IBM Cloud 9 for SCLM for z/OS

User's Guide

Version 2 Release 1

SC31-8846-04

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Note
Before using this document, read the general information under “Notices” on page 191.

Fifth Edition (April 2004)

This edition applies to Version 2 Release 1 of the licensed program IBM Cloud 9 for SCLM for z/OS (program number 5655-G93) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About This Document

This document contains the usage instructions for the IBM Cloud 9 for SCLM for z/OS product.

Who Should Use This Document

Readers should be familiar with the Unix System Services (USS) environment, Hierarchical File System (HFS) structure, and the Software Configuration and Library Manager (SCLM) component of IBM's Interactive System Productivity Facility (ISPF)..

Where to Find More Information

Where necessary, this document references information in other books, using shortened versions of the book title. For complete titles and order numbers of the books for all products that are part of z/OS, see *z/OS Information Roadmap* (GC28-1727). Direct your request for copies of any IBM publication to your IBM representative or to the IBM branch office serving your locality.

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SCLM Reference	Interactive System Productivity Facility (ISPF) Software Configuration and Library Manager (SCLM) Reference	SC28-1320-xx
USS User's Guide	z/OS Unix System Service User's Guide	SA22-7801-xx
ISPF User's Guide	ISPF User's Guide Volume I ISPF User's Guide Volume II	SC34-4791-xx SC34-4792-xx
Cloud 9 Installation Guide	IBM Cloud 9 for SCLM for z/OS Installation Guide	SC31-8845-xx

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Softcopy z/OS publications are also available for Web browsing. PDF versions of the z/OS publications for viewing or printing using Adobe Acrobat Reader are available at this URL:

`http://www.ibm.com/software/ad/sclmsuite/cloud/library/`

Summary of Changes

This chapter describes the changes made in the the documentation supporting Cloud 9 Version 2.1. Technical changes to the document are marked in the text by a vertical change bar in the left margin.

Important Information

The current edition of this document describes Cloud 9 V2.1 with the PTFs for APAR OA03122 applied. These PTFs must be applied before using Cloud 9 V2.1 or the product will not behave as described in this document.

Fifth Edition (April 2004)

The following enhancements and changes have been made to the Cloud 9 Version 2.1 interface, since the last edition of this manual.

- The Cloud 9 Cloud 9 WebSphere Studio Application Developer Plug-In (WSAD Plug-in) has been added to the product.
- You now have the ability to change the Authorization Code for a selected SCLM member or members.

Fourth Edition (December 2002)

The following enhancements and changes have been made to Cloud 9 Version 2.1 since the last edition of this manual:

- A major component has been added. This is a plug-in for IBM's Visual Age for Java, enabling Java source, classes and resources to be exported and imported to SCLM as a project using the Microsoft SCCI API (Application Programming Interface). With this plug-in, you can check in and check out source files and resources and set Authorization codes within SCLM.
- Directory names or a portion thereof can now be retained when adding or migrating a file into SCLM. To support this, a **Remove from path** field has been added to the ADD PC/WS FILES and MIGRATE panels (see "Remove from path" on page x).
- A facility has been provided, that allows remote build and deploy of Java objects to computers running an FTP server.
- Useability enhancements to the following panels:
  - SCLM Query
  - ADD WS/PC Files
  - Edit
  - Migrate
  - Open Package
  - Save Package

  These changes include the removal of the Access Key field (Access Key now defaults to the User Id) and the addition of drop-down lists for Authorization Codes.
- HTML upgraded to the 4.01 standard.
- Various minor technical corrections.

- Online help and links to technical documentation.

Remove from path

In Cloud 9, path names can now be retained as part of the file name for objects added into SCLM through the Cloud 9 Browser interface. This support can be seen on two Browser panels: ADD PC/WS FILES and MIGRATE.

The concept behind path name retention is simple: the long name associated with a file includes part or all of the directory name. For example, a file called `myDog.jpg` is located in a directory called `C:\pictures\mypets`. With this Cloud 9 feature, you can store the file as `\pictures\mypets\myDog.jpg` or `pictures\mypets\myDog.jpg` or `mypets\myDog.jpg` or even `myDog.jpg`.

This feature was developed because Cloud 9 deployment, through SCLM Build and Promote translators, uses the directory name component of the stored path name to properly copy a file to a target directory. In this way, a file defined as `mypets\myDog.jpg` is copied to the same directory structure, `mypets\myDog`, on a target server. You might have established a directory structure on the target server as `c:\sales\dev`, `c:\sales\qa` and `c:\sales\rel`, to correspond to an SCLM life cycle of PROJECT=SALES and groups of DEV, QA, and REL. When the Cloud 9 SCLM Build Deployment translator is called in the group DEV, the file `mypets\myDog.jpg` is copied from SCLM to `c:\sales\dev\mypets\myDOG.jpg` on the target server.

To implement this, fields called ″Remove from pathname″ have been added to the ADD PC/WS FILES and MIGRATE panels. In these fields, you can specify a portion of the path name to be removed. For example, if you have selected `c:\pictures\mypets\myDog.jpg` to be added into SCLM, but wish to define the file to SCLM as `mypets\myDog.jpg`, you would specify `c:\pictures\` in the ″Remove from pathname″ field. When the file is added to SCLM, the file name is stored as `mypets\myDog.jpg`.

Note: If no value is specified in ″Remove from pathname″, the file name is stored without any directory information. Also, the drive letter is never retained as part of the SCLM file name.

Part 1. Using Cloud 9

Chapter 1. Getting Started

What is Cloud 9?

IBM Cloud 9 for SCLM for z/OS, hereinafter called ***Cloud 9***, is a powerful front-end application that provides IBM Software Configuration and Library Manager (SCLM) users with a platform-transparent change management tool. Cloud 9 can perform key SCLM actions, including impact analysis and editing, all from a familiar and easy-to-use Web based interface.

Cloud 9 connects remote or intranet users to their host-based systems through the industry-standard Web browsers: Microsoft Internet Explorer and Netscape Navigator. Utilizing existing Web technology, a Hypertext Transfer Protocol (HTTP) Server, and the source management capabilities of SCLM, Cloud 9 gives developers distributed access to the programmer functions of SCLM without the need to log on to ISPF. Programmers can now access both distributed and host-based application inventory regardless of location or host-based licensing restrictions. With Cloud 9, organizations can take advantage of the security and stability of SCLM and the z/OS platform from their Web browser.

This chapter describes how to get started using Cloud 9, including how to:
- Configure your browser to use Cloud 9
- Start Cloud 9
- Set up your profile

You need the following:
- Uniform Resource Locator (URL) for Cloud 9 (Web address)
- TSO user ID for host access
- Password for host
- Names of data sets you want to view on the host
- Either:
  - Netscape 4.7 or higher
  - Internet Explorer 5.0 or higher
- Your e-mail address and telephone number
- Digitized photograph of yourself in .jpg format (optional)

Starting Cloud 9

You can access Cloud 9 from either of the most popular Web browsers— NetScape Navigator or Microsoft Internet Explorer. Before you begin Cloud 9, ensure that your browser is configured properly.

Setting up your Web browser

Before using the Cloud 9 Web interface, check that your Web browser uses the following settings.

Refresh every time

Ensure that your Web browser retrieves the latest version of a page every time you visit, rather than using a cached version from a previous visit.

Netscape users

1. From the Edit menu, select Preferences.
2. Under the Advanced category, select Cache.

3. Under “Document is compared to document on network”, click “Every time”.

Internet Explorer users

1. From the Tools menu, select Internet Options.
2. Click the General tab.
3. Under “Temporary internet files”, click the Settings button.
4. Under “Check for newer versions of stored pages”, select “Every visit to the page”.

Enable Java

The Cloud 9 Web interface is a Java applet. Ensure that your Web browser is configured to run Java.

Netscape users

Navigator versions 4.5 and later are already Java-enabled, therefore nothing more needs to be done.

Internet Explorer users

1. From the Tools menu, select Internet Options.
2. Click the Advanced tab.
3. Scroll down to Java VM or (depending on your version of IE) Microsoft VM.
4. Select all the check boxes under this option.
5. Restart your computer.

Use a direct connection

You can use the Cloud 9 Web interface to communicate with a Cloud 9 host over a corporate intranet or over the Internet, using a dial-up modem or a direct LAN connection. In any case, you need a connection between your browser and the Cloud 9 host that is unhampered by proxy servers or firewalls. If you are connecting within a corporate intranet, then you can ensure this by turning off proxies in your browser, as described in the procedures later in this section.

However, most corporations have a firewall between their intranet and the Internet; and the only way that you can access the external Internet is through a corporate proxy server. Therefore, if you turn off proxies in your browser, you can use Cloud 9, but you might not be able to access the Internet. In this case, the solution is to contact your network administrator, who can change the proxy server to recognize the Cloud 9 server address and provide a direct connection. If this is done, you can leave proxies turned on, and use both Cloud 9 and the Internet.

To turn off the use of proxies by your browser:

Netscape users

1. From the Edit menu, select Preferences.
2. Under the Advanced category, select Proxies.
3. Select “Direct connection to the Internet”.

Internet Explorer users

1. From the Tools menu, select Internet Options.
2. Click the Connections tab.
3. Click the LAN Settings button (if you are connected through a LAN) or the Dial-up Settings button (if you are connected by a modem).
4. Select “Automatically detect settings”. Deselect “Use a proxy server” and “Use automatic configuration script” .

To access Cloud 9

From a properly configured browser:

1. Open your browser window.
2. Type the URL for Cloud 9 in the location / address field of the browser and press ENTER. Figure 1 is displayed before the next browser window opens.

Figure 1. Enter Network Password Panel

3. Type in your User Name and Password.
4. Press **OK**.

Attention: If the password panel does not display, you might not have the correct Web address (URL). Check with the system administrator to ensure you have the correct address.

The Cloud 9 Main Menu Panel

The next panel you see is the Cloud 9 Main Menu, as shown in Figure 2.

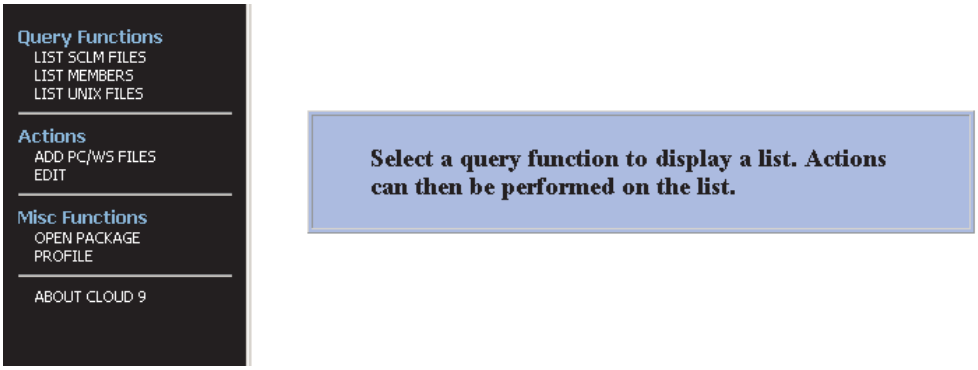


Figure 2. Cloud 9 Main Menu

If this is the first time you have logged onto Cloud 9, the pop-up panel shown in Figure 3 on page 6 is displayed. Fill in valid job card information in the

appropriate place on the profile panel. See “Setting Your Profile” on page 7 for more information.

Figure 3. Job Card Pop-up Panel

The Main Menu is divided into the following sections:

Query Functions

These are the functions that you use to create lists of objects residing on the host. Depending on which files you want to work with, you can choose to:

- List SCLM Files
- List Members
- List Unix Files.

Actions

There are two choices listed under this section:

- Add PC/WS Files, where you can add Personal Computer or Workstation files to your host repositories.
- Edit, from which you can edit files of your choosing.

Misc Functions

There are two miscellaneous functions:

- Open Package is the selection to start working with new or existing packages.
- Profile is the selection to create or work with your personal profile for Cloud 9.

About Cloud 9

A copyright statement for the Cloud 9 product that includes the product number and release number of the version your installation has installed.

All of these functions are explained in various sections of this book.

Using Pull-Down Lists

Several of the panels within Cloud 9 have entry fields that have an associated list of the values available for selection in the field. You can enter a value in these types of fields or you can display the list and then select from it. All fields that have a question mark (?) button next to them have this feature. For example, Figure 4 on page 7 shows part of the SCLM Query Panel with the Projects list open.

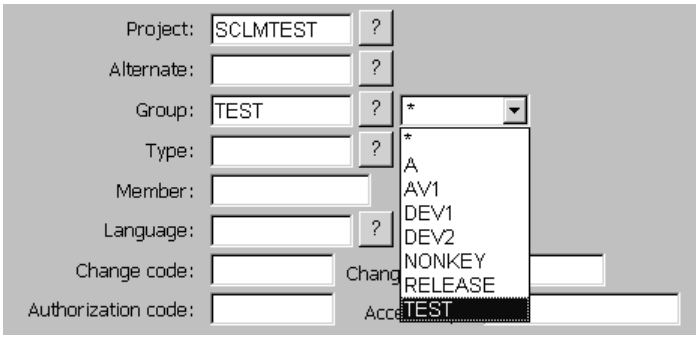


Figure 4. Pull-down Menu

- To display a list, click the question button. Cloud 9 returns a list box that contains the possible values that can be entered in that field.
- To select an item from a pull-down list, click anywhere on the list box to open it, then click your selection. Cloud 9 returns your choice to the adjacent field.

Note: Only one pull-down list is displayed at any one time.

Setting Your Profile

It is important that you set your profile before you begin using the system. Setting your profile:

- Creates a job card; without one you cannot run batch actions
- Improves communication with other users by providing your telephone number and e-mail contacts
- Automatically starts browsers and editors.

To set your profile:

1. Select **PROFILE** from the Cloud 9 Main Menu. The Profile panel is displayed (Figure 5 on page 8).

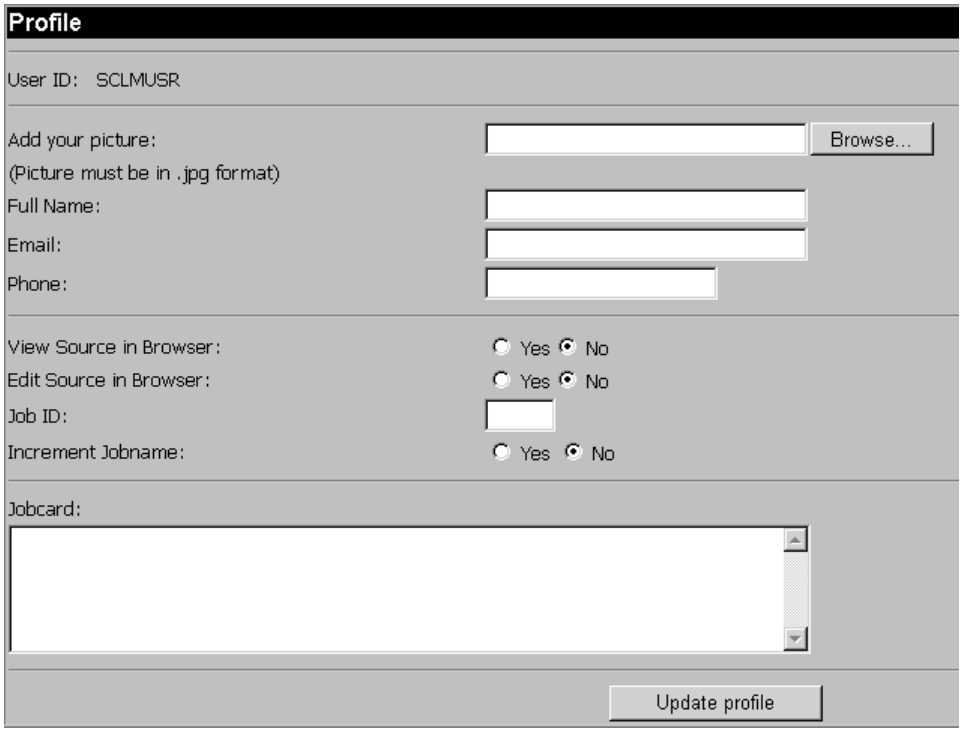


Figure 5. Cloud 9 Profile Panel

2. The entry fields on the Profile panel are as follows:

Add your picture — The file name and path name of a digital picture that you want to add to your profile. See "How to Add Your Picture (Optional)" on page 9 for more information.

Full Name — Your name.

Email — Your e-mail address.

Phone — Your telephone number.

View Source in Browser — The default setting to be used when viewing members or files:

- Yes — If accessing a text source file, the file automatically opens in a new browser window. If accessing a non-text file, the browser automatically prompts you to either open the file or download it to your PC or Workstation.
- No — Show the View Options panel, in which you can choose to open the file in a browser window (text only), open the file using its internal format (binary) or download the file to your PC or Workstation.

Edit Source in Browser — The default setting to be used when editing members or files:

- Yes — If accessing a text source file that is not contained in an SCLM Group, the file automatically opens in an edit session in a new browser window. If accessing a non-text file that is not contained in an SCLM Group, the browser automatically prompts you to either open the file or download it to your

PC or Workstation. If accessing files contained in an SCLM Group, the Edit Options panel is always displayed, as there are SCLM parameters such as Lock in Group and Access Key that might need to be specified.
- No — Show the Edit Options panel, in which you can specify the SCLM parameters (if necessary) and then choose to open the file in a browser window (text only), open the file using its internal format (binary) or download the file to your PC or Workstation.

Job ID — A letter to be appended to the Jobname.

Increment Jobname
- Yes —the letter that has been appended to the Jobname is incremented with each job submission.
- No — no incrementing of the Jobname.

Jobcard — Job card used to submit batch jobs on your host system. It must have valid accounting information, class specifications, and so on.

3. Complete as many of the fields as you require.
4. Click the Update Profile button. A message confirms that your Profile has been updated.

Figure 6. Profile confirmation message

Note: User profiles are an important feature of Cloud 9. If you attempt to edit or manipulate a file that is in use or has been locked and the person who is using/locked the file has completed his or her User Profile, you can view that user's telephone number and e-mail address in the member Accounting information. You can then call or e-mail the user to inquire about the member's availability, or to give an alert that you also need to make changes to it.

How to Add Your Picture (Optional)

The first field in the Profile panel asks you for the location of a picture. If you already have a digital version of a photograph, find that file on your hard drive by clicking the Browse button. Select the picture file and click the Update profile button.

If you do not have a digital photograph, see Appendix B, "Creating and Adding .jpg Images to the User Profile," on page 185 for suggestions for getting one.

Note: The picture must be in a file with a **.jpg** extension.

Chapter 2. Working with Objects

By using Cloud 9, you can work with members or files that are stored within an SCLM hierarchy, within PDS data sets or on a Unix server. This chapter describes how to:

- Generate a list of SCLM members, PDS members or Unix files.
- Select members or files for viewing, editing and other manipulation purposes.
- View members and files within a browser window (where appropriate), open them within in another application or download them to your PC or Workstation.
- Edit Text and Binary members and files.

Listing Objects

Most of the Cloud 9 functionality begins by listing members or files, using the Cloud 9 Main Menu. When you choose one of the three ***List*** functions, you create a list of objects from which you can perform most of the Cloud 9 functions such as editing, building, and promoting.

Listing SCLM Members

You can create a list of the SCLM members with which you want to work, by using the SCLM Query panel. This panel displays the various SCLM inventory locations and query filter settings. A query filter helps you to limit your request to specific items with common characteristics.

1. From the Cloud 9 Main Menu (Figure 2 on page 5), select **LIST SCLM FILES**. The SCLM Query panel (shown in Figure 7) is displayed.

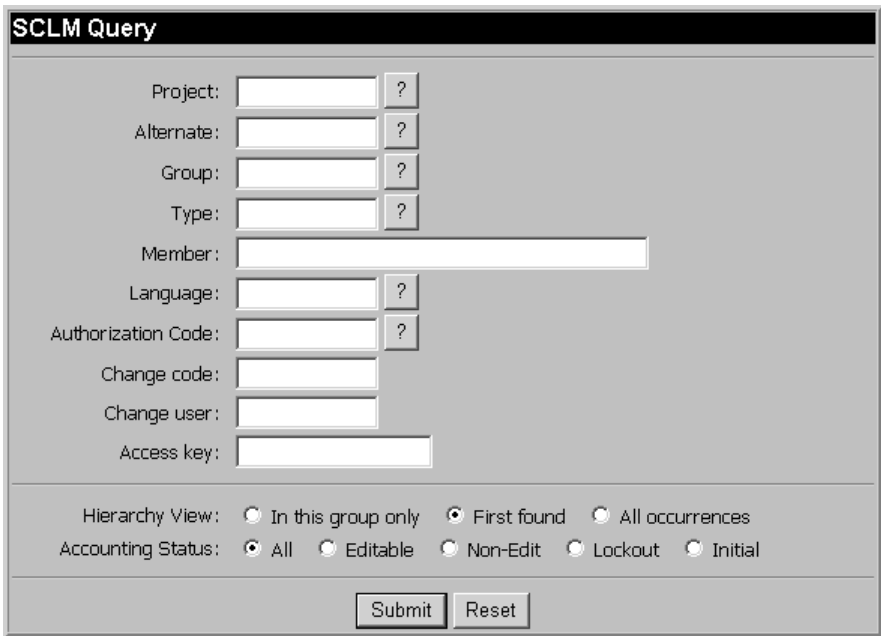


Figure 7. SCLM Query Panel

The entry fields on the SCLM Query Panel are:

Project — The name of the project that contains the member you want to access. This is the only required field on this panel.

Alternate — If you are using an alternative project for this particular process, enter its name here.

If blank, it defaults to the same name as the project.

Group — The name of the group that contains the member you want to access.

Type — The name of the type that goes with the project and group containing the member that you want to access.

Member — The name of the member that you want to access.

Language — A valid SCLM language for this project.

Change code — A valid SCLM change code string.

Change user — The last user ID to have updated a member.

Authorization code — Your authorization code. This is a character string that cannot contain commas, comprising up to and including 8 characters.

Access key — An identifier used to restrict access to a member. The default valued is the user ID of the person who currently has the member locked.

Hierarchy View — Selects the scope within the SCLM hierarchy in which the members can be found.

- In this group only — list members found only in the chosen group.
- First found — list only the first occurence of a match, starting in the group specified and continuing up the project hierarchy.
- All occurrences — list all members found in this project.

Accounting Status — Selects the Accounting Status within the SCLM hierarchy in which the members can be found.

- All — all members found.
- Editable — only members that can be edited.
- Non-Edit — members that SCLM creates as a result of build processing.
- Lockout — only locked members.
- Initial — Members for which a lock has been requested. This status generally is displayed while a member is being edited. When the edit is complete, the status changes to Editable.

2. Complete as many fields as you wish, ensuring that at least the Project field is filled in. You can leave each of the rest of the inventory and query filters blank, enter valid values in them, enter values with wild card characters in them, or select valid values from the lists by clicking on the '?' next to the field.

   Note: The wild card search character (*) is available for use in all fields except **Project** and **Access key**. The wild card character is used to replace certain characters in an entry when you want to find all objects that match a certain pattern. For example, if you wanted to find members ROD, RAD and RED, you can use the wild card like this:

R*D

3. Click the Submit button. This submits the query for processing.

If the query finds members using your specifications, the SCLM Member List panel is displayed (Figure 8).

	Member (4)	Project	Group	Type	Language	Status	Access key
☐	NJB1	SCLMTEST	TEST	ARCHDEF	ARCHDEF	EDITABLE	
☐	NJB1	SCLMTEST	TEST	JCLLIB	TEXT	EDITABLE	
☐	TESTEAC1	SCLMTEST	TEST	SOURCE	TEXT	EDITABLE	
☐	TESTPROM	SCLMTEST	TEST	SOURCE	TEXT	EDITABLE	

Figure 8. SCLM Member List

Note that the Main Menu changed after showing a list of members. The left side of the panel always reflects the actions available based on what has been listed. In this case, the menu contains all SCLM actions.

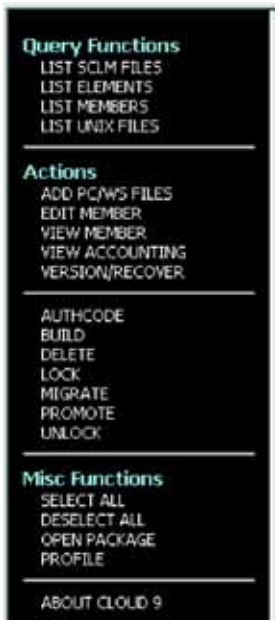


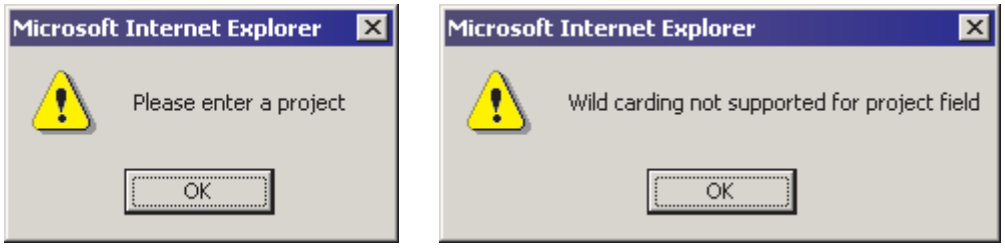
Figure 9. Menu options when SCLM Member list is displayed

If the query does not find any members, a message is displayed within the panel:

Figure 10. No members found message

You can select the LIST SCLM FILES menu option again, adjust your query specifications and click Submit again.

If you made an error in your query specifications, a message box is displayed to show the cause of the problem (see Figure 11). Click the OK button, adjust your query specifications and click Submit again.



Project field was empty

Project field contains a wild card character

Figure 11. SCLM query error messages

Notes:

1. If a wild card character is used in the Access key field, no error message is generated. Instead, it is treated as a text character and used in the search, e.g finding all members in which the Access key contains an asterisk. As a result, the query is unlikely to find matching members.
2. Clicking the **Reset** button clears all of the current field values. You can then begin constructing a new query.
3. The 'LIST SCLM FILES' option only lists members that have accounting information in the SCLM accounting file. As a result, using the 'LIST SCLM FILES' might not display all members in a PDS. To view all members in a PDS, use the 'LIST MEMBERS' option.

Listing Partitioned Data Set (PDS) Members

You can create a list of the PDS members with which you want to work, by using the List Members panel. In this panel, you can enter up to 7 data set and member name patterns.

1. From the Cloud 9 Main Menu, select **LIST MEMBERS**. The panel in Figure 12 is displayed.

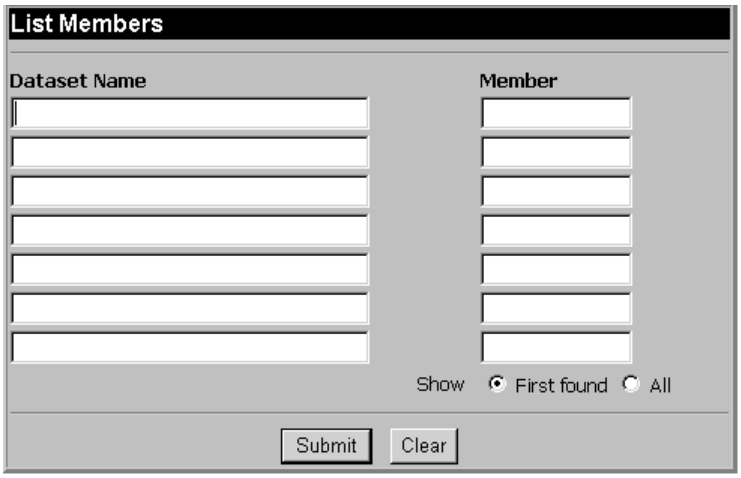


Figure 12. List Members Panel

The entry fields on the List Members Panel are as follows:

Dataset Name

Conventional Partitioned Data Set (PDS) or Partitioned Data Set Extended (PDSE) data set. The name must be entered without quotation marks and can use wild card characters.

Each level within a data set name can contain wild cards, however, the return results are restricted to members in data sets with the number of levels specified in your pattern. For example:

```
SCLMUSR.*
```

returns members in all matching data sets with two levels in their name but not those with one, three, or more levels (SCLMUSR.SRC but not SCLMUSR or SCLMUSR.SRC.TEST);

whereas:

```
SCLMUSR.*.*
```

returns members in all data sets with three levels in their name but not those with one, two, four, or more levels (SCLMUSR.SRC.TEST but not SCLMUSR, SCLMUSR.SRC or SCLMUSR.SRC.TEST.DATA1).

To list all matching data sets, regardless of the number of levels in the data set name, use a double asterisk, (**). For example:

```
SCLMUSR.**
```

would return the members in SCLMUSR, SCLMUSR.SRC and SCLMUSR.SRC.TEST, and so on.

Member

A member name, a pattern including wild cards or blank. Leaving the field blank results in a list of all members within the specified data set(s).

Show

Where the search finds multiple members with the same name, this determines the number of matches returned.

- First found — show the first occurrence encountered.
- All — show all occurrences.

2. Complete as many fields as you wish, ensuring that at least one data set name pattern is entered.
3. Click the Submit button. This submits the query for processing.

If the query finds members using your specifications, the Member List panel is displayed (Figure 13 on page 16).

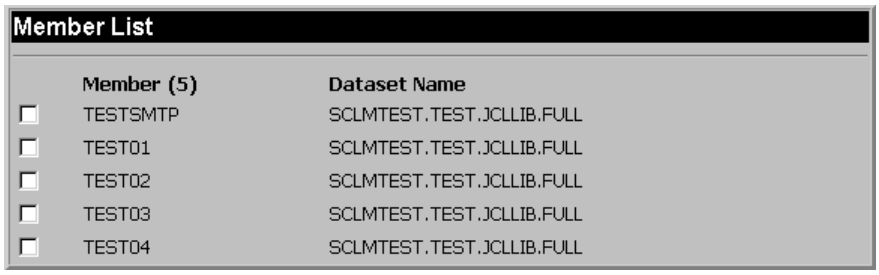


Figure 13. PDS Member List

Note that the Main Menu changed after showing a list of members. The menu always reflects the actions available, based on what has been listed. In this case, the menu is all PDS actions. For information about the various functions available to you, see Chapter 5, “PDS Functions,” on page 87.

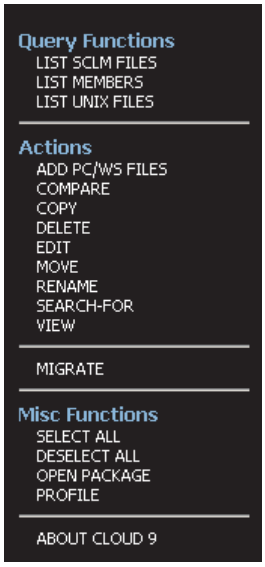


Figure 14. Menu options when the Member List is displayed

If the query does not find any members, a message is displayed within the panel:

Figure 15. No members found message

You can select the LIST MEMBERS menu option again, adjust your query specifications and click Submit again.

If you made an error in your query specifications, a message box displays the cause of the problem (see Figure 16 on page 17). Click the OK button, adjust your query specifications and click Submit again.

All data set name fields are empty

Figure 16. List Members query error message

Note: Clicking the **Clear** button clears all of the current field values. You can then begin constructing a new query.

Listing Unix Files

You can create a list of the Unix files with which you want to work, by using the Unix File List panel. In this panel, you can enter up to 7 Unix file paths and file name patterns.

1. From the Cloud 9 Main Menu, select **LIST UNIX FILES**. The panel in Figure 17 is displayed.

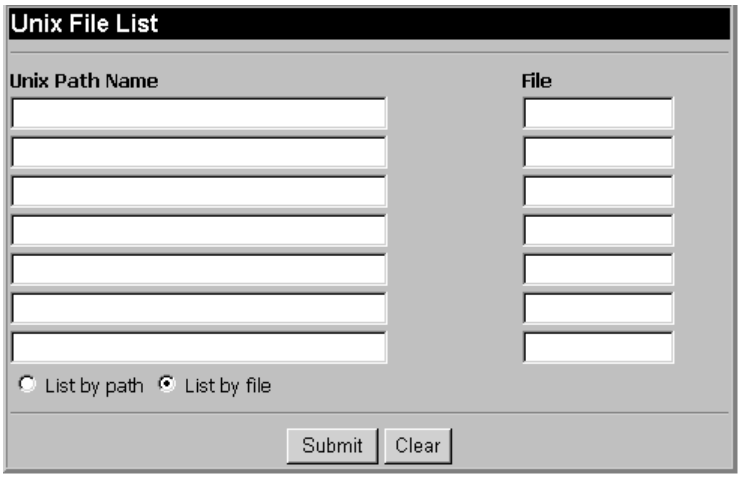


Figure 17. Unix File List Panel

The entry fields on the Unix File List Panel are as follows:

Unix Path Name — Fully qualified path for an HFS directory, starting with the root. For example:

```
/usr/lpp
```

File — An HFS file name, a pattern with wild card, or blank.

List by path — Occurrences found are listed according to path names. All occurrences under one path are listed before occurrences under a separate path are listed.

Making this selection might cause the resulting list to include directories upon which you cannot act.

List by file The list is ordered according to file name regardless of path.

2. Complete as many fields as you wish, ensuring that at least one Unix file path is entered (you cannot use the wild card search character in a Unix path name).
3. Select either *List by path* or *List by file*.
4. Click the Submit button. This submits the query for processing.

If List by path is chosen and the query finds files or directories using your specifications, the Unix Directory List panel is displayed (Figure 18).

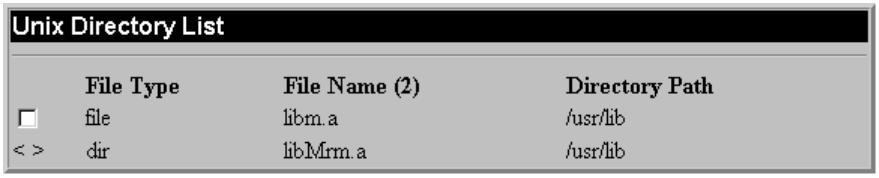


Figure 18. Unix Directory List

Note that the Main Menu changed after creating a list of Unix files. The menu always reflects the actions available, based on what has been listed. In this case, the menu is all Unix actions. For information about the various functions available to you, see Chapter 6, “Unix Functions,” on page 95.

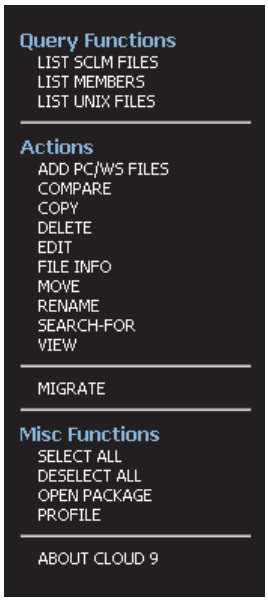


Figure 19. Menu options when the Unix Directory List is displayed

If the query does not find any results, a message is displayed within the panel:

Figure 20. No files found message

You can select the LIST UNIX FILES menu option again, adjust your query specifications and click Submit again.

If you made an error in your query specifications, a message box displays the cause of the problem (see Figure 21). Click the OK button, adjust your query specifications and click Submit again.

Unix Path Name field is empty

Figure 21. List Unix Files query error message

Note: Clicking the **Clear** button clears all of the current field values. You can then begin constructing a new query.

Selecting and Viewing Objects

Once your list of objects (SCLM members, PDS members or Unix files) has been created, you can select and view the objects, using the same techniques.

Selecting list items

With a Member List or Unix File List panel displayed:

- Manually select or clear the check box for each list item.
- Click the **SELECT ALL** menu command, found within the MISC FUNCTIONS section of each modified menu.
- Click the **DESELECT ALL** menu command, found within the MISC FUNCTIONS section of each modified menu.

Note: Although the SELECT ALL and DESELECT ALL commands remain visible after you have left the list panels, they have no effect if the panel is not currently displayed.

Once you have selected the list members, you can choose any of the available menu commands. Cloud 9 retains your selections until you remove them, perform another query or leave the Cloud 9 site.

Viewing Objects

Members and files can be viewed in a browser window, opened using the application associated with their extension or downloaded to your PC or Workstation and then opened for viewing. Files that have been opened in a separate application or downloaded can also be edited, however, you cannot transmit the edited file back into SCLM as part of this process (see “Transmitting an Edited Member Back to SCLM” on page 29). Instead, you must use the Add PC/WS File menu command (see “Add PC/WS Files” on page 47).

Your method of viewing objects varies, depending upon your Profile settings (see “Setting Your Profile” on page 7), your browser settings and the File Type of the object you are viewing:

- Your Profile settings determine whether the member or file is opened automatically in a browser window, using the default File Type setting, or if the View Options panel displays, in which you can choose the View in Browser or Download option and to set the File Type (Default, Text or Binary).
- If the View Options panel is displayed, Internet Explorer users can use the Download option for all File Types. Netscape Navigator users can use the Download option for Binary files but must use their Netscape Preferences to determine how to handle Text files when the Download option is selected.
- The method used to display Binary files depends upon your browser settings, the available browser plug-ins, the applications registered on your PC or Workstation and whether the file type is registered in the SLR Add Types within SCLM (see “Editing Binary Files” on page 30 for details).

Note: ″Text″ files are those objects that use EBSCIC format (for example, members that have been created in SCLM or in an Edit Session within Cloud 9) or ASCII format (for example, files that have been created in Notepad or a similar text editor). ″Binary″ files are all those files created in an external application that use a format internal to that application (for example, Microsoft Word documents).

Netscape settings for handling Text files

If you are using Netscape Navigator and choose the View in Browser option for a Text file, Netscape displays the text as an HTML page within a new browser window. However, if you choose the Download option, Netscape uses its internal settings to handle this file.

To customize your Netscape settings:

1. From the Netscape menu, click Edit > Preferences...
2. Select the Navigator > Applications category and locate the Description for Plain Text (Figure 22 on page 21).

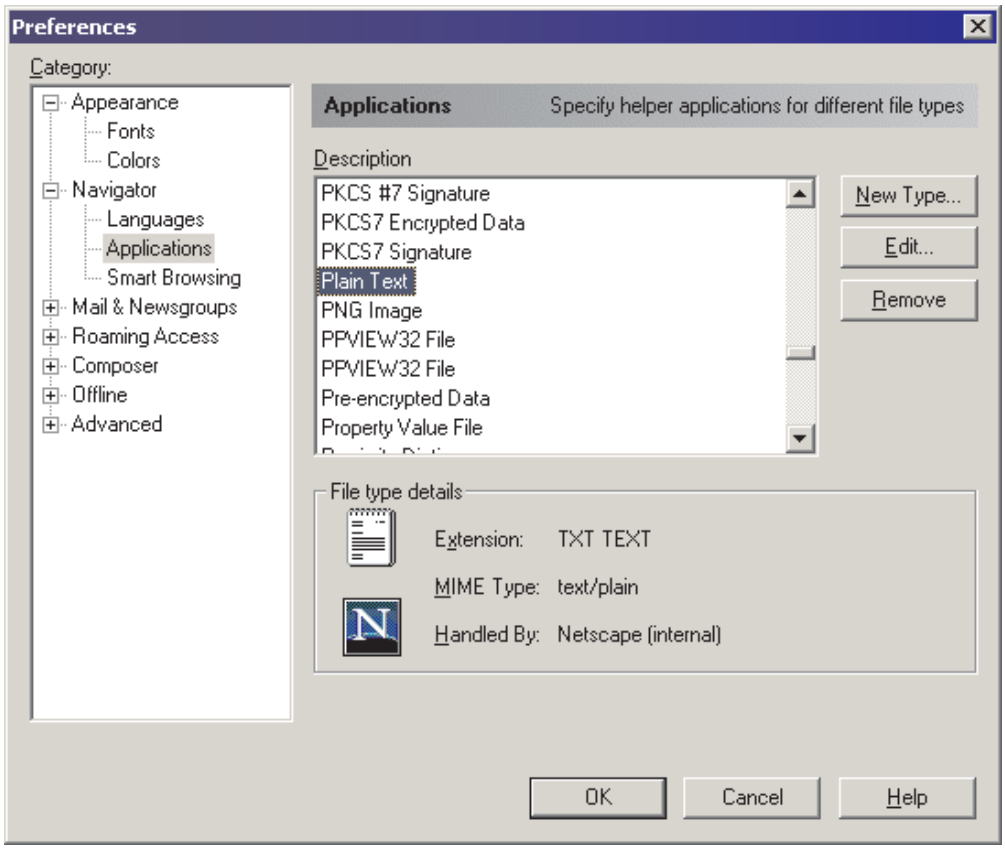


Figure 22. Netscape Navigator Plain Text category

3. Click the Edit button. The Edit Type dialog box is displayed:

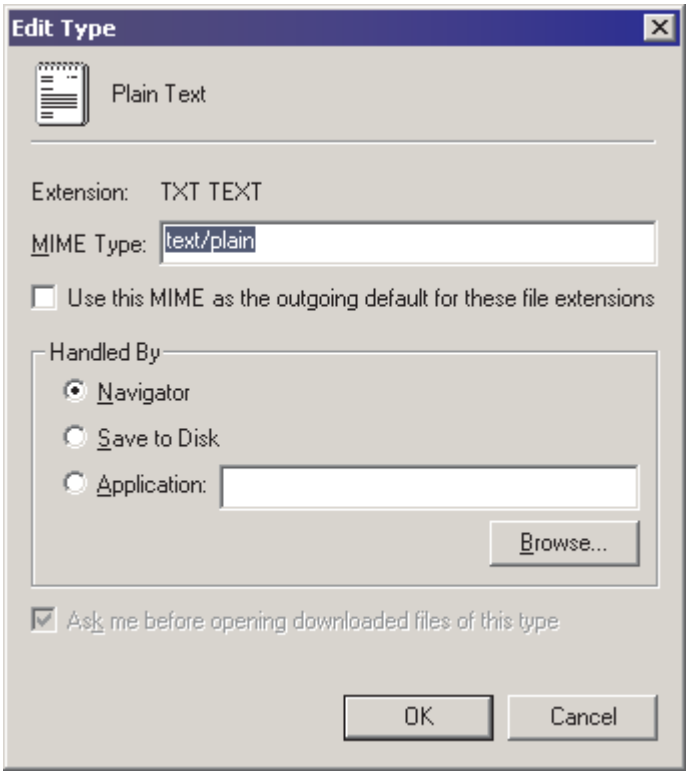


Figure 23. Netscape Navigator Plain Text settings

4. Select one of the Handled By options:
   - Navigator - a Text object opens as an HTML page within a new browser window, even when the Download option is selected.
   - Save to Disk - the Save As dialog box is displayed when the Download option is selected.
   - Application - use the Browse button to select the application executable file to be used when the Download option is selected.
   - Ask me before opening downloaded files of this type - if the Application option is selected and this is selected, a dialog box offers the choice of opening the object or saving it to disk, when the Download option is selected. If this option is cleared, the specified application opens automatically and displays the downloaded Text object.
5. Click OK in the Edit Type dialog box and OK in the Preferences dialog box.

Using the View command

If your Profile has the **View in browser** option set to **Yes**, then:

1. Generate a list of members or files (see “Listing Objects” on page 11).
2. Select the members or files that you wish to view (see “Selecting list items” on page 19).
3. Select **VIEW** or **VIEW MEMBER** from the Cloud 9 Main Menu.
   - If the selected object is a Text file (ASCII or EBCDIC), the file opens in a new browser window, converting EBCDIC to ASCII where necessary.

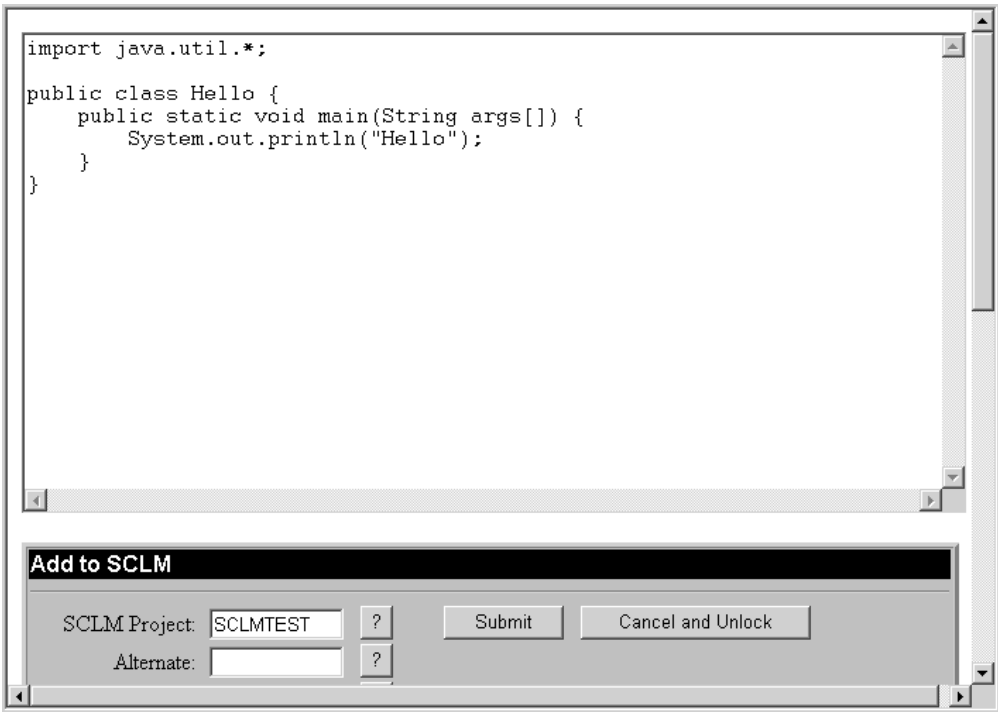


Figure 24. Text file as viewed in a browser window

- If the selected member is a Binary file, the browser prompts you to open the file using its internal format or to download the file to your PC or Workstation (see "Editing Binary Files" on page 30).

Note: If multiple files are selected, each file either opens in a new window or causes the browser to prompt you to open or download it, depending upon the file type.

If your Profile has the **View in browser** option set to **No**, then:

1. Generate a list of objects (see "Listing SCLM Members" on page 11).
2. Select the members or files that you wish to view (see "Selecting list items" on page 19).
3. Select **VIEW** or **VIEW MEMBER** from the Cloud 9 Main Menu. The View Options panel (Figure 25) is displayed.

Figure 25. View Options

The entry fields on the View Options panel are:

View in Browser Determines how the selected member or file is opened.

- Yes — If the selected member is a Text file, it opens in a new browser window, converting

EBCDIC to ASCII where necessary. If the selected member is a Binary file, it is handled according to your browser settings and other factors (see "Editing Binary Files" on page 30 for details).
- No — Regardless of the file type, the browser prompts you to download the file to your PC or Workstation.

Note: For Netscape users, the action taken is determined by your browser settings.

File Type Determines in what format the selected member or file is opened.
- **Default** — Cloud 9 selects the access method (Text or Binary) based on the file's extension.
- **Text** — access the member using EBCDIC to ASCII conversion where necessary. If this format is selected for a **Binary** object, the binary code for the file is displayed in a new browser window or downloaded, according to your View in Browser option and your browser settings.
- **Binary** — access the member using its internal format. If this format is selected for a **Text** file, the binary code for the file is displayed in a new browser window or downloaded, according to your View in Browser option and your browser settings.

4. Select your options and click **Submit**. The selected member(s) or file(s) open.

Note: If multiple files are selected, your View Options choices apply to all of the selected files.

Table 1. Summary of View results for Text objects

View Options	File Type	IE	NS
Profile View in Browser = Yes	Default	WP	WP
View in Browser = Yes	Default	WP	WP
View in Browser = Yes	Text	WP	WP
View in Browser = Yes	Binary	WP, BC	WP, BC
View in Browser = No	Default	FD	BS
View in Browser = No	Text	FD	BS
View in Browser = No	Binary	FD, BC	BS, BC

IE Internet Explorer

NS Netscape Navigator

WP Displays as a *Web page* in a new browser window

FD Displays the *File Download* dialog box

BS Action is determined by the *browser settings*

BC *Binary code* for the object is displayed / downloaded

When you have finished viewing the file, close the relevant window. The Cloud 9 browser window becomes active again.

Editing Objects

Text-based objects can be opened for editing within a browser window and then saved back into an SCLM hierarchy, a PDS data set or a Unix server. Both Text-based and Binary files can be opened in an external application or downloaded to your PC or Workstation, edited and then added back into an SCLM hierarchy, a PDS data set or saved to a Unix server, using the Add PC/WS Files command.

Your method of editing objects varies, depending upon your Profile settings (see "Setting Your Profile" on page 7), your browser settings and the File Type of the object you are editing:

- Your Profile settings determine whether the member or file is opened automatically in a browser window, using the default File Type setting, or if the Edit Options panel is displayed, in which you can choose the Edit in Browser or Download option and to set the File Type (Default, Text or Binary).

  Notes:

  1. The **Edit in browser** setting in your Profile is ignored when editing SCLM members, as there are SCLM parameters (such as Lock in Group and Authorization Code) that might need to be specified.
  2. Netscape browsers limit the amount of text that can be placed in a text area control to approximately 50,000 bytes. If you are using a Netscape browser and you attempt to edit an object that is larger than 50,000 bytes, Cloud 9 will download the file to your workstation, rather than attempt to place the large file into your browser text area control.
- If the Edit Options panel is displayed, Internet Explorer users can use the Download option for all File Types. Netscape Navigator users can use the Download option for Binary files but must use their Netscape Preferences to determine how to handle Text files when the Download option is selected (see "Netscape settings for handling Text files" on page 20).
- The method used to edit Binary files depends upon your browser settings, the available browser plug-ins, the applications registered on your PC or Workstation and whether the file type is registered in the SLR Add Types within SCLM (see "Editing Binary Files" on page 30 for details).

Note: ″Text″ files are those objects that use EBSCIC format (for example, members that have been created in SCLM or in an Edit Session within Cloud 9) or ASCII format (for example, files that have been created in Notepad or a similar text editor). ″Binary″ files are all those files created in an external application that use a format internal to that application (for example, Microsoft Word documents).

Opening an object for editing

If your Profile has the **View in browser** option set to **Yes** and the selected member or file is not in an SCLM hierarchy, then:

1. Generate a list of members or files (see "Listing Objects" on page 11).
2. Select the members or files that you wish to view (see "Selecting list items" on page 19).
3. Select **EDIT** or **EDIT MEMBER** from the Cloud 9 Main Menu.

- If the selected object is a Text file, the file opens in an editing session within a new browser window, converting EBCDIC to ASCII where necessary.

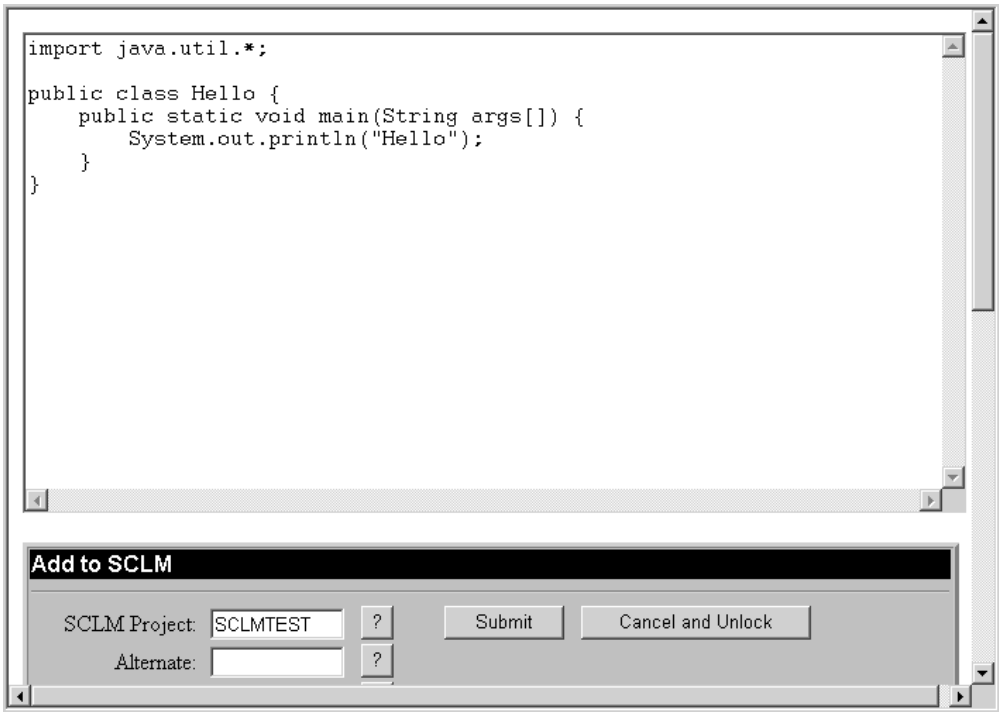


Figure 26. Browser editing session

- If the selected member is a Binary file, the browser prompts you to open the file using its internal format or to download the file to your PC or Workstation (see "Editing Binary Files" on page 30).

