



Rocket LegaSuite 5250 Collector

User's Guide

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Notices

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Chapter 1: About LegaSuite 5250 Collector

The **LegaSuite 5250 Collector** is a tool provided by Rocket Seagull for zSeries and IBM iSeries. You will use it to scan host application display files and menus. It will then collect the application screens and messages.

Why Use the Collector

The Collector allows you to do the following:

- Specify the libraries you want to Collect,
- Set up user options,
- Run the Collector process in batch mode,
- Upon completion of processing, the result is stored in the `AWHOST` file.

Installing the LegaSuite 5250 Collector

Consult the *Installation Guide* PDF in the **Documentation** folder for steps on installing the LegaSuite Collector for the iSeries.

Before Using the LegaSuite 5250 Collector

After installation, it is wise to perform the following checks before using the LegaSuite 5250 Collector .

1. Check if there is an [existing](#) LegaSuite 5250 Collector,
2. Check if there are [any other users](#) currently using the existing LegaSuite 5250 Collector on the host.

1. Checking for Installed Collectors

Perform the following task(s) to check if there is a LegaSuite 5250 Collector already installed:

Type in the `WRKLIBPDM SEACOL` command which shows if one or more versions of the LegaSuite 5250 Collector are present on the host.

2. Checking if the Existing Collector is in Use

Perform the following task to check if any other LegaSuite 5250 Collector users.

If library **SEACOL** is present, use the `WRKOBJLCK OBJ(SEACOL) OBJTYPE(*LIB)` command to see if any user and/or job is using the LegaSuite 5250 Collector at this moment.

Chapter 2: Tips for Using the Collector

How to Use the Resulting AWHOST File

The AWHOST file must be transferred to a LegaSuite Builder where a Picture Album is created from the AWHOST file.

The Picture Album is evaluated for unique picture identification. If too many pictures are not uniquely identified, these pictures would require a manual identification process. When the amount of pictures which are unidentified is too large, you should influence the Collector with [User Options Parameters](#) and [Accessing Collector Proposals, on page 22](#) to improve identification of your host screen formats to use (and omit or combine).

Re-running the LegaSuite 5250 Collector

It is useful to know when to re-run the LegaSuite 5250 Collector.

Host application updates may also require re-running the Collection process. In this case, you can elect to rebuild the entire application or specify (by date) to collect on recently changed objects. In either case, you will need to transfer the AWHOST file to the Builder again.

Note: Before re-running the Collector, always save your AWHOST file for future reference.

Chapter 3: About the Collector Process

The Collector process completes certain steps per phase. When the AWHOST file is created, all work files are deleted.

You can manipulate the work files (after a processing phase has completed) by specifying **Proposals** and your own custom programs. Work files and AWHOST file layouts are described in the Reference section.

Note: Each workfile contains elements of the resulting AWHOST file.

Collector Processing phases are the:

- [Prepare phase](#),
- [Extract phase](#),
- [Combine phase](#),
- [Collect phase](#).

Influencing the LegaSuite 5250 Collector Processing Phase

The Collector process can additionally be influenced during processing. Program flow can be interrupted to apply a proposal to your application collection.

To use proposals, you must know about RPG programming and details concerning your host application screen conditions. Influence the Collector to adjust or drastically change your AWHOST file contents.

Also, host application updates usually require re-running the Collector. In such a case, you can elect to rebuild the entire application or specify (by date) to collect on recently changed objects. In either case, you will need to transfer the AWHOST file to the Builder again. Keep a copy of your AWHOST files used for development.

About the AWHOST File

A closer look at the Collector process begins by looking at the resultant file, the AWHOST. The AWHOST file contains all application display details. You must create this file on your host application using the Collector.

To do so, you must know details about the host application and associated libraries.

Even if you only have the application objects and not the source members, the Collector can scan the objects and gather enough information to make a set of application screens into an AWHOST file.

Starting the LegaSuite 5250 Collector

Perform the following steps to start the LegaSuite 5250 Collector.

1. After you verify your application libraries, start the Collector.
2. Specify the application libraries and any changes to your **Current Library**.
3. Specify the **User Options Parameters** you require, and launch a batch job by pressing **Enter**. The Collector processes the application libraries in a phased approach.

- Each phase achieves a result which is written to the allocated work file.

Collector Prepare Phase

During preparation, the Collector tries to link the `DSPF` objects with their `DSPF` source members. Both `DSPF` objects and their source members must be present within the library list in order for a link to be established.

If you plan to run the **LegaSuite 5250 Collector** using your `DSPF` objects, then none of the `DSPF` objects should be in use. If an object is in use, the Collector will generate a warning message in the job log file and skip processing this object. The cause is most likely someone accessing the object (recordlock/ memberlock).

The Collector can automatically resolve some linking problems logged during the prepare phase. Others may require your intervention. Refer to the Introduction in the [Errors and Diagnostic messages](#) chapter for more details on **Prepare phase** messages found in your `AWPRT` spool files.

Related topics

[Linking Objects and Source Members](#)

Linking Objects and Source Members

The prepare phase links objects and source members by performing the following steps:

- Create a list of all sources in the library list.
- Create cross references of all compiled objects and corresponding source members.
- Allocate work files to be used in the extract phase.

Related topics

[Collector Prepare Phase](#)

Collector Extract Phase

The **Prepare Phase** linked all necessary files for collecting.

The **Extract Phase** reads all fields, texts and other relevant DDS keywords from `DSPF` (and MNU) source members and objects. The results are written to work the files temporarily allocated in your current library. The Collector may encounter `DSPF` source members having duplicate or non-ascending sequence numbers. Such a situation cannot occur in the OS/400 editor. It may be caused by source generating programs or by tools like `DFU` or `SQL`. The Collector can process these source members, but will still report this situation.

The **Extract Phase** may ignore a `DSPF` (MNU or Object) source. All ignored source files (`DSPFs`, etc.) will be reported in a spool file. The Collector is not capable of handling these objects in a correct way. It ignores `DSPFs` in the following cases:

- The source member is of a type `DSPF36`. Due to a different syntax, the Collector is not able to extract screens. You can convert `DSPF36` source to "native" by compiling the source twice.
- The object is of type `DSPF38`.
- The `DSPF` was found before in a source file already processed. The Collector will assume the first `DSPF` found to be the most recent one and will omit the latter one.
- The associated object for the source member to be processed can not be located.
- The associated object is in use and can not be processed.

6. The source member contains deleted records. Such a situation can not occur in the OS/400 editor. It may be caused by source generating programs or by tools like DFU or SQL. The Collector is not capable of handling these source members in a correct way.
7. The source member does not contain records at all. The Collector will not handle these source members.

Collector Combine Phase

Each display file can be viewed as made up of screen formats. The Collector identifies these formats during processing.

Each recognized screen format (collected) can produce a unique screen reference in the `AWHOST` file. At the Combine phase, the Collector will try to combine record formats (specified by Keyword). The combination of common screen formats reduces the number of actual screen references included in the `AWHOST` file. A combination will be regarded as a new format and can be combined with additional formats under the same conditions described below.

The combination of formats requires these conditions be observed:

1. Formats must be within the same display file.
2. The last row occupied by the first format must not overlap the first row of the second format.
3. The `OVERLAY` keyword or `PUTOVR` keyword must be defined in at least one of the two formats to be combined.

Uncombined Formats

The following formats will not be combined unless otherwise noted:

- Formats containing the `WINDOW` keyword will be regarded as non-combinable. However, formats referencing the same window may be combined, according to the rules described above.
- All formats containing the `SLNO(*VAR)` keyword will be regarded as non combinable.
- All formats containing the `CLRL` keyword will be regarded as non combinable. This is untrue when all rows from the top row of the format up to the bottom row of the screen (normally 24) are cleared. You may, however, consider to ignore the `CLRL` keyword in the combine phase. Refer to [User Options Parameters](#) for a detailed explanation.

Collector Work Files

The Collector stores processing results into work files. Work files are touched based on the processing phase. Work files are always allocated in the current library. This is to enable processing of multiple host applications at the same time. Use a different current library for every package you want to process.

The Collector creates a series of work files during processing (see Introduction in the Work Files layout chapter for the details to these files). **Note:** Upon completion of Collector processing, all work files are removed. Proposals and your own user defined programs can be executed after the [indicated] phase(s).

Work files and the associated processing phase are listed below.

Table 1. Work Files and Associated Processing Phases

File	Description	Processing Phase
------	-------------	------------------

AWOBJD	Contains a description of all objects involved.	[PREPARE]
AWMB	Contains a list of all file members found in the library list.	[PREPARE]
AWFMT	Contains a list of all formats found in all display source member	[EXTRACT,COMBINE]
AWTXT	Contains a list of all fields and texts extracted from all display source members.	[EXTRACT,COMBINE]
AWDFM	Formats not to include in final result .	[COLLECT]
AWSBF	All subfiles specified.	[EXTRACT/COMBINE]
AWDDWA	All windows attributes specified .	[EXTRACT/COMBINE]
AWDDWB	All windows specified.	[EXTRACT/COMBINE]
USREDT	Show edited lengths for fields using special edit code 5–9.	[EXTRACT/COMBINE]
AWHOST	Final result, to be sent to the PC.	[COLLECT]

Related topics

[Appendix D : Collector Work File Layouts](#)

Collector Extract Phase

The **Prepare Phase** linked all necessary files for collecting.

The **Extract Phase** reads all fields, texts and other relevant DDS keywords from `DSPF` (and `MNU`) source members and objects. The results are written to work the files temporarily allocated in your current library. The Collector may encounter `DSPF` source members having duplicate or non-ascending sequence numbers. Such a situation cannot occur in the OS/400 editor. It may be caused by source generating programs or by tools like `DFU` or `SQL`. The Collector can process these source members, but will still report this situation.

The **Extract Phase** may ignore a `DSPF` (`MNU` or `Object`) source. All ignored source files (`DSPFs`, etc.) will be reported in a spool file. The Collector is not capable of handling these objects in a correct way. It ignores `DSPFs` in the following cases:

1. The source member is of a type `DSPF36` . Due to a different syntax, the Collector is not able to extract screens. You can convert `DSPF36` source to "native" by compiling the source twice.
2. The object is of type `DSPF38`.
3. The `DSPF` was found before in a source file already processed. The Collector will assume the first `DSPF` found to be the most recent one and will omit the latter one.
4. The associated object for the source member to be processed can not be located.
5. The associated object is in use and can not be processed.
6. The source member contains deleted records. Such a situation can not occur in the OS/400 editor. It may be caused by source generating programs or by tools like `DFU` or `SQL`. The Collector is not capable of handling these source members in a correct way.
7. The source member does not contain records at all. The Collector will not handle these source members.

Collector Collect Phase

The Collect phase produces the final results of the completed process (`AWHOST` file) to reside in the current library.

This file should be transferred to PC, and will be the starting point for the Builder. Finally, when this phase is completed, all work files in the current library are removed.

Chapter 4: Summary — Steps to Collect the AWHOST

Here is a summary of the steps you will perform to produce an AWHOST file.

General steps to use the Collector to produce the AWHOST file are as follows.

1. Identify the Host Application Libraries to Collect.
2. Start the Collector program and verify your current library and library list .
3. Specify **User Options** to apply and start the Collector job.
4. Review Collector results on the host application.
5. Transfer the AWHOST file to a LegaSuite Builder.
6. Review the Picture Album on your PC.
7. If too many unidentified screens are produced in the Service Builder, specify **User Options** and/or **Proposals** to influence the Collector process with your additional processes. When you have prepared and specified any **Proposals** (or other options), re-run the Collector process.

Identifying the Application Libraries for Collection

The result of this step can be entered onto the Collector interface (edit library list). The Collector processes source members including referenced user message files (MSGFs).

The library list will normally be equal to the library list used when running the package. In addition, the libraries with the source members should be added to the list. The order of libraries in the Collector library list should be the same order as the library list used within your application.

Library Identification Issues

When identifying the library, note the following **library list** issues:

- Normally, there is a one-to-one relationship between DSPF objects and members. If there are multiple source members for an object, or multiple objects with the same name, the first object and source member are used.
- If the host application uses message files, make sure the message files can be found in the library list.
- The Collector must have *USE authority for all libraries defined within the library list.

Collector Preparation for Application Libraries

Before starting the Collector, you will need to check the following issues for the library list.:

1. Find out which libraries on your host actually contain source members with screens (DSPF and MNUs) to be processed.
2. Find out where the compiled objects reside.

Starting the Collector and Verifying the Libraries

This activity is performed from the Collector Main screen. The current library will hold all interim working files and the created AWHOST file. You can set the library before using the Collector by changing the current library using **CHGCURLIB**. It is important to ensure that you have "write" authorization to the library you will be working within, otherwise the Collector will terminate with an error message.

Perform the following steps to start the Collector:

1. You can start the Collector with the command: `SEACOL/COLLEC`. At the copyright screen, press **Enter** and the main screen of the Collector is displayed. It displays the library list and current library.
2. Press **F16** to update the library list if necessary. The library list should contain all of the Application Libraries.
3. Press **F17** to update the current library if necessary.

Altering the User Options

User Options influence the Collector operation.

Perform the following step to alter the User Options:

1. From the **Collector Main Screen**, check the user options by pressing **F18** and traversing through the menu options.
2. A menu of different options will appear. Navigate through the options by entering the number beside the option on the command line and pressing **Enter**.

User options include:

```
Parameters
Collector Program Flow
Indicator settings
Formats to remove or omit
Language specific options
```

3. Select and specify each option for your Collection Run.
4. Press **Enter** to return to the Main Screen.

As you perform the Collector operations, it may be necessary to specify *additional* User Options.

1. Update your host application Collector User Options as required.
2. When the Builder produces limited screen identification (your Picture Album contains too many unidentified screens?) you may need to affect the application Collector with additional **User Option Parameters** and/ or **Program flow** specification

Starting the Collector Run

Once the environment has been set up correctly, you can start the Collector run.

1. Press **ENTER** on the Collector main screen.
This submits a batch job called COLLECTOR.

If you run the Collector over objects that are in use (someone is running the application being collected), you will receive a warning message in the job log informing you that the object could not be collected.

2. Once the COLLECTOR job finishes, check the collector results on the host application by first evaluating the job log and spool files.
3. Check your library for the presence of a newly created AWHOST file. If no AWHOST file is created, there will be remaining work files containing the current results of the process.
4. The next step is to transfer the AWHOST file to a PC.

Transferring the AWHOST File

The transfer of the AWHOST file from the host application to the PC can be done using any software that provides communication between the host application and PC.

However, before carrying out the transfer, the following steps need to be performed.

