.VTAMHOST fgplu_name=SNANET1.CICSSYN
7.	Local Network Device (e.g., /dev/tr)	UNIX Configuration	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN

Table 1 Summary of Cross-Platform Definitions

Item	Name	Originates In	Needed In
8.	Local MAC Address (token ring only)	Token ring address of Host	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN
9.	Remote MAC Address (token ring only)	Token ring address of local machine	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN SNAP-IX based Stack Configuration: ² Example: fgcp_name=SNANET1.SPARC1 adj_cp_name=SNANET1.VTAMHOST fgplu_name=SNANET1.CICSSYN
10.	LAN Speed (e.g.,4MBs)	Speed of token ring network	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN
11.	SDLC parameters (line protocol)	VTAM-line definition	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN

Table 1 Summary of Cross-Platform Definitions

Item	Name	Originates In	Needed In
12.	Partner Definition (e.g.,TUXPART1)	CICS/ESA	Mainframe Client Application: (e.g., COBOL with embedded CPI-C to route CICS to appropriate LU for BEA Connect SNA) COBOL Example: MOVE 'TUXPART1' TO SYM-DEST-NAME CALL 'CMINIT' USING CONVERSATION-ID SYM-DEST-NAME, CM_RETCODE END-CALL
13.	Set LU definition so maximum sync-level allowed corresponds to DMCONFIG entry: *DM_SNA_LINKS MAXSYNCLVL	Stacks	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN SNAP-IX based Stack Configuration: ² Example: fgcp_name=SNANET1.SPARC1 adj_cp_name=SNANET1.VTAMHOST fgplu_name=SNANET1.CICSSYN
14.	Map all incoming conversations to BEA Connect SNA gateway (make sure TPs have all privileges available, e.g., CNOS, syncpoint if licensed, service conversations, etc.).	Stacks	Brixton-based Stack Configuration: ¹ Example: CP NQ_CP_NAME=SNANET1.SPARC1 DLC RMTNQ_CP_NAME=SNANET1.VTAMHOST LU NQ_LU_NAME=SNANET1.L0P0024A PTNR_LU NQ_LU_NAME=SNANET1.CICSSYN SNAP-IX based Stack Configuration: ² Example: fgcp_name=SNANET1.SPARC1 adj_cp_name=SNANET1.VTAMHOST fgplu_name=SNANET1.CICSSYN
15.	CICS Transaction IDs (e.g.,TOUP)	CICS/ESA	TUXEDO Domain Configuration: Example: *DM_REMOTE_SERVICES

1. Brixton-based stack = SunLink

2. SNAP-IX based stack = SNAPplus2, IBM CS/AIX, or SNAP-IX for Solaris

Using the License Key

You must enter the license key for BEA Connect SNA software to enable the connection capabilities for your system. As a prerequisite, BEA TUXEDO must be installed and operational with its license key file available. To enable the BEA Connect SNA license key, you must append the license key file provided with the product software to the TUXEDO license key file.

Caution: Do not alter any information in sections of the license key files. Doing so may disable your product software.

Perform the following steps to use the license key.

1. With the text editor of your choice, open the TUXEDO license key file in `$TUXEDIR/udataobj/lic.txt`. An example of this file follows:

```
[TUXEDO 6.4]
LICENSEE=BEA Professional Services
SERIAL=1000000104
ORDERID=0
USERS=20
TYPE=SDK
WEBGUI=separate
WSCOMPRESSION=separate
EXPIRATION=1998-12-31
SIGNATURE=MC0CFDu2oiQyE3lLAsF07IS3AfN42i75AhUA3v6TdZgRotoQPH5h8fnnCRARRES=
```

2. Append the BEA Connect SNA license key file `connectSNA20.pl` to the TUXEDO license key file. An example of the BEA Connect SNA license key file enabling sync-level 0 and sync-level 1 capabilities follows:

```
[CONNECT_SNA 2.0, Volume 2]
LICENSEE=*** BEA SYSTEMS ***
SERIAL=8882327878
EXPIRATION=1998-09-20
SIGNATURE=MCwCFBEXZHrSei+vTJBHwslqC2lN19vAhQaHx8+/HIkXqrOZbGz6TIyRvQLRw==
```

3. Save the file and exit the text editor. Your license key is now in effect.

Modifying DMTYPE File

After installing BEA Connect SNA software and using the license key to enable your system, you must edit the DMTYPE file to identify the SNAX domain type for compiling the DMCONFIG.

