Application Plan Maintenance

This section covers the following topics:

- Introduction
- Invoking the Application Plan Maintenance Function
- Commands and PF-Key Settings
- Prepare Job Profile
- Create DBRMs
- Bind Plan
- Rebind Plan
- Free Plan
- Bind Package
- Rebind Package
- Free Package
- List JCL Function
- Display Job Output

Introduction

The application plan maintenance part of the Natural Tools for DB2 is used to generate JCL code to:

- create database request modules (DBRMs) from your Natural programs,
- maintain DB2 application plans and packages from within your Natural environment.

Two modes of operation are available: fixed mode and free mode.

Fixed Mode

In fixed mode, maintenance screens with syntax graphs help you to specify the correct commands. Complete JCL members can be generated using predefined job profiles. You simply enter the required data in input maps. The data are checked to ensure that they comply with the correct syntax. Then JCL members are generated from these data. The members can be submitted directly by pressing PF4 (Submi). But you can also switch to free mode by pressing PF5 (Free).

Free Mode

Pressing PF5 in fixed mode invokes the free-mode editor, which can be used to modify JCL code generated in fixed mode, without the syntactical restrictions imposed. In free mode you can submit the JCL member currently in the source area by pressing PF4 (as in fixed mode).

Invoking the Application Plan Maintenance Function

To invoke the Application Plan Maintenance function

- On the **Natural Tools for DB2 Main Menu**, enter function code A.

  The **Application Plan Maintenance** menu is displayed:

```
16:14:02               ***** NATURAL TOOLS FOR DB2 *****            2009-10-30
                        - Application Plan Maintenance -

                  Code Function              Parameter

                   PP  Prepare Job Profile
                   CD  Create DBRMs          Lib
                   BI  Bind                  Lib, Obj
                   RB  Rebind                Lib, Obj
                   FR  Free                  Lib, Obj
                   LJ  List   JCL            Lib, JCL
                   JO  Display Job Output    Node
                   ?   Help
                   .   Exit

            Code .. __  Object ...... ________
                        Library ..... SAG_____
                        JCL Member .. ________
                        Node ........ 148

Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit                                      Logn        Canc
```

  The following functions are available:

Code	Description
PP	Defines job profiles for DBRM creation and plan/package maintenance; see *Prepare Job Profile*.
CD	Generates JCL to create database request modules.
BI	Generates JCL to bind a plan or package.
RB	Generates JCL to rebind a plan or package.
FR	Generates JCL to free a plan or package.
LJ	Invokes the free-mode editor.
JO	Displays job output. **Note:** This function only applies if the Entire System Server is installed.

In addition, four parameters are available, which must be specified according to the selected function:

Parameter	Description
Object	Specifies whether to maintain a plan (PLAN or PL) or a package (PACKAGE or PK).
Library	Specifies the name of a Natural source library. All existing libraries except the ones beginning with SYS can be specified; a library must be specified for JCL maintenance. The library name is preset with your Natural user ID.
JCL Member	If a valid member name is specified, the corresponding JCL member is displayed. If a value is specified followed by an asterisk (*), all JCL members in the specified library whose names begin with this value are listed. If asterisk notation is specified only, a selection list of all JCL members in the specified library is displayed. If the JCL Member field is left blank, the empty free-mode editor screen is displayed.
Node	Specifies the number of the node to be used by the Entire System Server. The default number "148" can be overwritten.

Commands and PF-Key Settings

Within the maintenance screens in fixed mode, various windows can be invoked. These windows are accessed via 1-byte control fields.

To invoke a window

- Enter S in the corresponding control field.

If the control field displays an X, data have already been entered in the corresponding window.

In addition, the following PF-key settings apply in fixed mode:

Key	Function
PF4	Generates JCL code and submits it.
PF5	Generates JCL code and enters free mode.
PF6	Scrolls to the top of a window.
PF7	Scrolls backwards in windows.
PF8	Scrolls forwards in windows.
PF9	Scrolls to the bottom of a window.
PF10	Either shows the previous screen (<) or displays a **Natural Process Logon** window (Logn).
PF11	Shows the next screen.

In free mode, JCL code can be edited and submitted. Editing of JCL code is done via edit and line commands; see *Editing within the Natural Tools for DB2*.

Generated JCL code is submitted by pressing PF4.

Apart from being submitted, JCL code can also be copied, listed, purged, retrieved from, or saved in a Natural library. All this is done via maintenance commands; see *Global Maintenenance Commands*.

Prepare Job Profile

If you want to generate JCL to create a DBRM or to bind, free, or rebind a plan or package, you have to specify a job name, job cards, and the name of a job profile. Thus, you have to prepare the job profiles first. Once your job profiles are defined, you can always immediately select the corresponding function if you want to create a new DBRM or if you want to bind, free, or rebind an a plan or package using your predefined job profiles.

To define a job profile

1. On the **Natural Tools for DB2 Main Menu**, enter function code A.

   The **Application Plan Maintenance** menu is displayed.

2. On the **Application Plan Maintenance** menu, invoke the **Prepare Job Profile** function by entering function code PP.

   The **Prepare Job Profile** menu is displayed.

Prepare Job Profile Menu

```
16:14:33               ***** NATURAL TOOLS FOR DB2 *****            2009-10-30
                            - Prepare Job Profile -




                       Code Function

                        J   Default Job Cards
                        D   Profile for Create DBRM Job
                        P   Profile for DSN Jobs
                        ?   Help
                        .   Exit

                 Code .. _   Profile .. ________

Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit                                                  Canc
```

Code	Description
J	Defines user-specific default job cards.
D	Defines job profiles for the DBRM creation function.
P	Defines job profiles for the plan or package maintenance functions.

In addition, the parameter Profile is available, which is relevant to function codes D and P only. With function code "J", Profile corresponds to USER.

Parameter	Description
Profile	Specifies the name of an already existing job profile. If a valid profile name is specified, the free-mode editor with the specified job profile is invoked, where the profile can be modified and saved. If a value is specified followed by an asterisk (*), all existing job profiles whose names begin with this value are listed. If asterisk notation is specified only, a selection list of all existing job profiles is displayed. If the field is left blank, the corresponding fixed-mode profile screen is invoked, where a new job profile can be created. To save the new profile, you have to switch to free mode.

Job profiles can be maintained (that is, copied, listed, purged, retrieved from, or saved in a Natural library) via maintenance commands; see *Global Maintenance Commands*.

Note:
Job profiles are saved on the Natural system file FNAT.

Default Job Cards

All jobs generated by the **Application Plan Maintenance** function require job cards. With the **Default Job Cards** function, you can define a default job card for each user. The default job cards apply to all function screens on which you can generate JCL. Default job cards can be invoked and modified on all these screens. Asterisk notation (*) can be used to select the desired job card from a list.

To define a default job card

- On the **Prepare Job Profile** menu, enter function code `J` and press Enter.

  The **Default Job Cards** screen is displayed.

```
16:14:33               ***** NATURAL TOOLS FOR DB2 *****            2009-10-30
                              - Default Job Cards -




 R ead,  S ave,  L ist or  P urge  Default Job Cards _      User ID .. ________

   Job Name ... ________
   Job Cards ..
     //          JOB ____________________________________________________________
     // ____________________________________________________________________________
     // ____________________________________________________________________________
     // ____________________________________________________________________________
     // ____________________________________________________________________________


Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit                                                   Canc
```

  On this screen, you can create and save your user-specific job cards. To do so, you can also read (directly or from a list) and modify an already existing default job card. Existing job cards can be purged, too.

Note:
All other function screens used to specify jobs contain the same two fields - **Job Name** and **Job Cards** - as the **Default Job Cards** screen. Thus, it is possible to override the default job cards in each of these screens, too.

To modify the job name

- Enter the new job name in the **Job Name** field and press Enter.

To modify the job cards

- In the **Job Cards** field, enter an `S` and press Enter.

  A window is displayed where you can modify all the job cards.

Profile for Create DBRM Job

The **Profile for Create DBRM Job** function enables you to define profiles for the **Create DBRMs** functions. Job profiles for DBRM creation consist of JCL which includes the following predefined set of substitution parameters:

Parameter	Description
`@JOBCARDS`	Is replaced by the job cards entered on the **Create DBRMs** screen (up to five lines). You can also code the job cards in the profile and omit the job cards modifier.
`@COMMAND`	Is replaced by the string `CREATE DBRM`.
`@DBRMNAME`	Is replaced by the name of the DBRM, which can be up to eight characters long.
`@CREATE-DBRM`	Is replaced by the command input for the static generation step. This parameter must be placed *after* the `//CMSYNIN` card and must comply with the Assembler naming conventions.
`@COMMAN2`	Is replaced by the string `MODIFY`.
`@MODIFY`	Is replaced by the command input for the static modification step.
`@XR-START` `@XR-END`	Both mark the JCL to contain the Natural Assembler `XREF` data; if no `XREF` option is specified, the JCL is deleted again.

To modify or rename a job profile for DBRM creation

1. On the **Prepare Job Profile** menu, invoke the **Profile for Create DBRM Job** function by entering function code `D`.
2. In the **Profile** field, specify a valid profile name and press Enter.

   The free-mode editor containing the specified profile is invoked, where you can modify, save, and rename the displayed profile.

