

# CA Chorus™ for DB2 Database Management

## Site Preparation Guide

Version 03.0.00, Seventh Edition



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## CA Technologies Product References

This document references the following CA Technologies products:

- CA ACF2™ for z/OS (CA ACF2)
- CA Chorus™ (CA Chorus)
- CA Chorus™ for DB2 Database Management (CA Chorus for DB2 Database Management)
- CA Chorus™ Infrastructure Management for Networks and Systems (CA Chorus Infrastructure Management)
- CA Chorus™ Software Manager (CA CSM)
- CA Common Services for z/OS (CA Common Services for z/OS)
- CA Compliance Manager for z/OS (CA Compliance Manager)
- CA Detector® for DB2 for z/OS (CA Detector)
- CA Insight™ Database Performance Monitor for DB2 for z/OS (CA Insight DPM)
- CA OPS/MVS® Event Management and Automation (CA OPS/MVS)
- CA Plan Analyzer® for DB2 for z/OS (CA Plan Analyzer)
- CA RC/Migrator™ for DB2 for z/OS (CA RC/Migrator)
- CA RC/Query® for DB2 for z/OS (CA RC/Query)
- CA RC/Update™ for DB2 for z/OS (CA RC/Update)
- CA Subsystem Analyzer for DB2 for z/OS (CA Subsystem Analyzer)
- CA Top Secret® for z/OS (CA Top Secret)
- CA Vantage™ Storage Resource Manager (CA Vantage)

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- Information about user communities and forums
- Product and documentation downloads
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## Documentation Changes

In the current edition, the Software Requirements have been updated for FMID EU9. The following list details the changes made since the fifth edition of this guide:

- [DB2 User Privileges](#) (see page 21)—Added this topic, which describes required DB2 user privileges.

The following list details the changes made since the fourth edition of this guide:

- Removed the Target Libraries and Distribution Libraries topics. This information is not needed to install the product.
- [Run the CA Chorus for DB2 Database Management Discipline Security Job](#) (see page 21)—Added this new topic, which replaces the manual instructions that were previously provided for addressing the following security requirements:
  - Installer user ID privileges for USS, z/OS, and DB2
  - User authorization to access USS resources
  - (Optional) Secondary authorization ID use with the EXPLAIN command
  - User authorization to work in CA Chorus
  - Started task permissions
  - PassTicket configuration for user authentication
  - RRSAF authorization

The following list details the changes made since the third edition of this guide:

Server Requirements—Noted new feature to automatically configure heap memory.

User Security Requirements—Added note about CHORTHDD.

The following list details the changes made since the second edition of this guide:

[Legal Notices](#) (see page 2)—Updated to reflect public documentation legal disclaimer.

[How the Installation Process Works](#) (see page 9)—Added reference to the Prerequisite Validator.

[CA Chorus for DB2 Database Management Architecture](#) (see page 13)—Added this topic.

[Software Requirements](#) (see page 17)—Added the CA Chorus FIXCAT label for back-end product maintenance.

The following list details the changes made since the first edition of this guide:

[System Requirements](#) (see page 19)—Removed the heap memory requirements and added a specialty processor recommendation.

[Server Requirements](#) (see page 19)—Updated the heap memory requirements, noted the parameters to modify the heap size, noted that the values represent real storage, and moved the heap memory requirements to this new topic.

[Software Requirements](#) (see page 17)—Clarified browser support.

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# Chapter 1: Architecture and Installation Overview

