

IBM Breeze for SCLM for z/OS



User's Guide

Release 1

IBM Breeze for SCLM for z/OS



User's Guide

Release 1

Note

Before using this document, read the general information under "Notices" on page 39.

Sixth Edition (October 2004)

This edition applies to Release 1 of the licensed program IBM Breeze for SCLM for z/OS (program number 5697-G58) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this book

This book describes:

- How to promote packages using Software Configuration and Library Manager (SCLM) with IBM Breeze for SCLM for z/OS (“Breeze”).
- How to use the Breeze Web interface to view packages and (if your site uses Breeze for voting) to approve or veto package promotion.

This book assumes that Breeze has already been installed (as described in the *Breeze Program Directory* and *Breeze Installation Guide*) and set up (as described in the *Breeze Planning and Administration Guide*).

Who should read this book

This book is aimed at:

- Developers who promote packages
- Approvers who want to use the Breeze Web interface to view and vote on packages
- General users who want to use the Breeze Web interface to view packages

If you are an approver, and you want to use the voting batch utility instead of the Breeze Web interface, then see the *Breeze Planning and Administration Guide*.

What you should already know

This book assumes that you understand SCLM promotion and the structure of SCLM high-level architecture members.

If you are a developer who promotes packages, then this book assumes that you know how to use the SCLM promote function: this book describes only how to use the additional pop-up windows displayed by Breeze.

Terminology used in this book

For definitions of Breeze terms used in this book (such as *package* and *approver*), see the “Glossary” on page 41.

Related information

For an introduction to Breeze, see the *Breeze Functional Overview*.

For the latest information about Breeze, go to www.ibm.com/software/awdtools/sclmsuite/breeze/

For information about using SCLM, see the *SCLM Project Manager’s and Developer’s Guide*.

For other related information, see the “Bibliography” on page 43.

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Your feedback is important in helping us to provide the most accurate and highest quality information. If you have any comments about this book or any other Breeze documentation, contact us in one of these ways:

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Summary of changes

Fifth Edition (October 2004)

The following enhancements and changes have been made to Breeze for SCLM for z/OS Version 1 since the last release of the documentation:

- New Breeze Archival Process.
- New variables added that can be included in approval e-mails.
- New directive to allow users not to force a RESET on a promote failure.
- Support for 8-character UNIT name in CIGINI definition.
- Allow the Sweep job to support projects that utilize the FLMLRBLD macro.
- Enhancement to allow empty packages to be promoted. This is useful if Breeze has finished processing but, due to a problem, SCLM has not finished processing. This allows Breeze to promote an “empty” package so that SCLM completes its processing.
- Changes to the way the Browser starts such that you do not need to set the setting to refresh each time.
- Various minor technical corrections.

The following changes have been made to the User’s Guide since the last edition of this document:

- Description of processing related to the new directive to allow users not to force a RESET on a promote failure.
- Changes to the Browser settings due to enhancements made.

Fifth Edition (September 2003)

The following enhancements and changes have been made to Breeze for SCLM for z/OS Version 1 since the last release of the documentation.

- Various minor technical corrections

The following changes have been made to the User Guide documentation, since the last edition of this document:

- A description of a new error message has been added to the Troubleshooting chapter. See “ERROR IN BATCH SHELLS” on page 33 for details.
- Additional instructions given in “Rebuilding a package during voting or after approval” on page 13.
- Changes to message FLM87107, as described in “Requesting approval to promote the package” on page 4.
- Expanded description of filters given in “Filtering packages from the list” on page 20.

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Chapter 1. How Breeze affects promotion

This chapter presents a summary and step-by-step example of how Breeze affects the SCLM promote function.

This chapter is aimed mostly at developers who promote packages, but it is also useful background reading for other Breeze users.

After reading this chapter, developers should read Chapter 2, “Promoting a package,” on page 9 for more detailed information about using the SCLM promote function with Breeze. Other users should read Chapter 3, “Viewing and voting on packages over the Web,” on page 15, which describes how to use the Breeze Web interface.

Summary

Before Breeze is installed, developers use the SCLM promote function to promote packages. Developers can use this function either via the SCLM promote panel under ISPF, or by invoking the SCLM promote service in a program or batch job.

The SCLM promote function has three phases:

1. **Verify** that the package has been built using the latest source member changes.
2. **Copy** the source members and any build outputs to the next higher group in the project hierarchy.
3. **Purge** the source members from the current group.

If there are no problems, then SCLM performs each phase immediately, one after the other. However, if a phase returns a non-zero return code (indicating that a problem occurred), then SCLM does not proceed to the next phase, and the promotion fails.

After Breeze is installed, developers still use the SCLM promote function to promote packages. However, if Breeze determines that a package requires approval, then the developer must use the SCLM promote function twice. The first time, Breeze notifies the approvers for the package, and causes SCLM to fail the promotion. The second time, if the approvers have voted to approve the package, then Breeze allows the promotion to proceed.

Breeze introduces two user exits that customize the SCLM promote function:

1. **Verify**
SCLM invokes Breeze “promote verify” user exit here.
2. **Copy**
SCLM invokes Breeze “promote copy” user exit here.
3. **Purge**

Here is a summary of what these Breeze exits do:

1. **Verify**
If the normal SCLM verify phase succeeds, then the Breeze promote verify user exit determines if the promote input member is a valid package (a high-level architecture member). If it is not a valid package, then the Breeze exit returns

Summary of how Breeze affects promotion

control to SCLM with a return code of zero, and the promotion proceeds with no further involvement from Breeze. If it is a valid package, then the Breeze exit records the package information in the Breeze package database, and continues processing.

If the Breeze exit determines that the package does not require approval, then it sets the package status to APPROVED, and returns control to SCLM with a return code of zero, allowing the promotion to proceed.

If the package does require approval, then the Breeze exit sets the package status to PENDING, notifies the approvers, and returns a non-zero return code to SCLM. This causes the promotion to “fail”. The approvers can now view and vote on the package.

If the voting results in a package status of APPROVED (instead of VETOED), then the developer can now promote the package by **retrying** the promote function. This time, the Breeze promote verify user exit recognizes that the package has been approved, and returns control to SCLM with a return code of zero, allowing the promotion to proceed.

Instead of manually using the promote function a second time, you can schedule the Breeze promotion sweep batch utility, BZZSMJS1, to automatically promote packages that have been approved. For more information, see the *Breeze Planning and Administration Guide*.

2. Copy

If the normal SCLM copy phase succeeds, then the Breeze promote copy user exit updates the package status to PROMOTED. Otherwise, the Breeze exit either updates the package status to INCOMPLETE or leaves the package in an APPROVED status, depending upon installation settings. The parameter “RESET NOT REQUIRED ON INCOMPLETE” as specified in the CIGINI file controls this behavior.

3. Purge

Breeze does not affect the normal SCLM Purge phase.

Step-by-step example

This example steps through the procedure for promoting a package requiring approval:

1. Creating the package
2. Building the package
3. Requesting approval to promote the package (first use of SCLM promote function)
4. Voting on the package
5. Promoting the approved package (second use of SCLM promote function)

Example scenario

Jane, a developer, is instructed to make changes to four COBOL programs to satisfy a change request form. The COBOL programs belong to an SCLM project called SCLMTEST.

