

IDXtendR Analyzer
Version 1.0
Reference Manual

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Preface

About this Manual

IDX produced this manual for the DBMS/RDBMS manager who uses the ID XtendR Analyzer system to perform the following tasks:

- Extract data from the transactional system.
- Move the data to the Analyzer server.
- Load the data into Microsoft SQL Server, a Relational Database Management System (RDBMS).
- Use reporting tools to create analysis reports.

Users who do not work directly with DBMS/RDBMS can also use this manual to learn general information about Analyzer's extraction, load, and reporting process.

Contents of this Manual

The following summary describes the parts of this manual:

- Part I, “[ID XtendR Analyzer Overview](#)” on page 15, provides an overview of Analyzer's components and how you use them.
- Part II, “[Analyzer Extractor](#)” on page 27, describes the component of Analyzer that you use to extract data from the transactional database to prepare it for loading into the Analyzer database.

- Part III, “Analyzer Loader” on page 149, describes the component of Analyzer that loads extracted data into the Analyzer database.
- Part IV, “Analyzer Information Delivery” on page 207, describes Analyzer’s reporting and analysis component, which is driven by Cognos reporting tools (Cognos is a third-party software development company).
- Part V, “Analyzer Support Tools” on page 249, describes the components used to support Analyzer tasks and functions.
- Appendix A: “RDBMS Specifications” describes the RDBMS character limits for database vendors whose products are compliant with Analyzer. This appendix also describes the reserved keywords that Analyzer cannot use.
- Appendix B: “Analyzer Datatype Specifications” contains a table that describes how datatype identifications change when the data is extracted and loaded.
- Appendix C: “Function Keys” helps you identify the keyboard keys you need to press to perform particular actions with the Analyzer Extractor on your terminal or PC.
- Appendix D: “Analyzer Database Column Naming Conventions” outlines the naming conventions used in the Analyzer database for columns.
- Appendix E: “Table Groups and Selection Criteria” describes the selection criteria the Analyzer Extractor uses for each table group on the system.

Manual Conventions

This manual uses the following conventions:

- System prompts and messages referenced within paragraphs are shown in courier type: For example, `Function`.
- User input in text is shown in **bold**.
- Text inside angle brackets indicates a specific key on the keyboard. For example, `<F14>`.
- Keys you press simultaneously are shown separated by a hyphen within angle brackets. For example, `<Ctrl-C>` indicates that you should hold down the `<Ctrl>` key and type `c`.
- F/A is an abbreviation for Function/Activity. For example, F2/A1 is an abbreviation for Function 2, Activity 1.

- C:\...\(application folder) is the location of the application discussed, where C: is the disk designation, \...\ is the path to the application's folder, and (application folder) is the application's folder. For example, when discussing the Analyzer Loader, C:\...\Analyzer Loader could be located at C:\Program Files\IDX Systems Corporation\Analyzer Loader on your computer.
- Important information is marked with icons. These icons indicate notes and cautions. The icons are as follow:



This icon is the Notes icon. Notes are specific points of interest about which you should be aware.



This icon is the Caution icon. Cautions indicate danger to the integrity of the data.



Part I

IDXtendR Analyzer

Overview

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Understanding IDXtendR Analyzer

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Understanding ID XtendR Analyzer

ID XtendR Analyzer is a set of components that enables you to create analytical reports based on data from your transactional applications. The Analyzer components enable you to perform the following tasks:

- Extract data from certain tables from the following ID XtendR **transactional applications**:
 - Billing and Accounts Receivable (BAR)
 - Registration
 - Patient Scheduling (SCHED)
 - Managed Care Application (MCA)
 - Hospital Patient Accounting (HPA)
 - Visit Management
- Load data extracted from your **transactional database** (the M database that stores data from your transactional applications) into a relational database called the **Analyzer database**.
- Validate the data that you extracted and loaded.
- Create high-level online analysis graphs and reports from the data in the Analyzer database.

Understanding Analyzer's Components

Analyzer consists of the following components:

- Extractor
- Loader
- Information Delivery

Analyzer also uses the following support tools:

- IDX Scheduler
- Loader Utilities
- Structured Query Language (SQL) stored procedures
- Data validation tool and queries

Analyzer Components

Extractor

The Extractor extracts data from your transactional database and prepares the data for loading into the Analyzer database. “[Understanding ID XtendR Analyzer](#)” on page 18 contains a list of IDX transactional applications from which the Extractor extracts data.

For more information on the Extractor, refer to [Part II: Analyzer Extractor, which begins on page 27](#), and the Extractor's online help.

Loader

The Loader creates the Analyzer database from the transactional data extracted by the Extractor. The Loader also provides data integrity checking while creating the database.

For more information on the Loader, refer to [Part III: Analyzer Loader, which begins on page 149](#), and the Loader's online help.

Information Delivery

Information Delivery is Analyzer's reporting and analysis component. It is powered by online analytical processing (OLAP) and report writing tools. These tools provide the engine to create and use multidimensional databases (also called cubes), which you can manipulate to answer questions about your data.

Analyzer's main interface is a briefing book that enables you to access collections of reports grouped into different categories.

For more information on Information Delivery, refer to [Part IV: Analyzer Information Delivery, which begins on page 207](#). Also refer to Information Delivery's online help.

Analyzer Support Tools

IDX Scheduler

IDX Scheduler launches programs automatically at specified times. For example, you can set the Scheduler to automatically run the Loader when the Extractor finishes extracting data.

For more information on the Scheduler, refer to [Chapter 13: Automating Tasks with IDX Scheduler, which begins on page 251](#).

Loader Utilities

Loader Utilities automates several setup tasks such as creating and populating Loader **metadata control tables** (the tables that store information about your database) and building and dropping stored procedures.

For more information on Loader Utilities, refer to [Chapter 14: Maintaining Your Database with Loader Utilities, which begins on page 271](#), and the Loader Utilities' online help.

SQL stored procedures

IDX has included predefined SQL stored procedures with Analyzer. These stored procedures assist you with Loader processing, summary table building, and database maintenance.

For more information on stored procedures, refer to [Chapter 15: Using Analyzer SQL Stored Procedures, which begins on page 273](#).

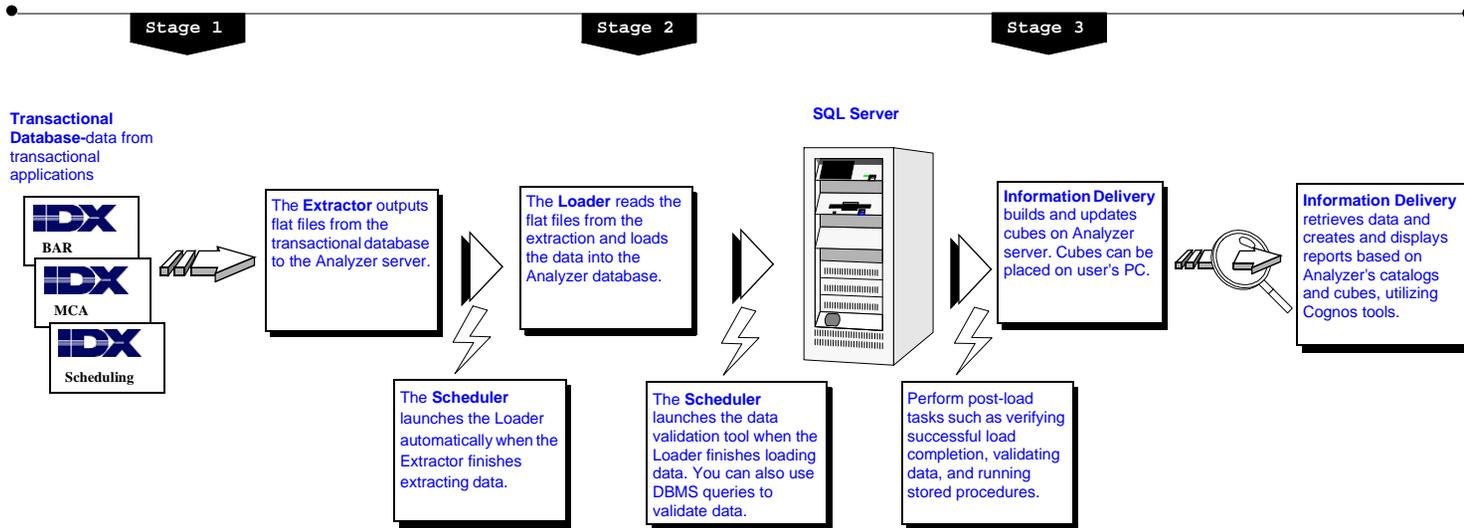
Data validation tool and queries

After you extract and load data, you can use the data validation tool and **Database Management System (DBMS)** queries to validate your data. Analyzer has post-load tools that compare data in the Analyzer database with extracted data and has suggested DBMS queries to help check the validity of extracted data.

For more information on data validation tools and queries, refer to [Chapter 16: Validating Data, which begins on page 301](#).

Understanding the Analyzer Process

The following diagram outlines the typical stages in extracting data from your transactional database, loading it into your Analyzer database, and viewing it in high-level reports:



Understanding Database and Server Concepts

To understand how Analyzer works, you should first be familiar with certain database and server concepts. Other Analyzer concepts are discussed in the overview sections of the components for which the specific concept is about. The following sections contain these specific concepts:

- “Understanding Extraction Concepts” on page 30
- “Understanding the Load Process” on page 152

You can also refer to “Glossary” on page 357 for a complete list of all terms associated with Analyzer.

Database Concepts

Transactional database

The database from which you extract data is called the **transactional database**. IDX transactional applications such as Billing and Accounts Receivable (BAR), Patient Scheduling (SCHED), and Managed Care Application (MCA) place data on the transactional database. The transactional database is continually updated as transactions are entered.

Analyzer relational database

The **Analyzer database** contains data that has been extracted from the transactional database and processed by the Analyzer Loader (refer to “Understanding the Analyzer Loader” on page 151 for a description of the Loader).

The Analyzer database is a relational database. A **relational database** stores related data in separate tables. Analyzer defines relationships between the tables and uses these relationships to more easily retrieve information from the database.

The Analyzer database is managed Microsoft SQL Server, a **Relational Database Management System (RDBMS)** and is updated only when data is moved into it.

Server Concepts

Transactional server

The **transactional server** is the network server on which the transactional database is located and IDX transactional applications

are run. The Extractor extracts data from the transactional database on the transactional server.

Analyzer Server

The **Analyzer server** is the network server on which the Analyzer database is located. It contains Microsoft SQL Server, Analyzer Loader, and any data analysis tools. The Loader loads extracted data into the Analyzer database on the Analyzer server.

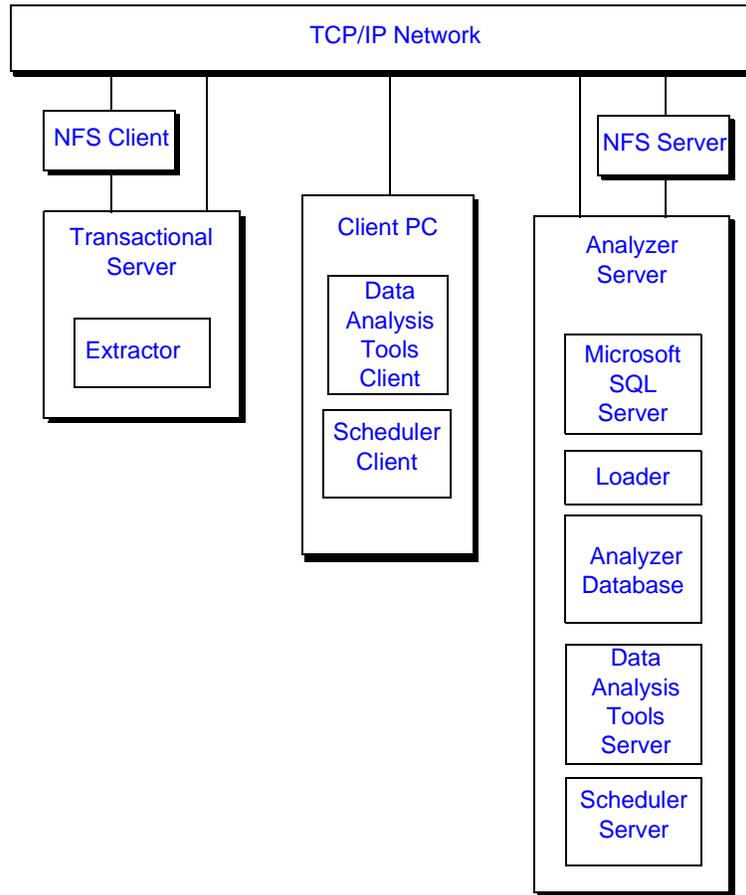
Understanding System Configuration

The components of Analyzer rely on a network to communicate and transfer data. Analyzer uses a **Transmission Control Protocol/Internet Protocol (TCP/IP)** network for the data acquisition process. This network connects the following components:

- IDX transactional system
- **Network File System (NFS) client**, which Analyzer uses to transfer files from the transactional server to the network
- **NFS server**, which Analyzer uses to transfer files from the network to the Analyzer server
- **Analyzer server**, which contains Microsoft SQL Server, the Loader, the Analyzer database, and data analysis tools
- Client personal computers (PCs) that contain data analysis tools that can run against the Analyzer database or cubes directly on the PC to produce information sets and reports

Diagram showing the relationship between network components

The Analyzer uses a network to move data from the transactional database (on the transactional server) to the Analyzer database (on the Analyzer server). The following diagram shows how the components of Analyzer are connected by this network:





Part II

Analyzer Extractor

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Understanding Analyzer Extractor

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Understanding Extraction Concepts

The Extractor extracts data from your transactional database and prepares the data for loading into the Analyzer database.

To understand how the Extractor works, you should first be familiar with certain extraction concepts.

You can also refer to “[Glossary](#)” on [page 357](#) for a complete list of all terms associated with Analyzer.

Extraction Set Concepts

Extractable domain

The **extractable domain** is the collection of extractable tables and columns in the transactional database; not all transactional tables and columns are extractable. The standard extraction set includes many tables and columns from the extractable domain. Both the standard extraction set and the working extraction set are subsets of the extractable domain. To view the extractable domain for your system, refer to “[Viewing the Extractable Domain](#)” on [page 119](#).

Extraction set

Data selected for extraction is called an **extraction set**. The two types of extraction sets are the standard extraction set and the working extraction set.

Standard extraction set

The **standard extraction set** is a set of tables and columns that IDX predefines and supplies with Analyzer. This set includes the tables and columns that IDX has determined many users will want to extract.

The standard extraction set also includes the following information:

- Columns necessary for using the Cognos Reporting Tools
For more information on the Cognos Reporting Tools, refer to [Chapter 12: Generating Reports with Cognos Reporting Tools, which begins on page 209](#), Analyzer online help, and Cognos’ documentation.
- Keys necessary to describe relationships between the columns and tables in the transactional database

Working extraction set

The **working extraction set** is the set of tables and columns that you extract when you perform an extraction. The standard extraction set is

always part of the working extraction set and is automatically extracted during an extraction.

You can add user-defined or custom tables and columns to the working extraction set. All custom tables and columns you add are extracted along with the standard extraction set.



You can only extract tables and columns that are part of the extractable domain, which you can view using Function 4, Activity 3. Contact IDX if you need to add custom tables and columns that are not currently part of your extractable domain.

For information on adding tables and columns to the working extraction set, refer to [Chapter 3: Selecting User-Defined Tables and Columns for Extraction](#), which begins on page 43.

Table and Column Concepts

DBMS tables and columns

DBMS tables and **DBMS columns** are the data tables and columns in the transactional database. Each DBMS table and column contains specific information entered through IDX's transactional applications.

Dictionary tables and columns

Dictionary tables and **dictionary columns** are the tables and columns that store dictionary information. Dictionary columns are also known as *dictionary fields* in IDX transactional applications.

Source tables and columns

Source tables and **source columns** are the tables and columns in the transactional database. These tables and columns are the *sources* from which the Extractor extracts data.

Standard tables and columns

Standard tables and **standard columns** are tables and columns that belong to the standard extraction set. You cannot edit or delete standard tables and columns.

User-defined tables and columns

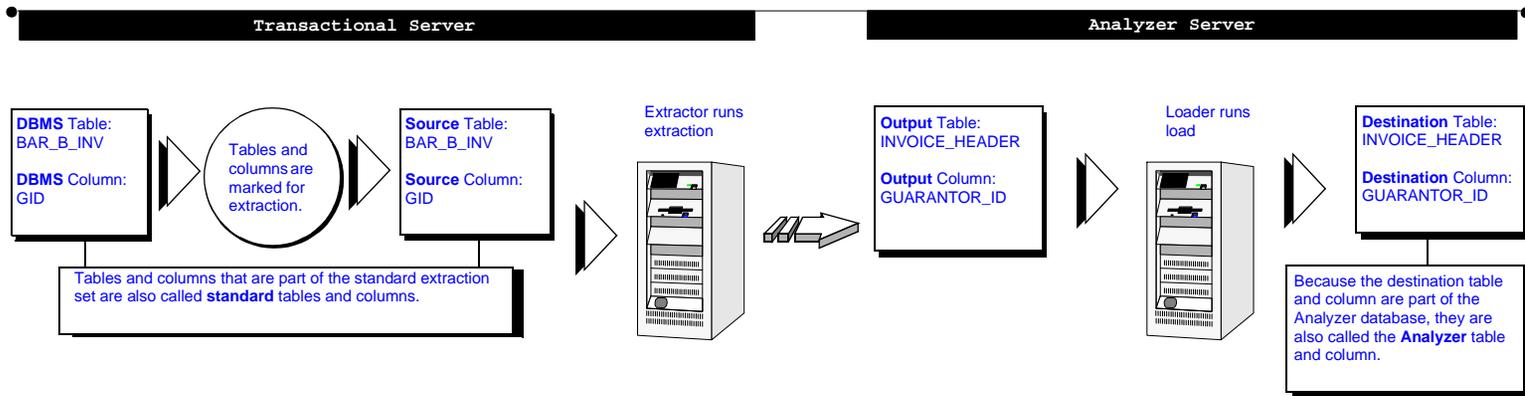
User-defined tables and **user-defined columns** are tables and columns that you add to the working extraction set by using Function 1. You can edit user-defined tables and columns.

Output table and columns	<p>Output tables and output columns are the table and column definitions that are extracted by the Extractor, renamed with descriptive names, and <i>output</i> to the Analyzer server using the Network File System (NFS) or other file transfer protocol. The Loader creates and populates Analyzer relational database tables using the output table and column definitions and data contained in the extraction output files.</p> <p>Output tables and columns are based on source DBMS tables and columns and IDX application dictionaries marked for extraction. Therefore, the tables and columns in the standard extraction set become output tables because they are automatically extracted.</p>
Destination tables and columns	<p>Destination tables and destination columns are the output tables and columns (which have been extracted from the transactional database and placed on the Analyzer server) that have been loaded by the Loader into the Analyzer database.</p>
Analyzer tables and columns	<p>Analyzer tables and Analyzer columns are the tables and columns that exist in the Analyzer database. These tables and columns include destination tables and columns along with the summary and rollup tables and columns that Analyzer creates.</p>
Repeating fields	<p>Repeating fields are IDX standard dictionary data elements that can contain multiple values. Each value is contained in a separate field. The field repeats as necessary for each value of a particular type of data.</p> <p>For example, the <code>Location</code> field in the Providers Dictionary (#3) is a repeating field because one provider can be associated with multiple locations.</p> <p>To maintain third normal form in Analyzer, repeating fields are placed in separate output tables. The repeating field tables are associated with the output table of the dictionary to which the fields belong.</p>
Table groups	<p>A table group is Analyzer's method for grouping data from the transactional database. Every table group contains data from one or more source tables in the transactional system. The system uses specific criteria for each table group.</p>
Differences between types of tables and columns	<p>Analyzer documentation makes reference to many different types of tables and columns. It is therefore important to recognize the</p>

differences among these various types. The concepts in this section discuss the different types of tables and columns that you should be aware of.

You should remember, however, that different types of tables and columns do not necessarily store different types of data. They just represent where in the Analyzer system the tables and columns exist. For example, a *DBMS* column can be a *source* column marked for extraction. Because that source column is part of the standard extraction set, it is also called a *standard* column. When the source column is extracted, it becomes an *output* column on the Analyzer server. When the output column is finally loaded into the Analyzer database, it becomes an *destination* column. Because the destination column is part of the Analyzer database, it is also called an *Analyzer* column. By that same note, a *dictionary* column could be a *source* column and would go through the same sequence of changes through the Analyzer system.

The following diagram shows an example of a table and column and how their naming conventions change throughout the Analyzer process:



Data Extraction Concepts

Date stamp

The Extractor often refers to the creation date or last edit date in the transactional database to identify which data to extract during an extraction. These dates are often stored in **date stamp** fields in the transactional database.

Extraction start and through dates

The Extractor extracts data that is dated within a certain date range in the transactional database. This date range is the extraction start date through the extraction through date.

The **extraction start date** is the beginning of the date range for which the Extractor extracts data. For the initial extraction, the start date is the earliest recorded date in the transactional database, unless you specify a later date. For incremental extractions, the start date is one day after the previous extraction's through date.

The **extraction through date** is the end of the date range for which the Extractor extracts data.

Initial and incremental extractions

The **initial extraction** is the first extraction you perform on the transactional database. An initial extraction includes historical data up to and including the extraction through date. You can select a start date for an initial extraction or you can use the **beginning of time**. The beginning of time is the earliest date for which data exists in the transactional database.

You can reset the Extractor as described in “[Resetting the Extractor](#)” on page 128. The next extraction that you run after resetting the Extractor is an initial extraction.

An **incremental extraction**, or periodic extraction, is any extraction you run after the completion of an initial extraction. The start date of an incremental extraction is one day after the extraction through date of the previous extraction run.

Relational Table Data Concepts

Metadata

Metadata is the information about data that is required to store that data in a relational database. Data type and field length are examples of metadata. The Extractor extracts metadata with the transactional data.

When data is moved into the relational database, the Loader uses the metadata to create relational database tables. The metadata tells the system how many tables to create, how many columns to create in each table, and how to validate the data for each column.

Primary key

A **primary key** is a row addressing mechanism. It is one column or a combination of columns that uniquely identifies a record in a relational table. No two rows in the same relational table have the same primary key.

If a table's rows are uniquely identified by a single column, the table has a **single-column key**. If the table's rows are uniquely identified by multiple columns, the table has a **composite key**.

A primary key is essential for identifying data in the system. Therefore, you must include the column or columns that comprise that table's key if you add a user-defined table to the working extraction set. You cannot remove a primary key from the working extraction set.

Primary keys for tables are based on the source table definitions in DBMS and are automatically assigned when a table is added to the working extraction set.

Foreign key

A **foreign key** is a column or combination of columns in a relational table that reference the primary key of another relational table.

Referential integrity

Referential integrity is a relational constraint that requires all foreign key values within a table to match their corresponding primary keys in the referenced relation. The Extractor verifies referential integrity among source tables and columns as it extracts data.

Following the Extraction Process

The following table highlights the extraction process:

Step	Description	For more information, refer to
1	If you choose to add user-defined tables and columns, define them using the Table Definition Module function prior to running an extraction.	Chapter 3: Selecting User-Defined Tables and Columns for Extraction, which begins on page 43.
2	Extract data from your transactional database using the Extraction Module function.	Chapter 4: Running the Extraction, which begins on page 89.

Options with the extraction process

The following table highlights the options available with the extraction process:

Option	For more information, refer to
<p>The Inquiry Module function contains the activities you use to make inquiries about your extraction set. You can use these activities to perform the following inquiries:</p> <ul style="list-style-type: none"> • view and print table and dictionary sources • view and print the extractable domain • view information about your extraction 	Chapter 5: Inquiring about the Extraction Set, which begins on page 111.
<p>The Operations function contains the activities you use to perform miscellaneous operations with your extraction set. You can use these activities to perform the following operations:</p> <ul style="list-style-type: none"> • create a test extraction file • delete your last extraction run • reset the Extractor • reconcile your extraction set • find dictionary trailing spaces • use the Join Map Module activity 	Chapter 6: Performing Operations, which begins on page 123.
Use the Dictionaries function to access IDX dictionary activities.	The <i>IDX Dictionary Activities Reference Manual</i> .

Using Extractor Menus

The Extractor makes its functions, activities, and action codes available through menus. From these menus you select functions and activities to perform specific actions on the transactional database.

Extractor main menu

You perform all Extractor procedures with the functions available in the Extractor main menu. If you do not see the functions listed in the main menu, enter ? after the Select Function prompt as shown in the following example:

```

Sep 22 1997                      Analyzer Extractor V1.0          3:00 PM
                                IDX Data Warehouse

Select Function: ?

    1) Table Definition Module...      2) Extraction Module...
    4) Inquiry Module...              10) Control Reports...
    13) Dictionaries...                20) Operations...

Select Function:
  
```

Overview of functions

You use the Extractor's functions to perform the following tasks:

Function	Enables you to	For information on this function, refer to
Table Definition Module (Function 1)	Add user-defined tables, columns, and dictionaries, if desired, to the working extraction set.	"Understanding the Table Definition Module" on page 44.
Extraction Module (Function 2)	Perform the actual data extraction (use this function for both initial and incremental extractions).	"Understanding the Extraction Module" on page 90.
Inquiry Module (Function 4)	Display information about the Extractor and extraction runs.	"Inquiring about the Extraction Set" on page 111.

Function	Enables you to	For information on this function, refer to
Control Reports (Function 10)	Print inquiry information to a printer.	“Printing Inquiry Information” on page 109.
Dictionaries (Function 13)	Access IDX dictionary activities.	The <i>IDX Dictionary Activities</i> reference manual.
Operations (Function 20)	Perform operations such as deleting the last extraction run.	“Performing Operations” on page 123.

Overview of activities and action codes

When you select a function from the Extractor main menu, the Extractor displays an activities menu. From this menu you can select specific activities which enable you to perform tasks within the given function. Some activities also offer specific action codes for you to perform specific actions within that activity.

Activities and action codes are discussed with each specific function throughout this reference manual.

Using Extractor Online Help

The Extractor has a complete online help system to help you understand different fields and action codes.

In most fields, you can press either [Help], [List], or [More Keys] to display help information. [Appendix C: Function Keys, which begins on page 331](#), contains a list of the function keys for various terminals.

Displaying field information

If you are not sure what to type into a field on a screen, press [Help]. The system displays brief information about the field in your message area or in a large popup window. If you press [Help] again, the system displays detailed information about the field.

Whenever you have help messages on your screen, the bottom of the message area or window shows your options. Usually, you can choose either to see more information or to exit from the help message to get back to your original field.

Displaying a list of options

When you are in a field that requires you to make a choice from a menu or dictionary, press [List] to see a list of the choices available. The system displays the information in your message area or in a small popup window.

Displaying function keys

To display a list of the available function keys, press [More Keys]. [Appendix C: Function Keys, which begins on page 331](#), contains lists of these keys for various terminals.

IDXterm version

If you are using IDXterm to access Analyzer components, be sure that you are using the most recent version. Some older versions of IDXterm do not display Analyzer help well. Contact IDX to determine if you have the most recent version of IDXterm.

Setting Up User Mode to Prevent Crashing

If you want to set up the Extractor to run in user mode, the Virtual Machine System (VMS) account used must *not* be a **captive account** (set up by your system administrator). A captive account does *not* allow users to create jobs or create files. However, these tasks are required to run an extraction. Therefore, users with captive accounts can access the Extractor but *cannot* successfully run an extraction. If the VMS account is captive and you run an extraction, the Extractor hangs or crashes shortly after starting the run.

Refer to the *IDXtendR Analyzer Installation Manual* for more information on setting up the Extractor to run in user mode.

Understanding Extraction Selection Criteria

The Extractor uses **selection criteria** to determine which data to extract for each table group. The number and types of table groups in your organization varies with the IDX applications that have been installed at your organization. There is typically one or more table groups per IDX application and one table data verification.

You can use Report Writer queries in DBMS to verify that the correct data is extracted from the transaction system based on the table group selection criteria. Refer to [“Using Data Validation Queries” on page 304](#) for more information.

Table group segments

Depending on the underlying data, table group extractions may result in multiple breakdowns of extracted data. You can view these breakdowns in the Extraction Inquiry screen by using action code S - Segment Information in the Extraction Inquiry activity of the Extraction Module function (F2/A3).

Refer to [“Extraction Inquiry screen” on page 101](#) for more information.



3

Selecting User-Defined Tables and Columns for Extraction

<i>Understanding the Table Definition Module</i>	<i>44</i>
<i>Working with DBMS Tables and Columns</i>	<i>46</i>
<i>Working with Dictionary Tables and Columns</i>	<i>68</i>

Understanding the Table Definition Module

The Extractor has a predefined standard extraction set for you to extract data from your transactional database. (Refer to “[Extraction Set Concepts](#)” on page 30 for more information on the standard extraction set.) Because the Extractor already has this standard extraction set defined, you typically do not have to add tables or columns to the working extraction set. (The working extracting set is also discussed in “[Extraction Set Concepts](#)” on page 30.) However, if you want to add your own user-defined tables and columns, you can do so with the Table Definition Module function (Function 1 in the Extractor Main Menu).



Before you add user-defined tables and columns to the extraction set, you should conduct research to make sure that the user-defined tables and columns are not duplicates of standard tables and columns already being extracted. While duplicating data will not hurt your database, it is inefficient and could make your Analyzer database significantly larger.

Naming conventions when adding user-defined tables

If you add your own user-defined tables to the working extraction set, you should use a consistent naming convention that both describes the table and identifies it as a user-defined table.

IDX recommends that you name all user-defined output tables with the following conventions:

- Begin the name with the “U_” prefix. The “U_” identifies the table as a user-defined table.
- Follow the “U_” with the original output table name. This name helps describe the table.

For example, if you look at the source table REG_B_PAT , which is a standard table, you will see that the corresponding output table name is PATIENT. If you wanted to add a user-defined table based on this table, you should name the output table U_PATIENT.

Activities within the Table Definition Module

The Table Definition Module contains the following activities for adding user-defined tables and columns to the working extraction set:

Activity	Enables you to	For more information, refer to
DBMS Source Tables (Activity 1)	add and edit user-defined DBMS tables and columns in the working extraction set.	“Working with DBMS Tables and Columns” on page 46.
Dictionary Source Tables (Activity 2)	add and edit dictionary tables and fields in the working extraction set.	“Working with Dictionary Tables and Columns” on page 68.

Working with DBMS Tables and Columns

Use the DBMS Source Tables activity (F1/A1) to perform any of the following tasks with the working extraction set:

- Add, edit, and delete user-defined DBMS tables and columns.
- View all DBMS tables and columns.
- Print DBMS table definitions.
- Reset a DBMS table's extraction history.



You cannot edit or delete standard tables and columns. The edit and delete action codes work only for your own user-defined tables and columns.

Displaying DBMS Tables in the Working Extraction Set

DBMS Output Tables screen

When you select the DBMS Source Tables activity (F1/A1), the system displays the following DBMS Output Tables screen

Name	DBMS Output Tables Description	User-defined
APPOINTMENT_DETAIL	appointment details	
APPOINTMENT_HEADER	Scheduling appointments	
APPOINTMENT_NUMBER	Appointment/Visit_num xref	
CABillingAreaCombined	COL_ANAL_BY_BILLING_AREA	
CADivisionCombined	COLL_ANALYSIS_BY_DIVISION	
CAFSCCombined	COLL_ANALYSIS_BY_FSC	
CAGroupCombined	COLL_ANALYSIS_BY_GROUP	
CALocationCombined	COLL_ANALYSIS_BY_LOCATION	
CAPITATION_DETAIL	Capitation transactions	
CAPITATION_HEADER	Capitation headers	
CAProviderCombined	COLL_ANALYSIS_BY_PROVIDER	
CLAIM_COB	Claim COB Activities	
CLAIM_HEADER	Claim headers	
CLAIM_INPT_DIAGNOSIS	claim inpatient diagnosis	
U_APPOINTMENT_DETAIL	User-defined appointment details	*
U_APPOINTMENT_HEADER	User-defined scheduling appointments	*

0	Selected	F7Q-Quit	F10-OK	<HELP>-Help	F13-More Keys
A	Add New Table		D	Delete	E-Edit
P	Print Definition		R	Reset	V-View

Names of output tables in the working extraction set
 Description of data in each output table
 Asterisk to identify user-defined tables
 Action code menu

This screen displays a list of all tables, both standard and user-defined, that are in the working extraction set and will therefore be extracted during the next extraction.

Action codes in the DBMS Output Tables screen Use the action codes at the bottom of the DBMS Output Tables screen to perform any of the following tasks:

Action code	Description	For more information
A - Add New Table	Add a user-defined table to the working extraction set. To add a table, press <A>. When you press this action code, the system displays the Add Output Table screen (DWR1.A) where you enter the new output table's definitions.	On adding output tables to the working extraction set, refer to "Adding, Editing, and Viewing DBMS Table Definitions in the Working Extraction Set" on page 49.
D - Delete	Delete user-defined tables from the working extraction set. To delete a table or tables, select the table(s) and then press <D>. When you press this action code for a user-defined table, the system displays the Are you sure that you want to delete (<i>table name</i>) prompt. You then have the following choices: <ul style="list-style-type: none"> Enter Y to delete the table from the extraction set. Enter N or press <Return> to skip this action and go back to the DBMS Output Tables screen. 	On deleting output tables, refer to "Deleting DBMS Output Tables from the Working Extraction Set" on page 55.
E - Edit	Edit user-defined tables in the working extraction set. To edit a table or tables, select the table(s) and then press <E>. When you press this action code for a user-defined table, the system displays the Edit Output Table screen (DWR1.A) where you edit the output table's definitions.	On editing output tables, refer to "Adding, Editing, and Viewing DBMS Table Definitions in the Working Extraction Set" on page 49.
P - Print Definition	Print a list of output tables and columns and their corresponding source tables and columns. To print table definitions, select the desired table(s) and then press <P>. When you press this action code, the system displays the Device and Right margin prompts. Specify your printer at the Device prompt and set the appropriate margin at the Right margin prompt (Extractor's default setting should work for most situations).	--

Action code	Description	For more information
R - Reset	<p>Reset a table's extraction history.</p> <p>When you extract a table without extraction history, the Extractor treats the table as if it had never been extracted before and runs an initial extraction for it the next time you run an extraction.</p> <p>This action is convenient when you want to change the output table name of a previously extracted table or if you want to delete columns from a user-defined table that was previously extracted.</p> <p>To reset the extraction history, select the table(s) and press <R>. When you press this action code, the system displays the <code>Are you sure that you want to Reset (table name)</code> prompt. You then have the following choices:</p> <ul style="list-style-type: none"> • Enter Y to reset the table's extraction history. • Enter N or press <Return> to skip this action and go back to the DBMS Output Tables screen. 	<p>On changing the output table name of a previously extracted table, refer to “Changing the output table name of a previously extracted table” on page 50.</p>
V - View	<p>View standard and user-defined table definitions in the working extraction set.</p> <p>To view a table or tables, select the table(s) and then press <V>. When you press this action code, the system displays the View Output Table screen (DWR1.A) where you view the output table's definitions.</p>	<p>On viewing output tables, refer to “Adding, Editing, and Viewing DBMS Table Definitions in the Working Extraction Set” on page 49.</p>

Searching for a DBMS output table

To search for an item in the DBMS Output Tables screen, press [Find] (or the corresponding key for the computer type you are using), and then enter the name of the table you want to find. Refer to [“Generic keys for selector lists” on page 338](#) for more information on corresponding [Find] keys.

If you do not know the full name of the table, enter the characters you do know. The system moves the highlight bar to the first item containing the characters you entered.

For example, if you are looking for patient_fsc_list table, enter **PATIENT** at the Find Output Table Name prompt. The system then moves the highlight bar to the first table in the list containing the word *patient*. Because this is not the correct table, you would press [Find] again to move the highlight bar to the next table in the list containing the word *patient*. You do this until you find the patient_fsc_list table. You can also enter more of the output table name to reduce the search time.

Adding, Editing, and Viewing DBMS Table Definitions in the Working Extraction Set

Add/Edit/View Output Table screen (DWR1.A)

If you perform any of the following tasks in the DBMS Output Tables screen:

- Press <A>.
- Select a user-defined table or tables and press <E>.
- Select any table or tables and press <V>.

the system displays the following Add/Edit/View Output Table screen:

Specifications for adding or editing user-defined tables in the working extraction set

```

Add Output Table                                     DWR1.A
Source Table: SCH_B_PAT_APPT_DET
Output Table Name: U_APPOINTMENT_DETAILS
Output Table Description: User-defined appointment details
Estimated Row Byte Length: 909
Pre-Load Action Code:
F7Q-Quit  F7P-Page  F10-OK  <Shift>F4-Major  <Shift>F5-Help  <Shift>F3-More keys
    
```



1. If you press <A>, the screen title is Add Output Table.
2. If you press <E> for a user-defined table, the screen title is Edit Output Table.
3. If you press <V> for any table, the screen title is View Output Table.

Contents of the Add/Edit/View Output Table screen

The Add/Edit/View Output Table screen has fields containing the following definitions:

- Source table name
- Output table name
Refer to “[Naming conventions when adding user-defined tables](#)” on page 44 for IDX’s recommendations on naming user-defined tables.
- Output table description
- Estimated row byte length
- Preload action code

If you are adding or editing user-defined tables, you can specify the definitions you want in most of these fields. If you are viewing a

table, you can view the definitions in these fields, but you cannot change them.

For specific information on each field in this screen, use the Extractor's online help as discussed in [“Using Extractor Online Help” on page 40](#).

Entering and cancelling table updates

To update the system with the table definitions you have entered in this screen, press <F10> to file the updates.

If you do *not* want to update the system with new table definitions, press <F7><Q> to exit the screen.

Changing the output table name of a previously extracted table

If you want to change the name of a user-defined output table for a previously extracted table, you must first reset that table's extraction history using action code R - Reset Table. The next extraction, however, becomes an initial extraction for the renamed table, which can be time-consuming for large extraction sets. For more information on this action code, refer to [“Action codes in the DBMS Output Tables screen” on page 47](#).

Procedure for adding DBMS output tables

Use the following steps to add user-defined DBMS output tables to the working extraction set:

Step	Action	Result	For more information
1	At the <code>Select Function</code> prompt in the Main Menu enter <code>1</code> , and then enter <code>1</code> again at the <code>Select Activity</code> prompt.	The system displays the DBMS Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
2	Press <A>.	The system displays the Add Output Table screen.	On the Add Output Table screen, refer to “Add/Edit/View Output Table screen (DWR1.A)” on page 49 .
3	Enter the appropriate information in each field for the new table.	--	On field descriptions, refer to Extractor online help.
4	Press <F10>.	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 57 .

Step	Action	Result	For more information
5	If you want to add, delete, edit, or view columns in the output table, refer to those specific sections of this chapter for details.	--	<ul style="list-style-type: none"> On procedures for adding columns to the output table, refer to “Procedure for adding DBMS columns to output tables” on page 61. On procedures for deleting columns from the output table, refer to “Procedure for deleting DBMS output columns” on page 62. On procedures for editing columns in the output table, refer to “Procedure for editing DBMS output columns” on page 64. On procedures for viewing columns in the output table, refer to “Procedure for viewing DBMS output columns” on page 66.
6	Press <F10>.	The system displays the Add Output Table screen.	On the Add Output Table screen, refer to “Add/Edit/View Output Table screen (DWR1.A)” on page 49.
7	If you want to add more output tables, go to step 3.	--	--
8	Press <F7><Q>, <F10>, and then <Esc>.	The system displays the Select Function prompt	On menus and activities, refer to “Using Extractor Menus” on page 38.

Procedure for editing DBMS output tables

Use the following steps to edit user-defined DBMS output tables in the working extraction set:

Step	Action	Result	For more information
1	At the <code>Select Function</code> prompt in the Main Menu enter <code>1</code> , and then enter <code>1</code> again at the <code>Select Activity</code> prompt.	The system displays the DBMS Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
2	Select the user-defined output table(s) you want to edit and press <code><E></code> .	<ul style="list-style-type: none"> The system displays the Edit Output Table screen with information on the selected output table. If you choose more than one output table, the system displays the information for the first table. 	On the Edit Output Table screen, refer to “Add/Edit/View Output Table screen (DWR1.A)” on page 49.
3	Edit the appropriate information in each field for the output table.	--	On field descriptions, refer to the Extractor online help.
4	Press <code><F10></code> .	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 57.

Step	Action	Result	For more information
5	If you want to add, delete, edit, or view columns in the output table, you can refer to those specific sections of this chapter.	--	<ul style="list-style-type: none"> On procedures for adding columns to the output table, refer to “Procedure for adding DBMS columns to output tables” on page 61. On procedures for deleting columns from the output table, refer to “Procedure for deleting DBMS output columns” on page 62. On procedures for editing columns in the output table, refer to “Procedure for editing DBMS output columns” on page 64. On procedures for viewing columns in the output table, refer to “Procedure for viewing DBMS output columns” on page 66.
6	Press <F10>.	<ul style="list-style-type: none"> If you selected multiple tables to edit, the system displays the Edit Output Table screen with information for the next output table. If you selected only one table to edit, or if you just edited the last table from a multiple selection, the system displays the DBMS Output Tables screen. 	<ul style="list-style-type: none"> On the Edit Output Table screen, refer to “Add/Edit/View Output Table screen (DWR1.A)” on page 49. On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
7	<p>Does the system show the Edit Output Table screen for the next selected output table?</p> <ul style="list-style-type: none"> If <i>yes</i>, go to step 4. If <i>no</i>, press <F10> and then <Esc>. 	If you press <F10> then <Esc>, the system displays the Select Function prompt	On menus and activities, refer to “Using Extractor Menus” on page 38.

Procedure for viewing DBMS output tables

Use the following steps to view DBMS output tables in the working extraction set:

Step	Action	Result	For more information
1	At the <code>Select Function</code> prompt in the Main Menu enter <code>1</code> , and then enter <code>1</code> again at the <code>Select Activity</code> prompt.	The system displays the DBMS Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
2	Select the output table(s) you want to view and press <code><V></code> .	<ul style="list-style-type: none"> The system displays the View Output Table screen with information on the selected output table. If you choose more than one output table, the system displays the information for the first table. 	On the View Output Table screen, refer to “Add/Edit/View Output Table screen (DWRI.A)” on page 49.
3	If you want to view column information for the selected output table press <code><F10></code> .	If you press <code><F10></code> , the system displays the Output Column Actions Screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 57.
4	If you do not want to view column information for the selected output table press <code><F7><Q></code> .	<ul style="list-style-type: none"> If you selected multiple tables to view, the system displays the View Output Table screen with information for the next output table. If you selected only one table to view, or if you just viewed the last table from a multiple selection, the system displays the DBMS Output Tables screen. 	<ul style="list-style-type: none"> On the View Output Table screen, refer to “Add/Edit/View Output Table screen (DWRI.A)” on page 49. On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
5	Does the system show the View Output Table screen for the next selected output table? <ul style="list-style-type: none"> If <i>yes</i>, go to step 4. If <i>no</i>, press <code><F10></code> and then <code><Esc></code>. 	If you press <code><F10></code> then <code><Esc></code> , the system displays the <code>Select Function</code> prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Deleting DBMS Output Tables from the Working Extraction Set

Restrictions for deleting a table

You can only delete user-defined output tables. You *cannot* delete a table from the standard extraction set. If you must reextract standard table data, use action code R - Reset Table (since you cannot delete the table). For more information on this action code, refer to “[Action codes in the DBMS Output Tables screen](#)” on page 47.

You *cannot* delete a user-defined table if it is the primary key table in a join and the join is defined and active in the join map. If you were to delete such a table, you would have referential integrity problems because one or more tables would reference a nonexistent table.

If the user-defined table you want to delete is a primary key table in an active join, you must first deactivate all joins that reference it. Use the action code F - Filter Joins, in the Edit Join Map activity (F20/A4/A1) to identify any joins that reference the table you want to delete.

For more information about the Edit Join Map activity and action code F, refer to “[Editing the Join Map](#)” on page 132.

Deleting previously extracted tables

When you delete an output table, the Extractor deletes the table definitions associated with the table. Then, during the next extraction run, the Extractor instructs the Loader to delete the corresponding tables, if any, from the Analyzer server.

If you try to delete a user-defined table that has previously been extracted, the system displays a warning similar to the following message:

```
Warning: Table (table name) was extracted in
run (run number). If you delete this table from
the extraction set and later add it back again,
the Extractor will perform an Initial
Extraction on the table.
```

```
Are you sure that you want to delete (table
name)? N=>
```



Be sure that you really want to delete the table before confirming deletion. If you should ever choose to extract the deleted table again, the Extractor treats it as an initial extraction and may need several days to complete what would have otherwise been a much faster extraction.

Procedure for deleting DBMS output tables

Use the following steps to delete user-defined DBMS output tables from the working extraction set:

Step	Action	Result	For more information
1	At the <code>Select Function</code> prompt in the Main Menu enter <code>1</code> , and then enter <code>1</code> again at the <code>Select Activity</code> prompt.	The system displays the DBMS Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
2	Select the user-defined output table(s) you want to delete and press <code><D></code> .	The system confirms deletion of each table you selected for deletion. If the table is used as a primary key table in a join, the system tells you to first deactivate the join before attempting to delete the table.	On deactivating joins, refer to “Activating and Deactivating Joins” on page 135.
3	If you want to delete the selected output table, enter <code>Y</code> ; if not, enter <code>N</code> .	The system deletes the table definitions for the tables for which you confirm deletion and then displays the DBMS Output Tables screen. During the next extraction run, the Extractor instructs the Loader to delete the corresponding tables, if any, from the Analyzer server.	On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
4	Press <code><F10></code> and then <code><Esc></code> .	The system displays the <code>Select Function</code> prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Displaying DBMS Columns in the Working Extraction Set

Output Column Actions screen

When you press <F10> in the Add/Edit/View Output Table screen, the system displays the following Output Column Actions screen:

Name of output table with which you are working

Columns that are included in the working extraction set

Key column identification

Source column

Dictionary number for dictionary corresponding with the column

Action code menu

Output Column Actions
Output Table: U_APPOINTMENT_DETAIL
Estimated Row Byte Length: 909

Name	Source Column	Key	Dictionary
APPOINTMENT_DATE	ID	*	
APPOINTMENT_TIME	TM	*	
PATIENT_ID	ID	*	
ACK_LET_TO_REF_PHY	ACK_LET_TO_REF_PHY		
ACTUAL_DEPARTMENT_ID_301	ACTUAL_DEPT		301
ACTUAL_PROVIDER_ID_302	ACTUAL_PROV		302
AMC_PROCEDURE_ID_334_1	ANC_PROC_1		334
ANCILLARY_DATE_1	ANC_DT_1_DW		
ANCILLARY_DATE_2	ANC_DT_2		
ANCILLARY_DATE_3	ANC_DT_3		
ANCILLARY_DATE_4	ANC_DT_4		
ANCILLARY_DATE_5	ANC_DT_5		

0 Selected F7Q-Quit F10-OK <Alt>F5-Help <Alt>F3-More Keys

A-Add Column(s) D-Delete E-Edit V-View



When you access this screen from the View Output Table screen, only action code V is available.

Contents of the Output Column Actions screen

The Output Column Actions screen displays columns that are included in the current output table, are therefore in the working extraction set, and will therefore be extracted during the next extraction.

Action codes in the Output Column Actions screen Use the action codes at the bottom of the Output Column Actions screen to perform the following tasks:

Action code	Description	For more information
A - Add Column(s)	Add user-defined columns to the current output table. To add a column or columns, press <A>. When you press this action code, the system displays the Add Output Columns screen where you select the column(s) you want to add to the output table.	On adding columns to output tables, refer to “Adding DBMS Columns to an Output Table” on page 59.
D-Delete	Delete user-defined columns from the current output table. To delete a column or columns, select the column(s) and press <D>. When you press this action code, the system does <i>not</i> confirm deletion. However, if you inadvertently delete a column, you can use action code A to add it back to the output table.	On deleting columns from output tables, refer to “Deleting DBMS Columns from an Output Table” on page 62.
E - Edit	Edit user-defined columns in the current output table. To edit a column or columns, select the column(s) and press <E>. When you press this action code, the system displays the Edit Output Column screen (DWC1.A), where you edit the column’s definitions.	On the Edit Output Column screen, refer to “Edit/View Output Column screen (DWC1.A)” on page 63.
V - View	View columns in the current output table. To view a column or columns, select the column(s) and press <V>. When you press this action code, the system displays the View Output Column screen (DWC1.A), where you view the column’s definitions.	On the View Output Column screen, refer to “Edit/View Output Column screen (DWC1.A)” on page 63.

Adding DBMS Columns to an Output Table

Add Output Columns screen

When you press <A> in the Output Column Actions screen, the system displays the following Add Output Columns screen:

Column list view changes as you toggle with <T>

Current source and output table names

Extracted with other table

Columns not yet included in the working extraction

Current row byte length

Dictionary number for corresponding dictionary

Action code menu

Contents of the Add Output Columns screen

The Add Output Columns screen displays columns that are *not* yet being extracted with the current output table. You use the list of columns in this screen to select the columns to add to the current output table. The columns in this list may change when you toggle between *Complete Column List* and *Restricted Column List*. Refer to “[T - Toggle Available Columns](#)” on page 60 for more information on toggling between these lists.

The Add Output Columns screen also shows the name of the source table name for the selected table. It is from this source table that you select the columns to add to the output table. For more information on the difference between source and output tables, refer to “[Source tables and columns](#)” on page 31 and “[Output table and columns](#)” on page 32.

Estimated row byte length

As you add columns to the output table, the estimated row byte length grows. The allowable limit is 1962 row bytes. Use discretion in adding columns as you reach that limit. If you exceed the limit, you can create a separate output table or tables for the columns that you are not able to add.

Action Codes in the Add Output Columns screen Use the action codes at the bottom of the Add Output Columns screen to perform the following tasks:

Action code	Description	For more information
A - Add Column	Adds the selected column(s) to the current output table.	On adding columns to the output table, refer to “ Adding DBMS Columns to an Output Table ” on page 59.
L - Load All Columns	Adds all columns in the Output Column Actions screen to the current output table. To add all columns press <L>. When you press this action code, the system adds all columns and keeps the Output Column Actions screen open.	On restrictions and considerations on adding <i>all</i> columns to the output table, refer to “ Considerations when loading all columns ” on page 60.
T - Toggle Available Columns	Toggles the column list between Restricted Column List and Complete Column List. To toggle between the two column lists, press <T>. When you toggle to <i>Restricted Column List</i> , the system displays columns not already selected for extraction with the current table or with any other output tables being extracted. When you toggle to <i>Complete Column List</i> , the system displays columns not already selected for extraction with the current table but which may be extracted with other output tables. Under the Complete Column List, columns already being extracted with other output tables are marked with an asterisk beneath the Extracted label.	--

Considerations when loading all columns

When you press <L > in the Add Output Columns screen, the system loads all columns displayed on the Output Column Actions screen.

The system only loads as many columns as space allows and displays the message `Maximum record length exceeded` when the number of columns added exceeds the maximum record length. If this problem occurs, you must create a separate output table or tables for the columns that did *not* get added. You can monitor how much space is currently being occupied with the estimated row byte value, as discussed in “[Estimated row byte length](#)” on page 59.

Procedure for adding DBMS columns to output tables

Use the following steps to add DBMS columns to user-defined output tables in the working extraction set.

Step	Action	Result	For more information
If you came to this procedure while adding or editing an output table, go to step 4.			
1	At the <code>Select Function</code> prompt in the Main Menu enter <code>1</code> , and then enter <code>1</code> again at the <code>Select Activity</code> prompt.	The system displays the DBMS Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
2	Select the user-defined output table to which you want to add a column, and press <code><E></code> .	The system displays the Edit Output Table screen.	On the Edit Output Table screen, refer to “Add/Edit/View Output Table screen (DWR1.A)” on page 49.
3	Press <code><F10></code> .	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 57.
4	Press <code><A></code> .	The system displays the Add Output Columns screen.	On the Add Output Columns screen, refer to “Add Output Columns screen” on page 59.
5	Select the column(s) you want to add to the output table, and then press <code><A></code> . If you want to add all columns, press <code><L></code> . (You do not have to select columns to press <code><L></code> .)	The system adds the selected columns to the output table.	--
6	Press <code><F10></code> .	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 57.
If you came to this procedure while adding or editing an output table, return to the original procedure table with which you were working.			
7	Press <code><F10></code> .	The system displays the DBMS Source Output Table.	On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
8	Press <code><F10></code> and then <code><Esc></code> .	The system displays the <code>Select Function</code> prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Deleting DBMS Columns from an Output Table

Restrictions for deleting a column

You can only delete user-defined output columns. You *cannot* delete a column from the standard extraction set.

You *cannot* delete a user-defined column if it is a primary or foreign key involved in a join. If you were to delete such a column, you would have referential integrity problems because one or more of the tables involved would reference a nonexisting column.

If the user-defined column you want to delete is a primary or foreign key in an active join, you must first deactivate the join. For more information deactivating joins, refer to “[Activating and Deactivating Joins](#)” on page 135.

Procedure for deleting DBMS output columns

Use the following steps to delete DBMS columns from user-defined output tables in the working extraction set:



If you want to delete a column from a previously extracted output table, you must first use the R - Reset action code for that particular table in the DBMS Output Tables screen. For more information, refer to action code R - Reset in “[Action codes in the DBMS Output Tables screen](#)” on page 47.

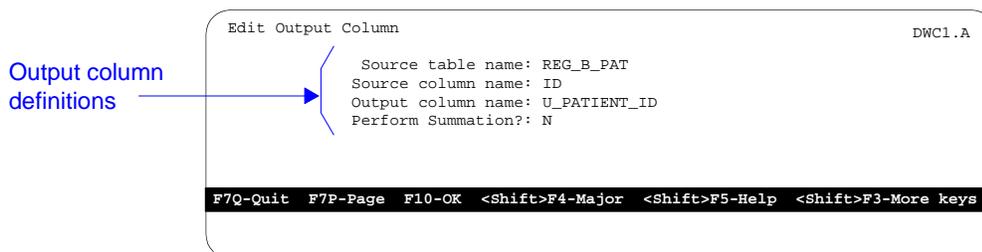
Step	Action	Result	For more information
If you came to this procedure while adding or editing an output table, go to step 4.			
1	At the <code>Select Function</code> prompt in the Main Menu enter <code>1</code> , and then enter <code>1</code> again at the <code>Select Activity</code> prompt.	The system displays the DBMS Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
2	Select the user-defined output table from which you want to delete a column, and press <code><E></code> .	The system displays the Edit Output Table screen.	On the Edit Output Table screen, refer to “ Add/Edit/View Output Table screen (DWR1.A) ” on page 49.
3	Press <code><F10></code> .	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “ Output Column Actions screen ” on page 57.