To create a job profile for DBRM creation

1. On the **Prepare Job Profile** menu, enter function code `D`.
2. Leave the **Profile** field blank, and press Enter.

   The **Profile for Create DBRM Job** screen is invoked, which helps you in creating a new profile.

```
16:15:18              ***** NATURAL TOOLS FOR DB2 *****           2009-10-30
                        - Profile for Create DBRM Job -

 +---------------------------- NATURAL Parameters --------------------------+
 !  Name of Batch NATURAL      : ________                                    !
 !  NATURAL Parameter          : ____________________________________________ !
 !  STEPLIB  DD                : _                                           !
 +------------------------- Precompile Parameters --------------------------+
 !  DBRMLIB  DD                : ____________________________________________ !
 !  STEPLIB  DD                : _                                           !
 +------------------------- Ass-Nat-Xref-Library --------------------------+
 !  CMWKF02  DD                : ____________________________________________ !
 +-----------------------------------------------------------------------+




Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit        Free                                      Canc
```

To save the newly created job profile

- Switch to free mode by pressing PF5.

Profile for DSN Jobs

The **Profile for DSN Jobs** function enables you to define profiles for the **Bind**, **Rebind**, and **Free** functions. The same profiles can be used for each of the three functions.

Profiles for DSN jobs consist of JCL which includes the following predefined set of substitution parameters:

Parameter	Description
`@JOBCARDS`	Is replaced by the current job cards; you can also code the job cards in the profile and omit the job cards modifier.
`@DSNCMD`	Is replaced by the command input for the bind, rebind or free function.
`@PLANNAME`	For the bind function, it is replaced by the name of the plan or package. For the rebind and free functions, it is set to blank.
`@COMMAND`	Is replaced by the string `BIND`, `REBIND` or `FREE`, respectively.

To modify or rename a profile for DSN jobs

1. On the **Prepare Job Profile** menu, enter function code `P`.
2. In the **Profile** field, specify a valid profile name, and press Enter.

   The free-mode editor containing the specified profile is invoked, where you can modify, save, and rename the displayed profile

To create a new profile for DSN jobs

1. On the Prepare Job Profile menu, enter function code P.
2. Leave the **Profile** field blank, and press Enter.

   The **Profile for DSN Jobs** screen is invoked, which helps you in creating a new profile for DSN jobs.

```
16:15:18              ***** NATURAL TOOLS FOR DB2 *****            2009-10-30
                             - Profile for DSN Jobs -

  DB2 System .. ________                                      Retries .. ___

 +------------------------- Steplibs for DSN Jobs ----------------------------+
 !  STEPLIB     DD             : ____________________________________________ !
 !                             : ____________________________________________ !
 !                             : ____________________________________________ !
 !                             : ____________________________________________ !
 !                             : ____________________________________________ !
 +--------------------------------------------------------------------------+

 +------------------------- DBRM Libraries for Bind --------------------------+
 !  DBRMLIB     DD             : ____________________________________________ !
 !                             : ____________________________________________ !
 !                             : ____________________________________________ !
 !                             : ____________________________________________ !
 !                             : ____________________________________________ !
 +--------------------------------------------------------------------------+

Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit        Free                                      Canc
```

To save the newly created job profile

- Switch to free mode by pressing PF5.

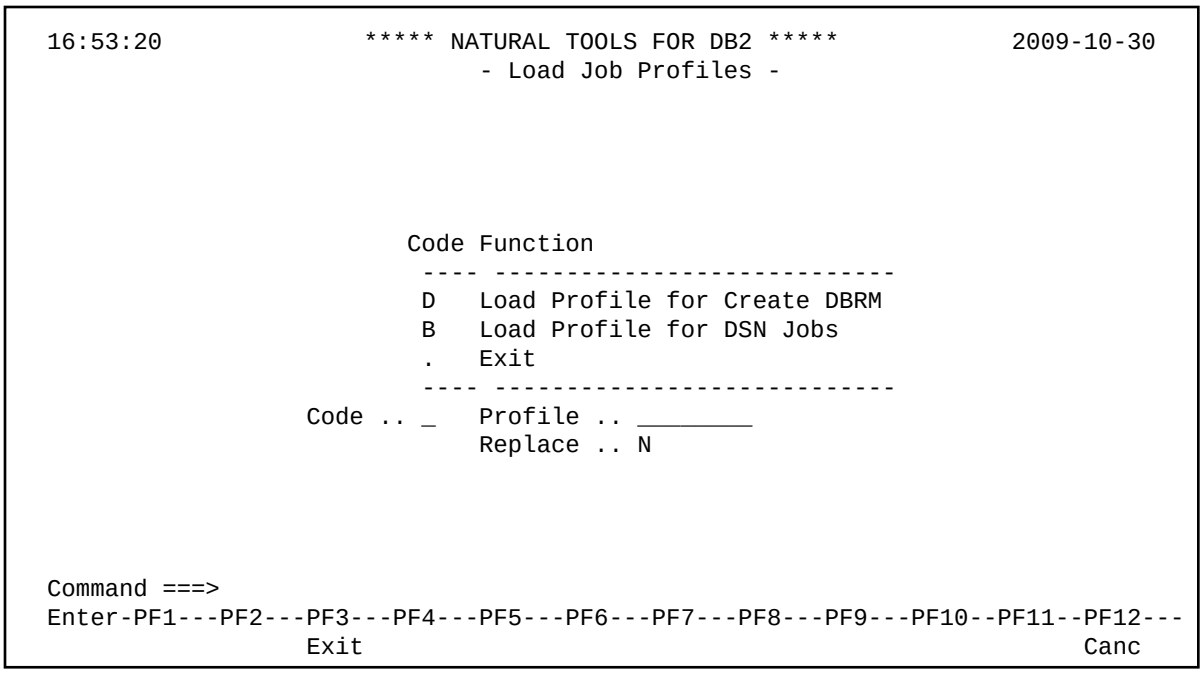
Loading Job Profiles

Job profiles for DBRM creation and plan/package maintenance are loaded from the dataset CMWKF01 in batch mode.

To load a job profile

1. Logon to library SYSDB2.
2. In the command line, issue the command LOADPROF.

   The **Load Job Profiles** menu is displayed.



The following functions are available:

Code	Description
D	Serves to load job profiles for DBRM creation.
B	Serves to load job profiles for plan or package maintenance.

The following parameters apply:

Parameter		Description
Profile		Specifies the name of the profile to be loaded. This parameter must be specified.
Replace		Specifies whether it is to be replaced or not if a profile with the specified name already exists.
	Y	An already existing profile is replaced.
	N	An already existing profile is *not* replaced. This parameter is optional; the default setting is N.

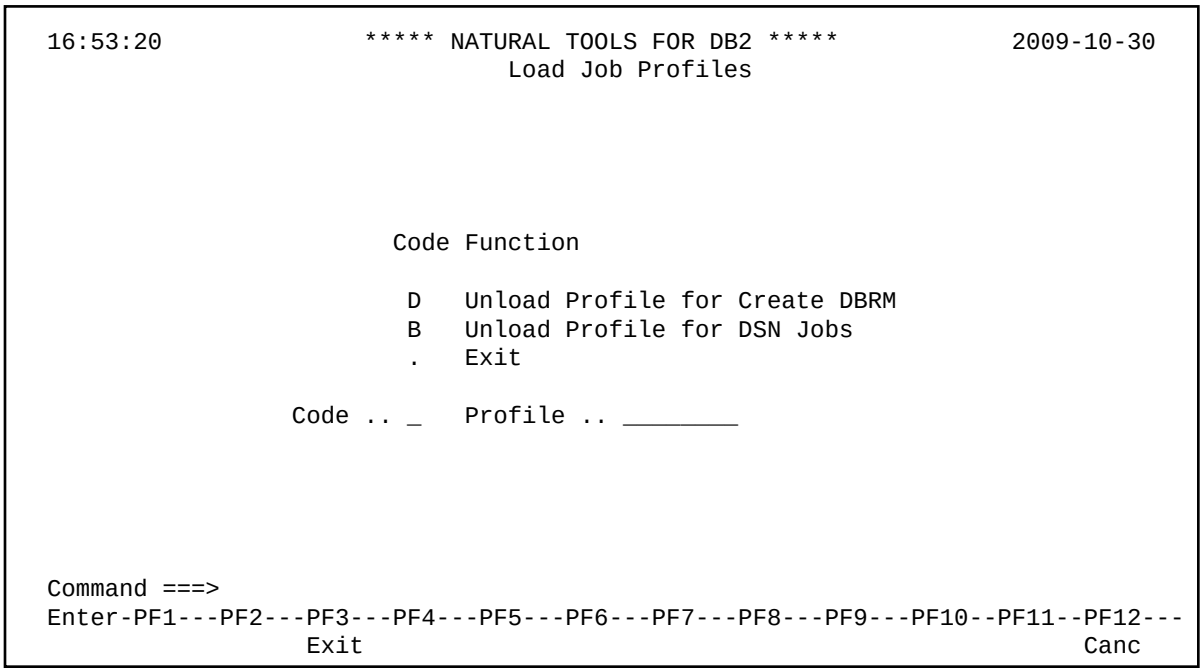
Unloading Job Profiles

Job profiles for DBRM creation and plan/package maintenance are unloaded and written to the dataset CMWKF01 in batch mode.

To unload a job profile

1. Logon to library SYSDB2.
2. In the command line, issue the command UNLDPROF.

   The **Load Job Profiles** menu is displayed.



The following functions are available:

Code	Description
D	Unloads job profiles for DBRM creation.
B	Unloads job profiles for plan or package maintenance.

The following parameter applies:

Parameter	Description
Profile	Specifies the name of the profile to be unloaded. This parameter must be specified.

