CA IDMS - 19.0
Using ASF

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Using ASF

ASF operates in the CA IDMS/DC and CA IDMS UCF environment. You can access ASF from a 3270-type terminal or from an IBM Personal Computer using 3270 emulation.

This section presents general introductory material on topics that will help you to use ASF effectively. For more information, see the following topics:
The Structure and Functions of ASF

ASF consists of a series of menu-driven screens. The screens are grouped into functional categories, as illustrated in the figure below.

- Session Control (see page 9)
- Information (see page 9)
- Query (see page 10)
- Definition (see page 10)
- Data Access (see page 11)
- Passkey (see page 12)
- Administrative (see page 12)
The functions and screens in ASF are listed below:

- **Session control** screens enable you to begin and end an ASF session:
  - Signon (SIGN)
  - Activity Selection (ASEL)
• **Activity Selection (ASEL)**

• **Information** screens provide information on using ASF:
  - Help (HELP)
  - Message (MSGS)

• **Query** enables you to access OnLine Query (CA OLQ) directly through ASF if CA OLQ is installed at your site.

• **Definition** screens enable you to define data tables (both stored tables and views):
  - Table Definition (TDEF)
  - Column Definition (CDEF)
  - Extended Column Definition (XCOL)
  - Extended Table Definition (XTAB)
  - Extended Table Derivation (XDER)
  - Extended Selection Definition (XSEL)
  - Extended Key Definition (XKEY)

• **Data access** screens enable you to manipulate the data in a table:
  - Data Selection (DSEL)
  - A data display screen accessed through the Load Data (DLOD) and Display/Change Data (DDIS) functions

• **Passkey** screens enable you to give other users access to tables you create:
  - Passkey Function (PASS)
  - Give Passkeys (GPAS)
  - Delete Passkeys (DPAS)
  - Show Passkeys Given (PASG)
  - Show Passkeys Held (PASH)

• **Administrative** screens enable authorized personnel to administer the ASF system:
  - Administrative Control (CNTL)
  - Catalog Control (CTLG)
  - User Limits and Defaults (ULIM)
User Maintenance (USER)
System Table Maintenance (SYST)
Row-level security screens enable you to restrict other users' access to rows of data within tables:
- Display/Change Row-Level Security (RDIS)
- Load Row-Level Security (RLOD)
- Row-Level Security (RSEC)
- Select Row-Level Security (RSEL)

The functional categories and the screens each includes are discussed in more detail below.

Session Control

An ASF session involves signing on to an ASF system and selecting tables and activities. The two screens used to control an ASF session are:

- **Signon (SIGN)** allows the user to:
  - Sign on to ASF as an authorized user
  - Sign on to the appropriate ASF system
  - Exit ASF if the user does not sign on

- **Activity Selection (ASEL)** allows the user to:
  - Name a new table to be defined
  - Select an existing table
  - Select an activity
  - Exit ASF

Information

**Online Assistance**

ASF provides information screens that help you through an ASF session:

- **Help (HELP)** provides tutorials on the use of the ASF screens. Help text is provided for each ASF screen. The Help facility displays the appropriate text for the screen being used when help is requested.
- **Message (MSGS)** provides informational messages related to ASF processing.

**Query**

**CA OLQ**

The **OnLine Query menu facility** can be accessed directly from ASF. If you have CA OLQ installed, you can select the Query function [(PF13) on the Activity Selection screen] and immediately display the CA OLQ Column Select screen for the table you were using in ASF. You can use CA OLQ to format a report for a table. If you haven't chosen a table in ASF, the Query function takes you to the Data Table Processing screen in CA OLQ.

For more information on using CA OLQ to process a table, see the OnLine Query documentation.

**Definition**

Applications are developed through ASF by defining data tables. Data tables can be defined easily by all users through the basic definition screens. ASF also provides extended definition screens for use by data processing professionals.

**Two Basic Definition Screens**

The following basic definition screens are always used in defining a data table:

- **Table Definition (TDEF)** allows the user to:
  - Specify the type of table being defined: STORED or VIEW
  - Specify a simple table derivation to define a view
  - GENERATE the table and an application for immediate online use of the table
  - DELETE the table definition, the generated application structures, and, for stored tables, all data stored in the table

- **Column Definition (CDEF)** allows the user to define each column to be contained in the stored table and specify the characteristics of each column.