The figure below shows the hierarchy of the groups in SCLMTEST. There are two development groups, DEV1 and DEV2. All source changes in the development groups are promoted to the TEST group for quality assurance (QA), then promoted to the RELEASE group for general release.

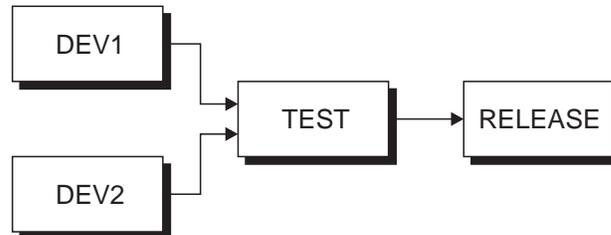


Figure 1. SCLMTEST project group hierarchy

After editing, compiling and unit testing the programs in the DEV1 group, Jane is now ready to hand over her changes to the QA team. The QA team use the TEST group. To hand over her changes, Jane uses a package to promote the programs from DEV1 to TEST, as described below.

Creating the package

Jane uses an editor to create a package containing the four COBOL programs:

```

EDIT          SCLMTEST.DEV1.PACKAGE(PKG1) - 01.00          Columns 00001 00072
Command ==>>                                         Scroll ==> CSR
***** ***** Top of Data *****
000001 INCLD  TEST01  SOURCE
000002 INCLD  TEST02  SOURCE
000003 INCLD  TEST03  SOURCE
000004 INCLD  TEST04  SOURCE
***** ***** Bottom of Data *****
  
```

Figure 2. Creating a package in a text editor

If Jane had specified a change code when she edited these COBOL programs, then instead of using INCLD statements to explicitly name each program, she could have included, for example, the SCLMTEST ARCHDEF, then used a single CCODE statement to include only the members with that change code.

Step-by-step example

Building the package

After creating the package, Jane uses the SCLM build panel to build the package:

```

                                     SCLM Build - Entry Panel
Command ==>>

Build input:
Project . . : SCLMTEST
Group . . . DEV1
Type . . . . PACKAGE
Member . . . PKG1

                                     Enter "/" to select option
                                     / Error Listings only
                                     Workstation Build

Mode . . 1 1. Conditional           Scope . . . 2 1. Limited
                                     2. Unconditional       2. Normal
                                     3. Forced                3. Subunit
                                     4. Report                4. Extended

Output control:
Ex Sub
Messages . . 3 3 1. Terminal
Report . . . 3 3 2. Printer
Listings . . 3 3 3. Data set
                                     4. None
Process . . 1 1. Execute
                                     2. Submit
Printer . . H
Volume . . .

```

Figure 3. The SCLM build panel

Requesting approval to promote the package

After building the package, Jane uses the SCLM promote panel to request approval to promote the package:

```

                                     SCLM Promote - Entry Panel
Command ==>>

Promote input:
Project . . . : SCLMTEST
From group . . DEV1
Type . . . . . PACKAGE
Member . . . . . PKG1

Mode . . 1 1. Conditional           Scope . . . 1 1. Normal
                                     2. Unconditional       2. Subunit
                                     3. Report                3. Extended

Output control Ex Sub
Messages . . 3 3 1. Terminal
Report . . . 3 3 2. Printer
                                     3. Data set
                                     4. None
Process . . 1 1. Execute
                                     2. Submit
Printer . . H
Volume . . .

Breeze control:
Clear Package: Y (Y/N)  Override Dates: N (Y/N)
Window (yy/mm/dd - hh:mm) 02 / 04 / 22 11 : 00 Thru 02 / 04 / 25 17 : 00
Description: BREEZE FOR SCLM PACKAGE      Type: ST (ST/EM)

```

Figure 4. The SCLM promote panel

Breeze uses the attributes entered on the promote window to create a record in the Breeze package database. For details on these attributes, see “Entering package attributes” on page 10.

After Jane has entered the package attributes, the Breeze promote verify user exit displays the following messages:

```

*****
* Now verifying package with Promote Report request. *
*****

FLM87107 - PROMOTE SUCCEEDED FOR MEMBER PKG1 AT 17:01:41, CODE: 0

*****
* Promote Report (verify function) succeeded. *
* Note SCLM message FLM87107 means that the Promote *
* Report for this package was successful. *
*****

*****
* Copying Package Defaults from Breeze Promote Panel . *
* Promotion Start Date: 02/04/22 *
* Promotion Start Time: 11:00 *
* Promotion End Date: 02/04/25 *
* Promotion End Time: 17:00 *
* Desc: BREEZE FOR SCLM PACKAGE *
* Package Type: STANDARD *
*****

*****
* Content and approver collection in progress for *
* Package PKG1. *
* From Group = DEV1 *
* To Group = TEST *
*****

```

(This example assumes that a Breeze administrator has already defined an inventory junction record, an approver group and three approvers, all of them required, for Jane's COBOL programs in DEV1. For details, see the *Breeze Planning and Administration Guide*.)

The message "FLM87107 - PROMOTE SUCCEEDED FOR MEMBER" followed by the subsequent message box stating "Promote Report Success" will appear only if the ddname FLMMMSGs was allocated to your TSO session or batch job.

Normally, the ddname FLMMMSGs is allocated only to batch jobs and not to your TSO session.

The Breeze exit determines that this package requires approval, and displays the following pop-up window (if the package did not require approval, then this example would end here, because the package would be promoted immediately):

Step-by-step example

```
Package Approver Reminder Prompt
Option ==>

The package PKG1          has 0001 approver
groups assigned, containing 0003 individual approvers
of which 0003 are required.

The package is not eligible for promotion until the
package is approved. All users have been notified that
their vote is required.

To approve or veto the package promotion, please use
the Breeze for SCLM Web Interface.

End = Return    Help = PF1
```

Figure 5. Breeze package approver reminder

The Breeze exit sends the following e-mail to each of the approvers:
There are Breeze packages that need to be approved (or vetoed) by you.
The current package id requiring your attention is "PKG1".
Click on the link below to perform review and approve/veto processing.
<http://breezehost.xyzcompany.com/brsclm.html>

The Breeze exit returns control to SCLM with a return code of 4, causing the SCLM promote function to fail with a return code of 8. SCLM displays the following messages:

```
RETURN CODE FROM PROMOTE VERIFY = 4
FLM09008 - RETURN CODE = 8
***
```

SCLM displays the promote messages, confirming that there was a verification "error":

```
FLM51000 - PROMOTE PROCESSOR INITIATED - 16:38:40 ON 2001/10/17
FLM52000 - INITIATING VERIFICATION PHASE - 16:38:40 ON 2001/10/17
FLM06512 - VERIFICATION ERROR FROM USER EXIT ROUTINE: BZZSME02, CODE: 4
FLM58000 - PROMOTE PROCESSOR COMPLETED - 16:42:17 ON 2001/10/17
```

Voting on the package

The approvers can now vote on the package, either by clicking on the link in the e-mail to go to the Breeze Web interface, or by submitting a voting batch utility job on the host.

To vote using the Breeze Web interface, approvers select "PKG1" from the list of packages requiring approval, then click either the **Approve** button to cast a "For" vote, or the **Veto** button to cast an "Against" vote.