1. You should check the AWPRT spool files in the SEACOL/AWOUTQ to see whether any serious problems were encountered during the process. Review each message and appropriate actions. Example:

```
WRKSPLF  Check for user data AW310
WRKSPLF  Check for user data AW810.
```

2. Investigate the job log (WRKSBJOB). If there are serious problems, then an AWHOST file may not have been generated.
3. If you correct any identified problem(s), you must specify those corrections (User Options) and restart the process.
4. When the Collector run is successful, the next step is to transfer the AWHOST file.

Related topics

[Transferring Files Using Shared Folders](#)

Transferring Files Using Shared Folders

The transfer of the AWHOST file from the host application to the PC can be done using any software that provides communication between the host application and PC. When transferring AWHOST to the PC, the file should be transferred as an ASCII text file. A suggested technique is to transfer the files using the **Shared Folders** function.

1. To transfer files through the Shared Folders function, you must have a communications package which supports the Shared Folders function, for instance **Client Access**.
2. Start Client Access.
3. Enable the **Shared Folders** function by entering the following command on the iSeries command line. CPYTOPCD FROMFILE (<YOUR_CURRENT_LIB/AWHOST>) TOFLR (TEMP) TRNTBL (*DFT) TRNFMT (TEXT)
4. Sign on to the host application.
5. Type CPYTOPCD and press **F4**.
6. Specify AWHOST at the **From file** prompt.
7. Specify the library you used as current library during the Collector run at the **Library** prompt.
8. Specify the folder (directory on your host application drive, e.g. I:) to receive the AWHOST file, e.g. 'TEMP'.

9. Press **ENTER**.

If the command completed successfully, the host application will respond with "File member copied to PC document AWHOST". You should be able to access the file with a path like I : \TEMP \AWHOST. You are now able to view the AWHOST file.

Related topics

[Transferring the AWHOST File](#)

Evaluating the Created Picture Album from the AWHOST File

Once the AWHOST file is transferred to the PC, it is necessary that you build a Picture Album using the Builder. Please see the related links on reviewing the Overview section concerning influencing Collector results, Collector User Options and other methods of influencing the Collector.

Perform the following steps to do so:

1. Review the screens produced using the AWHOST file.

2. Run **Picture identification** in the Builder.

After you have run Picture Identification, you may evaluate the usability of the current Picture Album (from the generated AWHOST file).

3. Usually, if you are not satisfied with the results of the Collector run, it is because there are too many unidentified screens from the Picture Album.

Consider using the following methods when you come across the following Picture Album issues. Apply the appropriate method(s) and re-run the Collector.

- If you have identical pictures except for the function keys listed at the bottom, apply **Combine Function Key Formats**
- If the Collector run is producing too many pictures from individual record formats, apply **Combine Formats Using PRECOL**.
- If record formats are not being combined correctly, producing pictures that only display the top half or bottom half of a screen, apply **Combine Formats Ignoring CLRL Instructions**.

Related topics

[Influencing the Collector Results](#)

Influencing the Collector Results

The goal of the Collector is to create an optimal AWHOST file. The AWHOST file can be evaluated. When the evaluation results indicate a better AWHOST file could be generated, you should produce a new AWHOST file by influencing the Collector and re-running.

Influencing the Collector means:

- Influencing the Collector with User Options.
- Applying Proposals and User-defined programs as they influence Collector Results (work files and AWHOST).
- Specify Indicator Settings Options,
- Removing or Omitting Formats,
- Specifying Language Options.

The Collector provides the following **tools** to influence the Collector results:

- User Options,
- Program Flow,
- Several other parameters for influencing the result.

The Collector job log and processing messages provide "hints" as to how the Collector results occurred.

Related topics

[Evaluating the Created Picture Album from the AWHOST File](#)

Collector User Options

The greater part of control over the Collector process is provided within the **User Options** menu. **User Options** span the operational parameters to use the Collector, as well as specific selections related to specific host application environments (display methods, language modes, etc.).

User Options include:

- Parameters,
- Program Flow,
- Indicator Settings,
- Formats to Remove or Omit,
- Select Language of Collector Screen,
- User Program Flow and the use of Proposals are also highlighted .

Related topics

[Appendix A: User Options Parameters](#)

Chapter 5: Collector User Options

The greater part of control over the Collector process is provided within the **User Options** menu. **User Options** span the operational parameters to use the Collector, as well as specific selections related to specific host application environments (display methods, language modes, etc.).

User Options include:

- Parameters,
- Program Flow,
- Indicator Settings,
- Formats to Remove or Omit,
- Select Language of Collector Screen,
- User Program Flow and the use of Proposals are also highlighted .

Related topics

[Appendix A: User Options Parameters](#)

User Options Parameters

The Collector provides various parameter options when controlling the effect of combining record formats.

In evaluating your Collector run, if a large number of unidentified screens exist within your Picture Album (on the Builder), one method of reducing the screens produced is to combine screen formats. You can combine several types of screen formats. Screen formats containing function keys can be combined. Screen formats including the CLRLkeyword may be combined.

Related topics

[Appendix A: User Options Parameters](#)

User Options — Collector User Option Parameters

Using parameters, you may affect the way the Collector reacts to commonly used display programming methods and control the resulting output.

To reach the **User Options** page perform the following steps:

1. Start the Collector with the command: SEACOL/COLLEC
2. From the Collector Main screen, specify **F18 User options** and enter a <1> for **Parameters**.

Related topics

[Appendix A: User Options Parameters](#)

[Using Proposals to Combine Formats Properly](#)

User Options — Collector Program Flow

The LegaSuite 5250 Collector will allow you to set programs, which will be executed during the Collector process. This will make the LegaSuite 5250 Collector open to whatever program you want to be included in its process.

When you are using the **Collector Program Flow**, be aware that control of the data is passed to one or more user defined programs. Results can therefore no longer be guaranteed and are the responsibility of the user. The following table indicates the **Program Flow** options and explanation per option.

- **User Defined Program After Prepare Phase.** The prepare phase results in two files residing in the current library and in a spool file. The data files are `AWMB` (containing all members found in the user part of the library list) and `AWOBJD` (containing all objects of type `*DSPF` found in the user part of the library list). A common use of the Collector Program Flow at this stage would be to inspect the spool file (and take appropriate action) or to remove certain members from the `AWMB` file, or to remove certain objects from the `AWOBJD` file.
- **User Defined Program After Extract Phase.** The extract phase results in two files, both residing in the current library. The data files are `AWFMT` (containing all separate formats found) and `AWTXT` (containing all texts and fields found). At this stage, the **Collector Program Flow** can be used to create your own screen combinations or add some conditional text to the picture formats.
- **User Defined Program After Combine Phase.** The extract phase results in two files, both residing in the current library. The data files are `AWFMT` (still containing all separate formats, but also containing the combinations created by the standard procedure or by the "user defined program after extract") and `AWTXT` (still containing all texts and fields found). After this stage, the Collector Program Flow can be inspected for all screen combinations in order to add, change or delete them from the `AWHOST`.
- **User Defined Program after Collect Phase.** The collect phase results in the creation of the `AWHOST` file. At this stage, it is possible to directly manipulate the contents of the `AWHOST` file.

Related topics

[Influencing the Collector Program Flow](#)

Influencing the Collector Program Flow

Perform the following steps to influence the **Collector Program Flow**:

1. From the **Collector Main screen**, specify **F18 User Options** and enter a `<2>` to display the **Program Flow screen**.
2. Specify a proposal or user program to invoke by specifying the program name in the field associated with a process phase (invoked after phase completes).
3. The interim results of the four phases of the Collector run (stored in working files) can be influenced by user programs. In between phases, user-defined programs can modify the Collector process by performing additional manipulations after the specified process phase. Use Proposals (or copy a proposal as a base from which you can create the customized values within program) and/ or user-defined programs to manipulate the work files (and resulting `AWHOST` file).

Related topics

[User Options — Collector Program Flow](#)

User Options — Collection of Language Display by Indicator Settings

Some applications make heavy use of indicators to implement multiple languages in one display file. In these situations every text is in the `DSPF` multiple times in different languages and dependent on some specific indicators.

The resulting picture contains all the texts and will display them in the sequence of statement numbers in reverse order. If the language is not always the last statement then the picture will display

the mixed language! Using this option you are able to control which language (indicator setting) will display in the Picture Album.

Use the **Language Display** screen to select fields and texts, that are conditional based on indicators. Texts and fields are examined for the use of indicators. If the marked indicator is encountered (marked as 0 if (Nxx), marked as 1 if (xx)) the text will be marked in such a way that it will appear when examining the pictures on PC.

Suppose an example source (generated by the IDDOS tool) looks like:

```
0001.00 A N61N62 63
0002.00 AAN64N65N66      row col 'GERMAN TEXT'
0003.00 A N61N62N63
0004.00 AA 64N65N66      row col 'ENGLISH TEXT'
0005.00 A N61N62N63
0006.00 AAN64N65 66      row col 'DUTCH TEXT'
```

Marking indicator **63** as 1 would select the German text, thus showing the German text when looking at pictures on PC. Although the English and Dutch text are in the picture as well, they are "hidden" under the German text. To choose the English text, indicator **64** would be marked with a **1**. To choose the Dutch text, the indicator **66** would be marked with a **1**.

User Options — Collector Select Language Option

The Collector uses message files for its texts. You may make a copy of an existing message file and translate the contents into your native language. So your users will operate the Collector in their own language. If the message is in the *SEACOL* library, you can activate the message file using this option. If you are using Collector on a DBCS version of iSeries then your Collector language is automatically set to uppercase English.

User Options — Collection Formats to Remove or Omit

Using this option, record formats can be marked by their name.

Some applications have one or more "special" formats copied or generated in display files, like *DUMMY* or *CLEAR*. Another common way of coding record formats is to include a format in each *DSPF*, showing for instance the copyright of the package. The result could be that the Collector generates many of the same looking pictures or too many format combinations. You may decide to omit these record formats in the Collector run, which will leave you with less pictures.

This option is used to exclude those formats by name from the Collector process.

You could mark these record format names as:

- **<1>**. Specifies the Collector to ignore all occurrences of this record format.
- **<2>**. You may decide to include these record formats in the Collector run only once, and omit all other occurrences by marking these record format names as "1".
- **<3>**. Finally, there may be record formats, which will not be combined with any other record format at runtime, even though the source would suggest so. You could mark these record format names as **<2>**, which will result in a separate picture for this record format. Typically this would be the case for the record formats, looking like windows, but coded with reversed blanks to show the borders instead of the *WINDOW* and *WDWBORDER* keyword.

User Options — Collector Select Language Option

The Collector uses message files for its texts. You may make a copy of an existing message file and translate the contents into your native language. So your users will operate the Collector in their own language. If the message is in the *SEACOL* library, you can activate the message file using this option. If you are using Collector on a DBCS version of iSeries then your Collector language is automatically set to uppercase English.

Chapter 6: Using Proposals to Influence the Collector

Proposals affect the results contained in the `AWHOST` file. Proposals influence the Collector results by modifying the interim work files produced after each phase of the Collector run. Consequently, it is necessary that you are familiar with RPG, the iSeries development environment and your own application in order to make use of proposals.

Collector proposals affect `AWHOST` results relating to:

- Handling of subfiles and attributes,
- Collecting of code generated display files (`DSPF`),
- Listing specific source members to collect,
- Halting the collector during processing,
- Handling of specified record formats (for removal or combination of pictures),
- Launching of two proposals during a processing phase.

Proposals are described and contained within the **SEACOL/PROPOSALS** source file. Use these proposals as example programs to copy and change based on your needs. Keep in mind that these Proposal programs may change in future releases of the Collector.

Note: A complete description of the purpose of each proposal can also be found in the associated source member.

Collector Proposal Descriptions

Proposals listed in the **Appendix** chapter are grouped according to an iSeries "element" of the display files which you want to affect during the Collector process. A complete description can be found in the associated source member.

Note: These proposals should be viewed as example programs you can model your needs around. RPG knowledge is essential to actually inspect and manipulate these proposals into your own Collector programs. Each description includes the proposal name, program type, and at which process phase it should be executed

Proposals can be used for changing attributes, etc. at the field-level. Examine these proposals when interested in changing field (text-based) attributes such static text into messages; messages into static text, and so on.

Related topics

[Appendix B : Collector Proposal Descriptions](#)

Accessing Collector Proposals

Proposals enable you to influence the results of the Collector. Proposals are example programs that you can customize and add to the Collector program flow.

Perform the following steps to access Collector proposals.

1. From the Collector main screen, choose to access **User options (F18)**.

2. Select the **Collector program flow menu** option. A dialog will be displayed which enables you to enter the name of a program (and the library) to be executed after the completion of a Collector phase.

Related topics

[Using Proposals to Combine Formats Properly](#)

Chapter 7: Collector DDS Keyword Handling

DDS Keywords describe display conditions within your `DSPF` and `MNU` files. The Collector examines supported DDS Keywords and can perform operations based on their presence. Relevant elements are extracted from `DSPF`'s with the type `DSPF` and `MNUDDS` and from source members with the type `DSPF38`.

Fields and texts are extracted from the members (or objects) that are found. All source statements are scanned to find information, like screen positions, field attributes, conditions and other relevant information. Fields and texts are gathered for each record format. The `SFL` record format and its associated `SFLCTL` record format are considered to be one format. All keywords are examined.

The Collector will combine two record formats, when the formats contain the `OVERLAY` or `PUTOVR` keyword.

Note: Overlapping formats have restrictions when combining them.

For a detailed description of all possible keywords, see the "Data Description Specifications Reference" (SC41-9620 -00). A list of DDS keywords supported (recognized) by the Collector is included in the **Appendix — Host Application DDS Keyword Listing** chapter.

Related topics

[Appendix C : Host Application DDS Keyword Listing](#)

Chapter 8: Collector Errors and Diagnostic Messages

This chapter contains information pertaining to the error and diagnostic messages which will be reported in the `AWPRT` spool files in the `SEACOL/AWOUTQ`. Always check the spool files for any messages after launching the process. Messages are grouped by :

- The **Prepare Phase**. The Prepare phase occurs first.
- The **Extract Phase** (in which they occur in the collection process).
- The **Extract phase** occurs after the Prepare phase.

Related topics

[Appendix E : Collector Messages](#)

Chapter 9: Troubleshooting Assistance

The following topics provide troubleshooting assistance should you come across Collector issues.

Combining Function Key Formats

If you do not get the results you were expecting when you run the Collector and create a Picture Album, you may need to use one or more proposals to influence the way the Collector gathers information. If you have multiple function key formats in the footer of many screens, you may get a different picture for each function key format.

The screenshot below shows an example.

