CA Chorus™ for DB2 Database Management

Site Preparation Guide

Version 04.0.00, Second Edition

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 OPS/MVS® Event Management and Automation (CA OPS/MVS)
- CA Detector® for DB2 for z/OS (CA Detector)
- 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 SYSVIEW® Performance Management Option for DB2 (CA SYSVIEW for DB2)
- CA Top Secret® for z/OS (CA Top Secret)

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Contact CA Support

For your convenience, CA Technologies provides one site where you can access the information that you need for your Home Office, Small Business, and Enterprise CA Technologies products. At http://ca.com/support, you can access the following resources:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

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To provide feedback about CA Technologies product documentation, complete our short customer survey which is available on the CA Support website at http://ca.com/docs.

Documentation Changes

The following documentation updates have been made since the initial 4.0 release:

- How the Installation Process Works—Added this topic.
- Getting Started—Expanded the steps in this topic.
- Software Requirements—Updated requirements for the CA Database Management Solutions for DB2 for z/OS.

The following documentation updates have been made since the last release of this documentation:

- Global—Removed references to manual configuration and the TPDTFEED started task. This task is no longer used in this release. See Set Up the Performance Warehouse (see page 38) instead.
- Software Requirements (see page 19)—Updated requirements.
- CA Chorus Application Server Requirements (see page 21)—Noted that CA Chorus now automatically configures the heap memory size. Renamed this server.
- Run the CA Chorus for DB2 Database Management Discipline Security Job (see page 23)—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
- Update the CA SYSVIEW for DB2 Configuration (see page 29)—Added information about updating the security IDs file.
- How to Enable Object Migration (see page 30)—Added this new scenario. It is now easier to install and configure the Object Framework Services agent (OFA) and Object Migrator model JCL. The security requirements have also been simplified to remove the need to setup a passticket to connect to CA Datacom/AD.
- Set Up the Performance Warehouse (see page 38)—Added this new section for providing historical data to the Performance Warehouse and Time Series Facility. Data is now stored in DB2 tables.

Contents

Chapter 1: Architecture and Installation Overview

This section contains the following topics:

How the Installation Process Works

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.

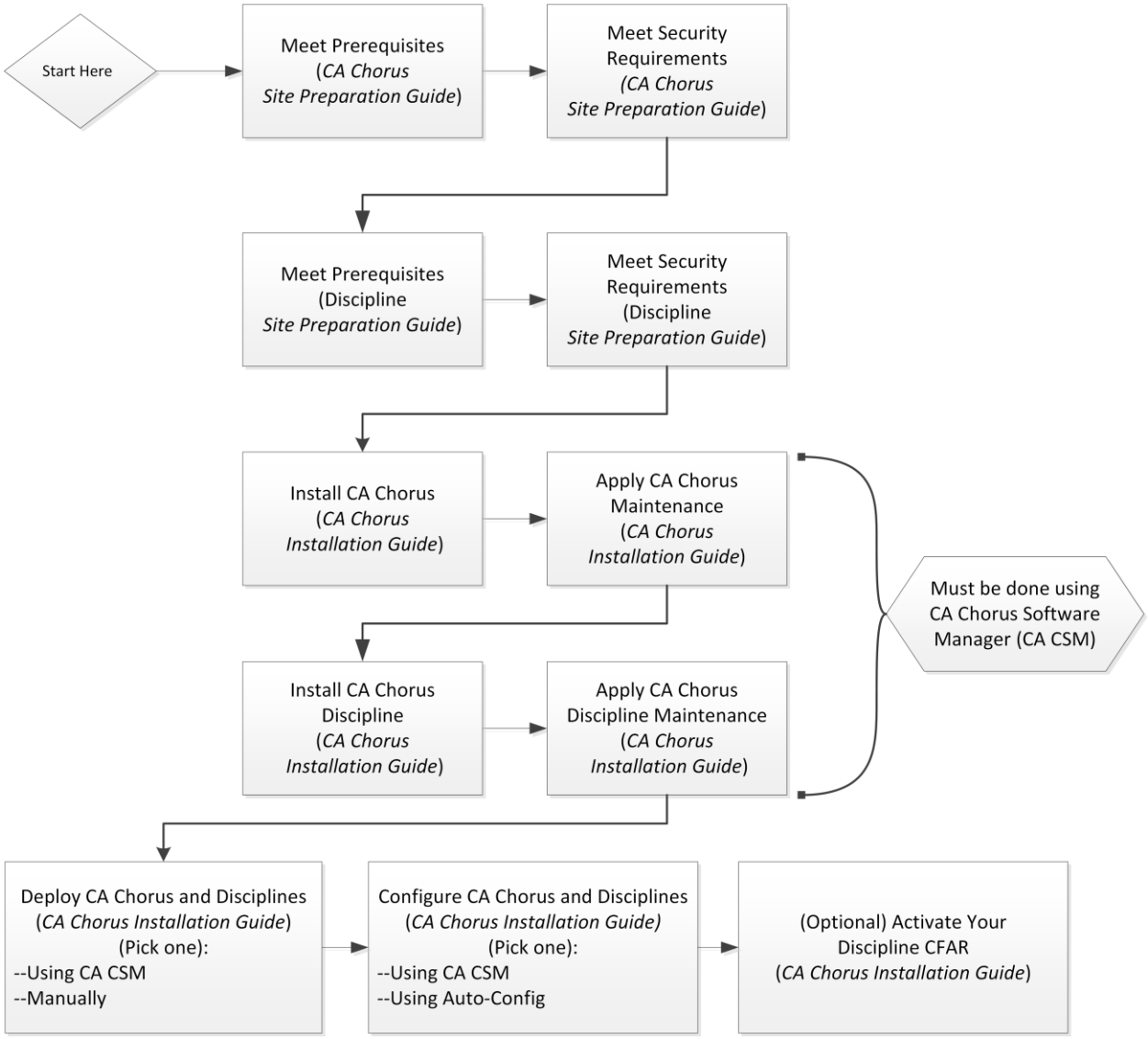
Important! You must use CA Chorus Software Manager to install CA Chorus and its disciplines.