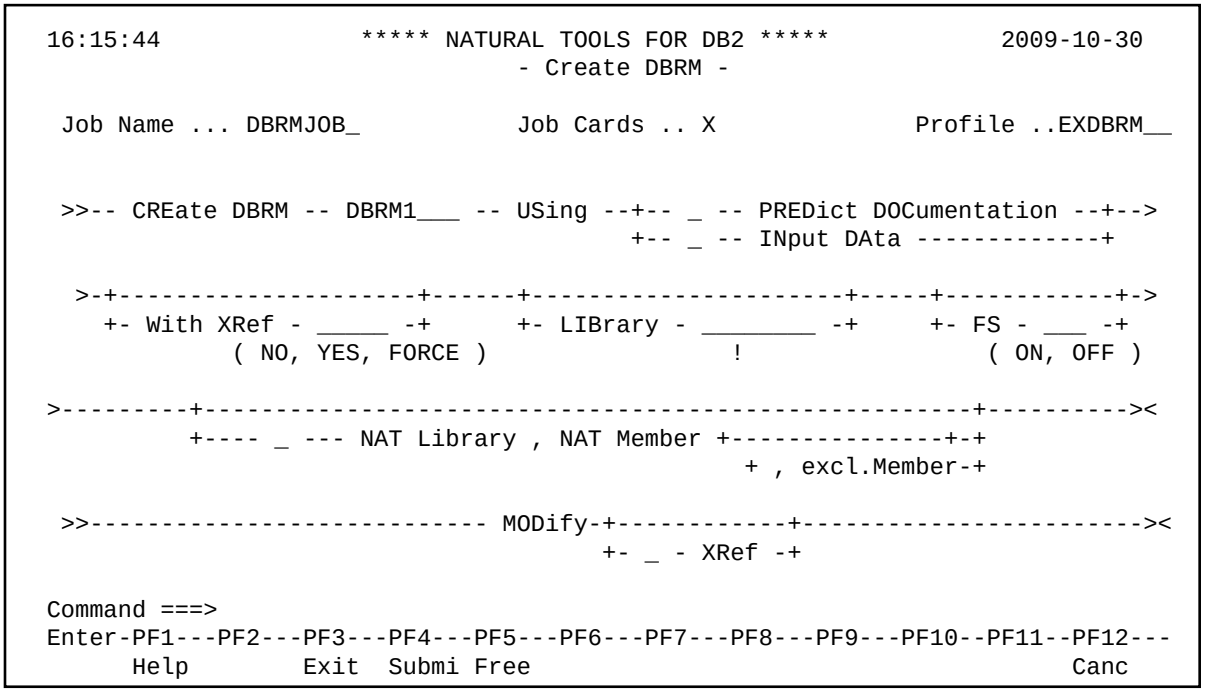
Create DBRMs

To create a DBRM, you have to generate JCL for DBRM creation.

To create a DBRM

1. On the **Application Plan Maintenance** menu, enter function code CD, and press Enter.

The **Create DBRM** screen is displayed where, in addition to a job name, your user-specific default job cards, and the desired job profile, you can specify all necessary information for the `CREATE DBRM` and `MODIFY` commands; see also *Generation Procedure: CMD CREATE Command* and *Modification Procedure: CMD MODIFY Command* in the section *Preparing Programs for Static Execution*.



2. In the **Job Name** field, a valid job name must be specified. If you only want to change the name of the job, you can do this using the **Job Name** field, too.

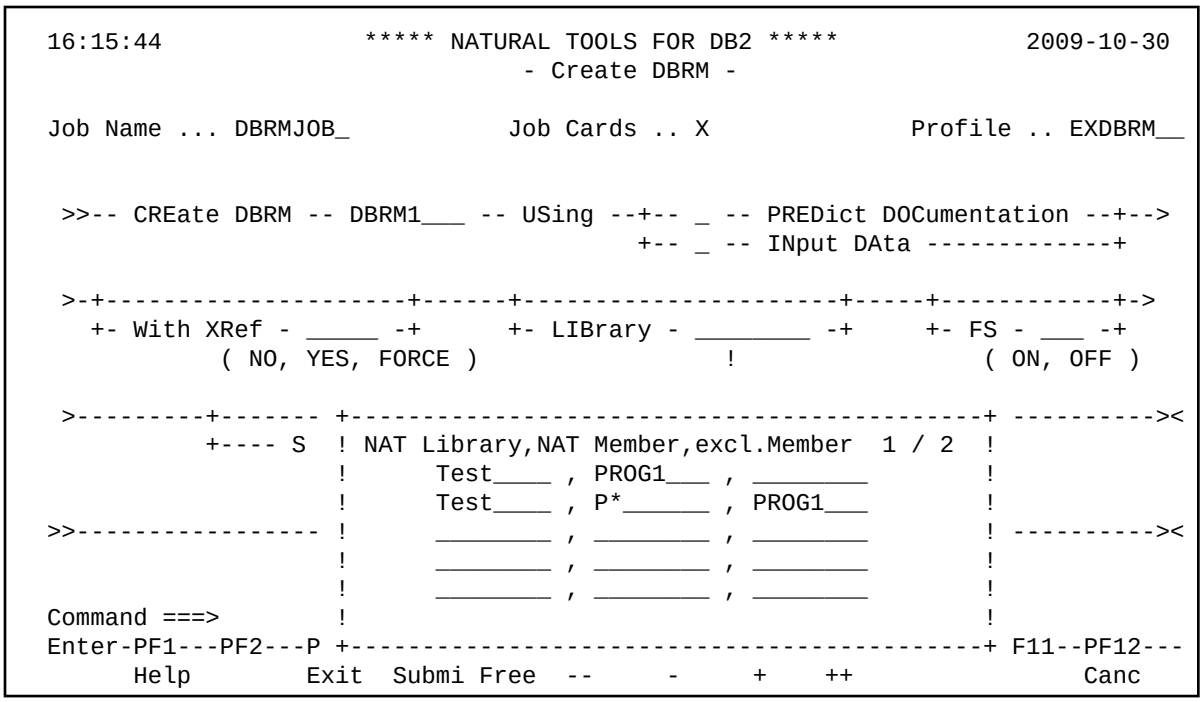
3. Via the **Job Cards** field, you can override your default job cards. To do so, enter an `S` in the **Job Cards** field.

   A window containing your job cards is displayed.

   An "X" in the **Job Cards** field indicates that job cards for DBRM creation are defined. A blank **Job Cards** field indicates that no job cards are defined.

4. In the **Profile** field, you can specify the name of a valid job profile for DBRM creation. If a value is specified followed by an asterisk (*), all existing job profiles whose names begin with this value are listed. If asterisk notation is specified only, a selection list of all available job profiles is displayed.

5. If you use the **INput DAta** option, a window is displayed, where you have to specify the Natural libraries and programs (members) to be contained in the DBRM.



In the third column of the above window, you can specify a program that is to be excluded from the DBRM; this is possible only if you specify an asterisk (*) with the program name in the second column.

Within the window, you can scroll using PF6 (--), PF7 (-), PF8 (+), or PF9 (++).

The generated JCL code can be either edited and/or saved in free mode by pressing PF5 (Free), or submitted immediately by pressing PF4 (Submi).

Bind Plan

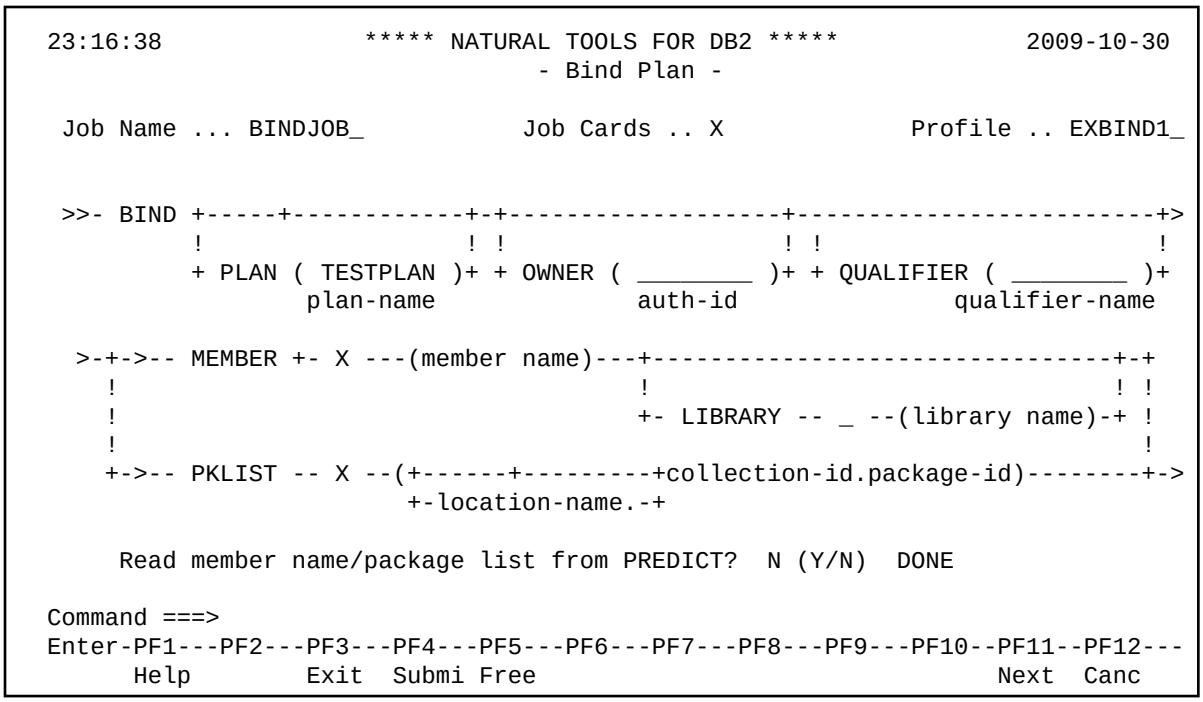
To generate JCL to bind a plan, you have to invoke the **Bind** function. All parameters necessary to bind a plan are entered on four screens, which show the syntax of the DB2 `BIND PLAN` command.

