

MAINVIEW[®] for DB2

User Guide

Volume 3: Views

Version 6.1

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 - product version (release number)
 - license number and password (trial or permanent)
- operating-system and environment information
 - machine type
 - operating system type, version, and service pack or program temporary fix (PTF)
 - system hardware configuration
 - serial numbers
 - related software (database, application, and communication) including type, version, and service pack or PTF
- sequence of events leading to the problem
- commands and options that you used
- messages received (and the time and date that you received them)
 - product error messages
 - messages from the operating system, such as `file system full`
 - messages from related software

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About This Book

This book describes how to use the online functions of MAINVIEW for DB2. It can be used by the DB2 database administrator, system programmer, or performance analyst to control resource usage and performance. Before using this book, you must be familiar with the IBM DB2 program product.

The batch reporting functions are described in the *MAINVIEW for DB2 Performance Reporter User Guide*.

How This Book Is Organized

This book is organized into three volumes:

- Volume 1: Overview/Analyzers/Monitors
- Volume 2: Traces
- Volume 3: Views

These parts are included in Volume 1:

- An overview of how to use MAINVIEW for DB2. It includes
 - An introduction describing the major functions of MAINVIEW for DB2
 - A description of the Primary Option Menu and how to access the MVDB2 functions
- An overview of how to use the MAINVIEW for DB2 services that run in full-screen mode. It includes
 - The DB2 analyzer, monitor, and trace display services and their parameters organized alphabetically (in a tabular format with page references to the detailed service descriptions)
 - A description of the analyzers, monitors, and traces, and how they are used
 - The MVDB2 general commands and services
- The DB2 resource analyzer display services
- The DB2 resource and workload monitor data collection services

These parts are included in Volume 2:

- How to use the trace facility
- The DB2 application trace display services

These parts are included in Volume 3:

- Using Views and Wizards
- Managing Views
- Analyzing DB2 Performance

Appendixes, a glossary, and an index are included in all volumes.

Throughout the body of this document, MVDB2 refers to MAINVIEW for DB2. The DMR acronym for the product is used occasionally in this book and in many online panels and messages.

Conventions Used in This Book

The following syntax notation is used in this manual. Do not type the special characters.

- Brackets [] enclose optional parameters or keywords.
- Braces { } enclose a list of parameters; one must be chosen.
- A vertical line | separates alternative options; one can be chosen.
- An underlined parameter is the default.
- AN ITEM IN CAPITAL LETTERS indicates exact characters; usage can be all uppercase or lowercase.
- Items in lowercase letters are values you supply.

Recommended Reading

The following books are referenced in this edition:

- *DB2 Administration Guide* from IBM
- *DB2 Command and Utility Reference* from IBM
- *DB2 Diagnosis Guide and Reference* from IBM
- *CICS/ESA Problem Determination Guide* from IBM
- *MVS/ESA Application Development Macro Reference* from IBM
- *MAINVIEW Solutions Guide*
- *Using MAINVIEW*
- *Quick Start with MAINVIEW*
- *Product Installation and Maintenance Guide*
- *MAINVIEW Implementation Guide*
- *MAINVIEW Alternate Access Implementation and User Guide*
- *Implementing Security for MAINVIEW Products*
- *MAINVIEW Administration Guide*
- *MAINVIEW for DB2 New Release Information*
- *Getting Started with MAINVIEW for DB2 and RxD2*
- *MAINVIEW for DB2 User Guide Volume 1: Overview/Analyzers/Monitors*
- *MAINVIEW for DB2 User Guide Volume 2: Traces*
- *MAINVIEW for DB2 User Guide Volume 3: Views*
- *MAINVIEW for DB2 Performance Reporter User Guide*
- *RxD2 User Guide*
- *MAINVIEW for DB2 Customization Guide*

Related Reading

This book is included as part of the MAINVIEW library, which documents all your MAINVIEW products and the tasks associated with using these products.

MAINVIEW Library

The MAINVIEW library documents these products:

- AutoOPERATOR™ (AO)
- CMF® MONITOR Online (CMF)
- IMSplex System Manager™ (IPSM)
- MAINVIEW® Desktop
- MAINVIEW® FOCAL POINT™
- MAINVIEW® for CICS (MVCICS)
- MAINVIEW® for DB2 (MVDB2)
- MAINVIEW® for DBCTL (MVDBC)
- MAINVIEW® for IMS (MVIMS)
- MAINVIEW® for MQSeries (MVMQS)
- MAINVIEW® for MVS (MVMVS)
- MAINVIEW® VistaPoint™(MVVP)
- Plex Manager (PLEXMGR)

The MAINVIEW library is organized into these three categories:

- Installer documentation
- Administrator documentation
- User documentation

Each book within these categories contains information about specific types of tasks. The following figure shows how this book relates with the other books in the MAINVIEW library.

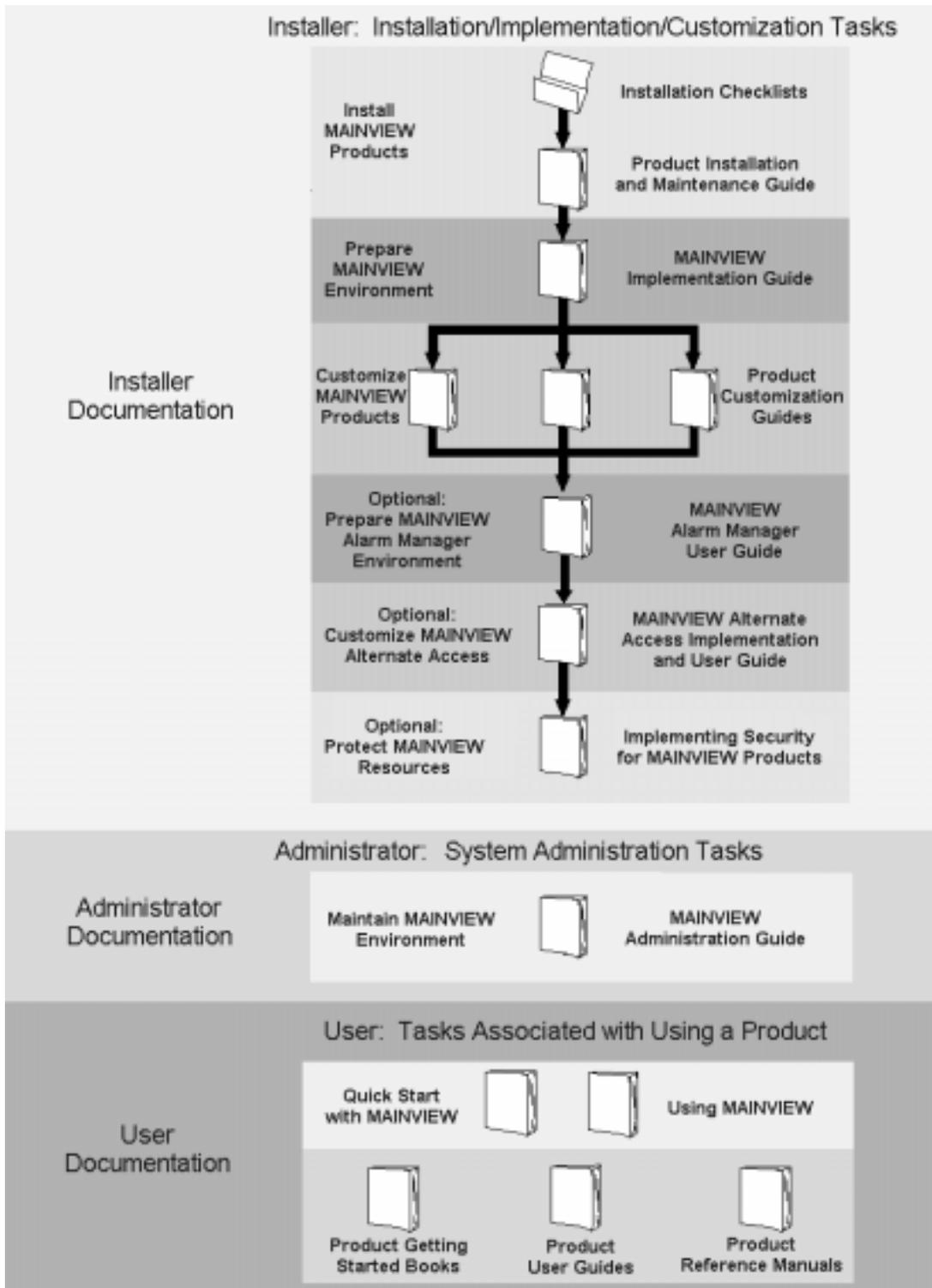


Figure 1. Organization of MAINVIEW Documentation

These books in the MAINVIEW library are used with all MAINVIEW products:

- *Quick Start with MAINVIEW* gives a brief overview to help you quickly get started using all your MAINVIEW products.
- *Using MAINVIEW* gives a more detailed description of how to use your MAINVIEW products. If you have more than one MAINVIEW product, it will help you understand how all your MAINVIEW products work. It will also help you use your products together and take advantage of the integration of all MAINVIEW products.
- The *Product Installation and Maintenance Guide* gives instructions for basic installation of the product libraries.
- The *MAINVIEW Implementation Guide* and the *MAINVIEW Administration Guide* provide customization and administration instructions for all MAINVIEW products.
- The *MAINVIEW Alternate Access Implementation and User Guide* describes how to use the MAINVIEW Alternate Access component. This component provides EXCP and VTAM communication to BMC Software products through ISPF without requiring a TSO subsystem to be active.
- *Implementing Security for MAINVIEW Products* describes how to implement security for MAINVIEW for DB2 with the external security manager installed at your site.

MAINVIEW for DB2 Library

The following documentation gives specific information about the MAINVIEW for DB2 and RxD2 products:

- *MAINVIEW for DB2 Release Notes* summarize the new features in this release of MAINVIEW for DB2 and RxD2. This enables you to quickly see what is new.
- The *MAINVIEW for DB2 Master Index* includes index entries for all the product-specific books in the MAINVIEW for DB2 library. This index shows where you can find information for specific topics in individual MAINVIEW for DB2 and RxD2 manuals.
- *Getting Started with MAINVIEW for DB2 and RxD2* is an introduction for new users of these products. It helps you use these products to solve problems more effectively in a short time.
- The *MAINVIEW for DB2 User Guide* (Volumes 1, 2, and 3) describes how to use the online monitor, analyzer, trace, and view services for the DB2 database administrator, system programmer, or performance analyst.
- The *MAINVIEW for DB2 Performance Reporter User Guide* describes how to create statistical batch reports about application activity and DB2 performance and resource usage for the database administrator, system programmer, or performance analyst.
- The *RxD2 User Guide* describes the RxD2 product, which provides access to DB2 from REXX. It also provides tools to query the DB2 catalog, issue dynamic SQL, test DB2 applications, analyze EXPLAIN data, generate DDL or DB2 utility JCL, edit DB2 table spaces, perform security administration, and much more. MAINVIEW for DB2 contains numerous hyperlinks to RxD2.
- The *MAINVIEW for DB2 Customization Guide* provides product-specific tailoring instructions. Use this book in conjunction with the *Product Installation and Maintenance Guide* and the *MAINVIEW Implementation Guide* during the customization process.
- Online tutorials are available by selecting option T from the MAINVIEW for DB2 Primary Option Menu or by pressing HELP (PF1/13) from the product application panels.

Part 1. Using Views and Wizards

This part gives an overview of how to use MAINVIEW for DB2 views. For information on how to use MAINVIEW windows mode, see the *Using MAINVIEW* manual.

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Chapter 1. Introduction

MAINVIEW for DB2 views exploit MAINVIEW windows-mode technology to display extensive DB2 data covering the analysis of

- DB2 subsystems
- Buffer pools and group buffer pools
- Page set status and I/O
- Lock contention lockout events
- Current thread activity

All of this data, except for the current threads, is available not only for the current time period, but also with online history.

Context-sensitive help includes extensive DB2 tuning information, while screen customization, graphics, and multiple windows provide the flexibility for each user to present the data exactly as needed to solve any monitoring or analysis task.

The windows-mode technology also enables single system image (SSI) views that can pull together and even summarize data from multiple DB2 subsystems.

This capability increases the span of control and saves time for all users managing more than one DB2. For example, a status overview display presents key indicators and exceptions for all DB2s, allowing for a quick check for potential problems. Any set of related DB2s, such as production or test, can be defined as a context for SSI monitoring.

SSI views are even more important in a data sharing environment, since now a group of DB2 members that work together can finally be monitored as a whole. This not only simplifies sysplex management, but also increases understanding of this complex environment.

Note: The analyzer, monitor, and trace displays of MAINVIEW for DB2 are described in the other volumes of the *MAINVIEW for DB2 User Guide*. These services are referred to collectively as running in full-screen mode.

Chapter 2. Getting Started with Windows Mode

This chapter provides a short overview of windows mode from a DB2 point of view.

If you are new to windows mode, a short introduction is available in *Quick Start with MAINVIEW*, which you should read before using windows mode for the first time. More complete information is provided in *Using MAINVIEW*.

Accessing Windows Mode

The views in windows mode can be accessed in two ways:

- From the MAINVIEW Selection Menu, select Option 5 to access the MAINVIEW for DB2 Primary Option Menu. Option V on this menu takes you to windows mode and presents a menu of options to monitor all DB2s.
- From the MAINVIEW Selection Menu, select Option 1, Plex Manager, to access a list of available targets and products in the PLEXOVER view. Cursor select (in the Context or Product field) a DB2 subsystem target where the product is shown as MVDB2 to access a menu of options to monitor one DB2 at a time.

Examples of these menus are shown in Figure 2 on page 7 and Figure 3 on page 8.

Accessing Views

Windows-mode data is displayed in *views*. A view is a display of information within a single window. There are three view types: tabular, summary, and detail.

Note: Summary views look like tabular views but combine data records by one or more keys. These views are generally suffixed with a Z.

The simplest way to move between views is to *hyperlink* to another view. You can do this by cursor selecting either a menu option or a highlighted field. (This is similar to *Expand* in full-screen mode.)

You can access views by one of the following methods:

- Hyperlink from a menu option.
- Hyperlink from a highlighted field in another view.
- Type the name of the view on the COMMAND line.
- Select the name of a view from a list of views:
 - The MAIN view presents a list of submenus with lists of related views that can be selected.

Note: You can access MAIN by using the S line command in the PLEXOVER view. Also, if you get lost, you can always type MAIN to get this list of views for any windows-mode product.
 - The VIEWS view presents a list of all distributed or site views.
 - The USERS view (available from MAIN) presents a list of all views that you have customized.

Easy Menus

All windows-mode products have *Easy Menus* to make it easier to access the information you need. All DB2 Easy Menus begin with EZD.

EZDSSI—Monitor Multiple DB2s

The EZDSSI view, shown in Figure 2, is one of the two primary product menus. It is designed for use when you want an overview of several target DB2 subsystems together in SSI mode.

```

W1 =EZDSSI===== (ALL=====*) 17MAY2000==14: 49: 11====MVDB2=====1
                                DB2 SSI Easy Menu

  Status
. Overview
. Exceptions
> Buffer Pools
> Status Menu

  Data Sharing
. GBP Group Status
. GBP Group Activity
. Global Lock Stats
. Global Lockouts
. Volume I/Os (SSI)
> Page Set Menu

                                Monitors
. In Warning
. Summary By Area
. Active
. Workload Objectives

                                Threads
. Current Threads
. DB2 Summary
. Attach Summary
. Connect Summary
. Plan Summary

                                Tools And Menus
. Set SSI Context
> Easy Menu
> MAIN Menu
> Tuning Wizards
. Return...

```

Figure 2. EZDSSI Easy Menu—Monitor Multiple DB2s

You can access this menu by entering windows mode from the DB2 Primary Option Menu V option, as described on page 5, or type its name, EZDSSI, on the COMMAND line. In this case, be sure to set the context to a valid SSI context. You see the current context in the window information line.

The SSI context of ALL is always available and is the one set by default through the V option. There may be other SSI contexts already defined that group several DB2s together, such as PROD or TEST, or a data sharing group. Select the Set SSI Context option to view a list of defined contexts. Hyperlink on any context to return to EZDSSI with that context set. If you already know the SSI context name, type

CON ssi context

on the COMMAND line.

The V option presents EZDSSI, context ALL, by invoking a screen definition named MVDB2. To modify the default context, or add additional views to this screen, see Chapter 6, “Using SSI Contexts” on page 25 for more information.

EZDB2—Monitor One DB2

EZDB2, shown in Figure 3, is the second of the two primary product menus. It is designed for use when you want to focus on information about one target DB2 subsystem.

```

W1 =EZDB2===== (ALL=====*) 17MAY2000==17: 36: 11====MVDB2=====1
                                DB2 Easy Menu

      DB2 Target --->
      Status
      . Overview
      . Exceptions
      . Buffer Pools
      . DDF Connections
      . Activity Rates
      > Status Menu

      Lockouts
      . Events
      . Resource Summary
      . Connection Summary
      . Blocker/Waiter Summary

      Page Sets
      . Page Set Status
      . Volume I/O Summary
      > Page Set Menu

      Monitors
      . In Warning
      . Summary By Area
      . Active
      . Workload Objectives

      DB2 Definitions
      > ZPARM Menu

      Threads
      . Current Threads
      . Attach Summary
      . Plan Summary
      . Thread History
      . Current Traces
      . History Traces

      Tools And Menus
      . Set Target Context
      . DB2 Catalog/Explain
      > SSI Easy Menu
      > DBA Easy Menu
      > Fast Menu
      > MAIN Menu
      > Tuning Wizards
      . Return...
  
```

Figure 3. EZDB2 Easy Menu—Monitor One DB2

You can access this menu by one of these methods:

- Select a target DB2 (with product MVDB2) from Plex Manager, as described on page 5.
- Select EZDB2 from the EZDSSI menu.
- Type the menu name, EZDB2, on the COMMAND line.

In the last two cases, be sure to set the context to the name of the DB2 you want to monitor. Select the Set Target Context option to view a list of defined targets. Hyperlink on any target to return to EZDB2 with that context set. If you already know the target name, type

```
CON db2target
```

on the COMMAND line.

EZDBA—Applications Menu

There is an alternative Easy Menu view, EZDBA, shown in Figure 4, that is oriented more toward applications analysis in one DB2.

```

W1 =EZDBA=====DB2H=====*=====17MAY2000==13: 04: 37====MVDB2=====1
                                DB2 DBA Easy Menu
      DB2 Target ---> DB2H
      Current Status
      . Overview
      . Exceptions
      . User Lock Contention
      . Page Set Status
      > Status Menu

      System Analysis
      . Buffer Pools
      . Lockout Events
      > Lock Wizard
      . Volume I/O Activity
      > Page Set Menu

      Current Thread Activity
      . Active Threads
      . CICS Connect Summary
      . Attach Summary
      . Connect Summary
      . Plan Summary

      Workload Analysis
      . Thread History
      . Workload Objectives
      . Current Traces
      . History Traces
      . Start Trace
      > DB2 Catalog/Expl ain

      Tools and Menus
      . Set Target Context
      > Easy Menu
      > SSI Easy Menu
      > Fast Menu
      . Return...
  
```

Figure 4. EZDBA Easy Menu—Applications Menu

You can access it from EZDB2, or it can be incorporated in a screen definition and specified as the default screen when entering windows mode.

Select Option 0—MAINVIEW Parameters from the MAINVIEW Selection Menu, or type MVPARMS on the COMMAND line to set this initial screen. Type HELP SCREEN to learn about creating screens.

Other DB2 Easy Menus

Some of the options on EZDB2 and EZDSSI are shown with a greater sign (>) in front of them instead of a period (.), indicating that this hyperlink goes to another menu. For example, the status and statistics information available is so large that it is most easily accessed through another Easy Menu, EZDSTAT. Therefore, the main menus offer direct access to some of the most frequently used status views, plus access to the Status Menu.

MAINVIEW for DB2 also has a Fast Menu, EZDFAST, that provides quick access to most full-screen displays from one spot in windows mode.

Integrating Views with Other MVDB2 Services

Hyperlinks. There are many hyperlinks from windows mode to full-screen displays of DB2 data that are more detailed than the data currently available in windows mode. PF3 returns you directly to your position in the windows mode view. For example, current thread activity is available in windows mode, but to see all the 200+ accounting fields for one specific user, a hyperlink goes to the full-screen DUSER display.

Hyperlinks from full-screen displays to windows-mode views are not provided.

Transfers. You can transfer directly from windows mode to full-screen mode by typing a transfer command on the COMMAND line of a view. To transfer to a DB2 display, type

```
TRANsfer target DB2; serv
```

A few examples are

```
TRAN DB2G DB2; LOG           to access the Journal Log display for DB2G
TRAN DB2P DB2; EX DB2ST DELTA to see delta values in DB2ST for DB2P
TRAN DB2P DB2; RX           to access RxD2 for DB2P
```

To transfer from full-screen mode to windows mode, use

```
TRANsfer target MVDB2; vi ew
```

Return. If you entered windows mode with the V option, pressing PF3 repeatedly or typing QUIT or RETURN returns you to the DB2 Primary Option Menu. From here, you can access all the full-screen displays as usual. If you entered windows mode through Plex Manager, pressing PF3 repeatedly or typing QUIT or RETURN returns you to the MAINVIEW Selection Menu. You can then choose Option 5, DB2, to access the full-screen displays.

Monitor Data. All the data collected by the DB2 monitors is available in both windows-mode views and full-screen displays. Use the windows-mode views when you need an SSI overview or want to use the additional customization options.

Integrating Views with Other MAINVIEW Products

If other MAINVIEW products are installed, they are available from the MAINVIEW Selection Menu or Plex Manager. In Plex Manager, you see a list of all targets and the products monitoring them.

Screens with multiple products. You can define screens (multiple windows with different views) that include views from different products when you want to look at related data across targets. For example, you may want to look at CICS systems that are accessing DB2 on the same screen with one of the MVDB2 current thread activity views.

Product transfers to full-screen mode. You can transfer to another product running in full-screen mode with the same command shown above for DB2:

```
TRANsfer target product; serv
```

In this case, replace the product variable with the product family name (AO, CAO, CICS, DB2, IAO, IMS, MAO).

Product transfers to windows mode. From within windows mode, you can transfer to another product running in windows mode with the SET or CONTEXT command. SET presents a panel where you fill in the target, product, and view name. If you prefer, you can type this directly on the COMMAND line:

```
CONtext target product; vi ew
```

In this case, use the product name shown in windows-mode views (CMF, MVCICS, MVDB2, MVIMS, MVMVS, PLEXMGR).

To transfer from full-screen mode to windows mode, type

```
TRANsfer target product; vi ew
```

with the product names shown above.

VistaPoint workloads. If VistaPoint is installed, you can combine DB2 workload data with workloads from other products under common application names. See Part 2, “Managing Views” on page 17.

Chapter 3. Viewing DB2 Performance Over Different Time Periods

This chapter presents how DB2 performance data can be viewed over different time periods.

There are two different ways that a historical perspective on the data is shown. First, when data is collected for a query to present a view, the data often covers more than just one time period. Second, windows mode supports historical logging of data for each interval. This data can be retrieved in the same views generally used for current-time data.

Data Collection Periods

Most DB2 windows-mode statistics are available as *interval* and *session* counts, except for current thread information, which is measured for the life of the thread to the time of the query.

Interval data represents the near-term performance of your DB2 targets. Typically, the interval is defined as 15 minutes. When you issue a view query for interval data, MAINVIEW for DB2 displays data for the current interval, which means that you see data from the beginning of this interval until the query was issued. The data collected represents that portion of the interval that has elapsed, something between 1 to 15 minutes. This is similar to the DELTA concept in the MAINVIEW for DB2 full-screen displays.

Session data represents a summary of performance information since the monitored DB2 system(s) started.

There are naming conventions for views to differentiate between these two types of data. If the data shown is interval data, there is no special suffix, while session data views are suffixed with an S. For example, total I/O counts per page set are shown for the interval in view PSTIO, while session counts are shown in PSTIOS.

Many detail DB2 statistics views show both interval and session counts together.

The monitor data available in windows mode is more granular, and includes **realtime** values for the most recent period, typically the last 60 to 90 seconds. This provides a much better indication of current problems. Realtime views are suffixed with an R.

In addition, some monitor views contain all three time periods in one view. These **cluster** views provide a better perspective of how these indicators have behaved over time. Cluster views are suffixed with a C.

Historical Data

Statistics data is available both for the current time period and from online historical data sets. Interval records are written to these data sets to capture the status of the monitored targets each time an interval is completed.

You can retrieve these interval records by date, time, and duration with the `TIME` command to analyze past problems or performance concerns. In this case, the interval counts are generally for a full past interval. The actual duration of the time span that the retrieved data covers is shown on the view in the window information line.

The `DSLIST` view in Plex Manager shows which history data sets are available and the time periods covered.

Chapter 4. Using the DB2 Tuning Wizards

This chapter discusses how to use the DB2 tuning wizards.

DB2 tuning wizards are designed to help you cope with today's complex systems and time pressures, turning data overload into usable knowledge about your DB2 systems. Wizards take advantage of the power of windows mode without requiring that you be an expert in all its usage techniques.

Each wizard is a set of views that lead you through all of the related information about a specific area of DB2 performance, providing critical DB2 tuning help and recommendations at just the point where they are needed. It presents the critical data in context with quick access to further details if needed.

Dynamic decision panels provide a consistent approach. Questions show the diagnostic paths, identifying *what* each path shows and *why* they could be important. Key indicators on the decision panels show whether a path is worth following, based on relevant current and long-term measurements.

Key indicators on the decision panels are the sign posts to help you decide which paths to follow to identify and solve problems. The measurements have defined thresholds that highlight problems as appropriate. View customization allows each user to modify these thresholds as needed. Often, you can immediately determine whether a path is worth following, avoiding false trails and time-consuming analysis.

Figure 5 shows an example of a decision panel. It is the start point of the Lock Analysis Wizard.

```

W1 =WZLOCK=====DB2G54C==*=====17MAY2000==16: 29: 20====MVDB2=====1
** LOCK WIZARD **                               Target Values.... DBOH

Data Sharing?
. Set Context to Group
. => Analyze Group

Analyze Single DB2?                               Interval   Sessi on
. Set Context to DB2                             Timeouts..... 0           0
                                                Deadlocks..... 0           0
Current Interval OK?                             Lock Suspensi ons.. 0           0
. Review Hi story and set TIME                   Global Suspensi ons 0           0

Are any values high?
. Check the System

Current Lock Contenti on?                         Suspended Threads. 0
. By DB/TS
. By Thread                                     Susp. Transacti ons:
** CICS Threads.. 0
** IMS Threads... 0

All OK? Congratulati ons!
(PF3 to Exit Wizard)

```

Figure 5. WZLOCK View—Lock Analysis Wizard

You can use a tuning wizard anytime without a long learning (or relearning) curve. Help is available on each of the decision points, in addition to the standard field help. These help panels include navigation tips as well as DB2 tuning information.

Note: No further written documentation should be needed. If you have suggestions for improvements, please send them in!

Part 2. Managing Views

This part describes system administration and operations views that are specific to MAINVIEW for DB2.

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Chapter 5. Defining a DB2 Workload

This chapter discusses how to define a DB2 workload.

A workload groups DB2 threads for performance reporting and analysis. You build a DB2 workload using a workload definition dialog called DWKLDDEF, which allows you to

- Establish a service-level objective for expected workload performance
Performance is measured by the service-level objective set for a workload. The service-level objective comprises
 - Response time limit set as a maximum threshold for acceptable performance
 - Percentage of transaction completions within the specified response time limit
- Assign a composite name to that workload grouping

Your defined service-level objectives and composite workloads are reported by MAINVIEW VistaPoint. MAINVIEW for DB2 also reports your defined workloads in response time views.

Planning a DB2 Workload Definition

To create a DB2 workload:

1. Access the DWKLDDEF dialog.
2. Start an edit session.
3. Save the workload definition.
4. Install the definition.

Before you begin, you need to establish workload conventions, identify critical monitoring periods, and set a workload service-level objective. A service-level objective is the minimum acceptable performance of a workload based on a user-specified transaction completion time and expected transaction completion percentage.

Default Workloads

Default workloads have been defined for the transaction and query connections to DB2, based on connection type. This includes

- IMSMPP
- CICS
- TSO
- CAF
- DBATDB2
- DBATDRDA

Batch-type work is not included in the default set.

Please review the values specified as response time objectives, objective percents, and start and end times. They are only meant as a starting point.

The DOBJx views show the results of the data gathered using these definitions. You may want to review them for a while to see how effective these objectives are in your environment. Then you can use this information in planning your changes. You can modify, delete, or add workloads.

Establishing Workload Conventions

Workload definitions are created in edit mode. When they are saved, they are saved in BBPARM member BBPTWK00 by default. These members can be in a shared library. If they are not in a shared library, you should have a consistent naming convention for similar workload members in different BBPARM data sets.

Shared BBPARM Library

Your BBPARM library should be accessible to all PASs. This keeps the number of workload definitions to a minimum. Otherwise, duplicate workload definitions must be created for each linked PAS to ensure that performance data from all targets is reported. Maintenance is easier if updates are made to a single workload definition rather than simultaneous changes to similar definitions in different parameter libraries.

Naming Conventions

Consistent names for workloads are important when

- Workload definitions cannot be stored in a shared BBPARM library

Similar workloads in different BBPARM libraries must be easily identifiable for workload definition updates.

- Sorting and filtering by workload or composite name is available in other views

Sorting and filtering are much easier with consistent names.

Workload names should be a brief representation of the work performed by the target. For example, DB2PAY1A identifies DB2 payroll transactions running in the DB21A subsystem. It can be a maximum of eight characters.

Composite names identify the workload grouping by the group's function. For example, a workload composite with a name of FINANCE indicates a workload's targets are completing financial transactions. Composite names can be a maximum of eight characters.

Identifying Critical Workload Monitoring Periods

During the day, there are periods when transaction performance is not at risk because of the relatively light load on the system. Other daily periods are critical. The demands on system resources lead to contention and transaction delays. You should monitor all your workloads during your site's daily periods when adequate transaction performance is essential. Workloads belonging to the same composite workload should have identical monitoring periods.

DWKLDDEF—DB2 Workload Definition

The DWKLDDEF view, shown in Figure 7, is the starting point for defining a DB2 workload.

```

>W1 =DWKLDDEF=====DB2G54C==*===== (00 BROWSE          )=====MVDB2=====7
CMD Workload Composite Target System Description Sta Resp %Tr
--- Name----- Name----- Target System Description -----
ALLWORK SAMPLE * * Sample DB2 Workload Act 1.00 95
CAF DB2SAMP * * CAF DB2 Workload Act 5.00 90
CICS DB2SAMP * * CICS DB2 Workload Act 1.00 95
DBATDB2 DB2SAMP * * DBAT DB2 Workload Act 5.00 90
DBATDRDA DB2SAMP * * DBAT DRDA Workload Act 5.00 90
IMSMPP DB2SAMP * * IMS MPP DB2 Workload Act 1.00 95
TSO DB2SAMP * * TSO DB2 Workload Act 5.00 90

```

Figure 7. DWKLDDEF View—DB2 Workload Definition

You can select the DWKLDDEF view at any time by typing one of the following view names on the COMMAND line:

- **DWKLDDEF**
Provides direct access to a list of existing DB2 workload definitions.
- **ADMIN**
Groups views by system and operations administration functions and is available from the MAIN menu when MAINVIEW for DB2 starts. Select DWKLDDEF from the list of ADMIN views.
- **IEWS**
Provides an alphabetical list of all views. Select DWKLDDEF from the list of views.

To add a new or change an existing DB2 workload definition, you must first type EDIT on the COMMAND line of the DWKLDDEF view.

The window information line changes from BROWSE to EDIT. In edit mode, you can use

- Primary commands to
 - ADD a new definition
 - CANCEL any changes made
This discards any changes made to the definition since the last save.
 - SAVE a definition you have added or changed
 - END your edit session
This saves any changes you made and returns the previous view.
- Line commands to select an existing definition to
 - ADD a definition using one you selected as a model
 - CHAnge the selected definition
 - DELete the selected definition
 - UNDelete or recover the selected definition if it is not saved
 - INStall or activate the selected definition

Using the DB2 Workload Definition Dialog

Online help describes how to use the fields in the dialog. Press your HELP key for descriptions of the fields by

- **Workload**
Name of the workload.
- **Composite**
Name used to group workloads together.
- **Target**
Name of the DB2 target to be monitored.
- **System**
Name of the MVS image where the target DB2 is running.
- **Description**
Describes (maximum of 24 characters) what this workload definition is for.
- **Monitored Resources**
For DB2, these are
 - Connection Type
 - Plan Name
 - Authorization ID
 - Connection Name
 - Correlation ID
 - Location Name
- **Service-Level Objective**
This comprises user-specified
 - Response time in seconds; for example:
Response time of ==> 1.0
 - Percentage of transactions to complete within specified response time; for example:
for ==> 95
 - Start time monitoring is to begin; for example:
Between ==> 00: 00
 - End time when collection of response or elapse time data is to stop; for example:
and ==> 24: 00
- **DB2 Only**
Specifies whether total elapsed time should be used instead of In-DB2 elapsed time (In-DB2 times require accounting class 2 to be active). If yes is specified, In-DB2 elapsed time is used. If no is specified, total elapsed time (since the first connection of the thread to DB2) is collected.

Saving and Installing the DB2 Workload Definition

After you have completed the DB2 workload definition dialog, you must save your definition and install it before it becomes active. Typing `SAVE` on the `COMMAND` line saves the workload definition you modified or added and retains edit mode for more changes. Pressing your `END` key saves your definition and returns the previous view.

Typing the `INStall` line command next to the listed workload definition starts monitoring of transaction response time if you are within the defined time range. The `DWKLDDDEF` status field changes from inactive to active.

If you updated an existing workload definition with the `CHAnge` line command and saved it, the `INStall` command deactivates the current definition. Monitoring begins with the parameters set in the updated workload definition.

`INStall` immediately updates the local `BBI-SS PAS`. If you are running `MAINVIEW` for DB2 in multiple `PASs`, you may want to issue the `INStall` on any additional `PASs` now. Otherwise, any `SAVED` definitions become active when those `PASs` are recycled.

DWKLDDDET—DB2 Workload Definition Detail

The DWKLDDDET view, shown in Figure 8, provides detailed information about the status and parameters in effect for a definition selected from the DWKLDDDEF view. It shows the current values of the parameters.

```

>W1 =DWKLDDDEF=DWKLDDDET=DB2G54C==*===== (00 BROWSE          )=====MVDB2=====1
Workload. CICS      Description CICS DB2 Workload
Composite DB2SAMP   ConnType... CICS
Target... *        PlanName...
System... *        AuthID....
Response. 1.00     ConnName...
%Trans... 95      CorrID....
Start.... 06:00   LocName...
End..... 06:00
DB2 Only. Y
Deleted.. N
Status... Active

```

Figure 8. DWKLDDDET View—DB2 Workload Definition Detail

The values shown may not be in effect if the parameters have changed and

- Changes were activated with the INStall command, but not SAVEd
The status of the definition is Install. The installed parameters are in effect.
- The changed parameters were SAVEd, but not INStalled
The status of the definition is Modified. The saved parameters are the current values. Saved changes are activated when they are installed or the PAS (product address space) is restarted.

You can use the same primary and line commands from this view as from DWKLDDDEF. Before you can use these commands, you must first type EDIT on the COMMAND line.

The window information line changes from BROWSE to EDIT.

Online help describes how to use these commands. Select the view name with your cursor, press your HELP key, and then select Actions from the help window.

Chapter 6. Using SSI Contexts

One of the most powerful features of windows mode is its ability to combine data from multiple targets in one view in single system image (SSI) mode. Even the data from DB2 subsystems operating on different MVS images can be brought together.

The default SSI context of ALL is always available and is the one set if you enter windows mode from the DB2 Primary Option Menu. There may be other SSI contexts already defined that group several similar DB2s together, such as PROD or TEST, or a data sharing group.

As you navigate between MVDB2 views, it is often necessary to set another context to look at a different group of DB2s or at a single DB2. You may want to switch out of SSI mode to analyze one DB2 target, or remain in SSI mode but temporarily narrow the focus. This focus is called SCOPE.

The DB2 Easy Menus have utility options to set context. From EZDSSI, you can hyperlink to view a list of defined contexts and select one to reset the context. From EZDB2 and EZDBA, you can hyperlink to view a list of target DB2s and select one to reset the context to a new target.

Using Commands to Change Context

There are four commands that affect the current context. When you know the name of the target or SSI context you need, you can type the information directly in one of these ways.

For more details about these commands, type HELP followed by the command name; for example, HELP CON.

CONtext Command

The CONtext command is the fastest way to switch between contexts. The syntax of the command is

```
CONtext target product; view
```

The product and view names are optional. For example, type

```
CON DBGG
```

to change the context to the data sharing group DBGG that has been previously defined as an SSI context.

CONtext establishes the current context, product, and target for the active window. Subsequent views displayed in that window inherit these values.

SET Command

The SET command invokes an ISPF dialog to display a panel where you can overtype context values. You can change context, product, server, scope, and view. Like CONtext, it sets these values for the current window. Type HELP SET for more details.

SETD Command

The SETD command is similar to SET in that it invokes an ISPF dialog to display a panel where you can overtype context values. You can change context, product, and scope. SETD changes the default settings of new windows but does not affect the context of the current window. It is useful when several windows need to be opened to a new context.

SCOPE Command

You can restrict views within an SSI context to show data from a single target using the SCOPE command. The syntax of this command is:

```
SCOpe target | *
```

Target narrows the focus to one target. The asterisk reverses back to the full SSI context.

Plex Manager Views of SSI Contexts

Plex Manager provides views that show you the defined SSI contexts and the targets within the contexts. Type

```
CON * PLEXMGR; CONACTZ
```

to view a summary list of all the SSI contexts known to the current Plex Manager. It shows the number of targets and number of active targets. You can use this command whenever you need to review the SSI contexts available to you.

A hyperlink from CONACTZ shows you all the targets in the selected context in the view CONACT.

Additional dialogs allow the definition of new SSI contexts. Refer to the *MAINVIEW Administration Guide* if you need to perform this function. These views are available through the ADMIN list of views on the MVDB2 MAIN menu.

Chapter 7. Securing Resources

This chapter discusses how to update security for the MAINVIEW for DB2 resources.

External security managers (ESMs), such as CA-ACF2, CA-TOP SECRET, or RACF can be used to protect access to a product and its resources, such as views, view actions or commands, and data. Product resources are identified to your ESM as a resource entity that can be protected so that existing security rules, permits, or profiles can be used.

Using the security resource administration views, you can see the access authorizations that are enabled for the MAINVIEW for DB2 resources by default. These views are SERDEF and SERDEFE. You can use them to enable, disable, and change security resource definitions. For information about securing resources, see *Implementing Security for MAINVIEW Products*.

SERDEF—Security Resource Definitions

You can use the SERDEF view, shown in Figure 9, to disable or enable resource definitions or to select one to view and change its attributes.

```

>W1 =SERDEF=====DB2G=====*=====17MAY2000==12: 09: 48====MVDB2=====13
CMD Description                               Enab Change Comment
-----
Default - Table Data                           Yes
Default - Any Table Actions                     Yes
Default - Alter Data Set                       No
Default - Specific Table Action                 Yes
Any Action (MVDB2 Views)                       Yes
Appl Monitor - Table Data                      Yes
Workload Definitions - Table Data              Yes
Workload Definitions - Any Action              Yes
Workload Definitions - Action - Install        Yes
Workload Definitions - Action - Edit          Yes
Workload Definitions - Alter Data Set         No
Appl Workload- Table Data                      Yes
BufferPool - Table Data                       Yes
IoActivity - Table Data                       Yes
LockOuts - Table Data                         Yes
Monitor - Table Data                          Yes
Status - Table Data                           Yes
Users - Table Data                             Yes

```

Figure 9. SERDEF View—Security Resource Definitions

You can select the SERDEF view at any time by typing one of the following on the COMMAND line:

- **SERDEF**
Provides direct access to a list of existing resource definitions.
- **ADMIN**
Groups views by system and operations administration functions and is available from the MAIN menu for MVDB2. Select SERDEF from the list of views.
- **IEWS**
Provides an alphabetical list of all views. Select SERDEF from the list of views.

Implementing Security for MAINVIEW Products describes how to use the SERDEF view.

SERDEFE—Security Resource Definition Detail

The SERDEFE view, shown in Figure 10, provides detailed information about a resource definition selected from the SERDEF view. It shows the class and entity names and other attributes for that definition.

```

>W1 =SERDEF===SERDEFE==DB2G=====17MAY2000==12: 09: 48===MVDB2=====1
Res Key. .... BBP9#DEFAULT Desc. .... Default - Specific Table Action
Enabled. ... Yes Comment... *Unchanged*
Type. .... DEFAULT

ESM Info---
Class. .... SBBM Entity... BBM &PRODUCT. &CONTEXT. &INTTABLE. &INTACT
VolSer. .... *NONE* Intent... READ
LogAuth. ... Allow LogFail.. Allow
Substitution Values
IntTable... #DEFAULT ExtTable. #Default
IntAction.. ACTION ExtAction
IntActTab.. *NONE* Product.. MVDB2
Parms?. ... No Fields?.. No
Update Info. Mem Suff. 00
UpdSystem.. *NONE* UpdTime.. 12: 09: 49
UpdUser... *NONE* UpdDate.. 17MAY2000
Res Version.
Version... 1 Release.. 1
ModLevel. 0

```

Figure 10. SERDEFE View—Security Resource Definition Detail

You can use the commands described in online help or in *Implementing Security for MAINVIEW Products* to change a definition's attributes.

Part 3. Analyzing DB2 Performance

This part describes the MAINVIEW for DB2 views you can use to analyze DB2 performance.

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Chapter 8. Alphabetical List of Views

Table 1 and Table 2 provide alphabetical lists of all the windows-mode views with page references to their descriptions in this manual. Table 2 on page 39 lists the monitor plot views and Table 1 lists all other windows-mode views available with MAINVIEW for DB2.

Table 1. Windows-Mode Views

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GBPGSTD	Group Buffer Pool Group Coupling Facility Status Detail	123
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Table 1. Windows-Mode Views (Continued)

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PSBPS	Buffer Pool Page Sets—Session	154
PSBPSZ	Buffer Pool Page Set Summary—Session	153
PSBPTMZ	Buffer Pool Page Set 2-Hour Summary	155
PSCACHE	Page Set Cache	146
PSDBSZ	Database Page Set Summary—Session	156
PSDBTMZ	Database Page Set 2-Hour Summary	157
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PSLIST	Page Set List	147
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Table 1. Windows-Mode Views (Continued)

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STQPAR	Query Parallelism	73
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Table 1. Windows-Mode Views (Continued)

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D@ELAP	Average Elapsed Time	279
D@ELCL	Average Elapsed for Claim Waits	279
D@ELDR	Average Elapsed for Drain Waits	279
D@ELGL	Average Elapsed Wait—Global Lock	280
D@ELGM	Average Elapsed Wait—Notify Message	280
D@ELP3	Average Elapsed Wait—All Class 3	279
D@ELPD	Average Elapsed in DB2	279
D@ELPL	Average Elapsed for Page Latch	279
D@ELPR	Average Elapsed for Prefetch Reads	279
D@ELIO	Average Elapsed for I/O	279
D@ELLK	Average Elapsed for Locks	279
D@ELSP	Average Elapsed Wait—Stored Procedure TCB	279
DARCDL	Read Accesses Delayed	271
DARCRA	Archive Log Read Allocations	271
DARCTC	Tape Volume Contention Read Delays	271
DARCTM	Look-Ahead Tape Mounts	271
DARCWA	Archive Log Write Allocations	271
DARCWR	Archive Log CIs Written	271
DBINDF	Failed Automatic Binds	250

Table 2. Plot Views (Continued)

View Name	Title	Page
DBINDS	Successful Automatic Binds	250
DBNPKF	FAILED Automatic Binds for Packages	250
DBNPKS	Successful Automatic Binds for Packages	250
DBPUSE	Buffer Pool Percent in Use	258
DBPUTL	Buffer Pool Percent Utilization	258
DBSDSA	BSDS Access Requests	271
DCHKPT	Number of Checkpoints	271
DCKPFR	Checkpoint Frequency	271
DCLM	Claim Requests	255
DCLMF	Claim Failures	255
DCNVLM	Conversations Deallocated - ZPARM Limit	273
DCOMP2	Phase 2 Commits	250
DCOMRO	Read-Only Commits	250
DCOMSY	Sync Commits	250
DCONUT	Connection Percent Utilization	250
DCSAP	CSA Percentage of Utilization	272
DCSAPG	CSA Paging	272
DDB2DP	Demand Paging	272
DDBTQD	Database Thread Queued	250
DDDFBR	DDF Bytes Received	273
DDFBS	DDF Bytes Sent	273
DDDFCQ	DDF Conversations Queued	273
DDESRD	Number of Pages for which Destructive Read Requested	258
DDRN	Drain Requests	255
DDRNF	Drain Failures	255
DDSOPN	Database Data Sets Open	249
DDSOPR	Database Data SET Open Requests	249
DDSUTL	Open Database Data SET Utilization	249
DDWTX	Vertical Deferred WRITE Threshold Reached	258
DECSAP	Extended CSA Percentage of Utilization	272

Table 2. Plot Views (Continued)

View Name	Title	Page
DEDMLD	Average EDM Requests Per Load I/O	257
DEDMUT	EDM Pool % Utilization	257
DEOMFL	End of Memory Failures	251
DEOTFL	End of Task Failures	251
DGCAST	GBP Castout Requests	259
DGCTPG	GBP Castout Pages	259
DGETPG	Getpage Requests	259
DGETRI	Getpage (GET) Requests Per Read I/O (RIO)	259
DGFAIL	GBP Failures	260
DGNEG	Negotiate P-Lock	255
DGNOEN	No Engines—P-Lock	255
DGNTFM	Notify Messages	255
DGOTHR	GBP Other Requests	260
DGPGWR	GBP Pages Written	260
DGPLK	Global P-Lock Requests	255
DGRDIN	GBP Read Requests—Interest	260
DGRDNO	GBP Read Requests—No Interest	261
DGRDRQ	GBP Read Requests with Data	261
DGSUSP	Global Lock Suspensions	255
DGXES	Global Lock XES Requests	255
DHPRDF	Read Pages Failures	261
DHPVPA	Successful Asynchronous Reads for HP-to-VP	261
DHPVPS	Successful Synchronous Reads for HP-to-VP	262
DHPWRF	Write Page Failures	262
DILREQ	IRLM Request Counts	255
DIXLOK	Index Space Locks	255
DLDEAD	Lock Deadlock Failures	256
DLESCL	Lock Escalations	256
DLOGRD	Log Reads for Backout/Recovery	271
DLOGUT	Active Log Percent Utilization	271
DLOGWR	Log Write Requests	271

Table 2. Plot Views (Continued)

View Name	Title	Page
DLOGWT	Log Buffer Waits	271
DLREQ	Lock Requests	256
DLSTPF	Number of List Prefetch Requests	262
DLSUSP	Suspensions	256
DLTIME	Lock Timeout Failures	256
DMAXPF	Maximum Concurrent Parallel I/O Prefetch Streams	262
DMIAPF	Multi-Index Failures	262
DMIGDS	Migrated Data Sets	262
DMXLOK	Maximum Page Lock Held by User	256
DNACTC	Current Inactive DB Threads	273
DPFDIO	Dynamic Prefetch Read I/O	263
DPFDPG	Dynamic Prefetch Pages Read	263
DPFDRQ	Dynamic Prefetch Requests	263
DPFIOF	Prefetch I/O Failures	263
DPFLIO	List Prefetch Read I/O	264
DPFLPG	List Prefetch Pages Read	264
DPFSIO	Sequential Prefetch Read I/O	264
DPFSPG	Sequential Prefetch Pages Read	264
DPFSRQ	Sequential Prefetch Requests	265
DPFTIO	Total Prefetch Read I/O	265
DPFTPG	Total Prefetch Pages Read	265
DPFTRQ	Total Prefetch Requests	265
DPGLOK	Page Locks	256
DPIO	Prefetch Read I/O	266
DPKBND	Number of Packages Bound	251
DPLBND	Number of Plans Bound	251
DPRLF	I/O Parallel Groups with Fallback to Sequential	252
DPRLG	I/O Parallel Groups Executed	251
DPRLGF	Conditional Getpage Failure	266
DPRLQ	Parallel Query Requests	266
DPRLQF	Parallel Query Request Failures	267

Table 2. Plot Views (Continued)

View Name	Title	Page
DPRLSF	Sysplex Parallel Query Failures	252
DPRL12	Prefetch Reduced to 1/2	266
DPRL14	Prefetch Reduced to 1/4	266
DPWS	System Pages Written	267
DPWSWI	System Pages Written (PWS) Per Write I/O (WIO)	267
DP2CON	2-Phase Connections	274
DP2RMC	Remote Location Coordinator Commits	274
DP2RMI	Remote Location Coordinator Indoubts	274
DP2RMR	Remote Location Coordinator Rollbacks	274
DP2RMT	Remote Location Coordinator Total Operations	274
DP2RSY	2-Phase Resync Connections	274
DRIDUT	RID Pool Percent Utilization	267
DRIO	Read I/O Activity	267
DRSQLR	Remote SQL Statements Received	252
DRSQLS	Remote SQL Statements Sent	252
DRTO	Recall Timeouts	268
DRWP	Reads with Paging	268
DSEQIO	Sequential Read I/O Requests	268
DSEQPG	Sequential Getpage Requests	268
DSPROC	Stored Procedures	253
DSQLAC	SQL Activity	253
DSWS	System Page Updates	268
DSWSPW	System Page Updates (SWS) Per System Pages Written (PWS)	269
DTHDAB	Aborted Threads	253
DTHDAC	Active Thread Status	253
DTHDCR	Create Thread Requests	253
DTHDID	In Doubt Thread Status	253
DTHDQD	Queued Thread Status	250
DTHDUT	Thread Percent Utilization	254
DTHDWT	Create Thread Waited	254

Table 2. Plot Views (Continued)

View Name	Title	Page
DTSLOK	Table Space Locks	257
DUSLOK	Users Suspended for Locks	257
DWIO	WRITE I/O Activity	269
DWKMAX	Max Workfiles Used Concurrently	269
DWKNBF	Workfile Not Created - No Buffers	269
DWKPFZ	Workfile Prefetch Quantity Is Zero	270
DWWP	Writes with Paging	270

Alphabetical List

Chapter 9. DB2 Systems

The DB2 system views provide an enormous amount of data about how a DB2 subsystem is running. This data includes

- Many status indicators, including warning flags and utilization measurements (pools, paging, and so forth)
- All DB2 statistics fields (IFCIDs 1 and 2)
- Buffer pool statistics totals
- DDF location statistics totals
- Additional statistics on group buffer pools for data sharing

Views for DB2 system analysis are organized into several groups, as follows:

- DB2 system status views
- User activity views
- Lock views
- Pool / page set views
- EDM pool views
- Logging views
- DDF views

For each major area, there are SSI views of the most important interval statistics per DB2. Most SSI views have a hyperlink to a detail view showing all related fields as both interval and session values for the selected DB2.

Each SSI view also can be expanded to show a different time perspective, either multiple intervals per DB2, or even an earlier time period. Use the `TIME` command to retrieve the historical data. You can use the command, `INCLUDE TIME`, to display a column showing the time; `EXCLUDE TIME` removes it from the display.

You can easily access all the views for DB2 systems analysis from the DB2 Status Easy Menu (EZDSTAT), shown in Figure 11.

```

W1 =EZDSTAT=====DB2J61E=*=====17MAY2000==16: 05: 59====MVDB2=====1
                                DB2 Status Menu
DB2 System
. Overview
. Exceptions
. Activity Rates
. DB2 System CPU
. Query Parallelism
. DB2 Command Counts

User Activity
. User Summary
. SQL Counts
. Subsystem Services
. Bind Activity
. Authorization Checks
. Routine Activity

                                +-----+
                                | Place cursor on |
                                | menu item and  |
                                | press ENTER    |
                                +-----+

                                Pools / Page Sets
                                . Buffer Pool Summary
                                . Hit Ratios
                                . Group Buffer Pools
                                . RID Pool
                                . Data Set Activity

                                EDM Pool
                                . EDM Pool

                                Logging
                                . Logging
                                . Checkpoint Activity

                                DDF
                                . DDF Statistics
                                . Distributed

                                . Return...
    
```

Figure 11. EZDSTAT Easy Menu—DB2 Status

There is also an Easy Menu, EZDSTATD, which provides similar options when looking at just one DB2. EZDSTAT hyperlinks generally go to tabular views that show one row per DB2 in the current context. EZDSTATD hyperlinks go directly to the detail views for that DB2.

Table 3 lists all the views available for DB2 systems.