Note: If multiple files are selected, each file either opens in a new window or causes the browser to prompt you to open or download it, depending upon the file type.

If your Profile has the **Edit in browser** option set to **No** or is an SCLM member, then:

1. Generate a list of objects (see "Listing SCLM Members" on page 11).
2. Select the members or files that you wish to edit (see "Selecting list items" on page 19).

   The Edit Options panel is displayed (Figure 27).

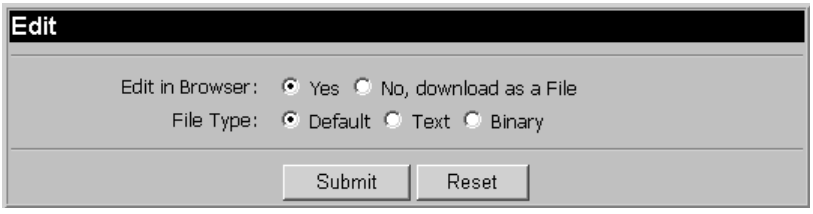


Figure 27. Edit Options for PDS members and Unix files

The entry fields on the Edit Options panel are:

Edit in Browser

Determines how the selected member or file is opened.

- Yes — If the selected object is a Text file, it opens in an editing session within new browser window, converting EBCDIC to ASCII where necessary. If the selected object is a Binary file, it is handled according to your browser settings and other factors (see "Editing Binary Files" on page 30 for details).
- No — Regardless of the file type, the browser prompts you to download the file to your PC or Workstation.

Note: For Netscape users, the action taken is determined by your browser settings.

File Type

Determines in what format the selected member or file is opened.

- **Default** — Cloud 9 selects the access method (Text or Binary) based on the file's extension.
- **Text** — access the object using EBCDIC to ASCII conversion where necessary. If this format is selected for a **Binary** object, the option is ignored, that is, it is treated as a Binary object.
- **Binary** — access the member using its internal format. If this format is selected for a **Text** object and the Edit in Browser option is Yes, the object opens in an editing session within new browser window, converting EBCDIC to ASCII where necessary. If the Edit in Browser option is No, the binary code for the Text file is displayed in a new browser window or downloaded, according to your browser settings.

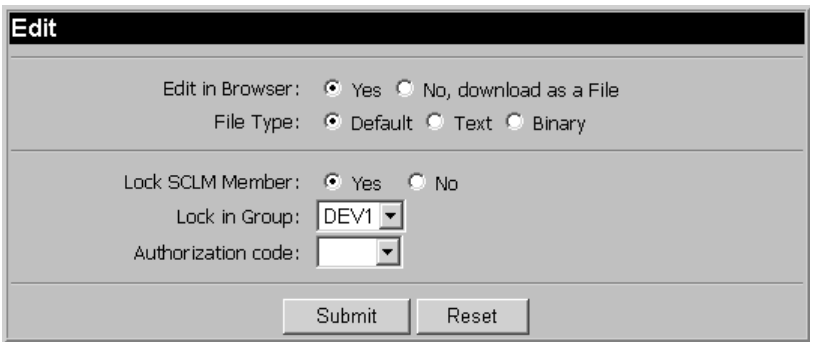


Figure 28. Edit Options for SCLM Members

The additional entry fields on the SCLM-specific Edit Options panel are:

Lock SCLM Member

Determines if the member is locked upon opening.

- Yes — locks the member into the SCLM group specified in the Lock in Group field.

- No — the member is opened without locking.

Lock In Group The name of the SCLM group into which you want to store this object (must be a development level group). If the selected member does not reside in a development level group, the member is copied to the group specified here and the copy is opened for editing.

Authorization code Standard code.

3. Specify your Edit options.
4. Click Submit.

   If the file is available for editing (that is, not locked or in use), the file is opened in the specified manner.

   Note: If you are running a version of Netscape that is pre-6.x and attempt to open a Text file greater than 20k within a browser editing session, you are prompted to download the file instead. (Netscape pre-6.x has a limitation of 20k worth of data that can be put in a HTML text area).

   If the file is in use or has been locked, Cloud 9 displays an error message.

Figure 29. File locked message

If you receive this message, you might want to look at the Accounting Information, which (if the user has completed his or her Cloud 9 Profile) displays the user's e-mail address and telephone number (see "Viewing SCLM Accounting Information" on page 64). You can then call or e-mail the user to inquire about the member's availability, or to give an alert that you also need to make changes to it.

Table 2. Summary of Edit results for Text objects

Edit Options	File Type	IE	NS
Profile Edit in Browser = Yes[1]	Default	ES	ES
Edit in Browser = Yes	Default	ES	ES
Edit in Browser = Yes	Text	ES	ES
Edit in Browser = Yes	Binary	ES	ES
Edit in Browser = No	Default	FD	BS
Edit in Browser = No	Text	FD	BS
Edit in Browser = No	Binary	FD, BC	BS, BC

Notes:
1. If the selected object is an SCLM member, the Edit Options panel is displayed.

IE Internet Explorer

NS Netscape Navigator

ES Displays text within an Edit Session in a new browser window.

FD Displays the *File Download* dialog box.

BS Action is determined by the *browser settings.*

BC *Binary code* for the object is displayed / downloaded.

Once a member or file has been opened in a browser editing session, it can be modified and then transmitted back to its source, using the panel options at the bottom of the edit session browser window (see "Transmitting an Edited Member Back to SCLM").

Members and files that have been opened in the applications associated with their extensions or have been downloaded to your PC or Workstation must be saved and then uploaded with the Add PC / WS Files command (see "Editing Binary Files" on page 30).

Transmitting an Edited Member Back to SCLM

When you are finished making changes to the member:

1. Scroll to the appropriate form beneath the editing area.

   These forms are almost identical to those seen when creating a new object in a browser editing session (see "Creating Text-based objects" on page 43). The only difference is that the Add to SCLM form also contains a **Cancel and Unlock** button.

   The Cancel and Unlock button closes the editing session and releases a locked SCLM member.

2. Update the fields in one section (Add to SCLM, Add to Dataset, Add to Unix or Submit Batch Job) and click the Submit button in that section.

   If all required fields were completed correctly and the submission is successful, a confirmation message is displayed:

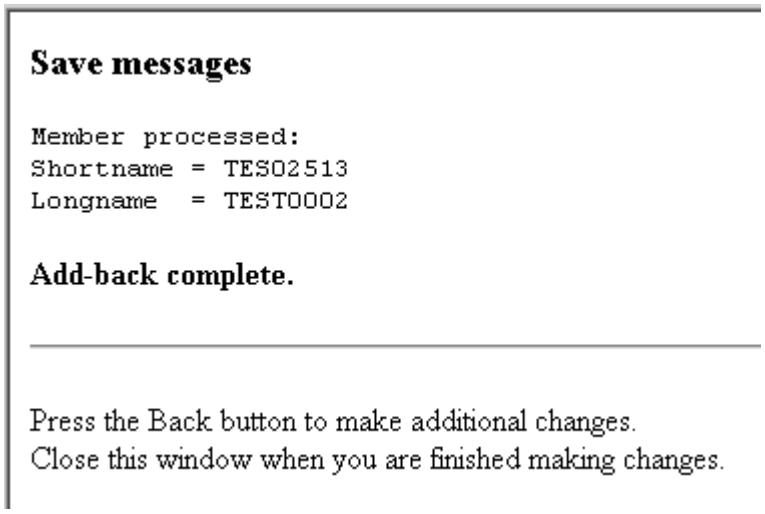


Figure 30. Successful save message

If a required field was not completed or contains incorrect data, an error message is displayed and describes the cause of the problem.

Figure 31. Example form error message

Click the OK button, correct the error and click the Submit button again.

If the form is correctly completed but the submission is unsuccessful, a message is displayed and describes the reason for failure, such as:

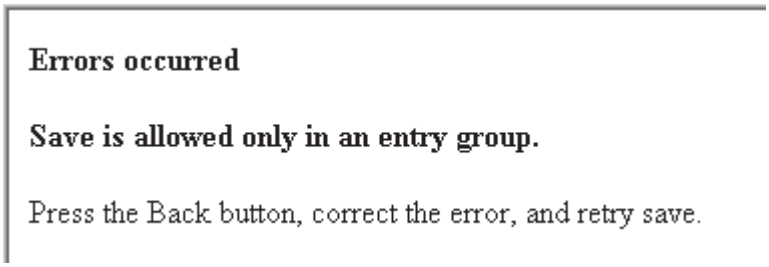


Figure 32. Example of Add-back failure message

Notes:

1. If an SCLM member was not locked on opening, setting the Lock option to Keep on this form applies a lock to the member.
2. You can use this form to return an edited member or file to a different SCLM location, a different PDS data set or a different Unix directory, performing a de facto copy. If the object was an SCLM member that was locked on opening, the original remains locked and the copy is locked or unlocked according to the settings on this form.

Editing Binary Files

So far, you have seen how to edit Text files in a browser Edit Session, however, with Cloud 9's versatility you can open or download any file stored in SCLM to the PC/Workstation, and edit it using another editor program. Cloud 9 accomplishes this by using the file's extension to determine the appropriate edit program to open.

For Cloud 9 to be able to ″recognize″ a file extension and handle the file appropriately, the extension must be registered as an SCLM Type and the Type must be defined within the Suite Long Name Registry (SLR). See "Adding and Defining Cross-Platform File Types" on page 36 for details.

File Extensions That Are Recognized by Cloud 9

These steps might vary slightly depending upon the browser and version that you are using. This section describes the actions that result when you use either Internet Explorer v5.5 or Netscape Navigator v4.75.

1. Generate a list of members or files (see "Listing Objects" on page 11).
2. Select the members or files that you wish to view (see "Selecting list items" on page 19).

3. Select **EDIT** or **EDIT MEMBER** from the Cloud 9 Main Menu.

   Note: If you want to download a Text file that is not an SCLM member (rather than edit in the browser), you must set the Edit in Browser option in your Profile to ″No″. This forces the display of the Edit Options panel, in which you can select the Download option. Otherwise, the file automatically opens in an editing session within a new browser window, converting EBCDIC to ASCII where necessary.

4. On the Edit Options panel, select the View Option as required and set the File Type to Binary.
5. Click Submit.

   From this point on the process varies, depending upon your browser version and your operating system's list of registered file types.

If you are using Internet Explorer:

- If the Edit in Browser option is set to Yes and the file was created using one of the Microsoft Office suite of products, the file is immediately displayed as an object embedded within a browser window. Most of the application menu commands are available.

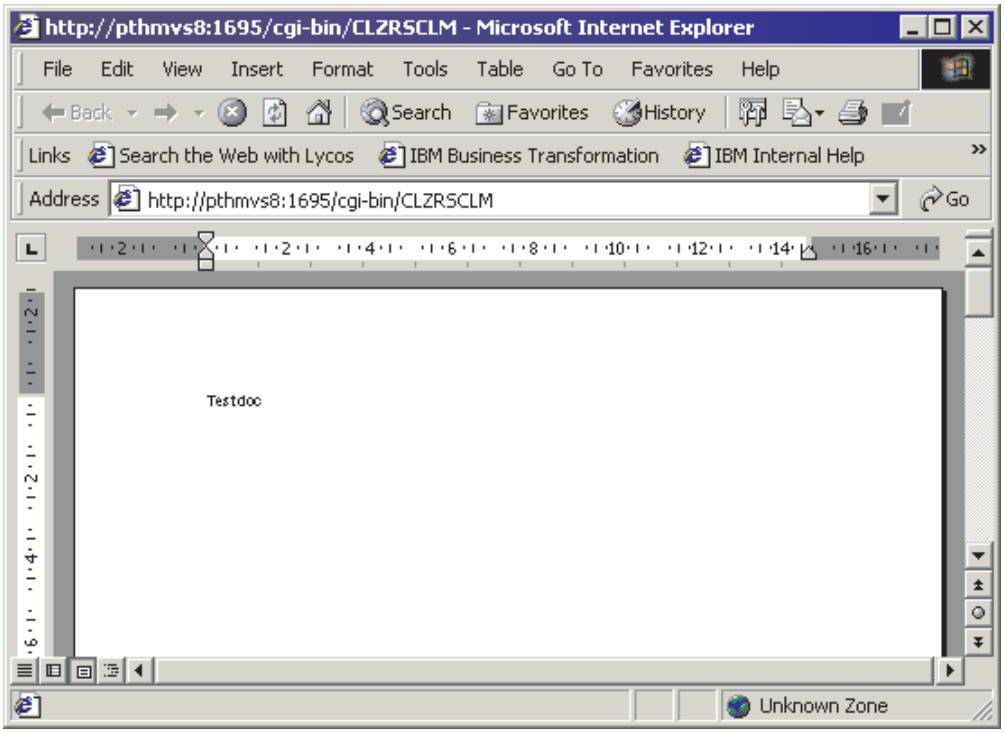


Figure 33. Microsoft Word document in an Internet Explorer browser

- If the Edit in Browser option is set to Yes and the file was *not* created using one of the Microsoft Office suite of products, a new browser window opens and the File Download dialog box is displayed (Figure 34 on page 32).

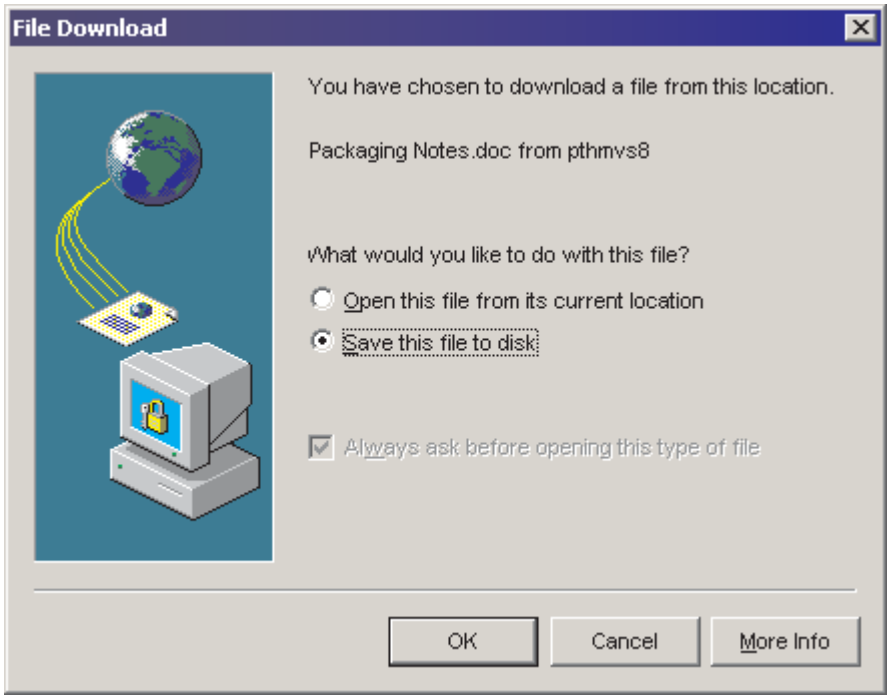


Figure 34. File Download Dialog Box

1. Select whether to open the file from the current location or save the file to disk.

   If you choose to open the file and Internet Explorer can integrate with the application, the file is displayed as an object embedded within a browser window.

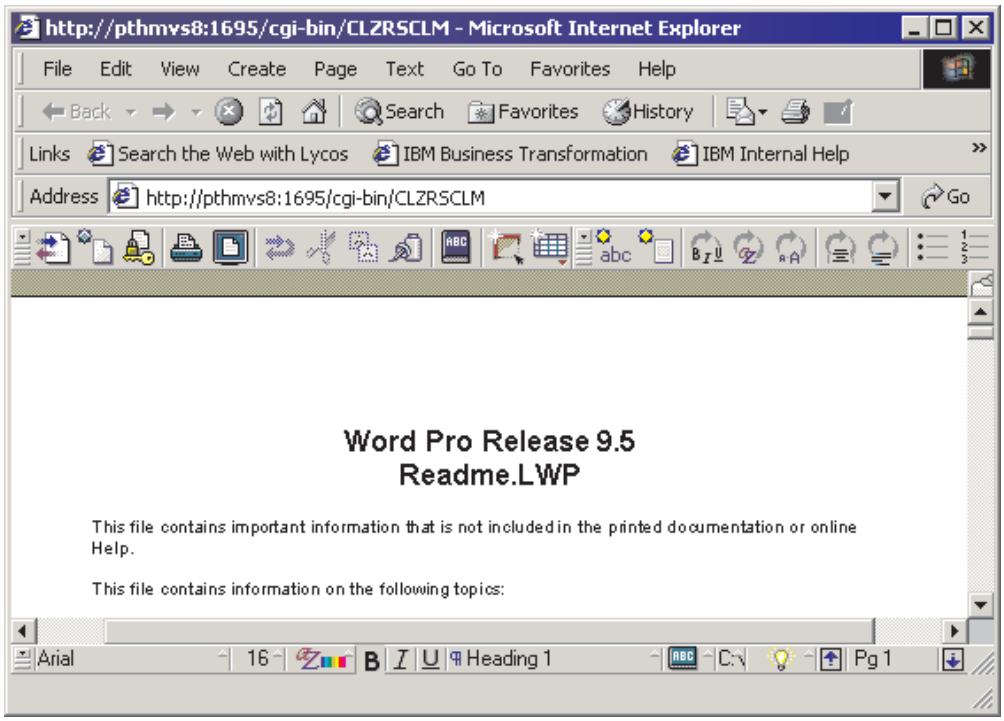


Figure 35. Lotus WordPro document in an Internet Explorer browser

If Internet Explorer cannot integrate with the application but the file extension is known to your operating system, the appropriate application opens. If the file extension is not known, see "File Extensions That are Not Recognized by Cloud 9" on page 34 for the action to take.

If you choose to download the file, the Save As dialog box is displayed. Navigate to the required location and save the file.

2. Close the empty browser window.

- If the Edit in Browser option is set to No, the File Download dialog box is displayed.

  If you choose to open the file, the appropriate application opens. If the file extension is not known, see "File Extensions That are Not Recognized by Cloud 9" on page 34 for the action to take.

  If you choose to download the file, the Save As dialog box is displayed. Navigate to the required location and save the file.

If you are using Netscape Navigator:

Regardless of the Edit in Browswer setting, Netscape displays the file using the instructions in its preferences.

To change the Netscape Preferences:

1. From the Netscape menu, click Edit > Preferences.
2. Select the Navigator > Applications category and locate the Description for the required extension.
3. Click the Edit button. The Edit Type dialog box is displayed.

Note: If the file is handled by an installed Plug-In, you might not be able to change the Netscape Preferences.

4. Select one of the Handled By options.
5. Click OK in the Edit Type dialog box and OK in the Preferences dialog box.

Table 3. Summary of Edit results for recognized Binary objects

Edit Options	File Type	IE	NS
Profile Edit in Browser = Yes[1]	Default	OLE	BS
Edit in Browser = Yes	Default	OLE	BS
Edit in Browser = Yes	Text	OLE	BS
Edit in Browser = Yes	Binary	OLE	BS
Edit in Browser = No	Default	FD	BS
Edit in Browser = No	Text	FD, BC	BS, BC
Edit in Browser = No	Binary	FD	BS

Notes:

1. If the selected object is an SCLM member, the Edit Options panel is displayed.

IE Internet Explorer

NS Netscape Navigator

OLE Display the as embedded object within the browser, if possible. If the application does not support OLE integration with IE, display the File Download dialog box.

FD Displays the *File Download* dialog box.

BS Action is determined by the *browser settings*. This can include displaying the object in the browser using an installed Plug-In, saving the object directly to disk as a file or opening the object using a specified application.

BC *Binary code* for the object is displayed/downloaded.

File Extensions That are Not Recognized by Cloud 9

If Cloud 9 does not recognize the file's extension and the Edit in Browser option is set to Yes, a new browser window opens and displays the binary code within a text field.

If the Edit in Browser option is set to No, the browser attempts to open or download the file.

Internet Explorer users:

The File Download dialog box is displayed. If you select Open and the file extension is not listed in the Registered File Types list, the ″Open With″ dialog box (Figure 36 on page 35) is displayed. In this window, you can associate the file's extension with the editor program of your choice.

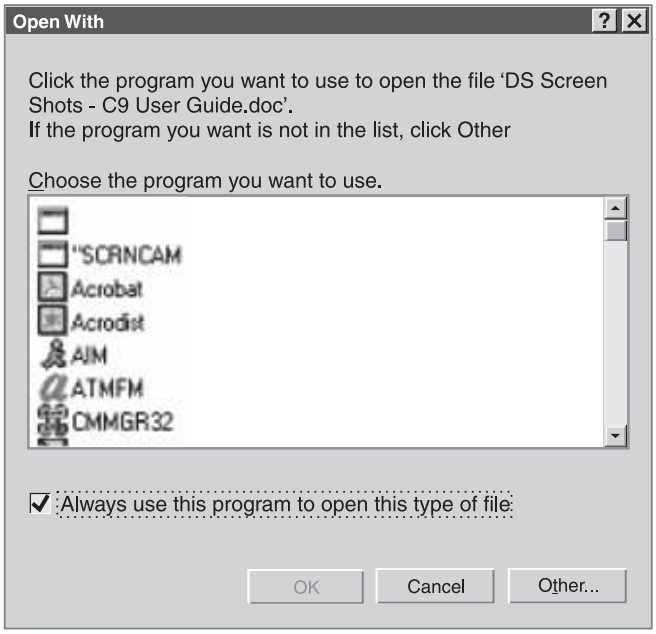


Figure 36. "Open With" Dialog Box

Note: Once you associate a file extension with a specific program, Cloud 9 uses that program to open all subsequent files that have that particular extension.

When the "Open With" dialog box appears, select an editing program and click OK. The file opens within the editing tool you chose.

Netscape Navigator users:

The Unknown File Type dialog box is displayed.

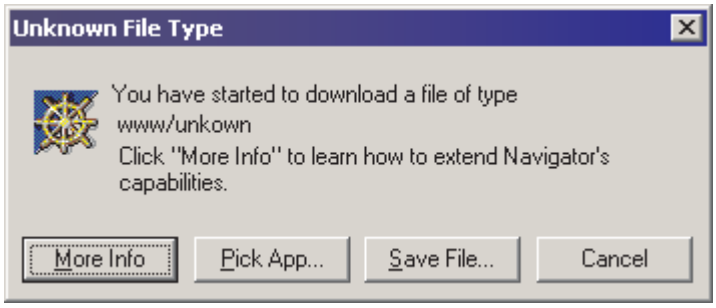


Figure 37. "Unknown File Type" Dialog Box

When the "Unknown File Type" dialog box is displayed, click the Pick App button and follow the dialog box prompts to select an editing program. The file opens within the editing tool you chose.

Adding and Defining Cross-Platform File Types

Step 1: Define File Types to SCLM

- Determine the type name, which you might want to be the same as the file extension. For instance, ***.DOC*** types might be defined as DOC, ***.JAVA*** types might be defined as JAVA, and so on.
- Define the type to SCLM.
- Determine if the type is binary or text based. For instance, DOC and GIF files are binary. Java Script, HTML, C and C++ are text. If the type is binary, type data sets must be defined as follows:
  - RECFM = VB
  - BLKSIZE = 26004
  - LRECL = 256

  Note: If there are records in your e-Business Source types, such as HTML, that extend beyond 256 bytes, you must assign a library with a larger LRECL in order to stop truncation.
- Default to ***language =TEXT*** for starters. Optional translators can be built later for deployment of objects.

Step 2: Define the Type to Suite Long Name Registry (SLR)

Run the SLR update utility CLZC9J06 (see the *IBM Cloud 9 for SCLM for z/OS Installation Guide* for more information) to see if the file type you are downloading is already supported by the SLR. The utility returns a list of file types and extensions that are currently defined in your SLR.

```
------------------------------------------------------------------------------------------
SDSF OUTPUT DISPLAY P390CTC JOB02591 DSID 106 LINE 84               COLUMNS 02 - 81
COMMAND INPUT ===>

 ADD NAME RULE FOR SCLM TYPE DOC      CASE SENSITIVE.
 ADD NAME RULE FOR SCLM TYPE GRAPHICS CASE SENSITIVE.
 ADD NAME RULE FOR SCLM TYPE HTML     CASE SENSITIVE.
 ADD NAME RULE FOR SCLM TYPE JAVA     CASE SENSITIVE.
 ADD NAME RULE FOR SCLM TYPE JAR      CASE SENSITIVE.
 ADD NAME RULE FOR SCLM TYPE JAVACLAS CASE SENSITIVE.
```

Figure 38. Example of List Rules Output

If the file type and extension are not defined, then use the SLR update utility to add the file type to the SLR. See the *IBM Cloud 9 for SCLM for z/OS Installation Guide* for full syntax and JCL examples.

```
//STEP1    EXEC PGM=CZLSLR
//STEPLIB  DD DSN=CLZ.SCLZLOAD,DISP=SHR
//CIGIN    DD *
ADD NAME RULE FOR SCLM TYPE DOC      CASE SENSITIVE.
ADD NAME RULE FOR SCLM TYPE GRAPHICS CASE SENSITIVE.
ADD NAME RULE FOR SCLM TYPE HTML     CASE SENSITIVE.
ADD NAME RULE FOR SCLM TYPE JAVA     CASE SENSITIVE.
ADD NAME RULE FOR SCLM TYPE JAR      CASE SENSITIVE.
ADD NAME RULE FOR SCLM TYPE JAVACLAS CASE SENSITIVE.
//CIGLOG   DD SYSOUT=*
```

Figure 39. Example of JCL for SLR Utility

Again, it is suggested that the SCLM type be the same as the file extension.

Step 3: Add Type Extension to the HTTP Rules File (httpd.conf)

Check the **httpd.conf** file to see if the file extension you want to add already exists.

ATTENTION REVIEWERS: SOMETHING HAS OBVIOUSLY GONE WRONG HERE, AS THERE ARE TWO FIGURE ENTRIES AND TWO CAPTIONS BUT ONLY ONE ACTUAL FIGURE. PLEASE ADVISE WHAT SHOULD BE HERE.

Figure 40. Example of ADDTYPE Entries

```
#-------------------------------------------------------------------------
AddType .asm   text/asm   ebcdic 1.0 # Assemble Macros
AddType .doc   binary/doc binary 1.0 # Microsoft Word Documents
AddType .ppt   binary/ppt binary 1.0 # Power Point Documents
AddType .cob   text/cobol ebcdic 1.0 # COBOL Source Code
AddType .cbl   text/cobol ebcdic 1.0 # COBOL Source Code
AddType .cobol text/cobol ebcdic 1.0 # COBOL Source Code
#-------------------------------------------------------------------------
```

Figure 41. CLZTHTPD — Cloud9 Server Rules File

If the file type you want to add is not there, then add it using the following format:

```
AddType   /  Extension  /   Mime type  /   Translation Technique
```

Where:

AddType
The keyword.

Extension
File qualifier.

Mime type
The Multipurpose Internet Mail Extension (MIME) type tells the browser how to treat the file.

Translation Technique
Binary or EBCDIC.

The number after the translation technique is arbitrary and the rest is a comment.

For example, If adding an MS-Excel file type, the following format is used:

```
AddType   /  .xls  /   application/msexcel  /   binary
```

If you are not sure what to use as a MIME type or translation technique, try to model it after a similar application or check your browser for MIME types. To check for MIME types in Windows, click **Start**, then **Settings**, then **Folder Options**, then **File Types**.

Update The Browser's File Type Settings

Windows Setup

In Windows, click **Start** > **Settings** > **Control Panel**, then double-click **Folder Options** and click the **File Types** tab.

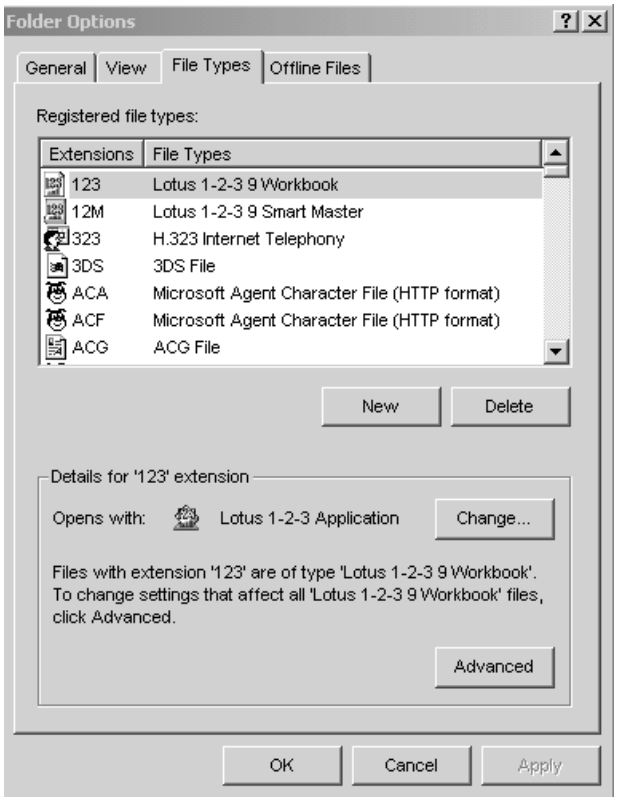


Figure 42. Windows Folder Options

Check the list of file types for the file type you want to download. If the file type you are looking for is there, then the application currently set to open the file is displayed.

If the file type is there, but set to the wrong application, then select **Advanced**.

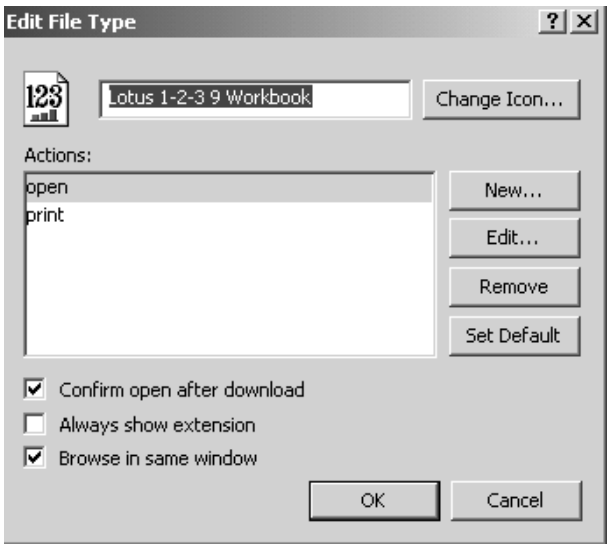


Figure 43. Windows Edit File Type

On the Edit panel you can specify what application is chosen to open the file. Also, the *Confirm open after download* option gives you the choice of whether a prompt occurs after a download.

If the file type you are looking for is not in the file list, then click the **New** button from the Windows Folder Options panel.

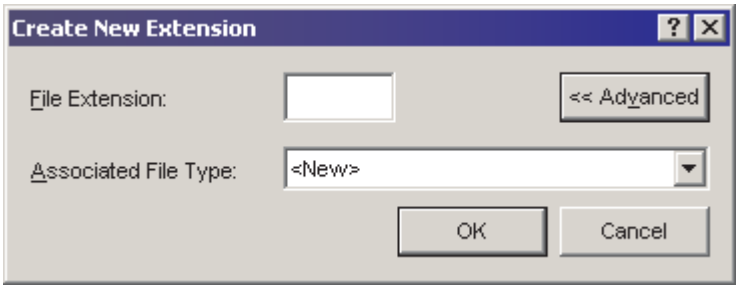


Figure 44. Create New Extension

On this panel, you can add a file type to the file list and choose a default application with which to open the file. If you edit or add a file type, also check the **httpd.conf** file to make sure that all the ADDTYPE definitions match.

Netscape Setup

In Netscape, go to **Edit**, then **Preferences**, then **Navigator**, then **Application**.

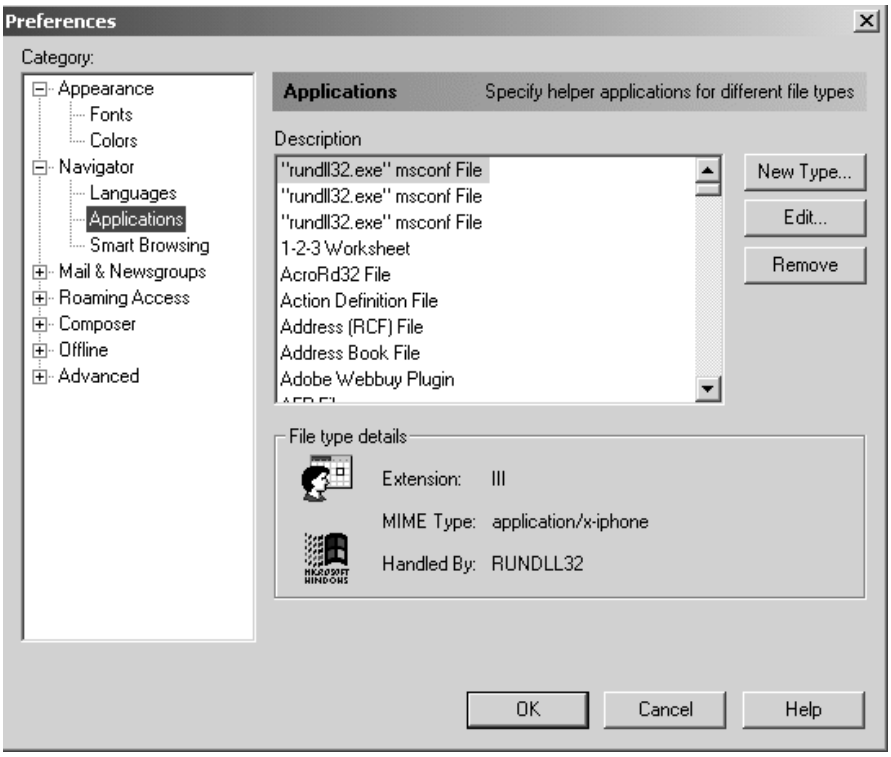


Figure 45. Preferences

Check the list of file types for the file type you want to download. If the file type you are looking for is there, then the application currently set to open the file is displayed.

Ensure that the correct application is set up to open your file. If it is not set to the right application then select **Edit**.

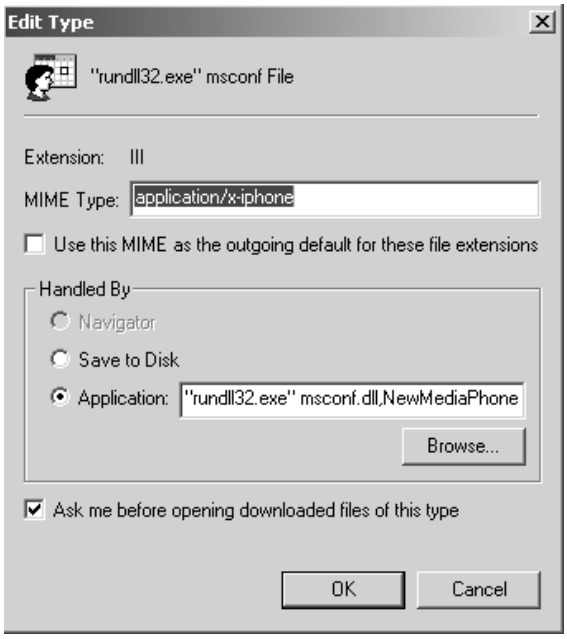


Figure 46. Edit Type

If the file type you are looking for is not in the list of file types, select **New Type**. In this panel you can add a file type to the file list and choose a default application with which to open the file. If you edit or add a file type, also check the **httpd.conf** file to make sure that all the ADDTYPE definitions match. In Netscape, any file without an extension is given a default extension of ***.TXT***. To change this default extension, you must change the ″Handled by″ option for the file types with the description, ***plain text***.

Note: Image files are downloaded as binary when running Netscape. In the httpd.config file, if the user had specified an Addtype statement for .jgp of image/jpeg then Cloud 9 downloads the file with a content-type of binary/jpeg. Therefore, the user needs to define a helper application for jpeg and jpg types (or any other image type to handle binary/image-type on downloads). If the Netscape user does not specify a helper application then Netscape downloads the file to the user's workstation.

Chapter 3. Creating Members and Packages

You can create new members in an SCLM hierarchy or within PDS data sets, or create and save files to a Unix server. You can also work with SCLM Packages, which are a special type of SCLM member. This chapter describes how to:

- Create text members in an SCLM hierarchy, a PDS data set or save text to a file on a Unix server.
- Add PC or Workstation files to an SCLM hierarchy, a PDS data set or save files to a file on a Unix server.
- Create, open and edit SCLM Package members.
- Delete members and files.

Creating Objects

Text-based objects can be created within a browser window and then saved into an SCLM hierarchy, a PDS data set or a Unix server, or can be submitted as a batch job. Both Text-based and Binary files stored on your PC or Workstation can be added to an SCLM hierarchy, a PDS data set or saved to a Unix server.

Creating Text-based objects

In Cloud 9, you can create a new file and add it into SCLM, PDS, or UNIX. To do this:

1. Ensure that you have no list items selected in any Member List or Unix File List.

   Note: You might need to return to each list panel and clear any selections.
2. On the Main Menu, click **EDIT** or **EDIT MEMBER**. An empty edit session is opened within a new browser window:

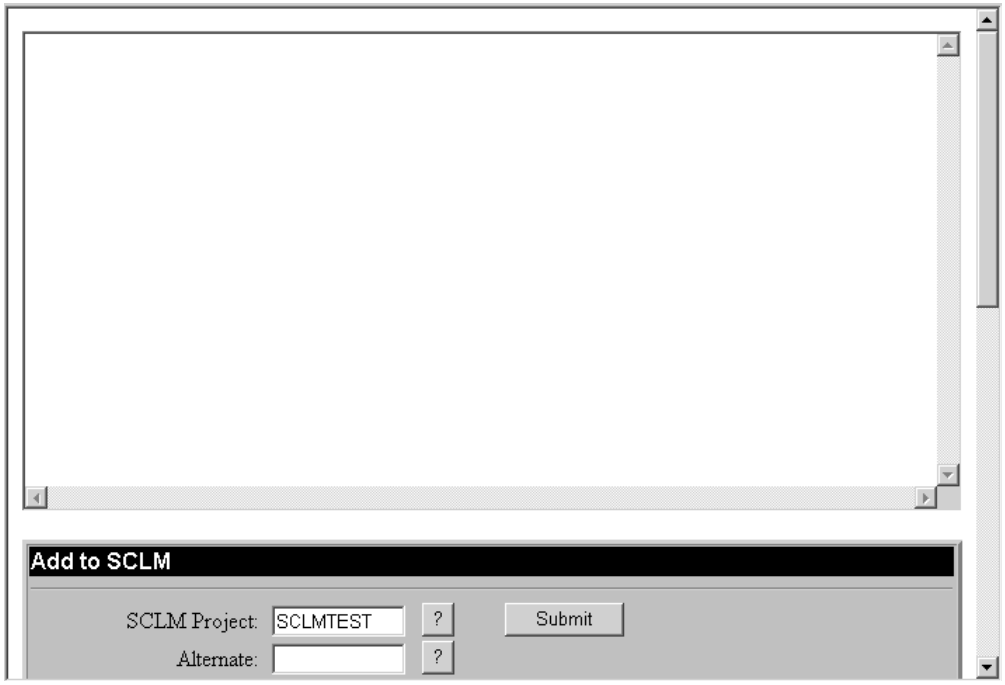


Figure 47. Empty edit session

3. Create your new file by typing directly in the editing area within the new browser window.

   Note: If you are running a pre-6.x version of Netscape, you cannot enter more than 20k of data in the editing area.

4. When you are ready to save your work, scroll down the Web browser window to the relevant section of the form beneath the editing area.

   Add to SCLM

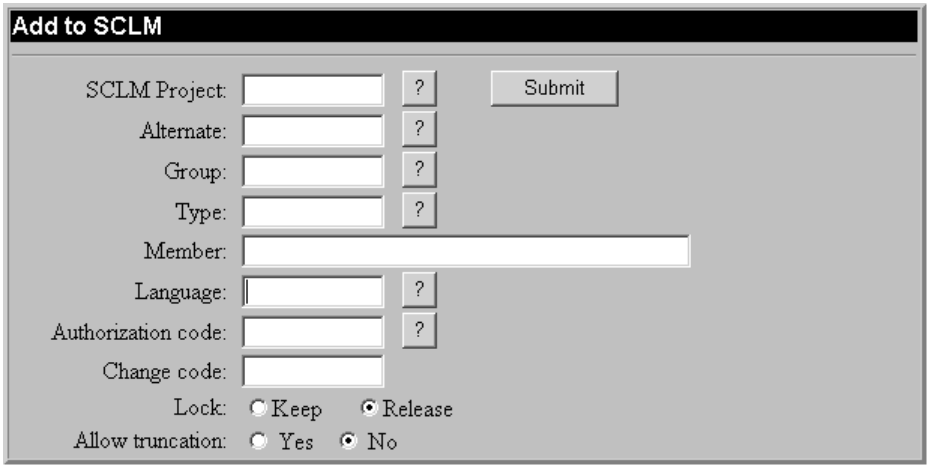


Figure 48. Add to SCLM form

The input fields in this form are:

SCLM Project	Your SCLM project name. Required field.
Alternate	Alternative SCLM project name. Optional field.
Group	Your SCLM group name. Required field.

Type Your SCLM type name. Required field.

Member Your SCLM member name. Required field.

Language Your SCLM language name. Required when adding a new member.

Authorization code Your authorization code.

Change code A valid SCLM change code. Optional field.

Lock During processing, the chosen member is locked to prevent another user from accessing it. After processing, this option determines what action to take on the chosen member.

- Keep — the member remains in a locked condition.
- Release — the member is unlocked and available to other users.

Allow truncation The Yes/No option specifies whether a file that has a line length greater than the defined record length of the SCLM data set is truncated as it is added.

- Yes — files are added with truncation where necessary.
- No — files that require truncation are not added.

Submit button Verifies that all required SCLM fields have been completed and attempts to add the member to SCLM.

Add to Dataset

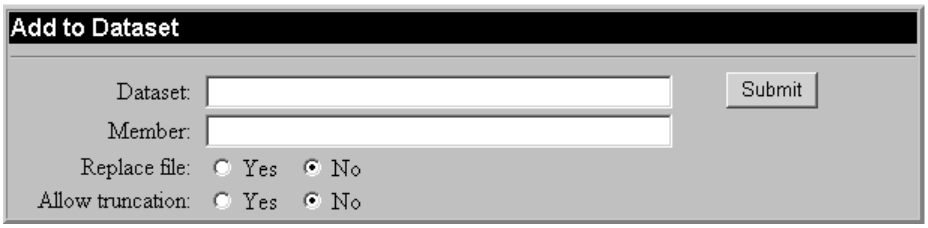


Figure 49. Add to Dataset form

The input fields in this form are:

Dataset Host data set. Required field.

Member MVS conventional member name. Required field.

Replace file Yes/No option buttons that specify whether like-named members of the data set are replaced.

Allow truncation The Yes/No option specifies whether a file that has a line length greater than the defined record length of the PDS data set is truncated as it is added.

- Yes — files are added with truncation where necessary.
- No — files that require truncation are not added.

Submit button Verifies that all required Dataset fields have been completed and attempts to add the member to a PDS data set.

Add to Unix

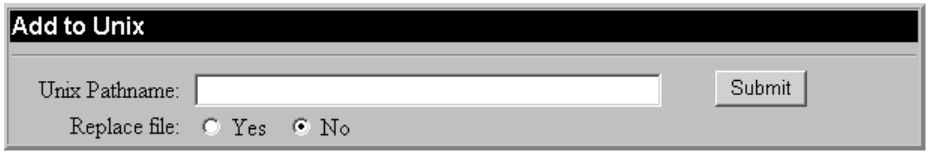


Figure 50. Add to Unix form

The input fields in this form are:

Unix File	Fully qualified Unix path. Required field.
Replace file	Yes/No option buttons that specify whether like-named files in the specified Unix path are replaced.
Submit button	Verifies that all required Unix fields have been completed and attempts to save the member to a Unix server.

Submit batch job

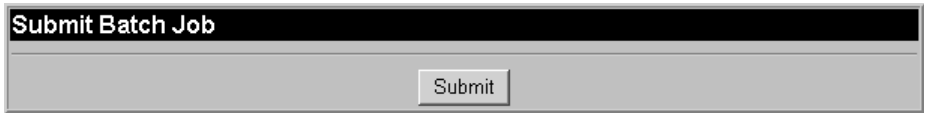


Figure 51. Submit Batch Job form

Clicking the **Submit** button within this section causes the current edit process to submit the file as a batch job, with no save action performed.

5. Complete the fields in one section only (Add to SCLM, Add to Dataset, Add to Unix or Submit Batch Job) and click the Submit button in that section.

   If all required fields were completed correctly and the submission is successful, a confirmation message displays:

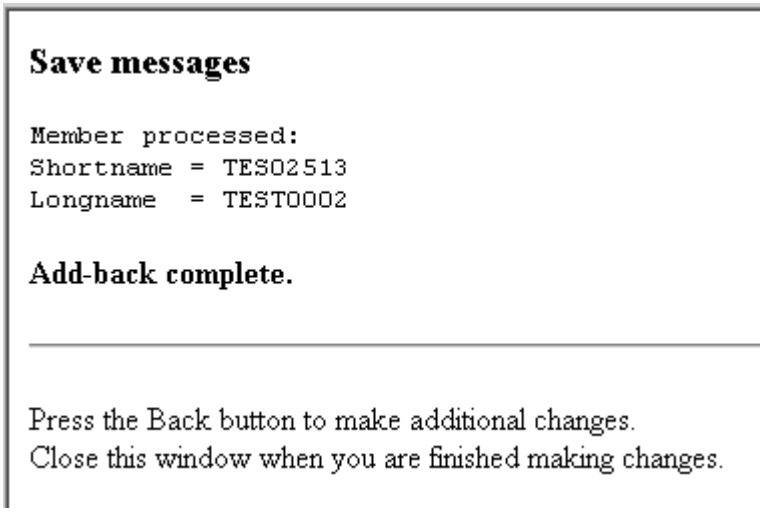


Figure 52. Successful save message

If a required field was not completed or contains incorrect data, an error message is displayed and describes the cause of the problem:

Figure 53. Example form error message

Click the OK button, correct the error and click the Submit button again.

If the form is correctly completed but the submission is unsuccessful, a message displays and describes the reason for failure:

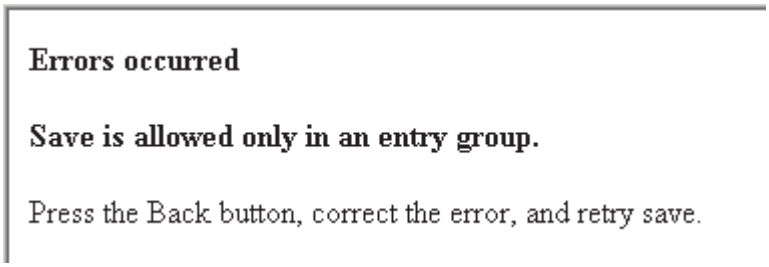


Figure 54. Example form error message

Add PC/WS Files

Cloud 9 gives you the ability to add Personal Computer (PC) or Workstation (WS) files to SCLM, a PDS data set or a Unix server, through the Web browser.

1. Click on **ADD PC/WS FILES** on the main menu. The Add PC/WS Files panel is displayed, containing three sections: Add to SCLM, Add to Dataset and Add to Unix directory.
2. Scroll to the relevant section for the task you want to perform.

   Add to SCLM

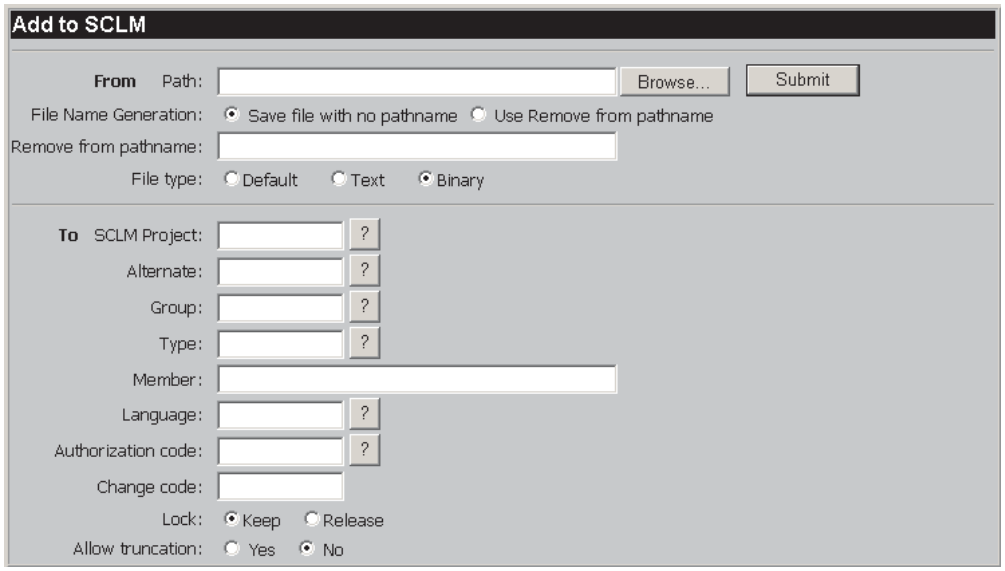


Figure 55. Add to SCLM form

The entry fields on the Add to SCLM panel are:

From Path
Fully qualified path and file name for the file to be uploaded, wild card characters are not allowed.

Browse button
Displays the File Open dialog box, in which you can navigate to the file to be uploaded. Once the file is selected, the full path and file name are returned to the From Path field and the path without the file name) is returned to the Remove from path name field.

File Name Generation
Controls the use of the Remove From Pathname field.

Save file with no pathname
If this option is selected, the file is stored in SCLM with no prefixed path name.

Use Remove from pathname
If this option is selected, the file is stored with the full path name, minus any section of a path name that is specified in the Remove from pathname field.

Remove from pathname
The specified section of a path name is removed and the remainder is retained as part of the long file name stored in SCLM.

For example, if you have selected `c:\pictures\mypets\myDog.jpg` to be added into SCLM, but wish to define the file to SCLM as `mypets\myDog.jpg`, you specify `c:\pictures\` in this field. When the file is added to SCLM, the file name is stored in the SLR as `mypets\myDog.jpg`.

Note: If no value is specified in ″Remove from pathname″, the file name is stored without any directory information. Also, the drive letter is never retained as part of the SCLM file name.

File type
Determines in what format the selected member or file is uploaded.
- Default — Cloud 9 selects the upload method (Text or Binary) based on the file's extension.
- Text — upload file using ASCII to EBCDIC conversion.
- Binary — upload the file ″as is″.

SCLM Project Your SCLM project name. Required field.

Alternate Alternative SCLM project name. Optional field.

