BEA Tuxedo® Mainframe Adapter for SNA

Release Notes

Version 9.1
Document Revised: August 16, 2006

Contents

BEA Tuxedo Mainframe Adapter for SNA Release Notes

The following topics are discussed in this document.

About BEA Tuxedo Mainframe Adapter for SNA

BEA Tuxedo Mainframe Adapter for SNA is a domains-based product that provides bidirectional connectivity between BEA Tuxedo 9.1 or 9.0 clients or servers and mainframe applications. The mainframe applications may use Customer Information Control System/Extended System Architecture (CICS TS) and Information Management System (IMS) implicit LU6.2, or any IBM-supported Application Program-to-Program Communication (APPC) or CICS TS interface.

New Product Features

The following new features are available in Version 9.1 of the Tuxedo Mainframe Adapter for SNA product:

- Support for Tuxedo 9.0 and 9.1

Product Packaging

The following items are included in the Tuxedo Mainframe Adapter for SNA product box:

- Product software CD ROM
- Product Documentation sheet
- BEA Systems, Inc. Support Guide and Registration Card

Supported Platforms

The following sections list the supported platforms for each of the Tuxedo Mainframe Adapter for SNA components.

Supported Tuxedo Mainframe Adapter for SNA Gateway Platforms

Table 1 provides a list of platforms that the Tuxedo Mainframe Adapter for SNA Gateway supports.

Table 1 Platforms Supported by the Tuxedo Mainframe Adapter for SNA Gateway

Operating System
AIX 5.3
HP-UX 11.23 (32 bit) PA-RISC
Solaris 10 (32 bit on 64 bit SPARC)
SUSE Linux Enterprise Server 9.0 (32 bit)
Windows 2003 Advanced Server

Note: Tuxedo Mainframe Adapter for SNA is a 32-bit application, but can run on a 64-bit machine. However, Tuxedo Mainframe Adapter for SNA *must* run with a 32-bit version of Tuxedo 9.1 or 9.0, but cannot run with a 64-bit version of Tuxedo 9.1 or 9.0.

Supported Communications Resource Manager Platforms and Required Stacks

Table 2 provides a list of platforms and stacks that the CRM supports.

Table 2 Platforms Supported by the CRM

Platform	Stack
HP-UX 11.23	PA-RISC using SNAplus2 v6.2
z/OS V1R6 (31 and 64 bit) (MVS)	VTAM V1R6

Supported Mainframe Software

Table 3 provides a list of IBM host software supported by Tuxedo Mainframe Adapter for SNA.

Table 3 Supported Mainframe Software

Platform
CICS Transaction Server 3.1
IMS Version 8.1

Upgrading from eLink Adapter for Mainframe SNA 3.x, eLink Adapter for Mainframe 4.x, or TMA SNA 8.1

Use normal installation procedures to upgrade from eLink Adapter for Mainframe SNA 3.x, eLink Adapter for Mainframe 4.x, or from TMA SNA 8.1. No special considerations are necessary.

If you are upgrading from a different version of the supported SNA stack, be sure to modify your `DMCONFIG` file to select the appropriate stack type for your system. Support for some SNA stacks from previous releases of eLink Adapter for Mainframe is no longer applicable. Refer to "Supported Platforms" for more information.

Known Problems

When using this release of BEA Tuxedo Mainframe Adapter for SNA, you may encounter some issues that can make Tuxedo Mainframe Adapter for SNA inoperable. The following sections describe these issues and provide workarounds where possible.

If an entry includes a CR (Change Request) number, a possible solution may exist in a future BEA Tuxedo Mainframe Adapter for SNA release where BEA will provide vendor specific code to fix the problem. Refer to this number to conveniently track the solution as the problems are resolved.

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

Change Request Number	Description
CR061031	**CRM does not shut down when CRMDOWN command is issued.** When a `CRMDOWN` command is issued, the CRM attempts to call `gethostbyname()`, but the call fails. The CRM returns -1, logs the error message `"gethostbyname failed to find host,"` and does not shut down. **Platform:** z/OS **Workaround:** The `CRMDOWN` command resolves the IP address using a default TCP/IP dataset, for example `TCPIP.TCPPARMS.(TCPDATA)`. This dataset contains parameters for TCP/IP and methods to communicate with the name server. If this TCP/IP dataset is not available in the default location, the `CRMDOWN` command fails and returns -1. If you are encountering this error, include the dataset which contains the TCP/IP information in the JCL which executes the `CRMDOWN` command.

Fixed Problems

This section describes known problems from the prior release of the Tuxedo Mainframe Adapter for SNA 8.1 that have been fixed with the current release of the Tuxedo Mainframe Adapter for SNA software. The following table lists a Case or CR (Change Request) number for each problem.

