

SEE/Change

PE Notes 4.5500

(Version 4.5500)



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Thenon – designers of SEE/Change, the leading iSeries change management product.

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2 Primary PE Enhancements

2.1 Promotion of concurrently developed programs

SEE/Change allows a program source member to be retrieved to two different CRs so that different versions of the source can be developed at the same time - in SEE/Change this is called concurrent development (CCD). Each CR has its own library, so each version of the source can be independently edited, compiled etc. without affecting the other version. However, if an attempt is made to promote one of the CRs to the Integration or Acceptance environment, and the other CR has already been promoted to that environment, then a conflict will occur as only one version of the program can exist in that environment's object library.

SEE/Change's current way of resolving this conflict is to ensure that only one version of the CR part can exist in this situation. When the attempt to promote the second CR is made, SEE/Change will display a warning that the concurrently developed program has previously been promoted from another CR and if you continue with the promotion, then the object will be permanently removed from that CR.

Warning Messages

```
Warning: Other versions of TESTCCDCL *PGM CLP level *BAS are:
         Rtv type *CCD, in CR 000001/19: CR status *MDL.
         Note: TESTCCDCL *PGM CLP will be removed from CR 000001/19 !!
```

```
Do you wish to ignore these warnings and continue ? . . . . . : N (Y/N)
```

Additional Message Information

```
Message ID . . . . . : OME3142      Severity . . . . . : 00
Message type . . . . . : Information
Date sent . . . . . : 01/08/20      Time sent . . . . . : 15:24:02
```

```
Message . . . . . : Note: TESTCCDCL *PGM CLP will be removed from CR
000001/19 !!
If you ignore this warning message and continue, object TESTCCDCL *PGM CLP
will be removed from CR 000001/19.
```

Bottom

Press Enter to continue.

```
F3=Exit   F6=Print   F9=Display message details
F10=Display messages in job log   F12=Cancel   F21=Select assistance level
```

If you continue, the CR part will be removed from the first CR and then the promotion will cause the version of the program in the object library to be replaced with the version from the second CR.

The net result will be that both CRs will be promoted to the same environment but only the second CR will have an entry for the CR part that gave the CCD conflict. The version of the program in the environment's object library will have come from the second CR.

Although this approach maintains the integrity of the promotions, some installations do not want the promoter of the second CR to be able to remove a CR part from the first CR (which may belong to a different development team). PE 4.5500 introduces a new option that will allow the second CR to be promoted without removing the concurrently developed part from the first CR.

(Note: Although the new option will allow different versions of a program to co-exist in the development life cycle, it will be the developer's responsibility to ensure that the different versions are promoted in the correct sequence and that any source code differences are resolved.)

In PE 4.5500, a new setting called *Allow CCD program promotion?* has been added to the *Work with Application Details* screen in the Configuration Manager.

```

THENON                      THENON Change Management System 4.5500
                             Work with Application Details

Application code . . . . . : AP1
Application description . . . . . Test Application 1
Development centre system . . (P). DEV          Dev Sys
Development centre site . . . (P). DEV          Dev Site
Application job description . . . AP1JOB          Message file lib . . AP1MSGF
Default CASE tool . . . . . (P). *NONE          Model/Set Name . . .
Cross-application documentation . N             (N)one/(A)ppl/(D)ate
Re-compile objs at remote sites? . Y            (Y)es/(N)o
Re-compile objs at Dev Centre? . . Y            (Y)es/(N)o
Distribute source code? . . . . . Y            (Y)es/(N)o
Distribute object override info? . Y            (Y)es/(N)o
Message file operations . . . . . D            (M)erge/(D)uplicate
Multiple versioning? . . . . . Y            (Y)es/(N)o
Planned concurrent development? . Y            (Y)es/(N)o
Allow CCD program promotion? . . N            (Y)es/(N)o
Auto revert if promote errors? . . N            (Y)es/(N)o/(P)rompt
Number of archiving levels . . . . . 03         (0-99) Archive Library . . @ARCD45500
Configuration complexity . . . . . 3            1=Simple 2=Intermed 3=Complex More...

F1=Help  F3=Exit  F4=Prompt  F9=Cmd  F12=Cancel  F16=Update  F24=Messages

```

If the value for *Allow CCD program promotion?* is set to No (the default), CCD promotions will behave unchanged as described above – i.e. if there is a conflict, a warning message will be displayed explaining that if you continue, the CR part in conflict will be removed from the other CR before promoting this CR.

If the value for *Allow CCD program promotion?* is set to Yes, then SEE/Change will allow two CRs containing the same CR part to be promoted to the same environment. When an attempt is made to promote the second CR containing the CCD program, a new warning message will be displayed explaining that the previous version of the program will be superseded. The CR part in conflict will not be removed from the other CR.

With the value for *Allow CCD program promotion?* set to Yes, the new warning will be displayed as follows:

```
Warning Messages

Warning: Other versions of TESTCCDCL *PGM CLP level *BAS are:
        Rtv type *CCD, in CR 000001/19: CR status *MDL.
        Note: TESTCCDCL *PGM CLP from CR 000001/19 will be superseded.

Do you wish to ignore these warnings and continue ? . . . . . : N (Y/N)
```

```
Additional Message Information

Message ID . . . . . : OME4329      Severity . . . . . : 00
Message type . . . . . : Information
Date sent . . . . . : 01/08/20      Time sent . . . . . : 15:35:01

Message . . . . . :      Note: TESTCCDCL *PGM CLP from CR 000001/19 will be
superseded.
If you ignore this warning message and continue, object TESTCCDCL *PGM CLP
from CR 000001/19 will be superseded - i.e. The current version of TESTCCDCL
*PGM CLP in the *MDL environment came from CR 000001/19. This will be
replaced by the version in CR 000003/12.

Press Enter to continue.

F3=Exit  F6=Print  F9=Display message details
F10=Display messages in job log  F12=Cancel  F21=Select assistance level
```

If you continue, the promotion will cause the version of the program in the object library to be replaced (i.e. superseded), but the CR part will not be removed from the other CR.