Group Your SCLM group name. Required field.

Type Your SCLM type name. Required field.

Member Your SCLM member name. Required field.

Language Your SCLM language name. Required field.

Authorization code Your authorization code.

Change code A valid SCLM change code. Optional field.

Lock
During processing, the chosen member is locked to prevent another user from accessing it. After processing, this option determines what action to take on the chosen member.

Keep — the member remains in a locked condition.

Release — the member is unlocked and available to other users.

Allow truncation
The Yes/No option specifies whether a file that has a line length greater than the defined record length of the SCLM data set is truncated as it is added.

Yes — files are added with truncation where necessary.

No — files that require truncation are not added.

Submit button
Verifies that all required SCLM fields have been completed and attempts to add the member to SCLM.

Add to Dataset

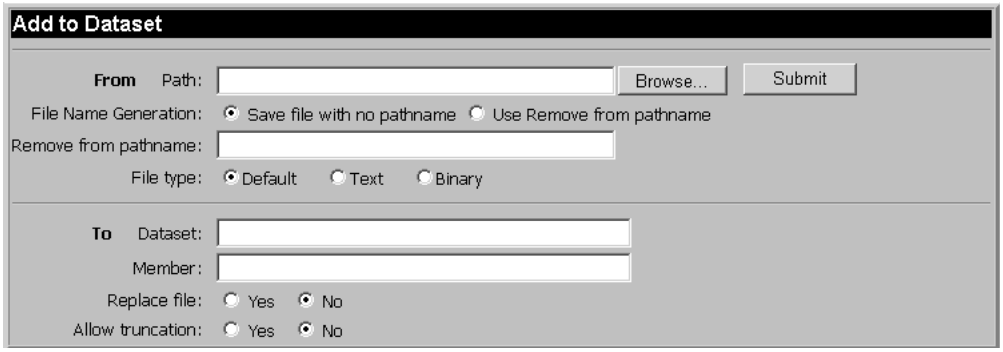


Figure 56. Add to Dataset form

The input fields in this form are:

From Path
Fully qualified path and file name for the file to be uploaded, wild card character is not allowed.

Browse button
Displays the File Open dialog box, in which you navigate to the file to be uploaded. Once the file is selected, the full path and file name are returned to the From Path field and the path without the file name) is returned to the Remove from path name field.

File Name Generation
Controls the use of the Remove From Pathname field.

Save file with no pathname
If this option is selected, the file is stored in the PDS Dataset with no prefixed path name.

Use Remove from pathname
If this option is selected, the file is stored with the full path name, minus any section of a path name that is specified in the Remove from pathname field.

Remove from pathname
The specified section of a path name is removed and the remainder is retained as part of the long file name stored in SCLM.

For example, if you have selected `c:\pictures\mypets\myDog.jpg` to be added into a Data set, but wish to define the file to SCLM as `mypets\myDog.jpg`, you specify `c:\pictures\` in this field. When the file is added to the data set, the file name is stored in the SLR as `mypets\myDog.jpg`.

Note: If no value is specified in ″Remove from pathname″, the file name is stored without any directory information. Also, the drive letter is never retained as part of the file name.

File type
Determines in what format the selected member or file is uploaded.

Default — Cloud 9 selects the upload method (Text or Binary) based on the file's extension.
Text — uploads file using ASCII to EBCDIC conversion where necessary.
Binary — uploads the file ″as is″.

Dataset
Host data set. Required field.

Member
MVS conventional member name. Required field.

Replace file
Determines the action to take if a member with the same name exists in the target data set.

- Yes — replace a like-named member with this one.
- No — do not replace a like-named member.

Submit button
Verifies that all required Dataset fields have

been completed and attempts to add the member to the PDS data set.

Add to Unix

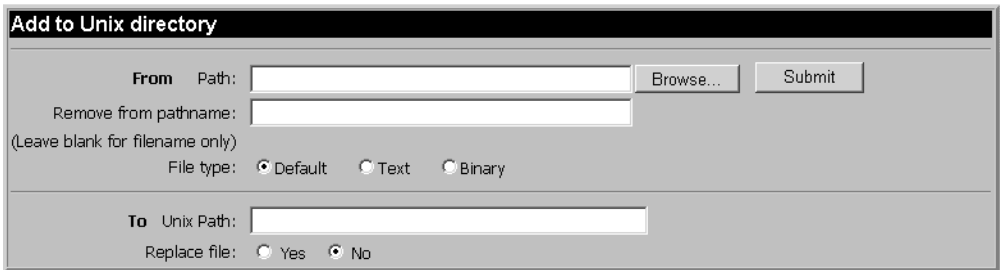


Figure 57. Add to Unix form

The input fields in this form are:

From Path
Fully qualified path and file name for the file to be uploaded, wild card character is not allowed.

Browse button
Displays the File Open dialog box, in which you navigate to the file to be uploaded. Once the file is selected, the full path and file name are returned to the From Path field and the path without the file name) is returned to the Remove from path name field.

File Name Generation
Controls the use of the Remove From Pathname field.

Save file with no pathname
If this option is selected, the file is stored in the Unix Directory, specified in the To Unix Path field, with no prefixed path name.

Use Remove from pathname
If this option is selected, the file is stored with the full path name, minus any section of a path name that is specified in the Remove from pathname field.

Remove from pathname
The specified section of a path name is removed and the remainder is retained as part of the long file name stored in SCLM.

For example, if you have selected `c:\pictures\mypets\myDog.jpg` to be added, but wish to define the file in Unix as `mypets/myDog.jpg`, you specify `c:\pictures\` in this field. If this were to be added to a Unix directory such as `/u/dohertl/sclmtest/dev1/docs/`, the file is copied to Unix as `/u/dohertl/sclmtest/dev1/docs/mypets/myDog.jpg`.

Notes:

a. The full Unix path must exist before files can be copied to it. That is, the ″mypets″ directory must exist within ″../docs/″, the

Add WS/PC Files process does not create the sub-directory for you.

b. If no value is specified in ″Remove from pathname″, the file name is stored directly in the specified Unix directory.

c. The drive letter is never retained as part of the file name or path name.

To Unix path	Fully qualified Unix path. Required field.
Replace file	Determines the action to take if a file with the same name exists in the target data set. • Yes — replace a like-named file with this one. • No — do not replace a like-named file.
Submit button	Verifies that all required Dataset fields have been completed and attempts to add the member to the PDS data set.

3. Complete the fields in one section only (Add to SCLM, Add to Dataset, Add to Unix or Submit Batch Job) and click the Submit button in that section.

   If all required fields were completed correctly and the submission is successful, a confirmation message displays:

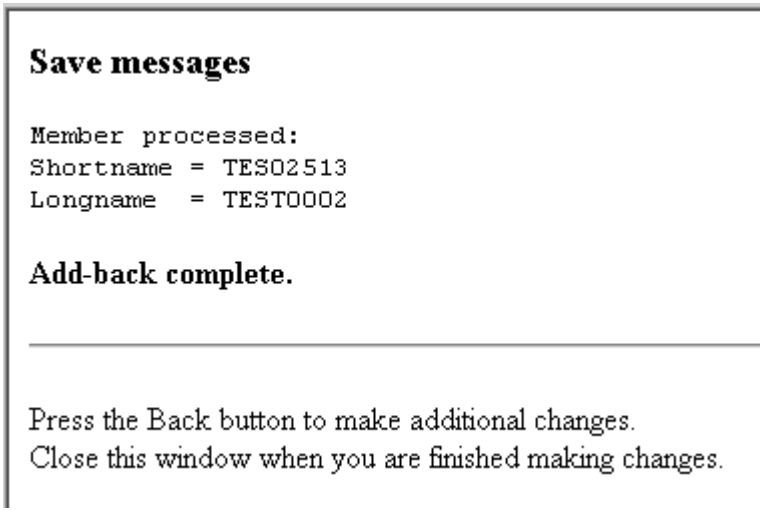


Figure 58. Successful save message

If a required field was not completed or contains incorrect data, an error message is displayed and describes the cause of the problem:

Figure 59. Example form error message

Click the OK button, correct the error and click the Submit button again.

If the form is correctly completed but the submission is unsuccessful, a message displays and describes the reason for failure:

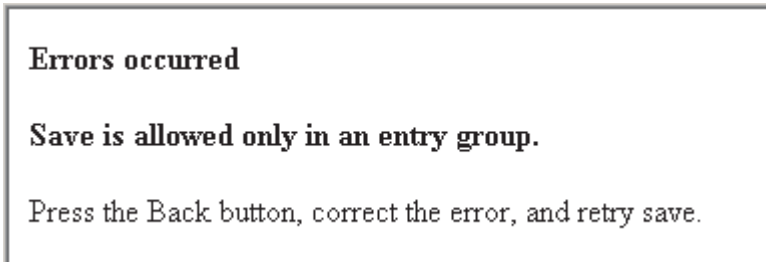


Figure 60. Example form error message

Packages

Cloud 9 gives you the ability to create, view, and modify SCLM Packages. An SCLM Package is a SCLM High-Level (HL) architecture definition member (ARCHDEF) that contains a list of the members that make up the Package. Packages are a means whereby you group SCLM members together to form a unit of work. Once placed in a Package, you can build and promote the members as a unit instead of having to build or promote the members individually.

For example, a developer might have a problem raised against a product such as ISPF. The developer investigates the problem and decides that there are 5 members that need to be changed, plus he wants to add some documentation. He can then create or open a Package and add the five members to it. When editing, he must still edit and change each member individually. However, the Package gives him the ability to build (compile) all the modules at once, without having to go into each of the 5 members. Once he has finished testing and has written his documentation, he can add that to the Package also. He then has a complete unit of work that can be promoted to the next level in the hierarchy, keeping all the bits of the change together. If he wants, he can build individual members but before he can promote the Package, he must also build it to make sure it picks up all the latest build information.

Only one Package at a time can be active within Cloud 9 and that Package remains available until you choose to ″Start Over″ (see Closing a Package) or leave the Cloud 9 Web site.

The main tasks involved in working a Package are:

1. Creating or opening a Package.
2. Adding SCLM Members to the active Package.
3. Editing and saving the Package contents.
4. Closing the Package.

Create or open Package

You start with the **OPEN PACKAGE** function, found in the Misc Functions section of the main menu.

From the Cloud 9 Main Menu:

1. Click on **OPEN PACKAGE**. The Open SCLM Package panel displays:

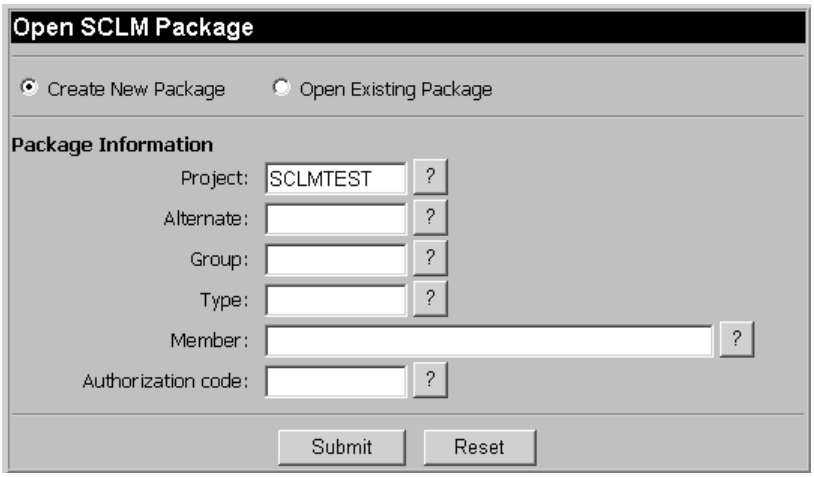


Figure 61. Open SCLM Package Panel

The input fields on the OPEN PACKAGE panel are:

Create New Package	Begin creation of a new package.
Open Existing Package	Begin working with a package that already exists.
Project	Your SCLM project name. Required field.
Alternate	Alternative SCLM project name. Optional field.
Group	Your SCLM group name. Required field.
Type	Your SCLM type name. Required field.
Member	Your SCLM member name. Required field.
Authorization code	Your authorization code.

2. Fill in the package information (Project, Group, and so on.).
3. Click on Submit.

   If all required fields were completed correctly and the submission is successful, the Package is created or opened and you are returned to the Cloud 9 Main Menu. The menu has two new options: **ADD TO PACKAGE** and **SAVE/VIEW PACKAGE**. These new options are explained in the following sections of this chapter. Notice that the OPEN PACKAGE option is no longer seen in the menu.

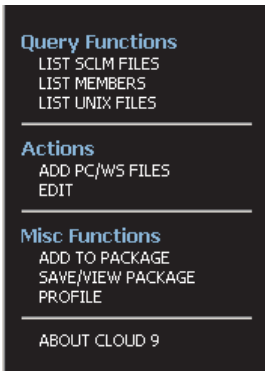


Figure 62. Add to Package and Save Package Menu Options

If a required field was not completed or contains incorrect data, an error message is displayed and describes the cause of the problem:

Figure 63. Example form error message

Click the OK button, correct the error and click the Submit button again.

If the form is correctly completed but the submission is unsuccessful, a message displays and describes the reason for failure:

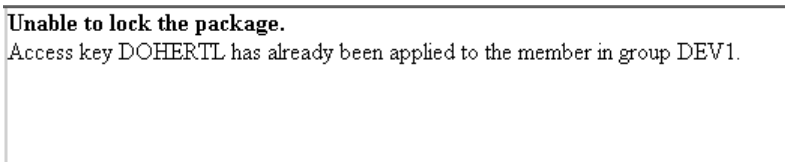


Figure 64. Example of Open Package failure message

Adding SCLM Members to a Package

To add SCLM members to an open package:

1. Generate a list of SCLM members (see "Listing SCLM Members" on page 11).
2. Select the members that you wish to add to the Package (see "Selecting list items" on page 19).

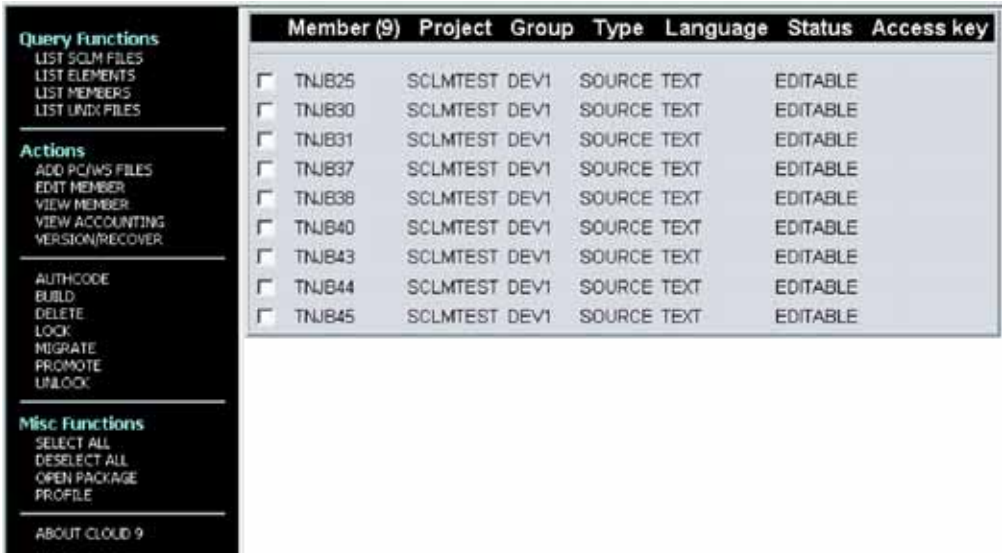


Figure 65. Member List

3. Click on **ADD TO PACKAGE**. The message in Figure 65 is displayed.

Figure 66. Package Add Message

Editing and Saving SCLM Packages

To view, edit or save the contents of the package into SCLM for further processing:

1. Click **SAVE/VIEW PACKAGE**. The panel in Figure 67 is displayed.

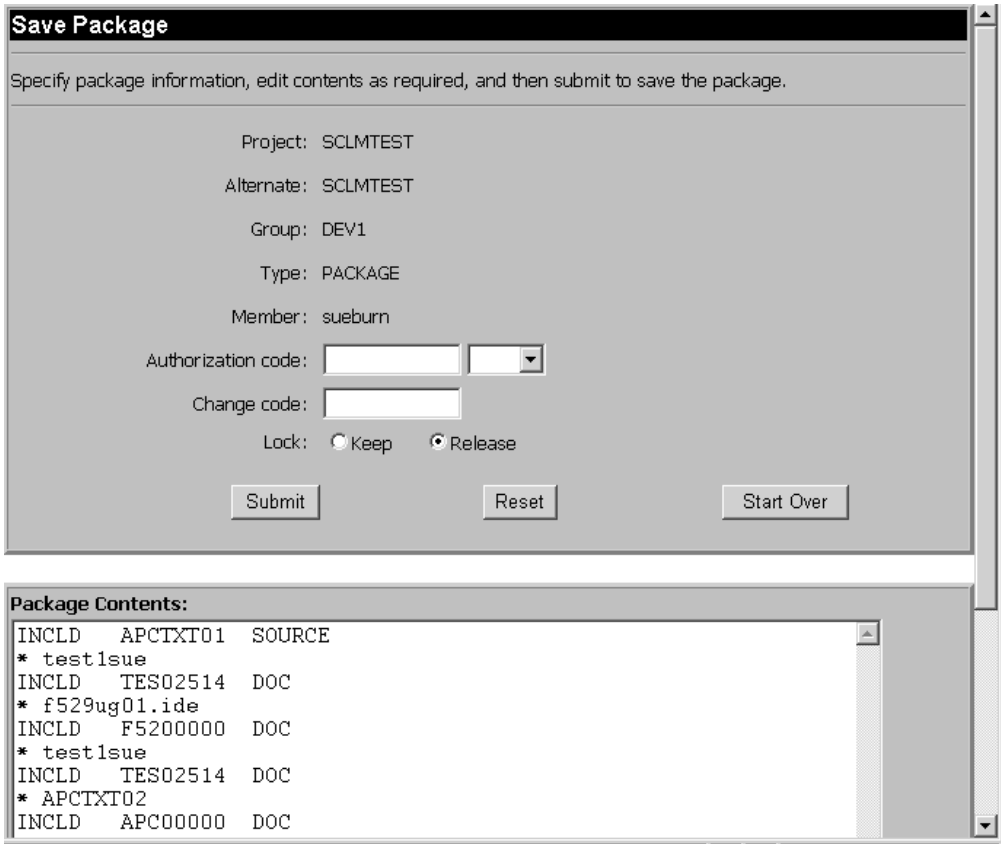


Figure 67. Save Package Panel

2. If required, edit the text in the Package Contents text area.

   Note: If you want to delete a member from the Package, delete the reference to it in the Package Contents.

3. Complete the input fields in the SAVE PACKAGE panel.

   The input fields are:

   Authorization code Your authorization code.
   Change code Your change code.

Lock	During processing, the chosen member is locked to prevent another user from accessing it. After processing, this option determines what action to take on the chosen member. • Keep — the member remains in a locked condition. • Release — the member is unlocked and available to other users.
Submit button	Verifies that all required SCLM fields have been completed and attempts to save the Package to SCLM.
Reset button	Clears all of the current field values within the Save Package form and returns option buttons to their default setting.
Start Over button	Closes the current Package. If changes have not yet been saved, they are lost.

4. Click Submit to save the member in SCLM for later processing.

   If all required fields were completed correctly and the submission is successful, the Package is saved and a confirmation message is displayed:

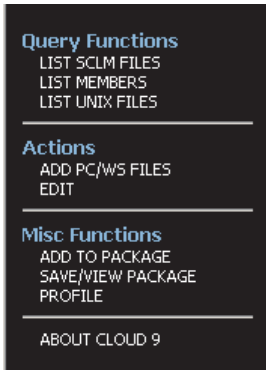


Figure 68. Package Save confirmation

If the form is correctly completed but the submission is unsuccessful, a message displays and describes the reason for failure:

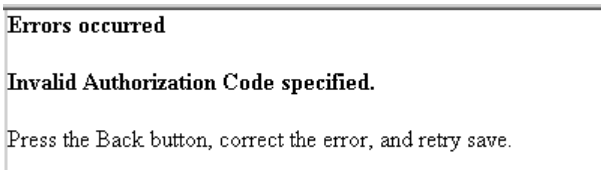


Figure 69. Example of Save Package failure message

Closing a Package

Only one Package at a time can be active within Cloud 9 and that Package remains available until you choose to ″Start Over″.

To close an open Package:

1. Click **SAVE/VIEW PACKAGE** .

2. Click the Start Over button. The Package closes and the Main Menu returns to its initial state (that is, it displays OPEN PACKAGE instead of ADD PACKAGE and SAVE/VIEW PACKAGE).

Note: The Start Over button does not prompt you to save the Package. If you have added members to the Package or edited the Package Contents and have not yet saved it, and then choose to close the Package, all your changes are lost.

Deleting Objects

You can use Cloud 9 to delete SCLM members (including SCLM Packages), PDS members and Unix files. If a Package is deleted, it is only the Package member that is removed, not the members that have been added to the Package.

To delete an object using Cloud 9:

1. Generate a list of members or files ("Listing Objects" on page 11).
2. Select a list item or items for deletion (see "Selecting list items" on page 19).
3. Click **DELETE**.

   For SCLM members, the following panel is returned:

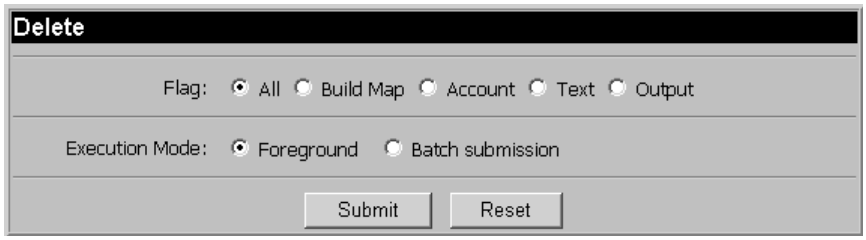


Figure 70. SCLM Delete Options

The input fields on the Delete Options panel are:

Flag

- All — All Flag options — Build Map, Account, Text, and Output — that match the selected pattern are deleted.
- Build Map — all build map records that match the selected pattern are deleted.
- Account — all accounting records, cross-reference records, intermediate records, and build map records that match the pattern are deleted. The accounting type is not checked.
- Text — all accounting records, cross-reference records, intermediate records, build map records, intermediate code, and Text members that match the pattern are deleted. The accounting type is not checked.
- Output — all build map records, intermediate records and code, and all non-editable accounting records, their cross-reference records and associated Text members that match the pattern are deleted. Editable accounting records, their cross-reference records or associated Text members are not deleted.

Execution Mode

- Foreground — processing done before any further action can be taken.

- Batch submission — control of the session is returned to the user, therefore additional tasks can be performed while the delete request is carried out.

Submit button
Submits the Delete request for processing.

Cancel button Cancels the Delete request and closes the Delete Options panel. The most recently used Cloud 9 panel is redisplayed.

For PDS members, the following panel is returned:

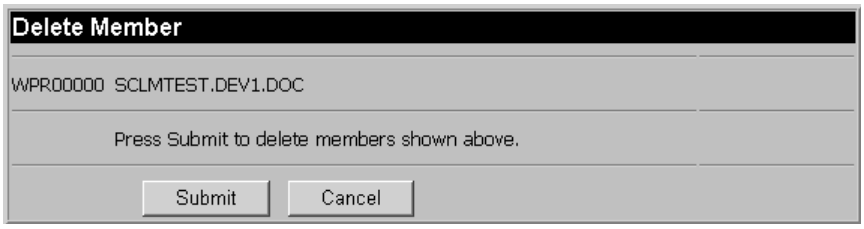


Figure 71. PDS Delete Member panel

For Unix files, the following panel is returned:

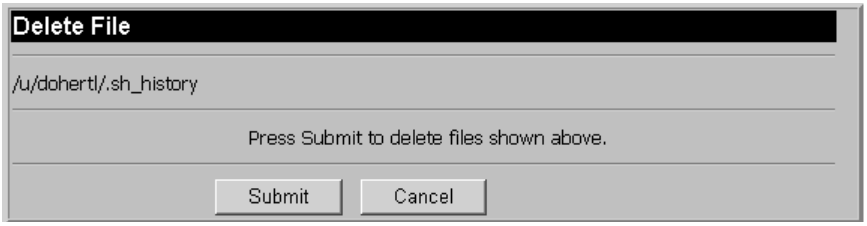


Figure 72. Unix Delete File panel

4. Choose your options (SCLM members only), then click Submit to remove the object or Cancel to abandon the Delete action.

   If the deletion is successful, a confirmation message displays:

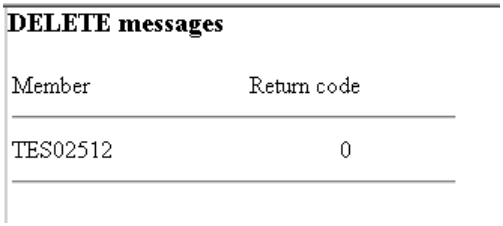


Figure 73. Confirmation of Delete success

If the deletion is unsuccessful or only partly successful, a message displays and describes any problems that might have occurred:

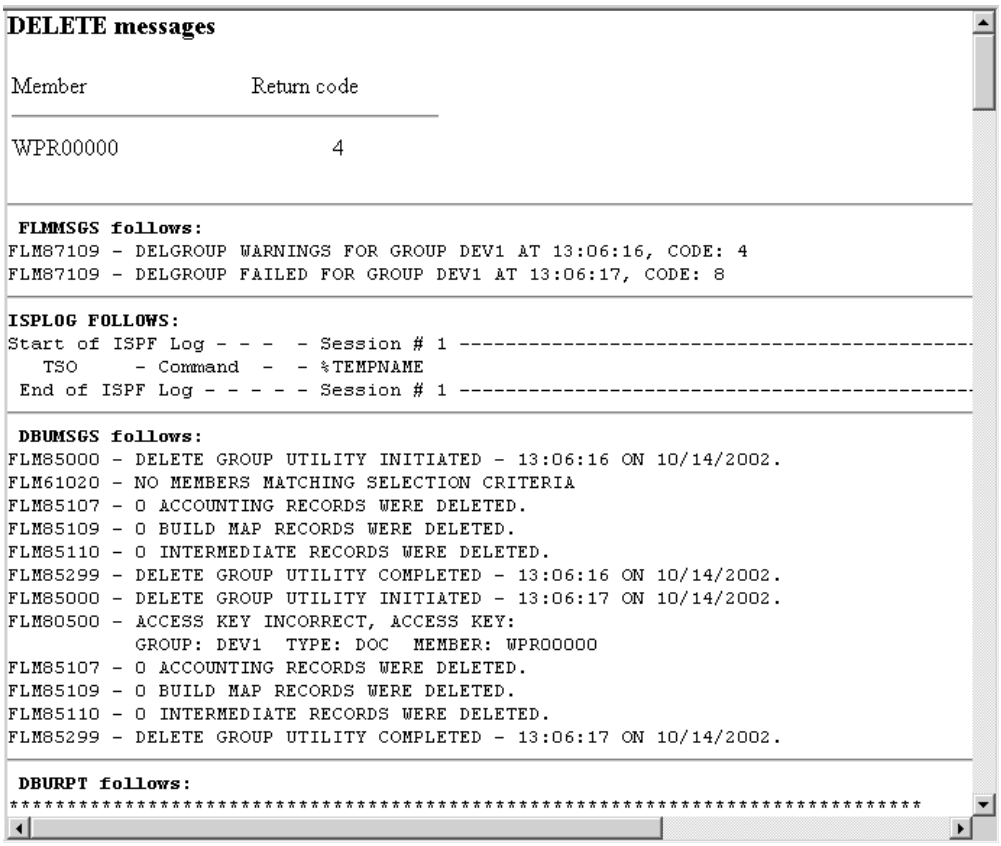


Figure 74. Example of Delete failure message

Chapter 4. SCLM Functions

A number of SCLM functions become available on the Main Menu, whenever an SCLM Query (List SCLM Members) has been performed. The menu items remain available until a different query (List Members or List Unix Files) is performed or a new SCLM Package is opened (or created).

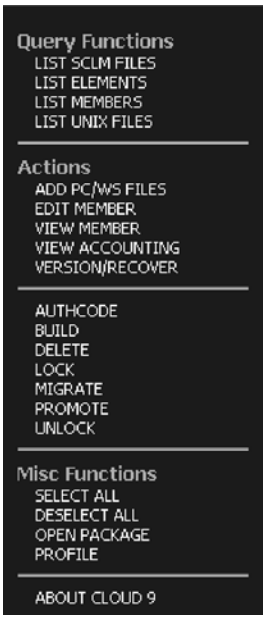


Figure 75. Main menu showing SCLM functions

This chapter describes the use of the following SCLM functions:

- Change the Authorization Code
- View SCLM accounting files
- Use the Version/Recover option
- Build and Promote SCLM members
- Lock and unlock SCLM members
- Migrate SCLM members

Changing the Authorization Code

Cloud 9 gives you the ability to change the Authorization Code for a selected SCLM member or members.

To change the Authorization Code for a member:

1. Generate a list of SCLM members (“Listing SCLM Members” on page 11).
2. Select the member or members for which you want to change the Authorization Code.
3. Click on AUTHCODE. The following panel displays:

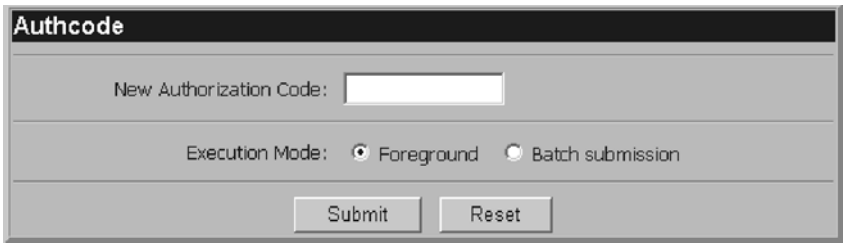


Figure 76. Authcode panel

The fields on this panel are:

New Authorization Code
Standard Authorization Code

Execution Mode
- Foreground — browser waits for end of processing.
- Batch submission — browser available for action while job is processing.

4. Enter a new Authorization Code. This code must be already defined to your project within SCLM.
5. Choose your Execution option and click Submit.
6. Your return message depends upon the Execution Mode you chose. A successful Authcode change, using Foreground Execution, returns the following message:

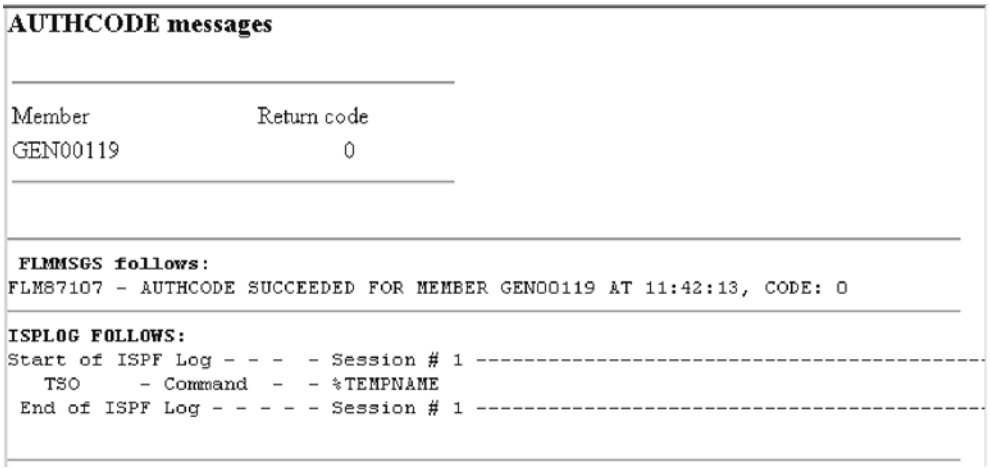


Figure 77. Authcode change (foreground) success message

An unsuccessful Authcode change, using Foreground Execution, returns a message describing the problem. For example:

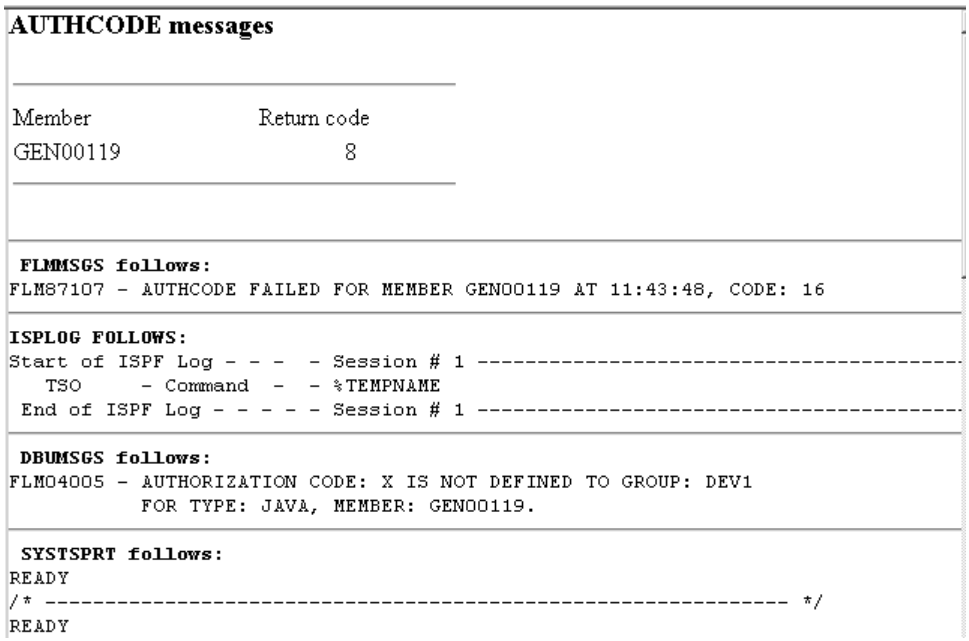
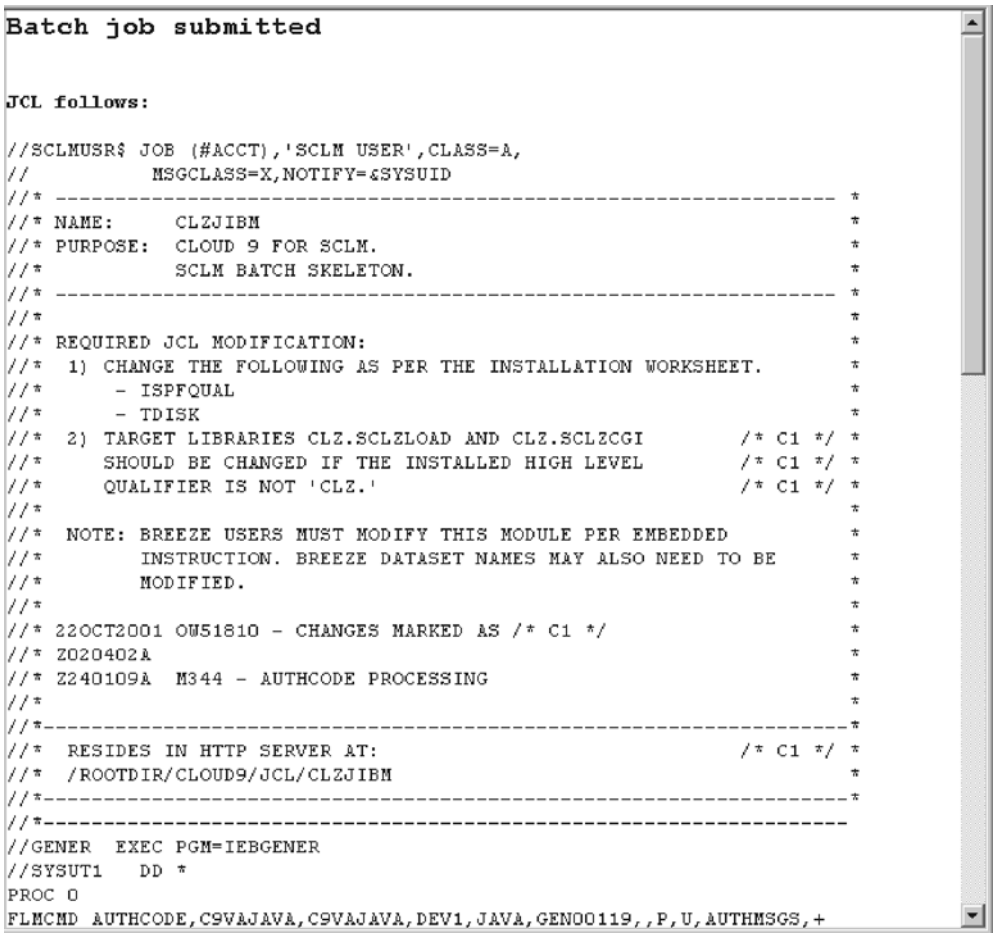


Figure 78. Authcode change (foreground) failure message

When the Execution Mode is set to Batch Submission, the JCL sent to SCLM is displayed in Cloud 9, for example:



```
Batch job submitted


JCL follows:

//SCLMUSR$ JOB (#ACCT),'SCLM USER',CLASS=A,
//          MSGCLASS=X,NOTIFY=&SYSUID
//* ------------------------------------------------------------------ *
//* NAME:     CLZJIBM                                                  *
//* PURPOSE:  CLOUD 9 FOR SCLM.                                        *
//*           SCLM BATCH SKELETON.                                     *
//* ------------------------------------------------------------------ *
//*                                                                    *
//* REQUIRED JCL MODIFICATION:                                         *
//*  1) CHANGE THE FOLLOWING AS PER THE INSTALLATION WORKSHEET.        *
//*       - ISPFQUAL                                                   *
//*       - TDISK                                                      *
//*  2) TARGET LIBRARIES CLZ.SCLZLOAD AND CLZ.SCLZCGI        /* C1 */ *
//*     SHOULD BE CHANGED IF THE INSTALLED HIGH LEVEL        /* C1 */ *
//*     QUALIFIER IS NOT 'CLZ.'                              /* C1 */ *
//*                                                                    *
//*  NOTE: BREEZE USERS MUST MODIFY THIS MODULE PER EMBEDDED           *
//*        INSTRUCTION. BREEZE DATASET NAMES MAY ALSO NEED TO BE       *
//*        MODIFIED.                                                   *
//*                                                                    *
//* 22OCT2001 OW51810 - CHANGES MARKED AS /* C1 */                     *
//* Z020402A                                                           *
//* Z240109A  M344 - AUTHCODE PROCESSING                               *
//*                                                                    *
//*--------------------------------------------------------------------*
//*  RESIDES IN HTTP SERVER AT:                              /* C1 */ *
//*  /ROOTDIR/CLOUD9/JCL/CLZJIBM                                       *
//*--------------------------------------------------------------------*
//*--------------------------------------------------------------------
//GENER  EXEC PGM=IEBGENER
//SYSUT1   DD *
PROC 0
FLMCMD AUTHCODE,C9VAJAVA,C9VAJAVA,DEV1,JAVA,GEN00119,,P,U,AUTHMSGS,+
```

Figure 79. Authcode Change (background) submission message

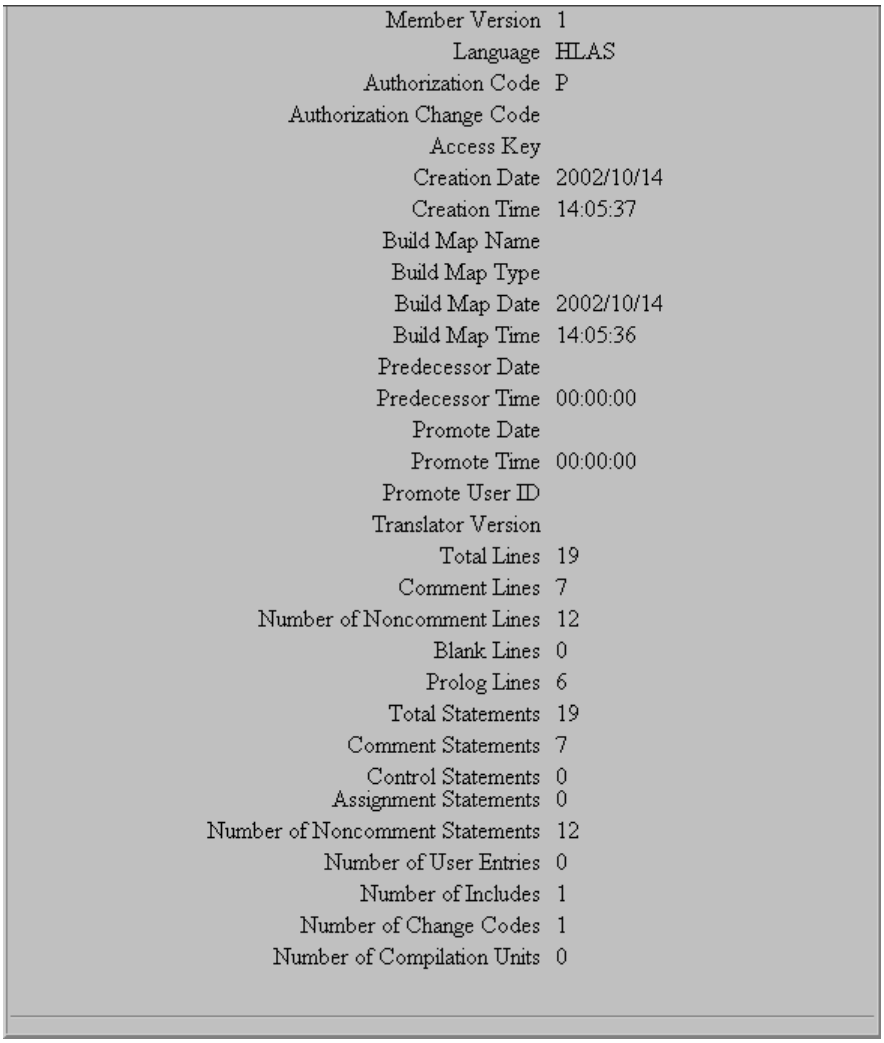
The Authcode change success or failure messages are part of the output generated by the batch job. To view these messages, check the output from the batch job submitted.

Viewing SCLM Accounting Information

Using Cloud 9 you can view the accounting information and view the build map for any SCLM member.

1. Generate a list of SCLM members (see “Listing SCLM Members” on page 11).
2. Select the members or files that you wish to view (see “Selecting list items” on page 19).
3. Select **VIEW ACCOUNTING** from the menu.
4. The Accounting Information displays in a new browser window:

Figure 80. Accounting Information (top of page)

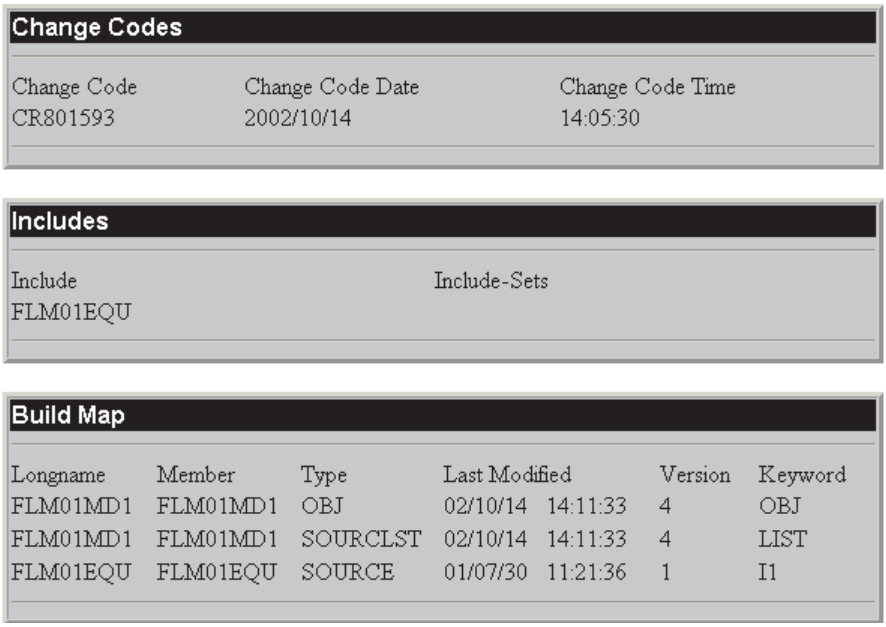


Member Version	1
Language	HLAS
Authorization Code	P
Authorization Change Code	
Access Key	
Creation Date	2002/10/14
Creation Time	14:05:37
Build Map Name	
Build Map Type	
Build Map Date	2002/10/14
Build Map Time	14:05:36
Predecessor Date	
Predecessor Time	00:00:00
Promote Date	
Promote Time	00:00:00
Promote User ID	
Translator Version	
Total Lines	19
Comment Lines	7
Number of Noncomment Lines	12
Blank Lines	0
Prolog Lines	6
Total Statements	19
Comment Statements	7
Control Statements	0
Assignment Statements	0
Number of Noncomment Statements	12
Number of User Entries	0
Number of Includes	1
Number of Change Codes	1
Number of Compilation Units	0

Figure 81. Accounting Information (bottom of page)

The information displayed in the Accounting Information main page is drawn directly from SCLM. See the SCLM Program Manager's and Developer's Guide for details about these fields. If the person specified in the Change User Id field has completed their Cloud 9 Profile information, their JPG image, e-mail address and telephone number is also displayed.

If the selected member has Change Code information, contains Include statements or has associated Build Map information, these details display in separate sections beneath the main Accounting Information.



Change Codes

Change Code	Change Code Date	Change Code Time
CR801593	2002/10/14	14:05:30

Includes

Include	Include-Sets
FLM01EQU	

Build Map

Longname	Member	Type	Last Modified	Version	Keyword
FLM01MD1	FLM01MD1	OBJ	02/10/14 14:11:33	4	OBJ
FLM01MD1	FLM01MD1	SOURCLST	02/10/14 14:11:33	4	LIST
FLM01EQU	FLM01EQU	SOURCE	01/07/30 11:21:36	1	I1

Figure 82. Accounting Information (additional info)

Using Version/Recover

In Cloud 9, you can view SCLM member versions and recover old member versions. You can only view or recover old versions of a member if the SCLM Group in which it resides has Version Control activated. The activation of Version Control is done from within the SCLM product.

1. Generate a list of SCLM members (Figure 8 on page 13).
2. Select a member whose versions you wish to view.
3. Click **VERSION/RECOVER** on the Main Menu.

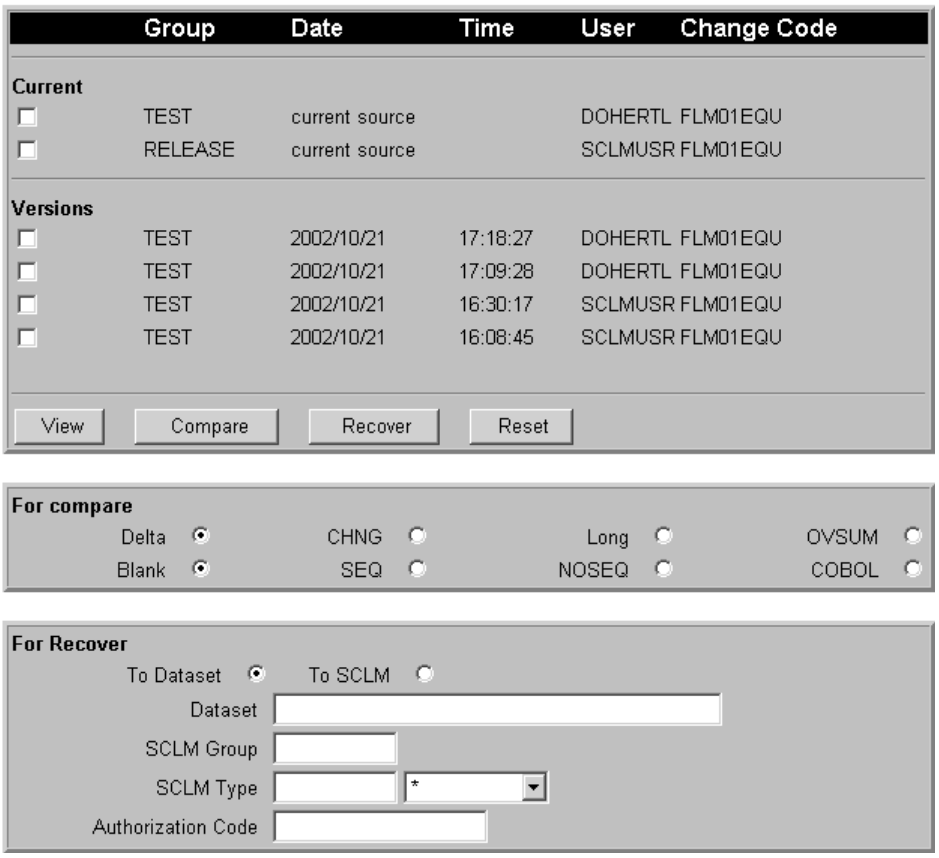


Figure 83. Version/Recover

The entry fields on the Version/Recover panel are as follows:

Current This section displays the most recent (current) version of a member in the member's group and all groups above it in the SCLM hierarchy.

Versions This section displays all previous versions of the member that exist within the current group.

View/Compare/Recover/Reset buttons
These verify that you have selected the appropriate number of members or versions and then submit the request for the named function.

- **View** View a selected member(s). You can select one or more members from the Current and Versions lists.
- **Compare** Compares two selected members (current or previous version). This button is used in conjunction with the **For compare** radio buttons found on this panel.
- **Recover** Recovers one selected version (not current members). This button is used in conjunction with the radio buttons and entry fields field in the **For Recover** section of this panel.
- **Reset** Restore the settings on this panel to their default values.

For compare Radio buttons that set the comparison filters for the selected members.

The comparison is made using the SuperC facility of ISPF. Cloud 9 sets the SuperC Compare Type to Line and the Display Output to Yes. You can select a Listing Option and select from a sub-set of Processing Options. For more information, see to the *ISPF User's Guide, Volume II* SC34-4792.

Delta A listing type. Lists only the differences between the source members being compared, followed by the overall summary results. Differences are flagged to the left of each output line.

CHNG
A listing type. Same as the **Delta** listing, plus up to 10 matching lines, words, or bytes before and after the differences. This shows the differences within the context of the surrounding lines.

Long A listing type. Same as the **CHNG** listing, except this listing shows the entire new data set, plus any data from the original data set that is not in the new data set.

OVSUM
A listing type. Lists only an overall summary of the results of the comparison without showing the individual differences themselves.

Blank Compare process option. Exclude sequence number fields from the comparison if the data set is Fixed 80 or Variable 255 and the compare type is Line. Otherwise, treat them as data.

SEQ Compare process option. Sequence numbers. Ignore standard sequence number columns that display in a file with Fixed 80 length.

NOSEQ
Compare process option. No sequence numbers. The comparison processes Fixed 80 standard sequence number columns as data.

COBOL
A compare process option. Ignore columns 1–6 in both Fixed 80 data sets. Data changes in columns 1–6 are ignored.

For Recover Radio buttons and entry fields that determine where and under what name to store a recovered version of an object.

To Dataset
Store the recovered version in a data set.

To SCLM
Store the recovered version in an SCLM data set.

Dataset
The fully qualified name of the data set in which to store the recovered version.

SCLM Group
SCLM Group name.

SCLM Type
SCLM Type name.

Authorization Code
Standard authorization code.

4. From this panel you can view different versions, compare versions, and recover an older version.

To view a version:

1. Select the check box next to the member(s) or version(s) you want to see.
2. Click the ″View″ button at the bottom of the panel.
3. Each selected member or version displays as a Web page in a new browser window (wherever possible). See “Viewing Objects” on page 19 for details about the way in which different File Types are viewed.