<table><tr><th>Header</th></tr><tr><td>Body</td></tr><tr><td>Footer A</td></tr></table>	Header	Body	Footer A	<table><tr><th>Header</th></tr><tr><td>Body</td></tr><tr><td>Footer B</td></tr></table>	Header	Body	Footer B	<table><tr><th>Header</th></tr><tr><td>Body</td></tr><tr><td>Footer C</td></tr></table>	Header	Body	Footer C
Header											
Body											
Footer A											
Header											
Body											
Footer B											
Header											
Body											
Footer C											
Picture 1	Picture 2	Picture 3									

Figure 1: Combining function key formats example

The desired result is a single picture that contains all the function key formats. You can set a parameter that tells the Collector which row your function key formats start on, and the parameter will combine all formats into one picture.

For example, if your function key formats start on row 22, perform the following steps to combine the function keys:

1. On the Collector's **Main Menu** screen, type `SEACOL/COLLEC` on the command line.
You are brought to the **Welcome To LegaSuite 5250 Collector** screen.
2. Press **Enter** on the **Welcome** screen.
You are brought to the **LegaSuite 5250 Collector Main Screen**.
3. Press **F18** .
You are brought to the **LegaSuite 5250 Collector User Options** screen.
4. Choose option 1, **Parameters**.
You are brought to the **LegaSuite 5250 Collector User Options – parameters** screen.
5. Enter the row number “22” in this field that starts with “**Combine record formats starting from row**”

6. Run the Collector.

You should have one picture containing all three footer formats.

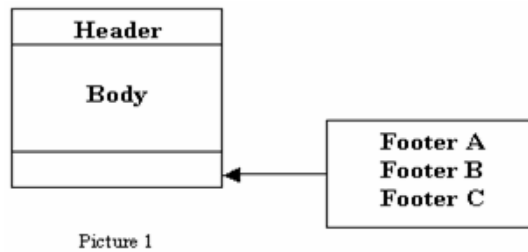


Figure 2 : Result of combined function key formats

Combining Consecutive Single Row Formats

If your application uses single row formats that make up a display file, you can have the Collector combine those formats into one format to produce fewer, more accurate pictures.

A single row format is combined with another if:

- It only occupies one row, and
- The next format occupies one row as well and is equal to or immediately following the row of the first format.
- If your single row formats are used to simulate the appearance of a subfile, you can create a subfile effect using this option.

Perform the following steps to combine consecutive single row formats:

1. On the Collector's **Main Menu** screen, type `SEACOL/COLLEC` on the command line.
You are brought to the **Welcome To LegaSuite 5250 Collector** screen.
2. Press **Enter** on the **Welcome** screen.
You are brought to the **LegaSuite 5250 Collector Main Screen**.
3. Press **F18**.
You are brought to the **LegaSuite 5250 Collector User Options** screen.
4. In the Collector's User Options menu, select the **Parameters** option, and in the parameter field that starts with "**Combine consecutive single row formats**", type `1` in this field.
5. Another way to combine single row formats is by using a proposal. Here are the proposals you can use to force the Collector to combine consecutive single row formats:

Use this proposal	To have the Collector combine single row formats...
APPL013	Row by row
APPL032	Two rows by two rows
APPL033	Three rows by three rows
APPL034	For rows by four rows

Each of the above proposals compares the consecutive rows, and if they are equal, it combines them.

Using Proposals to Combine Formats Properly

For non-standard applications, the Collector includes programs (called *proposals*) you can use to control the results of the collection. The source is included for each program so you can edit them to suit your needs if necessary.

You specify what proposals you want to use in the **User Options** before running the Collector, using the **Collector program flow** option. It is important that you apply a proposal after the proper phase of the collection. Within the source of each proposal, you can read a detailed explanation of its purpose and the proper Collector phase to apply it.

Related topics

[Accessing Collector Proposals](#)

[User Options — Collector User Option Parameters](#)

Using the PRECOL Proposal

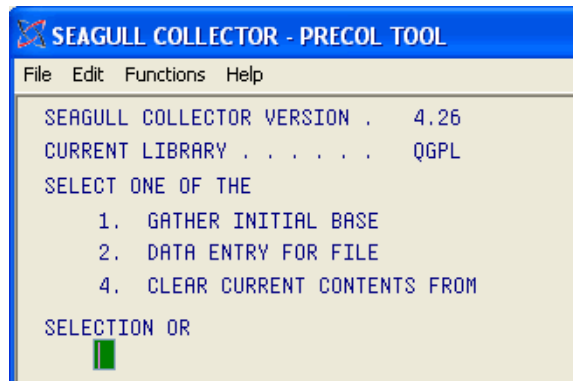
Using several PRECOL proposals, you can control how formats are combined in one display file or across several display files to create screens and panels. Before you undertake this procedure, you should understand your display files and the names of their formats.

Perform the following steps to use the PRECOL Proposal.

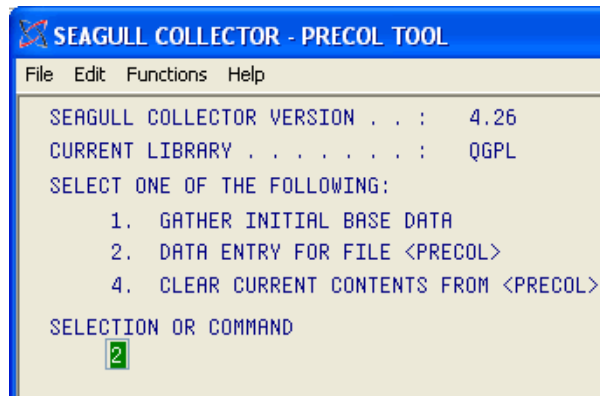
1. On the Collector's **Main Menu** screen, type `SEACOL/COLLEC` on the command line.
You are brought to the **Welcome To LegaSuite 5250 Collector** screen.
2. Press **Enter** on the **Welcome** screen.
You are brought to the **LegaSuite 5250 Collector Main Screen**.
3. Press **F18**.
You are brought to the **Legasuite 5250 Collector User Options** screen.
4. Click on the **Collector Program Flow** option.
The Collector Program Flow screen is displayed.
5. In the screen, go to the **Combine Phase**. Run the Collector using the MAKEPRECOL proposal after the Combine phase by typing "MAKEPRECOL" in the field after the User Defined Program after Combine field.
6. In the same **Combine phase**, type in "SEACOL" in the field after the **Library** field.
This proposal creates two files on the iSeries that you can edit to specify how formats should be combined:
 - `PRECOLNW` is a data file that allows you to combine formats within the same display file.
 - `PRECOL60` is a logical file – related to the `PRECOLNW` file – that allows you to combine formats across multiple display files.
7. Exit the **Program Flow** screen and exit the Collector until you return to the command line.

8. At the command line, enter `SEACOL/PRECOLTOOL` on a command line to open **PRECOLTOOL**, a file editor program.

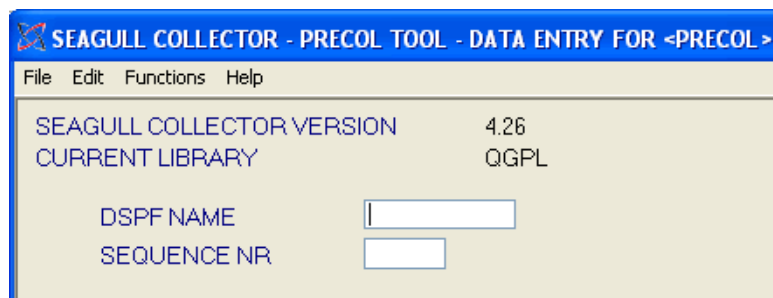
The **PRECOL** tool menu is displayed.



9. Type **1** and press **Enter** to view the data gathered about the display files you collected against. You need to do this the first time you use PRECOLTOOL. After that, you do not need to run it again as long as your display files do not change.
10. Edit the library list to include the libraries on which you ran the Collector.
 - a. Use **F19 (Edit library list)** to retrieve the list you used in the Collector run.
 - b. Press **Enter** to send **PRETLBAS** to batch.
 - c. Exit the Collector to return to the command line.
11. Type `SEACOL/PRECOLTOOL` on a command line again, then press **Enter**.
 - a. At this screen, type **2** and press **Enter** to edit the PRECOLNW file.



- b. Press **F4** in the **DSPF name** field to select the display file you want to use.

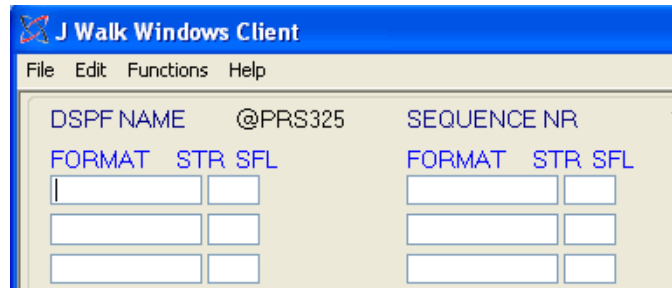


- c. In the displayed popup that lists the display files, type **1** next to the display file and press **Enter**.

The **DSPF name** and **Sequence number** fields are filled with the selection you made from the display file list pop-up.

12. You now have two options:

- Press **F9** to retrieve a new sequence number and press **F6** to display a dialog that allows you to enter a new format combination for this display file.



- To edit an existing combination, enter the sequence number previously assigned for a combination in this display file and press **Enter**.
13. If you go with the first option (pressing **F9**), press **F4** in the first field of the Format column to display a dialog with a list of formats for this display file.
- In the dialog, type a number (1 through 540) in front of each format you want to combine to specify the order in which they should be combined. The formats are listed in the order you specified.
For formats coded with the keyword SLNO(*VAR), you can specify the row where you want the format to start in the **Str** column. This provides a method of including such formats on more than one row within your picture, in the same way as the application program.
 - Press **Enter** to save this combination and press **F6** to add a new combination for this display file, or specify a different display file in the **Display name** field and then press **F6**. Repeat the steps for combining formats.
14. After you have specified all of your combinations, run the Collector again, this time using the **APPL061** proposal after the **Extract phase**. The **APPL061** proposal uses the PRECOLNW/PRECOL60 file to combine formats.
15. Create a Picture Album from the new AWHOST and check to see that your formats were combined correctly.

Eliminating Display Files from the Collection

Using the PRECOLNW file, you can specify display files to omit from the collection process.

Perform the following steps to eliminate display files from the collection:

1. Use **PRECOLTOOL** (explained in the topic [Using the PRECOL Proposal, on page 28](#)) to edit the PRECOLNW file.
2. For the display file that you want to omit, enter NOTHING (or any other word that is not a format name) as the format to combine.
3. Then use the **APPL061** proposal when you run the Collector. This display file will be omitted because the format does not exist.

Creating One Picture that Works for Multiple Languages

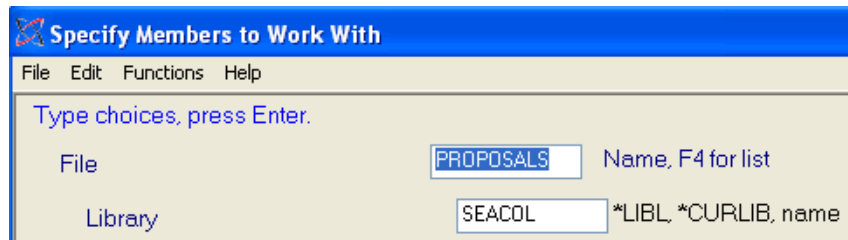
You can create one set of screens to handle multiple languages, as long as you have equal sets of display files for each language. The contents of the literal will of course vary among languages, but the length of the literal should match for each language. (You can use the **Text Translation Tool –TTT–**

to achieve this.) You can create the `AWHOST` file from just one of the sets of display files (for one of the languages). You should specify that literals be regarded as messages.

To do this, use the **LIKEMSG** proposal after the **Combine phase** when running the Collector. The proposal assumes that fixed text should be regarded as a message. Then as long as your text panel fields are set to Always update text, one panel can handle all versions of the text message. **Note:** By default, the proposal treats the whole screen. You can edit the program so that it begins and ends on certain rows.

Perform the following steps to create one picture that works for multiple languages.

1. On the host, type `STRPDM` on a command line and press **Enter** to start the **Program Development Manager**.
 - a. Choose option 3, **Work with Members**.



- b. Enter `PROPOSALS` as the file and `SEACOL` as the library.
2. Find the **LIKEMSG** proposal, then type `2` next to it and press **Enter**.
3. Page down to the **Default Values for Parameters** section.

Under ***LIKE DEFN AWLINE STRROW**, notice the **Z-ADD1** parameter. The **1** specifies the row number on which the proposal will start.

 - a. Change the **1** to the row number on which you want the proposal to start.
 - b. Under ***LIKE DEFN AWLINE ENDROW**, change the **Z-ADD** parameter to specify the row number on which the proposal will stop.
 - c. Press **F3**. On the **Exit** screen, leave **Y** in the **Change/create member field** and press **Enter** to save your changes. A message states that **LIKEMSG** has been changed.
4. Once you have changed the source, you need to compile it. Before you compile, make sure that **SEACOL** is part of your library list. To compile, type `14` next to the **LIKEMSG** member and press **Enter**.

If you see the **Confirm Compile of Member** screen, type **Y** in the **Delete existing object** field to replace the current **LIKEMSG** program. (Depending on your host application settings, you may not see this screen.) The compile is sent to batch. (Depending on your host application settings, the compilation may be performed interactively.)
5. Add the **LIKEMSG** proposal to the Collector run after the Combine phase.

Appendix A: User Options Parameters

The following list explains each of the user options as they appear on the **User Options – Parameters** screen.

Combine record formats starting from row

For each **DSPF**, the Collector finds all formats starting at or below the row indicated and regards them as a single format, regardless of any keyword specified. This can dramatically reduce the number of pictures that the Collector run makes. Use this parameter to combine formats containing function key references (e.g. row 22 or 23) and program messages (row 24) into one format. This new format can then be combined to other formats under the conditions described on the combine phase. Formats combined in this way, can be recognized by their name, which will be ***0XX/0YY**, where **XX** stands for the value you have entered and **YY** stands for the display height, normally 24. The default value is **<0>**, which indicates that this parameter will not be used

Combining Function Key Formats

Use this **User Options** method when you have pictures being produced that are identical except for the function key assignments displayed at the bottom of the screen. This commonly occurs when there are more function keys available than can be displayed on one screen. This solution combines these pictures into one and leaves the last lines of the screen variable. Follow these steps to perform this activity.

1. After pressing **F18** to display the **User options** menu, choose menu option **1** to display the **Parameters** screen. The cursor will be positioned at the first parameter, **Combine record formats** starting from row. By default, this row number is set to **<0>** which indicates that all rows should be used when generating record formats.
2. Change the row number to the first row where function key assignments are displayed at the bottom of the screen. This is usually at row 22. Now when the Collector run is started, the function key rows will not be considered unique record formats and only one picture will be generated, instead of one picture for each of the different function key assignment record formats

Combining Screen Formats Using PRECOL

If there is more than one format used to describe a screen and there are multiple screens in one source, all formats will be combined. This can form more pictures than the original number of screens. Use this method when record formats are being combined into too many pictures. The information is presented in an example format. If you have two screens within one **DSPF**, each made up of a header, body and footer, the screen permutations of this combination form eight different picture possibilities.