Perform the following steps.

1. With the text editor of your choice, open the DMTYPE file. It is located in the installed directory `$TUXDIR/dataobj`.
2. Enter the following line of text:

```
SNAX:-lgw -lgws:-lgp -lgpnet -lcsxcrm::
```
3. Save the file and exit the text editor.

Upgrading to BEA Connect SNA 2.0, Volume 2 from Connect SNA 1.1 or 1.2

If you are upgrading from BEA Connect SNA 1.1 or 1.2, perform the “General Check List” steps. Explanations of each step follow the check list. Use a text editor to modify your original DMCONFIG file. Refer to “Editing the DMCONFIG File” in the *BEA Connect SNA User Guide*.

Note: Make certain you have already installed TUXEDO 6.4, which requires you to set up a new directory for the installation. However, the steps for upgrading to BEA Connect SNA 2.0, Volume 2 involve files already existing in your application subdirectory (typically named \$APPDIR).

General Check List

1. After installing Connect SNA 2.0, Volume 2, modify your existing DMTYPE file, located in the \$TUXDIR/dataobj directory, to contain the following line:

```
SNAX:-lgw -lgws:-lgp -lgpnet -lcsxcrm::
```

2. In the DM_LOCAL_DOMAINS and DM_REMOTE_DOMAINS sections of the DMCONFIG file, change the value of the TYPE option from SNADOM to SNAX.
3. In the DM_REMOTE_SERVICES section of the DMCONFIG file, add the FUNCTION={APPC|DPL} option.
4. Replace the DM_SNADOM section of your existing DMCONFIG file with the following sections:
 - ◆ DM_SNA_LINKS
 - ◆ DM_SNASTACKS
 - ◆ DM_SNACRM
5. Populate these sections (refer to “Editing the DMCONFIG File” in the *BEA Connect SNA User Guide* and/or cut from the sample DMCONFIG file provided with your newly installed Connect SNA 2.0, Volume 2 software).
6. Map entries from the original DMCONFIG file to the new DMCONFIG file. Refer to Figure 1.
7. Update the TP definition ‘ * ‘ in the SunLink or Brixton stacks to allow the use of CNOS verbs and syncpoints.
8. Ensure Auto Connection is disabled for both the local system and the remote system.

Modify DMTYPE File

It is extremely important that you modify your existing DMTYPE file to contain the line:

```
SNAX:-lgw -lgws:-lgp -lgnnet -lcsxcrm::
```

This line is essential for Connect SNA 2.0, Volume 2 to start up. If this line is not entered into the file, when you run the `dmloadcf` command, the system generates an error message indicating "Unknown Domain Type."

Modify Original DMCONFIG File

To complete the upgrade, you must modify the original DMCONFIG file from your original Connect SNA installation. This includes changing existing values to accommodate the 2.0, Volume 2 software configuration, adding an option to a section of the file, replacing an existing section of the file with three new sections, and populating the new sections with options and appropriate values.

The following sections provide more detailed information about the steps in the "General Check List" which preceded.

Change Existing Values

In the `DM_LOCAL_DOMAINS` and `DM_REMOTE_DOMAINS` sections of the original DMCONFIG file, change the value of the `TYPE` option from `SNADOM` to `SNAX`.

Add Option

In the `DM_REMOTE_SERVICES` section of the DMCONFIG file, add the `FUNCTION={APPC|DPL}` option.

Replace Existing Section

Replace the DM_SNADOM section of your existing DMCONFIG file with the following sections (shown in Figure 1):

- ◆ DM_SNA_LINKS
- ◆ DM_SNASTACKS
- ◆ DM_SNACRM

Populate New Sections

Enter the values appropriate for your gateway's configuration. Refer to "Editing the DMCONFIG File" in the *BEA Connect SNA User Guide* for descriptions of the options in these sections.

Map Entries from Original DMCONFIG to New DMCONFIG

In Figure 1, the option values in the existing DM_SNADOM section of the DMCONFIG file are mapped to some of the option values in two of the three new sections of the DMCONFIG file. All other values not specifically mapped are dependent on your configuration.

The figure depicts two original DM_SNADOM sections, one defining a local domain (LDOM1) and one defining a remote domain (RDOM1). The domain values are mapped to the new DMCONFIG file. This demonstrates parameter duplication necessary to support two-way transactional SNA connectivity.

Table 2 and Table 3 present the same information in tabular format.