Table 3. DB2 System Views

View Name	Group / Type	Description
STAGENT	User Activity	Agent Services (see page 80)
	Tabular	Provides statistics about agent services in the current interval.
STAGENTD	User Activity	Agent Services Detail (see page 80)
	Detail	Provides statistics about agent services for each of these time periods: <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STAGENT view
STAUTH	User Activity	Authorization Checks (see page 85)
	Tabular	Provides statistics about authorization checks for PLANS, packages, and user-defined function or stored procedure routines. <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Authorization Checks option on EZDSTAT menu
STAUTHD	User Activity	Authorization Checks Detail (see page 86)
	Detail	Provides statistics about authorization checks for PLANS, packages, and user-defined function or stored procedure routines for each of these time periods: <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STAUTH view
STBFRPL	Pool / Page Set	Buffer Pool Statistics (see page 93)
	Tabular	Provides statistics about all defined buffer pools per DB2 in the current interval. <p>You can use this view to analyze total buffer pool activity in all pools combined. See Chapter 10, “Buffer Pools” on page 111 for views on individual pools.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Buffer Pool Summary option on EZDSTAT menu • Buffer Pools option on EZDSSI menu

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STBFRPLD	Pool / Page Set Detail	<p>Buffer Pool Statistics Detail (see page 94)</p> <p>Provides statistics about all buffer pools in the selected DB2 for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to analyze total buffer pool activity.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STBFRPL view • BP Rates field in STDB2D and STDB2DS views
STBIND	User Activity Tabular	<p>Bind Statistics (see page 83)</p> <p>Provides statistics about binds in the current interval.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Bind Activity option on EZDSTAT menu
STBINDD	User Activity Detail	<p>Bind Statistics Detail (see page 84)</p> <p>Provides statistics about binds for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STBIND view
STCHKP	Logging Tabular	<p>Checkpoint Data (see page 106)</p> <p>Provides statistics about checkpoint activity in the current interval. It also includes data capture statistics.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Checkpoint Activity option on EZDSTAT menu • Checkpoints column in STRATE view
STCHKPD	Logging Detail	<p>Checkpoint Data Detail (see page 106)</p> <p>Provides statistics about checkpoint activity and data capture for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STCHKP view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STCMDS	System Status Tabular	DB2 Commands (see page 75) Provides statistics about DB2 commands executed in the current interval. You can hyperlink to this view from <ul style="list-style-type: none"> • DB2 Commands option on EZDSTAT menu
STCMDSD	System Status Detail	DB2 Commands Detail (see page 76) Provides statistics about DB2 commands executed for each of these time periods: <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started You can hyperlink to this view from <ul style="list-style-type: none"> • DB2 Target column in STCMDS view
STDB2	System Status Tabular	DB2 Activity Overview (see page 62) SSI overview of the status of all DB2 subsystems in the context. For each DB2, it displays activity rates, number of exceptions, and warning flags. You can use this view to check the level of activity per DB2 and quickly determine if exceptions are outstanding. You can hyperlink to this view from <ul style="list-style-type: none"> • Overview option on EZDSTAT, EZDB2, and EZDSSI menus
STDB2D	System Status Detail	DB2 Status Detail—Interval (see page 63) Shows the overall status and activity within the selected DB2 subsystem for the current recording interval. You can use this view to see information concerning key indicators that apply to the entire subsystem, such as active users, threads by type, DB2 CPU usage, locking, paging, and buffer and Environmental Data Manager (EDM) pool activity and status. Exception conditions detected by the background Exception Sampler or active MVDB2 monitors are also shown. This information provides an overall view of DB2 system activity and shows problems within DB2 that can be diagnosed with MVDB2 facilities. You can hyperlink to this view from <ul style="list-style-type: none"> • DB2 Target column in STDB2 view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STDB2DS	System Status Detail	<p>DB2 Status Detail—Session (see page 65)</p> <p>Shows the overall status and activity within the selected DB2 subsystem for the current session since DB2 was started.</p> <p>You can use this view to see information concerning key indicators that apply to the entire subsystem, such as active users, threads by type, DB2 CPU usage, locking, paging, and buffer and Environmental Data Manager (EDM) pool activity and status. Exception conditions detected by the background Exception Sampler or active MVDB2 monitors are also shown. This information provides an overall view of DB2 system activity and shows problems within DB2 that can be diagnosed with MVDB2 facilities.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Session field in STDB2D view
STDB2SYS	System Status Tabular	<p>DB2 System Information (see page 71)</p> <p>Provides DB2 system information on CPU utilization in the current interval.</p> <p>You can use this view to compare the CPU usage per DB2 address space.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 System CPU option on EZDSTAT menu
STDBSYS	System Status Detail	<p>DB2 System Information Detail (see page 72)</p> <p>Provides DB2 system information for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to see CPU usage for all DB2 address spaces. Some additional diagnostic fields are included.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STDB2SYS view
STDDF	DDF Tabular	<p>DDF Statistics (see page 107)</p> <p>Provides statistics about total DDF activity for the current interval.</p> <p>You can use this view to analyze the total distributed requests sent and received per DB2.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DDF Statistics option on EZDSTAT menu • Conv Queued column in STWARN view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STDDFD	DDF Detail	DDF Statistics Detail (see page 108) Provides statistics about total DDF activity for each of these time periods: <ul style="list-style-type: none"> The current recording interval The current session since DB2 was started <p>You can use this view to analyze the total distributed requests sent and received per DB2.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> DB2 Target column in STDDF view
STDIST	DDF Tabular	DBAT Statistics (see page 109) Provides statistics about Database Access Threads (DBATs) for the current interval. You can use this view to analyze thread usage for distributed requests where this DB2 was acting as the server. You can hyperlink to this view from <ul style="list-style-type: none"> Distributed option on EZDSTAT menu DBAT Queued column in STWARN view
STDISTD	DDF Detail	DBAT Statistics Detail (see page 110) Provides statistics about DBATs for each of these time periods: <ul style="list-style-type: none"> The current recording interval The current session since DB2 was started <p>You can use this view to analyze thread usage for distributed requests where this DB2 was acting as the server.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> DB2 Target column in STDIST view
STDSA	Pool / Page Set Tabular	Data Set Activity (see page 101) Provides statistics about data set activity in the current interval. You can use this view to analyze open/close activity. You can hyperlink to this view from <ul style="list-style-type: none"> Data Set Activity option on EZDSTAT menu Max DS Open column in STWARN view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STDSAD	Pool / Page Set Detail	Data Set Activity Detail (see page 101) Provides statistics about data set activity for each of these time periods: <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started You can use this view to analyze open/close activity. You can hyperlink to this view from <ul style="list-style-type: none"> • DB2 Target column in STDSA view • Data Sets field in STDB2D and STDB2DS views
STEDMP	EDM Pool Tabular	EDM Pool Statistics (see page 102) Provides statistics about the EDM pool in the current interval. You can use this view to analyze EDM pool utilization and performance. You can hyperlink to this view from <ul style="list-style-type: none"> • EDM Pool option on EZDSTAT menu • EDM Loads column in STRATE view • EDM Failures column in STWARN view
STEDMPD	EDM Pool Detail	EDM Pool Statistics Detail (see page 103) Provides statistics about the EDM pool for each of these time periods: <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started You can use this view to analyze EDM pool utilization and performance. You can hyperlink to this view from <ul style="list-style-type: none"> • DB2 Target column in STEDMP view
STEXC	System Status Tabular	Exception Conditions (see page 67) Provides an overview of exception conditions. You can use this view to see in more detail which types of exceptions may be outstanding per DB2. Hyperlinks lead to more detail for each kind of exception. You can hyperlink to this view from <ul style="list-style-type: none"> • Exceptions option on EZDSTAT, EZDB2, and EZDSSI menus • Total Excpt column in STDB2 view • Exceptions field in STDB2D and STDB2DS views

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STGBFRPD	Pool / Page Set Detail	<p>Global Buffer Pool Statistics Detail (see page 97)</p> <p>Provides statistics about group buffer pools for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to analyze activity in the group buffer pools for one data sharing member in all pools combined. See Chapter 10, “Buffer Pools” on page 111 for views per individual buffer pool.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STGBFRPL view • Group BP field in STDB2D and STDB2DS views
STGBFRPL	Pool / Page Set Tabular	<p>Global Buffer Pool Statistics (see page 96)</p> <p>Provides statistics about group buffer pools in the current interval.</p> <p>You can use this view to analyze total global activity in the group buffer pools for data sharing in all pools combined. See Chapter 10, “Buffer Pools” on page 111 for views per individual buffer pool.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Group Buffer Pools option on EZDSTAT menu
STGBGRPD	Pool / Page Set Detail	<p>Global Buffer Pool Group Statistics Detail (see page 99)</p> <p>Provides statistics about group buffer pools for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to analyze total global activity in the group buffer pools for data sharing in all pools and all DB2 members combined. See Chapter 10, “Buffer Pools” on page 111 for views per individual buffer pool.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • The DB2STAT list of views accessible from MAIN
STGBLLK	Lock Tabular	<p>Global Locking (see page 91)</p> <p>Provides statistics about global locking in the current interval.</p> <p>You can use this view to analyze global locking activity and the level of global contention.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Global Locking option on EZDSTAT menu • GBL Contention>2% column in STWARN view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STGBLLKD	Lock Detail	<p>Global Locking Detail (see page 92)</p> <p>Provides statistics about global locking for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to analyze global locking activity and the level of global contention.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STGBLLK view
STHITR	Pool / Page Set Tabular	<p>Hit Ratios (see page 95)</p> <p>Provides statistics about hit ratios in the current interval.</p> <p>You can use this view to analyze buffer pool performance. The values used in the calculations are included in the view.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Hit Ratios option on EZDSTAT menu
STHITRD	Pool / Page Set Detail	<p>Hit Ratios Detail (see page 95)</p> <p>Provides statistics about hit ratios for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to analyze buffer pool performance. The values used in the calculations are included in the view.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STHITR view
STLOCK	Lock Tabular	<p>Lock Statistics (see page 89)</p> <p>Provides statistics about locks in the current interval.</p> <p>You can use this view to analyze lock activity and the amount of contention.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Locks option on EZDSTAT menu • LockSuspend column in STRATE view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STLOCKD	Lock Detail	<p>Lock Statistics Detail (see page 90)</p> <p>Provides statistics about locks for each of these time periods:</p> <ul style="list-style-type: none"> The current recording interval The current session since DB2 was started <p>You can use this view to analyze lock activity and the amount of contention.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> DB2 Target column in STLOCK view
STLOG	Logging Tabular	<p>Log Statistics (see page 104)</p> <p>Provides statistics about logging in the current interval.</p> <p>You can use this view to analyze activity on the active and archive logs and the BSDS. Problems such as unavailable buffers for logging, or reads from archive logs for backouts can be detected.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> Logging option on EZDSTAT menu
STLOGD	Logging Detail	<p>Log Statistics Detail (see page 105)</p> <p>Provides statistics about logging for each of these time periods:</p> <ul style="list-style-type: none"> The current recording interval The current session since DB2 was started <p>You can use this view to analyze activity on the active and archive logs and the BSDS. Problems such as unavailable buffers for logging, or reads from archive logs for backouts can be detected.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> DB2 Target column in STLOG view
STQPAR	System Status Tabular	<p>Query Parallelism (see page 73)</p> <p>Provides statistics about query parallelism in the current interval.</p> <p>You can use this view to identify how often query parallelism is being used.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> Query Parallelism option on EZDSTAT menu Prll Groups column in STRATE view Parallel Fallback column in STWARN view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STQPARD	System Status Detail	<p>Query Parallelism Detail (see page 74)</p> <p>Provides statistics about query parallelism for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to analyze parallelism activity on one DB2.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STQPAR view • Parallel field in STDB2D and STDB2DS views
STRATE	System Status Detail	<p>Activity Rates (see page 70)</p> <p>Provides the most critical measurements as quantities and rates per second, per thread, and per commit.</p> <p>You can use this view to analyze activity in one DB2 for both the current interval and since that DB2 started. The rate calculations give you values that make it easier to compare current activity with the totals accumulated over a longer time span.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Activity Rates option on EZDSTAT menu • Activity Rates option on EZDB2 menu • Comm Rate column in STDB2 view
STRID	Pool / Page Set Tabular	<p>RID Pool Statistics (see page 100)</p> <p>Provides statistics about the RID pool per DB2 for the current interval.</p> <p>You can use this view to analyze RID pool usage and failures.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • RID Pool option on EZDSTAT menu • RID Fails column in STRATE view • RID Failures column in STWARN view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STRIDD	Pool / Page Set Detail	<p>RID Pool Statistics Detail (see page 100)</p> <p>Provides statistics about the RID pool for one DB2 for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to analyze RID pool usage and failures.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STRID view
STROUT	User Activity Tabular	<p>Routine Statistics (see page 87)</p> <p>Provides statistics about cascading, stored procedure, trigger, and user-defined function routines.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Routine Statistics option on EZDSTAT menu
STROUTD	User Activity Detail	<p>Routine Statistics Detail (see page 88)</p> <p>Provides statistics about cascading, stored procedure, trigger, and user-defined function routines for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STROUT view
STSERV	User Activity Tabular	<p>Subsystem Services (see page 81)</p> <p>Provides statistics about subsystem services.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Subsystem Services option on EZDSTAT menu • Commits column in STRATE view
STSERVD	User Activity Detail	<p>Subsystem Services Detail (see page 82)</p> <p>Provides statistics about subsystem services for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STSERV view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STSQL	User Activity Tabular	<p>SQL Counts (see page 78)</p> <p>Provides statistics about SQL counts in the current interval.</p> <p>You can use this view to see what type of SQL activity is occurring.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • SQL Counts option on EZDSTAT menu • DML SQL column in STRATE view
STSQLD	User Activity Detail	<p>SQL Counts Detail (see page 79)</p> <p>Provides statistics about SQL counts for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to see what types of SQL activity are occurring.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Target column in STSQL view • STOPROCS field in STDB2D and STDB2DS views
STUSUMM	User Activity Tabular	<p>User Summary (see page 77)</p> <p>Provides summary statistics about current user connections.</p> <p>You can use this view to determine the current level of activity per DB2.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • User Summary option on EZDSTAT menu • IMS/CICS Queued column in STWARN view

Table 3. DB2 System Views (Continued)

View Name	Group / Type	Description
STUSUMMD	User Activity Detail	User Summary Detail (see page 77) Provides summary statistics about each type of user connection. You can hyperlink to this view from <ul style="list-style-type: none"> • DB2 Target column in STUSUMM view • Create Threads Queued—Max Users field in STSERVD view
STWARN	System Status Detail	Warning/Error Conditions (see page 68) Provides information about the most important key indicators of failures or degradation. You can use this view to see all the warning indicators that are set to Yes. You can hyperlink to this view from <ul style="list-style-type: none"> • Warning Msg column in STDB2 view • Warning Msg column in STEXC view

DB2 System Status Views

The following views display information about DB2 system status.

STDB2—DB2 Activity Overview

The STDB2 view, shown in Figure 12, is an SSI overview of the status of all DB2 subsystems in the context. For each DB2, it displays activity rates, number of exceptions, and warning flags.

```
>W1 =EZDSTAT==STDB2===(ALL=====*)=====) 17MAY2000==17: 43: 40====MADB2=====8
```

DB2	Act	Comm	Getpg	Lockout	Tot	Exc	Warning	Msg	Dataset	Dataset	GB
Target	Thrd	Rate	Rate	Rate	Exc	Warning	Msg	In-Use	Open		
DB0GMV54	0	0.0	0.0	0.0	0	0	Connect	Fail	0		
DB0HMV55	0	0.0	0.0	0.0	0	0	Connect	Fail	0		
DB1FMV53	0	0.0	0.0	0.0	0	0	Connect	Fail	0		
DB1GMV54	1	0.0	0.1	0.0	0	0	GBL cont	>2%	0	37	
DB1HMV55	0	0.0	0.0	0.0	0	0	Connect	Fail	0		
DB2FMV53	0	0.0	0.0	0.0	0	0	Connect	Fail	0		
DB2GMV54	2	0.0	0.1	0.0	0	0	GBL cont	>2%	0	78	
DB2HMV55	2	0.0	0.0	0.0	0	0			1	13	

Figure 12. STDB2 View—DB2 Activity Overview

You can use this view to check the level of activity per DB2 and quickly determine if exceptions are outstanding.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STDB2D to see detailed statistics for the selected DB2 subsystem
 - Act Thrd column to THDACTV to see information about each active thread for one DB2
 - Comm Rate column to STRATE to see rates per second, per thread, and per commit
 - Getpg Rate column to BFRPL to see buffer pools for one DB2
 - Lockout Rate column to LKEVENT to see lockout events for one DB2
 - Tot Exc column to STEXC to see an overview of exception conditions
 - Warning Msg column to STWARN to see information about the most important key indicators of failures or degradation for that DB2
 - Dataset Open column to EZDPS menu to see page set information
 - Threads Conn column to THDCONNZ to see current thread activity summarized by connection name
 - Total HitRt column to BFRPLH to see an overview of buffer pool hit ratios
 - GBP Depndnt column to PSBPGBPZ to see a summary of group-buffer pool-dependent page sets

STDB2D—DB2 Status Detail—Interval

The STDB2D view, shown in Figure 13, shows the overall status and activity within the selected DB2 subsystem for the current recording interval.

```

>W1 =STDB2====STDB2D==(ALL=====DB2H=====) 17MAY2000==12: 01: 37====MVDB2=====1
> EZ Menu      . Sessi on
                Connect   Active     In DB2     Queued      Suspended   CPU%
TS0.....      1         1         0          0           0           0.0
Batch.....    1         1         0          0           0           0.0
-CAF.....     1         1         0          0           0           0.0
-Utility...    0         0         0          0           0           0.0

IMS.....      0         0         0          0           0           0.0
CICS.....     0         0         0          0           0           0.0
DBAT.....     0         0         0          0           0           0.0
SPAS.....     9         0         0          0           0           0.0
RRSAF.....    0         0         0          0           0           0.0
*Total*....   11        2         0          0           0           0.0

                0 . . . 50. 100          0 . . . 50. 100
                EDM Pool          Total CPU%  **

BP Rates:..   Getpage    0.0      Reads      0          Writes     0.0
Locking:..    Suspend    0        Deadlocks  0          Timeouts   0
Exceptions:  Monitor    0        System     0          User       0
Data Sets:.. Open        25       Open HWM   25         In-use     1
Parallel:..  Maximum    0        Groups     0          Fall back  0
STOPROCS:.. Calls      0        Abends     0          Timeouts   0
Group BP:..   Reads      0        Writes     0          Failures   0
Paging:....  DB2        0.0      System     0.0
DB2 Start:.. Date       17MAY2000 Time      09: 33: 48

```

Figure 13. STDB2D View—DB2 Status Detail—Interval

You can use this view to see information concerning key indicators that apply to the entire subsystem, such as active users, threads by type, DB2 CPU usage, locking, paging, and buffer and Environmental Data Manager (EDM) pool activity and status. Exception conditions detected by the background Exception Sampler or active MVDB2 monitors are also shown. This information provides an overall view of DB2 system activity and shows problems within DB2 that can be diagnosed with MVDB2 facilities.

The default functions shipped with this view are as follows:

- Hyperlink from
 - EZ Menu field to the EZDSTATD menu to select views with data for the selected target only
 - Session field to STDB2DS to see these statistics for the current session since DB2 was started
 - TSO, Batch, -CAF, -Utility, IMS, CICS, DBAT, RRSAP, and *Total* fields to THDACTV to see information about each active thread for the selected connection type
 - BP Rates field to STBFRPLD to see detailed statistics about all buffer pools in this DB2
 - Locking field to LKEVENT to see lockout events for this DB2

- Exceptions field to STEXC to see an overview of exception conditions for this DB2
- Data Sets field to STDSAD to see detailed statistics about data set activity for this DB2
- Parallel field to STQPARD to see detailed statistics about query parallelism for this DB2
- STOPROCS field to STSQLD to see detailed statistics about SQL counts for this DB2
- Group BP field to STGBFRPD to see detailed statistics about group buffer pools in this DB2

STDB2DS—DB2 Status Detail—Session

The STDB2DS view, shown in Figure 14, shows the overall status and activity within the selected DB2 subsystem for the current session since DB2 was started.

```

>W1 =STDB2====STDB2DS=(ALL=====DB2H=====) 17MAY2000==12: 01: 37====MVDB2=====1
> EZ Menu

```

	Connect	Active	In DB2	Queued	Suspended	CPU%
TSO.....	1	1	0	0	0	0.0
Batch.....	1	1	0	0	0	0.0
-CAF.....	1	1	0	0	0	0.0
-Utility...	0	0	0	0	0	0.0
IMS.....	0	0	0	0	0	0.0
CICS.....	0	0	0	0	0	0.0
DBAT.....	0	0	0	0	0	0.0
SPAS.....	9	0	0	0	0	0.0
RRSAF.....	0	0	0	0	0	0.0
Total....	11	2	0	0	0	0.0

	0 . . . 50. 100		0 . . . 50. 100	
	EDM Pool	Total	CPU%	**
BP Rates:..	Getpage	1.8	Reads	0
Locking:...	Suspend	0	Deadlocks	0
Exceptions:	Monitor	0	System	0
Data Sets:..	Open	25	Open HWM	25
Parallel:..	Maximum	0	Groups	0
STOPROCS:..	Calls	0	Abends	0
Group BP:..	Reads	0	Writes	0
Paging:....	DB2	0.0	System	0.0
DB2 Start:..	Date	17MAY2000	Time	09: 33: 48

Figure 14. STDB2DS View—DB2 Status Detail—Session

You can use this view to see information concerning key indicators that apply to the entire subsystem, such as active users, threads by type, DB2 CPU usage, locking, paging, and buffer and Environmental Data Manager (EDM) pool activity and status. Exception conditions detected by the background Exception Sampler or active MVDB2 monitors are also shown. This information provides an overall view of DB2 system activity and shows problems within DB2 that can be diagnosed with MVDB2 facilities.

The default functions shipped with this view are as follows:

- Hyperlink from
 - EZ Menu field to the EZDSTATD menu to select views with data for the selected target only
 - TSO, Batch, -CAF, -Utility, IMS, CICS, DBAT, RRSAP, and *Total* fields to THDACTV to see information about each active thread for the selected connection type
 - BP Rates field to STBFRPLD to see detailed statistics about all buffer pools in this DB2
 - Locking field to LKEVENT to see lockout events for this DB2
 - Exceptions field to STEXC to see an overview of exception conditions for this DB2

- Data Sets field to STDSAD to see detailed statistics about data set activity for this DB2
- Parallel field to STQPARD to see detailed statistics about query parallelism for this DB2
- STOPROCS field to STSQLD to see detailed statistics about SQL counts for this DB2
- Group BP field to STGBFRPD to see detailed statistics about group buffer pools in this DB2

STEXC—Exception Conditions

The STEXC view, shown in Figure 15, provides an overview of exception conditions.

```

W1 =EZDSTAT==STEXC===(ALL=====*) 17MAY2000==11: 14: 35====MVDB2=====8
Intvl Intvl DB2      SSI      Warning System      User
Time  Date Target  System  Monitors Exceptions Exceptions Warning Msg
11: 14 17MAY DB2GMV54 SYSC      0         0         0 GBL cont >2%
11: 14 17MAY DB1GMV54 SYSC      0         0         0
11: 14 17MAY DB2FMV53 SYSC      0         0         0 Connect Fail
11: 14 17MAY DB1FMV53 SYSC      0         0         0 Connect Fail
11: 14 17MAY DBOGMV54 SYSC      0         0         0 Connect Fail
11: 14 17MAY DB2HMV55 SYSC      0         0         0
11: 14 17MAY DB1HMV55 SYSC      0         0         0 Connect Fail
11: 14 17MAY DBOHMV55 SYSC      0         0         0 Connect Fail

```

Figure 15. STEXC View—Exception Conditions

You can use this view to see in more detail which types of exceptions may be outstanding per DB2. Hyperlinks lead to more detail for each kind of exception.

The default functions shipped with this view are as follows:

- [Hyperlink from](#)
 - [Warning Monitors](#) column to DMWARN to see a list of each active monitor whose threshold has been exceeded
 - [System Exceptions](#) column to the DB2EX analyzer display to see a list of system exception messages
 - [User Exceptions](#) column to the DB2EX analyzer display to see a list of user exception messages (“runaway query”)
 - [Warning Msg](#) column to STWARN to see information about the most important key indicators of failures or degradation

STWARN—Warning/Error Conditions

The STWARN view, shown in Figure 16, provides information about the most important key indicators of failures or degradation.

H1 =STDB2====STWARN====DB2G=====17MAY2000==15: 00: 13====MVDB2=====1			
IFI Return Code....	00000000	DB2 Release.....	4100
IFI Error.....		MAINVIEW for DB2 Release	5100
Warning..... GBL cont >2%			
Log DS Full.....	No	Max Batch Users.....	No
INDOUBT Threads....	No	Max DS Open.....	No
DM Critical.....	No	BP Expansions.....	No
Last Log 75%.....	No	Bpool Failures.....	No
Single Logging.....	No	Expand Failures.....	No
Single BSDS.....	No	RID Failures.....	No
IMS/CICS Queued....	No	Last Log.....	No
DBAT Queued.....	No	Runaway Query.....	No
Conv Queued.....	No	Parallel Fallback.....	No
Imm Write Threshold	No	Archive Wait.....	No
GBL Contention>2%..	Yes	Utility Stopped.....	No
EDM Failures.....	No	GBP Failures.....	No
Defer Disable.....	No	Archive Reads.....	No
Prefetch Disable...	No	DB2 Connect Failure....	No
Max TSO Users.....	No		

Figure 16. STWARN View—Warning/Error Conditions

You can use this view to see all the warning indicators that are set to Yes.

The default functions shipped with this view are as follows:

- Hyperlink from
 - Log DS Full, Last Log 75%, Single Logging, Single BSDS, Last Log, Archive Wait, and Archive Reads columns to DLOGS analyzer display to see log status and activity information
 - INDOUBT Threads and Runaway Query columns to DB2EX analyzer display to see exception messages
 - DM Critical, Imm Write Threshold, Defer Disable, Prefetch Disable, BP Expansions, Bpool Failures, and Expand Failures columns to BFRPL to see an overview of buffer pool activity
 - IMS/CICS Queued column to STUSUMM to see summary statistics about current user connections
 - DBAT Queued column to STDIST to see DBAT statistics
 - Conv Queued column to STDDF to see DDF statistics
 - GBL Contention>2% column to STGBLLK to see global locking statistics
 - EDM Failures column to STEDMP to see EDM pool statistics
 - Max TSO Users and Max Batch Users columns to THDCTYPZ to see a summary of current thread activity by connection type

- Max DS Open column to STDSA to see data set activity statistics
- RID Failures column to STRID to see RID pool statistics
- Parallel Fallback column to STQPAR to see query parallelism statistics
- GBP Failures column to GBPCFM to see group buffer pool coupling facility activity statistics
- DB2 Connect Failure column to the Log Display application to see message details

STRATE—Activity Rates

The STRATE view, shown in Figure 17, provides the most critical measurements as quantities and rates per second, per thread, and per commit.

H1 =STRATE=====DB2G=====*=====17MAY2000==15: 00: 13====MVDB2=====1								
	Intvl	Sess	Intv	Sess	Intvl	Sess	Intvl	Sess
	Qty	Qty	Rate	Rate	/Thd	/Thd	/Comm	/Comm
Commits. . . .	0	546	0.0	0.0	0.0	4.3		
Thd Creates.	0	126	0.0	0.0			0.0	0.2
Getpages. . .	0	126062	0.0	4.4	0.0	1000.5	0.0	230.9
Page Updates	0	28527	0.0	1.0	0.0	226.4	0.0	52.2
Sync I/O. . .	0	1007	0.0	0.0	0.0	8.0	0.0	1.8
Prefetch I/O	0	3875	0.0	0.1	0.0	30.8	0.0	7.1
Write I/O. . .	0	1255	0.0	0.0	0.0	10.0	0.0	2.3
Dataset Opens	0	269	0.0	0.0	0.0	2.1	0.0	0.5
Lockouts. . .	0	0	0.0	0.0	0.0	0.0	0.0	0.0
LockSuspend	1	2824	0.0	0.1	0.0	22.4	0.0	5.2
GBLLockCont.	4	368	0.0	0.0	0.0	2.9	0.0	0.7
Clm/Drn Fls.	0	0	0.0	0.0	0.0	0.0	0.0	0.0
DML SQL. . . .	0	2637	0.0	0.1	0.0	20.9	0.0	4.8
StProcCalls.	0	0	0.0	0.0	0.0	0.0	0.0	0.0
StProcFails.	0	0	0.0	0.0	0.0	0.0	0.0	0.0
RID Fails. . .	0	0	0.0	0.0	0.0	0.0	0.0	0.0
EDM Loads. . .	0	76	0.0	0.0	0.0	0.6	0.0	0.1
EDM Fails. . .	0	0	0.0	0.0	0.0	0.0	0.0	0.0
Checkpoints.	0	2	0.0	0.0	0.0	0.0	0.0	0.0
Prll Groups.	0	0	0.0	0.0	0.0	0.0	0.0	0.0
Prll Fall back	0	0	0.0	0.0	0.0	0.0	0.0	0.0

Figure 17. STRATE View—Activity Rates

You can use this view to analyze activity in one DB2 for both the current interval and since that DB2 started. The rate calculations give you values that make it easier to compare current activity with the totals accumulated over a longer time span.

The default functions shipped with this view are as follows:

- Hyperlink from
 - Commits column to STSERV to see statistics about subsystem services
 - Getpages column to BFRPL to see an overview of buffer pool activity
 - Lockouts column to LKEVENT to see details about timeout and deadlock events
 - LockSuspend column to STLOCK to see lock statistics
 - DML SQL column to STSQL to see SQL count statistics
 - RID Fails column to STRID to see RID pool statistics
 - EDM Loads column to STEDMP to see EDM pool statistics
 - Checkpoints column to STCHKP to see checkpoint activity statistics
 - Prll Groups column to STQPAR to see query parallelism statistics

STDB2SYS—DB2 System Information

The STDB2SYS view, shown in Figure 18, provides DB2 system information on CPU utilization in the current interval.

```
>W1 =STDB2SYS===== (ALL=====*)=====) 17MAY2000==11: 20: 21====MVDB2=====8
```

DB2	Proc				Proc				Proc
Target	Name	TCB	Time	SRB	Name	TCB	Time	SRB	Name
DB0GMV54					N/A				
DB0HMV55					N/A				
DB1FMV53					N/A				
DB1GMV54	MSTR	00: 00: 00. 65		00: 00: 00. 12	DBM1	00: 00: 00. 00		00: 00: 00. 16	DIST 0
DB1HMV55					N/A				
DB2FMV53					N/A				
DB2GMV54	MSTR	00: 00: 00. 73		00: 00: 00. 29	DBM1	00: 00: 00. 17		00: 00: 00. 23	DIST 0
DB2HMV55	MSTR	00: 00: 01. 82		00: 00: 00. 23	DBM1	00: 00: 00. 01		00: 00: 00. 11	DIST 0

Figure 18. STDB2SYS View—DB2 System Information

You can use this view to compare the CPU usage per DB2 address space.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STDBSYS to see interval and session counts

STDBSYS—DB2 System Information Detail

The STDBSYS view, shown in Figure 19, provides DB2 system information for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STDB2SYS=STDBSYS(ALL=====DB1GMV54) 17MAY2000==11: 20: 21====MVDB2=====1		
	Interval	Session
Address Space.....	MSTR	
TCB Time.....	00:00:00.65	00:00:29.45
SRB Time.....	00:00:00.12	00:00:09.58
Address Space.....	DBMI	
TCB Time.....	00:00:00.00	00:00:03.07
SRB Time.....	00:00:00.16	00:00:08.37
Address Space.....	DI ST	
TCB Time.....	00:00:00.00	00:00:00.77
SRB Time.....	00:00:00.00	00:00:00.25
Address Space.....	IRLM	
TCB Time.....	00:00:00.00	00:00:00.23
SRB Time.....	00:00:00.51	00:00:26.63
Address Space.....	N/A	
TCB Time.....		
SRB Time.....		
Storage.....		
Max for LOB Values.....	0	0
Records By Destination.....		
SMF Written.....	0	111
Not Written.....	0	0
Buffer Errors.....	0	0
Not Active.....	0	0
Not Accepted.....	0	0
Writer Failures.....	0	0
GTF Written.....	0	0
Others Written.....	22	62
Records by IFCID.....		
IFCID 1 or 2 Records Written....	66	430
IFCID 1 or 2 Records Not Written	22	104
IFCID 3 Records Written.....	0	28
IFCID 3 Records Not Written....	0	0
Other IFCIDS Written.....	22	141
Other IFCIDS Not Written.....	0	59

Figure 19. STDBSYS View—DB2 System Information Detail

You can use this view to see CPU usage for all DB2 address spaces. Some additional diagnostic fields are included.

STQPAR—Query Parallelism

The STQPAR view, shown in Figure 20, provides statistics about query parallelism in the current interval.

```
>W1 =STQPAR===== (ALL=====*)=====) 17MAY2000==11: 23: 31====MVDB2=====8
```

DB2 Target	Max Parallels	Total Groups	Fallback Cursor	Fallback Not	Fallback ESA	Fallback No Buff	Fallback No Encl v	Less Than Planned
DB0GMV54	0	0	0	0	0	0	0	0
DB0HMV55	0	0	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0	0	0
DB1GMV54	0	0	0	0	0	0	0	0
DB1HMV55	0	0	0	0	0	0	0	0
DB2FMV53	0	0	0	0	0	0	0	0
DB2GMV54	0	0	0	0	0	0	0	0
DB2HMV55	0	0	0	0	0	0	0	0

Figure 20. STQPAR View—Query Parallelism

You can use this view to identify how often query parallelism is being used.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STQPARD to see interval and session counts

STQPARD—Query Parallelism Detail

The STQPARD view, shown in Figure 21, provides statistics about query parallelism for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STQPAR===STQPARD=(ALL=====DB2J61E=) 17MAY2000==18: 29: 00====MADB2=====1		
	Interval	Session
Parallel Execution.....		
Max Degree of Parallelism.....		0
Total Parallel Groups Executed.....	0	0
Groups Ran at Planned Degree.....	0	0
Groups Ran Reduced from Planned Degree	0	0
Set Current Degree Statements.....	0	0
Fallback to Sequential.....		
Update/Delete Cursor.....	0	0
Not ESA.....	0	0
No Buffer.....	0	0
No Enclave Support.....	0	0
Sysplex Parallelism.....		
Groups Intended to Run across DS Group	0	0
Groups on Single DB2, Coordinator=NO..	0	0
Groups on Single DB2, RR or CS.....	0	0
Member Skipped - Buffer Shortage.....	0	0
Recalc - Sysplex Config Changed.....	0	0
Recalc - Insufficient Buffers.....	0	0

Figure 21. STQPARD View—Query Parallelism Detail

You can use this view to analyze parallelism activity on one DB2.

STCMDS—DB2 Commands

The STCMDS view, shown in Figure 22, provides statistics about DB2 commands executed in the current interval.

```
>W1 =STCMDS===== (ALL=====*)=====) 17MAY2000==12: 21: 47====MVDB2=====4
```

DB2	-ALT	-ALT	-ARC	-CAN	-DIS	-DIS	-DIS	-DIS	-DIS	-
Target	BPOOL	GBPOOL	LOG	THD	ARC	BPOOL	DB	GROUP	GBPOOL	
DB1HSR	0	0	0	0	0	0	0	0	0	0
DB1JSR	0	0	0	0	0	0	0	0	0	0
DB2HSR	0	0	0	0	0	0	0	0	0	0
DB2JSR	0	0	0	0	0	0	0	0	0	0

Figure 22. STCMDS View—DB2 Commands

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STCMDSD to see interval and session counts

STCMDSD—DB2 Commands Detail

The STCMDSD view, shown in Figure 23, provides statistics about DB2 commands executed for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STCMDSD===STCMDSD=(ALL=====DB1HSR==) 17MAY2000==12: 21: 47====MVDB2=====1		
	Interval	Sessi on
ALTER.		
BUFFERPOOL.	0	0
GROUPBUFFERPOOL. .	0	0
ARCHI VE.		
LOG.	0	0
CANCEL.		
DDF THREAD.	0	0
DI SPLAY.		
ARCHI VE.	0	0
BUFFERPOOL.	0	0
DATABASE.	0	0
GROUP.	0	0
GROUPBUFFERPOOL. .	0	0
LOCATI ON.	0	0
PROCEDURE.	0	0
RLI MT.	0	0
THREAD.	0	0
TRACE.	0	0
UTI LITY.	0	0
FUNCTI ON.	0	0
LOG.	0	0
RESET.		
GENERI CLU.	0	0
INDOUBT.	0	0
START.		
DATABASE.	0	0
DB2.	0	1
DDF.	0	0
PROCEDURE.	0	0
RLI MT.	0	0
TRACE.	0	3
FUNCTI ON.	0	0
STOP.		
DATABASE.	0	0
DB2.	0	0
DDF.	0	0
PROCEDURE.	0	0
RLI MT.	0	0
TRACE.	0	2
FUNCTI ON.	0	0
OTHER.		
MODI FY TRACE.	0	1
RECOVER BSDS.	0	0
RECOVER INDOUBT. .	0	0
SET ARCHI VE.	0	0
SET LOG.	0	0
TERMI NATE UTI LITY	0	0
UNRECOGNIZED.	0	1

Figure 23. STCMDSD View—DB2 Commands Detail

User Activity Views

The following views display information about user activity.

STUSUMM—User Summary

The STUSUMM view, shown in Figure 24, provides summary statistics about current user connections.

```
>WI =STUSUMM===== (ALL===== *=====) 17MAY2000==11: 29: 36====MVDB2=====8
```

DB2	Total Connected	Total Active	Total In DB2	Total Queued	Total Suspended	Total %CPU	TSO Connected	TSO Act
DBOGMV54	0	0	0	0	0	0	0	0
DBOHMV55	0	0	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0	0	0
DB1GMV54	1	1	0	0	0	0	0	0
DB1HMV55	0	0	0	0	0	0	0	0
DB2FMV53	0	0	0	0	0	0	0	0
DB2GMV54	2	2	0	0	0	0	0	0
DB2HMV55	2	2	0	0	0	4	1	

Figure 24. STUSUMM View—User Summary

You can use this view to determine the current level of activity per DB2.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STSUMMD to see user connection details

STUSUMMD—User Summary Detail

The STUSUMMD view, shown in Figure 25, provides summary statistics about each type of user connection.

```
WI =STUSUMMD===== (ALL===== *=====) 17MAY2000==11: 30: 33====MVDB2=====1
```

	Connected	Active	In DB2	Queued	Suspended	CPU%
TSO.	2	2	0	0	0	0.0
Batch...	0	0	0	0	0	0.0
-CAF...	0	0	0	0	0	0.0
-Utility	0	0	0	0	0	0.0
IMS.	2	0	0	0	0	0.0
CICS. ...	0	0	0	0	0	0.0
DBAT. ...	0	0	0	0	0	0.0
SPAS. ...	9	0	0	0	0	0.0
Total...	13	2	0	0	0	0.0

Figure 25. STUSUMMD View—User Summary Detail

STSQL—SQL Counts

The STSQL view, shown in Figure 26, provides statistics about SQL counts in the current interval.

```
>W1 =STSQL===== (ALL=====*)=====) 17MAY2000==11: 31: 31====MVDB2=====8
DB2
```

Target	SELECT	INSERT	UPDATE	DELETE	DESCRIBE	PREPARE	OPEN	FETCH	CLO
DB0GMV54	0	0	0	0	0	0	0	0	0
DB0HMV55	0	0	0	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0	0	0	0
DB1GMV54	0	0	0	0	0	0	0	0	0
DB1HMV55	0	0	0	0	0	0	0	0	0
DB2FMV53	0	0	0	0	0	0	0	0	0
DB2GMV54	0	0	1	0	0	2	1	1	1
DB2HMV55	0	0	0	0	0	0	0	0	0

Figure 26. STSQL View—SQL Counts

You can use this view to see which type of SQL activity is occurring.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STSQLD to see interval and session counts

STSQLD—SQL Counts Detail

The STSQLD view, shown in Figure 27, provides statistics about SQL counts for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STSQL====STSQLD==(ALL=====DB1HSR==) 17MAY2000==14: 00: 46====MVDB2=====		
	Interval	Session
Data Manipulation Language.		
SELECT.	0	0
INSERT.	0	0
UPDATE.	0	0
DELETE.	0	0
DESCRIBE.	0	0
PREPARE.	0	0
OPEN.	0	0
FETCH.	0	0
CLOSE.	0	0
Data Definition Language...		
CREATE TABLE.	0	0
INDEX.	0	0
TABLESPACE.	0	0
SYNONYM.	0	0
DATABASE.	0	0
STOGROUP.	0	0
VIEW.	0	0
ALIAS.	0	0
GLOBAL TEMP TABLE.	0	0
TRIGGER.	0	0
DISTINCT TYPE.	0	0
FUNCTION.	0	0
PROCEDURE.	0	0
AUXILIARY TABLE.	0	0
DROP INDEX.	0	0
TABLE.	0	0
TABLESPACE.	0	0
DATABASE.	0	0
SYNONYM.	0	0
STOGROUP.	0	0
VIEW.	0	0
ALIAS.	0	0
PACKAGE.	0	0
TRIGGER.	0	0
UDF.	0	0
PROCEDURE.	0	0
DISTINCT TYPE.	0	0
ALTER STOGROUP.	0	0
TABLE.	0	0
INDEX.	0	0
DATABASE.	0	0
FUNCTION.	0	0
PROCEDURE.	0	0
COMMENT ON.	0	0
LABEL ON.	0	0
RENAME TABLE.	0	0
Data Control Language.....		

Figure 27. STSQLD View—SQL Counts Detail

You can use this view to see which types of SQL activity are occurring.

STAGENT—Agent Services

The STAGENT view, shown in Figure 28, provides statistics about agent services in the current interval.

```

WI =STAGENT===== (ALL===== *=====) 17MAY2000==11: 33: 23====MVDB2=====8
DB2      Physi cal Unavail able Al locati on Inval id
Target   Suspends Resources  Deadlocks  Resource
DB0GMV54      0         0         0         0
DB0HMV55      0         0         0         0
DB1FMV53      0         0         0         0
DB1GMV54     16         0         0         0
DB1HMV55      0         0         0         0
DB2FMV53      0         0         0         0
DB2GMV54     96         0         0         0
DB2HMV55    164         0         0         0
    
```

Figure 28. STAGENT View—Agent Services

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STAGENTD to see interval and session counts

STAGENTD—Agent Services Detail

The STAGENTD view, shown in Figure 29, provides statistics about agent services for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```

WI =STAGENT==STAGENTD (ALL=====DB2HMV55) 17MAY2000==11: 33: 23====MVDB2=====1
          Interval  Sessi on
Physi cal Suspends. . . . 164      5374
Unavail able Recources      0         0
Al locati on Deadlocks.     0         0
Inval id Resources. . . .   0         0
    
```

Figure 29. STAGENTD View—Agent Services Detail

STSERV—Subsystem Services

The STSERV view, shown in Figure 30, provides statistics about subsystem services.

```
>W1 =STSERV===== (ALL=====*)=====) 17MAY2000==11: 35: 03====MVDB2=====8
```

DB2 Target	Identify Requests	Signons	Create Threads	CTHDs Queued	Termi - nates	Resol ves	Prepare Commi t	Comm
DB0GMV54	0	0	0	0	0	0	0	0
DB0HMV55	0	0	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0	0	0
DB1GMV54	0	0	0	0	0	0	0	0
DB1HMV55	0	0	0	0	0	0	0	0
DB2FMV53	0	0	0	0	0	0	0	0
DB2GMV54	3	0	3	0	2	0	0	0
DB2HMV55	0	0	0	0	0	0	0	0

Figure 30. STSERV View—Subsystem Services

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STSERVD to see interval and session counts

STSERVD—Subsystem Services Detail

The STSERVD view, shown in Figure 31, provides statistics about subsystem services for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STSERV===STSERVD=(ALL=====DB2J61E=) 17MAY2000==18: 32: 25====MADB2=====1		
	Interval	Session
Identify Requests.....	0	14
Create Threads.....	0	14
Create Threads Queued - Max Users	0	0
Signons.....	0	0
Terminates.....	0	15
Rollbacks.....	0	0
Prepare to Commit - Phase 1.....	0	0
Commits - Phase 2.....	0	0
Read-Only Commits.....	0	0
Sync Commits (Single Phase).....	0	12
UOR Indoubt.....	0	0
UOR Indoubt Resolved.....	0	0
Allied Memory EOT.....	0	0
Allied Memory EOM.....	0	0
SSI Calls Processed.....	0	14
DSN3EXIT Requests.....	0	14

Figure 31. STSERVD View—Subsystem Services Detail

The default functions shipped with this view are as follows:

- Hyperlink from
 - Create Threads Queued—Max Users field to STUSUMMD to see summary statistics about each type of user connection

STBIND—Bind Statistics

The STBIND view, shown in Figure 32, provides statistics about binds in the current interval.

```
>W1 =STBIND===== (ALL=====*)=====) 17MAY2000==11: 36: 54=====MVDB2=====8
```

DB2 Target	Plan Allocs	Success Allocs	Auto- Binds	Success Autobinds	Invalid Resource	Bind Adds	Bind Repl	Bind Test	Plan Boun
DB0GMV54	0	0	0	0	0	0	0	0	0
DB0HMV55	0	0	0	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0	0	0	0
DB1GMV54	0	0	0	0	0	0	0	0	0
DB1HMV55	0	0	0	0	0	0	0	0	0
DB2FMV53	0	0	0	0	0	0	0	0	0
DB2GMV54	3	3	0	0	0	0	0	0	0
DB2HMV55	0	0	0	0	0	0	0	0	0

Figure 32. STBIND View—Bind Statistics

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STBINDD to see interval and session counts

STBINDD—Bind Statistics Detail

The STBINDD view, shown in Figure 33, provides statistics about binds for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STBINDD==STBINDD=(ALL=====DB2GMV54) 17MAY2000==11: 36: 54====MVDB2=====1		
	Interval	Session
Plan Activity:.....		
Allocation Attempts.....	3	125
Successful.....	3	125
Autobind Attempts.....	0	1
Successful.....	0	1
Invalid Resource IDs.....	0	0
Bind Adds.....	0	0
Replaces.....	0	5
Test.....	0	0
Bound.....	0	5
Rebinds.....	0	0
Attempts.....	0	0
Successful.....	0	0
Free Plans.....	0	0
Attempts.....	0	0
Successful.....	0	0
Authorization Checks.....	10	807
Successful.....	10	802
Successful from Cache.....	3	51
Successful for Public.....	3	51
Package Activity:.....		
Allocate Attempts.....	3	12
Successful.....	3	12
Autobind Attempts.....	0	0
Successful.....	0	0
Bind Adds.....	0	0
Replaces.....	0	5
Bound.....	0	5
Rebinds.....	0	0
Rebind Attempts.....	0	0
Successful.....	0	0
Free Commands.....	0	0
Attempts.....	0	0
Successful.....	0	0
Successful Auth Checks From Cache	0	0
Successful Public Checks.....	0	0

Figure 33. STBINDD View—Bind Statistics Detail

STAUTH—Authorization Checks

The STAUTH view, shown in Figure 34, provides statistics about authorization checks for PLANs, packages, and user-defined function or stored procedure routines.

Note: Many of the fields in this view show significant data only if the target subsystem is running DB2 6.1 or later.

```

>W1 =STAUTH===== (ALL=====*)=====) 17MAY2000==17: 39: 40====MVDB2=====2
DB2      Intvl PLAN-Auth   Total   Successful Successful % from PKG- Succ. S
Target   Time    Checks Successful No Catalog PUBLIC   Cache No Catalog P
DB1J61E  17: 39         0         0         0         0  0.00         0
DB2J61E  17: 39         0         0         0         0  0.00         0

```

Figure 34. STAUTH View—Authorization Checks

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STAUTHD to see interval and session counts

STAUTHD—Authorization Checks Detail

The STAUTHD view, shown in Figure 35, provides statistics about authorization checks for PLANS, packages, and user-defined function or stored procedure routines for each of these time periods:

- The current recording interval
- The current session since DB2 was started

Note: Many of the fields in this view show significant data only if the target subsystem is running DB2 6.1 or later.

W1 =STAUTH===STAUTHD=(ALL=====DB2J61E=) 17MAY2000==17: 39: 40=====MVDB2=====1		
	Interval	Session
PLAN Authorization.....		
Authorization Checks.....	0	19
Successful - Total.....	0	19
Successful without Catalog	0	0
Successful PUBLIC.....	0	0
Percent from Cache.....	0.00	0.00
Package Authorization.....		
Successful without Catalog	0	0
Successful PUBLIC.....	0	0
Not in Cache.....	0	0
Percent from Cache.....	0.00	0.00
Cache Overwrite - Auth ID.	0	0
Cache Overwrite - Coll ID.	0	0
Routine Authorization.....		
Successful without Catalog	0	0
Successful PUBLIC.....	0	0
Not in Cache.....	0	0
Percent from Cache.....	0.00	0.00
Cache Overwrite - Auth ID.	0	0
Cache Overwrite - Routine.	0	0
Entries Not Added.....	0	0

Figure 35. STAUTHD View—Authorization Checks Detail

STROUT—Routine Statistics

The STROUT view, shown in Figure 36, provides statistics about cascading, stored procedure, trigger, and user-defined function routines.

Note: Many of the fields in this view show significant data only if the target subsystem is running DB2 6.1 or later.

DB2 Target	Max Level Cascading	SPROC Calls	SPROC Abends	SPROC Timeouts	SPROC Rejects	Statement Triggers	Row Triggers	Trigger Errors	U
DB1HSR	0	0	0	0	0	0	0	0	0
DB1JSR	0	0	0	0	0	0	0	0	0
DB2HSR	0	0	0	0	0	0	0	0	0
DB2JSR	0	0	0	0	0	0	0	0	0

Figure 36. STROUT View—Routine Statistics

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STROUTD to see interval and session counts

STROUTD—Routine Statistics Detail

The STROUTD view, shown in Figure 37, provides statistics about cascading, stored procedure, trigger, and user-defined function routines for each of these time periods:

- The current recording interval
- The current session since DB2 was started

Note: Many of the fields in this view show significant data only if the target subsystem is running DB2 6.1 or later.

W1 =STROUT===STROUTD=(ALL=====DB1HSR==) 17MAY2000==12: 19: 34=====MVDB2=====1		
	Interval	Session
Cascading.....		
Maximum Level.....	0	0
Stored Procedures.....		
Calls.....	0	0
Abends.....	0	0
Timeouts.....	0	0
Rejects.....	0	0
Triggers.....		
Statement Triggers...	0	0
Row Triggers.....	0	0
Errors.....	0	0
User-Defined Functions		
Executions.....	0	0
Abends.....	0	0
Timeouts.....	0	0
Rejects.....	0	0

Figure 37. STROUTD View—Routine Statistics Detail

Lock Views

The following views display information about locks.

STLOCK—Lock Statistics

The STLOCK view, shown in Figure 38, provides statistics about locks in the current interval.

```
>W1 =STLOCK===== (ALL=====*) 17MAY2000==11: 58: 25====MADB2=====7
```

DB2 Target	Dead- locks	Time- outs	Suspend Conflict	Suspend Latch	Suspend Other	Escal SHR	Escal EXCL	Locks	Unl o
DB0GMV54	0	0	0	0	0	0	0	0	
DB0HMV55	0	0	0	0	0	0	0	0	
DB1FMV53	0	0	0	0	0	0	0	0	
DB1GMV54	0	0	0	0	0	0	0	80	
DB1HMV55	0	0	0	0	0	0	0	0	
DB2FMV53	0	0	0	0	0	0	0	0	
DB2HMV55	0	0	0	1	0	0	0	1420	1

Figure 38. STLOCK View—Lock Statistics

You can use this view to analyze lock activity and the amount of contention.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STLOCKD to see interval and session counts
 - Deadlocks or Timeouts column to LKEVENT to see details about timeout and deadlock events

STLOCKD—Lock Statistics Detail

The STLOCKD view, shown in Figure 39, provides statistics about locks for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STLOCKD=STLOCKD=(ALL=====DB2HMV55) 17MAY2000==11: 58: 25====MVDB2=====1		
	Interval	Session
Deadlocks.....	0	0
Timeouts.....	0	0
Suspends:.....		
Lock Conflict	0	2
For Latch....	1	4
Other Reasons	0	4
Escalations:....		
To Shared....	0	0
To Exclusive.	0	0
Locks:.....		
Requests....	1420	8866
Unlocks.....	1873	10656
Queries.....	0	0
Changes.....	0	0
Other IRLM..	0	2
Claims:.....		
Requests....	220	842
Unsuccessful.	0	0
Drains:.....		
Requests....	0	0
Unsuccessful.	0	0

Figure 39. STLOCKD View—Lock Statistics Detail

You can use this view to analyze lock activity and the amount of contention.

STGBLLK—Global Locking

The STGBLLK view, shown in Figure 40, provides statistics about global locking in the current interval.

```
>W1 =STGBLLK===== (ALL=====*)=====) 17MAY2000==12: 00: 17====MVDB2=====7
```

DB2 Target	Percent Suspend	P- Lock Lock	P- Lock Change	P- Lock Unl ock	XES Sync Lock	XES Sync Change	XES Sync Unl ock	IR Susp
DB0GMV54	0.0	0	0	0	0	0	0	0
DB0HMV55	0.0	0	0	0	0	0	0	0
DB1FMV53	0.0	0	0	0	0	0	0	0
DB1GMV54	50.0	0	0	0	0	0	0	1
DB1HMV55	0.0	0	0	0	0	0	0	0
DB2FMV53	0.0	0	0	0	0	0	0	0
DB2HMV55	0.0	0	0	0	8	0	0	8

Figure 40. STGBLLK View—Global Locking

You can use this view to analyze global locking activity and the level of global contention.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STGBLLKD to see interval and session counts

STGBLLKD—Global Locking Detail

The STGBLLKD view, shown in Figure 41, provides statistics about global locking for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STGBLLK==STGBLLKD(ALL=====DB1GMV54) 17MAY2000==12: 00: 17====MVDB2=====1		
	Interval	Session
P-Lock Requests:.....		
Lock.....	0	86
Change.....	0	12
Unlock.....	0	17
Propagated to XES Synch:...		
Lock.....	0	2166
Change.....	0	0
Unlock.....	1	2155
Suspends for Contention:...		
IRLM.....	1	98
XES.....	0	8
False.....	0	69
Total Percentage.....	50.0	3.9
Denied - Incompatible Lock.....	0	0
Notify Messages Sent.....	0	3
Notify Messages Received...	0	1575
Propagates to XES from IRLM.....	0	2
Lock Negotiations:.....		
Pgset/Part - Inter-DB2....	0	111
Page P-Lock - Inter-DB2...	0	0
Another P-Lock Type.....	0	8
P-Lock Change Requests....	0	115
Max Engines Available.....		10
Engine Not Available.....	0	0

Figure 41. STGBLLKD View—Global Locking Detail

You can use this view to analyze global locking activity and the level of global contention.

Pool/Page Set Views

The following views display information about pools and page sets.

STBFRPL—Buffer Pool Statistics

The STBFRPL view, shown in Figure 42, provides statistics about all defined buffer pools per DB2 in the current interval.