Step	Action	Result	For more information
4	Select the column(s) you want to delete and press <D>.	The system deletes the selected column(s) from the working extraction set and marks them for deletion from the Analyzer database (to be deleted during the next load). If the column is used as a primary or foreign key in a join, the system tells you to first deactivate the join before attempting to delete the column.	On deactivating joins, refer to “Activating and Deactivating Joins” on page 135.
If you came to this procedure while adding or editing an output table, return to the original procedure table with which you were working.			
5	Press <F10>.	The system displays the DBMS Output Tables screen.	On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
6	Press <F10> and then <Esc>.	The system displays the Select Function prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Editing and Viewing a DBMS Output Table’s Columns

Edit/View Output Column screen (DWC1.A)

When you select a column or columns and press <E> or <V> in the Output Column Actions screen, the system displays the following Edit/View Output Column screen:



1. If you press <E> in the Output Column Actions screen, the screen title is Edit Output Column.
2. If you press <V> in the Output Column Actions screen, the screen title is View Output Column.

Contents of the Edit/View Output Column screen

The Edit/View Output Column screen has fields containing the following:

- Source table name
- Source column name
- Output column name
- Option to include column in summation

If you are editing user-defined tables, you can specify the definitions you want in the *Output column name* and *Perform Summation* fields. If you are viewing a table, you can view the definitions in these fields, but you cannot change them.

For specific information on each field in this screen, use the Extractor’s online help as discussed in [“Using Extractor Online Help” on page 40](#).

Entering and cancelling column updates

To update the system with the column definitions you have entered in this screen, press <F10> to file the updates.

If you *do not* want to update the system with new column definitions, press <F7><Q> to exit the screen.

Procedure for editing DBMS output columns

Use the following steps to edit DBMS columns from user-defined output tables in the working extraction set:

Step	Action	Result	For more information
If you came to this procedure while adding or editing an output table, go to step 4.			
1	At the <code>Select Function</code> prompt in the Main Menu enter <code>1</code> , and then enter <code>1</code> again at the <code>Select Activity</code> prompt.	The system displays the DBMS Output Tables screen.	<ul style="list-style-type: none"> • On menus and activities, refer to “Using Extractor Menus” on page 38. • On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
2	Select the user-defined output table containing the column you want to edit and press <E>.	The system displays the Edit Output Table screen.	On the Edit Output Table screen, refer to “Add/Edit/View Output Table screen (DWR1.A)” on page 49 .
3	Press <F10>.	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 57 .

Step	Action	Result	For more information
4	Select the column(s) you want to edit and then press <E>.	<ul style="list-style-type: none"> The system displays the Edit Output Column screen with information on the selected column. If you choose more than one output column, the system displays the information for the first column. 	On the Edit Output Column screen, refer to “ Edit/View Output Column screen (DWC1.A) ” on page 63.
5	Edit the appropriate information in each field for the output column.	--	On field descriptions, refer to the Extractor online help.
6	Press <F10>.	<ul style="list-style-type: none"> If you selected multiple columns to edit, the system displays the Edit Output Column screen with information for the next output table. If you selected only one column to edit, or if you just edited the last column from a multiple selection, the system displays the Output Column Actions screen. 	<ul style="list-style-type: none"> On the Edit Output Column screen, refer to “Edit/View Output Column screen (DWC1.A)” on page 63. On the Output Column Actions screen, refer to “Output Column Actions screen” on page 57.
7	If the system shows the Edit Output Column screen for the next selected output column then go to step 5.	--	--
If you came to this procedure while adding or editing an output table, return to the original procedure table with which you were working.			
8	Press <F10>.	The system displays the DBMS Output Tables screen.	On the DBMS Output Tables screen, refer to “ DBMS Output Tables screen ” on page 46.
9	Press <F10> and then <Esc>.	The system displays the Select Function prompt.	On menus and activities, refer to “ Using Extractor Menus ” on page 38.

Procedure for viewing DBMS output columns

Use the following steps to view DBMS columns from output tables in the working extraction set:

Step	Action	Result	For more information
If you came to this procedure while viewing an output table, go to step 4.			
1	At the <code>Select Function</code> prompt in the Main Menu enter <code>1</code> , and then enter <code>1</code> again at the <code>Select Activity</code> prompt.	The system displays the DBMS Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
2	Select the output table for which you want to view a column, and press <code><V></code> .	The system displays the View Output Table screen.	On the View Output Table screen, refer to “Add/Edit/View Output Table screen (DWR1.A)” on page 49.
3	Press <code><F10></code> .	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 57.
4	Select the column(s) you want to view, and then press <code><V></code> .	<ul style="list-style-type: none"> The system displays the View Output Column screen with information on the selected column. If you choose more than one output column, the system displays the information for the first column. 	On the View Output Column screen, refer to “Edit/View Output Column screen (DWC1.A)” on page 63.
5	Press <code><F10></code> .	<ul style="list-style-type: none"> If you selected multiple columns to view, the system displays the View Output Column screen with information for the next output table. If you selected only one column to view, or if you just viewed the last column from a multiple selection, the system displays the Output Column Actions screen. 	<ul style="list-style-type: none"> On the View Output Column screen, refer to “Edit/View Output Column screen (DWC1.A)” on page 63. On the Output Column Actions screen, refer to “Output Column Actions screen” on page 57.
6	If the system shows the View Output Column screen for the next selected output column, go to step 5.	--	--

Step	Action	Result	For more information
If you came to this procedure while viewing an output table, press <F10> and then return to the original procedure table with which you were working.			
7	Press <F10>.	The system displays the DBMS Output Tables screen.	On the DBMS Output Tables screen, refer to “DBMS Output Tables screen” on page 46.
8	Press <F10> and then <Esc>.	The system displays the Select Function prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Working with Dictionary Tables and Columns

Overview of dictionary extraction

A dictionary is automatically extracted if it is referenced by an extracted column. You therefore do not have to add any dictionaries to the working extraction set unless you also want to extract other, non-referenced dictionaries. Dictionaries marked for extraction are extracted in their entirety during every extraction run.

Overview of the Dictionary Source Tables Activity

Use the Dictionary Source Tables activity (F1/A2) if you want to add or edit user-defined dictionaries and fields in the working extraction set.

When you select this activity, the system displays a series of screens through which you can add or edit user-defined dictionaries in the extraction set.

Displaying Dictionary Tables in the Working Extraction Set

Dictionary Source Output Tables screen

When you select the Dictionary Source Tables activity (F1/A2), the system displays the following Dictionary Source Output Tables screen:

Dict#	Name	Description	User-defined
1	PROCEDURE_CODES	Procedure Codes	
1	PROCEDURE_CODES_CONTINUED	PROCEDURE CODES CONTINUED	
2	PAYMENT_CODES	Payment Codes	
2	U_PAYMENT_CODES	User-defined payment codes	*
3	PROVIDERS	Providers	
3	PROVIDERS_CONTINUED	Providers	
5	MODIFIERS	Modifiers	
6	REJECTION_CODES	Rejection Codes	
7	REJECTION_TYPES	Rejection Type	
7	U_REJECTION_TYPES	User-defined rejection types	*
11	ZIP_CODE_CITY_CROSSMAP	Zip Code City Crossmap	
12	RELIGIONS	RELIGIONS	
13	RACE_ETHNIC_GROUP	RACE/ETHNIC GROUP	
18	FRONT_DESK_PAYMENT_TYPES	Front Desk Payment Types	
19	FINANCIAL_STATUS_CLASS	Financial Status Class	

0 Selected F7Q-Quit F10-OK <HELP>-Help F13-More Keys

A-Add New Table D-Delete E-Edit
P-Print Definition R-Reset V-View

This screen displays a list of all dictionary tables, both standard and user-defined, that are in the working extraction set and will therefore be extracted during the next extraction.



Dictionary tables are tables of data, so they are classified as tables in the Analyzer database.

Action codes in the Dictionary Source Output Tables screen

Use the action codes at the bottom of the Dictionary Source Output Tables screen to perform any of the following tasks:

Action code	Description	For more information
A - Add New Table	Add user-defined dictionary tables to the working extraction set. To add a table, press <A>. When you press this action code, the system displays the Add Output Table (DWD1.A) screen where you enter the new output table's definitions.	On the Add Output Table screen, refer to "Add/Edit/View Output Table screen (DWD1.A)" on page 71.
D - Delete Table	Delete user-defined dictionary tables from the working extraction set. To delete a table or tables, select the table(s) and then press <D>. When you press this action code, the system displays the Deleting output table x. Continue prompt, where x represents the selected table(s). You then have the following two choices: <ul style="list-style-type: none"> Enter Y to delete the table from the extraction set. Enter N or press <Return> to skip this option and go back to the Dictionary Source Output Tables screen. 	On deleting tables, refer to "Deleting Dictionary Tables from the Working Extraction Set" on page 77.
E - Edit Table	Edit user-defined dictionary tables. To edit a table or tables, select the table(s) and then press <E>. When you press this action code, the system displays the Edit Output Table (DWD1.A) screen where you edit the output table's definitions.	On the Edit Output Table screen, refer to "Add/Edit/View Output Table screen (DWD1.A)" on page 71.

Action code	Description	For more information
P - Print Definition	<p>Print a list of dictionary output table and columns and their corresponding source table and columns.</p> <p>To print table definitions, select the desired table(s) and then press <P>. When you press this action code, the system displays the <code>Device</code> and <code>Right margin</code> prompts. Specify your printer at the <code>Device</code> prompt and set the appropriate margin at the <code>Right margin</code> prompt (Extractor's default setting should work for most situations).</p>	--
R - Reset	<p>Reset a dictionary table's extraction history.</p> <p>This action is convenient when you want to change the output table name of a previously extracted table or when you want to delete a column from an extracted table.</p> <p>To reset the extraction history, select the table(s) and press <R>. When you press this action code, the system displays the <code>Are you sure that you want to Reset (table name)</code> prompt. You then have the following choices:</p> <ul style="list-style-type: none"> • Enter Y to reset the table's extraction history. • Enter N or press <Return> to skip this action and go back to the DBMS Output Tables screen. 	<p>On changing the output table name of a previously extracted table, refer to “Changing the output table name of a previously extracted table” on page 50 (while this information is in the section on DBMS tables and columns, the concepts still apply to dictionaries)</p>
V - View	<p>View standard and user-defined dictionary table definitions in the working extraction set.</p> <p>To view a table or tables, select the table(s) and then press <V>. When you press this action code, the system displays the View Output Table screen (DWD1.A) where you view the output table's definitions.</p>	<p>On the View Output Table screen, refer to “Add/Edit/View Output Table screen (DWD1.A)” on page 71.</p>

Searching for an output table

To search for an item in the Dictionary Source Output Tables screen, press [Find] (or the corresponding key for the computer type you are using), and then enter the dictionary number for the table you want to find. Refer to [“Generic keys for selector lists” on page 338](#) for more information on corresponding [Find] keys.

If you do not know the full name of the table, enter the characters you do know. The system moves the highlight bar to the first item containing the characters you entered.

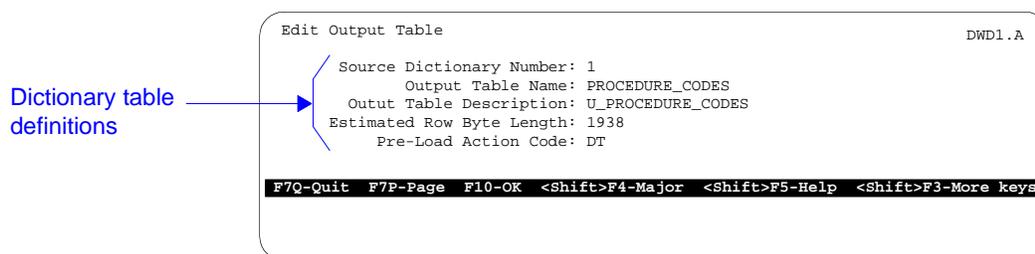
Adding, Editing, and Viewing Dictionary Table Definitions in the Working Extraction Set

Add/Edit/View Output Table screen (DWD1.A)

If you perform any of the following tasks in the Dictionary Source Output Tables screen:

- Press <A>.
- Select a user-defined table or tables and press <E>.
- Select any table or tables and press <V>.

the system displays the following Add/Edit/View Output Table screen:



1. If you press <A>, the screen title is Add Output Table.
2. If you press <E> for a user-defined table, the screen title is Edit Output Table.
3. If you press <V> for any table, the screen title is View Output Table.

Contents of the Add/Edit/View Output Table screen

The Add/Edit/View Output Table screen has fields containing the following definitions:

- Source dictionary number
- Output table name
 - Refer to “[Naming conventions when adding user-defined tables](#)” on page 44 for IDX’s recommendations on naming user-defined tables.
- Output table description
- Estimated row byte length
- Preload action code

If you are adding or editing user-defined tables, you can specify the definitions you want in these fields. If you are viewing a table, you can view the definitions in these fields, but you cannot change them.

For specific information on each field in this screen, use the Extractor's online help as discussed in [“Using Extractor Online Help” on page 40](#).

Entering and cancelling table updates

To update the system with the table definitions you have entered in this screen, press <F10> to file the updates.

If you do *not* want to update the system with new table definitions, press <F7><Q> to exit the screen.

Procedure for adding dictionary output tables

Use the following steps to add user-defined dictionary output tables to the working extraction set:

Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu enter 1 , and then enter 2 at the Select Activity prompt.	The system displays the Dictionary Source Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
2	Press <A>.	The system displays the Add Output Table screen.	On the Add Output Table screen, refer to “Add/Edit/View Output Table screen (DWD1.A)” on page 71 .
3	Enter the appropriate information in each field for the new table.	--	On field descriptions, refer to the Extractor online help.
4	Press <F10>.	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 78 .

Step	Action	Result	For more information
5	If you want to add, delete, edit, or view columns in the output table, you can refer to those specific sections of this chapter.	--	<ul style="list-style-type: none"> On adding columns to the output table, refer to “Procedure for adding dictionary columns to output tables” on page 82. On deleting columns from the output table, refer to “Procedure for deleting dictionary output columns” on page 83. On editing columns in the output table, refer to “Procedure for editing dictionary output columns” on page 85. On editing columns in the output table, refer to “Procedure for viewing dictionary output columns” on page 86.
6	Press <F10>.	The system displays the Add Output Table screen.	On the Add Output Table screen, refer to “Add/Edit/View Output Table screen (DWD1.A)” on page 71.
7	If you want to add more output tables, go to step 3.	--	--
8	Press <F7><Q>, <F10>, and then <Esc>.	The system displays the Select Function prompt	On menus and activities, refer to “Using Extractor Menus” on page 38.

Procedure for editing dictionary output tables

Use the following steps to edit user-defined dictionary output tables in the working extraction set:

Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu enter 1 , and then enter 2 at the Select Activity prompt.	The system displays the Dictionary Source Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
2	Select the user-defined output table(s) you want to edit and press <E>.	<ul style="list-style-type: none"> The system displays the Edit Output Table screen with information on the selected output table. If you choose more than one output table, the system displays the information for the first table. 	On the Edit Output Table screen, refer to “Add/Edit/View Output Table screen (DWD1.A)” on page 71.
3	Edit the appropriate information in each field for the output table.	--	On field descriptions, refer to the Extractor online help.
4	Press <F10>.	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 78.

Step	Action	Result	For more information
5	If you want to add, delete, edit, or view columns in the output table, you can refer to those specific sections of this chapter.	--	<ul style="list-style-type: none"> On adding columns to the output table, refer to “Procedure for adding dictionary columns to output tables” on page 82. On deleting columns from the output table, refer to “Procedure for deleting dictionary output columns” on page 83. On editing columns in the output table, refer to “Procedure for editing dictionary output columns” on page 85. On editing columns in the output table, refer to “Procedure for viewing dictionary output columns” on page 86.
6	Press <F10>.	<ul style="list-style-type: none"> If you selected multiple tables to edit, the system displays the Edit Output Table screen with information for the next output table. If you selected only one table to edit, or if you just edited the last table from a multiple selection, the system displays the Dictionary Source Output Tables screen. 	<ul style="list-style-type: none"> On the Edit Output Table screen, refer to “Add/Edit/View Output Table screen (DWD1.A)” on page 71. On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
7	<p>Does the system show the Edit Output Table screen for the next selected output table?</p> <ul style="list-style-type: none"> If <i>yes</i>, go to step 4. If <i>no</i>, press <F10> and then <Esc>. 	If you press <F10> then <Esc>, the system displays the Select Function prompt	On menus and activities, refer to “Using Extractor Menus” on page 38.

Procedure for viewing dictionary output tables

Use the following steps to view dictionary output tables in the working extraction set:

Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu enter 1 , and then enter 2 at the Select Activity prompt.	The system displays the Dictionary Source Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
2	Select the output table(s) you want to view and press <V>.	<ul style="list-style-type: none"> The system displays the View Output Table screen with information on the selected output table. If you choose more than one output table, the system displays the information for the first table. 	On the View Output Table screen, refer to “Add/Edit/View Output Table screen (DWD1.A)” on page 71.
3	If you want to view column information for the selected output table press <F10>.	If you press <F10>, the system displays the Output Column Actions Screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 78.
4	If you do not want to view column information for the selected output table press <F7><Q>.	<ul style="list-style-type: none"> If you selected multiple tables to view, the system displays the View Output Table screen with information for the next output table. If you selected only one table to view, or if you just viewed the last table from a multiple selection, the system displays the Dictionary Source Output Tables screen. 	<ul style="list-style-type: none"> On the View Output Table screen, refer to “Add/Edit/View Output Table screen (DWD1.A)” on page 71. On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
5	Does the system show the View Output Table screen for the next selected output table? <ul style="list-style-type: none"> If <i>yes</i>, go to step 4. If <i>no</i>, press <F10> and then <Esc>. 	If you press <F10> then <Esc>, the system displays the Select Function prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Deleting Dictionary Tables from the Working Extraction Set

Restrictions for deleting a dictionary table

You can only delete user-defined dictionary tables that are not referenced by any other column in the extraction set. If you attempt to delete a dictionary table that is referenced by a column in the extraction set, the system displays the following message:

Output table *x* cannot be deleted because it is referenced by *y*.

where *x* represents the dictionary table you attempted to delete, and *y* represents the DBMS output table and column it is referenced by.

Procedure for deleting dictionary output tables

Use the following steps to delete user-defined dictionary output tables from the working extraction set:

Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu enter 1 , and then enter 2 at the Select Activity prompt.	The system displays the Dictionary Source Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
2	Select the user-defined output table(s) you want to delete and press <D>.	The system confirms deletion of each table you selected for deletion.	--
3	If you want to delete the selected output table, enter Y . If not, enter N .	The system deletes the table(s) for which you confirm deletion and then displays the Dictionary Source Output Tables screen.	On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
4	Press <F10> and then <Esc>.	The system displays the Select Function prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Action codes in the Output Column Actions screen Use the action codes at the bottom of the Output Column Actions screen to perform the following tasks:

Action code	Description	For more information
A - Add Column(s)	Add user-defined columns to the current output table. To add a column or columns, press <A>. When you press this action code, the system displays the Add Output Columns screen where you select the column(s) you want to add to the output table.	On adding columns to output tables, refer to “Adding Dictionary Columns to an Output Table” on page 80.
D-Delete	Delete user-defined columns from the current output table. To delete a column or columns, select the column(s) and press <D>. When you press this action code, the system does <i>not</i> confirm deletion. However, if you inadvertently delete a column, you can use action code A to add it back to the output table.	On deleting columns from output tables, refer to “Deleting Dictionary Columns from an Output Table” on page 83.
E - Edit	Edit user-defined columns in the current output table. To edit a column or columns, select the column(s) and press <E>. When you press this action code, the system displays the Edit Output Column screen (DWD3.A; or DWD2.A for repeating data), where you edit the column’s definitions.	On the Edit Output Column screen, refer to “Editing and Viewing Columns from a DBMS Output Table” on page 84.
V - View	View columns in the current output table. To view a column or columns, select the column(s) and press <V>. When you press this action code, the system displays the View Output Column screen (DWD3.A; or DWD2.A for repeating data), where you view the column’s definitions.	On the View Output Column screen, refer to “Editing and Viewing Columns from a DBMS Output Table” on page 84.

Adding Dictionary Columns to an Output Table

Add Output Columns screen

When you press <A> in the Output Column Actions screen, the system displays the following Add Output Columns screen:

Column list view changes as you toggle with <T>

Current source and output table names

Extracted with other table

Columns not yet included in the working extraction

Storage Location in the dictionary

Specifies whether the field is repeating or not

Action code menu

Source Fields	Extracted	SL	Repeat
Add Output Columns Complete Column List Source Table: Dictionary #1 Output Table: U_PROCEDURE_CODES Estimated Row Byte Length: 116			
AMOUNT	*	3	N
ASA NUMBER	*	506	N
ASC TOS CODE	*	1002	N
ATTACH INFORMATION TO B/S CLAIM?	*	403	N
ATTACH INFORMATION TO IMS CLAIM FORM?	*	4105	N
ATTACH INFORMATION TO MEDICARE CLAIM?	*	503	N
ATTACH INFORMATION TO WELFARE CLAIM?	*	603	N
B. S. HANDLING CODE	*	404	N
BASE FEE AMOUNT	*	2103	N
BASE UNITS	*	2101	N
BLUE SHIELD DESCRIPTION (IF DIFF)	*	402	N

0 Selected	F7Q-Quit	F10-OK	<Alt>F5-Help	<Alt>F3-More Keys
A-Add Column	L-Load All Columns	T-Toggle Available Columns		

Contents of the Add Output Columns screen

The Add Output Columns screen displays columns that are *not* yet being extracted with the current output table. You use the list of columns in this screen to select the columns to add to the current output table. The columns in this list may change when you toggle between *Complete Column List* and *Restricted Column List*. Refer to “[T - Toggle Available Columns](#)” on page 81 for more information on toggling between these lists.

The Add Output Columns screen also shows the name of the source table name for the selected table. It is from this source table that you select the columns to add to the output table. For more information on the difference between source and output tables, refer to “[Source tables and columns](#)” on page 31 and “[Output table and columns](#)” on page 32.

Estimated row byte length

As you add columns to the output table, the estimated row byte length grows. The allowable limit is 1962 row bytes. Use discretion in adding columns as you reach that limit. If you exceed the limit, you can create a separate output table or tables for the columns that you are not able to add.

Action Codes in the Add Output Columns screen Use the action codes at the bottom of the Add Output Columns screen to perform the following tasks:

Action code	Description	For more information
A - Add Column	Adds the selected columns(s) to the current output table.	On adding columns to the output table, refer to “Adding Dictionary Columns to an Output Table” on page 80.
L - Load All Columns	Adds all columns in the Output Column Actions screen to the current output table. To add all columns, press <L>. When you press this action code, the system adds all columns and keeps the Output Column Actions screen open.	On restrictions and considerations on adding <i>all</i> columns to the output table, refer to “Considerations when loading all columns” on page 81.
T - Toggle Available Columns	Toggles the column list between Restricted Column List and Complete Column List. To toggle between the two column lists, press <T>. When you toggle to <i>Restricted Column List</i> , the system displays columns not already selected for extraction with the current table or with any other output tables being extracted. When you toggle to <i>Complete Column List</i> , the system displays columns not already selected for extraction with the current table but which may be extracted with other output tables. Under the Complete Column List, columns already being extracted with other output tables are marked with an asterisk beneath the Extracted label.	--

Considerations when loading all columns When you press <L > in the Add Output Columns screen, the system loads all columns displayed on the Output Column Actions screen.

The system only loads as many columns as space allows and displays the message *Maximum record length exceeded* when the number of columns added exceeds the maximum record length. If this problem occurs, you must create a separate output table or tables for the columns that did *not* get added. You can monitor how much space is currently being occupied with the estimated row byte value, as discussed in “Estimated row byte length” on page 80.

Procedure for adding dictionary columns to output tables

Use the following steps to add dictionary columns to user-defined output tables in the working extraction set:

Step	Action	Result	For more information
If you came to this procedure while adding or editing an output table, go to step 4.			
1	At the Select Function prompt in the Main Menu enter 1 , and then enter 2 at the Select Activity prompt.	The system displays the Dictionary Source Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
2	Select the user-defined output table to which you want to add a column, and press <E>.	The system displays the Edit Output Table screen.	On the Edit Output Table screen, refer to “Add/Edit/View Output Table screen (DWD1.A)” on page 71.
3	Press <F10>.	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 78.
4	Press <A>.	The system displays the Add Output Columns screen.	On the Add Output Columns screen, refer to “Add Output Columns screen” on page 80.
5	Select the column(s) you want to add to the output table, and then press <A>. If you want to add all columns, press <L>. (You do not have to select columns to press <L>.)	The system adds the selected columns to the output table.	--
6	Press <F10>.	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 78.
If you came to this procedure while adding or editing an output table, return to the original procedure table with which you were working.			
7	Press <F10>.	The system displays the Dictionary Source Output Table.	On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
8	Press <F10> and then <Esc>.	The system displays the Select Function prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Deleting Dictionary Columns from an Output Table

Procedure for deleting dictionary output columns

Use the following steps to delete dictionary columns from user-defined output tables in the working extraction set:



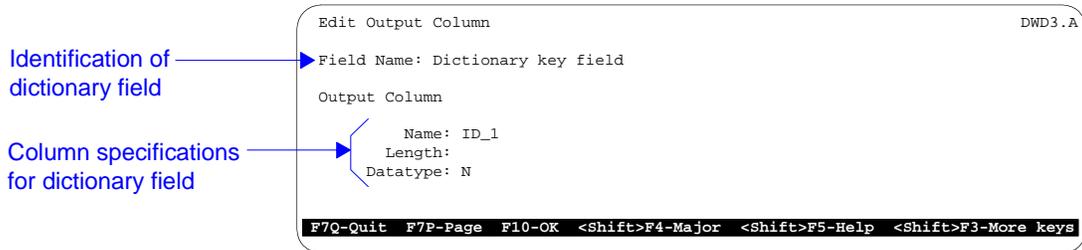
1. If you want to delete a column from a previously extracted output table, you must first use the R - Reset action code for that particular table in the Dictionary Source Output Tables screen. For more information, refer to action code R - Reset in "Action codes in the Dictionary Source Output Tables screen" on page 69.
2. You can only delete user-defined output tables. You cannot delete a table from the standard extraction set.

Step	Action	Result	For more information
If you came to this procedure while adding or editing an output table, go to step 4.			
1	At the Select Function prompt in the Main Menu enter 1 , and then enter 2 at the Select Activity prompt.	The system displays the Dictionary Source Output Tables screen.	<ul style="list-style-type: none"> • On menus and activities, refer to "Using Extractor Menus" on page 38. • On the DBMS Output Tables screen, refer to "Dictionary Source Output Tables screen" on page 68.
2	Select the user-defined output table from which you want to delete a column, and press <E>.	The system displays the Edit Output Table screen.	On the Edit Output Table screen, refer to "Add/Edit/View Output Table screen (DWD1.A)" on page 71.
3	Press <F10>.	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to "Output Column Actions screen" on page 78.
4	Select the column(s) you want to delete and press <D>.	The system deletes the selected column(s).	--
If you came to this procedure while adding or editing an output table, return to the original procedure table with which you were working.			
5	Press <F10>.	The system displays the Dictionary Source Output Table.	On the Dictionary Source Output Tables screen, refer to "Dictionary Source Output Tables screen" on page 68.
6	Press <F10> and then <Esc>.	The system displays the Select Function prompt.	On menus and activities, refer to "Using Extractor Menus" on page 38.

Editing and Viewing Columns from a DBMS Output Table

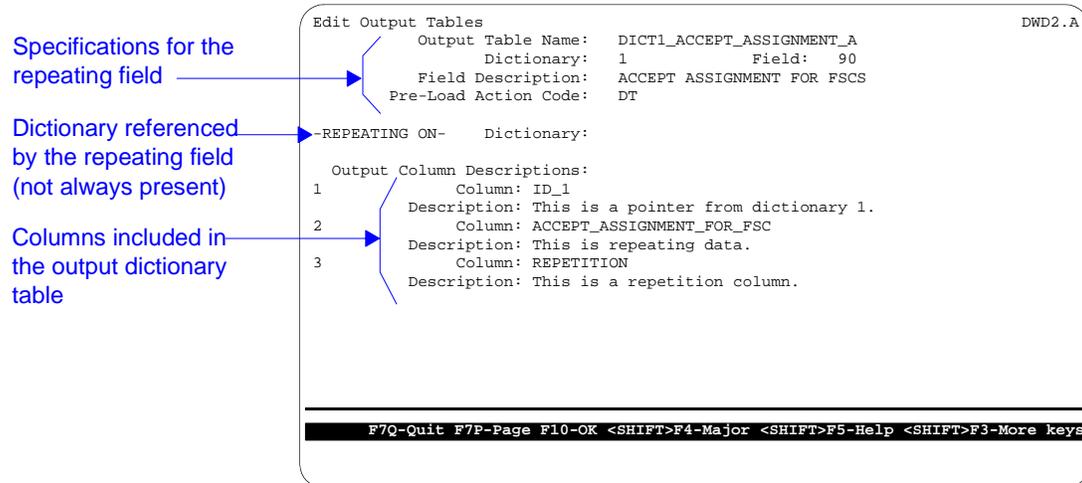
Edit/View Dictionary Column screen

When you select a column or columns and press <E> or <V> in the Output Column Actions screen, the system displays the following Edit/View Output Column screen:



1. If you press <E> in the Output Column Actions screen, the screen title is Edit Output Column.
2. If you press <V> in the Output Column Actions screen, the screen title is View Output Column.

When you select a repeating field to work with, the system displays the following Edit/View Output Column Screen (DWD2.A instead of DWD3.A):



Contents of the Edit/View Output Column screen

The Edit Dictionary Output Column screen displays the information about the dictionary column for the current output table.

For specific information on each field in this screen, use the Extractor's online help as discussed in ["Using Extractor Online Help"](#) on page 40.

Entering and cancelling column updates

To update the system with the column definitions you have entered in this screen, press <F10> to file the updates.

If you do *not* want to update the system with new column definitions, press <F7><Q> to exit the screen.

Procedure for editing dictionary output columns

Use the following steps to edit dictionary columns from user-defined output tables in the working extraction set:

Step	Action	Result	For more information
If you came to this procedure while adding or editing an output table, go to step 4.			
1	At the Select Function prompt in the Main Menu enter 1 , and then enter 2 at the Select Activity prompt.	The system displays the Dictionary Source Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the DBMS Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
2	Select the user-defined output table containing the column you want to edit and press <E>.	The system displays the Edit Output Table screen.	On the Edit Output Table screen, refer to “ Add/Edit/View Output Table screen (DWD1.A) ” on page 71.
3	Press <F10>.	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “ Output Column Actions screen ” on page 78.
4	Select the column(s) you want to edit and then press <E>.	<ul style="list-style-type: none"> The system displays the Edit Output Column screen with information on the selected column. If you choose more than one output column, the system displays the information for the first column. 	On the Edit Output Column screen, refer to “ Edit/View Dictionary Column screen ” on page 84.
5	Edit the appropriate information in each field for the output column.	--	On field descriptions, refer to the Extractor online help.

Step	Action	Result	For more information
6	Press <F10>.	<ul style="list-style-type: none"> If you selected multiple columns to edit, the system displays the Edit Output Column screen with information for the next output table. If you selected only one column to edit, or if you just edited the last column from a multiple selection, the system displays the Output Column Actions screen. 	<ul style="list-style-type: none"> On the Edit Output Column screen, refer to “Edit/View Dictionary Column screen” on page 84. On the Output Column Actions screen, refer to “Output Column Actions screen” on page 78.
7	If the system shows the Edit Output Column screen for the next selected output column then go to step 5.	--	--
If you came to this procedure while adding or editing an output table, return to the original procedure table with which you were working.			
8	Press <F10>.	The system displays the Dictionary Source Output Table.	On the Dictionary Source Output Tables screen, refer to “ Dictionary Source Output Tables screen ” on page 68.
9	Press <F10> and then <Esc>.	The system displays the Select Function prompt.	On menus and activities, refer to “ Using Extractor Menus ” on page 38.

Procedure for viewing dictionary output columns

Use the following steps to view dictionary columns from output tables in the working extraction set:

Step	Action	Result	For more information
If you came to this procedure while viewing an output table, go to step 4.			
1	At the Select Function prompt in the Main Menu enter 1 , and then enter 2 at the Select Activity prompt.	The system displays the Dictionary Source Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the DBMS Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
2	Select the user-defined output table for which you want to view a column, and press <V>.	The system displays the View Output Table screen.	on the View Output Table screen, refer to “ Add/Edit/View Output Table screen (DWD1.A) ” on page 71.

Step	Action	Result	For more information
3	Press <F10>.	The system displays the Output Column Actions screen.	On the Output Column Actions screen, refer to “Output Column Actions screen” on page 78.
4	Select the column(s) you want to view and then press <V>.	<ul style="list-style-type: none"> The system displays the View Output Column screen with information on the selected column. If you choose more than one output column, the system displays the information for the first column. 	On the View Output Column screen, refer to “Edit/View Dictionary Column screen” on page 84.
5	Press <F10>.	<ul style="list-style-type: none"> If you selected multiple columns to view, the system displays the View Output Column screen with information for the next output table. If you selected only one column to view, or if you just viewed the last column from a multiple selection, the system displays the Output Column Actions screen. 	<ul style="list-style-type: none"> On the View Output Column screen, refer to “Edit/View Dictionary Column screen” on page 84. On the Output Column Actions screen, refer to “Output Column Actions screen” on page 78.
6	If the system shows the View Output Column screen for the next selected output column then go to step 5.	--	--
If you came to this procedure while viewing an output table, press <F10> and then return to the original procedure table with which you were working.			
7	Press <F10>.	The system displays the Dictionary Source Output Table.	On the Dictionary Source Output Tables screen, refer to “Dictionary Source Output Tables screen” on page 68.
8	Press <F10> and then <Esc>.	The system displays the Select Function prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.



4

Running the Extraction

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<i>Pausing an Extraction Run.....</i>	<i>99</i>
<i>Restarting an Extraction Run</i>	<i>100</i>
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Understanding the Extraction Module

The Extraction Module function (F2 on the Extractor Main Menu) contains the activities you use to run an extraction.

Activities within the Extraction Module

The Extraction Module contains the following activities:

Activity	Enables you to	For more information, refer to
Table Extraction (A1)	Extract the output tables and columns from the working extraction set in the transactional database.	“Running Extractions” on page 95.
Extraction Inquiry (A3)	Display a history of extractions or the status of a currently running extraction.	“Inquiring About an Extraction Run” on page 101.
Check Extraction Set (A4)	Verify that all the tables and columns in the working extraction set can be extracted (you should verify that all output tables and columns are extractable before attempting to extract them).	“Checking the Extraction Set” on page 92.
Pause Current Extraction (A5)	Pause a running extraction.	“Pausing an Extraction Run” on page 99.
Restart Extraction Run (A6)	Restart a paused extraction run.	“Restarting an Extraction Run” on page 100.

Verifying that extraction set size is within system limitations

Before you extract data, you should know the approximate size of the extraction set and whether that size is within your system’s capabilities. It is important to know the extraction set size because the system creates data files on the server’s disk, and the server’s disk has a limited capacity.

Disk capacity may be an issue when you are performing the initial extraction because an initial extraction typically moves large quantities of data.

You can estimate extraction set size by identifying the number of rows for each table and then multiplying the number of rows by each of the table’s estimated row byte length. The sum of these products for all table groups is approximately the size of the extraction set.

Running the initial extraction

The first extraction you run is an **initial extraction**. An initial extraction run includes historical data up to and including the extract through date. The starting point for an initial extraction is the earliest

recorded date in the transactional database, unless you specify a later date.

When you perform an initial extraction, you may not want to extract all the data on your system at one time. For example, you may want to break extractions into subsets by year, and extract the data one subset at a time in **incremental extractions**.

Running incremental extractions

An incremental extraction is any extraction that is run after the completion of an initial extraction. You should run incremental extractions on a regular basis to collect data entered into the transactional system. The starting date for an incremental extraction is one day after the extraction through date of the previous extraction.

You might want to run the Extractor once each week or month, depending on how much data is typically in your transactional database. You can extract data on a daily basis, but you cannot extract the same data more frequently than once each day.

You can specify the date through which you want the system to extract data. However, all data may not be available in the date range that you specify. For example, some data may require that books are closed before it can be extracted.

Use Night Jobs to run extractions automatically

You can run automatic extractions on a daily basis with Night Jobs operations. To do so, you must use programming mode to make an entry in the ^ZIDMAN Night Jobs operations table for AUTO^DWEXREC. Contact IDX for assistance if you do not have programming mode for the Extractor.

Checking the Extraction Set

Before you run an extraction, use the Check Extraction Set activity (F2/A4) to determine if the tables and columns in the working extraction set can actually be extracted.

While performing this activity, the system checks the integrity of the *column definitions* included in the working extraction set to ensure metadata definitions are accurate for the Loader; the system checks columns based on the source columns in DBMS.

There may be problems with the data itself, which this activity does not check. The Analyzer Loader checks these types of errors.

Running the Check Extraction Set activity

When you select F2/A4, the system displays the following prompt:

```
This activity confirms that each column in the
Extraction Set is extractable.
```

```
Continue? No=>.
```

Enter **Y** if you want to continue with the extraction set check.

Enter **N**, or press <Return> to accept the “No” default of if you do not want to continue.

If the system does not find problems with the extraction set

If the system does not find problems with the integrity of any column in the extraction set, the system displays the following message:

```
No errors found in Extraction Set
Extraction Set Name.
```

```
Press any key to continue:
```

Once you determine that the data included in the extraction set can be extracted, you can perform the actual extraction.

If the system finds problems with the extraction set

If the system finds problems with the integrity of the column definitions, it displays the following message:

```
There are errors in the source columns.
```

The system also supplies the name of any column that has an integrity problem.

If the Extractor encounters an error in the extraction set, the Extractor will not proceed any further. You need to either fix the errors or delete the columns that are causing errors from the extraction set.

Troubleshooting problems with the extraction set

To find the cause of a problem in any column that contains an error reported by the system, use the following troubleshooting techniques:

- Check the data definition in DBMS.
- Ensure that the datatypes are valid for extraction.
- Ensure that the column is not pointing to a source column that does *not* exist, or is *not* extractable. To verify this, you can check the derivation code if it is present.

Refer to the following section (“Criteria for extraction”) for characteristics of extractable columns.

Criteria for extraction

The Extractor checks the definition at the time a column is selected to verify that the column meets the following list of requirements:

- The column must exist and be active in DBMS.
- If the column is a Dictionary type, the column must not use derivation code.
- If the column’s piece value points to another column, the column pointed to must also be extractable.
- The column must have a column type defined.
- The Maxlen field value for the column must be a positive integer.
- The combination of type, length and number of decimals must be capable of equating to a valid type in the RDBMS used on the server.
- If the column is a Dictionary type, the dictionary must exist.
- If the source of the column is *Base*, then either *node* or *piece* must have a value. Both can be defined, but this is not required. *Delimiter* is usually defined, but this also is not required.
- If the column uses derivation code, the code must meet the following criteria:
 - It must be correct (i.e. a valid SQL expression; no M code is allowed).
 - It must not make any outside table references.
 - All referenced columns must be extractable, though they can be on the Exclude List.
 - It must not use any local variables in a \$PCE function.

- If the source of the column is *LOCAL* and the column has a local name, then it must be a global subscript in the same table or have the same local name as another column in that table which is a global subscript. An exception to this is any column with the local name of *OCC* or *UDDOCC*.
- The following types of source columns are never extractable:
 - Repeating columns
 - Repeating variables
 - Word processing fields
 - DEDN datatype columns

Procedure for checking the working extraction set

Use the following steps to check the working extraction set:

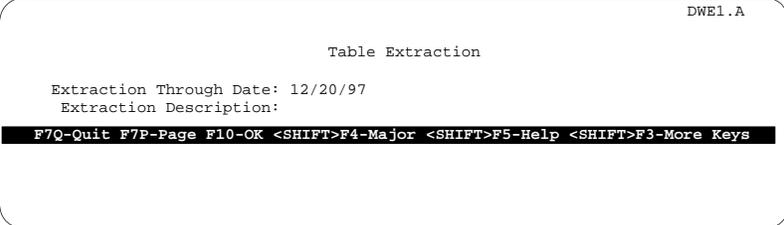
Step	Action	Result	For more information
1	At the <i>Select Function</i> prompt in the Main Menu enter 2 , and then enter 4 at the <i>Select Activity</i> prompt.	The system displays the <i>Continue</i> prompt.	On checking the extraction set, refer to “ Checking the Extraction Set ” on page 92.
2	Enter Y .	The system checks the extraction set, displays a status message to tell you if there were errors or not, and displays the <i>Press any key to continue</i> prompt.	<ul style="list-style-type: none"> • On errors when checking the extraction set, refer to “If the system finds problems with the extraction set” on page 92. • On checking the extraction set in general, refer to “Checking the Extraction Set” on page 92.
3	Press <Return> or any other key.	The system displays the <i>Select Activity</i> prompt.	On menus and activities, refer to “ Using Extractor Menus ” on page 38.
4	Press <Esc>.	The system displays the <i>Extractor Main Menu</i> .	On menus and activities, refer to “ Using Extractor Menus ” on page 38.

Running Extractions

Use the Table Extraction activity (F2/A1) to extract data from the transactional database.

Table Extraction screen (DWE1.A)

When you select F2/A1, the system displays the following Table Extraction screen:



```

DWE1.A
Table Extraction
Extraction Through Date: 12/20/97
Extraction Description:
F7Q-Quit F7P-Page F10-OK <SHIFT>F4-Major <SHIFT>F5-Help <SHIFT>F3-More Keys

```

The Table Extraction screen enables you to specify the date through which you want to extract data and a description of the extraction. By default, the system enters yesterday's date.

Error messages when using the Table Extraction activity

Depending on system status, the system may display an error message when you select the Table Extraction activity. If the Extractor is currently running, it displays the following message:

```
The Extractor is already running.
```

If you see this message, you must wait for the current extraction to finish before running the new one.

The system may also display the following message:

```
The last extraction run is awaiting a possible restart.
```

This message means the extraction has paused because of any of the following reasons:

- A user has manually paused the Extractor by using F2/A5.
- Mumps was brought down causing the Extractor to pause automatically.
- The Extractor encountered nonfatal problems, determined the run was still salvageable, and automatically paused the extraction run.

If the Extractor is in a paused state, you can restart the run as discussed in [“Restarting an Extraction Run” on page 100](#).

Extraction Through Date Prompt

At the **Extraction Through Date** prompt you specify the date through which you want the system to extract data. You must enter a previous day's date. Alternatively, you can enter **T-x** (where **T** represents today's date and **x** represents a number of days) in this field to extract data up to x number of days ago.

For example, enter **1/1/97** if you want the system to extract all the appropriate data up to and including 1/1/97, or enter **T-60** if you want to extract all appropriate data up to 60 days ago.



By default, the system enters yesterday's date (T-1) into this field.

Table-specific through dates

The extraction through date specifies the date limit for the entire extraction run. The system may adjust the through date as appropriate to ensure the data you extract is complete. The actual extraction through date differs for each table group.

For example, the Receivables table group selection criteria is based upon accounting periods rather than actual dates. Therefore, the extraction through date for the receivables table group is the last closed accounting period prior to the extraction through date. The system does, however, extract batch data for the current period if the period is still open and the extraction run spans only the current open period.

Maintaining referential integrity

The system also extracts any data needed to maintain referential integrity. For example, the system extracts any data referenced by an invoice you extract, such as appointments or referrals, regardless of whether the appointment or referral was entered after the extraction through date.

Error messages while entering the extraction through date

The system may display the following error message when you enter the extraction through date:

```
Run x did not complete. Delete last
extraction run (F20/A1) to continue.
```

where x represents the extraction run number. This error message implies that a previous extraction run started but did not run to completion. You may be able to view extraction run history for this run using the Extraction Inquiry activity (F2/A3). For more information on the Extraction Inquiry activity, refer to [“Inquiring About an Extraction Run”](#) on page 101.

If you cannot view Run History, it is possible that the previous run never reached the processing point where run history is recorded.

If you need to delete the last extraction run to continue with the extraction, use the Delete Last Extraction Run activity (F20/A1). For more information on the Delete Last Extraction Run activity, refer to [“Deleting the Last Extraction Run” on page 125](#).

The system may also display the following error message:

```
Extraction through date must be later than  
mm/dd/yy.
```

where mm/dd/yy represents the actual date determined by the Extractor. The system displays this error message when the user specifies an extraction through date that is covered by the date range of any previous run of the Extractor.

To correct this problem, enter a valid extraction through date as indicated by the error message (the date should be later than the date specified as mm/dd/yy).

The system may also display the following error message:

```
Extraction through date must not be earlier  
than mm/dd/yy.
```

where mm/dd/yy represents the actual date determined by the Extractor. The system displays this error message when the user specifies an extraction through date for an initial run where the date entered is earlier than the Starting Date for Initial Extraction that has been defined.

To correct this problem, enter a valid extraction through date as indicated by the error message (the date should be later than the date specified as mm/dd/yy).

The system may also display the following error message:

```
Extraction through date must not be later  
than Yesterday.
```

The system displays this error message when the user specifies a through date of today.

To correct this problem, enter a valid extraction through date as indicated by the error message (the date should be yesterday or an earlier date).

Extraction Description Prompt

Enter free text of up to 60 characters at the **Extraction Description** prompt to describe the extraction you are performing.

Procedure for Running an Extraction

Use the following steps to run an extraction:

Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu enter 2 , and then enter 1 at the Select Activity prompt.	The system displays the Table Extraction screen (DWE1.A).	<ul style="list-style-type: none"> On running the extraction, refer to “Running Extractions” on page 95. On the Table Extraction screen, refer to “When you select F2/A1, the system displays the following Table Extraction screen:” on page 95.
2	Enter the extraction through date.	--	On entering the extraction through date, refer to “ Extraction Through Date Prompt ” on page 96
3	Enter the extraction description.	--	On entering the extraction description, refer to “ Extraction Description Prompt ” on page 98.
4	Press <F10>.	The system starts running the extraction and then displays the Select Activity prompt (while the extraction is running).	On running the extraction, refer to “ Running Extractions ” on page 95.
5	Press <Esc>.	The system displays the Extractor Main Menu .	On menus and activities, refer to “ Using Extractor Menus ” on page 38.

Pausing an Extraction Run

Use the Pause Current Extraction activity (F2/A5) to pause an extraction run during the following situations:

- You begin an extraction run but decide to pause the extraction because of poor system performance.
- You begin an extraction run but then realize that the run has a problem. You can pause the run before the extraction completes and then delete the run.

System messages when pausing an extraction run

When you select F2/A5, the system determines if an extraction is running. The system then displays one of the following messages:

Message	Description
The Extractor is not running or has not reached a pause-able state	The system is generating the code for the extraction run and has not sent data to the job queue, or no extraction is running.
Extraction has already been paused	The extraction has already been paused.
Pausing current extraction run	The system is pausing the extraction run.

Procedure for pausing an extraction run

To pause an extraction run, enter **2** at the `Select Function` prompt in the Main Menu, and then enter **5** at the `Select Activity` prompt.

Restarting an Extraction Run

Use the Restart Extraction Run activity (F2/A6) to restart an extraction run after the following situations:

- You have paused an extraction using the Pause Current Extraction activity.
- The extraction run has crashed because of operating system failure, such as Mumps being brought down.
- The system has automatically paused the extraction run due to nonfatal problems.

System messages while restarting an extraction run

When you select F2/A6, the system determines if the extraction run can be restarted. The system then displays one of the messages outlined in the following table:

Message	Description
There is no run of the extraction awaiting restart	There is no extraction run to restart because there is no extraction run that was paused using F2/A5 <i>or</i> that has crashed because M had crashed <i>or</i> was automatically paused due to nonfatal problems.
The Extractor is currently running, you can't restart now	The system is performing an extraction, so you cannot restart an extraction.
Restarting Extraction	The system is restarting the extraction run.

Procedure for restarting an extraction run

To restart an extraction run, enter **2** at the `Select Function` prompt in the Main Menu, and then enter **6** at the `Select Activity` prompt.

Inquiring About an Extraction Run

Use the Extraction Inquiry activity (F2/A3) to view a history of the extractions or the status of a currently running extraction.

Extraction Inquiry screen

When you select F2/A3, the system displays the following Extraction Inquiry screen:

Extraction run information, including run number, extraction start and end dates, status of extraction run, and date/time of the most recent status update

Run level detail information, shown by pressing <D> when the run has not yet completed.

Action code menu

Run	Start Date	End Date	Status	Date/Time
10	Initial	12/11/1997	STARTED	12/12/1997 03:04 PM

Running?: Y Message: Waiting For Other Processes to Complete
Process ID: 1026E

0 Selected F7Q-Quit F10-OK <Alt>F5-Help <Alt>F3-More Keys
C-Column Sums D-View/Hide Detail O-Oldest/Newest
R-Refresh Display S-Segment Information T-Table Record Counts
V-View Run Information

Contents of the Extraction Inquiry screen

The Extraction Inquiry screen displays the following information about an extraction run:

- Run number
 - Extraction start date (the system displays *Initial* for initial extractions, which do not use a system supplied starting date)
 - Extraction through date
 - Extraction run status
- refer to “Possible statuses in the Extraction Inquiry screen” on page 102.
- Date and time of most recent status update
 - Run level detail information (when the run has not yet completed)

**Possible statuses in the
Extraction Inquiry screen**

The system displays one of the following statuses in the Extraction Inquiry screen for each extraction run:

Status	Description
Started	The extraction has begun.
Completed	The extraction has completed.
Crashed	At least one table group had an error during data output; consult your IDX representative.
Terminated	The system terminated the run because there is another extraction running. This status may also indicate that the extraction run crashed during a driver level process. Driver level processing occurs before table groups are processed.
Paused	The extraction has been paused with F2/A5 or was autopaused when an error was encountered that may be restartable. For more information, refer to “Pausing an Extraction Run” on page 99 .

**Extraction Inquiry screen
action codes**

The following table describes the action codes that appear in the Extraction Inquiry screen:

Action code	Description	For more information, refer to
C - Column Sums	Shows total values for all columns designated for summation in the extraction.	“Viewing Column Sums” on page 103 .
D - View/Hide Detail	Displays and hides run level detail information when the run has not yet completed. This action code acts as a toggle for displaying and hiding the detail information.	--
O - Oldest/Newest	Displays the extraction runs in chronological order. This action code acts as a toggle, displaying the extraction runs from oldest to newest or newest to oldest.	--
R - Refresh Display	Updates the information on the screen. You would use this action when an extraction is running and you want to see the most recent run information.	--
S - Segment Information	Displays information about the table group or dictionary that was extracted using the Table Group Segments Inquiry screen.	“Viewing Segment Information” on page 104 .
T - Table Record Counts	Shows record counts (of both regular and those extracted for referential integrity) for all tables in the selected extraction run.	“Viewing Table Record Counts” on page 105 .
V - View Run Information	Displays the Table Group Inquiry screen for the selected extraction run.	“Viewing Extraction Run Information” on page 106 .

Viewing Column Sums

Column Sums Inquiry screen

When you press the action code C - Column Sums in the Extraction Inquiry screen, the system displays the following Column Sums Inquiry screen:

Table Name	Column Name	Column Sum
claim_line	approved_amount	\$ 29544.00
claim_line	billed_amount	\$ 41029.96
claim_line	cap_adjustment_amount	\$ 0.00
claim_line	cob_distributed_amount	\$ 0.00
claim_line	cob_payment	\$ 0.00
claim_line	cob_primary_allowed	\$ 0.00
claim_line	cob_savings	\$ 0.00
claim_line	cob_withdraw	\$ 0.00
claim_line	coinsurance	\$ 0.00
claim_line	copay_and_coinsurance	\$ 535.00
claim_line	copay_only	\$ 0.00
claim_line	deductible_amount	\$ 0.00
claim_line	other_amount	\$ 0.00
claim_line	rejected_amount	\$ 10950.56
claim_line	withhold_amount	\$ 0.00
claim_adjudication	amount	\$ 41029.96

0 Selected F7Q-Quit F10-OK <Alt>F5-Help <Alt>F3-More Keys

R-Refresh

Contents of the Extraction Column Sums Inquiry screen

The Column Sums Inquiry screen displays the following information about the tables and columns designated for summation in the extraction:

- Name of each table and column included in the summation
- Sum for each of the included columns

Refreshing the screen

This inquiry screen only captures information at the time you press <C>. To see the most recent sums, press <R> to refresh the information on the screen.

Viewing Segment Information

Table Group Segments Inquiry screen

When you press the action code S - Segment Information in the Extraction Inquiry screen, the system displays the following Table Group Segments Inquiry screen:

Table Group	Segment	From	To	Status
APPOINTMENT		04/11/97	04/29/1997	COMPLETED
CAPITATION	1	05/19/97	08/29/1997	COMPLETED
CLAIMS	1	05/19/97	08/29/1997	COMPLETED
CLAIMS	49	05/19/97	08/29/1997	COMPLETED
CLAIMS	17	05/19/97	08/29/1997	COMPLETED
CLAIMS	333	05/19/97	08/29/1997	COMPLETED
CLAIMS	12	05/19/97	08/29/1997	COMPLETED
CLAIMS	123	05/19/97	08/29/1997	COMPLETED
DICTIONARY	1	Initial	08/29/1997	COMPLETED
DICTIONARY	5	Initial	08/29/1997	COMPLETED
DICTIONARY	5	Initial	08/29/1997	COMPLETED
DICTIONARY	18	Initial	08/29/1997	COMPLETED
DICTIONARY	19	Initial	08/29/1997	COMPLETED
DICTIONARY	31	Initial	08/29/1997	COMPLETED
		End		

0 Selected F7Q-Quit F10-OK <Alt>F5-Help <Alt>F3-More Keys

R-Refresh

Annotations:

- Name of table group → APPOINTMENT
- Table group segment → CLAIMS
- Extraction from and through dates → 04/11/97 04/29/1997
- Status of extraction run → COMPLETED
- Action code menu → R-Refresh

Contents of the Table Group Segments Inquiry screen

The Table Group Segments Inquiry screen displays the following information about the table groups and dictionaries the system extracted:

- Name of each table group for which an extraction was started or completed
- Segment of each table group

A segment represents different groupings of data within a table group.

- Date on which the extraction began

Dictionaries and dictionary-like table groups (such as appointment_visit_type) are listed with a *From Date* of Initial because dictionaries are always extracted in their entirety.



If you run an incremental extraction that extracts columns you did not previously extract, you will see a unique table group listed with a Segment From value of Initial. The table group's name is the name of the table group followed by *_I*. These properties are temporary and do not appear on subsequent runs. (*_I* entries may have a Segment From value for some table groups when a system-supplied starting date is used.)

- Date through which the data was extracted
- Status of the extraction run
- Date and time on which the extraction started or completed

For specific information on table groups and how table groups are segmented, refer to [Appendix E](#), which begins on page 351.

Refreshing the screen

This inquiry screen only captures information at the time you press <S>. To see the most recent segment information, press <R> to refresh the information on the screen.