**Six Extended Definition Screens**

The following extended screens are intended primarily for use by data processing professionals in further defining a data table:

- **Extended Column Definition (XCOL)** allows the user to define additional characteristics for a column and to edit the attributes automatically defined for a column.

- **Extended Table Definition (XTAB)** allows the user to override the default space allocation for the table, to specify access restrictions to be included in the ASF-created application, to review information, and if necessary, modify information supplied by ASF about the table.
Extended Table Derivation (XDER) allows the user to perform the following activities:

- Identify the sources from which a view is being derived
- Name the owner of the source table or the subschema if the source table was defined through a subschema
- Specify the conditions on which the source tables are to be joined

Extended Selection Definition (XSEL) allows the user to specify one or more selection criteria that become part of the table definition and are used as edit criteria for loading and/or displaying data.

Extended Key Definition (XKEY) allows the user to define keys used to index the table.

Row-Level Security (RSEC) allows the user to specify the security name for the table and any generic column names.

Data Access

When you generate a table through ASF, an application program that allows you to use the table online can be generated automatically. The application allows you to display, add, modify, and delete rows in the stored table and display and modify rows in a view. As part of the application, a Data Display screen is formatted for the table, displaying the columns defined for the table and providing response fields for adding and displaying rows of the table. Though not actually an ASF screen, the Data Display screen for a particular table can be accessed directly from ASF in the following ways:

Selecting Data to View: Through the Data Selection (DSEL) screen -- ASF provides a run-time selection screen similar to the Extended Selection Definition screen described earlier. The Data Selection screen allows you to specify a value or range of values for one or more columns in the table. Only the rows whose columns match the values specified will be displayed on the Data Display screen.

When you have specified the rows to be selected, the Data Selection screen transfers control directly to the Data Display screen, which displays the first row that matches the selection conditions specified.

The selection criteria do not affect what data is stored in the table, only what data is displayed in this run of the ASF-created application.

Adding Data: Through the Load Data (DLOD) function -- The Data Display screen displays the column headings so you can enter new data online, one row at a time, and add the new data to the database.

Row by Row Changes: Through the Display/Change Data (DDIS) function -- The Data Display screen lists the column headings and one row of data and allows you to:

- Modify the table in the database by changing, adding, or deleting data
- Display the entire table, one row at a time
When you access the Data Display screen, you are using the application developed by ASF for the data table. After completing all data access transactions (displaying, adding, changing, and deleting rows) through the table's online application, you return to ASF to continue or to conclude the ASF session.

Passkey

Control Access by Other Users

You can allow other users to access the applications you develop through ASF by issuing passkeys for your tables. Passkeys provide security for data tables. By granting and removing passkeys, you control what other users can do with the tables you create. For example, if you give a user an ADD passkey for your table, the user can add rows to the table.

You can give a passkey for an individual table, your user ID, which allows the user receiving the passkey to access all of your tables, or to a folder (CA-ICMS users only). Passkeys can be given, deleted, and displayed through the following screens:

- **Passkey Function (PASS)** provides a menu of passkey activities.

- **Give Passkeys (GPAS)** allows you to issue passkeys to another user. The passkeys given determine what the user can do with your table(s).

- **Delete Passkeys (DPAS)** allows you to remove passkeys previously given to another user.

- **Show Passkeys Given (PASG)** allows you to display a list of all the users to whom you have issued passkeys for a particular table, or for your user ID. The list shows which passkeys you have given each user.

- **Show Passkeys Held (PASH)** allows you to display a list of all the passkeys you have received from other users.

Administrative

Running ASF

The administrative screens enable personnel authorized as ASF administrators to control and maintain the ASF system. You must have administrative authority in order to access any of these screens. ASF administrators have access to the following screens:

Control the System

- **Administrator Control (CNTL)** allows an ASF administrator to initialize the ASF system, identify database areas that ASF can use to store relational tables, set system-wide defaults, and perform maintenance activities.

Control Users and Tables
Catalog Control (CTLG) allows an ASF administrator to prevent a user from accessing ASF, to give and remove administrative authority, and to maintain the catalog associated with ASF. The catalog is a directory of ASF users and their tables.