The package has a status of PENDING until voting is complete. Voting is complete when the package reaches either APPROVED or VETOED status. For a definition of the votes required for a package to reach APPROVED or VETOED status, see Chapter 3, "Viewing and voting on packages over the Web," on page 15.

In this example, all three approvers must vote before the package can reach either APPROVED or VETOED status.. If, after all three approvers have voted, there are at least two "for" (approve) votes, then Breeze sets the package status to APPROVED. Otherwise, Breeze sets the package status to VETOED.

For more information on using the Breeze Web interface, see Chapter 3, “Viewing and voting on packages over the Web,” on page 15.

Promoting the approved package

All three approvers have now voted on the package. All three voted for (approved) the package, so Breeze has changed the package status to APPROVED. The package can now be promoted.

Liam, one of the required approvers for the package, is also the QA team manager. In addition to using the Breeze Web interface to cast his own vote, Liam has been using the interface to monitor the other votes, and the status of the package.

When Liam sees that the package has reached APPROVED status, he goes to the SCLM promote panel, enters the package details, and presses Enter, exactly as Jane did previously.

However, this time, the Breeze promote verify exit recognizes that the package has been approved, and allows the promote to proceed.

The SCLM promote copy and purge phases complete without problems. The Breeze promote purge exit updates the package status to PROMOTED.

The handover of the four source programs from Jane to the QA team is now complete.

This is the end of the example.

Chapter 2. Promoting a package

The previous chapter presented a simple example of the procedure for promoting a package. This chapter presents the same procedure in more detail, with more information about how the Breeze exits work, the package attributes that you need to enter, and the conditions that a package must meet before it can be promoted. Unlike the example in the previous chapter, this chapter assumes that you have already created and built the package that you want to promote.

Requesting approval to promote the package

After creating and building the package, use the SCLM promote function to request approval to promote the package. To do this, you can either use the SCLM promote panel as described in the *SCLM Project Manager's and Developer's Guide*, or invoke the SCLM promote service as described in the *SCLM Reference*.

When the SCLM promote function starts, it produces messages similar to these:

```
FLM59001 - INVOKING PROMOTE PROCESSOR
FLM09002 - THE PROMOTE REPORT WILL APPEAR IN BABEL.PROMOTE.REPORT02
FLM09004 - THE PROMOTE MESSAGES WILL APPEAR IN BABEL.PROMOTE.MSGS02
```

If the normal promote verify phase succeeds, then SCLM invokes the Breeze promote verify user exit. The Breeze exit calls the RPTARCH SCLM service to generate an architecture report, producing a message similar to this:

```
FLM87107 - RPTARCH SUCCEEDED FOR MEMBER PKG1 AT 16:33:04, CODE: 0
***
```

Breeze uses this report to determine if the promote input member is a valid package (that is, a high-level architecture member).

If the member is not a package, then Breeze performs no further processing; the exit returns control to SCLM, and SCLM continues with a normal promote.

Requesting approval to promote the package

Entering package attributes

If you select the promote option from SCLM option 5 or SCLM option 3.1 you are presented with the SCLM promote panel that incorporates the Breeze attribute fields.

```

SCLM Promote - Entry Panel
Command ==>>
Promote input:
Project . . . : SCLMTEST
From group . . DEV1
Type . . . . . PACKAGE
Member . . . . . PKG1

Mode . . 1 1. Conditional          Scope . . . 1 1. Normal
           2. Unconditional        2. Subunit
           3. Report                3. Extended

Output control Ex Sub          Process . . 1 1. Execute
Messages . . 3 3 1. Terminal      2. Submit
Report . . . 3 3 2. Printer
                3. Data set      Printer . . H
                4. None           Volume . .

Breeze control:                Clear Package: Y (Y/N)  Override Dates: N (Y/N)
Window (yy/mm/dd - hh:mm) 02 / 04 / 22 11 : 00 Thru 02 / 04 / 25 17 : 00
Description: BREEZE FOR SCLM PACKAGE                                Type: ST (ST/EM)

```

Figure 6. Breeze package attribute input panel

The **package ID** added to the Breeze package database is the name of the package member being promoted.

The **package Type** (standard or emergency) 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*.

The **Window attributes** consist of a start and end date between which the package can be promoted. If the dates are left blank then the Breeze default dates are used.

The **Description attribute** allows the developer to enter a description for the package. If this is left blank then the package will be given a blank description.

The **Clear Package attribute**, if set to "Y" will allow the developer 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. If the developer does not clear the package, either manually with the BZZSMJD1 job or by using the Clear Package attribute, they will get a message from Breeze stopping the promote as Breeze will not allow the contents of a package to be overwritten unless the status of that package is set to blank.

The **Override attribute**, if set to "Y" will allow the developer to override these parameters on the second promote if they were entered incorrectly on the first promote. If after approval the second promote has been invoked but the promotion

Requesting approval to promote the package

date window has not been reached, due to being entered incorrectly on the first promote, by using the override attribute the developer can set the promotion window to it's correct value.

If the developer invokes the SCLM promote service as opposed to using the foreground SCLM promote, then Breeze will assign default attributes to the package.

Content and approver collection

Breeze uses the architecture report it generated earlier to determine the inventory location of each source member in the package. If any of these inventory locations match Breeze inventory junction records, then Breeze uses the approver groups named in the inventory junction records to collect a list of approvers for the package. This is known as "content and approver collection". At this point, Breeze displays the following message:

```
*****
* Content and approver collection in progress for      *
* Package PKG1.                                       *
* From Group = DEV1                                   *
* To   Group = TEST                                   *
*****
```

If Breeze determines that the package has no approvers, or all its approvers belong to groups with a quorum of zero, then the package needs no approval before promotion. Breeze sets the package status to APPROVED.

If the package has at least one approver in a group whose quorum is greater than zero, then the package requires approval before promotion. Breeze sets the package status to PENDING, and displays the following pop-up window:

```
                Package Approver Reminder Prompt
Option ==>

The package PKG1          has 0001 approver
groups assigned, containing 0003 individual approvers
of which 0003 are required.

The package is not eligible for promotion until the
package is approved. All users have been notified that
their vote is required.

To approve or veto the package promotion, please use
the Breeze for SCLM Web Interface.

                End = Return   Help = PF1
```

Figure 7. Breeze package approver reminder

Note: An approver group with required approvers cannot have a quorum of zero. A quorum must be equal to or greater than the number of required approvers in the group.

Breeze notifies all approvers for the package via e-mail, TSO SEND or both, depending on the approver records. For more information about approver records, see the *Breeze Planning and Administration Guide*

Requesting approval to promote the package

Returning control to SCLM

After notifying any approvers and updating the Breeze database, the Breeze exit returns control to SCLM.

If the package status is PENDING (requires approval), then the Breeze exit returns control to SCLM with a return code of 4, causing the promotion to fail.

If the package status is APPROVED, then the Breeze exit returns control to SCLM with a return code of zero, allowing the promotion to continue.

The package can now be viewed using the Breeze Web interface.

Voting on the package

If the package status is PENDING, approvers can vote on the package. For more information, see Chapter 3, “Viewing and voting on packages over the Web,” on page 15.

Promoting the approved package

If the package required approval, and voting has resulted in the package being approved, then the package can now be promoted.