1. HEADER1+BODY1+FOOTER1
2. HEADER1+BODY1+FOOTER2
3. HEADER1+BODY2+FOOTER1
4. HEADER1+BODY2+FOOTER2
5. HEADER2+BODY1+FOOTER1
6. HEADER2+BODY1+FOOTER2
7. HEADER2+BODY2+FOOTER1
8. HEADER2+BODY2+FOOTER2

Suppose the only combinations that you want as pictures are combination 1 and combination 8. Enter the record formats at the end of the **PRECOL** proposal. Each picture will be defined using three rows, identifying the source, the picture record number, and the record format. The rows used to define two pictures, one for combination 1 and one for combination 8 would look like:

Source	Pic #	Record Format
DSPF01	1	HEADER1
DSPF01	1	BODY1
DSPF01	1	FOOTER1
DSPF01	2	HEADER2
DSPF01	2	BODY2
DSPF01	2	FOOTER2

The `PRECOL` file and `PRECOLTOOL` are provided to define specific screen identification formats without viewing the source code. The `PRECOL` file is used to hold the selected combinations of pictures (from Initial Base Data). The `PRECOLTOOL` maintains the `PRECOL` file.

Combine consecutive single row formats

A package may be developed using a separate record format for each row displayed. In such cases the Collector has difficulties in combining the record formats. Not only would this take a considerable amount of time to process, the `AWHOST` file could contain a large amount of pictures "unknown" to the package at runtime. In such cases this parameter can help you save time, and still produce "known" pictures. Within a display file, record formats are sorted by their starting row. When the parameter has a value of `<1>`, record formats are combined when:

- The current record format only occupies one row and
- The next record format occupies one row as well and
- Both record formats are on the same row or on two consecutive rows.

Omit empty record formats

Setting this parameter value to `<1>` will cause the Collector to regard empty formats as non-existent. A format is considered empty when no fields or texts are displayed. Be aware that program and hidden fields as well as fields or texts with an unconditional ND (non-display) attribute are not displayed. (This is not true for message fields.)

Omit records only containing blanks

When this parameter is set to `<1>`, record formats only containing blanks will be ignored by the Collector. In most cases, record formats only containing blanks are used within a package to clear (part of) the screen and should be omitted. Keep in mind that this parameter is in effect for all display files of the package you are handling.

Ignore `<CLRL>` keyword on combine phase

The keyword is typically used in System 36 based packages. The `OVERLAY` keyword is the corresponding `iSeries` keyword. When this format is sent to a screen, it doesn't clear all lines, but only from the first defined row until the last defined row in this format. The `CLRL(*NO)` keyword doesn't clear the screen. The `CLRL(xx)` keyword clears "xx" (where xx indicates a number of lines on the screen) number of rows starting from the first defined row of this format. If this parameter is set to `<0>`, combinations of record formats will be made under the following conditions:

- Record formats must be within the same display file, and therefore within the same source member.
- The last row occupied by the first format must not overlap the first row of the second format.
- The `OVERLAY` or `PUT` keywords must be defined in at least one of the two formats.
- If you set this parameter value greater than `<0>`, every format containing the `CLRL` keyword is considered to have the `OVERLAY` keyword defined.

Note: In order to combine formats, these formats should not be overlapping. The following values can be used for this parameter.

- **<1> Ignore both CLRL(*NO) and CLRL(xx).** The Collector will try to combine these formats. The first row and the last row of these formats are as defined in the source.
- **<2> Ignore both CLRL(*NO) and CLRL(xx), do handle <xx>.** The Collector will try to combine these formats, but handle the format with CLRL(xx) starting from the first defined row and ending xx lines down.
- **<3> Ignore CLRL(*NO), do not combine CLRL(xx).** The Collector will try to combine all formats with CLRL(*NO), but won't combine formats with CLRL(xx). Every format gets a new picture.
- **<4> Do not combine CLRL(*NO), ignore CLRL(xx).** The Collector doesn't combine formats with CLRL(*NO). Every format gets a new picture. The Collector will try to combine all formats with CLRL(xx). The first row and the last row of these formats are as defined in the source.
- **<5> Do not combine CLRL(*NO), ignore CLRL(xx), do handle <xx>.** The Collector doesn't combine formats with CLRL(*NO). Every format gets a new picture. The Collector will try to combine format with CLRL(xx), but handle the format which using CLRL(xx) starting from the first defined row and ends xx lines down.

Include PULLDOWN formats

Use this setting to specify PULLDOWN formats to be included in your pictures:

- **<1>=Yes**
- **<0>=No.**

Use PRECOLTOOL to Create Pictures from DSPF Formats

Use this tool to remove unwanted screen formats during the Collector run. Follow these steps to perform this activity.

1. Start the PRECOLTOOL by typing the command `CALL SEACOL/PRECOLTOOL`
2. To create pictures using formats from a display file (DSPF), you must have gathered initial base data. Specify **<1>** and press **ENTER**.
3. After you have gathered the initial base data is completed, restart the PRECOLTOOL and select the **“Data entry for file <PRECOL>”** function. Enter **<2>** and press **ENTER**.
4. You may select the **“Clear current contents of <PRECOL> file”** (option **<4>** from the menu) to essentially start again (or recover a very small amount of disk space).

Note: It may be more valuable to save the <PRECOL> file for reuse after the host updates have occurred.

Gather Initial Base Data for PRECOLTOOL

Before you can proceed using the **PRECOLTOOL**, you must gather initial base data. This function gathers information from the display files (DSPF s) for later use with the **PRECOLTOOL**. When you have completed this step and your display files have not changed (again), you can consider that the base data is gathered.

Make PRECOL and AWHOST Files

Begin the Collector session by specifying that the Collector process produce an **AWHOST** file and **PRECOL** file. Please refer to the member **<MAKEPRECOL>** in source file **<SEACOL/PROPOSALS>** for a detailed description of this entry. Follow these steps to perform this activity.

- From with the Collector Start screen, select **User Options (F18)**.
- Call the **Collector Program Flow** entry (option **<2>**).
- Specify the program **<MAKEPRECOL>** in library **<SEACOL>** within the **“User defined program after combine”** field. Results of this activity are stored in the **PRECOLNW** file.

For OS/400 V2R3M0 or older

This parameter must be set to <0> for DSPF38 objects, when using OS/400 V2R3M0 or lower and when using indicator settings. Refer to Indicator Settings for more information about using indicator settings to operate your AS/400 application in different languages.

Reset Original Library List

This parameter specifies whether or not the library list will be set to the original value at the end of the process.

Run Process Interactive

Setting this value to <1> will make the Collector run operate interactively. This is only done when debugging user programs that you have added to the Collector process in the Collector Program Flow.

Prompt when submitting job <COLLECTOR>

With the setting of this parameter you may indicate whether or not you want to change the default settings when submitting the job <COLLECTOR>. If you set this parameter to <0> (no, the job <COLLECTOR> will be submitted using the default values from your job description. You may want to change some of these settings; typically you may use this feature to schedule the job <COLLECTOR> to run in the absence of users. Changing the default settings may interfere with other jobs running on your system, which may be delayed by your interference. If you are in any doubt, contact your security officer before changing these settings.

Only Handle Members Changed Since

This parameter may be typically used to run the Collector on a new version of your package. By entering the date, only those DSPF's changed since the date entered will be treated. All other DSPF files will be omitted. A source member is considered changed when:

- One or more statements have been changed,
- The source member text has been changed or renamed

An object is considered changed when:

- The object is compiled or moved,
- The date should be entered in the format (YYMMDD), disregarding the status of your system value (QDATFMT). are in use. A warning is logged indicating processing has skipped an object currently in use.

Collect on Object

The Collector can extract information from DSPF objects without the corresponding source members. This parameter can only be used with OS/400 V3R1M0 (minimum). This parameter has three possible values:

- **<0> Extract information from source members only.** The source member must have a corresponding DSPF object.
- **<1> Extract information from DSPF object.** The object must have a corresponding source member.
- **<2> Extract information from DSPF object.** Existence of source member is not important.

It is recommended to set this parameter to <1> or <2> when possible because the Collector works faster with objects than with sources and objects reflect more accurately what fields appear on the screen at runtime than sources. Using this option (<1> or <2>) requires that none of the DSPF files are in use. A warning is logged indicating processing has skipped an object currently in use.

Use CA/400 (W95 and NT) to Transfer AWHOST to PC (DBCS)

Use this parameter when you use Client Access/400 (W95 and NT) to download the AWHOST file to your PC (<1>=Yes, <0>=No). This parameter is only available on DBCS systems. CA/400 requires

DBCS files (be transferred to a PC) to be created with the option IGCDTA(*YES). Other file transfer utilities DO NOT require use of this option. Incorrect use of this option can result in an AWHOST. The file (on the PC) with the incorrect "JIS"-code. The AWHOST will appear corrupt in the Builder.

Add SO/SI To DBCS Graphic Text

Set this parameter to <1> or <0> to add SO/SI (shift in/shift out) characters to DBCS Graphic (G-type) text to enable the DBCS graphic text to be seen as DBCS characters when the AWHOST file is transferred from the iSeries to the PC.

Related topics

[User Options — Collector User Option Parameters](#)

[User Options Parameters](#)

[Collector User Options](#)

Appendix B : Collector Proposal Descriptions

All programs in the file <PROPOSALS> included with the Collector are listed below. .

Changing Field Attributes

Proposals can be used for changing attributes, etc. at the field-level. Examine these proposals when interested in changing field (text-based) attributes such static text into messages; messages into static text, and so on.

APPL011.Program Type – RPG. Process Phase – Extract.

This proposal examines source members for output fields and replaces the output field with the related text. The name of the text file is hard coded to <F9220>. Output fields have names with the format VTxxxx and have a three-digit number, starting with 001. So, the first output field name is VTX001. This proposal represents a specific manipulation and will require modification for your use.

LIKEMSG.Program Type – RPG. Process Phase – Combine.

Use this proposal to specify all text fields are coded as messages <MSGID>. This proposal can be used to create one set of language independent panels (containing message references) which can refer to externalized, translated literal message files for use in supporting various national languages.

SCREENID.Program Type – RPG. Process Phase – Combine.

This program specifies screen title fields to become fixed text. Use this program to improve the results of screen identification, particularly when your application texts are coded as externalized <MSGIDs>. The program searches for each occurrence of the I/O field <##PGM>, , on row one, position two, and when found, the program specifies field to be fixed text (containing the first seven characters of the DSPF name. The converted field provides a unique identifier within your screens. This program can also assist in identifying applications created using SYNON development tools.

Handling Subfiles and Attributes

Proposals can be applied to re-assign subfile attributes to field definitions under the appropriate circumstances.

APPL031.Program Type – RPG. Process Phase – Extract.

Rows that are coded as individual rows but appear as a subfile, have their attributes changed to that of a subfile in the resulting AWHOST file. There must be at least four rows of similar appearance.

APPL032.Program Type – RPG. Process Phase – Extract.

This program looks for sets of two rows that are similar in appearance and changes their attributes in the AWHOST file to that of a subfile with two rows per record. There must be at least four sets of rows of similar appearance.

APPL033.Program Type – RPG. Process Phase – Extract.

This program looks for sets of three rows that are similar in appearance and changes their attributes in the AWHOST file to that of a subfile with three rows per record. There must be at least three sets of rows of similar appearance.

APPL034. Program Type — RPG. Process Phase — Extract.

This program looks for sets of four rows that are similar in appearance and changes their attributes in the `AWHOST` file to that of a subfile with four rows per record. There must be at least three sets of rows of similar appearance.

Collecting Code Generated Display Files DSPF

AS/400 display files can be created by "code generators." When such a tool is used to develop your AS/400 displays, certain deficits may need to be corrected before you run the Collector. Study these example proposals in order to see LANSAs created display file deficits be corrected.

LANSAs. Program Type — CLP. Process Phase — Extract.

This proposal reads DSPF sources that were generated with the LANSAs code generator. All formats are then read and placed in the `PRECOL` file. This proposal was created for a specific development environment (i.e. LANSAs) and is not suitable for general use.

LANSAs2. Program Type — CLP. Process Phase — Extract.

This proposal reads the DSPF sources created by the LANSAs code generator. This proposal is used in conjunction with LANSAs. The first time that you execute the Collector process with LANSAs DSPF sources, and the `<LANSAs>` proposal to fill the `PRECOL` file. After that, always use the `<LANSAs2>` proposal. This way, you can edit the `PRECOL` file and keep these combined format definitions.

TESTDSPF. Program Type — RPG. Process Phase — Prepare.

Tests if source members (with no type identifier) are of type `<DSPF>`. Occasionally, generated code is created without the required DSPF type identifier. Use this program to inspect (particularly LANSAs generated code) display files (and when identified) set the type to "DSPF".

Listing Specific Source members to Collect

When you want to select a specific set of source members for Collecting, you may submit a file (list) to limit the scope of the Collector run.

APPL070. Program Type — RPG. Process Phase — Prepare.

This proposal will only collect those members that are listed in the `<MBRONLY>` file. This file must be located in the library list or, preferably, in the working library. If the file `<MBRONLY>` is not found, the Collector process will halt with an error CPF4101.

Halting the Collector during Processing

If you need to halt the Collector run (while investigating a proposal, etc.), apply the following proposal to do so.

Handling Specified Record Formats for Removal or Combination of Pictures

ERROR. Program Type — RPG. Process Phase — Any phase.

This proposal temporarily halts the Collector process after the specified phase. To continue processing, enter "I". To stop processing, enter "C".

Handling Specified Record Formats for Removal or Combination of Pictures

In the Collector process, record formats are a basis for identifying uniqueness amongst host application display files. In order to control record formats and how to handle them, study these proposals and the record format operations they perform.

EQUAL10. Program Type — RPG. Process Phase — Extract.

This proposal specifies record formats from the same display file (DSPF), where the six left-most characters are matching, to be grouped together in a single picture.

APPL080. Program Type — RPG. Process Phase — Extract.

This proposal removes formats found in the FMTREMOV file. This file must be located in the library list or, preferably, in the working library. If the file FMTREMOV is not found, the Collector process will end with an error CPF4101.

APPL021. Program Type — RPG. Process Phase — Extract.

Used in conjunction with <PRECOLNW> to combine record formats. Formats that start with the SLNO(*VAR) keyword are not combined and create their own record format. The last eight characters of the original record format name will be used as the name of the new record format.