Set User Defaults

User Limits and Defaults (ULIM) allows an ASF administrator to set the following defaults for an individual user:

- Database space allocation defaults
- Default models used to create the application
- Global passkey limitations for the ASF system
- Default area name for table data
- Specify limits for unstructured objects

User defaults override the defaults set for the ASF system.

Add, Delete Users

User Maintenance (USER) allows an ASF administrator to add and delete users from the catalog.

Low Level Security for Users

System Table Maintenance (SYST) allows an ASF administrator to initiate row-level security for chosen ASF users.

Low Level Security for Tables

Row-Level Security screens allow you to assign row-level security to stored tables.

RDIS -- Display/Change Row-Level Security

RLOD -- Load Row-Level Security

- RSEL -- Select Row-Level Security

ASF Screen Format

The First Two Lines

All ASF screens have a similar design. The first two lines of all screens (after the masthead) contain the same fields. These lines and the fields they contain are shown below; explanations of the fields follow.
Product name and release number

1. Screen title

2. Simulated PF-key field

3. Message display field

The first line contains the product name, release number, and screen title. To the right is a simulated PF-key field; to the left is the screen name field:

- The simulated PF-key field is an untitled field that you can use to simulate PF-keys when actual keys are unavailable. The use of this field is explained in detail under "ASF Screen Management Features" later in this section.

- The screen name field is an untitled field that displays the four-character screen name. This field can be used to move from one screen to another by changing the screen name. Use of this field is explained in detail under "Conducting an ASF Session" later in this section.

The second line contains the system message display field. This untitled field is used by the system to respond to your use of the screen. Messages are displayed to request additional information or action, to indicate that the information supplied has been processed, or to explain why information has not been processed.

The remaining lines on each screen contain menus, information display, prompts, and response fields into which you can enter information. Part III, "Automatic System Facility Screens," contains detailed presentations of each ASF screen.

ASF Screen Management Features

Contents

- Function Key Assignments Are Predefined (see page 15)
- Cursor Movement (see page 15)
- Message Display and Field Highlighting (see page 16)
- Default Value Assignment (see page 16)

ASF provides the following features that allow you to access and use the ASF screens efficiently:

- Function key assignments are predefined

- Cursor movement

- Message display and field highlighting

- Default value assignment
Function Key Assignments Are Predefined

The association between function keys and specific functions is predefined under ASF. You cannot change ASF function key associations. Function key assignments are either global or local.

Seven Global Keys

Global function keys perform the same functions at any point in an ASF session:

- Press [Enter] to submit information to ASF for processing.
- Press [Clear] to display the prior screen; press [Clear] from the Activity Selection screen to leave ASF and return to DC/UCF.
- Press [PA1] to access the Activity Selection screen from any screen. When on the Activity Selection screen, [PA1] displays the previously listed table directory.
- Press [PA2] to refresh the screen. Pressing [PA2] cancels the changes you have just typed on the screen, rewriting the screen as of the last time you pressed [Enter].
- Press [PF1] to invoke the Help function of ASF; the appropriate Help screen is displayed for the activity you are performing.
- Press [PF7] to scroll backward to the previous page of the currently displayed pageable screen. Pageable screens are indicated by the field Page__Of__.
- Press [PF8] to scroll forward to the next page of the currently displayed pageable screen.

Local Keys Vary with Screens

Local function keys perform different functions depending on the screen. The menu on each screen tells you the local function key assignments in effect for that screen.

When you are using a terminal that does not have PF-keys, you can perform PF-key-related functions by entering the appropriate PF-key number in the simulated PF-key field in the upper right corner of the screen. For example, to perform the function associated with [PF2], type 2 in the simulated PF-key field.

On screens with activity selection menus, you can select a PF-key-related function by entering any character in the response field associated with the listed function.

Cursor Movement

On all ASF screens, you can enter or change information only in response fields; you cannot change information in menu, display, or prompt fields. To ensure quick access to ASF response fields, use the [Tab], [Backtab], [Home], or [Return] key to move the cursor.
When the cursor is at a response field, you can key in new information or replace existing information. Additionally, you can press the space bar or the erase end-of-field key to delete characters across the response field. You can use the cursor control keys to move across the response field without deleting characters.