```
>W1 =STBFRPL===== (ALL===== *=====) 17MAY2000==12: 08: 29====MVDB2=====7
```

DB2 Target	Buff Alloc	Activ Buff	Expand/ Contract	Buffer Fails	Expand Fails	HP Exp Buffers	HP Alloc	HP Exp Contract	V G
DB0GMV54	0	0	0	0	0	0	0	0	0
DB0HNV55	0	0	0	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0	0	0	0
DB1GMV54	200	0	0	0	0	0	0	0	0
DB1HNV55	0	0	0	0	0	0	0	0	0
DB2FMV53	0	0	0	0	0	0	0	0	0
DB2HNV55	200	0	0	0	0	0	0	0	0

Figure 42. STBFRPL View—Buffer Pool Statistics

You can use this view to analyze total buffer pool activity in all pools combined. See Chapter 10, “Buffer Pools” on page 111 for views on individual pools.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STBFRPLD to see interval and session counts
 - Buff Alloc column to BFRPL to see buffer pool information for one DB2

STBFRPLD—Buffer Pool Statistics Detail

The STBFRPLD view, shown in Figure 43, provides statistics about all buffer pools in the selected DB2 for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STBFRPLD==STBFRPLD(ALL=====DB1GMV54) 17MAY2000==12: 08: 29====MVDB2=====1		
	Interval	Session
Virtual Pool Allocation.....		
Buffers Allocated.....		200
Current Active Buffers.....		0
Expansions/Contractions.....	0	0
No Buffer - Pool Full.....	0	0
Expansion Fail.....	0	0
Hyperpool Allocation.....		
Expanded Storage Buffers.....		0
Buffers Allocated.....		0
Expansions/Contractions.....	0	0
Virtual Pool Read Statistics....		
Getpages.....	0	690
Sequential Getpages.....	0	0
Sync I/O.....	0	175
Sequential Synch I/O.....	0	0
Destructive Reads.....	0	0
Destructive Reads Dequeue.....	0	0
Page-Ins for I/O.....	0	145
Virtual Pool Write Statistics....		
Async I/O.....	0	4
Sync Writes.....	0	3
Page Updates.....	0	22
Pages Written.....	0	9
Page-Ins for I/O.....	0	0
Parallel I/O Activity.....		
Requests.....	0	0
Max Concurrent I/O Streams....		0
Sequential Prefetch Statistics...		
Requests.....	0	0
Pages Read.....	0	0
Read I/O.....	0	0
List Prefetch Statistics.....		
Requests.....	0	0
Pages Read.....	0	0
Read I/O.....	0	0
Dynamic Prefetch Statistics.....		
Requests.....	0	0
Pages Read.....	0	0

Figure 43. STBFRPLD View—Buffer Pool Statistics Detail

You can use this view to analyze total buffer pool activity.

The default functions shipped with this view are as follows:

- Hyperlink from
 - Buffers Allocated field to BFRPL to see an overview of buffer pool activity

STHITR—Hit Ratios

The STHITR view, shown in Figure 44, provides statistics about hit ratios in the current interval.

```
>W1 =EZDSTAT==STHITR==(ALL=====*) 17MAY2000==12: 07: 40====MVDB2=====8
```

DB2 Target	Hit Rate w/o PF	Hit Rate with PF	Get- pages	Sync Reads	PF Reads	List PF Reads	Dynam PF	Seq Req	Co
DB0GMV54	0	0	0	0	0	0	0	0	0
DB0HMV55	0	0	0	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0	0	0	0
DB1GMV54	100	100	12	0	0	0	0	0	0
DB1HMV55	0	0	0	0	0	0	0	0	0
DB2FMV53	100	100	12	0	0	0	0	0	0
DB2GMV54	100	100	140	0	0	0	0	0	0
DB2HMV55	100	100	12	0	0	0	0	0	0

Figure 44. STHITR View—Hit Ratios

You can use this view to analyze buffer pool performance. The values used in the calculations are included in the view.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STHITRD to see interval and session counts
 - Hit Rate w/o PF column to BFRPLH to see an overview of hit ratios and the most critical buffer pool activity measurements

STHITRD—Hit Ratios Detail

The STHITRD view, shown in Figure 45, provides statistics about hit ratios for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```
W1 =EZDSTAT==STHITRD=(ALL=====DB1GMV54) 17MAY2000==12: 07: 40====MVDB2=====1
```

	Interval	Session
Hit Rate without Prefetch	100	74
Hitrate with Prefetch...	100	74
Getpages.....	12	312
Sync Reads.....	0	81
Prefetch Reads.....	0	0
List PF Reads.....	0	0
Dynamic Prefetch.....	0	0
SEQ REQ Getpages.....	0	0
Cond GP Failures.....	0	0
SEQ Sync Read.....	0	0

Figure 45. STHITRD View—Hit Ratios Detail

You can use this view to analyze buffer pool performance. The values used in the calculations are included in the view.

STGBFRPL—Global Buffer Pool Statistics

The STGBFRPL view, shown in Figure 46, provides statistics about group buffer pools in the current interval.

```
>W1 =STGBFRPL===== (ALL=====*)=====) 17MAY2000==12: 11: 11====MVDB2=====7
```

DB2 Target	GBP Changed Sync Writes	GBP Clean Sync Writes	GBP Changed Async Wrts	GBP Clean Async Wrts	GBP Castouts	Casto No Eng
DB0GMV54	0	0	0	0	0	0
DB0HMV55	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0
DB1GMV54	0	0	0	0	0	0
DB1HMV55	0	0	0	0	0	0
DB2FMV53	0	0	0	0	0	0
DB2HMV55	0	0	0	0	0	0

Figure 46. STGBFRPL View—Global Buffer Pool Statistics

You can use this view to analyze total global activity in the group buffer pools for data sharing in all pools combined. See Chapter 10, “Buffer Pools” on page 111 for views per individual buffer pool.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STGBFRPD to see interval and session counts for that DB2 target
 - GBP Changed Sync Writes column to GBPWRITZ to see statistics about group buffer pool write activity
 - GBP Castouts column to GBPCASTZ to see statistics about castout activity
 - Asyn Reads with Data column to GBPREADZ to see statistics about group buffer pool read activity
 - CF Write No Engine column to GBPCFZ to see statistics about the coupling facility

STGBFRPD—Global Buffer Pool Statistics Detail

The STGBFRPD view, shown in Figure 47, provides statistics about group buffer pools for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```

WI =STGBFRPL=STGBFRPD(ALL=====DB1HSR==) 17MAY2000==13: 57: 56====MVDB2=====1
                                Interval  Sessi on
Group Buffer Pool.....
  Changed Pages Written Sync.....          0          0
  Clean Pages Written Sync.....           0          0
  Changed Pages Written Async.....         0          0
  Clean Pages Written Async.....          0          0
  Castout Operations Performed.....        0          0
  Castout Engine Not Available.....        0          0
  Checkpoints Triggered.....              0          0
  Rebuilds Participated.....              0          0
  Register pages.....                     0          0
  Unregister pages.....                    0          0
  Explicit Cross-Invalidations.....        0          0

Sync Coupling Facility Reads.....
  Invalid Buffer with Data.....             0          0
  Invalid Buffer with Dir.....              0          0
  Invalid Buffer without Dir.....           0          0
  No Page with Data.....                   0          0
  No Page with Dir.....                    0          0
  No Page without Dir.....                 0          0

Async Coupling Facility Reads.....
  With Data.....                           0          0
  With Dir.....                             0          0
  Without Dir.....                          0          0
  Register-Page-List.....                  0          0
  Reads for Changed Pages (RPL).....        0          0
  Reads for Clean Pages (RPL).....          0          0

Coupling Facility.....
  Write Engine Not Available.....           0          0
  Read Not Complete.....                   0          0
  Write Not Complete.....                  0          0
  Other Requests.....                       0          0

IXLCACHE Requests.....
  Unlock-Castout.....                      0          0
  Read-Castout-Class.....                   0          0
  Read-Castout-Stats.....                  0          0
  Delete-Names.....                        0          0
  Read-Di rinfo.....                       0          0

Secondary Group Buffer Pool.....
  Duplexing Requests.....                  0          0
  Duplexing Request Failures.....          0          0
  Completion Checks Suspended.....         0          0
  Delete List of Pages After Castout.....   0          0
  Read Castout Statistics.....             0          0
  Page Delete Requests.....                0          0

```

Figure 47. STGBFRPD View—Global Buffer Pool Statistics Detail

You can use this view to analyze activity in the group buffer pools for one data sharing member in all pools combined. See Chapter 10, “Buffer Pools” on page 111 for views per individual buffer pool.

STGBGRPD—Global Buffer Pool Group Statistics Detail

The STGBGRPD view, shown in Figure 48, provides statistics about group buffer pools for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STGBGRPD===== (ALL=====DB1H=====) 17MAY2000==18: 05: 26====MVDB2=====1		
	Interval	Session
Read Hits.....	0	0
Read Miss Directory Hits.....	0	0
Read Miss Assignment Suppressed	0	0
Read Miss Name Assigned.....	0	0
Read Miss Cache Full.....	0	0
Changed Page Write Hits.....	0	0
Clean Page Write Hits.....	0	0
Write Miss Cache Full.....	0	0
Directory Entry Reclaims.....	0	0
Data Entry Reclaims.....	0	0
XI Directory Entry Reclaims...	0	0
Castouts.....	0	0

Figure 48. STGBGRPD View—Global Buffer Pool Group Statistics Detail

You can use this view to analyze total global activity in the group buffer pools for data sharing in all pools and all DB2 members combined. See Chapter 10, “Buffer Pools” on page 111 for views per individual buffer pool.

STRID—RID Pool Statistics

The STRID view, shown in Figure 49, provides statistics about the RID pool per DB2 for the current interval.

```

WI =STRID===== (ALL=====*) 17MAY2000==12: 12: 42====MVDB2=====7
DB2      Max      Current  Over RDS  Over DM  No      Too Many
Target   Alloc    Alloc    Limit    Limit    Storage Concurrent
DB0GMV54      0        0        0        0        0        0
DB0HMV55      0        0        0        0        0        0
DB1FMV53      0        0        0        0        0        0
DB1GMV54      0        0        0        0        0        0
DB1HMV55      0        0        0        0        0        0
DB2FMV53      0        0        0        0        0        0
DB2HMV55      0        0        0        0        0        0
    
```

Figure 49. STRID View—RID Pool Statistics

You can use this view to analyze RID pool usage and failures.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STRIDD to see interval and session counts

STRIDD—RID Pool Statistics Detail

The STRIDD view, shown in Figure 50, provides statistics about the RID pool for one DB2 for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```

WI =STRID====STRIDD== (ALL=====DB0HMV55) 17MAY2000==12: 12: 42====MVDB2=====1
                                Interval  Session
RID High Blocks Allocated...           0
RID Current Blocks Allocated           0

RID Processing Terminated:..
Over RDS Limit..... 0           0
Over DM Limit..... 0           0
No Storage..... 0           0
Too Many Concurrent..... 0           0
    
```

Figure 50. STRIDD View—RID Pool Statistics Detail

You can use this view to analyze RID pool usage and failures.

STDSA—Data Set Activity

The STDSA view, shown in Figure 51, provides statistics about data set activity in the current interval.

```
>W1 =STDSA===== (ALL===== *=====) 17MAY2000==17: 41: 29====MVDB2=====2
```

DB2 Target	Intvl Time	Dsets Open	Max Open	Success. Opens	Cur. DefCls	Max DefCls	Reopen Def. Clos	Closed by Drain	Con RW
DB1J61E	17: 41	25	25	0	24	24	0	0	
DB2J61E	17: 41	13	13	0	12	12	0	0	

Figure 51. STDSA View—Data Set Activity

You can use this view to analyze open/close activity.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STDSAD to see interval and session counts
 - DSets Open column to EZDPS menu to see page set information

STDSAD—Data Set Activity Detail

The STDSAD view, shown in Figure 52, provides statistics about data set activity for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```
W1 =STDSA====STDSAD==(ALL=====DB2J61E=) 17MAY2000==17: 41: 29====MVDB2=====1
```

	Interval	Session
Data Set Activity:.....		
Currently Open.....		13
Max Open Concurrently.....		13
Successful Opens.....	0	14
Max Page Sets in Def. Close..		12
Snapshot of PSs in Def. Close		12
Reopen from Deferred Close...	0	40
Closed by Drain (99% Max)....	0	0
Converted from RW to RO.....	0	0
Migrated Data Sets.....	0	0
Recall Timeouts.....	0	0

Figure 52. STDSAD View—Data Set Activity Detail

You can use this view to analyze open/close activity.

EDM Pool Views

The following views display information about EDM pools.

STEDMP—EDM Pool Statistics

The STEDMP view, shown in Figure 53, provides statistics about the EDM pool in the current interval.

```

>W1 =STEDMP===== (ALL=====*)=====) 17MAY2000==13: 53: 18====MADB2=====1
DB2      Pool  NS %   NS % Util  Tot %  DBD  CT  SKCT  PKG  SKPKG
Target   Fails  Util 0... 50...100 Util  Pages  Pages  Pages  Pages  Pages
DB1HSR      0    0.0                0.0    0    0    0    0    0

```

Figure 53. STEDMP View—EDM Pool Statistics

You can use this view to analyze EDM pool utilization and performance.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STEDMPD to see interval and session counts
 - DBD Pages column to the EDMPL Database Descriptors analyzer display to see detailed information about each database descriptor in the EDM pool
 - Free Pages column to the EDMPL Free Storage analyzer display to see detailed information about free pages in the EDM pool

STEDMPD—EDM Pool Statistics Detail

The STEDMPD view, shown in Figure 54, provides statistics about the EDM pool for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STEDMP===STEDMPD=(ALL=====DB1HSR==) 17MAY2000==13: 53: 18====MVDB2=====			
	Interval	Session	
EDM Pool Full Failures	0	0	
Pages Allocated.....			
CT.....		0	
DBD.....		0	
SKCT.....		0	
Package Table.....		0	
Skeleton PKG Table..		0	
Dynamic SQL Cache...		0	
Free.....		0	
Total.....		0	
CT: Requests.....	0	0	
Loads.....	0	0	
DBD: Requests.....	0	0	
Loads.....	0	0	
PKG: Requests.....	0	0	
Loads.....	0	0	
Data Space Usage.....			
Failures.....		0	
Pages Used.....		0	
Free Pages.....		0	

Figure 54. STEDMPD View—EDM Pool Statistics Detail

You can use this view to analyze EDM pool utilization and performance.

Logging Views

The following views display information about logging activity.

STLOG—Log Statistics

The STLOG view, shown in Figure 55, provides statistics about logging in the current interval.

```
>W1 =STLOG===== (ALL===== *=====) 17MAY2000==12: 18: 10====MVDB2=====7
```

DB2 Target	Nowait Writes	Force Writes	Buffer Uavail	CI s Created	Write Requests	Buffer Reads	Active Reads	Archi ve Reads
DB0GMV54	0	0	0	0	0	0	0	0
DB0H MV55	0	0	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0	0	0
DB1GMV54	0	0	0	0	0	0	0	0
DB1H MV55	0	0	0	0	0	0	0	0
DB2FMV53	0	0	0	0	0	0	0	0
DB2H MV55	0	43	0	0	43	0	0	0

Figure 55. STLOG View—Log Statistics

You can use this view to analyze activity on the active and archive logs and the BSDS. Problems such as unavailable buffers for logging, or reads from archive logs for backouts can be detected.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STLOGD to see interval and session counts
 - Nowait Writes column to the DLOGS analyzer display to see detailed information about log status, configuration, and activity for the selected DB2

STLOGD—Log Statistics Detail

The STLOGD view, shown in Figure 56, provides statistics about logging for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```

W1 =STLOG====STLOGD==(ALL=====DB2J61E=) 17MAY2000==18: 26: 23====MADB2=====1
                                     Interval          Sessi on
Log Writes:.....
  Nowait (Record Write to Buffer)...          0             138
  Force (Record / Buffer to DASD)...        172            5739
  Waits for Unavailable Buffer.....          0             0
  Active Log CIs Created.....              1             56
  Calls to Log Write Routine.....          172            5739
  Suspends for Log Writes.....             172            5739
  Log Write I/O Requests.....              173            5794
  Total Log CIs Written.....               173            5794
  Serial Log Rewrites (Dual Logs)...        172            5738
  Log Async Writes-Threshold.....           0             0
  Log Output Buffers Paged In.....          1             24
  Active Log Bytes Written/Sec.....         0.10           0.10
Log Reads:.....
  From Buffer.....                          0             0
  From Active Log.....                      0             140
  From Archive Log.....                     0             0
  Delayed for Tape Volume Contention        0             0
  Delayed for Unavailable Resource..        0             0
Archive Log Writes:.....
  Write Allocations.....                   0             0
  Control Intervals Offloaded.....          0             0
Archive Log Reads:.....
  Read Allocations.....                    0             0
  Look-ahead Tape Mount Attempt.....        0             0
  Look-ahead Tape Mount Successful..        0             0

BSDS Access Requests.....                  0             39
DB2 Checkpoints.....                       0             1
High Used Log RBA.....                     0000000046E30B48

```

Figure 56. STLOGD View—Log Statistics Detail

You can use this view to analyze activity on the active and archive logs and the BSDS. Problems such as unavailable buffers for logging, or reads from archive logs for backouts can be detected.

STCHKP—Checkpoint Data

The STCHKP view, shown in Figure 57, provides statistics about checkpoint activity in the current interval. It also includes data capture statistics.

```

>W1 =STCHKP===== (ALL=====*)===== 17MAY2000==17: 42: 28====MVDB2=====2
DB2      Intvl  Check-  Hi gh      IFI      IFI Unk    IFI      IFI
Target   Time   poi nts  Log RBA    ABENDS   Functions  Commands  READA
DB1J61E  17: 42    0 00000000000A720    0        0        0        8
DB2J61E  17: 42    0 0000000046E2A8E8    0        0        0       11
    
```

Figure 57. STCHKP View—Checkpoint Data

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STCHKPD to see interval and session counts
 - Checkpoints column to the DLOGS analyzer display to see checkpoint frequency

STCHKPD—Checkpoint Data Detail

The STCHKPD view, shown in Figure 58, provides statistics about checkpoint activity and data capture for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```

W1 =STCHKP===STCHKPD=(ALL=====DB2J61E=) 17MAY2000==17: 42: 28====MVDB2=====1
                                Interval          Sessi on
DB2 Checkpoints. . . . .          0              1
Hi gh Used Log RBA. . . . .      0000000046E2A8E8

IFI Abends. . . . .              0              0
IFI Unrecognized Functions. . . . 0              0
IFI Command Requests. . . . .    0              12
IFI READ-A Requests. . . . .     11             191
IFI READ-S Requests. . . . .     4              155
IFI Write Requests. . . . .      0              0

IFI Data Capture Statistics
Log Records Captured. . . . .    0              0
Log Reads Performed. . . . .    0              0
Log Records Returned. . . . .    0              0
Data Descriptors Returned. . . . 0              0
Describes Performed. . . . .    0              0
Tables Returned. . . . .         0              0
Data Rows Returned. . . . .      0              0
    
```

Figure 58. STCHKPD View—Checkpoint Data Detail

DDF Views

The following views display information about DDF activity.

STDDF—DDF Statistics

The STDDF view, shown in Figure 59, provides statistics about total DDF activity for the current interval.

```
>W1 =STDDF===== (ALL=====*) 17MAY2000==12: 24: 22====MADB2=====7
```

DB2 Target	Conv Queued	Switch to Limit	to Blk Bound	SQL Rows in Buffer	SQL Sent	SQL Recvd	Rows Sent	Rows Recvd	Bytes Sent
DB0GMV54	0	0	0	0	0	0	0	0	0
DB0HMV55	0	0	0	0	0	0	0	0	0
DB1FMV53	0	0	0	0	0	0	0	0	0
DB1GMV54	0	0	0	0	0	0	0	0	0
DB1HMV55	0	0	0	0	0	0	0	0	0
DB2FMV53	0	0	0	0	0	0	0	0	0
DB2HMV55	0	0	0	0	0	0	0	0	0

Figure 59. STDDF View—DDF Statistics

You can use this view to analyze the total distributed requests sent and received per DB2.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STDDFD to see interval and session counts
 - Conv Queued column to the DDFS analyzer display to see summary statistics about data flow between remote locations

STDDFD—DDF Statistics Detail

The STDDFD view, shown in Figure 60, provides statistics about total DDF activity for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STDDF====STDDFD==(ALL=====DB1FMV53) 17MAY2000==12: 31: 21====MVDB2=====1		
	Interval	Session
Conversation Requests Queued...	0	0
Switch to Limited Block Protocol	0	0
SQL Bound for Remote Access....	0	0
Rows in Buffer.....	0	0
SQL Statements: Sent.....	0	0
Received.....	0	0
Rows: Sent.....	0	0
Received.....	0	0
Bytes: Sent.....	0	0
Received.....	0	0
Conversations: From this Site..	0	0
To this Site...	0	0
Messages: Sent.....	0	0
Received.....	0	0
Trans Mi grated: To Remote.....	0	0
From Remote....	0	0
Commits: Sent.....	0	0
Received.....	0	0
Aborts: Sent.....	0	0
Received.....	0	0
Block Fetch Blocks: Sent.....	0	0
Received..	0	0
Prepare Requests: Sent.....	0	0
Received..	0	0
Last Agent Requests: Sent.....	0	0
Received..	0	0
Commit Requests: Sent.....	0	0
Received..	0	0
Backout Requests: Sent.....	0	0
Received..	0	0
Forget Responses: Sent.....	0	0
Received..	0	0
Req Commit Responses: Sent.....	0	0
Received..	0	0
Backout Responses: Sent.....	0	0
Received..	0	0
Remote Indoubt Threads.....	0	0

Figure 60. STDDFD View—DDF Statistics Detail

You can use this view to analyze the total distributed requests sent and received per DB2.

STDIST—DBAT Statistics

The STDIST view, shown in Figure 61, provides statistics about Database Access Threads (DBATs) for the current interval.

DB2	New DBATs	Convs	New Type	Connects	Max Remote	Current	M
Target	Queued	Deal loc	2 Queued	Termi nated	Connections	Actv DBAT	A
DB1HSR	0	0	0	0	0	0	0

Figure 61. STDIST View—DBAT Statistics

You can use this view to analyze thread usage for distributed requests where this DB2 was acting as the server.

The default functions shipped with this view are as follows:

- Hyperlink from
 - DB2 Target column to STDISTD to see interval and session counts
 - Thds Queued column to the DDFS analyzer display to see summary statistics about data flow between remote locations

STDISTD—DBAT Statistics Detail

The STDISTD view, shown in Figure 62, provides statistics about DBATs for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =STDISTD====STDISTD=(ALL=====DB1HSR==) 17MAY2000==13: 49: 08====MVDB2=====		
	Interval	Session
Maxiums Reached.....		
New DBATs Queued (MAXDBAT).....	0	0
Conversations Deallocated (CONDBAT).....	0	0
New/Resumed (Type 2) DBATs Queued (MAXDBAT)	0	0
Connections Terminated (MAXTYPE1).....	0	0
Status Values.....		
Remote Connections - Maximum.....		0
Active DBATs - Current.....		0
- Maximum.....		0
DBAT Slots Not Used - Current.....		0
- Maximum.....		0
Type 1 Inactive DBATs - Current.....		0
- Maximum.....		0
Type 2 Inactive DBATs - Current.....		0
- Maximum.....		0
Type 2 Queued (New/Resumed) - Current.....		0
- Maximum.....		0
Two-Phase Commit Activity.....		
Cold Start Connections.....	0	0
Warm Start Connections.....	0	0
Resync Attempts.....	0	0
Resync Succeeds.....	0	0

Figure 62. STDISTD View—DBAT Statistics Detail

You can use this view to analyze thread usage for distributed requests where this DB2 was acting as the server.

Chapter 10. Buffer Pools

Views for buffer pool analysis are organized into two groups:

- Local buffer pool views (virtual pools and hiperpools)
- Global buffer pool views (group buffer pools for data sharing)

You can easily access all the views for buffer pool analysis from the DB2 Buffer Pool Easy Menu (EZDBFRPL), as shown in Figure 63.

```

W1 =EZDBFRPL=====DB2GMV54=*=====17MAY2000==10: 39: 45====MVDB2=====1
                                DB2 Buffer Pool Menu
Local Pools                      Global Pools
. Overview                       +-----+ . Group CF Status
. Activity Rates                  |         | . Group CF Activity
                                | Place cursor on |
                                | menu item and  |
Tools And Menus                   | press ENTER   | . Read Activity
. Set Context                     +-----+ . Write Activity
                                |         | . Castout Activity
. Return...                       |         | . Coupling Facility

```

Figure 63. EZDBFRPL Easy Menu—DB2 Buffer Pools

Table 4 lists all the views available for buffer pools.

Table 4. Buffer Pool Views

View Name	Group / Type	Description
BFRPL	Local Pools Tabular	<p>Buffer Pool Statistics—SSI (see page 118)</p> <p>Provides an overview of buffer pool activity in the current interval. It can be invoked for one DB2 or in SSI mode for multiple DB2s; for example, a data sharing group to see member activity.</p> <p>You can use this view to review total buffer allocation and usage per pool. You can select any buffer pool to see further details.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Buffer Pools option on EZDB2 menu • Overview option on EZDBFRPL menu • Getpg Rate column in STDB2 view • Getpages column in STRATE view • Buff Alloc column in STBFRPL view • Buffers Allocated field in STBFRPLD view • DM Critical, Imm Write Threshold, Defer Disable, Prefetch Disable, BP Expansions, Bpool Failures, and Expand Failures columns in STWARN view
BFRPLD	Local Pools Detail	<p>Local Buffer Pool Statistics Detail (see page 119)</p> <p>Provides threshold settings and detailed local buffer pool statistics for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>Scroll down to see further details.</p> <p>You can use this view to analyze activity and threshold settings for an individual buffer pool. Both virtual pool and hiperpool information is included.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Pool Name column in BFRPL view

Table 4. Buffer Pool Views (Continued)

View Name	Group / Type	Description
BFRPLH	Local Pools Tabular	<p>Buffer Pool Rates—SSI (see page 120)</p> <p>Provides an overview of hit ratios and the most critical buffer pool activity measurements as rates per second in the current interval. It can be invoked for one DB2 or in SSI mode for multiple DB2s; for example, a data sharing group to see member activity.</p> <p>You can use this view to compare the most important indicators of buffer pool performance for all pools.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Activity Rates option on EZDBFRPL menu • Getpg/sec column in BFRPL view • Total HitRt column in STDB2 view • Hit Rate w/o PF column in STHITR view
BFRPLHD	Local Pools Detail	<p>Buffer Pool Rates Detail (see page 121)</p> <p>Provides the most critical measurements for the selected buffer pool as hit ratios and rates per second for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to determine overall activity since DB2 started and whether the current interval shows a significant deviation.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Pool Name column in BFRPLH view
GBPACTD	Global Pools Detail	<p>Group Buffer Pool Activity Detail (see page 134)</p> <p>Provides all statistics about a single group buffer pool for one DB2 member for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to see group buffer pool total activity details (reads, writes, castouts, coupling facility data) for one member and pool.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Pool Name column in GBPREADM view • Pool Name column in GBPWRITM view • Pool Name column in GBPCASTM view • Pool Name column in GBPCFM view

Table 4. Buffer Pool Views (Continued)

View Name	Group / Type	Description
GBPCASTM	Global Pools	Group Buffer Pool Castout Activity (see page 131)
	Tabular	<p>Provides statistics about castout activity per pool for each DB2 member currently connected to it.</p> <p>You can use this view to analyze group buffer pool castout activity for each DB2 member.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> Pool Name column in GBPCASTZ view
GBPCASTZ	Global Pools	Group Buffer Pool Castout Activity Summary (see page 130)
	Summary	<p>Provides statistics about castout activity. It is a summary of activity from each DB2 data sharing member currently connected to one or more pools.</p> <p>You can use this view to analyze group buffer pool castout activity from the viewpoint of the DB2 members. It shows all castout-related counts.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> Castout Activity option on EZDBFRPL menu GBP Castouts column in STGBFRPL view
GBPCFM	Global Pools	Group Buffer Pool Coupling Facility Activity (see page 133)
	Tabular	<p>Provides statistics about coupling facility activity per pool for each DB2 member currently connected to it.</p> <p>You can use this view to analyze group buffer pool coupling facility activity for each DB2 member.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> Pool Name column in GBPCFZ view GBP Failures column in STWARN view
GBPCFZ	Global Pools	Group Buffer Pool Coupling Facility Summary (see page 132)
	Summary	<p>Provides statistics about the coupling facility. It is a summary of activity from each DB2 data sharing member currently connected to one or more pools.</p> <p>You can use this view to analyze group buffer pool coupling facility activity from the viewpoint of the DB2 members. It shows coupling facility activity and failure counts.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> Coupling Facility option on EZDBFRPL menu CF Write No Engine column in STGBFRPL view

Table 4. Buffer Pool Views (Continued)

View Name	Group / Type	Description
GBPGACD	Global Pools Detail	<p>Group Buffer Pool Group Coupling Facility Activity Detail (see page 125)</p> <p>Provides statistics about group buffer pool activity for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to view all available activity counts for a single group buffer pool from a global coupling facility viewpoint.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Pool Name column in GBPGACZ view
GBPGACZ	Global Pools Summary	<p>Group Buffer Pool Group Coupling Facility Activity (see page 124)</p> <p>Provides statistics about group buffer pool activity.</p> <p>You can use this view to analyze the activity in all group buffer pools from a global coupling facility viewpoint.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Group CF Activity option on EZDBFRPL menu • GBP Group Activity option on EZDSSI menu
GBPGSTD	Global Pools Detail	<p>Group Buffer Pool Group Coupling Facility Status Detail (see page 123)</p> <p>Provides statistics about group buffer pool status for each of these time periods:</p> <ul style="list-style-type: none"> • The current recording interval • The current session since DB2 was started <p>You can use this view to view the group buffer pool definitions, current usage, and a few measurements of reclaim activity from a global coupling facility viewpoint.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Pool Name column in GBPGSTZ view

Table 4. Buffer Pool Views (Continued)

View Name	Group / Type	Description
GBPGSTZ	Global Pools Summary	<p>Group Buffer Pool Group Coupling Facility Status (see page 122)</p> <p>Provides statistics about group buffer pool status.</p> <p>You can use this view to analyze the status of all active group buffer pools from a global coupling facility viewpoint. It also shows how many DB2 members are currently connected to each pool.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Group CF Status option on EZDBFRPL menu • GBP Group Status option on EZDSSI menu
GBPREADM	Global Pools Tabular	<p>Group Buffer Pool Read Activity (see page 127)</p> <p>Provides statistics about group buffer pool read activity per pool for each DB2 member currently connected to it.</p> <p>You can use this view to analyze group buffer pool read activity for each DB2 member.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Pool Name column in GBPREADZ view
GBPREADZ	Global Pools Summary	<p>Group Buffer Pool Read Activity Summary (see page 126)</p> <p>Provides statistics about group buffer pool read activity. It is a summary of activity from each DB2 data sharing member currently connected to one or more pools.</p> <p>You can use this view to analyze group buffer pool read activity from the viewpoint of the DB2 members. It shows synchronous and asynchronous reads caused either by buffer invalidation or because the pages were not in the local pool.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Read Activity option on EZDBFRPL menu • Asyn Reads with Data column in STGBFRPL view

Table 4. Buffer Pool Views (Continued)

View Name	Group / Type	Description
GBPWRITM	Global Pools Tabular	<p>Group Buffer Pool Write Activity (see page 129)</p> <p>Provides statistics about group buffer pool write activity per pool for each DB2 member currently connected to it.</p> <p>You can use this view to analyze group buffer pool write activity for each DB2 member.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Pool Name column in GBPWRITZ view • GBP Changed Sync Writes column in STGBFRPL view
GBPWRITZ	Global Pools Summary	<p>Group Buffer Pool Write Activity Summary (see page 128)</p> <p>Provides statistics about group buffer pool write activity. It is a summary of activity from each DB2 data sharing member currently connected to one or more pools.</p> <p>You can use this view to analyze group buffer pool write activity from the viewpoint of the DB2 members. It shows synchronous and asynchronous writes for changed and clean pages as well as failures due to a lack of storage or write engines.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Write Activity option on EZDBFRPL menu

Local Buffer Pool Views

The following views display information about local buffer pools. This includes both the virtual pools and any related hiperpools.

BFRPL—Buffer Pool Statistics—SSI

The BFRPL view, shown in Figure 64, provides an overview of buffer pool activity in the current interval. It can be invoked for one DB2 or in SSI mode for multiple DB2s; for example, a data sharing group to see member activity.

```

WI =EZDBFRPL=BFRPL===(ALL=====*)=====) 17MAY2000==12: 52: 09====MVDB2=====31

```

Pool Name	DB2 Target	Vpool Size	Vpool Alloc	Hpool Size	Hpool Alloc	Getpg /sec	Get- pages	% Actv	% Active
BP0	DB1GMV54	200	200	0		0.0	0	0	
BP0	DB2FMV53	200	200	200	200	0.0	0	0	
BP0	DB2GMV54	300	300	200	200	0.1	32	0	
BP0	DB2HMV55	200	200	0		0.0	0	0	
BP1	DB1GMV54	25		0		0.0	0	0	
BP1	DB2FMV53	25		0		0.0	0	0	
BP1	DB2GMV54	50		0		0.0	0	0	
BP1	DB2HMV55	25		0		0.0	0	0	
BP2	DB1GMV54	75		0		0.0	0	0	
BP2	DB2FMV53	10		0		0.0	0	0	
BP2	DB2GMV54	100		10		0.0	0	0	
BP2	DB2HMV55	20		0		0.0	0	0	
BP4	DB1GMV54	21		0		0.0	0	0	
BP4	DB2GMV54	300		50		0.0	0	0	
BP4	DB2HMV55	21		0		0.0	0	0	
BP5	DB1GMV54	25		25		0.0	0	0	
BP5	DB2FMV53	25		0		0.0	0	0	
BP5	DB2GMV54	30		30		0.0	0	0	
BP9	DB1GMV54	20		0		0.0	0	0	
BP9	DB2FMV53	25		0		0.0	0	0	
BP9	DB2GMV54	50		50		0.0	0	0	
BP9	DB2HMV55	20		0		0.0	0	0	
BP32	DB2FMV53	20		0		0.0	0	0	
BP32K	DB1GMV54	20		0		0.0	0	0	
BP32K	DB2FMV53	250		0		0.0	0	0	
BP32K	DB2GMV54	20		0		0.0	0	0	
BP32K	DB2HMV55	20		0		0.0	0	0	
BP32K9	DB1GMV54	20		0		0.0	0	0	

Figure 64. BFRPL View—Buffer Pool Statistics—SSI

You can use this view to review total buffer allocation and usage per pool. You can select any buffer pool to see further details.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Pool Name column to BFRPLD to see threshold settings and interval and session counts for the selected buffer pool
 - Getpg/sec column to BFRPLH to see an overview of hit ratios and the most critical buffer pool activity measurements as rates per second

BFRPLD—Local Buffer Pool Statistics Detail

The BFRPLD view, shown in Figure 65, provides threshold settings and detailed local buffer pool statistics for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```

WI =BFRPL====BFRPLD==(ALL=====DB2JHH==) 17MAY2000==14: 10: 58====MVDB2=====1
Pool Name..... BPO
VP Size..... 2000
Hiperpool Size..... 0
Virtual Pool Sequential Threshold..... 80
Hiperpool Sequential Threshold.... 80
Deferred Write Threshold..... 50
Vertical Write Threshold..... 10
Vertical Write Threshold (Buffers)..... 0
Castout Attribute Y/N..... Y
Parallel Sequential Threshold.... 50
Assisting Parallel Threshold.... 0
Allocation type..... Vpool
Page Steal Algorithm..... LRU

Interval Session
Virtual Pool Allocation.....
  Buffers Allocated..... 2000
Current Active Buffers..... 1
  Expansions/contractions..... 0 0
  No Buffer - Pool Full..... 0 0
  Expansion Fail..... 0 0
Hiperpool Allocation.....
  Expanded Storage Buffers..... 200
  Buffers Allocated..... 200
  Expansions/Contractions..... 0 0
Virtual Pool Read Statistics....
  Getpages..... 32 67516
  Sequential Getpages..... 0 44304
  Sync I/O..... 0 504
  Sequential Sync I/O..... 0 6
  Destructive Reads..... 0 0
  Destructive Reads Dequeue..... 0 0
  Page-Ins for I/O..... 0 317
Virtual Pool Write Statistics...
  Async I/O..... 0 277
  Sync Writes..... 0 91
  Page Updates..... 0 7429
  Pages Written..... 0 708
  Page-ins for I/O..... 0 128
Parallel I/O Activity.....
  Requests..... 0 0

```

Figure 65. BFRPLD View—Local Buffer Pool Statistics Detail

Scroll down to see further details.

You can use this view to analyze activity and threshold settings for an individual buffer pool. Both virtual pool and hiperpool information is included.

BFRPLH—Buffer Pool Rates—SSI

The BFRPLH view, shown in Figure 66, provides an overview of hit ratios and the most critical buffer pool activity measurements as rates per second in the current interval. It can be invoked for one DB2 or in SSI mode for multiple DB2s; for example, a data sharing group to see member activity.

```
>W1 =EZDBFRPL=BFRPLH==(ALL=====*)=====) 17MAY2000==12: 56: 06====MVDB2=====31
```

Pool Name	DB2 Target	Hit Rate % with P/F	Hit Rate % w/o P/F	GBP Hit Ratio %	Getpgs /Second	Pg Upd /Second	Sync I/O /Secon
BP0	DB1GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP0	DB2FMV53	0.00	0.00	0.00	0.00	0.00	0.00
BP0	DB2GMV54	100.00	100.00	0.00	0.07	0.00	0.00
BP0	DB2HMV55	0.00	0.00	0.00	0.00	0.00	0.00
BP1	DB1GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP1	DB2FMV53	0.00	0.00	0.00	0.00	0.00	0.00
BP1	DB2GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP1	DB2HMV55	0.00	0.00	0.00	0.00	0.00	0.00
BP2	DB1GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP2	DB2FMV53	0.00	0.00	0.00	0.00	0.00	0.00
BP2	DB2GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP2	DB2HMV55	0.00	0.00	0.00	0.00	0.00	0.00
BP4	DB1GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP4	DB2GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP4	DB2HMV55	0.00	0.00	0.00	0.00	0.00	0.00
BP5	DB1GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP5	DB2FMV53	0.00	0.00	0.00	0.00	0.00	0.00
BP5	DB2GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP9	DB1GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP9	DB2FMV53	0.00	0.00	0.00	0.00	0.00	0.00
BP9	DB2GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP9	DB2HMV55	0.00	0.00	0.00	0.00	0.00	0.00
BP32	DB2FMV53	0.00	0.00	0.00	0.00	0.00	0.00
BP32K	DB1GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP32K	DB2FMV53	0.00	0.00	0.00	0.00	0.00	0.00
BP32K	DB2GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP32K	DB2HMV55	0.00	0.00	0.00	0.00	0.00	0.00
BP32K9	DB1GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP32K9	DB2FMV53	0.00	0.00	0.00	0.00	0.00	0.00
BP32K9	DB2GMV54	0.00	0.00	0.00	0.00	0.00	0.00
BP32K9	DB2HMV55	0.00	0.00	0.00	0.00	0.00	0.00

Figure 66. BFRPLH View—Buffer Pool Rates—SSI

You can use this view to compare the most important indicators of buffer pool performance for all pools.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Pool Name column to BFRPLHD to see interval and session hit ratios and counts for the selected buffer pool

BFRPLHD—Buffer Pool Rates Detail

The BFRPLHD view, shown in Figure 67, provides the most critical measurements for the selected buffer pool as hit ratios and rates per second for each of these time periods:

- The current recording interval
- The current session since DB2 was started

W1 =EZDBFRPL=BFRPLHD=(ALL=====DB2GMV54) 17MAY2000==12: 56: 06====MVDB2=====1		
Pool Name.....	BPO	
	Interval	Session
Hit Ratios.....		
VPOOL Hit Ratio % with P/F...	100.00	33.46
VPOOL Hit Ratio % without P/F	100.00	97.86
GBP Hit Ratio %.....	0.00	0.00
Activity per Second.....		
Getpages.....	0.07	3.14
Page Updates.....	0.00	0.35
Sync I/O.....	0.00	0.02
Prefetch I/O.....	0.00	0.13
Write I/O.....	0.00	0.02
Data Set Opens.....	0.00	0.01

Figure 67. BFRPLHD View—Buffer Pool Rates Detail

You can use this view to determine overall activity since DB2 started and whether the current interval shows a significant deviation.

Global Buffer Pool Views

The following views display information about global buffer pools. These are the group buffer pools defined in the coupling facility to support data sharing.

GBPGSTZ—Group Buffer Pool Group Coupling Facility Status

The GBPGSTZ view, shown in Figure 68, provides statistics about group buffer pool status.

```
>W1 =EZDBFRPL=GBPGSTZ=(ALL=====*) 17MAY2000==13: 00: 17====MVDB2=====
```

Pool Name	No. Mbrs	Blocks Alloc	Dir Entries	Data Pages	Changed Pages	XI Recl ai ms	Dir Recl ai ms	Data Recl ai ms
BP0	4	256	942	187	0	0	0	0
BP1	4	0	0	0	0	0	0	0
BP2	4	0	0	0	0	0	0	0
BP4	3	0	0	0	0	0	0	0
BP5	3	0	0	0	0	0	0	0
BP9	4	0	0	0	0	0	0	0
BP32	1	0	0	0	0	0	0	0
BP32K	4	0	0	0	0	0	0	0
BP32K9	4	0	0	0	0	0	0	0

Figure 68. GBPGSTZ View—Group Buffer Pool Group Coupling Facility Status

You can use this view to analyze the status of all active group buffer pools from a global coupling facility viewpoint. It also shows how many DB2 members are currently connected to each pool.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
- Hyperlink from
 - Pool Name column to GBPGSTD to see more detailed information about the selected buffer pool

GBPGSTD—Group Buffer Pool Group Coupling Facility Status Detail

The GBPGSTD view, shown in Figure 69, provides statistics about group buffer pool status for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```

WI =GBPGSTD===== (ALL===== *=====) 17MAY2000==15: 13: 49====MADB2=====1

Pool Name..... BPO

Current AUTOREC Setting..... N
Current GBPCACHE Setting..... N
Duplex or Simplex GBP..... S

Castout Class Level Threshold... 0
Castout Pool Level Threshold... 0
Current Dir/Data Ratio.....
Pending Dir/Data Ratio.....
Checkpoint Interval (mins)..... 0
Allocated Number of 4K Blocks... 0
Allocated Directory Entries.... 0
Allocated Data Entries..... 0
Total Changed Pages..... 0

                                     Intvl   Sessi on
Directory Entry Reclai ms..... 0         0
Data Entry Reclai ms..... 0         0
XI Di rectory Entry Reclai ms.... 0         0

Secondary GBP Allocated Size... 0
Secondary GBP Alloc Dir Entries. 0
Secondary GBP Alloc Data Entries 0

```

Figure 69. GBPGSTD View—Group Buffer Pool Group Coupling Facility Status Detail

You can use this view to view the group buffer pool definitions, current usage, and a few measurements of reclaim activity from a global coupling facility viewpoint.

GBPGACZ—Group Buffer Pool Group Coupling Facility Activity

The GBPGACZ view, shown in Figure 70, provides statistics about group buffer pool activity.

```
>W1 =EZDBFRPL=GBPGACZ=(ALL=====*======) 17MAY2000==13: 03: 50====MVDB2=====9
```

Pool Name	No. Mbrs	Read Hits	Read Miss Dir Hit	Read Miss Asgn Suppr	Read Miss Name Assgn	Read Miss Cache Full	Chng Page Wrt Hits
BP0	4	0	0	0	0	0	0
BP1	4	0	0	0	0	0	0
BP2	4	0	0	0	0	0	0
BP4	3	0	0	0	0	0	0
BP5	3	0	0	0	0	0	0
BP9	4	0	0	0	0	0	0
BP32	1	0	0	0	0	0	0
BP32K	4	0	0	0	0	0	0
BP32K9	4	0	0	0	0	0	0

Figure 70. GBPGACZ View—Group Buffer Pool Group Coupling Facility Activity

You can use this view to analyze the activity in all group buffer pools from a global coupling facility viewpoint.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
- Hyperlink from
 - Pool Name column to GBPGACD to see interval and session counts for the selected buffer pool

GBPGACD—Group Buffer Pool Group Coupling Facility Activity Detail

The GBPGACD view, shown in Figure 71, provides statistics about group buffer pool activity for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```

WI =GBPGACD===== (ALL===== *=====) 17MAY2000==15: 16: 30====MWDB2=====

```

Pool Name.....	BPO Interval	Sessi on
Read Hit Counter.....	0	0
Read Miss Directory Hit.....	0	0
Read Miss Assignment Suppressed	0	0
Read Miss Name Assigned.....	0	0
Read Miss Cache Full.....	0	0
Changed Page Write Hits.....	0	0
Clean Page Write Hits.....	0	0
Write Miss Cache Full.....	0	0
Directory Entry Reclaims.....	0	0
Data Entry Reclaims.....	0	0
XI Directory Entry Reclaims....	0	0
Castouts.....	0	0
Directory Entries.....		0
Data Entries.....		0
Total Changed.....		0
Explicit XI.....		0
Secondary Chg Pg Wrt Hit.....	0	0
Secondary Wrt Miss Cache Full..	0	0
Secondary Dir Entry Counter....	0	0
Secondary Data Entry Counter...	0	0
Secondary Total Changed.....	0	0

Figure 71. GBPGACD View—Group Buffer Pool Group Coupling Facility Activity Detail

You can use this view to view all available activity counts for a single group buffer pool from a global coupling facility viewpoint.