APPL061. Program Type — RPG. Process Phase — Extract.

Used in conjunction with <PRECOL60> to combine record formats. Formats that start with the SLNO(*VAR) keyword are not combined and create their own record format. The last eight characters of the original record format name will be used as the name of

MAKEPRECOL. Program Type — CLP. Process Phase — Combine.

This proposal fills the file <PRECOLNW> with all possible record format combinations, which equals the result fileAWHOST. Combinations found in <PRECOLNW> will automatically be added to AWHOST. You may want to run this program once and then maintain <PRECOLNW> manually.

PRECOLTOOL. Program Type — CLP. Process Phase — Before Collector Run.

This proposal should be run before the Collector process is started. It provides a means to create your own combinations of record formats into pictures. The utility allows you to easily maintain the PRECOLNW file.

APPL040. Program Type — RPG. Process Phase — Extract.

Generates one record format for each possible variation in a psuedo-window of varying height. This enables each variation to be recognized as a popup window within the Picture Album. This proposal was created for a single customer and is not suitable for general use.

APPL050. Program Type — CLP. Process Phase — Extract.

This proposal is used to execute two proposals that must execute during the same Collector phase. In this example, the two proposals that are executed are <APPL031> and <APPL040>.

Additional Proposals

The following proposals are other proposals you can use to influence the Collector run.

APPL50

Run multiple proposals in the same phase. Edit the APPL50 proposal to call the proposals you want to run. Then apply the proposal after the Extract phase. In this example of the APPL50 source, the APPL040 and APPL031 are specified to be run.

APPL070

Collect only specific display files.

APPL080

Omit certain formats from the collection. (From the standard collector options, you can only specify 16 formats.)

EQUAL10

Combine formats that have the same characters in the first part of the format name. (The default is the first 6 characters, but you can edit the program to change that number.) For example:

```
ITEM01
ITEM02
```

```
ITEM03
DEBTOR01
DEBTOR05
GENERAL01
ITEM04
ITEM01, 02, 03, and 04 are combined.
DEBTOR01 and 05 are combined.
```

ERROR

Force itself into an error after a certain phase so you can perform another task, such as looking at the intermediate files. You can then resume the collection by typing ! (for ignore).

Related topics

[Collector Proposal Descriptions](#)

Appendix C : Host Application DDS Keyword Listing

Below you will find an overview of keywords, that can be used in the DDS source for display files. Next to the keyword is stated ,the action taken by the Collector.

ALARM

No action taken. Passed.

ALIAS

No action taken

ALTHELP

The enabled key is passed.

ALTNAME

No action taken

ALTPAGEDWN

The enabled key is passed.

ALTPAGEUP

The enabled key is passed.

ALWGPH

No action taken.

ALWROL

No action taken.

ASSUME

No action taken.

AUTO

The appropriate attributes are passed.

BLANKS

No action taken.

BLINK

No action taken.

BLKFOLD

No action taken.

CAxx

Enabled function key is passed.

CFxx

Enabled function key is passed.

CHANGE

No action taken.

CHCACCEL

No action taken.

CHCAVAIL

No action taken. Also see SNGCHCFLD and MLTCHCFLD.

CHCCTL

No action taken. Also see SNGCHCFLD and MLTCHCFLD.

CHCSLT

No action taken. Also see SNGCHCFLD and MLTCHCFLD.

CHCUNAVAIL

No action taken. Also see SNGCHCFLD and MLTCHCFLD.

CHGINPDFT or CHGINPDFT

The appropriate attributes are passed.

CHECK

The appropriate attributes are passed.

CHKMSGID

See keyword ERRMSGID.

CHOICE

No action taken. Also see SNGCHCFLD and MLTCHCFLD.

CHRID

No action taken.

CLEAR

Enabled CLEAR key is passed.

CLRL*ALL, CLRL*END, CLRL*NO, CLRLxx

The record format containing this keyword will be handled according to the "CLRL" parameters set in the User Options.

CMP

No action taken.

CNTFLD

The field will be passed.

COLOR

The specified color is passed.

COMP

No action taken.

CSRINPONLY

No action taken.

CSRLOC

No action taken.

DATE

Date field is passed.

DFT

This may be the default value on an input field, which is passed. It may also be a constant.

DFTVAL

This is the default value on an output- or both-field, which is passed.

DLTCHK

No action taken.

DLTEDT

No action taken.

DSPATR

The attributes BL (blink), CS (column separator), HI (high intensity), ND (non display), PC (position cursor), PR (protect), RI (reversed image) and UL (underline) are passed. All other valid attributes are omitted.

DSPMOD

The appropriate screen sizes are passed.

DSPRL

No action taken.

DSPSIZ

The appropriate screen sized are passed.

EDTCDE

No action taken. The edit code used is found in the file field description of the object.

DUP

Enabled DUP key is passed.

EDTMSK

No action taken.

EDTWRD

No action taken. The edit word used is found in the file field description of the object.

ENTFLDATR or ENTFLDATR

The appropriate attributes are passed.

ERASE

No action taken.

ERASEINP or ERASEINP

No action taken.

ERRMSG

The message is passed.

ERRMSGID

The message is passed.

ERRSFL

This keyword may have it's influence on the location of the messages.

FLDCSRPRG

No action taken.

FLTFIXDEC

No action taken.

FLTPCN

No action taken.

FRCDTA

No action taken.

GETRETAIN

No action taken.

GRDATR

No action taken.

GRDBOX

No action taken.

GRDCLR

No action taken.

GRDLIN

No action taken.

GRDRCD

No action taken.

HELP

Enabled HELP key is passed.

HLPARA

No action taken.

HLPBDY

No action taken.

HLPCLR

No action taken.

HLPCMDKEY

No action taken.

HLPEXCLD

No action taken.

HLPDOC

No action taken.

HLPFULL

No action taken.

HLPID

No action taken.

HLPPNLGRP

No action taken.

HLPRCD

No action taken.

HLPRTN

No action taken.

HLPSCHIDX

No action taken.

HLPSEQ

No action taken.

HLPSHELF

No action taken.

HLPTITLE

No action taken.

HOME

Enabled HOME key is passed.

INDARA

No action taken.

INDTXT

No action taken.

INVITE

No action taken.

INZINP

No action taken.

INZRCD

No action taken.

KEEP

No action taken.

LOCK

No action taken.

LOGINP

No action taken.

LOGOUT

No action taken.

LOWER

The LC attribute is passed.

MDTOFF

No action taken.

MLTCHCFLD

The field and literals will be passed simulating the enhanced display *NO option.

MNUBAR

No action taken.

MNUBARSEP

No action taken.

MNUBARCHC

No action taken.

MNUBARDSP

No action taken.

MNUBARSW

No action taken.

MNUCNL

No action taken.

MOUBTN

No action taken.

MSGALARM

No action taken.

MSGCON

The message is passed.

MSGID

The message is passed

MSGLOC

The row where error messages are displayed is passed.

NOCCSID

No action taken.

OPENPRT

No action taken.

OVERLAY

The record format is marked as "combine capable".

OVRATR

No action taken.

OVRDTA

No action taken.

PAGEDOWN

The enabled PAGEDOWN key is passed.

PAGEUP

The enabled PAGEUP key is passed.

PASSCRD

No action taken.

PRINT

The enabled PRINT key is passed.

PROTECT

No action is taken.

PSHBTNCHC

No action is taken.

PSHBTNFLD

No action is taken.

PULLDOWN

No action is taken.

PUTOVR

The record format is marked as "combine capable".

PUTRETAIN

No action taken.

RANGE

No action taken.

RETCMDKEY

No action taken.

REF

No action taken.

REFFLD

No action taken.

RETKEY

No action taken.

RETCKSTS

No action taken.

ROLLDOWN

The enabled ROLLDOWN key is passed.

ROLLUP

The enabled ROLLUP key is passed.

RTNCSRLOC

No action taken.

RTNCSRLOC

No action taken.

RTNDTA

No action taken.

SETOF

No action taken.

SETOFF

No action taken.

SFL

The record format defined by this keyword is always combined with its associated subfile control record format. The Collector will send all fields and/or texts in the subfile for each row of a subfile page.

SFLCHCTL

No action taken.

SFLCLR

No action taken.

SFLCSRPRG

No action taken.

SFLCSRRRN

No action taken.

SFLCTL

See keyword SFL.

SFLDLT

No action taken.

SFLDROP

Two pictures will be generated, one folded and one unfolded.

SFLDSP

No action taken.

SFLDSPCTL

The appropriate "+", "MORE" and "BOTTOM" literals are passed.

SFLEND

The appropriate "+", "MORE" and "BOTTOM" literals are passed.

SFLENTER

No action taken.

SFLFOLD

Two pictures will be generated, one folded and one unfolded.

SFLINZ

No action taken.

SFLLIN

The number of blanks in between two records in the subfile is passed.

SFLMLTCHC

No action taken.

SFLMODE

No action taken.

SFLMSG

The message is passed.

SFLMSGID

The message is passed.

SFLMSGKEY

No action taken.

SFLMSGRCD

The message is passed.

SFLNXTCHG

No action taken.

SFLPAG

The number of subfile rows for a page is used. See keyword SFL.

SFLPGMQ

See keyword SFLMSGRCD().

SFLRCDNBR

No action taken.

SFLRNA

No action taken.

SFLROLVAL

No action taken.

SFLRTNSEL

No action taken.

SFLCSROLL

No action taken.

SFLSIZ

See keyword SFLPAG().

SFLSNGCHC

No action taken.

SLNO*VAR

The start row for this record format is unknown. Therefore the record format is marked as "not combine" capable.

SLNOxx

The start row for this record format is taken into account.

SNGCHCFLD

The field and literals will be passed simulating the enhanced display *NO option.

TEXT

No action taken.

TIME

The "time" field is passed.

UNLOCK

No action taken.

USER

The "user" field is passed.

USRDFN

No action taken.

USRDSMGT

Unless stated otherwise the CLRL(*NO) is assumed for each record format.

USRRSTDSP

No action taken.

VALNUM

No action taken.

VALUES

No action taken.

VLDCMDKEY

No action taken.

WDWBORDER

The window borders (color, attributes and characters) are passed.

WDWTITLE

No action taken.

WINDOW

The window size is passed. The record format is marked as "not combine" capable.

Related topics

[Collector DDS Keyword Handling](#)

Appendix D : Collector Work File Layouts

This chapter describes layouts of the Collector run working files. The work files hold the result each phase of the Collector process. Each file can be manipulated by user programs and proposals to affect the final outcome of the Collector run. The AWHOST stores the final results. A DDS description of all files used is present in the source file QDDSSRC in the library SEACOL.

Related topics

[Collector Work Files](#)

AWOBJD - Object Description

5738SS1 V2R3M0 931217 Display File Field Description

Input parameters

File : AWOBJD
Library : SEACOL

File Information

File : AWOBJD
Library : SEACOL
File location : *LCL
Externally described : Yes
Number of record formats : 1
Type of file : Physical
File creation date : 01-11-97
Text 'description'. : Collector - objectdescriptions

Record Format Information

Record format : QLIDOBJD
Format level identifier : 32E7BF3C24580
Number of fields : 85
Record length : 519
Format text : Object description

Field Level Information

Data	Field	Buffer	Buffer	Field	Column	
Field	Type	Length	Length	Position	Usage	Heading
ODDCEN	CHAR	1	1	1	Both	Display century
Field text	. . . . .					Display century
ODDDAT	CHAR	6	6	2	Both	Display date
Field text	. . . . .					Display date: format- Job date format
ODDTIM	CHAR	6	6	8	Both	Display time
Field text	. . . . .					Display time
ODLBNM	CHAR	10	10	14	Both	Library
Field text	. . . . .					Library
ODOBNM	CHAR	10	10	24	Both	Object
Field text	. . . . .					Object
ODOBTP	CHAR	8	8	34	Both	Object type
Field text	. . . . .					Object type
ODOBAT	CHAR	10	10	42	Both	Object attribute
Field text	. . . . .					Object attribute
ODOBFR	CHAR	1	1	52	Both	Storage freed
Field text	. . . . .					Storage freed: 0-not freed,1-freed
ODOBSZ	PACKED	10	6	53	Both	Object size
Field text	. . . . .					Object size
ODOBTX	CHAR	50	50	59	Both	Text description
Field text	. . . . .					Text description
ODOBLK	CHAR	1	1	109	Both	Object locked
Field text	. . . . .					Object locked: 0-not locked,1-locked
ODOBDM	CHAR	1	1	110	Both	Object damaged
Field text	. . . . .					Object damaged: 0-not damaged,1-damaged
ODCCEN	CHAR	1	1	111	Both	Creation century
Field text	. . . . .					Creation century

ODCDAT	CHAR	6	6	112	Both	Creation date	
Field text	. . . . .			:	Creation date: format-	mmddyy
ODCTIM	CHAR	6	6	118	Both	Creation time	
Field text	. . . . .			:	Creation time	
ODOBOW	CHAR	10	10	124	Both	Object owner	
Field text	. . . . .			:	Object owner	
ODSCEN	CHAR	1	1	134	Both	Save century	
Field text	. . . . .			:	Save century	
ODSDAT	CHAR	6	6	135	Both	Save date	
Field text	. . . . .			:	Save date: format-	mmddyy
ODSTIM	CHAR	6	6	141	Both	Save time	
Field text	. . . . .			:	Save time	
ODSCMD	CHAR	10	10	147	Both	Save command	
Field text	. . . . .			:	Save command	
ODSSZE	PACKED	10	0	6	157	Both	Saved size
Field text	. . . . .			:	Saved size	

ODSSLT	ZONED	2	0	2	163	Both	Starting slot
Field text	.	.	.	.	:	Starting slot	
ODSDEV	CHAR	10	10	165	Both	Save device	
Field text	.	.	.	.	:	Save device	
ODSV01	CHAR	6	6	175	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSV02	CHAR	6	6	181	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSV03	CHAR	6	6	187	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSV04	CHAR	6	6	193	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSV05	CHAR	6	6	199	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSV06	CHAR	6	6	205	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSV07	CHAR	6	6	211	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSV08	CHAR	6	6	217	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSV09	CHAR	6	6	223	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSV10	CHAR	6	6	229	Both	Saved volume	
Field text	.	.	.	.	:	Saved volume	
ODSVMR	CHAR	1	1	235	Both	More volumes	
Field text	.	.	.	.	:	More volumes: 0-no more, 1-more	
ODRCEN	CHAR	1	1	236	Both	Restore century	
Field text	.	.	.	.	:	Restore century	
ODRDAT	CHAR	6	6	237	Both	Restore date	
Field text	.	.	.	.	:	Restore date: format-mmddyy	
ODRTIM	CHAR	6	6	243	Both	Restore time	
Field text	.	.	.	.	:	Restore time	
ODCPFL	CHAR	6	6	249	Both	System level	
Field text	.	.	.	.	:	System level	
ODSRCF	CHAR	10	10	255	Both	SRC file name	
Field text	.	.	.	.	:	Source file name	
ODSRCL	CHAR	10	10	265	Both	SRC file library	
Field text	.	.	.	.	:	Source file library	
ODSRCM	CHAR	10	10	275	Both	SRC file member	
Field text	.	.	.	.	:	Source file member	
ODSRCC	CHAR	1	1	285	Both	SRC change century	
Field text	.	.	.	.	:	Source change century	
ODSRCD	CHAR	6	6	286	Both	SRC change date	
Field text	.	.	.	.	:	Source change date: format-yyymmdd	
ODSRCT	CHAR	6	6	292	Both	SRC change time	