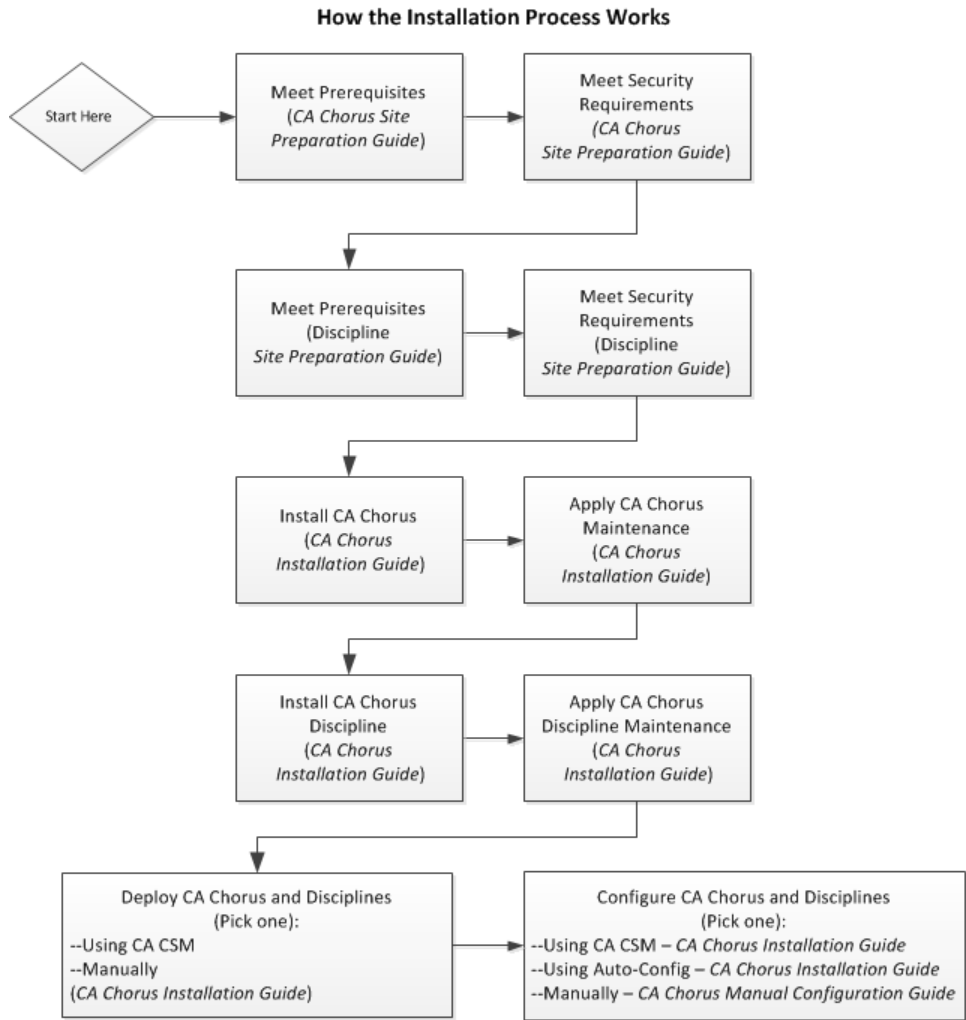
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This guide details the tasks that a system programmer and security administrator can complete before starting the installation, deployment, and configuration tasks that are described in the *Installation Guide*. The following diagram provides a high-level overview of the CA Chorus and discipline installation, deployment, and configuration process and the guides that you use.

**Important!** You must use CA Chorus Software Manager to install CA Chorus and its disciplines.

**Important!** If you install a discipline, you must deploy and configure it.

**Note:** For the boxes that indicate work from the discipline *Site Preparation Guide*, repeat this step for each discipline that you are installing.



To install, deploy, and configure your CA Chorus and its disciplines, complete the following steps:

1. Meet the software, system, port, and other prerequisites as described in the *CA Chorus Site Preparation Guide*.
2. Meet the security requirements as described in the *CA Chorus Site Preparation Guide*.
3. Use the Prerequisite Validator to confirm that you have set up your system correctly as described in the *CA Chorus Site Preparation Guide*.
4. Meet the software, system, port, and other prerequisites as described in the applicable discipline *Site Preparation Guide*. Repeat this step for each discipline that you are installing.
5. Meet the security requirements as described in the applicable discipline *Site Preparation Guide*. Repeat this step for each discipline that you are installing.
6. Install CA Chorus and the applicable disciplines using CA CSM as described in the *CA Chorus Installation Guide*. This step involves acquiring the CA Chorus software (transporting to your z/OS system) and installing using SMP/E. The installation process creates a CSI environment and runs the RECEIVE, APPLY, and ACCEPT SMP/E steps. The software is untailed.
7. Deploy CA Chorus and the applicable disciplines using CA CSM or a manual process. The *CA Chorus Installation Guide* details both methods.

This step copies the target libraries to another system or LPAR.