To generate JCL to bind a plan

1. On the **Application Plan Maintenance** menu, enter function code `BI`.

   In the **Object** field, enter `PLAN` or `PL`, and press Enter.

   The first **Bind Plan** screen is displayed, where all necessary information must be specified.



2. Apart from the specifications to be made in the **Job Name**, **Job Cards**, and **Profile** fields, to bind a plan, you have to specify the name of the plan and all DBRMs and/or packages that are to be bound into the specified plan.

3. You invoke the window to specify the DBRM members and/or package lists by entering an `S` in the **MEMBER** and/or **PKLIST** field respectively. Either or both windows must be invoked; otherwise, you are prompted by the system to do so.

   Within the windows for DBRM and package specification, you can scroll using PF6 (--), PF7 (-), PF8 (+), or PF9 (++).

4. If Predict is installed and a plan is documented in Predict, the DBRM members and/or package lists assigned to a plan in Predict can be read by entering `Y` for this option (default is `N`). A maximum of 50 DBRM members and/or 20 package lists can be read.

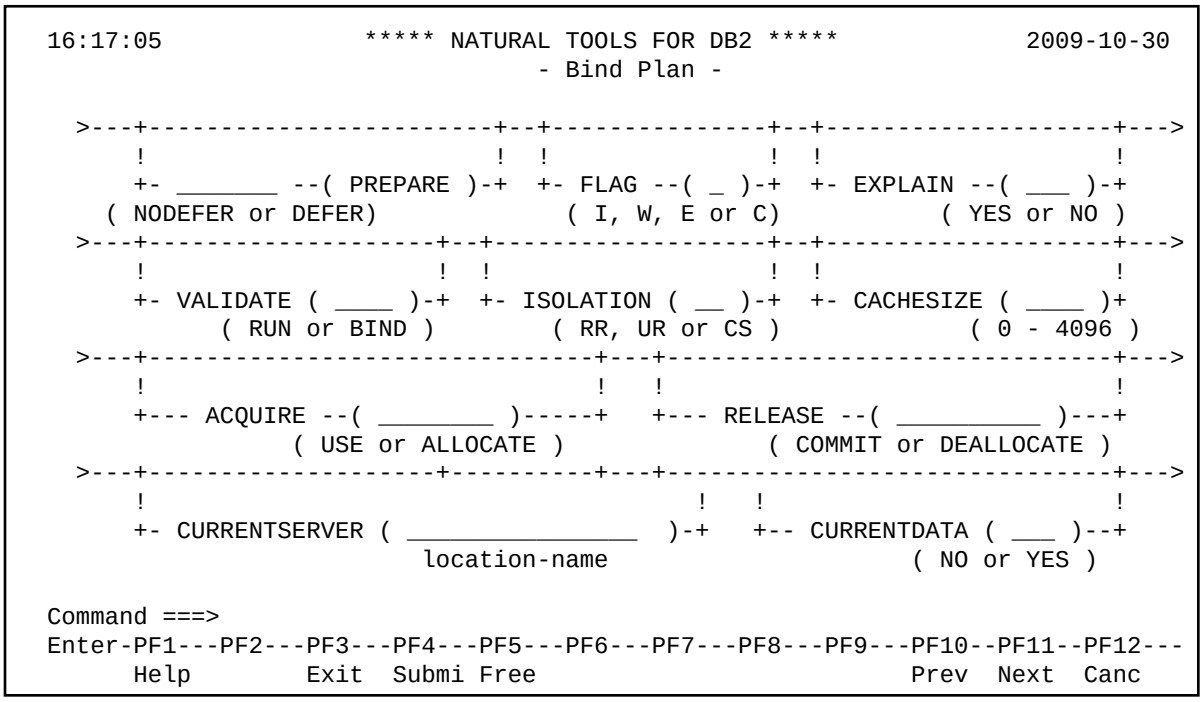
   If you use this option and DBRM members and/or package lists have been successfully read, the **MEMBER** and **PKLIST** selection fields are marked with `X`, and `DONE` is displayed next to the **(Y/N)** input field; `FAILED` is displayed if:

   - inconsistencies in the member/package list definition were detected,
   - over 50 DBRM members or more than 20 package lists were defined for the specified plan,
   - no members or package lists were defined for the specified plan,
   - the plan was not documented in Predict at all.

   Note:
   If Predict is not installed, the field **Read member name / package list from Predict?** does not appear on the above screen.

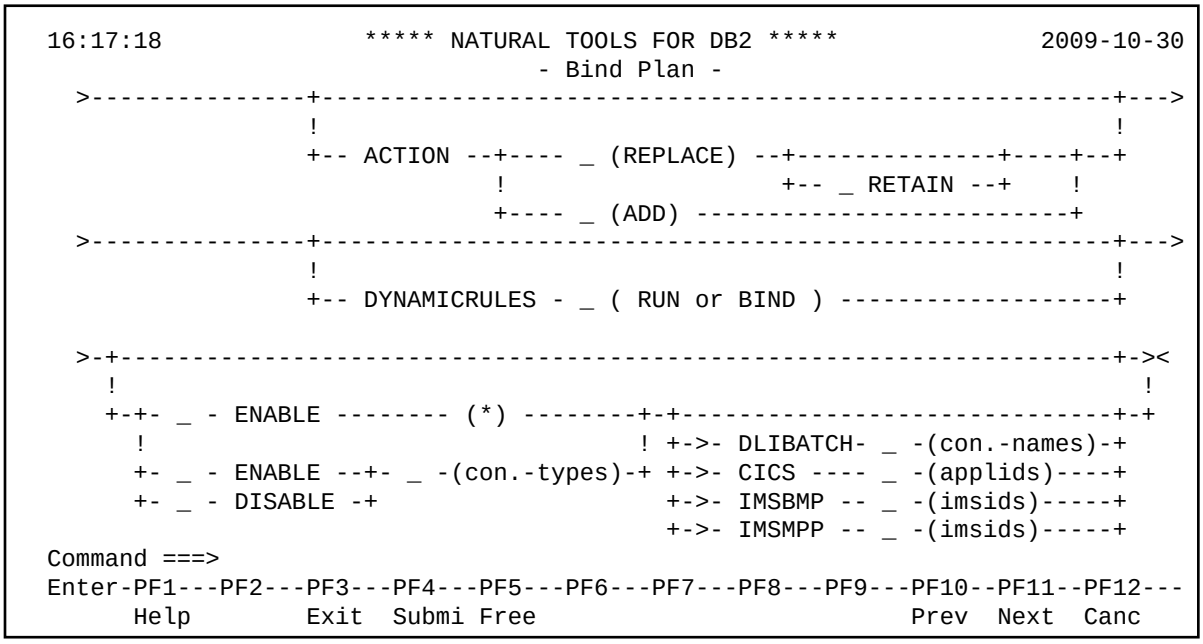
5. Pressing PF11 (Next) takes you to a second **Bind Plan** screen, where you can specify further options of the DB2 `BIND` command.

   A keyword is generated by entering its first letter in the corresponding input field; the default values are highlighted.

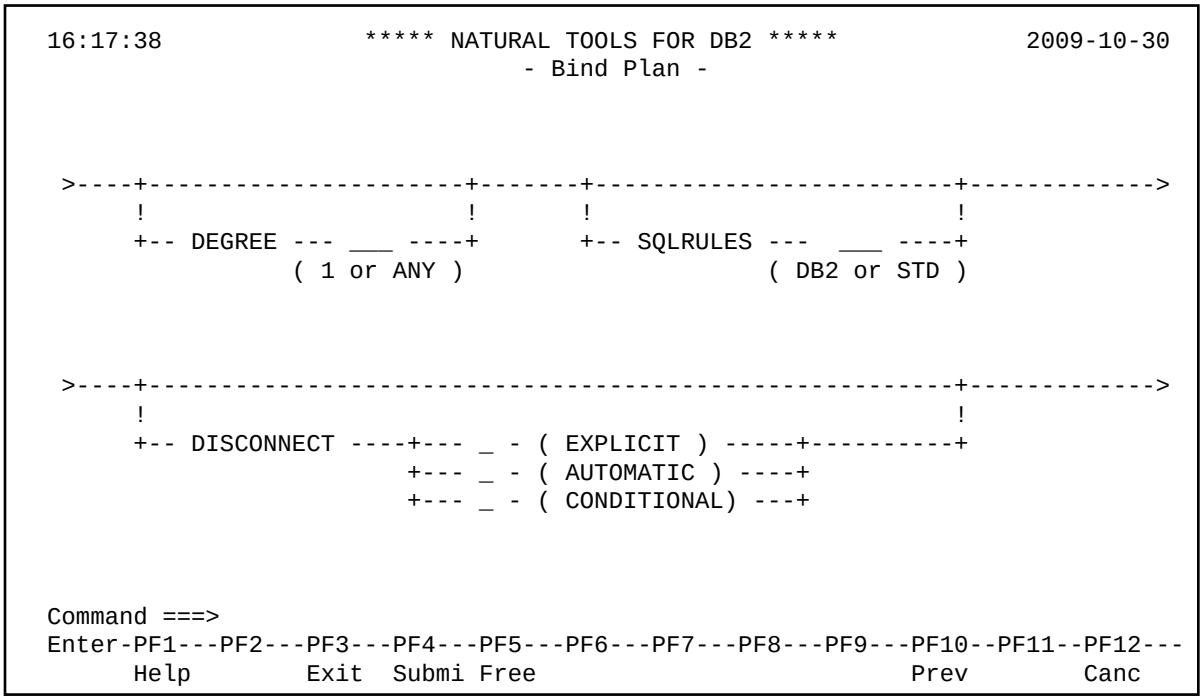


   Pressing PF10 (Prev) takes you back to the previous screen.