To compare versions:

1. Select the check boxes next to the two objects (members or versions) that you want to compare.
2. Select your compare options in the **For compare** section
3. Click the ″Compare″ button.
4. The comparison request is submitted to SCLM to run in the Foreground and, if successful, the results are returned to Cloud 9 and displayed in a new browser window.

To recover an older version

1. Select the check box next to the member or version that you want to recover.
2. Enter the appropriate information in the **For Recover** section.
3. click the ″Recover″ button.
4. The Recover request is prepared as a Batch Job and is submitted to SCLM. The batch job JCL is displayed in the current window (replacing the Version/Recover panel). To access the recovered member, list the SCLM members again.

Building an SCLM Member

In Cloud 9, you can use the Build process to build SCLM members and Packages in preparation for promotion. If an SCLM Package is built, all members referenced within the Package are built at the same time.

The Build process compiles, links and integrates software components according to the architecture. For any group in the hierarchy, the Build function uses the software components within the hierarchy of that group to update the out-of-date members. See the *SCLM Project Manager’s and Developer’s Guide* for more information about the Build process.

For each component that it processes, the Build function takes one of the following actions:

- Does nothing if the component has not changed since the previous build
- Deletes out-of-date outputs if that leaves the component in an up-to-date state
- Compiles or links changed components.

The Build can be run in either foreground or batch mode.

1. Generate a list of SCLM members (“Listing SCLM Members” on page 11).
2. Select a member or members to build.
3. Select **BUILD** from the Cloud 9 Main Menu. The following panel is displayed:

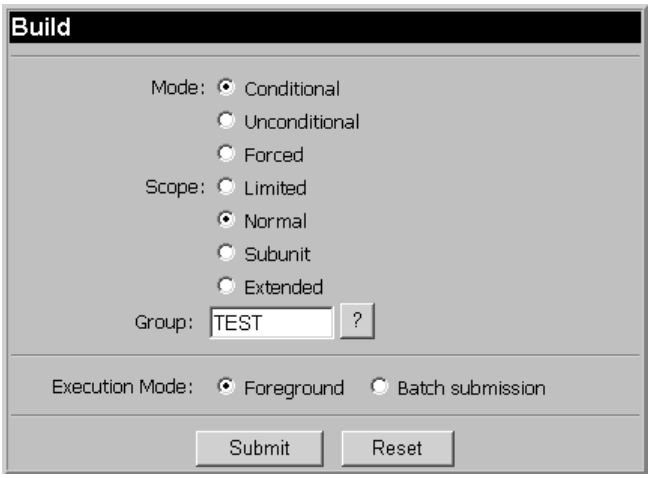


Figure 84. Build Options

The input fields on the Build Options panel are:

Mode

- Conditional — checks for unacceptable return codes and stops processing immediately if found.
- Unconditional — continues processing of all members despite translation errors of certain members.
- Forced — force requested components to be processed regardless of their previous status.

Scope

- Limited — process only components directly referenced by the architecture members.
- Normal — process components referenced by the architecture member, but also process upward dependencies for all Ada-type source members referenced directly by the architecture member and all source members referenced as upward dependencies.
- Subunit — process the components and members processed in Normal scope, and downward dependencies for all Ada-type source members referenced directly by the architecture member.
- Extended — process the components and members processed in Normal scope, and as downward dependencies for all source members within the Normal scope and the source to all outputs referenced. In addition, extended scope processes any outputs referenced through LINK architecture definition statements or parsed includes.

Group Standard group name, where the build is to be performed.

Execution Mode

- Foreground — browser waits for end of processing and results are returned to Cloud 9.
- Batch submission — browser available for action while job is processing.

Note: If you require a Build Report, select Batch submission and examine the report within the SCLM system.

4. Adjust the Mode, Scope, and Group settings.
5. Choose the Execution mode.

6. Click Submit.

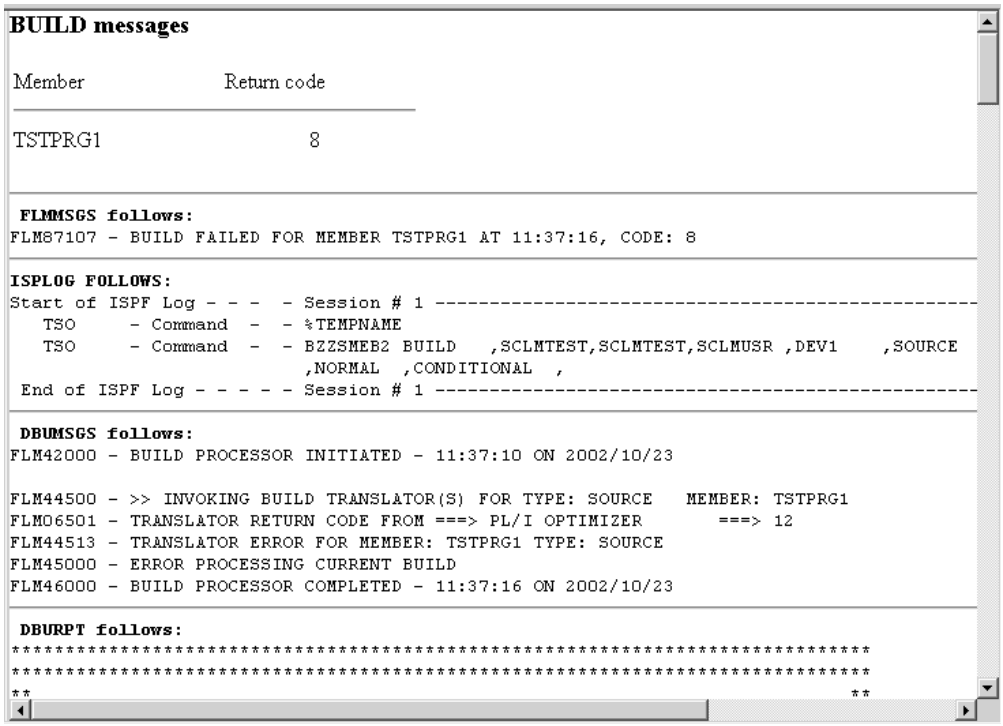
   Your return message depends upon the Execution Mode you chose. A successful Build action, using Foreground Execution, returns the following message:

BUILD messages

Member	Return code
SUE00000	0

Figure 85. Build (foreground) success message

An unsuccessful Build action, using Foreground Execution, returns a message describing the problem. For example:



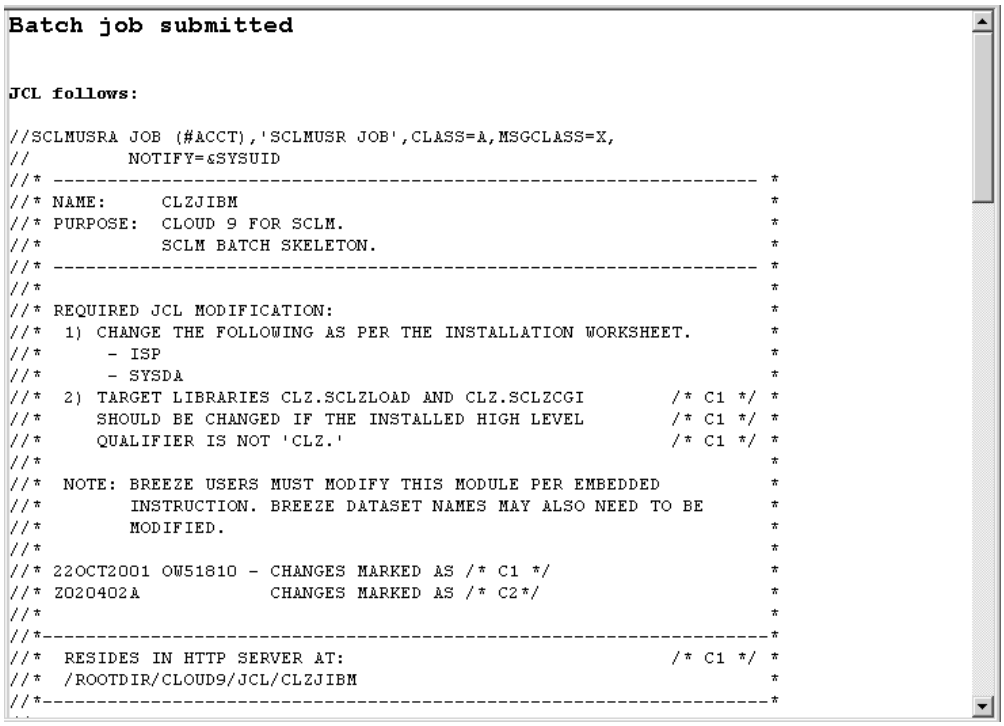
BUILD messages

Member	Return code
TSTPRG1	8

```
 FLMMSGS follows:
FLM87107 - BUILD FAILED FOR MEMBER TSTPRG1 AT 11:37:16, CODE: 8

ISPLOG FOLLOWS:
Start of ISPF Log - - -  - Session # 1 ----------------------------------------------------
   TSO     - Command  -  - %TEMPNAME
   TSO     - Command  -  - BZZSMEB2 BUILD   ,SCLMTEST,SCLMTEST,SCLMUSR ,DEV1    ,SOURCE
                         ,NORMAL  ,CONDITIONAL  ,
 End of ISPF Log - - - - - Session # 1 ----------------------------------------------------

 DBUMSGS follows:
FLM42000 - BUILD PROCESSOR INITIATED - 11:37:10 ON 2002/10/23

FLM44500 - >> INVOKING BUILD TRANSLATOR(S) FOR TYPE: SOURCE   MEMBER: TSTPRG1
FLM06501 - TRANSLATOR RETURN CODE FROM ===> PL/I OPTIMIZER       ===> 12
FLM44513 - TRANSLATOR ERROR FOR MEMBER: TSTPRG1 TYPE: SOURCE
FLM45000 - ERROR PROCESSING CURRENT BUILD
FLM46000 - BUILD PROCESSOR COMPLETED - 11:37:16 ON 2002/10/23

 DBURPT follows:
********************************************************************************
********************************************************************************
**                                                                            **
```

Figure 86. Build (foreground) failure message

When the Execution Mode is set to Batch Submission, the JCL sent to SCLM is displayed in Cloud 9, for example:



```
Batch job submitted


JCL follows:

//SCLMUSRA JOB (#ACCT),'SCLMUSR JOB',CLASS=A,MSGCLASS=X,
//         NOTIFY=&SYSUID
//* ------------------------------------------------------------------ *
//* NAME:     CLZJIBM                                                  *
//* PURPOSE:  CLOUD 9 FOR SCLM.                                        *
//*           SCLM BATCH SKELETON.                                     *
//* ------------------------------------------------------------------ *
//*                                                                    *
//* REQUIRED JCL MODIFICATION:                                         *
//*  1) CHANGE THE FOLLOWING AS PER THE INSTALLATION WORKSHEET.        *
//*      - ISP                                                         *
//*      - SYSDA                                                       *
//*  2) TARGET LIBRARIES CLZ.SCLZLOAD AND CLZ.SCLZCGI        /* C1 */ *
//*     SHOULD BE CHANGED IF THE INSTALLED HIGH LEVEL        /* C1 */ *
//*     QUALIFIER IS NOT 'CLZ.'                              /* C1 */ *
//*                                                                    *
//*  NOTE: BREEZE USERS MUST MODIFY THIS MODULE PER EMBEDDED           *
//*        INSTRUCTION. BREEZE DATASET NAMES MAY ALSO NEED TO BE       *
//*        MODIFIED.                                                   *
//*                                                                    *
//* 22OCT2001 OW51810 - CHANGES MARKED AS /* C1 */                     *
//* Z020402A          CHANGES MARKED AS /* C2*/                      *
//*                                                                    *
//*--------------------------------------------------------------------*
//*  RESIDES IN HTTP SERVER AT:                              /* C1 */ *
//*  /ROOTDIR/CLOUD9/JCL/CLZJIBM                                       *
//*--------------------------------------------------------------------*
```

Figure 87.

The Build messages, Build Report and Build List are all part of the output generated by the batch job. To view the job output that includes these reports, check the output from the batch job submitted by the Build process.

Promoting an SCLM Member

After a member is built, Cloud 9 can be used to promote the member in either foreground or batch mode.

1. Generate a list of SCLM members (“Listing SCLM Members” on page 11).
2. Select a member or members for promotion.
3. Click **PROMOTE** from the Cloud 9 menu. The following panel displays:

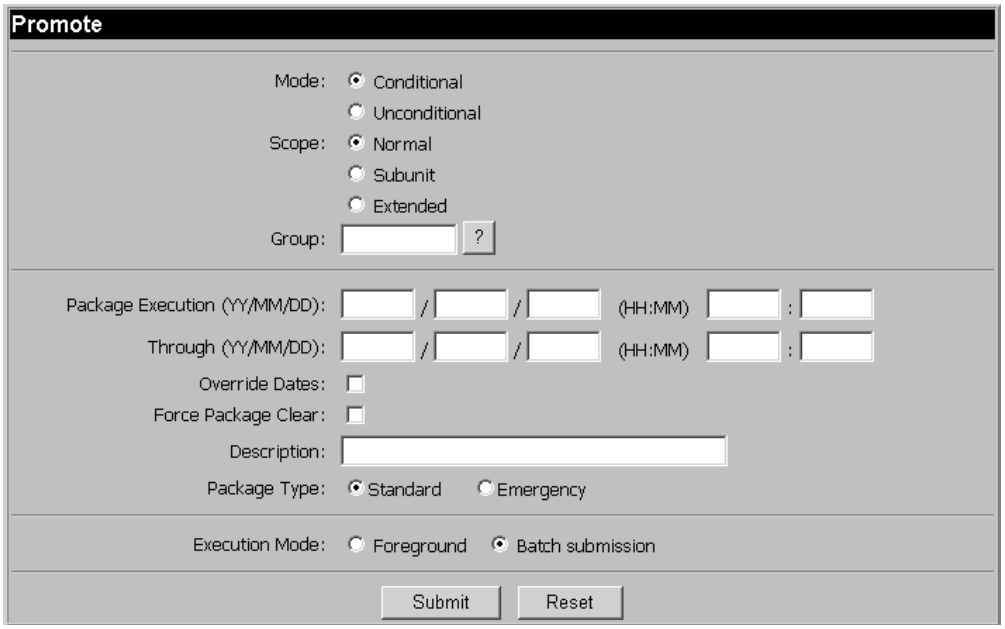


Figure 88. Promote Options

The input fields on the Promote Options panel are:

Mode

- Conditional — checks for unacceptable return codes and stops processing immediately if found.
- Unconditional — continues processing of all members despite translation errors of certain members.

Scope

- Normal — process components referenced by the architecture member, but also process upward dependencies for all Ada-type source members referenced directly by the architecture member and all source members referenced as upward dependencies.
- Subunit — process the components and members processed in Normal scope, and downward dependencies for all Ada-type source members referenced directly by the architecture member.
- Extended — process the components and members processed in Normal scope, and downward dependencies for all source members within the Normal scope and the source to all outputs referenced. In addition, extended scope processes any outputs referenced through LINK architecture definition statements or parsed includes. For more information, see the *SCLM Project Manager's and Developer's Guide*.

Group Standard group name, where the promote is to be performed.

Breeze Options

If you are running Breeze in conjuction with Cloud 9, the following options are displayed. These fields only affect the promotion of Packages that are under the Breeze Approval process.

Package Execution (YY/MM/DD) (HH:MM)

Start date and time for the window of time in which the package can be promoted. If the dates are left blank then the Breeze default dates are used.

When you promote a Package that requires approval (foreground or batch), you can specify a date when that promote can occur. There is a sweep job in Breeze that you can schedule to run automatically, looking for approved Packages to promote. Even though a package gets approved, its promotion does not take place until the specified date is reached. If the approval has not been given until after the Package Execution window, the promotion does not occur.

through (YY/MM/DD) (HH:MM)
End date for the window of time in which the package can be promoted. If the dates are left blank then the Breeze default dates are used.

Override Dates
Select the check box to override Package execution parameters on the second promote, if they were entered incorrectly on the first promote. If, after approval, the second promote has been started but the promotion date window has not been reached, due to being entered incorrectly on the first promote, use the override attribute to set the promotion window to it's correct value.

Force Package Clear
Check this box if you wish Breeze to automatically clear the package if it exists at the next level of the hierarchy. This enables packages to be reused without having to manually clear same-named packages using the BZZSMJD1 job.

Description
A description of the Package that is seen by approvers and other users, within the Breeze application.

Package Type
Standard or Emergency. This option does not affect approval, and is for documentation purposes only, except for one key difference: if your administrator has created a $$EMER member in the SBZZJAVA data set, then only the user IDs listed in that member can build or promote emergency packages. If there is no $$EMER member in the SBZZJAVA data set, then there is no difference in behavior between standard and emergency packages. For details, see the *Breeze Planning and Administration Guide*.

Execution Mode
- Foreground — browser waits for end of processing.
- Batch submission — browser available for action while job is processing.

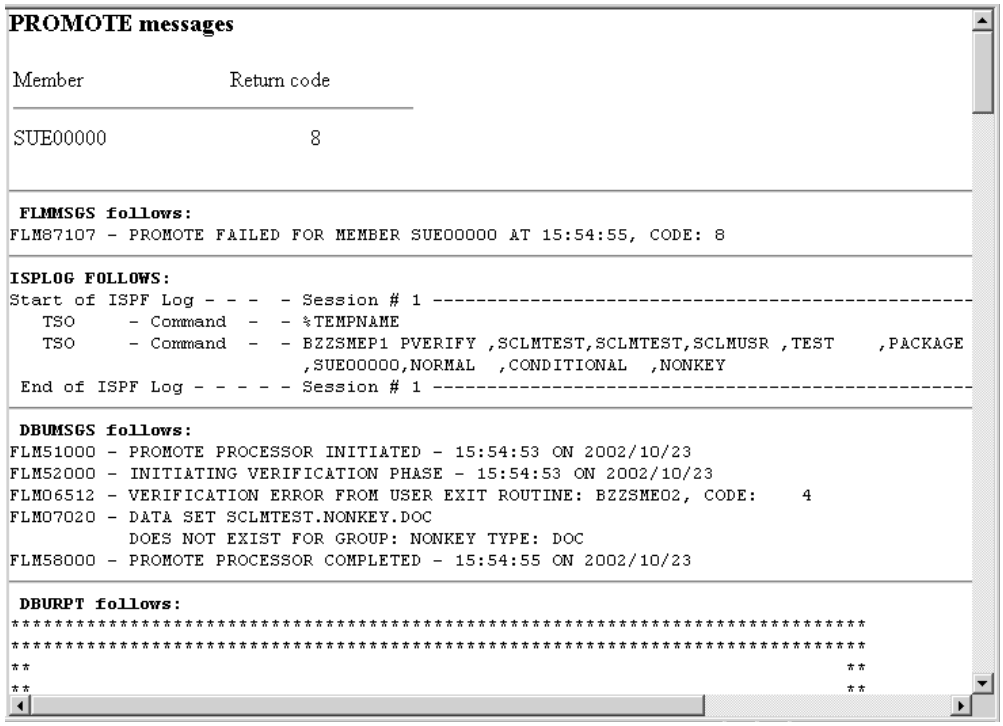
4. Adjust the Mode, Scope, and Group settings.
5. Choose the Execution Mode.
6. Click Submit.
7. Your return message depends upon the Execution Mode you chose. A successful Promote action, using Foreground Execution, returns the following message:

PROMOTE messages

Member	Return code
APCTXT01	0

Figure 89. Promote (foreground) success message

An unsuccessful Promote action, using Foreground Execution, returns a message describing the problem. For example:



PROMOTE messages

Member	Return code
SUE00000	8

```
 FLMMSGS follows:
FLM87107 - PROMOTE FAILED FOR MEMBER SUE00000 AT 15:54:55, CODE: 8
```

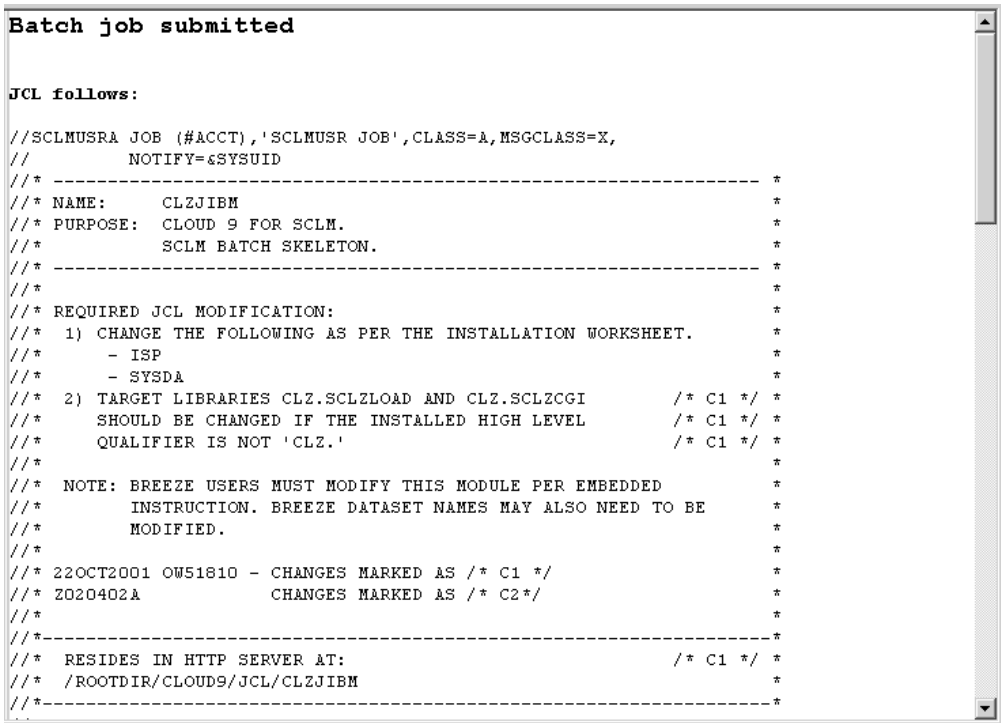
```
ISPLOG FOLLOWS:
Start of ISPF Log - - -  - Session # 1 ------------------------------------------------
   TSO     - Command  -  - %TEMPNAME
   TSO     - Command  -  - BZZSMEP1 PVERIFY ,SCLMTEST,SCLMTEST,SCLMUSR ,TEST    ,PACKAGE
                           ,SUE00000,NORMAL  ,CONDITIONAL  ,NONKEY
 End of ISPF Log - - - - - Session # 1 ------------------------------------------------
```

```
 DBUMSGS follows:
FLM51000 - PROMOTE PROCESSOR INITIATED - 15:54:53 ON 2002/10/23
FLM52000 - INITIATING VERIFICATION PHASE - 15:54:53 ON 2002/10/23
FLM06512 - VERIFICATION ERROR FROM USER EXIT ROUTINE: BZZSME02, CODE:    4
FLM07020 - DATA SET SCLMTEST.NONKEY.DOC
           DOES NOT EXIST FOR GROUP: NONKEY TYPE: DOC
FLM58000 - PROMOTE PROCESSOR COMPLETED - 15:54:55 ON 2002/10/23
```

```
 DBURPT follows:
********************************************************************************
********************************************************************************
**                                                                            **
**                                                                            **
```

Figure 90. Build (foreground) failure message

When the Execution Mode is set to Batch Submission, the JCL sent to SCLM is displayed in Cloud 9, for example:



```
Batch job submitted


JCL follows:

//SCLMUSRA JOB (#ACCT),'SCLMUSR JOB',CLASS=A,MSGCLASS=X,
//         NOTIFY=&SYSUID
//* ------------------------------------------------------------------ *
//* NAME:     CLZJIBM                                                  *
//* PURPOSE:  CLOUD 9 FOR SCLM.                                        *
//*           SCLM BATCH SKELETON.                                     *
//* ------------------------------------------------------------------ *
//*                                                                    *
//* REQUIRED JCL MODIFICATION:                                         *
//*  1) CHANGE THE FOLLOWING AS PER THE INSTALLATION WORKSHEET.        *
//*      - ISP                                                         *
//*      - SYSDA                                                       *
//*  2) TARGET LIBRARIES CLZ.SCLZLOAD AND CLZ.SCLZCGI        /* C1 */ *
//*     SHOULD BE CHANGED IF THE INSTALLED HIGH LEVEL        /* C1 */ *
//*     QUALIFIER IS NOT 'CLZ.'                              /* C1 */ *
//*                                                                    *
//*  NOTE: BREEZE USERS MUST MODIFY THIS MODULE PER EMBEDDED           *
//*        INSTRUCTION. BREEZE DATASET NAMES MAY ALSO NEED TO BE       *
//*        MODIFIED.                                                   *
//*                                                                    *
//* 22OCT2001 OW51810 - CHANGES MARKED AS /* C1 */                     *
//* Z020402A          CHANGES MARKED AS /* C2*/                      *
//*                                                                    *
//*--------------------------------------------------------------------*
//*  RESIDES IN HTTP SERVER AT:                              /* C1 */ *
//*  /ROOTDIR/CLOUD9/JCL/CLZJIBM                                       *
//*--------------------------------------------------------------------*
```

Figure 91.

The Promote messages, Promote Report and Promote List are all part of the output generated by the batch job. To view the job output that includes these reports, check the output from the batch job submitted by the Promote process.

Using Lock/Unlock

Cloud 9 gives you the ability to Lock or Unlock an SCLM member to insure that no other programmers are making simultaneous changes to the member you are working on.

To lock a member:

1. Generate a list of SCLM members (“Listing SCLM Members” on page 11).
2. Select an unlocked member (locked members display a string in the Access Key column of the SCLM Member List panel, unlocked members do not have an entry in this column).
3. Click on LOCK. The following panel displays:

Figure 92. Lock panel

The fields on this panel are:

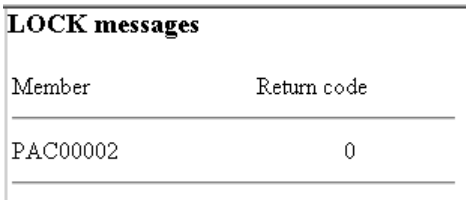
Lock in Group
The name of the SCLM group into which you want to lock this member (must be a development level group).

Authorization Code
Standard Authorization Code

Access Key
An identifier used to restrict access to a member.

Execution Mode
- Foreground — browser waits for end of processing.
- Batch submission — browser available for action while job is processing.

4. Choose your options and click Submit.
5. Your return message depends upon the Execution Mode you chose. A successful Lock action, using Foreground Execution, returns the following message:



LOCK messages

Member	Return code
PAC00002	0

Figure 93. Lock (foreground) success message

An unsuccessful Lock action, using Foreground Execution, returns a message describing the problem. For example:

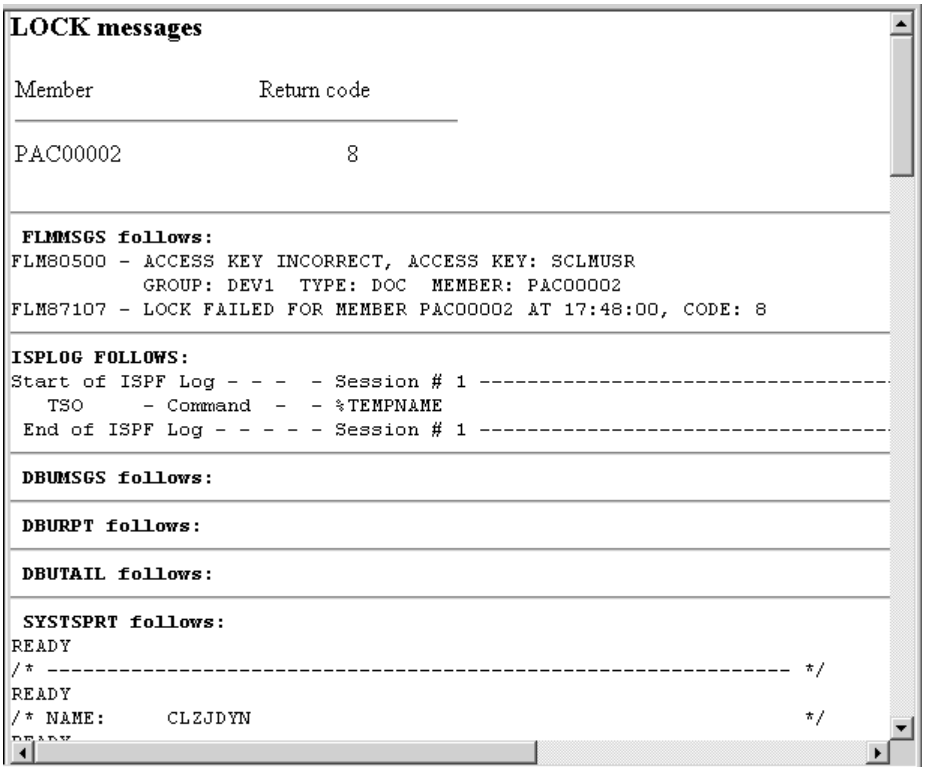


Figure 94. Lock (foreground) failure message

When the Execution Mode is set to Batch Submission, the JCL sent to SCLM is displayed in Cloud 9, for example:

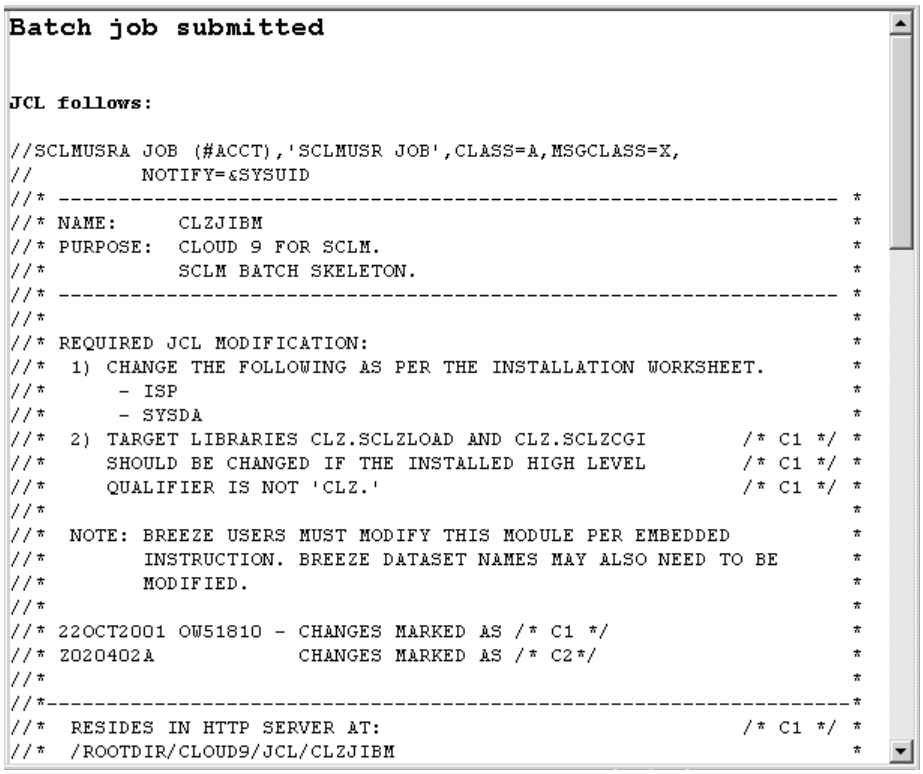


Figure 95. Lock JCL

The Lock success or failure messages are part of the output generated by the batch job. To view these messages, check the output from the batch job submitted by the Lock process.

To unlock a member:

1. Generate a list of SCLM members (“Listing SCLM Members” on page 11).
2. Select an locked member (locked members display a string in the Access Key column of the SCLM Member List panel).
3. Click on UNLOCK. The following panel displays:

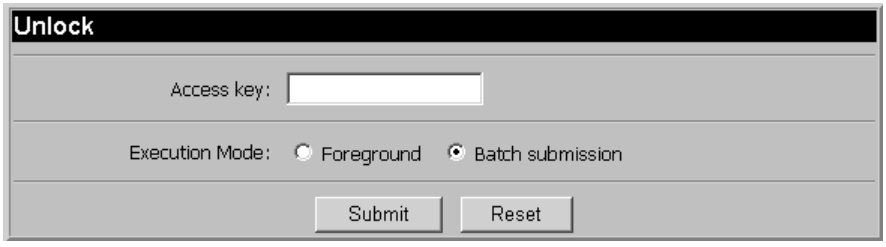


Figure 96. Unlock panel

The fields on this panel are:

Access Key
An identifier used to restrict access to a member.

Execution Mode
- Foreground — browser waits for end of processing.

- Batch submission — browser available for action while job is processing.

4. Choose your options and click Submit.
5. Your return message depends upon the Execution Mode you chose. A successful Unlock action, using Foreground Execution, returns the following message:

UNLOCK messages

Member	Return code
PAC00002	0

Figure 97. Unlock (foreground) success message

An unsuccessful Unlock action, using Foreground Execution, returns a message describing the problem. For example:

UNLOCK messages

```
 FLMMSGS follows:
FLM80500 - ACCESS KEY INCORRECT, ACCESS KEY: SCLMUSR
           GROUP: DEV2  TYPE: JAVA  MEMBER: TES02525
FLM87107 - UNLOCK FAILED FOR MEMBER TES02525 AT 17:38:32, CODE: 8
```

```
ISPLOG FOLLOWS:
Start of ISPF Log - - -  - Session # 1 ------------------------------------
   TSO     - Command  -  - %TEMPNAME
 End of ISPF Log - - - - - Session # 1 ------------------------------------
```

```
 DBUMSGS follows:
```

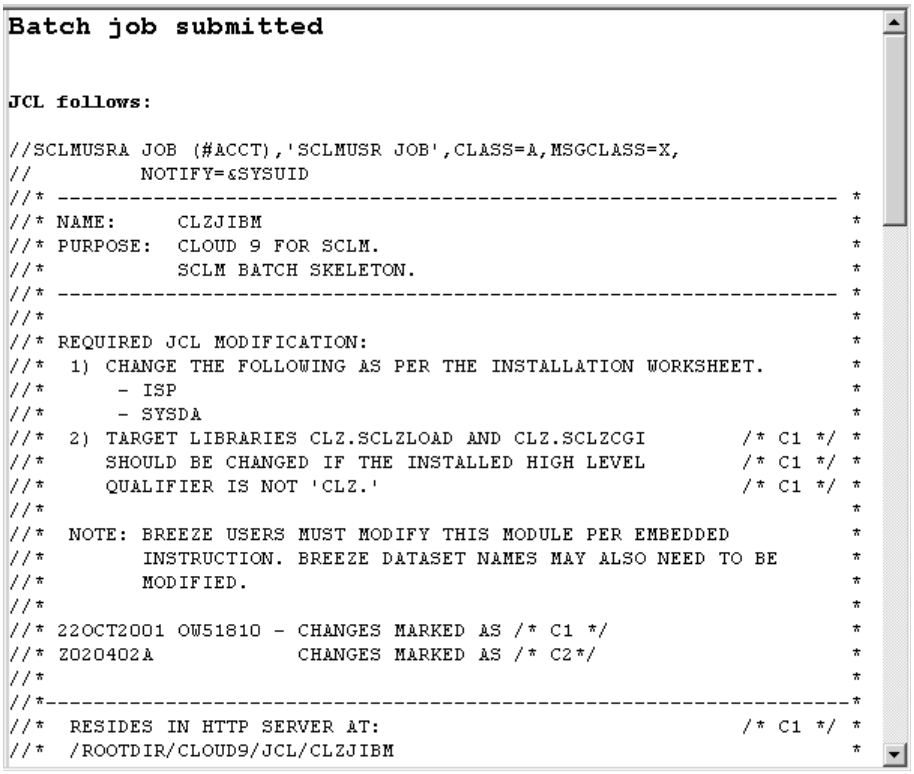
```
 DBURPT follows:
```

```
 DBUTAIL follows:
```

```
 SYSTSPRT follows:
READY
/* ------------------------------------------------------------- */
READY
/* NAME:     CLZJDYN                                             */
READY
/* PURPOSE:  CLOUD 9 FOR SCLM                                    */
READY
/*           ISPF ALLOCATIONS FOR SCLM WEB BASED FUNCTIONS.      */
READY
/* ------------------------------------------------------------- */
READY
/*                                                               */
READY
/* REQUIRED MODIFICATION:                                        */
READY
/*  1) CHANGE THE FOLLOWING AS PER THE INSTALLATION WORKSHEET.   */
READY
/*      - ISP                                                    */
READY
```

Figure 98. Unlock (foreground) failure message

When the Execution Mode is set to Batch Submission, the JCL sent to SCLM is displayed in Cloud 9, for example:



```
Batch job submitted


JCL follows:

//SCLMUSRA JOB (#ACCT),'SCLMUSR JOB',CLASS=A,MSGCLASS=X,
//         NOTIFY=&SYSUID
//* ------------------------------------------------------------------ *
//* NAME:     CLZJIBM                                                  *
//* PURPOSE:  CLOUD 9 FOR SCLM.                                        *
//*           SCLM BATCH SKELETON.                                     *
//* ------------------------------------------------------------------ *
//*                                                                    *
//* REQUIRED JCL MODIFICATION:                                         *
//*  1) CHANGE THE FOLLOWING AS PER THE INSTALLATION WORKSHEET.        *
//*      - ISP                                                         *
//*      - SYSDA                                                       *
//*  2) TARGET LIBRARIES CLZ.SCLZLOAD AND CLZ.SCLZCGI        /* C1 */ *
//*     SHOULD BE CHANGED IF THE INSTALLED HIGH LEVEL        /* C1 */ *
//*     QUALIFIER IS NOT 'CLZ.'                              /* C1 */ *
//*                                                                    *
//*  NOTE: BREEZE USERS MUST MODIFY THIS MODULE PER EMBEDDED           *
//*        INSTRUCTION. BREEZE DATASET NAMES MAY ALSO NEED TO BE       *
//*        MODIFIED.                                                   *
//*                                                                    *
//* 22OCT2001 OW51810 - CHANGES MARKED AS /* C1 */                     *
//* Z020402A          CHANGES MARKED AS /* C2*/                      *
//*                                                                    *
//*--------------------------------------------------------------------*
//*  RESIDES IN HTTP SERVER AT:                              /* C1 */ *
//*  /ROOTDIR/CLOUD9/JCL/CLZJIBM                                       *
```

Figure 99.

The Lock success or failure messages are part of the output generated by the batch job. To view these messages, check the output from the batch job submitted by the Lock process.

Migrating Members to SCLM

Cloud 9 gives you the ability to Migrate multiple SCLM members, PDS members or Unix files to an SCLM Life Cycle location (Project / Group / Type) or to change the Language of members in an existing location.

1. Generate a list of members or files (“Listing Objects” on page 11).

   Note: The MIGRATE command displays on all modified menus, after a list has been returned.

2. Select a list item or items for migration.
3. Click **MIGRATE** on the Main Menu. The following panel displays:

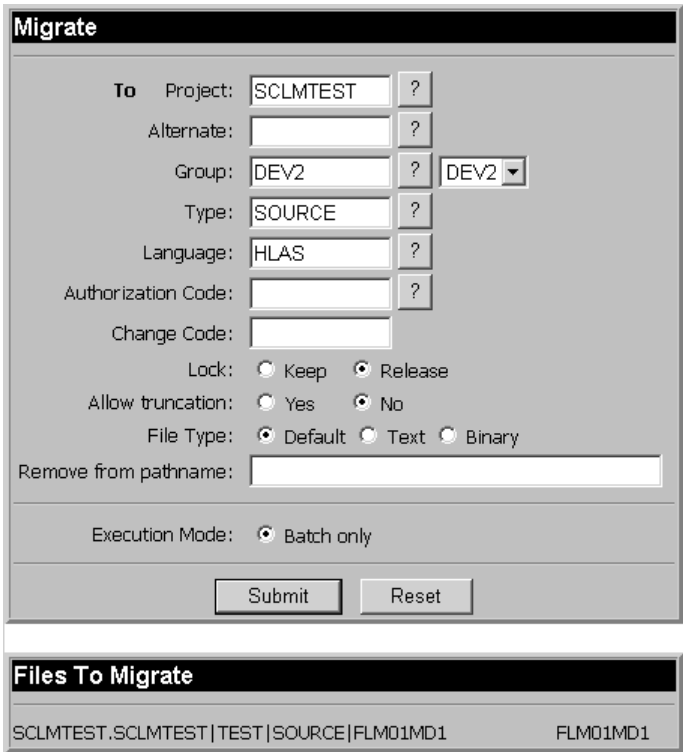


Figure 100. Migrate Options

The input fields on the Migrate Options panel are:

Project — Standard project name, required.

Alternate — Alternative project name.

Group — Standard group name, required.

Type — Standard type name, required.

Language — Standard language name, required.

Change code — Standard code.

Authorization code — Standard code.

Change code — A valid SCLM change code string.

Lock — Determines if the member is locked after migration.

- Keep — locks the member into the specified SCLM group.
- Release — unlocks the member immediately after migration.

Allow truncation — The Yes/No option specifies whether a file that has a line length greater than the defined record length of the SCLM data set is truncated as it is migrated.

- Yes — files are migrated with truncation where necessary.
- No — files that require truncation are not migrated.

File Type — Determines in what format the selected member or file is migrated.

- **Default** — Cloud 9 selects the access method (Text or Binary) based on the file's extension.
- **Text** — migrate the member using ASCII to EBCDIC conversion where necessary.

- **Binary** — migrate the member using its internal format.

  Note: If you are migrating load modules into an SCLM controlled data set, ensure the file type is set to binary. This ensures that the load module is copied into the PDS correctly.

Remove from pathname

Execution Mode Batch only — no foreground processing available.

The Files To Migrate section lists the members or files that you have selected for migration.

Note: Migration occurs at the ″member″ level, that is, dependent members or files generated in a Build process are not migrated unless they have been selected.

4. Enter your migration information and click Submit. The JCL sent to SCLM is displayed in Cloud 9, for example:

```
Batch job submitted


JCL follows:

//SCLMUSRA JOB (#ACCT),'SCLMUSR JOB',CLASS=A,MSGCLASS=X,
//         NOTIFY=&SYSUID
//* ------------------------------------------------------------------ *
//* NAME:     CLZJIBM                                                  *
//* PURPOSE:  CLOUD 9 FOR SCLM.                                        *
//*           SCLM BATCH SKELETON.                                     *
//* ------------------------------------------------------------------ *
//*                                                                    *
//* REQUIRED JCL MODIFICATION:                                         *
//*  1) CHANGE THE FOLLOWING AS PER THE INSTALLATION WORKSHEET.        *
//*      - ISP                                                         *
//*      - SYSDA                                                       *
//*  2) TARGET LIBRARIES CLZ.SCLZLOAD AND CLZ.SCLZCGI        /* C1 */ *
//*     SHOULD BE CHANGED IF THE INSTALLED HIGH LEVEL        /* C1 */ *
//*     QUALIFIER IS NOT 'CLZ.'                              /* C1 */ *
//*                                                                    *
//*  NOTE: BREEZE USERS MUST MODIFY THIS MODULE PER EMBEDDED           *
//*        INSTRUCTION. BREEZE DATASET NAMES MAY ALSO NEED TO BE       *
//*        MODIFIED.                                                   *
//*                                                                    *
//* 22OCT2001 OW51810 - CHANGES MARKED AS /* C1 */                     *
//* Z020402A          CHANGES MARKED AS /* C2*/                      *
//*                                                                    *
//*--------------------------------------------------------------------*
//*  RESIDES IN HTTP SERVER AT:                           /* C1 */ *
//*  /ROOTDIR/CLOUD9/JCL/CLZJIBM                                       *
//*--------------------------------------------------------------------*
//COPY   EXEC PGM=IKJEFT01
//I1 DD PATHDISP=(KEEP),
// PATH='/u/dohertl/sclmtest/dev3/doc/Testdoc001.doc'
//O1 DD DSN=SCLMTEST.DEV1.DOC(U$D00000),DISP=SHR
//SYSTSPRT DD SYSOUT=*
//SYSTSIN  DD *
  OCOPY INDD(I1) OUTDD(O1) BINARY
/*
```

Figure 101.

The Migrate success or failure messages are part of the output generated by the batch job. To view these messages, check the output from the batch job submitted by the Migrate process.

Chapter 5. PDS Functions

A number of PDS functions become available on the Main Menu, whenever the List Members action has been performed for PDS members. The menu items remain available until a different query (List SCLM Files or List Unix Files) is performed or a new SCLM Package is opened (or created).

This chapter describes the use of the following PDS functions:

- Compare function
- Copy and Move PDS members
- Rename PDS members
- Search-For function

Note: The MIGRATE command is described in "Migrating Members to SCLM" on page 82.

Comparing PDS Members

Cloud 9 gives you the ability to compare PDS members. Members can be compared against members in the same data set, a different data set, or a Unix directory. The compare results can be used to show changes that have been made to a member.

1. Generate a list of PDS members.
2. Select one member to compare it with a member in a different data set or with a Unix file;

   OR

   Select two members within this data set that you wish to compare.
3. Click on **COMPARE** on the Main Menu.
4. The following panel is returned:

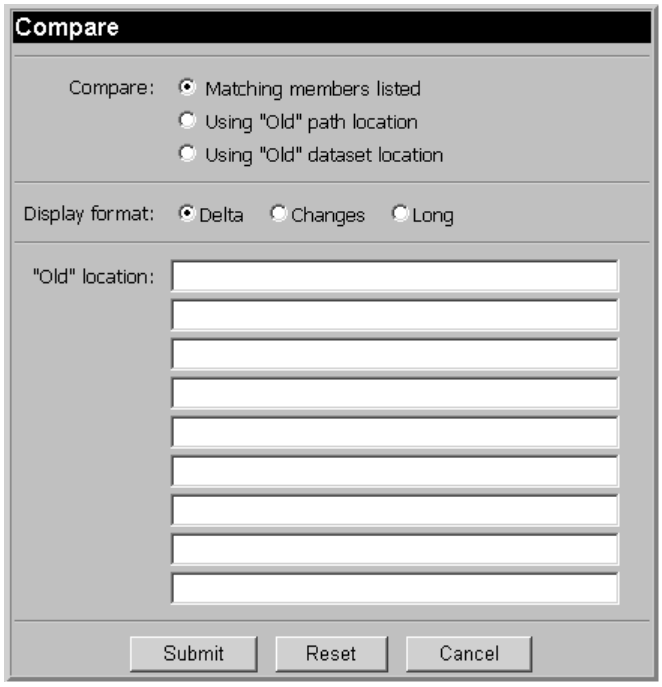


Figure 102. Compare Options

The entry fields on the Compare options panel are:

Compare

- Matching members listed — used to compare two members from the same data set.
- Using ″Old″ path location — used for comparing a PDS member against the same file in a Unix directory.
- Using ″Old″ dataset location — used for comparing a PDS member against the same PDS member in a different data set.

Display format

- Delta — list the differences between the source data sets.
- Changes — list the differences between the source data sets, plus up to 10 matching lines before and after the differences.
- Long — list all the new data set source lines, plus old data set deleted lines. Both inserted and deleted lines are flagged.

″Old″ location

If you select only one member for comparison, Cloud 9 prompts you for the location of another member or Unix file with which to compare it.

5. Set the *Compare* and *Display Format* options.
6. Enter the *″Old″ location* if applicable.
7. Click Submit. The results panel is displayed, for example:

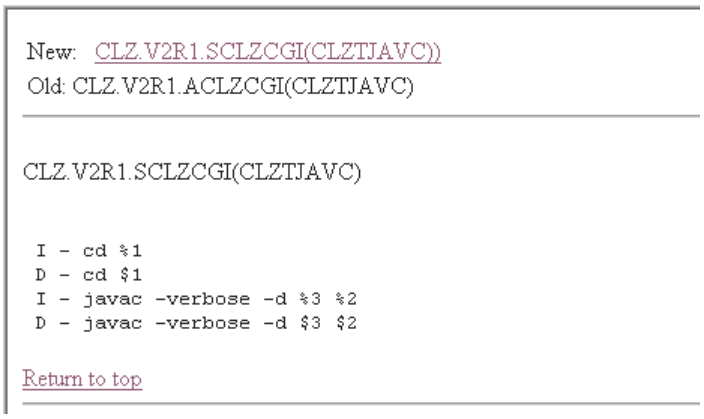


Figure 103. Compare Results

Copying PDS Members

Using Cloud 9 you can copy PDS members to another data set or to a UNIX directory. Copying to UNIX is covered in Chapter 6, “Unix Functions,” on page 95.

1. Generate a list of PDS members.
2. Select a member(s) to be copied.
3. Click **COPY** on the Main Menu. The following panel is returned:

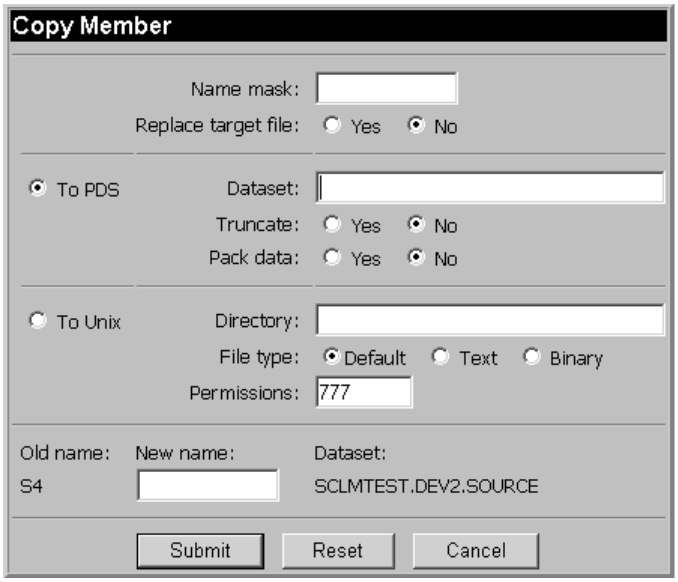


Figure 104. Copy Member Options

The entry fields on the Copy options panel are:

Name mask
Used to change individual characters in the member name. For example entering ’***2’ in the name mask field changes the member name from ’IBM1’ to ’IBM2’.

Replace target file

- Yes — if a file with the same name already exists in the data set that you are copying this file to, replace it with this file.
- No — do not replace a like-named file in the target data set.

Be sure to note the *Replace target file* option, if there is already a member in the target data set with the same name!

To PDS

- Dataset — the name of the data set into which you want to copy this file.
- Truncate — ″Yes″, truncate the newly copied file to fit restraints in the target data set. ″No″, do not truncate the new data.
- Pack data — ″Yes″, compress the data for storage. ″No″, do not compress the data.

To Unix

- Directory — the name of the directory into which you want to copy this file.
- File type
  - Default — Cloud 9 determines upload method based on file extension.
  - Text — upload using ASCII to EBCDIC
  - Binary — upload ″as is″
- Permissions — Unix permission bits.

New name

Used if a new member name is wanted.

4. Once all the options have been selected and the name has been decided, click Submit. The following panel is returned:

Copy complete

Old name	New name	Return code
S4	S4	0

Figure 105. Confirm Copy Panel

Moving PDS Members

Using Cloud 9, you can move PDS members to another data set or to a UNIX directory. This move is a ″copy and delete″ action, the member moved to a new data set or directory is removed from its old one.