GBPREADZ—Group Buffer Pool Read Activity Summary

The GBPREADZ view, shown in Figure 72, provides statistics about group buffer pool read activity. It is a summary of activity from each DB2 data sharing member currently connected to one or more pools.

```
>W1 =GBPREADZ=====DB2GMV54=*=====17MAY2000==14: 19: 32====MVDB2=====8
```

Pool Name	No. Mbrs	Sync Buf with Data	Sync Buf with Dir	Sync Buf w/o Dir	Sync Pg with Data	Sync Pg with Dir	Sync Pg w/o Dir	Asy wit
BP0	1	0	0	0	0	0	0	0
BP1	1	0	0	0	0	0	0	0
BP2	1	0	0	0	0	0	0	0
BP4	1	0	0	0	0	0	0	0
BP5	1	0	0	0	0	0	0	0
BP9	1	0	0	0	0	0	0	0
BP32K	1	0	0	0	0	0	0	0
BP32K9	1	0	0	0	0	0	0	0

Figure 72. GBPREADZ View—Group Buffer Pool Read Activity Summary

You can use this view to analyze group buffer pool read activity from the viewpoint of the DB2 members. It shows synchronous and asynchronous reads caused either by buffer invalidation or because the pages were not in the local pool.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
- Hyperlink from
 - Pool Name column to GBPREADM to see the counts broken out per individual DB2 member

GBPREADM—Group Buffer Pool Read Activity

The GBPREADM view, shown in Figure 73, provides statistics about group buffer pool read activity per pool for each DB2 member currently connected to it.

```
>W1 =EZDBFRPL=GBPREADM(ALL=====*)===== 17MAY2000==13: 07: 02====MVDB2=====31
```

Pool Name	DB2 Target	Sync Buf with Data	Sync Buf with Dir	Sync Buf w/o Dir	Sync Pg with Data	Sync Pg with Dir	Sync Pg w/o Dir
BP0	DB1GMV54	0	0	0	0	0	0
BP0	DB2FMV53	0	0	0	0	0	0
BP0	DB2GMV54	0	0	0	0	0	0
BP0	DB2HMV55	0	0	0	0	0	0
BP1	DB1GMV54	0	0	0	0	0	0
BP1	DB2FMV53	0	0	0	0	0	0
BP1	DB2GMV54	0	0	0	0	0	0
BP1	DB2HMV55	0	0	0	0	0	0
BP2	DB1GMV54	0	0	0	0	0	0
BP2	DB2FMV53	0	0	0	0	0	0
BP2	DB2GMV54	0	0	0	0	0	0
BP2	DB2HMV55	0	0	0	0	0	0
BP4	DB1GMV54	0	0	0	0	0	0
BP4	DB2GMV54	0	0	0	0	0	0
BP4	DB2HMV55	0	0	0	0	0	0
BP5	DB1GMV54	0	0	0	0	0	0
BP5	DB2FMV53	0	0	0	0	0	0
BP5	DB2GMV54	0	0	0	0	0	0
BP9	DB1GMV54	0	0	0	0	0	0
BP9	DB2FMV53	0	0	0	0	0	0
BP9	DB2GMV54	0	0	0	0	0	0
BP9	DB2HMV55	0	0	0	0	0	0
BP32	DB2FMV53	0	0	0	0	0	0
BP32K	DB1GMV54	0	0	0	0	0	0
BP32K	DB2FMV53	0	0	0	0	0	0
BP32K	DB2GMV54	0	0	0	0	0	0
BP32K	DB2HMV55	0	0	0	0	0	0
BP32K9	DB1GMV54	0	0	0	0	0	0
BP32K9	DB2FMV53	0	0	0	0	0	0
BP32K9	DB2GMV54	0	0	0	0	0	0
BP32K9	DB2HMV55	0	0	0	0	0	0

Figure 73. GBPREADM View—Group Buffer Pool Read Activity

You can use this view to analyze group buffer pool read activity for each DB2 member.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Pool Name column to GBPACTD to see group buffer pool total activity details (reads, writes, castouts, coupling facility data) for one member and pool

GBPWRITZ—Group Buffer Pool Write Activity Summary

The GBPWRITZ view, shown in Figure 74, provides statistics about group buffer pool write activity. It is a summary of activity from each DB2 data sharing member currently connected to one or more pools.

```

W1 =EZDBFRPL=GBPWRITZ(ALL=====*)=====) 17MAY2000==13:07:02====MVDB2=====9

```

Pool Name	No. Mbrs	Sync Chng Pgs	Sync Clean Pgs	Async Chng Pgs	Async Clean Pgs	CF No Wrt Eng	CF Write Incomplete
BP0	4	0	0	0	0	0	0
BP1	4	0	0	0	0	0	0
BP2	4	0	0	0	0	0	0
BP4	3	0	0	0	0	0	0
BP5	3	0	0	0	0	0	0
BP9	4	0	0	0	0	0	0
BP32	1	0	0	0	0	0	0
BP32K	4	0	0	0	0	0	0
BP32K9	4	0	0	0	0	0	0

Figure 74. GBPWRITZ View—Group Buffer Pool Write Activity Summary

You can use this view to analyze group buffer pool write activity from the viewpoint of the DB2 members. It shows synchronous and asynchronous writes for changed and clean pages as well as failures due to a lack of storage or write engines.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
- Hyperlink from
 - Pool Name column to GBPWRITM to see the counts broken out per individual DB2 member

GBPWRITM—Group Buffer Pool Write Activity

The GBPWRITM view, shown in Figure 75, provides statistics about group buffer pool write activity per pool for each DB2 member currently connected to it.

```

W1 =EZDBFRPL=GBPWRITM(ALL=*****=) 17MAY2000==13: 07: 02====MVDB2=====31

```

Pool Name	DB2 Target	Sync Chng Pgs	Sync Clean Pgs	Async Chng Pgs	Async Clean Pgs	CF No Wrt Eng	CF Write Incomplete
BP0	DB1GMV54	0	0	0	0	0	0
BP0	DB2FMV53	0	0	0	0	0	0
BP0	DB2GMV54	0	0	0	0	0	0
BP0	DB2HMV55	0	0	0	0	0	0
BP1	DB1GMV54	0	0	0	0	0	0
BP1	DB2FMV53	0	0	0	0	0	0
BP1	DB2GMV54	0	0	0	0	0	0
BP1	DB2HMV55	0	0	0	0	0	0
BP2	DB1GMV54	0	0	0	0	0	0
BP2	DB2FMV53	0	0	0	0	0	0
BP2	DB2GMV54	0	0	0	0	0	0
BP2	DB2HMV55	0	0	0	0	0	0
BP4	DB1GMV54	0	0	0	0	0	0
BP4	DB2GMV54	0	0	0	0	0	0
BP4	DB2HMV55	0	0	0	0	0	0
BP5	DB1GMV54	0	0	0	0	0	0
BP5	DB2FMV53	0	0	0	0	0	0
BP5	DB2GMV54	0	0	0	0	0	0
BP9	DB1GMV54	0	0	0	0	0	0
BP9	DB2FMV53	0	0	0	0	0	0
BP9	DB2GMV54	0	0	0	0	0	0
BP9	DB2HMV55	0	0	0	0	0	0
BP32	DB2FMV53	0	0	0	0	0	0
BP32K	DB1GMV54	0	0	0	0	0	0
BP32K	DB2FMV53	0	0	0	0	0	0
BP32K	DB2GMV54	0	0	0	0	0	0
BP32K	DB2HMV55	0	0	0	0	0	0
BP32K9	DB1GMV54	0	0	0	0	0	0
BP32K9	DB2FMV53	0	0	0	0	0	0
BP32K9	DB2GMV54	0	0	0	0	0	0
BP32K9	DB2HMV55	0	0	0	0	0	0

Figure 75. GBPWRITM View—Group Buffer Pool Write Activity

You can use this view to analyze group buffer pool write activity for each DB2 member.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Pool Name column to GBPACTD to see group buffer pool total activity details (reads, writes, castouts, coupling facility data) for one member and pool

GBPCASTZ—Group Buffer Pool Castout Activity Summary

The GBPCASTZ view, shown in Figure 76, provides statistics about castout activity. It is a summary of activity from each DB2 data sharing member currently connected to one or more pools.

```
>W1 =EZDBFRPL=GBPCASTZ(ALL=====*) 17MAY2000==13: 07: 02====MVDB2=====9
```

Pool Name	No. Mbrs	Class Thrshld	Pool Thrshld	Castout Operations	No Engine Available	Unlock Castouts	Read Class Requests	Re
BP0	4	0	0	0	0	0	0	
BP1	4	0	0	0	0	0	0	
BP2	4	0	0	0	0	0	0	
BP4	3	0	0	0	0	0	0	
BP5	3	0	0	0	0	0	0	
BP9	4	0	0	0	0	0	0	
BP32	1	0	0	0	0	0	0	
BP32K	4	0	0	0	0	0	0	
BP32K9	4	0	0	0	0	0	0	

Figure 76. GBPCASTZ View—Group Buffer Pool Castout Activity Summary

You can use this view to analyze group buffer pool castout activity from the viewpoint of the DB2 members. It shows all castout-related counts.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
- Hyperlink from
 - Pool Name column to GBPCASTM to see the counts broken out per individual DB2 member

GBPCASTM—Group Buffer Pool Castout Activity

The GBPCASTM view, shown in Figure 77, provides statistics about castout activity per pool for each DB2 member currently connected to it.

```
>W1 =EZDBFRPL=GBPCASTM(ALL=====*)=====) 17MAY2000==13: 07: 02====MVDB2=====31
```

Pool Name	DB2 Target	Class Thrshl d	Pool Thrshl d	Castout Operations	No Eng Avail	Unlock Castouts	Read Class Requests
BP0	DB1GMV54	0	0	0	0	0	0
BP0	DB2FMV53	0	0	0	0	0	0
BP0	DB2GMV54	0	0	0	0	0	0
BP0	DB2HMV55	0	0	0	0	0	0
BP1	DB1GMV54	0	0	0	0	0	0
BP1	DB2FMV53	0	0	0	0	0	0
BP1	DB2GMV54	0	0	0	0	0	0
BP1	DB2HMV55	0	0	0	0	0	0
BP2	DB1GMV54	0	0	0	0	0	0
BP2	DB2FMV53	0	0	0	0	0	0
BP2	DB2GMV54	0	0	0	0	0	0
BP2	DB2HMV55	0	0	0	0	0	0
BP4	DB1GMV54	0	0	0	0	0	0
BP4	DB2GMV54	0	0	0	0	0	0
BP4	DB2HMV55	0	0	0	0	0	0
BP5	DB1GMV54	0	0	0	0	0	0
BP5	DB2FMV53	0	0	0	0	0	0
BP5	DB2GMV54	0	0	0	0	0	0
BP9	DB1GMV54	0	0	0	0	0	0
BP9	DB2FMV53	0	0	0	0	0	0
BP9	DB2GMV54	0	0	0	0	0	0
BP9	DB2HMV55	0	0	0	0	0	0
BP32	DB2FMV53	0	0	0	0	0	0
BP32K	DB1GMV54	0	0	0	0	0	0
BP32K	DB2FMV53	0	0	0	0	0	0
BP32K	DB2GMV54	0	0	0	0	0	0
BP32K	DB2HMV55	0	0	0	0	0	0
BP32K9	DB1GMV54	0	0	0	0	0	0
BP32K9	DB2FMV53	0	0	0	0	0	0
BP32K9	DB2GMV54	0	0	0	0	0	0
BP32K9	DB2HMV55	0	0	0	0	0	0

Figure 77. GBPCASTM View—Group Buffer Pool Castout Activity

You can use this view to analyze group buffer pool castout activity for each DB2 member.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Pool Name column to GBPACTD to see group buffer pool total activity details (reads, writes, castouts, coupling facility data) for one member and pool

GBPCFZ—Group Buffer Pool Coupling Facility Summary

The GBPCFZ view, shown in Figure 78, provides statistics about the coupling facility. It is a summary of activity from each DB2 data sharing member currently connected to one or more pools.

```
>W1 =EZDBFRPL=GBPCFZ==(ALL=====*)=====) 17MAY2000==13: 07: 02====MVDB2=====9
```

Pool Name	No. Mbrs	Read Stats	Checkpts Triggered	Rebuil ds	Del ete Names	Read Dir Info	Castouts	No Engi ne Avail
BP0	4	48	0	0	0	0	0	0
BP1	4	0	0	0	0	0	0	0
BP2	4	0	0	0	0	0	0	0
BP4	3	0	0	0	0	0	0	0
BP5	3	0	0	0	0	0	0	0
BP9	4	0	0	0	0	0	0	0
BP32	1	0	0	0	0	0	0	0
BP32K	4	0	0	0	0	0	0	0
BP32K9	4	0	0	0	0	0	0	0

Figure 78. GBPCFZ View—Group Buffer Pool Coupling Facility Summary

You can use this view to analyze group buffer pool coupling facility activity from the viewpoint of the DB2 members. It shows coupling facility activity and failure counts.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
- Hyperlink from
 - Pool Name column to GBPCFM to see the counts broken out per individual DB2 member

GBPCFM—Group Buffer Pool Coupling Facility Activity

The GBPCFM view, shown in Figure 79, provides statistics about coupling facility activity per pool for each DB2 member currently connected to it.

```
>W1 =EZDBFRPL=GBPCFM==(ALL=====*)=====) 17MAY2000==13: 07: 02=====MVDB2=====31
```

Pool Name	DB2 Target	No Cast- out Eng	No CF Wrt Eng	Read Stats	Chkp Trig	Rebuil ds	Delete Names	Read Dir Info	C
BP0	DB1GMV54	0	0	7	0	0	0	0	0
BP0	DB2FMV53	0	0	0	0	0	0	0	0
BP0	DB2GMV54	0	0	48	0	0	0	0	0
BP0	DB2HMV55	0	0	0	0	0	0	0	0
BP1	DB1GMV54	0	0	0	0	0	0	0	0
BP1	DB2FMV53	0	0	0	0	0	0	0	0
BP1	DB2GMV54	0	0	0	0	0	0	0	0
BP1	DB2HMV55	0	0	0	0	0	0	0	0
BP2	DB1GMV54	0	0	0	0	0	0	0	0
BP2	DB2FMV53	0	0	0	0	0	0	0	0
BP2	DB2GMV54	0	0	0	0	0	0	0	0
BP2	DB2HMV55	0	0	0	0	0	0	0	0
BP4	DB1GMV54	0	0	0	0	0	0	0	0
BP4	DB2GMV54	0	0	0	0	0	0	0	0
BP4	DB2HMV55	0	0	0	0	0	0	0	0
BP5	DB1GMV54	0	0	0	0	0	0	0	0
BP5	DB2FMV53	0	0	0	0	0	0	0	0
BP5	DB2GMV54	0	0	0	0	0	0	0	0
BP9	DB1GMV54	0	0	0	0	0	0	0	0
BP9	DB2FMV53	0	0	0	0	0	0	0	0
BP9	DB2GMV54	0	0	0	0	0	0	0	0
BP9	DB2HMV55	0	0	0	0	0	0	0	0
BP32	DB2FMV53	0	0	0	0	0	0	0	0
BP32K	DB1GMV54	0	0	0	0	0	0	0	0
BP32K	DB2FMV53	0	0	0	0	0	0	0	0
BP32K	DB2GMV54	0	0	0	0	0	0	0	0
BP32K	DB2HMV55	0	0	0	0	0	0	0	0
BP32K9	DB1GMV54	0	0	0	0	0	0	0	0
BP32K9	DB2FMV53	0	0	0	0	0	0	0	0
BP32K9	DB2GMV54	0	0	0	0	0	0	0	0
BP32K9	DB2HMV55	0	0	0	0	0	0	0	0

Figure 79. GBPCFM View—Group Buffer Pool Coupling Facility Activity

You can use this view to analyze group buffer pool coupling facility activity for each DB2 member.

The default functions shipped with this view are as follows:

- Sort by
 - Pool Name column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Pool Name column to GBPACTD to see group buffer pool total activity details (reads, writes, castouts, coupling facility data) for one member and pool

GBPACTD—Group Buffer Pool Activity Detail

The GBPACTD view, shown in Figure 80, provides all statistics about a single group buffer pool for one DB2 member for each of these time periods:

- The current recording interval
- The current session since DB2 was started

```

W1 =GBPACTD===== (ALL===== *=====) 17MAY2000==15: 19: 40====MVDB2=====1

Group Buffer Pool Name..... BPO

Interval  Sessi on
Synchronous CF Reads.....
  Inv Buffer with Data.....      0      0
  Inv Buffer with Dir.....      0      0
  Inv Buffer without Dir.....    0      0
  No Page with Data.....      0      0
  No Page with Dir.....      0      0
  No Page without Dir.....     0      0
Asynchronous CF Reads.....
  With Data.....              0      0
  With Dir.....              0      0
  No Data and No Directory Entry
  Synchronous Pages Written.....
  Changed Pages.....          0      0
  Clean Pages.....            0      0
Asynchronous Pages Written.....
  Changed Pages.....          0      0
  Clean Pages.....            0      0
Group Buffer Pool Requests.....
  Checkpoints Triggered.....   0      0
  Rebuild Participations.....  0      0
  Delete All Entries for Pageset
  Castouts.....
  Pages Castout.....          0      0
  Class Threshold.....        0      0
  GBP Threshold.....          0      0
  Engine Not Available.....    0      0
Coupling Facility.....
  Write Engine Not Available... 0      0
  Read Not Complete.....      0      0
  Write Not Complete.....     0      0
  Unlock Castout Locks.....   0      0
  Read Castout Class.....     0      0
  Read Castout Statistics..... 0      0
  Read Storage Statistics..... 0      0
  Read Directory Information... 0      0
  Register Pages.....         0      0
  Unregister Pages.....       0      0
  Register Page Lists.....    0      0
  Reads for Changed Page.....  0      0
  Reads for Clean Page.....   0      0
  Explicit X-Invalidations.... 0      0
Secondary Group BP Requests....
  Delete-Name-List.....       0      0
  Delete-Name.....           0      0
  Read-Castout-Stats.....     0      0
    
```

Figure 80. GBPACTD View—Group Buffer Pool Activity Detail

You can use this view to see group buffer pool total activity details (reads, writes, castouts, coupling facility data) for one member and pool.

Chapter 11. Page Sets

Views for page set analysis are organized into three groups:

- Page set status views
- Page set summary views
- I/O by page set views

One page set record is created for each open data set. These records provide all the available data set-related information, including the DB2 I/O counts and wait times, buffer pool cache counts, and status information.

Historical data is available for a more detailed analysis. In addition, using SSI mode with these views is very valuable for data sharing, because it allows you to see total group I/O counts per shared data set, which would otherwise be split across multiple DB2s.

You can easily access all the views for page set analysis from the Page Set Easy Menu (EZDPS), shown in Figure 81.

```

W1 =EZDPS===== (ALL=====*) 17MAY2000==15:36:55====MVDB2=====1
                                DB2 Page Set Menu
Page Set Information           I/O by Page Set (SSI)
. Status                       +-----+ . Total I/Os - Session
. Cache Statistics             | Place Cursor On | . Total I/Os - Interval
. List Page Sets (/DB2)       | Menu Item And   | . Sync I/Os - Session
. List Page Sets (SSI)        | Press ENTER     | . Sync I/Os - Interval
. GBP-Dependent Status       +-----+ . Async I/Os - Session
                                . Async I/Os - Interval

Summaries
. By Volume (SSI)             . Set DB2 Subsystem . Return...
. By Volume (/DB2)           (Context)
. By Buffer Pool
. By Data Base
. By Object

```

Figure 81. EZDPS Easy Menu—DB2 Page Sets

Table 5 lists all the views available for page sets.

Table 5. Page Set Views

View Name	Group / Type	Description
PSAIO	I/O by Page Set Tabular	Asynchronous I/O Page Set Member Detail—Interval (see page 168) Shows asynchronous I/O activity per page set in the last interval. You can use this view to analyze the amount of I/O activity per page set and DB2 from one DB2. You can hyperlink to this view from <ul style="list-style-type: none"> Page Set column in PSAIOZ view
PSAIOS	I/O by Page Set Tabular	Asynchronous I/O Page Set Member Detail—Session (see page 166) Shows asynchronous I/O activity per page set since DB2 startup. You can use this view to analyze the amount of I/O activity per page set and DB2 and identify I/O response time problems. You can hyperlink to this view from <ul style="list-style-type: none"> Page Set column in PSAIOSZ view
PSAIOSZ	I/O by Page Set Summary	Asynchronous I/O Page Set Summary—Session (see page 165) Shows asynchronous I/O activity per page set since DB2 startup. If in SSI mode, data from multiple DB2 data sharing members is combined. You can use this view to analyze the amount of I/O activity per page set and identify I/O response time problems. You can hyperlink to this view from <ul style="list-style-type: none"> Async I/Os—Session option on EZDPS menu
PSAIOZ	I/O by Page Set Summary	Asynchronous I/O Page Set Summary—Interval (see page 167) Shows asynchronous I/O activity per page set in the last interval. If in SSI mode, data from multiple DB2 data sharing members is combined. You can use this view to see the current I/O workload and response times. You can hyperlink to this view from <ul style="list-style-type: none"> Async I/Os—Interval option on EZDPS menu

Table 5. Page Set Views (Continued)

View Name	Group / Type	Description
PSBPGBPZ	Status	Buffer Pool Page Set GBP-DEP Summary (see page 150)
	Summary	<p>Summarizes group buffer pool dependent page sets and inter-DB2 interest by buffer pool and target.</p> <p>You can use this view when analyzing the amount of interaction within a data sharing group.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • GBP-Dependent Status option on EZDPS menu • GBP Depndnt column in STDB2 view
PSBPS	Summary	Buffer Pool Page Sets—Session (see page 154)
	Tabular	<p>Lists the page sets for a selected buffer pool.</p> <p>You can use this view to help determine whether the access characteristics of the page set are similar and fit with the buffer pool thresholds. Scroll right to see additional data such as synchronous or asynchronous I/O.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Bfrpl ID column in PSCACHE view • Bfrpl ID column in PSBPSZ and PSBPTMZ views • DB2 Target column in PSBPSZ view
PSBPSZ	Summary	Buffer Pool Page Set Summary—Session (see page 153)
	Summary	<p>Summarizes buffer cache statistics and I/O activity by buffer pool and DB2.</p> <p>You can use this view when analyzing buffer pool usage and threshold and size specifications. When in SSI mode for a data sharing group, you can identify which DB2 members are causing the most activity per buffer pool.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Summaries By Buffer Pool option on EZDPS menu
PSBPTMZ	Summary	Buffer Pool Page Set 2-Hour Summary (see page 155)
	Summary	<p>Shows buffer pool activity for the last 2 hours. It is usually invoked by a hyperlink to select a specific buffer pool and DB2 target.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • VP Current column in PSBPSZ view

Table 5. Page Set Views (Continued)

View Name	Group / Type	Description
PSCACHE	Status	Page Set Cache (see page 146)
	Tabular	Lists all open page sets with cache statistics. You can use this view to determine virtual pool and hiperpool (scroll right) usage per page set. You can hyperlink to this view from <ul style="list-style-type: none"> • Cache Statistics option on EZDPS menu
PSDBSZ	Summary	Database Page Set Summary—Session (see page 156)
	Summary	Summarizes page set activity by database and DB2 target. You can use this view to evaluate I/O and cache information per database. You can hyperlink to this view from <ul style="list-style-type: none"> • Summaries By Database option on EZDPS menu
PSDBTMZ	Summary	Database Page Set 2-Hour Summary (see page 157)
	Summary	Shows database activity for the last 2 hours. It is usually invoked by a hyperlink to select a specific database and target. You can hyperlink to this view from <ul style="list-style-type: none"> • Total I/Os column in PSDBSZ view
PSDTL	Status	Page Set Detail (see page 152)
	Detail	Presents full data about the selected page set. You can hyperlink to this view from <ul style="list-style-type: none"> • Page Set column in PSSTAT view • Page Set column in PSCACHE view • Page Set / Database column in PSLIST view • Page Set column in PSBPS view • Page Set column in PSVOLPS view • Page Set column in PSSIOS view • Page Set column in PSSIO view • Page Set column in PSAIOS view • Page Set column in PSAIO view • Page Set column in PSTIOS view • Page Set column in PSTIO view

Table 5. Page Set Views (Continued)

View Name	Group / Type	Description
PSGBP	Status	Page Set GBP-DEP Status (see page 151)
	Tabular	<p>Shows which page sets are group buffer pool dependent and the local and remote inter-DB2 interest.</p> <p>You can use this view when analyzing the amount of interaction within a data sharing group.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • GBP Dep column in PSSTAT view • Bfrpl ID, DB2 Target, and GBP Dependent columns in PSBPGBPZ view
PSLIST	Status	Page Set List (see page 147)
	Tabular	<p>Lists all open page sets, with all data elements provided per DB2 target (scroll right).</p> <p>You can use this view as the destination for various selective hyperlinks from summary views and to customize page set views.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • List Page Sets (/DB2) option on EZDPS menu • Page Set / Database column in PSLISTZ view • DB2 Target column in PSDBSZ view • DB2 Target column in PSOBSZ view
PSLISTTZ	Status	Page Set 2-Hour Summary (see page 149)
	Summary	<p>Shows activity for the selected page set for the last 2 hours. Additional I/O and cache information is available (scroll right).</p> <p>You can use this view to evaluate page set usage patterns over time.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Total I/Os column in PSLIST view • Total I/Os column in PSLISTZ view

Table 5. Page Set Views (Continued)

View Name	Group / Type	Description
PSLISTZ	Status	Page Set List (SSI) (see page 148)
	Summary	<p>Lists all open page sets, with all data elements provided (scroll right), summarized by page set across multiple members in a data sharing group in SSI mode.</p> <p>You can use this view as the destination for various selective hyperlinks from summary views and to customize SSI page set views.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • List Page Sets (SSI) option on EZDPS menu • Page Set / Database column in PSDBSZ view • Page Set / Database Object column in PSOBSZ view
PSOBSZ	Summary	Object Page Set Summary—Session (see page 158)
	Summary	<p>Summarizes page set activity by database object and DB2 target. You can use this view to evaluate I/O and cache information per database object.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Summaries By Object option on EZDPS menu • Object Summary option on EZDB2 menu
PSOBTMZ	Summary	Object Page Set 2-Hour Summary (see page 159)
	Summary	<p>Shows database object activity for the last 2 hours. It is usually invoked by a hyperlink to select a specific database object and target.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Total I/Os column in PSOBSZ view
PSSIO	I/O by Page Set	Synchronous I/O Page Set Member Detail—Interval (see page 168)
	Tabular	<p>Shows synchronous I/O activity per page set in the last interval.</p> <p>You can use this view to analyze the amount of I/O activity per page set and DB2 from one DB2.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Page Set column in PSSIOZ view

Table 5. Page Set Views (Continued)

View Name	Group / Type	Description
PSSIOS	I/O by Page Set Tabular	<p>Synchronous I/O Page Set Member Detail—Session (see page 166)</p> <p>Shows synchronous I/O activity per page set since DB2 startup.</p> <p>You can use this view to analyze the amount of I/O activity per page set and DB2 and identify I/O response time problems.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Page Set column in PSSIOSZ view
PSSIOSZ	I/O by Page Set Summary	<p>Synchronous I/O Page Set Summary—Session (see page 165)</p> <p>Shows synchronous I/O activity per page set since DB2 startup. If in SSI mode, data from multiple DB2 data sharing members is combined.</p> <p>You can use this view to analyze the amount of I/O activity per page set and identify I/O response time problems.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Sync I/Os—Session option on EZDPS menu
PSSIOZ	I/O by Page Set Summary	<p>Synchronous I/O Page Set Summary—Interval (see page 167)</p> <p>Shows synchronous I/O activity per page set in the last interval. If in SSI mode, data from multiple DB2 data sharing members is combined.</p> <p>You can use this view to see the current I/O workload and response times.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Sync I/Os—Interval option on EZDPS menu
PSSTAT	Status Tabular	<p>Page Set Status (see page 145)</p> <p>Lists all open page sets (table spaces, partitions, index spaces) with current status information.</p> <p>You can use this view to identify size, data set utilization, and the number of extents, as well as the number of current users and pages on the deferred write queue. Hyperlinks provide more detailed status information.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Status option on EZDPS menu • Page Set Status option on EZDB2 menu

Table 5. Page Set Views (Continued)

View Name	Group / Type	Description
PSTIO	I/O by Page Set Tabular	Total I/O Page Set Member Detail—Interval (see page 168) Shows total I/O activity per page set in the last interval. You can use this view to analyze the amount of I/O activity per page set and DB2 from one DB2. You can hyperlink to this view from <ul style="list-style-type: none"> • Page Set column in PSTIOZ view
PSTIOS	I/O by Page Set Tabular	Total I/O Page Set Member Detail—Session (see page 166) Shows total I/O activity per page set since DB2 startup. You can use this view to analyze the amount of I/O activity per page set and DB2 and identify I/O response time problems. You can hyperlink to this view from <ul style="list-style-type: none"> • Page Set column in PSTIOSZ view
PSTIOSZ	I/O by Page Set Summary	Total I/O Page Set Summary—Session (see page 165) Shows total I/O activity per page set since DB2 startup. If in SSI mode, data from multiple DB2 data sharing members is combined. You can use this view to analyze the amount of I/O activity per page set and identify I/O response time problems. You can hyperlink to this view from <ul style="list-style-type: none"> • Total I/Os—Session option on EZDPS menu
PSTIOZ	I/O by Page Set Summary	Total I/O Page Set Summary—Interval (see page 167) Shows total I/O activity per page set in the last interval. If in SSI mode, data from multiple DB2 data sharing members is combined. You can use this view to see the current I/O workload and response times. You can hyperlink to this view from <ul style="list-style-type: none"> • Total I/Os—Interval option on EZDPS menu

Table 5. Page Set Views (Continued)

View Name	Group / Type	Description
PSVOLPS	Summary	Volume Page Sets (see page 163)
	Tabular	Shows I/O activity by volume and page set per DB2. You can use this view to analyze activity per page set on a volume. You can hyperlink to this view from <ul style="list-style-type: none"> • DB2 Target column in PSVOLSZ view • Volume column in PSVOLPSZ view • Page Set column in PSVOLPSZ view
PSVOLPSZ	Summary	Volume Page Sets (SSI) (see page 162)
	Summary	Summarizes I/O activity by volume and page sets in SSI mode. You can use this view to analyze total activity per page set within a data sharing group. You can hyperlink to this view from <ul style="list-style-type: none"> • Volume column in PSVOLSZ view
PSVOLSSI	Summary	Volume I/O SSI Summary—Session (see page 160)
	Summary	Summarizes I/O activity by volume across multiple DB2 targets in SSI mode. This data is especially valuable for a data sharing group to analyze total I/O. You can hyperlink to this view from <ul style="list-style-type: none"> • Summaries By Volume (SSI) option on EZDPS menu • Volume I/Os (SSI) option on EZDSSI menu

Table 5. Page Set Views (Continued)

View Name	Group / Type	Description
PSVOLSZ	<p>Summary</p> <p>Summary</p>	<p>Volume I/O Summary—Session (see page 161)</p> <p>Summarizes I/O activity by volume and DB2.</p> <p>You can use this view to analyze workload and I/O response time.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Summaries By Volume (/DB2) option on EZDPS menu • Volume Summary option on EZDB2 menu • Volume column in PSVOLSSI view
PSVOLTMZ	<p>Summary</p> <p>Summary</p>	<p>Volume I/O 2-Hour Summary (see page 164)</p> <p>Shows volume I/O activity over the last 2 hours. It is usually invoked by a hyperlink to select the volume.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Sync I/Os column in PSVOLSZ view • Sync I/Os column in PSVOLSSI view

Page Set Status Views

The following views display information about page set status.

PSSTAT—Page Set Status

The PSSTAT view, shown in Figure 82, lists all open page sets (table spaces, partitions, index spaces) with current status information.

```

>WI =PSSTAT=====DB2G=====17MAY2000=15: 29: 11====MADB2=====37
C -----Page Set----- Bfrpl
- Database Object Prt ID Ty Users Size(K) Used EXT Vol ume Wr tQ ERR Dep
DB2GWORK DSN4K01 001 BP00 TS 0 13920 100.0 1 BAB312 0 N
DSNDB01 DBD01 001 BP00 TS 0 1440 100.0 1 BAB316 0 N
DSNDB01 DSNLLX01 001 BP00 IX 0 288 66.7 1 BAB317 0 N
DSNDB01 DSNLLX02 001 BP00 IX 0 240 80.0 1 BAB330 0 N
DSNDB01 DSN SCT02 001 BP00 IX 0 144 66.7 1 BAB315 0 N
DSNDB01 DSN SPT01 001 BP00 IX 0 240 40.0 1 BAB313 0 N
DSNDB01 SCT02 001 BP00 TS 0 10080 14.3 1 BAB315 0 N
DSNDB01 SPT01 001 BP00 TS 0 5760 25.0 1 BAB315 0 N
DSNDB01 SYSLGRNX 001 BP00 TS 0 1440 100.0 1 BAB310 1 N
DSNDB06 DSNADH01 001 BP00 IX 0 48 33.3 1 BAB324 0 N
DSNDB06 DSNAPH01 001 BP00 IX 0 96 100.0 1 BAB312 0 N
DSNDB06 DSNATX02 001 BP00 IX 0 480 20.0 1 BAB312 0 N
DSNDB06 DSNAUH01 001 BP00 IX 0 96 16.7 1 BAB316 0 N
DSNDB06 DSNDDH01 001 BP00 IX 0 48 33.3 1 BAB312 0 N
DSNDB06 DSNDDX02 001 BP00 IX 0 48 33.3 1 BAB312 0 N

```

Figure 82. PSSTAT View—Page Set Status

You can use this view to identify size, data set, utilization, and the number of extents, as well as the number of current users and pages on the deferred write queue. Hyperlinks provide more detailed status information.

The default functions shipped with this view are as follows:

- Sort by
 - Page Set column (ascending)
- Hyperlink from
 - Page Set column to PSDTL to see detailed information on the selected page set
 - Ty (type) column to the CLAIM analyzer display to see the claim and drain locks for the selected table space
 - Users column to the USERS analyzer display to see those threads currently accessing the selected page set
 - ERR column to the DBTS analyzer display with a Q=RESTR parameter to see whether any restricted status indicators exist for this table space
 - GBP Dep column to PSGBP to see the local and remote interest in this page set

PSCACHE—Page Set Cache

The PSCACHE view, shown in Figure 83, lists all open page sets with cache statistics.

```

>W1 =PSCACHE=====DB2G=====*=====17MAY2000==15: 30: 50====MVDB2=====37
C -----Page Set----- Bfrpl      VP      VP      VP      VP      VPTot VPTot
- Database Object  Prt  ID      Current  Maximum  Changed  Max Chng  % All  %BP
DB2GWORK DSN4K01 001 BP00      2         2         0         2     1.4  0.7
DSNDB01  DBD01  001 BP00     11        11         0         0     7.6  3.7
DSNDB01  DSNLLX01 001 BP00     13        13         0         1     9.0  4.3
DSNDB01  DSNLLX02 001 BP00      3         3         0         1     2.1  1.0
DSNDB01  DSNNSCT02 001 BP00      3         3         0         0     2.1  1.0
DSNDB01  DSNNSPT01 001 BP00      3         3         0         0     2.1  1.0
DSNDB01  SCT02    001 BP00      3         3         0         0     2.1  1.0
DSNDB01  SPT01    001 BP00      3         3         0         0     2.1  1.0
DSNDB01  SYSLGRNX 001 BP00     12        12         0         1     8.3  4.0
DSNDB06  DSNADH01 001 BP00      3         3         0         0     2.1  1.0
DSNDB06  DSNAPH01 001 BP00      3         3         0         0     2.1  1.0
DSNDB06  DSNATX02 001 BP00      5         5         0         0     3.4  1.7
DSNDB06  DSNAUH01 001 BP00      3         3         0         0     2.1  1.0
DSNDB06  DSNDDH01 001 BP00      3         3         0         0     2.1  1.0
DSNDB06  DSNDDX02 001 BP00      3         3         0         0     2.1  1.0
DSNDB06  DSNDLX01 001 BP00      3         3         0         0     2.1  1.0

```

Figure 83. PSCACHE View—Page Set Cache

You can use this view to determine virtual pool and hiperpool (scroll right) usage per page set.

The default functions shipped with this view are as follows:

- Sort by
 - Page Set column (ascending)
- Hyperlink from
 - Page Set column to PSDTL to see detailed information on the selected page set
 - Bfrpl ID column to PSBPS to see all page sets in the selected buffer pool

PSLIST—Page Set List

The PSLIST view, shown in Figure 84, lists all open page sets, with all data elements provided per DB2 target (scroll right).

```
>W1 =PSLIST===== (ALL=====*)===== 17MAY2000==12: 22: 13====MVDB2=====147
C Page Set Page Set DS/      DB2      Total TotalMax TotalAvg
- Database Object Prt Typ Target      I/Os I/O Wait I/O Wait 0.... 40.... 80
DB1GWORK DSN4K01 001 TS DB1GMV54      1      32      0
DB2GWORK DSN4K01 001 TS DB2GMV54      1      32      0
DB2HWORK DSN4K01 001 TS DB2HMV55      1      22      0
DMR55DB1 DMRPRTAD 001 TS DB2HMV55    2681     266     19 ***
DSNDB01 DBD01      001 TS DB1GMV54      11      36      0
DSNDB01 DBD01      001 TS DB2GMV54      11      27      0
DSNDB01 DBD01      001 TS DB2HMV55      27      90     19 ***
DSNDB01 DSNLLX01 001 IX DB1GMV54      15      39      0
DSNDB01 DSNLLX01 001 IX DB2GMV54      18      80     20 ***
DSNDB01 DSNLLX01 001 IX DB2HMV55      10      48     19 ***
DSNDB01 DSNLLX02 001 IX DB1GMV54       4      34      0
DSNDB01 DSNLLX02 001 IX DB2GMV54       4      26     12 **
DSNDB01 DSNLLX02 001 IX DB2HMV55       7      38     16 **
DSNDB01 DSNLUX01 001 IX DB2HMV55       5     120     32 *****
DSNDB01 DSNLUX02 001 IX DB2HMV55       5      82     28 *****
```

Figure 84. PSLIST View—Page Set List

You can use this view as the destination for various selective hyperlinks from summary views and to customize page set views.

The default functions shipped with this view are as follows:

- Sort by
 - Page Set / Database column (ascending)
 - Page Set / Object column (ascending)
 - DS / Prt column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Page Set / Database column to PSDTL to see detailed information on the selected page set
 - Total I/Os column to PSLISTTZ to see I/O activity for the selected page set over the last two hours (SSI)

PSLISTZ—Page Set List (SSI)

The PSLISTZ view, shown in Figure 85, lists all open page sets, with all data elements provided (scroll right), summarized by page set across multiple members in a data sharing group in SSI mode.

```
>W1 =PSLISTZ=====DB2G=====*=====17MAY2000==15: 32: 30====MVDB2=====37
C Page Set Page Set DS/ No. Total I/O Total Max Total Avg
- Database Object Prt Mbrs I/Os % I/O Wait I/O Wait 0... 40... 80
DB2GWORK DSN4K01 001 1 0 0.0 30 0
DSNDB01 DSN SCT02 001 1 0 0.0 32 0
DSNDB01 DBD01 001 1 0 0.0 43 0
DSNDB01 DSNLLX01 001 1 14 35.9 42 21 ***
DSNDB01 DSNLLX02 001 1 4 10.3 37 25 ****
DSNDB01 SCT02 001 1 0 0.0 18 0
DSNDB01 SPT01 001 1 0 0.0 32 0
DSNDB01 SYSLGRNX 001 1 16 41.0 37 20 ***
DSNDB01 DSN SPT01 001 1 0 0.0 23 0
DSNDB06 DSNDDH01 001 1 0 0.0 31 0
DSNDB06 DSNAUH01 001 1 0 0.0 32 0
DSNDB06 SYSDBAUT 001 1 0 0.0 24 0
DSNDB06 SYSSTR 001 1 0 0.0 28 0
DSNDB06 DSNDDX02 001 1 0 0.0 28 0
DSNDB06 SYSDBASE 001 1 0 0.0 34 0
```

Figure 85. PSLISTZ View—Page Set List (SSI)

You can use this view as the destination for various selective hyperlinks from summary views and to customize SSI page set views.

The default functions shipped with this view are as follows:

- Sort by
 - Page Set / Database column (ascending)
 - Object column (ascending)
 - DS / Prt column (ascending)
- Hyperlink from
 - Page Set / Database column to PSLIST to see the detailed data per DB2 member
 - Total I/Os column to PSLISTTZ to see I/O activity within the data sharing group for the selected page set over the last two hours

PSLISTTZ—Page Set 2-Hour Summary

The PSLISTTZ view, shown in Figure 86, shows activity for the selected page set for the last 2 hours. Additional I/O and cache information is available (scroll right).

```

>H1 =PSLISTTZ=====DB2GMV54=*=====17MAY2000==12: 18=108M==MVDB2=====8
C -----Page Set----- Intvl DB2          Total   I/O   Total Max Total Avg
- Database Object  Prt  Time Target      I/Os   %    I/O Wait I/O Wait 0. 40. 8
DSNDB01 DSNLLX01 001 12: 18 DB2GMV54      0    0.0    80    20 ***
DSNDB01 DSNLLX01 001 12: 15 DB2GMV54      0    0.0    80    20 ***
DSNDB01 DSNLLX01 001 12: 00 DB2GMV54      0    0.0    80    20 ***
DSNDB01 DSNLLX01 001 11: 45 DB2GMV54      0    0.0    80    20 ***
DSNDB01 DSNLLX01 001 11: 30 DB2GMV54      0    0.0    80    20 ***
DSNDB01 DSNLLX01 001 11: 15 DB2GMV54      0    0.0    80    20 ***
DSNDB01 DSNLLX01 001 11: 00 DB2GMV54      0    0.0    80    20 ***
DSNDB01 DSNLLX01 001 10: 45 DB2GMV54      0    0.0    80    20 ***

```

Figure 86. PSLISTTZ View—Page Set 2-Hour Summary

You can use this view to evaluate page set usage patterns over time.

The default functions shipped with this view are as follows:

- Sort by
 - Page Set column (ascending)
 - Intvl Time column (descending)
 - DB2 Target column (ascending)

PSBPGBPZ—Buffer Pool Page Set GBP-DEP Summary

The PSBPGBPZ view, shown in Figure 87, summarizes group buffer pool dependent page sets and inter-DB2 interest by buffer pool and target.

```
>W1 =PSBPGBPZ===== (ALL===== *=====) 17MAY2000==15: 21: 47====MVDB2=====3
```

C	Bfrpl	DB2	Nr.	GBP	Local	Remote	VP	VP
-	ID	Target	PSs	Dependent	R/W Interest	R/W Interest	Current	Changed
	BP00	DB1GMV54	39	5	0	5	152	0
	BP00	DB2GMV54	80	5	5	0	198	0
	BP00	DB2HMV55	13	0	0	0	43	0

Figure 87. PSBPGBPZ View—Buffer Pool Page Set GBP-DEP Summary

You can use this view when analyzing the amount of interaction within a data sharing group.

The default functions shipped with this view are as follows:

- Sort by
 - Page Set column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Bfrpl ID column to PSGBP to see all page sets for the selected buffer pool and all targets
 - Nr. PSs column to PSGBP to see all page sets for the selected buffer pool and target
 - GBP Dependent column to PSGBP to see GBP-dependent page sets for this buffer pool for all targets

PSGBP—Page Set GBP-DEP Status

The PSGBP view, shown in Figure 88, shows which page sets are group buffer pool dependent and the local and remote inter-DB2 interest.

```

>W1 =PSBPGBPZ=PSGBP===(ALL=====*)=====) 17MAY2000==15: 14: 12====MVDB2=====52
-----Page Set----- DB2          No.  GBP Local  Remote  VP      VP
Database Object  Prt Target  Ty Usrs Dep Interest Interest Current Changed
DSN8D41A DSN8S41E 001 DB1GMV54 PS  0 Y R/O R/W      6      0
DSN8D41A DSN8S41E 003 DB1GMV54 PS  0 Y R/O N/RO     2      0
DSN8D41A DSN8S41P 001 DB1GMV54 TS  0 Y R/O R/W      3      0
DSN8D41A XEMP1    001 DB1GMV54 IX  0 Y R/O N/RO     3      0
DSN8D41A XEMP1    003 DB1GMV54 IX  0 Y R/O N/RO     3      0
DSN8D41A XPROJ1   001 DB1GMV54 IX  0 Y R/O N/RO     3      0

```

Figure 88. PSGBP View—Page Set GBP-DEP Status

You can use this view when analyzing the amount of interaction within a data sharing group.

The default functions shipped with this view are as follows:

- Sort by
 - Page Set column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Page Set column to PSDTL to see detailed information on the selected page set
 - No. Usrs column to the USERS analyzer display to see those threads currently accessing the selected page set

PSDTL—Page Set Detail

The PSDTL view, shown in Figure 89, presents full data about the selected page set.

W1 =PSSTAT===PSDTL====DB2GMV54=*=====17MAY2000==12: 45: 27====MVDB2=====1					
	Product Header	Cache Data.....	Current	Percents	
DB2 Target.....	DB2GMV54	VP Curr Cached....	24	8	
DB2 Location....	DB2G	VP Max Cached....	24		
DB2 ID.....	DB2G	VP Cur Changed....	1	0	
DataShar Group..	DBGG	VP Max Changed....	2		
DataShar Member..	DB2G	VP Curr Pgs.....	25	9	
MVS Name.....	SYSC	HP Cur Cached....	0	0	
DB2 Release.....	410	HP Max Cached....	0		
MVDB2 Release....	510	VP Pool Size.....	300		
	DB/TS Details	HP Pool Size.....	200		
Database.....	DEM0D41A	% Pageset in VP..	104		
Object (TS/IX)...	DEM0S41P	% Pageset in HP..	0		
Partition/Dataset	001	% Pgset in VP/HP..	104		
Object Type.....	TS				
Bpool ID.....	BP00	Sync I/O.....	Session	Interval	
Workfile.....	N	Page I/Os.....	4	0	
Volser (First)...	BAB312	Avg Time.....	14	0	
Page Size.....	4096	Max Time.....	33	0	
Data Set Size(K).	192	Pages/Sec.....		0	
Pgset % Util.....	50				
First Data Page..	512	Async I/O.....	Session	Interval	
High Alloc Page..	48	Page I/Os.....	21	0	
High Format Page.	24	Start I/Os.....	1	0	
	Current Details	Avg Time.....	66	0	
Number Extents...	1	Max Time.....	63	0	
Def Write Q.....	2	Pages/Sec.....		0	
Current Users....	0	SI0s/Sec.....		0	
Error Indicator..	N				
Commit LSN.....	AE7C9CC67F8C	Total I/O.....	Session	Interval	
GBP Dependent....		I/Os.....	5	0	
Local Interest... R/W		Avg Time.....	24	0	
Remote Interest.. None		Max Time.....	63	0	
Interval Secs....	27	I/Os /Sec.....	0	0	
Hist Int Secs....	0				
Secs per Int.....	300				
Date & Time key..	19991020131843				

Figure 89. PSDTL View—Page Set Detail

Page Set Summary Views

The following views summarize page set information by buffer pool, database, object, or volume.

PSBPSZ—Buffer Pool Page Set Summary—Session

The PSBPSZ view, shown in Figure 90, summarizes buffer cache statistics and I/O activity by buffer pool and DB2.

```

>W1 =PSBPSZ=====DB2G=====*=====17MAY2000==15:35:08====MVB2=====1
C Bfrpl  DB2  Nr.  VP      VP      HP      Total  VP Max  VPMaxChg
-  ID    Target  PSs  Current  Changed  Current  I/Os   (1 PSet) (1 PSet)
  BP00  DB2G   37    145     0        0        39     13     2

```

Figure 90. PSBPSZ View—Buffer Pool Page Set Summary—Session

You can use this view when analyzing buffer pool usage and threshold and size specifications. When in SSI mode for a data sharing group, you can identify which DB2 members are causing the most activity per buffer pool.

The default functions shipped with this view are as follows:

- Sort by
 - Bfrpl ID column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Bfrpl ID column to PSBPS to see the page sets in that pool
 - Nr. PSs column to PSBPS to see the page sets in that pool, with only the activity from this DB2
 - VP Current column to PSBPTMZ to see activity for that buffer pool over the last two hours

PSBPS—Buffer Pool Page Sets—Session

The PSBPS view, shown in Figure 91, lists the page sets for a selected buffer pool.

```
>W1 =PSBPS=====DB2G=====*=====17MAY2000==15: 35: 55====MVDB2=====37
```

C	Bfrpl	Page Set	DB2	VP	VP	HP	Total
-	ID	Database Object	Prt Target	Current	Changed	Current	I /Os
	BP00	DB2GWORK DSN4K01	001 DB2G	2	0	0	0
	BP00	DSNDB01 DBD01	001 DB2G	11	0	0	0
	BP00	DSNDB01 DSNLLX01	001 DB2G	13	0	0	14
	BP00	DSNDB01 DSNLLX02	001 DB2G	3	0	0	4
	BP00	DSNDB01 DSNCT02	001 DB2G	3	0	0	0
	BP00	DSNDB01 DSNST01	001 DB2G	3	0	0	0
	BP00	DSNDB01 SCT02	001 DB2G	3	0	0	0
	BP00	DSNDB01 SPT01	001 DB2G	3	0	0	0
	BP00	DSNDB01 SYSLGRNX	001 DB2G	12	0	0	16
	BP00	DSNDB06 DSNADH01	001 DB2G	3	0	0	0
	BP00	DSNDB06 DSNAPH01	001 DB2G	3	0	0	0
	BP00	DSNDB06 DSNATX02	001 DB2G	5	0	0	0
	BP00	DSNDB06 DSNAUH01	001 DB2G	3	0	0	0
	BP00	DSNDB06 DSNDDH01	001 DB2G	3	0	0	0
	BP00	DSNDB06 DSNDDX02	001 DB2G	3	0	0	0
	BP00	DSNDB06 DSNLX01	001 DB2G	3	0	0	0

Figure 91. PSBPS View—Buffer Pool Page Sets—Session

You can use this view to help determine whether the access characteristics of the page set are similar and fit with the buffer pool thresholds. Scroll right to see additional data such as synchronous or asynchronous I/O.

The default functions shipped with this view are as follows:

- Sort by
 - Bfrpl ID column (ascending)
 - Page Set column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Page Set column to PSDTL to see detailed information on the selected page set

PSBPTMZ—Buffer Pool Page Set 2-Hour Summary

The PSBPTMZ view, shown in Figure 92, shows buffer pool activity for the last 2 hours. It is usually invoked by a hyperlink to select a specific buffer pool and DB2 target.

```
>H1 =PSBPTMZ=====DB2GMV54=*=====17MAY2000==12: 51=96M===MVDB2=====7
```

C Bfrpl	Time	DB2	No.	VP	VP	HP	Total	I/O	Syn
- ID	Intvl	Target	PSs	Current	Changed	Current	I/Os	%	I/O
BP00	12: 51	DB2GMV54	81	148	37	198	23	79.3	1
BP00	12: 45	DB2GMV54	77	181	32	191	6	20.7	
BP00	12: 30	DB2GMV54	35	130	0	0	0	0.0	
BP00	12: 15	DB2GMV54	35	130	0	0	0	0.0	
BP00	12: 00	DB2GMV54	35	130	0	0	0	0.0	
BP00	11: 45	DB2GMV54	35	130	0	0	0	0.0	
BP00	11: 30	DB2GMV54	35	130	0	0	0	0.0	

Figure 92. PSBPTMZ View—Buffer Pool Page Set 2-Hour Summary

The default functions shipped with this view are as follows:

- Sort by
 - Bfrpl ID column (ascending)
 - Time Intvl column (descending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Bfrpl ID column to PSBPS to see page set activity for the selected buffer pool in that history interval

PSDBSZ—Database Page Set Summary—Session

The PSDBSZ view, shown in Figure 93, summarizes page set activity by database and DB2 target.

+W1 =PSDBSZ=====DB2G=====*=====17MAY2000==15: 37: 22====MVDB2=====5									
C	Page Set	DB2	Nr.	Total	I/O	Sync	Async	Async	VP
-	Database	Target	PSs	I/Os	%	I/Os	I/Os	Pages	Current
	DB2GWORK	DB2G	1	0	0.0	0	1	2	2
	DSNDB01	DB2G	8	34	87.2	53	4	4	51
	DSNDB06	DB2G	20	0	0.0	66	0	0	66
	DSNDDF	DB2G	4	0	0.0	11	0	0	11
	DSN8D41A	DB2G	4	5	12.8	16	1	2	15

Figure 93. PSDBSZ View—Database Page Set Summary—Session

You can use this view to evaluate I/O and cache information per database.

The default functions shipped with this view are as follows:

- Sort by
 - Page Set / Database column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Page Set / Database column to PSLISTZ to see the page set activity in this database (or summarized for the group if in SSI mode)
 - Nr. PSs column to PSLIST to see page set activity in the database for this DB2
 - Total I/Os column to PSDBTMZ to see activity for the selected database over the last two hours

PSDBTMZ—Database Page Set 2-Hour Summary

The PSDBTMZ view, shown in Figure 94, shows database activity for the last 2 hours. It is usually invoked by a hyperlink to select a specific database and target.

```
>H1 =PSDBTMZ=====DB2GMV54=*=====17MAY2000==12: 58=103M==MVDB2=====7
C Page Set Time DB2 No. Total I/O Sync Async Async VP
- Database Intvl Target PSs I/Os % I/Os I/Os Pages Curr
DSNDB06 12: 58 DB2GMV54 60 0 0.0 0 0 0
DSNDB06 12: 45 DB2GMV54 57 4 40.0 4 0 0
DSNDB06 12: 30 DB2GMV54 19 0 0.0 0 0 0
DSNDB06 12: 15 DB2GMV54 19 0 0.0 0 0 0
DSNDB06 12: 00 DB2GMV54 19 0 0.0 0 0 0
DSNDB06 11: 45 DB2GMV54 19 0 0.0 0 0 0
DSNDB06 11: 30 DB2GMV54 19 0 0.0 0 0 0
```

Figure 94. PSDBTMZ View—Database Page Set 2-Hour Summary

The default functions shipped with this view are as follows:

- Sort by
 - Page Set / Database column (ascending)
 - Time Intvl column (descending)
 - DB2 Target column (ascending)

PSOBSZ—Object Page Set Summary—Session

The PSOBSZ view, shown in Figure 95, summarizes page set activity by database object and DB2 target.

```
+W1 =PSOBSZ=====DB2G=====*=====17MAY2000==15: 45: 32====MVDB2=====37
C ---- Page Set----- DB2   Nr.      Total  I/O   Sync   Async   Async
- Database Object   Target  PSs Typ  I/Os   %     I/Os   I/Os   Pages
DB2GWORK DSN4K01  DB2G    1 TS    0  0.0    0     1     2
DSNDB01  DBD01   DB2G    1 TS    0  0.0   11     0     0
DSNDB01  DSNLLX01 DB2G    1 IX   14 35.9   13     1     1
DSNDB01  DSNLLX02 DB2G    1 IX    4 10.3    3     1     1
DSNDB01  DSN SCT02 DB2G    1 IX    0  0.0    3     0     0
DSNDB01  DSN SPT01 DB2G    1 IX    0  0.0    3     0     0
DSNDB01  SCT02   DB2G    1 TS    0  0.0    3     0     0
DSNDB01  SPT01   DB2G    1 TS    0  0.0    3     0     0
DSNDB01  SYSLGRNX DB2G    1 TS   16 41.0   14     2     2
```

Figure 95. PSOBSZ View—Object Page Set Summary—Session

You can use this view to evaluate I/O and cache information per database object.

The default functions shipped with this view are as follows:

- Sort by
 - Page Set / Database Object column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Page Set / Database Object column to PSLISTZ to see the page set activity in this database object (or summarized for the group if in SSI mode)
 - Nr. PSs column to PSLIST to see page set activity in the database object for this DB2
 - Total I/Os column to PSOBTMZ to see activity for the selected database object over the last two hours

PSOBTMZ—Object Page Set 2-Hour Summary

The PSOBTMZ view, shown in Figure 96, shows database object activity for the last 2 hours. It is usually invoked by a hyperlink to select a specific database object and target.

```
>H1 =PSOBTMZ=====DB2GMV54=*=====17MAY2000==13: 02=91M===MVDB2=====6
```

C	Page Set	Time	DB2	No.	Total	I/O	Sync	Async	
-	Database Object	Intvl	Target	PSs Typ	I/Os	%	I/Os	I/Os	
	DSNDB01	DSNLLX01	13: 02	DB2GMV54	1 IX	0	0.0	0	0
	DSNDB01	DSNLLX01	12: 45	DB2GMV54	1 IX	1	10.0	1	0
	DSNDB01	DSNLLX01	12: 30	DB2GMV54	1 IX	0	0.0	0	0
	DSNDB01	DSNLLX01	12: 15	DB2GMV54	1 IX	0	0.0	0	0
	DSNDB01	DSNLLX01	12: 00	DB2GMV54	1 IX	0	0.0	0	0
	DSNDB01	DSNLLX01	11: 45	DB2GMV54	1 IX	0	0.0	0	0

Figure 96. PSOBTMZ View—Object Page Set 2-Hour Summary

The default functions shipped with this view are as follows:

- Sort by
 - Page Set / Database Object column (ascending)
 - Time Intvl column (descending)
 - DB2 Target column (ascending)

PSVOLSSI—Volume I/O SSI Summary—Session

The PSVOLSSI view, shown in Figure 97, summarizes I/O activity by volume across multiple DB2 targets in SSI mode.

```

>W1 =PSVOLSSI===== (ALL=====*)=====) 17MAY2000==15: 54: 53====MVDB2=====2
C
- Volume      Sync   I/O  Sync Max   Sync Avg           Async   I/O   Async
              I/Os   %   I/O Wait  I/O Wait  0...20...40       I/Os   %     Pages
BAB310         39  88.6    37     23             1 100.0     2
BAB321          5  11.4    28     20             0  0.0     0

```

Figure 97. PSVOLSSI View—Volume I/O SSI Summary—Session

This data is especially valuable for a data sharing group to analyze total I/O.

The default functions shipped with this view are as follows:

- Sort by
 - Volume column (ascending)
- Hyperlink from
 - Volume column to PSVOLSZ to see I/O activity summarized by volume and DB2
 - Sync I/Os column to PSVOLTMZ to see I/O activity for that volume over the last two hours

PSVOLSZ—Volume I/O Summary—Session

The PSVOLSZ view, shown in Figure 98, summarizes I/O activity by volume and DB2.

```

>W1 =PSVOLSZ===== (ALL=====*)===== 17MAY2000==13: 05: 43====MVDB2=====35
C          DB2      Nr.   Sync  I/O Sync Max  Sync Avg          Async
- Volume Target  PSs   I/Os  % I/O Wait  I/O Wait  0... 20... 40    I/Os
BAB309 DB1GMV54   1     2   0.2    52    29 *****          0
BAB309 DB2GMV54   1     7   0.5   103    34 *****          3
BAB310 DB1GMV54   4    24   1.9    30    23 *****          0
BAB310 DB2GMV54  13    69   5.4   800   234 *****+         20
BAB310 DB2HMV55  17   155  12.0   73    23 *****          21
BAB311 DB2HMV55  12   274  21.3   90    24 *****          17
BAB312 DB1GMV54   6    24   1.9    42    17 *****          0
BAB312 DB2GMV54   9    36   2.8    37    20 *****          8
BAB313 DB1GMV54   1     3   0.2    14    10 ***             0
BAB313 DB2GMV54   1     4   0.3    17    13 ****            1
BAB314 DB1GMV54   3    10   0.8    41    22 *****          1
BAB314 DB2GMV54  11   35   2.7    72    30 *****          6
BAB315 DB1GMV54   5    11   0.9    26    18 *****          1
BAB315 DB2GMV54  15   55   4.3    53    31 *****          15
BAB316 DB1GMV54  11   42   3.3    46    19 *****          0
BAB316 DB2GMV54  11   55   4.3    48    24 *****          9
BAB317 DB1GMV54   2    18   1.4    39    13 ****            0
BAB317 DB2GMV54   2    29   2.3    80    22 *****          5
BAB318 DB2GMV54   1     3   0.2    32    16 *****          1
BAB318 DB2HMV55  23   177  13.8   98    40 *****          44
BAB320 DB1GMV54   1     3   0.2    16    11 ****            0
BAB320 DB2GMV54   1     4   0.3   967   251 *****+         2

```

Figure 98. PSVOLSZ View—Volume I/O Summary—Session

You can use this view to analyze workload and I/O response time.