6. Pressing PF11 (Next) takes you to a third **Bind Plan** screen, where you can again specify further options of the DB2 `BIND` command.



7. Pressing PF11 (Next) takes you to a fourth **Bind Plan** screen, where you can again specify further options of the DB2 `BIND` command.



8. The generated JCL code can be either edited and/or saved in free mode by pressing PF5 (Free), or submitted immediately by pressing PF4 (Submi).

Rebind Plan

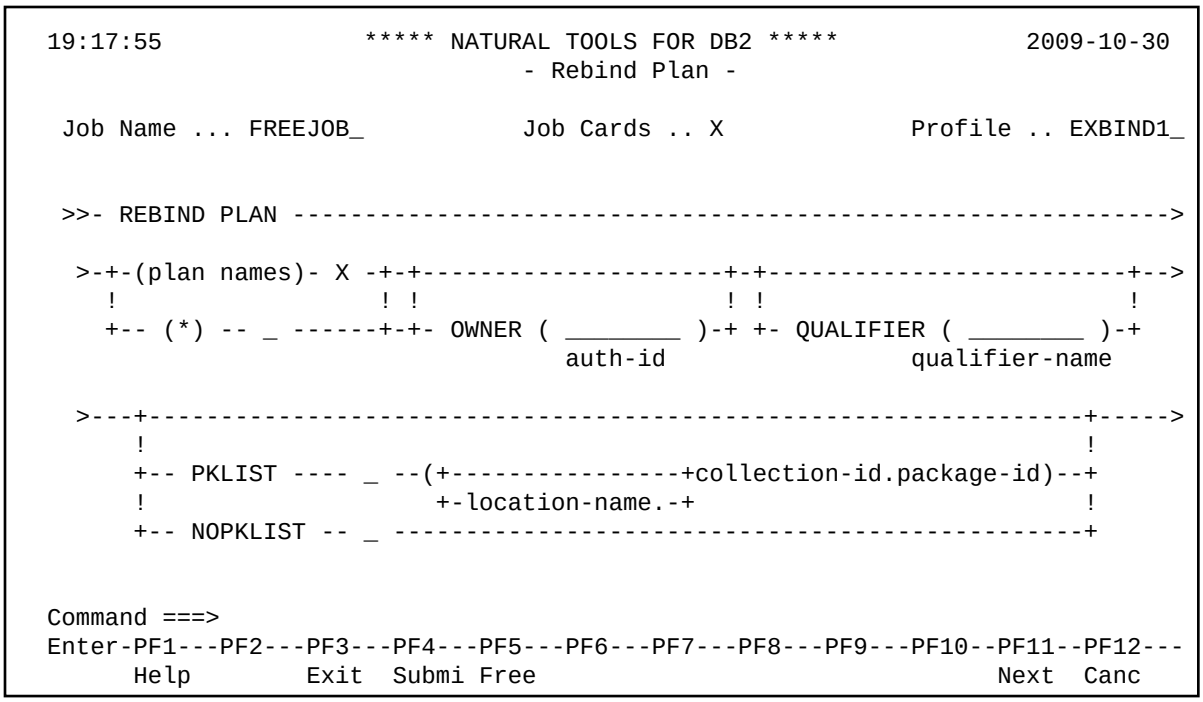
To generate JCL to rebind a plan, you have to invoke the **Rebind** function. All parameters necessary to rebind a plan are entered in three screens, which show the syntax of the DB2 `REBIND PLAN` command.

To generate JCL to rebind a plan

1. On the **Application Plan Maintenance** menu, enter function code `RB`.

   In the **Object** field, enter `PLAN` or `PL`, and press Enter.

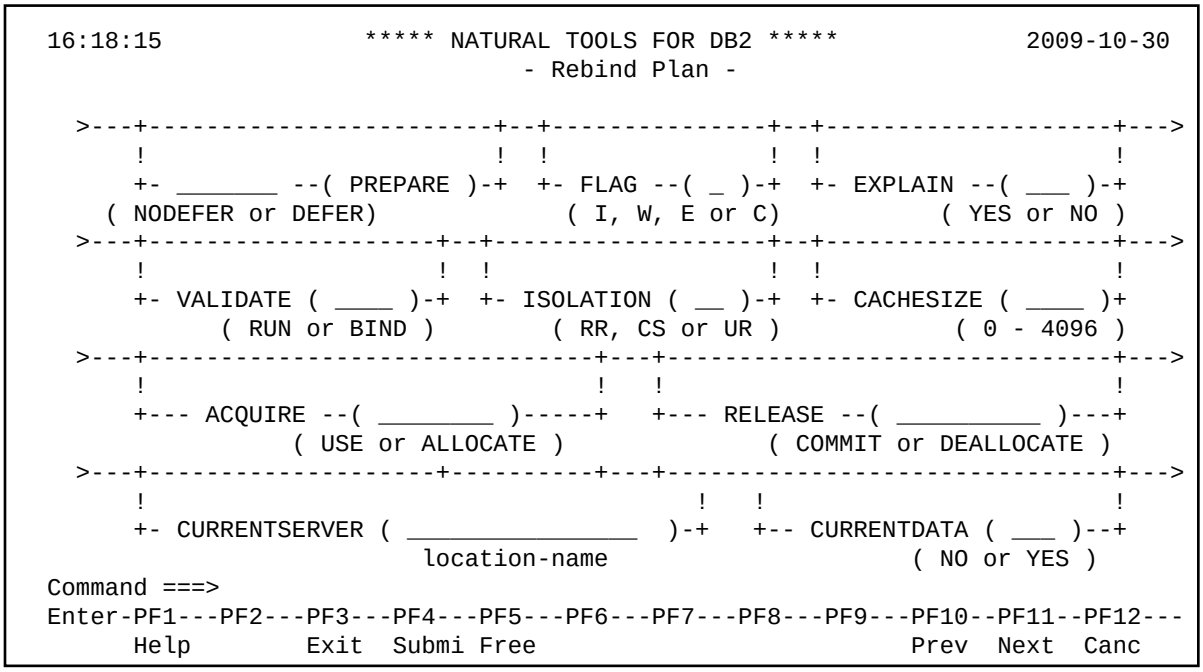
   The first **Rebind Plan** screen is displayed, where all necessary information must be specified.



2. Apart from the specifications to be made in the **Job Name**, **Job Cards**, and **Profile** fields, you have to specify the names of the plans to be rebound in a window. If you specify asterisk notation (*), all existing plans are rebound.

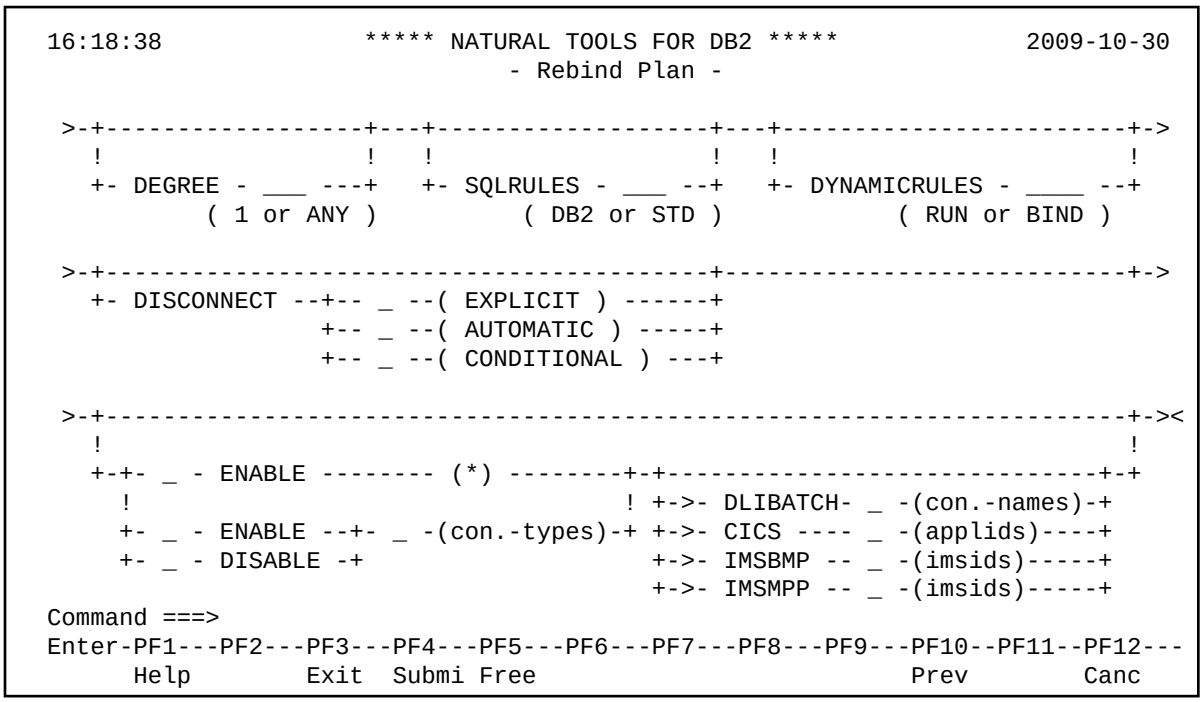
3. Pressing PF11 (Next) takes you to a second **Rebind Plan** screen, where you can specify further options of the DB2 `REBIND` command.

   A keyword is generated by entering its first letter in the corresponding input field; the default values are highlighted.



Pressing PF10 (Prev) takes you back to the previous screen.