Figure 1 DMCONFIG File Mapping

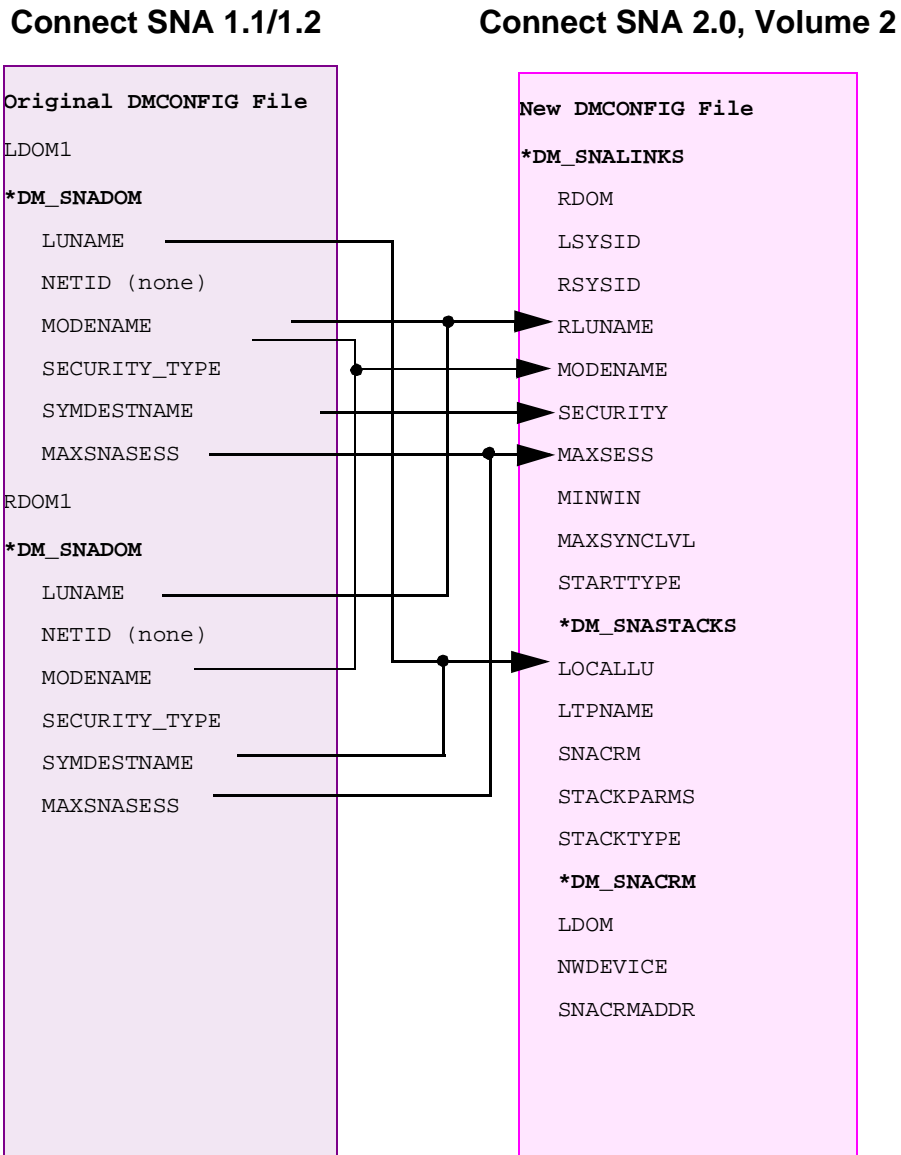


Table 2 DMCONFIG File Mapping for Local Domain (LDM1)

Connect SNA 1.1/1.2 DMCONFIG Parameter (Original File)		Connect SNA 2.0, Volume 2 DMCONFIG Parameter (New File)	
SECTION	PARAMETER	PARAMETER	SECTION
*DM_SNADOM	LUNAME =	LOCALLU	*DM_SNASTACKS
*DM_SNADOM	NETID =	(NONE)	N/A
*DM_SNADOM	MODENAME =	MODENAME	*DM_SNALINKS
*DM_SNADOM	SECURITY_TYPE =	SECURITY	*DM_SNALINKS
*DM_SNADOM	SYMDESTNAME =	RLUNAME	*DM_SNALINKS
*DM_SNADOM	MAXSNASSESS =	MAXSESS	*DM_SNALINKS

Table 3 DMCONFIG File Mapping for Remote Domain (RDM1)