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.

Important! These discipline installation, deployment, and configuration procedures do not apply to CA Chorus for IMS Database Management. To install this discipline, see the CA Chorus for IMS Database Management *Site Preparation Guide*.

How the Installation Process Works



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. 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.

4. Meet the security requirements as described in the applicable discipline *Site Preparation Guide*. Repeat this step for each discipline that you are installing.

5. 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 untailored.

6. 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, Security, and Storage, and then deploying only CA Chorus and Security is not supported.

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

7. 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:

   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 CA Chorus Platform and disciplines at the same time.

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

8. (Optional) If your discipline uses CA Chorus File Archive (CFAR), activate your discipline CFAR. You must first install, deploy, and configure the CA Chorus Platform and your discipline before you can do so. The *Installation Guide* includes the steps for this activation.

Getting Started

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 *CA Chorus Installation Guide*.

To get started installing and using CA Chorus for DB2 Database Management, complete the following tasks:

1. Prepare for installation.
    a. Download the CA Chorus for DB2 Database Management documentation. The following guides are needed for installation:
        - CA Chorus platform Site Preparation Guide
        - CA Chorus for DB2 Database Management discipline Site Preparation Guide
        - CA Chorus Installation Guide
        - Security jobs (available from CA Support Online on the CA Chorus for DB2 Database Management product page under Recommended Reading)
    b. Complete the following tasks in the CA Chorus Site Preparation Guide:
        - Read the Architecture and Installation Overview.
        - Meet with a system programmer, storage administrator, and security administrator and complete the check lists under Pre-Installation Planning.
        - Verify that the required prerequisite software is installed on your system (see Software Requirements).
        - Verify that the CA CSM DASD requirements for CA Chorus installation are met as described in CA CSM Dynamic Temporary Storage Requirements (CA Chorus Installation and Deployment).
        - Determine and record what TCP/IP ports will be used by CA Chorus. These port values are used later during CA Chorus configuration. See Port Requirements.
        - Determine and record SMTP mail server information if you want to use email notification in CA Chorus. See (Optional) SMTP Email Requirements.
        - Verify that maximum number of file descriptors in z/OS UNIX System Services is at least 64000 as described in USS Parmlib Requirements.

2. Address security requirements.

   a. Complete the CA Chorus platform security requirements. Download the CA Chorus platform security job located on CA Support Online at: http://www.ca.com/us/support/ca-support-online/support-by-product/ca-chorus.aspx.

      Use the downloaded job and the prerequisite checklists from Step 1b as input to the procedure described in Addressing Security Requirements of the CA Chorus Site Preparation Guide.

   b. Complete the CA Chorus for DB2 Database Management security requirements. Download the CA Chorus for DB2 Database Management security job located on CA Support Online site at: http://www.ca.com/us/support/ca-support-online/support-by-product/ca-chorus-for-db2-database-management.asp http://www.ca.com/us/support/ca-support-online/support-by-product/ca-chorus.aspx.

      Use the downloaded job and the prerequisite checklists completed from Step 1b as input to the procedure described in Addressing Security Requirements in this guide.

3. Install CA Chorus platform and apply maintenance as described in the CA Chorus Installation Guide.

4. Verify installation of the required CA Database Management Solutions for DB2 for z/OS, including FMID EU9/CHRDBM. See Software Requirements in this guide.

5. Apply maintenance for the CA Database Management Solutions for DB2 for z/OS.

   CA Chorus for DB2 Database Management requires installation of all PTFs for the backend products.

6. Update configuration of the CA Database Management Solutions for DB2 for z/OS for CA Chorus for DB2 Database Management.

   Complete each section in Addressing Configuration Changes in this guide. Changes are needed for:

   - Xnet
   - CA SYSVIEW for DB2
   - Object migration
   - (Optional) Performance warehouse

7. Install CA Chorus for DB2 Database Management discipline and apply maintenance as described in the CA Chorus Installation Guide.