Field text						: Source change time	
ODCMNM	CHAR	7	7	298	Both	Compiler name	
Field text						: Compiler name	
ODCMVR	CHAR	6	6	305	Both	Compiler level	
Field text						: Compiler level	
ODOBLV	CHAR	8	8	311	Both	Object level	
Field text						: Object level	
ODUMOD	CHAR	1	1	319	Both	User modified	
Field text						: User modified:0-not modified, 1-modified	
ODPPNM	CHAR	7	7	320	Both	LICPGM name	
Field text						: LICPGM name	
ODPPVR	CHAR	6	6	327	Both	LICPGM level	
Field text						: LICPGM level	
ODPCNR	CHAR	5	5	333	Both	PTF number	
Field text						: PTF number	
ODAPAR	CHAR	6	6	338	Both	APAR ID	
Field text						: APAR ID	
ODSSQN	ZONED	4	0	4	344	Both	Sequence number
Field text						: Sequence number	
ODLCEN	CHAR	1	1	348	Both	Change century	
Field text						: Change century	
ODLDAT	CHAR	6	6	349	Both	Change date	
Field text						: Change date: format- mmddyy	
ODLTIM	CHAR	6	6	355	Both	Change time	
Field text						: Change time	

ODSFIL	CHAR	10	10	361	Both	Save file	
Field text						: Save file	
ODSFLB	CHAR	10	10	371	Both	Save file library	
Field text						: Save file library	
ODASP	ZONED	2	0	2	381	Both	ASP number
Field text						: ASP number	
ODLBL	CHAR	17	17	383	Both	File label	
Field text						: File label	
ODPTFN	CHAR	7	7	400	Both	PTF ID	
Field text						: PTF ID	
ODOBSY	CHAR	8	8	407	Both	System name	
Field text						: System name	
ODCRTU	CHAR	10	10	415	Both	Created by user	
Field text						: Created by user	
ODCRTS	CHAR	8	8	425	Both	System created on	
Field text						: System created on	
ODUUPD	CHAR	1	1	433	Both	Usage updated	
Field text						: Usage updated: Y-Yes, N-No	
ODUCEN	CHAR	1	1	434	Both	Last Used century	
Field text						: Last used century	
ODUDAT	CHAR	6	6	435	Both	Last Used date	
Field text						: Last used date: format- mmddyy	
ODUCNT	PACKED	5	0	3	441	Both	Days Used count
Field text						: Days used count	
ODTCEN	CHAR	1	1	444	Both	Reset century	
Field text						: Reset century	
ODTDAT	CHAR	6	6	445	Both	Reset date	
Field text						: Reset date: format- mmddyy	
ODODMN	CHAR	2	2	451	Both	Object domain	
Field text						: Object domain: *S - System, *U - User	
ODCPVR	CHAR	6	6	453	Both	System version	
Field text						: System version	
ODCVRM	CHAR	6	6	459	Both	Compiler version	
Field text						: Compiler version	
ODPVRM	CHAR	6	6	465	Both	LICPGM version	
Field text						: LICPGM version	
ODCPRS	CHAR	1	1	471	Both	Compression status	
Field text						: Compression status	

ODOASP	CHAR	1	1	472	Both	Overflowed ASP	
Field text	: Overflowed ASP: 0-No,1-Yes						
ODAAPI	CHAR	1	1	473	Both	Allow API change	
Field text	: Allow change by API: 0-No,1-Yes						
ODAPIC	CHAR	1	1	474	Both	Changed by API	
Field text	: Changed by API: 0-not changed,1-changed						
ODUATR	CHAR	10	10	475	Both	User-defined attribute	
Field text	: User-defined attribute						
ODACEN	CHAR	1	1	485	Both	Save active century	
Field text	: Save active century						
ODADAT	CHAR	6	6	486	Both	Save active date	
Field text	: Save active date: format- mmddyy						
ODATIM	CHAR	6	6	492	Both	Save active time	
Field text	: Save active time						
ODAUDT	CHAR	10	10	498	Both	Auditing value	
Field text	: Object auditing value						
ODSIZU	PACKED	10	0	6	508	Both	Object size in units
Field text	: Object size in units						
ODBPUN	PACKED	10	0	6	514	Both	Bytes per unit
Field text	: Bytes per unit						

AWMB - Member Listing

```

5738SS1 V2R3M0 931217      Display File Field Description
Input parameters
  File . . . . . : AWMB
  Library . . . . . : SEACOL
File Information
  File . . . . . : AWMB
  Library . . . . . : SEACOL
  File location . . . . . : *LCL
  Externally described . . . . . : Yes
  Number of record formats . . . . . : 1
  Type of file . . . . . : Physical
  File creation date . . . . . : 01-11-97
  Text 'description'. . . . . : Collector - memberlist to treat
Record Format Information
  Record format . . . . . : QWHFDML
  Format level identifier . . . . . : 51852FE30C648
  Number of fields . . . . . : 31
  Record length . . . . . : 201
  Format text . . . . . : DSPFD format for TYPE *MBRLIST
Field Level Information
Data      Field  Buffer  Buffer  Field  Column
Field     Type   Length Length Position Usage  Heading
MLRCEN    CHAR    1      1      1      Both  Retrieval century
Field text . . . . . : Retrieval century: 0=20th, 1=21st
MLRDAT    CHAR    6      6      2      Both  Retrieval date
Field text . . . . . : Retrieval date: year/month/day
MLRTIM    CHAR    6      6      8      Both  Retrieval time
Field text . . . . . : Retrieval time: hour/minute/second
MLFILE    CHAR   10     10     14     Both  File
Field text . . . . . : File
MLLIB     CHAR   10     10     24     Both  Library
Field text . . . . . : Library
MLFTYP    CHAR    1      1     34     Both  Type of file
Field text . . . . . : P=PF, L=LF, R=DDM PF, S=DDM LF
MLFILA    CHAR    4      4     35     Both  File attribute
Field text . . . . . : File attribute: *PHY or *LGL
MLMXD     CHAR    3      3     39     Both  Reserved
Field text . . . . . : Reserved
MLFATR    CHAR    6      6     42     Both  File attribute
Field text . . . . . : File attribute: PF, LF, PF38,or LF38

```

MLSYSN	CHAR	8	8	48	Both	System name
Field text	. . . . .					: System Name (Source System,if file DDM)
MLASP	PACKED	3	0	2	56	Both ASP auxiliary storage pool ID
Field text	. . . . .					: Auxiliary storage pool ID:1=System ASP
MLRES	CHAR	4	4	58	Both	Reserved
Field text	. . . . .					: Reserved
MLNOMB	PACKED	5	0	3	62	Both Number of members
Field text	. . . . .					: Number of members
MLNAME	CHAR	10	10	65	Both	Member
Field text	. . . . .					: Member
MLNRCD	PACKED	10	0	6	75	Both Number of records
Field text	. . . . .					: Current number of records
MLNDTR	PACKED	10	0	6	81	Both Deleted records
Field text	. . . . .					: Number of deleted records
MLSIZE	PACKED	10	0	6	87	Both Data Space size
Field text	. . . . .					: Data space and index size in bytes, -1 = See MLSIZ
MLSEU	CHAR	4	4	93	Both	Source type
Field text	. . . . .					: Source type for S/38 View as it appeared on S/38
MLCCEN	CHAR	1	1	97	Both	Member creation century
Field text	. . . . .					: Member creation century: 0=20th,1=21st
MLCDAT	CHAR	6	6	98	Both	Member creation

Field text	. . . . .					: Member creation century:year/month/ day
MLCHGC	CHAR	1	1	104	Both	Last change century
Field text	. . . . .					: Last change century: 0=20th, 1=21st
MLCHGD	CHAR	6	6	105	Both	Last change date
Field text	. . . . .					: Last change date: year/month/day
MLCHGT	CHAR	6	6	111	Both	Last change time
Field text	. . . . .					: Last change time: hour/minute/ second
MLMTXT	CHAR	50	50	117	Both	TEXT
Field text	. . . . .					: Text 'description'
MLSEU2	CHAR	10	10	167	Both	Source type
Field text	. . . . .					: Source type
MLUCEN	CHAR	1	1	177	Both	Last Used century
Field text	. . . . .					: Last Used Century: 0=20th, 1=21st
MLUDAT	CHAR	6	6	178	Both	Last Used date
Field text	. . . . .					: Last Used Date: year/month/day
MLUCNT	PACKED	5	0	3	184	Both Days Used Count
Field text	. . . . .					: Days Used Count
MLTCEN	CHAR	1	1	187	Both	Usage Data reset century
Field text	. . . . .					: Usage Data Reset Century:0=20th, 1=21st
MLTDAT	CHAR	6	6	188	Both	Usage Data reset date
Field text	. . . . .					: Usage Data Reset Date: year/month/ day
MLSI22	PACKED	15	0	8	194	Both Data Space size
Field text	. . . . .					: Data space and index size in bytes

AWFTM - Format Attributes

5738SS1 V2R3M0 931217 Display File Field Description
Input parameters

```

File . . . . . : AWFMT
File Information
File . . . . . : AWFMT
File location . . . . . : *LCL
Externally described . . . . . : Yes
Number of record formats . . . . . : 1
Type of file . . . . . : Physical
File creation date . . . . . : 01-11-97
Text 'description'. . . . . : Collector - format attributes
Record Format Information
Record format . . . . . : AWFREC
Format level identifier . . . . . : 426D5417B691F
Number of fields . . . . . : 47
Record length . . . . . : 225
Field Level Information
AWFFIL CHAR 10 10 1 Both FILE
Field text . . . . . : Object file name
AWFLIB CHAR 10 10 11 Both LIBRAR
Field text . . . . . : Library name
AWFFRM CHAR 10 10 21 Both FRMNAM
Field text . . . . . : Record format name
AWFSIZ ZONED 3 0 3 31 Both DSPWID
Field text . . . . . : Page size width of record format
AWFHGT ZONED 3 0 3 34 Both DSPHGT
Field text . . . . . : Page size height of record format
AWFGRP PACKED 5 0 3 37 Both GRPHCS
Field text . . . . . : Graphic character set
AWFCOD PACKED 5 0 3 40 Both CODPAG
Field text . . . . . : Code page
AWFFNC CHAR 32 32 43 Both ENABLE
Field text . . . . . : Enabled function keys for record format
AWFSLN ZONED 3 0 3 75 Both STRLIN
Field text . . . . . : Start row record format
AWFELN ZONED 3 0 3 78 Both ENDLIN
Field text . . . . . : Last row record format
AWFOVL ZONED 1 0 1 81 Both AWOVRL
Field text . . . . . : Overlay code record format 0/1=N/Y
AWFINC ZONED 1 0 1 82 Both AWFINC
Field text . . . . . : Include code for combine
0 = record format contains WINDOW keyword
1 = record format contains SLNO(*VAR) keyword
2 = record format contains CLRL(*NO) keyword
3 = record format contains CLRL(xx) keyword, not to bottom row
4 = record format contains CLRL(*NO) keyword, only bottom row
5 = record format contains CRLR(xx) keyword, up to bottom row
6 = record format contains CLRL(xx) keyword, from start up to bottom row
7 = record format contains keyword CLRL(*ALL) keyword
8 = record format does not contain any keyword mentioned above
AWFCLN ZONED 3 0 3 83 Both LINE
Field text . . . . . : Number of rows to clear
AWFWDW ZONED 1 0 1 86 Both AWWDW
Field text . . . . . : Record format is window 0/1 = N/Y
AWFMSL ZONED 3 0 3 87 Both LINE
Field text . . . . . : Row for message location

```

```

AWFFM1 CHAR 10 10 90 Both FRMNAM
Field text . . . . . : Record format name 1
AWFSL1 ZONED 3 0 3 100 Both LINE
Field text . . . . . : Start row record format 1
AWFEL1 ZONED 3 0 3 103 Both LINE
Field text . . . . . : Last row record format 1
AWFOV1 ZONED 1 0 1 106 Both AWOVRL
Field text . . . . . : Overlay code record format 1
AWFFM2 CHAR 10 10 107 Both FRMNAM

```

Field text	. . . . .	: Record format name 2
AWFSL2	ZONED 3 0 3	117 Both LINE
Field text	. . . . .	: Start row record format 2
AWFEL2	ZONED 3 0 3	120 Both LINE
Field text	. . . . .	: Last row record format 2
AWFOV2	ZONED 1 0 1	123 Both AWOVRL
Field text	. . . . .	: Overlay code record format 2
AWFFM3	CHAR 10 10	124 Both FRMNAM
Field text	. . . . .	: Record format name 3
AWFSL3	ZONED 3 0 3	134 Both LINE
Field text	. . . . .	: Start row record format 3
AWFEL3	ZONED 3 0 3	137 Both LINE
Field text	. . . . .	: Last row record format 3
AWFOV3	ZONED 1 0 1	140 Both AWOVRL
Field text	. . . . .	: Overlay code record format 3
AWFFM4	CHAR 10 10	141 Both FRMNAM
Field text	. . . . .	: Record format name 4
AWFSL4	ZONED 3 0 3	151 Both LINE
Field text	. . . . .	: Start row record format 4
AWFEL4	ZONED 3 0 3	154 Both LINE
Field text	. . . . .	: Last row record format 4
AWFOV4	ZONED 1 0 1	157 Both AWOVRL
Field text	. . . . .	: Overlay code record format 4
AWFFM5	CHAR 10 10	158 Both FRMNAM
Field text	. . . . .	: Record format name 5
AWFSL5	ZONED 3 0 3	168 Both LINE
Field text	. . . . .	: Start row record format 5
AWFEL5	ZONED 3 0 3	171 Both LINE
Field text	. . . . .	: Last row record format 5
AWFOV5	ZONED 1 0 1	174 Both AWOVRL
Field text	. . . . .	: Overlay code record format 5
AWFFM6	CHAR 10 10	175 Both FRMNAM
Field text	. . . . .	: Record format name 6
AWFSL6	ZONED 3 0 3	185 Both LINE
Field text	. . . . .	: Start row record format 6
AWFEL6	ZONED 3 0 3	188 Both LINE
Field text	. . . . .	: Last row record format 6
AWFOV6	ZONED 1 0 1	191 Both AWOVRL
Field text	. . . . .	: Overlay code record format 6
AWFFM7	CHAR 10 10	192 Both FRMNAM
Field text	. . . . .	: Record format name 7
AWFSL7	ZONED 3 0 3	202 Both LINEField text
Field text.	. . . . .	: Start row record format 7
AWFEL7	ZONED 3 0 3	205 Both LINE
Field text	. . . . .	: Last row record format 7
AWFOV7	ZONED 1 0 1	208 Both AWOVRL
Field text	. . . . .	: Overlay code record format 7
AWFFM8	CHAR 10 10	209 Both FRMNAM
Field text	. . . . .	: Record format name 8
AWFSL8	ZONED 3 0 3	219 Both LINE
Field text	. . . . .	: Start row record format 8
AWFEL8	ZONED 3 0 3	222 Both LINE
Field text	. . . . .	: Last row record format 8
AWFOV8	ZONED 1 0 1	225 Both AWOVRL
Field text	. . . . .	: Overlay code record format 8