Connect SNA 1.1/1.2 DMCONFIG Parameter (Original File)		Connect SNA 2.0, Volume 2 DMCONFIG Parameter (New File)	
SECTION	PARAMETER	PARAMETER	SECTION
*DM_SNADOM	LUNAME =	RLUNAME	*DM_SNASTACKS
*DM_SNADOM	NETID =	(NONE)	N/A
*DM_SNADOM	MODENAME =	MODENAME	*DM_SNALINKS
*DM_SNADOM	SECURITY_TYPE =	SECURITY	*DM_SNALINKS
*DM_SNADOM	SYMDESTNAME =	LOCALLU	*DM_SNASTACKS
*DM_SNADOM	MAXSNASSESS =	MAXSESS	*DM_SNALINKS

Update TP Definition ' * '

You must update the TP definition ' * ' in the SunLink or Brixton stacks with the following privileges to allow CNOS verbs.

TP Definition:

```
TP_HEXNAME = X'2a'
LOC_LU_NAME = LUSUN2A
CONV_TYPE = BASIC
CONV_TYPE = MAPPED
SYNC_LVL = NONE
SYNC_LVL = CONFIRM
SYNC_LVL = SYNCPT
PIP = NO_LU_VERIFICATION
FMH_DATA = YES
PRIVILEGE = CNOS
PRIVILEGE = SESSION_CONTROL
PRIVILEGE = DEFINE
PRIVILEGE = DISPLAY
PRIVILEGE = ALLOCATE_SERVICE_TP
DMCONFIG File Upgrade Mapping
```

Caution: If these updates are not made, Connect SNA generates an error message when CNOS verbs are used and the SNACRM shuts down.

Disable Auto Connection

Connect SNA provides session management services for the domain. Therefore, any auto connection provided by the local SNA stack or the remote CICS/ESA connection should be disabled.

For CICS/ESA Connections:

```
AUTOCONNECT = NO
INSERVICE = YES
```

For CICS/ESA Sessions:

```
AUTOCONNECT = YES
```

For the Brixton or SunLink Stacks:

The Sessions to Autostart parameter in the mode definition set to zero.

Note: Session definition requires AUTOCONNECT for the CICS/ESA application session acquisition, but the connection itself should not be automatically acquired.

LUNAME TO LOCALLU

Match the LOCALLU name in the new DMCONFIG file with the LUNAME in the original DMCONFIG file. This holds true for both local and remote domains.

NETID (NONE)

There is no corresponding value in the new DMCONFIG file.

MODENAME TO MODENAME

Match the MODENAME in the new DMCONFIG file with the MODENAME in the original DMCONFIG file. This holds true for both local and remote domains.

SECURITY_TYPE TO SECURITY

Match the SECURITY settings in the new DMCONFIG file with the SECURITY_TYPE settings in the original DMCONFIG file.

SYMDESTNAME TO RLUNAME

Match the RLUNAME in the new DMCONFIG file with the SYMDESTNAME in the local domain definition in the original DMCONFIG file. This holds true for the local domain definition only.

MAXSNASESS TO MAXSESS

Match the MAXSESS value in the new DMCONFIG file with the MAXSNASESS value in the original DMCONFIG file.

SYMDESTNAME TO LOCALLU

Match the LOCALLU name in the new DMCONFIG file with the SYMDESTNAME in the remote domain definition in the original DMCONFIG file. This holds true for the remote domain definition only.

Upgrading to BEA Connect SNA 2.0, Volume 2 from Connect SNA 2.0, Volume 1

Please note the following changes regarding IBM Comm Server stack versions.

If you designated the IBM Comm Server 5.1 stack when Connect SNA 2.0, Volume 1 was installed, it is necessary to change the designation to IBM Comm Server 5.0 when you upgrade to Volume 2

To do this you must update the `STACKTYPE` parameter in the `DM_SNASTACKS` section of the `DMCONFIG` file. This parameter must be changed from `ibm51` to `ibm50`.

The result of this change is that the `libcsxibm50` library is installed, replacing the `libcsxibm51` library previously installed.

All references to IBM Comm Server 5.1 in the printed *BEA Connect SNA User Guide* should be ignored. Refer instead to the Volume 2 HTML version of this guide for updated references to IBM Comm Server 5.0. Subsequent printed releases of the guide will contain the updated references.