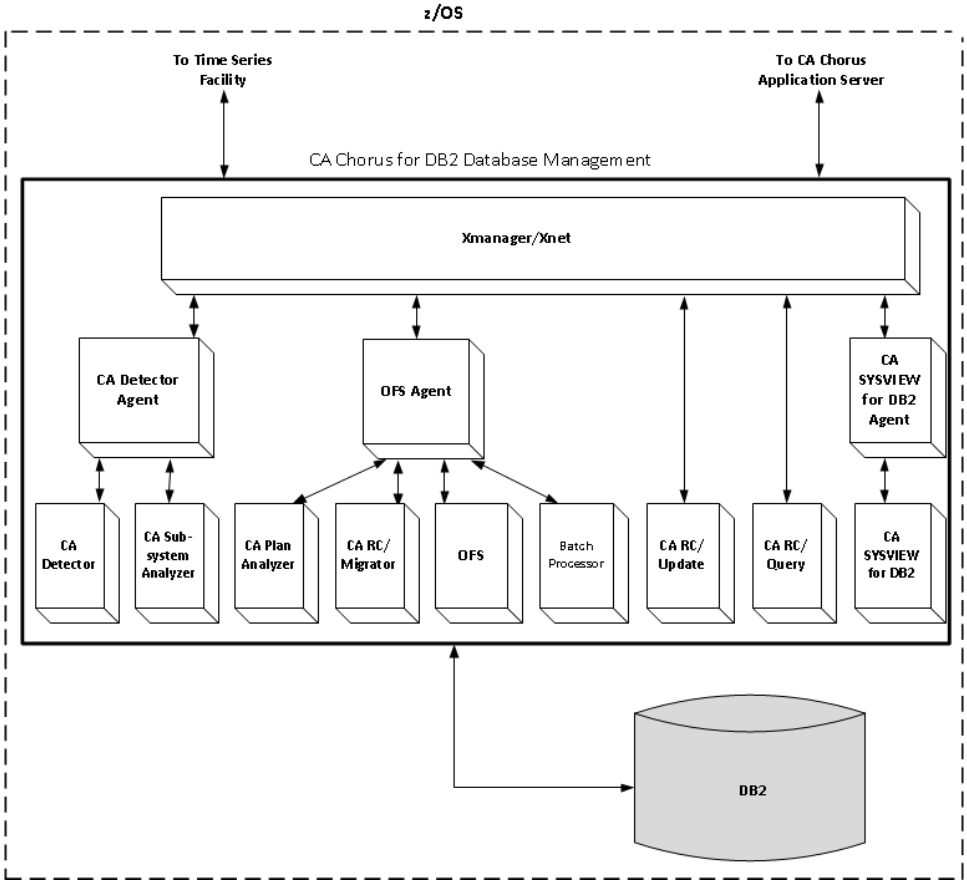
8. Deploy CA Chorus and CA Chorus for DB2 Database Management as described in the CA Chorus Installation Guide.

9. Configure CA Chorus and CA Chorus for DB2 Database Management discipline as described in the CA Chorus Installation Guide.
    a. Follow the steps in Configure Your Product Automatically (Auto Config). This step creates several jobs that are submitted in the next step.
    b. Submit jobs in the order documented in Submit CA Chorus and Discipline Jobs (Auto Config). The CA Chorus Application Server is started at the end of this step.
    c. Verify the CA Chorus Application Server by following the instructions in Verify the Installation and Configuration.
    d. Review the Post-Installation Considerations.
10. Configure your workspace to add discipline specific dashboards, policies, and metrics. Detailed information about configuring your workspace is provided in the *CA Chorus Product Guide* and the *CA Chorus for DB2 Database Management User Guide*.

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:



This diagram shows the following processing:

- The CA Database Management Solutions for DB2 for z/OS have been installed and configured for the ISPF interface. CA Chorus for DB2 Database Management interfaces directly with these products and components to manage your DB2 environment:

  CA Detector

  Optimizes performance of applications and databases while minimizing DB2 resource consumption by identifying dynamic and static SQL statements and DB2 applications that impact performance.

  CA Plan Analyzer

  Analyzes SQL and offers SQL performance improvement recommendations and management services.

  CA RC/Migrator

  Automates the processing of migrating and altering DB2 objects while maintaining the integrity of the DB2 environment.

  CA RC/Query

  Eases catalog navigation with a comprehensive DB2 catalog management facility for querying, evaluating, analyzing, and maintaining the DB2 subsystem.

  CA RC/Update

  Provides DB2 object creation and alteration capabilities, DB2 data related edit, compare, and copy functions, and SQL testing and execution. You can also insert, delete, and modify data in referential structures.

  CA Subsystem Analyzer

  Analyzes and tunes DB2 subsystems proactively, conserving DB2 resources and preventing DB2 subsystem performance problems.

  CA SYSVIEW for DB2

  Monitors DB2 system and application performance problems in real-time so they can fix critical issues before they impact service levels. Historical performance trending provides DBAs data that is necessary for proactive performance management.

  - General functions:
    - Batch Processor
    - Object Framework Services (OFS)—Performs DB2 system catalog access for CA Chorus for DB2 Database Management.
    - CA Chorus DBA Services (FMID EU9/CHRDBM) (OFS agent, OFA)—Services requests from the CA Database Management Solutions for DB2 for z/OS on behalf of user requests from other products like CA Chorus for DB2 Database Management. OFA executes as a started task in its own address space and works with the Xmanager and Xnet address spaces.

Product Agents

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

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 Chorus Application Server

Hosts the CA Chorus application server.

Time Series Facility (TSF)

Stores the data that is collected and provided from CA Detector.

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

This section contains the following topics:

Software Requirements

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

- CA Technologies software:
  - CA Chorus Version 4.0

    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 Release 16.0, Release 17.0, or Release 18.0:

  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 Plan Analyzer
  - CA RC/Migrator
  - CA RC/Query
  - CA RC/Update
  - CA Subsystem Analyzer
  - CA SYSVIEW for DB2
  - 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 CA Chorus Version 4.0.

  Note: If CA Chorus Infrastructure Management is installed, CA SYSVIEW for DB2, Xmanager, and Xnet are already installed and configured. For more information about installing these products and components, see the CA Database Management Solutions for DB2 for z/OS installation documentation. 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:
  - A supported IBM DB2 version based on the release of the CA Database Management Solutions for DB2 for z/OS that you are running:
    - For Release 16.0 or Release 17.0, IBM DB2 9 or 10.
    - For Release 18.0, IBM DB2 10 or 11.
  - 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.

CA Chorus Application 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: If all disciplines are installed, 3150 MB is required. CA Chorus automatically configures the heap memory size based on the disciplines that you install. This configuration is done during the CA CSM Software Configuration Service (SCS) or in CETJJCL(ETJI0150).

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 zIIP 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.

More information:

Update the Xnet Configuration (see page 25)

Chapter 3: Addressing Security Requirements

This section contains the following topics:

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 SYSVIEW for DB2

To assign these privileges, 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 under Knowledge Center.
2. Go to Recommended Reading under Content Summary and download one of the following security jobs based on the security product in use at your site and the product release:
   - 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.