AWTXT - Single DDS Texts

```

5738SS1 V3R310 951115      Display File Field Description
Input parameters
File . . . . . : AWTXT
Library . . . . . : SEACOL
File Information

```



```

File . . . . . : AWTXT
Library . . . . . : SEACOL
File location . . . . . : *LCL
Externally described . . . . . : Yes
Number of record formats . . . . . : 1
Type of file . . . . . : Physical
File creation date . . . . . : 01-11-97
Text 'description'. . . . . : Collector - single DDS-texts to PC
Record Format Information
Record format . . . . . : AWTREC
Format level identifier . . . . . : 2BE3F0483EC39
Number of fields . . . . . : 22
Record length . . . . . : 442
Field Level Information
AWLIBR CHAR 10 10 1 Both LIBRAR
Field text . . . . . : Library name
AWFILE CHAR 10 10 11 Both FILE
Field text . . . . . : Source file name
AWMEMB CHAR 10 10 21 Both MEMBER
Field text . . . . . : Source member name
AWSTNR ZONED 6 0 6 31 Both STMCNT
Field text . . . . . : Statement counter
AWFORM CHAR 10 10 37 Both FRMNAM
Field text . . . . . : Record format name
AWLINE ZONED 3 0 3 47 Both LINE
Field text . . . . . : Row for this field or text
AWCOLM ZONED 3 0 3 50 Both COLUMN
Field text . . . . . : Column for this field or text
AWFLDN CHAR 10 10 53 Both FIELD
Field text . . . . . : Field name
AWFLDT CHAR 1 1 63 Both FLDTYP
Field text . . . . . : Field type B/A/S/P/F/O/J/E/H
AWKIND ZONED 2 0 2 64 Both AWHKND
Field text . . . . . : Kind of field or text
AWDLNG ZONED 5 0 5 66 Both TXTLE5
Field text . . . . . : Edited length of field or text
AWLNGT ZONED 5 0 5 71 Both TXTLE5
Field text . . . . . : Length for field or text
AWNDEC ZONED 2 0 2 76 Both NRDEC
Field text . . . . . : Number of decimals this field
AWVARL ZONED 1 0 1 78 Both AWHVAR
Field text . . . . . : Variable length 0/1=N/Y
AWEXT CHAR 80 80 79 Both INDEXT
Field text . . . . . : Extra indicators for field or text
AWIND CHAR 10 10 159 Both INDUSE
Field text . . . . . : Last indicators for field or text
AWATTR CHAR 20 20 169 Both ATTRIB
Field text . . . . . : Attributes for field or text
AWFLIO CHAR 1 1 189 Both IOATTR
Field text . . . . . : IO-attribute I/O/B/N
AWMSGF ZONED 1 0 1 190 Both MSGFOU
Field text . . . . . : Message function found 0/1=N/Y
AWLAST ZONED 1 0 1 191 Both AWLAST
Field text . . . . . : Sort field for <AWHOST>0/1=N/Y
AWMESS CHAR 250 250 192 Both MESSAGE
Field text . . . . . : Literal text
AWSSIZ ZONED 1 0 1 442 Both AWSIZ
Field text . . . . . : 0 is primary, 1 is secondary size

```

AWHOST — Layout

S E A G U L L B U S I N E S S S O F T W A R E
C O L L E C T O R

F I L E L A Y - O U T V E R S I O N 0 0 0 0 0 0 5
R E C O R D L E N G T H = 3 1 4 B Y T E S

=====

H O S T - F I L E T O S E N D T O P C

=====

				REF (SEACOL/AWREF)
	R AWHREC			
	HSTFLD	R		REFFLD(HSTFLD)
DISPL	R AWHR00			
001	AWHT00	R		REFFLD(RECTYP)
				<00> = file header
003	AWNX00	R		REFFLD(RECTYP)
				Record type of continuing record
				<00> = no continuing record
005	AWHID0	R		REFFLD(LAYOUT)
				Layout version <AWHOST> (00000005)
013	AWHDAT	R		REFFLD(CRTCD)
				Creation date C-YY-MM-DD
020	AWHTIM	R		REFFLD(CRTTIM)
				Creation time HH-MM-SS
026	FILL01		16A	TEXT('FILLER')
042	AWSRLN	R		REFFLD(AWSRLN)
				Serial number of AS/400 creating
050	AWCOMP		30A	TEXT('COMPANY NAME')
				Company name (for future use)
080	AWHNR0	R		REFFLD(AWHREC)
				Total number of records type 00
090	AWHNR1	R		REFFLD(AWHREC)
				Total number of records type 01
100	AWHNR2	R		REFFLD(AWHREC)
				Total number of records type 02
110	AWHNR3	R		REFFLD(AWHREC)
				Total number of records type 03
120	AWHNR4	R		REFFLD(AWHREC)
				Total number of records type 04
130	AWHNR5	R		REFFLD(AWHREC)
				Total number of records type 05
140	AWHNR6	R		REFFLD(AWHREC)
				Total number of records type 06
150	AWHNR7	R		REFFLD(AWHREC)
				Total number of records type 07
160	AWHNR8	R		REFFLD(AWHREC)
				Total number of records type 08
170	AWHNR9	R		REFFLD(AWHREC)
				Total number of records type 09
180	AWHVER	R		REFFLD(AWVER)
				Collector version
194	DBMARK	R		REFFLD(DBMARK)
				DBCS-MARK (FOR INTERNAL USE ONLY)
200	FILL02		115A	TEXT('FILLER')

=====

DISPL	R AWHR01			
	AWHT01	R		REFFLD(RECTYP)
				<01> = Reserved for future use
003	FILL11		250A	TEXT('FILLER')
253	FILL12		62A	TEXT('FILLER')

=====

DISPL	R AWHR02			
001	AWHT02	R		REFFLD(RECTYP)
				<02> = reserved for future use

003	FILL21	250A	TEXT('FILLER')
253	FILL22	62A	TEXT('FILLER')
DISPL R AWHRO3			
001	AWHT03	R	REFFLD(RECTYP) <03> = picture header
003	AWNX03	R	REFFLD(RECTYP) Record type of continuing record <00> = no continuing record
005	AWHID3	R	REFFLD(AWHNAM) Internal name of picture
013	AWHLIB	R	REFFLD(LIBRAR) Library of picture
023	AWHMBR	R	REFFLD(MEMBER) Member name of picture
033	AWHKEY	R	REFFLD(ENABLE) <0> = not active <1> = active <2> = conditional active byte 01 - 24 = function key 01 - 24 byte 25 = (PRINT) key byte 26 = (HOME) key byte 27 = (ROLLUP) key byte 28 = (ROLLEDOWN) key byte 29 = (CLEAR) key byte 30 = (HELP) key byte 31 = (DUP) key byte 32 = reserved for future use Number of records type 06 for this picture
077	AWGRPH	R	REFFLD(AWGRPH) Graphical character set this picture
082	AWCOPD	R	REFFLD(AWCOPD) Code page this picture
087	AWFMT1	R	REFFLD(FRMNAM) Record format name 1
097	AWSLN1	R	REFFLD(LINE) Start row record format 1
100	AWELN1	R	REFFLD(LINE) Last row record format 1
103	AWOVL1	R	REFFLD(AWOVRL) Overlay code record format 1 <0> = not, <1> = yes
065	AWHSIZ	R	REFFLD(DSPWID) Width of picture
068	AWHHGT	R	REFFLD(DSPHGT) Height of picture
071	AWHNRT	R	REFFLD(AWRSCR)
104	AWFMT2	R	REFFLD(FRMNAM) Record format name 2
114	AWSLN2	R	REFFLD(LINE) Start row record format 2
117	AWELN2	R	REFFLD(LINE) Last row record format 2
120	AWOVL2	R	REFFLD(AWOVRL) Overlay code record format 2 <0> = not, <1> = yes
121	AWFMT3	R	REFFLD(FRMNAM) Record format name 3
131	AWSLN3	R	REFFLD(LINE) Start row record format 3
134	AWELN3	R	REFFLD(LINE) Last row record format 3
137	AWOVL3	R	REFFLD(AWOVRL) Overlay code record format 3

138	AWFMT4	R	REFFLD(FRMNAM)
-----	--------	---	----------------

			Record format name 4
148	AWSLN4	R	REFFLD(LINE)
			Start row record format 4
151	AWELN4	R	REFFLD(LINE)
			Last row record format 4
154	AWOVL4	R	REFFLD(AWOVRL)
			Overlay code record format 4
			<0> = not, <1> = yes
155	AWFMT5	R	REFFLD(FRMNAM)
			Record format name 5
165	AWSLN5	R	REFFLD(LINE)
			Start row record format 5
168	AWELN5	R	REFFLD(LINE)
			Last row record format 5
171	AWOVL5	R	REFFLD(AWOVRL)
			Overlay code record format 5
			<0> = not, <1> = yes
172	AWFMT6	R	REFFLD(FRMNAM)
			Record format name 6
182	AWSLN6	R	REFFLD(LINE)
			Start row record format 6
185	AWELN6	R	REFFLD(LINE)
			Last row record format 6
188	AWOVL6	R	REFFLD(AWOVRL)
			Overlay code record format 6
			<0> = not, <1> = yes
189	AWFMT7	R	REFFLD(FRMNAM)
			Record format name 7
199	AWSLN7	R	REFFLD(LINE)
			Start row record format 7
202	AWELN7	R	REFFLD(LINE)
			Last row record format 7
205	AWOVL7	R	REFFLD(AWOVRL)
			Overlay code record format 7
			<0> = not, <1> = yes
206	AWFMT8	R	REFFLD(FRMNAM)
			Record format name 8
216	AWSLN8	R	REFFLD(LINE)
			Start row record format 8
219	AWELN8	R	REFFLD(LINE)
			Last row record format 8
222	AWOVL8	R	REFFLD(AWOVRL)
			Overlay code record format 8
			<0> = not, <1> = yes
223	AWWDW	R	REFFLD(AWWDW)
			Record format is window
			<0> = not
			<1> = yes, fixed position
			<2> = yes, variable position
224	AWWUPP	R	REFFLD(BORDER)
			Top border of window
			<0> = variable top border
227	AWWLFT	R	REFFLD(BORDER)
			Left border of window
			<0> = variable left window
230	AWWLOW	R	REFFLD(BORDER)
			Bottom border of window
233	AWWRGT	R	REFFLD(BORDER)
			Right border of window
236	AWWSIZ	R	REFFLD(DSPWID)
			Width of window including borders
			equals field <AWHSIZ> if no window
239	AWWHGT	R	REFFLD(DSPHGT)
			Height of window including borders
			equals field <AWHGT> if no window
242	AWWCHR	R	REFFLD(AWWCHR)
			Border characters of window

250	AWWAT3	R	REFFLD(ATTRIB) Attributes of border characters
			<0> = not active <1> = active <2> = conditional active byte 01 = color <BLACK> byte 02 = color <BLUE> byte 03 = color <BROWN> byte 04 = color <GREEN> byte 05 = color <PINK> byte 06 = color <RED> byte 07 = color <TURQUOISE> byte 08 = color <WHITE> byte 09 = color <YELLOW> byte 10 = attribute <BLINKING> byte 11 = attribute <COLUMN SEPARATOR> byte 12 = attribute <HIGH INTENSITY> byte 13 = attribute <NON DISPLAY> byte 14 = attribute <POSITION CURSOR> byte 15 = attribute <REVERSED IMAGE> byte 16 = attribute <UNDERLINE> byte 17 = attribute <PROTECT> byte 18 = reserved for future use byte 19 = reserved for future use byte 20 = reserved for future use
270	AWBUPP	R	REFFLD(BORDER) Height of top border of window
273	AWBLFT	R	REFFLD(BORDER) Width of left border of window
276	AWBLOW	R	REFFLD(BORDER) Height of bottom border of window
279	AWBRGT	R	REFFLD(BORDER) Width of right border of window
282	AWMSG1	R	REFFLD(LINE) MESSAGE LOCATION
285	AWHDRL	R	REFFLD(RITOLE) FORMAT DISPLAYED RIGHT TO LEFT
286	AWHCRL	R	REFFLD(RITOLE) CURSOR MOVES RIGHT TO LEFT IN FORMAT
287	AWWDW2	R	REFFLD(AWWDW) WINDOWFORMAT COPY FROM FIELD <AWWDW> AT BYTE 223 <0> = NOT <1> = YES, FIXED POSITION <2> = YES, VARIABLE POSITION <3> = YES, VARIABLE POSITION INCLUDING WINDOW-TITLE
288	FILL3	27A	TEXT('FILLER')
=====			
DISPL	R AWHRO4		
001	AWHT04	R	REFFLD(RECTYP) <04> = border attributes for window
003	AWN04	R	REFFLD(RECTYP) Record type of continuing record <00> = no continuing record
005	AWWCH4	R	REFFLD(AWWCHR) Border characters of window

```

013      AWWAT4      R      REFFLD(ATTRIB)
      Attributes of border characters
      <0> = not active
      <1> = active
      <2> = conditional active
      byte 01 = color <BLACK>
      byte 02 = color <BLUE>
      byte 03 = color <BROWN>
      byte 04 = color <GREEN>
      byte 05 = color <PINK>
      byte 06 = color <RED>
      byte 07 = color <TURQUOISE>
      byte 08 = color <WHITE>
      byte 09 = color <YELLOW>
      byte 10 = attribute <BLINKING>
      byte 11 = attribute <COLUMN SEPARATOR>
      byte 12 = attribute <HIGH INTENSITY>
      byte 13 = attribute <NON DISPLAY>
      byte 14 = attribute <POSITION CURSOR>
      byte 15 = attribute <REVERSED IMAGE>
      byte 16 = attribute <UNDERLINE>
      byte 17 = attribute <PROTECT>
      byte 18 = reserved for future use
      byte 19 = reserved for future use
      byte 20 = reserved for future use

033      FILL41      32A      TEXT('FILLER')
065      FILL42      250A     TEXT('FILLER')
=====
DISPL    R AWHR05
001      AWHT05      R      REFFLD(RECTYP)
      <05> = reserved for future use

003      FILL51      250A     TEXT('FILLER')
253      FILL52      62A      TEXT('FILLER')
=====
DISPL    R AWHR06
001      AWHT06      R      REFFLD(RECTYP)
      <06> = field- or text-definitions

003      AWNX06      R      REFFLD(RECTYP)
      record type of continuing record
      <00> = no continuing record
      REFFLD(AWHKND)

005      AWHKND      R
DISPL    R AWHR06
001      AWHT06      R      REFFLD(RECTYP)
      <06> = field- or text-definitions

003      AWNX06      R      REFFLD(RECTYP)
      record type of continuing record
      <00> = no continuing record

005      AWHKND      R      REFFLD(AWHKND)
      <00> = field not in subfile
      <01> = field in subfile header
      <02> = field in subfile
      <10> = fixed text not in subfile
      <11> = fixed text in subfile header
      <12> = fixed text in subfile
      <20> = text using <MSGCON>-keyword
      not in subfile
      <21> = text using <MSGCON>-keyword
      in subfile header
      <22> = text using <MSGCON>-keyword
      in subfile
      <30> = text using <MSGID>-keyword
      not in subfile
      <31> = text using <MSGID>-keyword
      in subfile header
      <32> = text using <MSGID>-keyword
      in subfile <impossible>