Configuring Connect SNA 2.0, Volume 2 for TAP DPL

This section explains the entries in a BEA Connect SNA 2.0, Volume 2 `DMCONFIG` file needed to accommodate Distributed Programming Link (DPL) transactions in a BEA TAP environment serviced by the Connect SNA gateway. Refer to the HTML version of the *BEA Connect SNA User Guide* for detailed information about configuring the gateway.

Note: Information in this section is subject to change. The requirements for establishing DPL transactions will become automated features in future releases of BEA TAP.

System Requirements

In order for a TAP application to make a DPL to a mainframe-based application using the BEA Connect SNA (2.0, Volume 2) gateway, two things must first occur:

1. The application must reside in a TAP domain whose DMCONFIG file is properly configured to accommodate Connect SNA gateway service requests (refer to “Specifying DMCONFIG Entries”).
2. The Connect SNA gateway’s SNA Communication Manager (SNACRM) must be configured to run as a TUXEDO server (refer to “Specifying the SNACRM as a TUXEDO Server”).

Specifying DMCONFIG Entries

When Connect SNA is configured within a TUXEDO domain, it advertises mainframe service points (programs) based on its configuration. For outbound DPL, the gateway configuration must advertise the remote service points in the `*REMOTE_SERVICES` section of the DMCONFIG file (`RS1-RS4` in Figure 2). For inbound DPL, the gateway must advertise the local service points in the `*LOCAL_SERVICES` section of the DMCONFIG file (`CSMI PLCIX5` in Figure 2).

Figure 2 shows an example of a TAP/Connect SNA configuration. Figure 3 shows the DMCONFIG file entries required for that configuration.