**Important!** For deployments from CA CSM, you must deploy CA Chorus and your disciplines at the same time. For example, installing CA Chorus, DBA, and Security, and then deploying only CA Chorus and DBA is not supported.

**Important!** To use the CA CSM Software Configuration Service, CA CSM deployment is required.

8. Configure CA Chorus and the disciplines. This step creates customized load modules, bringing the CA Chorus software to an executable state. You configure the product using one of the following methods:

**Note:** We recommend one of the first two options as the most efficient method to configure your products.

#### **CA CSM**

This method lets you use the wizard-based CA CSM tools to configure the product. For this configuration method, a deployment using CA CSM is required.

The *Installation Guide* includes the CA Chorus and discipline steps for this method.

#### **Automated Configuration**

This method lets you edit one batch job (ETJICUST) and one configuration file. A Java program then propagates your changes to the applicable members. You then manually submit each job. For this option, we recommend that you configure the platform and disciplines at the same time.

The *Installation Guide* includes the CA Chorus and discipline steps for this method.

#### **Manual**

This method lets you manually edit and run each configuration job.

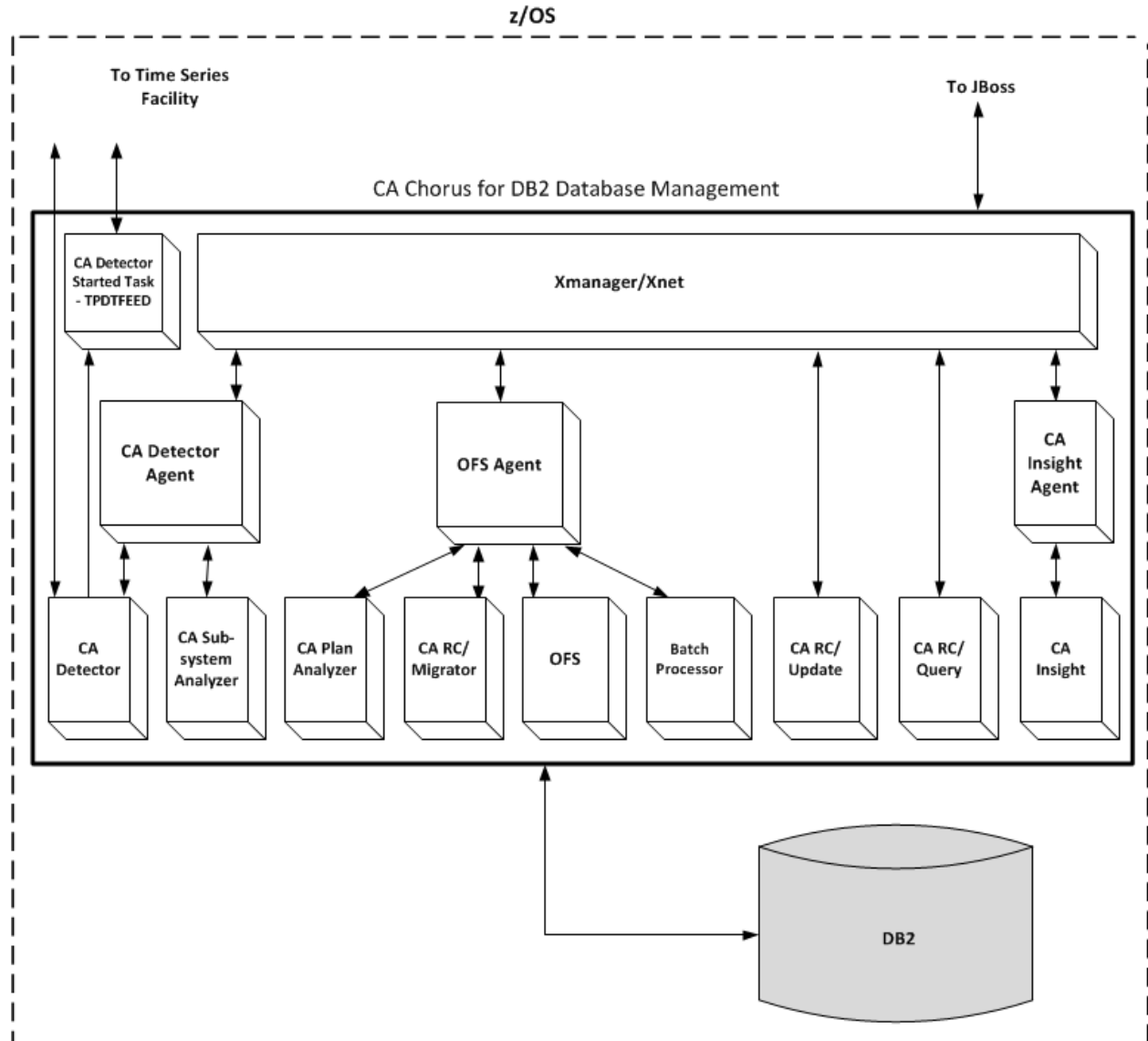
For this method, configure CA Chorus and its disciplines using the *Manual Configuration Guide*.