1. Generate a list of PDS members.
2. Select the PDS member or members to be moved.
3. Click **MOVE** on the Main Menu.
4. The following panel is returned:

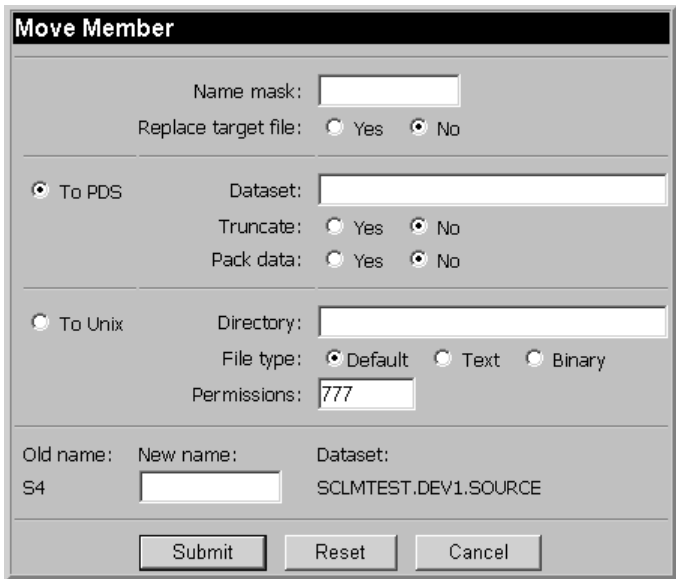


Figure 106. Move Member Options

The entry fields on the Move options panel are:

Name mask
Used to change individual characters in the member name. For example, entering '***2' in the Name mask field changes the member name from 'IBM1' to 'IBM2'.

Replace target file
- Yes — if a file with the same name already exists in the data set that you are moving this file to, replace it with this file.
- No — do not replace a like-named file in the target data set.

Be sure to note the *Replace target file* option, if there is already a member in the target data set with the same name!

To PDS
- Dataset — the name of the data set into which you want to copy this file.
- Truncate — ″Yes″, truncate the newly moved file to fit restraints in the target data set. ″No″, do not truncate the new data.
- Pack data — ″Yes″, compress data.. ″No″, do not compress data.

To Unix
- Directory — the name of the directory into which you want to copy this file.
- File type
  - Default — Cloud 9 determines upload method based on file extension.
  - Text — upload using ASCII to EBCDIC.
  - Binary — upload ″as is″.
- Permissions — USS permission bits.

New name
Used if a new member name is wanted.

5. Once all the options have been selected and the name has been decided, click Submit. The following panel is returned:

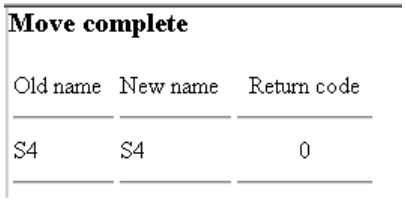


Figure 107. Move Confirmation Panel

Renaming PDS Members

One or more PDS members can be renamed using the Rename function. The Rename function works the same as the 'Name Mask' and 'New Name' fields on the Copy and Move panels.

1. Generate a list of PDS Members.
2. Select the member(s) to be renamed.
3. Click **RENAME** on the Main Menu. The following panel is returned:

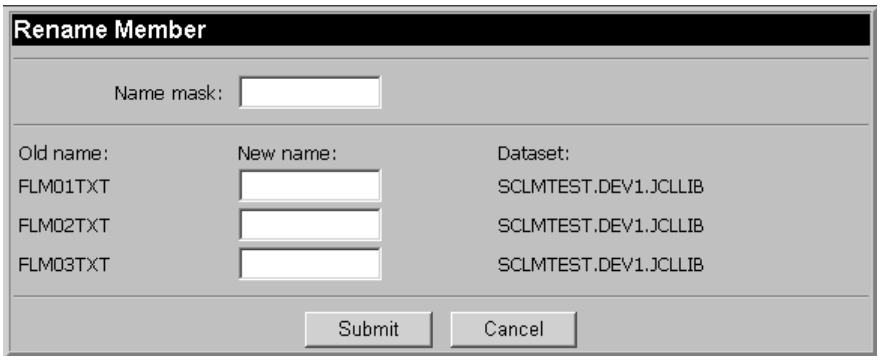


Figure 108. Rename Member Options

The entry fields on the Rename options panel are:

Name mask
Used to change individual characters in the member name. For example, entering '***2' in the Name mask field changes the member name from 'IBM1' to 'IBM2'.

New name
Used if a new member is wanted.

4. Enter data in either the *Name Mask* or *New Name* fields to change the name of the selected PDS member.
5. Click Submit. The following message is returned:

Rename complete

Old name	New name	Return code
TES02518	SHORTTAR	0

Figure 109. Rename Results

Using Search-For with PDS Members

You can use the **SEARCH-FOR** function to search multiple PDS members for individual data strings.

1. Generate a list of PDS Members.
2. Select member or members for search.
3. Click **SEARCH-FOR** on the Main Menu. The following panel is returned:

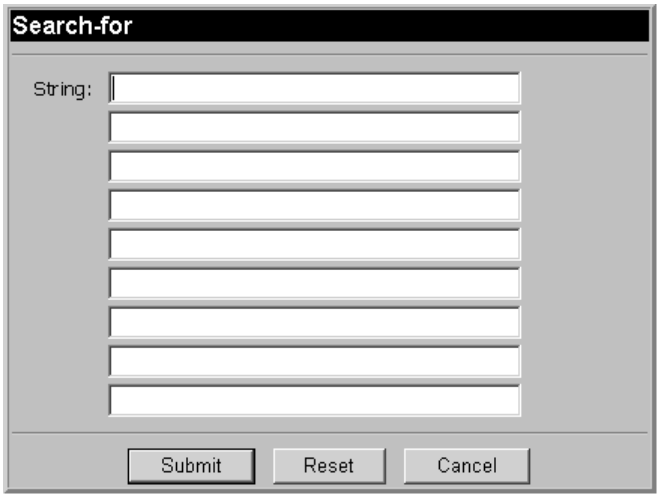


Figure 110. Search-For Options

The entry field on the Search-For options panel is:

String Enter the string (or strings) of characters that you want to search for in the selected members.

4. Enter the data string or strings to search for and click Submit.
5. If no data matches the requested search, then a 'No Matches' message is returned.
6. If there are any matching data strings, results similar to these are returned:

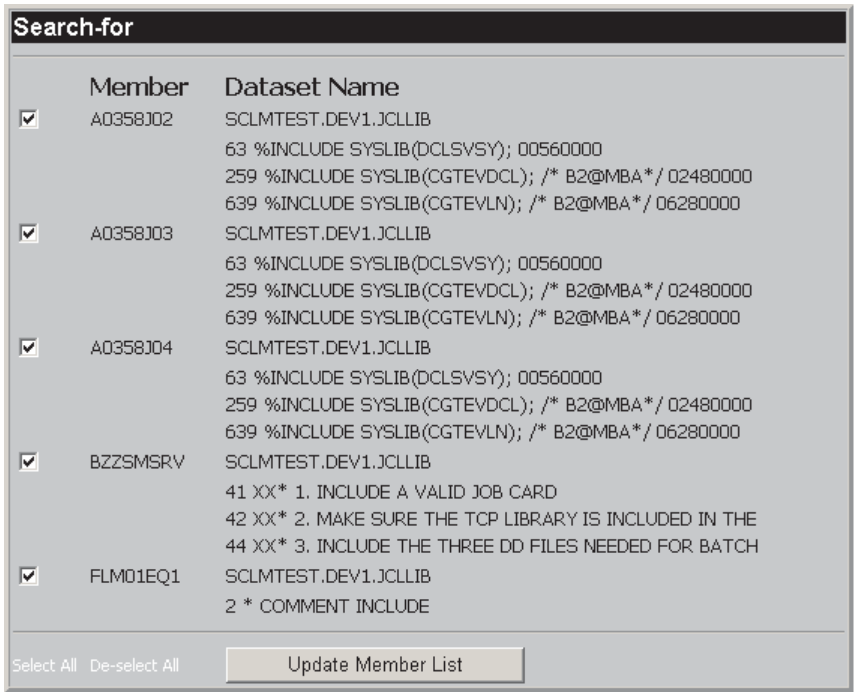


Figure 111. Search-For Results

Individual members can be selected or you can use the Select All and Deselect All links in the lower left corner of the form to select/deselect members.

7. Click the**Update Member List** button to return a new PDS Member List containing only the selected members.

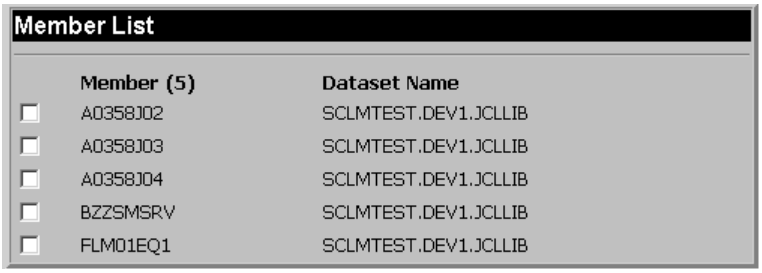


Figure 112. Updated Member List

You can then repeat your search, using additional strings, to find members within this smaller sub-set.

Chapter 6. Unix Functions

A number of Unix functions become available on the Main Menu, whenever the List Files action has been performed for Unix files. The menu items remain available until a different query (List SCLM Files or List Members) is performed or a new SCLM Package is opened (or created).

You can use the Unix functions to perform actions on files contained in the Unix System Service environment of your z/OS system.

This chapter describes the use of the following Unix functions:

- Compare function
- Copy and Move UNIX files
- View UNIX File information
- Rename Unix files
- Search-For function

Note: The MIGRATE command is described in "Migrating Members to SCLM" on page 82.

Comparing Unix Files

Cloud 9 gives you the ability to compare Unix files. Files can be compared against files in the same directory, a different directory, or a PDS data set. The compare results can be used to show changes that have been made to a file.

1. Generate a list of Unix files.
2. Select one file to compare it with a PDS member or with a Unix file not in these list results;

   OR

   Select two files within the list results that you wish to compare.
3. Click on **COMPARE** on the Main Menu.
4. The following panel is returned:

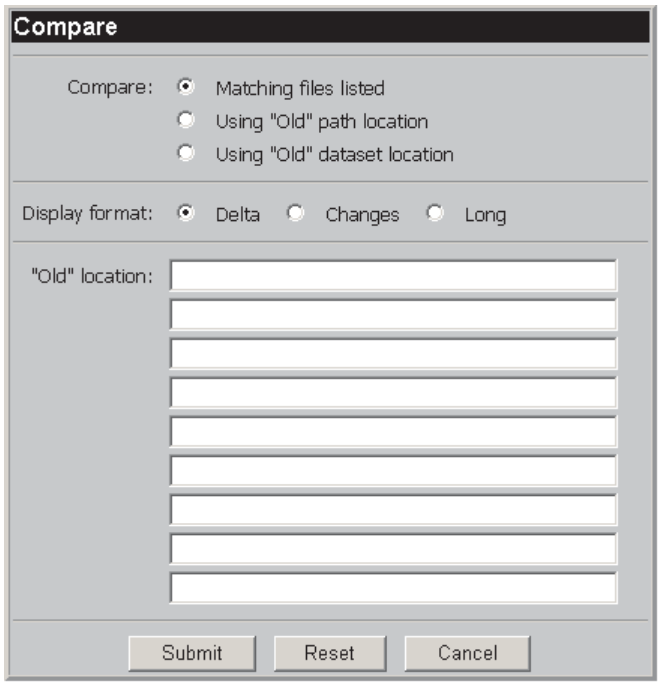


Figure 113. Compare Options

The entry fields on the Compare options panel are:

Compare

- Matching files listed — used to compare two files from the same List Files results set.
- Using ″Old″ path location — used for comparing a Unix file against a Unix file that is not in the current List File results set.
- Using ″Old″ dataset location — used for comparing a Unix file to a member in a PDS data set.

Display format

- Delta — list the differences between the source data sets
- Changes — list the differences between the source data sets, plus up to 10 matching lines before and after the differences.
- Long — list all the new data set source lines, plus old data set deleted lines. Both inserted and deleted lines are flagged.

″Old″ location

If you have selected only one file for comparison, Cloud 9 prompts you for the location of the file with which to compare it.

5. Set the *Compare* and *Display Format* options.
6. Enter the *″Old″ location*, if applicable.
7. Click Submit. The results are displayed, for example:

Figure 114. Compare Results

For an explanation of compare listings, see the SuperC sections of the *ISPF User's Guide Volume II*.

Copying Unix Files

Using Cloud 9 you can copy Unix files to a PDS data set or to a UNIX directory.

1. Generate a list of Unix files
2. Select a file (or files) to be copied
3. Click **COPY** on the Main Menu. The following panel is returned:

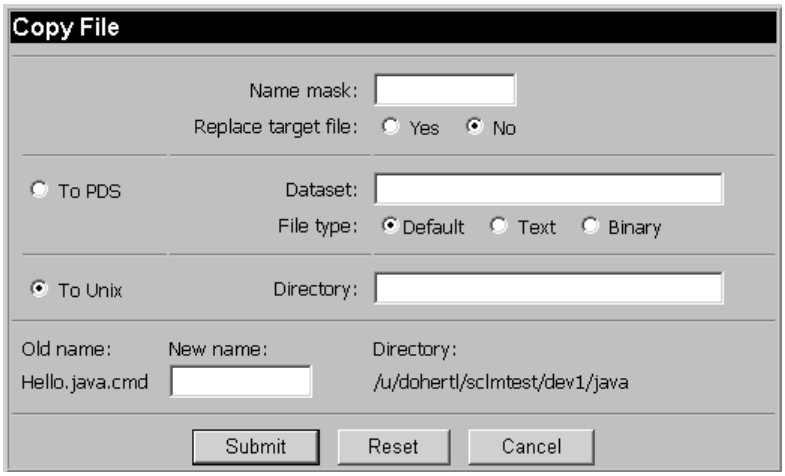


Figure 115. Copy File Options

Information about the fields on this panel can be found in "Copying PDS Members" on page 89. The fields are arranged differently on PDS Members Copy panel, but the explanations for each field are the same.

4. Once all the options have been selected and the name has been decided, click Submit. The following panel is returned:

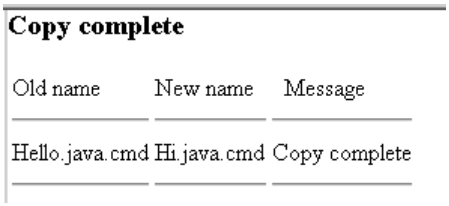


Figure 116. Copy Results

Moving Unix Files

Using Cloud 9, you can move Unix files to another UNIX directory or to a PDS data set.

1. Generate a list of Unix files.
2. Select the Unix file or files to be moved.
3. Click **MOVE** on the Main Menu.
4. The following panel is returned:

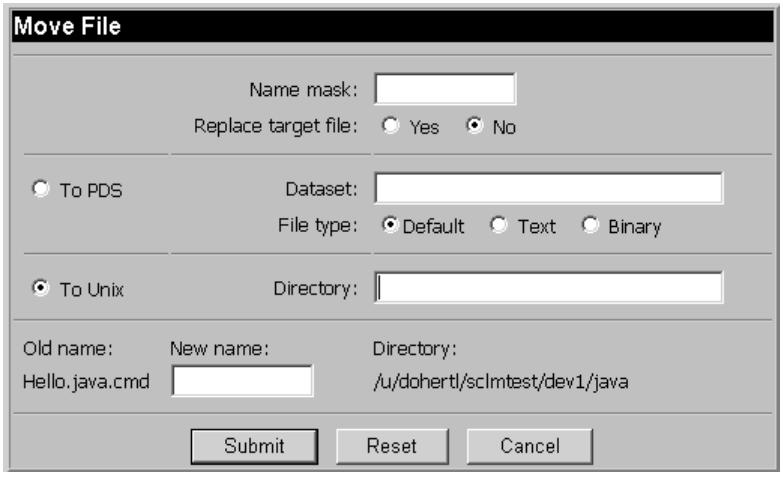


Figure 117. Move File Options

Information about the fields in this panel can be found in “Moving PDS Members” on page 90. The fields are arranged differently on that panel, but the information for the fields is the same.

5. Once all the options have been selected and the name has been decided, click Submit. The following panel is returned:

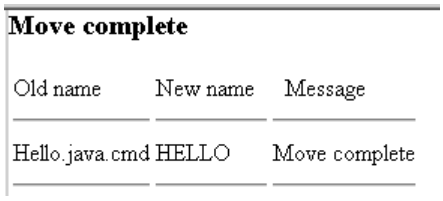


Figure 118. Move Results

Viewing Unix File Information

In Cloud 9, you can access the Unix file information and change a file's attributes.

1. Generate a list of Unix files.
2. Select the file or files whose information you wish to obtain.
3. Click **FILE INFO**. The following panel is returned:

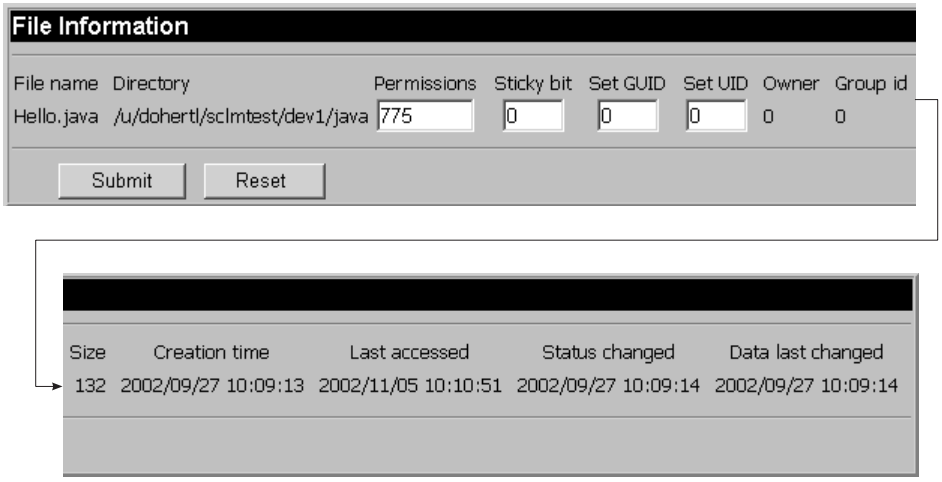


Figure 119. File Information Options

The entry fields on the File Info options panel are:

Permissions
See the Unix System Service (USS) User's Guide, SA22-7801.

Sticky bit
See the USS User's Guide.

Set GUID
See the USS User's Guide.

Set UID
See the USS User's Guide.

4. Change the options, if required, and click Submit. The following panel is returned:

File information

File	Directory	Message	Return code
Hello.java	/u/dohertl/sclmtest/dev1/java	chmod failed	-1

Figure 120. File Information Results

Note: The submission attempted in this example failed because the user did not have the correct authorization to make the change.

Renaming Unix Files

One or more Unix files can be renamed using the Rename function. The Rename function works the same as the *Name Mask* and *New Name* fields on the Copy and Move panels.

1. Generate a list of Unix files.
2. Select the file or files to be renamed.
3. Click **RENAME** on the Main Menu. The following panel is returned:

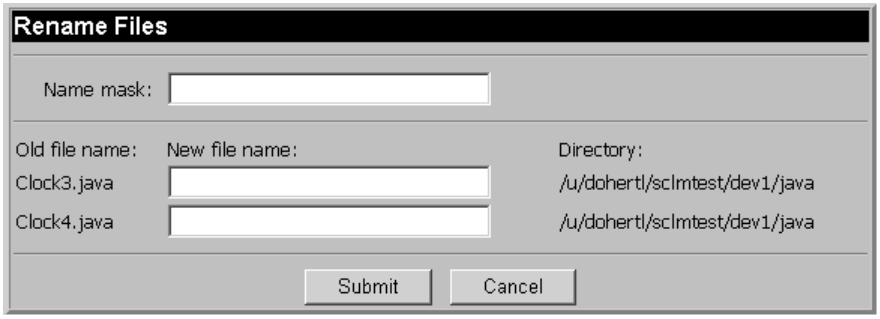


Figure 121. Rename Files Options

Information about the fields on this panel can be found in "Renaming PDS Members" on page 92. Note that the fields are arranged differently on that panel, but the explanations are the same.

4. Enter data in either the *Name Mask* or *New Name* fields to change the name of the selected Unix file. See "Copying Unix Files" on page 97 for more information.
5. Click Submit. The following message is returned:

Rename complete

Old name	New name	Message
Block3.java	Clock3.java	File renamed
Block4.java	Clock4.java	File renamed

Figure 122. Rename Results

Using Search-For with Unix Files

You can use the Search-For function to search multiple Unix files for individual data strings.

1. Generate a list of Unix files.
2. Select file or files for Search.
3. Click **SEARCH-FOR** on the Main Menu. The following panel is returned:

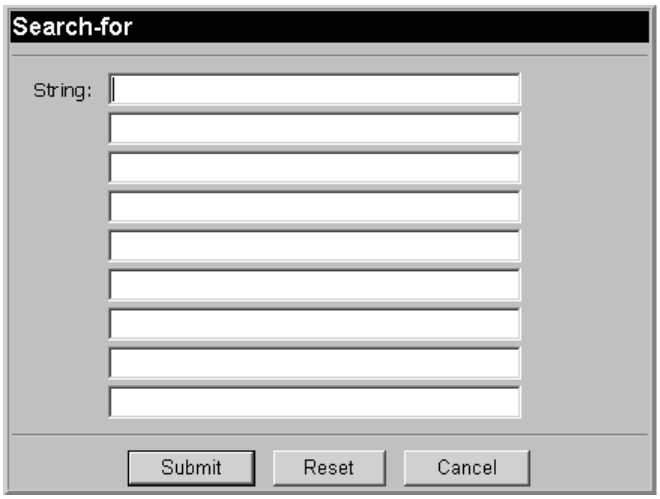


Figure 123. Search-for Options

Information about the field on this panel can be found in “Using Search-For with PDS Members” on page 93. The fields are arranged differently on this panel, but the explanations for the fields are the same.

4. Enter the data string or strings to search for and click Submit.
5. If no data matches the requested search then a ’No Matches’ message is returned.
6. If there are any matching data strings, results similar to these are returned:

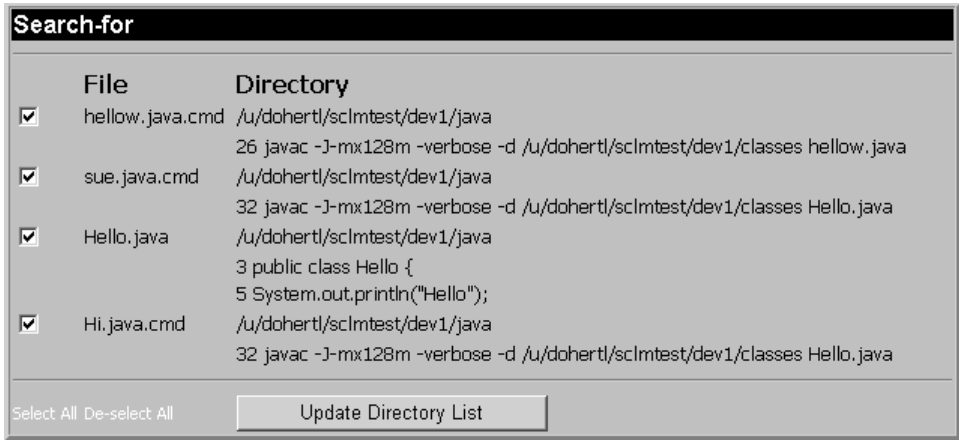


Figure 124. Search-for Results

Individual members can be selected or you can use the Select All and Deselect All links in the lower left corner of the form to select / deselect members.

7. Click the**Update Directory List** button to return a new Unix Directory List containing only the selected files.

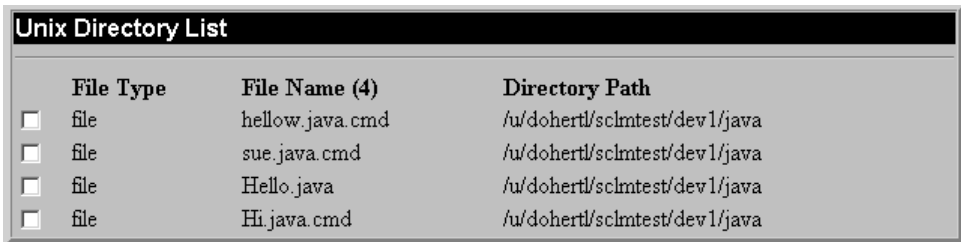


Figure 125. Updated Unix Directory List

You can then repeat your search, using additional strings, to find members within this smaller sub-set.

Chapter 7. Usage Scenario

This chapter descibes how to use Cloud 9 to manage your SCLM life cycle and development process, including how to:

- Use complex queries for multi-location selection lists
- List and build members based on SCLM language
- List and promote members based on SCLM change codes
- Use package processing to promote changes into production

Note: Our scenario uses the Sample project that can be generated from within SCLM. You can use Option 7 from the main SCLM menu to create a copy of this project, with your user ID as the Project Name. See the ISPF SCLM Program Manager's and Developer's Guide for details on how to use this option.

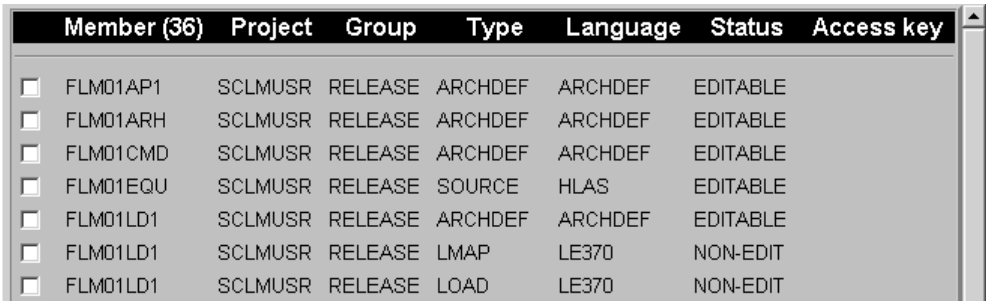
In our Scenario, the Project Name is SCLMUSR. You will be listing various members within your copy of this project, selecting some for editing, creating a Package for the edited members and building and promoting that Package up to Production (RELEASE).

Task #1: Exploring the SLCM Query options

In this task, you explore some of the unique querying capabilities of Cloud 9, to view your project's contents. At the end of the task, you list the members needed for Task #2.

1. If you have not done so already, log in to Cloud 9.
2. From the Cloud 9 main menu, click LIST SLCM FILES.
3. On the SCLM Query panel, click the ? button adjacent to the Project field and select your project name from the list.

   Note: If your project name is not on the list, you need to create the project in SCLM before continuing with this scenario.
4. Ensure that the Hierachy View option is set to **All occurrences** and the Accounting Status option is set to **All**, then click the Submit button.
5. Examine the results that are returned. You should see a list of 36 members, all in the RELEASE group and with a variety of Type, Language and Status values.



Member (36)	Project	Group	Type	Language	Status	Access key
FLM01AP1	SCLMUSR	RELEASE	ARCHDEF	ARCHDEF	EDITABLE	
FLM01ARH	SCLMUSR	RELEASE	ARCHDEF	ARCHDEF	EDITABLE	
FLM01CMD	SCLMUSR	RELEASE	ARCHDEF	ARCHDEF	EDITABLE	
FLM01EQU	SCLMUSR	RELEASE	SOURCE	HLAS	EDITABLE	
FLM01LD1	SCLMUSR	RELEASE	ARCHDEF	ARCHDEF	EDITABLE	
FLM01LD1	SCLMUSR	RELEASE	LMAP	LE370	NON-EDIT	
FLM01LD1	SCLMUSR	RELEASE	LOAD	LE370	NON-EDIT	

Figure 126. Members in the SCLM Sample project

Note: If the list contains less than 36 members, re-examine the way that you created your project copy.

6. Use the browser Back button to return to the SCLM Query panel.
7. Select the Type of **Source** and set the Accounting Status to **Editable** and click Submit again.
8. Examine the results that are returned. The list contains 7 members.

	Member (7)	Project	Group	Type	Language	Status	Access key
☐	FLM01EQU	SCLMUSR	RELEASE	SOURCE	HLAS	EDITABLE	
☐	FLM01MD1	SCLMUSR	RELEASE	SOURCE	HLAS	EDITABLE	
☐	FLM01MD2	SCLMUSR	RELEASE	SOURCE	PLIO	EDITABLE	
☐	FLM01MD3	SCLMUSR	RELEASE	SOURCE	HLAS	EDITABLE	
☐	FLM01MD4	SCLMUSR	RELEASE	SOURCE	HLAS	EDITABLE	
☐	FLM01MD5	SCLMUSR	RELEASE	SOURCE	HLAS	EDITABLE	
☐	FLM01MD6	SCLMUSR	RELEASE	SOURCE	HLAS	EDITABLE	

Figure 127. Editable Source members in the SCLM Sample project

9. Return to the SCLM Query panel and experiment with different query options, such as selecting by Language, and so on.
10. When you have finished experimenting, click the Reset button on the SCLM Query panel, set the Type to **Source** and the Accounting Status to **Editable** again, then click Submit.

You are now ready to begin Task #2.

Task #2: Editing Members

In this task, you edit two members in your project and assign these members a Change Code. This Change Code is used to track the members through the SCLM life cycle.

1. On your Member List, select FLM01MD1 and FLM01MD2. These members have different languages.
2. From the Cloud 9 main menu, click EDIT.
3. On the Edit Options panel, make sure your settings match the following:

   Edit in Browser Yes
   File Type Default
   Lock SCLM Member Yes
   Lock in Group DEV1
   Authorization Code Blank (empty)
4. Click Submit. Two new browser windows open, with your members loaded in an Edit session.
5. For each member:
   a. Make a minor change in the Edit area. If you do not know the language, just make a small change in the comments area at the top.
   b. Enter **CC01** into the Change Code field in the Add to SCLM section.
   c. Click the Submit button in the Add to SCLM section.
   d. Close the Edit session browser window.
6. From the Cloud 9 main menu, click LIST SCLM FILES.

7. Reset the SCLM Query options, then select your Project and **DEV1** from the drop down lists.
8. Click Submit. The results show that the two members you have just edited have been placed into DEV1.

You are now ready to begin Task #3.

Task #3: Compare files

In this task, you compare one of your edited files with the original, and investigate the various compare options.

1. On your Member List, select FLM01MD1 only.
2. From the Cloud 9 main menu, click VERSION/RECOVER. The Current section of this panel contains two copies of your member; one in the DEV1 Group and one in the RELEASE Group.

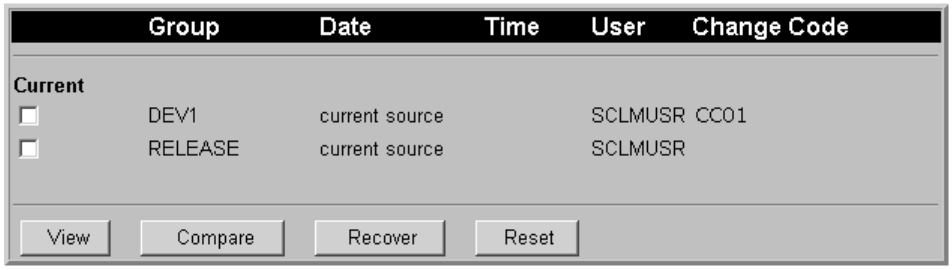


Figure 128. Member displayed in Version/Recover panel.

3. Select the two copies in the Current section.
4. Select the **Delta** and **Blank** For Compare options.
5. Click the Compare button. A new browser window opens and displays the Compare results.
6. Examine the results. You should be able to see the details of your small editing change, made in Task #2. If you cannot see any changes, return to Task #2 and edit and save the member again.
7. Close the Compare results browser window and experiment with different combinations of For Compare options. Close the browser windows when finished.

You are now ready to begin Task #4.

Task #4: Create Package and add members

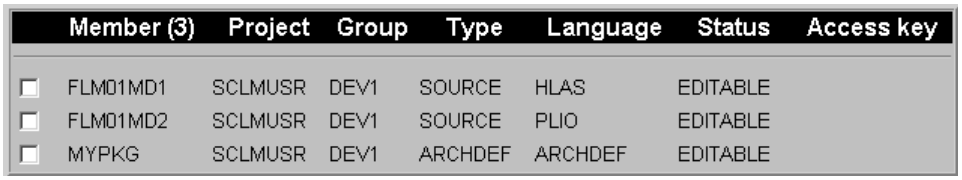
In this task, you create a Package to hold the edited members. In later tasks, you use this Package to build the members.

1. From the Cloud 9 main menu, click OPEN PACKAGE.
2. Select the Create New Package option and enter the following values in the fields:

Project	*SCLMUSR* (use your own Project Name)
Group	DEV1
Type	ARCHDEF
Member	MYPKG

3. Click the Submit button.

4. From the Cloud 9 main menu, click LIST SCLM FILES and search for all members in your Project with a Change Code of **CC01**. This finds the two members you have edited, within the DEV1 Group.
5. Select the two members and, from the Cloud 9 main menu, click ADD TO PACKAGE. A message box displays to confirm that the two rows have been added.
6. From the Cloud 9 main menu, click SAVE/VIEW PACKAGE. Your Package information is displayed in the Save Package section and the two members are listed in the Package Contents section.
7. Ensure that the Change Code field contains **CC01** and click the Submit button. A confirmation message displays in the browser.
8. From the Cloud 9 main menu, click LIST SCLM FILES again and search for all members in your Project with a Change Code of **CC01**. This finds the two members you have edited and your new Package.



	Member (3)	Project	Group	Type	Language	Status	Access key
☐	FLM01MD1	SCLMUSR	DEV1	SOURCE	HLAS	EDITABLE	
☐	FLM01MD2	SCLMUSR	DEV1	SOURCE	PLIO	EDITABLE	
☐	MYPKG	SCLMUSR	DEV1	ARCHDEF	ARCHDEF	EDITABLE	

Figure 129. Member List for DEV1, showing new Package

You are now ready to begin Task #5.

Task #5: Build the Package

This task has two sub-tasks, which together demonstrate the differences between a simple Build process, which uses Packages containing Source members; and Change Code processing, which uses Packages containing Change Codes and ARCHDEFs.

Task #5a: Build Packages with Source members

In this task, you build your existing Package member, which builds both members listed in the Package contents and all non-editable dependent members. This demonstrates simple Package processing, which is useful for testing your changes within its immediate scope.

1. On your Member List, select MYPKG (your existing Package member) only.
2. From the Cloud 9 main menu, click BUILD. The Build panel displays.
3. Set the Mode to **Conditional**, the Scope to **Normal** and the Execution Mode to **Foreground**.
4. Click the Submit button. A confirmation message displays in the browser.
5. From the Cloud 9 main menu, click LIST SCLM FILES again and search for all members in the **DEV1** Group. Ensure that the Accounting Status is set to **All**. This finds the two members you have edited, your Package and the non-editable members dependent upon your edited members.

	Member (7)	Project	Group	Type	Language	Status	Access key
☐	FLM01MD1	SCLMUSR	DEV1	OBJ	HLAS	NON-EDIT	
☐	FLM01MD1	SCLMUSR	DEV1	SOURCE	HLAS	EDITABLE	
☐	FLM01MD1	SCLMUSR	DEV1	SOURCLST	HLAS	NON-EDIT	
☐	FLM01MD2	SCLMUSR	DEV1	OBJ	PLIO	NON-EDIT	
☐	FLM01MD2	SCLMUSR	DEV1	SOURCE	PLIO	EDITABLE	
☐	FLM01MD2	SCLMUSR	DEV1	SOURCLST	PLIO	NON-EDIT	
☐	MYPKG	SCLMUSR	DEV1	ARCHDEF	ARCHDEF	EDITABLE	

Figure 130. Member List for DEV1, after MYPKG Build

Task #5b: Build Packages with Change Codes and ARCHDEFs

In this task, you create a Package that uses your Change Code and a High Level ARCHDEF, instead of individual source members. This builds all members of the package that have been assigned the Change Code and all members within the project that might be affected by these changes. This demonstrates Change Code processing, which is useful when you want to build your full application.

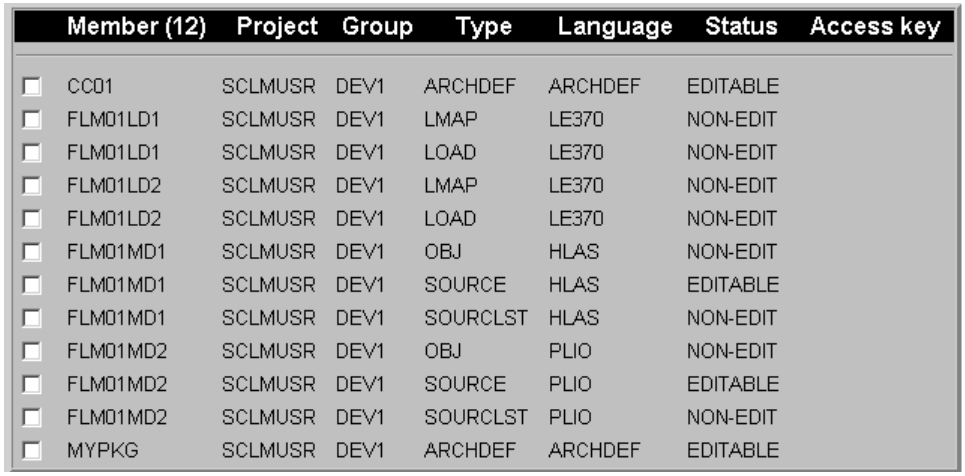
1. From the Cloud 9 main menu, click SAVE/VIEW PACKAGE.
2. Click the Start Over button, then click OPEN PACKAGE from the Cloud 9 main menu.
3. Select the Create New Package option and enter the following values in the fields:
   Project *SCLMUSR* (use your own Project Name)
   Group DEV1
   Type ARCHDEF
   Member CC01
4. Click the Submit button.
5. From the Cloud 9 main menu, click SAVE/VIEW PACKAGE. Your Package information is displayed in the Save Package section and the Package Contents section contains ***** FILE IS EMPTY *****.
6. Highlight and delete the current Package Contents.
7. Enter **CCODE CC01** at the top of the Package Contents area. This causes Cloud 9 (and therefore SCLM) to include any other source members that have this Change Code, when you Build and Promote the Package.
8. Enter **INCL FLM01AP1 ARCHDEF** on the next line. This is the highest level ARCHDEF in your project and it forces the re-link of any load modules affected by changes in Members marked with the CC01 Change Code.

```
Package Contents:
CCODE CC01
INCL  FLM01AP1 ARCHDEF
```

Figure 131. Package Contents after editing

9. Ensure that the Change Code field contains **CC01** and click the Submit button. A confirmation message displays in the browser.
10. From the Cloud 9 main menu, click LIST SCLM FILES again and search for all members in the **DEV1** Group.

11. Select the CC01 member and click BUILD.
12. List the SCLM members in DEV1 again. This time, the list includes a number of additional members.



Member (12)	Project	Group	Type	Language	Status	Access key
CC01	SCLMUSR	DEV1	ARCHDEF	ARCHDEF	EDITABLE	
FLM01LD1	SCLMUSR	DEV1	LMAP	LE370	NON-EDIT	
FLM01LD1	SCLMUSR	DEV1	LOAD	LE370	NON-EDIT	
FLM01LD2	SCLMUSR	DEV1	LMAP	LE370	NON-EDIT	
FLM01LD2	SCLMUSR	DEV1	LOAD	LE370	NON-EDIT	
FLM01MD1	SCLMUSR	DEV1	OBJ	HLAS	NON-EDIT	
FLM01MD1	SCLMUSR	DEV1	SOURCE	HLAS	EDITABLE	
FLM01MD1	SCLMUSR	DEV1	SOURCLST	HLAS	NON-EDIT	
FLM01MD2	SCLMUSR	DEV1	OBJ	PLIO	NON-EDIT	
FLM01MD2	SCLMUSR	DEV1	SOURCE	PLIO	EDITABLE	
FLM01MD2	SCLMUSR	DEV1	SOURCLST	PLIO	NON-EDIT	
MYPKG	SCLMUSR	DEV1	ARCHDEF	ARCHDEF	EDITABLE	

Figure 132. Member List for DEV1, after CC01 Build

You are now ready to begin Task #6.

Task #6: Promoting Packages

In this task you promote your Package to the TEST and RELEASE Groups, which promotes all of the edited members and any dependent non-editable members.

1. On your Member List, select CC01 (your new Package member) only.
2. From the Cloud 9 main menu, click PROMOTE. The Promote panel displays.
3. Set the Mode to **Conditional**, the Scope to **Normal** and the Execution Mode to **Foreground**.
4. Click the Submit button. A confirmation message displays in the browser.
5. List the SCLM members again, and search for all members in the **DEV1** Group. The list contains only your MYPKG member.

   Note: Attempting to Promote this member would cause errors, as the source members have been moved to the TEST Group.
6. List the SCLM members again, and search for all members in the **TEST** Group. The promoted members are on this list.
7. Select the CC01 member and Promote it a second time. This moves the Package and its related members up to the RELEASE Group.
8. List the SCLM members again, and search for all members in the **RELEASE** Group that have a Change Code of **CC01**. The CC01 Package and the two edited members are on this list.

Part 2. Using the VisualAge for Java Interface

Chapter 8. Cloud 9 Visual Age for Java Plug-in

This document is designed to familiarize you with the functionality of the Cloud 9 SCCI Interface. It describes the main aspects of the product's functionality, lists the product requirements, and provides a reference section with some key definitions and an FAQ section to answer any further questions the user might have. The topics covered in this document are:

- Product requirements
- Cloud 9 SCCI interface walkthrough
  - Add to Version Control
  - Cloud 9 browser interface
  - Adding Resource files to SCLM
  - Adding .class files to SCLM
  - Add to Version Control - project already in SCLM
  - Refresh project
  - Using the Check Out facility
  - Creating your Profile
  - Using the Check In facility
  - Viewing log files
- Key term definitions
- Cloud 9/VA Java limitations
- FAQ Section

Product requirements

The VA Java IDE interface has been tested using Visual Age for Java 3.5.3 and 4.0. Older versions of the product might work but have not, as of yet, been tested. The following list shows the operating systems on which the IDE Interface has been tested. Other operating systems might be compatible, but have not yet been tested.

- NT 4.0 SP5 (no longer supported by Microsoft)
- NT 4.0 SP6 (free upgrade)
- Windows 2000 Professional
- Windows 2000 Professional SP1
- Windows 2000 Professional SP2
- Windows 2000 Professional SP3
- Windows 2000 Professional SP4
- Windows XP Professional

Note: This document uses the term ″z/OS″ to refer to both the z/OS and the OS/390 operating systems.

VisualAge for Java - Cloud 9 SCCI Interface Walkthrough

This section of the document contains a comprehensive walkthrough of the Cloud 9 SCCI Interface. The walkthrough starts with the Add to Version Control function. Add to Version Control is an initial load of the project's files into SCLM. By the end of the walkthrough, many of the features of the Cloud 9 SCCI Interface will have been explained.

Add to Version Control

You can use Add to Version Control to initially place a VA Java project under the control of SCLM. This task only needs to be performed once for the VA Java project. After the project has been loaded into SCLM, you can use the check out, check in, add and delete functions to work with the VA Java files.

To add a project to version control:

1. Within the VisualAge for Java Workbench, right-click the project that you want to add.
2. Select **Tools** > **External Version Control** > **Add to Version Control**.

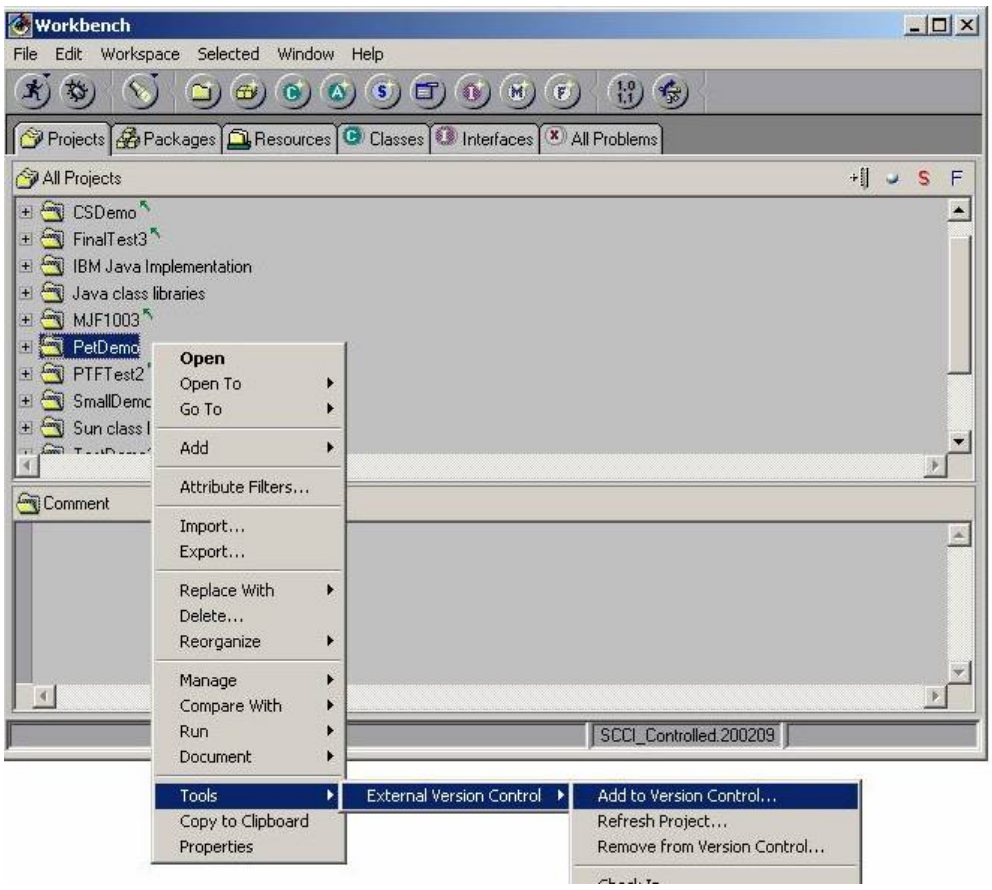


Figure 133. VA Java Workbench: Selecting Add to Version Control

The Add to Version Control window is displayed:

Figure 134. Add to Version Control: Selecting a source code management handler

3. Select Microsoft SCCI from the list. The Cloud 9 interface uses the Microsoft SCCI as its source code management handler.

   The Select SCM System window is displayed:

Figure 135. Select SCM System: Selecting Cloud 9 as your change control tool

4. Select Cloud 9 as your SCM tool. If you have other change management tools defined to VA Java, you can see other change control tools in the list.

   The Select local diretory window is displayed:

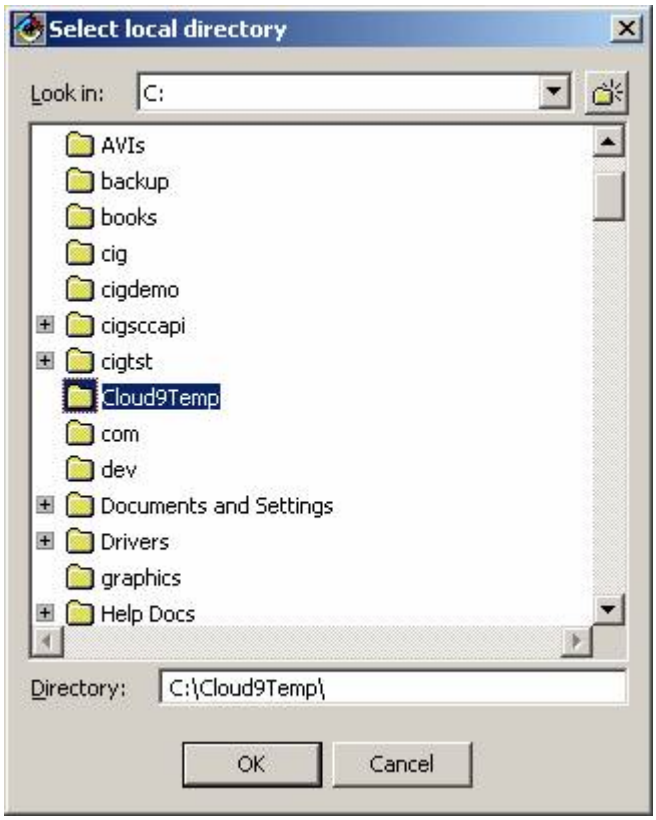


Figure 136. Selecting a local directory

5. Select a local working directory, accessible to Cloud 9, that VA Java can use for import and export files. It is best to have previously created a working directory before accessing this dialog box. In this example, a working directory called Cloud9Temp was created on the C: drive, and is being selected.

   The SCC Login dialog is displayed.

Figure 137. SCC Login

6. Enter your Z/OS user ID and password, and the host name or IP address associated with the Cloud 9 HTTP Server. If you are not using port 80, enter a port number.

   If the Cloud 9 executable files, located on the z/OS mainframe, were installed in a location other than `cgi-bin`, you need to specify the alternative location of the Cloud 9 mainframe executable files. Leaving this field blank tells the Cloud 9 SCCI Interface that the host executable files are in the default location, `../cgi-bin`.

7. You must now tell Cloud 9 where in SCLM you want the Project Profile to be stored.

Figure 138. SCM System Selection Panel

The Project Profile is a SCLM architecture definition member that contains a list of all files associated with the selected files under SCLM's control. The Cloud 9 SCLM member name is the same as the selected VA Java project name. The button to the right of the Project field can be used to show a list of valid Projects. The lists can be used to show the other supported SCLM inventory locations.

8. Once these settings are selected and the Save button is clicked, the dialog box shown in Figure 139 displays, requesting an Authorization Code. A Change Code can be specified.

Figure 139. SCLM Action Details

The Authorization Code and the Change Code are used when the Project Profile is stored under SCLM's control. Selecting the ″Display Host Messages″ option causes SCLM messages, generated when the Project Profile is added, to display.

Visual Age for Java tracks whether it thinks the selected project has been added to an external version control system before. If VA Java thinks the project is not

currently under the control of an external version control system then VA Java displays the Unable to Detect Files dialog box, as shown in Figure 140.

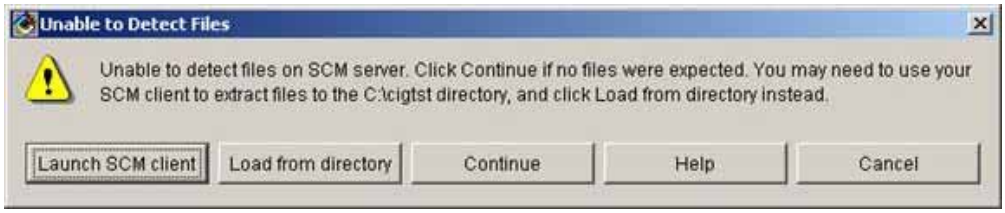


Figure 140. Unable to Detect Files

Figure 140 states that the VA Java project is not under control of an external version control system.

If the user is adding a Project Profile that already exists in SCLM, then skip to the "Add to Version Control - Project already in SCLM" on page 124 section. Figure 153 on page 125 shows the dialog box that is displayed if a Project Profile already exists in SCLM.

Click Continue and a dialog box listing the Java project's types is returned. You can now select all files to be added into SCLM. The Select all Types check box provides a fast way to do just that. Once you have selected the files, click the Next button.