The default functions shipped with this view are as follows:

- Sort by
 - Volume column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Volume column to PSVOLPSZ to see page set statistics for the selected volume in SSI mode (summarized across multiple members if the context is for a data sharing group)
 - Nr. PSs column to PSVOLPS to see page set statistics for the selected volume for one DB2
 - Sync I/Os column to PSVOLTMZ to see I/O activity for that volume over the last two hours

PSVOLPSZ—Volume Page Sets (SSI)

The PSVOLPSZ view, shown in Figure 99, summarizes I/O activity by volume and page sets in SSI mode.

```

>W1 =PSVOLSZ==PSVOLPSZ(ALL=====*)=====) 17MAY2000==16: 14: 55====MVDB2=====30
C      ----- Page Set----- No.      Sync   I/O Sync Max Sync Avg
- Volume Database Object  Prt  Mbrs   I/Os   %   I/O Wait I/O Wait 0. . 20. . 40
BAB310 DB2HWORK DSN4K01 001    1      0   0.0      0      0
BAB310 DSNDB01  DBD01   001    2     47   2.7     73     17 ****
BAB310 DSNDB01  DSNLLX01 001    2     19   1.1     46     18 ****
BAB310 DSNDB01  DSN SCTO2 001    2     14   0.8     40     20 *****
BAB310 DSNDB01  SCTO2    001    2     24   1.4     51     20 *****
BAB310 DSNDB01  SYSLGRNX 001    4     68   3.9     48     22 *****
BAB310 DSNDB06  DSNAPX01 001    2     14   0.8     36     22 *****
BAB310 DSNDB06  DSNAPX01 001    1      3   0.2     21     14 ***
BAB310 DSNDB06  DSNAUH01 001    2     18   1.0     62     21 *****
BAB310 DSNDB06  DSNDDH01 001    2     16   0.9    137     27 *****
BAB310 DSNDB06  DSNDDX02 001    2      6   0.3     26     15 ***
BAB310 DSNDB06  DSNFNX01 001    2      6   0.3     31     18 ****
BAB310 DSNDB06  DSNKAX01 001    1      4   0.2     800    234 *****+
BAB310 DSNDB06  DSNKAX02 001    2      9   0.5     67     25 *****
BAB310 DSNDB06  DSNKAX03 001    1      3   0.2     28     17 ****
BAB310 DSNDB06  DSNKDX01 001    1      3   0.2     48     35 *****

```

Figure 99. PSVOLPSZ View—Volume Page Sets (SSI)

You can use this view to analyze total activity per page set within a data sharing group.

The default functions shipped with this view are as follows:

- Sort by
 - Volume column (ascending)
 - Page Set column (ascending)
- Hyperlink from
 - Volume column to PSVOLPS to see I/O activity for that volume per page set and DB2 member
 - Page Set column to PSVOLPS to see I/O activity for the selected page set per DB2 member

PSVOLPS—Volume Page Sets

The PSVOLPS view, shown in Figure 100, shows I/O activity by volume and page set per DB2.

```

>W1 =PSVOLSZ==PSVOLPS==DB2G=====17MAY2000==15: 28: 08====MVDB2=====11
C
-----Page Set----- DB2
- Volume Database Object Prt Target Sync Sync Max Sync Avg
I/Os I/O Wait I/O Wait 0. . 20. . 40
BAB316 DSNDB01 DBD01 001 DB2G 97 136 24
BAB316 DSNDB06 DSNAUHO1 001 DB2G 3 41 20
BAB316 DSNDB06 DSNDSX01 001 DB2G 4 37 29
BAB316 DSNDB06 DSNDXO1 001 DB2G 4 68 39
BAB316 DSNDB06 DSNSSX01 001 DB2G 4 39 18
BAB316 DSNDB06 SYSSTR 001 DB2G 14 51 25
BAB316 DSNDB06 SYSUSER 001 DB2G 2 63 47
BAB316 DSNDDF DSNDDFLL 001 DB2G 3 43 28
BAB316 DSNDDF DSNDDFLM 001 DB2G 3 45 37
BAB316 DSNDDF DSNDDFLN 001 DB2G 3 52 33
BAB316 DSNDDF SYSDDF 001 DB2G 2 39 30

```

Figure 100. PSVOLPS View—Volume Page Sets

You can use this view to analyze activity per page set on a volume.

The default functions shipped with this view are as follows:

- Sort by
 - Volume column (ascending)
 - Page Set column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Page Set column to PSDTL to see detailed information on the selected page set

PSVOLTMZ—Volume I/O 2-Hour Summary

The PSVOLTMZ view, shown in Figure 101, shows volume I/O activity over the last 2 hours. It is usually invoked by a hyperlink to select the volume.

```
>H1 =PSVOLTMZ===== (ALL===== *=====) 17MAY2000==13: 07=97M===MVDB2=====20
C          Time DB2      Nr.      Sync  Sync Max  Sync Avg          Async
- Volume Intvl Target  PSs     I/Os  I/O Wait  I/O Wait  0...20...40    Pages
BAB310 13: 07 DB1GMV54   4        0       30         0           0
BAB310 13: 07 DB2GMV54  13        2      800        12 ***         3
BAB310 13: 07 DB2HMV55  17       31       73        34 *****      16
BAB310 13: 00 DB1GMV54   3         0       30         0           0
BAB310 13: 00 DB2HMV55  15       22       65        34 *****      4
BAB310 12: 45 DB1GMV54   3         0       30         0           0
BAB310 12: 45 DB2GMV54  12        0      800         0           0
BAB310 12: 45 DB2HMV55  15        0       65         0           0
BAB310 12: 30 DB1GMV54   3         0       30         0           0
BAB310 12: 30 DB2GMV54   3         0       46         0           0
BAB310 12: 30 DB2HMV55  15        0       65         0           0
BAB310 12: 15 DB1GMV54   3         0       30         0           0
BAB310 12: 15 DB2GMV54   3         0       46         0           0
BAB310 12: 15 DB2HMV55  15        0       65         0           0
BAB310 12: 00 DB1GMV54   3         0       30         0           0
BAB310 12: 00 DB2GMV54   3         0       46         0           0
BAB310 12: 00 DB2HMV55  15        0       65         0           0
BAB310 11: 45 DB1GMV54   3         0       30         0           0
BAB310 11: 45 DB2GMV54   3         0       46         0           0
BAB310 11: 45 DB2HMV55  15        0       65         0           0
```

Figure 101. PSVOLTMZ View—Volume I/O 2-Hour Summary

The default functions shipped with this view are as follows:

- Sort by
 - Volume column (ascending)
 - Time Intvl column (descending)
 - DB2 Target column (ascending)

I/O by Page Set Views

The following views display information about I/O by page set.

PSxIOSZ—I/O Page Set Summary—Session

The PSxIOSZ views, as shown in Figure 102, show I/O activity per page set since DB2 startup for each of these categories:

- Synchronous I/O
- Asynchronous I/O
- Total I/O

If in SSI mode, data from multiple DB2 data sharing members is combined.

```

>W1 =PSSIOSZ=====DB2G=====*=====17MAY2000==15: 53: 09====MVDB2=====37
CMD -----Page Set----- No.      Sync  I/O  Sync Max  Sync Avg
--- Database Object  Prt Mbrs  I/Os  %    I/O Wait  I/O Wait 0...20...40
DB2GWORK DSN4K01 001    1      0    0.0      0         0
DSNDB01  DBD01   001    1     11    7.5     43        18 *****
DSNDB01  DSNLLX01 001    1     13    8.9     42        20 *****
DSNDB01  DSNLLX02 001    1      3    2.1     35        20 *****
DSNDB01  DSNCT02  001    1      3    2.1     32        16 *****
DSNDB01  DSNST01  001    1      3    2.1     23        13 *****
DSNDB01  SCT02    001    1      3    2.1     18        12 *****
DSNDB01  SPT01    001    1      3    2.1     32        21 *****
DSNDB01  SYSLGRNX 001    1     14    9.6     37        19 *****
DSNDB06  DSNADH01 001    1      3    2.1     50        34 *****
DSNDB06  DSNAPH01 001    1      3    2.1     26        14 *****
DSNDB06  DSNATX02 001    1      5    3.4     40        13 *****

```

Figure 102. PSSIOSZ View—I/O Page Set Summary—Session

You can use these views to analyze the amount of I/O activity per page set and identify I/O response time problems.

There are three similar views that present the data for either synchronous, asynchronous, or total I/O:

- PSSIOSZ—Synchronous I/O
- PSAIOSZ—Asynchronous I/O
- PSTIOSZ—Total I/O

The default functions shipped with these views are as follows:

- Sort by
 - Page Set column (ascending)
- Hyperlink from
 - Page Set column to PSxIOS to see I/O activity per DB2 (in SSI mode)

PSxIOS—I/O Page Set Member Detail—Session

The PSxIOS views, as shown in Figure 103, show I/O activity per page set since DB2 startup for each of these categories:

- Synchronous I/O
- Asynchronous I/O
- Total I/O

```

WI =PSSI OS=====DB2G=====*=====17MAY2000==15: 53: 54====MVDB2=====37
C -----Page Set----- DB2          Sync  Sync Max  Sync Avg
- Database Object  Prt Target          I/Os  I/O Wait  I/O Wait 0... 20... 40
DB2GWORK DSN4K01 001 DB2G          0         0         0
DSNDB01 DBD01 001 DB2G          11        43        18 **
DSNDB01 DSNLLX01 001 DB2G          13        42        20 ***
DSNDB01 DSNLLX02 001 DB2G           3        35        20 ***
DSNDB01 DSNNSCT02 001 DB2G           3        32        16 **
DSNDB01 DSNNSPT01 001 DB2G           3        23        13 **
DSNDB01 SCT02 001 DB2G           3        18        12 **
DSNDB01 SPT01 001 DB2G           3        32        21 ***
DSNDB01 SYSLGRNX 001 DB2G          14        37        19 **
DSNDB06 DSNADH01 001 DB2G           3        50        34 ****
DSNDB06 DSNAPH01 001 DB2G           3        26        14 **
DSNDB06 DSNATX02 001 DB2G           5        40        13 **
DSNDB06 DSNAUH01 001 DB2G           3        32        19 ***

```

Figure 103. PSSIOS View—I/O Page Set Member Detail—Session

You can use these views to analyze the amount of I/O activity per page set and DB2 and identify I/O response time problems.

There are three similar views that present the data for either synchronous, asynchronous, or total I/O:

- PSSIOS—Synchronous I/O
- PSAIOS—Asynchronous I/O
- PSTIOS—Total I/O

The default functions shipped with these views are as follows:

- Sort by
 - Page Set column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Page Set column to PSDTL to see detailed information on the selected page set

PSxIOZ—I/O Page Set Summary—Interval

The PSxIOZ views, as shown in Figure 104, show I/O activity per page set in the last interval for each of these categories:

- Synchronous I/O
- Asynchronous I/O
- Total I/O

If in SSI mode, data from multiple DB2 data sharing members is combined.

```

>W1 =PSSIOZ=====DB2G=====*=17MAY2000==15: 54: 35====MVDB2=====37
CMD -----Page Set----- No.      Sync   I/O Sync Max Sync Avg
--- Database Object  Prt Mbrs   I/Os   %   I/O Wait I/O Wait 0. . . . 20. . . . 40
DB2GWORK DSN4K01 001   1       0  0.0       0       0
DSNDB01  DBD01   001   1       0  0.0      43       0
DSNDB01  DSNLLX01 001   1       0  0.0      42       0
DSNDB01  DSNLLX02 001   1       0  0.0      35       0
DSNDB01  DSNST02  001   1       0  0.0      32       0
DSNDB01  DSNST01  001   1       0  0.0      23       0
DSNDB01  SCT02    001   1       0  0.0      18       0
DSNDB01  SPT01    001   1       0  0.0      32       0
DSNDB01  SYSLGRNX 001   1       0  0.0      37       0
DSNDB06  DSNADH01 001   1       0  0.0      50       0
DSNDB06  DSNAPH01 001   1       0  0.0      26       0
DSNDB06  DSNATX02 001   1       0  0.0      40       0
DSNDB06  DSNAUH01 001   1       0  0.0      32       0
DSNDB06  DSNDDH01 001   1       0  0.0      31       0
DSNDB06  DSNDDX02 001   1       0  0.0      28       0

```

Figure 104. PSSIOZ View—I/O Page Set Summary—Interval

You can use these views to see the current I/O workload and response times.

There are three similar views that present the data for either synchronous, asynchronous, or total I/O:

- PSSIOZ—Synchronous I/O
- PSAIOZ—Asynchronous I/O
- PSTIOZ—Total I/O

The default functions shipped with these views are as follows:

- Sort by
 - Page Set column (ascending)
- Hyperlink from
 - Page Set column to PSxIO to see I/O activity in the last interval for the selected page set

PSxIO—I/O Page Set Member Detail—Interval

The PSxIO views, as shown in Figure 105, show I/O activity per page set in the last interval for each of these categories:

- Synchronous I/O
- Asynchronous I/O
- Total I/O

```

WI =PSSIO=====DB2G=====*=====17MAY2000==15: 55: 23====MVDB2=====37
C -----Page Set----- DB2          Sync Sync Max Sync Avg          Sync I/O
- Database Object  Prt Target      I/0s I/O Wait I/O Wait 0. . . 20. . 40 Rate/Sec
DB2GWORK DSN4K01  001 DB2G          0      0      0      0
DSNDB01  DBD01   001 DB2G          0     43      0      0
DSNDB01  DSNLLX01 001 DB2G          0     42      0      0
DSNDB01  DSNLLX02 001 DB2G          0     35      0      0
DSNDB01  DSNNSCT02 001 DB2G          0     32      0      0
DSNDB01  DSNNSPT01 001 DB2G          0     23      0      0
DSNDB01  SCT02     001 DB2G          0     18      0      0
DSNDB01  SPT01     001 DB2G          0     32      0      0
DSNDB01  SYSLGRNX 001 DB2G          0     37      0      0
DSNDB06  DSNADH01 001 DB2G          0     50      0      0
DSNDB06  DSNAPH01 001 DB2G          0     26      0      0
DSNDB06  DSNATX02 001 DB2G          0     40      0      0
DSNDB06  DSNAUH01 001 DB2G          0     32      0      0
DSNDB06  DSNDDH01 001 DB2G          0     31      0      0

```

Figure 105. PSSIO View—I/O Page Set Member Detail—Interval

You can use these views to analyze the amount of I/O activity per page set and DB2 from one DB2.

There are three similar views that present the data for either synchronous, asynchronous, or total I/O:

- PSSIO—Synchronous I/O
- PSAIO—Asynchronous I/O
- PSTIO—Total I/O

The default functions shipped with these views are as follows:

- Sort by
 - Page Set column (ascending)
 - DB2 Target column (ascending)
- Hyperlink from
 - Page Set column to PSDTL to see detailed information on the selected page set

Chapter 12. Threads

Views for thread analysis are organized into two groups:

- Thread summary views
- Thread detail views

One thread record is created for each active thread. These records provide the most important indicators of current thread activity.

Using SSI mode with these views allows the threads from multiple DB2s to be shown together in one display. This ability is especially important in a sysplex where incoming work may be processed in any of several different systems and it can be difficult to locate a particular user.

Table 6 lists all the views available for threads.

Table 6. Thread Views

View Name	Group / Type	Description
THDACTV	Detail	All Active Threads (see page 180)
	Tabular	<p>Displays information about each active thread.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Current Threads option on EZDB2 and EZDSSI menus • Threads in Plan column in THDCONNZ view • Threads in Plan column in THDCTYPZ view • Threads in Plan column in THDDB2Z view • Threads in Plan column in THDPLANZ view • DB2 column in THDUSERZ view • DB2 column in THDALL view • Act Thrd column in STDB2 view • TSO, Batch, -CAF, -Utility, IMS, CICS, DBAT, RRSAP, and *Total* fields in STDB2D and STDB2DS views
THDALL	Detail	All Connected Threads (see page 181)
	Tabular	<p>Displays information about each connected thread.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Threads Connect column in the thread summary views

Table 6. Thread Views (Continued)

View Name	Group / Type	Description
THDCICPR	Detail Tabular	<p>CICS Protected Thread Averages (see page 183)</p> <p>Displays information about CICS protected threads.</p> <p>You can use this view to see average counts and times across the multiple CICS transactions executed under a single protected thread.</p> <p>You can hyperlink to this view when connection type equals CICS and a protected thread has been reused from</p> <ul style="list-style-type: none"> • Connect Name column in THDCONNZ view • Connect Type column in THDCTYPZ view • Plan column in THDPLANZ view • Connect Name column in THDACTV view • Connect Name column in THDALL view
THDCONNZ	Summary Summary	<p>Thread Summary by Connection (see page 174)</p> <p>Summarizes current thread activity by connection name.</p> <p>You can use this view to see an overview of current activity by the source of each workload, such as CICS, IMS, batch, or TSO connections. In SSI mode, it shows the total workload in the defined context. This can be especially valuable in a data sharing sysplex.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Connect Summary option on EZDSSI menu • Threads Conn column in STDB2 view
THDCTYPZ	Summary Summary	<p>Thread Summary by Connection Type (see page 175)</p> <p>Summarizes current thread activity by connection type.</p> <p>You can use this view to see an overview of current activity by attach type, such as CICS, TSO, IMS-MPP, or IMS-BMP. In SSI mode, it shows the total workload in the defined context. This can be especially valuable in a data sharing sysplex.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Attach Summary option on EZDB2 and EZDSSI menus • Max TSO Users and Max Batch Users columns in STWARN view

Table 6. Thread Views (Continued)

View Name	Group / Type	Description
THDDB2Z	Summary	Thread Summary by DB2 ID (see page 176)
	Summary	<p>Summarizes current thread activity by the target DB2 subsystem ID.</p> <p>You can use this view to see an overview of current activity for each DB2 in the defined context.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • DB2 Summary option on EZDSSI menu
THDDETL	Detail	Thread Detail (see page 185)
	Detail	<p>Shows detailed information about the selected user.</p> <p>You can use this view to view all collected information for a thread. Additional information is available through the alternative hyperlinks to the DUSER display.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • User Status column in THDALL view • User Status column in THDACTV view • User Status column in THDLIST view • User Status column in THDWARN view • Indicator Message and Current Task Status columns in THDWARND view
THDLIST	Detail	All Active Threads—Long Form (see page 182)
	Tabular	<p>Displays information about each active thread.</p> <p>You can use this view to customize one or more views with exactly the data you want to see for your workload(s).</p>
THDPLANZ	Summary	Thread Summary by Plan Name (see page 177)
	Summary	<p>Summarizes current thread activity by plan name.</p> <p>You can use this view to see an overview of current activity by application. In SSI mode, it shows the total workload in the defined context. This can be especially valuable in a data sharing sysplex.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Plan Summary option on EZDB2 and EZDSSI menus

Threads

Table 6. Thread Views (Continued)

View Name	Group / Type	Description
THDPRLLD	Detail	Parallel Query Detail (see page 184)
	Tabular	<p>Shows each active task of a parallel query.</p> <p>You can use this view to understand the total scope of a parallel query. In a data sharing group context, it shows all parallel tasks running in multiple DB2 members with sysplex query parallelism.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none">• Query Nr. column in THDPRLZ view
THDPRLZ	Summary	Summary of Parallel Queries (see page 178)
	Summary	<p>Summarizes all queries that have invoked the parallel processing feature.</p> <p>You can use this view to see an overview of all parallel queries currently active in the defined context. In a data sharing group, it includes all parallel tasks running with sysplex query parallelism.</p>
THDUSERZ	Summary	Thread Summary by User ID (see page 179)
	Summary	<p>Summarizes current thread activity by user ID.</p> <p>You can use this view to see an overview of current activity by user ID and DB2. This is useful mainly for sources of multiple threads like CICS or the DB2 internal threads labeled SYSOPR.</p>

Table 6. Thread Views (Continued)

View Name	Group / Type	Description
THDWARN	Detail Tabular	<p>Key Indicator/Warnings (see page 187)</p> <p>Provides information about the most important key indicators of failures or degradation.</p> <p>You can use this view to see if the selected threads have more than one warning indicator set. A hyperlink on the Indicator Msg column shows more information on these warnings.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Warn column in THDCONNZ view • Warn column in THDCTYPZ view • Warn column in THDDB2Z view • Warn column in THDPLANZ view
THDWARND	Detail Detail	<p>Key Indicator/Warnings Detail (see page 188)</p> <p>Displays detailed information about key indicator warning messages for the selected user.</p> <p>You can use this view to analyze threads that have more than one warning.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Warn column in THDALL view • Warn column in THDACTV view • Warn column in THDLIST view • Indicator Msg column in THDWARN view • Warn Indicators and User Status columns in THDDETL view

Thread Summary Views

The following views display summary information about all active threads.

THDCONNZ—Thread Summary by Connection

The THDCONNZ view, shown in Figure 106, summarizes current thread activity by connection name.

Connect Name	Threads Connect	Threads in Plan	Active in DB2	Thds Susp	Average Elapsed	Warn	SQL Rate	Locks	Getpg Rate
CICSCN4	14	2	0	0	00:00:00.00	Yes	0	7	0
CICS41C3	27	1	0	0	00:00:00.00	No	0	4	0
DB2CALL	13	4	8	0	00:45:22.26	No	0	0	0
SYSTEM	91	0	91	76	00:00:00.00	Yes	0	4	0
X18H	2	0	0	0	00:00:00.00	No	0	0	0

Figure 106. THDCONNZ View—Thread Summary by Connection

You can use this view to see an overview of current activity by the source of each workload, such as CICS, IMS, batch, or TSO connections. In SSI mode, it shows the total workload in the defined context. This can be especially valuable in a data sharing sysplex.

The default functions shipped with this view are as follows:

- Sort by
 - Connect Name column (ascending)
- Hyperlink from
 - Connect Name column to THDCICPR to see information about CICS protected threads when connection type equals CICS and a protected thread has been reused
 - Threads Connect column to THDALL to see all connected threads for the selected connection in the defined context
 - Threads in Plan column to THDACTV to see all active threads for the selected connection in the defined context
 - Warn column to THDWARN to see information about the key indicators of failures or degradation for the selected connection
 - Locks column to LOCKU analyzer display to see a summary of lock contention by user if any locks are held by threads of this connection

THDCTYPZ—Thread Summary by Connection Type

The THDCTYPZ view, shown in Figure 107, summarizes current thread activity by connection type.

Connect Type	Threads Connect	Threads in Plan	Active in DB2	Thrds Susp	Average Elapsed	Warn	SQL Rate	Locks	Getpg Rate
DB2CALL	13	4	8	0	01:46:42.36	No	0	0	0
SYSTEM	112	0	112	97	00:00:00.00	No	0	2	0

Figure 107. THDCTYPZ View—Thread Summary by Connection Type

You can use this view to see an overview of current activity by attach type, such as CICS, TSO, IMS-MPP, or IMS-BMP. In SSI mode, it shows the total workload in the defined context. This can be especially valuable in a data sharing sysplex.

The default functions shipped with this view are as follows:

- Sort by
 - Connect Type column (ascending)
- Hyperlink from
 - Connect Type column to THDCICPR to see information about CICS protected threads when connection type equals CICS and a protected thread has been reused
 - Threads Connect column to THDALL to see all connected threads for the selected connection in the defined context
 - Threads in Plan column to THDACTV to see all active threads for the selected connection in the defined context
 - Warn column to THDWARN to see information about the key indicators of failures or degradation for the selected connection
 - Locks column to LOCKU analyzer display to see a summary of lock contention by user if any locks are held by threads of this connection type

THDDB2Z—Thread Summary by DB2 ID

The THDDB2Z view, shown in Figure 108, summarizes current thread activity by the target DB2 subsystem ID.

W1 =THDDB2Z=====DB2G=====*=====17MAY2000==17: 57: 08====M/DB2=====1										
DB2	MVS	Threads Connect	Threads in Plan	Active Thrds in DB2	Susp	Average Elapsed	Warn	SQL Rate	Locks	Get pg Rate
DB2G	SYSD	54	2	38	0	00: 15: 35. 16	No	0	1	0

Figure 108. THDDB2Z View—Thread Summary by DB2 ID

You can use this view to see an overview of current activity for each DB2 in the defined context.

The default functions shipped with this view are as follows:

- Sort by
 - DB2 column (ascending)
- Hyperlink from
 - Threads Connect column to THDALL to see all connected threads for the selected DB2 in the defined context
 - Threads in Plan column to THDACTV to see all active threads for the selected DB2 in the defined context
 - Warn column to THDWARN to see information about the key indicators of failures or degradation for the selected DB2
 - Locks column to LOCKU analyzer display to see a summary of lock contention by user if any locks are held by threads of this DB2

THDPLANZ—Thread Summary by Plan Name

The THDPLANZ view, shown in Figure 109, summarizes current thread activity by plan name.

```
>WI =THDPLANZ=====DB2G=====*=====17MAY2000==14: 31: 48====MVDB2=====7
```

Plan	Threads Connect	Threads in Plan	Active in DB2	Thds Susp	Average Elapsed	In DB2 Elapsed	Warn	SQL Rate
-noname-	52	3	8	0	00:13:26.59	00:00:00.12	No	0
DB2GDBM1	68	0	68	66	00:00:00.00	00:00:00.00	Yes	0
DB2GDI ST	6	0	6	4	00:00:00.00	00:00:00.00	Yes	0
DB2GMSTR	17	0	17	6	00:00:00.00	00:00:00.00	Yes	0
DSN8CCO	1	1	0	0	00:00:00.00	00:00:00.00	No	0
TSMCOM3	1	1	0	0	00:00:00.00	00:00:00.00	No	0
TSMPL08	1	1	0	0	00:00:00.00	00:00:00.00	Yes	0

Figure 109. THDPLANZ View—Thread Summary by Plan Name

You can use this view to see an overview of current activity by application. In SSI mode, it shows the total workload in the defined context. This can be especially valuable in a data sharing sysplex.

The default functions shipped with this view are as follows:

- Sort by
 - Plan column (ascending)
- Hyperlink from
 - Plan column to THDCICPR to see information about CICS protected threads when connection type equals CICS and a protected thread has been reused
 - Threads Connect column to THDALL to see all connected threads for the selected plan in the defined context
 - Threads in Plan column to THDACTV to see all active threads for the selected plan in the defined context
 - Warn column to THDWARN to see information about the key indicators of failures or degradation for the selected plan
 - Locks column to LOCKU analyzer display to see a summary of lock contention by user if any locks are held by execution of this plan

THDPRLZ—Summary of Parallel Queries

The THDPRLZ view, shown in Figure 110, summarizes all queries that have invoked the parallel processing feature.

W1 =THDPRLZ=====DBGG=====17MAY2000==13: 48: 31====MVDB2=====5								
Query		Totl Connect		Average	SQL		Get pg	
Nr.	User ID	Task Name	CPU Time	Elapsed	Stmts	Locks	Total	
1	ACCTDEP	2 CICSCN4	00: 00: 01. 32	00: 01: 40. 09	2	0	0	
2	BOLHHH4	4 TSO	00: 00: 00. 79	00: 00: 55. 36	1	10	25312	

Figure 110. THDPRLZ View—Summary of Parallel Queries

You can use this view to see an overview of all parallel queries currently active in the defined context. In a data sharing group, it includes all parallel tasks running with sysplex query parallelism.

The default functions shipped with this view are as follows:

- Sort by
 - Query Nr. column (ascending)
- Hyperlink from
 - Query Nr. column to THDPRLD to see detailed information about each task of a parallel query

THDUSERZ—Thread Summary by User ID

The THDUSERZ view, shown in Figure 111, summarizes current thread activity by user ID.

W1 =THDUSERZ=====DB2G=====*=*****17MAY2000==17: 58: 32====MVDB2=====19										
User ID	DB2	Totl	Connect Name	CPU Time	Average Elapsed	%CPU	SQL Stmt s	Locks	Getpg	Total
- noname-	DB2G	43	CICS***	00:00:00.00	00:00:00.00	0.0	0	0	0	0
ACCTDEP	DB2G	2	CICSCN4	00:00:00.00	00:00:00.00	0.0	0	0	0	0
BABUSER	DB2G	1	CICSCN4	00:00:00.00	00:00:00.00	0.0	0	0	0	0
BOLBPL1	DB2G	9	DB2CALL	00:00:00.00	00:00:00.00	0.0	0	0	0	0
BOLBPL4	DB2G	1	DB2CALL	00:00:18.15	02:32:55.04	0.0	0	0	0	0
BOLHHH2	DB2G	1	DB2CALL	00:00:00.79	00:10:55.36	0.0	0	0	0	0
BOLSMR2	DB2G	1	DB2CALL	00:00:02.16	00:10:55.36	0.0	0	0	0	0
CICSTC	DB2G	1	CICS41C	00:00:00.00	00:00:00.00	0.0	0	0	0	0
CIM4X	DB2G	1	X18H	00:00:00.00	00:00:00.00	0.0	0	0	0	0
CMR4	DB2G	1	CICSCN4	00:00:00.00	00:00:00.00	0.0	0	0	0	0
DMRA	DB2G	1	DB2CALL	00:00:30.89	03:49:22.56	0.0	0	0	0	0
OLTR	DB2G	1	DB2CALL	00:00:56.38	08:11:31.20	0.0	0	0	0	0
PAYROLDP	DB2G	1	CICSCN4	00:00:00.00	00:00:00.00	0.0	0	0	0	0
PDRI VER	DB2G	1	X18H	00:00:00.00	00:00:00.00	0.0	0	0	0	0
SYSOPR	DB2G	104	SYSTEM	00:00:00.00	00:00:00.00	0.0	0	4	147	

Figure 111. THDUSERZ View—Thread Summary by User ID

You can use this view to see an overview of current activity by user ID and DB2. This is useful mainly for sources of multiple threads like CICS or the DB2 internal threads labeled SYSOPR.

The default functions shipped with this view are as follows:

- Sort by
 - User ID column (ascending)
 - DB2 column (ascending)
- Hyperlink from
 - DB2 column to THDACTV to see all active threads for the selected DB2 and user ID
 - Locks column to LOCKU analyzer display to see a summary of lock contention by user if any locks are held by threads from this user ID

Thread Detail Views

The following views display detailed information about each active thread.

THDACTV—All Active Threads

The THDACTV view, shown in Figure 112, displays information about each active thread.

```

>W1 =THDACTV=====DB2G=====*=====17MAY2000==13: 53: 53====MVDB2=====7

```

Auth ID	ID	Connect Name	CPU Time	El apsed Time	%CPU	SQL Stmt's	Warn	Locks	User
ACCTDEP	DB2G	CI CSCN4	00:00:00.00	00:00:00.00	0.0	2	No	3	ACTIV
BOLHHH2	DB2G	DB2CALL	00:00:03.04	00:32:46.08	0.0	0	No	0	BBI M
DMRA	DB2G	DB2CALL	00:00:16.58	02:43:50.40	0.0	0	No	0	BBI M
DSN8410	DB2G	CI CS41C3	00:00:00.00	00:00:00.00	0.0	1	No	4	ACTIV
OLTR	DB2G	DB2CALL	00:00:06.72	01:05:32.16	0.0	0	No	0	BBI M
TSGSTC	DB2G	DB2CALL	00:00:36.88	06:11:22.24	0.0	0	No	0	BBI M
TSM8	DB2G	CI CSCN4	00:00:00.00	00:00:00.00	0.0	348	Yes	4	ACTIV

Figure 112. THDACTV View—All Active Threads

The default functions shipped with this view are as follows:

- Hyperlink from
 - Auth ID column to DUSER analyzer display to see detailed information about the selected user in each of these categories:
 - Status
 - Environmental indicators
 - Elapsed time analysis
 - SQL statement execution counts
 - Buffer pool activity
 - Lock activity
 - Parallelism
 - DDF activity
 - Stored procedures
 - Connect Name column to THDCICPR to see information about CICS protected threads when connection type equals CICS and a protected thread has been reused
 - Warn column to THDWARND to see details about key indicator warning messages for the selected user
 - Locks column to LOCKE analyzer display to see lock contention by user details if this thread is holding locks
 - User Status column to THDDETL to see more detailed information about the selected user

THDALL—All Connected Threads

The THDALL view, shown in Figure 113, displays information about each connected thread.

```
>WI =THDALL=====DB2G=====17MAY2000==12: 28: 56====MADB2=====120
```

User ID	DB2	Connect Name	CPU Time	Elapsed Time	%CPU	User Status	SQL	Stmts	Warn
ACCTDEP	DB2G	CI CSCN4	00:00:00.00	00:00:00.00	0.0	ACTIVE-USER		4	No
ACCTDEP	DB2G	CI CSCN4	00:00:00.00	00:00:00.00	0.0	ACTIVE-USER		0	No
BABUSER	DB2G	CI CSCN4	00:00:00.00	00:00:00.00	0.0	ACTIVE-USER		0	No
BOLBPL1	DB2G	DB2CALL	00:00:00.00	00:00:00.00	0.0	ACTIVE-DB2		0	No
BOLSMR2	DB2G	DB2CALL	00:00:14.03	02:21:59.68	0.0	BBI MONITOR		0	No
CMR4	DB2G	CI CSCN4	00:00:00.00	00:00:00.00	0.0	ACTIVE-USER		0	No
DMRA	DB2G	DB2CALL	00:00:07.99	01:16:27.52	0.0	BBI MONITOR		0	No
OLTR	DB2G	DB2CALL	00:00:27.37	04:43:59.36	0.0	BBI MONITOR		0	No
PAYROLDP	DB2G	CI CSCN4	00:00:00.00	00:00:00.00	0.0	ACTIVE-USER		0	No
PPE2	DB2G	X18H	00:00:00.00	00:00:00.00	0.0	ACTIVE-USER		0	No
SYSOPR	DB2G	SYSTEM	00:00:00.00	00:00:00.00	0.0	SUSP - IRLM		0	No
SYSOPR	DB2G	SYSTEM	00:00:00.00	00:00:00.00	0.0	SUSP - IRLM		0	No
SYSOPR	DB2G	SYSTEM	00:00:00.00	00:00:00.00	0.0	SUSP - IRLM		0	No
SYSOPR	DB2G	SYSTEM	00:00:00.00	00:00:00.00	0.0	SUSP - IRLM		0	No
SYSOPR	DB2G	SYSTEM	00:00:00.00	00:00:00.00	0.0	SYSTEM TASK		0	No

Figure 113. THDALL View—All Connected Threads

The default functions shipped with this view are as follows:

- Sort by
 - User ID column (ascending)
 - DB2 column (ascending)
- Hyperlink from
 - User ID column to DUSER analyzer display to see detailed information about the selected user in each of these categories:
 - Status
 - Environmental indicators
 - Elapsed time analysis
 - SQL statement execution counts
 - Buffer pool activity
 - Lock activity
 - Parallelism
 - DDF activity
 - Stored procedures
 - DB2 column to THDACTV to see all active threads for the selected target
 - Connect Name column to THDCICPR to see information about CICS protected threads when connection type equals CICS and a protected thread has been reused
 - User Status column to THDDETL to see more detailed information about the selected user
 - Warn column to THDWARND to see details about key indicator warning messages for the selected user
 - Lock column to LOCKE analyzer display to see lock contention by user details if this user is holding locks

THDLIST—All Active Threads—Long Form

The THDLIST view, shown in Figure 114, displays information about each active thread.

```
>W1 =THDLIST=====DB2G=====*=====17MAY2000==12: 05: 10====MVDB2=====120
```

User ID	DB2	Connect Name	Plan Name	CPU Time	SRB Time	Addr space Time	%CPU	Tra E
ACCTDEP	DB2G	CI CSCN4	TSMCOM3	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
ACCTDEP	DB2G	CI CSCN4	- noname-	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
BABUSER	DB2G	CI CSCN4	- noname-	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
BOLBPL1	DB2G	DB2CALL	- noname-	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
BOLSMR2	DB2G	DB2CALL	- noname-	00: 00: 11. 66	00: 00: 05. 80	00: 03: 08. 80	0. 0	02:
CMR4	DB2G	CI CSCN4	- noname-	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
DMRA	DB2G	DB2CALL	- noname-	00: 00: 05. 78	00: 00: 01. 35	00: 00: 43. 42	0. 0	00:
OLTR	DB2G	DB2CALL	- noname-	00: 00: 25. 06	00: 00: 30. 22	00: 13: 48. 83	0. 0	04:
PAYROLDP	DB2G	CI CSCN4	- noname-	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
PPE2	DB2G	X18H	- noname-	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
SYSOPR	DB2G	SYSTEM	DB2GDBM1	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
SYSOPR	DB2G	SYSTEM	DB2GMSTR	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
SYSOPR	DB2G	SYSTEM	DB2GDBM1	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
SYSOPR	DB2G	SYSTEM	DB2GDBM1	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
SYSOPR	DB2G	SYSTEM	DB2GDBM1	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
SYSOPR	DB2G	SYSTEM	DB2GMSTR	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
SYSOPR	DB2G	SYSTEM	DB2GMSTR	00: 00: 00. 00	00: 00: 00. 00	00: 00: 00. 00	0. 0	00:
TSGSTC	DB2G	DB2CALL	- noname-	00: 00: 25. 60	00: 00: 05. 74	00: 05: 01. 47	0. 0	04:

Figure 114. THDLIST View—All Active Threads—Long Form

You can use this view to customize one or more views with exactly the data you want to see for your workload(s).

The default functions shipped with this view are as follows:

- Sort by
 - User ID column (ascending)
 - DB2 column (ascending)
- Hyperlink from
 - User ID column to DUSER analyzer display to see detailed information about the selected user in each of these categories:
 - Status
 - Environmental indicators
 - Elapsed time analysis
 - SQL statement execution counts
 - Buffer pool activity
 - Lock activity
 - Parallelism
 - DDF activity
 - Stored procedures
 - Warn column to THDWARND to see details about key indicator warning messages for the selected user
 - User Status column to THDDETL to see more detailed information about the selected user

- Locks column to LOCKE analyzer display to see lock contention by user details if this thread is holding locks

THDCICPR—CICS Protected Thread Averages

The THDCICPR view, shown in Figure 115, displays information about CICS protected threads.

```
>WI =THDCICPR=====DB2G=====17MAY2000==13: 53: 53====MVB2=====3
```

Auth ID	Nr.	CICS Tran Name	Average CPU Time	Average Elapsed	Average SQL	Average Getpages	Average SyncRead
ACCTDEP	10	CI CSCN4	00: 00: 00. 00	00: 00: 01. 02	2	325	112
DSN8410	1	CI CS41C3	00: 00: 02. 65	00: 00: 30. 09	1	10	2
TSM8	3	CI CSCN4	00: 00: 00. 00	00: 00: 05. 15	348	7923	821

Figure 115. THDCICPR View—CICS Protected Thread Averages

You can use this view to see average counts and times across the multiple CICS transactions executed under a single protected thread.

The default functions shipped with this view are as follows:

- Sort by
 - Auth ID column (ascending)
- Hyperlink from
 - Auth ID column to THDDETL to see more detailed information about the selected user
 - CICS Name column to THDACTV to see all active threads for the selected CICS system in the defined context

THDPRLLD—Parallel Query Detail

The THDPRLLD view, shown in Figure 116, shows each active task of a parallel query.

W1 =THDPRLLD=====DBGG=====*=====17MAY2000==13: 48: 43====MVDB2=====5									
User ID	DB2	Connect Name	CPU Time	Getpage Total	SQL Stmt's	Warn	Task Type	User	Status
BOLHHH4	DB2G	TSO	00: 00: 00. 08	255	4	No	Coord	ACTIVE-	DB2
BOLHHH4	DB0G	TSO	00: 00: 00. 01	17	0	No	Assist	IRLM	
BOLHHH4	DB1G	TSO	00: 00: 00. 63	25109	0	No	Assist	ACTIVE-	DB2
BOLHHH4	DB2G	TSO	00: 00: 00. 23	5989	0	No	Assist	ACTIVE-	DB2

Figure 116. THDPRLLD View—Parallel Query Detail

You can use this view to understand the total scope of a parallel query. In a data sharing group context, it shows all parallel tasks running in multiple DB2 members with sysplex query parallelism.

The default functions shipped with this view are as follows:

- Hyperlink from
 - User ID column to DUSER to see more detailed information about the selected user

THDDETL—Thread Detail

The THDDETL view, shown in Figure 117, shows detailed information about the selected user.

```

>W1 =THDWARN==THDDETL==DB2H=====*****17MAY2000==13: 48: 58====MVDB2=====1
- - - Identifier Data - - - - -
Primary User ID.... BOLHHH4      Job Name..... BOLHHH4
Auth ID..... BOLHHH4      Correlation ID.... BOLHHH4
SQL ID..... BOLHHH4      DB2 Target..... DB2GHH
Plan Name..... DSNESPRR    DB2 ID..... DB2G
Package Id..... DSNESM68   Connect Name..... TSO
- - - - - SQL Counts - - - - -   Connect Type..... TSO
Total SQL..... 5          Location Name.... DB2G
Total DCL..... 0          D. S Group Name.... DBGG
Total DDL..... 0          D. S. Member Name... DB2G
Total DML..... 5          MVS System Name... SYSD
Commits..... 0           - - - - - Time Data - - - - -
Aborts..... 0           CPU Time..... 00: 00: 00. 20
Selects..... 0           SRB Time..... 00: 00: 00. 00
Fetches..... 2           Addr space time... 00: 00: 35. 65
Inserts..... 0           Percent CPU..... 0. 1
Updates..... 0           Trans Elapsed.... 00: 00: 03. 10
Deletes..... 0           Addr Space Elap... 00: 01: 26. 88
Prepares..... 1          In DB2 CPU Time... 00: 00: 00. 04
Other SQL..... 2         In DB2 SRB Time... 00: 00: 00. 00
SQL Writes..... 0        In DB2 Elapsed... 00: 00: 01. 96
- - - Buffer Pool Data - - - - -   Adjusted TCB Time.. 180
Total Getpages..... 66    Adjusted SRB Time.. 3
Getpage Rate..... 0      Adjusted ASCB Time. 31555
Sync Reads..... 0        Adj In DB2 CPU.... 44
Async Reads..... 0       Adj In DB2 SRB.... 0
Sync Read Rate..... 0    - - - Mi scellaneous - - - - -
Async Read Rate.... 0    Locks..... 7
Getpage/Update.... 0    Thread in Plan.... YES
Prefetch Requests... 4   Warn Indicators... No
Succ HP Reads..... 0     User Status..... SWAPPED OUT
Unsucc HP Reads.... 0    Warning Msg.....
VP Hit Ratio..... 10.0   User State Flg1... 11
HP Hit Ratio..... 0.0   User State Flg2...
Updates/Committ... 0     VTAM State.....
Updates/Committ (B).. 0   Current Activi ty... CLOSE
Coupling Fac. Reads.. 0   ACE Address..... ACE=0ECFE768
Coupling Fac. Writes. 0

```

Figure 117. THDDETL View—Thread Detail

You can use this view to view all collected information for a thread. Additional information is available through the alternative hyperlinks to the DUSER display.

Threads

The default functions shipped with this view are as follows:

- Hyperlink from
 - Primary User ID column to DUSER analyzer display to see detailed information about the selected user in each of these categories:
 - Status
 - Environmental indicators
 - Elapsed time analysis
 - SQL statement execution counts
 - Buffer pool activity
 - Lock activity
 - Parallelism
 - DDF activity
 - Stored procedures
 - Warn Indicators and User Status columns to THDWARND to see more information on all warning indicators
 - Locks column to LOCKE analyzer display to see lock contention by user details if this thread is holding locks

THDWARN—Key Indicator/Warnings

The THDWARN view, shown in Figure 118, provides information about the most important key indicators of failures or degradation.

```

>W1 =THDWARN=====DB2H=====17MAY2000==13: 30: 40====MVDB2=====47

```

User ID	DB2	Plan Name	User Status	Indicator	Msg	Ind 1	Ind 2	Ind 3	Ind 4	Ind 5	Ind 6
BOLBPL4	DB2H	-noname-	BBI MONI TOR			0	0	0	0	0	0
BOLHHH2	DB2H	-noname-	BBI MONI TOR			0	0	0	0	0	0
BOLSMR3	DB2H	RXDB2	SWAPPED OUT			0	0	0	0	0	0
BOLSTC	DB2H	-noname-	ACTI VE- DB2			0	0	0	0	0	0
BOLSTC	DB2H	-noname-	ACTI VE- DB2			0	0	0	0	0	0
BOLSTC	DB2H	-noname-	ACTI VE- DB2			0	0	0	0	0	0
BOLSTC	DB2H	-noname-	BBI MONI TOR			0	0	0	0	0	0
BOLSTC	DB2H	-noname-	ACTI VE- DB2			0	0	0	0	0	0
BOLSTC	DB2H	-noname-	ACTI VE- DB2			0	0	0	0	0	0
BOLSTC	DB2H	-noname-	ACTI VE- USER	CLAIM FAI LURE		0	0	0	0	9	0
BOLSTC	DB2H	-noname-	ACTI VE- DB2			0	0	0	0	0	0
BOLSTC	DB2H	-noname-	ACTI VE- DB2			0	0	0	0	0	0
BOLSTC	DB2H	-noname-	ACTI VE- DB2			0	0	0	0	0	0
SYSOPR	DB2H	-noname-	SYSTEM TASK			0	0	0	0	0	0
SYSOPR	DB2H	-noname-	SYSTEM TASK			0	0	0	0	0	0

Figure 118. THDWARN View—Key Indicator/Warnings

You can use this view to see if the selected threads have more than one warning indicator set. A hyperlink on the Indicator Msg column shows more information on these warnings.

The default functions shipped with this view are as follows:

- Hyperlink from
 - User ID column to DUSER analyzer display to see detailed information about the selected user in each of these categories:
 - Status
 - Environmental indicators
 - Elapsed time analysis
 - SQL statement execution counts
 - Buffer pool activity
 - Lock activity
 - Parallelism
 - DDF activity
 - Stored procedures
 - User Status column to THDDETL to see more detailed information about the selected user
 - Indicator Msg column to THDWARND to see more information on all warning indicators

THDWARND—Key Indicator/Warnings Detail

The THDWARND view, shown in Figure 119, displays detailed information about key indicator warning messages for the selected user.

W1 =THDWARND=THDWARND=DB2G=====17MAY2000==12: 50: 45====MVDB2=====1	
User's Authorization ID.....	TSTUSER1
DB2 Subsystem Name.....	DB2G
Indicator Message.....	SPAS REQ ABENDED
Number of Key Warning Occurrences.....	3
Stored Procedure Failed (ABEND).....	1
Stored Procedure Failed (TIMEOUT).....	0
Stored Procedure Failed (REJECTED).....	0
RID List Failed (# RIDS).....	0
RID List Failed (STORAGE).....	0
Number Of Claim Failures.....	0
Number Of Drain Failures.....	0
CPU Parallelism Failed - NO ENCLAVE Support...	0
CPU Parallelism Failed - RLF.....	0
I/O Parallelism Fallback (Storage).....	0
I/O Parallelism Fallback (NO ESA SORT).....	0
I/O Parallelism Fallback (UPDATE CURSOR).....	0
Incremental Bind Occurred.....	2
Thread Currently Waiting On A Stored Procedure	0
PLEX Parallelism Reduced to Single DB2 System.	0
I/O Parallelism Reduced Below Planned Degree..	0
Alias of Target DB2.....	DB2G
Current Task Status.....	QUEUED THRD
User State Flag 1.....	82
User State Flag 2.....	20
VTAM State Flag.....	80

Figure 119. THDWARND View—Key Indicator/Warnings Detail

You can use this view to analyze threads that have more than one warning.

The default functions shipped with this view are as follows:

- Hyperlink from
 - User's Authorization ID column to DUSER analyzer display to see detailed information about the selected user in each of these categories:
 - Status
 - Environmental indicators
 - Elapsed time analysis
 - SQL statement execution counts
 - Buffer pool activity
 - Lock activity
 - Parallelism
 - DDF activity
 - Stored procedures
 - Indicator Message and Current Task Status columns to THDDETL to see more detailed information

Chapter 13. Workloads

Views for workload analysis are grouped into a single category:

- Workload objective views

The workload objective views show the response or elapsed time performance of DB2 transactions that occur within workloads defined as part of a MAINVIEW for DB2 workload. Workloads are ranked according to the percentage of transactions that are completed in less time than the response time objective defined for the workload.

You can use these views to see how well MAINVIEW for DB2 workloads are meeting their defined response time objectives.

Table 7 lists all the views available for workloads.

Table 7. Workload Views

View Name	Group / Type	Description
DOBJ	Objective	Objectives Review—Interval (see page 191)
	Tabular	Shows a workload’s transaction performance for each target DB2 subsystem for the current interval. You can hyperlink to this view from <ul style="list-style-type: none"> • Workload Objectives option on the EZDB2 menu
DOBJR	Objective	Objectives Review—Realtime (see page 191)
	Tabular	Shows a workload’s transaction performance for each target DB2 subsystem for the current realtime period.
DOBJRZ	Objective	Objective Summary—Realtime (see page 192)
	Summary	Summarizes workload performance across all DB2 subsystems in the current context for the current realtime period.
DOBJS	Objective	Objectives Review—Session (see page 191)
	Tabular	Shows a workload’s transaction performance for each target DB2 subsystem for the current session since DB2 was started.
DOBJSZ	Objective	Objective Summary—Session (see page 192)
	Summary	Summarizes workload performance across all DB2 subsystems in the current context for the current session since DB2 was started.
DOBJZ	Objective	Objective Summary—Interval (see page 192)
	Summary	Summarizes workload performance across all DB2 subsystems in the current context for the current interval. You can hyperlink to this view from <ul style="list-style-type: none"> • Workload Objectives option on the EZDSSI menu

Workload Objective Views

The following views display information about workload objectives.

DOBJ—Objectives Review

The Objectives Review views, as shown in Figure 120, show a workload's transaction performance for each target DB2 subsystem.

W1 =DOBJ=====DB2G=====*=====17MAY2000==14: 49: 33====MVDB2=====1										
CMD	Workl oad	% <=	Resp	Goal	Resp	Goal	Avg	Tran	Composite	Target
---	Name----	0.	50. . .	100	Goal -	%	Resp---	Count	Workl oad-	-----
	ALLWORK	95.6			1.00	95	0.843	125	SAMPLE	DB2G
	ALLWORK	66.7			1.00	95	1.428	167	SAMPLE	DB1G

Figure 120. DOBJ View—Objectives Review

There are three similar views that present the data from different time periods:

- DOBJ—Interval
- DOBJR—Realtime
- DOBJS—Session

The default functions shipped with these views are as follows:

- Hyperlink from
 - Workload Name column to DWKLDDET to see the current values of the definition for that workload
 - % Resp Goal column to D@ELTD plot view to see a graph of DB2 elapsed time values for this workload

DOBJZ—Objective Summary

The Objective Summary views, as shown in Figure 121, summarize workload performance across all DB2 subsystems in the current context.

W1 =DOBJZ=====DB2G=====*=====17MAY2000==11: 31: 55====MVDB2=====1									
CMD	Workl oad	% <=	Resp	Goal	Resp	Goal	Avg	Tran	Composit e
---	Name----	0.	50. ...	100	Goal-	%	Resp---	Count	Workl oad-
	ALLWORK	92.3			1.00	95	0.892	1417	SAMPLE
									Wkl ds---
									2

Figure 121. DOBJZ View—Objective Summary

There are three similar views that present the data from different time periods:

- DOBJZ—Interval
- DOBJRZ—Realtime
- DOBJSZ—Session

The default functions shipped with these views are as follows:

- Hyperlink from
 - Workload Name column to DOBJ to see the data for each target

Chapter 14. Lockouts

Views for lock contention analysis based on timeout and deadlock events are organized into three groups:

- Lockout event views
- Resource conflict views
- Involved thread views (victims, blockers, waiters)

Lockout records are created per resource involved in a lockout (usually just one for a timeout, but two or more for a deadlock). This enables views by resource, blocker, and waiter, not just the lockout events and the victim identifiers. Each record is marked as having the victim as the waiter or blocker, or only containing participants in a deadlock. Lockout event-related views select only those records where the victim is the waiter, whereas resource or waiter/blocker views select all records.

The records are written to history as they occur and can be retrieved by TIME period. If no TIME is specified, the latest events still in the active LKOUT buffer (default of 100) are shown.

Note: Instead of *holder*, the term *blocker* is used, since a priority waiter or a retained lock also can block a resource and cause lockouts.

Table 8 lists all the views available for lockouts.

Table 8. Lockout Views

View Name	Group / Type	Description
LKBLOCK	Thread Detail	<p>Lockout Blocker Plan Detail (see page 209)</p> <p>Lists all conflicts by blocker plan and timestamp.</p> <p>You can use this view to identify all specific conflicts caused by a plan over time.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Blocker PlanName column in LKBLOCKZ view • Blocker PlanName column in LKBWZ view • Blocker PlanName column in LKBWZSSI view • Blocker Plan column in LKEVENT view • Blocker Plan column in LKEVSSI view
LKBLOCKZ	Thread Summary	<p>Lockout Blocker Plan Summary (see page 208)</p> <p>Summarizes conflicts by blocker IDs.</p> <p>You can use this view to analyze plans and users causing lockouts.</p>
LKBWZ	Thread Summary	<p>Lockout Blocker/Waiter Summary (see page 207)</p> <p>Lists a summary of blocker / waiter plans.</p> <p>You can use this view to identify conflicting plans.</p>
LKBWZSSI	Thread Summary	<p>Lockout Global Blocker/Waiter Summary (see page 206)</p> <p>Lists a summary of blocker / waiter plans and systems.</p> <p>You can use this view to identify conflicting plans across multiple data sharing DB2 members.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Global Contention column in LKEVSSI view
LKCONZ	Thread Summary	<p>Lockout Connection Summary (see page 205)</p> <p>Lists a summary of lockout victims by connection type.</p> <p>You can use this view to identify scheduling problems with incompatible workloads (for example, IMS/CICS transactions blocked by batch).</p>

Table 8. Lockout Views (Continued)

View Name	Group / Type	Description
LKEVD	Event Detail	Lockout Event Resource Detail (see page 201) Provides full data about the selected resource conflict. You can hyperlink to this view from <ul style="list-style-type: none"> • Res Seq column in LKEVRES view • Date / Time column in LKBLOCK view • Date / Time column in LKWAIT view
LKEVENT	Event Tabular	Lockout Events (see page 198) Lists the latest timeout (IFCID 196) or deadlock (IFCID 172) events that have occurred in this DB2. You can hyperlink to this view from <ul style="list-style-type: none"> • EZDB2 menu (to view all events) • Lockout Rate column in STDB2 view • Lockouts column in STRATE view • Deadlocks or Timeouts column in STLOCK view • Locking field in STDB2D and STDB2DS views
LKEVRES	Event Tabular	Lockout Event Resources (see page 200) Lists each resource involved in the selected lockout. You can hyperlink to this view from <ul style="list-style-type: none"> • Date / Time column in LKEVENT view • Date / Time column in LKEVSSI view
LKEVSSI	Event Tabular	Global Lockout Events (see page 199) Lists lockout events within a data sharing group. You can hyperlink to this view from <ul style="list-style-type: none"> • EZDSSI (to view all events in an SSI context) • Victim ConnType column in LKCONZ view • Victim Connect column in LKCONZ view • Blocker Connect column in LKCONZ view

Lockouts

Table 8. Lockout Views (Continued)

View Name	Group / Type	Description
LKRESD	Event Tabular	<p>Lockout Resource Conflict Detail (see page 204)</p> <p>Lists each occurrence by time of any lockout where the selected resource (database / table space or specific page) was involved.</p> <p>You can use this view to identify all plans involved in conflicts on this resource and help identify potential application scheduling problems.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Resource Name column in LKRESNRZ view (with a parameter of Resource Name) • Resource Number column in LKRESNRZ view (with parameters of both Resource Name and Resource Number)
LKRESNRZ	Resource Summary	<p>Lockout Resource Number Summary (see page 203)</p> <p>Lists each page / row involved in any conflict, usually for a selected resource (database / table space) from LKRESZ.</p> <p>You can use this view to see the hot spots in a table by identifying the pages hit.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Resource Name column in LKRESZ view • Resource Name column in LKEVRES view
LKRESZ	Resource Summary	<p>Lockout Resource Summary (see page 202)</p> <p>Lists each resource (database / table space) involved in any conflict.</p> <p>You can use this view to see which table spaces cause the most conflicts.</p>

Table 8. Lockout Views (Continued)

View Name	Group / Type	Description
LKWAIT	Thread	Lockout Waiter Plan Detail (see page 211)
	Detail	<p>Lists all conflicts by waiter plan and timestamp.</p> <p>You can use this view to identify all specific conflicts over time where a plan was a waiter.</p> <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Victim Plan column in LKWAIT view • Victim Plan column in LKEVSSI view • Waiter PlanName column in LKBWZSSI view • Waiter PlanName column in LKBWZ view • Waiter PlanName column in LKWAITZ view
LKWAITZ	Thread	Lockout Waiter Plan Summary (see page 210)
	Summary	<p>Lists conflicts by waiter IDs.</p> <p>You can use this view to analyze plans and users suffering most from lockouts.</p>

Lockout Event Views

The following views display information about lockout events.