Chapter 4: Addressing Configuration Changes

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 SYSVIEW for DB2 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 installation documentation has been completed.

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

Follow these steps:

1. Address PassTicket security requirements (see page 26).
2. Update the Xnet configuration (see page 27).
3. Tune OPSEVENT health checks for all configurations (see page 29).

Address PassTicket Security Requirements

All of the products that use Xnet send a z/OS user ID to Xnet when they first establish their TCP/IP connection to Xnet. This z/OS user ID is expected to be a valid user ID that is properly defined to the security subsystem of the z/OS system where Xnet is executing.

All of the external products also send a PassTicket value that use can be used as a substitute for the current password that is associated with the z/OS user ID. The PassTicket value is:

- Generated by the security subsystem on the z/OS system where the external product is executing.
- Authenticated by the security subsystem on the z/OS system where Xnet is executing.

Xnet and the external products often reside on the same z/OS system but this is not a requirement.

Several security subsystem definitions must be established before the security subsystem can generate or authenticate a PassTicket value. These definitions are typically created as part of the installation procedures for the external product.

PassTickets are always generated for a specific application and the security subsystem requires the definition of an APPL name to represent the application. PassTicket generation requires that you also define a *secret* encryption key value for that APPL name within the security subsystem. The PassTicket value that the security subsystem generates creates a substitute password that:

- Combines elements of the user ID name, the APPL name, and the current time and date
- Is encrypted using the *secret* encryption key value

The substitute password is:

- Valid for only a short period of time
- Only recognizable by a product that references the same APPL name when it calls its local security subsystem to authenticate the user ID and PassTicket value.

If the generating and authenticating security subsystems reside on different z/OS systems, the secret encryption key value that is defined for the APPL name on each system must be the same.

When all of the required security subsystem definitions are completed, Xnet can be updated to use PassTicket values for user ID authentication. To update Xnet, edit the PASSNAME parameter in the PXNPARM member in the CDBAPARM data set. The Xnet PASSNAME parameter specifies the APPL name that has been selected and configured for PassTicket generation and authentication in the security subsystem or subsystems.

Important! Enable the Xnet PASSNAME parameter *before* the product begins sending PassTicket values for user authentication. Failure to enable the Xnet PASSNAME can result in the suspension of user IDs by the security subsystem due to PassTicket authentication failures.

Important! Xnet supports a single APPL name that is specified using the PASSNAME parameter. If Xnet is interfacing to more than one product outside the CA Database Management Solutions for DB2 for z/OS, a conflict can arise with respect to the required APPL name. For example, CA Chorus for DB2 Database Management can be installed using the APPL name CHORWEBS and CA SYSVIEW Performance Management can be set up to use the APPL name DB2TOOLS. If there is a conflict, the products must be changed to use a common APPL name that can be specified in the Xnet PASSNAME parameter.

Configure Xnet

CA Chorus for DB2 Database Management uses the Xnet execution space (XES) feature and this feature must be enabled in the Xnet PXNPARM member.

CA Chorus for DB2 Database Management also provides an interface component that is known as the data source handler (DSH). The DSH can interface the CA Chorus Application Server to any number of Xnet servers that may be running on the same, or different, z/OS systems. To identify each Xnet to be included, the DSH uses the db2tools.cfg file that is prepared during CA Chorus for DB2 Database Management configuration.

To configure Xnet for use with CA Chorus for DB2 Database Management, complete the following steps:

1. Edit the Xnet PXNPARM member in the *your_db2tools_hlq.*CDBAPARM data set to remove the comment indication (*) from the:

   - PASSNAME parameter.

     The PASSNAME value specifies the application name (APPL) that is used for PassTicket support. This value is used when CA Chorus for DB2 Database Management user logins are verified. You may need to change the actual application (APPL) name that is specified in the PASSNAME parameter to match the APPL name that is specified in the db2tools.cfg file entry. See Step 4.

   - Set of XES-related statements.

   Note: The INITPARM DD statement in the Xnet JCL procedure selects the PXNPARM startup parameter file.

2. Set port, tcp, and xman ID in the Xnet started task (PXNPROC in *your_db2tools_hlq.*CDBASAMP).

   Note: 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=1800 for Version 18.0 of the CA Database Management Solutions for DB2 for z/OS.

3. Restart each Xnet configuration:

   ```
   S PXNPROC
   ```

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

Tune OPSEVENT Health Checks for All Configurations

Xnet performs a health check every five (5) minutes. By default, Xnet checks a number of key facilities and then reports a NORMAL, WARNING, or PROBLEM status to the Xnet JESMSGLG and also to the CA OPS/MVS product, if it is available. Not all of the key facilities being checked are required in every configuration. If unnecessary key facilities are checked, inaccurate WARNING or PROBLEM reports can be generated even though the configuration is correct and operating properly.

To prevent these unnecessary reports, we recommend that you tune the OPSEVENT health checks that are described in the PXNPARM member in the CDBAPARM data set. The goal of the tuning is to test all of the key facilities that should be operational in your Xnet configuration periodically so that the health reporting is NORMAL when your configuration is completely operational. Then, using the periodic report messages that are logged, it will be possible to identify the approximate time when a WARNING or PROBLEM condition first began, review other system events around that time, track down the cause, and effect a remedy.

All of the health checks are appropriate when Xnet is interfacing with CA Chorus for DB2 Database Management. Use the comments in the PXNPARM member to help identify specific checks that should be disabled when Xnet is interfacing with other products.

One of the checks verifies the correct operation of the PassTicket services that rely on the PASSNAME parameter using the user ID that is assigned to the Xnet started task. This check simulates a "log in" operation using a PassTicket. In some security subsystem definitions, user IDs that are assigned to started tasks are often assigned a special property that prevents the started task user IDs from being used in "log in" operations. When this occurs, specify a valid user ID that can "log in" instead of the Xnet started task user ID.