Your CA Chorus system is installed, deployed, and configured.

## CA Chorus for DB2 Database Management Architecture

CA Chorus for DB2 Database Management lets you perform various database administration and performance management operations on mainframe databases from a single console.

The following diagram details the architecture and data flow for the discipline components:



The following list details the components and products that you use with this discipline:

**JBoss**

Hosts the CA Chorus application. JBoss is an open source Java-based application server that operates cross-platform. JBoss is usable on any operating system that supports Java.

**CA Datacom/AD**

Supplies the database for CA Chorus for DB2 Database Management usage.

**CA Detector Started Task - TPDTFEED**

Invokes the CA Detector Unload utility to gather and send DB2 performance data to TSF. This component starts only by automation, and it is *not* a permanent address space. This component is a short-running started task that stops after it transfers DB2 performance data to TSF.

**Xmanager**

Establishes and controls an execution environment for all products. Xmanager (Execution Manager) executes as a started task in its own address space by all products on a single LPAR. If you have products that are installed on multiple LPARs, repeat the customization steps on each LPAR.

**Xnet**

Provides a shared communications subsystem for all CA Database Management Solutions for DB2 for z/OS. Xnet (Execution Manager Networking) executes as a started task in its own address space. Xnet works with the Xmanager address space for CA Database Management Solutions for DB2 for z/OS.

**CA Database Management Solutions for DB2 for z/OS**

Provides the tools for you to manage your DB2 environment. CA Chorus for DB2 Database Management interfaces directly with the following products:

- CA Detector
- CA Insight DPM
- CA Plan Analyzer
- CA RC/Migrator
- CA RC/Query
- CA RC/Update
- CA Subsystem Analyzer
- General functions:
  - Batch Processor
  - CA Chorus DBA Services (FMID EU9/CHRDBM) (OFS agent, OFA)

**Product Agents**

Translates communications among CA Chorus, CA Chorus for DB2 Database Management, and CA Database Management Solutions for DB2 for z/OS products.

**DB2 for z/OS**

Indicates the IBM DB2 for z/OS version that you are using with CA Chorus and CA Chorus for DB2 Database Management.



# Chapter 2: Addressing General Prerequisites

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## Software Requirements

The following software is required for CA Chorus for DB2 Database Management:

**Note:** The CA Chorus prerequisites and security requirements must have already been met.

- CA Technologies software:
  - CA Chorus Version 3.0

For initial site installations, you install CA Chorus and the disciplines at the same time as described in the *CA Chorus Installation Guide*.

When you are installing a discipline into an existing CA Chorus instance, confirm that the version of your discipline matches the CA Chorus version.

**Note:** For more information about installing CA Chorus, see the *CA Chorus Site Preparation Guide* and *CA Chorus Installation Guide*.

- The following CA Database Management Solutions for DB2 for z/OS at r15 or higher:

**Important!** Apply all current CA Chorus FIXCAT maintenance for these products. The FIXCAT label is CA.ProductInstall-RequiredService.CA-Mainframe-Chorus.\*, where \* indicates the version of CA Chorus that you are installing.

- CA Detector
- CA Insight DPM
- CA Plan Analyzer
- CA RC/Migrator
- CA RC/Query
- CA RC/Update
- CA Subsystem Analyzer
- General components: Xmanager, Xnet. Batch Processor, Object Framework Services (OFS), and CA Chorus DBA Services (FMID EU9/CHRDBM).