Message Display and Field Highlighting

Message Display

Messages are displayed in the system message display field on the second line of a screen. Messages perform the following functions:

- Request that you supply additional information
- Tell you what action is required next
- Inform you about what has been done with information you entered for processing
- Tell you why information has not been processed
- Report on the status of tables and processing

Field Highlighting

Highlighting is sometimes used in conjunction with a message to indicate the field on the screen referenced by the message. Highlighting can appear in any information display field on a screen.

Default Value Assignment

ASF supplies default values in the response fields of some screens. These default values allow you quick access to the information most likely to be used in response fields. Additionally, some default values are supplied as a result of processing performed on a screen.

Use or Change Defaults

You can decide to use the default values or change them by typing the appropriate value in place of the default value. More information on specific default values is provided in Part III, "Automatic System Facility Screens."

Conducting an ASF Session

Contents

- Beginning an ASF session (see page 17)
- Moving Between ASF Screens (see page 17)
- Ending an ASF Session (see page 19)
An ASF session begins when you access ASF from DC/UCF; the session ends when you exit from ASF and return control to DC/UCF. During an ASF session, you can use any number and combination of screens to perform various activities.

A Session Has Three Parts

- Beginning an ASF session
- Moving between the various ASF screens
- Ending an ASF session

Beginning an ASF session

To begin an ASF session, sign on to DC/UCF. At the ENTER NEXT TASK CODE prompt, type `asf`, as shown below:

```
ENTER NEXT TASK CODE:
?asf
```

Note: The task code prompt and/or the task code to invoke ASF may be different at your installation; check with your ASF administrator if you are unsuccessful in accessing ASF.

Press [Enter]. If your DC/UCF signon is sufficient to access the ASF system, the Activity Selection screen is displayed. If your DC/UCF signon is not sufficient to access the ASF system, the Signon screen is displayed, enabling you to sign on successfully to ASF:

- **Sign on as an authorized ASF user** by entering a valid user name and/or password.
- **Sign on to the correct ASF system** by entering the appropriate catalog.

Press [Enter]. When signon is successful, the Activity Selection screen is displayed.

Moving Between ASF Screens

When you have accessed an ASF screen, you can move to another screen in any of several ways.

Use the Menu

Select the function associated with the screen from the activity selection menu:

- Press the appropriate PF-key.
- Enter any character in the response field and press [Enter].
- Type the PF-key number in the upper right corner of the screen and press [Enter].
Specify a Screen

Enter the screen name in the upper left corner of the screen.

You can always move directly to a screen by entering the screen name in the upper left corner, even if the screen is not listed in the activity selection menu.

```
CA
tdef1 CA - Automatic System Facility nn.n ** Activity Selection ** 22
DC560002 SELECT NEXT ACTIVITY

User Name: SNELL

PF1 - Help           PF5 - Select Data          PF13 - Query
PF2 - Define Table   PF6 - Page Backward       PF14 - Signon
PF3 - Load Data      PF7 - Page Forward         PF15 - Prior Level
PF4 - Display/Change Data  PF8 - Passkey    CLEAR - Leave ASF
```

Enter screen name in the screen name field.

1. Enter the PF-key number in the simulated PF-key field.
2. Enter a character in the response field or press the PF-key.

Return

Once you have moved to a screen, you can:

- **Press [Clear]** to return to the prior screen.
- **Press [PA1]** to move to the Activity Selection screen.

⚠️ **Note:** Moving forward to another screen causes changes on the current screen to be processed. Returning to the prior screen by pressing [Clear] does not process changes on the current screen.

The following table shows ASF screens and the four-character screen name that can always be used to move directly to the screen.

⚠️ **Note:** You can review the screen names at any time during an ASF session by accessing the online Help facility (press [PF1]).