LKEVENT—Lockout Events

The LKEVENT view, shown in Figure 122, lists the latest timeout (IFCID 196) or deadlock (IFCID 172) events that have occurred in this DB2.

```

>W1 =LKEVENT=====DB2G=====*=====17MAY2000==16:31:07====MVDB2=====5
Date / Time      Lockout  Victim  Victim  Victim  Victim  Victim  Nr.
----- Type      Plan    AuthID  Connect CType  Corr ID  Res.
17MAY- 15: 27: 45 DEADLOCK  RXDB2   BOLJGQ2 DB2CALL  CAF    BOLJGQ2    2
17MAY- 15: 19: 24 TIMEOUT  RXDB2   BOLJGQ3 DB2CALL  CAF    BOLJGQ3    1
17MAY- 15: 10: 43 TIMEOUT  RXDB2   BOLJGQ3 DB2CALL  CAF    BOLJGQ3    1
17MAY- 15: 00: 10 TIMEOUT  RXDB2   BOLJGQ2 DB2CALL  CAF    BOLJGQ2    1
17MAY- 14: 59: 01 TIMEOUT  RXDB2   BOLJGQ2 DB2CALL  CAF    BOLJGQ2    1
    
```

Figure 122. LKEVENT View—Lockout Events

The default functions shipped with this view are as follows:

- Sort by
 - Date / Time column (descending)
- Hyperlink from
 - Date / Time column to LKEVRES to see the resources involved
 - Victim Plan column to LKWAIT to see other events where this plan was a waiter

LKEVSSI—Global Lockout Events

The LKEVSSI view, shown in Figure 123, lists lockout events within a data sharing group.

```
>W1 =LKEVSSI =====(DBGG=====*)===== 17MAY2000==11: 00: 44====MVDB2=====9
```

Date / Time	Lockout Type	Victim Member	Victim Plan	Victim AuthID	Victim Connect	Victim CorrName	Global Cont.
17MAY- 10: 46: 11	TIMEOUT	DB1G	RXDB2	BOLJGQ2	DB2CALL	BOLJGQ2	YES
17MAY- 10: 44: 09	DEADLOCK	DB2G	RXDB2	BOLJGQ1	DB2CALL	BOLJGQ1	YES
17MAY- 10: 42: 41	TIMEOUT	DB1G	RXDB2	BOLJGQ2	DB2CALL	BOLJGQ2	
17MAY- 10: 40: 39	DEADLOCK	DB2G	RXDB2	BOLJGQ1	DB2CALL	BOLJGQ1	YES
17MAY- 10: 39: 59	DEADLOCK	DB2G	RXDB2	BOLJGQ1	DB2CALL	BOLJGQ1	YES
17MAY- 10: 38: 41	DEADLOCK	DB1G	RXDB2	BOLJGQ1	DB2CALL	BOLJGQ1	
17MAY- 10: 37: 41	TIMEOUT	DB1G	RXDB2	BOLJGQ2	DB2CALL	BOLJGQ2	
17MAY- 10: 29: 46	DEADLOCK	DB2G	RXDB2	BOLJGQ2	DB2CALL	BOLJGQ2	
17MAY- 10: 24: 01	TIMEOUT	DB2G	RXDB2	BOLJGQ2	DB2CALL	BOLJGQ2	

Figure 123. LKEVSSI View—Global Lockout Events

The default functions shipped with this view are as follows:

- Sort by
 - Date / Time column
- Hyperlink from
 - Date / Time column to LKEVRES to see the resources involved
 - Victim Plan column to LKWAIT to see other events where this plan was a waiter
 - Global Contention column to LKBWZSSI to see conflicting plans across multiple data sharing DB2 members

LKEVRES—Lockout Event Resources

The LKEVRES view, shown in Figure 124, lists each resource involved in the selected lockout.

```

>W1 =LKEVENT=LKEVRES=DB2G=====17MAY2000=18:24:40====MVDB2=====2
Res --Resource Name-- Resource  Resource  Blocker  Waiter  G Blocker  Waiter
Seq Database Object  Number    Type      PlanName PlanName B Member  Member
  1 DSN8D41A DSN8S41P 000000201 ROW       RXDB2    RXDB2     DB2G    DB2G
  2 DSN8D41A DSN8S41E 0000001200 DATAPAGE RXDB2    RXDB2     DB2G    DB2G
    
```

Figure 124. LKEVRES View—Lockout Event Resources

The default functions shipped with this view are as follows:

- Sort by
 - Res Seq (resource sequence number) column
- Hyperlink from
 - Res Seq column to LKEVD to see full data about the selected resource conflict
 - Resource Name column to LKRESD to see each occurrence by time of any lockout where the selected resource was involved
 - Resource Number column to LKRESD to see each occurrence by time of any lockout where the selected resource was involved

LKEVD—Lockout Event Resource Detail

The LKEVD view, shown in Figure 125, provides full data about the selected resource conflict.

```

>W1 =LKEVRES==LKEVD===(DBGG====DB1G====) 17MAY2000==19: 32: 05====MVDB2=====1
-- Prod Header --
DB2 Target..... DB1G                Plan Name..... RXDB2
DB2 Location..... DB2G                Connect..... DB2CALL
DataShar Group... DBGG                Corr ID..... BOLJGQ2
DataShar Member... DB1G              Member DB2..... DB2G
MVS Name..... SYSC                    LUW-NetID..... USB00L01
DB2 Release..... 410                  LUW-LName..... LUDB2G
MVDB2 Release..... 510                LUW-Unicode... AE3DF10B5DD9
-- Event Data ---
Lockout Type..... TIMEOUT             LUW-CC..... 0001
Date..... 17MAY2000                  LUW-Token.....
Time..... 15: 24: 07. 00              Owning WU..... 00C2006206EC62E8
Seq Number..... 1                     State..... EXCLUSIVE
Total Conflicts... 1                  Duration..... COMMIT
-- Victim Data --
Plan Name..... RXDB2                  Blocker Flag... H
AuthID..... BOLJGQ3
Connect..... DB2CALL
ConnType..... CAF
Corr ID..... BOLJGQ3
Victim Flag..... W
ZPARM T/O Invtl... 60
ZPARM T/O Count... 1
Deadlock IntvCount 0
Global Lockout.... YES
-- Resource Data--
Resource Name.... DSN8D41A DSN8S41E
Resource Number... 0000001200
Resource Type.... DATAPAGE
Hash Value..... 19012
BPID(BP lock).... 0
Global Conflict... YES
-- Waiter Data--
Plan Name..... RXDB2
Connect..... DB2CALL
Corr ID..... BOLJGQ3
Member DB2..... DB1G
LUW-NetID.....
LUW-LName.....
LUW-Unicode... 000000000000
LUW-CC..... 0000
LUW-Token.....
Owning WU..... 00C2006206EC62E8
Requesting WU... 00C3002B06EC2B88
Function..... LOCK
State..... EXCLUSIVE
Duration..... COMMIT
Worth..... 00

```

Figure 125. LKEVD View—Lockout Event Resource Detail

Resource Conflict Views

The following views display information about resource conflicts.

LKRESZ—Lockout Resource Summary

The LKRESZ view, shown in Figure 126, lists each resource (database / table space) involved in any conflict.

```

>W1 =LKRESZ=====DB2G=====*=====17MAY2000==18: 59: 15====MVDB2=====2
--Resource Name-- Total          % Total          Global
Database Object  Conflicts      0.. 50.. 100    PAGE  ROW  INDEX Conflicts
DSN8D41A DSN8S41E      3  50.0          3    0    0      0
DSN8D41A DSN8S41P      3  50.0          0    3    0      0
    
```

Figure 126. LKRESZ View—Lockout Resource Summary

You can use this view to see which table spaces cause the most conflicts.

The default functions shipped with this view are as follows:

- Sort by
 - Resource Name column
- Hyperlink from
 - Resource Name column to LKRESNRZ to see each page / row involved in any conflict for the selected resource

LKRESNRZ—Lockout Resource Number Summary

The LKRESNRZ view, shown in Figure 127, lists each page / row involved in any conflict, usually for a selected resource (database / table space) from LKRESZ.

```
>W1 =LKRESZ===LKRESNRZ(DBGG=====*)=====) 17MAY2000==11: 09: 06====MVDB2=====2
```

-- Resource Name--	Resource	Resource	Total	% Total	Global
Database Object	Number	Type	Conflicts	0 . . 50 . . 100	Conflicts
DSN8D41A DSN8S41E	0000001200	DATAPAGE	10	73.9	6
DSN8D41A DSN8S41E	0020000200	DATAPAGE	3	26.1	0

Figure 127. LKRESNRZ View—Lockout Resource Number Summary

You can use this view to see the hot spots in a table by identifying the pages hit.

The default functions shipped with this view are as follows:

- Sort by
 - Resource Name column
 - Resource Number column
- Hyperlink from
 - Resource Name column to LKRESD to see each occurrence by time of the lockouts where the selected resource was involved
 - Resource Number column to LKRESD to see each occurrence by time of the lockouts where the selected resource name/resource number was involved

LKRESD—Lockout Resource Conflict Detail

The LKRESD view, shown in Figure 128, lists each occurrence by time of any lockout where the selected resource (database / table space or specific page) was involved.

```

>W1 =LKRESD===== (DBGG=====*)===== 17MAY2000==15: 20: 12====MVDB2=====23
--Resource Name-- Resource Resource Time Lockout Blocker Waiter Gbl
Database Object Number Type ----- Type PlanName PlanName Con
DSN8D41A DSN8S41E 0000000004 PART-DS 12: 31: 26 TIMEOUT DSNESPRR DSNESPRR
DSN8D41A DSN8S41E 0000000004 PART-DS 12: 27: 35 TIMEOUT DSNESPRR DSNESPRR
DSN8D41A DSN8S41E 0000001200 DATAPAGE 10: 13: 11 DEADLOCK RXDB2 RXDB2
DSN8D41A DSN8S41E 0000001200 DATAPAGE 10: 12: 41 TIMEOUT RXDB2 RXDB2
DSN8D41A DSN8S41E 0000001200 DATAPAGE 10: 08: 41 DEADLOCK RXDB2 RXDB2 Yes
    
```

Figure 128. LKRESD View—Lockout Resource Conflict Detail

You can use this view to identify all plans involved in conflicts on this resource and help identify potential application scheduling problems.

The default functions shipped with this view are as follows:

- Sort by
 - Resource Name column
 - Resource Number column
 - Date / Time (hidden) column (descending)

Involved Thread Views

The following views display information about involved threads.

LKCONZ—Lockout Connection Summary

The LKCONZ view, shown in Figure 129, lists a summary of lockout victims by connection type.

DB2 Target	Victim ConnType	Victim Connect	Blocker Connect	Timeouts	Deadlocks	% Lockouts
DB1G	CAF	DB2CALL	DB2CALL	1	1	14.3
DB2G	CAF	DB2CALL	DB2CALL	3	7	71.4
DB2G	TS0	TS0	TS0	2	0	14.3

Figure 129. LKCONZ View—Lockout Connection Summary

You can use this view to identify scheduling problems with incompatible workloads (for example, IMS/CICS transactions blocked by batch).

The default functions shipped with this view are as follows:

- Sort by
 - DB2 target
 - Victim ConnType column
 - Victim Connect column
 - Blocker Connect column
- Hyperlink from
 - Victim ConnType column to LKEVSSI to see all lockout events for the selected victim connection type
 - Victim Connect column to LKEVSSI to see all lockout events for the selected victim connection type/connection name
 - Blocker Connect column to LKEVSSI to see all lockout events for the selected blocker connection name

LKBWZSSI—Lockout Global Blocker/Waiter Summary

The LKBWZSSI view, shown in Figure 130, lists a summary of blocker / waiter plans and systems.

```

>W1 =LKBWZSSI =====(DBGG=====*)=====) 17MAY2000==17: 04: 41====MVDB2=====5
Blocker  Blocker  Waiter  Waiter  Timeout  Deadlock      % Conflicts  Gbl
PlanName Member   PlanName Member   Invol v.  Invol v.      . . . . 0 . . . 50 . . 100  Con
DSNESP RR  DB2G    DSNESP RR  DB2G      2         0       8.7          0
RXDB2     DB1G    RXDB2     DB1G      2         2      17.4         0
RXDB2     DB1G    RXDB2     DB2G      1         5      26.1         6
RXDB2     DB2G    RXDB2     DB1G      0         5      21.7         5
RXDB2     DB2G    RXDB2     DB2G      2         4      26.1         0
    
```

Figure 130. LKBWZSSI View—Lockout Global Blocker/Waiter Summary

You can use this view to identify conflicting plans across multiple data sharing DB2 members.

The default functions shipped with this view are as follows:

- Sort by
 - Blocker PlanName column
 - Blocker Member column
 - Waiter PlanName column
 - Waiter Member column
- Hyperlink from
 - Blocker PlanName column to LKBLOCK to see all conflicts caused by the selected plan
 - Waiter PlanName column to LKWAIT to see all conflicts where the selected plan was a waiter

LKBWZ—Lockout Blocker/Waiter Summary

The LKBWZ view, shown in Figure 131, lists a summary of blocker / waiter plans.

```

>W1 =LKBWZ=====DB2GXAL==*=====17MAY2000==19: 40: 46====MVDB2=====1
Blocker Waiter Timeout Deadlock % Conflicts Global Participant
PlanName PlanName Invol v. Invol. .... 0... 50.. 100 Conf. -Only Count
RXDB2 RXDB2 0 10 100.0 0 0

```

Figure 131. LKBWZ View—Lockout Blocker/Waiter Summary

You can use this view to identify conflicting plans.

The default functions shipped with this view are as follows:

- Sort by
 - Blocker PlanName column
 - Waiter PlanName column
- Hyperlink from
 - Blocker PlanName column to LKBLOCK to see all conflicts caused by the selected plan
 - Waiter PlanName column to LKWAIT to see all conflicts where the selected plan was a waiter

LKBLOCKZ—Lockout Blocker Plan Summary

The LKBLOCKZ view, shown in Figure 132, summarizes conflicts by blocker IDs.

```
>W1 =LKBLOCKZ=====DB2GXAL==*=====17MAY2000==14: 39: 08====MVDB2=====2
```

Blocker PlanName	Blocker Connect	Blocker Corr ID	Timeout Invol v.	Deadlock Invovl.	% Conflicts	Gbl
RXDB2	DB2CALL	BOLJGQ1	1	2	55.6	0
RXDB2	DB2CALL	BOLJGQ2	0	2	44.4	0

Figure 132. LKBLOCKZ View—Lockout Blocker Plan Summary

You can use this view to analyze plans and users causing lockouts.

The default functions shipped with this view are as follows:

- Summarize and sort by:
 - Blocker PlanName column
 - Blocker Connect column
 - Blocker Corr ID column
- Hyperlink from
 - Blocker PlanName column to LKBLOCK to see all conflicts caused by the selected plan

LKBLOCK—Lockout Blocker Plan Detail

The LKBLOCK view, shown in Figure 133, lists all conflicts by blocker plan and timestamp.

```
>W1 =LKBLOCK=====DB2G=====*=17MAY2000==11: 18: 27====MVDB2=====3
```

Blocker PlanName	Blocker Member	Date / Time	Lockout Type	Blocker Connect	Blocker Corr ID	Gbl Con
RXDB2	DB1G	24MAY- 11093599	DEADLOCK	DB2CALL	BOLJGQ2	YES
RXDB2	DB2G	24MAY- 11093599	DEADLOCK	DB2CALL	BOLJGQ1	YES
RXDB2	DB2G	24MAY- 11082634	TIMEOUT	DB2CALL	BOLJGQ1	

Figure 133. LKBLOCK View—Lockout Blocker Plan Detail

You can use this view to identify all specific conflicts caused by a plan over time.

The default functions shipped with this view are as follows:

- Sort by
 - Blocker PlanName column
 - Blocker Member column
 - Date / Time column
- Hyperlink from
 - Date / Time column to LKEVD to see complete details about the selected conflict

LKWAITZ—Lockout Waiter Plan Summary

The LKWAITZ view, shown in Figure 134, lists conflicts by waiter IDs.

```
>W1 =LKWAITZ=====DB2G=====*=====17MAY2000==19: 55: 47====MVDB2=====2
```

Waiter PlanName	Waiter Connect	Waiter Corr ID	Timeout Invol v.	Deadlock Invovl.	% Conflicts 0 . . . 50 . . 100	Gbl
RXDB2	DB2CALL	B0LJGQ2	0	3	50.0	0
RXDB2	DB2CALL	B0LJGQ3	0	3	50.0	0

Figure 134. LKWAITZ View—Lockout Waiter Plan Summary

You can use this view to analyze plans and users suffering most from lockouts.

The default functions shipped with this view are as follows:

- Summarize and sort by:
 - Waiter PlanName column
 - Waiter Connect column
 - Waiter Corr ID column
- Hyperlink from
 - Waiter PlanName column to LKWAIT to see all conflicts where the selected plan was a waiter

LKWAIT—Lockout Waiter Plan Detail

The LKWAIT view, shown in Figure 135, lists all conflicts by waiter plan and timestamp.

```
>W1 =LKWAIT=====DB2G=====*=17MAY2000==11:27:01====MVDB2=====3
```

Waiter PlanName	Waiter Member	Date / Time	Lockout Type	Waiter Connect	Waiter Corr ID	Gbl Con
RXDB2	DB1G	24MAY- 11093599	DEADLOCK	DB2CALL	BOLJGQ2	YES
RXDB2	DB2G	24MAY- 11093599	DEADLOCK	DB2CALL	BOLJGQ1	YES
RXDB2	DB2G	24MAY- 11082634	TIMEOUT	DB2CALL	BOLJGQ2	

Figure 135. LKWAIT View—Lockout Waiter Plan Detail

You can use this view to identify all specific conflicts over time where a plan was a waiter.

The default functions shipped with this view are as follows:

- Sort by
 - Waiter PlanName column
 - Waiter Member column
 - Date / Time column
- Hyperlink from
 - Date / Time column to LKEVD to see complete details about the selected conflict

Chapter 15. ZPARM Installation Parameters

Views for ZPARM installation parameter analysis are organized into seven groups:

- DB2 System
- Locking
- Logging
- Distributed
- Storage and Data Sets
- Authorization
- Application-Related

You can easily access all the views for installation parameter analysis from the DB2 ZPARM Easy Menu (EZDZPARM), as shown in Figure 136.

```

WI =EZDBFRPL=====DB2GMV54=*=====17MAY2000==10: 39: 45====MVDB2=====1
                                DB2 ZPARM Menu
      DB2 Target ---> DB2J61E
DB2 System                               Distributed
. DB2 Definition                         +-----+ . Dist Data Facility
. System Definition                       | Place cursor on |
. Trace Parameters                        | menu item and   |
. Data Sharing                            | press ENTER    | . Authorization
. Thread Parameters                       +-----+ . Authorization
                                           . Resource Limit (RLF)

Locking                                  Storage and Data Sets  Application-Related
. IRLM Definitions                       . Storage-Related Parm s . Query Parallelism
. IRLM Lockout Detection . Data Set Management . Routine Parm s (SPROC)
. Logging                                 . Buffer Manager       . Appl Prog Defaults
. Active Log Definitions                  . Data Def Control    . SAP R/3-Related Parm s
. Archive Log Definition
. Archive Log Allocation > ZPARM Index    . Return. . .

```

Figure 136. EZDZPARM Easy Menu—DB2 Installation Parameters

An index view provides an alphabetic list of all ZPARM names with hyperlinks to the view where they are displayed.

Many of the ZPARM views also provide hyperlinks to related statistics views or tuning wizards to simplify analysis of the effects of various parameters on DB2 performance. You can hyperlink on the following buttons when they are displayed on the right side of a view:

- The WIZARD button to access a DB2 tuning wizard that leads you through all the related information about the selected area of DB2 performance
- The STATS button to see related statistics for each of these time periods:
 - The current recording interval
 - The current session since DB2 was started

ZPARM Installation Parameters

You can also hyperlink on the NEXT and PREV buttons to easily browse through several or all of the ZPARM views.

Installation parameters highlighted in green (the default color for fields with a defined action) can be modified by overtyping the value, provided you have

- Appropriate authorization
- BMC Software's OPERTUNE for DB2 product installed

When an action is invoked by overtyping a field, the new value is displayed after the successful completion of the OPERTUNE command. The command and the resulting messages are written to the Journal Log. If the command was not successful, ERR appears at the top left of the view and provides a direct hyperlink to display the error messages.

For more information about these commands, see the *OPERTUNE for DB2 Reference Manual*.

Note: The OPERTUNE interface will be shipped shortly after GA for MainView for DB2 6.1.

Table 9 lists all the views available for installation parameters.

Table 9. Installation Parameter Views

View Name	Group/Type	Description
ZPARCALD	Logging Detail	Archive Log Allocation Definitions (see page 229) Shows the installation parameter settings for <ul style="list-style-type: none"> Archive Log Allocation Definitions You can hyperlink to this view from <ul style="list-style-type: none"> Archive Log Allocation option on EZDZPARM menu
ZPARCDFD	Logging Detail	Archive Log Definitions (see page 228) Shows the installation parameter settings for <ul style="list-style-type: none"> Archive Log Read Parameters Archive Log Definitions You can hyperlink to this view from <ul style="list-style-type: none"> Archive Log Definition option on EZDZPARM menu
ZPAUTHD	Authorization Detail	Authorization (see page 235) Shows the installation parameter settings for <ul style="list-style-type: none"> Authorization Definitions Authorization Cache Sizes DDF-Related Authorization You can hyperlink to this view from <ul style="list-style-type: none"> Authorization option on EZDZPARM menu
ZPBFMGRD	Storage and Data Sets Detail	Buffer Manager (see page 233) Shows the installation parameter settings for <ul style="list-style-type: none"> Buffer Manager—Default Pools Buffer Manager—Data Sharing Castout Buffer Manager—Internal Work Elements You can hyperlink to this view from <ul style="list-style-type: none"> Buffer Manager option on EZDZPARM menu
ZPDB2D	DB2 System Detail	DB2 Definition (see page 220) Shows the installation parameter settings for <ul style="list-style-type: none"> DB2 Definition You can hyperlink to this view from <ul style="list-style-type: none"> DB2 Definition option on EZDZPARM menu

ZPARM Installation Parameters

Table 9. Installation Parameter Views (Continued)

View Name	Group/Type	Description
ZPDDFD	Distribution Detail	DDF—Distributed Data Facility (see page 230) Shows the installation parameter settings for <ul style="list-style-type: none"> • DDF—Distributed Data Facility Definitions • DBAT Thread Controls • DDF-Related Authorization You can hyperlink to this view from <ul style="list-style-type: none"> • Dist Data Facility option on EZDZPARM menu
ZPDDLCTD	Storage and Data Sets Detail	Data Definition Control (see page 234) Shows the installation parameter settings for <ul style="list-style-type: none"> • Data Definition Control You can hyperlink to this view from <ul style="list-style-type: none"> • Data Def Control option on EZDZPARM menu
ZPDSETD	Storage and Data Sets Detail	Data Set Management (see page 232) Shows the installation parameter settings for <ul style="list-style-type: none"> • Data Set Management You can hyperlink to this view from <ul style="list-style-type: none"> • Data Set Management option on EZDZPARM menu
ZPDSHRD	DB2 System Detail	Data Sharing (see page 223) Shows the installation parameter settings for <ul style="list-style-type: none"> • Data Sharing • Sysplex Query Parrallelism You can hyperlink to this view from <ul style="list-style-type: none"> • Data Sharing option on EZDZPARM menu
ZPHDECPD	Application-Related Detail	DSNHDECP—Application Programming Defaults (see page 239) Shows the installation parameter settings for <ul style="list-style-type: none"> • DSNHDECP—Application Programming Defaults You can hyperlink to this view from <ul style="list-style-type: none"> • Appl Prog Defaults option on EZDZPARM menu

Table 9. Installation Parameter Views (Continued)

View Name	Group/Type	Description
ZPIRLMDD	Locking Detail	IRLM Definitions (see page 225) Shows the installation parameter settings for <ul style="list-style-type: none"> IRLM Definitions You can hyperlink to this view from <ul style="list-style-type: none"> IRLM Definitions option on EZDZPARM menu
ZPIRLMLD	Locking Detail	IRLM—Lockout Detection (see page 226) Shows the installation parameter settings for <ul style="list-style-type: none"> IRLM—Timeout/Deadlock Detectioin IRLM—Application Lock Usage You can hyperlink to this view from <ul style="list-style-type: none"> IRLM Lockout Detection option on EZDZPARM menu
ZPLOGD	Logging Detail	Active Log Definitions (see page 227) Shows the installation parameter settings for <ul style="list-style-type: none"> Active Log Definitions Active Log Write Parameters You can hyperlink to this view from <ul style="list-style-type: none"> Active Log Definitions option on EZDZPARM menu
ZPQPARD	Application-Related Detail	Query Parallelism (see page 237) Shows the installation parameter settings for <ul style="list-style-type: none"> Query Parallelism Sysplex Query Parallelism You can hyperlink to this view from <ul style="list-style-type: none"> Query Parallelism option on EZDZPARM menu
ZPRLFD	Authorization Detail	Resource Limit Facility (RLF) (see page 236) Shows the installation parameter settings for <ul style="list-style-type: none"> Resource Limit Facility (RLF) You can hyperlink to this view from <ul style="list-style-type: none"> Resource Limit (RLF) option on EZDZPARM menu

ZPARM Installation Parameters

Table 9. Installation Parameter Views (Continued)

View Name	Group/Type	Description
ZPROUTD	Application-Related Detail	<p>Routine Parameters (Stored Procedures/UDFs) (see page 238)</p> <p>Shows the installation parameter settings for</p> <ul style="list-style-type: none"> • Stored Procedures • User-Defined Functions <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Routine Parms (SPROC) option on EZDZPARM menu
ZPSAPD	Application-Related Detail	<p>SAP R/3–Related Parameters (see page 240)</p> <p>Shows the installation parameter settings for</p> <ul style="list-style-type: none"> • Parameters with Required Settings for SAP R/3 • Parameters with Recommended Settings for SAP R/3 <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • SAP R/3–Related Parms option on EZDZPARM menu
ZPSTGD	Storage and Data Sets Detail	<p>Storage-Related Parameters (see page 231)</p> <p>Shows the installation parameter settings for</p> <ul style="list-style-type: none"> • Storage-Related Parameters • Sort Pool • RID Pool • LOB Storage • Miscellaneous Storage • Reserved DBM1 Storage • Trace Storage <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Storage-Related Parms option on EZDZPARM menu
ZPSYSD	DB2 System Detail	<p>System Definitions (see page 221)</p> <p>Shows the installation parameter settings for</p> <ul style="list-style-type: none"> • System Definitions • Data Propagation <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • System Definition option on EZDZPARM menu

Table 9. Installation Parameter Views (Continued)

View Name	Group/Type	Description
ZPTHDD	DB2 System Detail	<p>Thread Parameters (see page 224)</p> <p>Shows the installation parameter settings for</p> <ul style="list-style-type: none"> • Thread Parameters • DDF DBATs • Automatic Bind • Dynamic SQL Caching • Miscellaneous Thread Parameters <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Thread Parameters option on EZDZPARM menu
ZPTRACED	DB2 System Detail	<p>Trace Parameters (see page 222)</p> <p>Shows the installation parameter settings for</p> <ul style="list-style-type: none"> • Trace Parameters <p>You can hyperlink to this view from</p> <ul style="list-style-type: none"> • Trace Parameters option on EZDZPARM menu

DB2 System ZPARM Views

The following views display information about DB2 system installation parameters.

ZPDB2D—DB2 Definition

The ZPDB2D view, shown in Figure 137, shows the installation parameter settings for

- DB2 Definition

```

W1 =ZPDB2D=====DB2J61E=*=====17MAY2000==18: 54: 07====MVDB2=====1
. PREV

DB2 Definition.....
Subsystem ID (SSID)..... DB2J
Release..... 610
Command Prefix..... )DB2J
Location..... DB2J
Group..... DBGJ
Data Sharing Member..... DB2J
DSNZPARM Assembly Date..... 01/06/00
DSNZPARM Name..... DSN610
. NEXT
    
```

Figure 137. ZPDB2D View—DB2 Definition

The default functions shipped with this view are as follows:

- Hyperlink from
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPSYSD—System Definitions

The ZPSYSD view, shown in Figure 138, shows the installation parameter settings for

- System Definitions
- Data Propagation

W1 =ZPSYSD=====DB2J61E==*=====17MAY2000==18: 55: 39====MVDB2=====1	
	. PREV
System Definitions.....	
MVS Environment..... (MVS).....	XA
WTO Route Code Bitmap..... (ROUTCDE)...	8000
Type of Site (Local or Recovery)..... (SITETYP)...	LOCALSITE
Remote Tracker Site..... (TRKRSITE)...	
3990 Sequential Cache Prefetch Mode..... (SEQCACH)...	B
Utility Cache Option..... (SEQPRES)...	N
Enable Database Checking..... (DBCHK).....	
Activate I/O Scheduling Feature..... (SPRMIOP)...	I/O FEAT
Maximum LE Tokens..... (LEMAX).....	20
Maximum ZIVLEMPER Dictionary Entries..... (SPRMMDE)...	4096
Data Propagation.....	STATS
Enable Change Data Capture..... (CHGDC).....	
Enforce DPROP..... (EDPROP).....	
	. NEXT

Figure 138. ZPSYSD View—System Definitions

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to STCHKPD to see interval and session counts for data propagation statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPTRACED—Trace Parameters

The ZPTRACED view, shown in Figure 139, shows the installation parameter settings for

- Trace Parameters

```

W1 =ZPTRACED=====DB2J61E=*=====17MAY2000==18: 56: 01====MVDB2=====1
. PREV

Trace Parameters.....
Statistics Time Interval (Minutes)..... (STATIME)... 30
SMF Statistics Trace Start Classes..... (SMFSTAT)... B8000000
SMF Accounting Trace Start Classes..... (SMFACCT)... 43000000
Roll Up Parallel Task Accounting..... (PTASKROL).. Y
SMF Audit Trace Start Classes..... (AUDITST)...
Monitor Trace Start Classes..... (MON).....
Global Trace Start Classes..... (TRACSTR)...
. NEXT
    
```

Figure 139. ZPTRACE View—Trace Parameters

The default functions shipped with this view are as follows:

- Hyperlink from
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPDSHRD—Data Sharing

The ZPDSHRD view, shown in Figure 140, shows the installation parameter settings for

- Data Sharing
- Sysplex Query Parallelism

W1 =ZPDSHRD=====DB2J61E==*=====17MAY2000==18: 56: 20====MVDB2=====1	
	. PREV
Data Sharing.....	WI ZARD
Data Sharing Enabled..... (DSHARE)....	YES
Group Name..... (GRPNAME)...	DBGJ
Member Name..... (MEMBNAME)...	DB2J
Maximum Number of Data Sharing Members.....	248
Service Unit (SU) Conversion Factor.....	1742
GBP-Dependent Page Immed. or Phase 1 Write. (IMMEDWRI)...	
Sysplex Query Parallelism.....	STATS
Coordinate Parallel Processing..... (COORDNTR)...	Y
Assist Parallel Processing..... (ASSIST)....	Y
	. NEXT

Figure 140. ZPDSHRD View—Data Sharing

The default functions shipped with this view are as follows:

- Hyperlink from
 - WIZARD button to WZDSHAR tuning wizard to step through an analysis of the performance of a data sharing group
 - STATS button to STQPARD to see interval and session counts for query parallelism statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPTHDD—Thread Parameters

The ZPTHDD view, shown in Figure 141, shows the installation parameter settings for

- Thread Parameters
- DDF DBATs
- Automatic Bind
- Dynamic SQL Caching
- Miscellaneous Thread Parameters

W1 =ZPTHDD=====DB2J61E=*=====17MAY2000==18: 56: 38====MVDB2=====1	
	. PREV
Thread Parameters.....	. STATS
Max Concurrent Threads..... (CTHREAD)...	100
Max TSO Connections..... (IDFORE)....	40
Max BATCH Connections..... (IDBACK)....	20
DDF DBATs.....	. STATS
Max Concurrent Remote Connections..... (CONDBAT)...	64
Max Remote Active Database Access Thds..... (MAXDBAT)...	64
Max Type 1 Inactive Threads..... (MAXTYPE1)...	0
Automatic Bind.....	. STATS
Automatic Bind Mode..... (ABIND)....	Y
Dynamic SQL Caching.....	. WIZARD
Cache Dynamic SQL..... (CACHEDYN)...	N
Maximum Kept Dynamic SQL Statements..... (MAXKEEPD)...	5000
Maximum EDM Pool Data Space Size..... (EDMDSPEC)...	0
Miscellaneous Thread Parameters.....	
UR Checkpoint Frequency..... (URCHKTH)...	0
Default CURRENT DEGREE..... (CDSSRDEF)...	1
Optimization Hints..... (OPTHINTS)...	N
EXPLAIN Allowed During Automatic Rebind..... (ABEXP)....	ALLOW
NPAGE Threshold (Access Path Adjustmt)..... (NPGTHRSH)...	0
May DB2 Use Index Access for IN List..... (SPRNOI)...	YES
Maximum Level for Index ANDing..... (SPRMAND)...	32
Minimum Percent Level for Index ORing..... (SPRMOR)....	19
Enable Filter Factor Refinement..... (SPRMFFB)...	C3
	. NEXT

Figure 141. ZPTHDD View—Thread Parameters

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to see interval and session counts for thread parameters, DDF database access threads, or automatic BINDs
 - WIZARD button to WZEDDYND tuning wizard to see all the counts related to dynamic SQL cache usage
 - NEXT and PREV buttons to see the next or previous ZPARM view

Locking ZPARM Views

The following views display information about locking installation parameters.

ZPIRLMDD—IRLM Definitions

The ZPIRLMDD view, shown in Figure 142, shows the installation parameter settings for

- IRLM Definitions

```

W1 =ZPIRLMDD=====DB2J61E==*=====17MAY2000==18: 56: 57====MVDB2=====1
      . PREV
IRLM Definitions.....
IRLM Subsystem ID..... (IRLMSID)...      IR2J
MVS Procname (Procedure Name)..... (IRLMPROC)...  DB2IR2J
IRLM Identifier..... (IRLMID)...          1
IRLM Automatic Start..... (IRLMAUT)...      80
Initialization Query Time in Seconds..... 1
Initialization Delay Limit..... (IRLMSWT)... 300
IRLM Internal Trace Status..... (ITRACE)...   15

Cross Memory (PC=YES / NO)..... (PC)..... 1
Maximum ECSA Usage (when PC=NO)..... (MAXCSA)... 6291456
Current Used ECSA (Applies when PC=NO)..... 610304
High Water Mark ECSA (Valid when PC=NO)..... 611328
      . NEXT

```

Figure 142. ZPIRLMDD View—IRLM Definitions

The default functions shipped with this view are as follows:

- Hyperlink from
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPIRLMLD—IRLM—Lockout Detection

The ZPIRLMLD view, shown in Figure 143, shows the installation parameter settings for

- IRLM—Timeout/Deadlock Detection
- IRLM—Application Lock Usage

W1 =ZPIRLMLD=====DB2J61E==*=====17MAY2000==18: 57: 49====MVDB2=====1	
	. PREV
IRLM - Lockout Detection.....	. WIZARD
Timeout Interval..... (IRLMRWT)....	300
Deadlock Detection Time (Seconds)..... (DEADLOK)....	5
Global Deadlock Detection Cycles..... (DEADLOK)....	1
Wait for Retained Locks..... (RETLWAIT)....	0
Utility Timeout Factor..... (UTIMOUT)....	6
IMS BMP Timeout Factor..... (BMPTOUT)....	4
DL/I Batch Timeout Factor..... (DLITOUT)....	6
IRLM - Application Lock Usage.....	. STATS
Maximum Locks per Application..... (NUMLKUS)....	10000
Maximum Locks per Table Space..... (NUMLKTS)....	1000
Use Update Lock for RR Isolation Access.... (RRULOCK)....	N
Use X Lock for Seached Update/Delete..... (XLKUPDLT)....	N
Release Locks for Held Csr at Commi t..... (RELCURHL)....	Y
Maximum Number of DDs with Hold.....	3
Enable VARCHAR Data Retrieval from Index... (RETVLCFK)....	N
Default Index Type..... (DEFIXTP)....	2
Value for Trigger Drain.....	1
	. NEXT

Figure 143. ZPIRLMLD View—IRLM Lockout Detection

The default functions shipped with this view are as follows:

- Hyperlink from
 - WIZARD button to WZLOCK tuning wizard to step through the analysis of lock contention in DB2, either for one subsystem, or for a data sharing group
 - STATS button to STLOCKD to see interval and session counts for IRLM application lock usage statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

Logging ZPARM Views

The following views display information about logging installation parameters.

ZPLOGD—Active Log Definitions

The ZPLOGD view, shown in Figure 144, shows the installation parameter settings for

- Active Log Definitions
- Active Log Write Parameters

```

WI =ZPLOGD=====DB2J61E==*=====17MAY2000==18: 58: 20====MVDB2=====1
. PREV

Active Log Definitions.....
Use Two Active Logs..... (TWOACTV)...
Use Two Bootstrap Data Sets (BSDS)..... (TWOBSDS)...          DUAL
Limit Restart Backout (YES\NO\AUTO)..... (LBACKOUT)..          AUTO
Restart Backout Limit (0-255)..... (BACKODUR)..              5
Max DBMI Storage for Fast Log Apply..... (LOGAPSTG)..          0
Active Log Write Parameters..... . STATS
Checkpoint Frequency..... (LOGLOAD)...          100000
UR Checkpoint Frequency..... (URCHKTH)...          0
Output Buffer Size (1K Blocks)..... (OUTBUFF)...          4000
Write Threshold-Max Buffers before Write... (WRTHRSH)...      20
. NEXT

```

Figure 144. ZPLOGD View—Active Log Definitions

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to STLOGD to see interval and session counts for active log write parameter statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPARCDFD—Archive Log Definitions

The ZPARCDFD view, shown in Figure 145, shows the installation parameter settings for

- Archive Log Read Parameters
- Archive Log Definitions

W1 =ZPARCDFD=====DB2J61E=*=====17MAY2000==18: 58: 49====MVDB2=====1	
	. PREV
Archive Log Definitions.....	
Archive Log Read Parameters.....	. STATS
Input Buffer Size (1K Blocks)..... (INBUFF)....	0
Maximum Archive Read Tape Units..... (MAXRTU)....	2
Tape Volume Deallocation Time (Minutes).... (DEALLCT)...	0
Archive Log Definitions.....	
Use Two Archive Logs..... (TWOARCH)...	N
Read Copy2 Archive First..... (ARC2FRST)...	Y
WTO Msg to Operator at Archive..... (ARCWTOR)...	Y
Maximum Archive Logs in BSDS..... (MAXARCH)...	1000
Archive Log Retention Period (Days)..... (ARCRETN)...	0
RACF-Protect Archive Logs..... (PROTECT)...	Y
Timestamp Archive Logs..... (TSTAMP)....	NO
Max Quiesce Time for -ARCHIVE LOG (Sec).... (QUIESCE)...	5
	. NEXT

Figure 145. ZPARCDFDS View—Archive Log Definitions

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to STLOGD to see interval and session counts for archive log read parameter statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPARCALD—Archive Log Allocation Definitions

The ZPARCALD view, shown in Figure 146, shows the installation parameter settings for

- Archive Log Allocation Definitions

```

W1 =ZPARCALD=====DB2J61E==*=====17MAY2000==18: 59: 12====MVDB2=====1
. PREV

Archive Log Allocation Definitions. . . .
Use IDRC (Data Compaction).. (COMPACT). . . . N
Archive Log Alloc. Blksize.. (BLKSIZE). . . . 28672
Archive Log Allocation Unit. (ALCUNIT). . . . CYL
Primary Allocation Amount.. (PRIQTY).. . . . 1234
Secondary Allocation Amount. (SECQTY).. . . . 154
Archive Unit 1 Name..... (UNIT) . . . . . CARTS
Archive Unit 2 Name..... (UNIT2) . . . . .
MSS Volume Group 1..... (MSVGP) . . . . .
MSS Volume Group 2..... (MSVGP2) . . . . .
Archive Dataset 1 Prefix... (ARCPFX1). . . . . DSN610. DB2J. ARCLG1
Archive Dataset 2 Prefix... (ARCPFX2). . . . . DSN610. DB2J. ARCLG2
. NEXT

```

Figure 146. ZPARCALD View—Archive Log Allocation Definitions

The default functions shipped with this view are as follows:

- Hyperlink from
 - NEXT and PREV buttons to see the next or previous ZPARM view

Distributed ZPARM Views

The following view displays information about distributed installation parameters.

ZPDDFD—Distributed Data Facility

The ZPDDFD view, shown in Figure 147, shows the installation parameter settings for

- Distributed Data Facility Definitions
- DBAT Thread Controls
- DDF-Related Authorization

```

W1 =ZPDDFD=====DB2J61E==*=====17MAY2000==18: 59: 40====MADB2=====1
      . PREV
DDF - Dist Data Facility Definitions..... STATS
Local Location..... DB2J
DDF Startup Facility Name..... DDF
DDF Start Option..... (DDF)..... A
Database Protocol for 3-Part Names..... (DBPROTCL).. DRDA
DDF Max Number of Facility Entries..... 1
DBAT Status after Commit..... (CMSTAT)... ACTIVE
Idle Thread Timeout (Seconds)..... (IDTHTOIN).. 5
Minutes between Resync Periods..... (RESYNC)... 2
TCP/IP KEEPALIVE..... (TCPKPALV)... 0
DDF Interval Cycle Frequency..... (SPRMINT)... 180
DDF Queued Conversation Time..... (SPRMQCT)... 120
DDF Receive Buffer Size..... (SPRMDRB)... 30720
Max Extra DRDA Query Blocks for DB2 Req... (EXTRAREQ).. 100
Max Extra DRDA Query Blocks for DB2 Svr... (EXTRASRV).. 100
DBAT Thread Controls..... STATS
Max Concurrent Database Access Threads... (CONDBAT)... 64
Maximum Remote Database Access Threads... (MAXDBAT)... 64
Maximum Type 1 Inactive Threads..... (MAXTYPE1).. 0
DDF Pool Thread Timeout Value..... (POOLINAC).. 120
DDF-Related Authorization.....
Extended Security..... (EXTSEC)... N
ID Sent to Second Server..... (HOPAUTH)... YES
Accept Already Verified TCP/IP Connects... (TCPALVER).. Y
DDF RLF Error Parameter (NOLIMIT)..... (RLFERRD)... NOLIMIT
DDF RLF Error Parameter (NORUN)..... (RLFERRD)...
DDF RLF Service Unit Limit..... (RLFERRD)... 0
      . NEXT
    
```

Figure 147. ZPDDFD View—Distributed Data Facility

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to see interval and session counts for DDF definitions or DBAT thread controls
 - NEXT and PREV buttons to see the next or previous ZPARM view

Storage and Data Set ZPARM Views

The following views display information about storage and data set installation parameters.

ZPSTGD—Storage-Related Parameters

The ZPSTGD view, shown in Figure 148, shows the installation parameter settings for

- Storage-Related Parameters
- Sort Pool
- RID Pool
- LOB Storage
- Miscellaneous Storage
- Reserved DBM1 Storage
- Trace Storage

```

WI =ZPSTGD=====DB2J61E==*=====17MAY2000==18: 59: 57====MVDB2=====1
. PREV
Storage-Related Parameters..... WIZARD
Maximum EDM Pool Size (Bytes)..... (EDMPOOL)... 16128000
Maximum EDM Pool Data Space Size..... (EDMDSPEC)... 0
EDM Pool Best Fit Algorithm..... (EDMBFIT)... EDM 1st
Sort Pool..... STATS
Maximum SORT Pool Size (Bytes)..... (SRTPOOL)... 1024000
Number of Sort Work Files..... (SPRMSNW)... 140
Sort Work Files Obtained Unconditionally... (SPRMSWF)... 5
Maximum Number of Nodes in Sort Tree..... (SPRMSMX)... 32000
RID Pool..... STATS
RID Pool Size (16K Blocks)..... (MAXRBLK)... 250
Minimum RID Lists..... (MINRBLK)... 1
LOB Storage.....
Kilobytes for LOB Values - per Agent..... (LOBVALA)... 2048
Megabytes for LOB Values - per System..... (LOBVALS)... 2048
Miscellaneous Storage.....
Max Utility Buffer Size (4K Pages)..... (SPRMUBS)... 80
Max DBM1 Storage for Fast Log Apply..... (LOGAPSTG)... 0
Max Extra DRDA Query Blocks for DB2 Req.... (EXTRAREQ)... 100
Max Extra DRDA Query Blocks for DB2 Svr.... (EXTRASRV)... 100
Reserved DBM1 Storage.....
Reserved DBM1 Space for Critical Work..... (CRIT)... 3379200
Reserved DBM1 Space for MVS Functions..... 40960
Additional DBM1 Reserved Space..... (SOS)... 3379200
Trace Storage.....
Monitor Trace Buffer Size (Bytes)..... (MONSIZE)... 65536
Size of Internal Trace Table (4K Pages)... (TRACTBL)... 16
Max Allocated READS Storage Area..... (SPRMIFS)... 4192
Size of Local Trace Table (4K Pages)..... (TRACLOC)... 16
. NEXT

```

Figure 148. ZPSTGD View—Storage-Related Parameters

The default functions shipped with this view are as follows:

- Hyperlink from
 - WIZARD button to WZEDMPL tuning wizard to step through an analysis of the performance and usage of the EDM pool
 - STATS button to see interval and session counts for sort pool or RID pool statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPDSETD—Data Set Management

The ZPDSETD view, shown in Figure 149, shows the installation parameter settings for

- Data Set Management

W1 =ZPDSETD=====DB2J61E=*=====17MAY2000==19: 00: 14====MVDB2=====1	
	. PREV
Data Set Management.....	. STATS
Maximum Data Sets Open at Once..... (DSMAX).....	3000
Pseudo-CLOSE Frequency (R0 Switch Ckpts)... (PCLOSEN)...	5
Pseudo-CLOSE Timer (R0 Switch Time)..... (PCLOSET)...	10
Checkpoints between Level ID Updates..... (DLDFREQ)...	5
Recall Database..... (RECALL).....	Y
Auto Recall Wait (Seconds)..... (RECALLD)...	300
VSAM Catalog Name..... (CATALOG)...	DSN610
Auto-Start Databases.....	80
Allow Update of Partitioning Key..... (PARTKEYU)...	
Time between Reset of Data Set Stats..... (DSSTIME)...	5
Max Storage Blocks above the 16M Line..... (SPRMKDA)...	1300
Max Storage Blocks below the 16M Line..... (SPRMKDB)...	1000
	. NEXT

Figure 149. ZPSETD View—Data Set Management

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to STDSAD to see interval and session counts for data set management statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPBFMGRD—Buffer Manager

The ZPBFMGRD view, shown in Figure 150, shows the installation parameter settings for

- Buffer Manager—Default Pools
- Buffer Manager—Data Sharing Castout
- Buffer Manager—Internal Work Elements

W1 =ZPBFMGRD=====DB2J61E==*=====17MAY2000==19: 00: 35====MVDB2=====1	
Buffer Manager - Default Pools.....	
Default BPOOL for User Data..... (TBSBPOOL)..	BP0
Default BPOOL for User Indexes..... (IDXBP00L)..	BP2
Buffer Manager - Data Sharing Castout..... . STATS	
Castout Timer Interval (Seconds)..... (SPRMSCT)...	10
Maximum Number of Pages Cast Out..... (SPRMC01)...	128
Reverse Threshold for Structure Castout.... (SPRMC02)...	10
Bfr Manager - Internal Work Elements..... . STATS	
Maximum Number of Read Engines..... (SPRMDEU)...	600
Number of BM Async Write Engines..... (SPRMWRN)...	300
Media Manager Request Blocks..... (SPRMMRB)..	408
	. NEXT

Figure 150. ZPBFMGRD View—Buffer Manager

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to see interval and session counts for data sharing castout or internal work element statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPDDLCTD—Data Definitions Control

The ZPDDLCTD view, shown in Figure 151, shows the installation parameter settings for

- Data Definition Control

```

W1 =ZPDDLCTD=====DB2J61E=*=====17MAY2000==19: 01: 11====MVDB2=====1
      . PREV

Data Definition Control.....
Registration Facility Enabled..... (RGFINSTL)..      30
DDL Registration Enforced..... (RGFDEDPL)..      30
Action if DDL Not Registered..... (RGFDEFLLT)..    30
Fully Qualified Object Registry Table..... (RGFFULLQ)..    30
DDL Registration Owner..... (RGFCOLID).. DSNRGCOL
DDL Registration Database Name..... (RGFDBNAM).. DSNRGFDB
DDL Application Registration Table Name... (RGFNMPT).. DSN_REGI
DDL Object Registration Table Name..... (RGFNMORT).. DSN_REGI
ART/ORT Escape Character..... (RGFFESCP)..
      . NEXT
    
```

Figure 151. ZPDDLCTD View—Data Definition Control

The default functions shipped with this view are as follows:

- Hyperlink from
 - NEXT and PREV buttons to see the next or previous ZPARM view

Authorization ZPARM Views

The following views display information about authorization installation parameters.

ZPAUTHD—Authorization

The ZPAUTHD view, shown in Figure 152, shows the installation parameter settings for

- Authorization Definitions
- Authorization Cache Sizes
- DDF-Related Authorization

```

WI =ZPAUTHD=====DB2J61E==*=====17MAY2000==19: 01: 26====MVDB2=====1
. PREV
Authorization Definitions.....
DB2 Authorization Enabled..... (AUTH)..... Y
SYSADM 1 User ID..... (SYSADM).... BOLHHH1
SYSADM 2 User ID..... (SYSADM2)... BOLBPL1
SYSOPR 1 User ID..... (SYSOPR1)... BOLHHH1
SYSOPR 2 User ID..... (SYSOPR2)... BOLBPL1
Default User ID..... (DEFLTID)... BABUSER
Bind Authority..... (BINDNV).... BINDADD
RACF-Protect Archive Logs..... (PROTECT)... Y
Authorization Cache Sizes..... STATS
Plan Authorization Cache Size..... (AUTHCACH).. 1024
Package Authorization Cache Size..... (CACHEPAC).. 32768
Routine Authorization Cache Size..... (CACHERAC).. 32768
DDF-Related Authorization.....
Extended Security..... (EXTSEC).... N
ID Sent to Second Server..... (HOPAUTH)... YES
Accept Already Verified TCP/IP Connects.... (TCPALVER).. Y
. NEXT

```

Figure 152. ZPAUTHD View—Authorization

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to STAUTHD to see interval and session counts for authorization cache size statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPRLFD—Resource Limit Facility (RLF)

The ZPRLFD view, shown in Figure 153, shows the installation parameter settings for

- Resource Limit Facility (RLF)

W1 =ZPRLFD=====DB2J61E=*=====17MAY2000==19: 01: 42====MVDB2=====1		
		. PREV
Resource Limit Facility (RLF).....		
Authorization ID for RLF..... (RLFAUTH) ..	SYSIBM	
RLF Table Suffix..... (RLFTBL) ..	01	
Start RLF when DB2 Starts..... (RLF).....	40	
Execute with No Limit (NOLIMIT)..... (RLFERR) ..	40	
Terminate SQL Statement (NORUN)..... (RLFERR) ..	40	
RLF Service Unit Limit..... (RLFERR) ..		
DDF RLF Error Parameter (NOLIMIT)..... (RLFERRD) ..	NOLIMIT	
DDF RLF Error Parameter (NORUN)..... (RLFERRD) ..		
DDF RLF Service Unit Limit..... (RLFERRD) ..	0	
		. NEXT

Figure 153. ZPRLFD View—Resource Limit Facility (RLF)

The default functions shipped with this view are as follows:

- Hyperlink from
 - NEXT and PREV buttons to see the next or previous ZPARM view

Application-Related ZPARM Views

The following views display information about application-related installation parameters.