Figure 2 Connect SNA Configuration

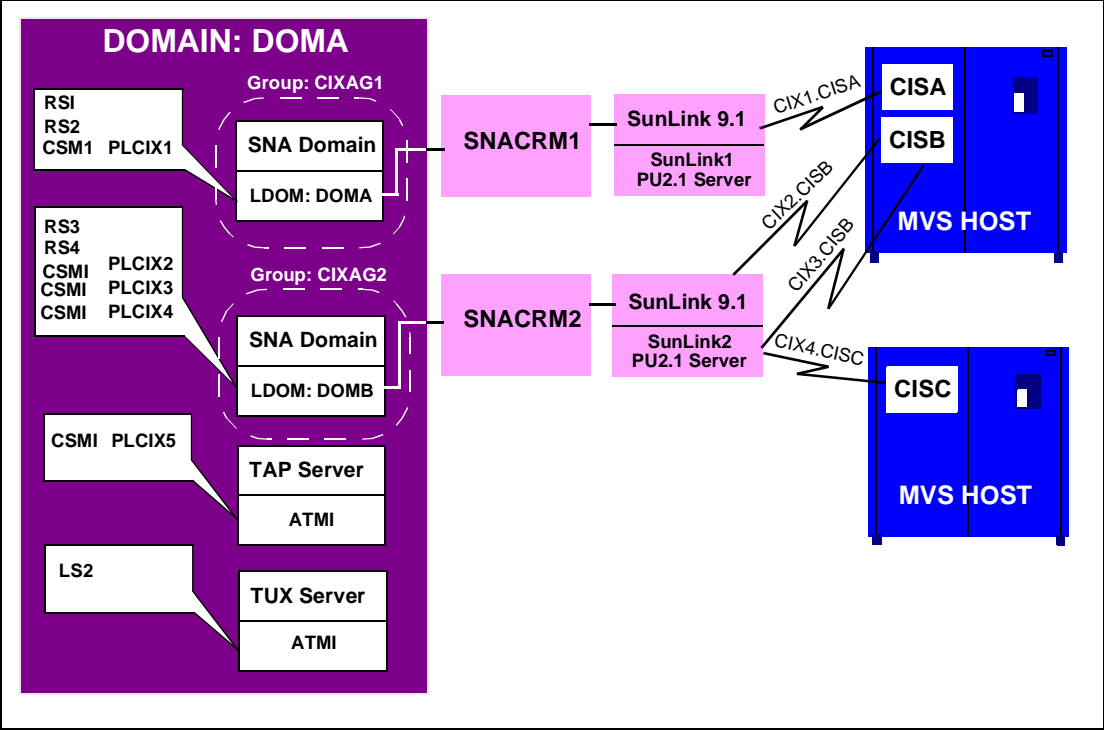


Figure 3 DMCONFIG File Entries for Configuration in Figure 2

*DM_LOCAL_DOMAINS		*DM_REMOTE_SERVICES	
DOMA	GWGRP=CIXAG1 TYPE=SNAX	RS1	LDOM=DOMA RNAME=PROG0002 RDOM=CIX1 FUNCTION=DPL
DOMB	GWGRP=CICAG2 TYPE=SNAX	RS2	LDOM=DOMA RNAME=TXN1 RDOM=CIX2 CONV=Y
*DM_REMOTE_DOMAINS		RS3	LDOM=DOMB RNAME=TXV3 RDOM=CIX3 CONV=Y
CIX1	TYPE=SNAX	RS4	LDOM=DOMB RNAME=PROG0003 RDOM=CIX4 FUNCTION=DPL CONV=Y
CIX2	TYPE=SNAX		
CIX3	TYPE=SNAX		
CIX4	TYPE=SNAX		
*DM_SNACRM			
SNACRM1	LDOM=DOMA		
SNACRM2	LDOM=DOMB		
*DM_STACKS			
SunLink1	SNACRM=snacrm1 STACKTYPE= sun91...		
SunLink2	SNACRM=snacrm2 STACKTYPE=sun91...	"CSMI PLCIX1"	LDOM=DOMA RDOM=CIX2 API=CICS
*DM_SNALINKS		"CSMI PLCIX2"	LDOM=DOMB RDOM=CIX2 API=CICS
CIX1.CISA	STACKREF=SunLink1 LSYSID=CIX1 RSYSID=CISA	"CSMI PLCIX3"	LDOM=DOMB API=CICS RDOM=CIX3
CIX2.CISB	STACKREF=SunLink2 LSYSID=CIX2 RSYSID=CISB	"CSMI PLCIX4"	LDOM=DOMB API=CICS RDOM=CIX4
CIX3.CISB	STACKREF=SunLink2 LSYSID=CIX3 RSYSID=CISB		
CIX4.CISC	STACKREF=SunLink2 LSYSID=CIX4 RSYSID=CISC		
*DM_LOCAL-SERVICES			
LS1	LDOM=DOMA RNAME=PROG0001		
LS2	LDOM=DOMB RNAME=TXN1 CONV=Y		
"CSMI PLCIX1"	API=CICS		
"CSMI PLCIX5"	API=CICS		

DMCONFIG File Entries Required to Receive DPL Requests from TAP

An entry is required in the `*DM_REMOTE_SERVICES` section of the DMCNFIG file for each combination mirror transaction name and remote `sysid`. The service name must be in the form:

MIRRbbbPLSYSI

where:

- ◆ MIRR is the mirror transaction name
- ◆ bbbb is exactly four spaces
- ◆ PL is literal
- ◆ SYSI is the remote `sysid`

Each service must be specified as `CONV=N` and have the correct `LDM` and `RDM` domain names.

In the `*DM_SNALINKS` section, the `LSYSID` must be the name of the TAP region and `RSYSID` must be the `sysid` of the remote region.

DMCONFIG File Entries Required to Send DPL Requests to TAP

An entry is required in the `*DM_LOCAL_SERVICES` section of the DMCNFIG file for each combination of program, remote `sysid`, and mirror transaction. The service name must be in the form:

MIRRbbbPLSYSI

where:

- ◆ MIRR is the mirror transaction name
- ◆ bbbb is exactly four spaces
- ◆ PL is literal
- ◆ SYSI is the remote `sysid`

Each service must be specified as `CONV=N`, `API=CICS`, and have the correct `LDM` and `RDM` domain names.

In the `*DM_SNALINKS` section, the `LSYSID` must be the name of the TAP region and `RSYSID` must be the `sysid` of the remote region.

Specifying the SNACRM as a TUXEDO Server

In order for Connect SNA to be used with TAP, you must specify the SNACRM as a TUXEDO server and provide a script to do a `tmshutdown` and `tmboot` of the specific group that contains the servers.

To specify the SNACRM as a TUXEDO server, provide the equivalent UBBCONFIG parameters shown in the example in Figure 4.