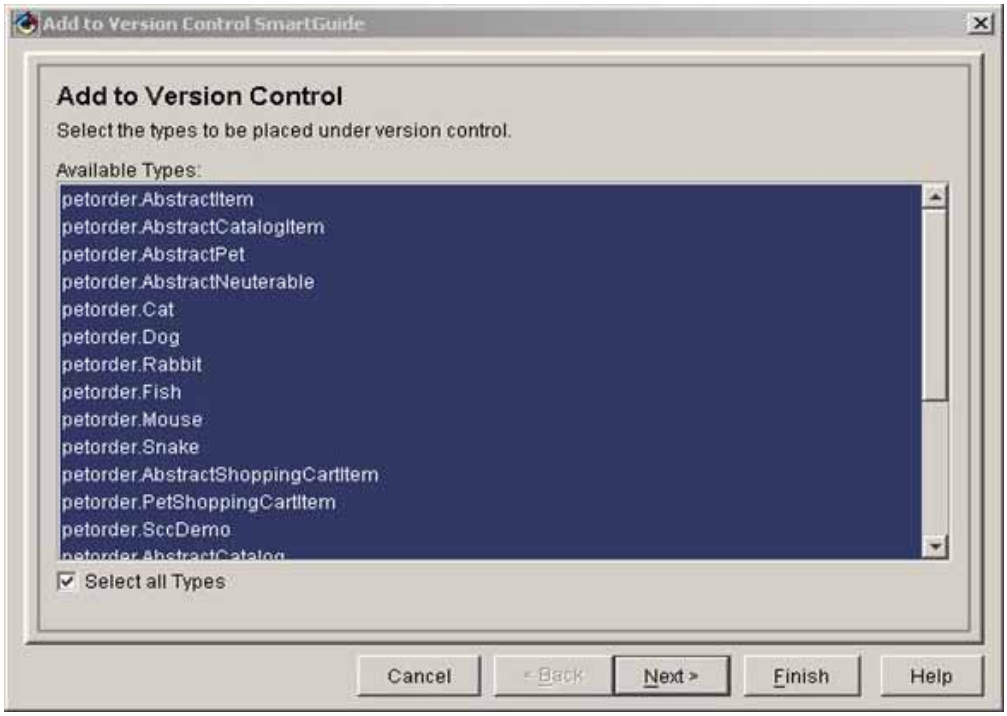


Figure 141. Export Type Panel

A panel listing all of the project's files is returned. Visual Age shows this panel for every different type of file associated with the project being added to version control. For example, Figure 142 on page 118 contains a list of the all of the .gif

files in the project. At this point, you select all of the files being added into SCLM and click Next.

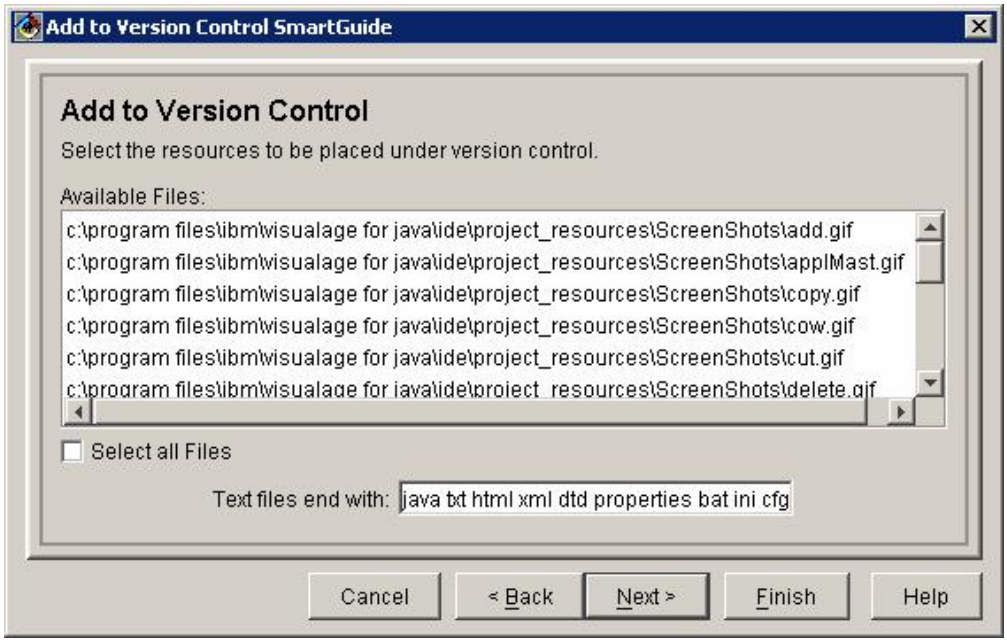


Figure 142. Export Files Panel

Clicking Next brings up a panel giving you an option to add a prefix to the files being stored in SCLM. Click Finish and the export process starts.

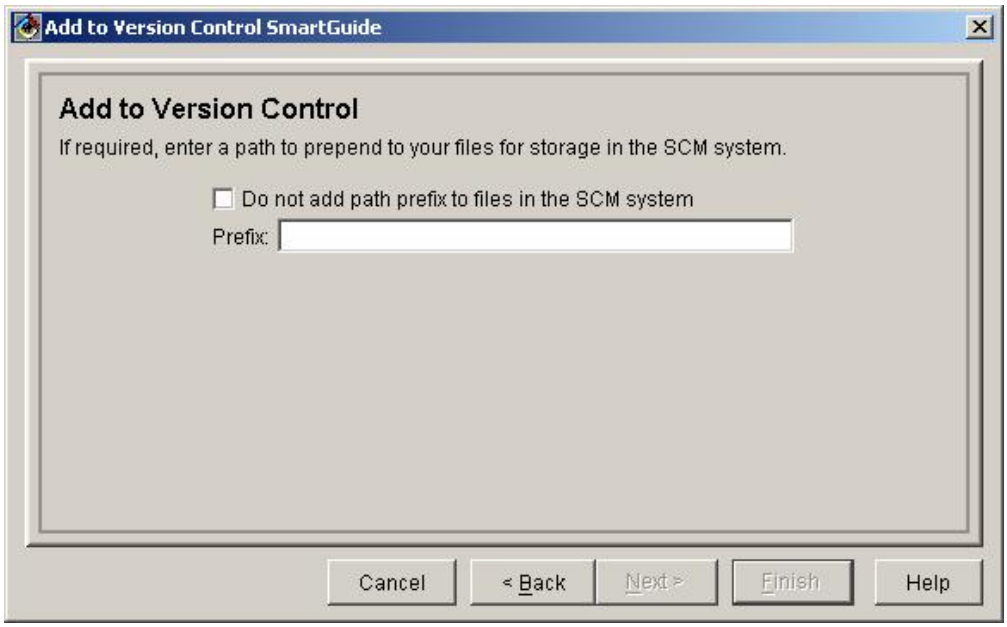


Figure 143. Add Prefix

Next, the SCLM action panel shown in Figure 144 on page 119 displays. This panel is similar to the one shown in Figure 139 on page 116 except that it also includes

the option to do a Remote Build. A Remote Build causes the SCLM translator to be called once the file's source is stored under SCLM's control.

Figure 144. Remote Build Option

On the panel shown in Figure 144, you can specify an SCLM Authorization Code and Change Code to be associated with all the files being added into SCLM. To view the SCLM messages generated when the SCLM save operation is performed, select the ″Display Host Messages″ check box. You also have the ability to request that the SCLM Build translator be called for each file, by selecting the ″Perform Remote Build″ option. For java files, the remote build causes the java programs to be compiled. Fill in the correct information and then the SCLM Details panel is displayed.

Figure 145. SCLM Item Details

Select the Language and Type for the files being added to the SCM system, click OK, then watch as the selected files are placed under the control of SCLM. When all of the files have been added, the following VA Java summary window is opened:

Figure 146. Export progress

The summary panel states that the project's java files have been added into SCLM.

Cloud 9 Browser Interface

You can view either the Project Profile or any of the other files just added into SCLM, using the Cloud 9 browser interface. To access this, the Open Version Control function can be used.

To open the user's version control system (in this case Cloud 9):

1. Right-click the project under version control.
2. Select Tools > External Version Control > Open Version Control.

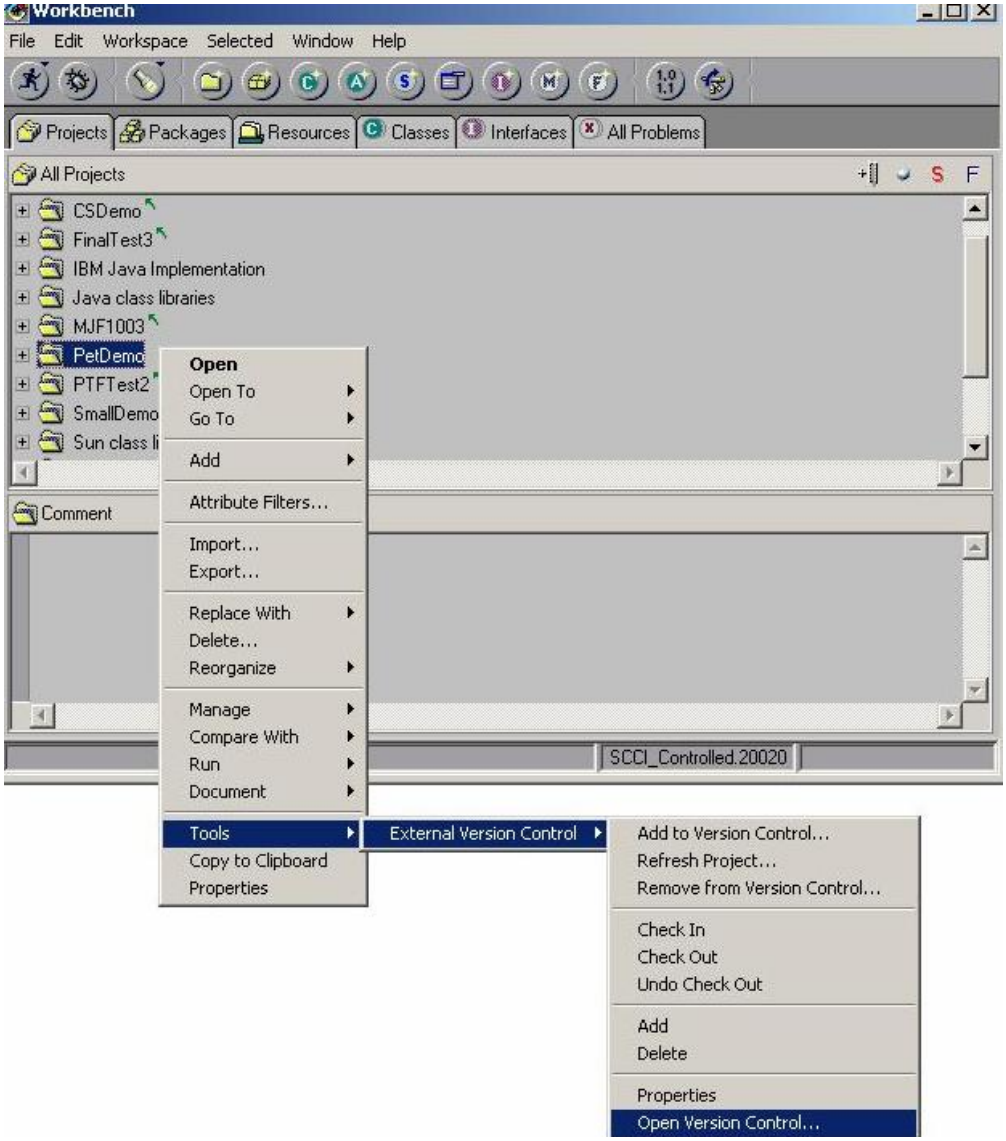


Figure 147. Cloud 9 Package List

This starts a browser and load Cloud 9's log-in panel. Once Cloud 9 is accessed, the user can check to see if their project and its files have been added into SCLM. The Visual Age for Java project is now a standard package in SCLM and is located wherever the user specified on the SCM System Selection Panel (Figure 138 on page 116)

Figure 148 on page 122 shows a list of SCLM Packages in Cloud 9:

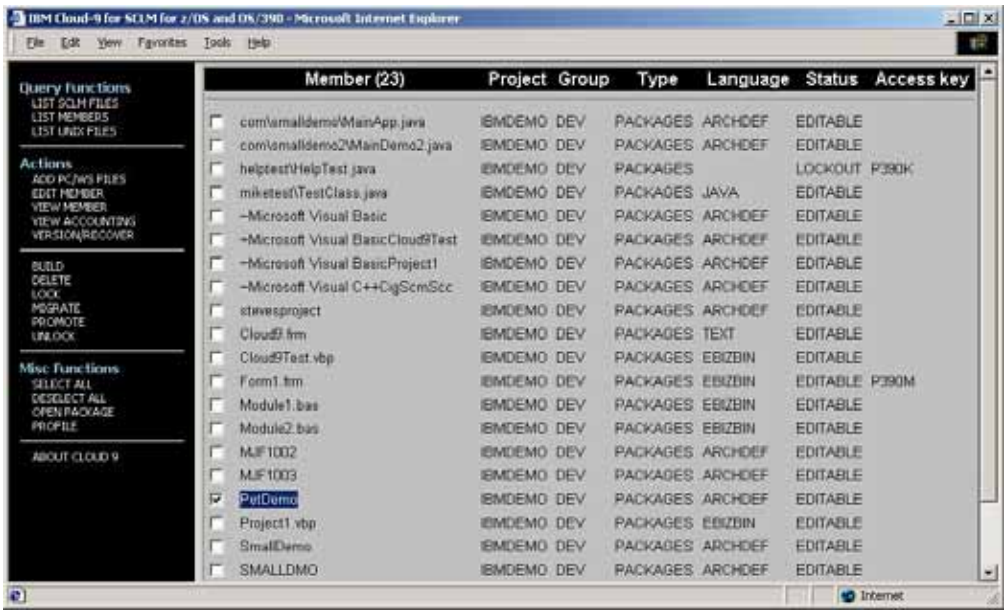


Figure 148. Cloud 9 Package List

The previous list contains a number of VA Java projects that have been added into SCLM. Notice that one of them has been checked and highlighted. That is the project that was just added to version control. Figure 149 shows what that package looks like in SCLM:

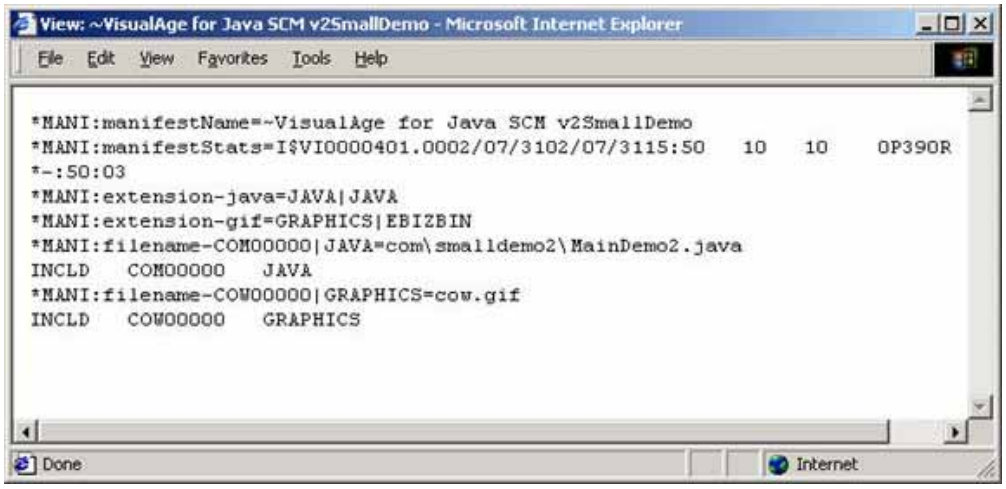


Figure 149. View Package

Adding Resource Files

Now that the VA Java project has been added to version control, the individual resource files can be added as well. To do this:

1. Make sure the project in question has been added to version control.
2. From the VAJ Workbench Resources Tab, right-click the resource you wish to add.
3. From the menu, select Tools > External Version Control > Add.

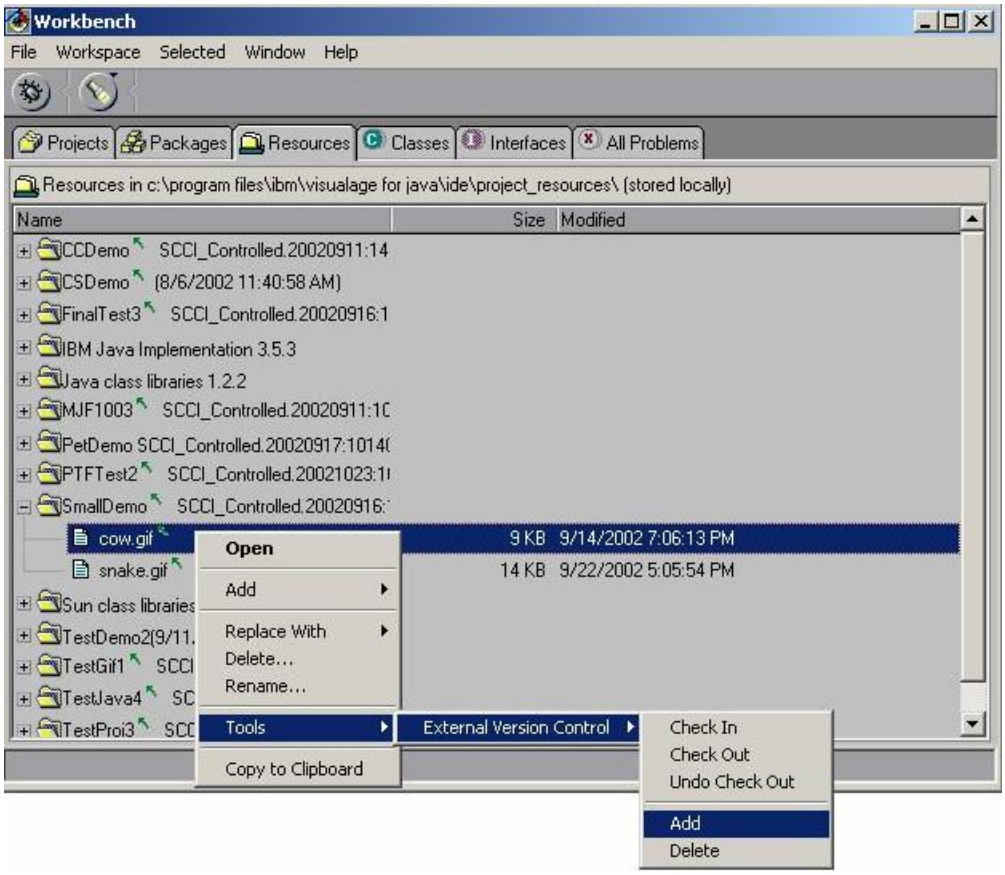


Figure 150. Add resources to SCLM

4. Next you see a dialog box listing the resources being added. Click OK.

Figure 151. Resource being added to SCLM

5. After clicking OK, the SCLM options dialog box displays.

Figure 152. SCLM options dialog

On this panel, you can specify an SCLM Authorization Code and Change Code to be associated with all the files being added into SCLM. To view the SCLM messages generated when the SCLM save operation is performed, select the Display Host Messages check box. You also have the ability to request that the SCLM Build translator be called for each file, by selecting the Perform Remote Build option.

Adding .Class Files to SCLM

1. On the VAJ Workbench Project Tab, right-click the project, package or class that you wish to store in SCLM.
2. From the menu, select Export.
3. In the Export Dialog, select Directory as the export destination. Click OK.
4. In the Export to Directory dialog, enter the directory that is the local directory that the user defined when adding the project to version control. Click OK.
5. In the Export to Directory dialog, for the *What do you want to Export?* option, select *.class and make sure nothing else is selected. Click Finish.

Once the .class files have been exported to a directory, follow the instructions previously provided, on adding resource files.

Add to Version Control - Project already in SCLM

If the VA Java project being added to version control is already located in SCLM, then instead of Figure 140 on page 117, the following dialog box is displayed:

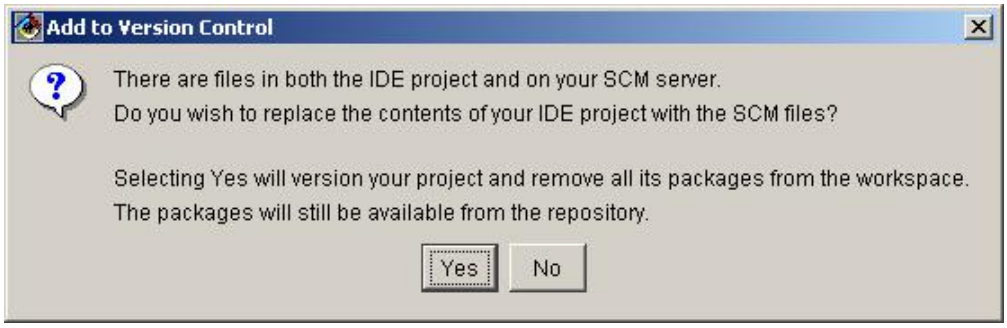


Figure 153. Import Process

This panel states that the project that you are adding to version control already exists in SCLM. Clicking Yes causes all the files in your local VA Java project to be overlaid and refreshed with files stored in SCLM.

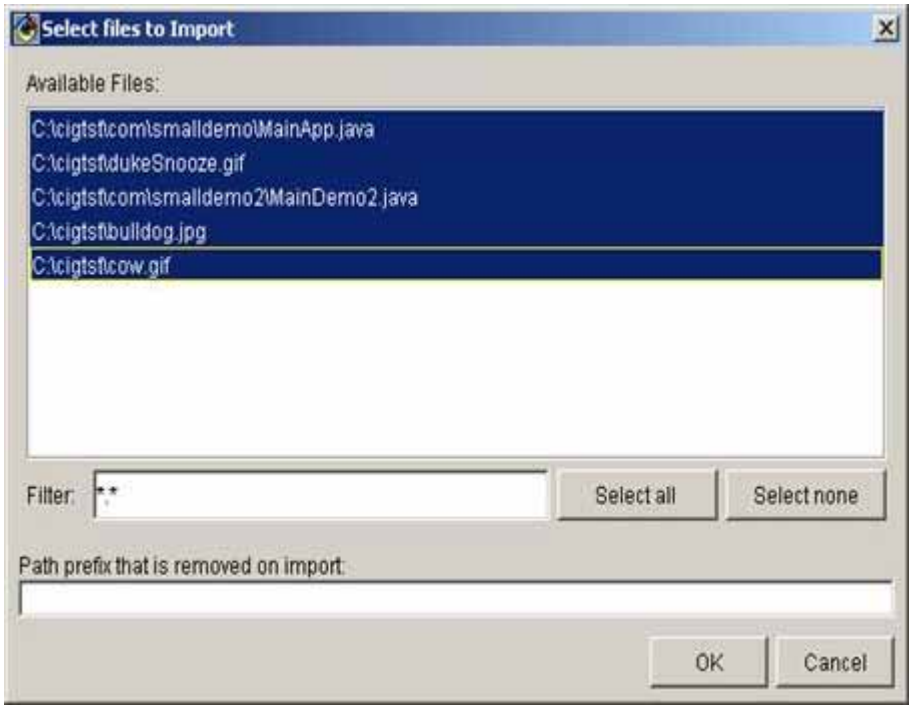


Figure 154. Import Process - Select Files

Because the project's files already reside on the mainframe, the mainframe versions of the files are imported and compared against the project files being added to version control. Select the files being added to version control and the correct path prefix and click OK.

When the files have all been imported to the IDE, the VA Java summary panel is returned:

Figure 155. Progress Info

The files within Visual Age for Java have now been refreshed and replaced with the files stored in SCLM.

Refresh Project

Now that the VA Java project's files have been added to version control, you might want to edit the project's files. To be safe, you can do a Refresh Project, just to make sure you are working with the most current version of the project.

To refresh the project:

1. Right-click the project under version control.
2. Select Tools > External Version Control > Refresh Project.

If the project has not been changed, the Refresh Project window is displayed:

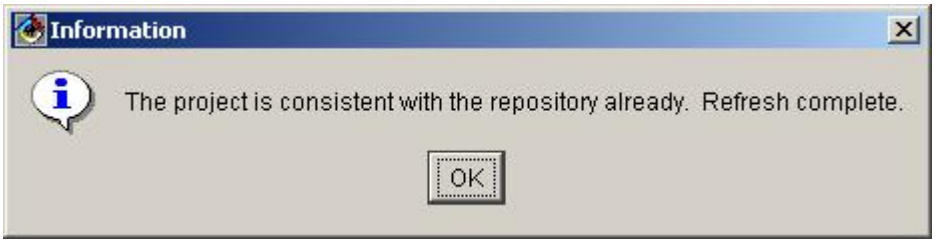


Figure 156. Refresh Project

If the VA Java project's files have been changed since being added to version control, the Refresh Project dialog box displays. Different tabs are highlighted depending on what changes were made to the files.

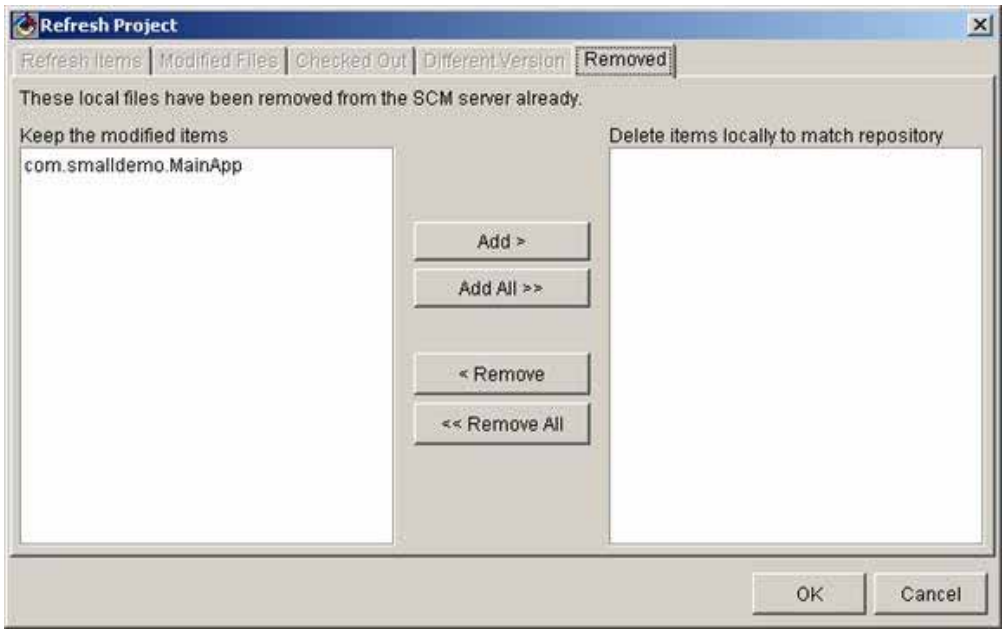


Figure 157. Refresh Project

Check Out

After the VA Java project has been refreshed, the files being edited need to be checked out from SCLM. A lock is placed on a file when the user does a Check Out in VA Java.

To Check Out a file:

1. Right-click the file that needs to be Checked Out.
2. Select Tools > External Version Control > Check Out.

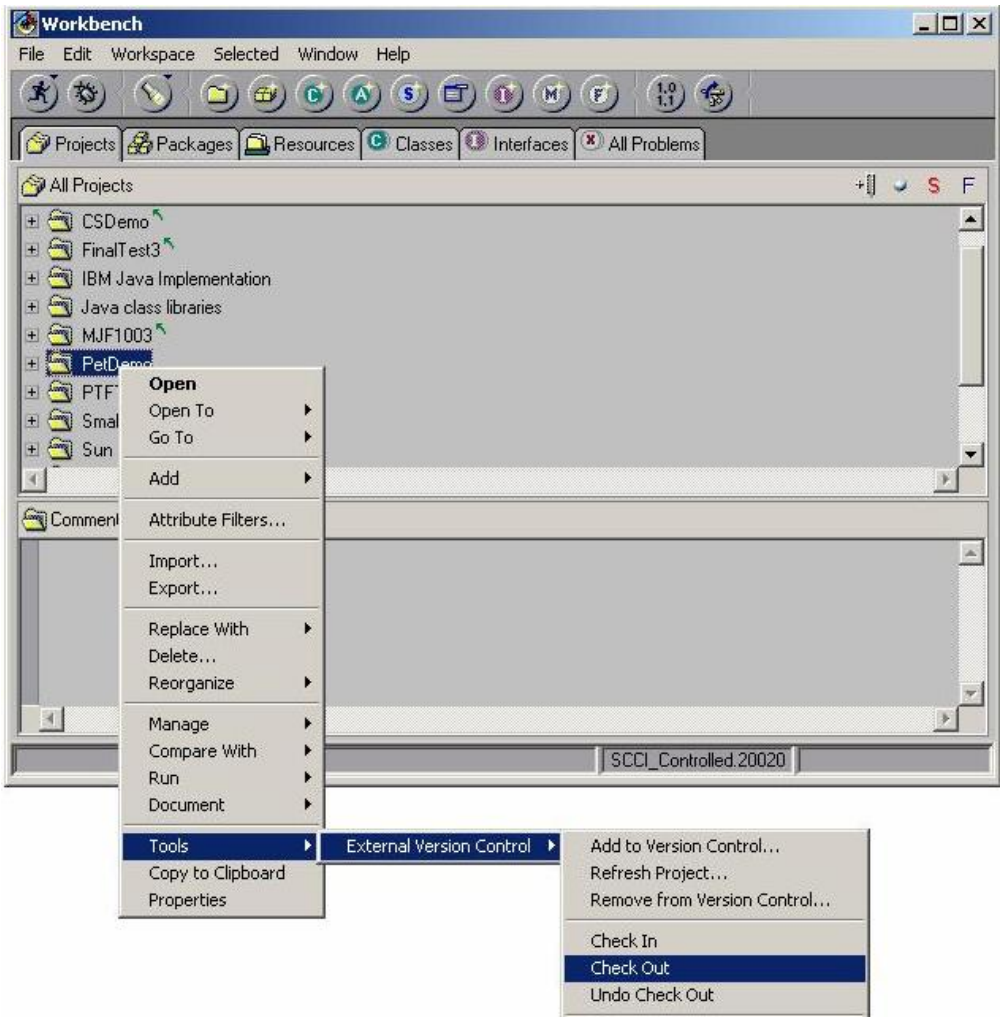


Figure 158. Check Out Summary

3. Once Check Out is selected, a panel is displayed, asking for confirmation of the checkout. Click OK and the next panel asks you for an Authorization Code, a Change Code and give you an option to view host messages.

Figure 159.

From this point, two different windows can be shown. If another user has not checked out the previously mentioned file, the VA Java summary window is displayed and the file is locked in both SCLM and VA Java.

Figure 160. Check Out Summary

If the file you are requesting is already checked out by another user, you cannot check out the file until the other user has checked it in. A ″checked out″ panel is displayed and gives all the information needed to contact the user who has checked out the file the you are requesting. Their picture, user ID, telephone number, and an e-mail link are all provided.

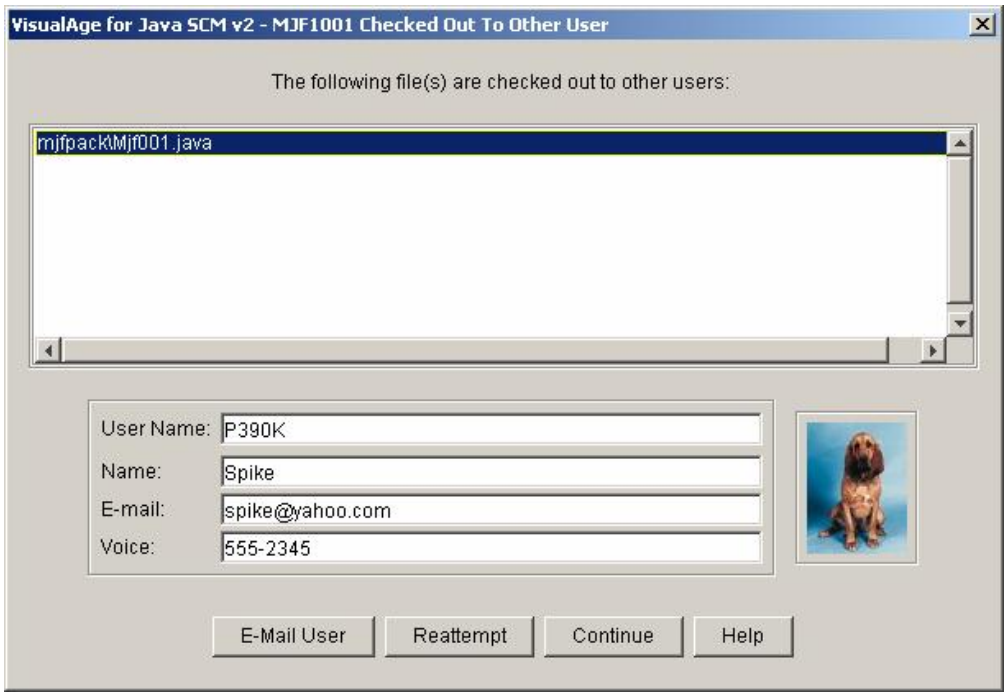


Figure 161. Re-Attempt Check Out

Once the other user has been contacted and the file has been checked in, you can click Re-attempt Check Out to go on with the editing process. A summary statement, such as the one in Figure 160, is displayed. Click OK and the requested

file is checked out and ready to edit. Upon checkout, there a lock displays next to the file on the VA Java workbench.

Figure 162. Locked file

Create your Profile

The Re-Attempt Check Out dialog uses information stored in your Cloud 9 Profile. To set up your Cloud 9 profile, you need to use the Cloud 9 Browser Interface. To access the Cloud 9 Browser Interface, you need to use the Open Version Control function as is shown in Figure 163 on page 131.

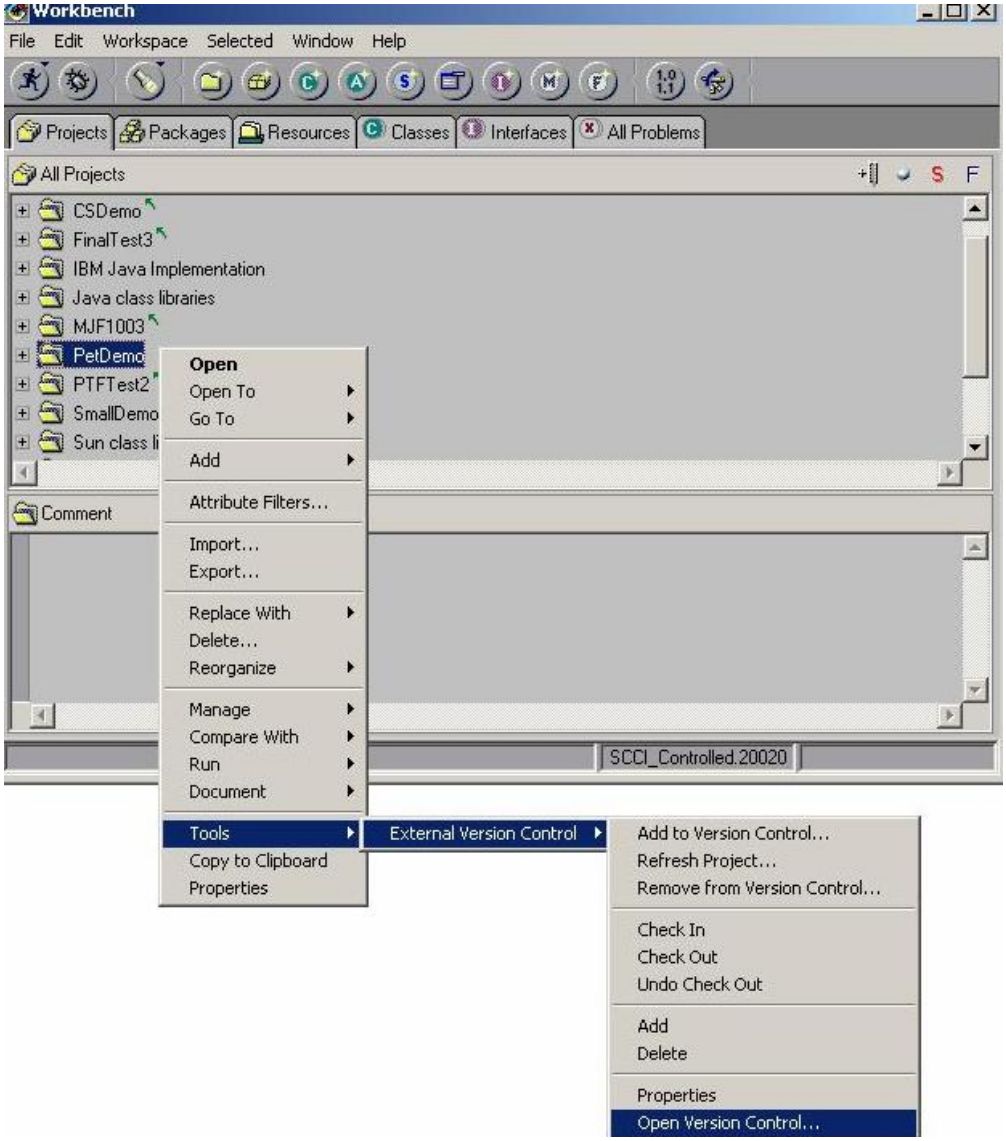


Figure 163. Accessing Cloud 9 Browser Interface

Once Cloud 9 is accessed, click the Profile link on the main menu to display the Profile panel.

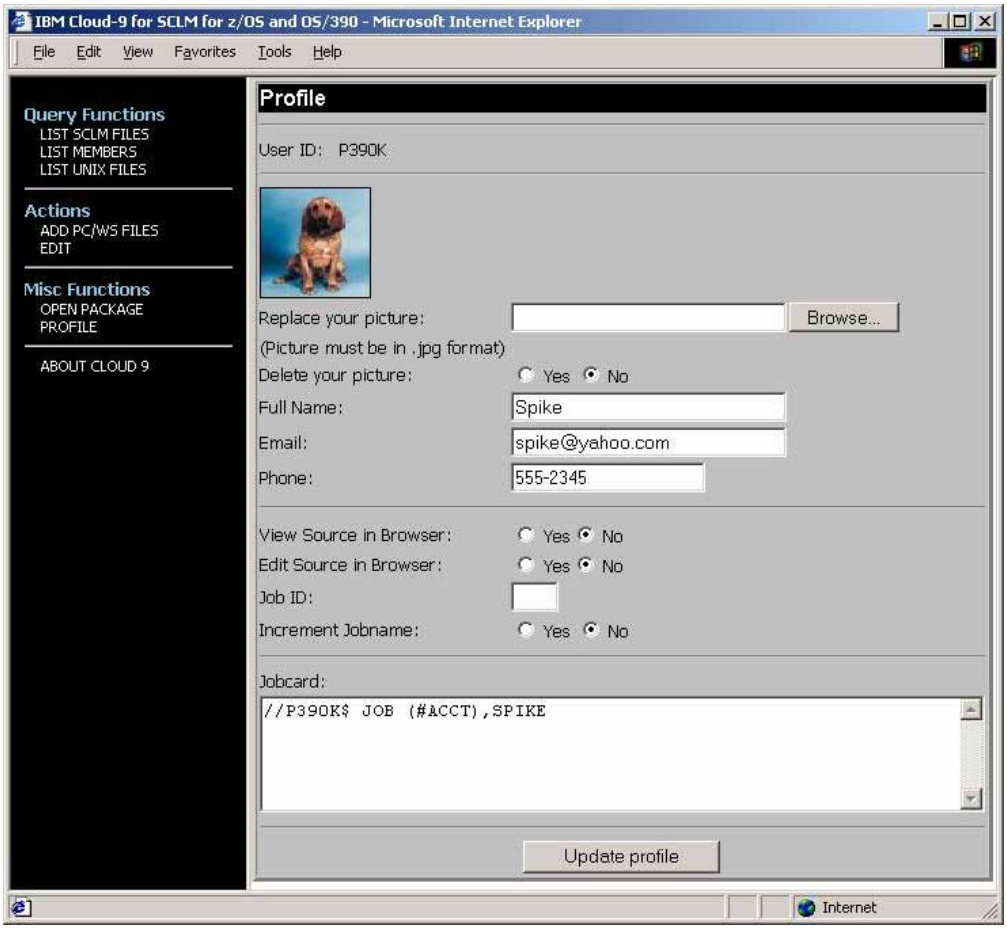


Figure 164. Profile options

Fill in the fields for your name, e-mail address, telephone number and picture (only .jpg images), and click Update profile. This information is then returned to other users when they attempt to check out files already under your control. The rest of the fields on the Profile panel are used for specific Cloud 9 functions only and are not used directly by the Cloud 9 SCCI Interface.

Check In

Now that the file is checked out, it is ready to be edited. Double-click the file to display the edit window.

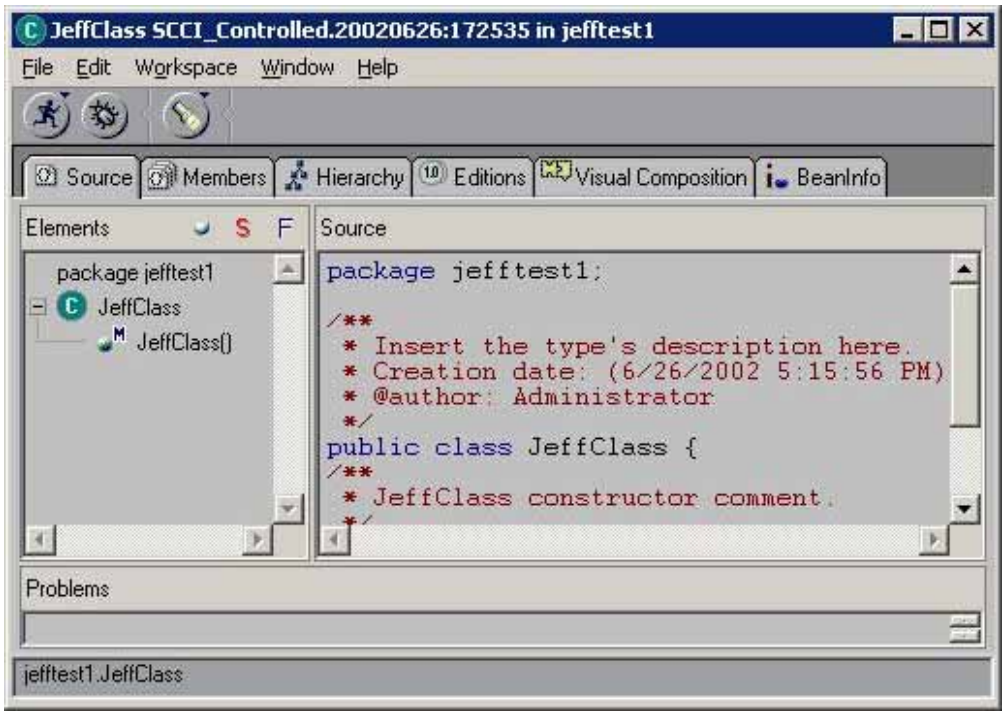


Figure 165. Edit window

Once the file has been edited, it is ready to be checked back in to SCLM. To Check In a file:

1. Save any changes made to the file.
2. Right-click the file the user wants to Check In.
3. Select Tools > External Version Control > Check In.

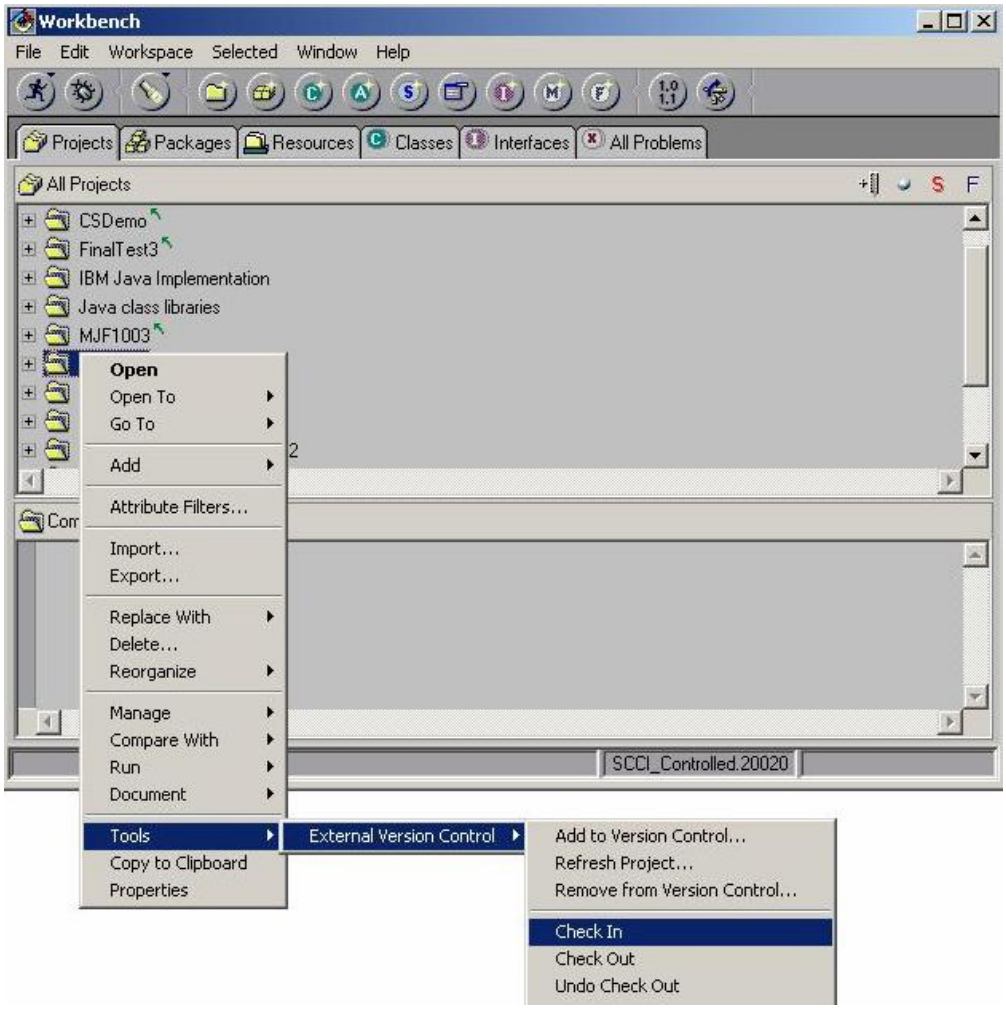


Figure 166. Check In

The next panel received asks you for an Authorization Code and a Change Code, and gives you an option to view host messages. Enter the Codes and, if you want, select the check box.

Figure 167. SCLM Action Details

A VA Java summary window is displayed, informing the user that the file has been checked in. Also, the lock that was previously next to the file, has gone.

Figure 168. Check In Summary

View Log Files

If a problem occurs, there are log files that can be turned on and then accessed. To do this:

1. Click the Start button.
2. Select Run.

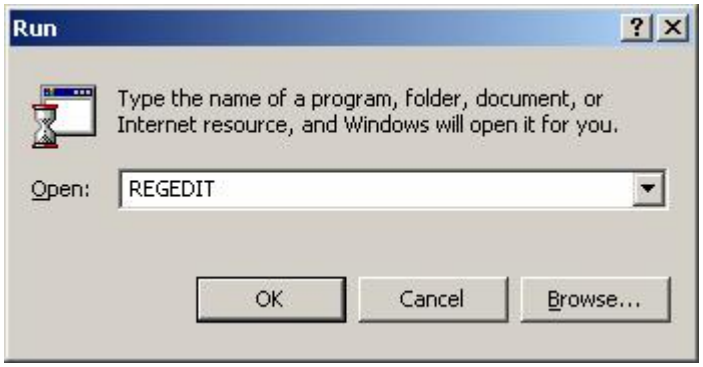


Figure 169. Run dialog box

3. Type REGEDIT on the command line and click OK. The following screen is displayed.

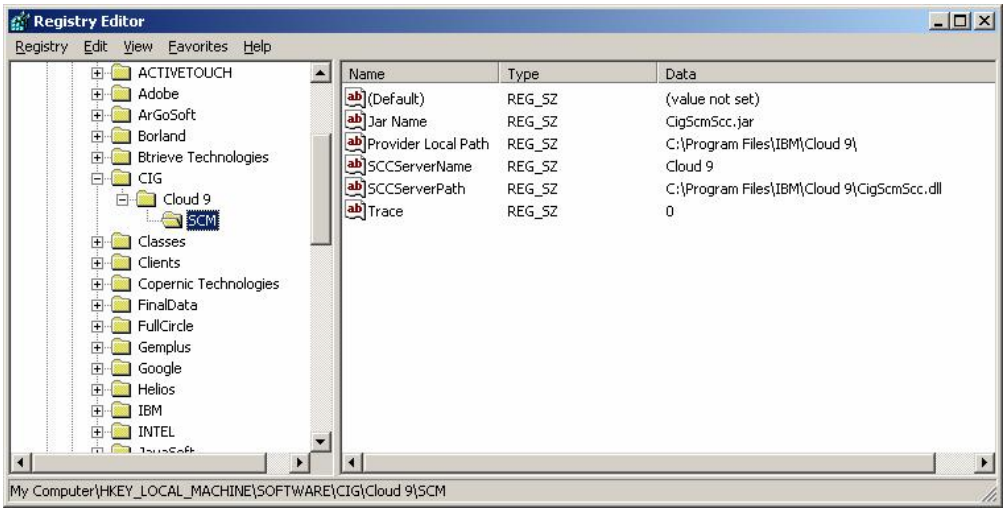


Figure 170.

4. Right-click Trace on the right half of Figure 170.
5. Select Modify.
6. Change the trace value to 0, 1 or 4, depending on what level of tracing you require.
7. Then re-create the error.
8. The trace messages is stored in a folder called ~log, in the user's installation directory. This file contains helpful error information.

Cloud 9/VisualAge for Java - Definitions

IDE - Integrated Development Environment

An IDE is a development tool used for rapid application development. The IDE includes an editor, debugging tool, run-time environment and deployment capabilities. Visual Age for Java provides for an Integrated Development Environment.

SCCI - Source Change Control Interface

This is a Microsoft published specification that describes how IDE vendors interface to Source Change Control systems. The SCCI, also known as the SCC API, describes the functions that IDE vendors support, such as Check-in, Check-out and Project Refresh.

SCM - Software Configuration Management

Software Configuration Management is one of the systems management disciplines that focus on the management of software components. SCM includes capabilities such as version control, life cycle management, build management and component relationships.

SCLM Server

SCLM is the SCM solution developed and distributed by IBM for the OS/390 and z/OS systems. SCLM is an acronym meaning Software Configuration and Library Manager. SCLM is one of the integrated components of TSO/ISPF. The SCLM Server extends the capabilities of SCLM to the user's desktop through both browsers and IDEs. Technically, the SCLM Server is an application called Cloud 9 that runs under the control of the IBM HTTP Server running on the OS/390 or z/OS system.

Cloud 9/VisualAge for Java - Frequently Asked Questions

Q1: After the SCCI interface and SCM system have been selected, a *location working directory needs to be established* **statement displays. Where is the location working directory supposed to be established: on the user's workstation or on a server?**

Answer: The local working directory is a temporary directory used by VisualAge For Java to pass files to Cloud 9. The directory is similar to the C:\TEMP directory used by Windows. The VisualAge for Java working directory must be established on the local user's workstation. You can see an example of the local working directory in Figure 136 on page 114. The example shows a working directory of C:\Cloud9Temp.

Q2: In the example, Project, Alternate, Group, Type and Lang are entered. Does this mean that if multiple Java classes are being extracted from VA Java into SCLM then a separate logon must be performed each time Type or Language change?

Answer: You log on to Cloud 9 only once per invocation of VisualAge for Java, when the first SCCI service is requested. You are not required to log on for each type.

Q3: Can the Java code and the Java output classes both be added, checked out and checked in?

Answer: You can check-in both source and class files into SCLM, using the Cloud 9 SCCI. In addition, other file types, such as graphics, can be added into SCLM using the Cloud 9 SCCI.

Q4: Can code be added into separate SCLM types if needed?

Answer: VA Java files with the same extension are associated with a single SCLM type for a single VA Java project. Therefore .java, .class, .jpg, and .gif files can be stored as separate SCLM types; the files can be stored as the same SCLM type. However, all file extensions with the same extension are stored in the same SCLM type. For example, the user might store both .jpg and .gif files into the SCLM type called GRAPHICS while .java files are stored as type JAVA and .class files are stored as SCLM type CLASS.