**Important!** Install FMID EU9/CHRDBM after the installation of the CA Chorus platform. PTF RO77028 is required for r18. CA Insight DPM, Xmanager, and Xnet are also prerequisites for CA Chorus Infrastructure Management. If CA Chorus Infrastructure Management is installed, CA Insight DPM, Xmanager, and Xnet are already installed and configured.

**Note:** For more information about installing these products and components, see the CA Database Management Solutions for DB2 for z/OS *Installation Guide* and *Implementation Guide*. For more information about updating the configuration of these products to integrate with CA Chorus for DB2 Database Management, see the later chapters in this guide.

- IBM software:
  - IBM DB2 V8 New Function Mode (NFM), DB2 9, 10, or 11 based on the DB2 Tools release
  - IBM Resource Recovery Services (RRS) for z/OS to manage the Resource Recovery Services Attachment Facility (RRSAF)

**Note:** RRSAF is the DB2 attachment facility that CA Chorus for DB2 Database Management uses. For more information about implementing RRS for your DB2 systems, see the IBM Resource Recovery Services documentation.

- PC software that is required for each user:
  - Adobe Flash Player 9.0.124 or above
  - At the release of Version 3.0, CA Chorus supports Microsoft Windows Internet Explorer 9 and Mozilla Firefox 13 through 19. As new browsers are released, we will validate them and post compatibility on the [CA Chorus product page](#) under Content Type, Recommended Reading.
  - **Note:** CA Chorus requires a minimum screen resolution of 1024 x 768. If your screen resolution does not meet this requirement, use full screen mode (F11 in most browsers) to include the scroll bar on the display.

## Server Requirements

Confirm that your site meets the following requirements:

### Real storage

200 MB heap memory for CA Chorus for DB2 Database Management plus 2450 MB heap memory for CA Chorus.

**Note:** CA Chorus automatically configures the heap memory size based on the disciplines that you install at JBoss startup.

**Note:** If all disciplines are installed, 3150 MB is required. This value is the default. To increase the heap memory size *after* installing CA Chorus and any disciplines, see the Java heap size (Java SDK Option) setting in the ENVETJ member of `your_chorus_hlq.CETJOPTN`. For the heap range, `-Xms` is the starting value, and `-Xmx` is the ending value.

## System Requirements

Confirm that your site meets the following system requirements:

### Disk

CA Chorus for DB2 Database Management requires approximately 251 tracks.

**Note:** The download and REL files are automatically deleted after the installation completes successfully.

### Processor

CA Chorus uses a JavaVM environment on z/OS. So, we *strongly* recommend that you use a specialty processor for the best performance and better use of resources.

## Port Requirements

Each Xnet (execution manager networking) server that you are running, requires a TCP/IP port specification and a corresponding connection definition in CA Chorus for DB2 Database Management.

The listener process in the Xnet communications server uses the port to accept connections from the data source handler (DSH) in CA Chorus for DB2 Database Management to Xnet. Xnet provides a shared communications subsystem for all CA Database Management solutions for DB2 for z/OS. When Xnet is started, it binds the port to a listening socket and it accepts connections from CA Chorus clients.

The port number is specified in the PXNPROC JCL in *your\_db2tools\_hlq.CDBASAMP*. This value is typically customized during post-installation processing of the installed CA Database Management Solutions for DB2 for z/OS. Use this same port value to define the DB2 subsystem connections during CA Chorus for DB2 Database Management configuration.

Confirm that the ports you intend to use are available by consulting with your network management team.

**Note:** For more information about configuring CA Chorus for DB2 Database Management, see the *CA Chorus Manual Configuration Guide*.

**More information:**

[Update the Xnet Configuration](#) (see page 25)

# Chapter 3: Addressing Security Requirements

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## DB2 User Privileges

CA Chorus for DB2 Database Management users need EXECUTE authority in DB2 on the requisite CA Database Management Solutions for DB2 for z/OS product plans:

- General functions (batch processor, object framework services)
- Chorus OFS agent
- CA Detector
- CA Plan Analyzer
- CA RC/Migrator
- CA RC/Query
- CA RC/Update
- CA Subsystem Analyzer
- CA Insight DPM

To assign these privileges, you can use the Product Authorizations facility (option A) on the CA Database Management for DB2 for z/OS Main Menu.