To promote the package, retry the SCLM promote function. This time, the Breeze promote verify user exit recognizes that the package has been approved, and allows the promotion to proceed.

The Breeze promote verify user exit allows the promotion to proceed only if all of the following conditions are true:

- The package is in APPROVED status.
- The current date is inside the package execution window.
- The SCLM package build time stamp has not changed since content and approver collection was performed.
- If the package type is emergency and your administrator has created a \$\$EMER member, then your user ID must be listed in the member. (If the \$\$EMER member exists, then only the user IDs listed in this member can build or promote emergency packages. For details, see the *Breeze Planning and Administration Guide*.)

If the promotion proceeds, and the subsequent copy and purge phases also succeed, then the Breeze promote purge exit updates the package status to PROMOTED.

Automatically promoting approved packages

Instead of manually retrying the SCLM promote function, you can schedule the Breeze promotion sweep batch utility, BZZSMJS1, to automatically promote packages that have been approved and are within their execution window. For more information, see the *Breeze Planning and Administration Guide*.

What if the package is vetoed?

If voting results in a package being vetoed, it generally means that you must make further changes to the source members in the package (to satisfy the approvers’

reasons for vetoing the package). Then you have to rebuild the package, and request approval to promote the rebuilt package.

Before rebuilding the package, run the Breeze delete batch utility, BZZSMJD1. This sets the package status to blank, and deletes the votes and previously collected content and approver data. When you use the SCLM promote function to request approval for the rebuilt package, the Breeze promote verify user exit will perform content and approver collection for the package, and change its status from blank to PENDING (keeping the package activity log, with its record of the previous veto). Approvers can now view and vote on the rebuilt package.

Rebuilding a package during voting or after approval

If you rebuild an existing package when it is in PENDING or APPROVED status, Breeze changes the package status to blank. When the rebuilt package is promoted, Breeze will also reissue the e-mail and TSO notifications to all users who have approved the package, notifying each user that the package will need to be re-approved. Also, users defined to watchlists will receive Breeze notification if a package clear occurs as the result of an SCLM build being performed.

If the package has been promoted to a higher level in the hierarchy and then one of the modules is changed and the package rebuilt, Breeze will display panel BZZSM014 which states that the package exists at the higher level already. What must be done in this case is to use the CLEAR utility to clear all reference of the voting on the package, so that it can be reused. Alternatively a different package id could be used. It should also be noted that vetoed packages will be cleared if an SCLM build is performed on the package.

For more information on Breeze batch utilities, see the *Breeze Planning and Administration Guide*.

Problems during promotion of the approved package

If, during the second promote, there is a problem with the promote (such as a space problem in the target data set), the promote fails. In this instance, Breeze does one of two things:

- If “RESET NOT REQUIRED ON INCOMPLETE” is specified in the CIGINI file, Breeze leaves the package in APPROVED status. This means that, once the problem is rectified, the promotion is retried without having to RESET the package. The disadvantage is that the sweep job still picks up the problem package until the problem is rectified.
- If “RESET NOT REQUIRED ON INCOMPLETE” is *not* specified in the CIGINI file, Breeze changes the status of the package being promoted to INCOMPLETE. In this case, the sweep job (BZZSMJS1) does not pick up the problem package. Also, it allows you to list the problem packages with the web browser by selecting “Promotion Failed” under “Packages by Status”. Once you have rectified the issues causing the promote problem, you can run the RESET utility with job BZZSMJD1. This resets the status of the package back to its previous status of APPROVED. The promote can then be invoked again. If the promote is successful, the status of the package is changed to PROMOTED.

Promoting the approved package

Chapter 3. Viewing and voting on packages over the Web

This chapter describes how to use the Breeze Web interface to view and vote on packages.

To use the Breeze Web interface, you need:

- A Web browser (Netscape Navigator 4.6 or later, or Microsoft Internet Explorer 5.0 or later) with Java enabled
- The URL (“Web address”) of the Breeze Web interface at your site
- A TSO user ID on the host where Breeze is installed (you use this ID to login to the Breeze Web interface).

To vote on a package, you must be defined as an approver in the Breeze records on the host. For details, see the *Breeze Planning and Administration Guide*.

What you can do with the Breeze Web interface

You can use the Breeze Web interface to view information about any package in the Breeze package database: summary, status, activity log, source member contents and line-by-line changes, member collisions, ballot (who has voted, and how) and notes left by other approvers. (However, if there are no approvers for a package, then you can view only the package summary and activity log.)

If you are an approver for a package that is in PENDING status, then you can use the Breeze Web interface to cast an approve (“for”) or veto (“against”) vote for the package, and to leave notes explaining your vote.

Setting up your Web browser

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

Enable Java

The Breeze 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, so nothing more needs to be done.

Internet Explorer users

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

Use a direct connection

You can use the Breeze Web interface to communicate with a Breeze 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

Setting up your Web browser

Breeze 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 below.

However, most corporations have a firewall between their intranet and the Internet; and the only way that you can access the external Internet is via a corporate proxy server. So if you turn off proxies in your browser, you will be able to use Breeze, 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 Breeze server address and allow direct connection, so that you can leave proxies turned on, and use both Breeze and the Internet.

To turn off 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. Select the Connections tab.
3. Click the LAN Settings button (if you are connected via a LAN) or the Dial-up Settings button (if you are connected via a modem).
4. Select "Automatically detect settings". Deselect "Use a proxy server" and "Use automatic configuration script" .

Getting started

When a developer uses the SCLM promote function to request approval to promote a package, Breeze sends an e-mail to the package approvers. The e-mail contains a link to the Web page that displays the Breeze interface.

To start using the Breeze Web interface, you can either click on the link in the e-mail, or you can ask your Breeze administrator for the Web address (URL) of the interface, and enter the address in your Web browser. The Web address of the Breeze Web interface has the following format:

```
http://host-ip-address:port/brsc1m.html
```

This Web page downloads a Java applet that displays inside your Web browser window. Depending on the speed of your network connection, it may take a few seconds for the Java applet to download from the host (the z/OS or OS/390 system where Breeze is installed) to your Web browser.

Logging in

When the Breeze Web interface has loaded, it displays a login prompt:



The screenshot shows a dialog box titled "Welcome to Breeze for SCLM". It contains two input fields: "User Name:" and "Password:". To the right of the "User Name:" field is an "OK" button, and to the right of the "Password:" field is an "About" button. Below the input fields, the text "Please login." is displayed.

Figure 8. Breeze login prompt

To view Breeze version and release information before logging in, click the **About** button.

To login, type your host TSO user ID and password, then click OK.

Getting started

The main panel

After you login, the Breeze Web interface displays the main panel:

In-box determines the packages in the list

List of packages, determined by the in-box and the filter (if set)

Package Status

Package ID Description

APC00200 IBM BREEZE FOR SCLM PACKAGE

Click a package in this list to **vote** or to **view**

Login to a different user ID

Approve >>
Veto >>
Login

Summary Contents Log Collisions Ballot Box Notes

Description IBM BREEZE FOR SCLM PACKAGE
Type STANDARD
Status PENDING
Last cast/pverify DOHERTL 10/19/01 11:35a
Last promote
Next promote date start 10/19/01 11:35a
Next promote date end 12/31/80 11:59p
Package member project SCLMTEST
Package member altproj SCLMTEST
Package member group DEV1
Package member to group TEST
Package member type PACKAGE
Collisions YES

No filters set

Package ID

Go

Host access complete

Filter limits the packages displayed in the list

Information about the package selected from the list

Status of communication between this interface and the Breeze host

Figure 9. Breeze Web interface main panel

The main panel is divided into several areas:

- In-box** Lets you determine which packages are displayed in the list, according to package status and whether you are an approver for the package.
- Filter** Limits the packages displayed in the list to those that meet the criteria you specify.
- List** Displays a list of packages, determined by the in-box and any filter that you have set. To view or vote on a package, you select the package from this list.
- Information** Displays information about the package that you select from the list.
- Status** Describes communication between the Breeze Web interface and the Breeze host.