ZPQPARD—Query Parallelism

The ZPQPARD view, shown in Figure 154, shows the installation parameter settings for

- Query Parallelism
- Sysplex Query Parallelism

WI =ZPQPARD=====DB2J61E=*=====17MAY2000==19: 01: 55====MVDB2=====1			
			. PREV
Query Parallelism.....		STATS	
Default CURRENT DEGREE.....	(CDSSRDEF)...		1
Sysplex Query Parallelism.....			
Coordinate Parallel Processing.....	(COORDNTR)...		Y
Assist Parallel Processing.....	(ASSIST)....		Y
			. NEXT

Figure 154. ZPQPARD View—Query Parallelism

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to STQPARD to see interval and session counts for query parallelism statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPROUTD—Routine Parameters (Stored Procedures/UDFs)

The ZPROUTD view, shown in Figure 154, shows the installation parameter settings for

- Stored Procedures
- User-Defined Functions

```

W1 =ZPROUTD=====DB2J61E=*=====17MAY2000==19: 02: 19===MVDB2=====1
                                     . PREV
Routine Parameters (Stored Procs/UDF)..... . STATS
Maximum Abends..... (STORMXAB)..... 1
MVS Procname (Procedure Name)..... (STORPROC).. DB2JSPAS
Timeout Value..... (STORTIME).. 180
Default WLM Environment..... (WLMENV).....
                                     . NEXT
    
```

Figure 155. ZPROUTD View—Routine Parameters (Stored Procedures/UDFs)

The default functions shipped with this view are as follows:

- Hyperlink from
 - STATS button to STROUTD to see interval and session counts for routine parameter statistics
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPHDECPD—DSNHDECP—Application Programming Defaults

The ZPHDECPD view, shown in Figure 156, shows the installation parameter settings for

- DSNHDECP—Application Programming Defaults

W1 =ZPHDECPD=====DB2J61E==*=====17MAY2000==19: 02: 31====MVDB2=====1	
	. PREV
DSNHDECP - Appl Programming Defaults.....	
Default Programming Language..... (DEFLANG)...	IBMCOB
Decimal Point..... (DECIMAL)...	PERIOD
Minimum Divide Scale of 3..... (DECDIV3)...	
Default String Delimiter..... (DELIM)....	QUOTE=0
Default SQL String Delimiter..... (SQLDELI)...	64
Distributed SQL String Delimiter..... (DSQDELI)...	QUOTE=0
Mixed Data..... (MIXED)....	NO
EBCDIC GBCS CCSID..... (GCCSID)....	FFFE0100
EBCDIC MBCS CCSID..... (MCCSID)....	FFFEFFFE
EBCDIC SBCS CCSID..... (SCCSID)....	0025FFFE
ASCII GBCS CCSID..... (AGCCSID)....	FFFE0000
ASCII MBCS CCSID..... (AMCCSID)....	FFFEFFFE
ASCII SBCS CCSID..... (ASCCSID)....	0000FFFE
Default Encoding Scheme..... (ENSCHHEME)...	EBCDIC
Decimal Arithmetic..... (DECARTH)...	DEC31=0
Use DSNHDECP for Dynamic Statements..... (DYNRULS)...	80
Generate DESCRIBE SQLDA for Static SQL..... (DESCSTAT)...	N
Date Format..... (DATE)....	ISO
Date Length when Date Format = LOCAL..... (DATELEN)...	
Time Format..... (TIME)....	ISO
Time Length when Time Format = LOCAL..... (TIMELEN)...	
Standard SQL Level..... (STDSQL)....	1
Default Character Set..... (CHARSET)...	ALPHANUM
Locale Character Functions..... (LC_CTYPE)...	
Default DB2 Subsystem ID (SSID)..... (SSID)....	DBGJ
Compatibility Option..... (COMPAT)....	
	. NEXT

Figure 156. ZPHDECPD View—DSNHDECP—Application Programming Defaults

The default functions shipped with this view are as follows:

- Hyperlink from
 - NEXT and PREV buttons to see the next or previous ZPARM view

ZPSAPD—SAP R/3—Related Parameters

The ZPSAPD view, shown in Figure 157, shows the installation parameter settings for

- Parameters with Required Settings for SAP R/3
- Parameters with Recommended Settings for SAP R/3

```

WI =ZPSAPD=====DB2JHH===*=====17MAY2000==15: 26: 25====MWDB2=====1
. PREV

Parameters with Required Settings.....
ASCII SBCS CCSID..... (ASCCSID).... 0000FFFE
EBCDIC SBCS CCSID..... (SCCSID).... 0025FFFE
Decimal Arithmetic..... (DECARTH).... DEC31
Max Concurrent Threads..... (CTHREAD).... 100
Max BATCH Connections..... (IDBACK).... 20
Parameters with Recommended Settings.....
Maximum Data Sets Open at Once..... (DSMAX).... 3000
Decimal Point..... (DECIMAL).... PERIOD
Default Encoding Scheme..... (ENSCHHEME).... EBCDIC
Cache Dynamic SQL..... (CACHEDYN).... N
Maximum Kept Dynamic SQL Statements..... (MAXKEEPD).... 5000
Maximum Locks per Application..... (NUMLKUS).... 10000
Release Locks for Held Csr at Commit..... (RELCURHL).... Y
Timeout Interval..... (IRLMRWT).... 300
Utility Timeout Factor..... (UTIMOUT).... 6
Cross Memory (PC=YES / NO)..... (PC).... 1
Global Deadlock Detection Cycles..... (DEADLOK).... 1
Deadlock Detection Time (Seconds)..... (DEADLOK).... 5
Checkpoint Frequency..... (LOGLOAD).... 100000
Input Buffer Size (1K Blocks)..... (INBUFF).... n/a
Max Quiesce Time for -ARCHIVE LOG (Sec).... (QUIESCE).... 5
Output Buffer Size (1K Blocks)..... (OUTBUFF).... 4000
UR Checkpoint Frequency..... (URCHKTH).... 0
Use Two Active Logs..... (TWOACTV)....
Use Two Archive Logs..... (TWOARCH).... N
Max DBMI Storage for Fast Log Apply..... (LOGAPSTG).... 0
Maximum EDM Pool Size (Bytes)..... (EDMPPOOL).... 16128000
Maximum SORT Pool Size (Bytes)..... (SRTPOOL).... 1024000
RID Pool Size (16K Blocks)..... (MAXRBLK).... 250
Monitor Trace Buffer Size (Bytes)..... (MONSIZE).... 65536
MVS Procname (Procedure Name)..... (STORPROC).... DB2JSPAS
3990 Sequential Cache Prefetch Mode..... (SEQCACH).... B
Default WLM Environment..... (WLMENV)....
Limit Restart Backout (YES/NO/AUTO)..... (LBACKOUT).... AUTO
SMF Accounting Trace Start Classes..... (SMFACCT).... 43000000
SMF Statistics Trace Start Classes..... (SMFSTAT).... B8000000
Use X Lock for Seached Update/Delete..... (XLKUPDLT).... N
NPAGE Threshold (Access Path Adjstmnt).... (NPGTHRSH).... 0
Allow Update of Partitioning Key..... (PARTKEYU)....
Free Unused Thread Storage..... (CONTSTOR).... N
Commits Before THRD Storage Contraction... (SPRMCTH).... 50
Max Storage Before THRD Stg Contraction... (SPRMSTH).... 2097152
.. NEXT
    
```

Figure 157. ZPSAPD View—SAP R/3—Related Parameters

The default functions shipped with this view are as follows:

- Hyperlink from
 - NEXT and PREV buttons to see the next or previous ZPARM view

Chapter 16. Monitors

From the MAINVIEW for DB2 windows environment, you can view the DB2 Workload and Resource Monitor services described in Volume 1 of the *MAINVIEW for DB2 User Guide*. These services are timer-driven monitors that measure DB2 workload and resources over time as requested by a user. A set of monitors is generally activated automatically per DB2 target.

The windows-mode views described in this chapter present the monitor data either for a single DB2 target or for multiple targets in an SSI context. They are organized into three groups:

- Monitor summary views, which show you how many monitors are active and how many have exceeded their warning thresholds:
 - DMON** Summary by target.
 - DMAREAZ** Summary by target and monitor area.
 - DSOVER** Summary by monitor type across multiple targets in an SSI context.
- Monitor detail views, which list individual monitors:
 - DSERV** Lists each active monitor.
 - DMWARN** Lists each active monitor whose threshold has been exceeded.
- Plot views, which show the data collected by a single monitor.

Table 10 lists all the views available for monitors.

Table 10. Monitor Views

View Name	Group / Type	Description
DMAREAZ	Summary	Monitor Summary by Area—Interval (see page 245)
	Summary	Summarizes the monitors by target and monitor area. You can hyperlink to this view from <ul style="list-style-type: none"> • Monitors Summary By Area option on the EZDB2 menu
DMON	Summary	Monitors by Target—Interval (see page 244)
	Summary	Summarizes the monitors by target for the current interval. You can hyperlink to this view from <ul style="list-style-type: none"> • Monitors Active option on the EZDB2 menu
DMONC	Summary	Monitors by Target—Cluster (see page 244)
	Summary	Summarizes the monitors by target for the current interval, for the current realtime period, and for the current session since DB2 was started.
DMONR	Summary	Monitors by Target—Realtime (see page 244)
	Summary	Summarizes the monitors by target for the current realtime period.
DMONS	Summary	Monitors by Target—Session (see page 244)
	Summary	Summarizes the monitors by target for the current session since DB2 was started.
DMWARN	Detail	Monitors in Warning—Realtime (see page 247)
	Tabular	Lists each active monitor whose threshold has been exceeded for the current realtime period. You can hyperlink to this view from <ul style="list-style-type: none"> • Monitors in Warning option on the EZDB2 menu • Warning Monitors column in STEXC view
DSERV	Detail	Monitor Overview—Interval (see page 246)
	Tabular	Lists each active monitor for the current interval. You can hyperlink to this view from <ul style="list-style-type: none"> • Target column or Actv Mntrs column in DMON view • Area column in DMAREAZ, filtering on area

Table 10. Monitor Views (Continued)

View Name	Group / Type	Description
DSERVC	Detail	Monitor Overview—Cluster (see page 246)
	Tabular	Lists each active monitor for the current interval, for the current realtime period, and for the current session since DB2 was started. You can hyperlink to this view from <ul style="list-style-type: none"> • Target column or Actv Mntrs column in DMONC view
DSERVR	Detail	Monitor Overview—Realtime (see page 246)
	Tabular	Lists each active monitor for the current realtime period. You can hyperlink to this view from <ul style="list-style-type: none"> • Target column or Actv Mntrs column in DMONR view
DSERVS	Detail	Monitor Overview—Session (see page 246)
	Tabular	Lists each active monitor for the current session since DB2 was started. You can hyperlink to this view from <ul style="list-style-type: none"> • Target column or Actv Mntrs column in DMONS view
DSOVER	Summary	Monitors by Type—Interval (see page 245)
	Summary	Summarizes the monitors by type (service and parameter) across multiple targets in an SSI context for the current interval.
DSOVERC	Summary	Monitors by Type—Cluster (see page 245)
	Summary	Summarizes the monitors by type (service and parameter) across multiple targets in an SSI context for the current interval, for the current realtime period, and for the current session since DB2 was started.
DSOVERR	Summary	Monitors by Type—Realtime (see page 245)
	Summary	Summarizes the monitors by type (service and parameter) across multiple targets in an SSI context for the current realtime period.
DSOVERS	Summary	Monitors by Type—Session (see page 245)
	Summary	Summarizes the monitors by type (service and parameter) across multiple targets in an SSI context for the current session since DB2 was started.
Plot Views	Plot	Display the data collected by one monitor.
	Detail	See “Plot Views” on page 248 for a description of each of the plot views. You can hyperlink to these views from <ul style="list-style-type: none"> • Serv column in DSERV and DMWARN views

Monitor Summary Views

The following views display summary information about how many monitors are active and how many have exceeded their warning thresholds.

DMON—Target Monitor Summaries

The DMONx views, as shown in Figure 158, summarize the number of monitors started for each target and show how many of those have exceeded their warning thresholds and the average percent of warning. Avg % Warning measures how close the reported data is to the warning threshold set for each monitor.

W1 =DMON=====DB2G=====17MAY2000==13: 54: 24====MVDB2=====1					
CMD	Target	Actv	Number in Warn	Avg % Warni ng	Maxi mum
---	-----	Mntrs	0 10 20	0 50 . . . 100 % Warni ng	
	DB2G	83	0	5.4 *	97.1

Figure 158. DMON View—Target Monitor Summaries

There are four similar views that present the data from different time periods:

- DMON—Interval
- DMONR—Realtime
- DMONS—Session
- DMONC—Cluster (all three)

The default functions shipped with these views are as follows:

- Hyperlink from
 - Target column or Actv Mntrs column to see a list of each active monitor for the same time period

DMAREAZ—Monitor Summary by Area

The DMAREAZ view, shown in Figure 159, summarizes the number of monitors by target and area and shows their status. It summarizes performance by the number of monitors that have exceeded their warning threshold and the average percent of the warning value.

```

W1 =DMAREAZ=====DB2G=====*=====17MAY2000==14: 11: 50====MVDB2=====9
CMD      Target Area      Number Number      Average Maximum Number
--- Target Area      Monitors in Warn 0. . . . . 10 Warning Warning Active
DB2G    WKLD      7      1 *      109.1  763.5   7
DB2G    DMVS      5      0      31.3   93.7   5
DB2G    LOG      8      0      11.2   22.4   8
DB2G    EDM      2      0      4.1    4.1    2
DB2G    USER     22     0      1.4    3.7   22

```

Figure 159. DMAREAZ View—Monitor Summary by Area

The default functions shipped with this view are as follows:

- Hyperlink from
 - Area column or Number Monitors column to DSERV to see a list of active monitors for the selected target and area
 - Number in Warn column to DSERV to see a list of monitors in warning for the selected target and area

DSOVER—Monitors by Type

The DSOVERx views, as shown in Figure 160, show a performance summary by monitor type (service and parameter) of monitors collecting data from active DB2 targets in the current context. In an SSI context, data from similar monitors across multiple targets are combined and then ranked according to the average percentage of warning threshold. Average percentage of warning measures how close the reported data is to the warning threshold set for the monitor that collects the data.

```

W1 =DSOVER=====DB2G=====*=====17MAY2000==15: 02: 38====MVDB2=====83
CMD Serv Parm      Avg % Warning Avg      Avg      Area Count
--- --- ---      0. . . . . 50. . . 100 Value-- Warni ng- ----
ECSAP      108.6 *****+ 76.00  70.00 DMVS  1
CSAP       81.2 ***** 65.00  80.00 DMVS  1
LOGUT      22.4 *** 19.00  85.00 LOG  1
EDMUT      4.7 * 4.00  85.00 EDM  1
CONUT BATCH 3.7 * 3.00  80.00 USER  1
DSUTL      1.2 1.00  85.00 DSYS  1

```

Figure 160. DSOVER View—Monitors by Type

There are four similar views that present the data from different time periods:

- DSOVER—Interval
- DSOVERR—Realtime
- DSOVERS—Session
- DSOVERC—Cluster (all three)

Monitor Detail Views

The following views display detailed information about each active monitor.

DSERV—Active Monitors

The DSERVx views, as shown in Figure 161, list the individual monitors by name for each target.

Monitors are ranked according to their average percentage of warning threshold in the time period being reported.

W1 =DSERV=====DB2G=====17MAY2000==14: 09: 07====MADB2=====83							
CMD	Serv	Parm	% Warning	Curr	Warn	Area	Target
-----			0 50 . . 100	Value---	Value---	-----	
	ECSAP		97.4 *****	68.17	70.00	DMVS	DB2G
	CSAP		66.2 *****	53.00	80.00	DMVS	DB2G
	LOGUT		22.4 ***	19.00	85.00	LOG	DB2G
	CONUT	TSO	5.0 *	4.00	80.00	USER	DB2G
	EDMUT		4.7 *	4.00	85.00	EDM	DB2G

Figure 161. DSERV View—Active Monitors

There are four similar views that present the data from different time periods:

- DSERV—Interval
- DSERV—Realtime
- DSERV—Session
- DSERV—Cluster (all three)

The default functions shipped with these views are as follows:

- Hyperlink from
 - Serv column to see a plot of the data collected by the selected monitor

DMWARN—Monitors in Warning

The DMWARN view, shown in Figure 162, displays only those monitors in a warning condition. It shows how many are in warning and the defined threshold and current measured value for each monitor.

W1 =DMWARN=====DB2G=====*=====17MAY2000==14:25:26====MVDB2=====2						
CMD	Serv	Parm	% Warning	Curr	Warn	Area Target
			0 50 . . . 100	Val ue---	Val ue---	-----
@ELTD	ALLWORK	127.8	*****+	1.28	1.00	WKLD DB2G
ECSAP		102.1	*****+	71.50	70.00	DMVS DB2G

Figure 162. DMWARN View—Monitors in Warning

The default functions shipped with this view are as follows:

- Hyperlink from
 - Serv column to see a plot of the data collected by the selected monitor

Plot Views

When you select a monitor from DSERV or DMWARN, a view showing a plot of the data collected by that monitor is displayed, as shown in Figure 163.

```

>W1 =DCONUT=====DB2G=====*=====5/17/00===18:00:13===MVDB2=====1
>>DB2ST |.....|.....| % Util Parm.... BATCH
18:00:00 *                6.00 Warni ng.. 80.00
17:59:00                0.00 Max/Mi n.. Maxi mum
17:58:00                0.00 Val ue... 6.00
17:57:00                0.00 Ti me... 18:00:00
17:56:00                0.00 Graph Max 80.00
17:55:00                0.00 Target... DB2G
17:54:00                0.00 Descri pt. CONNECTION % UTI LI ZATION
17:53:00                0.00
17:52:00                0.00 Samp les.. 1
17:51:00                0.00 Peri od... 00:10:00
Total      |.....|.....| % Util Samp Int. 00:01:00
Prev Pd   *                6.00 Start.... 18:00:00
Curr Pd   0.00 El apsed.. 00:00:00
          0.00

```

Figure 163. Plot View

Each plot provided by a monitor has a hyperlink to a corresponding MVDB2 service that you can use for detail analysis of your target's performance. The hyperlink is indicated by >> in the upper left portion of the view. In the preceding example, it is >>DB2ST. This is a hyperlink to the DB2 analyzer DB2ST online service. When you make this hyperlink, you have access to all the online services provided by the DB2 analyzer and monitor components of MAINVIEW for DB2.

This section lists the monitor plot views for the DB2 workload and resource monitor services described in Volume 1 of the *MAINVIEW for DB2 User Guide*. The descriptions are in tabular form and categorized by DB2 area. Each table shows the plot view and its corresponding monitor and describes the performance data provided.

DB2 Resource Monitors

This section describes the views and monitors that provide performance plot displays about DB2:

- General DB2 system activity
- User activity
- Lock activity
- EDM pool activity
- Buffer pool activity
- Log activity
- MVS services
- DDF activity

General DB2 System Monitors (Area = DSYS)

The monitors listed in Table 11 measure general DB2 system activity and status.

Table 11. General DB2 System Monitors

View Name	Monitor	Description
DDSOPN	DSOPN	Reports the number of open DB2 database data sets during the sampling period.
DDSOPR	DSOPR	Reports the number of successful open requests for database data sets by buffer pool during the sampling period. If a large number of databases are specified to automatically open at DB2 startup, a measurement spike occurs at startup.
DDSUTL	DSUTL	Reports the percentage of the maximum number of concurrently accessible DB2 database data sets (DSNZPARM value DSMAX) that are open during the specified time interval.

User Activity Monitors (Area = USER)

The monitors listed in Table 12 measure user activity.

Table 12. User Activity Monitors

View Name	Monitor	Description						
DBINDF	BINDF	Reports the number of attempted automatic binds that failed during the sampling period.						
DBINDS	BINDS	Reports the number of automatic binds that completed successfully during the sampling period.						
DBNPKF	BNPKF	Reports the number of failed automatic bind requests for packages during the sampling period. The reported value is the difference between the total automatic bind requests for packages minus the successful requests (QTAUTOBA).						
DBNPKS	BNPKS	Reports the number of successful automatic bind requests for packages during the sampling period (QTPKABND).						
DCOMP2	COMP2	Reports the number of successful phase 2 commit requests during the sampling period. A two-phase commit is used by both IMS and CICS transactions.						
DCOMRO	COMRO	Reports the number of read-only commit requests during the sampling period. A read-only commit is a one-phase commit used by IMS and CICS in query-only processing.						
DCOMSY	COMSY	Reports the number of synchronized commit requests during the sampling period. A synchronized commit is used by TSO applications, the Call Attach Facility, and batch applications.						
DCONUT	CONUT	<p>Reports the percentage of active connections of the total allowable during the specified sampling period. The total allowable connections are defined by the following members in the DSNZPARM data set:</p> <table border="0"> <tr> <td>IDFORE</td> <td>TSO foreground (QMF or DB2I)</td> </tr> <tr> <td>IDBACK</td> <td>TSO background (batch jobs, CAF, or utilities)</td> </tr> <tr> <td>MAXBAT</td> <td></td> </tr> </table> <p>When CONUT is started without parameters, all active connections are monitored. The percentage is reported as the sum of active connections of the total.</p>	IDFORE	TSO foreground (QMF or DB2I)	IDBACK	TSO background (batch jobs, CAF, or utilities)	MAXBAT	
IDFORE	TSO foreground (QMF or DB2I)							
IDBACK	TSO background (batch jobs, CAF, or utilities)							
MAXBAT								
DDBTQD	DBTQD	Reports the number of times a database access thread was queued because the number of concurrent remote threads was already at a maximum (QDSTQDBT).						

Table 12. User Activity Monitors (Continued)

View Name	Monitor	Description
DDROWA	DROWA	<p>Reports the number of attempts to use Direct Row Access to locate a record during the sampling period (QXROIMAT, QXROIIDX, QXROITS) with one of the following results:</p> <p>USED DB2 used Direct Row Access to locate a record</p> <p>FAILIX DB2 attempted to use Direct Row Access but reverted to using an index to locate a record</p> <p>FAILTS DB2 attempted to use Direct Row Access but reverted to using a table space scan to locate a record</p> <p>FAILURES Direct Row Access attempts failed</p> <p>If the DROWA monitor is started without parameters (blank), the reported number is the sum of all Direct Row Access attempts during the sampling period.</p> <p>(DB2 Release 6.1 and above)</p>
DEOMFL	EOMFL	Reports the number of end of memory (EOM) failures during the sampling period. The count is incremented when an end of memory request is processed for a DB2-connected address space; for example, at TSO force.
DEOTFL	EOTFL	Reports the number of end of task (EOT) failures during the sampling period. The count is incremented when an end of task request is processed for a DB2-connected address space; for example, an abend of IMS or CICS tasks that have a DB2 thread.
DLOBMX	LOBMX	<p>Reports the maximum storage used for LOB values, in megabytes, during the sampling period (QXSTLOBV).</p> <p>(DB2 Release 6.1 and above)</p>
DNESTM	NESTM	<p>Reports the maximum level of nested SQL cascading due to triggers, user-defined functions, and stored procedures during the sampling period (QXCASCDP).</p> <p>(DB2 Release 6.1 and above)</p>
DPLBND	PLBND	Reports the number of successfully bound plans during the sampling period (QTPLNBD).
DPKBND	PKBND	Reports the number of successfully bound packages during the sampling period (QTPKGBD).
DPRLG	PRLG	Reports the number of parallel groups that executed to the planned parallel degree (QXNORGRP), which executed to a degree less than planned because of a storage shortage or contention on the buffer pool (QXREDGRP), or the total number of parallel groups executed (QXTOTGRP).

Monitors

Table 12. User Activity Monitors (Continued)

View Name	Monitor	Description
DPRLF	PRLF	<p>Reports the number of planned parallel groups that fallback to sequential execution during the sampling period (QXDEG CUR, QXDEGES A, QXDEGBUF, QXDEGENC) for one of the following reasons:</p> <p>CURSOR Fallback to sequential because of ambiguous cursor (can be used for update or delete)</p> <p>NOSORT Fallback to sequential because of lack of ESA Sort support</p> <p>NOBFR Fallback to sequential because of storage shortage or buffer pool contention</p> <p>NOENCLAV Fallback to sequential because MVS/ESA enclave services were unavailable (DB2 Release 4.1 and above)</p> <p>If the PRLF monitor is started without parameters (blank), the reported number is the sum of all fallbacks to sequential processing for any reason.</p>
DPRLSF	PRLSF	<p>Reports the number of sysplex query failures during the sampling period (QXCOORNO, QXISORR, QXXCSKIP) for one of the following reasons:</p> <p>COORNO Failed because coordinator changed to NO</p> <p>ISORR Failed because of ISOLATION RR/RS</p> <p>CSKIP Skipped a DB2 because of buffer shortage</p> <p>(DB2 Release 5.1 and above)</p>
DRSQLS	RSQLS	<p>Reports the number of SQL statements sent to a remote site to be executed on behalf of a user at a local site (QLSTS QLS).</p> <p>If the RSQLS monitor is started without parameters (blank), the reported number is the sum of SQL statements sent to all remote sites.</p>
DRSQLR	RSQLR	<p>Reports the number of SQL statements received from a remote site to be executed locally on behalf of a remote user (QLSTS QLR).</p> <p>If the RSQLR monitor is started without parameters (blank), the reported number is the sum of SQL statements received from all remote sites.</p>

Table 12. User Activity Monitors (Continued)

View Name	Monitor	Description										
DSQLAC	SQLAC	<p>Reports the number of SQL statements that executed during the sampling period (QXSETCRL, QXCALL).</p> <p>DSQLAC reports the number of executed statements by the following SQL types:</p> <table> <tr> <td>Data Definition Language</td> <td>Authorization statements</td> </tr> <tr> <td>Lock statements</td> <td>Select/Fetch statements</td> </tr> <tr> <td>Dynamic SQL</td> <td>Update, insert, or delete statements</td> </tr> <tr> <td>Control statements</td> <td>Open statements</td> </tr> <tr> <td>Close statements</td> <td>Stored procedure calls (DB2 Release 4.1 and above)</td> </tr> </table> <p>If the SQLAC monitor is started without parameters (blank), the reported number is the sum of all SQL statement types that executed during the sampling period.</p>	Data Definition Language	Authorization statements	Lock statements	Select/Fetch statements	Dynamic SQL	Update, insert, or delete statements	Control statements	Open statements	Close statements	Stored procedure calls (DB2 Release 4.1 and above)
Data Definition Language	Authorization statements											
Lock statements	Select/Fetch statements											
Dynamic SQL	Update, insert, or delete statements											
Control statements	Open statements											
Close statements	Stored procedure calls (DB2 Release 4.1 and above)											
DSPROC	SPROC	<p>Reports the number of stored procedure calls for all users during the sampling period (QXCALL, QXCALLAB, QXCALLTO, QXCALLRJ). The reported value can be for one of the following types:</p> <table> <tr> <td>CALLS</td> <td>Number of SQL CALL statements that were executed</td> </tr> <tr> <td>ABENDS</td> <td>Number of times a stored procedure terminated abnormally</td> </tr> <tr> <td>TIMEOUTS</td> <td>Number of times an SQL CALL statement timed out while waiting to be scheduled</td> </tr> <tr> <td>REJECTS</td> <td>Number of times an SQL CALL statement was rejected because the procedure was in the 'STOP ACTION(REJECT)' state</td> </tr> </table> <p>If the SPROC monitor is started without parameters (blank), the reported number is the sum of all SQL CALL statements during the sampling period.</p>	CALLS	Number of SQL CALL statements that were executed	ABENDS	Number of times a stored procedure terminated abnormally	TIMEOUTS	Number of times an SQL CALL statement timed out while waiting to be scheduled	REJECTS	Number of times an SQL CALL statement was rejected because the procedure was in the 'STOP ACTION(REJECT)' state		
CALLS	Number of SQL CALL statements that were executed											
ABENDS	Number of times a stored procedure terminated abnormally											
TIMEOUTS	Number of times an SQL CALL statement timed out while waiting to be scheduled											
REJECTS	Number of times an SQL CALL statement was rejected because the procedure was in the 'STOP ACTION(REJECT)' state											
DTHDAB	THDAB	Reports the number of ABORTed threads during the sampling period.										
DTHDAC	THDAC	<p>Reports the number of active threads by one of the following types:</p> <table> <tr> <td>TSO</td> <td>Batch</td> </tr> <tr> <td>Utility</td> <td>Call Attach Facility</td> </tr> <tr> <td>IMS</td> <td>Database Access (DBAT)</td> </tr> <tr> <td>CICS</td> <td>Distributed Allied Agent (DIST)</td> </tr> <tr> <td>Blank</td> <td>Both DBAT and DIST</td> </tr> </table> <p>If the THDAC monitor is started without parameters (blank), the reported number is the sum of active threads of all sampled types.</p>	TSO	Batch	Utility	Call Attach Facility	IMS	Database Access (DBAT)	CICS	Distributed Allied Agent (DIST)	Blank	Both DBAT and DIST
TSO	Batch											
Utility	Call Attach Facility											
IMS	Database Access (DBAT)											
CICS	Distributed Allied Agent (DIST)											
Blank	Both DBAT and DIST											
DTHDCR	THDCR	Reports the number of successful CREATE THREAD requests during the sampling period.										
DTHDID	THDID	Reports the number of in doubt threads during the sampling period. Only IMS or CICS threads can be in doubt.										

Monitors

Table 12. User Activity Monitors (Continued)

View Name	Monitor	Description										
DTHDQD	THDQD	<p>Reports the number of queued threads by one of the following types:</p> <table> <tr> <td>TSO</td> <td>Batch</td> </tr> <tr> <td>Utility</td> <td>Call Attach Facility</td> </tr> <tr> <td>IMS</td> <td>CICS</td> </tr> </table> <p>If the THDQD monitor is started without parameters (blank), the reported number is the sum of queued threads of all sampled types.</p>	TSO	Batch	Utility	Call Attach Facility	IMS	CICS				
TSO	Batch											
Utility	Call Attach Facility											
IMS	CICS											
DTHDUT	THDUT	<p>Reports the percentage of active threads from the total allowable during the sampling period. Allowable threads are defined in member CTHREAD of the DSNZPARM data set.</p>										
DTHDWT	THDWT	<p>Reports the number of CREATE THREAD requests that waited for an available thread during the sampling period.</p>										
DTRIGR	TRIGR	<p>Reports the number of triggered actions during the sampling period (QXSTTRG, QXRROWTRG, QXTRGERR). The reported value can be for one of the following types:</p> <table> <tr> <td>STMT</td> <td>Number of times a statement trigger was activated</td> </tr> <tr> <td>ROW</td> <td>Number of times a row trigger was activated</td> </tr> <tr> <td>ERROR</td> <td>Number of times an SQL error occurred during execution of a triggered action</td> </tr> </table> <p>If the TRIGR monitor is started without parameters (blank), the reported number is the sum of all activated triggers during the sampling period.</p> <p>(DB2 Release 6.1 and above)</p>	STMT	Number of times a statement trigger was activated	ROW	Number of times a row trigger was activated	ERROR	Number of times an SQL error occurred during execution of a triggered action				
STMT	Number of times a statement trigger was activated											
ROW	Number of times a row trigger was activated											
ERROR	Number of times an SQL error occurred during execution of a triggered action											
DUDF	UDF	<p>Reports the number of user-defined functions during the sampling period (QXCAUD, QXCAUDAB, QXCAUDTO, QXCAUDRJ). The reported value can be for one of the following types:</p> <table> <tr> <td>EXECS</td> <td>Number of user-defined functions executed</td> </tr> <tr> <td>ABENDS</td> <td>Number of times a user-defined function terminated abnormally</td> </tr> <tr> <td>TIMEOUTS</td> <td>Number of times a user-defined function timed out while waiting to be scheduled</td> </tr> <tr> <td>REJECTS</td> <td>Number of times a user-defined function was rejected</td> </tr> <tr> <td>FAILURES</td> <td>Number of user-defined functions that failed</td> </tr> </table> <p>If the UDF monitor is started without parameters (blank), the reported number is the sum of all user-defined functions during the sampling period.</p> <p>(DB2 Release 6.1 and above)</p>	EXECS	Number of user-defined functions executed	ABENDS	Number of times a user-defined function terminated abnormally	TIMEOUTS	Number of times a user-defined function timed out while waiting to be scheduled	REJECTS	Number of times a user-defined function was rejected	FAILURES	Number of user-defined functions that failed
EXECS	Number of user-defined functions executed											
ABENDS	Number of times a user-defined function terminated abnormally											
TIMEOUTS	Number of times a user-defined function timed out while waiting to be scheduled											
REJECTS	Number of times a user-defined function was rejected											
FAILURES	Number of user-defined functions that failed											

Lock Monitors (Area = LOCK)

The monitors listed in Table 13 measure locking activity.

Table 13. Lock Monitors

View Name	Monitor	Description				
DCLM	CLM	Reports the number of claim requests during the sampling period (QTXACLNO).				
DCLMF	CLMF	Reports the number of unsuccessful claim requests during the sampling period (QTXACLUN).				
DDRN	DRN	Reports the number of drain requests during the sampling period (QTXADRNO).				
DDRNF	DRNF	Reports the number of unsuccessful drain requests during the sampling period (QTXADRUN).				
DGNEG	GNEG	Reports the number of times this DB2 was driven to negotiate a p-lock or the number of p-lock change requests (QTGSPPPE, QTGSPGPE, QTGSCHNP, QTGSOTPE).				
DGNOEN	GNOEN	Reports the number of times an engine is not available for a p-lock exit or a notify exit request (QTGSPEQW).				
DGNTFM	GNTFM	Reports the number of notify messages sent or received (QTGSNTFY, QTGSNTFR).				
DGPLK	GPLK	Reports the number of p-lock lock, change, and unlock requests (QTGSLPLK, QTGSCPLK, QTGSUPLK).				
DGSUSP	GSUSP	Reports the number of suspends or global lock or change requests denied (QTGSIGLO, QTGSSGLO, QTGSFLSE, QTGSDRTA).				
DGXES	GXES	Reports the number of both l-lock and p-lock lock, change, and unlock requests propagated to MVS XES synchronously (QTGSLSLM, QTGSCSLM, QTGSUSLM, QTGSKIDS).				
DILREQ	ILREQ	Reports the number of requests to the IMS resource lock manager during the sampling period by one of the following types: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Query</td> <td>Change</td> </tr> <tr> <td>Other</td> <td>All requests to the IRLM address space</td> </tr> </table>	Query	Change	Other	All requests to the IRLM address space
Query	Change					
Other	All requests to the IRLM address space					
DIXLOK	IXLOK	Reports the number of index space locks during the sampling period. An index space lock can be one of the following types: <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Shared</td> <td>Shared index space locks that include SHARE, INTENT SHARE, and SHARE with INTENT EXCLUSIVE</td> </tr> <tr> <td>Exclusive</td> <td>Exclusive index space locks that include UPDATE, INTENT EXCLUSIVE, and EXCLUSIVE</td> </tr> </table> <p>If the IXLOK monitor is started without parameters (blank), the reported number is the sum of all index space locks during the sampling period.</p>	Shared	Shared index space locks that include SHARE, INTENT SHARE, and SHARE with INTENT EXCLUSIVE	Exclusive	Exclusive index space locks that include UPDATE, INTENT EXCLUSIVE, and EXCLUSIVE
Shared	Shared index space locks that include SHARE, INTENT SHARE, and SHARE with INTENT EXCLUSIVE					
Exclusive	Exclusive index space locks that include UPDATE, INTENT EXCLUSIVE, and EXCLUSIVE					

Monitors

Table 13. Lock Monitors (Continued)

View Name	Monitor	Description
DLDEAD	LDEAD	Reports the number of lock deadlock failures during the sampling period.
DLESCL	LESCL	<p>Reports the number of lock escalations during the sampling period. A lock escalation can be one of the following types:</p> <p>Shared Shared lock escalations that include SHARE, INTENT SHARE, and SHARE with INTENT EXCLUSIVE</p> <p>Exclusive Exclusive lock escalations that include UPDATE, INTENT EXCLUSIVE, and EXCLUSIVE</p> <p>If the LESCL monitor is started without parameters (blank), the reported number is the sum of all lock escalations during the sampling period.</p>
DLREQ	LREQ	<p>Reports the number of lock or unlock requests during the sampling period.</p> <p>If the LREQ monitor is started without parameters (blank), the reported number is the sum of all lock and unlock requests during the sampling period.</p>
DLSUSP	LSUSP	<p>Reports the number of lock suspensions during the sampling period by one of the following types:</p> <p>Lock suspensions Latch suspensions Other suspensions All suspensions</p>
DLTIME	LTIME	Reports the number of lock timeout failures during the sampling period.
DMXLOK	MXLOK	Reports the maximum number of locks of any kind (page, row, or table) held by a single user during the sampling period.
DPGLOK	PGLOK	<p>Reports the number of page locks during the sampling period. A page lock can be one of the following types:</p> <p>Shared Shared page locks that include SHARE, INTENT SHARE, and SHARE with INTENT EXCLUSIVE</p> <p>Exclusive Exclusive page locks that include UPDATE, INTENT EXCLUSIVE, and EXCLUSIVE</p> <p>If the PGLOK monitor is started without parameters (blank), the reported number is the sum of all page locks during the sampling period.</p>

Table 13. Lock Monitors (Continued)

View Name	Monitor	Description
DTSLOK	TSLOK	<p>Reports the number of table space locks during the sampling period. A table space lock can be one of the following types:</p> <p>Shared Shared table space locks that include SHARE, INTENT SHARE, and SHARE with INTENT EXCLUSIVE</p> <p>Exclusive Exclusive table space locks that include UPDATE, INTENT EXCLUSIVE, and EXCLUSIVE</p> <p>If the TSLOK monitor is started without parameters (blank), the reported number is the sum of all table space locks during the sampling period.</p>
DUSLOK	USLOK	<p>Reports the number of suspended users because of lock conflicts during the sampling period.</p> <p>Lock conflicts are reported by the following attach types:</p> <ul style="list-style-type: none"> • TSO • Batch • CICS • IMS • Utility • Call Attach Facility • Database Access (DDF servers) • Distributed Allied Agent (DDF requestors) • Both Database Access and Distributed Allied Agent • All (blank parameter)

EDM Pool Monitors (Area = EDM)

The monitors listed in Table 14 measure the EDM pool.

Table 14. EDM Pool Monitors

View Name	Monitor	Description
DEDMLD	EDMLD	<p>Reports the average number of EDM page requests per load I/O during the sampling period by one of the following types:</p> <p>Cursor Table (CT) loads Package Table (PT) loads DBD loads All EDM page requests</p>
DEDMDS	EDMDS	<p>Reports the percentage of Data Space pages used by the EDM pool during the sampling period (QISEDFRE / QISEDPGE).</p> <p>(DB2 Release 6.1 and above)</p>
DEDMUT	EDMUT	Reports the percentage of EDM pool pages in use during the sampling period.

Buffer Pool Monitors (Area = BUFR)

The monitors listed in Table 15 measure the buffer pools.

Table 15. Buffer Pool Monitors

View Name	Monitor	Description
DBPUSE	BPUSE	<p>Reports the percentage of buffer pools specified as in use by a thread. The percentage usage is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DBPUTL	BPUTL	<p>Reports the percentage of buffer pool usage. Unavailable buffer pool pages are assessed whether they are in use or being updated. The percentage usage is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools <p>Note: Unavailable pages are sometimes referred to as nonstealable pages. This includes pages currently in use by a thread and those updated but not yet written to disk.</p>
DDESRD	DESRD	<p>Reports the number of pages for which a destructive read was requested during the sampling period.</p>
DDWTX	DWTX	<p>Reports the number of times that a buffer pool Vertical Deferred Write threshold was exceeded during the sampling period (QBSTDWV). When the number of updated pages for a given data set exceeds the Vertical Deferred Write threshold, deferred writes are initiated for that data set.</p> <p>The count of times that the Vertical Deferred Write threshold was exceeded is reported for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DG2WRF	G2WRF	<p>Reports the number of coupling facility requests to write changed pages to the secondary group buffer pool for duplexing that failed due to a lack of storage in the coupling facility during the sampling period (QBGL2F). The count is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools <p>(DB2 Release 6.1 and above)</p>
DGCAST	GCAST	<p>Reports the number of times group buffer pool castout was initiated because the class castout threshold was detected or the group buffer pool castout threshold was detected during the sampling period (QBGLCT, QBGLGT).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DGCTPG	GCTPG	<p>Reports the number of pages cast out from the group buffer pool to DASD during the sampling period (QBGLRC).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DGETPG	GETPG	<p>Reports the number of GETPAGE requests during the sampling period. The number of GETPAGE requests is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DGETRI	GETRI	<p>Reports the average number of GETPAGE requests per read I/O during the sampling period. The average number of GETPAGE requests is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools

Monitors

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DGFAIL	GFAIL	<p>Reports the number of times a castout engine was not available, a coupling facility write engine was not available for coupling facility writes, or coupling facility read or write requests could not complete because of a lack of coupling facility storage resources during the sampling period (QBGLCN, QBGLSU, QBGLRF, QBGLWF).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DGOTHR	GOTHR	<p>Reports the number of other coupling facility requests that are not counted in any of the other QBGL fields during the sampling period (QBGLS).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DGPGWR	GPGWR	<p>Reports the number of changed or clean pages written to the group buffer pool during the sampling period (QBGLSW, QBGLWC, QBGLAW, QBGLAC).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DGRDIN	GRDIN	<p>Reports the number of coupling facility read requests caused by the buffer being marked invalid or the requested page was not found in the buffer pool during the sampling period (QBGLXR, QBGLMR, QBGLAR). Data is not returned from the group buffer pool and a directory entry is created if it does not already exist. This means another DB2 in the group has R/W interest in the page set or partition.</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DGRDNO	GRDNO	<p>Reports the number of coupling facility read requests caused by the buffer being marked invalid or the requested page was not found in the buffer pool during the sampling period (QBGLXN, QBGLMN, QBGLAN). Data is not returned from the group buffer pool and no directory entry is created for this page. This means no other DB2 in the group has R/W interest in the page set or partition.</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DGRDRQ	GRDRQ	<p>Reports the number of coupling facility read requests with data returned during the sampling period (QBGLXD, QBGLMD, QBGLAD).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DHPRDF	HPRDF	<p>Reports the number of read page request failures because the backing expanded store was stolen (castout=yes) or some other error occurred during the sampling period (QBSTHRF + QBSTARF).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DHPVPA	HPVPA	<p>Reports the number of successful asynchronous page moves from the hiperpool to the virtual buffer pool during the sampling interval (QBSTHRA + QBSTARA).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools

Monitors

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DHPVPS	HPVPS	<p>Reports the number of successful synchronous reads to move a page from a hiperpool to a virtual buffer pool during the sampling period (QBSTHRE).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DHPWRF	HPWRF	<p>Reports the number of write page request failures because the backing expanded store was stolen (castout=yes) or some other error occurred during the sampling period (QBSTHWF + QBSTAWF).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DLSTPF	LSTPF	<p>Reports the number of buffer pool list prefetch requests during the sampling period (QBSTLPF). If the monitor is started without a buffer pool ID, the sum of prefetch requests for all active buffer pools are reported.</p>
DMAXPF	MAXPF	<p>Reports the maximum number of concurrent prefetch I/O streams allocated for parallel processing queries during the sampling interval (QBSTXIS).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DMIAPF	MIAPF	<p>Reports the number of RID list processing failures that occurred during the sampling period. List processing failures are attributed to SQL routines that EXPLAIN indicates will use multi-index access paths, but fail to do so at run-time because storage limits or RID thresholds are exceeded.</p>
DMIGDS	MIGDS	<p>Reports the number of data sets that migrated from a buffer pool during the sampling period.</p> <p>DMIGDS shows the number of migrated data sets for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DPFDIO	PFDIO	<p>Reports the number of asynchronous read I/Os because of a dynamic prefetch during the sampling period (QBSTDIO).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPFDPG	PFDPG	<p>Reports the number of asynchronous page reads because of a dynamic prefetch during the sampling period (QBSTDPP).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPFDRQ	PFDRQ	<p>Reports the number of dynamic prefetch requests during the sampling interval (QBSTDPF).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPFIOF	PFIOF	<p>Reports the number of prefetch I/O stream request failures because of buffer storage shortages during the sampling period (QBSTJIS).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools

Monitors

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DPFLIO	PFLIO	<p>Reports the number of asynchronous read I/Os caused by list prefetch to a buffer pool during the sampling period (QBSTLIO).</p> <p>The count of asynchronous read I/Os caused by a list prefetch is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPFLPG	PFLPG	<p>Reports the number of asynchronous page reads resulting from a list prefetch during the sampling period (QBSTLPP).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPFLRQ	PFLRQ	<p>Reports the number of list prefetch requests during the sampling period (QBSTLPF). The number of list prefetch requests is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DPFSIO	PFSIO	<p>Reports the number of asynchronous read I/Os caused by sequential prefetch during the sampling period (QBSTPIO).</p> <p>The number of asynchronous read I/Os is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DPFSPG	PFSPG	<p>Reports the number of asynchronous page reads caused by sequential prefetch during the sampling period (QBSTSP). This count is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DPFSRQ	PFSRQ	<p>Reports the number of sequential prefetch requests for a buffer pool during the sampling period (QBSTSEQ).</p> <p>The number of sequential prefetch requests is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DPFTIO	PFTIO	<p>Reports the number of asynchronous read I/Os caused by prefetch during the sampling period. The count is calculated as the sum (QBSTPIO + QBSTLIO + QBSTDIO).</p> <p>The count of asynchronous read I/Os caused by prefetch is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPFTPG	PFTPG	<p>Reports the number of total asynchronous page reads caused by prefetch during the sampling period. The count is calculated as the sum (QBSTSPP + QBSTLPP + QBSTDPP).</p> <p>The count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPFTRQ	PFTRQ	<p>Reports the number of total prefetch requests from an active buffer pool during the sampling period. The count is calculated as the sum (QBSTSEQ + QBSLTLPF + QBSTDPF).</p> <p>The count of total prefetch requests is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools

Monitors

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DPPIO	PIO	<p>Reports the number of prefetch read I/Os that occurred during the sampling period. The number of prefetch read I/Os are shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DPRL12	PRL12	<p>Reports the number of times that a prefetch quantity is reduced from normal to one-half during the sampling period (QBSTPL1).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPRL14	PRL14	<p>Reports the number of times that a prefetch quantity is reduced from one-half of normal to one-quarter during the sampling period (QBSTPL2).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPRLGF	PRLGF	<p>Reports the number of times that a conditional GETPAGE request cannot be satisfied from a buffer pool during the sampling period (QBSTNGT).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPRLQ	PRLQ	<p>Reports the number of parallel processing requests in the buffer pool during the sampling period (QBSTPQO).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DPRLQF	PRLQF	<p>Reports the number of times that DB2 cannot allocate the requested number of buffer pages to allow a parallel group to run to the planned degree during the sampling period (QBSTPQF).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DPWS	PWS	<p>Reports the number of database system pages that were written during the sampling period. The number of written database system pages is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DPWSWI	PWSWI	<p>Reports the average number of system pages written per write I/O during the sampling period. The average number of written system pages for each write I/O is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DRIDUT	RIDUT	<p>Reports the percentage of RID control blocks in use during the sampling period. The percentage is calculated as the number of used RID blocks divided by the total number of available RID blocks.</p>
DRIO	RIO	<p>Reports the number of media manager read I/O requests during the sampling period. The counts are either a GETPAGE request or a multiple page request for a prefetch function. The number of media manager read I/O requests is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools

Monitors

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DRTO	RTO	Shows the number of HSM recall timeouts that occurred during the sampling period. The number of HSM recall timeouts are shown for one of the following buffer pools: <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DRWP	RWP	Reports the number of reads with paging during the sampling period. The reported value is the number of times a buffer did not have real storage frame backing when being PAGEFIXed to perform a read I/O. The count is shown for one of the following buffer pools: <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DSEQIO	SEQIO	Reports the number of synchronous read I/Os issued by sequential access requesters in the sampling period (QBSTSIO). A synchronous read I/O occurs as a result of a disabled prefetch or when the requested pages are not consecutive. <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DSEQPG	SEQPG	Reports the number of GETPAGE requests issued by sequential access requesters during the sampling period (QBSTSGT). <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DSWS	SWS	Reports the number of system updates (SWS) during the sampling period. The count increments by one each time a row in a database system page is updated. The number of system updates is shown for one of the following buffer pools: <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DSWSPW	SWSPW	<p>Reports the average number of updates for each system page written during the sampling period. The average number of updates for each system page is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DWIO	WIO	<p>Reports the number of media manager write I/O requests during the sampling period. Requests can batch-write I/O to allow multiple pages to be written per a single call to the media manager. The number of media manager write I/O requests is shown for one of the following buffer pools:</p> <ul style="list-style-type: none"> • BP0-BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K-BP32K9 • All active pools
DWKMAX	WKMAX	<p>Reports the maximum number of work files in use during merge processing in the sampling period (QBSTWFM).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools
DWKNBF	WKNBF	<p>Reports the number of work files that cannot be created because of insufficient buffer resources during the sampling period (QBSTMAX).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none"> • BP0 through BP49 • BP8K-BP8K9 • BP16K-BP16K9 • BP32K through BP32K9 • All active buffer pools

Monitors

Table 15. Buffer Pool Monitors (Continued)

View Name	Monitor	Description
DWKPFZ	WKPFZ	<p>Reports the number of work file sequential prefetches that did not occur because the dynamic prefetch quantity is zero during the sampling period (QBSTWKPD).</p> <p>This count is shown for the following buffer pools:</p> <ul style="list-style-type: none">• BP0 through BP49• BP8K-BP8K9• BP16K-BP16K9• BP32K through BP32K9• All active buffer pools
DWWP	WWP	<p>Reports the number of writes with paging during the sampling period. The reported value is the number of times a buffer did not have real storage frame backing when being PAGEFIXed to perform a write I/O. The count is shown for one of the following buffer pools:</p> <ul style="list-style-type: none">• BP0-BP49• BP8K-BP8K9• BP16K-BP16K9• BP32K-BP32K9• All active pools

Log Monitors (Area = LOG)

The monitors listed in Table 16 measure logging activity.

Table 16. Log Monitors

View Name	Monitor	Description
DARCDL	ARCDL	Reports the number of read accesses delayed because of unavailable resources during the sampling period.
DARCRA	ARCRA	Reports the number of read archive logs allocated during a sampling interval. Read archive logs are allocated when backout or recovery data requests cannot be satisfied from the log buffers or from the active log.
DARCTC	ARCTC	Reports the number of read accesses delayed because of tape mount contention during the sampling period.
DARCTM	ARCTM	Reports the number of look-ahead tape mount requests that occurred during the sampling period.
DARCWA	ARCWA	Reports the number of archive logs allocated as a result of an active log data set being archived during the sampling period.
DARCWR	ARCWR	Reports the number of control intervals (CIs) that are archived during the sampling period.
DBSDSA	BSDSA	Reports the number of accesses to the Bootstrap Data Set (BSDS) during the sampling period.
DCHKPT	CHKPT	Reports the number of DB2 checkpoints taken during the sampling interval.
DCKPFR	CHKPT	<p>Reports the number of DB2 checkpoints taken during the sampling interval. The purpose of this monitor is to report that fewer than the specified number of checkpoints have occurred in the specified time interval.</p> <p>Suggested values to start this monitor are:</p> <ul style="list-style-type: none"> • An interval of 20 minutes • A value of less than 1 <p>For example: INTERVAL=20: 00 WWAL=<1</p> <p>In this example, the message will be issued if no checkpoints occur in a twenty minute interval.</p>
DLOGRD	LOGRD	Reports the number of log reads for backout or recovery during the sampling period. The number is the sum of log reads satisfied from active log buffers, log data sets, archive logs, or from other sources.
DLOGUT	LOGUT	Reports the percentage of log CIs in use during the sampling interval.
DLOGWR	LOGWR	Reports the number of log write requests during the sampling interval. The reported number of log write requests can be selected as either FORCE, NOWAIT, or the total of all requests.
DLOGWT	LOGWT	Reports the number of log request waits because log buffers were unavailable during the sampling period.

Monitors

MVS Services (Area = DMVS)

The monitors listed in Table 17 measure MVS activities that may affect DB2 performance.

Table 17. MVS Services

View Name	Monitor	Description
DCSAPG	CSAPG	Reports the total number of page requests to the common storage area (CSA) during the sampling period.
DCSAP	CSAP	Reports the percent usage of CSA during the sampling period. CSA percent usage is calculated with the following formula: $100 * \frac{((\text{Total CSA}) - (\text{Space described by FBQEs in CSA}))}{(\text{Total CSA})}$
DDB2DP	DB2DP	Reports the number of page-in requests for the MVS image or by the specified address spaces listed below: <ul style="list-style-type: none">• IMS Resource Lock Manager address space• DB2 System Service address space• DB2 Database Service address space• DDF address space plus the three address spaces listed above• DDF address space only• Total page-in requests for the MVS image
DECSAP	ECSAP	Reports the extended CSA percent usage during the sampling interval. Extended CSA percent usage is calculated with the following formula: $100 * \frac{((\text{Total ECSA}) - (\text{Space described by FBQEs in ECSA}))}{(\text{Total ECSA})}$

DDF Monitors (Area = DDF)

The monitors listed in Table 18 measure activity in the DB2 Distributed Data Facility address space.