<table>
<thead>
<tr>
<th>Screen title</th>
<th>Screen name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Selection</td>
<td>ASEL</td>
</tr>
<tr>
<td>Signon</td>
<td>SIGN</td>
</tr>
<tr>
<td></td>
<td>DDIS</td>
</tr>
<tr>
<td></td>
<td>DLOD</td>
</tr>
</tbody>
</table>
### Screen title | Screen name
--- | ---
Data Display * | DSEL
* The screen formatted by ASF for the online application created for the table
Data Selection | DSEL
Table Definition | TDEF
Column Definition | CDEF
Extended Column Definition | XCOL (valid from CDEF only)
Extended Table Definition | XTAB
Extended Selection Definition | XSEL
Extended Key Definition | XKEY
Extended Table Derivation | XDER
Passkey Function | PASS
Give Passkeys | GPAS
Delete Passkeys | DPAS
Show Passkeys Given | PASG
Show Passkeys Held | PASH
Administrator Control (available with administrator authority only) | CNTL
Catalog Control (available with administrator authority only) | CTLG
User Limits and Defaults (available with administrator authority only) | ULIM
User Maintenance (available with administrator authority only) | USER
System Table Maintenance (available with administrator authority only) | SYST
Help | HELP
Message | MSGS
Column Select screen of OnLine Query menu facility * | CA OLQ
Display/Change Row-Level Security | RDIS
Load Row-Level Security | RLOD
Row-Level Security | RSEC
Select Row-Level Security | RSEL

* Other CA OLQ screens can then be accessed from this screen.

### Ending an ASF Session

To end an ASF session, return to the Activity Selection screen by pressing [PA1], then press [Clear] from the Activity Selection screen. This ends the session and returns control to DC/UCF. At this point, you can use another DC/UCF facility, or sign off from the system by entering `bye` at the ENTER NEXT TASK CODE prompt.
Selecting Tables

Most often, an ASF session involves creating a new table or selecting an existing table for processing.

**Naming a New Table**

New tables are created by entering a unique name in the Table Name field of the Activity Selection screen. A table name:

- Can be 1 to 32 characters long
- Can include letters, numbers, spaces, and special characters
- Cannot include a period (.), underscore (_), accent grave (&grave.), or backslash (\), and should not include a cent sign (&cent.)
- Cannot be the same as your user ID
- Cannot begin with spaces

When you enter the name of a new table, you must select DEFINE TABLE as your first activity.

**Listing Tables**

Existing tables are listed in the directory at the bottom of the Activity Selection screen. You can browse through the directory to display the names of all your existing tables. Press [PF8] to page the directory forward and [PF7] to page backward.

You can browse through the directory of another user if the user has given you a passkey to do so. For information on passkeys, see the section "Granting Access to Tables", and the section "Passkey Screens". To list another user's directory, enter the user's ID in the Table Owner field, leaving the Table Name field blank.

**Selecting a Table**

To select an existing table:

- Type the table name in the Table Name field. If the table is owned by another user, type the user’s ID in the Table Owner field.
- Type any character next to the name of a table listed in the directory, whether you are displaying your directory or another user’s directory.

When you select an existing table, you can select any activity that you have passkey authorization to perform.

**Tables in Folders**

When CA-ICMS is installed, the ASF directory can include folders as well as data tables. Data tables can be placed in folders through CA-ICMS. Folders are indicated by three periods (...) after a listed item. The following considerations apply to the use of folders in ASF:
When you select a folder from the directory, the folder's **access path** is displayed in the Table Name field and the contents of the folder are listed in the directory.

As you move down the levels of a folder, ASF adds to the access path displayed in the Table Name field. If the access path exceeds 64 characters, the Table Name field displays the minimum path needed to uniquely identify the folder or table selected.

You can redisplay the prior directory level of a folder by pressing [PA1].

You can select a table within a folder by finding the table in the directory and selecting it, or by entering an access path that identifies the table in the Table Name field.

When creating a new table through ASF, you cannot add it to a folder. You can include tables in folders only through CA-ICMS.

**Leaving a Table**

Once a table is selected, the directory is no longer displayed. To redisplay the directory and cancel the table selection, press [PA1].

A sample directory is illustrated below. Note that the directory includes two folders, which are indicated by three periods (...) after the folder name.

**Table Directory with Folders**

<table>
<thead>
<tr>
<th>Table Name:</th>
<th>Table Owner: SNELL</th>
</tr>
</thead>
<tbody>
<tr>
<td>_ APPLICANT</td>
<td></td>
</tr>
<tr>
<td>_ BUDGET</td>
<td></td>
</tr>
<tr>
<td>_ EMPLOYEE</td>
<td></td>
</tr>
<tr>
<td>_ MONTHLY REPORTS...</td>
<td></td>
</tr>
<tr>
<td>_ PERSONNEL...</td>
<td></td>
</tr>
</tbody>
</table>