The rest of this chapter describes how to use the main panel:

For information about using the...	See...
In-box, filter and list	"Selecting a package for viewing or voting"
Tabbed information area	"Viewing package information" on page 22
Approve and Veto buttons	"Voting on a package" on page 20

Selecting a package for viewing or voting

Before you can view or vote on a package, you need to select it by clicking on the package ID or description in the list on the main panel. Before you can do this, you need to display the package in the list.

To determine which packages are displayed in the list, click an in-box item (at the top left of the main panel):

Requiring my approval

Displays packages that require your approval; that is, the packages in PENDING status for which you are an approver. When you login, this is the default.

If your user ID is set up as "notify only" then you will not see the package in the "Requiring my approval" section on the web browser. You will also not be able to vote on the package either via the browser or using the vote batch job.

Emergency packages

Displays only the emergency packages that require your approval.

Standard packages

Displays only the standard packages that require your approval.

Packages by status

Displays all packages, regardless of their status or approvers.

Pending

Displays packages that require approval, and for which voting is still in progress.

Vetoed

Displays packages that have been voted on and vetoed.

Approved

Displays packages that have been voted on and approved. This status can also apply to packages that did not require approval but, for some reason (such as a problem in SCLM) have not yet been promoted.

Promoted

Displays packages that have been successfully promoted.

Promotion failed

Displays packages that were approved but, for some reason (such as a problem in SCLM), have not been promoted.

When the list displays the package you want, select the package by clicking on the list.

To view information about the selected package, see "Viewing package information" on page 22.

Selecting a package for viewing or voting

To vote on a package for which you are an approver, you must select the package from the list displayed when you click “Requiring my approval” or one of its sub-items. This enables the **Approve** and **Veto** buttons, allowing you to cast a vote. If you select the same package from the “Packages by status” list, then these buttons remain disabled. For information about voting, see “Voting on a package.”

Filtering packages from the list

To limit the list to packages that meet certain criteria, set a filter:

1. From the drop-down list at the bottom left of the main panel, select a filter criteria:

Criteria	Value
Package ID	1 to 16 character SCLM package ID
Promotion Window	The timeframe in which the package can be promoted
Build User ID	User ID of the person who built the package
Promote User ID	User ID of the person who promoted the package
Promote Date	Date package was promoted
Last Update User ID	User ID of the person who made the last update to the package
Last Update Date	Date the package was last updated

2. Type the criteria value under the drop-down list.
3. Click **Go**.

The list now displays only the packages that meet your criteria.

When you set a filter, a **Reset** button appears in the filter area of the main panel. To remove the filter, click **Reset**.

Once filters are set, the message text “Filters are set” is displayed next to the Reset button. Once set, filters remain in effect, even if you switch to a different filter type. For example, if you set Build User ID to STEVE and then set Promote User ID to LIAM, both filters remain in effect, so subsequent query requests will return data only if packages were built by STEVE and promoted by LIAM.

Voting on a package

You can vote on a package only if all of these conditions are true:

- You are an approver for the package. Before you can be an approver, your Breeze administrator must define the necessary Breeze records on the host. For information about defining these records, see the *Breeze Planning and Administration Guide*.
- The package is still in PENDING status. That is, when you click “Requiring my approval” in the in-box, the package appears in the package list.
- You have not already voted on the package.
- You have selected “Requiring my approval” (or one of its sub-items, “Standard Packages” or “Emergency Packages”) in the in-box.

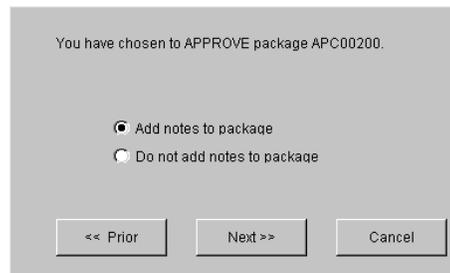
To vote on a package:

1. Click on the package in the list.
2. To cast a “for” vote, click the **Approve** button.

To cast an “against” vote, click the **Veto** button.

(If any of the conditions listed above are not true, then these buttons are disabled, and you will not be able to cast a vote.)

3. A voting dialog appears, similar to the one shown below (depending on whether you clicked Approve or Veto).



The screenshot shows a dialog box with a grey background. At the top, it says "You have chosen to APPROVE package APC00200." Below this, there are two radio button options: "Add notes to package" (which is selected) and "Do not add notes to package". At the bottom, there are three buttons: "<< Prior", "Next >>", and "Cancel".

This is the first in a sequence of voting dialogs. Each of these panels has a **Prior** button and a **Cancel** button. To step back through the sequence, click **Prior**. To return to the main panel without voting, click **Cancel**. (On the first dialog in the sequence, shown above, both **Prior** and **Cancel** return you to the main panel without voting.)

To leave notes explaining your vote to other users, select “Add notes to package”.

To proceed, click **Next**.

4. If you chose not to add notes, go to the next step.

If you chose to add notes, then a dialog appears with a text box where you can enter your notes.

You can enter up to 480 characters. To insert a line break in your notes, press the Enter key.

When you have finished entering your notes, click **Next** to proceed.

5. The final voting dialog appears, similar to the one shown below. To cast your vote, click **Submit**.



The screenshot shows a dialog box with a grey background. At the top, it says "Press submit to APPROVE package APC00200." Below this, there are three buttons: "<< Prior", "Submit", and "Cancel".

How voting results in APPROVED or VETOED status

Here is how a package in PENDING status reaches either approved status or VETOED status:

APPROVED status

Every approver group for the package approves the package. That is, in every approver group:

- Every required approver has voted (either “for” or “against”; a package can be approved even if one or more required approvers vote against it).
- The number of votes is equal to or greater than the quorum (minimum number of votes required for the approver group).
- There are a majority of “for” votes.

The package can now be promoted. For details, see Chapter 2, “Promoting a package,” on page 9

VETOED status

One approver group for the package vetoes the package. That is, in one of the approver groups:

- Every required approver has voted (either “for” or “against”; a package can be vetoed even if one or more required approvers vote for it).
- The number of votes is equal to or greater than the quorum (minimum number of votes required for the approver group).
- There are at least as many “against” votes as “for” votes.

If one approver group vetoes a package, then Breeze immediately sets the package to VETOED status, even if required approvers in other approver groups have not yet voted.

It is easier for a package to be vetoed than approved: an equal number of “for” and “against” votes in one approver group is enough to veto a package. For example, if there are five approver groups for a package, and four of the approver groups approve the package, but in the fifth approver group, there is an equal number of “for” and “against” votes, then the package is vetoed.