4. Pressing PF11 (Next) takes you to a third **Rebind Plan** screen, where you can again specify further options of the DB2 `REBIND` command.



5. The generated JCL code can be either edited and/or saved in free mode by pressing PF5 (Free), or submitted immediately by pressing PF4 (Submi).

Free Plan

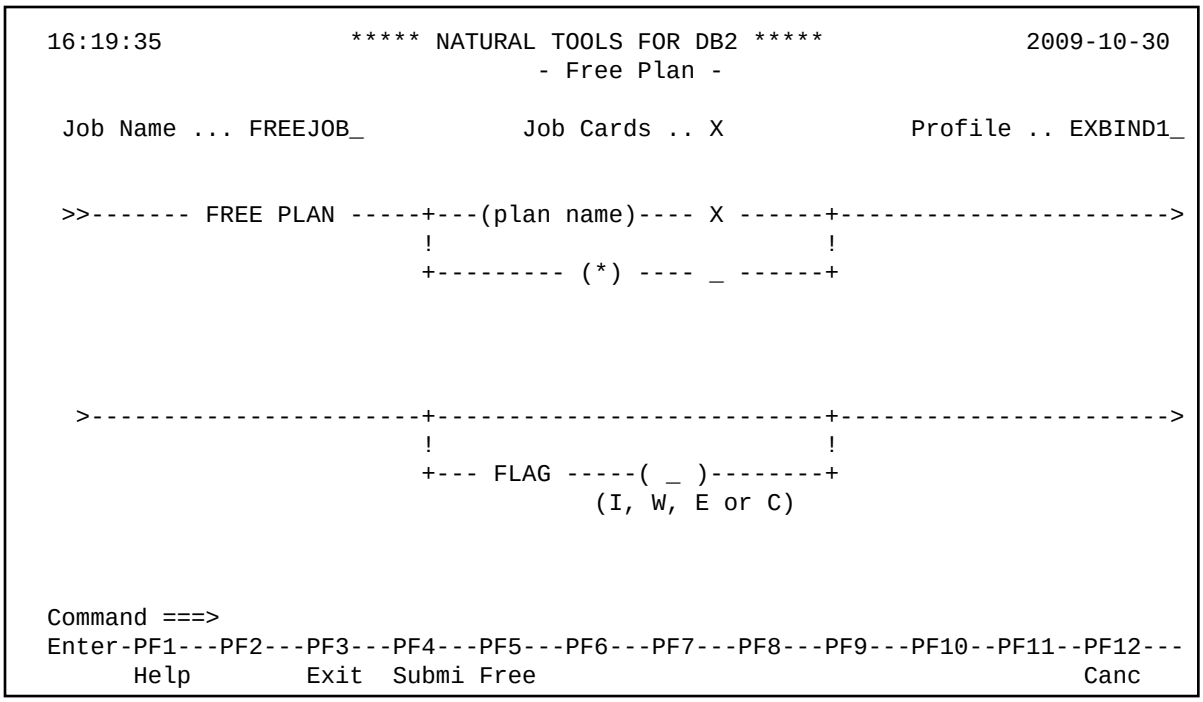
A free plan can be generated with the **Free** function of the **Application Plan Maintenance** menu.

To generate JCL to free a plan

1. On the **Application Plan Maintenance** menu, enter function code `FR`.

   In the Object field, enter `PLAN` or `PL`, and press Enter.

   The **Free Plan** screen is displayed, where all necessary information must be specified.



2. Apart from the specifications to be made in the **Job Name**, **Job Cards**, and **Profile** fields, all parameters necessary to free a plan are entered in a screen showing the syntax of the DB2 `FREE PLAN` command. The names of the plans to be freed are entered in a window. If you specify asterisk notation (*), all plans are freed.

3. The generated JCL code can be either edited and/or saved in free mode by pressing PF5 (Free), or submitted immediately by pressing PF4 (Submi).

Bind Package

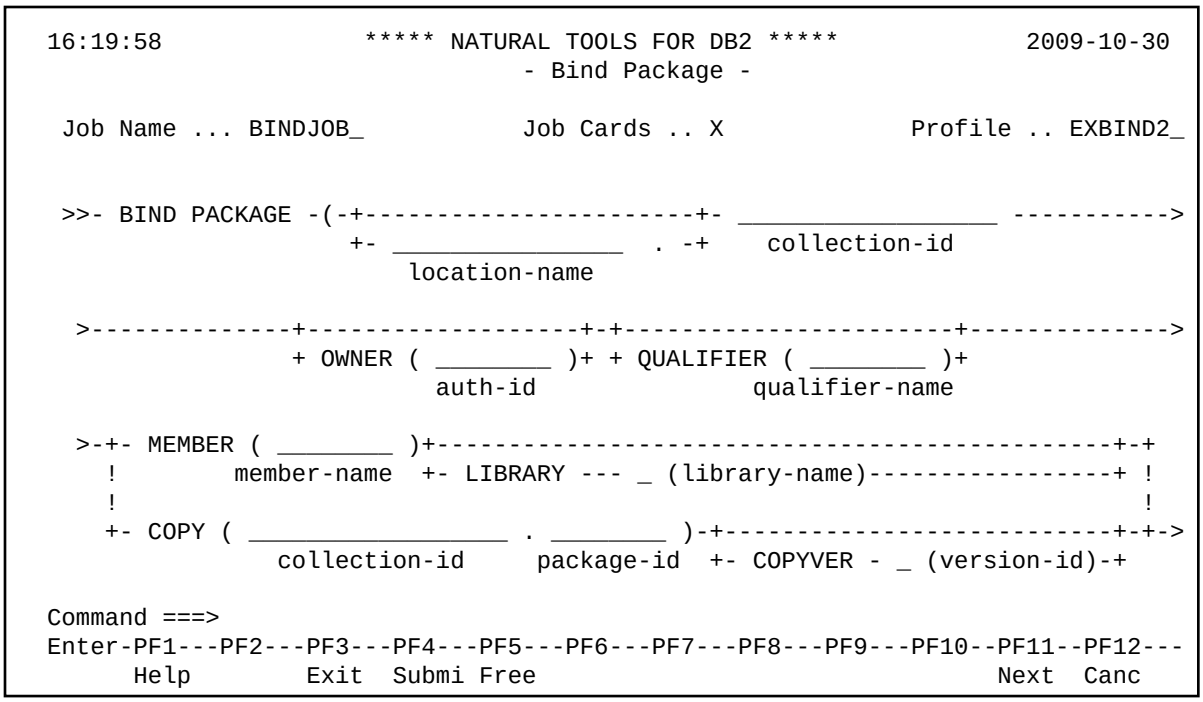
Packages can be bound with the Bind function of the **Application Plan Maintenance** menu. All parameters necessary to bind a package are entered on three screens, which show the syntax of the DB2 `BIND PACKAGE` command.

To generate JCL to bind a package

1. On the **Application Plan Maintenance** menu, enter function code "BI".

   In the Object field, enter `PACKAGE` or `PK`, and press Enter.

   The first **Bind Package** screen is displayed, where all necessary information must be specified.

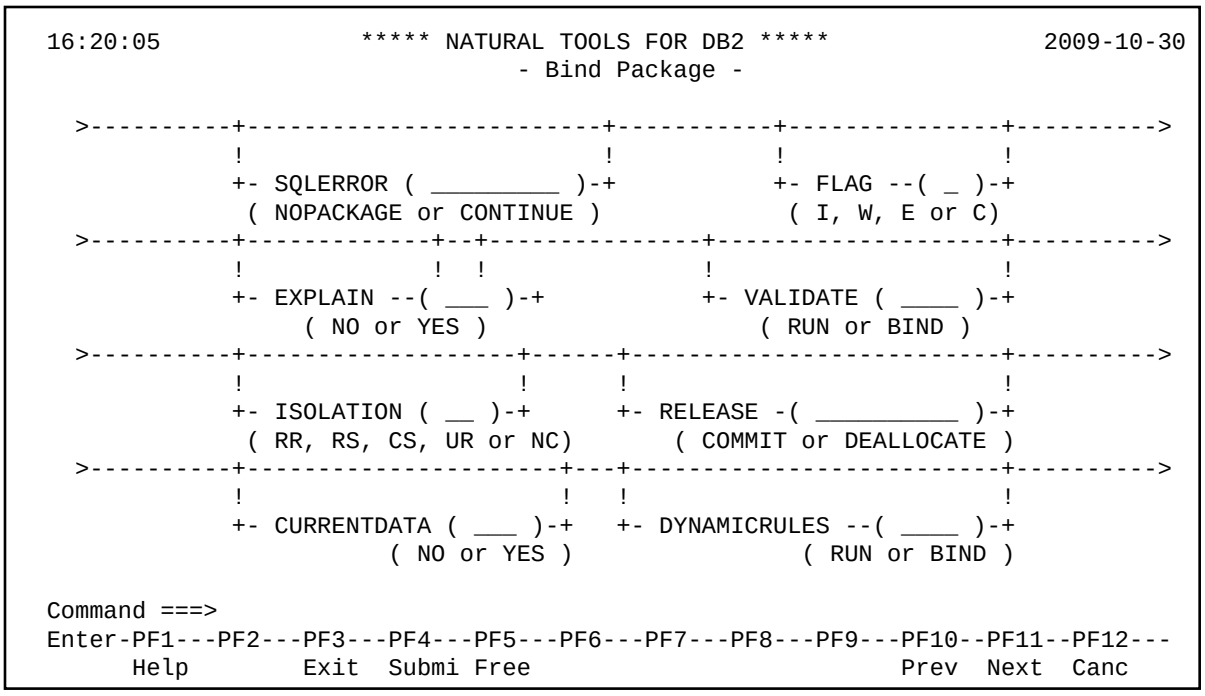


2. Apart from the specifications to be made in the **Job Name**, **Job Cards**, and **Profile** fields, to bind a package, you have to specify the collection ID of the package and a DBRM or a further package to be bound into the specified package.