Figure 4 Example UBBCONFIG File Entries Specifying SNACRM as Tuxedo Server

*GROUPS		*SERVERS	
SNAGRP	LMID=mysys GRPNO=4	DEFAULT:	CLOPT = "-A"
LOCGRP	LMID=mysys BRPNO=5	DMADM	SRVGRP=LOCGRP SRVID=14
		GWADM	SRVGRP=SNAGRP SRVID=14 RE PLYQ=Y RESTART=N GRACE=0
		SNACRM	SRVGRP=SNAGRP SRVID=15 CLOPT="-A -- //dalhps2:4452 SNAGRP" RESTART=Y RCMD=rstsnagrp GRACE=120 MAXGEN=2
		GWSNAX	SRVGRP=SNAGRP SRVID=16 RQADDR="SNADOM" REPLYQ=N RESTART=Y RCMD=rstsnagrp GRACE=120 MAXGEN=2

The executable script `rstsnagrp` should reside in the `APPDIR` and contain the following lines:

```
# Filename = rstsnagrp
tmshutdown -g SNAGRP
tmboot -g SNAGRP
```

Using the Online Documentation

The BEA Connect SNA release includes online documentation that you can view using an HTML browser. You can install the HTML files on your server or client, or leave them on the CD-ROM. The files are located on the CDROM in the `doc` directory. Note the filename path to the directory where you install them on your server or client.

To view the documentation, you need a Web browser that supports HTML 3.0 features including tables and frames. Netscape Navigator 2.02 or Microsoft Internet Explorer 3.0 or later are recommended. When you install the HTML files, they will be located in a directory on your system. You should keep the HTML files that are contained within a directory together. However, you can move that directory to any location.

Note: It is recommended that the HTML browser and the HTML files are located on the same client or server device.

Accessing the Documentation

To begin viewing the online documentation, you should first open the following HTML file from the Web browser:

When accessing the document from the CD,

`<cdrom>/doc/index.htm`

When installed to a local directory,

`$TUXDIR/doc/index.htm`

When installed to a Web server,

`http://(directory path to Connect SNA HTML files)/index.htm`

Figure 5 shows the online document with the clickable navigation link and table of contents.

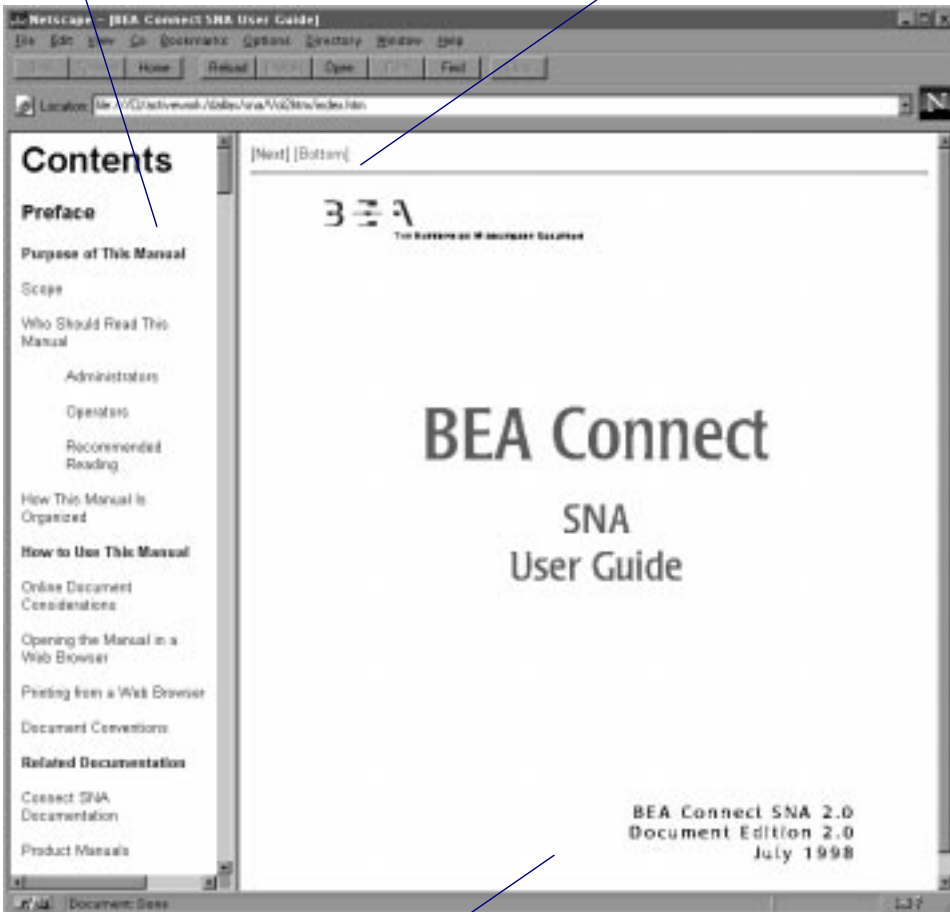
Figure 5 BEA Connect SNA User Guide Displayed in Netscape Web Browser

Table of Contents

Click a topic to view it.