Viewing Table Record Counts

Table Record Counts Inquiry screen

When you press the action code T - Table Record Counts in the Extraction Inquiry screen, the system displays the following Table Record Counts Inquiry screen

Table Name	Record Count	Ref Integ Count
claim	119	0
claim_adjudication	416	0
claim_cob	0	0
claim_dx_inpatient	0	0
claim_line	214	0
claim_status	279	0
End		

0 Selected F7Q-Quit F10-OK <Alt>F5-Help <Alt>F3-More Keys
R-Refresh

Contents of the Table Record Counts Inquiry screen

The Table Group Segments Inquiry screen displays the following information:

- Name of the table(s) in the selected table group(s)
- Count of regular records that have been extracted
- Count of records extracted to maintain referential integrity

Refreshing the screen

This inquiry screen only captures information at the time you press <T>. To see the most recent segment information, press <R> to refresh the information on the screen.

Viewing Extraction Run Information

Table Group Inquiry screen

When you press the action code V - View Run Information in the Extraction Inquiry screen, the system displays the following Table Group Inquiry screen:

Table group information, including table group name, stage of extraction, status of extraction run, and date/time of the most recent status update

Table group level detail information, shown by pressing <D> when the run has not yet completed.

Action code menu

Table Group	Stage	Status	Date/Time
APPOINTMENT		COMPLETED	06/13/1997 05:57 PM
APPOINTMENT_VISIT_TYPE	EXTRACT	STARTED	06/13/1997 05:57 PM
CAPITATION	EXTRACT	COMPLETED	06/13/1997 05:57 PM
CLAIMS		COMPLETED	06/13/1997 05:57 PM
DICTIONARY	NONE	NONE	
DRG	EXTRACT	STARTED	06/13/1997 05:57 PM
Running?: Y Message: Performing DRG Extraction Routine			
Process ID: E36D Last saved value: 2*3***399*14			
EMPLOYER_PLAN_LINK	INDEX	COMPLETED	06/13/1997 05:56 PM
ENROLLMENT	INDEX	COMPLETED	06/13/1997 05:56 PM
HPAPLAN	INDEX	COMPLETED	06/13/1997 05:56 PM
HPAPROF	INDEX	COMPLETED	06/13/1997 05:56 PM
HPAPROF_EXCP	INDEX	COMPLETED	06/13/1997 05:56 PM
PLAN	INDEX	COMPLETED	06/13/1997 05:57 PM
PREMIUM_BILLING	INDEX	COMPLETED	06/13/1997 05:56 PM
PREMIUM_BILLING_RATE	INDEX	COMPLETED	06/13/1997 05:56 PM

0 Selected	F7Q-Quit	F10-OK	<Alt>F5-Help	<Alt>F3-More Keys
C-Column Sums		D-View/Hide Detail		R-Refresh Display
S-Segment Information		T-Table Record Counts		

Contents of the Table Group Inquiry screen

The Table Group Inquiry screen displays the following information:

- Name of each table group for which an extraction was started or completed
- Stage of the extraction for a particular table group

The screen will display any of the following stages:

Stage	Description
Index	First stage where the Extractor marks information for extraction. Dictionaries do not have an Index stage.
Extract	The Extractor reads indexed information and extracts it.
Output	The Extractor writes information to the file. This stage is an optional stage that is used to avoid problems with table groups having too many tables.
Special	Table group is undergoing special processing.
(Blank)	The extraction for that table group is completed when combined with "COMPLETED" in the Status column.

- Status of the extraction of that table group
- Date and time on which the extraction for that table group started or completed

Table Group Inquiry screen action codes

The following table describes the action codes that appear in the Table Group Inquiry screen:

Action code	Description
C - Column Sums	Shows total values for all columns designated for summation in this table group.
D - View/Hide Detail	Displays and hides table group level detail information when the run has not yet completed. This action code acts as a toggle for displaying and hiding the detail information.
R - Refresh Display	Updates the information on the screen. You would use this action when an extraction is running and you want to see the most recent run information.
S - Segment Information	Displays information for all segments of the selected table group.
T - Table Record Counts	Shows record counts (of both regular and those extracted for referential integrity) for all tables in the selected table group.

Procedure for Inquiring About an Extraction Run

Use the following steps to inquire about an extraction run:

Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu enter 2 , and then enter 3 at the Select Activity prompt.	The system displays the Extraction Inquiry screen.	<ul style="list-style-type: none"> On inquiring about an extraction run, refer to “Inquiring About an Extraction Run” on page 101. On the Extraction Inquiry screen, refer to “Extraction Inquiry screen” on page 101.
2	If you want to view or hide run level detail information, select the run(s) you want to affect, and press <D> .	If you press <D> , the system toggles between displaying and hiding detail information in the Extraction Inquiry screen.	--
3	If you want to change the order in which the information is displayed, select the run(s) you want to affect, and press <O> .	If you press <O> , the system toggles between showing the oldest extraction first and the latest extraction first.	--
3	If you want to refresh the Extraction Inquiry screen to see the most recent information, press <R> .	If you press <R> , the system refreshes the Extraction Inquiry screen.	--
4	Perform any of the following actions for the selected extraction run(s): <ul style="list-style-type: none"> Press <C> to view column sums. Press <S> to view extraction run information by table segments. Press <T> to view table record counts. Press <V> to view extraction run information by table group. Press <F10> to close the Extractor Inquiry screen. 	<ul style="list-style-type: none"> If you press <S>, the system displays the Table Group Segments Inquiry screen. If you press <T>, the system displays the Table Record Counts Inquiry screen. If you press <V>, the system displays the Table Group Inquiry screen. If you press <F10>, the system displays the Select Activity prompt. 	<ul style="list-style-type: none"> On the Table Group Segments Inquiry screen, refer to “Table Group Inquiry screen” on page 106. On the Table Record Counts Inquiry screen, refer to “Table Record Counts Inquiry screen” on page 105. On the Table Group Inquiry screen, refer to “Table Group Inquiry screen” on page 106.
5	Press <Esc> .	The system displays the Extractor Main Menu.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Printing Inquiry Information

Overview of printing inquiry information

You can print inquiry information to a printer by using the Control Reports function (F10 on the Extractor Main Menu). The Control Reports module contains the following activities:

Activity	Enables you to	For more information, refer to
Table Record Counts (A1)	print the same information that is generated during a table record count inquiry.	“Viewing Table Record Counts” on page 105.
Column Sums (A2)	print the same information that is generated during a column sum inquiry.	“Viewing Column Sums” on page 103.

To print the report, simply press the action code for the report you want to generate.



5

Inquiring about the Extraction Set

<i>Understanding the Inquiry Function</i>	<i>112</i>
<i>Viewing the Source Table Crossmap</i>	<i>113</i>
<i>Viewing the Source Dictionary Crossmap</i>	<i>116</i>
<i>Viewing the Extractable Domain</i>	<i>119</i>
<i>Inquiring About an Extraction Run</i>	<i>122</i>

Understanding the Inquiry Function

The Inquiry function (F4 on the Extractor Main Menu) contains the following activities, which you use to obtain information about the working extraction set:

Activity	Enables you to	For more information, refer to
Source Table Crossmap (A1)	<ul style="list-style-type: none">• View output tables and their associated source tables• View columns associated with the tables selected for extraction	“Viewing the Source Table Crossmap” on page 113.
Source Dictionary Crossmap (A2)	<ul style="list-style-type: none">• View each dictionary’s output table name in the Analyzer database and its associated source table• View the dictionary fields that are associated with the dictionaries selected for extraction	“Viewing the Source Dictionary Crossmap” on page 116.
View Extractable Domain (A3)	View tables and dictionaries.	“Viewing the Extractable Domain” on page 119.
Extraction Inquiry (A4)	Display a history of extractions or the status of a currently running extraction.	<ul style="list-style-type: none">• “Inquiring About an Extraction Run” on page 122.• “Inquiring About an Extraction Run” on page 101

Viewing the Source Table Crossmap

The Source Table Crossmap activity (F4/A1) displays source and output tables for the working extraction set along with the table's name in the Analyzer database.

Source Table Crossmap to Output Tables screen

When you select F4/A1 the system displays the following Source Table Crossmap to Output Tables screen:

Source Table Crossmap to Output Tables	
DBMS Source Table	Output Table Name
MCA_B_REF	REFERRAL_HEADER
MCA_B_REF	REFERRAL_HEADER_CONTINUED
MCA_B_REF_ADM_DX	REFERRAL_ADMITTING_DXS
MCA_B_REF_DIS_DX	REFERRAL_DISCHARGE_DXS
MCA_B_REF_LINE	REFERRAL_LINE
MCA_B_REF_WORK_DX	REFERRAL_WORKING_DXS
REG_B_FSCS	PATIENT_FSCS
REG_B_PAT	PATIENT
REG_B_PAT	PATIENT_CONTACT
REG_B_PAT	PATIENT_FINANCIAL
REG_B_PAT	PATIENT_RELATIONS
REG_B_PAT_DT	PATIENT_PCPS
REG_B_PAT_FSC	PATIENT_FSC_FOLLOWUP
REG_B_PAT_APPT	APPOINTMENT_HEADER
REG_B_PAT_APPT_DET	APPOINTMENT_DETAIL

0 Selected	F7Q-Quit	F10-OK	<Alt>F5-Help	<Alt>F3-More Keys
P-Print Table Crossmap	V-View Source Columns			

Contents of the Source Table Crossmap to Output Tables screen

The tables in the Source Table Crossmap to Output Tables screen appear in alphabetical order by the source table name.

The DBMS Source Table column shows the table names of all the tables in the extraction set as they appear in the transactional database. The Output Table Name column shows the corresponding table name in the Analyzer database.

Action codes in the Source Table Crossmap to Output Tables screen

To perform specific actions with the source table crossmap, you must select action codes from the action code menu. The following action codes appear at the bottom of the Source Table Crossmap to Output Tables screen:

Action code	Description	For more information
P - Print Table Crossmap	Prints the source table crossmap for the selected tables.	--
V - View Source Columns	Displays the Source Column Crossmap for the selected tables.	On the Source Column Crossmap, refer to “Viewing Source Column Crossmap” on page 114.

Multiple occurrences of source tables

A table name may appear in the source table column multiple times because data from a source table may be output to multiple tables in the Analyzer database.

For example, the REG_B_PAT table appears four times in the source table column—once for each Analyzer database table name. This repetition occurs because the REG_B_PAT table is mapped to four separate tables in the Analyzer database.

Viewing Source Column Crossmap

Source Column Crossmap to Output Columns screen

When you select a source table and press action code V - View Source Columns in the Source Table Crossmap to Output Tables screen, the system displays the following Source Column Crossmap to Output Columns screen:

Contents of the Source Column Crossmap to Output Columns screen

The Source Column column shows the names of the source columns for the selected source table. The Output Table Column shows the names of all of the Analyzer database output columns

associated with each source column. Tables and columns in the output table column appear in the *table.column* format.

The previous example shows the first screen of the column crossmap for the table REG_B_PAT.

Action code in the Source Column Crossmap to Output Columns screen

Use action code P - Print Column Crossmap to print the source column crossmap.

Procedure for Viewing Source Table and Column Crossmaps

Use the following steps to view source table and source column crossmaps:

Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu, enter 4 , and then enter 1 at the Select Activity prompt.	The system displays the Source Table Crossmap to Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the Source Table Crossmap to Output Tables screen, refer to “Source Table Crossmap to Output Tables screen” on page 113.
2	Do you want to view source columns for any of the tables? <ul style="list-style-type: none"> If <i>yes</i>, select the appropriate table(s) and press <V>. If <i>no</i>, go to step 5. 	If you press <V>, the system displays the Source Column Crossmap to Output Columns screen.	On the Source Column Crossmap to Output Columns screen, refer to “Source Column Crossmap to Output Columns screen” on page 114.
3	Press <F10> when you are finished viewing the source columns.	The system displays the Source Table Crossmap to Output Tables screen.	On the Source Table Crossmap to Output Tables screen, refer to “Source Table Crossmap to Output Tables screen” on page 113.
4	If you want to view more source columns, go back to step 2.	--	--
5	Press <F10> when you are finished viewing the source table crossmaps.	The system displays the Select Activity prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
6	Press <Esc>.	The system displays the Extractor Main Menu.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Viewing the Source Dictionary Crossmap

The Source Dictionary Crossmap activity (F4/A2) enables you to view the dictionaries in the extraction set as well as the dictionary names in the Analyzer database.

Source Dictionary Crossmap to Output Tables screen

When you select F4/A2, the system displays the following Source Dictionary Crossmap to Output Tables screen:

Source Dictionary Crossmap to Output Tables	
Dictionary Source	Output Table Name
Procedure Codes (1)	PROCEDURE CODES CONTINUED
Procedure Codes (1)	PROCEDURE_CODES
Payment Codes (2)	PAYMENT_CODES
Providers (3)	PROVIDERS
Providers (3)	PROVIDERS_CONTINUED
Modifiers (5)	MODIFIERS
Rejection Codes (6)	REJECTION_CODES
Rejection Type (7)	REJECTION_TYPES
Zip Code City Crossmap (11)	ZIP_CODE_CITY_CROSSMAP
RELIGIONS (12)	RELIGIONS
RACE/ETHNIC GROUP (13)	RACE_ETHNIC_GROUP
Front Desk Payment Types (18)	FRONT_DESK_PAYMENT_TYPES
Financial Status Classificatio	FINANCIAL_STATUS_CLASS
Financial Status Classificatio	FINANCIAL_STATUS_CLASS_CT
Family Relationships (31)	FAMILY_RELATIONSHIPS
EMPLOYMENT STATUS (32)	EMPLOYMENT_STATUS

0 Selected	F7Q-Quit	F10-OK	<Alt>F5-Help	<Alt>F3-More Keys
P-Print Dictionary Crossmap		V-View Field Sources		

Contents of the Source Dictionary Crossmap to Output Tables screen

The Dictionary Source column shows the names of the dictionaries in the working extraction set as they appear in the transactional database along with their corresponding dictionary number in parentheses. The dictionaries appear in numerical order by dictionary. The Output Table Name column shows the Analyzer database table names.

A dictionary name may appear in the Dictionary Source column multiple times because data from a source dictionary in the transactional database may be output to multiple tables in the Analyzer database.

Action codes in the Source Dictionary Crossmap to Output Tables screen

The Source Dictionary Crossmap to Output Tables screen contains the following action codes:

Action code	Description	For more information
P - Print Dictionary Crossmap	Prints the source dictionary crossmap for the dictionaries that are selected.	--
V - View Field Sources	Displays the Source Field Crossmap for the dictionary tables that are selected.	On the Source Field Crossmap, refer to “Viewing Source Dictionary Field Crossmap” on page 117.

Viewing Source Dictionary Field Crossmap

Source Field Crossmap to Output Columns screen

When you select a dictionary and press action code V - View Field Sources in the Source Dictionary Crossmap to Output Tables screen, the system displays the following Source Field Crossmap to Output Columns screen:

Source Field Crossmap to Output Columns for Dictionary #

Source Field	Output Table.Column
IS THIS A VISIT CHARGE	PROCEDURE_CODES.IS THIS A VISIT CHARGE
EXPLODE FOR FSC(S)	PROCEDURE_CODES.EXPLODE_FOR_FSC_S
FACILITY FEE COMPONENT PROCEDU	PROCEDURE_CODES.FAC_FEE_CMPNT_PROC_ID_1
COMPONENT PROCEDURE (rep)	dict1_component_procedure.component_procedu
COMPONENT PROCEDURE (rep)	dict1_component_procedure.component_procedu
BASE UNITS	PROCEDURE_CODES.BASE_UNITS
DURATION OF A TIME UNIT	PROCEDURE_CODES.CONTINUED.DURATION_OF_A_TIM
BASE FEE AMOUNT	PROCEDURE_CODES.BASE_FEE_AMOUNT
MEDICARE REDUCTION PROCEDURE?	PROCEDURE_CODES.MEDICARE_REDUCTION_PROC
DEFAULT PROVIDER	PROCEDURE_CODES.DEFAULT_PROVIDER_ID_3
TECH/PROF OVERRIDE TYPE	PROCEDURE_CODES.CONTINUED.TECH_PROF_OVERRIDE
LIMITING CHARGE	PROCEDURE_CODES.CONTINUED.LIMITING_CHARGE
PREVAILING FEE	PROCEDURE_CODES.CONTINUED.PREVAILING_FEE
WORK RVU	PROCEDURE_CODES.CONTINUED.WORK_RVU
PRACTICE EXPENSE RVU	PROCEDURE_CODES.CONTINUED.PRACTICE_EXPENSE_

0 Selected F7Q-Quit F10-OK <Alt>F5-Help <Alt>F3-More Keys

P-Print Field Crossmap

Contents of the Source Field Crossmap to Output Columns screen

The Source Field column shows the names of the dictionary source fields for the selected dictionary. The Output Table Column column shows the names of all of the Analyzer database output columns associated with each source field. Tables and columns in the output table column appear in the *table.column* format.

Action code in the Source Field Crossmap to Output Columns screen Use action code P - Print Field Crossmap to print the Dictionary Source Field Crossmap.

Procedure for Viewing Source Dictionary and Field Crossmaps

Use the following steps to view the source dictionary and source dictionary field crossmaps:

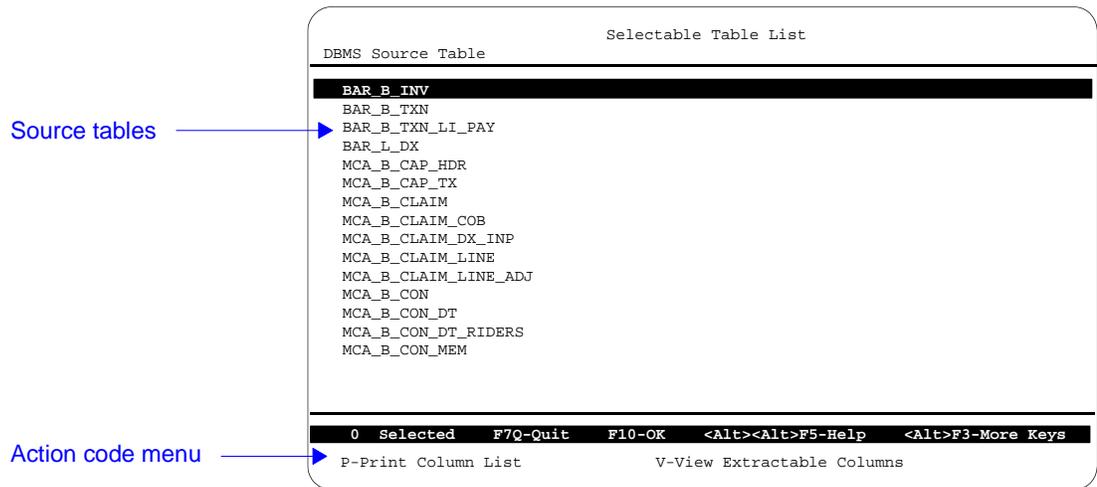
Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu, enter 4 , and enter 2 at the Select Activity prompt.	The system displays the Source Dictionary Crossmap to Output Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the Source Dictionary Crossmap to Output Tables screen, refer to “Source Dictionary Crossmap to Output Tables screen” on page 116.
2	Do you want to view field sources? <ul style="list-style-type: none"> If <i>yes</i>, select the appropriate dictionaries and press <V>. If <i>no</i>, go to step 5. 	If you press <V>, the system displays the Source Field Crossmap to Output Columns screen.	On the Source Field Crossmap to Output Columns screen, refer to “Source Field Crossmap to Output Columns screen” on page 117.
3	Press <F10> when you are finished viewing the field sources.	The system displays the Source Dictionary Crossmap to Output Tables screen.	On the Source Dictionary Crossmap to Output Tables screen, refer to “Source Dictionary Crossmap to Output Tables screen” on page 116.
4	If you want to view more field sources, go back to step 2.	--	--
5	Press <F10> when you are finished viewing the source dictionary crossmaps.	The system displays the Select Activity prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
6	Press <Esc>.	The system displays the Extractor Main Menu.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Viewing the Extractable Domain

The View Extractable Domain activity (F4/A3) enables you to view the extractable domain. The **extractable domain** is the collection of all extractable tables and columns. The standard extraction set and the working extraction set are subsets of this extractable domain.

Extractable Tables screen

When you select the F4/A3, the system displays the following Extractable Tables screen:



Contents of Extractable Tables screen

The Extractable Tables screen displays the tables that are available for extraction. These tables are listed in alphabetical order.

Action codes in the Extractable Tables screen

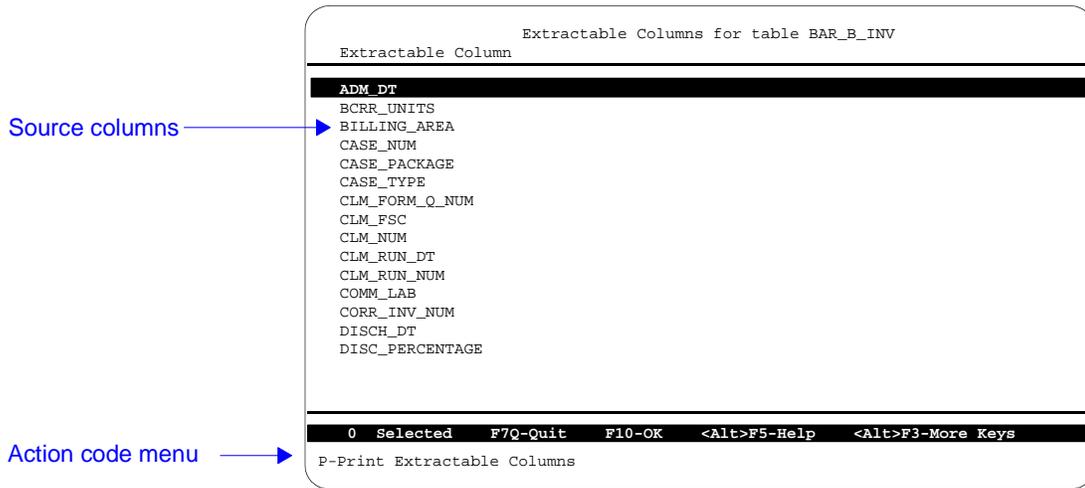
To perform specific actions with the extractable domain, you must select action codes from the action code menu. The following action codes appear at the bottom of the Extractable Tables screen:

Action code	Description	For more information
P - Print Column List	Prints the extractable columns for the source tables that are selected.	--
V - View Extractable Columns	Displays the extractable columns screen which contains the extractable columns for the source tables.	On viewing extractable columns, refer to “Viewing Extractable Columns” on page 120.

Viewing Extractable Columns

Extractable Columns screen

When you select a source table and press action code V - View Extractable Columns in the Extractable Tables screen, the system displays the following Extractable Columns screen:



Contents of the Extractable Columns screen

The Extractable Columns screen displays the source columns in the selected source table that are available for you to extract. The system identifies the source table across the top of the screen.

Action code in the Extractable Columns screen

Use action code P - Print Extractable Columns to print the list of extractable columns.

Procedure for Viewing the Extractable Domain

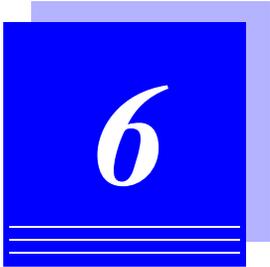
Use the following steps to view the extractable domain:

Step	Action	Result	For more information
1	At the <code>Select Function</code> prompt in the Main Menu, enter 4 , and then enter 3 at the <code>Select Activity</code> prompt.	The system displays the Extractable Tables screen.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On the Extractable Tables screen, refer to “Extractable Tables screen” on page 119.
2	Do you want to view extractable columns? <ul style="list-style-type: none"> If <i>yes</i>, select the appropriate table(s) and press <code><V></code>. If <i>no</i>, go to step 5. 	If you press <code><V></code> , the system displays the Extractable Columns screen.	On the Extractable Columns screen, refer to “Extractable Columns screen” on page 120.
3	Press <code><F10></code> when you are finished viewing the extractable columns.	The system displays the Extractable Tables screen.	On the Extractable Tables screen, refer to “Extractable Tables screen” on page 119.
4	If you want to view more extractable columns, go back to step 2.	--	--
5	Press <code><F10></code> when you are finished viewing the extractable columns.	The system displays the <code>Select Activity</code> prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
6	Press <code><Esc></code> .	The system displays the Extractor Main Menu.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Inquiring About an Extraction Run

Use the Extraction Inquiry activity (F4/A4) to view a history of the extractions or the status of a currently running extraction. When you select this activity, the system displays the Extraction Inquiry screen.

The Extraction Inquiry activity is the same activity available in the Extraction Module (F2/A3). For more information on this activity, refer to “[Inquiring About an Extraction Run](#)” on page 101.



6

Performing Operations

<i>Understanding the Operations Function</i>	<i>124</i>
<i>Deleting the Last Extraction Run</i>	<i>125</i>
<i>Resetting the Extractor</i>	<i>128</i>
<i>Working with the Join Map.....</i>	<i>131</i>
<i>Creating a Test Extract File</i>	<i>142</i>
<i>Finding Dictionary Trailing Spaces</i>	<i>145</i>

Understanding the Operations Function

The Operations function (F20 on the Extractor Main Menu) enables you to perform certain operations on extraction sets.

The Operations function contains the following activities:

Activity	Enables you to	For more information, refer to
Delete Last Extraction Run (A1)	Delete the most recent extraction run.	“Deleting the Last Extraction Run” on page 125.
Reset Extractor (A2)	Reset the system to run an initial extraction.	“Resetting the Extractor” on page 128.
Join Map Module (A4)	Access the following join map activities: <ul style="list-style-type: none"> Edit Join Map activity (A4/A1), which enables you to edit the default join map Join Map Quick Load (A4/A2), which enables you to re-create the join map 	“Working with the Join Map” on page 131.
Create Test Extract File (A20)	Create a test extraction set before you perform an actual extraction run.	“Creating a Test Extract File” on page 142.
Find Dictionary Trailing Spaces (A21)	Scan all dictionaries in an extraction set and identify synonyms that end with one or more trailing spaces.	“Finding Dictionary Trailing Spaces” on page 145.

Deleting the Last Extraction Run

Overview of the Delete Last Extraction Run activity

The Delete Last Extraction Run activity (F20/A1) deletes the extraction output from your most recent extraction run.

This activity deletes output *only* from the last extraction run. When you run this activity, the system deletes all output files and generated routines.

When to delete the last extraction run

Use the Delete Last Extraction Run activity in the following circumstances:

- An extraction run crashes and cannot be restarted.
- You want to rerun the last extraction run (because you have added additional columns) but do not want to wait for the next extraction run.



You must run this activity if you want to rerun the last extraction.

Restrictions for deleting the last extraction run

You cannot delete an extraction run during any of the following conditions:

- An extraction run is currently running.
- You are currently defining the extraction set using Function 1 activities in the Table Definition Module.
- You are currently deleting all the extraction runs using F20/A2.

Paused or incomplete extraction runs

If you reset a paused or incomplete run (a run that crashed because of operating system failure), the data processed prior to the pause or crash is lost.

If you choose this activity and you have an extraction run that is paused or incomplete, the system displays the following message:

```
There is a prior incomplete run waiting in
a re-startable state. If you proceed then
all data which has been processed will be
lost.
```

Deleting extraction runs that have been loaded

Deleting the last extraction run does not remove any data that has already been loaded (by the Analyzer Loader) into the Analyzer database. If you want to delete data that has already been loaded onto

your Analyzer server, you will have to restore the database using backup files.

Running the Delete Last Extraction Run activity several times

If you run the Delete Last Extraction Run activity several times, the next extraction you run may take considerably longer than the first extraction run on the same data.

Every time you run the Extractor, the system purges indices that are maintained for incremental extraction purposes. Specifically, when you run an incremental extraction, the system purges the indices of prior runs. If you run this activity, subsequent extractions will not have use of indices purged in prior runs. Subsequent extractions will therefore require considerably more time to complete than the first extraction of the same data.

Procedure for deleting the last extraction run

Use the following steps to delete the last extraction run:

Step	Action	Result	For more information
1	At the <i>Select Function</i> prompt in the Main Menu, enter 20 , and then Enter 1 at the <i>Select Activity</i> prompt.	The system displays a message and the <i>Would you like to inquire about run (Run #)</i> prompt.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On deleting the last extraction run, refer to “Deleting the Last Extraction Run” on page 125.
2	Do you want to inquire about the run? <ul style="list-style-type: none"> If <i>yes</i>, press <Return>. If <i>no</i>, enter N, then go to step 5. 	<ul style="list-style-type: none"> If you press <Return>, the system displays the <i>Extraction Run</i> screen. If you enter N, the system displays the <i>Do you want to continue (Answer 'YES' if you do)</i> prompt. 	On the <i>Extraction Run</i> screen, refer to “Table Group Inquiry screen” on page 106.
3	If you want to refresh the <i>Extraction Run</i> screen, press <R>.	If you press <R>, the system refreshes the <i>Extraction Run</i> screen.	On the <i>Extraction Run</i> screen, refer to “Table Group Inquiry screen” on page 106.
4	Press <F10> when you are finished viewing the run information.	The system displays the <i>Do you want to continue (Answer 'YES' if you do)</i> prompt.	On deleting the last extraction run, refer to “Deleting the Last Extraction Run” on page 125.

Step	Action	Result	For more information
5	If you are sure you want to continue deleting the last extraction run, enter YES . If you are not sure, enter N , and then go to step 7.	<ul style="list-style-type: none"> • If you enter YES, the system deletes the last extraction run and displays the <code>Press any key to continue</code> prompt. • If you enter N, the system displays the <code>Select Activity</code> prompt. 	<ul style="list-style-type: none"> • On deleting the last extraction run, refer to “Deleting the Last Extraction Run” on page 125. • On menus and activities, refer to “Using Extractor Menus” on page 38.
6	Press <Return>.	The system displays the <code>Select Activity</code> prompt.	On menus and activities, refer to “ Using Extractor Menus ” on page 38.
7	Press <Esc>.	The system displays the Extractor Main Menu.	On menus and activities, refer to “ Using Extractor Menus ” on page 38.

Resetting the Extractor

Overview of the Reset Extractor activity

The Reset Extractor activity (F20/A2) resets the system to run an initial extraction by deleting all runs from the system.

This activity is helpful when you are testing the system.



Use this activity when you are testing the system. If you are not testing the system, you should use this activity with caution. Be aware that if you run this activity you will need to rebuild your entire Analyzer.

Restrictions for resetting the Extractor

You cannot reset an extraction run during any of the following conditions:

- An extraction run is currently running.
- You are currently defining the extraction set using Function 1 activities in the Table Definition Module.
- You are currently deleting the last extraction run using F20/A1.

Considerations when resetting the Extractor

Every time you run the Extractor, the system purges indices that are maintained for incremental extraction purposes. Specifically, when you run an incremental extraction, the system purges the indices of prior runs.

If you run this activity, subsequent extractions will not have use of indices purged in prior runs. Subsequent extraction will therefore require considerably more time to complete than the first extraction of the same data.

Procedure for resetting the Extractor Use the following steps to reset the Extractor:



Use this activity when you are testing the system. If you are not testing the system, you should use this activity with caution. Be aware that if you run this activity you will need to rebuild your entire Analyzer database.

Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu, enter 20 , and then enter 2 at the Select Activity prompt.	The system displays a message and the Would you like to inquire about the extraction runs prompt.	<ul style="list-style-type: none"> On menus and activities, refer to “Using Extractor Menus” on page 38. On resetting the Extractor, refer to “Resetting the Extractor” on page 128.
2	Do you want to inquire about the extraction runs? <ul style="list-style-type: none"> If <i>yes</i>, press <Return>. If <i>no</i>, enter N, then go to step 8. 	<ul style="list-style-type: none"> If you press <Return>, the system displays the Extraction Inquiry screen. If you enter N, the system displays the Do you want to continue (Answer 'YES' if you do) prompt. 	On the Extraction Inquiry screen, refer to “Extraction Inquiry screen” on page 101.
3	If you want to refresh the Extraction Inquiry screen, press <R>.	If you press <R>, the system refreshes the Extraction Inquiry screen.	On the Extraction Inquiry screen, refer to “Extraction Inquiry screen” on page 101.
4	Do you want to view information for a specific extraction run? <ul style="list-style-type: none"> If <i>yes</i>, press <V> to view the highlighted extraction run. If <i>no</i>, go to step 7. 	If you press <V>, the system displays the Extraction Run screen.	On the Extraction Run screen, refer to “Table Group Inquiry screen” on page 106.
5	If you want to refresh the Extraction Run screen, press <R>.	If you press <R>, the system refreshes the Extraction Run screen.	On the Extraction Run screen, refer to “Table Group Inquiry screen” on page 106.
6	Do you want to view information for another extraction run? <ul style="list-style-type: none"> If <i>yes</i>, press <V> to view the highlighted extraction run, then go to step 7. If <i>no</i>, go to step 8. 	If you press <V>, the system displays the Extraction Run screen.	On the Extraction Run screen, refer to “Table Group Inquiry screen” on page 106.
7	Press <F10>.	The system displays the Do you want to continue (Answer 'YES' if you do) prompt.	On resetting the Extractor, refer to “Resetting the Extractor” on page 128.

Step	Action	Result	For more information
8	Do you want to continue resetting the Extractor? <ul style="list-style-type: none"> • If <i>yes</i>, enter YES (must be in capital letters). • If <i>no</i>, enter N, then go to step 9. 	<ul style="list-style-type: none"> • If you enter YES, the system resets the Extractor and displays the <code>Press any key to continue</code> prompt. • If you enter N, the system displays the <code>Select Activity</code> prompt. 	<ul style="list-style-type: none"> • On resetting the Extractor, refer to “Resetting the Extractor” on page 128. • On menus and activities, refer to “Using Extractor Menus” on page 38.
9	Press <Return> or any other key.	The system displays the <code>Select Activity</code> prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
10	Press <Esc>.	The system displays the Extractor Main Menu.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Working with the Join Map

Overview of the Join Map Module activity

The Join Map Module activity (F20/A4) shows table joins that do not involve dictionary output tables. Joins to dictionary output tables are made automatically and cannot be edited.

The Join Map Module activity enables you to edit and re-create the join map. To understand Join Map operations, you should be familiar with the following concepts:

Concept	Description
Join map	The join map shows how the tables in your extraction set relate to each other.
Default join map	The default join map is based on the IDX DBMS join map.
Primary keys	<p>A primary key is a row addressing mechanism. It is one column or a combination of columns that uniquely identifies a record in a relational table. No two rows in the same relational table have the same primary key.</p> <ul style="list-style-type: none"> • If a table's rows are uniquely identified by a single column, the table has a single-column key. • If the table's rows are uniquely identified by multiple columns, the table has a composite key. <p>IDX assigns primary keys for tables based on the source table definitions in DBMS. Primary keys are assigned by IDX when a table is added to an extraction set. You cannot delete a primary key column.</p>
Foreign keys	<p>A foreign key is a column or combination of columns in a relational table that reference the primary key of another table.</p> <p>For example, to link the claim_line table to the claim table, the foreign key in the claim_line table references the primary key (a composite key of the claim, HMO, and ID columns) in the claim table.</p>
Referential integrity	Referential integrity is a relational constraint that requires all foreign key values within a table match a primary key in the referenced relation. The Analyzer Extractor verifies referential integrity among source tables and columns before it extracts data.

Join Map Module activities

To provide its join map features, the Join Map Module contains the following two activities:

Activity	Enables you to	For more information, refer to
Edit Join Map (A4/A1)	Edit the default Join Map.	"Editing the Join Map" on page 132.
Join Map Quick Load (A4/A2)	Recreate the join map.	"Running the Join Map Quick Load" on page 138.

Editing the Join Map

Overview of the Edit Join Map activity

The Edit Join Map activity (F20/A4/A1) enables you to manipulate the default join map. You should only change your join map *once*, before you perform your initial extraction. The join map information is used by the Analyzer database and is essential for maintaining referential integrity.



1. Because the entries in the join map table are used to define joins in the Analyzer database, you should not edit the join map unless you are thoroughly familiar with it and understand the architecture of your databases.
2. Because IDX has already established joins for standard tables, you should not edit joins between two standard output tables.

Foreign Key Relations screen

When you select the Edit Join Map activity (F20/A4/A1), the system displays the following Foreign Key Relations screen, showing the current join map relationships:

Foreign Key Table	Primary Key Table	Deactivated?
appointment	patient	
appointment	patient_address	
appointment	patient_contact	
appointment	patient_employer	
appointment	patient_guarantor	
appointment	patient_workers_comp	
appointment_detail	appointment	
appointment_detail	patient	
appointment_detail	patient_address	
appointment_detail	patient_contact	Y
appointment_detail	patient_employer	
appointment_detail	patient_guarantor	
appointment_detail	patient_workers_comp	
capitation_header	patient	

0 Selected F7><Q>-Quit <F10>-OK <Alt>F5-Help <Alt>F3-More Keys

A-Add a Join D-Deact/React Join E-Edit a Join
F-Filter Joins N-Show/NoShow P-Print Join

Contents of the Foreign Key Relations screen

The first column of the Foreign Key Relations screen lists the tables containing foreign keys. The second column lists the corresponding tables containing the primary keys. The third column indicates whether the join is deactivated or not.

In a relational database, all values of a foreign key column point to a primary key column. This means that at least one column in *Foreign Key Table* column references the primary key column listed in the *Primary Key Table* column.

Action codes in the Foreign Key Relations screen The Foreign Key Relations screen contains the following action codes:

Action Code	Description	For more information
A - Add a Join	Enables you to add a join.	On adding a join, refer to “Adding a Join” on page 133.
D - Deact/React Join	Enables you to deactivate or activate a selected join.	On deactivating or reactivating a join, refer to “Activating and Deactivating Joins” on page 135.
E - Edit a Join	Enables you to edit a join by changing the foreign key column (or columns) that reference primary key columns in the join map.	On editing a join, refer to “Editing a Join” on page 136.
F - Filter Joins	Enables you to display specific joins on the screen.	On filtering joins, refer to “Filtering Joins” on page 137.
N - Show/No Show	Displays deactivated or activated joins.	Displaying deactivated or activated joins, refer to “Showing and Hiding Deactivated Joins” on page 137.
P - Print Join	Prints selected joins from the join map.	--

Adding a Join

Add Join screen (DWFK.A) Whenever you add a user-defined output table to the working extraction set, by default the Extractor adds the corresponding DBMS joins to the join map. If you find that the system did not add a join for any new user-defined table or map, you can use the Add Join screen to add the desired join.

When you choose action code A - Add a Join in the Foreign Key Relations screen, the system displays the following Add Join screen:

Analyzer Extractor Join Map DWFK.A

Foreign Key Table References Primary Key Table

Foreign key table name

Primary key table name

Specify the tables in the Join

F7Q-Quit F7P-Page F10-OK <Shift>F4-Major <Shift>F5-Help <Shift>F3-More Keys

Contents of the Add Join screen

The Add Join screen contains the following two fields:

- Foreign Key Table field, where you enter the name of the table containing the foreign key you want to add
- Primary Key Table field, where you enter the name of the table containing the corresponding primary key you want to add

Enter ? in these fields to see a list of available tables. To select the desired table, enter its corresponding number.

When you select the tables and press <F10>, The system displays the following additional fields:

Columns that act as foreign keys

Columns acting as primary keys

Foreign Key Table	References	Primary Key Table
appointment	References	claim_cob
Foreign Key Column(s)	References	Primary Key Column(s)
		claim hmo id

Specify the column(s) in the Join

F7Q-Quit F7P-Page F10-OK <Shift>F4-Major <Shift>F5-Help <Shift>F3-More Keys

The system enters data in the Primary Key Column(s) fields. You must enter information into the Foreign Key Column(s) fields. Again, enter ? in these fields to see a list of available columns.

Activating and Deactivating Joins

Overview of activating and deactivating joins

Action code D - Deact/React Join in the Foreign Key Relations screen acts as a toggle to activate or deactivate a selected join. If a join is active, the action code deactivates it, and the system displays a Y in the Deactivated? column. If a join is deactivated, the action code activates it, and the system removes the Y from the Deactivated? column.



Deactivated joins are not passed to the Analyzer database.

You can work on several joins at once by highlighting and pressing <Return> on each join you want to change. You can select both activated and deactivated joins at the same time.

Deactivating a join

You may have to deactivate a join if you are deleting a user-defined DBMS output table or column (using F1/A1). The system prevents you from deleting a user-defined table or column if the table or column is used as a primary key table in a join. If you are certain you

want to delete the column, deactivate the join and then delete the column.

Activating a join

When activating a join, the system checks to ensure that all columns used in the join are defined in the extraction set. Before activating a join that contains deleted columns, the system forces you to edit the join by displaying the form described in “Editing a Join” on page 136. You must edit the join successfully before you can activate the join.

Editing a Join

Overview of editing a join

Use action code E - Edit a Join in the Foreign Key Relations screen to edit a join by changing the foreign key column (or columns) that reference primary key columns in the join map.



You cannot edit a deactivated join.

Edit Join screen (DWJM.A)

When you choose action code E - Edit a Join in the Foreign Key Relations screen, the system displays the following Edit Join (DWJM.A) screen:

Foreign Key Table	References	Primary Key Table
appointment		claim_line
Foreign Key Column(s)	References	Primary Key Column(s)
appt_pat		claim_num
dur_of_appt		line
can_bmp_ini_and_term		id
can_or_bmp_comm		hmo

Specify the column(s) in the Join

F7Q-Quit F7P-Page F10-OK <Shift>F4-Major <Shift>F5-Help <Shift>F3-More Keys

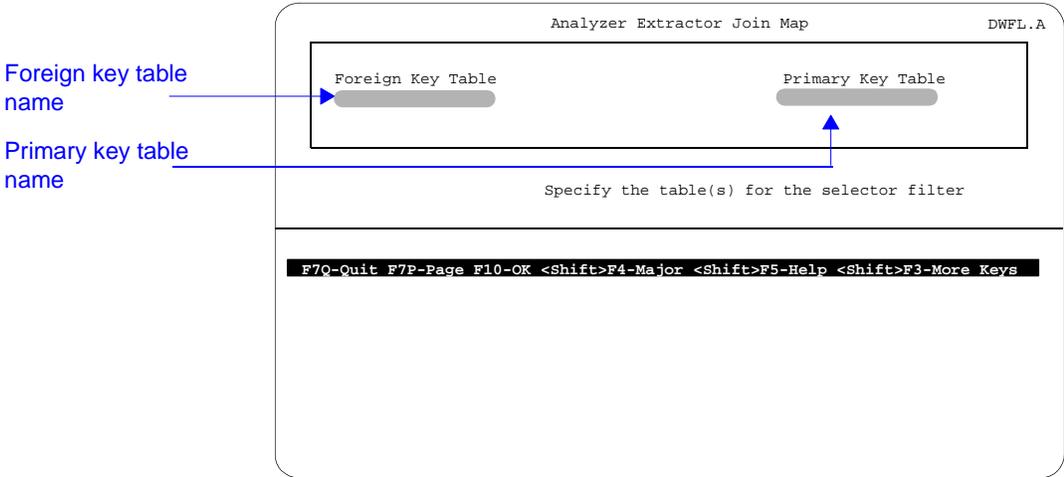
Contents of the Edit join screen

The Edit Join screen is identical to the secondary portion of the Add Join screen. You edit the screen’s fields the same way you added them in the Add Join screen. More more information on editing these fields, refer to “Contents of the Add Join screen” on page 134.

Filtering Joins

Filter Joins screen (DWFL.A)

Use action code F - Filter Joins in the Foreign Key Relations screen to specify which joins are displayed on the Foreign Key Relations screen. When you select this action code the system displays the following Filter Joins screen:



For specific information on each field in this screen, use the Extractor’s online help as discussed in “Using Extractor Online Help” on page 40.

Using the Filter Joins screen

You can use the filter to view all joins in which a specific table is used as the foreign key or used as the primary key. To view *all* joins for a specific table, enter the table name in *both* fields.

Showing and Hiding Deactivated Joins

Overview of showing and hiding deactivated joins

Action code N - Show/No Show in the Foreign Key Relations screen acts as a toggle for showing and hiding deactivated joins. For more information on activating and deactivating joins, refer to “Activating and Deactivating Joins” on page 135.

Use this action code if you need to perform an action on a group of joins that are not deactivated. Press <N> to hide deactivated joins. Press <N> again to show deactivated joins.

Deactivated joins are ignored by the system, so you may wish to hide them when working with the join map.

Running the Join Map Quick Load

Overview of the Join Map Quick Load activity

Use the Join Map Quick Load activity (F20/A4/A2) to re-create the join map. If you add a table using the Table Definition Module activity (F1/A1) you must run the Join Map Quick Load to add the new table to the join map. This activity adds the table to the join map based on the DBMS definition of the source table associated with the table added.



The system always re-creates the join map when you run an extraction.

When you run this activity the system displays the following messages:

```

Processing Phase One - Building Primary and
Dictionary Keys.....
Processing Phase Two - Building Foreign
Keys.....
Press any key to continue:
  
```

After you press any key, the system returns to the Select Activity prompt.

Procedure for Working with the Join Map

Use the following steps for working with the join map:

Step	Action	Result	For more information
1	At the <code>Select Function</code> prompt in the Main Menu, enter 20 , and then Enter 4 at the <code>Select Activity</code> prompt.	The system displays the <code>Select Activity</code> prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
2	Do you want to recreate the join map? <ul style="list-style-type: none"> • If <i>yes</i>, enter 2. • If <i>no</i>, go to step 4. 	If you enter 2 , the system recreates the join map and displays the <code>Press any key to continue</code> prompt.	On recreating the join map, refer to “Running the Join Map Quick Load” on page 138.
3	Press <Return> or any other key.	The system displays the <code>Select Activity</code> prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
4	Do you want add, edit, filter, print, or activate/deactivate joins? <ul style="list-style-type: none"> • If <i>yes</i>, enter 1, then go to step 1 of “Performing editing tasks on the join map” on page 140 • If <i>no</i>, go to step 5. 	If you enter 1 , the system displays the Foreign Key Relations screen.	On the Foreign Key Relations screen, refer to “When you select the Edit Join Map activity (F20/A4/A1), the system displays the following Foreign Key Relations screen, showing the current join map relationships:” on page 132.
5	Press <Esc>.	The system displays the Extractor Main Menu.	On menus and activities, refer to “Using Extractor Menus” on page 38.

**Performing editing tasks
on the join map**

To perform editing tasks on the join map, you must first perform the steps in “[Procedure for Working with the Join Map](#)” on page 139. Those steps direct you to the following steps for performing join map editing tasks:

Step	Action	Result	For more information
1	From the Foreign Key Relations screen, do you want to add a join? <ul style="list-style-type: none"> • If <i>yes</i>, press <A>. • If <i>no</i>, go to step 4. 	If you press <A>, the system displays the Add Join screen.	<ul style="list-style-type: none"> • On the Foreign Key Relations screen, refer to “When you select the Edit Join Map activity (F20/A4/A1), the system displays the following Foreign Key Relations screen, showing the current join map relationships:” on page 132. • On the adding a join, refer to “Adding a Join” on page 133.
2	Specify the tables in the join, then press <F10>.	When you press <F10> the system displays the secondary Add Join screen.	on the Add Join screen, refer to “Add Join screen (DWFK.A)” on page 133.
3	Specify the column(s) in the join, then press <F10>.	When you press <F10> the system adds the join and displays the Foreign Key Relations screen.	<ul style="list-style-type: none"> • On the adding a join, refer to “Adding a Join” on page 133. • On the Foreign Key Relations screen, refer to “When you select the Edit Join Map activity (F20/A4/A1), the system displays the following Foreign Key Relations screen, showing the current join map relationships:” on page 132.
4	Do you want to edit a join? <ul style="list-style-type: none"> • If <i>yes</i>, press <E> to edit the highlighted tables. • If <i>no</i>, go to step 6. 	If you press <E>, the system displays the screen.	On the Edit Join screen, refer to “Edit Join screen (DWJM.A)” on page 136.
5	Edit the column(s) in the join, then press <F10>.	When you press <F10>, the system updates the join and displays the Foreign Key Relations screen.	On the Foreign Key Relations screen, refer to “When you select the Edit Join Map activity (F20/A4/A1), the system displays the following Foreign Key Relations screen, showing the current join map relationships:” on page 132.

Step	Action	Result	For more information
6	<p>Do you want to activate/deactivate a join?</p> <ul style="list-style-type: none"> If <i>yes</i>, highlight and press <Return> on every join you want to activate/deactivate, then press <D>. If <i>no</i>, go to step 7. 	The system activates or deactivates the selected joins and redisplay the Foreign Key Relations screen.	<ul style="list-style-type: none"> On activating/deactivating joins, refer to “Activating and Deactivating Joins” on page 135. On the Foreign Key Relations screen, refer to “When you select the Edit Join Map activity (F20/A4/A1), the system displays the following Foreign Key Relations screen, showing the current join map relationships:” on page 132.
7	<p>Do you want to show/hide deactivated joins?</p> <ul style="list-style-type: none"> If <i>yes</i>, press <N> to toggle show and hide. If <i>no</i>, go to step 8. 	The system toggles between show and hide deactivated joins each time you press <N> and redisplay the Foreign Key Relations screen.	<ul style="list-style-type: none"> On showing/hiding deactivated joins, refer to “Showing and Hiding Deactivated Joins” on page 137. On the Foreign Key Relations screen, refer to “When you select the Edit Join Map activity (F20/A4/A1), the system displays the following Foreign Key Relations screen, showing the current join map relationships:” on page 132.
8	<p>Do you want to filter a join?</p> <ul style="list-style-type: none"> If <i>yes</i>, press <F>. If <i>no</i>, go to step 10. 	If you press <F>, the system displays the Filter Join (DWFL.A) screen.	On the Filter Join screen, refer to “Filter Joins screen (DWFL.A)” on page 137.
9	Specify the table names in the available fields, then press <F10>.	When you press <F10>, the system filters the join and displays the Foreign Key Relations screen.	<ul style="list-style-type: none"> On descriptions for available fields, refer to the Extractor’s online help. On the Foreign Key Relations screen, refer to “When you select the Edit Join Map activity (F20/A4/A1), the system displays the following Foreign Key Relations screen, showing the current join map relationships:” on page 132.
10	Press <F10>.	The system displays the Select Activity prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
11	Go to step 5 of “Procedure for Working with the Join Map” on page 139.	--	--

Creating a Test Extract File

Overview of the Create Test Extract File activity

The Create Test Extract File activity (F20/A20) enables you to create a test extraction file before you run an actual extraction. This activity attempts to create a text file, NFSTEST.TXT, using the same file format as an actual extraction run. If you run multiple tests, the system deletes any existing NFSTEST.TXT files before creating the new ones.

Reasons for using the Create Test Extract File activity

You use the Create Test Extract File activity for the following reasons:

- This activity is useful when the NFS file transfer protocol is used in the extraction process because the activity provides a means of testing the structure of extract output files without actually running an extraction.
- The Extractor is designed to run on multiple platforms and M environments. The Create Test Extract File activity provides a means of testing the extraction parameters defined in Dictionary 21381 without actually running an extraction.

Using the Create Test Extract File activity

Use the Create Test Extract File activity to test the process for creating an extraction file.

If the activity runs without error, verify the file transfer by examining the file on the Analyzer Server (use the **TYPE** command, or an equivalent command, to examine the file on the server).

Verifying a successful test extraction run

There are two occurrences in the extraction test where you must tell the system to continue testing. At the first occurrence, the system displays a preliminary test message. This message should appear *exactly* as follows:

```
This test file created on <date> at <time>
All lines in this file begin in column 1
This is line 3
This is the 4th and final line
```

where <date> and <time> are the actual date and time that this activity is run.

Compare this output with the NFSTEST.TXT file on your server to identify any errors. If this file is not transferred to the server with

NFS, you must first move the file to the server using the same method used during normal extractions.

After continuing with the test run, the system displays another test result similar to the following message:

The parameters used for this file are:

```
Logical:
Open Params:          NEW:RECORDSIZE=2048
File Name:            NFSTEST.TXT
Suffix:
Record Terminator:   !
Date/Time:           11/01/96 09:30:37AM
```

Deleting old test files...

The file has been created.

If the test is unsuccessful

If the file cannot be created for any reason, the system displays one or more error messages. Make a note of the exact text of each error message before reporting it to IDX.

The test is also unsuccessful if the file is created but is not exactly as it is displayed in the test message above. Some possible differences are additional carriage returns or missing carriage returns. Verify that the line numbers indicated in the test message match the line numbers in the actual test file.

Corrective action typically involves changing one or more of the parameters defined in Dictionary 21381.

Procedure for creating a test extract file Use the following steps to create a test extract file:

Step	Action	Result	For more information
1	At the <code>Select Function</code> prompt in the Main Menu, enter <code>20</code> , and then Enter <code>20</code> at the <code>Select Activity</code> prompt.	The system displays a message and the <code>Continue</code> prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
2	Do you want to continue with the extraction test? <ul style="list-style-type: none"> • If <i>yes</i>, enter <code>Y</code>. • If <i>no</i>, press <code><Return></code>, then go to step 5. 	<ul style="list-style-type: none"> • If you enter <code>Y</code>, the system runs a preliminary test, displays a test message, and displays the <code>Continue</code> prompt. • If you press <code><Return></code>, the system displays the <code>Press any key to continue</code> prompt. 	On creating a test extract file, refer to “Creating a Test Extract File” on page 142.
3	Verify that the preliminary test output appears exactly as shown in “Verifying a successful test extraction run” on page 142.	--	On verifying preliminary test results, refer to “Verifying a successful test extraction run” on page 142 and “If the test is unsuccessful” on page 143.
4	Do you want to continue with the extraction test? <ul style="list-style-type: none"> • If <i>yes</i>, enter <code>Y</code>. • If <i>no</i>, press <code><Return></code>. 	<ul style="list-style-type: none"> • If you enter <code>Y</code>, the system runs the test, displays test file information, and displays the <code>Press any key to continue</code> prompt. • If you press <code><Return></code>, the system displays the <code>Press any key to continue</code> prompt. 	On creating a test extract file, refer to “Creating a Test Extract File” on page 142.
5	Press <code><Return></code> or any other key.	The system displays the <code>Select Activity</code> prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
6	Press <code><Esc></code> .	The system displays the Extractor Main Menu.	On menus and activities, refer to “Using Extractor Menus” on page 38.

Finding Dictionary Trailing Spaces

Overview of the Find Dictionary Trailing Spaces activity

The Find Dictionary Trailing Spaces activity (F20/A21) scans all dictionaries in an extraction set and displays synonyms that end with one or more trailing spaces.

Trailing spaces are additional spaces at the end of dictionary entries. You must identify trailing spaces because Microsoft SQL Server removes them when storing them in a database. When the trailing spaces are removed, the dictionary synonyms may no longer be unique.

For example, in a dictionary in the transactional database you might have two providers whose last name is Smith. To distinguish between the two names, you could add a space at the end of one of them (you use Smith_, where _ represents a space). While this trailing space remains in the transactional database (making each name unique), it gets deleted from the Analyzer server (making both names the same).