Update the CA SYSVIEW for DB2 Configuration

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

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

Follow these steps:

1. Update your CA SYSVIEW for DB2 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 SYSVIEW for DB2 initialization. This subtask periodically attempts to connect to its associated Xmanager and Xnet pair using the XMANID value that CA SYSVIEW for DB2 has obtained. CA SYSVIEW for DB2 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 shared common documentation.

2. If the CA SYSVIEW for DB2 security facility is used to control access to CA SYSVIEW for DB2 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 SYSVIEW for DB2. 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 SYSVIEW for DB2 is populated during the post-installation processing.

How to Enable DB2 Object Migration

Before you can use the Object Migrator function in CA Chorus for DB2 Database Management to migrate DB2 objects, perform the tasks in the following procedure manually outside of CA CSM. This procedure describes how to customize the Object Framework Services Agent (OFA) that is used by the Object Migrator and DBA Command Manager functions in CA Chorus for DB2 Database Management.

Note: This configuration is not required for integration with CA Chorus Infrastructure Management.

Follow these steps:

1. Confirm that at least one CA RC/Migrator utility model ID exists.

   Note: The @DEFAULT model is created during CA RC/Migrator post-installation DB2 catalog customization. You can create this model and additional models using the CA RC/Migrator profile option (PROF). Select Utility Model Services, and then use the template (T) option to create a model using an existing model as a template. For more information about creating models, see the *CA RC/Migrator User Guide*.

2. Based on the version of the CA Database Management Solutions for DB2 for z/OS that you are running at your site, complete *either* of the following bullet items to configure the OFA:

   - If you are running Version 18.0, use ISPF panels during post-installation processing to configure OFA as described in the *CA Database Management Solutions for DB2 for z/OS Installation Guide*.
   - If you are running Version 17.0 or Version 16.0, complete the remaining steps in this procedure manually, starting at Step 3. Ensure all OFA-related maintenance has been applied before completing these steps.

3. Allocate a configuration PDS with the following attributes:

   - Tracks: 2
   - Record format: FB
   - Record length: 80
   - Block size: 27920

4. Define global configuration parameters:

   - Create the default global configuration member (@DEFAULT) in the OFA configuration PDS and add the following JCL:

     ```
     <JOB CARD>
     //jobcard JOB (ACCT INFO),'job title',CLASS=A,MSGCLASS=X,
     //   MSGLEVEL=(1,1),REGION=0M,NOTIFY=userid
     </JOB CARD>
     <MODEL4>
     MODEL4 model ID
     </MODEL4>
     <MODEL4C>
     MODEL4C creator
     </MODEL4C>
     ```

   - Replace the italicized text with site-specific values. Include the desired JOB statement for z/OS batch jobs (<JOB CARD>, </JOB CARD), the model ID or name (<MODEL4>, </MODEL4), and creator (<MODEL4C>, </MODEL4C>), and save your changes.

Important! By default, the DBA Command Manager and Object Migrator functions create temporary data sets using the TSO PREFIX of each user as the high-level qualifier. You can override the default settings on a specific LPAR or on all systems. For more information about overriding the default settings, see Override Data Set Allocations (see page 33).

5. (Optional) Specify alternate high-level qualifiers for use with temporary data sets:

   - Create a member in the OFA configuration PDS for each Object Migrator user that is named the same as their user ID. You can use the @DEFAULT member in the OFA configuration PDS as a template.

     Note: Use the JOB statement, model name (ID), and creator values for overriding global settings. The model ID and creator must match the members that you create. The creator specifies the member creator user ID.

   - Add the following tags to specify an LPAR name and the high-level qualifier to be used with the creation of temporary data sets for this user:

     ```
     <SYSTEM:lpar>
     <PREFIX>
     hlq;
     </PREFIX>
     </SYSTEM:lpar>
     ```

     Note: The *hlq* must be terminated with a semi-colon.

     For examples on overriding the default settings, see Override Data Set Allocations (see page 33).

   When you are done adding members, the members appear in the configuration data set members list. These members are used during DB2 object migration when the migration is submitted for analysis.

6. Update the OFAPROC started task JCL as follows and save your changes:

   Important! When complete, you must recycle the agent to enable these changes.

   Note: The OFAPROC started task needs READ permission for BPX.SERVER. If the EZB.STACKACCESS resource is protected, the appropriate READ permissions are needed for the user ID that is associated with the OFAPROC started task and the users requesting access to the Object Migrator function.

   a. Copy the OFAPROC sample JCL procedure in *your_db2tools_hlq*.CDBASAMP to a z/OS system procedure library that is available to the z/OS START command.

   b. Edit the new member as follows:

      - Specify a valid JOB statement.
      - Add MSGCLASS or CLASS.
      - Supply the target library data set name prefix (TGTPFX) .
      - (Optional) Use a unique name for the agent by changing the value that is specified for the procedure ID. By default, XMANID is specified in *hlq*.CDBAPARM(SETUP*xx*).

- Add the following DD statement:

  ```
  //CFGFILE   DD DISP=SHR,DSN=config.om.pds
  ```

c. (Optional) If you want to direct output to a data set instead of SYSOUT (the default), add the following DD statements for the sequential log data sets and allocate the log data sets manually with record format VB, record length 1028, block size 6144, cylinders 20:

```
//LOGGER1   DD DISP=SHR,DSN=hlq.OFALOG1
//LOGGER2   DD DISP=SHR,DSN=hlq.OFALOG2
```

Note: To turn off the logging capability for OFAPROC, contact CA Support for instructions.