Q5: Authorization codes, change codes and languages can be specified through the Cloud 9 IDE panels. Can these fields be validated by exit routines and on which platforms will the routines run?

Answer: Cloud 9 uses standard SCLM services when storing and updating SCLM controlled files. By using published SCLM services, all SCLM exit routines are available. Validation of authorization codes, change codes and languages is typically performed through the use of the SCLM CCID exit routine. SCLM exit routines run in the OS/390 or z/OS environment. SCLM exit routines are described in the *ISPF SCLM Project Manager's and Developer's Guide* and *ISPF SCLM Reference* manuals.

Q6: In the statement *"If the project being added is new and is not located anywhere on the SCLM server, then a panel listing all of the project's files is displayed. Visual Age display panel for every different type of file associated with the project being added to version control."***, what project are you referring to? Is this the VAJ project or is this a definition within SCLM?**

Answer: There are two different projects here: the VisualAge for Java (VAJ) project and SCLM project. The VAJ project includes all of the objects associated with the currently opened VAJ project. The list of files included within the VAJ project is stored as a single member within SCLM known as a SCLM package. Each file within the VAJ project is stored as a separate SCLM member.

SCLM also uses the term Project to describe all files associated with a particular application. All VAJ files associated with a VAJ project are stored under the control of a single SCLM project. An SCLM project can have non-VAJ objects such as COBOL and JCL.

For example, you might have a VAJ project called *Petdemo* that includes twenty java files, twenty class files and ten graphics files. The VAJ project might be stored under the SCLM Order Entry project called ORDENTRY. Also under control of the SCLM ORDENTRY project might be a COBOL billing application.

Q7: During the process of Adding a project to version control, is an ARCHDEF being created to define all of the members being exported from VA Java? All of your examples indicate ARCHDEF or similar named languages/types.

Answer: All of the files names and default type/language definitions associated with a single VAJ project are stored as a single SCLM member. This member, known as a Package, must have a language of ARCHDEF. The examples in the Cloud-9 VAJ documentation show a SCLM type of PACKAGE with a SCLM language of ARCHDEF. The flexibility of SCLM allows the user to define SCLM types and languages other than PACKAGES and ARCHDEF.

Packages use the default language of ARCHDEF.

Q8: I understand that full path names can be added / saved for the VAJ member in Cloud 9. Is this an option that has to be specified each time or can it be set in an option file?

Answer: The full path names are stored in the SCLM-VAJ package. Once the full path name is defined to the SCLM-VAJ package, the full path name is not specified again. If for some reason the full path name does change, then the definition contained within the SCLM-VAJ package can be updated by the SCCI function Remove from Version Control followed by the SCCI function Add to Version Control. The SCCI function Remove from Version Control only updates the SCLM-VAJ package file, and does not physically delete the SCLM file.

Part 3. Using the WebSphere Studio Application Developer

Chapter 9. Cloud 9 WebSphere Studio Application Developer Plug-in

This document is designed to familiarize you with the functionality of the Cloud 9 WebSphere Studio Application Developer Plug-in (WSAD Plug-in). This is a plug-in that you can install onto your PC, so that you can use the Version Control features of WebSphere Studio Application Developer or WebSphere Studio Enterprise Developer. Because the WSAD Plug-in is configured and works in exactly the same way with either WebSphere product, this manual uses the name ″WebSphere Studio Application Developer″ to refer to both WSAD and WSED.

This part of the Guide describes the main aspects of the plug-in's functionality, lists the product requirements, and provides a reference section with some key definitions and an FAQ section to answer any further questions that you may have. The topics covered in this document are:

- Product requirements
- IDE interface walkthrough
  - Adding a project to Version Control
  - Launching the Cloud 9 browser interface
  - Using Add Special
  - Performing a Remote Build
  - Modifying your project settings
  - Refreshing project
  - Using the Check Out facility
  - Creating your Profile
  - Using the Check In facility
  - Viewing log files
- Key term definitions
- Frequently asked questions

Product requirements

The Cloud 9 WSAD Plug-in has been tested using Websphere Studio Application Developer 5.0 and 5.1 and Websphere Studio Enterprise Developer 5.0 and 5.1.1. Older versions of the product may work, but have not been tested. The following list shows the operating systems on which the Cloud 9 WSAD Plug-in has been tested. Other operating systems might be compatible, but have not been tested.

- Windows 2000 Professional
- Windows 2000 Professional SP1
- Windows 2000 Professional SP2
- Windows 2000 Professional SP3
- Windows XP Professional

Note: This document uses the term ″z/OS″ to refer to both the z/OS and the OS/390 operating systems.

Cloud 9 WebSphere Studio Application Developer Plug-in walkthrough

This section contains a comprehensive walkthrough of the Cloud 9 WSAD Plug-in. The walkthrough starts with the Add to Version Control function: Add to Version Control is an initial load of the project's files into SCLM. By the end of the walkthrough, many of the features of the Cloud 9 WSAD Plug-in will have been explained.

Add to Version Control

You can use Add to Version Control to initially place a WSAD project under the control of SCLM. This task only needs to be performed once for the WSAD project. After the project has been loaded into SCLM, you can use the check out, check in, refresh and remove functions to work with the WSAD files.

The first step in adding a project to version control is sharing the project with a change control tool, in this case, Cloud 9.

1. Within the WebSphere Studio Application Developer window, right-click the project that you want to share.
2. Select **Team** > **Share Project**.

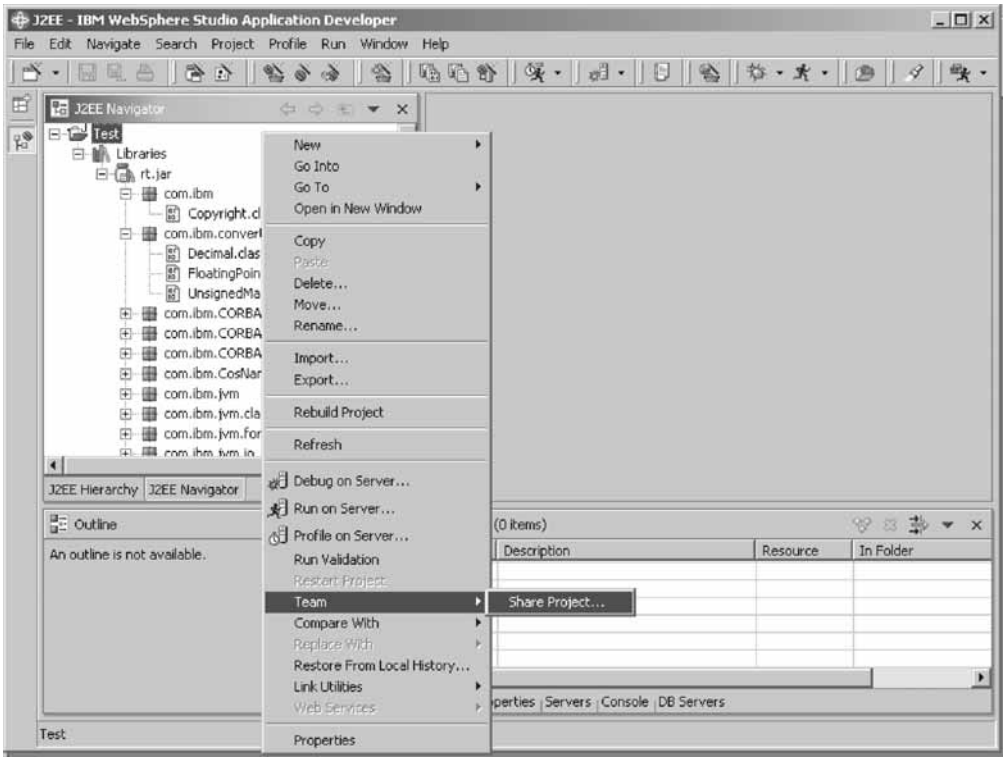


Figure 171. Selecting Share Project

3. From the Share Project window, select Cloud 9 as your source code management handler, then click **Next**.

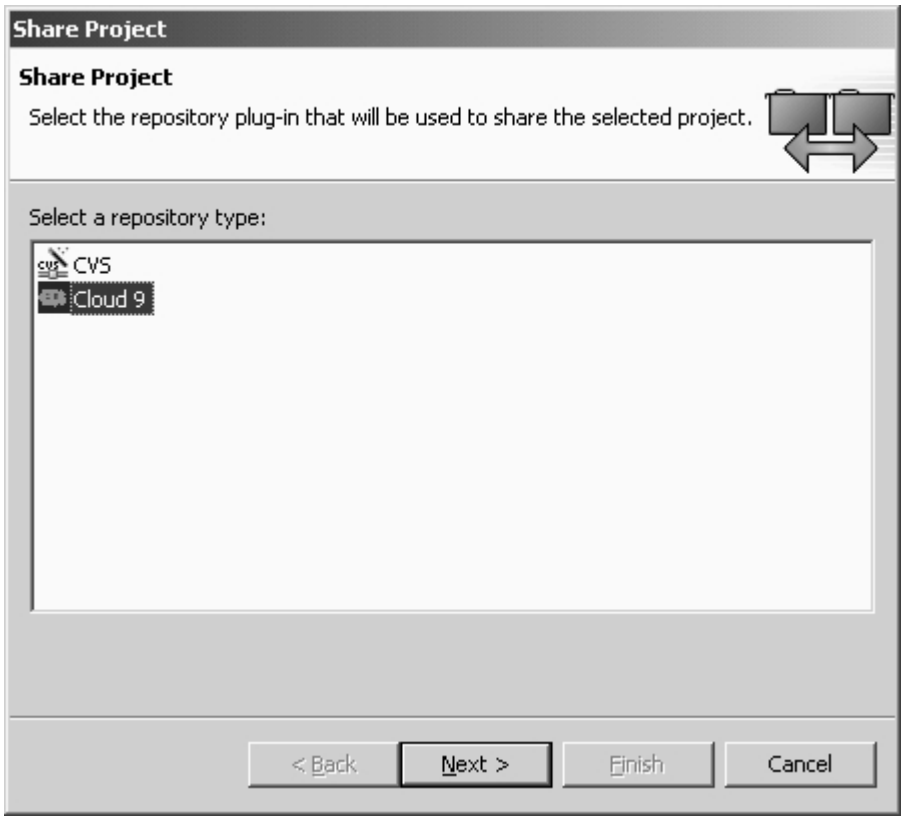


Figure 172. Selecting a source code management handler

4. The next dialog box asks you to verify that you selected Cloud 9. Click **Finish** to confirm that your WSAD project will be shared with Cloud 9.

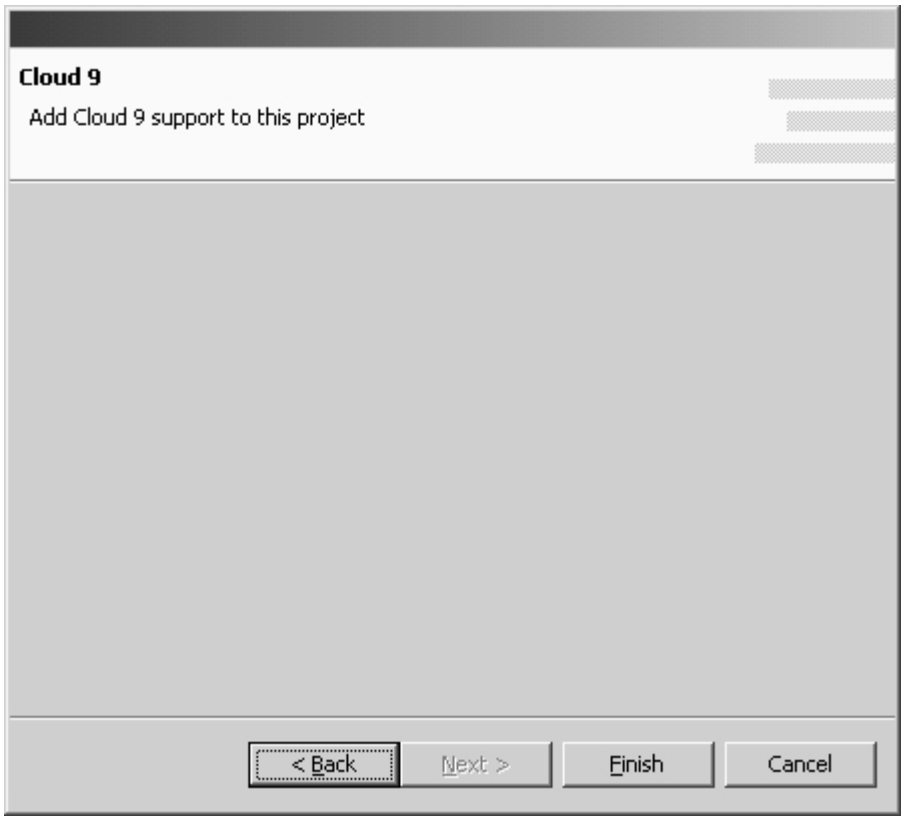


Figure 173. Confirming Cloud 9 as your change control tool

Note: To unshare your project, right-click the project and select **Team** > **Unshare Project**.

After you have shared the project, you can add the project and its files to version control. To do this:

1. Right click on the project, package, or individual files you want to add.
2. Select **Team** > **Add to Version Control**.

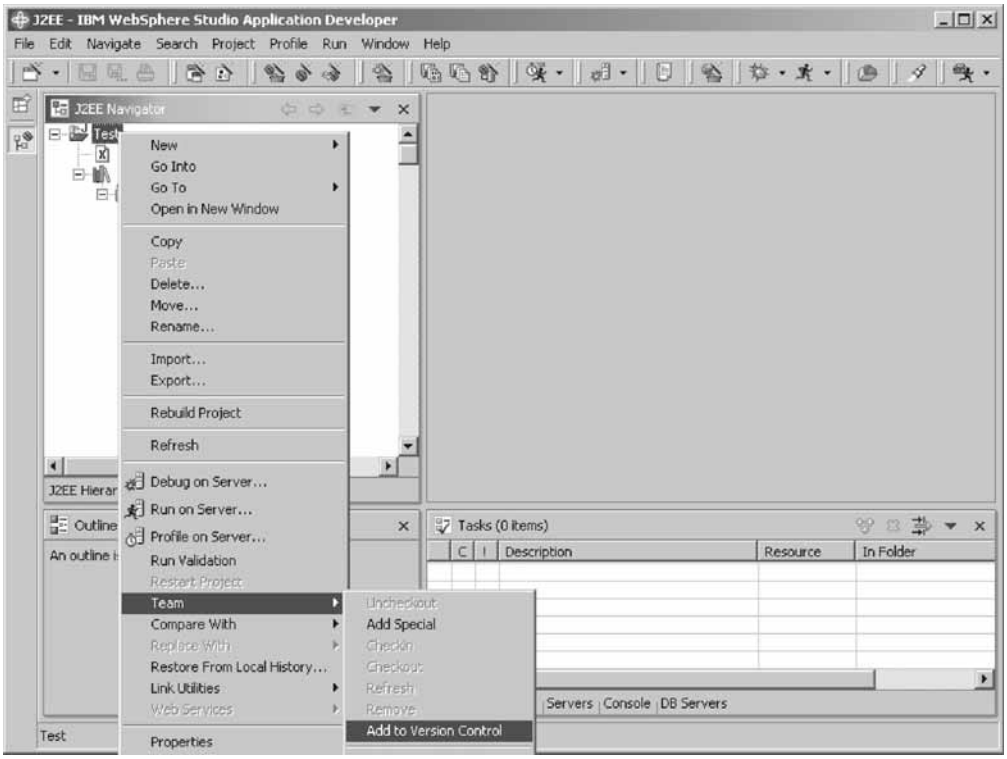


Figure 174. Add to Version Control

3. From the **Select Files to Add** window, select the files that you want to add to version control, then click **OK**.

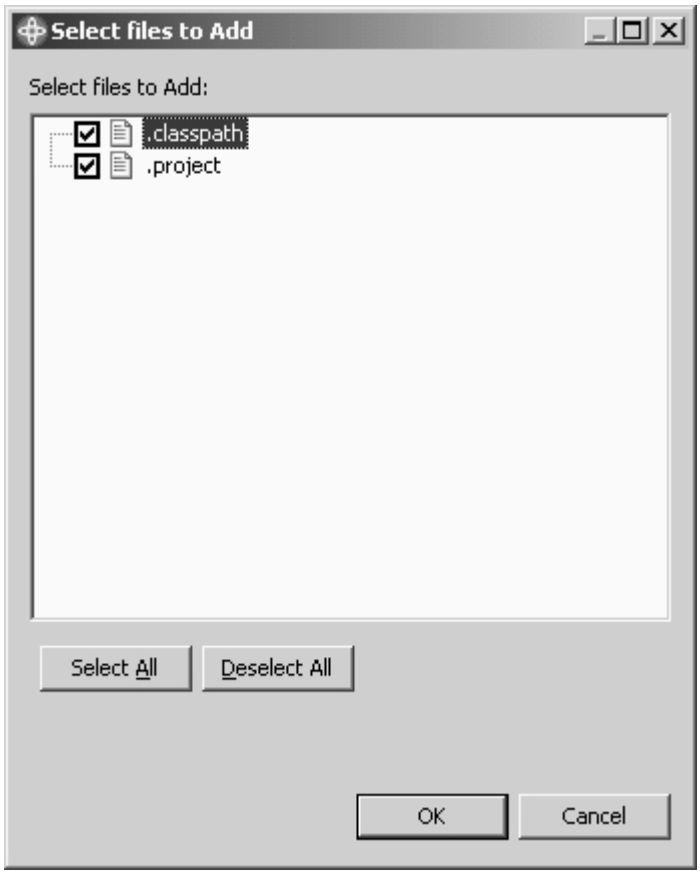


Figure 175. Select files to add

4. In the Login window that appears next, enter your z/OS user ID and password, and the host name or IP address associated with the Cloud 9 HTTP Server. If you are not using port 80, enter a port number.

   If the Cloud 9 executable files, located on the z/OS mainframe, were installed in a location other than `cgi-bin`, you need to specify the alternative location of the Cloud 9 mainframe executable files. Leaving this field blank tells the Cloud 9 WSAD Plug-in that the host executable files are in the default location, `../cgi-bin`.

Figure 176. Cloud 9 Login

5. In the **Project Settings** window (Figure 177 on page 148), you can add your files to an existing Manifest or create a new Manifest.

   When you create a new Manifest, a Host Manifest file is created in USS and a Local Manifest file is created in your local working directory. When you add files to an existing Manifest to which you have not added files before, a Local Manifest file is created. The Host Manifest file contains a listing of all of the files which are a part of that WSAD project and metadata about the project, including default extension mapping to SCLM types and languages. The Local Manifest file is used to cache your Cloud 9 settings and includes the Manifest name on the host, the host IP address and port number, and other settings. See "Cloud 9 - WSAD Definitions" on page 163 for more information about Host Manifest and Local Manifest files.

   To create a new Manifest:

   a. If necessary, click **New** in the **Project Settings** window.

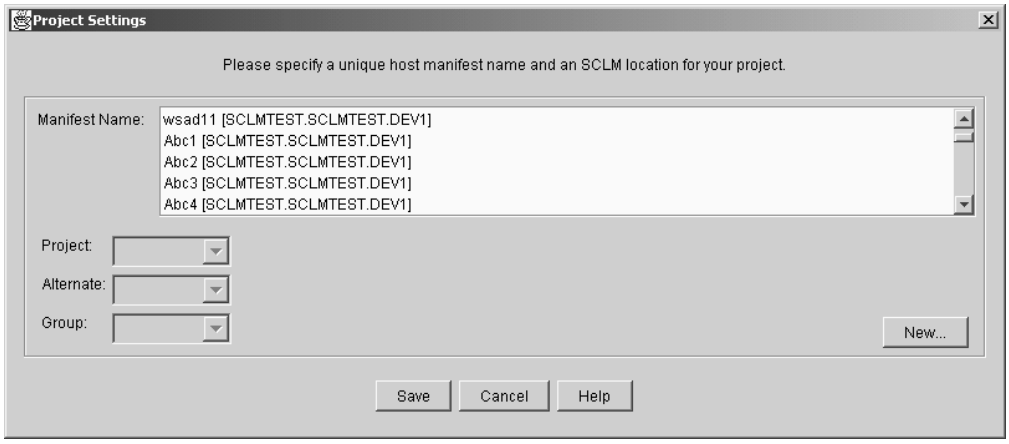


Figure 177. Project Settings

A name for your new Manifest is suggested for you, based on the selected WASD project name. You can accept this name, modify it or replace it with your own choice.

b. In the **Project** field, type the name of an existing SCLM project. If you are not sure of the project name, click the button adjacent to the field to populate the dropdown list, then select the name from the list.

   Note: If you have a lot of SCLM projects, this may take a few minutes.

c. Select a name from the **Alternate** list. This list shows names associated with your selected SCLM project.

d. Select a Group from the **Group** list. This is list shows names associated with your selected alternate project.

e. Click **Save** to save your selections and continue, or click **Return** to return to the SCM Project Profile Selection - existing Manifests window.

To select an existing Manifest:

a. In the **Project Settings** window, select the name of an existing Manifest.

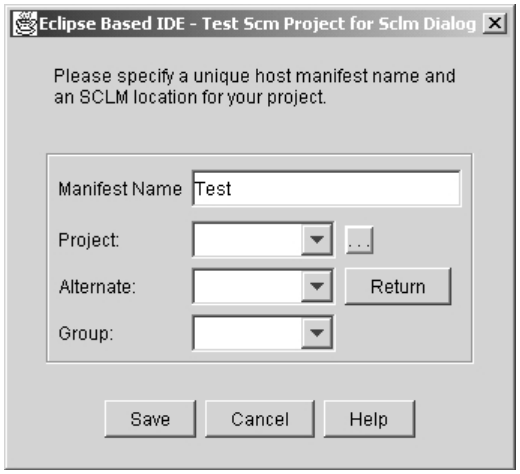


Figure 178. Project Settings

b. Select a name from the Project list. This list shows the SCLM project names associated with your selected Manifest.

c. Select a name from the **Alternate** list. This list shows names associated with your selected SCLM project.
d. Select a Group from the **Group** list. This is list shows names associated with your selected project.
e. Click **Save** to save your selections and continue.

6. Specify an SCLM Authorization Code and Change Code to be associated with all the files that you are adding into SCLM.

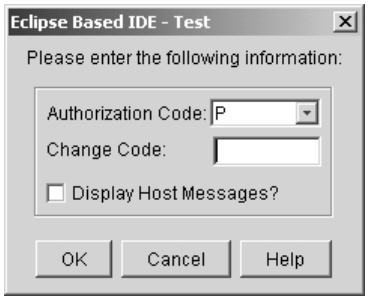


Figure 179. Specifying SCLM Authorization Codes

If required, select the **Display Host Messages** checkbox, which displays the SCLM messages that are generated when the SCLM Save operation is performed. An example of these messages is shown in Figure 181 on page 150.

7. In the next window, select the Language and Type for the files being added into SCLM, click OK, and then watch as the selected files are placed under the control of SCLM.

Figure 180. Default SCLM File Type Mapping

This dialog box is redisplayed for each type of file (extension) being added into SCLM control. Select the Language and Type for each file type until all types have been added.

If you selected the **Display Host Messages** option in the SCLM Action window, the SCLM messages window is displayed when all of your project's files have been

added into SCLM. If you did not select the option, you are returned to the WSAD main screen when all of your project's files have been added into SCLM.

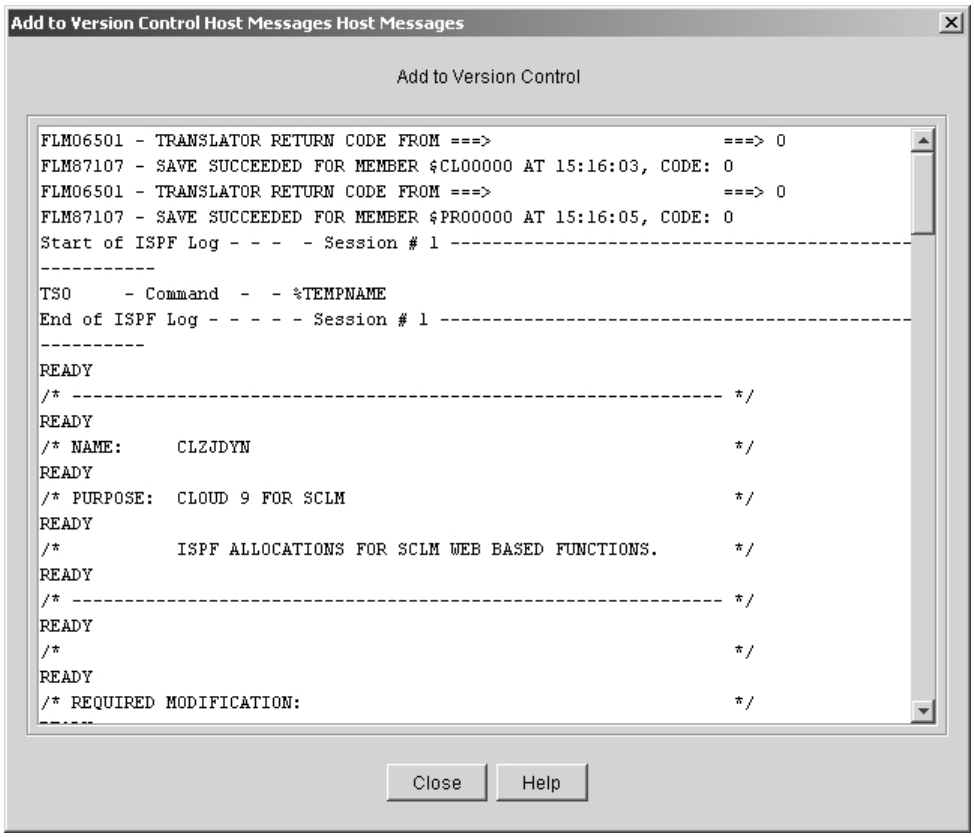


Figure 181. SCLM messages

When you close this window, you are returned to the WSAD main screen. The associations that you made between the file extension and the SCLM Type and Language are stored in your Host Manifest file. When you add files with the same extension in the future, the files will automatically be put into SCLM with the same Type and Language settings. You can override these settings by adding a file to version control using the Add Special command. (See "Add Special" on page 151 for details.)

Projects and files can also be removed from version control. To remove a project or files from version control:

1. Right-click the project or file you wish to remove.
2. Select **Team** > **Remove**.

Launching the Cloud 9 browser interface

You may wish to use the Cloud 9 browser interface to view the files that you have just added into SCLM version control. To open your version control system from within WebSphere Application Developer:

1. Right click on a project that is under version control.
2. Select **Team** > **Launch Cloud 9**.

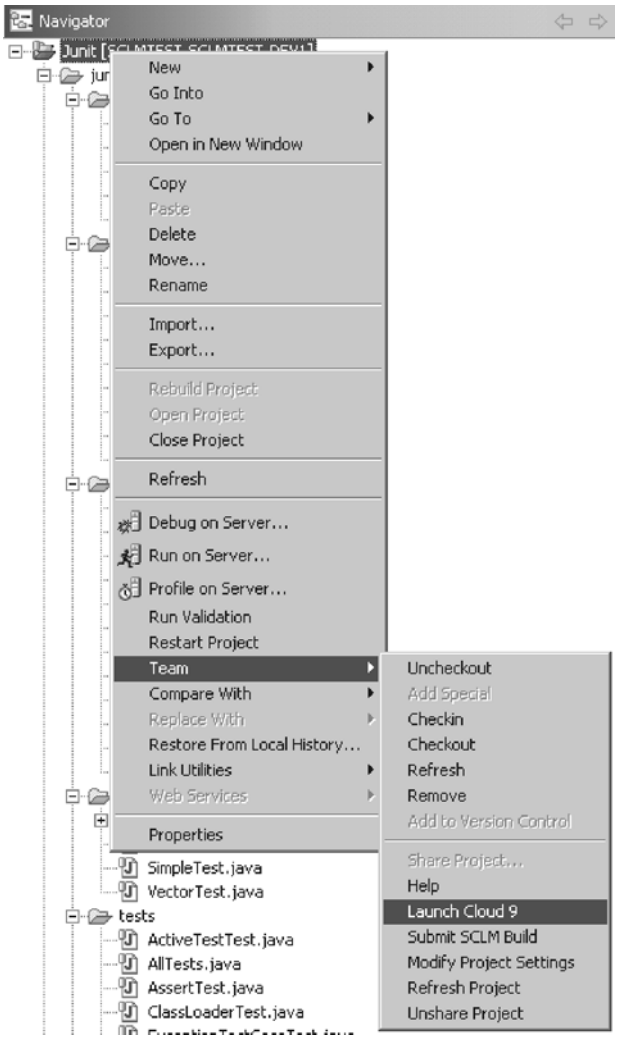


Figure 182. Launch Cloud 9

From within Cloud 9, you can use the LIST SCLM FILES option to check that your files have been correctly added into SCLM.

Add Special

You can add a file to version control using a Language and Type that is different to the one specified in your Host Manifest file.

To do this:

1. Right-click on the file that you want to add.
2. Select **Team** > **Add Special**.
3. In the **Select Files to Add** window (see Figure 175 on page 146), ensure that your files are selected and click **Next**.
4. In the **Add Special** window, specify your Authorization Code, Change Code, Language and Type. You can use this window to override the default Language and Type specifications.

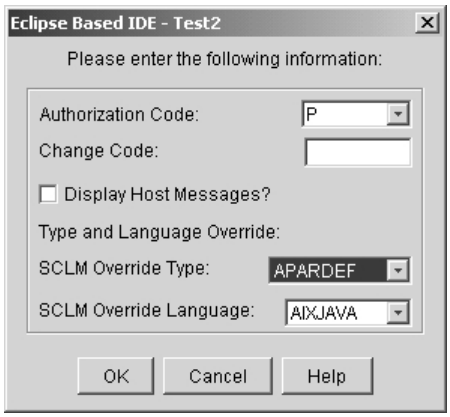


Figure 183. Add Special

Submitting an SCLM build

After a project and its files have been added to version control, you have the option of submitting a batch SCLM build. Requesting a remote build calls the SCLM Build Translator to be invoked for each file. For Java files, the remote build will cause the Java programs to be compiled.

To perform a remote build:

1. Right-click the project for which the build will be performed.
2. Select **Team** > **Submit SCLM Build**.

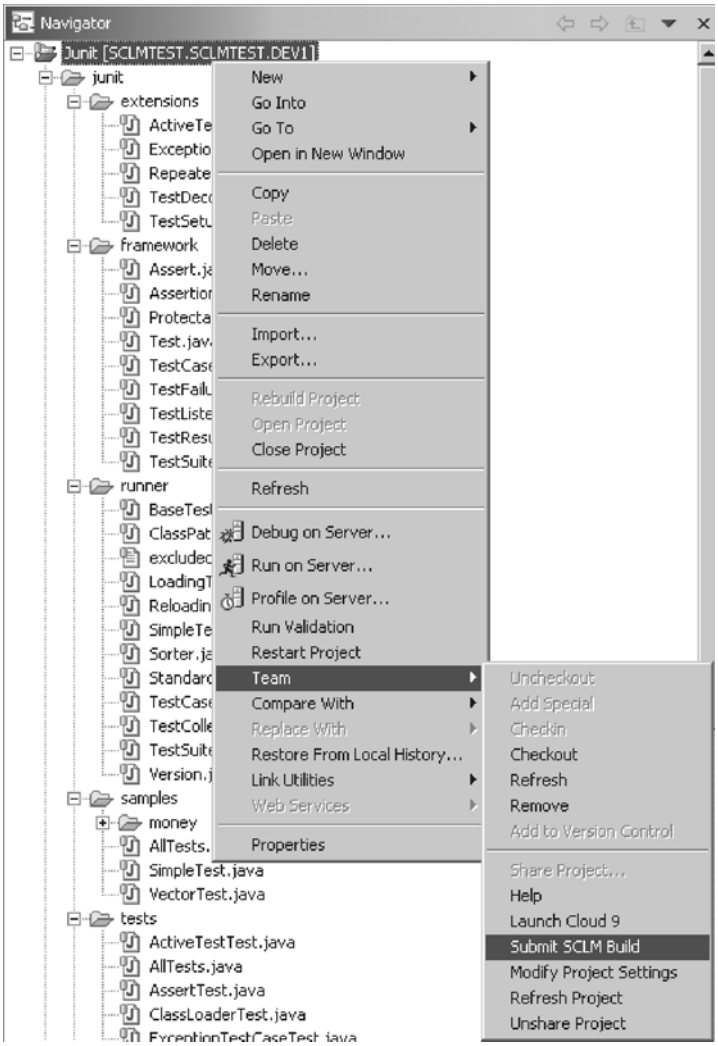


Figure 184. Submit SCLM Build

3. A message will confirm whether or not the build has been submitted.

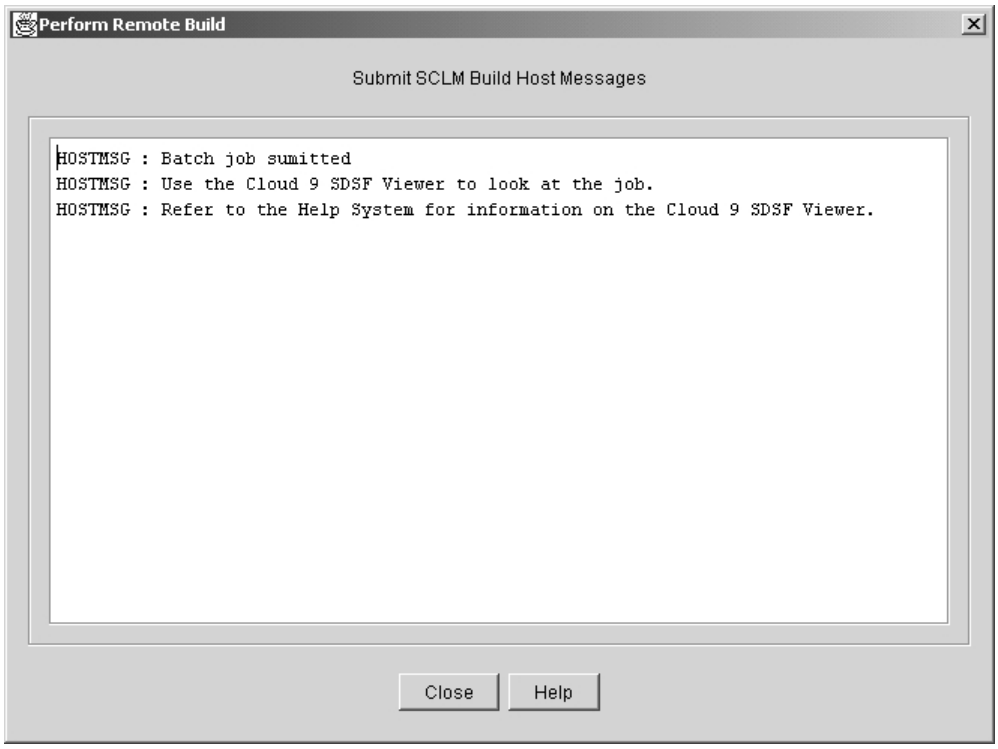


Figure 185. Submit SCLM Build

Remote builds can also be performed when checking in a file, which is explained further in that section.

Modify project settings

After a project had been added into SCLM, you can change the group that the project is stored in. This is done using the Modify Project Settings option. To access this option:

1. Right-click on the project.
2. Select **Team** > **Modify Project Settings**.
3. Change the SCLM entry group of the project.

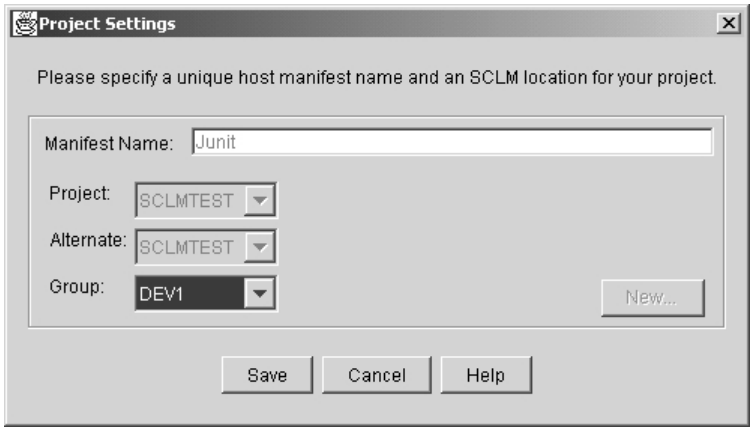


Figure 186. Modify Project Settings

In some cases you may want to add the project to a non-entry SCLM group, which will be listed in the group dropdown. This will change the group for the project in your local manifest. The project now contains all the data from the non-entry SCLM group and your local manifest correctly contains the entry group you want to work in.

Refresh Project

Now that the WSAD project's files have been added to version control, you may wish to edit the project's files. To be safe, you may want to do a Refresh Project, just to make sure you are working with the most current version of the project. To refresh the project:

1. Right click on the project under version control.
2. Select **Team** > **Refresh Project**. The Refresh Project window will display the list of files registered in the Host Manifest for your project. If you are missing any files associated with the host project they can be downloaded to your machine.

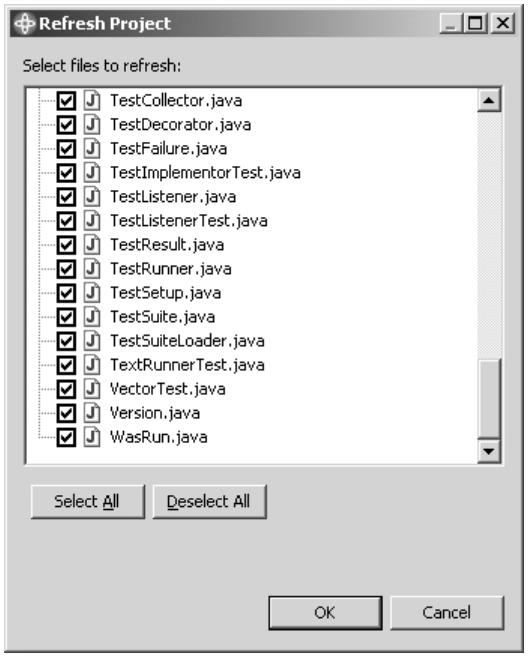


Figure 187. Refresh Project

3. Review the list of selected files, then click **OK** to confirm your choices. The files will be compared with the version in SCLM and the most current version of the file will be returned to your local repository.

If you wish to refresh individual files:

1. Right click on the files that you wish to refresh.
2. Select **Team** > **Refresh**. Your selected files will be listed in the Refresh Files window.

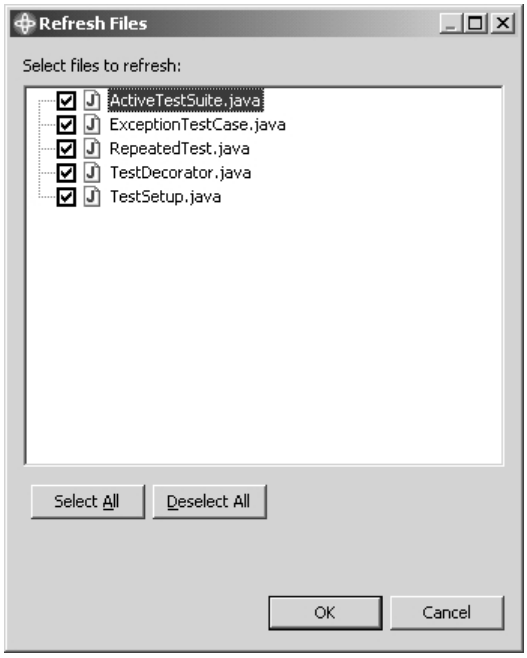


Figure 188. Refresh Files

3. Review your selections, then click **OK** to confirm your choices. The file or files will be compared with the version in SCLM and the most current version of the file will be returned to your local repository.

Check Out

After the WSAD project has been refreshed, the files being edited need to be checked out from SCLM. A lock is placed on a file when the user does a Check Out in WSAD.

To Check Out a file:

1. Right click on the file that needs to be checked out.
2. Select **Team** > **Check Out**. The Checkout window will display your selected files.

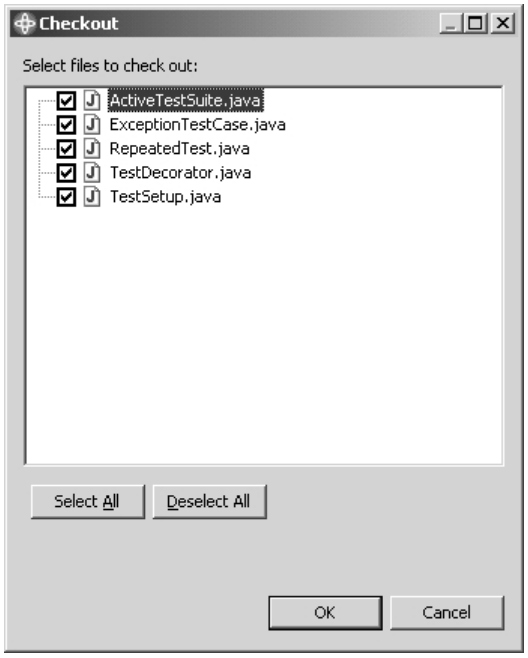


Figure 189. Check Out

3. Review your selections, then click **OK** to confirm your choices.
4. In the next window, change the Authorization Code (if desired) and enter a valid Change Code. If required, select the option to view host messages. Click **OK**.

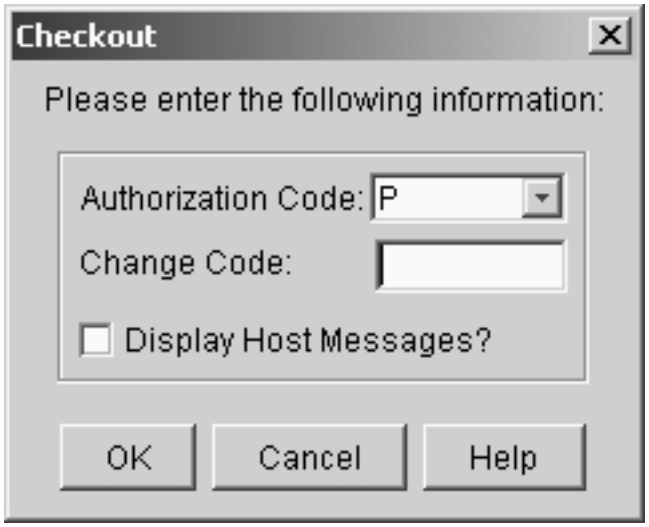


Figure 190. Check Out

5. From this point two different screens may be shown. If another user has not checked out your selected files, then they are checked out to your user ID and a check mark appears next to the file on the WSAD menu.

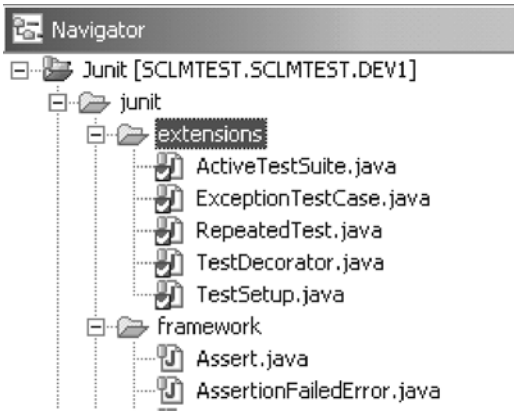


Figure 191. Checked out files in WSAD list

If the file or files you are requesting are already checked out by another user, you cannot check out the file until the other user has checked it back in. You will see a Checked out window that shows all the information needed to contact the user who has checked out the file. If the other user has completed their profile information, their picture, user ID, phone number, and an email link are provided.

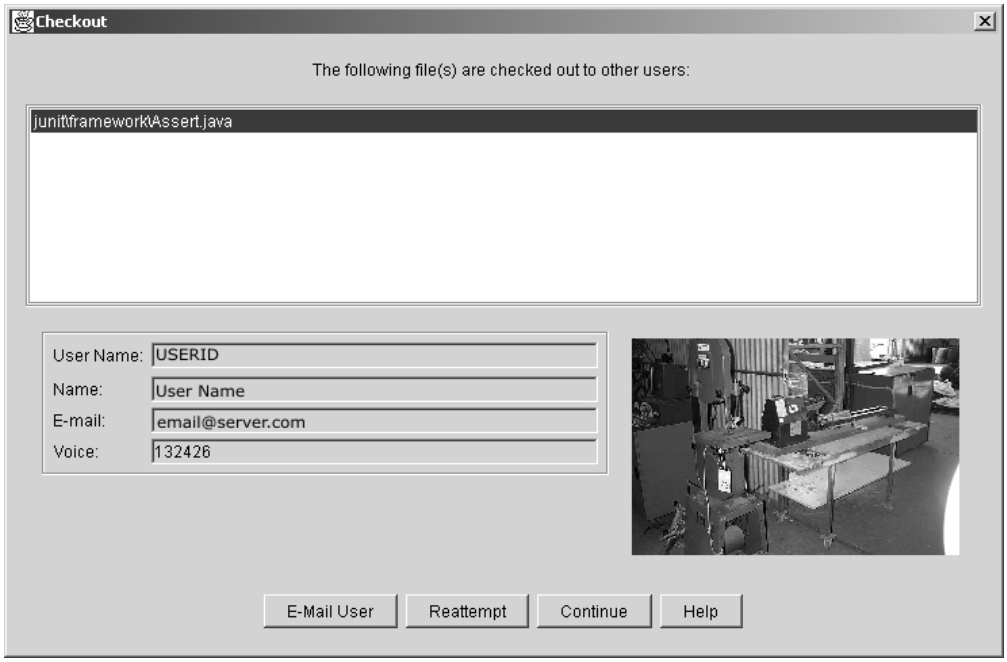


Figure 192. Checked out files window

If you are able to contact the other user, and they can check the file in immediately, you can click **Re-attempt Check Out** to go on with the editing process. Otherwise, click **Continue** to close the window without checking out the file.

Create your Profile

The Re-Attempt Check Out dialog uses information stored in your Cloud 9 Profile. To set up your Cloud 9 profile:

1. Launch the Cloud 9 Browser Interface.

2. Click the **PROFILE** link on the main menu to bring up the Profile page.

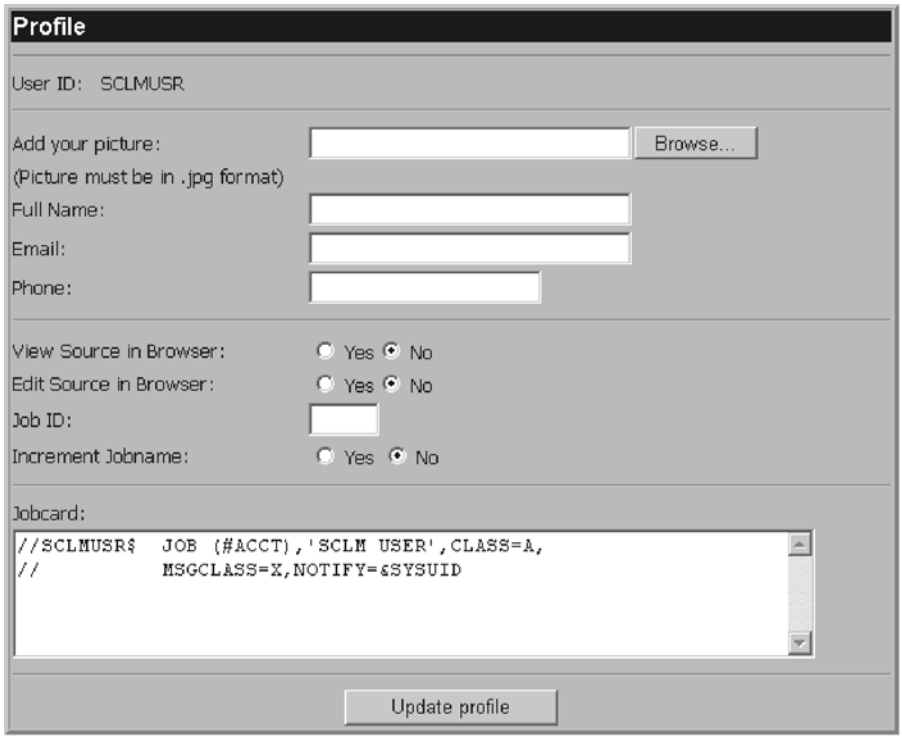


Figure 193. Profile page in Cloud 9

3. Fill in the fields for your name, email, phone, and picture (only .jpg images) and click **Update profile**.

   This information will then be returned to other users when they attempt to check out files already under your control. The rest of the fields on the Profile panel are used for specific Cloud 9 functions only and are not used directly by the Cloud 9 WSAD Plug-in.

Check In

Now that the file is checked out, it is ready to be edited. Double click on the file to activate the edit window and make whatever changes are necessary. Once the file has been edited, it is ready to be checked in to SCLM. To Check In a file:

1. Save any changes made to the file.
2. Right click on the file and select **Team** > **Check In**.

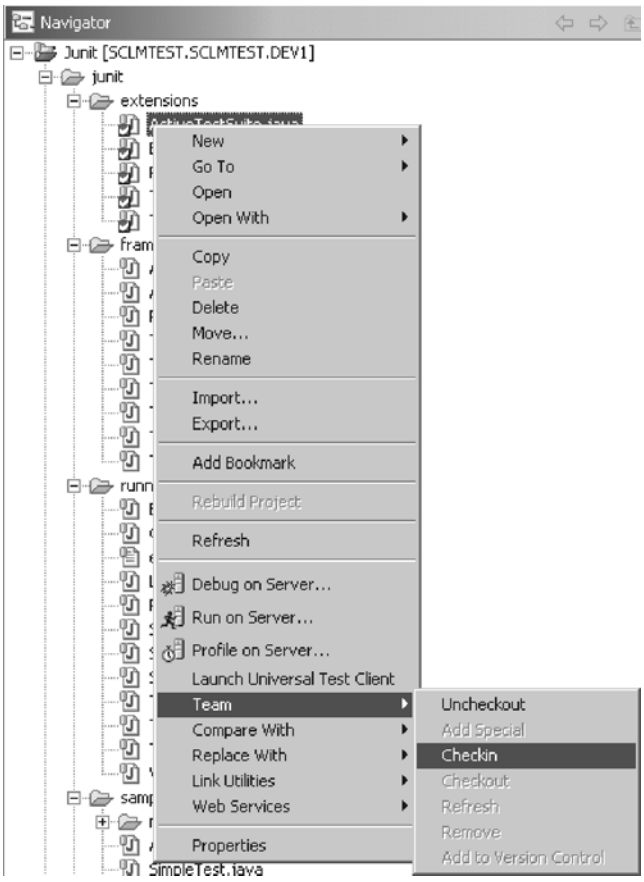


Figure 194. Check in

3. The Checkin window will display your selected files.

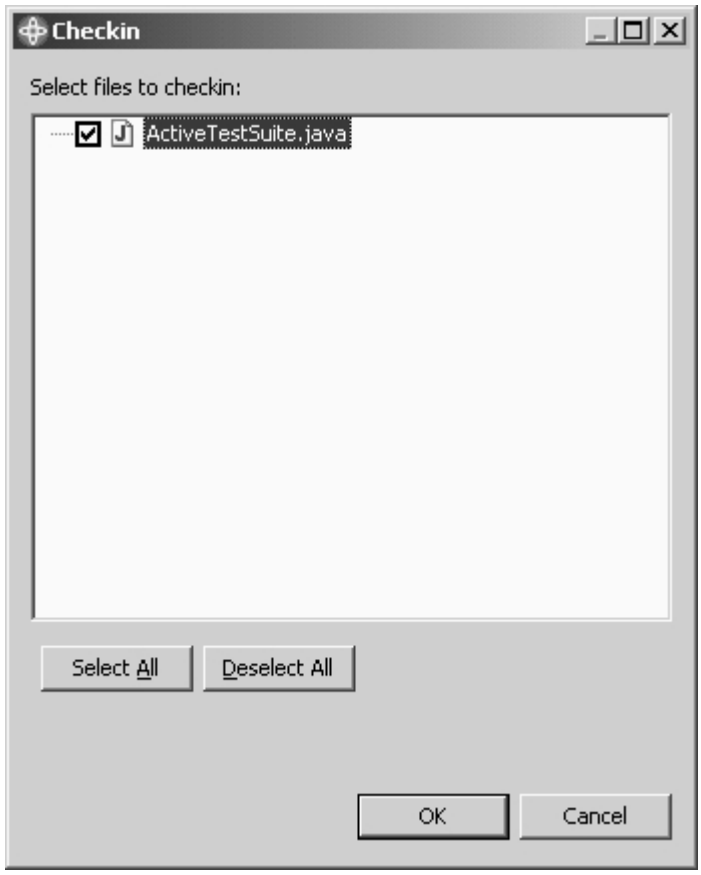


Figure 195. Checkin files

4. Review your selections, then click **OK** to confirm your choices.
5. In the next window, change the Authorization Code (if desired) and enter a valid Change Code. If required, select the option to view host messages. Click **OK**.