When to use the Find Dictionary Trailing Spaces activity

Use the Finding Trailing Spaces activity to verify the existence of trailing spaces within dictionary fields. The Analyzer Loader places these fields on the server in varchar datatypes. Varchar datatypes do not accept trailing spaces so it is important that you address them when this activity identifies them.

Handling trailing spaces

You can resolve problems with trailing spaces by using one of the following techniques:

- You can remove the spaces directly from the affected fields in the transactional database. If you use this technique, you must apply a different naming convention to make same names distinct from one another (for example, Smith1, Smith2, Smith3, etc.).
- You can leave the fields with trailing spaces as is in the transactional database, and use fields with unique identifiers when querying for data in the Analyzer server. If you use this technique, names that become the same (because trailing spaces are deleted) will be identified distinctly by their unique identifiers.

Example of output

When you run the Find Dictionary Trailing Spaces activity, the system creates a report similar to the following one:

Dictionary fields without trailing spaces

Dictionary fields that contain entries with trailing spaces

Entries in dictionary that contain trailing spaces

```

Dictionary 500 (HMO Profile) [OK]
Dictionary 501 (Employer Groups)
  Extracted synonym fields
  Number Text
    1 Name
    2 Mnemonic
    3 Number

Synonyms with trailing spaces
Field  Synonym

  1 'AEA CREDIT UNION '
  1 'CONCO EQUIPMENT '
  1 'CIMCO '
  1 'DIOCESE OF STOCKTON '
  1 'VALID LOGIC '
  1 'SAN JOSE MERCURY NEWS '
  1 'STERLING SOFTWARE '
  1 'STRATEGIC MATERIALS WORKERS '
  1 'SIMPSON PAPER MANAGEMENT '
  1 'SYNTEX CORPORATION '
  1 'REDWOOD PLUMBING '
    
```

Procedure for finding a dictionary trailing space

Use the following steps to find dictionary trailing spaces:

Step	Action	Result	For more information
1	At the Select Function prompt in the Main Menu, enter 20 , and then Enter 21 at the Select Activity prompt.	The system displays a message and the Continue prompt.	On menus and activities, refer to “Using Extractor Menus” on page 38.
3	Do you want to continue searching for dictionary trailing spaces? <ul style="list-style-type: none"> If <i>yes</i>, enter Y. If <i>no</i>, press <Return>, then go to step 5. 	<ul style="list-style-type: none"> If you enter Y, the system displays a message and the Device prompt. If you press <Return>, the system displays the Press any key to continue prompt. 	On finding dictionary trailing spaces, refer to “Finding Dictionary Trailing Spaces” on page 145.
3	Press <Return>.	The system displays the Right margin prompt.	--

Step	Action	Result	For more information
4	Do you want the right margin of the report set at 80 characters? <ul style="list-style-type: none"> • If <i>yes</i>, press <Return>. • If <i>no</i>, type in a new margin number, then press <Return>. 	The system displays a report of dictionaries with trailing spaces and the <code>Press any key to continue</code> prompt.	On the report of dictionary trailing spaces, refer to “ Example of output ” on page 146.
5	Press <Return> or any other key.	The system displays the <code>Select Activity</code> prompt.	On menus and activities, refer to “ Using Extractor Menus ” on page 38.
6	Press <Esc>.	The system displays the Extractor Main Menu.	On menus and activities, refer to “ Using Extractor Menus ” on page 38.



Part III

Analyzer Loader

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Understanding the Analyzer Loader

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Understanding the Load Process

When the Analyzer Extractor extracts data from the transactional database, it places the data into a series of **flat files** on the Analyzer server. The Analyzer Loader then converts these flat files into a relational database (the Analyzer database) on the Analyzer server. During this load process, the Loader also checks data integrity and reconciles files against database metadata.

You can run the Loader manually or you can set it to run automatically after data is extracted with the Extractor.

Initial and incremental loads

The **initial load** is the first load performed on the Analyzer database. Every load following the initial load is an **incremental load**.

Steps in the load process

The load process consists of the following three steps:

Step	Description	For more information, refer to
1	The Loader checks the integrity of the extraction files.	“Checking Extract File Integrity and Updating the Control Table” on page 169.
2	The Loader reconciles the extraction files with database metadata.	“Reconciling Extract Files” on page 170.
3	The Loader loads data into the Analyzer database.	“Loading the Analyzer Database with Valid Extracted Data” on page 177.

During the first two steps, the Loader verifies that the data in the extract file set is complete and usable. During the third step, the Loader moves the extracted data into the Analyzer database.



You can instruct the Loader to automatically perform the Load steps all at once, or you can run each step individually.

Using the Loader

When you start the Loader, you use the Analyzer Loader window to choose which step(s) of the load process you want to run. You use the window’s menu bar to enter specifications and choose options for the load. Refer to “Using the Analyzer Loader Window” on page 155 for a description of this window.

As you run the Loader and complete each step in the load process, the system displays a status window to inform you of the Loader’s progress. Refer to “Viewing the Loader Status Window” on page 157 for a description of this window.

Automatic load feature

You can have the Loader run automatically after the Extractor finishes extracting data. Doing so enables you to complete the entire extraction and load cycle without tending to the Analyzer system. Refer to [“Using the Automatic Load Feature”](#) on page 179 for more information.

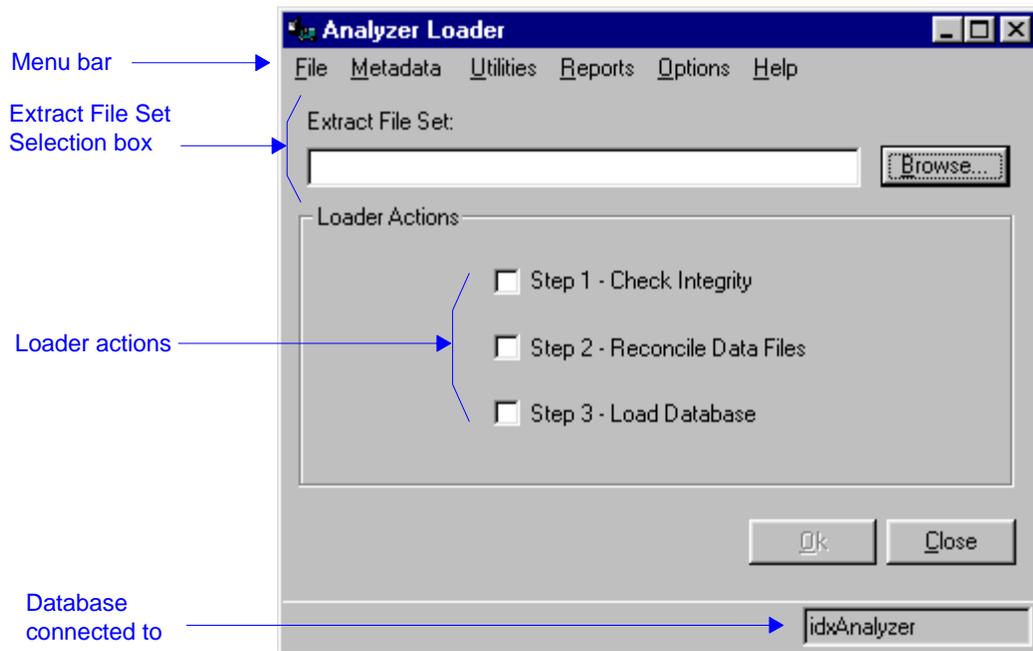
Using Loader Online Help

The Loader has a complete online help system to guide you through the Loader's functions and procedures. To access this help, click the Help menu and then Help Topics.

You can also use context-sensitive help to get help on specific items in any window. To use this help, click the question mark at the top of the window or click the Help menu and then What's This? (whichever option is available). Then click the item about which you want information.

Using the Analyzer Loader Window

When you open the Loader, the system displays the following Analyzer Loader window:



You access all Loader activities through this window and the menu bar that appears across the top of it. For specific procedures and window descriptions, use the Loader’s online help as discussed in [“Using Loader Online Help”](#) on page 154.

Menu bar

You use the Loader menu bar to select optional functions and set system configurations for the load process. You can also create Loader reports and access the Loader Help files.

Refer to [Chapter 8: Setting Loader System Options](#), which begins on page 159, for a description of the Loader options you can choose from the Metadata, Utilities, and Options menus.



If no data has been previously loaded, the Metadata pull-down menu is unavailable.

Refer to [Chapter 10: Generating Loader Reports](#), which begins on page 185, for a description of the Loader reports you can generate from the Reports menu.

Loader actions

The Analyzer Loader window offers the following three options for working with extracted data:

- Check Integrity
- Reconcile Data Files
- Load Database

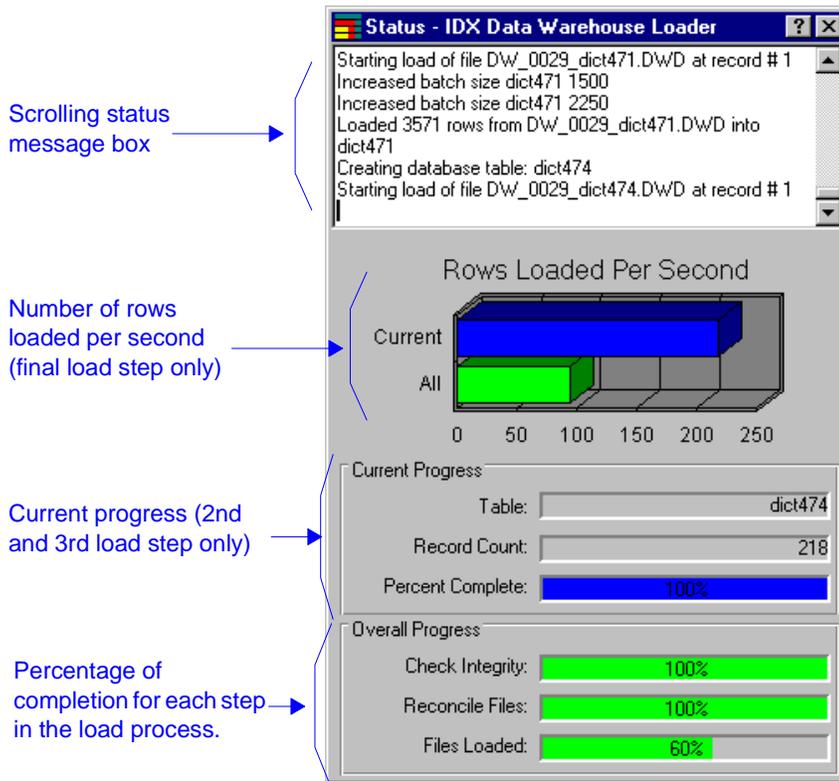
Each option represents a step in the load process. You can select more than one Loader action so that the Loader performs multiple steps in succession. For example, selecting Loader actions 1 and 2 will run step 2 automatically after step 1.



IDX recommends that you run one step at a time until you are sure that each step runs smoothly.

Viewing the Loader Status Window

When you run the Loader, the following Loader Status window describes the progress of each step:



For specific procedures and window descriptions, use the Loader's online help as discussed in "Using Loader Online Help" on page 154.



Setting Loader System Options

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<i>Setting up Database Specifications</i>	<i>161</i>
<i>Selecting File Locations</i>	<i>162</i>
<i>Setting General Options</i>	<i>163</i>
<i>Setting up for a Bulk Load</i>	<i>164</i>

Understanding Loader System Options

The Loader setup process updates Loader system information in the registry. The Options menu in the main menu enables you to modify the parameters set in this registry.

The Options menu in the Analyzer Loader window includes the following submenus:

Option	Description	For more information, refer to
Database Setup	Specifies information about the Analyzer database.	“Setting up Database Specifications” on page 161.
File Locations	Specifies where and how the Loader stores its log and work files.	“Selecting File Locations” on page 162.
General	Specifies methods for handling truncated fields and bad data, displaying messages and specifying the number of errors allowed in a file.	“Setting General Options” on page 163.
Bulk Load	Specifies bulk load parameters.	“Setting up for a Bulk Load” on page 164.

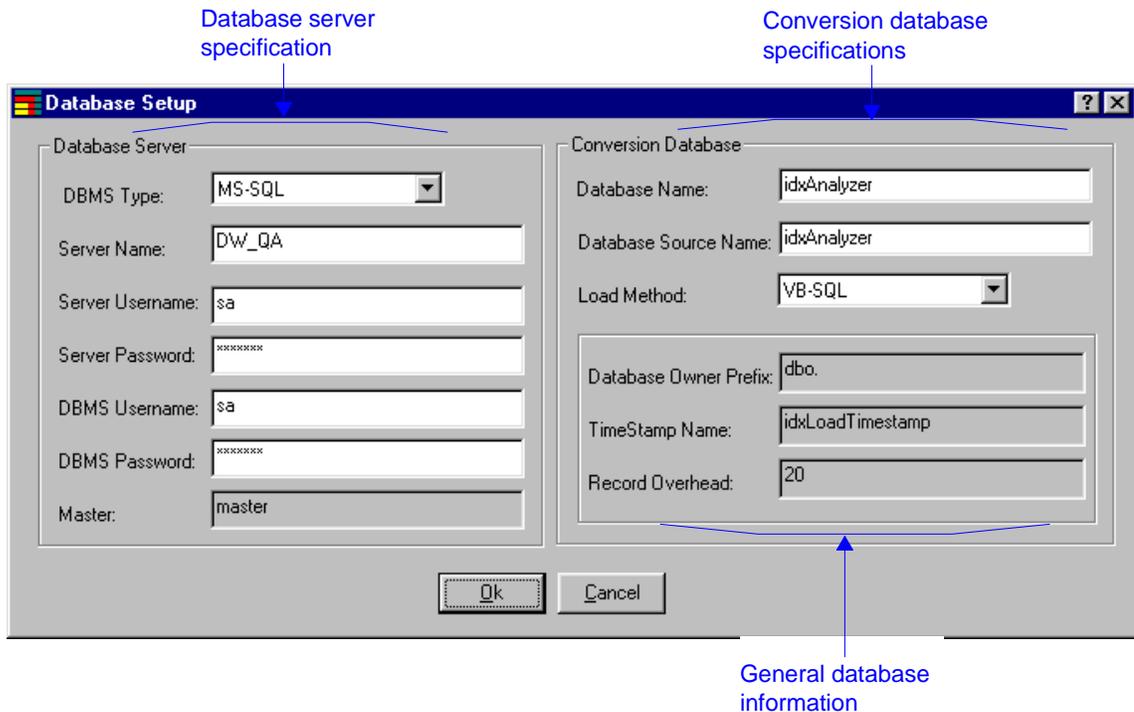
Setting up Database Specifications

Use the Database Setup option to enter the following database specifications:

- Server DBMS type, name, and log-on information
- Conversion database names and the load method

You can also view timestamp and database ownership information by using this option.

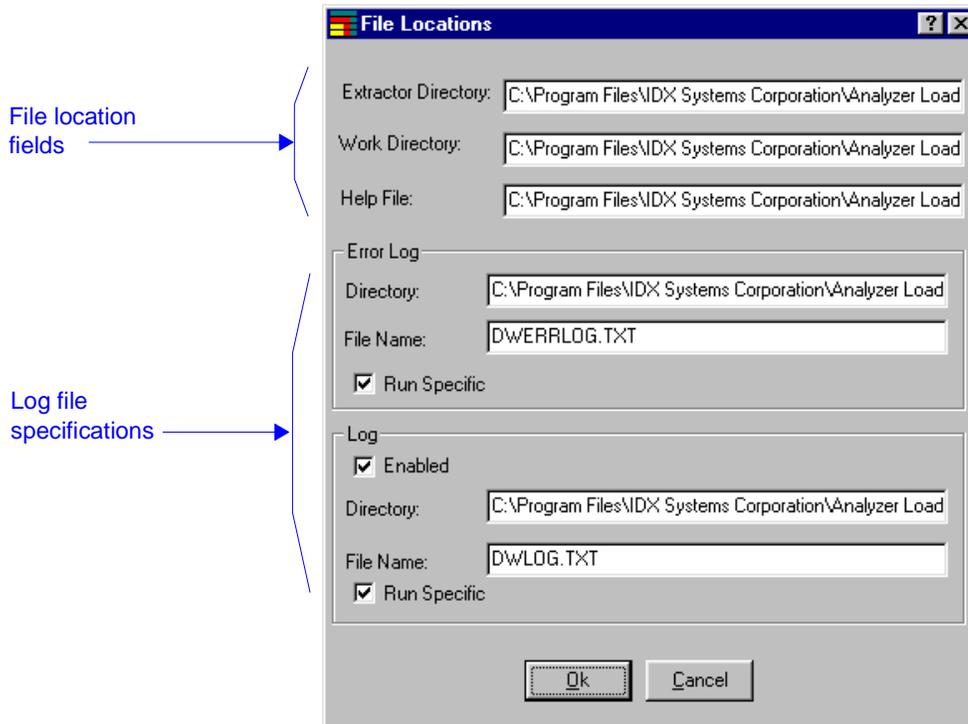
When you select the Database Setup option from the Options menu, the Loader reads the *database server* section in the registry and displays the information in the following Database Setup window:



For specific procedures and window descriptions, use the Loader’s online help as discussed in “Using Loader Online Help” on page 154.

Selecting File Locations

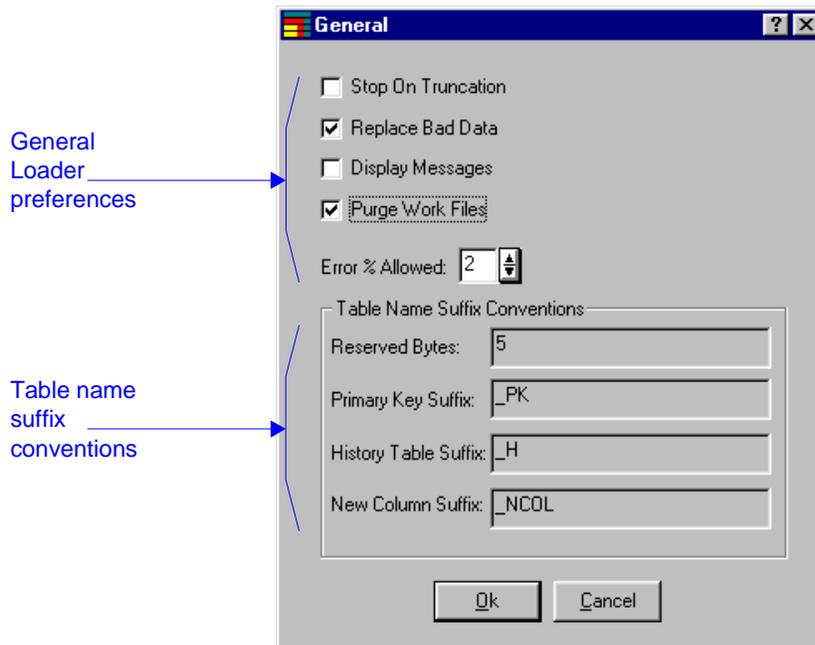
Use the File Locations option to change where the Loader stores its log and work files. When you select the File Locations option from the Options menu, the system displays the following File Locations window:



For specific procedures and window descriptions, use the Loader’s online help as discussed in “Using Loader Online Help” on page 154.

Setting General Options

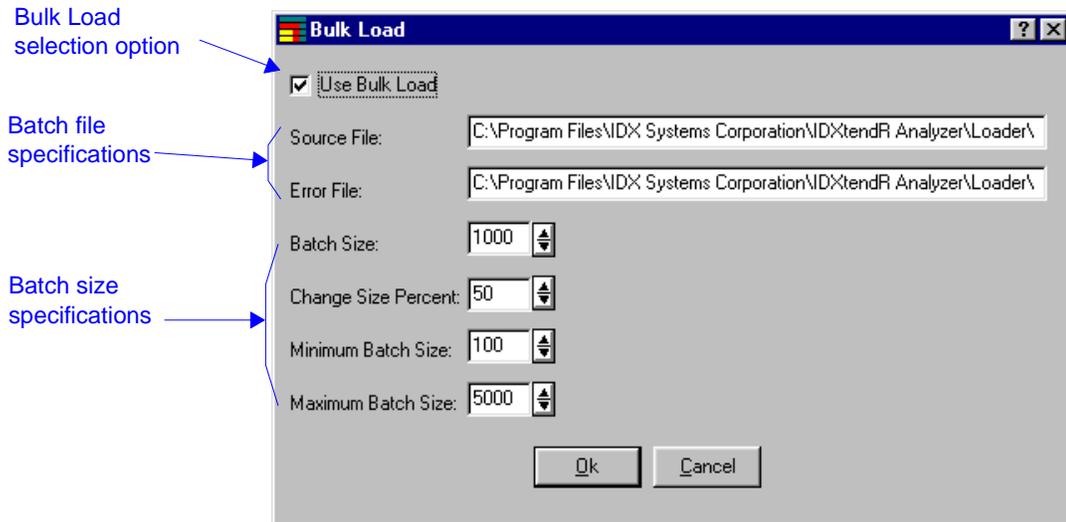
Use the General option to set Loader options. When you select the General option from the Options menu, the Loader displays the following General window:



For specific procedures and window descriptions, use the Loader's online help as discussed in ["Using Loader Online Help"](#) on page 154.

Setting up for a Bulk Load

Use the Bulk Load option to have the Loader use bulk loading software to expedite data loading. When you select Bulk Load from the Options menu, the Loader displays the current settings for bulk loading in the following Bulk Load window:



For specific procedures and window descriptions, use the Loader’s online help, as discussed in [“Using Loader Online Help”](#) on page 154.

Batch size specifications

The Batch Size and Change Size Percent boxes in the Bulk Load window enable you to specify the number of records that the system loads in each batch.

Setting a large batch file improves overall performance, but may appear to hinder system performance. When the Loader passes control to the bulk load function, the system cannot respond to keyboard or mouse events, and the screen cannot refresh. Thus, the system may appear to hang even when it is working. If this appearance is distracting, you can use the Batch Size box to set the batch size lower and set the Change Size Percent to zero.

Processing bulk loads

The system begins by loading the number of records specified in the Batch Size box. If the batch loads successfully, the system increases the size of the next batch by the percent amount (if any) in the Change Size Percentage box. If a batch load is not successful, the system automatically decreases the size of the next batch by the amount in the Change Size Percentage box.

For example, if the value in the Batch Size box is 1000, and the value in the Change Size Percentage box is 50%, the next batch size will be 1500 if the current batch load succeeds, and 500 if the current batch load fails.

The system does not increase or decrease the number of records in a load batch beyond the values specified in the Minimum Batch Size and Maximum Batch Size boxes.



Running a Load

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Selecting an Extract File Set

The file set that the Analyzer Extractor places on the Analyzer server after a single data extraction is the **extract file set**. Each extract file set contains a header file that contains pointers to the other files in the set.

You load an extract file set into your Analyzer database by selecting its header (.dwh) file in the Extract File Set Selection box in the Analyzer Loader window.

Files types in the extract file set

The extract file set includes the following types of files:

File extension	File type	Description
.dwh	Control	The header file. Contains extract number, description, and pointers to the other files in the set.
.dwt and .dwc	Metadata	Work together to define tables.
.dws	Metadata	Describes the column metadata (datatype and size).
.dwr	Control	Contains actual record counts for each data (.dwd) file.
.dwp	Metadata	Defines the primary keys.
.dwf	Metadata	Defines the foreign keys.
.dwd	Raw Data	The actual data files — one file for each table.
.dwv	Control	Contains actual column sums for each column to be extracted that will have summations performed for it. These columns generally contain dollar amounts, although there are some numeric columns as well.
.dwa	Data Change	Update or delete rows from a table.
.dwx	Table Level Actions	Delete rows or drop table.
.dwz	Trigger	Created at the end of an extraction. Triggers the automatic load process, if selected in IDX Scheduler.

Incomplete loads

If the Loader was previously unable to complete a load, it displays the header file for the incomplete load in the Header File box. You must complete this load before you can select a different header file to run a different load.

Checking Extract File Integrity and Updating the Control Table

The first step in the load process is to check the integrity of the control files that you extracted from the transactional database and confirm that all files are present.

Header file validation

The system checks the header (.dwh) file to ensure that the following conditions exist:

- The version number and control strings are correct.
- The run number is greater than the most recently loaded extract file set.
- The extract from date is one day greater than the extract through date of the last load.
- The previous extraction file has completed loading.
- All files pointed to by the header file are present in the extract file set.

Extractor metadata file verification

The system runs a consistency check of the Extractor metadata files to ensure that all of the required data is present. These files have extensions of .dws, .dwr, .dwc, .dwp, .dwf, .dwt, .dwx, and .dwa.

The Extractor metadata describes data input (.dwd) files created by the Extractor and table definitions for the Analyzer tables in the SQL database.

This consistency check includes checks such as:

- Checking the .dwc file to learn the tables' source and Analyzer table and column datatypes.
- Verifying datatype definitions from the .dws file for each source column in the .dwc file.
- Deriving system datatypes for each Analyzer column.

Control table updates

The Loader applies any user or IDX-defined overrides to the Extractor control files.

Reconciling Extract Files

The second step in the load process is to reconcile extract files with database metadata. During this step, the system completes the following tasks:

- Uses control data (read from database tables) to verify that the raw data matches or is compatible with the metadata in the Analyzer table
- Examines input files and verifies each data field against the column definition of the Analyzer table

Running Loader steps automatically

You can have the Loader automatically perform steps 2 and 3 after running step 1 by selecting all of the steps you want to run in the Analyzer Loader window.



IDX recommends that you perform each step in the load process one at a time until you are comfortable performing all steps together and you are sure the steps will complete without error.

Refer to [“Using the Analyzer Loader Window” on page 155](#) for a description of how you can select multiple steps at once.

Errors and warnings

Finding errors during the reconciliation process

During the reconciliation process (step 2 of the load process), the system may warn you of errors it found in the extract file set.

Nonfatal errors

If the system finds incompatibilities such as truncated fields or incompatible datatypes in the data files during the reconciliation process, it records them in the `idxLoadDataWarnings` table. For more information on the warnings in this table, refer to [“Load Warnings Report” on page 277](#).

For example, if a numeric column contains a character string the Loader will optionally replace the string with a null value and signal an invalid datatype.

Fatal errors

If the reconciliation process finds fatal errors in the data files, it stops processing. The following list includes examples of fatal errors:

- A primary key column contains a null value or an invalid entry.
- The number of records in a file does not match the control counts.
- The number of fields in a row does not match the control counts.

A fatal error in any file in the extract file set prevents the Loader from loading the database.

Percentage of errors allowed

The Loader continues processing a file until the number of errors in the file exceeds the Error % Allowed amount specified in the General window under the Options menu.

IDX recommends using a low value for Error % Allowed (for example, 2 or 3) when you are loading an initial extraction, when you are loading an entire table's contents (when you have added new columns or when you delete and read a table), and when you are loading a very large volume of records which you believe will have unpredictable metadata problems. IDX recommends using a high value for Error % Allowed (for example, 100) when you are loading incremental extractions, when you are loading relatively small data volumes, and when you are confident that the data in the extract file set accurately reflects the source metadata.

If the Error % Allowed is low, the Loader will stop processing a file after only a small percentage of the file's records have been processed. A low setting can be useful if you believe the quality of your data is low or if you believe the metadata that defines the fields in the file is incorrect. A low setting allows you to get an idea of the metadata changes necessary to load the entire file without having to process the entire file. Processing a large number of problem records significantly increases the database disk space used as well as the time needed to complete the reconciliation process (step 2 of the load process).

If the Error % Allowed is high, the Loader won't stop processing a file until most or all of the file's records have been processed. A high setting can be useful if you believe the quality of the data in the file is high or if you believe the metadata that defines the data in the file is accurate. A high setting allows you to force the Loader to process every record in a file. When the Loader processes every record in a file, a subsequent printing of the Load Warnings report will provide you with complete information regarding a file's invalid data. If a

Load Warnings report is printed based on less than 100% of a file's data, invalid data may exist in the file that is not indicated on the report. A Error % Allowed value of 100 is the only way to process a file with problems on every record.

Viewing the idxLoadDataWarnings table

Use one of the following methods to view the Load Warnings report:

- Run the SQL Server `sp_idxLoadWarningsReport` stored procedure from the SQL Enterprise Manager; refer to [“Load Warnings Report” on page 277](#).
- Select the File Preparation option from the Analyzer Loader window's Reports menu; refer to [“Understanding the Loader Reports” on page 186](#).
- Use SQL Server or another 32-bit ODBC-compliant tool to read data from the table in two views:
 - `idxLoadDataWarningsView`
 - `idxLoadWarningSummaryView`

Problem correction options

You have the following options for correcting problems:

- Modify system parameters to allow truncation or replace bad data with NULL. Refer to [“Setting General Options” on page 163](#) for information about making these changes.



You cannot use the Replace Bad Data option to correct fatal errors.

- Apply a column override in the control table to change the allowable field length or datatype.

Refer to [“Overriding Metadata” on page 173](#) for information about column overrides.

- Correct the field size or datatype in the source database so that the field size is within allowable range or the datatype matches the datatype in the Analyzer database. Run the extract again.



Caution

If you choose to change the transactional database, be careful that your changes do not adversely affect other programs that must access or modify data on the transactional database.

Overriding Metadata

Use the Override option in the Metadata menu to change Analyzer database column definitions and solve certain types of data incompatibilities, such as field truncation or incorrect datatypes.

You can also use the metadata override option to add descriptive statements to columns and to store changes in table information.



1. You cannot change the datatype of columns in standard tables (tables generated from the standard extraction set).
2. You cannot change the length of columns in standard tables unless the column is a text datatype. You can only change the length of text columns before the Load Database step (step 3) of the *initial* load. Keep in mind that tables that get reextracted in their entirety during each run (for example, dictionary tables) are always loaded like an initial load. You can therefore perform overrides for these tables during any load.
3. Changes to column datatypes and lengths can be made only before the Load Database step (step 3) of the *initial* load. Once the Loader creates the database tables, the column override controls on the Metadata Override window will be inactive. Again, as stated in note 2 above, tables that get reextracted in their entirety during each run (for example, dictionary tables) are always loaded like an initial load and can be overridden during any load.
4. You cannot change primary or foreign key columns.

Reason for selecting the Metadata Override option

By overriding the columns in the control tables, you avoid having to change the data in the source database. This option eliminates the potential for interference with other programs that use the data on the host system.

Overriding metadata for new columns

When you add a new column to a previously loaded table, the Loader treats the column as an initial extraction. You can therefore override the new column's metadata before step 3.

Prior to step 3, however, the new column is merged into a temporary table and not the actual table. To override metadata for these new columns, you must do so in the temporary table. The temporary table has the same name as the actual table along with the suffix `_ncol` as in the following example:

```
tablename_ncol
```

During step 3, the Loader applies the metadata override to the actual table.

Overriding datatypes

You can override datatypes using the Metadata Override option. You may want to use this option if the Relational Database Management System (RDBMS) you are using requires different datatypes than those set in the source database.

The following datatypes are allowed by SQL Server:

Datatype	Type description	Maximum size
3	Integer	32,768
4	Long	2,147,483,647
5	Currency	922,337,203,685,477.5807
6	Single Precision Float	9,999,999,999,999.99
7	Double Precision Float	9,999,999,999,999.99
8	Date	12/31/9999
10	Text	255 characters
12	Memo	2.1 billion characters

The Metadata Override window

When you select the Override option from the Metadata menu, the system displays the following Metadata Override window:

Table Attributes

Analyzer Table: ACCOM_TYPE_CATEGORY

Version: 1 Track History

Created By: IDX Initial Load Date Created: Aug 21 1997 8:25AM

Source Table Description: ACCOM. TYPE CATEGORY

User Table Description:

Column Attributes

Datatype: Long

Length:

Contact:

User Column Description:

Source Column Description: _DE1303

Name	Datatype	Length	Source Description
id_1303	Long		_DE1303
category_name	Text	16	CATEGORY NAME
category_number	Text	1	CATEGORY NUMBER
short_name_column_headir	Text	8	SHORT NAME (COLUMN HEADING)

Save Close

Non-Standard table already built, no datatype changes allowed.

For specific procedures and window descriptions, use the Loader’s online help as discussed in “Using Loader Online Help” on page 154.

Backing up Metadata Overrides

The Backup Metadata Overrides option in the Metadata menu enables you to store metadata overrides or changes. This backup is stored in ASCII file format. Refer to “[Overriding Metadata](#)” on page 173 for a description of metadata overrides.

You might use the Backup Metadata Overrides Option when upgrading from a test database to a live database. The option allows you to back up table and column changes that you identify as necessary for your organization’s needs. Before each initial load of data from the transactional database, the overrides that you had previously backed up are applied.

idxDestinationTable and idxDestinationColumns tables

The idxDestinationTable and idxDestinationColumns tables store Metadata overrides. After the metadata tables have been populated with the contents of the Extractor control files, any changes to the idxDestinationTable and idxDestinationColumns tables are applied to the metadata. These changes are backed up in Metadata change files.

Metadata change files

Metadata changes are stored in pairs of .dat files with identical structures. These files are in ASCII format.

IDX supplies suggestions for metadata overrides with the Loader. You may identify specific needs for creating your own metadata overrides and create user defined overrides.

IDX-supplied overrides are stored in files named IDX_TBL.DAT and IDX_COL.DAT. User-defined overrides are stored in user files named USER_TBL.DAT and USER_COL.DAT.

When you select the Backup Metadata Overrides option, the system stores information in these user files.

Loading the Analyzer Database with Valid Extracted Data

Overview of Load Database step

The third step of the load process is to load the data into the Analyzer database.

The Load Database step completes the following tasks:

- Searches the database for the Analyzer table

If the Loader does not find it, it creates the Analyzer table using the following information:

- Information from the metadata control tables *idxDestinationTable* and *idxDestinationColumns*
- Column override information (refer to “[Overriding Metadata](#)” on page 173)

- Defines the primary keys

- Checks for duplicates (based on primary key columns)

If it finds duplicates, the Loader inserts each record one at a time and processes the duplicate row.

- Breaks the input files into smaller batches and loads them into the database

Optionally, the Load Database step completes the following additional tasks:

- Create the history table with an *_H* suffix if the Track History check box is selected in the Metadata Override window (for more information on the Metadata Override window, refer to “[The Metadata Override window](#)” on page 175)
- Move duplicate rows to the history table and updates those rows to the main table if the Track History check box is selected in the Metadata Override window (for more information on the Metadata Override window, refer to “[Overriding Metadata](#)” on page 173)
- Drop tables and updates or deletes rows from tables depending on the preload action code set in the Extractor



The Loader does not create a transaction log when it loads the data. Be sure to back up the database after each load to prevent the loss of data.

Improving performance

You can affect the rate at which the load process occurs by changing the bulk load options and general parameters. Refer to “[Setting](#)

General Options” on page 163 and Setting up for a Bulk Load section on page 164 for more information on these topics.

Using the Automatic Load Feature

You can have the Loader run automatically after the Extractor finishes extracting data. Doing so enables you to complete the entire extraction and load cycle without tending to the Analyzer system.

The Loader runs automatically on the Analyzer server when you set the appropriate parameters in IDX Scheduler. This tool launches applications according to the schedule you set within it. Refer to [Chapter 13: Automating Tasks with IDX Scheduler, which begins on page 251](#) for more information on IDX Scheduler.

Parameters in IDX Scheduler are typically set during Analyzer installation. Depending on the Loader parameter you set, the Loader runs in either batch mode or full view mode.

Running an automatic load in batch mode

When you run an automatic load in *batch mode*, the load process runs with the following characteristics:

- Interaction is not required by the user.
- Messages are diverted to the log files.
- Windows are not displayed.

Because no Loader windows are displayed in this mode, you cannot stop the Loader from the Loader window. If you need to stop the Loader while it is running in batch mode, use the Windows NT Task Manager.

Running an automatic load in full view mode

When you run an automatic load in *full view mode*, the load process runs with the following characteristics:

- Interaction is not required by the user.
- Messages are diverted to the log files.
- If you set the Loader to run minimized, the Loader window and Status window are displayed and then minimized after step 1 of the load process.
- If you *do not* set the Loader to run minimized, the Loader window and Status window are displayed throughout the entire load process.

Because you have access to the Loader windows in this mode, you can stop the load process manually if you need to. Otherwise, the Loader stops itself when finished with the load process.

Performing Postload Steps

Perform the following postload steps after completing a load (some steps are optional and are noted as such):

1. Verify that the Loader successfully completed the load (optional).
2. Validate data (optional).
3. Execute the postload stored procedures.
4. Build foreign keys (optional).
5. Review performance and load times (optional).
6. Execute the Invoice Balance Check stored procedure, if you use IDX's Billing and Accounts Receivable (BAR) application (optional).

Verifying Successful Load Completion

Overview of verification of load completion

As an optional step, you can use one of the following options to confirm that a load completed successfully:

- Verify that the system is indicating that it has completed a load.

When the Loader completes a load, the Overall Progress status bars in the Loader Status window appear full and read 100%. Additionally, the Scrolling Status message box shows a message similar to the following line:

```
Load of extract set completed DW003130.DWH
```

- Verify that the information log file has logged the completion of the load. By default, this file is located in the C:\...\Analyzer Loader\Log directory. It should contain a similar Load of extract set completed message as shown above.



Log files contain status information indicating the status of the Loader at all times. The log can be a useful source of information when monitoring the Loader from a client PC.

- Review the control tables in the database for information about the status of every extract file set loaded (or being loaded).

The `idxLoadPerformanceView` table is created during the installation process and joins together several control tables to provide an integrated view of the load data.

To view all columns in the table, open a query window and enter `SELECT * FROM idxLoadPerformanceView`. The query displays the status of each file along with performance data indicating how many rows per second have been loaded for each file.

- In SQL Server Enterprise Manager, use the following steps to verify that all database objects (tables, views, and stored procedures) were created correctly:

Step	Action	Result
1	Click the table name for the table you want to verify.	The table appears highlighted.
2	Double-click the table name.	The system displays the structure (metadata) of the specified table.
3	Click Manage and then click Indexes.	The resulting Manage Indexes window displays the number of rows currently loaded into the table. This number is the difference between the <i>RowsAddedCount</i> and <i>RowsUpdatedCount</i> in the <code>idxLoadHistoryView</code> after an initial load has been done.

Validating Data

Overview of validating data

You can validate data to ensure that the extracted and loaded data is accurate and complete. To validate data, use the data validation tool and queries that come with Analyzer. For more information on data validation, refer to [Chapter 16: Validating Data, which begins on page 301](#).

Postload Stored Procedure

Overview of postload stored procedure

You should execute the postload stored procedure (`sp_idxPostLoad`) after each load. The `sp_idxPostLoad` stored procedure executes any SQL code or stored procedures that should run against the database

after initial and incremental loads are complete. It also runs any customized stored procedures you may have in the User Postload stored procedure.

For more information on postload stored procedures, refer to [“Postload” on page 293](#).

Building Foreign Keys

Overview of building foreign keys after a load

Prior to loading data into the database, the Loader drops all foreign keys. As an optional step you can rebuild these foreign keys as discussed in [“Building and Dropping Foreign Keys” on page 200](#).

Reviewing Performance and Load times

Overview of reviewing performance and load times

As an optional step, you can use the `idxLoadHistoryView` table to view information about SQL Server load performance. This information is expressed in the number of rows loaded per second for each of the files in the extract file set. The number of rows loaded per second will be lower if the Loader is not using the Bulk Load option but is handling duplicate rows with slower SQL insert statements.

Review the information log file in the `C:\...\Analyzer Loader\Log` directory with a text editor. The log files contain timestamped start and stop messages for each of the three steps. This information is useful in the following situations:

- When experimenting with different Loader settings for Bulk Load operations
- When running the Loader across a LAN
- When running the Loader with different memory or disk configurations

Subtracting the start and stop times for each of the steps yields the total time required to run each of the three Loader steps.

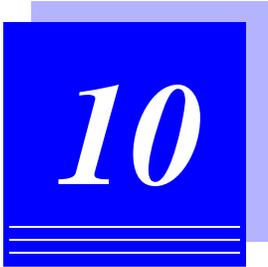
Executing the Invoice Balance Check Stored Procedure

Overview of executing the Invoice Balance Check stored procedure

As an optional step, users of BAR can use the Invoice Balance Check stored procedure (`sp_idxInvoiceBalanceCheck`) to determine if the invoice header balance is not equal to the invoice transaction balance and, if not equal, to display the specific invoices where an imbalance exists. Refer to [“Invoice Balance Check” on page 285](#) for more details.



IDX suggests that you run this stored procedure after every database load. You may want to copy it into your User Postload stored procedure (`sp_idxUserPostLoad`) so that it automatically runs during your postload activities. For more information on `sp_idxUserPostLoad`, refer to [“User Postload stored procedure” on page 293](#).



Generating Loader Reports

Understanding the Loader Reports 186

Understanding the Loader Reports

The Loader includes the following predefined reports:

- Metadata History report

This report shows changes made to a specific table or to all tables.

- File Preparation report

This report shows the results of the Reconcile Data Files step (step 2 of the load process) for a specified extract file set. Use this report to resolve control table errors. The report enables you to determine details about columns such as length, datatype, and record number.

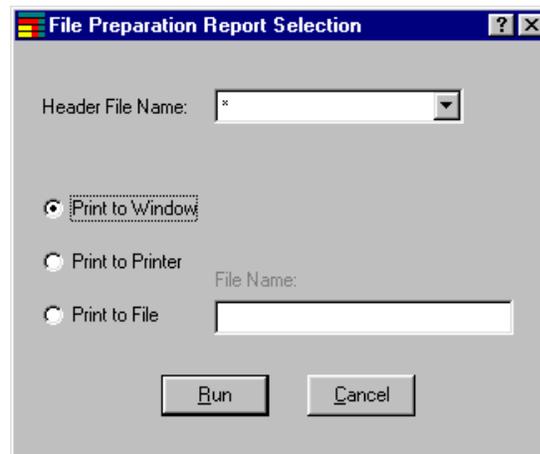
- Load History report

This report shows the load history for each Analyzer file.

For specific steps on generating these reports, see the Loader's online help.

Report selection windows

To generate a report, select it from the Reports menu. When you select the report, the system displays a report selection window similar to the following one:



Using the report selection windows

In the report selection window, you select the file or table name (whichever is appropriate for the report you are generating) and select your desired output source. If you print to a file, you must also name the file you want to create. When you click Run, the Loader generates the report.

Metadata History report

The following sample shows the Metadata History report:

Metadata History Report				2/19/97
Destination Table Name: PATIENT		Created By: IDX Override		
Destination Table Version: 5.00		Date Created: 2/13/1998		
Destination Table Description: PATIENT_DEMOGRAPHICS		Historical Table Name: patient_H		
<u>Destination Column Name</u>	<u>Type Description</u>	<u>Length</u>	<u>Primary Key</u>	
idxLoadTimestamp	smalldatetime			
PATIENT_ID	Double Precision Float		1	
IDX internal variable; internal patient ID number; used with ^PT(ID).				
DEACTIVATION_DATE	Date			
Date the patient was deactivated in internal MUMPS format.				
DECEASED_INDICATOR	Text	3		
If the patient has expired, then this field will contain a "Y"; if not, then this field will contain a "N"				
DATE_OF_BIRTH	Date			
The patient's date of birth in internal MUMPS format.				
MAIDEN_NAME	Text	40		
The patient's maiden name, if any.				
MEDICAL_RECORD_NUMBER	Text	20		
The patient's medical record number. This is indexed.				



File Preparation report

The following sample shows the File Preparation report:

File Preparation Report							2/19/97
Header File Name:DW1_103.DWH			Source Table Name:MCA_B_REF				
Data File Name:DW1_30.DWD			Destination Table Name:referral				
Load Time Stamp: 12/19/97							
<u>Destination Column Name</u>	<u>Source Column Name</u>	<u>Record No</u>	<u>Description</u>	<u>Field Value</u>	<u>Type Description</u>	<u>Length</u>	
int_ext	INT_EXT	21	Truncated value	INTERNAL MED	Text	8	
tot_app_treatments	TOT_APP_TREATMENTS	21	Invalid datatype	1.2	Long		
valid_to_dt	VALID_TO_DT	10	Invalid datatype	01234567	Date		

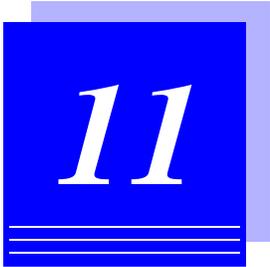


Load History report

The following sample shows the Load History report:

Load History Report								2/19/97
Header File Name:DW2_103.DWH		Run Description:Full extract on 6/10/97						
		OverAll Status: Load Completed						
Extract Date Time:6/10/1997		Extract From Date:		Extract Through Date:12/19/1997				
Extractor Initials:BKD		Load Time Stamp:12/19/1997		Bulk Load Sw:ON				
Extractor Version:1-0		Data Source:IDX		Bulk Load Batch Size:5,000				
Extract Directory:C:\PROGRAM\EXTRACT		Run Code:Initial		Bulk Load Batch Size:100				
Extract Set Number:109		Run Number:1		Bulk Load Batch Pct Change:50				
Extract Set Name:DWQ10		Run Delimiter:^		Replace Bad Data Sw:ON				
<u>File Name</u>	<u>Source Table</u>	<u>Load Description</u>	<u>Extracted Row Count</u>	<u>Rows Added</u>	<u>Rows Updated</u>	<u>Rows Loaded Per Second</u>	<u>Byte Count</u>	<u>Rows Ext For Integrity</u>
DW_ANLYZ_0007_02 19		Load Completed	12	12	0	6	106	0
DW_ANLYZ_0007_00 302		Load Completed	0	0	0	0	0	0
DW_ANLYZ_0007_00 302		Load Completed	151	151	0	151	1,456	0
DW_ANLYZ_0007_00 3		Load Completed	444	444	0	444	4,856	0
DW_ANLYZ_0007_00 3		Load Completed	2,894	2,894	0	1,447	30,502	0
DW_ANLYZ_0007_02 3		Load Completed	5,176	2,588	2,588	63	106,716	0





11

Troubleshooting the Loader

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Identifying and Correcting Errors

The information in this chapter will help you identify and correct problems that may occur during the Analyzer load process. It also describes the steps and tools available for identifying problems and their causes.

Log Files and Messages

Overview of log files and messages

The system displays all Loader errors in a standard Windows message box or as an entry in the Loader Status window. You can disable the Windows message boxes by clearing the Display Messages selection in the General window under the Options menu. Doing so instructs the Loader to divert all messages to the Loader Status window, enabling the Loader to run without being tended to. Refer to [“Setting General Options” on page 163](#) and the Loader’s What’s This? help for more information on the Display Messages option.

Errors are permanently written to either the information log file or the error log file. The Loader places these files in the C:\...\Analyzer Loader\Log directory unless you have specified a different location (for more information on specifying file locations, refer to [“Setting up Database Specifications” on page 161](#)).

Determining the sequence of errors

When an error occurs, more than one error message is usually displayed on the screen or written to the log file.

For example, if the SQL Server database runs out of space during a load, you initially see a SQL Server error indicating that the database is full. You then see errors that indicate that the number of records loaded does not match the number of rows extracted and that the load has failed.

The first error is often the cause for the other errors so it is critical that you focus on the first error when diagnosing problems. The log file has a timestamp value that helps you determine the sequence of events.

The following sample is an excerpt from a log file:

```
12/29/97 11:46:30 AM    An SQL error has been detected. 10007 Severity is 5 General
SQL Server error: Check messages from the SQL Server. Can't allocate space for
object 'idxDestinationColumns' in database 'TestDb' because the 'default' segment is
full. If you ran out of space in Syslogs, dump the transaction log. Otherwise, use
ALTER DATABASE or sp_extendsegment to increase the size of the segment.

12/29/97 11:46:31 AM    MsgBox Text diverted to log file: Unable to insert the
idxDestinationColumns.

12/29/97 11:46:32 AM    The metadata checks for this extract set failed
H:\DWQ80\DEMOFILE\EXTRACT\ALLFILES\DW03_130.DWH
```

This log file shows the sequence of events that occurs after the SQL Server Database runs out of space. The critical error occurred at 11:46:30 and was the cause for the next 2 errors. You would resolve this error, by shutting down the Loader, expanding the database, and then restarting the Loader.

Examining Control and Data Files

Overview of control and data files

Files can become corrupt as they are moved from the transactional system to the Analyzer server. If the NFS client or server is not configured properly, the format of the files on the Windows NT Server machine may generate errors when the Loader attempts to read the control and data files.

For example, if the header file is not using the proper format, the following error message appears:

```
12/29/97 10:05:53 AM    The header file
(.DWH extension) is invalid.
```

Identifying discrepancies in record lengths

When NFS moves files from a VMS machine, which has variable length records, to the Windows NT machine, it normally strips the record length bytes from the beginning of every record and appends carriage returns and line feed characters to the end of every record.

Verify that this process has occurred by looking at the file with a text editor. You should see blocks indicating that unprintable characters are present in the file. For convenience, associate the control file extensions of .dwh, .dws, .dwc, .dwt, .dwf, and .dwp with the text editor's executable file.



Refer to “[Examining Records](#)” on page 197 to look at the contents of large data files (.dwd extension) that you cannot read with a text editor.

**Testing files after
correcting corruptions**

After you make changes to either the client or server setup to correct the corrupt files, run the Create Test Extract File activity (F20/A20) from the Extractor to create a small test file on the Analyzer server. Refer to [“Creating a Test Extract File” on page 142](#) for more information.

You can then open the file using a text editor to verify that there are no unprintable characters or blank lines in the file.

Checking Invoice Balances (for BAR Users)

**Using the Invoice Balance
Check stored procedure**

In a normal database, the invoice header balance is always equal to the invoice transaction balance. These balances can, however, become unequal. To determine whether or not the balances are equal, run the `sp_idxInvoiceBalanceCheck` stored procedure. Refer to [“Invoice Balance Check” on page 285](#) for more information on this stored procedure.

Handling Loader Failure

**Determining at which step
the Loader failed**

It is helpful to know which load step was being executed when the Loader signalled an error. Examining the information log as described in [“Log Files and Messages” on page 192](#) reveals which step was running when the Loader encountered an error. The log file contains informational entries indicating when each one of the three main steps started and completed.

**Determining which file was
processing when the Loader
failed**

You may also want to know which file was processing when the Loader failed. This may be important if you want to estimate how much space to add to a database to allow it to complete the loading of the remaining files. You can retrieve this information by querying the control tables in the database or selecting columns from the `idxLoadHistoryView` table. This view shows you the current status and number of rows loaded for each file in the extract file set.

Failure while Merging New Columns into Existing Tables

Overview of merging new columns

If you are loading a new column (one that has not yet been loaded) for a table that has already been extracted and loaded during a previous run, all data for that column since the initial extract date merges into the existing table. Since this process can be time-consuming, the Loader keeps track of the new data in batches of rows to guard against any type of failure. As the Loader successfully loads a batch, it records the transaction in the `idxLoadNcolMergeStatus` control table. The Loader then knows what information it successfully loaded and where it left off if an error should occur.

Finding the merge error

When a new column is being merged into an existing table, the current load status display shows the name of the table being merged, as in the following example:

tablename_ncol (Data Merge)

This line should be the last entry in the load status display if an error occurs during the new column merge. Using this line as a reference, you can refer to the log files or the data within the specific table column to determine the cause of the problem.

When you've fixed the data causing the error, you can rerun the Loader. The Loader then continues merging the new column from the batch of rows at which it left off.

Foreign Keys Failing to Build

Causes of foreign keys failing to build

The following situations can cause failure of a foreign key to build after the load finishes:

- Datatype mismatch in one or more of the columns
- Missing primary key values in the referenced table

The log file indicates which foreign key was being built and lists the columns and primary table being referenced.

Identifying problems with the foreign key build

After you run the Build Foreign Keys option, you may see a message in the status form or the error log indicating that some foreign keys have not been built.

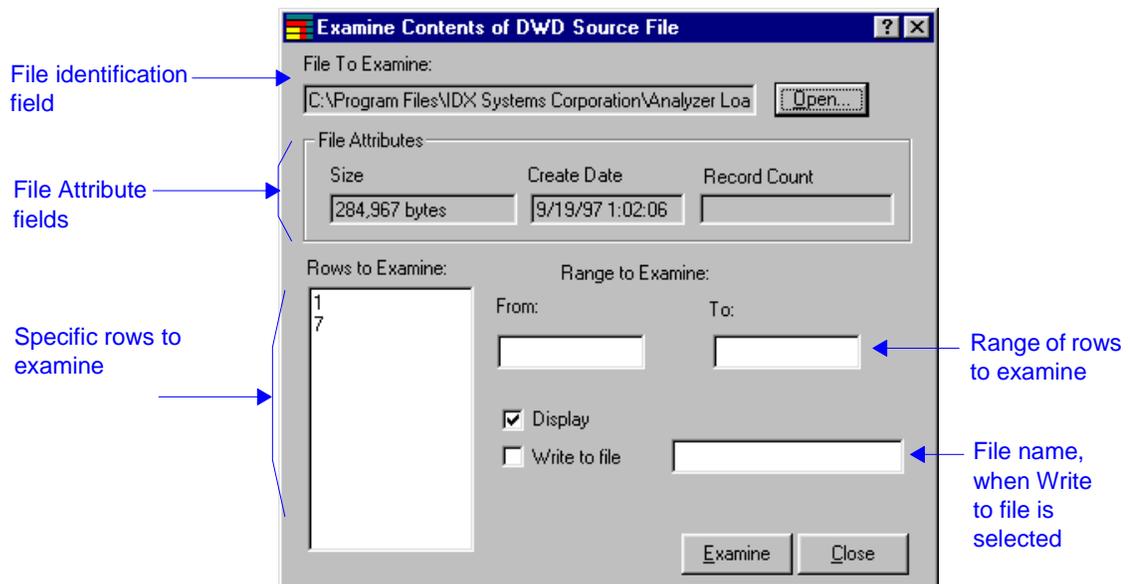
Run the `sp_idxForeignKeyReport` stored procedure with the *unbuilt* parameter to generate a list of which keys did not build. Refer to “[Foreign Key Report](#)” on [page 288](#) for a description of this stored procedure.

Examining Records

The Examine Records option in the Utilities menu enables you to display the contents of individual records from a file. Use this tool when you need to examine the contents of data (.dwd) files that are too large to be viewed with a text editor.

You can also use this tool to find out the total number of rows in the selected file. This number is displayed in the Record Count field and should match the value in the record count (.dwr) file.

When you select the Examine Records option from the Utilities menu, the Loader displays the following Examine Contents of DWD Source File window:



For specific procedures and window descriptions, use the Loader’s online help as discussed in [“Using Loader Online Help”](#) on page 154.

Display options

You can examine the selected records by either displaying them on screen, writing them to a text file and viewing them with a text editor, or both.

If you select Write to File, you must also enter a drive and text file name. For example, you could enter C:\records.txt.

The default for these options is Display *selected* and Write to File *clear*.