Override Data Set Allocations

To override the default data set allocations for the Object Migrator and the DBA Command Manager for DB2, specify an alternate high-level qualifier in the default or user-specific configuration parameters. You can override the default settings on a specific LPAR or on all systems by specifying an alternate high-level qualifier such as a specific TSO prefix, the CA Chorus user ID, any constant, or a combination of a constant and a user ID or TSO prefix.

The following table describes the order of precedence processing (first to last) that occurs when an alternate high-level qualifier (*hlq*) is specified:

Order of precedence in which the high-level qualifier is used:

Order of precedence: 1 (First) to 4 (Last)	Order of precedence in which the high-level qualifier is used:
1	Individual member – specific LPAR
2	@DEFAULT member – specific LPAR
3	Individual member – SYSTEM: ALL
4	@DEFAULT member – SYSTEM: ALL

The following examples demonstrate how this processing works.

Example for @DEFAULT Member

In this example, the following entries are defined in the @DEFAULT member:

- SYSTEM: ALL
- SYSTEM: LPAR1

There are no entries defined in individual user members.

The following table shows the LPAR on which execution occurs and the HLQ value that is used in the @DEFAULT member:

Execution LPAR	HLQ Used
LPAR1	HLQ defined for LPAR1
LPAR2 (represents any LPAR other than LPAR1 defined in the @DEFAULT member)	HLQ defined for ALL.

Example 1 for individual member (Case 1)

In this example, there are no entries defined in the @DEFAULT member.

The following entries are defined in individual user members:

- SYSTEM: ALL
- SYSTEM: LPAR1

The following table shows the LPAR on which execution occurs and the HLQ value that is used in the individual user member:

LPAR in which execution happens	HLQ used
LPAR1	HLQ defined for LPAR1 in the individual user member
LPAR2 (any LPAR other than LPAR1 defined in the individual user member)	HLQ defined for ALL in the individual user member

Example 2 for individual member (Case 2)

In this example, the following entries are defined in the @DEFAULT member:

- SYSTEM: ALL
- SYSTEM: LPAR2

The following entries are defined in individual user members:

- SYSTEM: ALL
- SYSTEM: LPAR1

The following table shows the LPAR on which execution occurs and the HLQ value that is used:

LPAR in which execution happens	HLQ used
LPAR1	HLQ defined for LPAR1 in the individual user member
LPAR2	HLQ defined for LPAR2 in the @DEFAULT member
LPAR3 (any LPAR other than LPAR1 and LPAR2 defined in the @DEFAULT member and the individual user member)	HLQ defined for ALL in the individual user member

Example: How to Specify Different Allocation Parameters for Different LPARs

This example shows how to use different allocation parameters for different LPARs. Edit the @DEFAULT member from the OFA configuration file (PDS) and add the following values:

```
<SYSTEM:ALL>
<PREFIX>
%USERID;
</PREFIX>
</SYSTEM:ALL>
<SYSTEM:LPAR1>
<PREFIX>
%TSOPREFIX.LPAR1
</PREFIX>
</SYSTEM:LPAR1>
```

During run time, the value %TSOPREFIX.LPAR1.* is used for requests coming from LPAR1 and the value %USERID.* is used for requests coming from all other systems/LPARs.

You can also provide system/LPAR-specific configuration by manually editing the @DEFAULT member or the individual member to add the following control statements:

```
<SYSTEM:ALL>
<PREFIX>
%TSOPREFIX;
</PREFIX>
</SYSTEM:ALL>
```

Note: Replace ALL in the <SYSTEM:ALL> and </SYSTEM:ALL> tags with the same specific LPAR, for example, LPAR1.

Example: Override Data Set Allocations when the Configuration File contains the @DEFAULT and User ID Members

These examples show how to override the prefix values that are based on the originating system during data set allocations. To do so, add <SYSTEM> and <PREFIX> control cards to the @DEFAULT and user ID members:

- The @DEFAULT member contains the following:

```
<SYSTEM:SYS1>
<PREFIX>
MCA11
</PREFIX>
</SYSTEM:SYS1>
```

- The user ID member contains the following:

```
<SYSTEM:SYS2>
<PREFIX>
MCOE
</PREFIX>
</SYSTEM:SYS2>
```

During run time, the value MCA11.ETJ.* is used for requests coming from SYS1 and the value MCOE.ETJ.* is used for requests coming from SYS2.

We recommend that you repeat the previous lines (from <SYSTEM:ALL> to </SYSTEM:ALL>) and customize as needed for a specific LPAR.

Example: Override Data Set Allocations Using a Different High-Level Qualifier

This example shows how to use a site-specific high-level qualifier during data set allocations for all users:

```
CHORUS.TEMP
```

Example: Override Data Set Allocations Using the MYID.HLQ Prefix

This example shows how to use a constant second node applicable for all users while the first node is replaced with the user ID:

```
%USERID..CATECH
```

During run time, values in the @DEFAULT member are ignored. Instead, the value MYID.HLQ.ETJ* is used. If this control statement is added to the @DEFAULT member, the value MYID.HLQ.ETJ* is used during run time if no user ID member is specified.

Example: Override Data Set Allocations Using the CATECH.%TSOPREFIX Prefix

This example shows how to use a constant first node applicable for all users while the second node is replaced with the TSOPREFIX value of the user:

```
CATECH.%TSOPREFIX
```

Example: Override Data Set Allocations Using the %USERID.B Prefix

This example shows how to append a constant to the user ID and use the resulting string as the prefix:

```
%USERID.B
```

Set Up the Performance Warehouse

You can access existing CA Detector, CA Subsystem Analyzer, and CA SYSVIEW for DB2 performance data from the Performance Warehouse in the CA Chorus for DB2 Database Management Investigator, and then chart that data using the CA Chorus Time Series Facility (TSF). The Performance Warehouse requires the data to be loaded into the product tables and then mapped to the Performance Warehouse folders using views on each desired DB2 subsystem.