   You specify the DBRM or the second package in the **MEMBER** or **COPY** field respectively. Either of the fields must be selected and the package ID will be either the DBRM name or the package ID of the copied package.

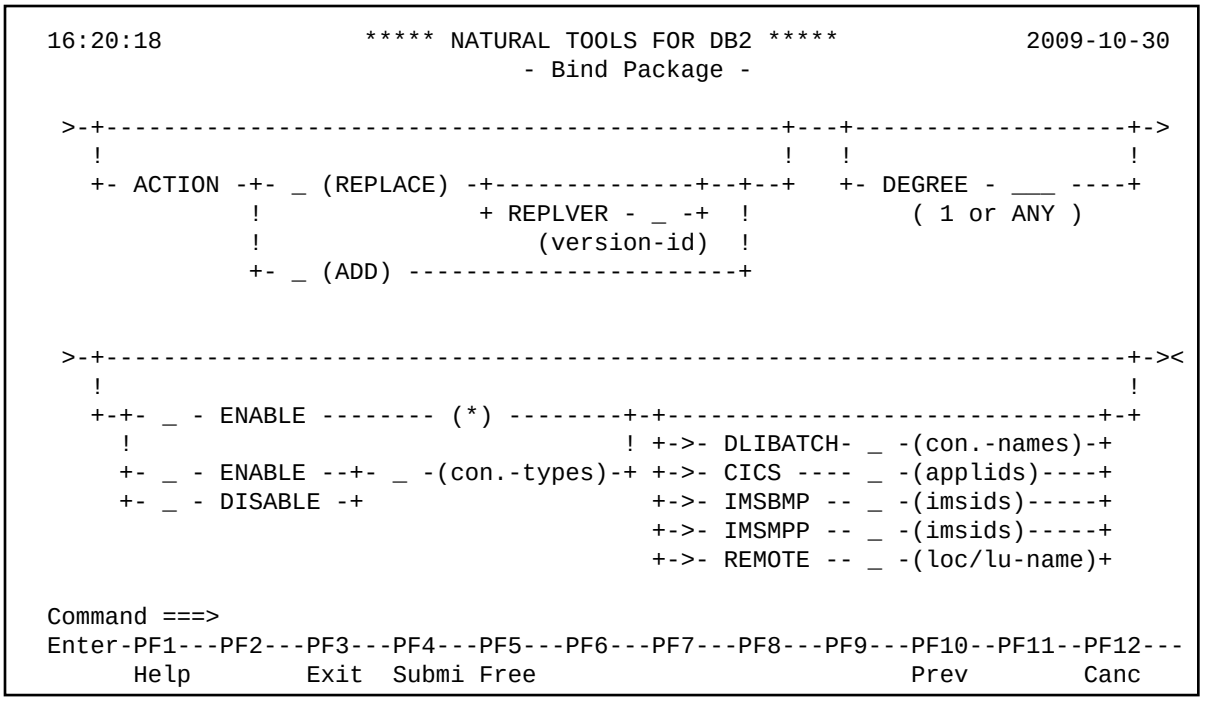
3. Pressing PF11 (Next) takes you to a second **Bind Package** screen, where you can specify further options of the DB2 `BIND` command.

   A keyword is generated by entering its first letter in the corresponding input field; the default values are highlighted.



Pressing PF10 (Prev) takes you back to the previous screen.

4. Pressing PF11 (Next) takes you to a third **Bind Package** screen, where you can again specify further options of the DB2 `BIND` command.



5. The generated JCL code can be either edited and/or saved in free mode by pressing PF5 (Free), or submitted immediately by pressing PF4 (Submi).

Rebind Package

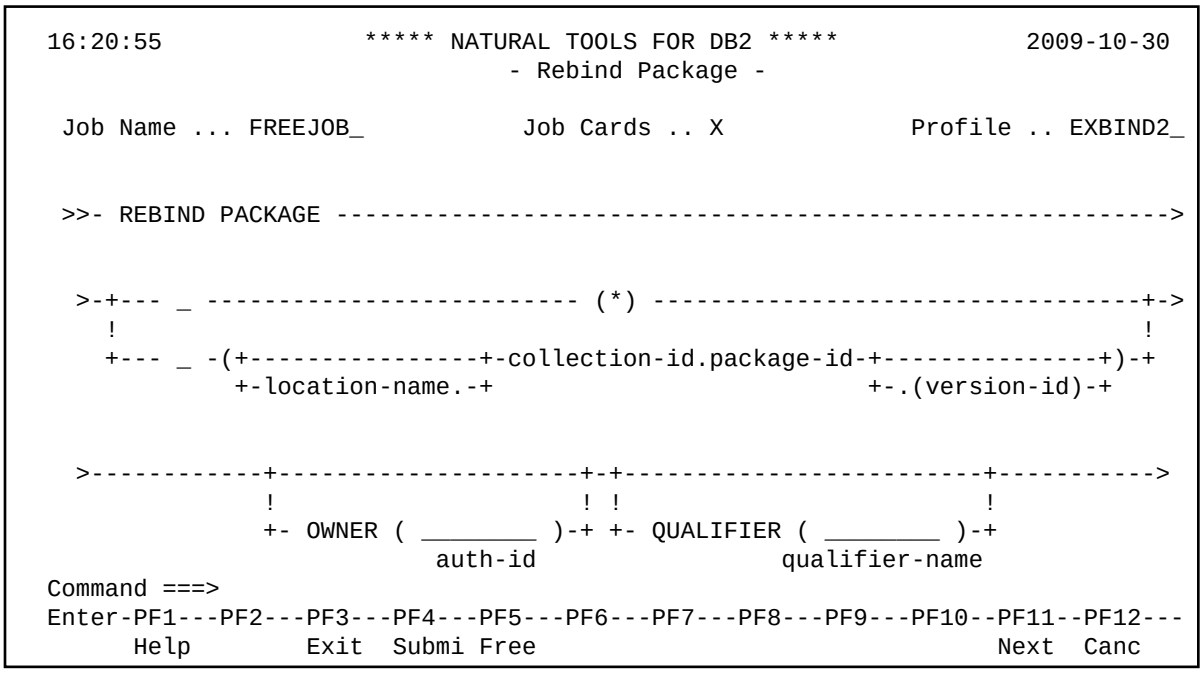
A package can be rebound with the **Rebind** function of the **Application Plan Maintenance** menu. All parameters necessary to rebind a package are entered in two screens, which show the syntax of the DB2 `REBIND PACKAGE` command

To generate JCL to rebind a package

1. On the **Application Plan Maintenance** menu, enter function code `RB`.

   In the **Object** field, enter `PACKAGE` or `PK`, and press Enter.

   The first Rebind Package screen is displayed, where all necessary information must be specified.



2. Apart from the specifications to be made in the **Job Name**, **Job Cards**, and **Profile** fields, you have to specify the names of the packages to be rebound in a window. If you specify asterisk notation (*), all locally existing packages are rebound.

3. Pressing PF11 (Next) takes you to a second **Rebind Package** screen, where you can specify further options of the DB2 `REBIND` command.

   A keyword is generated by entering its first letter in the corresponding input field; the default values are highlighted.

```
16:21:21              ***** NATURAL TOOLS FOR DB2 *****             2009-10-30
                                - Rebind Package -

  >----------+--------------------+-----------+--------------------+--------->
             !                    !           !                    !
             +- FLAG -----( _ )---+           +- DEGREE --( ___ )--+
                  ( I, W, E or C)                   ( 1 or ANY )
  >----------+--------------------+-----------+--------------------+--------->
             !                    !           !                    !
             +- EXPLAIN --( ___ )-+           +- VALIDATE ( ____ )-+
                  ( NO or YES )                   ( RUN or BIND )
  >----------+--------------------+-----+-----------------------+----------->
             !                    !     !                       !
             +- ISOLATION ( __ )--+     +- RELEASE -( _________ )-+
             ( RR, RS, CS, UR or NC )      ( COMMIT or DEALLOCATE )
  >----------+--------------------+---+-------------------------+---------->
             !                    !   !                         !
             +- CURRENTDATA ( ___ )-+   +- DYNAMICRULES -( ____ )--+
                       ( NO or YES )               ( RUN OR BIND )

Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit  Submi Free                         Prev  Next  Canc
```

Pressing PF10 (Prev) takes you back to the previous screen.

4. Pressing PF11 (Next) takes you to a third **Rebind Package** screen, where you can again specify further options of the DB2 `REBIND` command.

```
16:21:38              ***** NATURAL TOOLS FOR DB2 *****             2009-10-30
                                - Rebind Package -




 >-+-------------------------------------------------------------------------+-><
   !                                                                         !
   +-+- _ - ENABLE -------- (*) --------+-+---------------------------+-+
     !                                  ! +->- DLIBATCH- _ -(con.-names)-+
     +- _ - ENABLE --+- _ -(con.-types)-+ +->- CICS ---- _ -(applids)----+
     +- _ - DISABLE -+                    +->- IMSBMP -- _ -(imsids)-----+
                                          +->- IMSMPP -- _ -(imsids)-----+
                                          +->- REMOTE -- _ -(loc/lu-name)+




Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit  Submi Free                         Prev        Canc
```

5. The generated JCL code can be either edited and/or saved in free mode by pressing PF5 (Free), or submitted immediately by pressing PF4 (Submi).