If you display records to the screen, each record appears individually as shown in the following example:



When you click OK, the system displays the next selected record. When there are no more records the system returns to the Examine Records window.

Procedure for examining records in a data file

Use the following steps to examine records in data files:

Step	Action	Result
1	In the Loader Main window, select Examine Records from the Utilities menu.	The system displays the Examine Contents of DWD Source File window. For more information on the Loader Main window, refer to “Using the Analyzer Loader Window” on page 155
2	Click Open.	The system displays a selection dialog box from which you can select data (.dwd) files.
3	Select the data (.dwd) file that has the record(s) you want to examine and click Open.	The system pulls the data for the selected data file into the Examine Contents of DWD Source File window.
4	Do you want to examine individual records from the data (.dwd) file, or do you want to examine records in a range? <ul style="list-style-type: none"> If you want to view <i>individual records</i>, type the number for each of the records(s) you want to examine in the Rows to Examine box. Press Enter after each number if you are examining more than one record. If you want to view <i>records in a range</i>, type the number of the first record you want to examine in the From box and the number of the last record you want to examine in the To box. 	--
5	Do you want to view the record contents on screen? <ul style="list-style-type: none"> If <i>yes</i>, select Display. If <i>no</i>, clear Display. 	If you select Display, the Display check box is checked. If you clear Display, the Display check box is clear.

Step	Action	Result
6	Do you want to write the record contents to a text file? <ul style="list-style-type: none"> • If <i>yes</i>, select Write to File, and then type in the Write to File box the path and file name to which you want the record contents saved. • If <i>no</i>, clear Write to File. 	If you select Write to File, the Write to File check box is checked, and the Write to File text box is available for the file name. If you clear Write to File, the Write to File check box is clear.
7	Click Examine.	Depending on your selection in steps 5 and 6, the Loader displays the record contents to screen and/or prints them to a text file. The Record Count field is updated with the actual number of rows in this file.
8	Do you want to examine record contents for other data files? <ul style="list-style-type: none"> • If <i>yes</i>, go to step 2 of these procedures. • If <i>no</i>, click Close. 	If you click Close, the Examine Contents of DWD Source File window closes, and you are back in the Loader Main window.

Building and Dropping Foreign Keys

Building foreign keys helps reveal any referential integrity problems that may exist. You can use the Build Foreign Keys or Drop Foreign Keys in the Utilities menu to build or drop foreign keys respectively.

Before every load, all foreign keys are dropped automatically.

For information on identifying problems with the foreign key build, refer to “[Identifying problems with the foreign key build](#)” on page 195.

Procedure for building and dropping foreign keys

To build foreign keys, click Build Foreign Keys in the Utilities menu, and then click Yes when the Loader asks you to confirm. The foreign key build can take a considerably long time to complete.

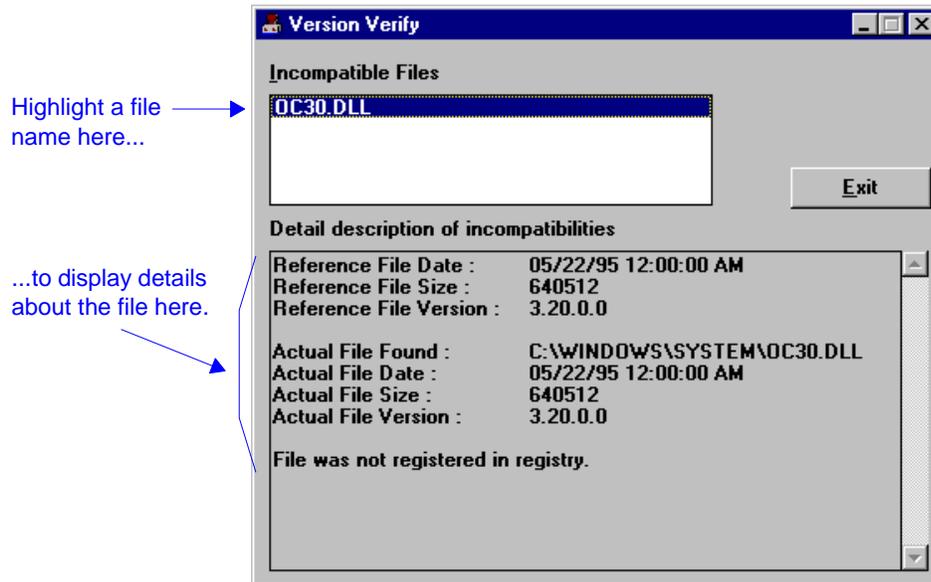
To drop foreign keys, click Drop Foreign Keys in the Utilities menu, and then click Yes when the Loader asks you to confirm.

Loader Startup Errors

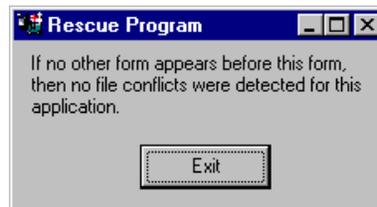
If files that the Loader needs to run are either missing or are so incompatible that they prevent the Loader from running, you need to run Loader Rescue.

Version Verify window

If Loader Rescue finds an incompatible file version at program startup, it displays the following Version Verify window:



If Loader Rescue does not find incompatibility errors or if you exit from the Version Verify window, the system displays the following Rescue Program window.



Verifying file versions

Read any incompatible file information in the Detail description of incompatibilities window. Based on this information, you can continue using the Loader if the incompatibilities are not fatal or, if incompatibilities are fatal, exit and reinstall the Loader to update the files.

**Procedure for Running
 Loader Rescue**

Use the following steps to run Loader Rescue:

Step	Action	Result
1	Click Start, Programs, ID XtendR Analyzer, and then Loader Rescue.	Loader Rescue runs. If it finds an incompatible file version, Loader Rescue displays the Version Verify window. If not, it displays the Loader Rescue message box.
2	Did the Rescue program display the Version Verify window? <ul style="list-style-type: none"> • If <i>yes</i>, click the file you want to examine from the Incompatible Files box. • If <i>no</i>, go to step 6 of these steps. 	If you click a file in the Version Verify window, the file appears highlighted and its file information appears in the Detail description of incompatibilities box.
3	Are the file incompatibilities fatal? <ul style="list-style-type: none"> • If <i>yes</i>, you must reinstall the Loader after exiting the Rescue program. • If <i>no</i>, you can continue using the Loader after exiting the Rescue program. 	--
4	Do you want to examine another incompatible file? <ul style="list-style-type: none"> • If <i>yes</i>, click that file and then go to step 3 of these steps. • If <i>no</i>, go click Exit and then go to step 5 of these steps. 	If you select another file, the file appears highlighted and its file information appears in the Detail description of incompatibilities box. If you click exit, the system displays the Loader Rescue message box.
5	Click Exit.	The Loader Rescue message box opens.
6	Click Exit.	Loader Rescue closes.

Loader Runtime Errors

You may encounter certain error messages while running the Loader. These runtime errors, along with an explanation, are listed alphabetically in the Loader online help.

If you are not able to access the online help through the Loader, you can access it through the Windows Start button. Click Start, Programs, ID XtendR Analyzer, and then Loader Help.

SQL Server Issues

Overview of SQL Server issues

If the Loader encounters a runtime error, it is generally when the Loader is unable to communicate with the Analyzer database. Any of the following situations might prevent the Loader from communicating with the Analyzer database:

- Invalid database name is in the registry (i.e., SQL Server cannot identify the database).
- Invalid database source name is in the registry and stored in the ODBC registry file by the Loader.
- User name entered is not a valid SQL Server username.
- Password entered is not a valid SQL Server password.
- SQL Server machine's security system does not permit access to the username and password entered through the client.
- Specified server is not a PC running SQL Server or the specified address does not point to a server running SQL Server.
- SQL Server is not running on the server.
- Maximum number of connections to the SQL Server machine has already been reached.
- Master database or target database has a full syslogs table and the SA (system administrator) needs to truncate and/or expand the log.
- Master database or target database is corrupt and needs to be recovered.
- SQL Server machine has crashed.

- A user or a process has an exclusive lock on resources needed by the Loader program; use SQL Server's `sp_who` stored procedure to identify who is currently using the database.

Database Access Problems

Overview of database access problems

Errors frequently occur because the Loader cannot access the Analyzer database to insert or update rows. The database often generates additional messages to help identify the cause of the problem (refer to “[SQL Server Issues](#)” on page 203).

The following items address possible database access problems:

- The control tables may not have been built. Verify that the post installation procedures that build the control tables have been run. Refer to *IDXtendR Analyzer Installation Manual* for more information.
- There may be a problem with your database connection; the Loader uses ODBC in addition to DB-Lib calls when performing work on the SQL Server database. Errors similar to the following indicate that the entry in the ODBC setup file that points to the SQL Server database is not correct:

```
12/8/97 10:29:39 AM      A fatal error has occurred.
Error # 3146 ODBC--call failed.
Error produced in gnGetColumnMetadata
Attempt to locate entry in Sysdatabases for database 'foo' by name
failed -
```

Use the Database Setup option in the Loader to correct these entries. Refer to “[Setting up Database Specifications](#)” on page 161 for more information on the Database Setup option.

Problems Accessing Files

Overview of problems accessing files

If you have problems accessing files, examine the log file or message box on the screen and take appropriate corrective action. There sometimes are additional messages that help identify the problem's cause.

The following list identifies common causes of file access problems:

- The disk is full.

- The file is locked by another process.
- The file's *read only* property has been applied.
- The file has NT security parameters set that prevent the Loader from writing to it.

Use the Windows NT File Manager to examine the NT security settings and file level attributes indicating that the file has been set to read only.



Part IV

Analyzer Information Delivery

Chapter 12: Generating Reports with Cognos Reporting Tools 209



12

Generating Reports with Cognos Reporting Tools

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<i>Using Cognos Tools with Analyzer.....</i>	<i>212</i>
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<i>Standard Cubes Delivered by IDX</i>	<i>224</i>
<i>Standard Reports Delivered by IDX.....</i>	<i>242</i>

Understanding Cognos Concepts

IDXtendR Analyzer uses a suite of reporting and analysis tools from Cognos, Inc. These tools are used in conjunction with one another to provide an in-depth analysis of information in your Analyzer database.

You use Cognos tools after data is extracted from the IDX source systems by the Analyzer Extractor and loaded into the Analyzer database by the Analyzer Loader.

Cognos analysis features

Cognos tools enable you to perform the following analysis tasks:

- Build detailed reports from data in the relational database.
- Perform multidimensional reporting and drill through to detailed data.
- Package reports into briefing books.

IDX supplies a prebuilt briefing book as a standard part of the Analyzer package. You can construct your own briefing books as well.

Online Analytical Processing (OLAP)

Online analytical processing (OLAP) is the key to effective use of your data. OLAP helps you turn raw transaction-based data into knowledge, focusing on the relationships between the drivers of business performance. With this information, you can identify trends, make more informed decisions, and react faster to change.

Multiple dimensions

In contrast to a relational database's two-dimensional structure, the OLAP model stores data in multiple dimensions. This structure enables analysts to slice and dice data into different views, depending on the information needed. While the relational model is well-suited for online transaction processing, the multidimensional OLAP model lends itself to analysis and decision support. Each dimension consists of units that are organized in hierarchical relationships. For example, years are broken down into quarters, then into months. Payors may be organized by type, such as HMOs or PPOs.

PowerPlay Cubes

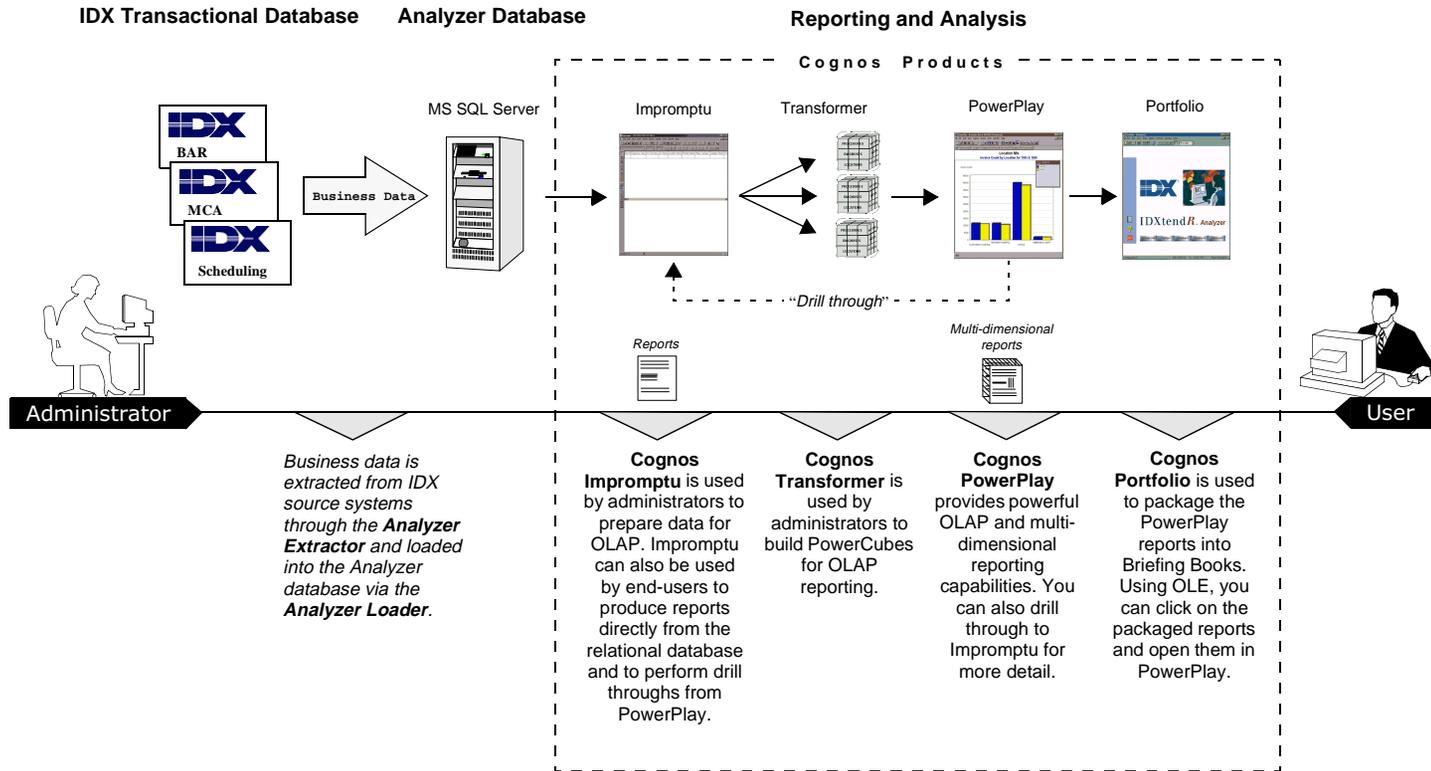
For decision support analysis, an organization needs both current and historical data, encompassing a wide range of operations. To maximize system performance and analytical focus, you use PowerPlay to create smaller subsets of data called **cubes** (also called PowerCubes). Cubes concentrate on an area of inquiry. You can manipulate cubes to answer questions about your data. Each cube may actually support hundreds of online graphs and reports.

Information Delivery comes with cubes that IDX has developed. These cubes generate reports from the data extracted from your transactional database.



Using Cognos Tools with Analyzer

The following illustration demonstrates the relationship between the four Cognos tools and Analyzer:



Cognos and the System Administrator

Overview of system administrator tasks with Cognos

The administrator's view of Analyzer is very different from that of the end-user. The administrator is concerned with the flow of data from IDX source systems (for example, BAR, MCA, and Scheduling) into the Analyzer database and out to the end-user. To facilitate this data flow, the administrator uses the following Cognos tools:

- Cognos Impromptu (Administrator version)
- Cognos Transformer

Cognos Impromptu - Administrator version

The Administrator version of Cognos Impromptu is used to build and maintain data catalogs. IDX delivers Analyzer with a standard catalog which may never need to be altered. If you need to change the catalog, you can use Impromptu to make the edits. For more information on editing or building catalogs, refer to Impromptu's documentation.



In addition to its catalog building features, the Administrator version includes all the functionality of Impromptu's User version. For information on these features, refer to "Cognos Impromptu - User version" on page 214.

Impromptu catalogs

IDX has developed an Impromptu catalog for use with Information Delivery. The catalog's file name is IDXANALYZER.CAT. This catalog contains all the information necessary for Impromptu to access and retrieve information from the Analyzer database. It assembles information from the Analyzer database so that multidimensional cubes can be constructed from them. The standard catalog is delivered with Analyzer, but you can generate custom catalogs if necessary.

Catalog profiles and passwords

User profiles consist of one or more user classes which share the same access privileges and access similar data within a catalog. User classes define capabilities for a group of users and can contain subordinate user classes.

You can protect a catalog by assigning a password to a user class. All members of a user class must enter the password to use the catalog. This should in no way be construed as a replacement for database security at the SQL Server level.

For more information, refer to Impromptu's documentation.

Cognos Transformer

Cognos Transformer serves the following functions:

- Enables you to build new cubes
- Updates existing cubes with fresh data from the Analyzer database

Building new cubes

The standard set of cubes that is delivered with Analyzer should meet your analysis needs. However, if you need to analyze different data, Transformer enables you to create new cubes. For more information on creating cubes, refer to Transformer's documentation.

Updating cubes

Cubes are automatically updated on a schedule defined in IDX Scheduler. Once the schedules are set, the Scheduler automatically launches Transformer, the cube is updated, and Transformer is closed. No manual intervention is required once the schedules are set in the Scheduler. For more information on using the Scheduler, refer to [Chapter 13: Automating Tasks with IDX Scheduler, which begins on page 251](#).

Cognos and the End-user

Overview of end-user tasks with Cognos

The end-user of Analyzer uses Cognos tools to view, analyze, and report data. End-users use the following tools to accomplish these tasks:

- Cognos Impromptu (User version)
- Cognos PowerPlay
- Cognos Portfolio

Cognos Impromptu - User version

Use the User version of Impromptu to perform the following tasks:

- Perform detailed analyses of PowerPlay report data, through the use of "drill throughs."
- Build reports directly from data in the relational database, without the use of data cubes.



1. For more information on performing drill throughs, refer to the Analyzer Information Delivery online help or Cognos' documentation.
2. For information on building reports, refer to Impromptu's documentation.

Cognos PowerPlay

PowerPlay is used to perform multidimensional reporting. Users can drill through to Impromptu reports for more detailed data.



1. For more information on how PowerPlay works with the standard Analyzer Briefing Book, refer to the Analyzer Information Delivery online help.
2. For more information on PowerPlay, refer to PowerPlay's documentation.

Cognos Portfolio

Use Portfolio to package PowerPlay reports into Briefing Books. IDX supplies a prebuilt briefing book with Analyzer. You can construct your own briefing books as well.



1. For more information on the Analyzer briefing book, refer to the Analyzer Information Delivery online help.
2. For more information on creating additional briefing books, refer to Portfolio's documentation.

Structure of Analyzer Database

Destination tables The tables and columns in the Analyzer database represent the DBMS tables and columns from the transactional database.

Database naming conventions Many of the DBMS tables and columns are renamed in the Analyzer database with more descriptive names. This is done to make it clearer what the table or column contains.

For an outline of the naming conventions used in the Analyzer database for columns, refer to [Appendix D: Analyzer Database Column Naming Conventions](#), which begins on page 341.

Summary and Rollup Tables

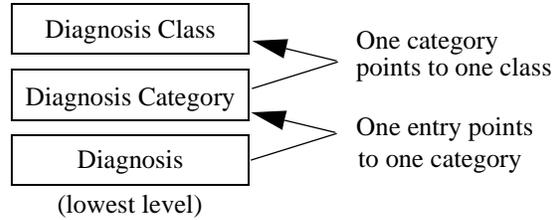
Summary tables The Analyzer database also contains other tables that do not exist in the transactional database; these are referred to as summary tables. These are built in the Analyzer database using SQL stored procedures. For more information on the stored procedures, refer to [Chapter 15: Using Analyzer SQL Stored Procedures](#), which begins on page 273.

Summary tables contain a summary of information that is needed often or is difficult to calculate in one query (would require multiple joins). The summary table pulls this information together in one place to increase the speed and efficiency in getting this data.

For example, the Member Months table provides a quick snapshot of enrollment information for each patient enrolled in a plan that month. This table contains one row for each member month for a given HMO/Contract ID/Patient ID combination; therefore, if a patient is enrolled in more than one HMO that patient will have multiple rows in this table.

Rollup tables One type of summary table is a rollup table; these tables provide easy access to groupings or layers of the data that remain relatively stable.

The terms category and class are used in Analyzer to define a way of grouping data. At the lowest level there is an entry (for example, diagnosis). The next level is the **category** (for example, diagnosis category). The highest level and most general grouping is the **class** (for example, diagnosis class). The following diagram illustrates this concept.



Each level of a rollup table must have a one-to-one relationship from the lowest to the next higher level within the rollup table. For example, in the Division rollup table, each division points to one category, and each category points to one class.

A rollup table contains links to information that is contained in other tables or dictionaries. On the following pages, the standard rollup tables delivered by IDX are described. The links used within the rollup tables can be modified by making changes to the stored procedures used to build these tables. For more information on the stored procedures, refer to the [Rollup Stored Procedures section on page 297 in Chapter 15](#).

Descriptions of the Summary and Rollup Tables

Billing Area rollup table (idx_Billing_Area_Rollup)

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
Billing Area Class	77	Reporting Category	Reporting Category 2	202	Billing Area
Billing Area Category	77	Reporting Category	Reporting Category 1	202	Billing Area
Billing Area	202	Billing Area	--	--	--

Diagnosis rollup table
(idx_Diagnosis_Rollup)

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
Diagnosis Class	77	Reporting Category	Reporting Category 1	527	MCA Diagnosis Category
Diagnosis Category	527	MCA Diagnosis Category	Reporting Category 1	36	Diagnosis
Diagnosis	36	Diagnosis	--	--	--

Division rollup table
(idx_Division_Rollup)

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
Division Class	77	Reporting Category	Reporting Category 2	102	Division
Division Category	77	Reporting Category	Reporting Category 1	102	Division
Division	102	Division	--	--	--

Employer rollup table
(idx_Employer_Rollup)

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
Super Group	501	Employer Group	Super Group	501	Employer Group
Master Group	501	Employer Group	Master Group	501	Employer Group
Employer Group	501	Employer Group	--	--	--

**FSC rollup table
(idx_FSC_Rollup)**

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
FSC Class	77	Reporting Category	Reporting Category 2	19	FSC
FSC Category	77	Reporting Category	Reporting Category 1	19	FSC
FSC	19	Financial Status Class	--	--	--

**Location rollup table
(idx_Location_Rollup)**

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
Location Class	77	Reporting Category	Reporting Category 2	100	Location
Location Category	77	Reporting Category	Reporting Category 1	100	Location
Location	100	Location	--	--	--

**Procedure rollup table
(idx_Procedure_Rollup)**

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
Procedure Class	77	Reporting Category	Reporting Category 1	112	Categories
Procedure Category	112	Categories	--	1	Procedure Codes
Procedure	1	Procedure Codes	--	--	--

Provider rollup table
(idx_Provider_Rollup)

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
Provider Class	77	Reporting Category	Reporting Category 2	3	Physician
Provider Category	77	Reporting Category	Reporting Category 1	3	Physician
Provider	3	Physician	--	--	--

Region rollup table
(idx_Region_Rollup)

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
National Region	512	National Region	National Region	11	ZIP Code
Region	512	Region	Region	11	ZIP Code
County	117	County	County	11	ZIP Code
City, State	11	City, State	City, State	11	ZIP Code
ZIP Code	11	ZIP Code	--	--	--

Vendor rollup table
(idx_Vendor_Rollup)

Level Name	M Dictionary Number	M Dictionary Name	Dictionary Field Name	Linked Dictionary Number	Pointer Located in which Dictionary?
Vendor Class	77	Reporting Categories	Reporting Category 1	474	Vendor Category
Vendor Category	474	Vendor Category	Vendor Category	471	PVendor
Vendor	471	PVendor	--	--	--

**Member Months table
(idx_Member_Months)**

This table is the primary table that will be used for cube building to count members and member months. **For each month included, this table contains one row for each member for a given HMO/Contract/Patient combination.** The columns in each row include such information as the member's employer group, PCP, and plan for that particular month. The Member Months table also includes additional columns for Sex and Age that come from the Patient table.

The following table gives you an idea of the general layout of the Member Months table and some examples of the type of data that could appear in this table.

Member Month Column	Sample Data
HMO	Gold HMO
Contract ID	1003
Patient ID	25222
Member Year	1998
Member Month	04
PCP	Smith MD, Timothy E.
Medical Practice	Smith and Jones Associates
Location	--
Practice Site	Main Street
Employer Group	ABC International
Plan Number	51423
Plan Type	Gold-Basic
Plan Type B	Large Employers
Plan Type C	--
Member Month Day	04/15/1998
Sex	Female
Age	42

The Member Months table is usually rebuilt monthly. All information is recalculated to account for changes, including retroactive changes. For example, a patient switches to a new PCP effective for the month of February but that change is not entered into the system until after the Member Months table is built for the month of February. When

the Member Months table is built for the month of March, that change will be updated in the table for both February and March.

The information is calculated based on a certain period of time to include (referred to as the number of months, default is the beginning of time in your Analyzer database) and a particular date in the month (referred to as the target date, default is the 15th). Both of these variables are set in the Member Months stored procedure (sp_idxMemberMonths). For more information about modifying the number of months and target date, refer to the [Number of months and target date section on page 294 in Chapter 15](#).

The Member Month query (MemMth1.iqd) gathers the data from the Member Month table. It is used to build the MemMth1 cube for enrollment counts. It can be combined with queries from claims or referrals to do calculations such as PMPM and utilization rates.

For more information on the Member Months table, refer to the [Enrollment and Member Months section on page 294 in Chapter 15](#).

Catalog Delivered by IDX

The catalog delivered by IDX has a file name of IDXANALYZER.CAT. This catalog contains all the information necessary for Impromptu to access and retrieve information from the Analyzer database.

Calculations

Calculations are generally used to perform a mathematical function on one or more columns. For example, to find the average age for a group of patients, all of the patient's ages would be added together and then divided by the number of patients.

Analyzer has created several calculations (also referred to as counts) to maintain a consistent method of counting certain items. These particular calculations are referred to as counts because they actually count the number of occurrences of a particular item. The following table describes how each of the counts is calculated.

Count	Description
Appointment count	Every row is counted as one appointment.
Claim count	Every unique claim number with a blank adjustment type (meaning the claim is not a backout, replacement, etc.) counts as one claim.
Invoice count	The lowest transaction sequence for each invoice is counted as one invoice. For example, if an invoice has transaction sequence numbers of 1, 2, and 3, only the transaction sequence number of 1 will be counted.
Member count	Counts every unique combination of HMO/patient ID/contract ID that exists on the date the Memmth1 query was run. The member month table contains one row for each month that a member is in a plan. This means that if a member belongs to a plan for a full year, that member will have 12 entries in the table; there will be one row for each month.
Procedure count	For invoice transactions with a Pay Code Number of 99 (it's a procedure with a charge), takes the value in the Units Service Analysis Modifier field or the Units Service Analysis Actual field as the procedure count for that particular procedure. The field that is used (Modifier versus Actual) depends on how your system is set up. IDX delivers the standard cubes with the procedure count using the Units Service Analysis Modifier field.
Referral count	Each unique referral number counts as one referral.

Standard Cubes Delivered by IDX

IDX delivers a set of standard cubes to address basic business needs. You can also build your own cubes. Descriptions of the standard cubes delivered by IDX begin on [page 229](#).

These cubes use some special time variations and age groupings created by IDX. For more information, refer to [page 226](#).

All of the cubes have some type of filter built in to ensure that only the necessary data is pulled in. For example, the Invoice 1 cube only includes transactions with a Pay Code Number of 99 (transactions with a charge).

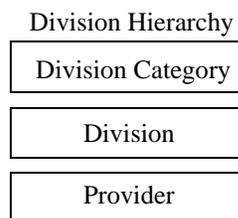
In addition, all of the cubes have a date prompt so that you can filter the amount of data that is included. The date prompt is based on the date that is included in the cube. For example, the Invoice 1 cube contains the service date. The date prompt for this cube lets you determine the range of service dates you want to include.

Hierarchies

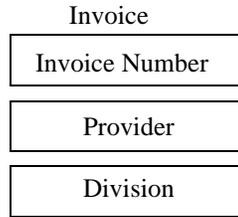
Hierarchies are similar in concept to rollup tables (as described previously on [page 216](#)). The primary difference is that rollups only allow a one-to-one relationship from the lowest to the next higher level within the rollup table. For example, in the Division rollup table, each division points to one category, and each category points to one class. There could be multiple invoices that contain a particular division and that division would always point to the same division category.

In contrast, a hierarchy can have a lower level with multiple links to higher levels, but for any specific record only one link will apply. For example, one invoice could contain a particular provider and division and another invoice could contain that same provider but a different division.

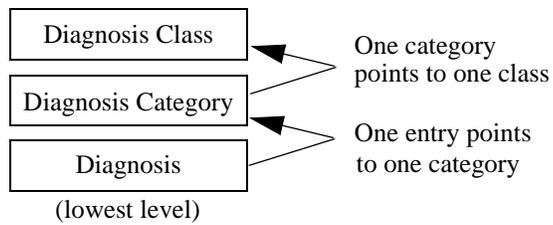
For example, the following is a sample Division Hierarchy.



To build the Division Hierarchy, the Provider and Division are pulled from each invoice.

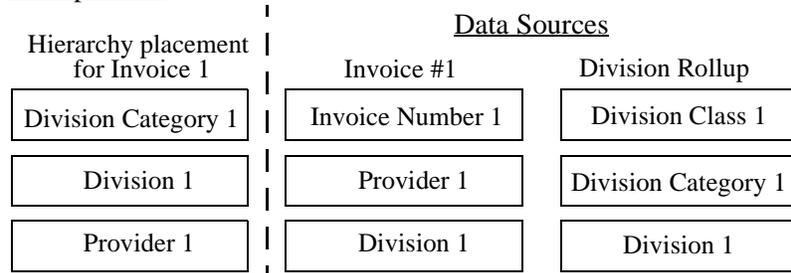


As the final step, the Division from each invoice is used to get the appropriate Division Category from the rollup table.

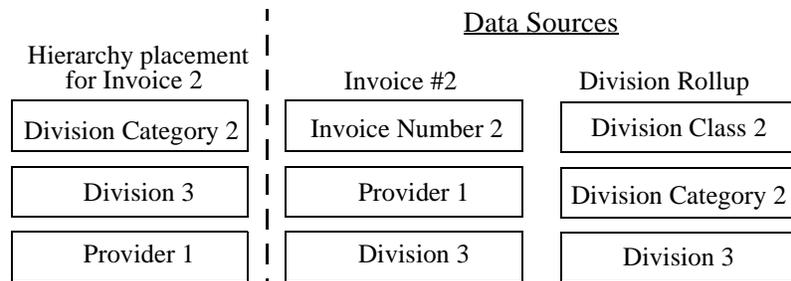


The following two examples show the placement in the hierarchy for two specific invoices.

Example One



Example Two



Time Variations and Age Groupings Used in the Standard Cubes

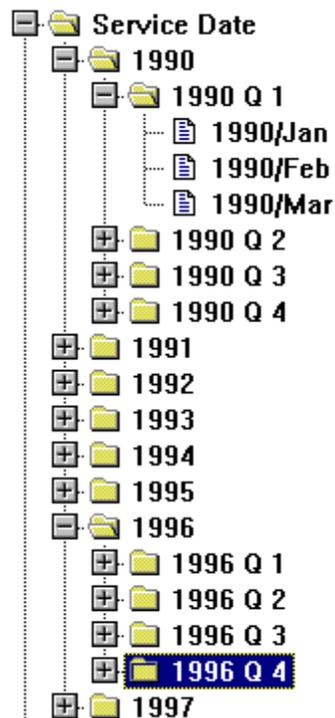
Time variations

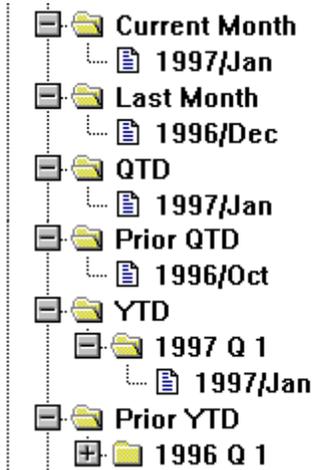
Cognos provides a number of standard date variations. The following service data example includes these standard date variations in the first part of the graphic.

In addition, IDX has created some additional custom date variations. These date variations allow you to compare data for last year and the current year at the same time, last quarter and the current quarter at the same time, data for the last 13 months all at one time, and data for the last 24 months all at one time. These views make it possible to look at data side by side as opposed to looking at data for one time period and then having to switch over to another view to see data for another time period. The IDX custom data variations make it easier to do these types of comparisons. The following service date example includes the IDX custom date variations in the second part of the graphic.

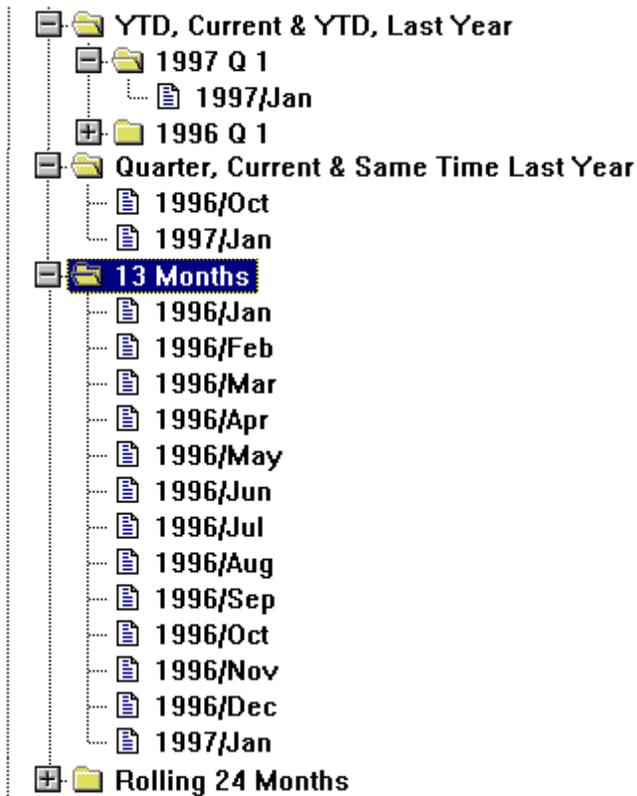


This example is based on the current month being January 1997. In addition, this example is based on a database that contains data for January 1990 - January 1997.





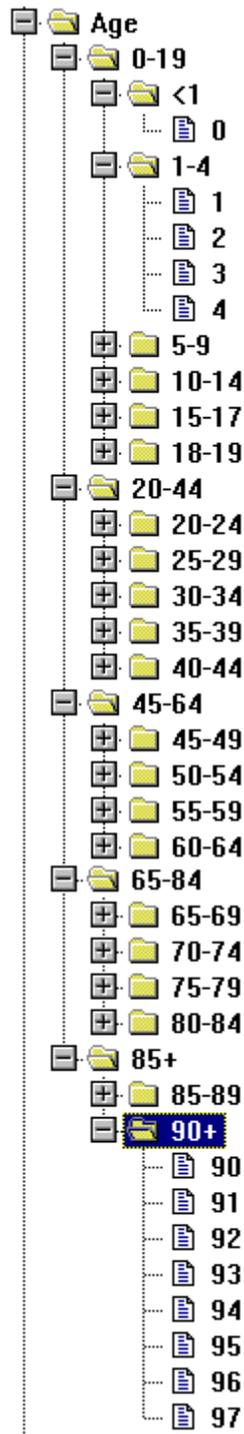
The following are the IDX custom date variations.



Age Group

IDX has also created some special age groups. The following table lists the age groups and levels you can drill down to. For example, you could view data for the 20-44 age group, and then drill down to

the 25-29 age group, and then drill down to look just at data for 28 year olds.



Standard Cube Descriptions

**Financial - Invoice 1
(Invoice1.mdc)**

This cube contains information regarding services rendered including location, division, financial class, service date or posting period. (Based on Transaction_Charges.mdl.)

Measures include invoice and procedure counts, average charge per invoice or procedure and average procedure per invoice.

This cube only includes invoice transactions that have a Pay Code Number of 99 (transactions with a charge).

This cube uses tables and columns that contain the invoice and transactions data from the IDX BAR module.

Dimension	Dimension Hierarchy	Measures
Service Date	Time	<ul style="list-style-type: none"> • Invoice Count • Charge Amount • Procedure Count • Avg Charge per Invoice • Avg Charge per Procedure • Avg Procedure per Invoice • Relative Value Units
Location	<ul style="list-style-type: none"> • Location Class • Location Category • Location 	
Group	Group	
Division	<ul style="list-style-type: none"> • Division Category • Division 	
Financial Class	<ul style="list-style-type: none"> • Original FSC Class • Original FSC Category • Original FSC 	
Diagnosis	<ul style="list-style-type: none"> • Diagnosis Class • Diagnosis Category • Diagnosis 	
Procedure	<ul style="list-style-type: none"> • Procedure Class • Procedure Category • Procedure 	
Posting Period	Posting Period	

**Practice Patterns -
 Invoice 2 (Invoice2.mdc)**

This cube contains information regarding provider practice patterns including location, division, diagnosis, procedures, and service date. (Based on Transaction_Charges.mdl.)

Measures include invoice and procedure counts, average charge per invoice or procedure and average procedure per invoice.

This cube only includes invoice transactions that have a Pay Code Number of 99 (transactions with a charge).

This cube uses tables and columns that contain the invoice and transactions data from the IDX BAR module.

Dimension	Dimension Hierarchy	Measures
Service Date	Time	<ul style="list-style-type: none"> • Invoice Count • Charge Amount • Procedure Count • Avg Charge per Invoice • Avg Charge per Procedure • Avg Procedure per Invoice • Relative Value Units
Location	<ul style="list-style-type: none"> • Location Class • Location Category • Location 	
Group	Group	
Division	<ul style="list-style-type: none"> • Division Category • Division 	
Diagnosis	<ul style="list-style-type: none"> • Diagnosis Class • Diagnosis Category • Diagnosis 	
Procedure	<ul style="list-style-type: none"> • Procedure Class • Procedure Category • Procedure 	
Provider	<ul style="list-style-type: none"> • Provider Category • Provider 	

**Practice Patterns with
Billing Area - Invoice 3
(Invoice3.mdc)**

This cube contains information regarding provider practice patterns including location, division, diagnosis, procedures, service date, and billing area. (Based on Transaction_Charges.mdl.)

This cube only includes invoice transactions that have a Pay Code Number of 99 (transactions with a charge).

This cube uses tables and columns that contain the invoice and transactions data from the IDX BAR module.

Dimension	Dimension Hierarchy	Measures
Service Date	Time	<ul style="list-style-type: none"> • Invoice Count • Charge Amount • Procedure Count • Avg Charge per Invoice • Avg Charge per Procedure • Avg Procedure per Invoice • Relative Value Units
Location	<ul style="list-style-type: none"> • Location Class • Location Category • Location 	
Group	Group	
Division	<ul style="list-style-type: none"> • Division Category • Division 	
Billing Area	<ul style="list-style-type: none"> • Billing Area Category • Billing Area • Provider 	
Diagnosis	<ul style="list-style-type: none"> • Diagnosis Class • Diagnosis Category • Diagnosis 	
Procedure	<ul style="list-style-type: none"> • Procedure Class • Procedure Category • Procedure 	
Provider	<ul style="list-style-type: none"> • Provider Category • Provider 	
Posting Period	Posting Period	

Marketing - Invoice 4
(Invoice4.mdc)

The purpose of this cube is to aggregate the geographic and demographic data of patients for whom a Group has provided services. Reports generated from this cube allow comparisons between geographic, demographic, and financial business aspects over time. (Based on Transaction_Charges_Region.mdl.)

This cube only includes invoice transactions that have a Pay Code Number of 99 (transactions with a charge).

This cube uses tables and columns that contain the invoice and transactions data from the IDX BAR module.

Dimension	Dimension Hierarchy	Measures
Service Date	Time	<ul style="list-style-type: none"> • Invoice Count • Charge Amount • Avg Charge per Invoice
Location	<ul style="list-style-type: none"> • Location Class • Location Category • Location 	
Group	Group	
Division	<ul style="list-style-type: none"> • Division Category • Division • Provider 	
Billing Area	<ul style="list-style-type: none"> • Billing Area Category • Billing Area 	
Region	<ul style="list-style-type: none"> • National Region • Region • County • City/State • Zip Code 	
Sex	<ul style="list-style-type: none"> • Female • Male • Unknown 	

**Payments - Invoice 5
(Invoice5.mdc)**

This cube contains information showing all activity at the account, invoice, and transaction level including payments and write-offs using original FSC. (Based on Non_zero_transactions_ar.mdl.)

This cubes includes all transactions (for example, payments and adjustments) except transfers.

This cube uses tables and columns from the IDX BAR module.

Dimension	Dimension Hierarchy	Measures
Charge Period	Time	<ul style="list-style-type: none"> • Invoice Count • Charge Amount • Payment Amount • Adjustment Amount • Credit Amount • Non Charge Debits • Avg Charge per Invoice • Avg Paid per Invoice • Percent Paid
Group	Group	
Location	<ul style="list-style-type: none"> • Location Class • Location Category • Location 	
Division	<ul style="list-style-type: none"> • Division Class • Division Category • Division • Provider 	
Billing Area	<ul style="list-style-type: none"> • Billing Area Category • Billing Area 	
Original Financial Class	<ul style="list-style-type: none"> • Original FSC Class • Original FSC Category • Original FSC 	
Posting Period	Posting Period	

**Member Months
(Memmoth1.mdc)**

This cube contains information regarding membership including age group, sex, HMO, plan, employer, PCP, and medical practice. Measures include member months, average member, and average age. (Based on Memmoth1.mdl.)

This cube uses tables and columns that contain the enrollment data from the IDX MCA module.



For the Age dimension, for each of the top-level age groups (0-19, 20-44, etc.) you can drill down to the next level of ages which are grouped into five year increments (for example, 1-4 and 5-9). You can then drill down one more level to the individual ages. In the following table, you can see the 0-19 age group opened up, and then the 1-4 age group, and then finally ages 1, 2, 3, and 4.

Dimension	Dimension Hierarchy	Measures
Period	Time	<ul style="list-style-type: none"> • Member Count • Average Members • Average Age
Age	<ul style="list-style-type: none"> • 0 - 19 • <0 • 1-4 <ul style="list-style-type: none"> • 1 • 2 • 3 • 4 • 5-9 • 10-14 • 15-19 • 20 - 44 • 45 - 64 • 65 - 84 (see note above) 	
Sex	<ul style="list-style-type: none"> • Female • Male • Unknown 	
HMO	<ul style="list-style-type: none"> • HMO • Plan Type 	
PCP	<ul style="list-style-type: none"> • PCP Category • PCP 	
Employer	<ul style="list-style-type: none"> • Employer Super Group • Employer Master Group • Employer Group 	
Medical Practice	<ul style="list-style-type: none"> • Medical Practice Category • Medical Practice 	

Collection Analysis cubes

These are a set of 10 cubes that provide structured sets of data for analyzing collection trends in your organization; each cube focuses on a specific facet of collection analysis as listed below.

These cubes use tables and columns from the IDX BAR module.

The transactional database is the collectional analysis data used to build month end reports.

- Billing Area
- Division
- FSC
- Location
- Provider

For each area there are two cubes based on the following filters.

- “Current” cube, which contains cumulative amounts for all the transactions kept for collection analysis in your transaction database as of the most recent posting period. Therefore, the posting period dimension will only include one month - the most recent one. Each month when this cube is rebuilt the latest posting period's data is added and the posting period will change.

Multiple charge periods are included in the cube, so one use of the cube is for reports that pull various types of transactions back to the charge period. Such transactions are charges, payments, credit adjustments, courtesy, bad debt, and transfers.

- “Detail” cube, which contains the detail transactions only in the month in which they occurred- the posting period. Since the data is not cumulative, multiple posting periods are included. In this cube, reports can be developed that show the specific transaction activity that occurred in any posting period.

The following is a complete list of the cube and model names.

- cabacur.mdc (based on ca_ba_current.mdl)
- cabadtl.mdc (based on ca_ba_dtl.mdl)
- cadivcur.mdc (based on ca_div_current.mdl)
- cadivdtl.mdc (based on ca_div_dtl.mdl)
- cafsecur.mdc (based on ca_fsc_current.mdl)
- cafscdtl.mdc (based on ca_fsc_dtl.mdl)
- caloccur.mdc (based on ca_loc_current.mdl)
- calocdtl.mdc (based on ca_loc_dtl.mdl)
- caprovcur.mdc (based on ca_prov_current.mdl)
- caprovdtl.mdc (based on ca_prov_dtl.mdl)

The following dimensions and measures are common to the collection analysis cubes. Note that not every dimension hierarchy appears in every cube.

Dimension	Dimension Hierarchy	Measures
Posting Period	Time	<ul style="list-style-type: none"> • Amount K • Absolute Amount K • Amount • Absolute Amount
Group	Group	
Charge Period	Time	
Choice of one per cube:	<ul style="list-style-type: none"> • Provider • FSC • Location • Division • Billing Area 	
Transaction Category	<ul style="list-style-type: none"> • Charges • Payments • Credit Adj • Courtesy • Bad Debt • Transfers 	

**Appt1 - Appointments
(Appts1.mdc)**

The purpose of this cube is to make available information about appointment scheduling. (Based on Appointments.mdl.)

This cube uses tables and columns from the IDX Scheduling application.

Dimension	Dimension Hierarchy	Measures
Appointment Date	Time	Appointment Count
Location	Location	
Department	<ul style="list-style-type: none"> • Department • Provider Category 	
Appointment Status	Appointment Status	
Appointment Type	<ul style="list-style-type: none"> • Appointment Category • Appointment Long Name 	
Week Day	Week Day	

Referral1 - All Referrals
(Refer1.mdc)

The purpose of this cube is to provide reporting on referral activity, including information by referring providers, refer to vendors, referral status, and type. The measures include referral count, authorized treatments, and average authorized treatments per referral. (Based on All_Referrals.mdl.)

This cube uses tables and columns that contain the referral data from the IDX MCA module.

This cube does not include referrals with a status of deleted.

Dimension	Dimension Hierarchy	Measures
Referral Create Date	Time	<ul style="list-style-type: none"> • Referral Count • Authorized Treatments • Avg Auth Treatments per Referral
Referral Status	<ul style="list-style-type: none"> • Status Type • Referral Status 	
Inpatient/Outpatient	<ul style="list-style-type: none"> • Inpatient/Outpatient • Referral Type 	
Referral Type	Referral Type	
HMO	HMO	
Referring Provider	<ul style="list-style-type: none"> • Referring Provider Class • Referring Provider Category • Referring Provider 	
Refer To Vendor	<ul style="list-style-type: none"> • Refer To Vendor Class • Refer To Vendor Category • Refer To Vendor 	

**IPRef1 - IP Utilization
(IPRef1.mdc)**

The purpose of this cube is to make available information about discharged inpatient admissions based on information from the referral and associated claims. (Based on Discharged_IP_Referrals.mdl.)

This cube uses tables and columns that contain the referral and claim data from the IDX MCA module.

This cube filters out referrals that do not have a discharge date. In addition, this cube does not include referrals with a status of deleted.

Dimension	Dimension Hierarchy	Measures
Discharge Date	Time	<ul style="list-style-type: none"> • Number of Discharges • Number of Days • Approved Days • Authorized Treatments • Billed Dollars • Approved Dollars • Estimated Liability • Average Days Per Discharge • Average Billed Per Discharge • Average Approved Dollars Per Discharge • Percent Approved Dollars • Percent Approved Days
Admit Type	Admit Type	
HMO	HMO	
Diagnosis	<ul style="list-style-type: none"> • Diagnosis Class • Diagnosis Category • Diagnosis 	
Referring Provider	<ul style="list-style-type: none"> • Referring Provider Class • Referring Provider Category • Referring Provider 	
Refer To Vendor	<ul style="list-style-type: none"> • Refer To Vendor Class • Refer To Vendor Category • Refer To Vendor 	

Claims1 - All Claims
(Claims1.mdc)

The purpose of this cube is to make available information from managed care claims at the summary claim level. (Based on All_Claims.mdl.)

This cube uses tables and columns from the IDX MCA module.

This cube filters out claims that have been rejected.

Dimension	Dimension Hierarchy	Measures
Service Date	Time	<ul style="list-style-type: none"> • Claim Count • Approved Days • Approved Units • Billed Amount • Approved Amount • Average Billed Amount Per Claim • Average Approved Dollars Per Claim • Percent Dollars Approved
HMO	HMO	
Vendor Category	<ul style="list-style-type: none"> • Master Vendor Category • Master Vendor • Vendor 	
Diagnosis	<ul style="list-style-type: none"> • Diagnosis Class • Diagnosis Category • Diagnosis 	
Inpatient?	<ul style="list-style-type: none"> • Yes • No 	
Statistical?	<ul style="list-style-type: none"> • Yes • No 	

InvIPD - Financial Posting Period (InvIPD.mdc)

This cube contains information regarding services rendered by posting period (which is the month that the charge was posted). This cube can use a fiscal year; the cube is delivered with a fiscal year default of July 1 which can be modified. (Based on Transaction_Charges_Post_Pd.mdl.)

Measures include invoice and procedure counts, average charge per invoice or procedure, average procedure per invoice, and RVUs.

This cube only includes invoice transactions that have a Pay Code Number of 99 (transactions with a charge).

This cube uses tables and columns that contain the invoice and transactions data from the IDX BAR module.

Dimension	Dimension Hierarchy	Measures
Charge Period (as date)	Time	<ul style="list-style-type: none"> • Invoice Count • Charge Amount • Procedure Count • Avg Charge per Invoice • Avg Charge per Procedure • Avg Procedure per Invoice • Relative Value Units
Location	<ul style="list-style-type: none"> • Location Class • Location Category • Location 	
Group	Group	
Division	<ul style="list-style-type: none"> • Division Category • Division • Provider 	
Billing Area	<ul style="list-style-type: none"> • Billing Area Category • Billing Area 	
Financial Class	<ul style="list-style-type: none"> • Original FSC Class • Original FSC Category • Original FSC 	
Procedure	<ul style="list-style-type: none"> • Procedure Class • Procedure Category • Procedure 	

Standard Reports Delivered by IDX

IDX delivers a set of standard reports based on the standard cubes described in the previous section to address basic business needs. You can also build your own reports.

The standard reports delivered by IDX are categorized and described on the following pages. The report name and cube name are shown in parentheses.

IDX also delivers several Metadata reports as described on [page 246](#).

Service Mix

Location Mix
(**Location Mix.ppr**)

Clustered bar graph that compares invoice volumes by location for multiple service date years. (Based on Invoice1.mdc.)

Payor Mix
(**Payor Mix.ppr**)

Pie chart that shows the business' payor mix that is the distribution of charges by broad category of primary payor (financial class). (Based on Invoice1.mdc.)

Charges Trend
(**Charges Trend.ppr**)

Layered line graph that displays the trend in total charges by procedure class for each division as well as for all divisions. Each layer of the graph displays data across several years for one division with each line representing a procedure class. (Based on Invoice1.mdc.)

Key Results
(**Key Results.ppr**)

Bar graph that compares key result measures for several years between divisions. One measure is displayed at a time. (Based on Invoice1.mdc.)

Invoice Market Distribution
(**Invoice Market Distribution.ppr**)

Stacked bar graph that displays the market distribution (invoice count) by region for each division. (Based on Invoice4.mdc)

Profiles

Diagnosis by Division (Diagnosis by Division.ppr)

Stacked bar graph that displays the mix of primary diagnoses using the volume of invoices by diagnosis class for each division. Each bar presents the number of invoices generated by that division with each segment of the bar representing a diagnosis category. (Based on Invoice3.mdc.)

RVUs by Billing Area (RVUs by Billing Area.ppr)

Bar graph that compares RVUs for procedure classes by each division and for all divisions. Each layer of the graph includes data for all service years for one division, and one layer shows all divisions combined. (Based on Invoice3.mdc.)

Members

Membership Trends (Membership Trends.ppr)

Multiple line graph that displays average membership by the top four plans across several years. Each line represents a different plan allowing quick analysis of trends in plan membership over time. (Based on Memmth1.mdc.)

Membership by PCP (Membership by PCP.ppr)

Stacked bar graph depicting average membership by primary care provider (PCP) for the top five plans during a period or all periods combined. This allows comparison of membership for a PCP by plan, and membership by plans across all PCPs. (Based on Memmth1.mdc.)

Age Sex Distribution (Age Sex Distribution.ppr)

Clustered bar graph compares membership trends by age group and sex for each HMO during a specific period. Membership is shown as percentages by each age grouping for each year. (Based on Memmth1.mdc.)

Financial

FSC Charge AR Trend by Charge Period (FSC Chg AR Trend by Chg Pd.ppr)

Layered multi-line graph that shows charges and the accounts receivable balance for each charge period. The AR balance is the outstanding amount as of the most recent posting period applied back to the period in which the charges were originally entered. (Based on Cafsccur.mdc.)

**Payor Mix by Chg Pd
(Payor Mix by Charge
Pd.ppr)**

Layered pie chart showing percentage of charges by financial class grouping for a single charge period. Each layer is a different charge period. Use the lower right hand drop down box to change from charges to other transaction categories, such as payments or adjustments. (Based on Cafsccur.mdc.)

**Division Activity by Post
Period (Division Activity)
(Div Activity by Post
Pd.ppr)**

Layered multi-line graph shows categories of transaction activity for several posting periods. Each line represents a separate transaction category e.g., charges, payments, write-offs, etc. Activities are shown in the period in which they were posted. (Based on Cadivdtl.mdc.)

**Charge AR Trend by
Charge Period by Division
(Div Chg AR trend by Chg
Pd.ppr)**

Layered multi-line graph showing charges and accounts receivable balances for each charge period. The AR balance is the outstanding amount as of the most recent posting period applied back to the period in which the charges were originally entered. Each layer is a division. This comparison allows analysis of original charges posted to the amount still outstanding for that period as of the most recent month end. (Based on Cadivcur.mdc.)

**Paid & AR Trend by
Charge Period by Division
(Div Paid & AR by Chg
Pd.ppr)**

Layered stacked bar graph showing categories of transaction activity for each charge period as of the most recent posting period. All activities, such as payments or adjustments are applied back to the period when the original charge was posted. (Based on Cadivcur.mdc.)

**Average Charge and
Payment per Invoice
(Avg Charge & Paid per
Invoice.ppr)**

Correlation graph showing two measures, the average charge per invoice compared to the average paid per invoice displayed by group and year. (Based on Invoice5.mdc.)