## Run the CA Chorus for DB2 Database Management Discipline Security Job

The E3KI095x security jobs consolidate the security requirements (installer, user, secondary, started task, PassTicket, RRSAF) for the CA Chorus for DB2 Database Management discipline. Use these jobs to authorize users to work in the CA Chorus for DB2 Database Management discipline and address other security requirements.

**Follow these steps:**

1. Log in to CA Support Online (CSO) and go to the CA Chorus for DB2 Database Management product page.
2. Go to Content Type, Recommended Reading and download one of the following security jobs:
  - E3KI095A for CA ACF2
  - E3KI095I for CA Top Secret
  - E3KI095R for IBM RACF
3. Customize the job for your environment as described within the JCL and save your changes.
4. Submit the job. The expected return code is zero.
5. Review the output of the job for verification that the security definitions have been defined successfully.

## Sample PassTicket Configuration for CA Chorus Systems

The following diagram shows a CA Chorus server system on the left and a CA Chorus remote system on the right. In the diagram, the white boxes represent configuration steps that are required only for the server system. The light gray boxes represent required configuration steps for the CA Chorus server and remote systems. These light gray areas represent the configuration of the CA Technologies back-end products that are required for CA Chorus. Each area includes a common component name with the STC JCL name in parentheses.



If your z/OS security product uses a shared security database, no additional security setup is needed on remote systems beyond the security setup for the server system. If you are installing the supporting CA Technologies back-end products on systems that do not share the security database, perform the security setup on the remote system.

**Note:** This diagram uses the default application name (CHORWEBS) to define the PassTicket validation for the reporting option and Object Migrator jobs to the external security manager. However, this application name is configurable (any uppercase string of eight characters or less is permitted). If you use a different value than CHORWEBS for the application ID, update your security job (E3KI095x) to use the same value. Additionally, update the CHORUS\_APPL environment variable in the ENVETJ member in *your\_chorus\_hlq.CETJOPTN* to use the same value after installing CA Chorus.

# Chapter 4: Addressing Configuration Changes

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This chapter describes the configuration tasks that must be done to integrate the back-end products with CA Chorus for DB2 Database Management.

If CA Chorus Infrastructure Management is installed, the following tasks have already been completed:

- Update the Xnet configuration.
- Update the CA Insight DPM configuration.

## Update the Xnet Configuration

Execution Manager Networking (Xnet) executes as a started task in its own address space. Xnet works with the Execution Manager (Xmanager) address space for the CA Database Management Solutions for DB2 for z/OS to provide a shared communications subsystem. The Xnet configuration must be updated for use with CA Chorus for DB2 Database Management to enable communication between the CA Database Management Solutions for DB2 for z/OS and CA Chorus for DB2 Database Management.

**Note:** Verify that Xnet customization as described in the *CA Database Management Solutions for DB2 for z/OS Implementation Guide* has been completed. This verification includes reviewing the customization information member, allocating the Xnet log files, preparing the Xnet started task JCL, and verifying the Xnet startup configuration.

**Important!** PassTicket configuration for CA Chorus for DB2 Database Management must be completed before you update the Xnet configuration.

**Follow these steps:**

1. Update the Xnet PXNPARM parmlib member in *your\_db2tools\_hlq.CDBAPARM* to specify the application name (APPL) that is used for PassTicket support. Insert the following line before or after the CMD entries in the Xnet PXNPARM parmlib member:

```
PASSNAME (DB2T00LS)
```

Save your changes.

PXNPARM is updated and the application name (DB2TOOLS) for the CA Database Management Solutions for DB2 for z/OS is used when CA Chorus for DB2 Database Management user logins are verified.

**Note:** The INITPARM DD statement in the Xnet JCL procedure selects the PXNPARM startup parameter file. For more information about the PASSNAME parameter and Xnet, see the *CA Database Management Solutions for DB2 for z/OS General Facilities Reference Guide*.