Viewing package information

To view detailed information about a package:

1. Select the package you want from the package list. For details, see “Selecting a package for viewing or voting” on page 19.
2. Click one of the tabs in the information area of the main panel. These tabs are described under the headings that follow.

Summary

The Summary tab displays various information about the selected package.

Summary	
Description	IBM BREEZE FOR SCLM PACKAGE
Type	STANDARD
Status	PENDING
Last cast/pverify	DOHERTL 10/29/01 4:02p
Last promote	
Next promote date start	10/29/01 4:02p
Next promote date end	12/31/80 11:59p
Package member project	SCLMTEST
Package member altproj	SCLMTEST
Package member group	DEV1
Package member to group	TEST
Package member type	PACKAGE
Collisions	YES

Figure 10. Summary tab

Description

If a developer used the SCLM promote function in foreground to request promotion for this package, then this is the description that the developer entered on the Breeze pop-up window. Otherwise, if the developer used the SCLM promote service in a batch job, then this is the default description supplied by Breeze.

Type Package type: standard or emergency.

Status Current package status.

Last cast/pverify

User ID, time and date of the most recent invocation of the Breeze “promote verify” user exit for this package. (That is, who last used the SCLM promote function for this package, and when they used it.)

Last promote

User ID, time and date of the most recent successful promotion of this package (as recorded by the Breeze “promote purge” user exit).

Next promote date start/end

If the package reaches APPROVED status between these two dates, then the package can be promoted. Otherwise, the package cannot be promoted, even if it is approved.

Package member

Package member details. The “to” group is the SCLM project group to which the package will be promoted.

Collisions

Indicates whether or not the current package is in collision with any other packages.

Viewing package information

Contents

The Contents tab lists the names and inventory locations of the members in the selected package. The tab lists each member at its *source* inventory location (the SCLM project group where the member is to be promoted from) and also at its *target* inventory location (the SCLM project group where the member will be promoted to).

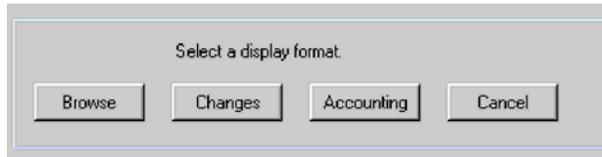


Figure 11. Contents tab

To view more detailed information about a member, click the entry for the member in the Contents tab. A dialog appears with the following choices, each of which opens a new browser window displaying the selected information:

Browse

Displays the contents of the member.

Changes

Displays a line-by-line comparison of the new (source) and old (target) members. For example:

```
BREEZE FOR SCLM
REQUEST IS FOR CHANGES PROCESSING
MEMBER = TEST01 PROJECT = SCLMTEST GROUP = DEV1 TYPE = SOURCE
```

```
ISRSUPC - MVS/PDF FILE/LINE/WORD/BYTE/SFOR COMPARE UTILITY - ISPF FOR OS/390 2000/01/14 12.08
NEW: SCLMTEST.DEV1.SOURCE(TEST01) OLD: SCLMTEST.TEST.SOURCE(TEST01)
```

LISTING OUTPUT SECTION (LINE COMPARE)

ID	SOURCE LINES	TYPE	LEN	N-LN#	O-LN#
	-----1-----2-----3-----4-----5-----6-----7-----8				
I -	BREEZE FOR SCLM	00001005	INS=	13	00001 00001
I - *		00005005			00002
I - *		00005105			00003
I - *		00005205			00004
I -	THE PURPOSE OF THIS MEMBER IS TO SHOW THE CHANGES FUNCTION FOR BREEZE	00006005			00005
I -	CHANGES WILL BE IN THE FORM OF INSERTS (I), DELETES (D), OR FORMAT (RN)	00007005			00006
I -	FOR LARGE MEMBERS THERE WILL BE CHANGE SECTIONS CONTAINING CHANGES.	00009005			00007
I - *		00009105			00008
I -	THIS IS A TEST MEMBER	00010005			00009
I -	THIS IS A TEST MEMBER FROM THE FIELD	00011005			00010
I - *	THIS IS A TEST MEMBER FROM DEVELOPMENT	00020005			00011
D -	THIS IS A TEST MEMBER FROM THE FIELD	00010000	DEL=	4	00002 00001
D -	THIS IS A TEST MEMBER FROM DEVELOPMENT	00020001			00002

Figure 12. Sample change comparison of source and target members

Accounting

Displays accounting information for the member. For example:

```
BREEZE FOR SCLM
REQUEST FOR ACCOUNTING INFORMATION
MEMBER = TEST01 PROJECT = SCLMTEST GROUP = DEV1 TYPE = SOURCE
BREEZE FOR SCLM ACCOUNTING REPORT
```

PROJECT	: SCLMTEST	STATUS	: EDITABLE	MEM VERSION	: 9
ALTPROJ	: SCLMTEST	CHANGE DATE	: 99/12/20	CHG VERSION	: 60
GROUP	: DEV1	CHANGE TIME	: 12:07:00	AUTH CODE	: DEV
TYPE	: SOURCE	CHANGE USER	: P390J	CHANGE CODE	: SCLMJFP
LANGUAGE	: COBOL	CREATE DATE	: 98/10/24	PROMOTE DATE	: 99/12/15
MEMBER	: TEST01	CREATE TIME	: 13:57:45	PROMOTE TIME	: 17:02:00

Figure 13. Sample accounting information

Viewing package information

Log

The Log tab displays a history of the actions performed on a package.

Log					
10/29/01	4:02p	PVERIFY	RC=04	DOHERTL	SCLM promote function Four approvers clicked the Approve or Veto button, casting a vote and tallying the vote count (represented by a single TALLYING log entry)
10/29/01	4:03p	TALLYING	RC=00	CATTERRJ	
10/29/01	4:05p	TALLYING	RC=00	DOHERTLJ	
10/29/01	4:05p	TALLYING	RC=00	OSPEEDJ	
10/29/01	4:07p	TALLYING	RC=00	SCLMADMJ	

Figure 14. Log tab

PVERIFY

A developer used the SCLM promote function (invokes the Breeze "promote verify" user exit) to request package promotion

CLEAR

An administrator used the delete batch utility to clear all votes and set the package status to blank. After this action, the package information can still be viewed, but the package cannot be voted on. To begin voting over again, use the SCLM promote function.

UPDATE

Either the execution dates and/or description have been changed during a promote, by using the "override dates" flag on the promote panel, or the delete batch utility job has been used to update the package attributes.

BUILD

A developer used SCLM to build the package.

PROMOTE

A developer used SCLM to promote the package.

VOTING

An approver used the voting batch utility to cast a vote (or to change an existing vote) without tallying the votes.

STATUS CHG

An administrator used either the delete batch utility (which changes a package status to blank) or the reset batch utility (which changes a package status of INCOMPLETE to its previous status of PENDING or APPROVED).

TALLYING

An approver either:

- Used the voting batch utility to vote (or change an existing vote) and also tally the votes.
- or
- Used the Breeze Web interface to approve or veto the package.

For each action, the log displays the date and time, the return code, and the user ID that performed the action. If a package has previously been promoted, then the package inherits the existing log, and the log accumulates as the package is promoted up the hierarchy. Any builds before the first use of the promote function are not recorded, because the Breeze record of the package is created during the promote function, by the Breeze promote verify user exit.