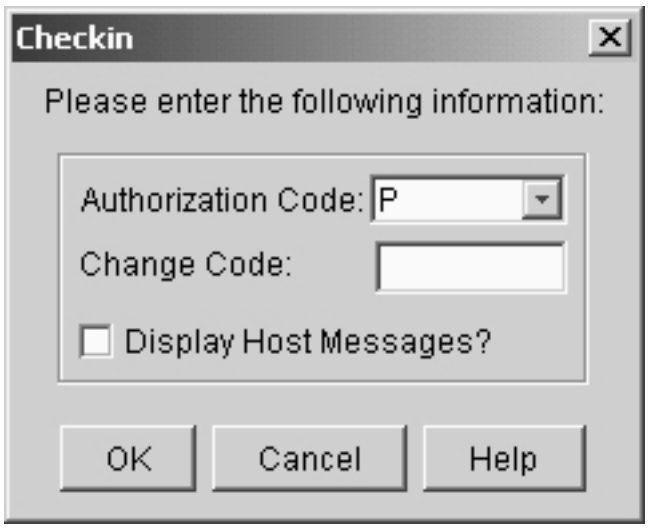


Figure 196. Checkin - authorization and change codes

Once the file(s) has been checked in, then you will be returned to the WSAD main menu. Also the check mark, which was previously next to the file, will be gone.

Note: If you want to change the SCLM Type of a file after editing, remove the file from version control, and then add it back in using the Add Special function.

View Log Files

If a problem occurs, there are log files that can be turned on and then accessed. To do this:

1. In the WSAD application, select **Window** > **Preferences**
2. On the left side of the screen, select **Team** > **Cloud 9 Provider**.

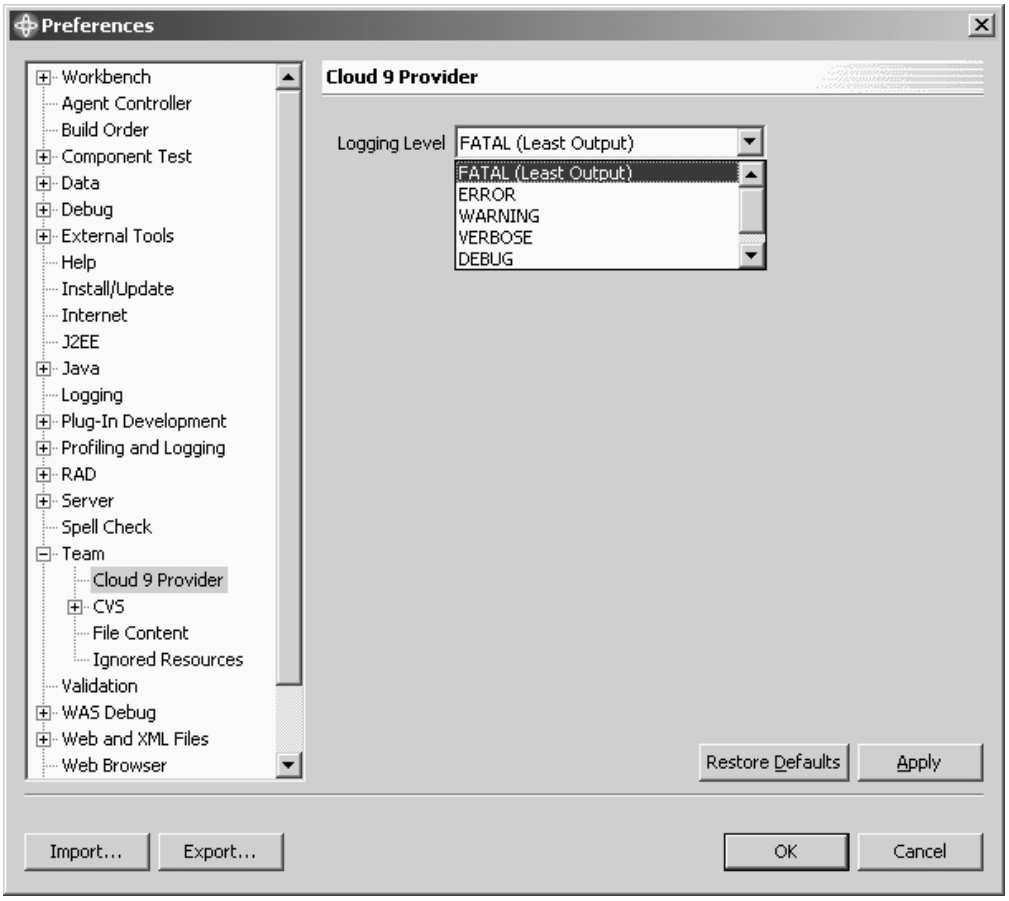


Figure 197. WSAD Preferences

3. From the drop-down list, select the logging level that you require and click **OK**.
4. Recreate the error.
5. The trace messages will be stored in a folder located in Program Files/IBM/Cloud 9/~log or in the directory you specified on the install. These files will contain helpful error information.

Cloud 9 - WSAD Definitions

IDE-Integrated Development Environment

An IDE is a development tool allowing rapid application development. The IDE includes an editor, debugging tool, run-time environment, and deployment capabilities. WSAD provides for an Integrated Development Environment.

SCM - Software Configuration Management

Source Configuration Management is one of the systems management disciplines that focus on the management of software components. SCM includes capabilities such as version control, life cycle management, build management, and component relationships.

SCLM Server

SCLM is the SCM solution developed and distributed by IBM for the z/OS platform. SCLM is an acronym meaning Software Configuration and Library Manager. SCLM is one of the integrated components of TSO/ISPF. The SCLM Server extends the capabilities of SCLM to the end-user's desktop through both browsers and IDEs. Technically, the SCLM Server is an application called Cloud 9 that executes under the control of the IBM HTTP Server running on the z/OS platform.

Local Manifest

The local manifest is an .xml file stored in the work directory for a WSAD project which has been placed under Cloud 9's control. It is named with a ~, followed by the project name with an .xml extension, and is located in the work directory specified for the project. For example, a WSAD project named Animals with a work directory of C:\Animals would contain a file named ~Animals.xml.

This local manifest is used to cache your Cloud 9 settings. It includes the manifest name on the host, the host IP address and port, and also stores certain settings, such as the last change code used and last authorization code selected.

Under certain circumstances, it may be necessary to delete this file. If, for example the hosts SCLM configuration has been modified or a project's location in SCLM has changed, a user would be required to perform a Remove from Version Control operation on the WSAD project. Prior to re-adding the project to version control, WSAD should be shut down and the local manifest for the project deleted, in order to match the new SCLM settings. This removes the cached location information and permits specification of the new location upon performing an Add to Version Control action on the project.

Host Manifest

The host manifest is a flat file, stored under USS in the manifest directory, parallel to the cgi-bin folder containing the Cloud 9 executables. The host manifest consists of two sections. The first contains metadata about the project, including default extension mapping to SCLM types and languages. Maintaining this default mapping on the host prevents the user from having to associate each file with a type and language. Upon creating a new project, users are prompted to map file extensions to these types. That preference is then stored in the manifest on the host, and will be used as the default SCLM type and language for other files with the same extension. The second part of the host manifest contains a listing of all of the files which are a part of that WSAD project. When actions, such as refresh project, are performed the manifest is used to determine which

members belong to that WSAD project. This allows a single SCLM project to be used to manage an arbitrary number of WSAD projects.

The host manifest does not require any maintenance, as it is kept updated by actions against the project. While loss of or damage to the host manifest will not result in any data loss, as the actual files are stored in SCLM, the host manifest directories should be backed up as part of a regular backup and disaster recovery strategy. If, for some reason, the host manifest files are deleted, then the user will lose the ability to add the project to version control. When this occurs, the user should perform an 'Unshare Project' action, which will automatically remove the Cloud 9 metadata files from the project. The user may then re-add the project to version control and either select an existing manifest or create a new one. Information on backup procedures can be found in the Cloud 9 Installation Guide (ch.20).

Cloud 9 - WSAD Frequently Asked Questions

Q1. On the initial add to version control, all the source and class files are listed. Is it possible to provide a filter to deselect the class files, as on a very large project it would be very tedious to individually select or deselect them?

Answer: You can use the provided Ignored Resources Preference page to add and remove file name patterns you wish to ignore. This is available from **Window** > **Preferences** > **Team** > **Ignored Resources**. Just click the **Add** button on the far right of the panel and enter in whatever file types you want blocked.

Q2. In the example, Project, Alternate, and Group are entered. This raises a number of questions:

Q2.1. Does this mean that if multiple Java classes are being extracted from WSAD into SCLM then a separate logon must be performed each time Type or Language change?

Answer: You will logon to Cloud 9 only once per invocation of WSAD, when the first Plug-in service is requested. You are not required to re-login for each type.

Q2.2. Can the Java code and the Java output classes both be added, checked out, and checked in?

Answer: You can check-in both source and class files into SCLM using the Cloud 9 WSAD Plug-in. In addition, other file types such as graphics can be added into SCLM via the plug-in.

Q2.3. Can code be added into separate SCLM types if needed?

Answer: WSAD files with the same extension are associated with a single SCLM type for a single WSAD project. So .java, .class, .jpg, or .gif files can be stored as separate SCLM types; the files could be stored as the same SCLM type. However, all file extensions with the same extension are stored in the same SCLM type. For example, the user might store both .jpg and .gif files into the SCLM type called GRAPHICS while .java files are stored as type JAVA and .class files are stored as SCLM type CLASS.

Q3: Authorization codes, change codes, and languages can be specified through the Cloud 9 WSAD Plug-in panels. Can these fields be validated via exits and which platform will the exits run on?

Answer: Cloud 9 uses standard SCLM services when storing and updating SCLM controlled files. By using published SCLM services, all SCLM exits are available. Validation of authorization codes, change codes, and languages is typically performed through the use of the SCLM CCID exit.

SCLM exits execute in the z/OS environment. SCLM exits are described in the ISPF SCLM Developer's Guide and ISPF SCLM Reference manuals.

Q4. The term project is mentioned throughout the Help system. What project are you referring to? Is this the WSAD project or is this a definition within SCLM?

Answer: There are two different projects here; the WSAD project and SCLM project. The WSAD project includes all of the objects associated with the currently opened WSAD project. The list of files included within the WSAD project is stored as a flat file in USS, known as the host manifest. Each file within the WSAD project is stored as a separate SCLM member.

SCLM also uses the term Project to describe all files associated with a particular application. All WSAD files associated with a WSAD project are stored under the control of a single SCLM project. An SCLM project can have non-WSAD objects such as COBOL and JCL.

For example, you might have a WSAD project called Petdemo that includes twenty java files, twenty class files, and ten graphics files. The WSAD project might be stored under the SCLM Order Entry project called ORDENTRY. Also under control of the SCLM ORDENTRY project might be a COBOL billing application.

Q5. I understand that full path names can be added / saved for the WSAD member in Cloud 9. Is this an option that has to be specified each time or can it be set in an option file?

Answer: The full path names are stored in the SCLM-WSAD package. Once the full path name is defined to the SCLM-WSAD package then the full path name is not specified again. If for some reason the full path name does change, then the definition contained within the SCLM-WSAD package can be updated via the PLUG-IN function Remove from Version Control followed by the PLUG-IN function Add to Version Control. The PLUG-IN function Remove from Version Control only updates the SCLM-WSAD package file, and does not physically delete the SCLM file.

Part 4. Using the JES2 SDSF Viewer

Chapter 10. JES2 SDSF Viewer

The Job Entry Subsystem 2 Spool Display and Search Facility (JES2 SDSF) Viewer, hereinafter called the SDSF Viewer, is used to display at the contents of batch jobs. This chapter describes how to:

- Start the SDSF Viewer
- List spool files
- Perform actions against files

Starting the Viewer

To start the SDSF Viewer, enter the following in your Web browser location entry field:

```
host's ip-address:port/sdsf.htm
```

where *host's ip-address:port* is the address and port of the system where you are running Cloud 9, and *sdsf.htm* is used **as is** to start the SDSF viewer (note that *sdsf* is in lowercase). The SDSF Viewer panel displays.

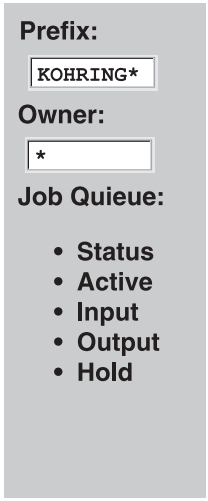


Figure 198. SDSF Viewer first panel

The left side of the panel contains the Viewer menu and two input fields. The functions of these items are:

Prefix SDSF Viewer queries default to the user ID * Prefix mask. To query using a different mask, enter the job ID mask in the *Prefix* input field. The resultant list is filtered on the mask value. The purpose of the Prefix input field is equivalent to entering the **PREFIX** command on the command line in SDSF to override the default value.

Owner
The purpose of the *Owner* input field is to change the default of owner (*) to a more specific value. This field corresponds to the *Owner* field in the job information of SDSF.

Job Queue

- Status — equivalent to issuing the 'st' line command in SDSF. Shows all jobs regardless of status.
- Active — equal to issuing the 'da' line command in SDSF. Shows a list of currently executing jobs.
- Input — equivalent to issuing the 'i' line command in SDSF. Shows a list of jobs awaiting execution.
- Output — equivalent to issuing the 'o' line command in SDSF. Shows a list of jobs waiting to print.
- Hold — equivalent to issuing the 'h' line command in SDSF. Shows a list of jobs on the output hold queue.

To view output, input, or active JES2 files, the user must enter a Prefix (with or without wild card), an Owner (wild card allowed), then select a queue type from the menu.

Listing JES2 Spool Files by Job Queue Type

After entering the appropriate information in the SDSF Viewer's main panel and selecting a queue type, a list of results is displayed on a new panel. The row that displays with each list varies, depending on the type of list requested.

The Status Queue row fields

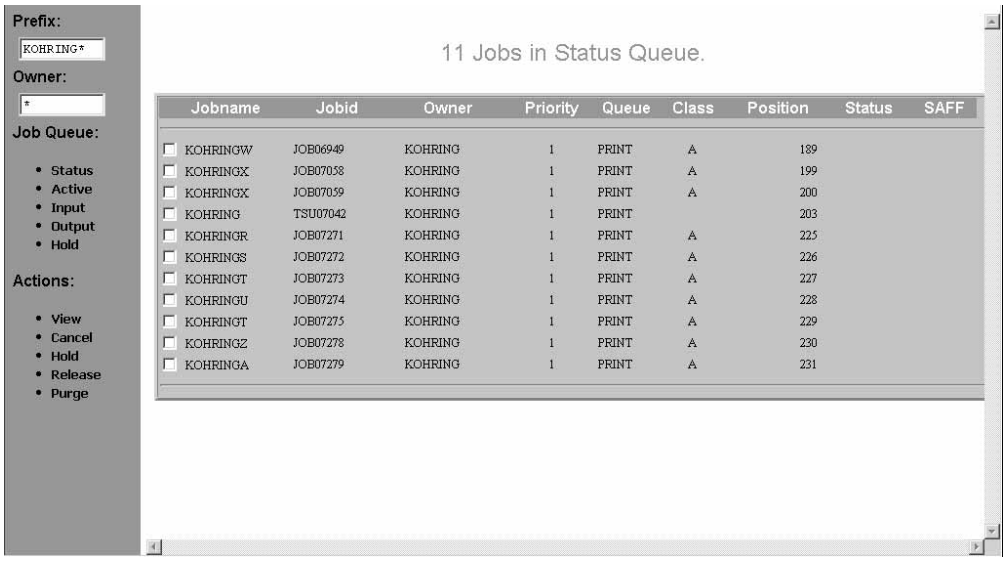


Figure 199. Result of STATUS List Request

Jobname The name of the job and address space.

Jobid The number assigned from JES2.

Owner The user ID of the person who submitted the job.

Priority The JES2 input or output priority.

Queue The JES2 queue name.

Class The JES2 output class for routing/printing.

Position The position in print queue.

Status Job Status.

SAFF System ID where job is running.

The Active Queue row fields

Figure 200. Result of ACTIVE List Request

Jobname The name of the job and address space.

Jobid The number assigned from JES2 Owner.

Stepname The step currently being issued.

Procstep If active, the current procedure step.

Owner The user ID of the person who created the task.

CPU % The percentage of the CPU used by the task.

CPU Time Number of CPU seconds used by the task.

IO# Number of EXCPs used by the task.

The Input Queue row fields

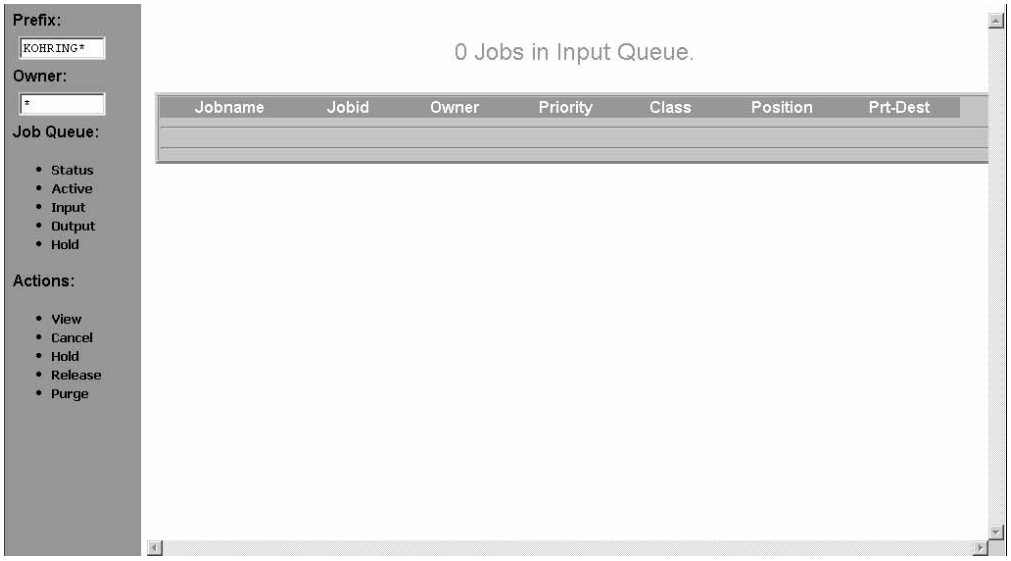


Figure 201. Result of INPUT List Request

Jobname The name of the job and address space.

Jobid The number assigned from JES2.

Owner The user ID of the person who submitted the job.

Priority The JES2 input priority.

Class The JES2 input class (Initiator).

Position The position in the input queue, if waiting.

Prt-Dest The printing destination.

The Output Queue row fields

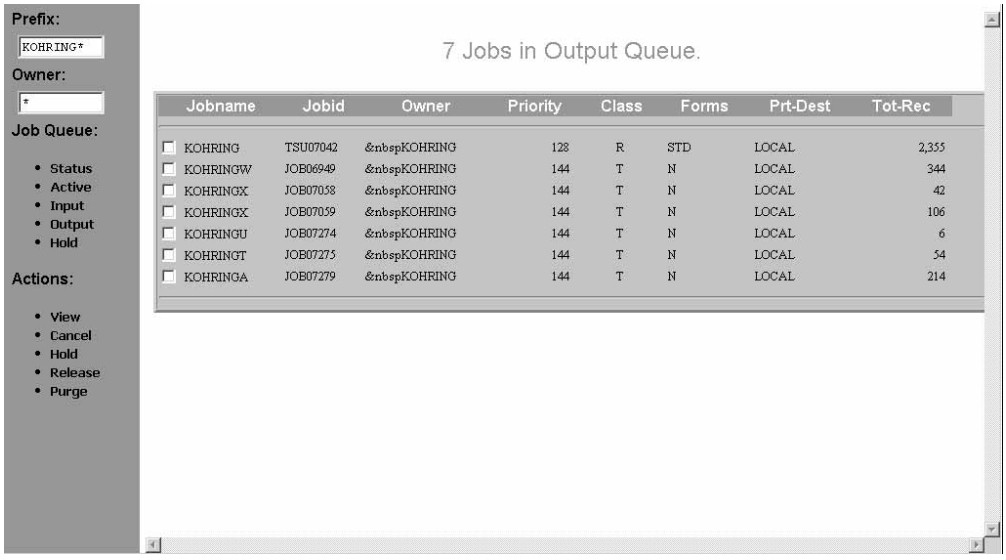


Figure 202. Result of OUTPUT List Request

Jobname The name of the job and address space.

Jobid The number assigned from JES2.

Owner The user ID of the person who submitted the job.

Priority The JES2 output priority.

Class The JES2 output class for routing/printing.

Forms The form definition for printing.

Prt-Dest The printing destination.

Tot-Rec The size of the file.

The Hold Queue row fields

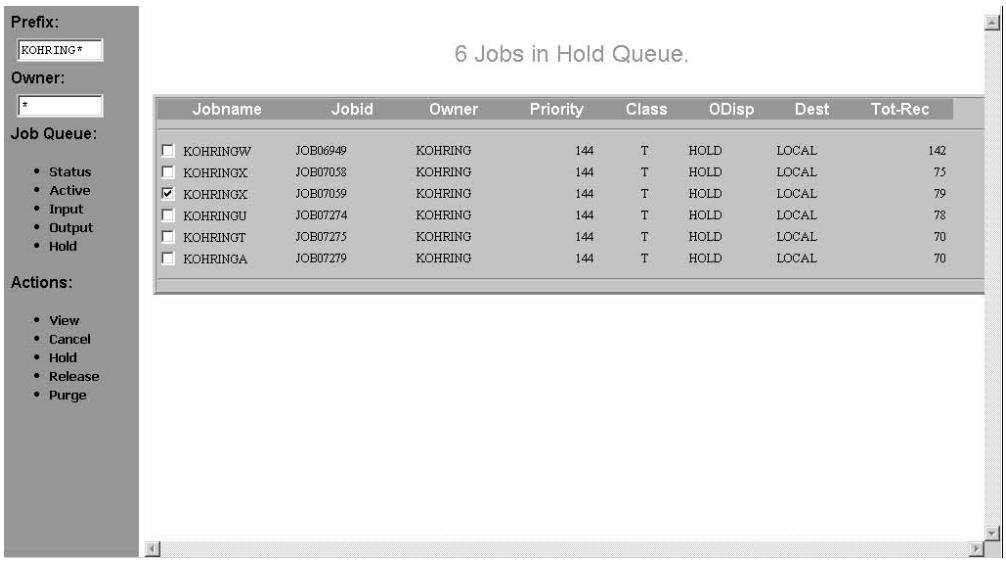


Figure 203. Result of HOLD List Request

Jobname The name of the job and address space.

Jobid The number assigned from JES2.

Owner The user ID of the person who submitted the job.

Priority The JES2 output priority.

Class The JES2 output class for routing/printing.

Odisp The current output disposition (Hold, Write, and so on).

Dest The printing destination.

Tot-Rec The size of the file.

Notice that the menu on the left of the panel now contains more options, the **Actions**. These options are explained in the following sections of this chapter.

Using the Action Menu Options

After you have created a list of files using the SDSF Viewer, you can then request actions against the resultant list. The actions available for use are listed in the **Actions** portion of the menu on the left of the list panel.

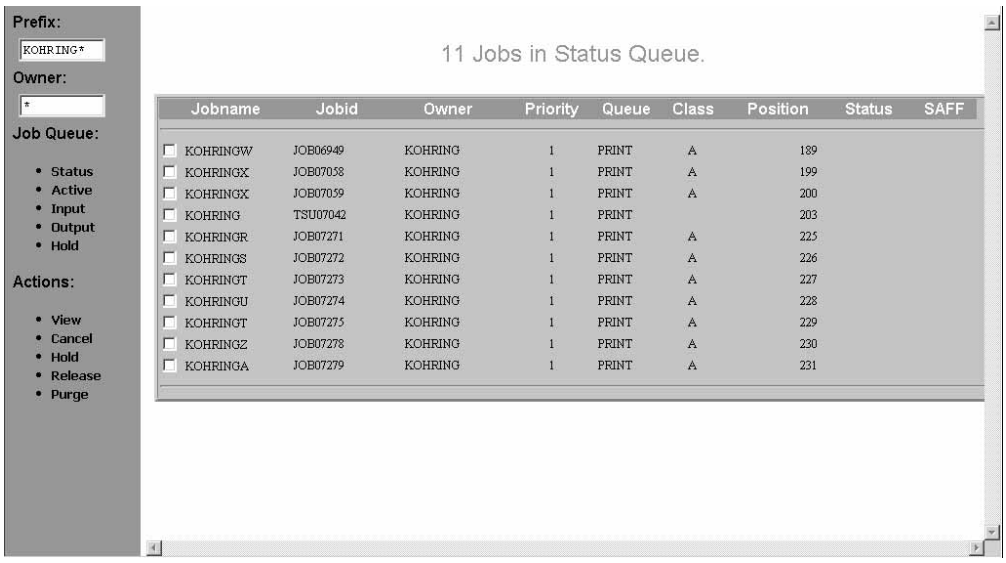


Figure 204. Result of Status List Request Showing Menu with Actions

The Actions available on the menu are:

View Look at a selected job.

Cancel Stop the running of a selected job.

Hold Transfer a job from output queue to hold queue.

Release Transfer a job from hold queue to output queue.

Purge Remove a job from JES2.

One or more jobs can be chosen for the action. Only one action request can be requested at a time. For instance, you can select all of the files on the panel, but can only request one action, such as **View**, at one time.

The View Action

You can use the **View** action to view any displayable data from SDSF on the browser panel. Each file is displayed in its own browser window. There are no limits to the amount of data displayed or number of active windows allowed. The following is an example of how to view all three files in the usage example:

1. Select the files to be viewed (Figure 205 on page 175).
2. Click on the **View** action on the left menu.
3. View each output in its own window.

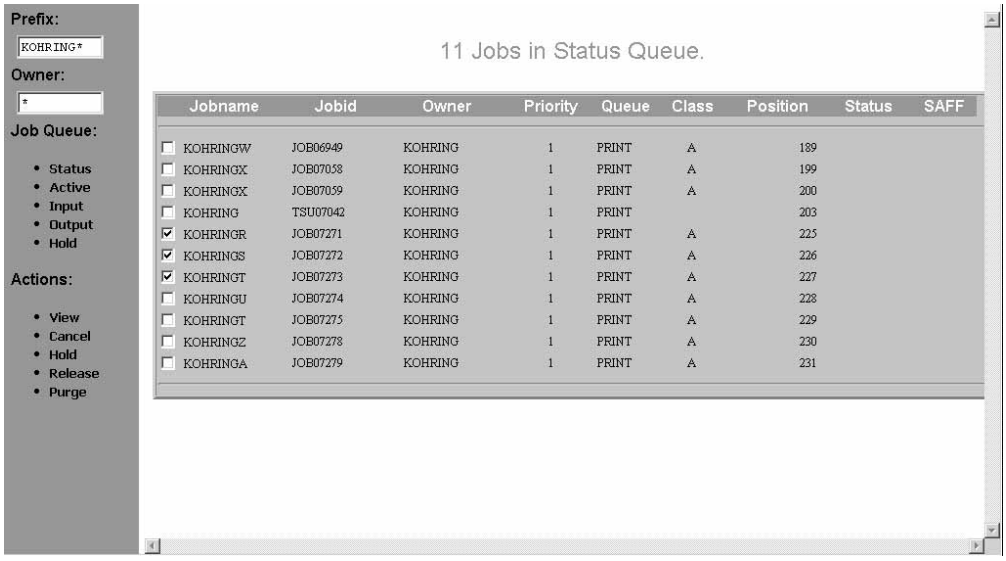


Figure 205. Selecting Jobs from List

When the job is returned, the title of the browser window is the file name/jobnumber. In the following example, the *KOHRINGS* output is displayed. There were also two other windows opened and populated.

Figure 206. Browsing Outputs

No Data Condition

The list displayed in the browser is current at the time of the request. The output might be deleted or the active task might actually end before an action request on the file. If the task or output file no longer exists, then the resulting panel's message area is blank.

The Cancel Action

Users can select the **Cancel** action to purge existing output or to cancel an active task. To cancel an active task or purge an output file, first request a list of jobs.

Then select the jobs to cancel by clicking on the check box next to the entry. When one or more jobs have been selected, click Cancel. In the following example, the user is canceling *KOHRINGZ*.

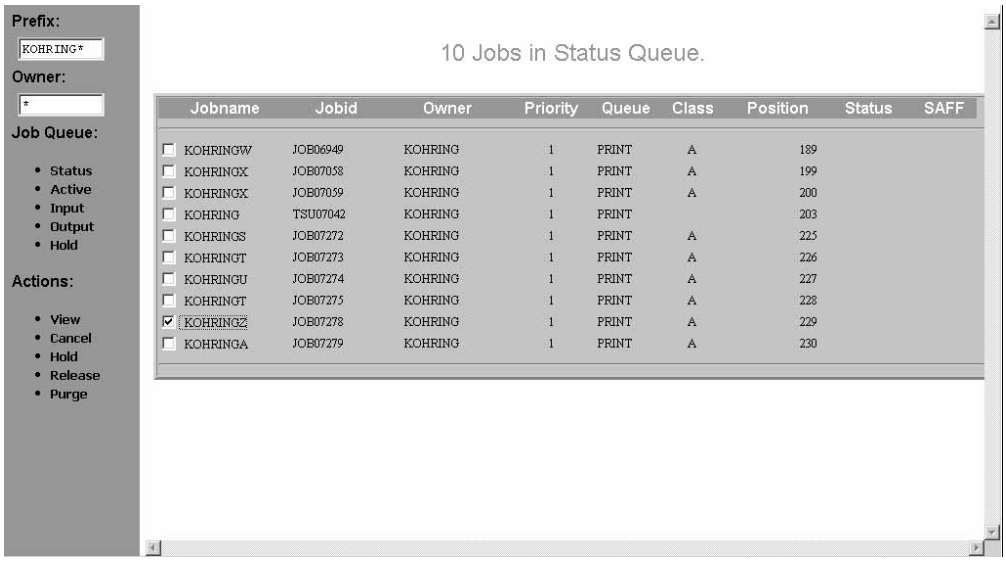


Figure 207. Cancel Request

After processing, the updated list reflects the canceled job as follows:

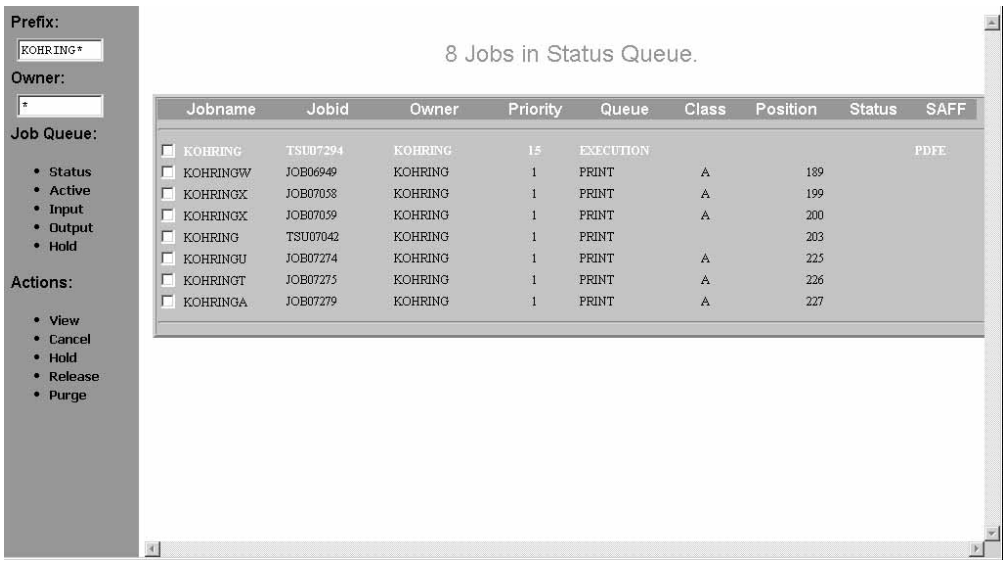


Figure 208. Post Cancel Request Display

Cancel Versus Purge Actions

The cancel and purge actions have the same effect if requested against a non-active task. For instance, if the user selects two output files and purges one but cancels the other, the effect is the same — They are both deleted from the JES2 spool.

The cancel and purge actions have different effects if requested against an active task such as a TSO session or executing batch job. If the **cancel** action is chosen,

then the task is canceled, but any existing output remains in the output queue. If the **purge** action is requested, the task is canceled and all existing output is purged from the queue.

The Hold Action

The purpose of the **Hold** action is to change the status of a job to HOLD. For instance, a user might have created an output to go to class A output, only to decide that they do not want to print the file, just view it. For example, the user wants to create a dump for diagnostic purposes and mistakenly asked for it to be printed.

To change the status of output files, first request a list of output files. Select one or more of the jobs in the list. Then click the **Hold** action to reset the output files. Output is reset to HOLD class. You can also issue a Hold request for active tasks.

The Release Action

The purpose of the **Release** action is to release held output to the output queue, thus making it available to be printed. To change the status of held output files, first request a list of Held output files. Select one or more of the jobs in the list. Then click the **Release** action to change the status of the output files. Output is released to the default print class.

In this example, the output disposition (ODISP) is set to hold before the Release action request.

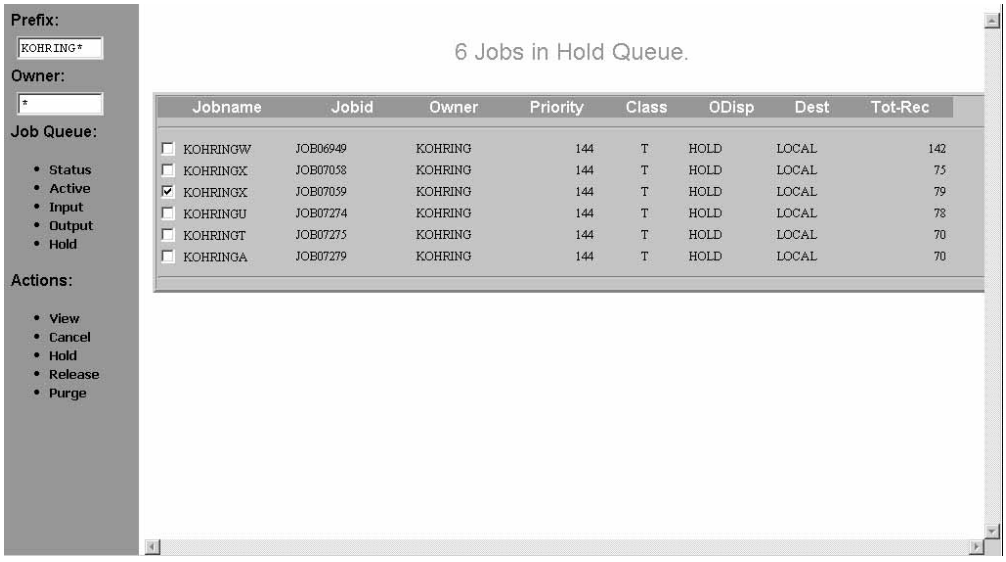


Figure 209. Release Action Request

After the release of the held file, the job is removed from the hold queue, and only displays in the status or output. The following example shows that the job has been reassigned to the output queue:

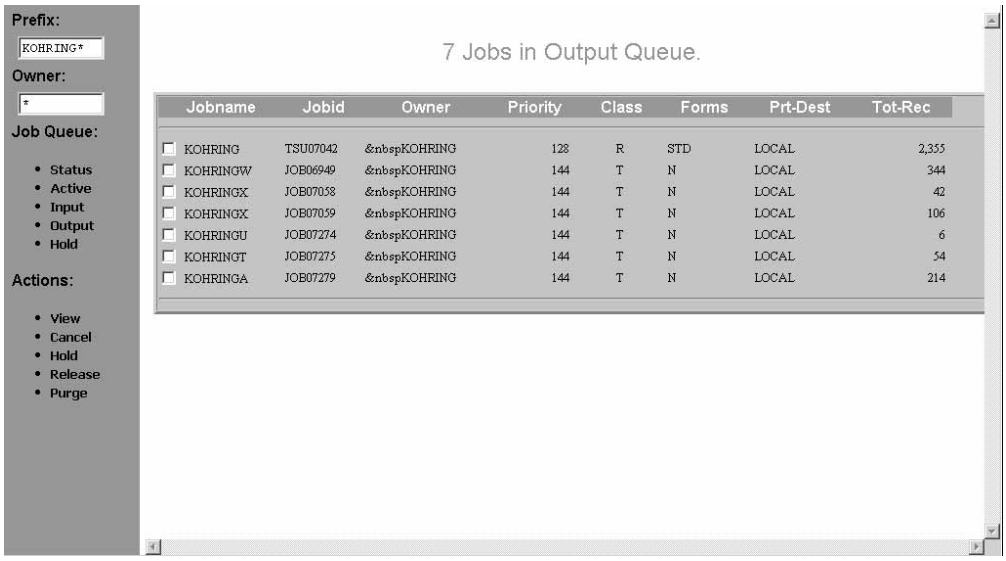


Figure 210. Release Action Result

SDSF Batch Authorization

Results depend on the security settings of your SDSF configuration. The default setting, in most systems, is to restrict batch SDSF processing to the user ID of the caller. Check with your SDSF administrator for more information about batch SDSF authorizations. The administrator can see the *SDSF Customization and Security Manual* for batch SDSF information.

Part 5. Appendixes

Appendix A. Cloud 9 with the CA-Endevor Bridge

The CA-Endevor Bridge is designed to assist SCLM implementors with listing and building CA-Endevor syntax for export and subsequent import into SCLM. The main difference between the standard Cloud 9 for SCLM and Cloud 9 for SCLM with the CA-Endevor Bridge is the appearance of the **LIST ELEMENTS** menu option. All other SCLM functionality is the same. Figure 211 shows the additional listing function.

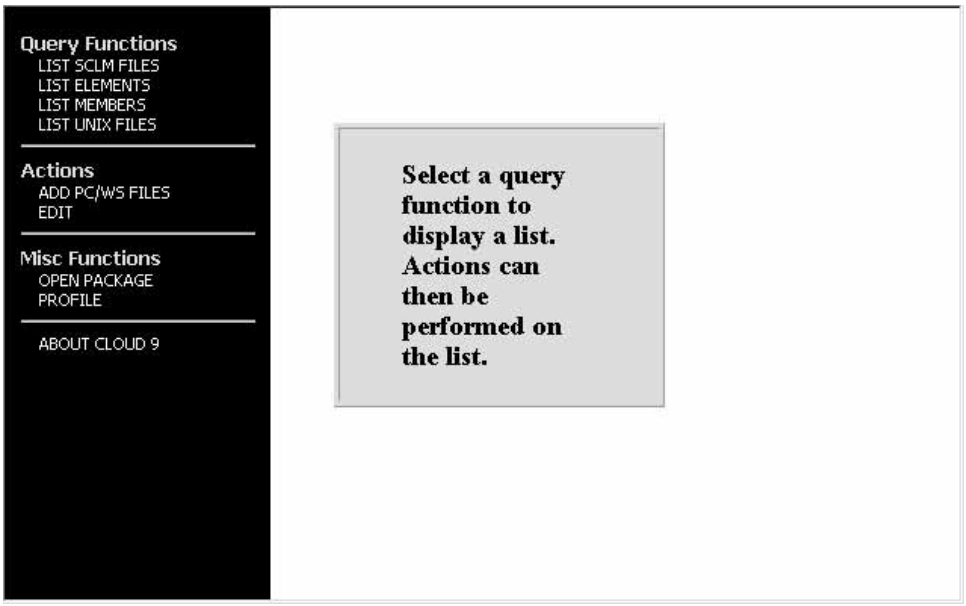


Figure 211. List Elements Menu Option

This chapter descibes how to use Cloud 9 to migrate source code from CA-Endevor to SCLM by showing you how to:

- Perform CA-Endevor listing functions.
- Migrate existing elements into SCLM.

Listing Elements in Cloud 9

The following panel is provided to users for element listing.

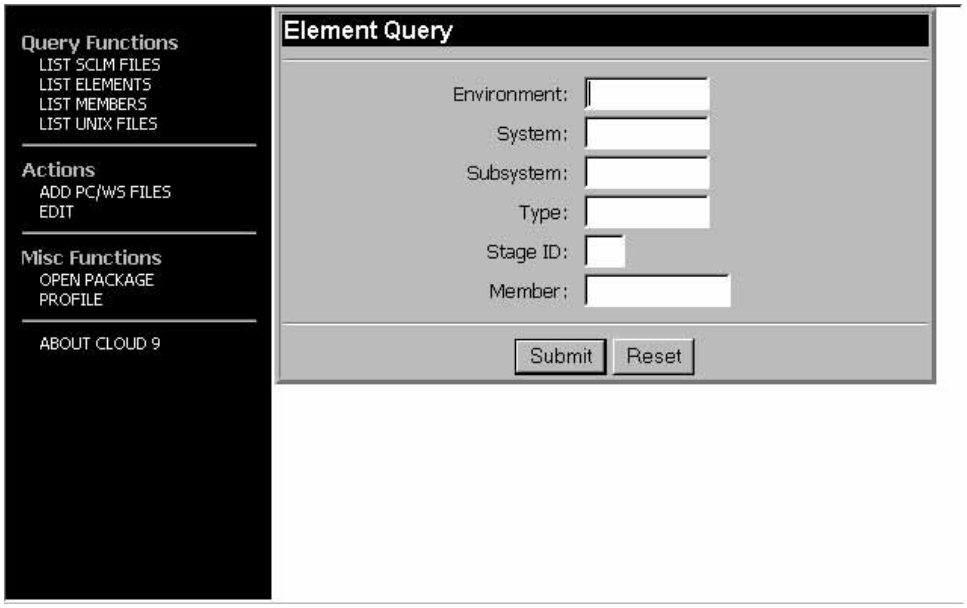
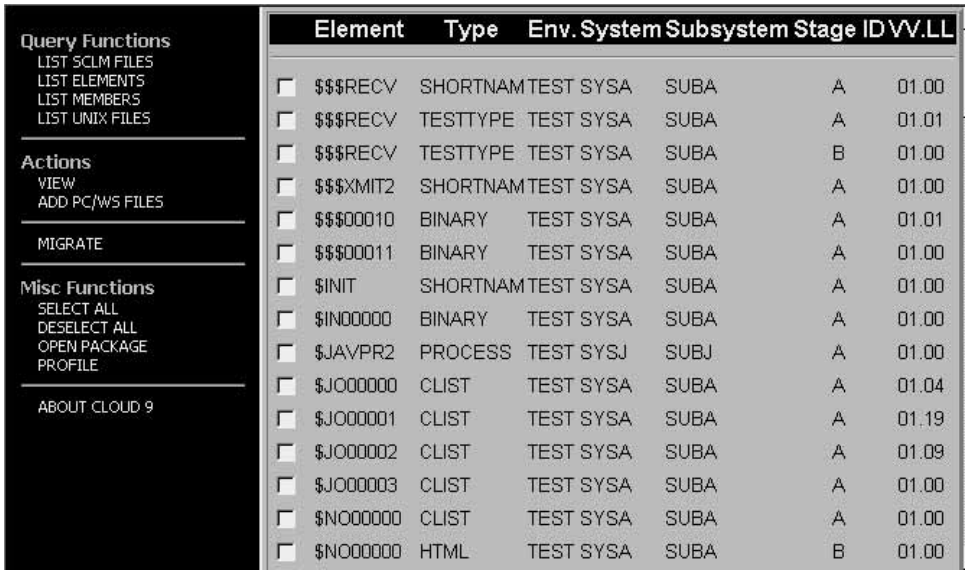


Figure 212. Element Query Panel

Required Fields: The Environment field is required and cannot be wild carded.

Enter the known CA-Endevor values and click submit. An element list is returned.



Element	Type	Env.	System	Subsystem	Stage ID	VV.LL
$$$RECV	SHORTNAM	TEST	SYSA	SUBA	A	01.00
$$$RECV	TESTTYPE	TEST	SYSA	SUBA	A	01.01
$$$RECV	TESTTYPE	TEST	SYSA	SUBA	B	01.00
$$$XMIT2	SHORTNAM	TEST	SYSA	SUBA	A	01.00
$$$00010	BINARY	TEST	SYSA	SUBA	A	01.01
$$$00011	BINARY	TEST	SYSA	SUBA	A	01.00
$INIT	SHORTNAM	TEST	SYSA	SUBA	A	01.00
$IN00000	BINARY	TEST	SYSA	SUBA	A	01.00
$JAVPR2	PROCESS	TEST	SYSJ	SUBJ	A	01.00
$JO00000	CLIST	TEST	SYSA	SUBA	A	01.04
$JO00001	CLIST	TEST	SYSA	SUBA	A	01.19
$JO00002	CLIST	TEST	SYSA	SUBA	A	01.09
$JO00003	CLIST	TEST	SYSA	SUBA	A	01.00
$NO00000	CLIST	TEST	SYSA	SUBA	A	01.00
$NO00000	HTML	TEST	SYSA	SUBA	B	01.00

Figure 213. Element List Display

Actions Against Element List

Once the list of elements is displayed, the user has a few options for working with the CA-Endevor elements. Aside from requesting the **Migrate to SCLM** action, users can also perform standard CA-Endevor **Browse** functions against the elements. The following panel is displayed in response to clicking on **VIEW** on the Actions menu.

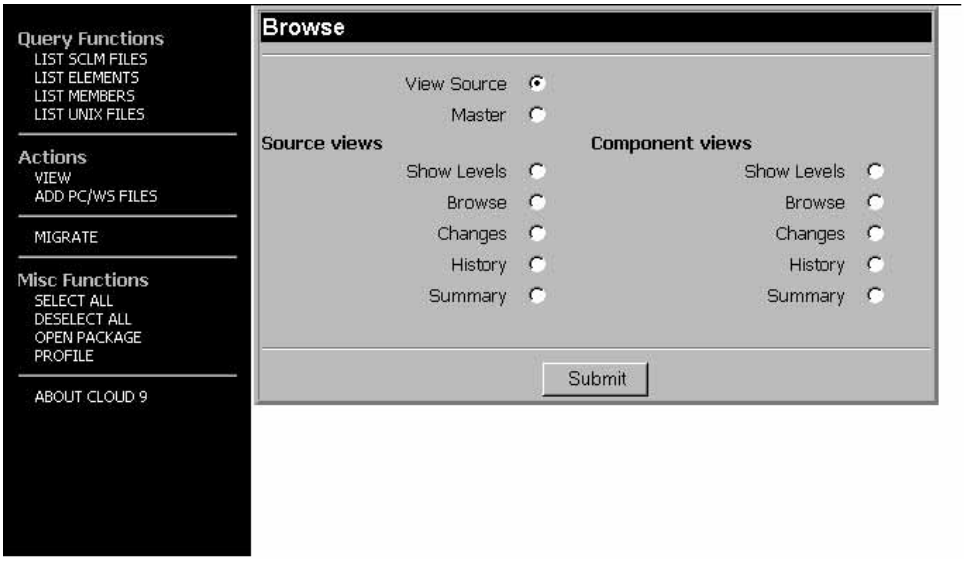


Figure 214. View Elements Panel

From this point, all standard CA-Endevor browse functions can be performed.

Migrating to SCLM from CA-Endevor

1. Display a list of CA-Endevor Elements.
2. Click on **Submit.**
3. Once the element list is returned, click **Select ALL** or individually select elements for processing.
4. Click on **Migrate to SCLM** . The following panel is displayed.

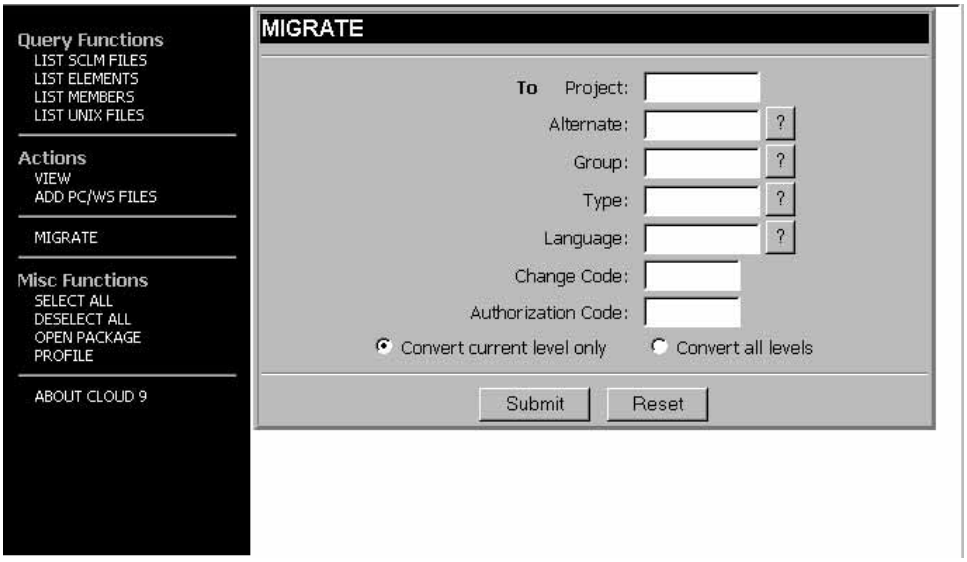


Figure 215. Convert Elements to SCLM Panel

Required Fields: Project, Group, Type and Language are required and cannot use wild cards.

Optional Fields: Change Code and Authcode are optional.

Click **Submit** and a batch conversion job is submitted.

Appendix B. Creating and Adding .jpg Images to the User Profile

This appendix covers how to create, scan, and add .jpg images to your user profile.

Creating the File

To create a .jpg or picture file, you need to capture your image and save it. There are many ways to capture images:

- Take a picture with a digital camera.
- Scan an existing photograph into a PC.
- Take a photograph with a film camera but have the developer provide a disk version rather than (or in addition to) a printed photograph.
- Take an existing photograph to a copy or office supply store and have them scan it into a .jpg file.

Some photo development companies will develop your pictures and post the files on the Web. To retrieve the file:

1. Go to the Web site address they provide you with.
2. Right-click your picture.
3. Select “Save Image As . . .” The Save dialog box displays.
4. Enter a name for the file.
5. Click Save.

Note: Check to make sure the file is stored with a .jpg extension. Other file formats are not supported.

Adding the File

To add the .jpg file to your profile:

1. Select **PROFILE** from the Cloud 9 Main Menu.
2. Type in the location of the .jpg file.
3. If the file location is on the A: drive, Select *Browse*.
4. Move to the A: drive.
5. Highlight the file.
6. Select *Open*.
7. The file directory path is automatically filled in on the Profile panel.
8. Click the *Update profile* button to submit the new picture.

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Special characters

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