Note: This configuration is not required for integration with CA Chorus Infrastructure Management.

Important! This step must be performed manually outside of CA CSM.

Follow these steps:

1. Start collection activity as described in the CA Detector, CA Subsystem Analyzer, and CA SYSVIEW for DB2 product-specific documentation.
2. Verify that the following product tables have been defined on the desired DB2 subsystems. These DB2 objects are created during post-installation processing of the CA Database Management Solutions for DB2 for z/OS and the DDL is located in *your_db2_hlq*.SPFSLIB members.
   - PDTDDL (for CA Detector)
   - PSADDL (for CA Subsystem Analyzer)
   - ARCDDL (for CA SYSVIEW for DB2)

3. Define the CA Chorus for DB2 Database Management Investigator Performance Warehouse DB2 views using the following members in *your_db2_hlq.*CDBASKL0: (modify as needed at your site)

   - CHRSDDL1 (for CA Detector) (see page 39)
   - CHRSDDL2 (for CA Subsystem Analyzer) (see page 40)
   - ARCVW418 (for CA SYSVIEW for DB2) (see page 41)

   Note: These views are not part of the CA Database Management Solutions for DB2 for z/OS post-installation process. Use the CA Interactive SQL facility (ISQL) or IBM SPUFI under DB2I to execute these members. Perform this step on each DB2 subsystem where archived performance data is stored and desired to be accessible from the CA Chorus for DB2 Database Management Investigator Performance Warehouse.

4. Load the desired product data:

   - For CA Detector, follow the instructions under Using Batch Reporting on CA Detector for information about how to unload collection data and load collection data into DB2 tables.
   - For CA Subsystem Analyzer, follow the instructions under Using Batch Reporting on CA Subsystem Analyzer for information about how to unload collection data and load collection data into DB2 tables.
   - For CA SYSVIEW for DB2, follow the instructions for archiving DB2 performance data in the *CA SYSVIEW for DB2 System Reference Guide*.

     For CA SYSVIEW for DB2 documentation, use the following bookshelf: CA Database Management Solutions Version 18.0.00 for DB2 for z/OS Bookshelf (https://support.ca.com/cadocs/7/CA%20Database%20Management%20Solutions%20Version%2018%200%2000%20for%20DB2%20for%20z%20OS-ENU/Bookshelf.html)>

CA Detector Tables and Views

The following table shows the CA Detector application performance tables and views that you can map to the Application category in the Performance Warehouse in CA Chorus for DB2 Database Management:

Note: Table DDL is located in *your_db2_hlq.*SPFSLIB(PDTDDL). View DDL is located in *your_db2_hlq.*SPFSLIB(CHRSDDL1). The CA Detector PDT_STANDARD_# table is mapped by many views per the record type.

Category	Table	View
Plans	PTI.PDT_STANDARD_#	PTI.PDT_STANDARD_PLAN_VW

Category	Table	View
Programs	PTI.PDT_STANDARD_#	PTI.PDT_STANDARD_PGM_VW
Package	PTI.PDT_STANDARD_#	PTI.PDT_STANDARD_PKGE_VW
Packages	PTI.PDT_STANDARD_#	PTI.PDT_STANDARD_PKGS_VW
Packages, group	PTI.PDT_STANDARD_#	PTI.PDT_STANDARD_PKGP_VW
SQL statements	PTI.PDT_STANDARD_#	PTI.PDT_STANDARD_STMT_VW
Dynamic SQL statements	PTI.PDT_STANDARD_#	PTI.PDT_STANDARD_DYNS_VW
SQL statement object	PTI.PDT_OBJECT_#	PTI.PDT_OBJECT_VW
SQL text	PTI.PDT_STANTEXT_#	PTI.PDT_STANTEXT_VW
SQL error activity	PTI.PDT_SQLERROR_#	PTI.PDT_SQLERROR_VW
SQL error activity, SQL text	PTI.PDT_ERRORTXT_#	PTI.PDT_ERRORTXT_VW
SQL error activity, SQL host variables	PTI.PDT_ERRORVAR_#	PTI.PDT_ERRORVAR_VW
SQL exception activity	PTI.PDT_DYNAMREQ_#	PDI.PDT_DYNAMREQ_VW
SQL exception activity, SQL text	PTI.PDT_DYNAMTXT_#	PTI.PDT_DYNAMTXT_VW
SQL exception activity, SQL host variables	PTI.PDT_HOSTVARS_#	PTI.PDT_HOSTVAR_VW

CA Subsystem Analyzer Tables and Views

The following table shows the CA Subsystem Analyzer subsystem performance tables and views that you can map to the Subsystem Performance category in the Performance Warehouse in CA Chorus for DB2 Database Management:

Note: Table DDL is located in *your_db2_hlq*.SPFSLIB(PSADDL). View DDL is located in *your_db2_hlq*.SPFSLIB(CHRSDDL2).

Category	Table	View
Buffer pool I/O activity	PTI.PSA_BP_#	PTI.PSA_BP_VW
Database I/O activity	PTI.PSA_DB_#	PTI.PSA_DB_VW
Storage volume I/O activity	PTI.PSA_VOL_#	PTI.PSA_VOL_VW

CA SYSVIEW for DB2 Tables and Views

The following table shows the CA SYSVIEW for DB2 application and subsystem performance tables and views that you can map to the Application and Subsystem categories in the Performance Warehouse in CA Chorus for DB2 Database Management:

Note: Table DDL is located in *your_db2_hlq*.SPFSLIB(ARCDDL). View DDL is located in *your_db2_hlq*.SPFSLIB(ARCVW418).