2. Set port, tcp and xman id in the Xnet started task (PXNPROC in *your\_db2tools\_hlq.CDBASAMP*).
3. (Optional) If you are using an Xmanager value of 0000 in the started task procedure (PTXMAN), update the XMANID parameter to the release version. For example, specify XMANID=1500 for r15 of the CA Database Management Solutions for DB2 for z/OS. This parameter is located in the Xnet started task procedure (PXNPROC in *your\_db2tools\_hlq.CDBASAMP*).

PXNPROC is updated.

PXNPROC is updated.

4. Restart each Xnet configuration by entering the following command:

```
S PXNPROC
```

A message indicates that the Xnet started task has initialized successfully.

## Update the CA Insight DPM Configuration

To enable communication between CA Chorus for DB2 Database Management and CA Insight DPM data collectors, the CA Insight DPM configuration must be updated.

**Note:** CA Insight DPM data collectors are set up and configured during the post-installation processing of CA Insight DPM. For more information about the set up and configuration of CA Insight DPM, see the *CA Database Management Solutions for DB2 for z/OS Installation Guide*, the *CA Database Management Solutions for DB2 for z/OS Implementation Guide*, and the *CA Insight DPM System Reference Guide*. For CA Insight DPM best practices, see the *CA Database Management Solutions for DB2 for z/OS Best Practices Guide*.

**Follow these steps:**

1. Update your CA Insight DPM data collector initialization parameters to specify XNETAGT=YES for each DB2 subsystem in your CA Chorus configuration. The data collector initialization parameters reside in IDDCPRMS in *your\_db2tools\_hlq.SOURCE*.

The Xnet agent subtask is started during CA Insight DPM initialization. This subtask periodically attempts to connect to its associated Xmanager and Xnet pair using the XMANID value that CA Insight DPM has obtained. CA Insight DPM obtains the XMANID from the Xmanager global parameters in the SETUPxx parmlib member in *your\_db2tools\_hlq.CDBAPARM*.

**Note:** For more information about using Xmanager and Xnet, see the *CA Database Management Solutions for DB2 for z/OS General Facilities Reference Guide*.

2. If the CA Insight DPM security facility is used to control access to CA Insight DPM and specific menus, add the following line to the SECURITY IDS=( ) definition:

```
(TYPE=USER, CHORTHD, *, SYSADM) ,
```

The ID that is used for CHORTHD must be given the same access as a normal user to CA Insight DPM. CHORTHD is set during installation and configuration of CA Chorus.

**Note:** For more information about installing CA Chorus, see the *CA Chorus Site Preparation Guide* and the *CA Chorus Installation Guide*.

3. Ensure that the STARTUP member contains the DSQxxxx requests that are included by default when the .SOURCE library in CA Insight DPM is populated during the post-installation processing.



# Appendix A: Improving Performance

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To improve performance of the integrated back-end CA Database Management Solutions for DB2 for z/OS with CA Chorus for DB2 Database Management, create indexes on the following DB2 catalog tables:

- Index on SYSTABLES (DBNAME,TSNAME). Sample in *your\_db2tools\_hlq.CDBASRC(CATDTX08)*.
- Index on SYSTABLES (TBCREATOR,TBNAME). Sample in *your\_db2tools\_hlq.CDBASRC(CATDTX09)*. This index is also the DB2 recommended index DSNDTX03.
- Index on SYSSYNONYMS(TBNAME,TBREATOR).Sample in *your\_db2tools\_hlq.CDBASRC(CATDYX02)*
- Index on SYSRELS (IXNAME,IXOWNER)
- Index on SYSPACKAGE (NAME,COLLID)
- Index on SYSTABLESPACE (NAME)
- Index on SYSVIEWDEP (DCREATOR, DNAME). Sample in *your\_db2tools\_hlq.CDBASRC(CATGGX02)*.

If you do not have many Views, Aliases, and so on, in a table, the cursor using TBNAME and TBCREATOR for SYSTABLES has a low cardinality for the SYSIBM.DSNDTX03 index. The index uses tablespace scans instead of the index access path.