Table 18. DDF Monitors

View Name	Monitor	Description
DCNVLM	CNVLM	Reports the number of conversations that are deallocated because the ZPARM limit was reached for maximum concurrent threads during a sampling interval (QDSTQCRT).
DDBATQ	DBATQ	<p>Reports the number of DBATs queued because the MAXDBAT limit was reached during the sampling period (QDSTQDBT, QDSTQIN2). The reported value can be for the following type:</p> <p>NEW Number of times that a new Database Access Thread (DBAT) was queued because it reached the ZPARM maximum for active remote threads (QDSTQDBT)</p> <p>If the DBATQ monitor is started without parameters (blank), the reported value is the number of times that a new or reactivated type 2 DBAT was queued because it reached the ZPARM maximum for active remote threads during the sampling period.</p> <p>For DB2 Release 5.1, this value is the same as for the NEW parameter (QDSTQDBT).</p> <p>For DB2 Release 6.1 and above, this value indicates the number of queued receive requests for a type 2 inactive thread, plus the number of queued requests for new connections. These requests were received after the maximum number of remote active threads was reached (ZPARM MAXDBAT) (QDSTQIN2).</p> <p>(DB2 Release 5.1 and above)</p>
DDDFBS	DDFBS	Reports the total bytes sent from the monitor target to all remote locations or to specified locations during the sampling period.
DDDFBR	DDFBR	Reports the total bytes received at the monitor target location from all remote locations or from specified locations during the sampling period.
DDDFCQ	DDFCQ	Reports the number of queued conversations because the session limit has been reached for all LUs or for specified LUs during a sampling interval.
DDDF1	DDFT1	<p>Reports the number of connections that were terminated instead of made type 1 inactive because the maximum number of type 1 inactive threads was reached during the sampling period (QDSTNITC).</p> <p>(DB2 Release 6.1 and above)</p>
DNACTC	NACTC	Reports the number of inactive database access threads during a sampling period (QDSTQCIT).

Monitors

Table 18. DDF Monitors (Continued)

View Name	Monitor	Description
DP2CON	P2CON	Reports the number of connections with two-phase commit operations (QDSTQCIT + QDSTWSTR), cold started connections (QDSTCSTR), and warm started connections (QDSTWSTR) during a sampling interval.
DP2RSY	P2RSY	Reports the number of resynchronization connections attempted with all remote locations for two-phase commit operations (QDSTRSAT), successful attempts (QDSTRSSU), and unsuccessful attempts (QDSTRSAT - QDSTRSSU) during a sampling period.
DP2RMT	P2RMT	Reports the number of operations that have the remote location as the coordinator or for all remote locations during the specified time interval (QLSTINDT + QLSTCPTR + QLSTRBTR).
DP2RMI	P2RMI	Reports the number of threads that became INDOUBT that have the remote location as the coordinator or for all remote locations during the specified time interval (QLSTINDT).
DP2RMC	P2RMC	Reports the number of COMMIT operations that have the specified location as the coordinator or for all remote locations during the specified time interval (QLSTCPTR).
DP2RMR	P2RMR	Reports the number of ROLLBACK operations that have the specified locations as the coordinator or for all remote locations during the specified time interval (QLSTRBTR).

DB2 Workload Monitors

This section describes the views and monitors that provide performance plot displays about DB2 workloads.

SQL Monitors (Area = WKLD)

The monitors listed in Table 19 measure the number and type of SQL calls made.

Table 19. SQL Monitors

View Name	Monitor	Description
D#SQLD	#SQLD	Reports the number of Data Definition Language statements (CREATE, ALTER, DROP) during the sampling period (QXCRTAB + QXCRINX + QXCTABS + QXCRSYN + QXCRDAB + QXCRSTG + QXDEFVU + QXDRPIX + QXDRPTA + QXDRPTS + QXDRPDB + QXDRPSY + QXDRPST + QXDRPVU + QXALTST + QXFETCH + QXALTTS + QXALTTA + QXALTIX + QXDRPAL + QXCRALS + QXALDAB + QXDRPPKG).
D#SQLM	#SQLM	Reports the number of data manipulative SQL statements issued by a transaction (SELECT, INSERT, UPDATE, DELETE, PREPARE, OPEN, CLOSE, FETCH) during the sampling period (QXSELECT + QXFETCH + QXINSRT + QXDELET + QXUPDTE + QXOPEN + QXCLOSE + QXPREP).
D#SQLA	#SQLA	Reports the number of SQL administrative statements issued by a transaction during the sampling period. This includes <ul style="list-style-type: none"> • LOCK TABLE • COMMENT • LABEL • GRANT • REVOKE • SET CURRENT SQL ID • SET CONNECTION • SET CURRENT DEGREE • CONNECT • RELEASE • SET CURRENT RULES (DB2 Release 4.1 and above) (QXCMTON + QXLOCK + QXGRANT + QXREVOK + QXLABON + QXSETSQL + QXCON1 + QXCON2 + QXREL + QXSETCON + QXSETCDG + QXSETCRL).
D#SQLC	#SQLC	Reports the number of SQL statements per commit point (SELECT, FETCH, INSERT, DELETE, UPDATE) during the sampling period (QXSELECT + QXFETCH + QXINSRT + QXDELET + QXUPDTE).
D#DYN	#DYN	Reports the number of dynamic SQL statements (PREPARE) during the sampling period (QXPREP).
D#CALL	#CALL	Reports the number of stored procedure calls during the sampling period (QXCALL).

Monitors

Table 19. SQL Monitors (Continued)

View Name	Monitor	Description
D#SPRC	#SPRC	Reports the number of stored procedures executed during the sampling period (QXCALL, QXCALLAB, QXCALLTO, QXCALLRJ).
D#REOP	#REOP	Reports the number of times that reoptimization for host variables occurred during the sampling period (QXSTREOP). (DB2 Release 5.1 and above)

CPU Usage Monitors (Area = WKLD)

The monitors listed in Table 20 measure the use of CPU time by a transaction.

Table 20. CPU Usage Monitors

View Name	Monitor	Description
D@CPU	@CPU	Reports the average CPU time used by a transaction during the sampling period (QWACSPCP + QWACEJST - QWACBJST).
D@CPUD	@CPUD	Reports the average CPU time in DB2 used by a transaction during the sampling period (QWACAJST + QWACSPPT).

Transaction Usage Monitor (Area = WKLD)

The monitor listed in Table 21 measures the amount of DB2 transactions processed.

Table 21. Transaction Workload Monitor

View Name	Monitor	Description
D#PROC	#PROC	Reports the number of processed DB2 transactions during the sampling period. A transaction is equivalent to a DB2 accounting record.

Buffer Usage Monitors (Area = WKLD)

The monitors listed in Table 22 measure the amount of buffer usage activity.

Table 22. Buffer Usage Monitors

View Name	Monitor	Description
D#GETP	#GETP	Reports the number of GETPAGE requests in the buffer pools during the sampling period (QBACGET).
D#UPDP	#UPDP	Reports the number of update page requests in the buffer pool during the sampling period (QBACSWU).
D#RDIO	#RDIO	Reports the number of synchronous read I/O requests processed during the sampling period (QBACRIO).
D#PFRD	#PFRD	Reports the number of prefetch read requests processed during the sampling period.
D#WRIT	#WRIT	Reports the number of Write Immediate I/O requests processed during the sampling period (QBACIMW).
D#PFRQ	#PFRQ	Reports the number of prefetch requests processed (sequential, list, dynamic) during the sampling period (QBACSEQ + QBACLPF + QBACDPF).
D#PFIO	#PFIO	Reports the number of prefetch I/O requests processed during the sampling period (QBACRIO).
D#PFPG	#PFPG	Reports the number of prefetch I/O pages read during the sampling period (QBACRIO).
D#GETF	#GETF	Reports the number of conditional GETPAGE failures in the buffer pools during the sampling period (QBACNGT).
D#HPVS	#HPVS	Reports the number of successful synchronous reads to move a page from a hiperpool to a virtual buffer pool during the sampling period (QBACHRE).
D#HPPG	#HPPG	Reports the number of pages found in a hiperpool and moved to a virtual buffer pool because of a prefetch under control of the agent during the sampling period (QBACHPG).
D#GSRD	#GSRD	Reports the number of coupling facility read requests because of the buffer being marked invalid or the requested page not found in the buffer pool during the sampling period (QBGAXD, QBGAXR, QBGAXN, QBGAMD, QBGAMR, QBGAMN).
D#GSWR	#GSWR	Reports the number of changed pages written to the group buffer pool during the sampling period (QBGASW).
D#GSWC	#GSWC	Reports the number of clean pages written to the group buffer pool during the sampling period (QBGAWC).

Lock Usage Monitors (Area = WKLD)

The monitors listed in Table 23 measure lock activity and contention.

Table 23. Lock Usage Monitors

View Name	Monitor	Description
D#DDLK	#DDLK	Reports the number of deadlock conditions detected during the sampling period (QTXADEA).
D#TMO	#TMO	Reports the number of times the transaction timed out waiting for a lock or latch during the sampling period (QTXATIM).
D#SUSP	#SUSP	Reports the number of times the transaction was suspended for a lock or latch during the sampling period (QTXASLOC).
D#ESCL	#ESCL	Reports the number of lock escalations that occurred during the sampling period (QTXALES + QTXALEX).
D#MAXL	#MAXL	Reports the maximum number of locks held by a transaction during the sampling period (QTXANPL).
D#CLMF	#CLMF	Reports the number of claim request failures detected during the sampling period (QTXACLUN).
D#DRNF	#DRNF	Reports the number of drain request failures detected during the sampling period (QTXADRUN).
D#GSUS	#GSUS	Reports the number of suspensions because of global resource contention during the sampling period (QTGAIGLO, QTGASGLO, QTGAFLSE).
D#GFAL	#GFAL	Reports the number of suspensions caused by false contentions during the sampling period (QTGAFLSE).
D#GRTA	#GRTA	Reports the number of global lock or change requests denied because of an incompatible retained lock during the sampling period (QTGADRTA).
D#GLRQ	#GLRQ	Reports the number of lock requests for p-locks during the sampling period (QTGALPLK).
D#GLKX	#GLKX	Reports the number of both l-lock and p-lock requests propagated to MVS XES synchronously during the sampling period (QTGALSLM).
D#GNTS	#GNTS	Reports the number of notify messages sent during the sampling period (QTGANTFY).

Elapsed Time Monitors (Area = WKLD)

The monitors listed in Table 24 measure elapsed time for a transaction, DB2 processing, I/O operations, or lock or latch waits.

Table 24. Elapsed Time Monitors

View Name	Monitor	Description
D@ELAP	@ELAP	Reports the average elapsed time for a transaction during the sampling period (QWACESC - QWACBSC).
D@ELTM	@ELTM	Reports the elapsed time for transactions that occur within DB2 targets defined as part of a MAINVIEW for DB2 workload during the sampling period. Note: This monitor is automatically invoked when a DB2 workload is started.
D@ELPD	@ELPD	Reports the average elapsed time in DB2 processing during the sampling period (QWACASC).
D@ELTD	@ELTD	Reports the elapsed time for DB2 transactions that occur within targets defined as part of a MAINVIEW for DB2 workload during the sampling period. Note: This monitor is automatically invoked when a DB2 workload is started.
D@ELP3	@ELP3	Reports the average elapsed time spent waiting for all accounting class 3 reasons during the sampling period (QWACCAST, QWACAWTG, QWACAWTJ, QWACAWTI, QWACAWTL, QWACAWDR, QWACAWCL, QWACAWTP) (QWACAWTR).
D@ELIO	@ELIO	Reports the average elapsed time doing I/O operations during the sampling period (QWACAWTI).
D@ELLK	@ELLK	Reports the average elapsed time the transaction spent waiting for locks or latches in DB2 during the sampling period (QWACAWTL + QWACAWDR + QWACAWCL + QWACAWTP).
D@ELPR	@ELPR	Reports the average elapsed time spent processing prefetch reads during the sampling period (QWACAWTR).
D@ELDR	@ELDR	Reports the average elapsed time the transaction spent waiting for drain during the sampling period (QWACAWDR).
D@ELCL	@ELCL	Reports the average elapsed time the transaction spent waiting for claim during the sampling period (QWACAWCL).
D@ELPL	@ELPL	Reports the average elapsed time the transaction spent waiting for page latch during the sampling period (QWACAWTP).
D@ELSP	@ELSP	Reports the average elapsed time spent waiting for an available TCB before the stored procedure could be scheduled during the sampling period (QWACCAST).

Monitors

Table 24. Elapsed Time Monitors (Continued)

View Name	Monitor	Description
D@ELGM	@ELGM	Reports the average elapsed wait time caused by suspension for sending messages to other members in the data sharing group during the sampling period (QWACAWTG).
D@ELGL	@ELGL	Reports the average elapsed wait time caused by suspension of an IRLM lock request due to global lock contention that requires inter-system communication to resolve during the sampling period (QWACAWTJ).

I/O Parallelism Monitors (Area = WKLD)

The monitors listed in Table 25 measure the amount of parallel I/O for a transaction.

Table 25. I/O Parallelism Monitors

View Name	Monitor	Description
D#PRLG	#PRLG	Reports the total number of parallel groups executed during the sampling period (QXTOTGRP).
D#PRLR	#PRLR	Reports the number of parallel groups executed to a degree less than planned due to storage shortage or buffer pool contention during the sampling period (QXREDGRP).
D#PRLF	#PRLF	Reports the number of parallel groups that fell back to sequential operation during the sampling period due to <ul style="list-style-type: none"> • Ambiguous cursor • Lack of ESA SORT support • Storage shortage or buffer pool contention • Unavailable MVS/ESA enclave services (DB2 Release 4.1 and above) • Query Parallelism disabled by the RLF (DB2 Release 4.1 and above) (QXDEG CUR + QXDEGES A + QXDEGBUF + QXDEGENC + QXRLFDPA).
D#PRLS	#PRLS	Reports the number of sysplex query failures during the sampling period (QXCOORNO + QXISORR + QXC SKIP). (DB2 Release 5.1 and above)

Part 4. Appendixes/Glossary

This part gives information about data found in views.

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Appendix A. Lock Type Table

Table 26 defines the possible lock types and resources for the lock-related detail trace events:

- Detail logical lock - IFCID 21
- Lock Suspension - IFCID 44/45
- Deadlock - IFCID 172
- Timeout - IFCID 196
- Detail physical locks (P-Locks) - IFCIDs 251, 259

Table 26. Lock Types

Lock Type (short)	Lock Type (long)	Resource Name	Resource Number (hex)
ALTER BP	ALTER BUFFERPOOL	BP = bpid	
BINDLOCK	AUTOBIND/REMOTE BIND	BINDLOCK	
CATM CAT	CATMAINT CONVERT CATALOG	DB = database OB = pageset	
CATM DIR	CATMAINT CONVERT DIRECTORY	DB = database OB = pageset	
CATM MIG	CATMAINT MIGRATION	DB = database OB = pageset	
CDB PLOK	CDB P-LOCK (DDF)	DB = database	
COLLECTN	COLLECTION	Collection ID	
CS-DRAIN	CURSOR STABILITY DRAIN	DB = database OB = pageset	Part# / 0
DATABASE	DATABASE	DB = database	
DATAPAGE	DATA PAGE	DB = database OB = pageset	Page#
DBALLOC	DBALLOC - START/STOP	DB = database OB = pageset	Part# / 0
DBCMDSER	DB CMD SERIAL	DB = database	
DBD PLOK	DBD P-LOCK	DB = database	
GBP CAST	GROUP BP CASTOUT P-LOCK	BP = bpid	
GP EX UP	GROUP DB EXCEPTION UPDATE	DX = GDBET	
GROUP BP	GROUP BP START/STOP	BP = bpid	
HASH-ANC	HASH ANCHOR	DB = database OB = pageset	Page# Anchor

Table 26. Lock Types (Continued)

Lock Type (short)	Lock Type (long)	Resource Name	Resource Number (hex)
INDEXPAG	INDEX PAGE (# = x'000002FF', index root page)	DB = database OB = pageset	Page# Subpage#
IX EOF	INDEX END-OF-FILE	DB = database OB = pageset	Part# / 0
IXTREEPL	INDEX MANAGER TREE P-LOCK	BP = bpid DB = database OB = pageset	
LPL/GREC	LPL/GRECP DB EXCEPTION	DB = database OB = pageset	Part# / 0
MASSDEL	MASS DELETE	DB = database OB = pageset	
OPEN	OPEN PAGESET / DATASET	DB = database OB = pageset	
PAGE PLK	PAGE P-LOCK	BP = bpid DB = database OB = pageset	Part# / 0 Page#
PAGESET	PAGE SET	DB = database OB = pageset	
PART-DS	PARTITIONED DATASET	DB = database OB = pageset	Part#
PARTLOCK	PARTITION LOCKING	DB = database OB = pageset	Part#
P/P CAST	PAGESET/PARTITION CASTOUT PLOCK	BP = bpid DB = database OB = pageset	Part# / 0
P/P PLOCK	PAGESET/PARTITION P-LOCK	BP = bpid DB = database OB = pageset	Part# / 0
REPR DBD	REPAIR DBD TEST/DIAGNOSE	DB = database OB = pageset	
RLF PLOCK	RLF P-LOCK	DB = database OB = pageset	
ROW	ROW	DB = database OB = pageset	Page# RID
RR-DRAIN	REPEATABLE READ DRAIN	DB = database OB = pageset	Part# / 0
SCA ACC	SCA ACCESS - RESTART/REDO	SC = BMC-RSTP	
SERVICE	SERVICEABILITY	(not identified)	

Table 26. Lock Types (Continued)

Lock Type (short)	Lock Type (long)	Resource Name	Resource Number (hex)
SKCT	SKELETON CURSOR TABLE	PL = planname	
SKPT	SKELETON PACKAGE TABLE	PK = Collection, package, token	
SYSLGRNG	SYSLGRNG RECORDING	DB = database OB = pageset	
TABLE	TABLE	DB = database OB = pageset	
UTIL EXC	UTILITY EXCLUSIVE EXECUTION	UTEXEC	
UTILSER	UTILITY SERIALIZATION	UTSERIAL	
UTILUID	UTILITY UID	UI = utility ID	
WR-DRAIN	WRITE DRAIN	DB = database OB = pageset	Part# / 0

- Page# is 0 for unlocks.
- P-Locks do not cause timeouts or deadlocks, so do not appear for these events.

Appendix B. View Conventions

This appendix describes MAINVIEW conventions used to display numeric and graphic data in views. These conventions are adhered to by all BMC MAINVIEW products.

Numeric Values

If a number fits within the column width of a field, it is displayed in its entirety. When a number exceeds the column width of a field, MAINVIEW attempts to fit the number by several methods. The following list shows the methods in the order in which they are employed to fit a number within a field's column width:

1. Insignificant low-order decimal values are rounded.
2. Low-order digits are truncated. Decimal numbers are converted to integers if necessary.
3. Numbers are expressed in powers of 1000 using the following notation:

- K** Kilo (1000)
- M** Mega (1,000,000)
- G** Giga (1,000,000,000)
- T** Terra (1,000,000,000,000)

If a number is still too large to display within the field width, asterisks (*) appear in the field to indicate the numeric value is too large to display.

Graph Values

A value within the lower and upper boundaries of a graph is displayed as a horizontal bar. Depending upon the display terminal, the magnitude of the graphed value may be depicted as a high-resolution horizontal bar or simply keyboard characters in the case of low-resolution terminals.

A value exceeding an upper graph boundary has a plus sign (+) to indicate the horizontal bar has been truncated at the upper boundary limit. The example below shows a value exceeding the 100% upper boundary limit of a graph displayed on a low-resolution terminal.

W1 =DSOVER=====DB2G=====*=====17MAY2000==15: 02: 38====MVDB2=====83							
CMD	Serv	Parm	Avg % Warning	Avg	Avg	Area	Count
---	---	---	0 50 . . 100	Val ue--	Warni ng-	---	---
	ECSAP		108.6 *****+	76.00	70.00	DMVS	1

Glossary

This glossary defines BMC Software terminology. Other dictionaries and glossaries may be used in conjunction with this glossary.

Since this glossary pertains to BMC Software-related products, some of the terms defined may not appear in this book.

To help you find the information you need, this glossary uses the following cross-references:

Contrast with	Indicates a term that has a contrary or contradictory meaning.
See	Indicates an entry that is a synonym or contains expanded information.
See also	Indicates an entry that contains related information.

A

action. Defined operation, such as modifying a MAINVIEW window, that is performed in response to a command. See *object*.

active window. Any MAINVIEW window in which data can be refreshed. See *alternate window*, *current window*, *window*.

administrative view. Display from which a product's management tasks are performed, such as the DSLIST view for managing historical data sets. See *view*.

ALT WIN field. Input field that allows you to specify the window identifier for an alternate window where the results of a hyperlink are displayed. See *alternate window*.

Alternate Access. See *MAINVIEW Alternate Access*.

alternate form. View requested through the FORM command that changes the format of a previously displayed view to show related information. See also *form*, *query*.

alternate window. (1) Window that is specifically selected to display the results of a hyperlink. (2) Window whose identifier is defined to the ALT WIN field. Contrast with *current window*. See *active window*, *window*, *ALT WIN field*.

analyzer. (1) Online display that presents a snapshot of status and activity data and indicates problem areas. (2) Component of CMF MONITOR. See *CMF MONITOR Analyzer*.

application. (1) Program that performs a specific set of tasks within a MAINVIEW product. (2) In MAINVIEW VistaPoint, combination of workloads to enable display of their transaction performance data in a single view.

application trace. See *trace*.

ASCH workload. Workload comprising Advanced Program-to-Program Communication (APPC) address spaces.

AutoCustomization. Online facility for customizing the installation of products. AutoCustomization provides an ISPF panel interface that both presents customization steps in sequence and provides current status information about the progress of the installation.

automatic screen update. Usage mode wherein the currently displayed screen is refreshed automatically with new data at an interval you specify. Invoked by the ASU command.

AutoOPERATOR. MAINVIEW product that uses tools, techniques, and facilities to automate routine operator tasks and provide online performance monitoring, and that achieves high availability through error minimization, improved productivity, and problem prediction and prevention.

B

batch workload. Workload consisting of address spaces running batch jobs.

BBI. Basic architecture that distributes work between workstations and multiple MVS targets for BMC Software MAINVIEW products.

BBI-SS PAS. See *BBI subsystem product address space*.

BBI subsystem product address space (BBI-SS PAS).

MVS subsystem address space that manages communication between local and remote systems and that contains one or more of the following products:

- AutoOPERATOR
- MAINVIEW for CICS
- MAINVIEW for DB2
- MAINVIEW for DBCTL
- MAINVIEW for IMS
- Command MQ for S/390
- MAINVIEW VistaPoint (for CICS, DB2, and IMS workloads)

BBPARM. See *parameter library*.

BBPROC. See *procedure library*.

BBPROF. See *profile library*.

BBSAMP. See *sample library*.

BBV. See *MAINVIEW Alternate Access*.

BBXS. BMC Software Subsystem Services. Common set of service routines loaded into common storage and used by several BMC Software MAINVIEW products.

border. Visual indication of the boundaries of a window.

bottleneck analysis. Process of determining which resources have insufficient capacity to provide acceptable service levels and that therefore can cause performance problems.

C

CAS. Coordinating address space. One of the address spaces used by the MAINVIEW windows environment architecture. The CAS supplies common services and enables communication between linked systems. Each MVS image requires a separate CAS. Cross-system communication is established through the CAS using VTAM and XCF communication links.

CFMON. See *coupling facility monitoring*.

chart. Display format for graphical data. See also *graph*.

CICSplex. User-defined set of one or more CICS systems that are controlled and managed as a single functional entity.

CMF MONITOR. Comprehensive Management Facility MONITOR. Product that measures and reports on all critical system resources, such as CPU, channel, and device usage; memory, paging, and swapping activity; and workload performance.

CMF MONITOR Analyzer. Batch component of CMF MONITOR that reads the SMF user and 70 series records created by the CMF MONITOR Extractor and/or the RMF Extractor and formats them into printed system performance reports.

CMF MONITOR Extractor. Component of CMF that collects performance statistics for CMF MONITOR Analyzer, CMF MONITOR Online, MAINVIEW for MVS, and RMF postprocessor. See *CMF MONITOR Analyzer*, *CMF MONITOR Online*, *MAINVIEW for MVS*.

CMF MONITOR Online. Component of CMF that uses the MAINVIEW window interface to present data on all address spaces, their use of various system resources, and the delays that each address space incurs while waiting for access to these resources. See *CMF MONITOR*, *MAINVIEW for MVS*.

CMF Type 79 API. Application programming interface, provided by CMF, that provides access to MAINVIEW SMF-type 79 records.

CMFMON. Component of CMF MONITOR that simplifies online retrieval of information about system hardware and application performance and creates MAINVIEW SMF-type 79 records.

The CMFMON *online facility* can be used to view data in one or more formatted screens.

The CMFMON *write facility* can be used to write collected data as MAINVIEW SMF-type 79 records to an SMF or sequential data set.

CMRDETL. MAINVIEW for CICS data set that stores detail transaction records (type 6E) and abend records (type 6D). Detail records are logged for each successful transaction. Abend records are written when an abend occurs. Both records have the same format when stored on CMRDETL.

CMRSTAT. MAINVIEW for CICS data set that stores both CICS operational statistic records, at 5-minute intervals, and other records, at intervals defined by parameters specified during customization (using CMRSOPT).

column. Vertical component of a view or display, typically containing fields of the same type of information, that varies by the objects associated in each row.

collection interval. Length of time data is collected. See also *delta mode*, *total mode*.

command delimiter. Special character, usually a ; (semicolon), used to stack commands typed concurrently on the COMMAND line for sequential execution.

COMMAND line. Line in the control area of the display screen where primary commands can be typed. Contrast with *line command column*.

Command MQ Automation D/S. Command MQ agents, which provide local proactive monitoring for both MQSeries and MSMQ (Microsoft message queue manager). The Command MQ agents operate at the local node level where they continue to perform functions regardless of the availability of the MQM (message queue manager) network. Functionality includes automatic monitoring and restarts of channels, queue managers, queues and command servers. In cases where automated recovery is not possible, the agents transport critical alert information to a central console.

Command MQ Automation S/390. Command MQ component, which monitors the MQM (message queue manager) networks and intercedes to perform corrective actions when problems arise. Solutions include:

- Dead-Letter Queue management
- System Queue Archival
- Service Interval Performance solutions
- Channel Availability

These solutions help ensure immediate relief to some of the most pressing MQM operations and performance problems.

Command MQ for D/S. Command MQ for D/S utilizes a true client/server architecture and employs resident agents to provide configuration, administration, performance monitoring and operations management for the MQM (message queue manager) network.

Command MQ for S/390. Delivers comprehensive capabilities for configuration, administration, performance monitoring and operations management for an entire MQM (message queue manager) network.

COMMON STORAGE MONITOR. Component of MAINVIEW for MVS that monitors usage and reconfigures MVS common storage blocks.

composite workload. Workload made up of a WLM workload or other workloads, which are called *constituent workloads*.

constituent workload. Member of a composite workload. Constituent workloads in a composite usually belong to a single workload class, but sometimes are mixed.

contention. Occurs when there are more requests for service than there are servers available.

context. In a Plex Manager view, field that contains the name of a target or group of targets specified with the CONTEXT command. See *scope*, *service point*, *SSI context*, *target context*.

CONTEXT command. Specifies either a MAINVIEW product and a specific target for that product (see *target context*) or a MAINVIEW product and a name representing one or more targets (see *SSI context*) for that product.

control statement. (1) Statement that interrupts a sequence of instructions and transfers control to another part of the program. (2) Statement that names samplers and other parameters that configure the MAINVIEW components to perform specified functions. (3) In CMF MONITOR, statement in a parameter library member used to identify a sampler in the extractor or a report in the analyzer, or to describe either component's processing requirements to the operating system.

coupling facility monitoring (CFMON). Coupling facility views that monitor the activity of your system's coupling facilities.

CPO. Customized Product Offering. Delivery and installation technique that allows any combination of BMC Software SMP/E-maintainable products to be distributed on a product tape to a customer and installed quickly. The CPO product tape contains libraries required for product customization and execution, plus SMP distribution libraries and data sets needed for application of SMP maintenance.

current data. Data that reflects the system in its current state. The two types of current data are realtime data and interval data. Contrast with *historical data*. See also *interval data* and *realtime data*.

current window. In the MAINVIEW window environment, window where the main dialog with the application takes place. The current window is used as the default window destination for commands issued on the COMMAND line when no window number is specified. Contrast with *alternate window*. See *active window*, *window*.

D

DASD. Direct Access Storage Device. (1) A device with rotating recording surfaces that provides immediate access to stored data. (2) Any device that responds to a DASD program.

DASD ADVISOR. An interactive software tool that diagnoses DASD performance problems and makes recommendations to reduce overall service time. This tool measures and reports on the operational performance of IBM and IBM-compatible devices.

data collector. Program that belongs to a MAINVIEW product and that collects data from various sources and stores the data in records used by views. For example, MAINVIEW for MVS data collectors obtain data from MVS services, MVS control blocks, CMF MONITOR Extractor control blocks, and other sources. Contrast with *extractor*.

delta mode. (1) In MAINVIEW for DB2 analyzer displays, difference between the value sampled at the start of the current statistics interval and the value sampled by the current analyzer request. See also *statistics interval*. (2) In CMFMON, usage mode wherein certain columns of data reflect the difference in values between one sample cycle and the next. Invoked by the DELTA ON command. See also *collection interval*, *sample cycle*, *total mode*.

DMR. See *MAINVIEW for DB2*.

DSO. Data Set Optimizer. CMF MONITOR Extractor component that uses CMF MONITOR Extractor data to produce reports specifying the optimal ordering of data sets on moveable head devices.

E

element. (1) Data component of a data collector record, shown in a view as a field. (2) Internal value of a field in a view, used in product functions.

element help. Online help for a field in a view. The preferred term is *field help*.

Event Collector. Component for MAINVIEW for IMS and MAINVIEW for DBCTL that collects data about events in the IMS environment. This data is required for Workload Monitor and optional for Workload Analyzer (except for the workload trace service). This data also is recorded as transaction records (X'FA') and program records (X'F9') on the IMS system log for later use by the batch products: Performance Reporter and Transaction Accountant. If the Extensions for DB2 option to IMS PR, IMS TA, IMS WA, or IMS WM is installed, the Event Collector also measures DB2 activity through the Attach facility.

expand. Predefined link from one display to a related display. See also *hyperlink*.

Extensions for DB2. Additions to MAINVIEW for IMS and MAINVIEW for DBCTL that gather DB2 subsystem activity through the IMS Attach facility. These additions are licensed as options to IMS PR, IMS TA, IMS WA, and IMS WM. No license is required for IMS RA, IMS RM, and AutoOPERATOR for IMS.

Extensions for IRLM. Additions to MAINVIEW for IMS and MAINVIEW for DBCTL that analyze database locking and measure IRLM activity when IRLM is used. These additions are licensed as options to IMS RA and IMS RM.

extractor. Program that collects data from various sources and keeps the data control blocks to be written as records. Extractors obtain data from services, control blocks, and other sources. Contrast with *data collector*.

extractor interval. See *collection interval*.

F

fast path. Predefined link between one screen and another. To use the fast path, place the cursor on a single value in a field and press Enter. The resulting screen displays more detailed information about the selected value. See also *hyperlink*.

field. Group of character positions within a screen or report used to type or display specific information.

field help. Online help describing the purpose or contents of a field on a screen. To display field help, place the cursor anywhere in a field and press PF1 (HELP). In some products, field help is accessible from the screen help that is displayed when you press PF1.

filter. Selection criteria used to limit the number of rows displayed in a view. Data that does not meet the selection criteria is not displayed. A filter is composed of an element, an operator, and an operand (a number or character string). Filters can be implemented in view customization, through the PARM/QPARM commands, or through the Where/QWhere commands. Filters are established against elements of data.

fixed field. Field that remains stationary at the left margin of a screen that is scrolled either right or left.

FOCAL POINT. MAINVIEW product that displays a summary of key performance indicators across systems, sites, and applications from a single terminal.

form. One of two constituent parts of a view; the other is query. A form defines how the data is presented; a query identifies the data required for the view. See also *query*, *view*.

full-screen mode. Display of a MAINVIEW product application or service on the entire screen. There is no window information line. Contrast with *windows mode*.

G

global command. Any MAINVIEW window interface command that can affect all windows in the window area of a MAINVIEW display.

graph. Graphical display of data that you select from a MAINVIEW window environment view. See also *chart*.

H

hilevel. For MAINVIEW products, high-level data set qualifier required by a site's naming conventions.

historical data. (1) Data that reflects the system as it existed at the end of a past recording interval or the duration of several intervals. (2) Any data stored in the historical database and retrieved using the TIME command. Contrast with *current data*, *interval data* and *realtime data*.

historical database. Collection of performance data written at the end of each installation-defined recording interval and containing up to 100 VSAM clusters. Data is extracted from the historical database with the TIME command. See *historical data*.

historical data set. In MAINVIEW products that display historical data, VSAM cluster file in which data is recorded at regular intervals.

hyperlink. (1) Preset field in a view or an EXPAND line on a display that permits you to

- Access cursor-sensitive help
- Issue commands
- Link to another view or display

The transfer can be either within a single product or to a related display/view in a different MAINVIEW product. Generally, hyperlinked fields are highlighted. (2) Cursor-activated short path from a topic or term in online help to related information. See also *fast path*.

I

Image log. Collection of screen-display records. Image logs may be created for both the BBI-SS PAS and the BBI terminal session (TS).

The BBI-SS PAS Image log consists of two data sets that are used alternately: as one fills up, the other is used. Logging to the BBI-SS PAS Image log stops when both data sets are filled and the first data set is not processed by the archive program.

The TS Image log is a single data set that wraps around when full.

IMS PERFORMANCE REPORTER (IMS PR). Offline product that organizes data and prints reports that can be used to analyze IMS performance.

IMS PR EXTENSIONS for DB2. Licensed option to the IMS Performance Reporter that provides offline statistical, graphic, and calendar reports about DB2 subsystem activity and requests that are integrated with IMS activity.

IMS RA EXTENSIONS for DB2. Additions to the IMS Resource Analyzer that provide online monitoring displays of DB2 region connection and thread status.

IMS RESOURCE ANALYZER (IMS RA). Online realtime displays used to analyze IMS resources and determine which are affected by specific workload problems.

IMS RESOURCE MONITOR (IMS RM). Online data collection services used to monitor IMS resources and issue warnings when defined utilization thresholds are exceeded.

IMS RM EXTENSIONS for DB2. Additions to the IMS Resource Monitor that provide timer-driven data collection of DB2 region connection and threads.

IMS TA EXTENSIONS for DB2. Licensed option to the IMS Transaction Accountant that provides integrated accounting of IMS and DB2 activity through the IMS Attach Facility.

IMS TRANSACTION ACCOUNTANT (IMS TA). Offline product used to produce cost accounting and user charge-back records and reports.

IMS WA EXTENSIONS for DB2. Licensed option to the IMS Workload Analyzer that provides

- Timer-driven workload wait and trace data collection
- Displays of the transaction active and wait time for DB2 processing events
- Trace of DB2 subsystem activity

The trace is either summarized by DB2 calls and CPU usage for DB2 processing or detailed to include call start, elapsed times, SQL statement numbers, and return codes.

IMS WORKLOAD ANALYZER (IMS WA). Online data collection and display services used to analyze IMS workloads and determine problem causes.

IMS WM EXTENSIONS for DB2. Licensed option to the IMS Workload Monitor that provides timer-driven data collection of the types and number of calls issued to a DB2 subsystem, DB2 transaction input queue and response time, and average DB2 CPU time per transaction.

IMS WORKLOAD MONITOR (IMS WM). Online data collection services used to monitor IMS workloads and issue warnings when defined thresholds are exceeded.

IMSplex System Manager (IPSM). Online service that provides Single System Image views of resources and bottlenecks for applications across one or more IMS regions and systems.

interval data. Cumulative data collected during a collection interval. Intervals usually last from 15 to 30 minutes depending on how the recording interval is specified during product customization. Contrast with *historical data*.

Note: If change is made to the workloads, a new interval will be started.

See also *current data and realtime data*.

InTune. Product for improving application program performance. It monitors the program and provides information used to reduce bottlenecks and delays.

IRUF. IMS Resource Utilization File (IRUF). IRUFs can be either detailed (one event, one record) or summarized (more than one event, one record). A detailed IRUF is created by processing the IMS system log through a program called IMFLEDIT. A summarized IRUF is created by processing one or more detailed IRUFs, one or more summarized IRUFs, or a combination of both, through a sort program and the TASCOSTR program. If the Extensions for DB2 option to IMS PR or IMS TA is installed, the IRUF includes data about DB2 calls made through the IMS Attach Facility.

J

job activity view. Report about address space consumption of resources. See *view*.

journal. Special-purpose data set that stores the chronological records of operator and system actions.

Journal log. Collection of messages. Journal logs are created for both the BBI-SS PAS and the BBI terminal session (TS).

The BBI-SS PAS Journal log consists of two data sets that are used alternately: as one fills up, the other is used. Logging to the BBI-SS PAS Journal log stops when both data sets are filled and the first data set is not being processed by the archive program.

The TS Journal log is a single data set that wraps around when full.

L

line command. Command that you type in the line command column in a view or display. Line commands initiate actions that apply to the data displayed in that particular row.

line command column. Command input column on the left side of a view or display. Contrast with *COMMAND line*.

log edit. In the MAINVIEW for IMS and MAINVIEW for DBCTL program named IMFLEDIT, function that extracts transaction (X'FA') and program (X'F9') records from the IMS system log. IMFLEDIT also extracts certain records that were recorded on the system log by IMS. IMFLEDIT then formats the records into a file called the IMS Resource Utilization File (IRUF).

M

MAINVIEW. BMC Software integrated systems management architecture.

MAINVIEW Alarm Manager. Monitor that reads the data elements produced by products in the MAINVIEW window environment and returns SQL-syntactic statements.

MAINVIEW Alternate Access. Enables MAINVIEW products to be used without TSO by providing access through EXCP and VTAM interfaces.

MAINVIEW control area. In the MAINVIEW window environment, first three lines at the top of the view containing the window information line and the COMMAND, SCROLL, CURR WIN, and ALT WIN lines. The control area cannot be customized and is part of the information display. Contrast with *MAINVIEW display area*, *MAINVIEW window area*.

MAINVIEW Desktop. Version of the MAINVIEW window interface designed to run on OS/2 and Windows workstations.

MAINVIEW display area. See *MAINVIEW window area*.

MAINVIEW Explorer. Product that provides access to MAINVIEW products from a Web browser running under Windows. MAINVIEW Explorer replaces MAINVIEW Desktop.

MAINVIEW for CICS. Product (formerly MV MANAGER for CICS) that provides realtime application performance analysis and monitoring for CICS system management.

MAINVIEW for DB2. Product (formerly MV MANAGER for DB2) that provides realtime and historical application performance analysis and monitoring for DB2 subsystem management.

MAINVIEW for DBCTL. Product (formerly MV MANAGER for DBCTL) that provides realtime application performance analysis and monitoring for DBCTL management.

MAINVIEW for IMS. Product (formerly MV MANAGER for IMS) that provides realtime application performance analysis and monitoring for IMS management.

MAINVIEW for MVS. System management application (formerly MV MANAGER for MVS). Built upon the MAINVIEW window environment architecture, it uses the window interface to provide access to system performance data and other functions necessary in the overall management of an enterprise.

MAINVIEW for OS/390. System management application (formerly MAINVIEW for MVS (prior to version 2.5)). Built upon the MAINVIEW window environment architecture, it uses the window interface to provide access to system performance data and other functions necessary in the overall management of an enterprise.

MAINVIEW for UNIX System Services. System management application that allows you to monitor the performance of the Unix System Services from a MAINVIEW window interface.

MAINVIEW for VTAM. Product that displays application performance data by application, transaction ID, and LU name. This collected data includes: connections, response time statistics, application availability, and application throughput.

MAINVIEW Selection Menu. ISPF selection panel that provides access to all MAINVIEW windows-mode and full-screen mode products.

MAINVIEW VistaPoint. Product that provides enterprise-wide views of performance. Application and workload views are available for CICS, DB2, IMS, and MVS. Data is summarized at the level of detail needed; e.g., reports may be for a single target, an MVS image, or an entire enterprise.

MAINVIEW window area. Portion of the information display that is not the control area and in which views are displayed and windows opened. It includes all but the first three lines of the information display. Contrast with *MAINVIEW control area*.

monitor. Online service that measures resources or workloads at user-defined intervals and issues warnings when user-defined thresholds are exceeded.

MV MANAGER for CICS. See *MAINVIEW for CICS*.

MV MANAGER for DB2. See *MAINVIEW for DB2*.

MV MANAGER for DBCTL. See *MAINVIEW for DBCTL*.

MV MANAGER for IMS. See *MAINVIEW for IMS*.

MV MANAGER for MVS. See *MAINVIEW for MVS*.

MVALARM. See *MAINVIEW Alarm Manager*.

MVCICS. See *MAINVIEW for CICS*.

MVDB2. See *MAINVIEW for DB2*.

MVDBC. See *MAINVIEW for DBCTL*.

MVIMS. See *MAINVIEW for IMS*.

MVMQS. See *Command MQ for S/390*.

MVMVS. See *MAINVIEW for OS/390*.

MVS product address space (PAS). Address space containing MVS data collectors, including the CMF MONITOR Extractor. Used by MAINVIEW for MVS and CMF MONITOR products. See *PAS*.

MVScope. MAINVIEW for MVS application that traces both CPU usage down to the CSECT level and I/O usage down to the channel program level.

MVVP. See *MAINVIEW VistaPoint*.

MVVTAM. See *MAINVIEW for VTAM*.

N

nested help. Multiple layers of help pop-up windows. Each successive layer is accessed by hyperlinking from the previous layer.

O

object. Anything you can manipulate as a single unit. MAINVIEW objects can be any of the following: product, secondary window, view, row, column, or field.

You can issue an action against an object by issuing a line command in the line command column to the left of the object. See *action*.

OMVS workload. Workload consisting of MVS OpenEdition address spaces.

online help. Help information that is accessible online.

P

parameter library. Data set comprised of members containing parameters for specific MAINVIEW products or a support component. There can be several versions:

- The distributed parameter library, called BBPARAM
- A site-specific parameter library or libraries

These can be

- A library created by AutoCustomization, called UBBPARAM
- A library created manually, with a unique name

PAS. Product address space. Used by the MAINVIEW products. Contains data collectors and other product functions. See *MVS product address space (PAS)*, *BBI subsystem product address space (BBI-SS PAS)*.

performance group workload. MVS/SP-defined collection of address spaces. See *service class workload*, *workload definition*.

PERFORMANCE MANAGER. MAINVIEW for CICS online service for monitoring and managing current performance of CICS regions.

PERFORMANCE REPORTER. Product component that generates offline batch reports. The following products can generate these reports:

- MAINVIEW for DB2
- MAINVIEW for IMS
- MAINVIEW for CICS

Plex Manager. Product through which cross-system communication, MAINVIEW security, and an SSI context are established and controlled. Plex Manager is shipped with MAINVIEW window environment products as part of the coordinating address space (CAS) and is accessible as a menu option from the MAINVIEW Selection Menu.

pop-up window. Window containing help information that, when active, overlays part of the window area. A pop-up panel is displayed when you issue the HELP command.

PRGP workload. In MVS/SP 5.0 or earlier, or in compatibility mode in MVS/SP 5.1 or later, composite of service classes. MAINVIEW for MVS creates a performance group workload for each performance group defined in the current IEAIPStxx member.

procedure library. Data set comprised of members containing executable procedures used by AutoOPERATOR. These procedures are execute command lists (EXECs) that automate site functions. There can be several versions:

- The distributed parameter library, called BBPROC
- A site-specific parameter library or libraries

These can be

- A library created by AutoCustomization, called UBBPROC
- A library created manually, with a unique name

The site-created EXECs can be either user-written or customized AutoOPERATOR-supplied EXECs from BBPROC.

product address space. See *PAS*.

profile library. Data set comprised of members containing profile information and cycle refresh definitions for a terminal session connected to a BBI-SS PAS. Other members are dynamically created by MAINVIEW applications. There can be several versions:

- The distributed profile library, called BBPROF
- A site-specific profile library or libraries

These can be

- A library created by AutoCustomization, called SBBPROF
- A library created manually, with a unique name

The site library is a common profile shared by all site users. The terminal session CLIST creates a user profile automatically if one does not exist; it is called userid.BBPROF, where userid is your logon ID. User profile libraries allow each user to specify unique PF keys, CYCLE commands, target system defaults, a Primary Option Menu, and a unique set of application profiles.

Q

query. One of two constituent parts of a view; the other is form. A query defines the data for a view; a form defines the display format. See also *form*, *view*.

R

realtime data. Performance data as it exists at the moment of inquiry. Realtime data is recorded during the smallest unit of time for data collection. Contrast with *historical data*. See also *current data and interval data*.

row. (1) Horizontal component of a view or display comprising all the fields pertaining to a single device, address space, user, etc. (2) Horizontal component of a DB2 table consisting of a sequence of values, one for each column of the table.

RxD2. Product that provides access to DB2 from REXX. It provides tools to query the DB2 catalog, issue dynamic SQL, test DB2 applications, analyze EXPLAIN data, generate DDL or DB2 utility JCL, edit DB2 table spaces, perform security administration, and much more.

S

sample cycle. Time between data samples.

For the CMF MONITOR Extractor, this is the time specified in the extractor control statements (usually 1 to 5 seconds).

For realtime data, the cycle is not fixed. Data is sampled each time you press Enter.

sample library. Data set comprised of members each of which contains one of the following:

- Sample JCL that can be edited to perform specific functions
- A macro that is referenced in the assembly of user-written services
- A sample user exit routine

There can be several versions:

- The distributed sample library, called BBSAMP
- A site-specific sample library or libraries

These can be

- A library created by AutoCustomization, called UBBSAMP
- A library created manually, with a unique name

sampler. Program that monitors a specific aspect of system performance. Includes utilization thresholds used by the Exception Monitor. The CMF MONITOR Extractor contains samplers.

SBBPROF. See *profile library*.

scope. Subset of an SSI context. The scope could be all the data for the context or a subset of data within the context. It is user- or site-defined. See *SSI context, target*.

screen definition. Configuration of one or more views that have been stored with the SAVEScr command and assigned a unique name. A screen includes the layout of the windows and the view, context, system, and product active in each window.

selection view. In MAINVIEW products, view displaying a list of available views.

service class workload. MVS- or MAINVIEW for MVS-defined collection of address spaces.

If you are running MVS Workload Manager (WLM) in goal mode, MAINVIEW for MVS creates a service class workload for each service class that you define through WLM definition dialogs.

If you are running MVS 4.3 or earlier, or MVS/SP 5.1 or later with WLM in compatibility mode, MVS creates a performance group workload instead of a service class. See *performance group workload*.

service objective. Workload performance goal, specified in terms of response time for TSO workloads or turnaround time for batch workloads. Performance group workloads can be measured by either objective. Composite workload service objectives consist of user-defined weighting factors assigned to each constituent workload. There are no MVS-related measures of service for started task workloads.

service point. Specification, to MAINVIEW, of the services required to enable a specific product. Services may be actions, selectors, or views. Each target (e.g., CICS, DB2, or IMS,) has its own service point.

The PLEX view lists all the defined service points known to the CAS to which the terminal session is connected.

service request block (SRB). Control block that represents a routine to be dispatched. SRB mode routines generally perform work for the operating system at a high priority. An SRB is similar to a task control block (TCB) in that it identifies a unit of work to the system. See also *task control block*.

service select code. Code entered to invoke analyzers, monitors, and general services. This code is also the name of the individual service.

session. Total period of time an address space has been active. A session begins when monitoring can be performed. If the product address space (PAS) starts after the job, the session starts with the PAS.

SRB. See *service request block*.

single system image (SSI). Feature of the MAINVIEW window environment architecture that allows you to view and perform actions on multiple MVS systems as though they were a single system. The rows of a single tabular view can contain rows from different MVS images.

SpaceView for MVS. Suite of products that assist in all phases of MVS storage management. SpaceView consists of components that perform automation, reporting, trend analysis, and error correction for storage management in MVS.

SSI. See *single system image*.

SSI context. Name created to represent one or more targets for a given product. See *context, target*.

started task workload. Address spaces running jobs that were initiated programmatically.

statistics interval. For MAINVIEW for DB2, cumulative count within a predefined interval (30-minute default set by the DB2STATS parameter in the distributed BBPARM member BBIISP00) for an analyzer service DELTA or RATE display. Specifying the DELTA parameter displays the current value as the difference between the value sampled by the current analyzer request and the value sampled at the start of the current interval. Specifying the RATE parameter displays the current value by minute (DELTA divided by the number of elapsed minutes).

summary view. View created from a tabular view using the Summarize option in view customization. A summary view compresses several rows of data into a single row based on the summarize criteria.

system resource. See *object*.

T

target. Entity monitored by one or more MAINVIEW products, such as an MVS image, IMS or DB2 subsystem, CICS region, or related workloads across systems. See *context*, *scope*, *SSI context*.

target context. Single target/product combination. See *context*.

TASCOSTR. MAINVIEW for IMS and MAINVIEW for DBCTL program that summarizes detail and summary IMS Resource Utilization Files (IRUFs) to be used as input to the offline products.

task control block (TCB). Address space-specific control block that represents a unit of work that is dispatched in the address space in which it was created. See also *service request block*.

TCB. See *task control block*.

terminal session (TS). Single point of control for MAINVIEW products, allowing data manipulation and data display and providing other terminal user services for MAINVIEW products. The terminal session runs in a user address space (either a TSO address space or a standalone address space for EXCP/VTAM access).

TDIR. See *trace log directory*.

threshold. Specified value used to determine whether the data in a field meets specific criteria.

TLDS. See *trace log data set*.

total mode. Usage mode in CMFMON wherein certain columns of data reflect the cumulative value between collection intervals. Invoked by the DELTA OFF command. See also *collection interval*, *delta mode*.

trace. (1) Record of a series of events chronologically listed as they occur. (2) Online data collection and display services that track transaction activity through DB2, IMS, or CICS.

trace log data set (TLDS). Single or multiple external VSAM data sets containing summary or detail trace data for later viewing or printing. The trace log(s) can be defined as needed or dynamically allocated by the BBI-SS PAS. Each trace request is assigned its own trace log data set(s).

trace log directory (TDIR). VSAM linear data set containing one entry for each trace log data set. Each entry indicates the date and time of data set creation, the current status of the data set, the trace target, and other related information.

transaction. Specific set of input data that initiates a predefined process or job.

TS. See *terminal session*.

TSO workload. Workload that consists of address spaces running TSO sessions.

U

UAS. See *user address space*.

UBBPARM. See *parameter library*.

UBBPROC. See *procedure library*.

UBBSAMP. See *sample library*.

user address space. Runs a MAINVIEW terminal session (TS) in TSO, VTAM, or EXCP mode.

User BBPROF. See *profile library*.

V

view. Formatted data within a MAINVIEW window, acquired from a product as a result of a view command or action. A view consists of two parts: query and form. See also *form*, *job activity view*, *query*.

view definition. Meaning of data that appears online, including source of data, selection criteria for data field inclusion and placement, data format, summarization, context, product, view name, hyperlink fields, and threshold conditions.

view command. Name of a view that you type on the COMMAND line to display that view.

view command stack. Internal stack of up to 10 queries. For each command, the stack contains the filter parameters, sort order, context, product, and timeframe that accompany the view.

view help. Online help describing the purpose of a view. To display view help, place the cursor on the view name on the window information line and press PF1 (HELP).

W

window. Area of the MAINVIEW screen in which views and resources are presented. A window has visible boundaries and can be smaller than or equal in size to the MAINVIEW window area. See *active window*, *alternate window*, *current window*, *MAINVIEW window area*.

window information line. Top border of a window. Shows the window identifier, the name of the view displayed in the window, the system, the scope, the product reflected by the window, and the timeframe for which the data in the window is relevant. See also *window status field*.

window number. Sequential number assigned by MAINVIEW to each window when it is opened. The window number is the second character in the window status field. See also *window status field*.

window status. One-character letter in the window status field that indicates when a window is ready to receive commands, is busy processing commands, is not to be updated, or contains no data. It also indicates when an error has occurred in a window. The window status is the first character in the window status field. See also *window information line*, *window status field*.

window status field. Field on the window information line that shows the current status and assigned number of the window. See also *window number*, *window status*.

windows mode. Display of one or more MAINVIEW product views on a screen that can be divided into a maximum of 20 windows. A window information line defines the top border of each window. Contrast with *full-screen mode*.

WLM workload. In goal mode in MVS/SP 5.1 and later, a composite of service classes. MAINVIEW for MVS creates a workload for each WLM workload defined in the active service policy.

workflow. Measure of system activity that indicates how efficiently system resources are serving the jobs in a workload.

workload. (1) Systematic grouping of units of work (e.g., address spaces, CICS transactions, IMS transactions) according to classification criteria established by a system administrator. (2) In MVS, group of service classes within a service definition.

workload activity view. Tracks workload activity as the workload accesses system resources. A workload activity view measures workload activity in terms of resource consumption and how well the workload activity meets its service objectives.

workload definition. Workload created through the WKLIST view. Contains a unique name, a description, an initial status, a current status, and selection criteria by which address spaces are selected for inclusion in the workload. See *Workload Definition Facility*.

Workload Definition Facility. In MAINVIEW for MVS, WKLIST view and its associated dialogs through which workloads are defined and service objectives set.

workload delay view. Tracks workload performance as the workload accesses system resources. A workload delay view measures any delay a workload experiences as it contends for those resources.

workload objectives. Performance goals for a workload, defined in WKLIST. Objectives may include measures of performance such as response times and batch turnaround times.

Part 5. Index

This part contains the index.

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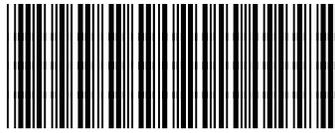
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