Collisions

The Collisions tab contains detailed collision information about the current package, including which members are causing the collision. The collision may be current or historic, depending on the status and location of the package.

Collisions					
OTHER PKGID	MEMBER	PROJECT	ALT-PROJECT	GROUP	TYPE
APC01962	FLM01MD1	SCLMTEST	SCLMTEST	DEV1	SOURCE

Figure 15. Collisions tab

Ballot Box

The Ballot Box tab shows the details of the current voting status:

- Which approver groups are responsible for voting on the selected package.
- Which approvers are in each approver group.
- Who has voted.
- How and when those approvers voted.
- Whether or not a quorum has been reached.

Viewing package information

Ballot Box					
MGRGROUP		PENDING	Quorum: 02		
CATTERR	REQUIRED	FOR	10/29/01	4:03p] Quorum not yet reached, so group vote still pending
DOHERT2	REQUIRED		10/29/01	4:02p	
APCGROUP		APPROVED	Quorum: 03		
CORMACK			10/29/01	4:02p] Quorum has been reached (3 votes) and all required approvers have voted: group vote is "approved"
DOHERTL	REQUIRED	FOR	10/29/01	4:05p	
OSPEED	REQUIRED	FOR	10/29/01	4:05p	
SCLMADM		FOR	10/29/01	4:07p	

Figure 16. Ballot Box tab

Notes

The Notes tab displays any notes that have been added by approvers who have voted on the package.

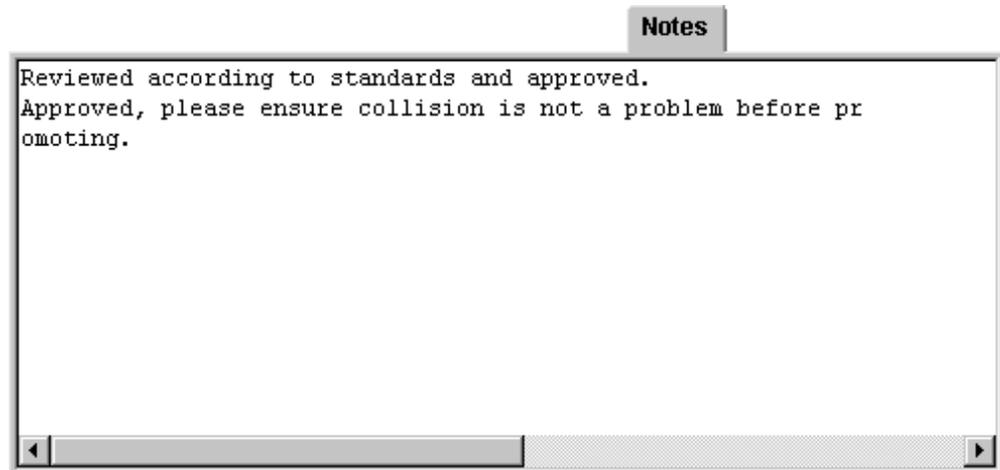


Figure 17. Notes tab

Chapter 4. Troubleshooting

This chapter provides help for problems you might encounter using Breeze. These problems are presented in the order that you are likely to encounter them. Additionally, they are presented alphabetically in the index at the back of the chapter.

No response

Problem or informational message	Corrective measures
In the process of launching the Breeze for SCLM product, you get no response from the server.	<p>Check your HTML file to ensure that both the IP and the port address are correct. Note that the port address cannot have leading zeros.</p> <p>Ensure the Breeze load library is in an APF-authorized library.</p> <p>If you are running Breeze on an intranet:</p> <p>Make sure that the CTS server (the Breeze HTTP server) is up and running on the host.</p> <p>If you are running Breeze on the Internet:</p> <p>Make sure that the CTS server is up and running on the host. Additionally, you may want to check with your ISP; traffic on the line or a problem in routing to your host IP address could also prevent the Breeze applet from loading.</p>

Class/Jar not found or Class/Jar cannot load

Problem or informational message	Corrective measures
In the process of launching the Breeze Web interface, you get a message from the browser that the Class/Jar/Zip file cannot be found or cannot be loaded.	<p>There is probably an error in the HTML file related to the location of Breeze on your host.</p> <p>Modify the HTML file to ensure that the jar name is correct and that both the IP and the port address are correct.</p>

Not allowed to use applet or security error

Problem or informational message	Corrective measures
The message "not allowed to use applet" appears in the status window of your browser, or you receive some other error related to security.	This is likely a firewall issue that will affect intranet users. Contact your systems or LAN administrator for assistance.

Login fails

If your login fails, it could be due to a number of factors:

Problem or informational message	Corrective measures
Security error.	Re-launch the product and make sure you enter the correct host user ID and password. If log in still fails, see your systems administrator for help in validating your user ID or password. A failed log in could also mean that your user ID and/or password combination is incorrect, or that your TSO password has expired.
The IP and/or port address in the Breeze HTML file could be incorrect.	Modify the HTML file to ensure that both the IP and the port address are correct.

Java not enabled on browser or virtual machine not loaded

The Breeze Web interface uses a Java applet, which requires that your browser be configured to read the Java language and that the Virtual Machine (the equivalent of the Java run-time environment) be loaded.

Netscape Navigator versions 4.5 and later are already Java-enabled, so this error condition applies to Internet Explorer users only.

Problem or informational message	Corrective measures
Java not enabled on browser or virtual machine not loaded.	For IE users: From the Internet Explorer Tools menu: <ol style="list-style-type: none">1. Select Internet Options.2. Select the Advanced tab.3. Scroll down to Java VM or (depending on your version of IE) Microsoft VM.4. Select all the checkboxes under this option.5. Restart your computer.

CIGINI errors

Problem or informational message	Corrective measures
CIGINI error. If there is a problem with your CIGINI file in the host component of Breeze, you will encounter this message on your first query.	Check the CIGINI file for a valid product password.
Data set allocation error.	Check your CIGINI parameters for VIO and work files.

JCL errors

Problem or informational message	Corrective measures
JCL setup error from the Breeze host component.	<p>Three pieces of JCL are required for the Breeze product:</p> <ul style="list-style-type: none"> • BZZSMSRV • BZZSMPKG • BZZSMPRT <p>Check to make sure that these have all been correctly modified.</p>

ERROR IN BATCH SHELLS

Problem or informational message	Corrective measures
This message is produced in the browser when either a vote action is performed and there is a problem with the BZZSMPKJ batch shell, or a Browse/Changes/Accounting action is performed and there is a problem with the BZZSMPRT batch shell.	<p>When any of these actions are performed, a batch job is submitted which has a job name of the submitter's Userid, concatenated with the letter "J". To resolve these types of errors, look for this job on your job queue viewer and ensure there are no JCL errors that will have caused the job to fail. Common problems are:</p> <ul style="list-style-type: none"> • incorrect tailoring of site related libraries • Security problems

Storage errors

Problem or informational message	Corrective measures
Any storage errors will originate from the host component of Breeze.	Check the region size allocated in the CIGINI, or check with your systems administrator.