Free Package

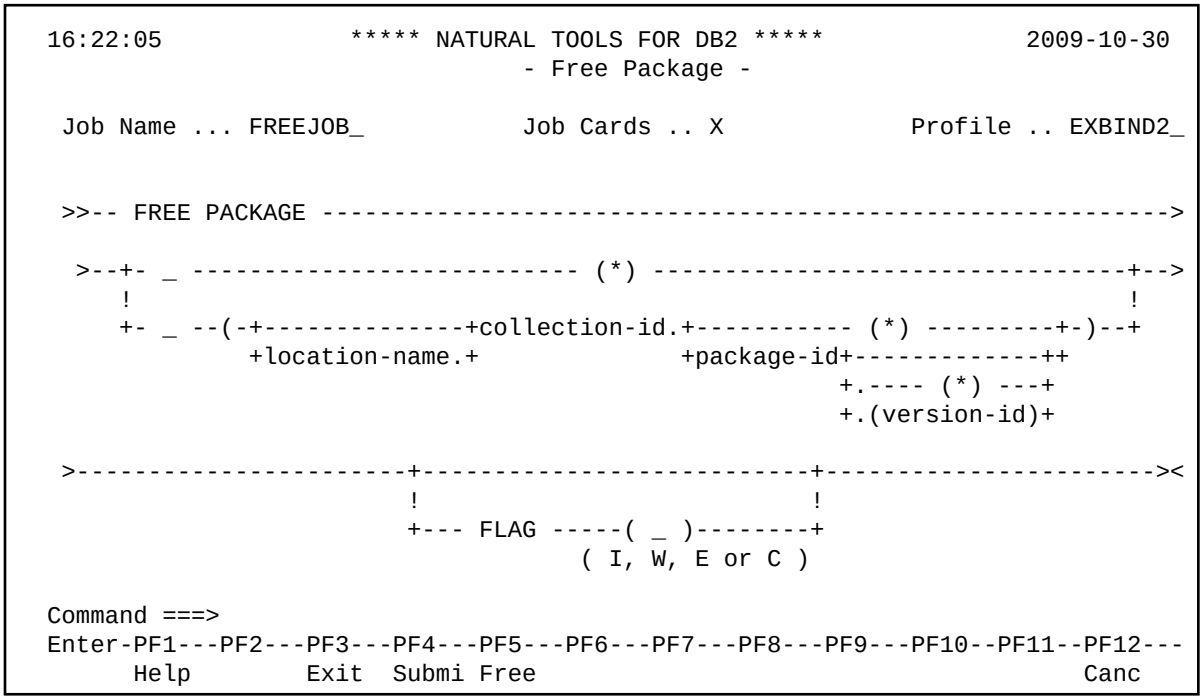
A package can be freed with the **Free Package** function of the **Application Plan Maintenance** menu.

To generate JCL to free a package

1. On the **Application Plan Maintenance** menu, enter function code FR.

   In the **Object** field, enter PACKAGE or PK, and press Enter.

   The Free Package screen is displayed, where all necessary information must be specified.



2. Apart from the specifications to be made in the **Job Name**, **Job Cards**, and **Profile** fields, all parameters necessary to free a package are entered in a screen showing the syntax of the DB2 FREE PACKAGE command. The names of the packages to be freed are entered in a window. If you specify asterisk notation (*), all local packages are freed.

3. The generated JCL code can be either edited and/or saved in free mode by pressing PF5 (Free), or submitted immediately by pressing PF4 (Submi).

List JCL Function

The **List JCL** function serves to invoke the free-mode editor via the **Application Plan Maintenance** menu.

To invoke the List JCL function

1. On the **Application Plan Maintenance** menu, enter function code LJ.

- If you leave the **JCL Member** field blank and press Enter, the empty free-mode editor is invoked.
- If you specify a value followed by an asterisk, or specify asterisk notation only and press Enter, a list of JCL members is displayed for selection.
- If you specify a valid member name and press Enter, the invoked free-mode editor contains the corresponding JCL.

```
16:18:18              ***** NATURAL TOOLS FOR DB2 *****              2009-10-30
 APM - free mode     TESTLIB(TESTPLAN)     S 01- --------------Columns 001 072
=====>                                                        Scroll ===>  PAGE
 ***** ***************************** top of data ****************************
 00001 //BINDJOB  JOB TESTPLAN,CLASS=K,MSGCLASS=X
 00002 //*************************************************************
 00003 //* EXAMPLE JOB PROFILE FOR BIND, FREE AND REBIND             *
 00004 //*                                                           *
 00005 //* BIND PLAN                                                 *
 00006 //*************************************************************
 00007 //BINDJOB  EXEC PGM=IKJEFT01,DYNAMNBR=20,REGION=4096K
 00008 //STEPLIB  DD DSN=DB2.Vnnn.DSNLOAD,DISP=SHR
 00009 //DBRMLIB  DD DSN=DB2.Vnnn.DBRMLIB.DATA,DISP=SHR
 00010 //SYSTSPRT DD SYSOUT=*
 00011 //SYSPRINT DD SYSOUT=*
 00012 //SYSUDUMP DD SYSOUT=*
 00013 //SYSTSIN  DD *
 00014 DSN SYSTEM (DB2)
 00015     BIND PLAN (PLAN1)
 00016     MEMBER (  DBRM1)
 00017 END

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit  Submi Rfind Rchan -     +           <      >   Canc
```

Within the free-mode editor, JCL members can be copied, listed, purged, retrieved from, or saved in a Natural library. All this is done via maintenance commands; see *Global Maintenenance Commands*.

2. Press PF4 (Submi) to submit JCL code listed in the editor, press PF5 (Fix) to switch to fixed mode.

Display Job Output

The **Display Job Output** function can be used to display the output of a JCL member.

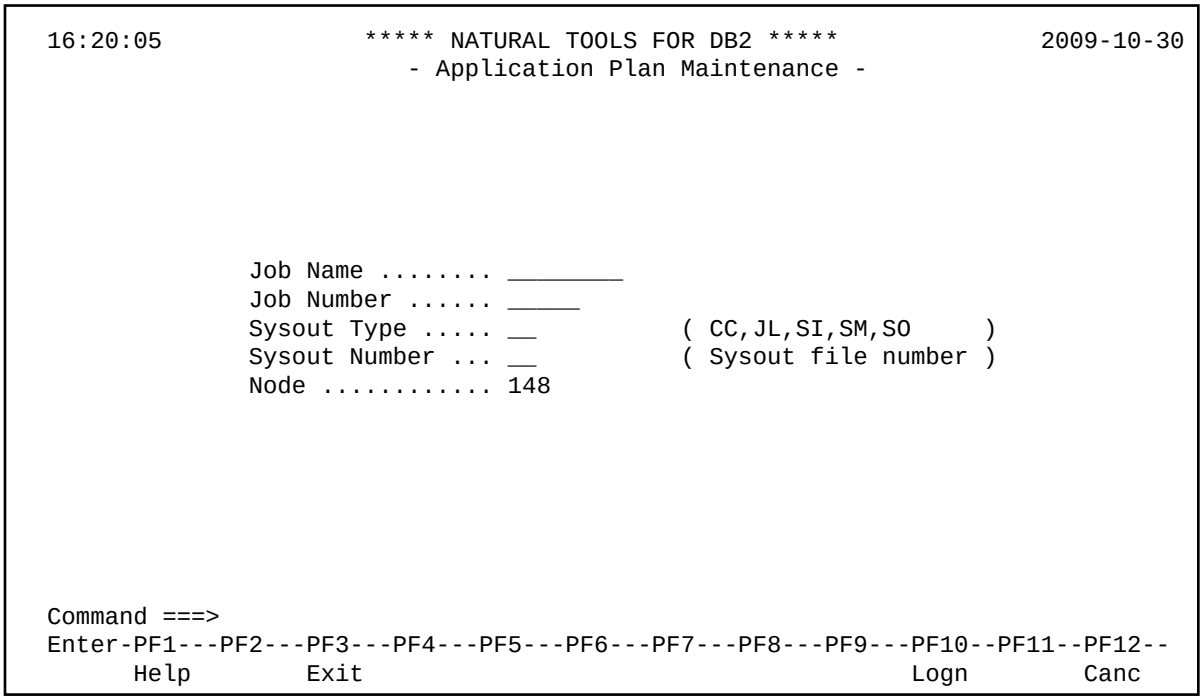
Note:
The Display Job Output function is available only if the Entire System Server is installed.

To display the output of a JCL member

1. On the **Application Plan Maintenance** menu, enter function code `JO`.

   In the Node field, the default node number (148) for Entire System Server can be modified.

A screen is displayed, where you can specify the desired job name and job number, as well as the numbers of the SYSOUT types.



2. In the **Job Name** field, a valid job name can be specified.

   - If you specify a value followed by an asterisk (*), or specify asterisk (*) notation only, a list of job output members is displayed for selection. In a job output member selection list, you can mark an output member with either B to display the member only, or L to display a list of all the job output's SYSOUT datasets, which in turn can be marked with B for display.
   - If you leave the **Job Name** field blank, you must specify a job number.

3. In the **Job Number** field, you can specify a unique job number. Only if a unique job number has been specified, specifications can be made in the **Sysout Type** and **Sysout Number** fields, too.

4. In the **Sysout Type** field, you can specify the type of SYSOUT dataset of the job with the specified job number to be displayed. The following codes apply:

Code	SYSOUT Type
CC	Condition Code
JL	Job Listing
SI	System Input
SM	System Message
SO	System Output

5. In the **Sysout Number** field, you can specify a file number to display a specific SYSOUT dataset of the type specified in the Sysout type field.

If you leave the **Sysout Number** field blank, all SYSOUT datasets of the specified type are displayed.