To update these indexes manually, complete the following steps:

1. Update SYSIBM.SYSINDEXES table with FIRSTKEYCARDF=200 and FULLKEYCARDF=2000 for index DSNDTX03.

For example, UPDATE SYSIBM.SYSINDEXES SET FIRSTKEYCARDF = 200, FULLKEYCARDF = 2000 WHERE NAME = 'DSNDTX03' AND CREATOR = 'SYSIBM';

2. Run RUNSTATS UPDATE(NONE).

The dynamic statement cache is invalidated. A new access path is selected for index DSNDTX03.

**Note:** Any time that you run RUNSTATS on the catalog, manually update the FIRSTKEYCARDF and FULLKEYCARDF values and repeat the preceding steps.



# Appendix B: CA Chorus for DB2 Database Management Installation Worksheet

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Use this worksheet to gather all required installation parameters from the following data sources that must be specified during CA Chorus for DB2 Database Management installation and configuration.

## CA Database Management Solutions for DB2 for z/OS Configuration Information

The following CA Database Management Solutions for DB2 for z/OS related information is required when you install and configure CA Chorus for DB2 Database Management:

High-level qualifier for the deployed CA Database Management Solutions for DB2 for z/OS target libraries. This value (DB2TOOLS) is used in the ETJVARs and ETJI095x members in *your\_chorus\_hlq.CETJJCL*. (x represents your External Security Manager). A for CA ACF2, T for CA Top Secret, or R for IBM RACF.

- Started task user ID values:
  - TPDTFEED—CA Detector utility program. If CA OPS/MVS is used, this task provides CA Detector data to the Time Series Facility component in CA Chorus.
  - OFAPROC—Object Framework Services agent (OFA) for DB2 object migration in CA Chorus for DB2 Database Management.
  - PTXMAN—Xmanager (execution manager).
  - PXNPROC—Xnet (execution manager connection).
- Xnet port values for the PORT symbolic in the *your\_db2tools\_hlq.PXNPROC JCL*. This value is specified when the DB2 subsystems are defined in CA Chorus for DB2 Database Management. Use E3KCFG10 in *your\_chorusdba\_hlq.CE3KJCL* to update the db2tools.cfg file. Specify the PORT value in E3KCFG10 in *your\_chorusdba\_hlq.CE3KPARAM*.

### CA Chorus for DB2 Database Management Configuration

The following values are specified during CA Chorus for DB2 Database Management configuration:

- JOB statement settings—&CAI (the *hlq* where the CA Chorus installation data sets are defined).
- Confederation settings in E3KCFG10 (*your\_chorusdba\_hlq.CE3KPARAM*):
  - TRACE—Activates tracing during the initial configuration processing. The default is 0. The valid range is 0 through 7.
  - REFRESH—Sets the minimum time limit in seconds between configuration refreshes. The default is 60. The valid range is 60 through 300.
  - GLOBALAPPLID—Specifies the application name that is associated with the PassTicket definition in the security subsystem that is defined for use with CA Chorus for DB2 Database Management. The default is DB2TOOLS. This value must match the PASSNAME() specified in the Xnet startup parameters for the target CA Database Management Solutions for DB2 for z/OS installation. The actual SESSKEY value assigned to that application name in the security subsystem definitions must be identical on the DSH z/OS system and on the Xnet z/OS system. When Xnet receives a CA Chorus request containing a PassTicket, the following processing occurs:
    - Xnet calls the security subsystem to authenticate the user access request to the CA Database Management Solutions for DB2 for z/OS
    - Xnet validates the PassTicket that was generated for the user by the DSH.

**Note:** The TRACE, REFRESH, and GLOBALAPPLID default values are acceptable in most instances.

- CONFEDERATION1 through CONFEDERATION5—Identifies the Xnet connections in comma-separated value (CSV) format to create a logical grouping that is known as a confederation. Add a confederation definition as follows for each Xnet server installation in your CA Chorus for DB2 Database Management configuration: The confederation includes the Xnet server (*conf*), the TCP/IP host address (*host*), and port (*port*) that are required to connect with the CA Chorus server. If an APPLID is specified, this value overrides the GLOBALAPPLID value.

Examples:

```
# DEFAULT Confederation member definitions
conf=default host=system1.com port=1027
conf=default host=system2.com port=1027
#
# TEST Confederation member definitions
conf=test host=system1.com port=1229 Applid=DB2T00LS
conf=test host=system3.com port=6791 Applid=DB2T00LS
```