Referral

**Referrals by HMO
(Referrals by HMO.ppr)**

Pie chart comparing volumes of referrals across HMOs for a year. Each pie slice represents an HMO's total referral count. (Based on Refer1.mdc.)

Referrals by Referring Provider
(Referrals by Referring Provider.ppr)

Pie chart showing the number of referrals made by a referring provider by the type of referral. A different referring provider can be selected using the lower right hand drop-down box. (Based on Refer1.mdc.)

Referrals by Status and Type
(Referrals by Status and Type.ppr)

Pie chart comparing volume of a selected type of referrals by status. A different referral type can be selected using the lower right hand drop down box. (Based on Refer1.mdc.)

Approved Ref Days by Admit Type
(Approved Ref Days by Admit Type.ppr)

Line graph showing the volume of approved inpatient days among types of admissions. (Based on IPRef1.mdc.)

Discharge Ref Dollars by Referring Provider
(Discharge Ref Dollars by Referring Provider.ppr)

Single line graph depicting the average billed amount for a discharged inpatient referral by referring provider class. This allows for comparison between groups of providers. (Based on IPRef1.mdc.)

Percent Approved Ref Dollars
(Percent Approved Ref Dollars.ppr)

Clustered bar graph showing the percentage of approved dollars for referrals across HMOs. (Based on IPRef1.mdc.)

Claims

Average Approved Claim by Vendor Category
(Average Approved Claim by Vendor Category.ppr)

Crosstab view of the average approved amount per claim by vendor category or grouping of vendors. (Based on Claims1.mdc.)

Nonstatistical Claim Count by HMO
(Nonstatistical Claim Count by Hmo.ppr)

Pie chart allows for comparison of the volume of nonstatistical claim count across HMOs. (Based on Claims1.mdc.)

Appointments

Appointment by Status (Appointments by Status.ppr)	Stacked bar graph showing the appointment count by status for a department. This presentation allows for comparison of appointment percentage by status across years and within a year for each department. (Based on Appts1.mdc.)
Appts by Loc & Day of Week (Appts by Loc & Day of Week.ppr)	Clustered bar graph that displays appointment volumes by location, day of week and service year. This allows for appointment volume comparison by location from year to year as well across days of the week for those same years. (Based on Appts1.mdc.)
Appts by Dept & Day of Week (Appts by Dept & Day of Week.ppr)	Clustered bar graph that displays appointment volumes by department, day of week and service year. This allows for appointment volume comparison by department from year to year as well across days of the week for those same years. (Based on Appts1.mdc.)
Appts by Dept & Type (Appts by Dept & Type.ppr)	Clustered bar graph depicts appointment volume for department by appointment type and year. Each bar represents total appointment counts for each year while each cluster allows comparison of counts between appointment type. (Based on Appts1.mdc.)

Metadata

	The Metadata reports delivered by IDX are Impromptu reports.
Source Tables (Source Tables.imr)	This report lists the source tables from the transactional database and the corresponding destination table sorted by source table name. This report does not include tables that start with “idx” (tables that have been built in the Analyzer database).
Destination Tables (Destination Tables.imr)	This report lists the destination tables from the Analyzer database and the corresponding source table sorted by destination table name. This report does not include tables that start with “idx” (tables that have been built in the Analyzer database).

**Source Columns with
Table Prompt
(Source Columns with
Table Prompt.imr)**

This report includes both the source and destination tables and their columns; this report makes it easy to see what source table and column match up with each destination table and column.

In addition, when you first open the report, you are prompted for a particular source table that you want to filter the report by. You can enter a full table name to only include that table, partial table name to include any tables that begin with those characters, or leave the field blank if you want to include everything.

**Destination Columns with
Table Prompt
(Destination Columns with
Table Prompt.imr)**

This report includes both the source and destination tables and their columns; this report makes it easy to see what destination table and column match up with each source table and column.

In addition, when you first open the report, you are prompted for a particular destination table that you want to filter the report by. You can enter a full table name to only include that table, partial table name to include any tables that begin with those characters, or leave the field blank if you want to include everything.



Part V

Analyzer Support Tools

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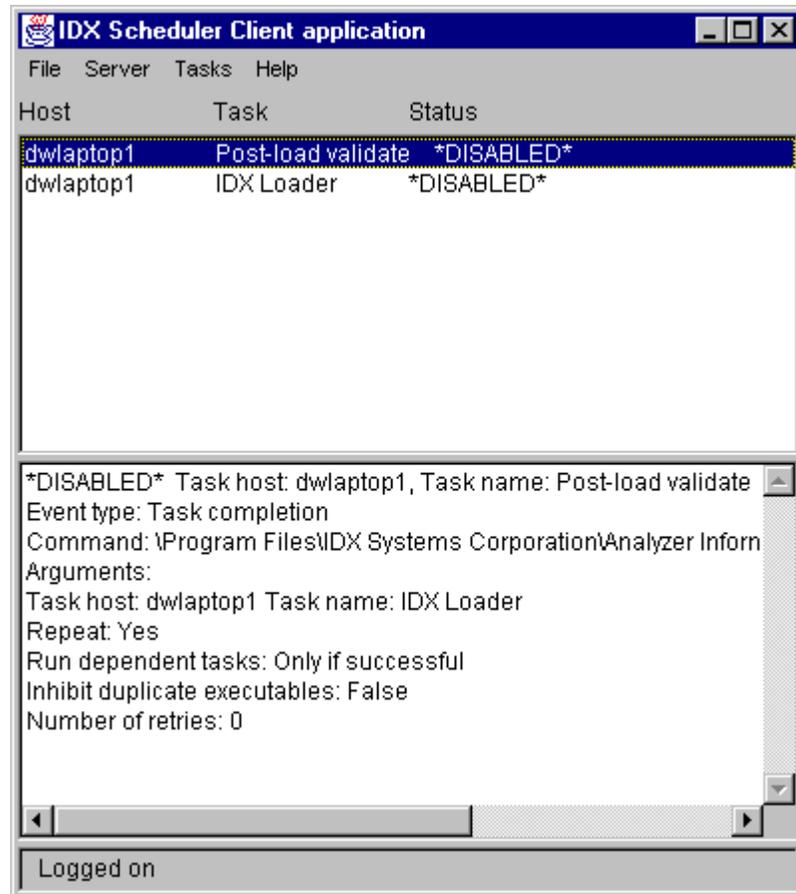
Automating Tasks with IDX Scheduler

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Understanding IDX Scheduler

IDX Scheduler launches programs automatically at specified times. For example, you can set IDX Scheduler to automatically run the Loader when the Extractor finishes extracting data.

When you open IDX Scheduler, the system displays the following Scheduler Client window:



This window shows tasks currently in IDX Scheduler, the status of those tasks, and the server (host) those tasks are associated with. Details related to the highlighted task are shown in the lower pane. You can initiate the add, edit, and remove task functions through this window.

Starting IDX Scheduler and Connecting to the Server

Before you can work with tasks, you must start up IDX Scheduler and connect to the server where the scheduled program is located.

Starting IDX Scheduler

Use the following steps to start IDX Scheduler.

1. Click the Start button.
2. Point to Programs, point to IDXTendR Analyzer, and then click IDXScheduler Client.

The system displays the Scheduler Client window.

Starting up the server

If you are running IDX Scheduler from a client machine (not on the server itself) and the server is not currently running, you need to manually start the server.

Use the followings steps to start up the server.

On Windows NT:

1. Click the Start button.
2. Point to Settings and then click Control Panel.
3. Double-click Services.
4. Click the IDXScheduler service.
5. Click the Startup button and verify that the following are selected:
 - System Account
 - Allow Server to Interact with Desktop
6. Click OK.
7. Click the IDXScheduler service and then click the Start button.

On Windows 95:

1. In My Computer or Windows Explorer, locate the directory where you installed the IDX Scheduler server pieces (the default is C:\IDX Systems Corporation\Analyzer Information Delivery\Server\IOT).
2. Double-click IOTServer.bat.

When the server starts up, all tasks are scanned to determine if they should have been executed and are run accordingly. For example, if a

task was scheduled to be run at 9 a.m. and you start the server up at 11 a.m., the task will be run at that time.

Connecting to the server

You can only be connected to one server at one time. If you are already connected to a server when you choose to connect to another server, the system disconnects your connection to the original server.

Use the following steps to connect to the server.

1. On the Server menu, click Connect to server.
2. Indicate the host (server) you want to connect to. You can type the host name or the IP address. IP addresses are entered in the format #.#.#.# - for example, 10.123.55.123
3. Indicate the TCP/IP port number the server will use for communications.



The port number defaults to 4324. If the default port number is already in use by other programs, you can change it to avoid conflicts.

4. Type a valid username and password.



If you do not enter a valid username and password, you will only be able to view the tasks on the server; you will not be able to add or edit tasks.

5. Click OK.

In the status bar of the Scheduler Client window, the system displays a message indicating that it is connecting to the server and then a confirmation message when you are logged on. If an error occurs, a message will display indicating that a connection was not made with the server.

Working with Tasks in IDX Scheduler

After you connect to the server where the scheduled application is located, you can add or edit tasks for IDX Scheduler to perform.

Task window

You add or edit these tasks through the following Task window, which you access through the Tasks menu:

The screenshot shows the 'Task Window' dialog box. It includes the following fields and controls:

- Name:** [Empty text box]
- Host:** [slk.idx.com]
- Command:** [Empty text box]
- Inhibit command from running in more than one task
- Enabled
- Retry on failure
- Retries:** [0]
- Start Event:** [Date/Time]
- Date/Time Properties:**
 - Date:** [03/23/1998]
 - Time:** [17:08]
- Frequency:** [Once]
- Every:** [1]
- month(s) on the:** [Last]
- Day:** [Sunday]

Buttons: [Submit] [Cancel]

The fields in the top half of this window are displayed for all tasks. The fields displayed in the lower half of this window are dependent on the value chosen from the Start Event list.

Procedure for adding or editing a task Use the following steps to add or edit a task.

Step	Action	Result	For more information
1	<ul style="list-style-type: none"> To create a new task, click Add on the Tasks menu. To edit a task, select the task in the list at the top of the window, and then click Edit on the Tasks menu. 	<p>The system displays the Task window.</p> <p>If you are editing an existing task, the Task window contains the information that was entered previously.</p>	--
2	In the Name box, type a name for the task.	--	--
3	In the Command box, type the program that you want to be run.	--	Refer to “Entering program information in the Command box” on page 260.
4	<p>Select the Inhibit Command From Running in More Than One Task check box if you want the program to only be running once at any given time.</p> <p>If you select this check box, any task that is set to run the same command will be postponed until that task is done.</p>	--	--
5	<p>Select the Enabled check box to have this task run the next time the start event criteria is met.</p> <p>Otherwise, clear this check box if you don’t want the task to run even if the start event criteria is met.</p>	--	On what will cause a task to be run, refer to “Selecting a Start Event for a Task” on page 263.
6	Select the Retry on Failure check box if you want IDX Scheduler to try to run this task again if it fails the first time. Otherwise, clear this check box and skip to step 8.	If you select this check box, the Retries box becomes available.	--
7	In the Retries box, specify the number of times you want IDX Scheduler to try to run this task if it fails to run the first time.	--	--

Step	Action	Result	For more information
8	<p>From the Start Event list, select what you want to cause a task to be run.</p> <p>This can be any of the following.</p> <ul style="list-style-type: none"> • Date/Time • File Change • Task Completion • New File 	<p>The remaining fields in the Task window are updated to reflect the start event that you chose.</p>	<p>Refer to “Selecting a Start Event for a Task” on page 263.</p>
9	<p>Depending on the start event that you chose, refer to the appropriate step indicated.</p> <ul style="list-style-type: none"> • Date/Time - step 10 • File Change - step 15 • Task Completion - step 18 • New File - step 21 	--	--

Step	Action	Result	For more information
Perform this next group of steps if you chose a start event of Date/Time.			
10	In the Date box, type the first date you want this task to be run.	--	Refer to "Date/Time" on page 263.
11	In the Time box, type the first time you want this task to be run. IDX Scheduler uses a 24-hour clock. For example, 14:15 represents 2:15 p.m.	--	
12	From the Frequency list, select how often you want this task to be run. <ul style="list-style-type: none"> • Once • Hourly • Daily • Weekly • Monthly on the Specified Date • Monthly <p>If you chose Monthly refer to the next step; otherwise, skip to step 14.</p>	--	
13	Using the next three fields, you need to indicate: <ul style="list-style-type: none"> • how often in months you want this task to be run (for example, you could select 2 to repeat this task every 2 months) • day of the month (for example, you could select Last to have the task run on the last day of each month) • day of the week (for example, you could select Last as the day of the month and Tuesday as the day of the week to have the task run on the last Tuesday of each month) 	--	
14	If you are done adding or editing the task, refer to step 23.	--	

Step	Action	Result	For more information
Perform this next group of steps if you chose a start event of File Change.			
15	In the Filename box, type the directory and name of the file that needs to change in order for this task to be run.	--	<ul style="list-style-type: none"> On creating a task with a Start Event of File Change, refer to “File Change” on page 264. On entering a filename, refer to “Entering a filename” on page 260.
16	Select the Repeat check box if you want this task to be run every time a change is made to the specified file. Otherwise, clear this check box if you want this task to be run only the first time a change is made to the specified file.	--	
17	If you are done adding or editing the task, refer to step 23.	--	
Perform this next group of steps if you chose a start event of Task Completion.			
18	In the Name box, type the name of the task that you want to be completed before this task will be run.	--	Refer to “Task Completion” on page 264.
19	Select the Run Only on Successful Completion check box if you want this task to be run only if the other task completes successfully. Otherwise, clear this check box.	--	
20	If you are done adding or editing the task, refer to step 23.	--	
Perform this next group of steps if you chose a start event of New File.			
21	In the Filename box, type the name of the file that needs to be created in order for this task to be run. You also need to include the directory for the file.	--	Refer to “New File” on page 264.
22	Select the Include New File as Program Argument check box if you want the new file to be appended to the command line for this task. Otherwise, clear this check box.	--	
Perform the next step when you are done adding or editing a task.			
23	Click Submit.	The system closes the Task window.	--

Entering program information in the Command box

In the Command box, you identify the program, script, or batch file that will be run for this task.

All task commands are executed on the server. If you are setting up this task from a client machine and you are pointing to a program or file on a remote machine (through a network connection), you need to be sure the server also has a connection to this remote machine. If the server does not have a connection to this remote machine, it will encounter an error when it tries to run this task. If you are using a mapped network drive, you need to be sure you are referring to the connection as mapped on the server.

In addition, you need to follow the rules for path and filename as defined by your operating system.

When entering a program to be run, you can also indicate a specific file to be opened by that program when the task is run. For more information about specifying a filename, refer to [“Entering a filename” on page 260](#).

You can also include switches in the command. For example, some programs have switches that allow you to indicate that you want to run the program in a particular mode.

Some examples of what could be entered in the Command box:

- Notepad.exe
- C:\Windows\Defrag.exe
- Notepad.exe C:\My Documents\Test.txt
- C:\IDX Systems Corporation\Loader\dwloader.exe /b
(runs Loader in batch mode)

Entering a filename

When entering information in the Command box and when selecting a start event of New File or File Change, you can enter a filename. IDX Scheduler allows you to enter a specific filename or use wildcards to identify the file.

When identifying a file, you need to include the following information.

- Remote machine (if the file is not stored on the server)
- Directory
- Filename

Some examples of what could be entered:

- C:\My Documents\Test.txt (file is stored on the server)
- \\remote1\My Documents>LoginInfo.doc (file is stored on a remote machine)

You need to follow the rules for path and filename as defined by your operating system.

You can use the following wildcards when defining a filename.

Wildcard	Description	Examples
*	Represents one or more alphanumeric characters	<p>C:*.chk could be:</p> <ul style="list-style-type: none"> • C:\anything.chk • C:\3.chk <p>\\remote1\IDXdoc.* could be:</p> <ul style="list-style-type: none"> • \\remote1\IDXdoc.doc • \\remote1\IDXdoc.bmp
?	Represents one alphanumeric character	<p>C:\version?.chk could be:</p> <ul style="list-style-type: none"> • C:\version1.chk • C:\versionB.chk <p>\\remote1\idx?.doc could be:</p> <ul style="list-style-type: none"> • \\remote1\idx2.doc • \\remote1\idxB.doc

Troubleshooting tasks

If you are having trouble getting a task to run, it is generally a problem with the program information you entered in the Command box.

There are several things you can do to troubleshoot the problem. You can:

- Use the Start menu, Run option to quickly test the command you are trying to run.
- Verify that the remote machine, directory, and/or filename have been specified correctly.

- Check that the switches you are using (if any) actually work for the program you are trying to run. Once again, you can use the Start menu, Run option to quickly test this.
- View the log of the tasks run on the server. For more information, refer to the [Viewing and Clearing IDX Scheduler Logs section on page 266](#).

When viewing the log, pay particular attention to the following:

- Number of retries listed for the task (if any)
 - In the lower pane of the View Log window, check the area where the log message appears (this area is blank unless the task encountered an error)
- Verify that the server is running properly.

Removing tasks from IDX Scheduler

To remove a task from IDX Scheduler, select the task in the client window and then click Remove from the Tasks menu.

Selecting a Start Event for a Task

The Start Event for a task defines what will cause the task to be run. This can be any of the following.

- Date/Time
- File Change
- Task Completion
- New File

These options are described in the following sections.

Date/Time

You can schedule a task to be run at a specific date and time. Once you select the start event of Date/Time, you need to indicate how often you want this task to be run. This can be any of the following.

- Once - task is run once and then removed from the task list
- Hourly - task is run at the scheduled date and time and then run again 60 minutes later
- Daily - task is run at the scheduled date and time and then run again 24 hours later
- Weekly - task is run at the scheduled date and time and then run again 7 days later
- Monthly on the Specified Date - task is run at the scheduled date and time and then run again a month later
- Monthly - task is run on the scheduled day of the month every month or whatever number of months is specified (for example, if 2 months is specified the task is run every other month)

For tasks with a start event of Date/Time, the system updates the date and time each time the task is run; the date and time is updated to be the next time the task will be run. For example, if you set up a task to be run hourly starting at 12:15, after this task is run, the system will update the time to be 13:15. If you select this task and click Edit on the Task menu, you will see the updated time in the Task window. The Date/Time start event is the only start event that causes the original task definition to be updated each time the task is run.

One use for the Date/Time start event could be to set up your system for backups. You could set up your backups to be run every night at 2 a.m. For this scenario, you would need to type 2:00 in the Time box and choose a frequency of Daily.

File Change

You can schedule a task to be run when a specific file changes. You need to indicate the specific directory and filename that IDX Scheduler should monitor for changes.

If you are setting up this task from a client machine and you are pointing to a file on a remote machine (through a network connection), you need to be sure the server also has a connection to this remote machine. If the server does not have a connection to this remote machine, it will encounter an error when it tries to run this task.

For more information about specifying a filename, refer to [“Entering a filename” on page 260](#).

Task Completion

You can schedule a task to be run on completion of another scheduled task. When you select a start event of Task Completion, you need to specify the following information.

- Other task’s name
- Whether you want this task to only be run if the other task completes successfully

The host (server) for the task is set to the current host.

One use for the Task Completion start event could be to set up your system to run Defrag after you run ScanDisk. First, using a Date/Time start event, you could schedule ScanDisk to be run once a week. You could then schedule Defrag to be run after the ScanDisk task completes. Ideally, you would set up Defrag to run only if ScanDisk completes successfully.

New File

You can schedule a task to be run on addition of a new file to a specified directory. You need to indicate the specific directory and filename (you can use wildcards for the filename) that IDX Scheduler should monitor. For more information about specifying a filename, refer to [“Entering a filename” on page 260](#).



Some operating systems behave differently when creating new files. When the file is very large, the file may be created before it is finished putting data into the file. IDX Scheduler attempts to wait for files to complete before considering them new, but a very large file may require a significantly long wait period - longer than IDX Scheduler can allow. Therefore the only safe way to use a start event of New File when the file is large is to create the new file with a different name and then copy the file into the New File name that IDX Scheduler is waiting for. This ensures that all the data is in the file when IDX Scheduler runs the task.

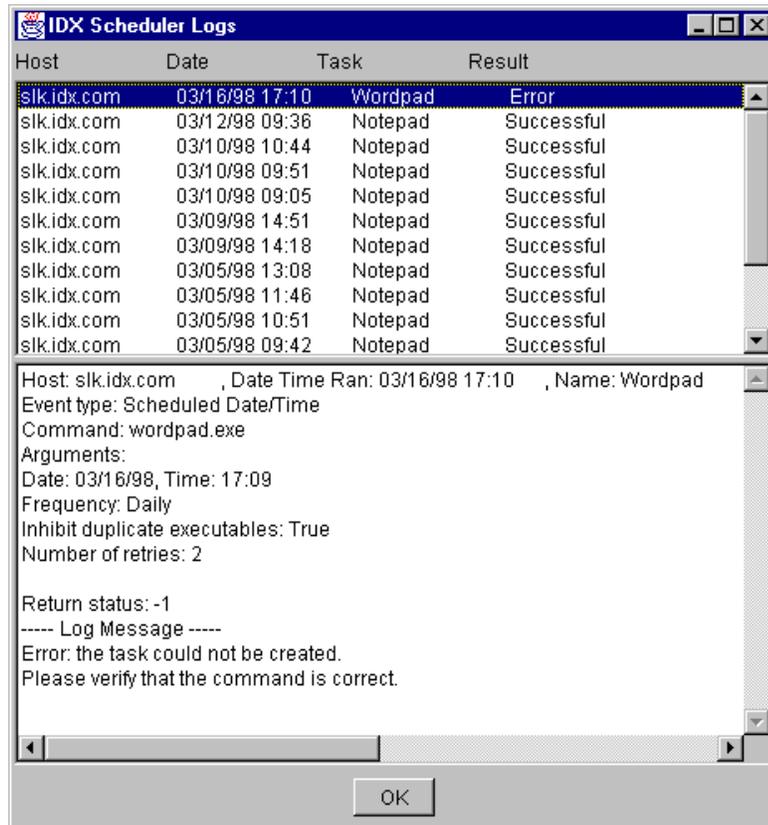
One use for the New File start event could be to launch the Loader at the end of an extraction. You would need to indicate that IDX Scheduler look for the .dwz file the Extractor creates at the end of an extraction. To do this, you would select the New File start event and then type ***.dwz** (the ***** represents any .dwz file) in the Filename box to specify the file type to search for.

If you are setting up this task from a client machine and you are pointing to a file on a remote machine (through a network connection), you need to be sure the server also has a connection to this remote machine. If the server does not have a connection to this remote machine, it will encounter an error when it tries to run this task.

Viewing and Clearing IDX Scheduler Logs

A log is kept of all the tasks that are run on the server. The log contains details about the tasks that were run since the last time the log was cleared.

The following is an example of a log.



Details related to the highlighted task are shown in the lower pane.

Viewing the log

On the Server menu, click View Log. The log is displayed in a separate window.

Clearing the log

To clear all the entries in the current log, click Clear Log on the Server menu.

Shutting Down IDX Scheduler and Disconnecting from the Server

Disconnecting from the server

To shutdown the server, click Shutdown server on the Server menu.



This option is disabled if you are not running IDX Scheduler on the server machine.

Once you have shutdown the server, you can no longer add, edit, or delete tasks on that server. In addition, you cannot view or clear the log for that server.

Shutting down IDX Scheduler

To exit IDX Scheduler, click Exit on the File menu.

When you shutdown IDX Scheduler, the server continues to run the tasks as scheduled.

Working with Analyzer-specific Tasks in IDX Scheduler

Adding and editing the automatic load feature for the Loader

IDX Scheduler comes with the automatic load feature set up as a default. To ensure it runs after each load, make sure that Enabled is selected in the Task window.

You can use the Task window to set different parameters for the Loader to use when running automatically. To set these parameters, enter the Loader executable (C:\...\Analyzer Loader\dwloader.exe) in the Command box and specify the parameter for the mode you want the Loader to run in.

You can set one of the following parameters to automatically run the Loader in different modes:

Parameter	Example	Mode	For more information, refer to
/b	C:\...\dwloader.exe /b	Batch mode	“Running an automatic load in batch mode” on page 179.
/i	C:\...\dwloader.exe /i	Full view mode (minimized)	“Running an automatic load in full view mode” on page 179.
/in	C:\...\dwloader.exe /in	Full view mode (not minimized)	

To have the Loader load data with a specific header file, type a comma and the header file name after the parameter. For example, type `C:\...\dwloader.exe /i,dw_0002_0098.dwh`.

For IDX Scheduler to launch the Loader at the end of an extraction, you must have IDX Scheduler look for the .dwz file the Extractor creates at the end of an extraction. You therefore must select New File for Start Event so that IDX Scheduler will search for this file. Then type `*.dwz` (the `*` represents any .dwz file) in the Filename box to specify the file type to search for.

Adding and editing the data validation tool

IDX Scheduler comes with the data validation tool set up as a default. To ensure it runs after each load, make sure the data validation tool is set up appropriately. To do so, from the Task window, make sure the data validation tool executable (default location is C:\...\Analyzer Information Delivery\Server\DataVal\DataVal.bat) is listed in the Command box and Enabled is selected.



If you change the user name, password, or ODBC data source name for your Analyzer database, you must change this information in the data validation tool batch file before

having IDX Scheduler run the data validation tool automatically.

For more information, refer to “Using the data validation tool” on page 302.



14

Maintaining Your Database with Loader Utilities

Using Analyzer Loader Utilities 272

Using Analyzer Loader Utilities

Analyzer Loader Utilities automates the following tasks, which are required to support certain functions of the Analyzer Loader:

- Creating metadata tables
- Populating metadata tables
- Building and dropping stored procedures

When to run Loader Utilities

You must run Analyzer Loader Utilities after you install or upgrade, but before you run, the Analyzer Loader. Loader Utilities creates and populates the metadata tables required by the Loader. Loader Utilities also builds the stored procedures you need to work with your tables in SQL Server.

You should also run Loader Utilities if any of the following control tables become corrupt or get deleted:

- idxDataTypes
- idxRdbmsRules
- idxRdbmsDatatypes
- idxStatusCodes
- idxReport

Using Loader Utilities online help

Analyzer Loader Utilities has a complete online help system to guide you through Loader Utilities' functions and procedures. To access this help, click the Help menu and then Help Topics.

You can also use context-sensitive help to get help on specific items in any window. To use this help, click the question mark at the top of the window or click the Help menu and then What's This? (whichever option is available). Then click the item about which you want information.

Using Analyzer SQL Stored Procedures

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Understanding IDX Stored Procedures

When you run Analyzer Loader Utilities following installation, it creates stored procedures that IDX has included to assist you with Loader processing, summary table building, and database maintenance.

This chapter provides overviews of each of these stored procedures and descriptions of the tables included in these stored procedures.

Stored procedures for Loader processing

You use the stored procedures in the following table for Loader processing. When you create a Loader processing report using a stored procedure, the stored procedure places the report data in a table called `idxReport`. The system then uses the data in this table to generate the report.

Stored Procedure(s)	Script file(s)	Description of procedure(s)	For more information, refer to
<code>sp_idxLoadWarningsReport</code>	<code>spLodWar.sql</code>	Generates Load Warnings report.	“Load Warnings Report” on page 277.
<code>sp_idxLoadStatus</code>	<code>spLoadSt.sql</code>	Generates Loader Status report.	“Load Status Report” on page 284.
<code>sp_idxInvoiceBalanceCheck</code>	<code>spibc.sql</code>	Finds discrepancies if an invoice header balance is not equal to the invoice transaction balance and prints the information in a report.	“Invoice Balance Check” on page 285.
<code>sp_idxForeignKeyReport</code>	<code>spForKey.sql</code>	Generates a report with a listing of foreign keys.	“Foreign Key Report” on page 288.
<code>sp_idxPkRebuild</code>	<code>spPkRebuild.sql</code>	Removes clustered index.	“Primary Key Rebuild” on page 291.
<code>sp_idxPostLoad</code>	<code>spPstLd.sql</code>	Runs tasks that should be performed after each load.	“Postload” on page 293.
<code>sp_idxUpdateStatistics</code>	<code>spmupdsts.sql</code>	Refreshes table information after the load process. This stored procedure is only used by the <code>sp_idxPostLoad</code> stored procedure.	
<code>sp_idxUserPostLoad</code>	<code>sppstldu.sql</code>	This stored procedure is run by the <code>sp_idxPostLoad</code> stored procedure. It holds user-created stored procedures which are executed when you run <code>sp_idxPostLoad</code> .	

Stored procedures for summary tables

You use the following stored procedures for building summary tables:

Stored Procedure(s)	Script file(s)	Description of procedure(s)	For more information, refer to
sp_idxPlanMaster	spMPlanMsAnlz.sql	Builds Plan Master table, used for building the Enrollment Date table.	“Enrollment and Member Months” on page 294.
sp_idxEmployerMaster	spMEmpMsAnlz.sql	Builds Employer Master table, used for building the Enrollment Date table.	
sp_idxEnrollmentDate	spMEnrollDtAnlz.sql	Builds Enrollment Date table, used for building the Member Months table.	
sp_idxMemberMonths	spMMAnlz.sql	Builds Member Months table.	

Stored procedures for database maintenance

You use the following stored procedures for database maintenance:

Stored Procedure(s)	Script file(s)	Description of procedure(s)	For more information, refer to
sp_idxBillingAreaRollup	spMBARollAnlz.sql	Creates rollup tables to facilitate reporting in Information Delivery.	“Rollup Stored Procedures” on page 297
sp_idxDiagRollup	spMdiagRollAnlz.sql		
sp_idxDivisionRollup	spMdivRollAnlz.sql		
sp_idxFscRollup	spMFscRollAnlz.sql		
sp_idxLocationRollup	spMLocRollAnlz.sql		
sp_idxProcRollup	spMProcRollAnlz.sql		
sp_idxProviderRollup	spMProvRollAnlz.sql		
sp_idxRegionRollup	spMRegnRollAnlz.sql		
sp_idxVendorRollup	spMVendRollAnlz.sql		
sp_idxCreateIndxs	spCreateIndxs.sql	Creates and drops indexes that improve query performance in Information Delivery.	“Index Stored Procedures” on page 299
sp_idxDropIndxs	spDropIndxs.sql		

Stored procedure template IDX has also included the `sp_<yourstoredprocedure>` stored procedure (`sp_sp.sql` script file), which you can use as a template to create your own stored procedures. For more information, refer to “[Stored Procedure Template](#)” on page 300.

Loader processing report options with stored procedures When you create a Loader processing report using a stored procedure, the stored procedure places the report data in a table called `idxReport`. The system then uses the data in this table to generate the report.

To specify how the system should handle the `idxReport` table, type the appropriate parameter(s) after the stored procedure name, as shown in the following table:

Parameter	Example	Description
?	<code>sp_idxLoadWarningsReport '?'</code>	Displays a help message for the stored procedure and its parameters.
Delete	<code>sp_idxLoadWarningsReport 'Delete'</code>	Displays the report. Once the report is displayed, the system deletes the report data from the <code>idxReport</code> table.
Last	<code>sp_idxLoadWarningsReport 'Last'</code>	Displays the last Load Warnings report stored in the <code>idxReport</code> table.
Save	<code>sp_idxLoadWarningsReport 'Save'</code>	Displays the report but does <i>not</i> delete the report data from the <code>idxReport</code> table.
Purge	<code>sp_idxLoadWarningsReport 'Purge'</code>	Deletes all Load Warnings report data from the <code>idxReport</code> table.

Load Warnings Report

The Load Warnings Report stored procedure (sp_idxLoadWarningsReport) takes information from the idxLoadDataWarnings table and uses it to create the Load Warnings report.

The Load Warnings report informs you of inconsistencies between extract files and data specifications in the database metadata. The report displays a summary of all warnings and then lists details of each warning.

You can create the Load Warnings report only after you have run the Analyzer Extractor and have completed step two of the Loader process. Refer to [“Reconciling Extract Files” on page 170](#) for a description of this step.

Sample of Load Warnings Report

The following example shows the Load Warnings report (the report is shortened to show all sections):

```

                                IDX Analyzer
                                Load Warnings Report
                                Mar 23 1998 6:27PM
                                Database: idxAnalyzer
                                Load Timestamp: Feb 26 1998 1:28AM

=====
                                Summary List Of Warnings
=====
Source                               Warning                               Count
-----                               -
MCA_B_CAP_TX.SKEY                    Invalid datatype/num                959
MCA_B_CLAIM.CHECK_NUM_DW             Truncated value.                    21

=====
                                Detailed List Of Warnings
=====
                                Invalid datatype/number too large.
Source: MCA_B_CAP_TX.SKEY
Datatype: N      Length: 20      Decimals: 0
Destination: CAPITATION_DETAIL.SKEY
Datatype: Double Precision Float      Length: 0
File Name: DW_MPG04_0007_0005.DWD
Warning Count:959      Extracted Rows:      959 Percent: 100.0

Example data (within ||'s)
-----
|zz|
|zz|
|zz|

=====
                                Truncated Value.
Source: MCA_B_CLAIM_LINE.COMMENT
Datatype: F      Length: 40      Decimals: 0
Destination: CLAIM_LINE.COMMENT
Datatype: Text      Length: 40
File Name: DW_MPG04_0007_0008.DWD
Warning Count: 9      Extracted Rows:      1419 Percent: 0.63

Example data (within ||'s)
-----
|[GMIS - ADDED SEX / PROC NOT KNOWN (53661)]|
|[GMIS - DUPLICATE PROC / SECONDARY PROC PAY 136]|
|[GMIS - DUPLICATE PROC / SECONDARY PROC PAY 33]|
|[GMIS - ADDED REB / SECONDARY PROC PAY 0 / PROC NOT KNOWN (80008)|
|[GMIS - ADDED REB / SECONDARY PROC PAY 0 / PROC NOT KNOWN (80008)|

Truncation Summary

Count   Length
-----
2       43
1       47
1       48
2       63
3       64

=====
Report Complete at Mar 23 1998 6:27PM

```

Summary Portion of Load Warnings Report

Overview of the summary portion of the Load Warnings report

The summary portion of the Load Warnings report lists the following information:

- Source table/column in which the inconsistency occurs
- Warning of a specific type of inconsistency in the table
- Frequency (count) at which the inconsistency occurred in the table

Sample of the summary portion of the Load Warnings report

The following example shows the summary portion of the Load Warnings report:

Source	Warning	Count
MCA_B_CAP_TX.SKEY	Invalid datatype/num	959
MCA_B_CLAIM.CHECK_NUM_DW	Truncated value.	21

Annotations in the image:

- An arrow points from the text "Source table/column" to the "Source" column header.
- An arrow points from the text "Types of inconsistencies in the source" to the "Warning" column header.
- An arrow points from the text "Frequency at which the inconsistency occurred" to the "Count" column header.



This example describes the most frequently occurring inconsistencies. Your report may include warnings not shown above.

Detail Portion of Load Warnings Report

Overview of the detail portion of the Load Warnings report

The Detail portion of the Load Warnings report describes the Load Warnings that appear for each source.

The two most common load warnings that appear are Invalid datatype and Truncated value warnings. An *invalid datatype* warning identifies data in the extraction file that is inconsistent with metadata specifications in the Loader. The *truncated value* warning identifies data in the extraction file whose length exceeds the maximum length specified in the metadata.

Contents of the detail portion of the Load Warnings report

The Load Warnings report lists each warning by its source. The source is the table and column reference from the source database.

The destination is the output table and column reference for this data in the Analyzer database.

Each warning that appears on the report includes general datatype characteristics for those values that are inconsistent. Each warning also lists the Extractor file name in which the inconsistency occurred and then calculates the percentage of the warning's occurrence based on the number of warnings of that type in that table and the number of extracted rows in that table.

In addition, the warning includes up to 10 examples of the data that are inconsistent with metadata specifications.

If the type of warning is a *truncated value* warning, a truncation summary appears below the example data. This summary displays a count of each instance in which the length of a value exceeds the specified datatype length.

Sample of the detail portion of the Load Warnings report

The following example shows the detail portion of a Load Warnings report:

Datatype characteristics

Extractor file name and warning occurrence information

Examples of data that is inconsistent

Truncation summary (this only appears in Truncated Value Warnings)

```

Truncated Value.
Source: MCA_B_CLAIM_LINE.COMMENT
Datatype: F      Length: 40      Decimals: 0
Destination: CLAIM_LINE.COMMENT
Datatype: Text      Length: 40
File Name: DW_MPG04_0007_0008.DWD
Warning Count: 9      Extracted Rows: 1419      Percent: 0.63
Example data (within ||'s)
-----
|[GMIS - ADDED SEX / PROC NOT KNOWN (53661)]
|[GMIS - DUPLICATE PROC / SECONDARY PROC PAY 136]|
|[GMIS - DUPLICATE PROC / SECONDARY PROC PAY 33]|
|[GMIS - ADDED REB / SECONDARY PROC PAY 0 / PROC NOT KNOWN (80008|
|[GMIS - ADDED REB / SECONDARY PROC PAY 0 / PROC NOT KNOWN (80008|

Truncation Summary

Count      Length
-----
2          43
1          47
1          48
2          63
3          64
    
```

**Field descriptions for the
Load Warnings report**

The following fields appear on the Load Warnings report:

Source:

The source table and column that contains the inconsistent data.

Datatype:

The assigned datatype for the source table and column.

Length:

The length assigned to the datatype of the source table and column.

Decimal:

The number of decimal places allowed for the data element/source table and column.

This field is important if a numeric datatype is assigned to the table and column.

Destination:

The database table into which the data from the source table and column is being loaded.

Datatype:

This field applies to the Analyzer database.

The datatype that is specified in the Analyzer table. This datatype should be compatible with the datatype of the corresponding value in the source table and column.

Length:

This field applies to the Analyzer database.

The acceptable length assigned to the datatype in the Analyzer database. This length should be compatible with the datatype of the corresponding value in the source table and column.

File Name:

The Extractor file name that contains the inconsistent data.

Warning Count:

The number of occurrences of this type of data inconsistency for the source table and column identified at the `Source` prompt.

Extracted Rows:

The number of rows that were extracted for the source table and column identified at the `Source` prompt.

Percent:

The percentage of inconsistencies in the total number of extracted rows for the source table and column identified at the `Source` prompt.

Load Status Report

The Load Status Report stored procedure (`sp_idxLoadStatus`) generates the Load Status report. You can run this stored procedure at any time to view the following data about a single load or a group of loads since a specific date:

Load data	Description
Load date	Date of the load
Header file	Header file from the Extract File Set that was loaded
Operator	Initials of the user who initiated the load
Description	Description of the files being loaded specified in the Extractor
From date	Start date of the extraction
Through date	Extraction through date of the files that were extracted
Run code	Indication of whether the extraction was an initial or incremental extraction
Overall status	Status of the load

Using a start date

You can generate the Load Status report for loads starting from a specified date by using a date parameter as shown in the following example:

```
sp_idxLoadStatus 'JAN 01 1998'
```

JAN 01 1998 represents the starting date for the loads you want to include in the report.

The command `sp_idxLoadStatus` (without a specified date) displays the latest load on the system.

Invoice Balance Check

You can use the Invoice Balance Check stored procedure (`sp_idxInvoiceBalanceCheck`) to determine whether or not a BAR invoice header balance is equal to the invoice transaction balance and, if not equal, display the specific invoices where an imbalance exists.



IDX suggests that you run this stored procedure after every database load. You may want to copy it into your User Postload stored procedure (`sp_idxUserPostLoad`) so that it automatically runs during your postload activities. For more information on `sp_idxUserPostLoad`, refer to “User Postload stored procedure” on page 293.

Building the report

In addition to the parameters discussed in “Loader processing report options with stored procedures” on page 276, you can use the following parameters with this stored procedure:

Parameter	Enter the stored procedure as	Description
(No Parameter)	<code>sp_idxInvoiceBalanceCheck</code>	Uses the default parameters Brief and Delete.
Brief	<code>sp_idxInvoiceBalanceCheck 'Brief'</code>	Displays the total invoice header balance and the total invoice transaction balance as two separate values. If the two values are equal, then the individual header balances are <i>likely</i> to be equal their corresponding invoice transaction balances. You should occasionally run the stored procedure with the 'Detail' parameter to be <i>certain</i> that the individual header balances are equal to their corresponding invoice balances.
Detail	<code>sp_idxInvoiceBalanceCheck 'Detail'</code>	Displays a list of every invoice for which the header balance is not equal to the sum of its corresponding invoice transaction balances.

If you must specify more than one parameter, separate the parameters with a comma. For example, `sp_idxInvoiceBalanceCheck 'Detail' , 'Save'`.

**sp_idxInvoiceBalanceCheck
 'Brief' sample output**

When you run sp_idxInvoiceBalanceCheck 'Brief', the stored procedure generates a report similar to the following example:

```
Starting: Jan  9 1998  4:51PM

Compare the following Total Header Balance with the Total
Transaction Balance. If they are not equal, rerun this stored
procedure with the 'DETAIL' parameter to view the balance
details by invoice.

Total Header Balance
-----
2,555.14

Total Transaction Balance
-----
2,555.14

Ending: Jan  9 1998  4:51PM
```

**sp_idxInvoiceBalanceCheck
 'Detail' sample output**

When you run sp_idxInvoiceBalanceCheck 'Detail', the stored procedure generates a report based on whether or not a problem exists with the invoice balances.

When the stored procedure does *not* find any invoices that are out of balance, it produces a report similar to the following example:

```
Starting: Jan  9 1998  4:59PM

The following invoices' header balance does not equal the invoices'
transaction balance:

No invoice balance integrity problems were found.

Ending: Jan  9 1998  4:59PM

Group  Guarantor ID Invoice Number Header Balance Transaction Balance
-----
```

When one or more invoices are out of balance, the stored procedure produces a report similar to the following example:

```
Starting: Jan  9 1998  4:59PM

The following invoices' header balance does not equal the invoices'
transaction balance:

Group  Guarantor ID Invoice Number Header Balance Transaction Balance
-----
   3      234199      2741194      3168.01      3168.00
   3      241704      2764275      1758.51      1758.50
   3      490020      2823070      1492.01      1492.00
   3      569405      843139      1136.12      1136.11
   3      569405      1606643      1255.96      1255.95

Ending: Jan  9 1998  4:59PM
```

**sp_idxInvoiceBalanceCheck
 ‘?’ sample output**

When you run sp_idxInvoiceBalanceCheck “#”, the stored procedure generates the following report:

```
usage: sp_idxInvoiceBalanceCheck ['BRIEF' | 'DETAIL' | '?']

Example: sp_idxInvoiceBalanceCheck 'DETAIL'
```

Foreign Key Report

The Foreign Key Report stored procedure (`sp_idxForeignKeyReport`) generates the Foreign Keys report. This report lists the following information:

- Built foreign keys
- Unbuilt foreign keys
- All foreign keys (built or unbuilt)

You can use this stored procedure if you run the Build Foreign Keys option and see errors in the Loader Status window or in the error log that indicate that some foreign keys did not build. The Foreign Keys report identifies those foreign keys that did not build.

Building the report

In addition to the parameters discussed in “[Loader processing report options with stored procedures](#)” on page 276, you can use the following parameters with this stored procedure:

Parameter	Enter the stored procedure as	Description
Built	<code>sp_idxForeignKeyReport 'Built'</code>	Displays built foreign keys.
Unbuilt	<code>sp_idxForeignKeyReport 'Unbuilt'</code>	Displays unbuilt foreign keys.
All	<code>sp_idxForeignKeyReport 'All'</code>	Displays both built and unbuilt foreign keys.

If you must specify more than one parameter, separate the parameters with a comma. For example, `sp_idxForeignKeyReport 'Built' , 'Save'`.

Sample Unbuilt Foreign Keys report

The following example shows the Foreign Keys report unbuilt foreign keys (the report is shortened to show all sections):

```

IDX Analyzer
All Foreign Key Report
Mar 23 1998 6:29PM
Database: idxAnalyzer

=====
Summary List Of All Foreign Keys
=====
Foreign Key Name                                Table Name
-----
APPOINTMENT_DETAIL_FK01                        APPOINTMENT_DETAIL
CABillingAreaCombined_FK01                    CABillingAreaCombined
=====
Detailed List Of All Foreign Keys
=====
Foreign Key: APPOINTMENT_DETAIL_FK01

Foreign Key Table/Columns                       Primary Key Table/Columns
APPOINTMENT_DETAIL                             APPOINTMENT_HEADER
  APPOINTMENT_DATE                             APPOINTMENT_DATE
  APPOINTMENT_TIME                             APPOINTMENT_TIME

Referential Integrity Check Query
=====
SELECT APPOINTMENT_DATE,APPOINTMENT_TIME,PATIENT_ID,APPOINTMENT_DATE
FROM APPOINTMENT_DETAIL
WHERE NOT EXISTS (SELECT * FROM APPOINTMENT_HEADER WHERE
APPOINTMENT_DETAIL.APPOINTMENT_DATE=APPOINTMENT_HEADER.APPOINTMENT_DATE
AND
APPOINTMENT_DETAIL.APPOINTMENT_TIME=APPOINTMENT_HEADER.APPOINTMENT_TIME)
=====

Foreign Key: APPOINTMENT_DETAIL_FK02

Foreign Key Table/Columns                       Primary Key Table/Columns
APPOINTMENT_DETAIL                             BILLING_AREAS
  ID_202                                       ID_202

Referential Integrity Check Query
=====
SELECT ID_202,ID_202,ID_202,ID_202
FROM APPOINTMENT_DETAIL
WHERE NOT EXISTS (SELECT * FROM BILLING_AREAS WHERE
APPOINTMENT_DETAIL.ID_202=BILLING_AREAS.ID_202
ANDAPPOINTMENT_DETAIL.ID_202=BILLING_AREAS.ID_202

Report Complete at Mar 23 1998 6:29PM
    
```

Report type

The report shown above is an *All Foreign Key* report. The *Built Foreign Keys* report and the *Unbuilt Foreign Keys* report are similar

to this report. The following sections describe the differences between the three reports.

Summary section

The summary section in the Foreign Keys report has the following characteristics:

- *All Foreign Keys report* lists all Loader defined foreign keys.
- *Built Foreign Keys report* lists each Loader defined foreign key that has been built.
- *Unbuilt Foreign Keys report* lists each Loader defined foreign key that has not been built.

Detail section

The detail section in each report lists the foreign and primary key tables as well each foreign and primary key column. The detail section in the Foreign Keys report has the following characteristics:

- *All Foreign Keys report* includes SQL code only for unbuilt foreign keys
- *Built Foreign Keys report* does not include any SQL code
- *Unbuilt Foreign Keys report* lists SQL code that displays the key columns for all the rows in the foreign key table that don't exist in the primary key table

Reason for foreign keys failing to build

None of the *Foreign Keys reports* include information about why foreign keys failed to build. Consult the error log files for this information. Refer to [“The following situations can cause failure of a foreign key to build after the load finishes:”](#) on page 195 for more information.

Primary Key Rebuild

The Primary Key Rebuild stored procedure (sp_idxPkRebuild) removes the clustered index option from primary keys in tables created by the Loader. This stored procedure is used primarily by Analyzer users who initially built their database using early versions of IDX Data Warehouse that automatically created clustered primary keys.

Clustered and nonclustered indexes

A clustered index in a table forces that table's rows to be physically sorted on the hard disk. The rows are sorted in order based on the column(s) set as the clustered index. Each table can have only one clustered index.

For example, if a table has a column for service date, and if that column is set as a clustered index, all the rows in that table are physically sorted on the hard disk in order of service date.

A clustered index can increase the performance of certain queries, particularly when the queries include date ranges. However, the clustered index may reduce speed during a database load.

If a table has a nonclustered index, the rows are not physically sorted, and any new rows are added to the end of the given table.

Running the Primary Key Rebuild stored procedure

The Primary Key Rebuild stored procedure does not execute the actual primary key rebuild but instead writes the SQL commands so that you can choose which tables are to be affected.

Building the report

In addition to the parameters discussed in “[Loader processing report options with stored procedures](#)” on page 276, you can use the following parameters with this stored procedure:

Parameter	Enter the stored procedure as	Description
Nonclustered	<code>sp_idxPkRebuild 'Nonclustered'</code>	Creates SQL commands that change the primary keys to nonclustered. You may then use transact SQL or the SQL Server’s Enterprise Manager to add indexes on columns using the clustered option.
Clustered	<code>sp_idxPkRebuild 'Clustered'</code>	Creates SQL commands that rebuild all of the primary keys in tables with the clustered option.

If you must specify more than one parameter, separate the parameters with a comma. For example, `sp_idxPkRebuild 'Nonclustered' , 'Save'`.

Postload

As an option, you can run the Postload stored procedure (sp_idxPostLoad) after each load. The sp_idxPostLoad stored procedure executes any SQL code or stored procedures that should run against the database after initial and incremental loads are complete. The sp_idxPostLoad stored procedure is added to the database when you use Analyzer Loader Utilities to build stored procedures during the installation process.

The procedure requires a numeric parameter of **1** to indicate an *initial load* and **2** to indicate an *incremental load*. For example, **sp_idxPostLoad 2** executes all the code in the incremental section of the stored procedure.

User Postload stored procedure

If you have specific tasks you want to run after each load, you can place a customized stored procedure in the User Postload stored procedure (sp_idxUserPostLoad). The User Postload stored procedure automatically runs when you execute the Postload stored procedure, enabling you to run a customized postload procedure.

For example, if your organization's needs require that you update the member months summary table after each load, you can specify in sp_idxUserPostLoad that the system run the stored procedures required to update the table.

You should place customized postload stored procedures in sp_idxUserPostLoad instead of directly in the sp_idxPostLoad stored procedure so that IDX can provide future updates to sp_idxPostLoad without interfering with your organization's customization.

Enrollment and Member Months

The Enrollment and Member Months stored procedures modify Extractor output tables and build Analyzer tables to serve the following purposes:

- Provide data required for building the Member Months table and Membership cube. The Member Months table contains various enrollment information about members for a given date range.
- Improve efficiency and data integrity.
- Function as templates to facilitate adhoc queries.

Number of months and target date

The Member Months stored procedure contains two variables that determine the period of time to include (referred to as the number of months) and a particular date in the month (referred to as the target date) to be used when this stored procedure is run.

The default number of months is set to the beginning of time (zero), but can be set to any number of months. For example, to include one year in the table, the number of months would be set to 12.

The default target date is set to mid-month (the 15th), but can be changed to be any day from the 1st of the month to the 28th.

Refer to the actual stored procedure (sp_idxMemberMonths) for information about how to modify these variables.

Member year and month data

Within the Member Months table, the member year and month is stored as two integer columns called MEMBER_YEAR and MEMBER_MONTH respectively. Another date type column called MEMBER_MONTH_DAY contains the full date synchronized to the target day for which the stored procedure was run (usually 15).

Running the stored procedures

Four stored procedures create the Enrollment and Member Months tables. The following table shows these stored procedures along with the associated output and Analyzer tables:

Name	Stored Procedure	Output Table	Analyzer Table Created
Plan Master	sp_idxPlanMaster	PLAN_HEADER	idx_Plan_Master_Term_Dt
Employer Master	sp_idxEmployerMaster	EMPLOYER_CONTRACT_HEADER	idx_Employer_Master_Term_Dt
Enrollment Date	sp_idxEnrollmentDate	ENROLLMENT_DATE_INDEX PLAN_HEADER EMPLOYER_CONTRACT_HEADER CONTRACT_DATES MEMBER_DATES PATIENT_PCPS	idx_Enrollment_Date
Member Months	sp_idxMemberMonths	--	idx_Member_Months

You must run these stored procedures in the following order:

1. Plan Master and Employer Master
2. Enrollment Date
3. Member Months

You don't always have to run the Member Months stored procedure when running the other three. However, when you do run the Member Months stored procedure, you must run it after the other three. For example, you should run the Plan Master, Employer Master, and Enrollment Date stored procedures after every load to ensure efficiency and data integrity. You need only run the Member Months stored procedure once a month, but you must run it only after you run the other three stored procedures.

Using Enrollment and Member Months batch files

To simplify running these stored procedures, IDX includes the following batch files with Analyzer:

- EnrollmentTables.bat
- MembershipCubes.bat

These batch files run all stored procedures in their required order.

Enrollment batch file

Since EnrollmentTables.bat runs the Enrollment stored procedures, you should run this batch file after every load to ensure efficiency and data integrity.

Member Months batch file

You need only run MembershipCubes.bat once a month, but you must run it only after running EnrollmentTables.bat. MembershipCubes.bat not only runs the stored procedure for building the Member Months table but also runs the appropriate commands to build the Membership cube. If you do not need to build the Membership cube, then you can run the Member Months stored procedure instead of the batch file. For more information on the Membership cube, refer to “[Member Months \(Memmonth1.mdc\)](#)” on [page 234](#).

Using IDX Scheduler

You can set IDX Scheduler to run the batch files or stored procedures automatically. You can schedule the Enrollment batch file to run automatically after every load, and you can schedule the Member Months batch file (or stored procedure) to run automatically once a month following the Enrollment batch file. For more information on IDX Scheduler, refer to [Chapter 13: Automating Tasks with IDX Scheduler](#), which begins on [page 251](#).

Rollup Stored Procedures

Analyzer is shipped with the following stored procedures, which you use to create rollup tables to facilitate reporting in Information Delivery (for more information on rollups, refer to the [Rollup tables section on page 216 in Chapter 12](#)):

Stored Procedure	Script File	Rollup Table Created
sp_idxBillingAreaRollup	spMBarRollAnlz.sql	idx_Billing_Area_Rollup
sp_idxDiagRollup	spMdiagRollAnlz.sql	idx_Diagnosis_Rollup
sp_idxDivisionRollup	spMdivRollAnlz.sql	idx_Division_Rollup
sp_idxFscRollup	spMFscRollAnlz.sql	idx_FSC_Rollup
sp_idxLocationRollup	spMLocRollAnlz.sql	idx_Location_Rollup
sp_idxProcRollup	spMProcRollAnlz.sql	idx_Procedure_Rollup
sp_idxProviderRollup	spMProvRollAnlz.sql	idx_Provider_Rollup
sp_idxRegionRollup	spMRegnRollAnlz.sql	idx_Region_Rollup
sp_idxVendorRollup	spMVendRollAnlz.sql	idx_Vendor_Rollup

When to run the rollup stored procedures

You must run the rollup stored procedures after every load to create the rollups in Information Delivery. You should therefore use IDX Scheduler to run them automatically following a load. Use the **SummaryTables.bat** batch file to run all of the rollup stored procedures together.

For more information on using IDX Scheduler, refer to [Chapter 13: Automating Tasks with IDX Scheduler, which begins on page 251](#).

Errors related to rollup stored procedures

If you do not run the rollup stored procedures after a load, Information Delivery will produce an error message stating the rollups were not found when generating reports. If this occurs, run the rollup stored procedures to build the rollup tables.