Application Data (Thread Statistics - Detail)

Category	Table	View
Base thread information	INSIGHT.APPLICATION_DETAIL	INSIGHT.APPLICATION_DETAIL_VW
DB2 accelerator data, by accelerator server name	INSIGHT.APPL_ACCEL_DETAIL	INSIGHT.APPL_ACCEL_DETAIL_VW
Buffer pool data, by buffer pool	INSIGHT.APPL_BP_DETAIL	INSIGHT.APPL_BP_DETAIL_VW
Distributed data, by location	INSIGHT.APPL_DDF_DETAIL	INSIGHT.APPL_DDF_DETAIL_VW
Group buffer pool data, by group buffer pool	INSIGHT.APPL_GBP_DETAIL	INSIGHT.APPL_GBP_DETAIL_VW
Package/DBRM accounting data, by program	INSIGHT.APPL_PGM_DETAIL	INSIGHT.APPL_PGM_DETAIL_VW

Application Data (Thread Statistics - Daily Aggregates by lpar, ssid, plan, connection, location by 1 day)

Category	Table	View
Base thread information	INSIGHT.APPLICATION_DAILY	INSIGHT.APPLICATION_DAILY_VW
DB2 accelerator data, by accelerator server name	INSIGHT.APPL_ACCEL_DAILY	INSIGHT.APPL_ACCEL_DAILY_VW
Buffer pool data, by buffer pool	INSIGHT.APPL_BP_DAILY	INSIGHT.APPL_BP_DAILY_VW
Distributed data, by location	INSIGHT.APPL_DDF_DAILY	INSIGHT.APPL_DDF_DAILY_VW
Group buffer pool data, by group buffer pool	INSIGHT.APPL_GBP_DAILY	INSIGHT.APPL_GBP_DAILY_VW
Package/DBRM accounting data, by program	INSIGHT.APPL_PGM_DAILY	INSIGHT.APPL_PGM_DAILY_VW

Subsystem Data (Subsystem Statistics - Detail)

Category	Table	View
Base subsystem information	INSIGHT.SUBSYSTEM_DETAIL	INSIGHT.SUBSYSTEM_DETAIL_VW
DB2 accelerator data, by accelerator server name	INSIGHT.SUBSYS_ACCEL_DETAIL	INSIGHT.SUBSYS_ACCEL_DETAIL_VW
Buffer pool data, by buffer pool	INSIGHT.SUBSYS_BP_DETAIL	INSIGHT.SUBSYS_BP_DETAIL_VW
Distributed data, by location	INSIGHT.SUBSYS_DDF_DETAIL	INSIGHT.SUBSYS_DDF_DETAIL_VW
Group buffer pool data, by group buffer pool	INSIGHT.SUBSYS_GBP_DETAIL	INSIGHT.SUBSYS_GBP_DETAIL_VW
DB2 storage use and address space-related data, by address space name	INSIGHT.SUBSYS_STORAGE_AS_DETAIL	INSIGHT.SUBSYS_STORAGE_AS_DETAIL_VW
DB2 storage use and other DB2 storage use data	INSIGHT.SUBSYS_STORAGE_DETAIL	INSIGHT.SUBSYS_STORAGE_DETAIL_VW

Subsystem Data (Subsystem Statistics - Daily)

Category	Table	View
Base subsystem information	INSIGHT.SUBSYSTEM_DAILY	INSIGHT.SUBSYSTEM_DAILY_VW
DB2 accelerator data, by accelerator server name	INSIGHT.SUBSYS_ACCEL_DAILY	INSIGHT.SUBSYS_ACCEL_DAILY_VW
Buffer pool data, by buffer pool	INSIGHT.SUBSYS_BP_DAILY	INSIGHT.SUBSYS_BP_DAILY_VW
Distributed data, by location	INSIGHT.SUBSYS_DDF_DAILY	INSIGHT.SUBSYS_DDF_DAILY_VW
Group buffer pool data, by group buffer pool	INSIGHT.SUBSYS_GBP_DAILY	INSIGHT.SUBSYS_GBP_DAILY_VW

Subsystem Data (Parameters)

Category	Table	View
DB2 subsystem parameters information	INSIGHT.SUBSYS_ZPARMS	INSIGHT.SUBSYS_ZPARMS_VW
System buffer pool parameters information	INSIGHT.SUBSYS_BP_PARMS	INSIGHT.SUBSYS_BP_PARMS_VW
Group buffer pool parameters information	INSIGHT.SUBSYS_GBP_PARMS	INSIGHT.SUBSYS_GBP_PARMS_VW

Appendix A: Improving Performance

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

Use this worksheet as a checklist for installing CA Chorus for DB2 Database Management and to gather all required installation parameters.

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

The following installation and configuration information is required when you install and configure CA Chorus for DB2 Database Management:

☐ Record the high-level qualifier for the deployed target libraries for the following CA Database Management Solutions for DB2 for z/OS:

- CA Detector
- CA Plan Analyzer
- CA RC/Migrator
- CA RC/Query
- CA RC/Update
- CA Subsystem Analyzer
- CA SYSVIEW for DB2
- General components: Xmanager, Xnet. Batch Processor, Object Framework Services (OFS), and CA Chorus DBA Services (FMID EU9/CHRDBM).

This information is used in the CA Chorus installation.

- Started task user ID values:
  - OFAPROC—Object Framework Services agent (OFA) for DB2 object migration in CA Chorus for DB2 Database Management.
  - PTXMAN—Xmanager (execution manager).
  - PXNPROC and PXNPROCE—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 for CA Chorus for DB2 Database Management.

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.*CE3KPARM):
  - 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=DB2TOOLS
    conf=test host=system3.com port=6791 Applid=DB2TOOLS
    ```