```

<40> = text using <ERRMSG>-keyword
 <50> = text using <ERRMSGID>-keyword
 <60> = text using <SFLMSG>-keyword
 <70> = text using <SFLMSGID>-keyword
 <80> = subfile end indication <+>
 <81> = subfile end indication <MORE>
 <82> = subfile end indication <BOTTOM>

007	AWHCO6	R	REFFLD(AWHCON) Conditional display <0> = not, <1> = yes
008	AWHIN6	R	REFFLD(INDUSE) byte 01 = more indicators active byte 02 - 10 = active indicators
018	AWHFTP	R	REFFLD(FLDTYP) < > = text <A> = character data = binary data <E> = DBCS-either data <F> = floating point data <G> = DBCS-graphic data <H> = hexadecimal data <J> = DBCS-only data <L> = date data <O> = DBCS-open data <P> = packed decimal data <S> = zoned decimal data <T> = time data <Z> = time stamp
019	AWHFIO	R	REFFLD(IOATTR) = input and output allowed <I> = only input allowed <N> = no input or output allowed <O> = only output allowed
020	AWHATR	R	REFFLD(ATTRIB) <0> = not active <1> = active <2> = conditional active byte 01 = Right to left input byte 02 = color <BLUE> byte 03 = DUP key allowed byte 04 = color <GREEN> byte 05 = color <PINK> byte 06 = color <RED> byte 07 = color <TURQUOISE> byte 08 = color <WHITE> byte 09 = color <YELLOW> byte 10 = attribute <BLINKING> byte 11 = attribute <COLUMN SEPARATOR> byte 12 = attribute <HIGH INTENSITY> byte 13 = attribute <NON DISPLAY> byte 14 = attribute <POSITION CURSOR> byte 15 = attribute <REVERSED IMAGE> byte 16 = attribute <UNDERLINE> byte 17 = attribute <PROTECT> byte 18 = <FIELD EXIT> required byte 19 = <EXIT RECORD> in effect byte 20 = <LOWER CASE> allowed
040	AWHFLD	R	REFFLD(FIELD) blank when text
050	AWHLIN	R	REFFLD(LINE) Row where to display
053	AWHCOL	R	REFFLD(COLUMN) Column where to display
056	AWHDLN	R	REFFLD(AWLEN)

059	AWHLEN	R	Edited length of field or text REFFLD(AWLEN)
062	AWHDEC	R	Unedited length of field or text REFFLD(NRDEC)
064	AWHVAR	R	Number of decimals REFFLD(AWHVAR)
065	AWHTX6	R	REFFLD(MESSAG)

- text of 250 characters when text

```
=====
DISPL  R AWHR07
001    AWH07    R          REFFLD(RECTYP)
                        <07> = default value for previous field
003    AWNX07    R          REFFLD(RECTYP)
                        Record type of continuing record
                        <00> = no continuing record
005    AWHCO7    R          REFFLD(AWHCON)
                        conditional display
                        <0> = not, <1> = yes
006    AWHIN7    R          REFFLD(INDUSE)
                        byte 01      = more indicators active
                        byte 02 - 10 = active indicators
016    FILL7      49A      TEXT('FILLER')
065    AWHTX7    R          REFFLD(MESSAG)
                        Text of default value
=====
```

```
DISPL  R AWHR08
001    AWH08    R          REFFLD(RECTYP)
                        <08> = reserved for future use
003    FILL81     250A     TEXT('FILLER')
253    FILL82     62A     TEXT('FILLER')
=====
```

```
DISPL  R AWHR09
001    AWH09    R          REFFLD(RECTYP)
                        <09> = reserved for future use
003    FILL91     250A     TEXT('FILLER')
253    FILL92     62A     TEXT('FILLER')
```

Appendix E : Collector Messages

The following are the Collector messages (error and diagnostic) reported in the AWPRT spool files.

Collector Prepare Phase Messages

Messages from this phase are stored in the spool file AWPRT with user data AW310. The message meaning and action are described with each message.

Object compiled using member in file1 in library1. Collector assumes library2

Action: A compiled object was created based upon the source member member in file1 in library1. Either this source member does not exist in file file1 in library library1, or library library1 is not part of your library list. The Collector has assumed that the source member member found in file file1 in library library2 can be used as a suitable substitute.

Meaning: This can be a common and acceptable situation. In most cases the substituted source will be correct. You could perform one of the following actions : Add library library1 to your list of libraries if not already there. Re-run the Collector. Ignore the message and continue, assuming that the substituted library library2 contains the correct source member. Always verify this situation when in doubt.

Object compiled using member in file1 in library1. Collector assumes in file2 in library1/2

Action: A compiled object was created based upon the source member in file1 in library1. Either this source member does not exist in file1 in library1, or library1 is not part of your library list. The Collector has assumed that the source member member found in file2 in library library1/2 can be used as a suitable substitute.

Meaning: This can be a common and acceptable situation. In most cases the substituted source will be correct. You could perform one of the following actions : Add library library1 to your list of libraries if not already there. Re-run the Collector. Ignore the message and continue, assuming that the substituted file file2 in library library1/2 contains the correct source member. Always verify this situation when in doubt.

Object compiled using member1 in file1 in library1. Collector assumes member2 in file1/2 in library1/2

Action: A compiled DSPF object was created based upon the source member1 in file1 in library1. Either this source member does not exist in file1 in library1, or library1 is not part of your library list. The Collector has assumed that the source member2 found in file2 in library1 (or in library2) can be used as a suitable substitute. This error can only occur for DSPF source members generated by compiling a DSPF36 source.

Meaning: This can be a common and acceptable situation. In most cases the substituted source will be correct. You could perform one of the following actions : Add library library1 to your list of libraries if not already there. Re-run the Collector. Ignore the message and continue, assuming that the substituted file file2 in library library1 (or in library library2) contains the correct source member. Always verify this situation when in doubt.

Object object compiled using member member in file file in library library Member member does not exist in file file in library library. Check your list of libraries.

Action: A compiled DSPF object was created based upon source member member in file file in library library. Either library library is not part of your library list or the library, file or member does not exist. The Collector could not find a suitable substitute in one of the libraries in the library list.

Meaning: This is an exceptional situation and should be resolved. The Collector requires the source member and object to extract texts. The collector can not extract screens without the corresponding source member. You should perform one of the following actions : Add library library to your list of libraries if not already there. Re-run the Collector. Compare the library list to the library list as used by the package to be processed and make sure that all libraries are included. Correct any inconsistencies and re-run the Collector. If no further action is taken then the source member will not be available for processing.

Object object compiled using member member in file file in library library Member member does not exist in file file in library library Re-compile this member.

Action: A compiled DSPF object was created based upon source member member in file file in library library. Either library library is not part of your library list or the library, file or member does not exist. The Collector found more than one source member in the library list which could be used as a substitute for the missing source member.

Meaning: This can be a common and acceptable situation. The Collector cannot be certain which of the source members will be used so requests that you recompile the source member. This will update the source member reference in the compiled object. You could perform one of the following actions : Recompile the source member and re-run the Collector. If no further action is taken then the source member will not be available for processing.

No text or field found in the libraries you have entered

Action: Either not a single DSPF was found in your list of libraries, or DSPF source members found were not treated due to one of the reasons mentioned in the log report.

Meaning: Check your library list or your log report.

Object in Use.

Action: The DSPF object (in object collect mode) was found to be in use. The object is skipped.

Meaning: It is likely the DSPF object is locked in use (by you or another user). Release the DSPF object and re-collect.

Collector Extract Phase Messages

Messages from this phase are stored in the spool file `AWPRT` with user data `AW800`. Each message is preceded by the library, file and name of the member involved, and where applicable by the statement number containing the problem.

Member member1 was encountered before in file file1 in library library1. Texts for this member are not treated or Object object1 was encountered before in library library1.

Action: A source member or object occurs more than once in your library list.

Meaning: This can be a common and acceptable situation. The Collector assumes the first occurrence is the most recent one.

Member has statements with duplicate or non-ascending sequence numbers.

Action: This is only a diagnostic message, indicating the source member has its statement numbers in an unusual order.

Meaning: You may decide to edit the source member in order to re-sequence the statements on saving. This action will have no influence on the Collector.

Member has deleted records. Texts for this member are not treated.

Action: The Collector has encountered a source member containing one or more deleted records.

Meaning: This is a situation caused by handling the member in another way than editing (possibly a file utility like DFU). The Collector is not able to treat such a source member. You could perform one of the following actions: Edit the source member in order to re-sequence the statements on saving, thus eliminating the deleted record(s). Re-run the Collector. Ignore the message and continue, no pictures will be generated for this source member.

Member is of type <DSPF36>. Texts for this member are not treated.

Action: The Collector cannot handle source members having <DSPF36> syntax.

Meaning: You could perform one of the following actions : Re-compile the source member, thus creating its "native" DDS source member as well. Re-run the Collector. Ignore the message and continue, no pictures will be generated for this source member.

No associated <*MENU> object found in your library list. Texts for this member are not treated.

Action: The Collector has encountered a source member of type (MNUDDS) and can not find its object in your library list.

Meaning: The Collector is not able to treat such a source member as it can not distinguish its attributes like the presence of a key guidance and the form of the command line. You could perform one of the following actions : Re-compile the source member and re-run the Collector. Ignore the message and continue, no pictures will be generated for this source member.

No associated <*FILE> object found in your library list. Texts for this member are not treated.

Action: The Collector has encountered a source member of type <DSPF> and cannot find its object in your library list.

Meaning: The Collector cannot handle such a source member as it cannot distinguish attributes such as (referenced) field lengths. You could perform one of the following actions: Re-compile the source member and re-run the Collector. Ignore the message and continue, no pictures will be generated for this source member.

Text found is too long, text is not extracted.

Action: The Collector encountered a text of more than 999 characters.

Meaning: The Collector cannot handle texts of more than 999 characters. You could perform one of the following actions : Split up the text in smaller parts. Ignore the message and continue, an incomplete picture will be generated which should be processed manually.

Field length greater than 999, field is not extracted.

Action: The Collector encountered a field more than 999 characters.

Meaning: Collector cannot handle fields of more than 999 characters. You can only : Ignore the message and continue, an incomplete picture will be generated which should be processed manually.

Variable found on (MSGID)-keyword, outputfield assumed.

Action: The Collector encountered a (MSGID)-keyword and can not distinguish what message to use.

Meaning: This can be a common and acceptable situation. This message is only meant as information, there is no need to take any action.

Unknown keyword found, starting with ..

Action: The Collector encountered a syntax error in the source member.

Meaning: Check the source member.

Unable to find valid syntax on ..

Action: The Collector encountered a syntax error in the source member.

Meaning: Check the source member.

Unable to find referenced <WINDOW>.

Action: The Collector encountered a <WINDOW> keyword referring to another window, which on its turn cannot be found.

Meaning: Check the source member.

Special edit code 5 to 9 used, edited length found in file <USREDT>.

Action: The Collector encountered the use of the keyword EDTCDE(5), EDTCDE(6), EDTCDE(7), EDTCDE(8) or EDTCDE(9). The Collector is able to determine the edited length of the field.

Meaning: None.

Special edit code 5/6/7/8/9 used, edited length not found in file <USREDT>

Action: The Collector encountered the use of the keyword EDTCDE(5), EDTCDE(6), EDTCDE(7), EDTCDE(8) or EDTCDE(9) but cannot determine the edited length of the field.

Meaning: You could perform one of the following actions: Add a record to the file <USREDT> and re-run the Collector. Ignore the message and continue, an incomplete picture will be generated which should be processed manually.

Length of 1 assumed for REFFLD(.....

Action: The Collector encountered the use of the keyword <REFFLD>. The Collector cannot determine the length of the field, as it is not in the I/O-buffer for the display file and cannot be found in the referenced file defined by the <REFFLD> keyword.

Meaning: Normally this message will only apply to the use of the keyword <MSGID> together with the keyword <REFFLD>. MSGID's are not part of the I/O-buffer. You could perform one of the following actions: Inspect the <REFFLD> keyword (and possibly the <REF> keyword).

If the referenced file is not qualified (i.e. no fixed library name is defined), then add the library where the referenced file resides to your library list. Re-run the Collector. Set the length of the field in the source member (although a solution, this is not preferred). Ignore the message and continue, an incomplete picture will be generated which should be processed manually.

Unable to find message XXXXXXX in message file YYYYYYYYY

Action: The Collector encountered the use of a message, but did not find the messageID XXXXXXX in the message file YYYYYYYYY

Meaning: You could perform one of the following actions:

- Inspect your source member (a wrong ID could be coded)
- Inspect your message file
- Ignore the message and continue, an incomplete picture will be generated which should be processed manually.

Object in Use

Action: The DSPF object (in object collect mode) was found to be in use. The object is skipped.

Meaning: It is likely the DSPF object is locked in use (by you or another user). Release the DSPF object and re-collect.

Related topics

[Collector Errors and Diagnostic Messages](#)