Customizing the rollup stored procedures

If your facility uses nonstandard dictionaries or table joins, you may need to customize the SQL scripts associated with the rollup stored procedures. Use the following steps to customize rollup SQL scripts:

Step	Action
1	Determine which SQL scripts you need to customize. The scripts are listed in the table at the beginning of this section.
2	Make a copy of the scripts that you need to customize.
3	Edit the copied scripts.
4	Run the edited scripts to create new stored procedures.

Index Stored Procedures

You can use stored procedures to create and drop indexes that improve query performance in Information Delivery. The following stored procedures are shipped with Analyzer:

Stored Procedure	Script File	Description
sp_idxCreateIndxs	spCreateIndxs.sql	This stored procedure adds indexes to tables to improve query performance. Run this stored procedure after a load is completed.
sp_idxDropIndxs	spDropIndxs.sql	This stored procedure drops indexes built by the spCreateIndxs stored procedure. Run this stored procedure before a large load to improve Loader performance.

Stored Procedure Template

By running `sp_<yourstoredprocedure>`, you can generate a template for creating your own stored procedures. Once this template is generated, you add your own code to create the customized procedure. You can then build the procedure and execute it as you do with other stored procedures.



Validating Data

<i>Using the Analyzer Data Validation Tool</i>	<i>302</i>
<i>Using Data Validation Queries</i>	<i>304</i>

Using the Analyzer Data Validation Tool

You can validate data after a load with the Analyzer data validation tool. The data validation tool compares numerical data in your Analyzer database with data that was extracted from your transactional database. The tool compares record counts and financial sums and writes the results in text files from which you can print reports.

Validation reports

After each validation, the data validation tool creates a full report and a discrepancy report. The *full report* shows a row by row count and sum for all records used in the validation. The *discrepancy report* shows only records, if any, that did not validate correctly during the validation.

The data validation tool writes the reports as text files during the validation and saves them in the default folder C:\...\Analyzer Loader\Validation Reports.



The validation report path is set in the data validation tool batch file and is based on the Analyzer installation program's default folder locations. If you did not accept the system defaults when you installed Analyzer, you must edit the DataVal.bat file in the C:\...\Analyzer Information Delivery\Server\DataVal (default location) folder to reflect your new path.

The text files use the following naming convention:

mmddtype##.txt

where the following conditions apply:

- *mm* is the month in which the report was generated.
- *dd* is the day of the month on which the report was generated.
- *type* is the type of report, where “full” represents a full report and “discrep” represents a discrepancy report.
- *##* is a number that increments if more than one report is generated in the same day.

Using the data validation tool

The Scheduler automatically runs the data validation tool when the Loader finishes loading data into the Analyzer database providing you have the Scheduler and the data validation tool set up to do so.

The Scheduler comes with the data validation tool set up as a default. To ensure it runs, make sure Enabled is selected in the Scheduler Task window. For more information on setting up the data validation

tool in the Scheduler, refer to “Adding and editing the data validation tool” on page 268.

The data validation tool batch file requires the following parameters, based on your server and database information, to run properly:

- User name
- Password
- Analyzer database name
- ODBC data source name
- Directory for output for the reports

To edit these parameters, use a text editor and open the DataVal.bat file in the C:\...\Analyzer Information Delivery\Server\DataVal folder. The parameters appear together as in the following model:

```
-U<user name> -P<password> -D<Analyzer database name>  
-S<ODBC data source name> -O<directory for output>
```



Depending on the privileges you have set for the data validation tool batch file, other users may be able to open this file and view your database security information. Consult with your system administrator on how to protect the file from unauthorized users.



If you change the user name, password, or ODBC data source name for your Analyzer database, you must change this information in the data validation tool batch file before running the data validation tool.

Using Data Validation Queries

You can run queries through IDX's Database Management System (DBMS) and the Analyzer database and compare the results with extracted data to validate the results of an extraction. Refer to the IDX document *IDXtendR Analyzer Data Validation* for the validation queries you can run against your data along with the rationale behind running them.

Extraction selection criteria for validation queries is based on extraction dates and application referential integrity. A single query may not be able to account for both extraction dates and referential integrity. Running multiple queries on extracted data may be necessary to validate the data.

Row counts for initial extraction

Examining row counts for extracted data is useful for initial extractions because all data records are stored on the server side of the Analyzer database. This data record storage allows for a one-to-one ratio of *extracted* to *stored* records, which you can verify.

Row counts for incremental extractions

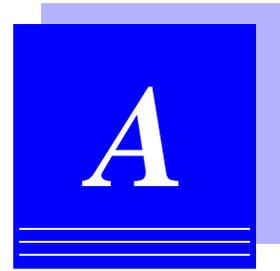
For incremental extractions, it is not useful to examine row counts because there may be record updates to the server side of the Analyzer database which prevent a one-to-one ratio of *extracted* to *stored* records.

The number of updated records plus the number of added records equals the number of extracted records, so it is more practical to examine and compare summary data when validating incremental extractions.

Daily variations in the transactional database

Validation of extraction data on the transactional database is limited because the content of the transactional database constantly changes during daily operations. As a result, there may be discrepancies between extracted data and your data validation. To eliminate discrepancies, run the DBMS validation queries as soon as possible after completing an extraction.

Additional discrepancies that result from this issue are described in the description of each table group.



RDBMS Specifications

This appendix describes the RDBMS character limits for database vendors whose products are compliant with the Analyzer. It also describes the reserved keywords that cannot be used by the Analyzer.

<i>RDBMS-Specific Character Limits</i>	306
<i>Reserved SQL Words</i>	308

RDBMS-Specific Character Limits

This section describes the RDBMS character limits for database vendors whose products are compliant with the Analyzer.

IDX DBMS

Database attribute	Vendor specification
Maximum row length (bytes)	99999
Maximum number of columns in a table	99999
Maximum object name length	60

Informix RDBMS

Database attribute	Vendor specification
Maximum row length (bytes)	32767
Maximum number of columns in a table	32767
Maximum object name length	18

Microsoft Access RDBMS

Database attribute	Vendor specification
Maximum row length (bytes)	65025
Maximum number of columns in a table	255
Maximum object name length	64

Microsoft SQL Server

Database attribute	Vendor specification
Maximum row length (bytes)	1962
Maximum number of columns in a table	250
Maximum object name length	30

Oracle RDBMS

Database attribute	Vendor specification
Maximum row length (bytes)	99999
Maximum number of columns in a table	254
Maximum object name length	30

Sybase RDBMS

Database attribute	Vendor specification
Maximum row length (bytes)	1962
Maximum number of columns in a table	250
Maximum object name length	30

Reserved SQL Words

This section describes the reserved keywords that cannot be used by the Analyzer.

IDX's Reserved Words

The following words have been reserved by IDX:

IDX Reserved Words
IDXDATATYPES
IDXDESTINATIONCOLUMNS
IDXDESTINATIONFORKEYS
IDXDESTINATIONTABLE
IDXLOADCONTROL
IDXLOADDATAWARNINGS
IDXLOADSOURCEFIELDS
IDXLOADSOURCEFILE
IDXMEMBERMONTHS
IDXPLANMASTERTERMDT
IDXQBGENDER
IDXQBHEDIS1AAGEGROUP
IDXQBHEDIS2BAGEGROUP_CHOLECYST
IDXQBHEDIS2BAGEGROUP_HYSTERECT
IDXQBHEDIS2BAGEGROUP_LAMINECT
IDXQBHEDIS2BAGEGROUP_OTHER
IDXQBHEDIS2BCPT4
IDXQBHEDISADMIT
IDXQBHEDISADMITCHEM
IDXQBHEDISADMITMH
IDXQBHEDISAGEGROUP9
IDXQBHEDISAGEGROUPING
IDXQBHEDISENROLL

IDX Reserved Words

IDXQBHEDISFREQUENCYPROCEDURES
 IDXRDBMSDATATYPES
 IDXRDBMSRULES
 IDXRESERVEDWORDS
 IDXROWACTIONHEADER
 IDXROWACTIONLINES
 IDXSOURCEPRIMFORKEYS
 IDXSTATUSCODES
 IDXTABLEACTIONS
 IDXVERSION
 IDXCURRENTMETADATAVIEW
 IDXLOADHISTORYVIEW
 IDXLOADPERFORMANCEVIEW
 IDXLOADWARNINGSSUMMARYVIEW
 IDXLOADWARNINGSVIEW

SQL Reserved Words

The following words have been reserved by SQL. This list is SQL92 compliant:

SQL Reserved Words

ABSOLUTE
 ACTION
 ADA
 ADD
 AFTER
 ALIAS
 ALL
 ALLOCATE
 ALTER

SQL Reserved Words

AND
ANY
ARE
AS
ASC
ASSERTION
ASYNC
AT
AUTHORIZATION
AVG
BEFORE
BEGIN
BETWEEN
BIT
BIT_LENGTH
BOOLEAN
BOTH
BREADTH
BY
C
CALL
CASCADE
CASCADED
CASE
CAST
CATALOG
CATALOG_NAME
CHAR
CHARACTER
CHARACTER_LENGTH

SQL Reserved Words

CHARACTER_SET_CATALOG
CHARACTER_SET_NAME
CHARACTER_SET_SCHEMA
CHAR_LENGTH
CHAR_LENGTH
CHECK
CLASS_ORIGIN
CLOSE
COALESCE
COBAL
COLLATE
COLLATION
COLLATION_CATALOG
COLLATION_NAME
COLLATION_SCHEMA
COLUMN
COLUMN_NAME
COMMAND_FUNCTION
COMMIT
COMMITTED
COMPLETION
CONDITION_NUMBER
CONNECT
CONNECTION
CONNECTION_NAME
CONSTRAINT
CONSTRAINTS
CONSTRAINT_CATALOG
CONSTRAINT_NAME
CONSTRAINT_SCHEMA

SQL Reserved Words

CONTINUE
CONVERT
CORRESPONDING
COUNT
CREATE
CROSS
CURRENT
CURRENT_DATE
CURRENT_TIME
CURRENT_TIMESTAMP
CURRENT_USER
CURSOR
CURSOR_NAME
CYCLE
DATA
DATE
DATETIME_INTERVAL_CODE
DATETIME_INTERVAL_PRECISION
DAY
DEALLOCATE
DEC
DECIMAL
DECLARE
DEFAULT
DEFERRABLE
DEFERRED
DELETE
DEPTH
DESC
DESCRIBE

SQL Reserved Words

DESCRIPTOR
DIAGNOSTICS
DICTIONARY
DISCONNECT
DISTINCT
DOMAIN
DOUBLE
DROP
DYNAMIC_FUNCTION
EACH
ELSE
ELSEIF
END
END-EXEC
EQUALS
ESCAPE
EXCEPT
EXCEPTION
EXEC
EXECUTE
EXISTS
EXTERNAL
EXTRACT
FALSE
FETCH
FIRST
FLOAT
FOR
FOREIGN
FORTRAN

SQL Reserved Words

FOUND
FROM
FULL
GENERAL
GET
GLOBAL
GO
GOTO
GRANT
GROUP
HAVING
HOUR
IDENTITY
IF
IGNORE
IMMEDIATE
IN
INDICATOR
INITIALLY
INNER
INPUT
INSENSITIVE
INSERT
INT
INTEGER
INTERSECT
INTERVAL
INTO
IS
ISOLATION

SQL Reserved Words

JOIN
KEY
LANGUAGE
LAST
LEADING
LEAVE
LEFT
LENGTH
LESS
LEVEL
LIKE
LIMIT
LOCAL
LOOP
LOWER
MATCH
MAX
MESSAGE_LENGTH
MESSAGE_OCTET_LENGTH
MESSAGE_TEXT
MIN
MINUTE
MODIFY
MODULE
MONTH
MORE
MUMPS
NAME
NAMES
NATIONAL

SQL Reserved Words

NATURAL
NCHAR
NEW
NEXT
NO
NONE
NOT
NULL
NULLABLE
NULLIF
NUMBER
NUMERIC
OBJECT
OCTET_LENGTH
OF
OFF
OID
OLD
ON
ONLY
OPEN
OPERATION
OPERATORS
OPTION
OR
ORDER
OTHERS
OUTER
OUTPUT
OVERLAPS

SQL Reserved Words

PAD
PARAMETERS
PARTIAL
PASCAL
PENDANT
PLI
POSITION
PRECISION
PREORDER
PREPARE
PRESERVE
PRIMARY
PRIOR
PRIVATE
PRIVILEGES
PROCEDURE
PROTECTED
PUBLIC
READ
REAL
RECURSIVE
REF
REFERENCES
REFERENCING
RELATIVE
REPEATABLE
REPLACE
RESIGNAL
RESTRICT
RETURN

SQL Reserved Words

RETURNED_LENGTH
RETURNED_OCTET_LENGTH
RETURNED_SQLSTATE
RETURNS
REVOKE
RIGHT
ROLE
ROLLBACK
ROUTINE
ROW
ROWS
ROW_COUNT
SAVEPOINT
SCALE
SCHEMA
SCHEMA_NAME
SCROLL
SEARCH
SECOND
SECTION
SELECT
SENSITIVE
SEQUENCE
SERIALIZABLE
SERVER_NAME
SESSION
SESSION_USER
SET
SIGNAL
SIMILAR

SQL Reserved Words

SIZE
SMALLINT
SOME
SPACE
SQL
SQLCODE
SQLERROR
SQLEXCEPTION
SQLSTATE
SQLWARNING
STRUCTURE
SUBCLASS_ORIGIN
SUBSTRING
SUM
SYSTEM_USER
TABLE
TABLE_NAME
TEMPORARY
TEST
THEN
THERE
TIME
TIMESTAMP
TIMEZONE_HOUR
TIMEZONE_MINUTE
TO
TRAILING
TRANSACTION
TRANSLATE
TRANSLATION

SQL Reserved Words

TRIGGER
TRIM
TRUE
TYPE
UNCOMMITTED
UNDER
UNION
UNIQUE
UNKNOWN
UNNAMED
UPDATE
UPPER
USAGE
USER
USING
VALUE
VALUES
VARCHAR
VARIABLE
VARYING
VIEW
VIRTUAL
VISIBLE
WAIT
WHEN
WHENEVER
WHERE
WHILE
WITH
WITHOUT

SQL Reserved Words
WORK
WRITE
YEAR
ZONE

Microsoft SQL Server Reserved Words

The following words are reserved by the Microsoft SQL Server RDBMS. The SQL Server RDBMS also complies with the SQL list of reserved words on [page 309](#).

Microsoft SQL Server Reserved Words
BREAK
BROWSE
BULK
CHECKPOINT
CLUSTERED
COMPUTE
CONFIRM
CONTROLROW
DATABASE
DBCC
DISK
DUMMY
DUMP
END_EXEC
ERRLVL
ERROREXIT
EXIT
EXPIREDATE
FILE

Microsoft SQL Server Reserved Words

FILLFACTOR
FLOPPY
HOLDLOCK
IDENTITYCOL
IDENTITY_INSERT
INDEX
KILL
LOAD
MINENO
MIRROREXIT
NOCHECK
NONCLUSTERED
OFFSETS
ONCE
OVER
PERM
PERMANENT
PIPE
PLAN
PRINT
PROC
PROCESSEXIT
RAISERROR
RECONFIGURE
REPLICATION
RETAIN_DAYS
ROWCOUNT
RULE
SAVE
SETUSER

Microsoft SQL Server Reserved Words
SHUTDOWN
STATISTICS
TAPE
TEMP
TEXTSIZE
TRAN
TRUNCATE
TSEQUAL
UPDATETEXT
USE
VOLUME
WAITFOR
WRITETEXT

Sybase Reserved Words

The following words are reserved by the Sybase RDBMS. This RDBMS also complies with the SQL list of reserved words on [page 309](#).

Sybase Reserved Words
BREAK
BROWSE
BULK
CHECKPOINT
CLUSTERED
COMPUTE
CONFIRM
CONTROLROW
DATABASE
DBCC

Sybase Reserved Words

DISK
DUMMY
DUMP
END_EXEC
ERRLVL
ERROREXIT
EXIT
EXPIREDATE
FILE
FILLFACTOR
FLOPPY
HOLDLOCK
IDENTITYCOL
IDENTITY_INSERT
INDEX
KILL
LOAD
MINENO
MIRROREXIT
NOCHECK
NONCLUSTERED
OFFSETS
ONCE
OVER
PERM
PERMANENT
PIPE
PLAN
PRINT
PROC

Sybase Reserved Words

PROCESSEXIT
RAISERROR
RECONFIGURE
REPLICATION
RETAINDAYS
ROWCOUNT
RULE
SAVE
SETUSER
SHUTDOWN
STATISTICS
TAPE
TEMP
TEXTSIZE
TRAN
TRUNCATE
TSEQUAL
UPDATETEXT
USE
VOLUME
WAITFOR
WRITETEXT

Microsoft Access Reserved Words

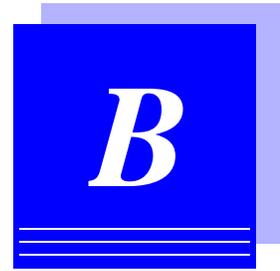
The following words are reserved by the Microsoft Access RDBMS. The Microsoft Access RDBMS also complies with the SQL list of reserved words on [page 309](#).

Microsoft Access Reserved Words

ALPHANUMERIC
AUTOINCREMENT
BINARY
BYTE
COUNTER
CURRENCY
DATABASE
DATETIME
DISALLOW
DISTINCTROW
FLOAT4
FLOAT8
IEEEDOUBLE
IEEESINGLE
INDEX
INTEGER1
INTEGER2
INTEGER4
LOGICAL
LOGICAL1
LONG
LONGBINARY
LONGTEXT
MEMO
MOD
MONEY

Microsoft Access Reserved Words

OLEOBJECT
OWNERACCESS
PERCENT
PIVOT
SHORT
SINGLE
STDEV
STDEVP
STRING
TABLEID
TEXT
TOP
TRANSFORM
VAR
VARBINARY
VARP
XOR
YESNO



Analyzer Datatype Specifications

This appendix contains a table that describes how datatype identifications change between each component in the Analyzer system.

<i>Datatype Changes Across Analyzer Components.....</i>	<i>330</i>
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Datatype Changes Across Analyzer Components

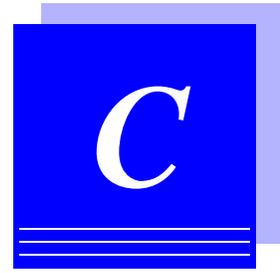
The following table describes how datatype identifications change between each component in the Analyzer system:

Extractor	Loader	SQL Server
Number ≤ 4	Integer	Small Integer
Number $5 < n \leq 9$	Long	Integer
Number ≥ 10	Float	Float
Date or Time	Date	Small Datetime (4 bytes)
\$	Currency	Money
Freetext ≤ 255	Text	VarChar
Freetext > 255	Memo	Text

Datatypes

Changes across Analyzer components

VarChar in SQL Server cannot handle trailing spaces and automatically right trims them.



Function Keys

This appendix helps you identify the keyboard keys you need to press to perform particular actions on your terminal or PC.

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<i>Standard Keys</i>	333
<i>Generic Keys</i>	337

Overview

Standard keys

Standard keys, those that are the same across all terminal types, appear in angle brackets, such as <F10>. The value between the brackets is the actual name of the key on your keyboard. This appendix lists the standard keys you use in four different environments: most fields, selector lists, word processor fields, and repeating group fields.

Generic keys

Throughout this manual, some references to keys on your terminal's or PC's keyboard have been replaced by a generic key name in square brackets. A generic key name indicates that the actual key you press to perform a particular action differs from keyboard to keyboard. For example, when this manual says to press [Help] for online help, you use this appendix to determine the specific key(s) you press on your particular keyboard to perform the [Help] command. This appendix lists the generic keys you use while working in three different environments: most fields, selector lists, and word processor fields.

Pressing multiple keys to perform a function

Sometimes you need to press two keys at the same time, and other times you need to press one key quickly followed by another.

Two keys that appear separated by a dash mean you need to press the keys simultaneously. For example, <Shift-F4> means you press the <Shift> key and the <F4> key at the same time. Two keys that appear next to each other but not separated by a dash mean you press the first key and then press the second key. For example, <F7><P> means you press <F7> and then press <P>.

Supported terminals

This appendix lists generic key translations for the following terminals and systems:

- All DEC VT200, VT300 and VT400 series terminals (refer to the DEC column in the generic key charts)
- WYSE WY-75, WY-60 and WY-1000 terminals (refer to the WYSE column in the generic key charts)
- IBM PC or compatible desktop computers running the IDX Terminal Emulator or the IDXTerm emulator for Windows. (refer to the IDX Emulator column in the generic key charts)



The keys you use while editing or creating screens in the Screen Generator are described in the *Screen Generator User's Guide*.

Standard Keys

This section describes the standard keys you use in the following environments:

- Most fields on IDX screens
- Selector lists
- Word processor fields
- Repeating group fields

The keys in this section are standard across WYSE terminals, VT terminals and PCs running IDXTerm or the IDX terminal emulator. The angle brackets surrounding the key names in these charts indicate that this is the actual key name on your keyboard.

Standard keys for most fields

The table below lists the standard keys that you use in most fields, but not in word processor fields.

Key Name	Function
<Return>	Enter data and move cursor to the next logical field
<F7><C>	Delete data in a field group
<F8>	Toggle insert mode; enables you to insert text
<F10>	File data/exit form
<F7><P>	Enables you to choose another screen/page
<↑>	Move the cursor to the previous field on the page
<↓> or <Tab>	Move the cursor to the next field on the page
<F7><Q>	Exit the form without filing data
<F7><↓>	Move the cursor to the last field on a page or group
<F7><↑>	Move the cursor to the first field on a page or group
<F7><I>	Toggle implied enter
<F7><←>	Move the cursor to the beginning of the field
<F7><→>	Move the cursor to the end of the field

Standard keys in selector lists

The table below lists the standard keys you use in selector lists.

Key Name	Function
<F7><H>	Move the highlight bar to the first item in the selector list (“H” stands for Home).
<F7><E>	Move the highlight bar to the first item in the last screen of the selector list (“E” stands for End).
<↑>	Move the highlight bar up one item.
<↓>	Move the highlight bar down one item.
<→>	Move the highlight bar right one column in double column displays.
<←>	Move the highlight bar left one column in double column displays.
<+>	Move the highlight bar forward a few items in the selector list.
<->	Move the highlight bar backward a few items in the selector list.

Standard keys used in word processor fields

The table below lists the standard keys you use in word processor fields.

Key Name	Function
<F9>	Insert a blank line above the cursor.
<F8>	Toggle insert mode; enables you to insert text.
<Return>	Move cursor to the start of the next line.
<F10>	Finish editing and jump to the next field in a form.
<F7><Q>	Exit a form without filing data.
<F7><↓>	Move the cursor to the bottom of a field or next screen of lines.
<F7><E>	Scroll to the last line of a field.
<F7><H>	Scroll to the first line of a field.
<F7><↑>	Move the cursor to the top of a field or previous screen of lines.
<F7><S>	Search for specified text.
<F7><C>	Search again for the same text as that which you specified when you pressed <F7><S>.
<Tab>	Space to next tab position.
<F7><J>	Connect the current line and the next line.
<F7>	Split line at the cursor.
<F7><=>	Jump to the beginning of the line.
<Ctrl-F>	Move to the next spot following the next colon.
<F7><->	Jump to the end of the line.
<F7><L>	Show the number of lines in the field.

Standard keys in repeating group fields

The table below lists standard keys you use only in repeating group fields.

Key Name	Function
<F7><2>	Enable cursor movement mode.
<F7><A>	Insert a blank repetition .
<F7><S>	Select a repetition.
<F7><M>	Move a selected repetition.
<F7><D>	Delete a repetition.

Generic Keys

This section describes the generic keys you use in the following environments:

- Most fields on IDX screens
- Selectors
- Word processor fields

The generic key equivalents in this section are different across WYSE terminals, VT terminals and PCs running IDXTerm or the IDX terminal emulator. To determine a generic key's equivalent on your keyboard, look for the key name on the left, locate your device across the top, and read where the row and column meet.

Generic keys used in most fields

The table below contains the generic key translation for keys you use while working in most fields on IDX screens.

Generic Key Name	Function	DEC	IDX Emulator	WYSE
[Erase Char]	Delete the character at the cursor.	<PF4>	<F4>	<PF4>
[Erase Field]	Delete the contents of the current field.	<PF1>	<F1>	<PF1>
[Help]	Display a help message.	<Help>	<Shift-F5>	<F15>
[List]	Display a list of options.	<F12>	<Shift-F2>	<F12>
[Major]	Move the cursor to the next major field on the screen.	<F14>	<Shift-F4>	<F14>
[More Keys]	Display function keys.	<F13>	<Shift-F3>	<F13>
[Next Page]	Jump to the next page in a form.	<Next Screen>	<Page Down>	<Shift-F16>
[Prev Page]	Jump to the previous page in a form.	<Prev Screen>	<Page Up>	<Shift-F15>

Generic Key Name	Function	DEC	IDX Emulator	WYSE
[Refresh Screen]	Redraw the screen.	<F11>	<Shift-F11>	<F11>
[Restore Field]	Restore current field.	<PF2>	<F2>	<PF2>
[Insert]	Copy a column in the custom report formatter.	<Insert Here>	<Insert>	<Shift-F12>

Generic keys for selector lists

The table below contains the generic key translation for keys you use while working in IDX selector lists.

Generic Key Name	Function	DEC	IDX Emulator	WYSE
[Find]	Move highlight bar to an item in a selector list.	<Find>	<Home>	<Shift-F11>
[Next Page]	Jump to the next screen of items in a selector list.	<Next Screen>	<Page Down>	<Shift-F16>
[Prev Page]	Jump to the previous screen of items in a selector list.	<Prev Screen>	<Page Up>	<Shift-F15>
[Select]	Select an item in a selector list.	<Select>	<End>	<Shift-F14>
[Deselect]	Deselect an item in a selector list.	<Remove>	<Delete>	<Remove>
<F7> [Select]	Select all items in a selector list.	<F7> <Select>	<F7><End>	<F7> <Shift-F14>
[Do]	Select and file an item in a selector list.	<F16> or <Do>	<Shift-F6>	<F16>

Generic keys for word processing fields

The table below contains the generic key translation for keys you use while working in word processing fields.

Generic Key Name	Function	DEC	IDX Emulator	WYSE
[Erase Char]	Delete the character at cursor.	<PF4>	<F4>	<PF4>
[Erase Line]	Delete the current line.	<PF1>	<F1>	<PF1>
[Erase Word]	Delete to the end of the next word.	<PF3>	<F3>	<PF3>
[Margin: Clear]	Clear left and right margins.	<F12><C>	<Shift-F2><C>	<F12><C>
[Margin: Left]	Set left text margin.	<F12><L>	<Shift-F2><L>	<F12><L>
[Margin: Prev]	Restore previous left and right margins.	<F12><P>	<Shift-F2><P>	<F12><P>
[Margin: Right]	Set right text margin.	<F12><R>	<Shift-F2><R>	<F12><R>
[Margin: Show]	Show current left and right margins.	<F12><?>	<Shift-F2><?>	<F12><?>
[Pack Para]	Rewrap to end of paragraph.	<F11>	<Shift-F1>	<F11>
[Select Text]	Select text for cut and paste.	<PF2>	<F2>	<PF2>
[WP Help]	Display help for word processor keys.	<Help>	<Shift-F5>	<F15>
[Phrase]	Insert phrase dictionary text (if available).	<Do>	<Shift-F6>	<F16>



Analyzer Database Column Naming Conventions

Defining the standard extraction data set for Analyzer included renaming for both tables and columns from the DBMS source names.

This appendix outlines the naming conventions used in the Analyzer database for columns.

<i>General Approach</i>	342
<i>Internal vs. External Reference Numbers</i>	343
<i>Dictionary Tables</i>	344
<i>Standard Terminology</i>	346
<i>Standard Abbreviations</i>	347

General Approach

- All naming conventions for columns are displayed in this document between quotes. The quotes are not part of the convention. The use of quotes is to clearly define the characters used in the convention.
- Words are spelled out completely when the 25 character limit for the column name is not an issue.
- Standard abbreviations are used when space is limited. When there are many similar columns, the standard abbreviation is used even when space is available, so that the columns will be more consistent in the display. For example, the Patient tables contain many variations of employer phone number for the patient, guarantor, contacts, etc. The abbreviation “EMP” is used in all these columns for consistency, rather than spelling it out in some of the columns. For more information, refer to [Standard Abbreviations section on page 347](#).
- An underscore “_” is used between words or word abbreviations to allow for ease of comprehension in the column name. The “_” displays as a space in the Impromptu catalog.

Internal vs. External Reference Numbers

- This convention is to distinguish between the two types, since customers are not exposed to the internal references in either M or DBMS applications. Where possible, in building the User Catalog in Impromptu, the internal IDs will not be displayed to the customer. They are needed as primary keys and for joins in the Analyzer (SQL) database.
- Data that is only an internal reference number uses the convention “ID”. For this data, the customer does not know the data by that number. Both M and DBMS translate the internal ID into the external number. SQL does not.

Example: PATIENT_ID

- Data that is the “external” number uses the convention “NUMBER”. In instances when both the external and internal references are the same, “NUMBER” is used.

Example: REFERRAL_NUMBERGROUP_NUMBER

(both internal & external are the same)

Dictionary Tables

- The primary key for each dictionary table is the internal ID for the dictionary and is named “ID_#”, where # represents the M dictionary number.
- For dictionary fields that are repeating in M, a separate table is created by the Extractor for the repeating field. The table name uses the convention “dict#_column_name”, where the # is the dictionary number and the column_name is the field name in the dictionary.

References to Dictionary Tables Within the Same Base Table

When a column in a base table is a pointer to a dictionary table, one of the following conventions will be used:

- When the column is the only reference to that dictionary - “ID_#”. Use of the exact name of the dictionary primary key allows the base table column and the dictionary to be joined automatically by Impromptu.

Example: ID_500 in the CLAIM_HEADER table points to the HMO table, which is M dictionary 500, which has a primary key of ID_500.

- There is more than one reference to the same dictionary
 - For multiple columns of the same type; usually a sequence - “ID_#_#” - the first “#” is the dictionary number; the second “#” is the number of the occurrence of the same type of information.

Example: ID_36_2 and ID_36_3 in the INVOICE_HEADER table are the second (2) and the third (3) diagnoses on the invoice. Both point to the DIAGNOSIS table, which is dictionary 36. In some cases, the first reference uses “ID_#_1”; in other cases, just the “ID_#” is used for the first reference.

- For multiple columns with different meaning - “meaning_ID_#” The “meaning” is word(s) or abbreviation(s) that describes the data use. The ID_# is the reference to the dictionary.

Example: ADMITTING_PHY_ID_3 and REFERRING_PROVIDER_ID_3 in the REFERRAL_HEADER table. Both columns point to the

PROVIDER table, which is dictionary 3. However the meaning in this case, the role of the provider, is different.

- For multiple columns with different meanings AND with multiple sequence - “meaning_ID_#_#” The “meaning” is word(s) or abbreviation(s) that describes the data use. The “ID_#” is the reference to the dictionary. The second “#” is the occurrence number.

Example: ANC_DEPARTMENT_ID_301_4 and ANC_DEPARTMENT_ID_301_5 are the 4th and 5th occurrences of the departments for ancillary appointments in the APPOINTMENT_DETAIL table. Both columns point to the SCHEDULING DEPARTMENT table, which is dictionary 301. The meaning is included since there are also other columns that refer to the SCHEDULING DEPARTMENT table that have different meanings. An example is ACTUAL_DEPARTMENT_ID_301, the department where this appointment takes place.

Standard Terminology

Since there are similar and sometime multiple uses of the same term with the different M applications, the following conventions are used.

TERM	DICTIONARY	APPLICATION
EMPLOYER	124	Registration
EMPLOYER GROUP	501	MCA enrollment and premium billing
LOCATION	100	BAR as billing location
SCHEDULING LOCATION	331	Scheduling
CLAIM FORM	N/A	Billing
CLAIM	N/A	MCA claims

There is no clear pattern to distinguish between the various physician and provider dictionaries. If the column is specific to a physician, then the word physician is used. When the professional could be a physician or another health care professional, the term provider is used.

Standard Abbreviations

The following abbreviations are always used and are sorted in abbreviation order.

Abbreviation	Word or Phrase
ADDR1	First Street Address Line
ADDR2	Second Street Address Line
ADDR3	Third Street Address Line
AP	Accounts Payable
AR	Accounts Receivable
COB	Coordination of Benefits
CRNA	Certified Registered Nurse Anesthetist
DRG	Diagnosis Related Groups
EOB	Explanation of Benefits
FTXT	Free Text
GL	General Ledger

Abbreviation	Word or Phrase
HMO	Health Maintenance Organization
ICD9	International Classification of Diagnoses
LOS	Length of Stay
MAXOUTP	Maximum Out Of Pocket Expense
OCC	Occurrence (sequence number)
POS	Point-of-Service Plan
PCP	Primary Care Provider or Physician
PRE_EX	Pre existing condition
PHONE	Telephone number
RETRO	Retroactive
ZIP	Zip Code

These abbreviations are used when the complete word will not fit. They are sorted in abbreviation order.

Abbreviation	Word or Phrase
ACCT	Account
ALT	Alternate
AMT	Amount
ANC	Ancillary
ANESTHES	Anesthesia
APP	Approved
APPT	Appointment
BMP	Bump
CALC	Calculation
CAN	Cancel
CAT	Category
COMP	Company
COV	Coverage
CR	Credit
DT	Date
DED	Deductible
DEP	Dependent
DEPT	Department
DESC	Description
DX	Diagnosis
EFF	Effective
EMP	Employer
EMPLY_ LENGTH	Employment_ Length

Abbreviation	Word or Phrase
GRP	Group
GUAR	Guarantor
GUARD	Guardian
HOSP	Hospital
INV	Invoice
MAX	Maximum
MISS	Missing
MULTI	Multiple
NONRES	Non Resident
PAT	Patient
PD	Period
PHY	Physician
PROC	Procedure
PROV	Provider
PYMNT	Payment
REL	Relationship
SCH	Schedule Or Scheduling
SOC_SEC	Social Security
ST	State
STAT	Status
STATIS	Statistical
TOT	Total
TFR	Transfer

Abbreviation	Word or Phrase
EMPLY_STA	Employment_ Status
EST	Estimated
FSC	Financial Status Class

Abbreviation	Word or Phrase
WORK_ COMP	Workers' Compensation
W_C_ CARRIER	Workers' Compensation Carrier



Table Groups and Selection Criteria

This appendix describes the selection criteria the Analyzer Extractor uses for each table group on the system. If there are differences in the selection criteria for initial or incremental extractions, those differences are described here.

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Table Groups and Selection Criteria

The Analyzer Extractor consults **selection criteria** to determine what data to extract from table groups. The number and type of table group in your organization varies with the IDX applications that have been installed at your facility. There is a specific table group for dictionaries.

This section describes the selection criteria the system uses for each table group on the system. If there are differences in the selection criteria for initial or incremental extractions, those differences are described here.

Data validation

You can use queries through IDX's Database Management System (DBMS) to validate what is extracted using this selection criteria. Refer to [Chapter 16: Validating Data, which begins on page 301](#), for more information on data validation.

Table group and selection criteria

This section describes each table group and its selection criteria.

Table Group	Selection Criteria
Appointment	<p>The system extracts appointments based on at least one of five dates falling within the extraction date range:</p> <ul style="list-style-type: none"> • Arrival date (SCH_B_PAT_APPT) • Cancellation date (SCH_B_PAT_APPT.CAN_BMP_DT) • Date when scheduled (SCH_B_PAT_APPT.DT_WHEN_SCHEDULED) • Edited date (SCH_B_PAT_APPT.EDIT_DT) • Date when rescheduled (SCH_B_PAT_APPT.DT_WHEN_RESCHEDULED) <p>Segmented by: N/A</p>
Appointment_visit_types	<p>The Patient Scheduling application uses appointment visit type data (SCH_B_PAT_APPT_VT) as a custom dictionary. The system extracts all data entries from appointment visit type data in the same way that dictionaries are extracted.</p> <p>Visit type data is <i>not</i> part of the Dictionary Table Group because it is not a dictionary.</p> <p>Segmented by: N/A</p>

Table Group	Selection Criteria
Capitation	<p>For an initial extraction, the system chooses the last capitation period. This is the period of the last capitation compile that precedes the extraction through date.</p> <p>For an incremental extraction, the index ^DWXAPP("CAPITATION") should exist but it may <i>not</i> include entries for all capitation compiles on the system. If the index does not exist, the system searches every record for capitation.</p> <p>This index marks the dates on which each ID has had capitation information filed. If the full extraction date range for the periods being extracted are in the special index, then the index builder scans this index and files entries into the extraction index for patients with activity in the extraction date range. The system extracts all of these patient capitation records.</p> <p>Segmented by: HMO</p>
Claims	<p>The system uses the date that a claim was frozen by Night Jobs to determine whether or not to extract a claim and its related data (MCA_B_CLAIM.DT_FROZEN_BY_NIGHT_JOBS). The system extracts all claims frozen by Night Jobs during the extraction period.</p> <p>Segmented by: HMO</p>
Dictionary	<p>The system extracts all dictionaries in the extraction set in their entirety.</p> <p>Segmented by: Dictionary number</p>
DRG	<p>The tables in this table group provide a set of "quasi" dictionaries for the HPA/ADT application. Each table can also be customized for each hospital group. During an extraction all the DRG tables are extracted in their entirety.</p> <p>Segmented by: Group</p>
Employer_Plan_Link	<p>Index ^DWXAPP ("EMPLOYER_PLAN_LINK") keeps an entry for each employer link record added or modified on the system.</p> <p>For an initial extraction, the index may not exist or will probably not include entries for employer_plan_link. In this case, the system searches the entire employer_plan_link file and selects all transactions created within the extraction data range. If the index does exist, the system uses it to scan all records within the extraction range.</p> <p>For incremental extractions, the system still uses ^DWXAPP ("EMPLOYER_PLAN_LINK") but may <i>not</i> include entries for all added/edited employer plan link records on the system. This index is a combination of two date stamp fields:</p> <ul style="list-style-type: none"> • Last changed date (MCA_B_EMPLAST_CHANGED_DT) • Created date (MCA_B_EMP.CREATED_DT) <p>If the full extraction date range being extracted is included in this index, the index builder scans the ^DWXAPP index and files entries into the extraction index for all employer plan link records with activity in the extraction date range. If the full extraction date range is not included, then the system selects a record if either the last changed or created date is within the extraction date range.</p> <p>Segmented by: HMO</p>

Table Group	Selection Criteria
Enrollment	<p>A specific index, ^DWCAPP("ENROLLMENT") contains an entry for each date that an enrollment contract is added or edited.</p> <p>For an initial extraction, this index examines every contract in the enrollment date file. Each contract whose creation date falls within the extraction date range is extracted.</p> <p>For incremental extractions, ^DWCAPP("ENROLLMENT") exists, but it may <i>not</i> include entries for all added/edited enrollment records on the system. This index is a combination of date stamp fields:</p> <ul style="list-style-type: none"> • Last edited date (MCA_B_ENROLL_DT_CON_HDR.LAST_EDITED_DT) • Created date (MCA_B_ENROLL_DT_CON_HDR.CREATED_DT) <p>These fields are stored in the enrollment date index global at the contract level.</p> <p>If the full extraction date range is included in this index, then the index builder scans this index and files entries into the extraction index for all enrollment records with activity in the extraction date range. If the full extraction date range is not included, then the system scans the entire database and selects a record if either the last edited or created date for the contract is within the extraction date range.</p> <p>Segmented by: HMO</p>
HPAplan	<p>The tables in this table group provide a set of "quasi" dictionaries for the HPA/ADT application. Each table can also be customized for each hospital group. During an extraction all the HPA Plan tables are extracted in their entirety.</p> <p>Segmented by: Group</p>
HPAprof and HPA_prof_ excp	<p>The tables in this table group provide a set of "quasi" dictionaries for the HPA/ADT application. Each table can also be customized for each hospital group. During an extraction all the HPA Profile tables are extracted in their entirety.</p> <p>Segmented by: Group</p>
Plan	<p>The index builder scans the ^HMOPLAN global for both initial and incremental extractions.</p> <p>For an initial extraction, the system selects a record if the created date (MCA_B_PLAN.CREATED_ON) is within the extraction range.</p> <p>For incremental extractions, the system selects a record if either the last changed date (MCA_B_PLAN.LAST_CHANGED_ON) or the created date is within the extraction date range.</p> <p>Segmented by: HMO</p>
Premium_ Billing	<p>Index ^DWAPP("PREMIUM_BILLING) maintains all premium billing runs and manual adjustments.</p> <p>For an initial extraction, the special index may not exist or will probably not include entries for premium billing activity on the system. In that case, the system searches the entire premium billing file and selects all transactions created within the extraction date range (MCA_B_PRM_TX.REC_CREATE_DT) within the starting and ending dates.</p> <p>For incremental extractions, the index, ^DWAPP("PREMIUM_BILLING), exists, but it may not include entries for newly entered premium billing transactions. If the full extraction date range for the periods being extracted are in this index, the index builder scans the index and files entries into the extraction index for transactions created within the extraction date range.</p> <p>Segmented by: HMO</p>

Table Group	Selection Criteria
Premium_Billing_Rate	<p>The index builder searches the ^HMOPRMRT global for both initial and incremental extractions.</p> <p>For an initial extraction, the system selects a record if the created date (MCA_B_PRM_RATE_HDR.DT_CREATED) is within the extraction range.</p> <p>For incremental extractions, the system selects a record if either the last edited date (MCA_B_PRM_RATE_HDR.LAST_EDIT_DT) or created date (MCA_B_PRM_RATE_HDR.DT_CREATED) is within the extraction date range.</p> <p>Segmented by: HMO</p>
Receivables	<p>The system selects invoices based on two sets of dates. The Extractor first identifies the <i>Extraction From Date</i> and <i>Extraction Through Date</i>. Then the Extractor determines the closed Billing and Accounts Receivables (BAR) accounting periods that fall completely within these dates. The starting and ending dates for the billing periods that can be included are the <i>Receivables Extraction From Date</i> and <i>Receivables Extraction Through Date</i>.</p> <p>For an initial extraction, the <i>Receivables Extraction From Date</i> is null and the <i>Receivables Extraction Through Date</i> must precede or equal the <i>Extraction Through Date</i>.</p> <p>For incremental extractions, the <i>Receivables Extraction From Date</i> is equal to the last day of the previous BAR period's <i>Extraction Through Date</i>. The <i>Receivables Extraction Through Date</i> must precede or equal the <i>Extraction Through Date</i>.</p> <p>Several BAR billing periods may be included within a set of Extraction From and Extraction Through Dates.</p> <p>Segmented by: BAR Group (Dictionary 200 entry)</p>
Referrals	<p>Index ^DWAPP("REFERRAL") is maintained during all referral processing. This index keeps an entry for each referral added or modified on the system.</p> <p>For an initial extraction, the system searches the ^HMOREF global. The system selects a record if the created date is within the extraction range.</p> <p>For incremental extractions, the ^DWAPP("REFERRAL") index exists but may not include entries for all added/edited referrals on the system. This index is a combination of two date stamp fields, created and last edited date. If the full extraction date range being extracted is included in the special index, then the index builder scans the index and files entries into the extraction index for all referrals with activity in the extraction date range. If the full extraction date range is not included, then the system selects a record if either the last edited or created date within the extraction date range.</p> <p>Segmented by: HMO</p>
Registration	<p>For an initial extraction, the system searches the entire registration file; and records all registration data modified in the extraction date range. If the registration date or the update date fall within the extraction date range, the system extracts the patient's data.</p> <p>For incremental extractions, the index ^AUDITR, the Daily Registration Tape List, exists on the system. If the first date in the Daily Registration Tap List is earlier than the starting date for the extraction, the index is used. If not, then each patient record is examined as in the initial extraction.</p> <p>Segmented by: N/A</p>

Table Group	Selection Criteria
Visit, Visit_adm_ disch, Visit_excp, Visit_prof, and Visit_transfer	Visits are extracted based on the following dates in the IV_B_VISIT_HDR table: <ul style="list-style-type: none"> • FIRST_DT_FILED • LAST_DT_FILED The extraction index builder for the Visit table group traverses all visits and adds the visit to the extraction index if the visit has a FIRST_DT_FILED or LAST_DT_FILED between the extraction start and through dates. Because an initial extraction has no extraction start date only the FIRST_DT_FILED field is checked. An incremental run will usually use the ^DWXAPP index. Segmented by: Group
Visit_ar	Visit AR records are extracted based on the following dates in the IV_B_VISIT_AR table: <ul style="list-style-type: none"> • DATE_CREATED • DATE_EDITED The extraction index builder for the Visit AR table group traverses all visit accounts receivable records and adds them to the extraction index if there is a DATE_CREATED or DATE_EDITED between the extraction start and through dates. Because an initial extraction has no extraction start date only the DATE_CREATED field is checked. An incremental run will usually use the ^DWXAPP index. Segmented by: Group
Visit_charges	Visit Charge records are extracted based on the following dates in the IV_B_VISIT_IBI table: <ul style="list-style-type: none"> • DATE_CREATED • DATE_EDITED The extraction index builder for the Visit Charge table group traverses all visit charge records and adds them to the extraction index if there is a DATE_CREATED or DATE_EDITED between the extraction start and through dates. Because an initial extraction has no extraction start date only the DATE_CREATED field is checked. An incremental run will usually use the ^DWXAPP index. Segmented by: Group

Glossary

3-D bar display

A display that shows relationships between several variables. Use to analyze large quantities of data that are otherwise difficult to interpret.

Applies to: PowerPlay

Access password

A password that protects a briefing book from unauthorized access. When you assign an access password and no edit password, users who know the access password can use the briefing book in Display mode and Edit mode. When you assign an access password and an edit password, users who know the access password can use the briefing book in Display mode only. Users who know the edit password can use the briefing book in Display mode and Edit mode.

See also [Edit password](#).

Applies to: Portfolio, PowerPlay

Activate

A command that opens an OLE object in its source application (the application that created it) so that you can explore it or change it. If an object is activated in place, it remains within the window where it is linked or embedded; the toolbars and menus are replaced by those of the source application. (In Windows 95, the toolbars and menus merge with those of the source application.) In Portfolio, if you activate an OLE object in Display mode, you may or may not be able

to save changes depending on the capabilities that the designer of the briefing book gave you.

Applies to: Portfolio, PowerPlay

Active icon

An icon that performs an action. Applies to: Portfolio, PowerPlay

Active OLE object

An embedded or linked object that can be opened and updated.

See also [Activate](#), [Embed](#), and [Link](#).

Applies to: PowerPlay

Aggregate

Also called *summary*. A calculation involving a summary component and a FOR clause indicating for which group the aggregate is calculated. An aggregate is calculated independently of its position in a report and of its association with a group. You can perform the following aggregates: total, minimum, maximum, average, count, rank, percentile, percentage, running total, running minimum, running maximum, running average, running count, and standard deviation.

Applies to: Impromptu

Alias

An alternative name for a table. You create table aliases in order to create self-joins. You add two copies of the same table so that you can relate values in a single table. For example, you can find out which employee works for which manager when all the employee data is in one database table. You can also create table aliases to use in a filter expression to create a view of part of the data in a table. For example, you can create a view for managers of the employee table by aliasing the Employee table under the name of Managers. You can then use a filter expression on the Managers table to create the view.

Applies to: Impromptu

Allocation

The process of apportioning measure values, whose original source is in categories at a higher level of the primary drill-down path, to categories in lower levels of the primary drill-down. Values may be apportioned as constants or in proportion to another measure whose values are available to the bottom of the tree.

Applies to: PowerPlay

<i>Alternate drill-down path</i>	<p>In PowerPlay, an alternate path within the same dimension that leads to lower-level categories.</p> <p>See also Primary drill-down path.</p> <p>Applies to: PowerPlay</p>
<i>Analyzer column</i>	<p>A column that has been extracted from the transactional database, loaded into a relational database (the Analyzer database), and renamed with a column descriptive name.</p> <p>Applies to: Analyzer</p>
<i>Analyzer database</i>	<p>The relational database that is created by the Analyzer Loader and used by Analyzer's reporting tools to present data.</p> <p>Applies to: Analyzer</p>
<i>Analyzer table</i>	<p>A tables that has been extracted from the transactional database, loaded into a relational database (the Analyzer database), and renamed with a descriptive table name.</p> <p>Applies to: Analyzer</p>
<i>Ancestor</i>	<p>A related category at a higher level in a category structure. In a diagram, a category's direct ancestors (parents) appear to the left of the category and are linked by a line.</p> <p>Applies to: PowerPlay</p>
<i>Aspect ratio</i>	<p>The relationship between the height and the width of a picture. Changing the aspect ratio of a picture (for example, increasing its width without proportionally increasing its height) distorts the picture. Distortion can be used intentionally to create an effect; however, most pictures look best when the original aspect ratio is maintained.</p> <p>Applies to: Portfolio, PowerPlay</p>
<i>Associated data item</i>	<p>A data item that is linked to the group data item. Associated data items suppress duplicate data values, but don't generate a control break. For example, if Customer Number is the grouped data item, then Customer Name can be repressed by declaring it as an associated data item. In this way, when Customer Number appears in the report,</p>

Customer Name appears only once for the group. Marking a data item as associated affects how Impromptu calculates summary values.

See also [Group data item](#).

Applies to: Impromptu

Auto-access

Automated access to a data source or server. Authenticator can provide an application with the access keys (user ID and password) for an authenticated user, eliminating the need for user intervention.

Applies to: PowerPlay

Automatic association

The group association of a newly created SmartSummary, determined by the group in which the SmartSummary is located when it is created. If you create a SmartSummary using the Calculate button in the Data tab, the SmartSummary appears at the bottom of the Group Order box until the query is run. Then the SmartSummary appears under the lowest group in the Group Order box or, if you move the SmartSummary to a new location in the report, under the group representing the new location.

See also [Smartssummary](#).

Applies to: Impromptu

Automation

See [OLE Automation](#).

Applies to: Impromptu

Base value

The value that is the same in all calculations. For example, if you select the total as the base value and then run the Percent of Base calculation on the data making up the total, each result will show the percentage contribution of the associated value to the total.

Applies to: PowerPlay

Beginning of time

The earliest date for which data exists in the transactional database.

Applies to: Extractor, Loader

Bitmap

An image that consists of pixels on the screen and is stored as a collection of bits. Bitmaps usually have the extension .BMP when they are stored as files.

Applies to: Impromptu

- BLOB*** A Binary Large Object, or large unstructured object stored in the database. A BLOB can be free text, images, digitized images, or audio streams.
Applies to: Impromptu
- Book PowerBar*** A PowerBar with buttons that you can use to set preferences for the active briefing book and show or hide the table of contents.
See also [PowerBar](#) and [PowerBar button](#).
Applies to: Portfolio, PowerPlay
- Boundary line*** A line that indicates the extent of a frame as well as names of each report object. You show or hide boundary lines by using the Boundary Line command (View menu).
Applies to: Impromptu
- Briefing book*** A document created in Portfolio. A briefing book is a way of combining OLE objects, such as PowerPlay reports, and other objects in a single, easy-to-distribute document.
Applies to: Portfolio, PowerPlay
- Bulk copy (BCP)*** An option the Loader uses to copy large amounts of data in batches to the SQL Server.
Applies to: Extractor, Loader
- Cache query*** A temporary cache on your PC that Impromptu uses to store report results. You set the cache query by clicking Query from the Report menu, and then clicking the Access tab.
Applies to: Impromptu
- Calculated data item*** A data item that displays the result of an expression that uses stored data. The value is recalculated each time a value in the expression changes. For example, you can use the string operator (+) to combine a data item called Firstname with a data item called Lastname to form a calculated data item called Fullname.
Applies to: Impromptu

Captive account

An account that does not allow users to create jobs or files, which is a large part of extraction process. Users with captive accounts cannot access all Extractor functions and activities.

Applies to: Extractor, Loader

Catalog

A file (with the extension .CAT) that contains all the information necessary for Impromptu to access and retrieve information from a relational database. The catalog does not store data, but it does provide Impromptu with a business view of the data. A catalog contains information about what database to access, where the database is stored, and how the tables in the catalog are joined.

See also [Distributed catalog](#), [Personal catalog](#), [Shared catalog](#), [Secured catalog](#), and [Source catalog](#).

Applies to: Impromptu

Catalog condition

An expression that can be used anywhere you need a true-false value. A catalog condition is stored in the catalog. You can use conditions in filters, in conditional formatting, and in calculations. For example, you can use a condition to see only data for your sales region.

Applies to: Impromptu

Catalog PowerBar

A PowerBar with buttons and options you can use to work with catalogs.

See also [PowerBar](#) and [PowerBar button](#).

Applies to: Impromptu

Category

Describes or classifies details of an organization. For example, a category might represent the specific date of a business transaction, or a particular product, customer, or market. Categories can often be grouped into more general categories. For example, a set of dates could be grouped into a month, and months into years.

See also [Special category](#).

Applies to: PowerPlay

Category label

The name of a category.

Applies to: PowerPlay

- Cell** In Impromptu, the intersection of a column and row that contains a single value (Impromptu Crosstab Query).
In PowerPlay, the intersection of a column and row that contains a single value. Only crosstab displays have cells.
Applies to: Impromptu, PowerPlay
- Chart frame** A type of frame that provides a visual display of numeric report data. Charts can be formatted in a number of ways, including bar charts, area charts, pie charts, bubble charts, and many other popular formats.
See also [Frame](#) and [Report object](#).
Applies to: Impromptu
- Child frame** A frame or report object that is subordinate to a parent frame.
See also [Frame](#) and [Report object](#).
Applies to: Impromptu
- Clustered bar display** A display that groups related information, compares summaries, and compares categories.
Applies to: PowerPlay
- Cognos** A vendor of third party software. They create applications such as Impromptu, Portfolio, and PowerPlay, which are tools used in conjunction with Information Delivery.
Applies to: Impromptu, Portfolio, PowerPlay
- Cognosscript** A language similar to BASIC, that is included with Cognos applications. You can use CognosScript to write macros.
Applies to: PowerPlay
- Column** A type of information in a list frame that is a vertical list of data sharing the same definition.
Applies to: Impromptu
- Column** A category that shows related information in a vertical list.
Applies to: PowerPlay

<i>Column label</i>	<p>The name of a column.</p> <p>Applies to: PowerPlay</p>
<i>Column spacer</i>	<p>Enables you to create an empty space between list frame columns.</p> <p>Applies to: Impromptu</p>
<i>Comma-delimited ASCII file</i>	<p>A text file where each column of data is separated from the next by a comma. All data must use ASCII standard characters.</p> <p>Applies to: Impromptu</p>
<i>Command line</i>	<p>The characters used to start an application. For example, you enter command line parameters when you start Impromptu by clicking Run from the Start menu and typing a command.</p> <p>Applies to: Impromptu, PowerPlay</p>
<i>Complex join</i>	<p>A complex join uses an expression to join two tables. You must click the Expression option button to create a complex join.</p> <p>Applies to: Impromptu</p>
<i>Composite key</i>	<p>A primary key made up of multiple columns.</p> <p>Applies to: Extractor, Loader</p>
<i>Compound join</i>	<p>A join containing several columns joining two tables.</p> <p>A compound join can be an Equi-join, Nonequi-Join, Outer join, Self-join, or Complex join.</p> <p>Applies to: Impromptu</p>
<i>Condition</i>	<p>An expression that can be used anywhere you need a true-false value. A condition can be stored in the catalog. You can use conditions in filters, in conditional formatting, and in calculations. For example, you can use a condition to see only data for your sales region. See also filter.</p> <p>Applies to: Impromptu</p>
<i>Conditional format</i>	<p>An instruction to Impromptu to look through data in the selected report objects and format the data that meets predefined conditions.</p>

Use to identify exceptional data in your report. For example, retail outlets with quarterly revenues greater than \$500,000 could be highlighted in green, while retail outlets with quarterly revenues less than \$250,000 could be highlighted in red.