Navigation Bar

Click a button to view
a main topic.



Document Display Area

Printing from a Web Browser

You can print a copy of this document, one file at a time, from the Web browser. Before you print, make sure that the chapter or appendix you want is displayed and *selected* in your browser. (To select a chapter or appendix, click anywhere inside the chapter or appendix you want to print. If your browser offers a Print Preview feature, you can use the feature to verify which chapter or appendix you are about to print.)

Known Problems

This section includes known problems that remain open with the current release of software.

If a table entry includes a CR (Change Request) number, a possible solution may exist in a future BEA Connect SNA release. Refer to this number to conveniently track the solution as the problems are resolved.

Please contact BEA Technical Support for assistance in tracking the unresolved problems identified with a CR number. For contact information, see the section “Contacting BEA Customer Support.”

When using the BEA Connect SNA release, you may encounter some of the following problems that can cause BEA Connect SNA or a BEA Connect SNA component to operate improperly. Table 4 describes these issues and provides a workaround where possible.

Table 4 Known Problems

CR011785	Premature Client Request Causes SNADOM Shutdown	
	Problem	If you try to start client request before SNACRM is fully active, the Gateway SNADOM shuts down.
	Platform	All
	Workaround	Manually kill the SNACRM and reboot the Gateway server group.
CR012071	SNACRM startup fails and logs message, SNA Domain does not see failure	
	Problem	If the SNACRM fails to attach to the PU server, a message 90011 ERROR is logged. In most cases, the SNACRM shuts down; however, the SNA Domain Gateway continues to run and issues the following log message: CONNECTED TO SNACRM.
	Platform	All
	Workaround	Restart the GWSNAX server group.
CR012865	Local Service SERVICE not found causes CICS client to hang.	
	Problem	When a host client issues a service request that is defined in the DMCONFIG as a LOCAL SERVICE DEFINITION, but not defined in the UBBCONFIG file, the host client hangs up.
	Platform	All
	Workaround	Define the service in the UBBCONFIG.

Fixed Problems

This section includes known problems from previous releases of Connect SNA that have been fixed with the current release of software. Table 5 describes these issues and provides a workaround where possible.

Table 5 Fixed Problems

CR0113594	Connect SNA sends incorrect sub type of buffer to TUXEDO for FML buffer types.	
	Problem	The request or response buffer from CICS for an FML or FML32 buffer failed when passed back from the SNADOM (OUTBUFTYPE=FML: <i>subtype</i>).
	Platform	All
	Resolution	FML responses now work correctly.
CR012362	CICS server performs a syncpoint, invalid condition not reported to TUXEDO client.	
	Problem	When a CICS server performs a syncpoint request (in SEND state), the SNACRM recognizes it as invalid, logs data to the DOMAIN, and deallocates its conversation with an ABEND. However, it does not communicate the invalid condition to the Gateway and the client. The client ends with TPETIME. No work-around is needed; both client and server ABEND and the user can identify the problem in the ULOG.
	Platform	All
	Resolution	The TUXEDO client receives a TPESVCFAIL when the server issues an invalid syncpoint.
CR011919	Local Service SERVICE not found causes CICS client to hang.	
	Problem	When a host client issues a service request that is defined in the DMCONFIG as a LOCAL SERVICE DEFINITION, but not defined in the UBBCONFIG file, the host client hangs up.
	Platform	All
	Workaround	Define the service in the UBBCONFIG.

Table 5 Fixed Problems

CR013404	Allocation error for security invalid returns invalid rc.	
	Problem	Security error on an allocation returned an invalid return code.
	Platform	All
	Workaround	Proper return code is now issued.

Obtaining Software Patches

Contact BEA Customer Support to fix known problems with software patches, if available.

Contacting BEA Customer Support

If you have any questions about this version of BEA Connect SNA, or if you have problems installing and running BEA Connect SNA, contact BEA Customer Support through BEA WebSupport at www.beasys.com. You can also contact Customer Support by using the contact information provided on the Customer Support Card, which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- ◆ Your name, e-mail address, phone number, and fax number
- ◆ Your company name and company address
- ◆ Your machine type and authorization codes
- ◆ The name and version of the product you are using
- ◆ A description of the problem and the content of pertinent error messages