TCP/IP errors

Problem or informational message	Corrective measures
Any storage errors will originate from the host component of Breeze.	Check the region size allocated in the CIGINI, or check with your systems administrator.
IP address incorrect.	Check IP address in HTML file.
Assigned port incorrect.	Check port address in HTML file.

E-mail errors

Problem or informational message	Corrective measures
E-mail errors.	SMTP server may not be set up correctly or might not be set up at all. Check with systems personnel to run e-mail test using sample JCL member BZZSMJX4 in SBZZJCL.
Incorrect e-mail list in \$\$SMTP.	Verify that e-mail list exists.

Query errors

Problem or informational message	Corrective measures
Request yields no results.	This is possibly a JCL error. Verify that required JCL members have been modified correctly. This could also be a job-card error. Verify that job-card values are correct.

Data display errors

Problem or informational message	Corrective measures
Data displays incorrectly. Data returned is not what you requested.	This is likely due to a set-up error. Verify that all steplib are pointing to the correct sets of files.

Bundle errors

When you run a JDK 1.1 Applet in a browser, errors appear.

Due to Internationalization in Java, the Applet looks at the system locale, and finds the local language. The Applet then looks for the ErrorsBundle_en_xx class and properties, where xx is a mnemonic that represents your country's locale. Because it cannot be found, it throws an informational message in the CIGXSUBT portion of the server output. It also issues the "SUBTASK GETJAVA FIND FAILED" in the CIGOUT and CIGXSUBT portions of the server output. According to the Symantec Web site, the Applet will now try a close match on the file name and look for

ErrorsBundle_en and then ErrorsBundle until it gets a match.

Problem or informational message	Corrective measures
File not found when looking for: symantec.itools.resources.ErrorsBundle_en_xx	You can safely ignore these messages.

where *xx* is a mnemonic that represents your country's locale.

Bundle errors

Chapter 5. Appendix

This chapter provides additional information that may be of help to Breeze users.

Package reuse scenarios

The scenarios below are examples of how Breeze operates when packages are reused at various levels of approval and promotion. For all scenarios assume a project hierarchy of DEV --> TEST --> RELEASE.

Scenario 1:

1. A package at DEV has been built and the first promote has already been performed. The package is either in PENDING status as it is awaiting approval, or it is in APPROVED status as it has been approved.
2. An object in the package is edited at DEV and saved.
3. A build is performed on the package. Breeze will issue a warning message that says the package status has been cleared and the user will have to re-promote to collect approvers again.
4. The ballot box votes will be cleared for the package.
5. Approvers will be notified that the package has been rebuilt and they will be required to vote again.
6. The user re-promotes the package, causing any approvers to be notified again that there is a package requiring their approval. The approvers will have to revote.

Scenario 2:

1. A package has been promoted to the TEST level. The Status of this package could be:
PROMOTED
The package has just been promoted
PENDING
The package is awaiting approval for the promotion to RELEASE
APPROVED
The package is approved and is awaiting for promotion to RELEASE
2. An object in the package is edited and saved at DEV.
3. The package is rebuilt at DEV. There is no warning message this time as the original package is at TEST. Breeze treats the package at DEV as a separate package with the same name as the original, i.e. the package name could be being reused.
4. The first promote of the new package at DEV is invoked and approvers are notified that there is a package requiring their approval.
5. The approvers approve the package at DEV.
6. The second promote of the package at DEV is invoked but BREEZE issues a warning message saying that there are changes pending at the target group, and the package at the target group (TEST for this example) must be promoted first.
7. There are three options available to the user in this instance:

Package reuse scenarios

- a. If the user does not want to promote the package at the target group but continue promoting the DEV package the user must use the CLEAR utility against the TEST package in order to allow Breeze to replace it with the DEV package.
- b. If the TEST package is valid for promotion, the user could promote the TEST package to RELEASE if it is in the correct STATUS, and then promote the DEV package to TEST.
- c. A different package name could be used for the DEV package.

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Glossary

activity log. See *log*.

administrator. Person responsible for using batch utilities on the host to:

- Define Breeze records for inventory junctions, approver groups and individual approvers
- Create reports of package activity
- Delete Breeze records of old packages

APPROVED. A package status. Indicates either:

- The package was in PENDING status, and approvers have voted. In every approver group, there is a quorum of votes; all required approvers have voted and more than half of the votes cast were “for” (approve) votes. The package has not yet been promoted.

or

- The package does not require approval, but has not yet been promoted.

If the package reaches APPROVED status before its execution window end date, then the package can be promoted.

However, if there is a problem with the SCLM promote copy or purge phase, then the promotion will fail, and the package will go into INCOMPLETE status.

approver. A Breeze user who is responsible for voting on (approving or vetoing) requests to promote members from a particular inventory location to the next higher group in the project hierarchy.

To vote, approvers use either the Breeze Web interface or the host-based voting batch utility. Approvers can use the Breeze Web interface to leave notes explaining their vote, and view package information: summaries, status, activity logs, source member contents and line-by-line changes, member collisions, ballot (who has voted, and how) and notes left by other approvers.

If your site does not use Breeze for voting, then there will be no approvers defined, and the role of administrator will be limited to creating reports of package activity and deleting Breeze records of old packages.

approver group. A set of approvers. An approver group can be assigned to an inventory location by an inventory junction record.

blank. A package status. Indicates that the Breeze administrator has run the delete batch utility on a package, leaving only summary and log information. Alternatively, the package has been rebuilt since the request for approval. The package cannot be promoted (because source members might have been changed).

general user. A Breeze user who can use the Breeze Web interface to view package information. Unlike approvers, general users cannot vote. A general user is anyone with a TSO user ID on the host where Breeze is installed.

host. The OS/390 or z/OS system where Breeze is installed.

INCOMPLETE. A package status. Indicates that there has been a problem with the second promote, such as a space problem in the target data set, and the promote will fail. In this instance, Breeze will change the status of the package being promoted to INCOMPLETE.

inventory junction record. A type of Breeze record that links an inventory location to an approver group.

inventory location. A particular SCLM project, group, type and language. Identifies a set of source members in an SCLM project hierarchy.

log. A history of the actions performed on a package. Contains the action type, date and time, return code and user ID that performed the action.

package. An SCLM high-level (HL) architecture member. Developers create packages to identify source members that should be promoted together because they contain related changes. For details, see the *SCLM Project Manager's and Developer's Guide*.

package status. One of the following: PENDING, APPROVED, VETOED, PROMOTED, INCOMPLETE or blank.

PENDING. A package status. Indicates that a developer has used the SCLM promote function to request approval to promote a package. Breeze caused the promote function to fail because the package requires approval. Approvers can now vote on the package.

PROMOTED. A package status. Indicates that SCLM has promoted the package.

quorum. The number of votes required in an approver group before the group vote can be decided as “approve” or “veto”. (An approver group with required approvers cannot have a quorum of zero. A quorum must be equal to or greater than the number of required approvers in the group.)

required approver. An approver whose vote is required before the vote of the approver group can be decided.

VETOED. A package status. Indicates that, in at least one approver group, there is a quorum of votes, all required approvers in the group have voted, and at least half of the votes cast by the group were “against” (veto) votes. The package cannot be promoted.

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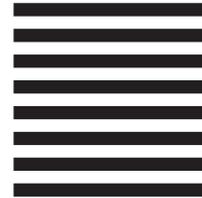
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