- Memory-related Issues and Segmentation Fault Issues
- Two-Phase Commit, Resynchronization, and Protocol Issues

Memory-related Issues and Segmentation Fault Issues

Change Request Number	Description and Workaround or Solution
CR177686	Association of tpid to a sequence number is validated to avoid assertion and facilitate creation of new tpid. BLOBLOG manipulation routines modified to handle corruption when BLOB Record header length is zero.
CR184520	Timeout message is propagated to connection task to cleanup conversation-related information.
CR190035	Fix for recursive abend accessing task table due to improper cleanup from previous shutdowns.
CR195914	Fix storage violation for CICS inbound exchange logs not associated to transaction information (blob).
CR196206	Avoid erasing contents of BLOBLOG for transactions with state prepared after socket disconnect due to gateway shutdown.
CR198709	Fix to handle the termination of invalid stray task in CRM.
CR201874	Fix to avoid CRM from crashing during shutdown after inbound `rtimout`.
CR211080	Fixed the VTAM S00A8 abend during gateway shutdown.
CR233501 & CR235337	Fix for outbound transactions getting lost in CRM after SNACRM_PREPARE is sent to CRM.
CR-239810	Fixed the CRM 4088 RC-63 LE User abend with crash.
CR260250	Fixed the CRM assertion at line 376 in `crmftsk.cpp`, due to reuse of old `CrmServiceContext` object.
CR262593	Fixed the CRM crash after a transevent error, due to reuse of old `CrmServiceContext` object.
CR280205	Modified `crmftsk.cpp` file to prevent NULL access of `CrmTransactionInfo` object.

Two-Phase Commit, Resynchronization, and Protocol Issues

Change Request Number	Description and Workaround or Solution
CR174199	CRM sends a committed instead of Heuristic Committed during ExchangeLogs phase for a transaction marked for `recovCommit`. CRM sends a SNACRM_HEURISTIC to gateway when it receives a HEURISTIC_RESET from CICS/IMS
CR184905	Inbound transaction timeout triggered in CICS results in CRM sending the correct status to gateway.
CR189199	`ResourceFailureNoRetry` returned by CICS when CRM sends a `BackOut` to CICS after `RtimOut` is handled.
CR191931	CRM will not send SNCRM_FORGET when a HEURISTIC situation is detected by CRM during recovery. CRM will not send SNACRM_HEURISTIC twice. Transaction set to aborted when Reset is received during exchangelogs.
CR194346	Recovery state machine modified to send appropriate response to `RecQuery` requests.
CR197056	RECOVER_QUERY from sub-ordinate gateway is responded with ROLLBACK when no bloblog entry exists corresponding to transaction requested.
CR198010	Handle `ResourcefailurenoRetry` during `ProcessPrepare`,check transaction validity before logging/forgetting blob. Fixed to send rollback for a transaction recovering due to remotestart. Handle remote restart resynchronization.
CR198560	Add modification to handle CICS readtimeout of inbound to Tuxedo requests during in doubt period which causes shunting of the transaction and subsequent resynchronization flows from CICS. The CRM was attempting to restart the link due to the resync flows, and ultimately lost its active state with the link.
CR200298	Fix for transaction recovery lost by the CRM introduced in rolling patch 44.
CR200624	Exchange logs and compare states are executed under the same tpid to group the requests to SNASVCMGR together. The tpid link list was not threadsafe.
CR200684	Fix to have gateway reply with appropriate code when BLOB entry is not found during resynchronization.

Change Request Number	Description and Workaround or Solution
CR206268	CRM modified to send a SNACRM_FORGET when outbound transactions are aborted due to rollback from gateway after transaction reaches ready state in CRM.
CR206869	Fix to send correct status of transaction during inbound exchangelogs due to Rtimout in second phase of two-phase commit. CICS Session outage before first phase of two-phase commit due to Rtimout in outbound transaction will be considered as backout by CRM.
CR217745	Fix to avoid CRM from sending a rollback for transaction aborted by gateway after Rtimout. Outbound transactions will be dynamically resynchronized by CRM after session failure due to Rtimout.
CR222352	CRM modified to send a SNACRM_FORGET only after receiving SNACRM_DONE in case of inbound transaction with Rtimout.
CR245990	Modified code to send a SNACRM_FORGET and an informational message to GWSNAX to indicate a possible heuristic completion.
CR274199	Fixed the protocol violation and CRM looping problem in `crmftsk.cpp` file.

Timeout Issues

Change Request Number	Description and Workaround or Solution
CR206486	The BLOCKTIME configured for each individual service was not coming into effect. With this fix the BLOCKTIME for a given individual service is now coming into effect.
CR214109	Resolved wrong timeout event with inbound transaction.

Miscellaneous Issues and Enhancements

Change Request Number	Description and Workaround or Solution
CR179422	CRM rejects any new allocate requests when 75% of CRM suspend queue is full.
CR179433	CRM ISC transformer module is modified to handle an unexpected return value from CICS for DPL request.
CR187934	CRM user conversation state machine modified to handle `resourceFailureNoRetry` response during syncpt.
CR195348	Fix to avoid association of old transaction record retrieved from BLOBLOG to new transaction.
CR276072	Added a timestamp to messages written to SYSOUT.

Where to Get Product Documentation

Documentation for this product is available on the BEA corporate Web site. From the BEA Home page at http://www.bea.com, click on Product Documentation or go directly to the "e-docs" Product Documentation page at http://e-docs.bea.com. The Tuxedo Mainframe Adapter for SNA 9.1 Product Documentation will have a link on the following location:

- Tuxedo 9.0 Product Documentation at the following URL:
  http://edocs.bea.com/tuxedo/tux90/index.html
- Tuxedo 9.1 Product Documentation at the following URL:
  http://edocs.bea.com/tuxedo/tux91/index.html

Contacting BEA Customer Support

If you have any questions about this version of Tuxedo Mainframe Adapter for SNA, or if you have problems installing and running the software, contact BEA Customer Support through BEA WebSupport at `www.bea.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