Applies to: Impromptu

Control break

The start of a new group of data, which allows operations such as subtotaling.

Applies to: Impromptu

Control file

A file containing specifications about the extraction. For example, .dwh file and .dwr files are control files. These files are loaded by the Loader.

Applies to: Extractor, Loader

Convergence level

The level at which two or more alternate drill-down structures converge.

Applies to: PowerPlay

Correlation display

A display that compares the values of two measures. Bars represent one measure, and a line represents the other. You must have at least two measures to use a correlation display effectively.

Applies to: PowerPlay

Creator

The user class who creates a catalog and usually administers it. By default, the creator has no restrictions on using the catalog.

Applies to: Impromptu

Crop

Trims, rather than resizes, a picture to fit a given area.

Applies to: Portfolio, PowerPlay

Cross-product query

A report that retrieves data from tables that do not have table joins defined for them.

Applies to: Impromptu

<i>Crosstab</i>	<p>Shows summary information from a list report in a compact table of rows and columns. A crosstab shows the value for the combination of each row and column, enabling you to gain a different perspective on the data and see more without the need to scroll. For example, you can change a list report that has three columns (Product Type, Sales Channel, Total Sale Amount) into a crosstab that has each Product Type as a row, each Sales Channel as a column, and the Total Sale Amount for each combination of Product Type and Sales Channel in the cells.</p> <p>Applies to: Impromptu</p>
<i>Crosstab dimension</i>	<p>The qualitative values of a data item along the top of the crosstab. For example, if you select Country as the crosstab dimension, each value of Country (Australia, Canada,...) will appear in the crosstab.</p> <p>Applies to: Impromptu</p>
<i>Crosstab display</i>	<p>A display that shows data in tabular format.</p> <p>Applies to: PowerPlay</p>
<i>Crosstab filter</i>	<p>A detail filter applicable only to the crosstab. When you undo the crosstab, the filter is not applied to the original list report query.</p> <p>See also Filter.</p> <p>Applies to: Impromptu</p>
<i>Cube</i>	<p>See PowerCube.</p>
<i>Custom condition</i>	<p>An expression that has a true-false value that you use when conditionally formatting report data. For example, you can define a condition that highlights sales margins less than 50%. You create a custom condition in a report.</p> <p>Applies to: Impromptu</p>
<i>Data</i>	<p>The values and category labels.</p> <p>Applies to: PowerPlay</p>
<i>Data item</i>	<p>A column from a database, HotFile table, or a snapshot of a report.</p> <p>Applies to: Impromptu</p>

<i>Data source</i>	<p>For Impromptu, where Impromptu retrieves information for your query. The data source can be a database, HotFile, snapshot, or thumbnail. For PowerPlay, where PowerPlay retrieves information for a report. The source can be a multidimensional cube located on your PC, or a pointer to an OLAP server.</p> <p>Applies to: Impromptu, PowerPlay</p>
<i>Data type</i>	<p>One of six data types in Impromptu: character, date, date-time, numeric, time, and interval.</p> <p>Applies to: Impromptu</p>
<i>Database</i>	<p>A collection of data related to a particular purpose and organized for ease of reference. Depending on the type of database you're using, a database can contain tables, views, synonyms, and stored procedures. PowerPlay Transformer can access information in a database and produce PowerCubes that PowerPlay can use to create detailed and precise reports.</p> <p>Applies to: Extractor, Loader, Impromptu, PowerPlay</p>
<i>Database Management System (DBMS)</i>	<p>The name of the IDX product that enables you to view the hierarchal transactional databases in a relational fashion. DBMS encompasses a code generation utility, a screen generation utility, and a report writer.</p> <p>Applies to: IDX Classic</p>
<i>Dataset</i>	<p>An Impromptu report that stores data values you can use when applying a filter. A dataset is dynamic, meaning that when you use a dataset in a filter, the report that stores that dataset is rerun.</p> <p>Applies to: Impromptu</p>
<i>Date_Exp</i>	<p>A date constant, a date data item, or any expression resulting in a date value that is used for date or datetime types.</p> <p>Applies to: Impromptu</p>
<i>Datetime_Exp</i>	<p>A date constant, a date data item, or any expression resulting in a date value that is used for a datetime type only.</p> <p>Applies to: Impromptu</p>

<i>DBMS</i>	<p>See Database Management System (DBMS).</p> <p>Applies to: IDX Classic</p>
<i>DBMS column</i>	<p>A data column in the transactional database. Each DBMS column contains specific information entered through IDX's transactional applications.</p> <p>Applies to: IDX Classic</p>
<i>DBMS table</i>	<p>A data table in the transactional database. Each DBMS table has DBMS columns that contain specific information entered through IDX's transactional applications.</p> <p>Applies to: IDX Classic</p>
<i>Default join map</i>	<p>A join map based on the IDX DBMS join map. The join map shows how the tables in your extraction set relate to each other.</p> <p>Applies to: Extractor, Loader</p>
<i>Detail</i>	<p>The level of information displayed in categories. When you drill down on categories in a dimension, you see more detailed information.</p> <p>Applies to: PowerPlay</p>
<i>Detail filter</i>	<p>Limits the data retrieved in a report. A detail filter eliminates data from a report by restricting the data. For example, you could create a detail filter to specify that only sales over \$1000 be included in the report. It is the only filter choice if you have not created a summary calculation for a report.</p> <p>See also Filter.</p> <p>Applies to: Impromptu</p>
<i>Device independent bitmap (DIB)</i>	<p>A bitmap that contains a color table describing how the pixel values correspond to RGB color values.</p> <p>Applies to: Impromptu</p>
<i>Dictionary column</i>	<p>A column that stores dictionary information. Dictionary columns are also known as <i>dictionary fields</i> in IDX transactional applications.</p> <p>Applies to: IDX Classic</p>

<i>Dictionary field</i>	<p>See Dictionary column.</p> <p>Applies to: IDX Classic</p>
<i>Dictionary table</i>	<p>A table that holds dictionary columns containing dictionary information.</p> <p>See also Dictionary column.</p> <p>Applies to: IDX Classic</p>
<i>Dimension</i>	<p>A broad grouping of descriptive data about a major aspect of a business, such as products, dates, or markets. Each dimension includes categories in one or more drill-down paths and an optional set of special categories.</p> <p>Applies to: PowerPlay</p>
<i>Dimension line</i>	<p>Shows the dimensions in the cube and the category within each dimension currently being examined.</p> <p>Applies to: PowerPlay</p>
<i>Display</i>	<p>The type of chart or graph. You can change the display; for example, you can switch from a crosstab to a pie display. You can also add another display; for example, you can have both multiline and crosstab displays in the same report.</p> <p>Applies to: PowerPlay</p>
<i>Display mode</i>	<p>Provides the commands for viewing the contents of an existing briefing book. You may be able to activate OLE objects, add text objects, print, and save, depending on the capabilities that the designer of the briefing book gave you.</p> <p>See also Edit mode.</p> <p>Applies to: Portfolio, PowerPlay</p>
<i>Displays PowerBar</i>	<p>A default PowerBar with buttons that you can use to change to another display or add another display to your report.</p> <p>See also PowerBar and PowerBar button.</p> <p>Applies to: PowerPlay</p>

Distributed catalog

Can be either a personal distributed catalog or a master distributed catalog. Impromptu maintains links between the master distributed catalogs and personal distributed catalogs, and automatically updates the personal distributed catalogs whenever changes are made to the master distributed catalog.

See also [Catalog](#).

Applies to: Impromptu

Dither

Simulates a color in a bitmap by mixing colors from the palette.

Applies to: PowerPlay

Docked

A PowerBar that is positioned on the perimeter of the window. When the PowerBar is positioned elsewhere, it is floating.

See also [Floating](#) and [PowerBar](#).

Applies to: PowerPlay

Drill down

An action that shows lower levels of categories.

See also [Drill up](#).

Applies to: PowerPlay

Drill through

An action that enables you to view transaction-level details by opening an Impromptu report from any cell in PowerPlay. The filters you've applied to the PowerPlay report are also applied to the Impromptu report.

Applies to: Impromptu, PowerPlay

Drill up

In Explorer reports, an action that shows higher levels of categories. In Reporter reports, an action that removes lower-level categories from the report.

See also [Drill down](#).

Applies to: PowerPlay

Driving category

A category whose values are compared with those specified in the exception definition.

Applies to: PowerPlay

Dynamic SQL

The standard method that the Loader uses to load a SQL Server Database.

Applies to: Extractor, Loader

Edit mode

Provides the tools for creating a new briefing book or for viewing and changing the contents of an existing briefing book. You can link or embed objects, add HotSpots, set the actions permitted to users of the briefing book in Display mode, and more.

See also [Display mode](#).

Applies to: Portfolio, PowerPlay

Edit password

A password that protects a briefing book from unauthorized changes. When you assign an edit password and no access password, anyone can use the briefing book in Display mode, but only users who know the edit password can use the briefing book in Edit mode. When you assign an edit password and an access password, users who know the access password can use the briefing book in display mode only. Users who know the edit password can use the briefing book in display mode and edit mode.

See also [Access password](#).

Applies to: Portfolio, PowerPlay

Element

The dimensions and measures used for generating information about your facility.

See also [Dimension](#) and [Measure](#).

Applies to: PowerPlay

Embed

Inserts information, created in another application, into another application. Once embedded, the information, called an object, becomes part of the document in which it is embedded. When you double-click an embedded object, you open the application in which the object was created; you can edit the object. You can embed objects in a PowerPlay report, or a PowerPlay report into another application.

See also [Link](#) and [Object Linking And Embedding \(OLE\)](#).

Applies to: PowerPlay

Equi-join

A type of join that retrieves all the rows from one table that have matching rows in another table.

See also [Join](#), [Nonequi-Join](#), [Outer join](#), and [Self-join](#).

Applies to: Impromptu

Estimated row byte length

The approximate number of bytes each row in the current table uses in the RDBMS.

Applies to: Extractor, Loader

Exception definition

A set of rules applied to selected information. If information in the report meets certain conditions (for example, negative numbers), then formatting is applied to it (for example, a pattern). Exceptions then stand out in the report.

Applies to: PowerPlay

Explorer report

Enables you to explore data quickly and easily, at any level of detail. PowerPlay shows the report with one level of one dimension in each row, column, or layer. You can show summary rows, columns, and layers that change dynamically as you drill down and drill up, and slice and dice. You can also show numeric values as a percentage of the rows, columns, layers, or the whole report, and have the percentages change dynamically as you drill down and up, and slice and dice.

See also [Reporter report](#).

Applies to: PowerPlay

Expression

Any combination of operators, constants, functions, data items, and other components that evaluates to a single value.

Applies to: Impromptu

Extension

Three characters that follow a file name. The following file extensions are related to Analyzer:

Extension	File Type	Applies to
ASC	Comma-delimited ASCII file	PowerPlay
BMP	Window Bitmap	Impromptu, PowerPlay
CAT	Catalog	Impromptu
CRE	PowerPlay version 4.x report	PowerPlay
CSV	Delimited ASCII file	Impromptu
DAT	PowerPlay file	Impromptu
DBF	dBASE file	Impromptu
DIB	Device Independent Bitmap	Impromptu, PowerPlay
DWA	Update or delete rows	Extractor, Loader
DWC	Column definition	Extractor, Loader
DWD	Actual data	Extractor, Loader
DWF	Foreign keys	Extractor, Loader
DWH	Header file	Extractor, Loader
DWP	Primary keys	Extractor, Loader
DWR	Data record counts	Extractor, Loader
DWS	Column metadata	Extractor, Loader
DWT	Table definition	Extractor, Loader
DWX	Delete rows or drop table	Extractor, Loader
DWZ	End of extraction	Extractor, Loader
ICR	Catalog content report	Impromptu
IMB	Template bitmap	Impromptu
IMR	Impromptu Report	Impromptu, PowerPlay
IMS	HotFile	Impromptu
IMT	Template	Impromptu
IQD	Transformer file	Impromptu

Extension	File Type	Applies to
MAC	Macro	Impromptu, PowerPlay
MCX	Compiled Macro	Impromptu
MDC	Multidimensional Cube	PowerPlay
PBB	Portfolio Briefing Book	PowerPlay
PPR	PowerPlay Report	PowerPlay
SQL	SQL file	Impromptu
TMP	Temporary file	Impromptu
TXT	Text files	Impromptu
WK1	Lotus 1-2-3 file	Impromptu
WMF	Windows Metafile	Impromptu, PowerPlay
XLS	Excel file	Impromptu, PowerPlay

Extract file set

The complete set of files produced by the Extractor.

Applies to: Extractor, Loader

Extractable domain

The collection of all extractable tables and columns in the transactional database.

Applies to: Extractor, Loader

Extraction set

A set of tables and columns that are selected for an extraction. The two types of extraction sets are the standard extraction set and the working extraction set.

Applies to: Extractor, Loader

Extraction start date

The beginning of the date range for which the Extractor extracts data. For the initial extraction, the start date is the earliest recorded date in the transactional database or a start date specified by the user. For incremental extractions, the start date is one day after the previous extraction's through date.

Applies to: Extractor, Loader

Extraction through date

The end of the date range for which the Extractor extracts data.

Applies to: Extractor, Loader

Extractor

The component of Analyzer that extracts data from your transactional database (your M database).

Applies to: Extractor, Loader

Feeler

Line connecting a value to the slice it represents in a pie display.

Applies to: PowerPlay

File PowerBar

A default PowerBar with buttons that you can use to perform the following tasks:

- Create, open, save, and type.
- Undo changes made to the report.
- Reset the dimension line to the top level.
- Drill through to Impromptu.
- Add, choose, and rank categories.
- Change the report type.

See also [PowerBar](#) and [PowerBar button](#).

Applies to: PowerPlay

Filter

A set of criteria used to retrieve a specific subset of records for your report. You can use a filter in reports to filter out unnecessary data and highlight the most important information in your report. For example, you can use a filter that shows only the data for your sales region. If you are using Impromptu Administrator Version, you can create a filter for a user class that is automatically applied when the user class accesses the table or column specified in the filter. For example, you can create a filter on the Salary table so that only the Human Resources department can view that table. All other user classes will not see the Salary table.

See also [Crosstab filter](#), [Detail filter](#), [Parent filter](#), and [Summary filter](#).

Applies to: Impromptu

Filter

Emphasizes information important to you by removing unnecessary information from the report. For example, instead of looking at the total sales picture, you can view sales for a specific region, or product line, or demographic market without deleting data in the report.

Applies to: PowerPlay

Flat file

A straight ASCII field-delimited file of extracted data that the Extractor copies using NFS. These flat files consist of one file per extracted table and dictionary, plus one file for each repeated field.

Applies to: Extractor, Loader

Floating

A PowerBar that is not docked on the perimeter of the window.

See also [Docked](#) and [PowerBar](#).

Applies to: PowerPlay

Fly-by text

Information about an object that appears when the pointer pauses over the object.

Applies to: PowerPlay

Flyout

A menu that appears when your pointer pauses over a dimension folder. You can use a flyout to filter out unnecessary information. When you select a category from the flyout, the level of the dimension changes, and so do the values in the report.

Applies to: PowerPlay

Footer

A free-format area that appears at the bottom of a list frame or below a specific portion of a list frame.

See also [Header](#).

Applies to: Impromptu

Foreign key

A column or combination of columns in a relational table that reference the primary key of another table.

Applies to: Extractor, Loader

Form frame

A type of frame that serves as a free-format container for other frames and report objects. Forms are useful when creating reports that

require custom placement of data, text, tables, and other report objects. A form frame shows one row, or record, at a time.

See also [Frame](#) and [Report object](#).

Applies to: Impromptu

Format PowerBar

A bar with buttons and options you can use to format selected report objects.

See also [PowerBar](#) and [PowerBar button](#).

Applies to: Impromptu

Format symbol

Tells Impromptu how to display the data value. For example, the numeric format symbol displays a single digit.

Applies to: Impromptu

Frame

A report object that acts as a container for other report objects. Frames are the basic building block with which you create Impromptu reports.

See also [Child frame](#), [Parent frame](#), [Chart frame](#), [Form frame](#), [List frame](#), [Primary frame](#), [Picture frame](#), [Text frame](#), and [Report object](#).

Applies to: Impromptu

Full-screen view

Hides the title bar, menus, and status line, maximizing the viewing area.

Applies to: PowerPlay

Function

There are two kinds of functions in Impromptu: built-in Impromptu functions and database functions. A function is a predefined calculation that takes one or more values, performs an operation, and returns a value.

Applies to: Impromptu

Grid

A series of evenly spaced horizontal and vertical lines in the page area. When you design or edit briefing books, you can use the grid as a guide to align objects.

Applies to: Portfolio, PowerPlay

Group data item

A control data item that is used to group data in a report.

See also [Associated data item](#).

Applies to: Impromptu

Header

A free-format area that appears at the top of a list frame or above a specific portion of a list frame.

See also [Footer](#).

Applies to: Impromptu

Hierarchy

A reference to the relationship of different dimension levels to each other. Hierarchies are supported by the source data and exist in cubes.

Applies to: PowerPlay

Horizontal axis

The X axis on a display.

Applies to: PowerPlay

HotFile

A separate local data table that can be added to your catalog or used in a report as if it were a regular database table. Once you create a HotFile, any report or catalog can use it. You can use a HotFile to link to any database. For example, you can use HotFiles to compare this month's data with last month's data.

Applies to: Impromptu

Hotspot

An object that performs one or more actions when you click it. Possible HotSpot actions include jumping to other pages in the briefing book, launching programs, running macros, and exiting Portfolio. You can click a HotSpot to initiate its actions, or you can choose it from the HotSpot menu. The HotSpot menu is available when the active page contains HotSpots.

Applies to: Portfolio, PowerPlay

Icon

The graphical representation of an object that you can select and open, such as a drive, disk, folder, document, or application. In an OLE operation, you can choose to display a linked or embedded object, or its native icon. See also static icon.

Applies to: Portfolio, PowerPlay

<i>Impromptu</i>	A Cognos tool used to build and maintain data catalogs. Applies to: Impromptu
<i>Incremental extraction</i>	Any extraction that is run after the completion of an initial extraction. See also Initial extraction . Applies to: Extractor, Loader
<i>Incremental load</i>	Any load that is performed after the completion of the initial load. See also Initial load . Applies to: Extractor, Loader
<i>Initial extraction</i>	The first extraction performed on the transactional database. See also Incremental extraction . Applies to: Extractor, Loader
<i>Initial load</i>	The first load performed on the Analyzer database. See also Incremental load . Applies to: Extractor, Loader
<i>In-place activation</i>	Activates an OLE object within the window where it is linked or embedded; the toolbars and menus are replaced by those of the source application. (In Windows 95, the toolbars and menus merge with those of the source application.) In-place active objects are identified by a special border. Applies to: Portfolio, PowerPlay
<i>Integer_Exp</i>	An integer constant, an integer data item, or any expression (including a numeric_exp) resulting in an integer value. Applies to: Impromptu
<i>Intersected category</i>	Combines categories from different dimensions into new categories. For example, you can select the intersection of Products and Regions, and add the new intersected category as rows. If you add Years as columns, the report shows the number of products sold over the years by region.

Applies to: PowerPlay

Interval_Exp

An interval constant, an interval data item, or any expression resulting in an interval value.

Applies to: Impromptu

Join

Defines the relational links between tables in the physical database. These joins enable you to relate the data in one table to the data in another table in the same database so that you can retrieve data from more than one table at a time. You join tables using columns in tables. For example, the Customer table and the Sales table can be joined using the Cust column.

See also [Equi-join](#), [Nonequi-Join](#), [Outer join](#), and [Self-join](#).

Applies to: Impromptu

Key

Keys are used to uniquely identify each record in a table. Keys are also used to make joins between tables. For example, Cust-id is the key of the Customer table because there can only be one customer ID for each customer.

Applies to: Impromptu

Label

The name of a row, column, or layer.

Applies to: PowerPlay

Layer

A third set of dimension categories, along with rows and columns, that you can add to a report. Details for another dimension provide a new perspective on your report results. A report can contain several layers, but you can look at only one at a time. For example, a report currently shows the number of tents sold in California between 1995 and 1996. You add another layer to show the value of the tents sold. Both layers show the same rows and columns, but use different measures.

Applies to: PowerPlay

Layer label

The name of the layer.

Applies to: PowerPlay

Layout PowerBar

A bar with buttons and options you can use to work with report objects.

See also [PowerBar](#) and [PowerBar button](#).

Applies to: Impromptu

Legend

An explanatory list of categories in the report. It shows the category name and the color that is used to represent the associated data. The legend doesn't appear in crosstab, simple bar, single line, and 3-D bar displays.

Applies to: PowerPlay

Link

The connection between a linked object and the application in which it was created. When the information changes in the source file, the changes are reflected in the destination file. You can choose to update linked information manually or automatically.

See also [Embed](#) and [Object Linking And Embedding \(OLE\)](#).

Applies to: Impromptu

List frame

A type of frame that's designed to report tabular data in rows and columns. Each column in a list frame displays all the values for a data item in the database or a calculation based on data items in the database.

See also [Frame](#) and [Report object](#).

Applies to: Impromptu

Loader

The component of Analyzer that creates and loads a relational database (the Analyzer database) on the server using data files produced by the Extractor.

Applies to: Extractor, Loader

Log file

A file that contains information about the load process. A log file can be useful in tracking down load problems. The following files are log files:

- DWLOG.TXT is the Loader's log file. IDX strongly recommends that this log file be turned on. It contains all text written to the Loader Status window text box.

- DWERRLOG.TXT contains additional information about SQL Server errors.

Applies to: Extractor, Loader

Long name

The comprehensive or complete name for a dimension or category that is often accompanied by a shorter, abbreviated name. For example, the long name could be "all products" and the short name "prod." Long names are defined by the administrator. See also short name.

Applies to: PowerPlay

Lowest detail

The lowest level of information available. For example, you have a category called 1996 that is divided into four quarters. Quarters are divided into months, which are in turn divided into weeks. The lowest level of detail available for that dimension is weeks.

Applies to: PowerPlay

Macro

A customized sequence of instructions ("macro commands") that Cognos applications can carry out.

Applies to: PowerPlay

Marked for insertion

A data item that will appear in the report. This icon appears beside the data in the Data tab (Query dialog box). Data items can be included in the query and not marked for insertion in the report.

Applies to: Impromptu

Marker

The graphical representation of a single data point in a report.

Applies to: PowerPlay

Master distributed catalog

Intended for a workgroup or company where several users need to create and edit reports by using a common source of information. Only the Creator class can modify or change the master distributed catalog. When users first open a master distributed catalog, Impromptu makes a copy of the master distributed catalog on the user's PC. This local copy is called a personal distributed catalog, and allows users to move and rename folders, and work offline with Impromptu. Impromptu maintains links between master distributed catalogs and personal distributed catalogs, and automatically updates these personal distributed catalogs whenever changes are made to the

master distributed catalog. See also catalog, personal catalog, shared catalog, secured catalog, and source catalog.

Applies to: Impromptu

MDC

See **Multidimensional cube (MDC)**.

Measure

A key performance indicator that is quantifiable and used to determine how well a business is operating. For example, measures can be Revenue, Revenue/Employee, and Profit Margin %. The measures folder is always the last folder on the dimension line.

Applies to: PowerPlay

Metacharacter

A character used in pattern matching, such as asterisk (*), at-sign (@), caret (^), exclamation (!), left angle bracket (<), or-bar (|), parentheses (), pound (#), question mark (?), right angle bracket (>), or slash (\).

Applies to: Impromptu

Metadata

Information about the catalogs, schemas, tables, and columns in the database.

Applies to: Extractor, Impromptu, Loader

Metadata control table

A table that keeps track of metadata, changes to the metadata, and historical information about the loads. Metadata control tables control the actual loading of data into the database and provide detailed information about the tables and columns in the database.

Applies to: Extractor, Loader

Metafile

An image that is generated by the calculation of position on the screen. It can produce more intricate images than a bitmap. Metafiles usually have the extension .WMF when they are stored as files.

Applies to: Impromptu

Missing value

A category may have a missing value if no data is available, or if the measure has no relevance in the current context. Missing values appear in a report as zeros (00000), "na" (not available), a blank (nothing in the cell), or "missing," depending on how the measures in the cube were designed to handle missing values.

Applies to: PowerPlay

Model

A multidimensional representation of a business comprising the structures and specifications for one or more PowerCubes. The information for a model is stored in a model file, with the extension .PYE (binary) or .MDL (ASCII). PowerPlay Transformer processes data with a model file to produce a PowerCube.

Applies to: PowerPlay

Multidimensional cube (MDC)

A file format that contains either all of the data for a PowerCube or a pointer to an information source on an OLAP server. In PowerPlay version 4.1, a multidimensional cube was known as an extract.

Applies to: PowerPlay

Multiline display

A display that reveals and compares trends and cycles, that shows relationships between variables, and that shows time series analysis and relationships between variables.

Applies to: PowerPlay

Native icon

The icon that belongs to an application or a file.

Applies to: PowerPlay

Nested object

An OLE object contained within one or more other OLE objects.

Applies to: Portfolio, PowerPlay

Network File System (NFS) client

A network utility that Analyzer uses to transfer files from the transaction system to the network.

Applies to: Extractor, Loader

Network File System (NFS) server

A network utility that Analyzer uses to transfer files from the network to the Analyzer Server.

Applies to: Extractor, Loader

NFS client

See [Network File System \(NFS\) client](#).

NFS server

See [Network File System \(NFS\) server](#).

Nonequi-Join

A type of join that retrieves all the rows from one table that meet the criteria in another table. For example, for each product, you can list the active accounts that have not yet purchased a product using the not equal to (<>) operator.

See also [Join](#), [Equi-join](#), [Outer join](#), and [Self-join](#).

Applies to: Impromptu

Numeric_Exp

A numeric constant, a numeric data item, or any expression resulting in a numeric value.

Applies to: Impromptu

Object

In Impromptu, any piece of information that you create and edit, often with an application other than Impromptu, and then insert and store in an Impromptu report.

In PowerPlay, a table, display, graphic, or other item of information that you create and edit, often with an application other than PowerPlay, and then insert and store in a PowerPlay report.

In Portfolio, anything you add to a briefing book page, other than a background picture or pattern. For example, text and icons are considered objects.

Applies to: Impromptu, Portfolio, PowerPlay

Object Linking And Embedding (OLE)

A Microsoft Windows facility that enables applications to share data. When you use OLE, two applications can share data through a connection that you establish.

See also [Link](#) and [Embed](#).

Applies to: PowerPlay

Object PowerBar

A PowerBar with buttons that you can use to perform the following tasks:

- Change the properties of a selected object.
- Add a text, icon, picture, or OLE object.
- Format a selected object as an icon or a button.
- Show or hide the border of a selected object.

See also [PowerBar](#) and [PowerBar button](#).

Applies to: Portfolio, PowerPlay

ODBC	See Open database connectivity (ODBC) .
ODBC driver	<p>A dynamic-link library (DLL) that an ODBC-enabled application, such as Impromptu, can use to gain access to a particular data source. Each database management system (DBMS), such as dBASE, requires a different driver.</p> <p>See also Open database connectivity (ODBC).</p> <p>Applies to: Impromptu</p>
OLAP	See Online analytical processing (OLAP) .
OLE	See Object Linking And Embedding (OLE) .
OLE Automation	<p>An industry standard that allows applications to expose OLE objects to development tools, macro languages, and other applications that support the standard. With OLE automation, you can work in one application from within another application.</p> <p>See also Object Linking And Embedding (OLE).</p> <p>Applies to: PowerPlay</p>
Online analytical processing (OLAP)	<p>Industry term for multidimensional data representation.</p> <p>Applies to: PowerPlay</p>
Open database connectivity (ODBC)	<p>A Microsoft vendor neutral interface between database management systems (DBMS) from multiple vendors. It is based on existing standards from the SQL Access Group (SAG), X/Open, and ANSI.</p> <p>Applies to: Analyzer</p>
Operator	<p>Specifies what happens to the values on either side of the operator. The following list describes the four types of operators:</p> <ul style="list-style-type: none">▪ <i>Logical operator</i> defines relationships between two parts of the expression.▪ <i>Arithmetic operator</i> performs arithmetic operations on two parts of an expression.▪ <i>String operator</i> concatenates two character strings.

- *Comparison operator* compares one or more values that you enter against the values in the database.

Applies to: Impromptu

Outer join

A type of join that retrieves rows from one table even if the rows in another table do not match. You can use the following types of outer joins:

- *Left outer join* includes all rows from Table A, matched or not, plus the matching values from Table B.
- *Right outer join* includes all rows from Table B, matched or not, plus the matching values from Table A.
- *Full outer join* includes all rows from both tables, merged where matches were found. See also equi-join, non-equi-join, and self-join.

See also [Equi-join](#), [Nonequi-Join](#), [Join](#), and [Self-join](#).

Applies to: Impromptu

Output column

A column definition that the Extractor extracts to the Analyzer server. Output columns are based on source columns and are used by the Loader to create columns in the Analyzer database.

Applies to: Extractor, Loader

Output table

A table definition that the Extractor extracts to the Analyzer server. Output tables are based on source tables and are used by the Loader to create tables in the Analyzer database.

Applies to: Extractor, Loader

Overflow value

A value that is larger than the measure's storage type allows. It shows in a report as "overflow." The administrator defines the measure's storage type when creating the cube.

Applies to: PowerPlay

Page boundary

A box shown around the page area. When you design or edit briefing books, use the page boundary as a guide to help you place objects within the page area. Objects placed outside the page boundary are not visible when the briefing book is viewed at 100% zoom at the target screen resolution.

Applies to: Portfolio, PowerPlay

Parent filter

A filter created for the parent user class of the selected user class. For example, a user class called Employees is based on the user class called Managers. In this case, the Managers user class is the parent user class. If you create a filter for Managers, it is automatically applied to Employees. The filter for Managers is a parent filter for Employees.

See also [Filter](#).

Applies to: Impromptu

Parent frame

A frame that contains one or more subordinate frames or report objects.

See also [Frame](#) and [Report object](#).

Applies to: Impromptu

Partitioning

A process by which Transformer divides a large PowerCube into a set of nested "sub-cubes" called partitions. Partitioning optimizes run-time performance in PowerPlay by reducing the number of data records searched to satisfy each information request.

Applies to: PowerPlay

Percentage of error

The amount of error that the Loader allows in a file before it aborts the file reconciliation step. If a file reconciliation fails, the entire extraction set reconciliation fails.

Applies to: Extractor, Loader

Percentile

The value on a scale of one hundred that indicates the percent of a distribution that is equal to or below it.

Applies to: Impromptu

Personal catalog

Intended for the small business owner who wants to maintain data such as personal information, customer lists, and product pricing. Use a personal catalog if you are the only person using the catalog and you are using the Administrator Version of Impromptu.

See also [Catalog](#).

Applies to: Impromptu

Personal distributed catalog

Personal distributed catalogs exist on the user's PC, and are copies of the master distributed catalog. They are created the first time the user attempts to use a master distributed catalog. Users can work offline with their personal distributed catalogs. They can also modify their personal distributed catalogs by moving and renaming folders. However, they cannot change the tables, columns, or joins that are defined for the distributed catalog. Impromptu maintains links between the master distributed catalogs and personal distributed catalogs, and automatically updates the personal distributed catalogs whenever changes are made to the master distributed catalog. See also catalog, personal catalog, shared catalog, secured catalog, and source catalog.

Applies to: Impromptu

Picture frame

A frame that you can use to show a bitmap (BMP) or Device Independent Bitmap (DIB). You can enhance the appearance of your reports by adding images such as a company logo. In addition, you can display pictures, such as your company's products or employees, that change based on the content for the items.

See also [Frame](#) and [Report object](#).

Applies to: Impromptu

Pie display

A display that shows the relationship between the whole and the parts. For example, a pie display can show you how much of a department's budget goes to paper supplies.

Applies to: PowerPlay

Placeholder

A representation of what data should appear in place of the placeholder. Placeholders determine where and how the data and calculations will be positioned and displayed in reports that use the template. You must fill in all placeholders to create a report. For example, you can add placeholders to a template that represent the customer's address in a report. This helps other users understand how to complete the report.

Applies to: Impromptu

Portfolio

The Cognos application you use to create and view briefing books.

See also [Briefing book](#).

Portfolio

PowerBar

A bar with buttons that perform commands.

See also [PowerBar button](#), [Book PowerBar](#), [Catalog PowerBar](#), [Displays PowerBar](#), [File PowerBar](#), [Format PowerBar](#), [Layout PowerBar](#), [Object PowerBar](#), [Standard PowerBar](#), [Tools PowerBar](#), and [View Modes PowerBar](#).

Applies to: Impromptu

PowerBar button

A button that you click to perform an action. Buttons that perform related actions are grouped on a PowerBar.

See also [PowerBar](#).

Applies to: PowerPlay

PowerCube

Also called *cube*. A set of data that contains information that focuses on specific aspects of your facility. It is organized into dimensions to provide for faster retrieval and drill down. For example, one cube might store data on patients while another cube might store data on invoices. Cognos reports are based on cubes. In PowerPlay version 4.1, PowerCubes were known as extracts.

Applies to: PowerPlay

PowerCube object

An object in a model corresponding to a PowerCube. It contains specifications that tell Transformer how to build the PowerCube and how to reflect the status once the PowerCube has been built.

Applies to: PowerPlay

PowerPlay

A multidimensional online analytical processing (OLAP) tool from Cognos that Information Delivery uses in conjunction with the briefing book to generate your facility's reports.

Applies to: PowerPlay

Presummarization

Summarizing calculations that are performed at the time a cube is built. See [summary partition](#).

Applies to: PowerPlay

Primary drill-down path

In PowerPlay, one of the drill-down paths in a dimension that contains multiple drill-down paths.

In Transformer, one of the drill-down paths in a dimension that contains multiple drill-down paths. Partitioning and allocation can take place only on the primary drill-down path.

See also [Alternate drill-down path](#).

Applies to: PowerPlay, Transformer

Primary frame

A frame that serves as the default object into which Impromptu inserts report objects such as placeholders and data. The first form frame or list frame that's created in a report or template is automatically designated as the primary frame.

See also [Frame](#) and [Report object](#).

Applies to: Impromptu

Primary key

A row addressing mechanism. It is one column or a combination of columns that uniquely identifies a record in a relational table. No two rows in the same relational table have the same primary key.

Applies to: Extractor, Loader

Property

A named attribute of an object.

Applies to: Impromptu

Protected cube

A multidimensional cube where members of different user classes have access to specific categories, measures, or dimensions depending on the access privileges defined. Each user class can work with the data they require. For example, a product development manager needs data about his or her product while the vice-president of research and development needs data about all products.

Applies to: PowerPlay

Query

A question to the database, snapshot, or HotFile that defines what data you want to retrieve from the data source.

Applies to: Impromptu

Quickhelp

Shows the name of a PowerBar button when the pointer pauses over the button.

Applies to: PowerPlay

Raw data files

Raw data files are the files that contain the data from the user's transactional database. These files are loaded by the Loader.

Applies to: Extractor, Loader

RDBMS

See [Relational Database Management System \(RDBMS\)](#).

Record

Composed of one data value from each column in the database. Also known as a row.

Applies to: Impromptu

Referential integrity

A relational constraint that requires all foreign key values within a table to match their corresponding primary keys in the referenced relation.

Applies to: Extractor, Loader

Registry

The Windows registry stores information about applications installed on your computer.

Applies to: Analyzer

Relational database

Stores related data in separate tables. You define relationships between the tables and use these relationships to more easily retrieve information from the database. The Analyzer database is a relational database.

Applies to: Analyzer

Relational Database Management System (RDBMS)

A system on which a relational database runs.

See also [Relational database](#).

Applies to: Analyzer

Repeating field

An IDX standard dictionary data element that can contain multiple values; each value is contained in a separate field. The field repeats as necessary for each value of a particular type of data.

Applies to: IDX Classic

Report

A view of the current data in your company database organized and formatted the way you want it. The data you see in your report

depends on the data you can access from your catalog. A report can be based on a template. A report contains frames.

See also [Template](#) and [Frame](#).

Applies to: Impromptu

Report

A document created in PowerPlay. A report consists of data selected from a cube. When you save a report and later reopen it, PowerPlay opens the report with the latest data from the cube, if the cube has been updated.

Applies to: PowerPlay

Report definition

A definition of the data in the report and how the data is displayed and formatted. The report definition is static; it doesn't change when the report data changes. The database provides you with access to the most current data in the database. Therefore, when you save a report, you are not saving the actual data in your report, only the report itself. To save the report data, create a snapshot, create a HotFile, or use the Save As command to move the data to an external file in a specified format (for example, Microsoft Excel or Lotus 1-2-3). You could also print the report using the Print command to save a copy of its current data.

Applies to: Impromptu

Report navigator

An optional control in a HyperText Markup Language (HTML) report. It enables you to jump to a grouped column value or a specific page number in the HTML report.

Applies to: Impromptu

Report object

An object in a report. Report objects include text, pictures, frames, data items, report variables such as Date, Page Number, and so on. You can format report objects using the Format menu commands.

Applies to: Impromptu

Report token

A value that is supplied by your computer or by Impromptu. Report tokens are inserted into reports using the More Objects command from the Insert menu. Also known as a report variable. See also report variable.

Applies to: Impromptu

Report variable

A value that is supplied by your computer or by Impromptu. Report variables are inserted into reports using the More Objects command from the Insert menu.

Applies to: Impromptu

Reporter report

Enables you to build powerful, interactive, and automated reports in a variety of formats. PowerPlay can show categories from more than one dimension and more than one level of categories in rows, columns, or layers. You can also add calculated categories, create intersected categories, and add a ranking position column.

See also [Explorer report](#).

Applies to: PowerPlay

Rollup table

Reference tables created by IDX to support a hierarchical relationship of dimension levels. Rollup tables are static and exist in dictionary tables.

Applies to: Analyzer

Root category

The category in a dimension or subdimension from which all other categories are descendant.

Applies to: PowerPlay

Row

Composed of one data value from each column in the database. Also known as a record.

Applies to: Impromptu

Row

A category that shows related information in a horizontal list.

Applies to: PowerPlay

Row label

The name of a row.

Applies to: PowerPlay

Running-average

Listing of averages calculated by adding values, one by one, to the average calculation.

Applies to: Impromptu

<i>Running-count</i>	<p>Listing of the number of selected data items that is calculated by counting data items as they occur.</p> <p>Applies to: Impromptu</p>
<i>Running-maximum</i>	<p>Listing of the maximum values when adding data items, one by one, to the selection.</p> <p>Applies to: Impromptu</p>
<i>Running-minimum</i>	<p>Listing of the minimum values when adding data items, one by one, to the selection.</p> <p>Applies to: Impromptu</p>
<i>Running-total</i>	<p>Listing of the total values when adding data items, one by one, to the selection.</p> <p>Applies to: Impromptu</p>
<i>Scatter display</i>	<p>A display that compares two different measures. You must have at least two measures to use the scatter display effectively.</p> <p>Applies to: PowerPlay</p>
<i>Secured catalog</i>	<p>Intended for users who do not need or want to create or edit their own reports. The users cannot change the catalog in any way. They can run, export, and print reports that the administrator has created. This type of catalog is useful for users who are not familiar with Impromptu and just want to analyze the data in the "canned" reports.</p> <p>See also Catalog.</p> <p>Applies to: Impromptu</p>
<i>Selection criteria</i>	<p>Information the Extractor uses to determine what data it extracts from table groups.</p> <p>Applies to: Extractor, Loader</p>
<i>Self-join</i>	<p>A type of join that enables you to add two copies of the same table to a catalog so that you can relate values within a single table.</p> <p>See also Equi-join, Nonequi-Join, Outer join, and Join.</p> <p>Applies to: Impromptu</p>

- Share of*** A category shown as a percentage of another category. For example, you can find that Cooking Equipment accounts for 25% of the total sales for all products.
- Applies to: PowerPlay
- Shared catalog*** Intended for a workgroup or company where several users need to create and edit their own reports. A shared catalog is ideal in a LAN environment where the catalog can be stored in a shared drive and directory that everyone can access.
- See also [Catalog](#).
- Applies to: Impromptu
- Shared dimensions*** Two or more reports joined together to show simultaneous information about the same cube. Any combination of Reporter and Explorer reports can share the dimension line.
- Applies to: PowerPlay
- Short name*** Usually an abbreviation or code name for a more comprehensive long name for a dimension or category. For example, the short name could be "prods" and the long name "all products." Short names are defined by the administrator. See also long name.
- Applies to: PowerPlay
- Simple bar display*** A display that shows change over a specific time period, that contrasts two or more variables, and that reveals trends and irregularities.
- Applies to: PowerPlay
- Single line display*** A display that shows change over a specific time period, contrasts two or more variables, and reveals trends and irregularities.
- Applies to: PowerPlay
- Single-column key*** A primary key made up of only one column.
- Applies to: Extractor, Loader
- Slice and dice*** Changing and arranging data by such actions as dragging dimensions from the dimension line to the report and swapping rows, columns,

and layers (or other display components). For example, if a report shows the number of products sold by each branch at the end of the last quarter, you can slice and dice information to show revenue over the last two months for each product line.

Applies to: PowerPlay

Smartssummary

A summary component combined with a data item, that is automatically associated with its location. For example, if Total (Sales) is located in the Branch footer, then the display will reflect the total sales for each branch. The association of a SmartSummary determines what group it's calculated for. If a SmartSummary is explicitly associated, its display will reflect the group it's associated with, regardless of where you put it in the report. For example, if the SmartSummary Total (Sales) is associated with the Country group and you place it in the City footer, then the SmartSummary will still reflect the total sales for each country. Only the following summary components can be used to create a SmartSummary: Total, Minimum, Maximum, Average, Count, and Percentage.

Applies to: Impromptu

Snapshot

A permanent local copy of the data retrieved by a report. The data on your PC can be shown and even manipulated at a later date without having to connect it to the original database.

Applies to: Impromptu

Source catalog

A distributed catalog on the LAN that is maintained by the administrator. When users open a distributed catalog, Impromptu makes a copy of the catalog on the user's PC. Impromptu maintains a link with the original source catalog so that if any changes are made to the original, each user's copy is updated automatically. Also called a master catalog.

See also [Catalog](#).

Applies to: Impromptu

Source column

A column defined in the transactional database through IDX's DBMS. Source columns are the sources of data that the Extractor copies from the transactional database.

Applies to: Extractor, Loader

Source table

A tables defined in the transactional database through IDX's DBMS. Source tables are the sources of data that the Extractor copies from the transactional database.

Applies to: Extractor, Loader

Source value

The data value that is retrieved from a source data record and used to identify and/or locate a category.

Applies to: PowerPlay

Special category

A category that groups a set of regular categories from any level in the same dimension without regard to their normal hierarchical organization. For example, you have a dimension called Management that includes the levels Senior Management, Middle Management, and Junior Management. You can have a special category called Social Committee that includes specific personnel from each of these levels.

Applies to: PowerPlay

SQL

See [Structured Query Language \(SQL\)](#).

Stacked bar display

A display that shows relative proportions of parts to the whole and the relationship between the parts.

Applies to: PowerPlay

Stacked line display

See multiline display.

Applies to: PowerPlay

Standard column

A column that belongs to the standard extraction set.

See also [Standard extraction set](#).

Applies to: Extractor, Loader

Standard extraction set

A set of data elements for extraction that IDX predefines and supplies with Analyzer. This set includes the tables and columns that IDX has determined many users will want to extract. When the standard extraction set is extracted, it is part (if not all) of the working extraction set.

See also [Working extraction set](#).

Applies to: Extractor, Loader

Standard PowerBar

In Impromptu, a PowerBar with buttons and options that you can use to perform the following tasks:

- Create new reports.
- Open existing reports.
- Cut, paste, and copy report objects.
- Perform many other routine commands while you work with Impromptu reports.

In Portfolio and PowerPlay, a PowerBar with buttons that you can use to perform the following tasks:

- Create, open, and save a briefing book.
- Cut, copy, and paste objects.
- Get online Help.
- Switch to full-screen view.

See also [PowerBar](#) and [PowerBar button](#).

Applies to: Impromptu, Portfolio, PowerPlay

Standard table

A table that belongs to the standard extraction set.

See also [Standard extraction set](#).

Applies to: Extractor, Loader

Start date

See [Extraction start date](#).

Applies to: Extractor, Loader

Static icon

An icon that doesn't perform an action.

Applies to: Portfolio, PowerPlay

Static OLE object

An embedded or linked object that cannot be activated.

Applies to: Portfolio, PowerPlay

Status line

A bar that appears at the bottom of the report window. The status line is a source of context-sensitive help. The status line is continually updated to provide you with information as you're working. It tells

you what's happening, where you are, and what your options are. If your pointer is over a PowerBar button or if you've highlighted a command, the status line tells you what the command does. The status line is divided into three sections. The catalog section shows which catalog is currently active. The report section displays report information such as progress indicators during saving, retrieving, and printing. It also displays coordinates during drag-and-drop operations. The general section provides information about memory, keyboard toggles, and product toggles (such as autoretrieve).

Applies to: Impromptu

Storage type

Specifies how values are stored in the data source. For example, if the source values represent text or alphanumeric category labels, they are stored as "Text."

Applies to: PowerPlay

Stored procedure

A procedure defined and stored in a host database (such as Oracle or Sybase) that performs actions on the database.

Applies to: Impromptu

String

A character string enclosed in quotation marks. For example: "Cognos."

Applies to: Impromptu

String_Exp

A string constant, a string data item, or any expression resulting in a string value.

Applies to: Impromptu

Structure query

Contains columns that map onto levels and categories to build dimensions. Structure queries define the structure of a model; they do not include measure values.

Applies to: PowerPlay

Structured Query Language (SQL)

The structured query language for accessing relational database information. You don't need to know SQL to use Impromptu; Impromptu automatically generates the SQL needed to retrieve the data for your report.

Applies to: Impromptu

<i>Style</i>	<p>A defined group of formatting options you can apply to selected report objects.</p> <p>Applies to: Impromptu</p>
<i>Style</i>	<p>A defined group of formatting options that you apply to selected categories or to an exception definition.</p> <p>Applies to: PowerPlay</p>
<i>Subdimension</i>	<p>A tree of categories with levels that are independent of levels in other parts of the dimension. A subdimension can be used to provide different levels of detail, or different detail altogether, for certain categories in a level. A subdimension can support an alternate drill-down path.</p> <p>Applies to: PowerPlay</p>
<i>Submenu</i>	<p>A cascading menu that contains its own set of commands. You access a submenu from another menu.</p> <p>Applies to: PowerPlay</p>
<i>Summary</i>	<p>See Aggregate.</p>
<i>Summary component</i>	<p>An operation that enables you to extract summary information from your data in the following ways: total, minimum, maximum, average, count, rank, percentile, percentage, running total, running minimum, running maximum, running average, and running count.</p> <p>Applies to: Impromptu</p>
<i>Summary filter</i>	<p>Limits the data retrieved in a report and can include summary components. A summary filter eliminates data from a report based on summary data items. For example, you could create a summary filter that eliminates all distributors with sales totaling less than \$100,000. Data item summary values are calculated after the summary filter is applied.</p> <p>See also Filter.</p> <p>Applies to: Impromptu</p>

Summary partition

A summary partition contains presummarized values for the categories in upper levels of one or more dimensions. Information requests that can be satisfied from the summary partition can make use of the presummarization and therefore require less calculation at the time of the request.

Applies to: PowerPlay

Swapping

Exchanges the positions of categories in the report. You can swap rows and columns, columns and layers, or rows and layers. The terms rows and columns change depending on the current display. For a pie display, rows and columns are called displays and slices.

Applies to: PowerPlay

Synonym

An alternative name for a table, view, alias, or another synonym. A synonym can be used in SQL statements wherever a table or view is used. The effect of using a synonym is that the value of a synonym is substituted within the SQL statement.

Applies to: Impromptu

Syntax

Specific grammatical rules.

Applies to: Impromptu

Table

A portion of the database or HotFile that contains one kind of information organized into rows and columns. In Impromptu, a table is a label for the item in Impromptu that points to the database table. A catalog identifies the tables from the database you want to access in Impromptu.

Applies to: Impromptu

Table group

Analyzer's method for sorting the tables in the working extraction set.

Applies to: Extractor, Loader

Table of contents

A list of the page titles in a briefing book. When the Table of Contents is docked, it appears as a drop-down list from which you can select a page. When the Table of Contents is floating, it appears as a window in which you can select a page or, in Edit mode, change the order of the pages.

Applies to: Portfolio, PowerPlay

- TCP/IP*** See [Transmission Control Protocol/Internet Protocol \(TCP/IP\)](#).
Applies to: Analyzer
- Template*** A template is a pattern you can use to build reports. By using templates, you can save time and effort when you create new reports since you can base them on templates. If you create the same type of report frequently, the template can be your guide. A template can contain placeholders and store formatting information. You can specify information about margin settings, page orientation, font choices for different report objects, and so on.
Applies to: Impromptu
- Text frame*** A type of frame that contains text or data. Text frames are useful when creating blocks of static text (as in form letters), or dynamic text based on data. All text in Impromptu reports is contained in text frames. For example, whenever you see a data cell in a list frame, or a label in a summary calculation, you're seeing a text frame.
See also [Frame](#) and [Report object](#).
Applies to: Impromptu
- Text object*** An object that includes text.
Applies to: Impromptu
- Text object*** Text that you add to a briefing book. You may or may not be able to add text objects in Display mode, depending on the capabilities that the designer of the briefing book gave you. OLE objects that contain text, such as embedded documents from Microsoft Word, are not considered text objects.
Applies to: Portfolio, PowerPlay
- Through date*** See [Extraction through date](#).
Applies to: Extractor, Loader
- Thumbnail*** A mode of operation you can set in Impromptu to create a temporary data file with a restricted number of rows.
Applies to: Impromptu

<i>Tick</i>	<p>Small lines that intersect an axis like divisions on a ruler.</p> <p>Applies to: PowerPlay</p>
<i>Time_Exp</i>	<p>A time constant, a time data item, or any expression resulting in a time value, for time, datetime, or interval types.</p> <p>Applies to: Impromptu</p>
<i>Token</i>	<p>A value that's supplied by your computer or by Impromptu. Tokens are inserted into reports using the More Objects command from the Insert menu. See also report variable.</p> <p>Applies to: Impromptu</p>
<i>Tools PowerBar</i>	<p>A bar with buttons and options you can use to quickly launch Portfolio, PowerPlay Transformer, PowerPlay, Scheduler, CognosScript Editor, and ODBC Administrator. You can also define or edit data by using the Data Definition button on this PowerBar.</p> <p>See also PowerBar and PowerBar button.</p> <p>Applies to: Impromptu</p>
<i>Trailing spaces</i>	<p>Additional spaces at the end of dictionary entries.</p> <p>Applies to: Extractor, Loader</p>
<i>Transaction query</i>	<p>Contains transaction records that provide measure values for PowerCubes.</p> <p>Applies to: PowerPlay</p>
<i>Transactional applications</i>	<p>The IDX applications you use to enter data. Transactional applications include, but are not limited to, Billing and Accounts Receivable (BAR), Patient Scheduling (SCHED), and Managed Care Application (MCA).</p> <p>Applies to: IDX Classic</p>
<i>Transactional database</i>	<p>An M database that stores information entered through IDX's transactional applications. Transactional databases are continually updated as transactions are entered.</p> <p>Applies to: IDX Classic</p>

<i>Transactional server</i>	<p>The network server on which the transactional database and IDX transactional applications run.</p> <p>Applies to: IDX Classic</p>
<i>Transformer</i>	<p>Transformer is a Cognos tool used to build new cubes and update existing cubes with fresh data from the Analyzer database</p> <p>Transformer</p>
<i>Transmission Control Protocol/Internet Protocol (TCP/IP)</i>	<p>The network protocol that connects different components used by IDX applications.</p> <p>Applies to: IDX Classic</p>
<i>User class</i>	<p>A group of users (or a single user) who need access to the same data in the catalog and who have the same access privileges. For example, European salespeople all need data on their customers who are in Europe, while North American salespeople need data on their customers in North America.</p> <p>Applies to: Impromptu</p>
<i>User profile</i>	<p>All the information about a user class, such as the name of the user class, password, data access privileges, whether the user class can create reports, and so on.</p> <p>See also User class.</p> <p>Applies to: Impromptu</p>
<i>User-defined columns</i>	<p>Columns you add to the working extraction set using Function 1 of the Extractor. You can edit and delete these columns.</p> <p>Applies to: Extractor, Loader</p>
<i>User-defined tables</i>	<p>Tables you add to the working extraction set using Function 1 of the Extractor. You can edit and delete these tables.</p> <p>Applies to: Extractor, Loader</p>
<i>Value</i>	<p>In Impromptu, a fixed and unchanging component that you can use in an expression, such as string, number, date, time, date-time, or interval.</p> <p>In PowerPlay, a number that appears in a cell in the report.</p>

Applies to: Impromptu, PowerPlay

Variable

A value that's supplied by your computer or by Impromptu. Variables are inserted into reports using the More Objects command from the Insert menu.

Applies to: Impromptu

Variable

A symbol representing a value supplied by your computer or by PowerPlay. For example, the variable "date" represents today's date. You can add a report variable such as "date" to a report title, header, or footer.

Applies to: PowerPlay

Vertical axis

The Y axis on a display.

Applies to: PowerPlay

View

A definition stored in a database's metadata that defines a 'virtual table' that does not exist until referenced in an SQL statement, such as a select statement.

Applies to: Impromptu

View

Different ways of looking at a report-normal, page layout, and page width. You can use a combination of views to work more efficiently. For example, you can use normal view for working with the report, and page layout or page width view for changing how the report will look when printed.

Applies to: PowerPlay

View Modes PowerBar

A default PowerBar with buttons that you can use to switch to a different view.

See also [PowerBar](#) and [PowerBar button](#).

Applies to: PowerPlay

Working extraction set

The set of tables and columns that you extract when you perform an extraction. The standard extraction set is always part of the working extraction set because it is automatically extracted during an extraction.

See also [Standard extraction set](#).

Applies to: Extractor, Loader

ymdinterval_exp

A year-month-day interval expression.

Applies to: Impromptu

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