The net result will be that both CRs will be promoted to the same environment and each will have an entry for the CCD CR part, but the version of the program in the environment's object library will have come from the second CR.

If the second CR is subsequently promoted further through the life cycle (or reverted back to development), then SEE/Change will firstly check whether the second CR previously caused a program in another CR to be superseded in the current environment. If so, then when the promotion to the new environment is attempted, a new warning will be displayed explaining that if you continue with the promotion of the second CR, then the previously superseded program from the first CR will be reinstated (to the current environment).

```

Warning Messages

Warning: Other versions of TESTCCDCL *PGM CLP level *BAS are:
        Rtv type *CCD, in CR 000001/19: CR status *MDL.
        Note: TESTCCDCL *PGM CLP from CR 000001/19 will be reinstated.

Do you wish to ignore these warnings and continue ? . . . . . : N (Y/N)

```

```

Additional Message Information

Message ID . . . . . : OME4330      Severity . . . . . : 00
Message type . . . . . : Information
Date sent . . . . . : 01/08/20      Time sent . . . . . : 15:17:25

Message . . . . . : Note: TESTCCDCL *PGM CLP from CR 000001/19 will be
reinstated.
If you ignore this warning message and continue, object TESTCCDCL *PGM CLP
from CR 000001/19 will be reinstated - i.e. The current version of TESTCCDCL
*PGM CLP in the *MDL environment came from CR 000003/12. This will be
replaced by the version in CR 000001/19.

Bottom

Press Enter to continue.

F3=Exit   F6=Print   F9=Display message details
F10=Display messages in job log   F12=Cancel   F21=Select assistance level

```

If you continue, the promotion will cause the version of the program in the current environment's object library to be replaced by the version in the first CR (i.e. the previously superseded version will be reinstated). The promotion of the second CR to the new environment will continue as normal.

The net result will be that the second CR will have been promoted to the new environment and that environment's object library will contain the version of the CCD program from the second CR. The first CR will remain promoted to the current environment and that environment's object library will now contain the version of the CCD program from the first CR (reinstated).

The *Display CR Parts* function has been updated to help identify CR parts that have been superseded. If a part in a CR that was previously promoted has since been superseded, the *Display CR Parts* alternative view screen has been amended to show the *Retrieval Status* for the superseded CR part as ***SUP**.

THENON Change Management System 4.5500							
Display CR Parts							
CR : DEV 000001 / 19 CCD demonstration							Envr: *MDL
Appl : AP1 Test Application Contact Ref:							
Status: *MDL 1/08/20		Assigned to: TEAM1		Pty: *VHI		Rls: *N/A	
5=Display		11=Transfer		20=Movements		21=History	
25=Tfr History		26=Obj Browser		22=Overrides			
Opt	Object	Type (P)	Attr (P)	Level	Ver	Rtv status	Additional Info
___	TESTCCDCL	*PGM	CLP	*BAS	001	*SUP	5/08/20 Dist: Src/Compl
Bottom							
F3=Exit F5=Refresh F9=Cmd F11=Change view F12=Cancel F18=Delivery seq							
F19=Stream Files							

This setting will remain in effect as long as both CRs remain promoted to the same environment – if either CR is promoted to a different environment (or reverted for development), then there is no longer a conflict at the current environment and the CCD part is no longer regarded as superseded, and so will not be stamped with ***SUP**.

Note: The behaviour described above only applies to SEE/Change *PGM parts – i.e. parts that will be delivered to the configured application Object Libraries. SEE/Change does not support concurrent development promotions for *DB parts – i.e. parts that will be delivered to the configured application Database Libraries.

2.2 New warning when overwriting a Live part

While testing the functionality of the new CCD promotions described above, the following situation was encountered. A program is checked out to one CR and that CR is promoted to a testing environment (Integration or Acceptance). The same part is then checked out to a second CR and that CR is promoted through the life cycle to the Live environment. If the first CR is subsequently promoted to Live, there is no indication that the CCD part was recently delivered to Live by the second CR and that this version would be overwritten.

To identify this situation, when attempting to promote the first CR to Live, a new warning message has been included. This message will be displayed if SEE/Change finds that a CCD part has been promoted to Live by another CR and the delivery occurred after the first CR was promoted out of Development (i.e. to Integration or Acceptance).

```
Warning Messages

Warning: TESTCCDCL *PGM CLP from CR 000003/12 promoted to Live recently...

Do you wish to ignore these warnings and continue ? . . . . . : N (Y/N)
```

```
Additional Message Information

Message ID . . . . . : OME3245      Severity . . . . . : 00
Message type . . . . . : Information
Date sent . . . . . : 11/08/20      Time sent . . . . . : 15:48:49

Message . . . . . : Warning: TESTCCDCL *PGM CLP from CR 000003/12 promoted to
Live recently...

A version of object TESTCCDCL *PGM CLP also exists in CR 000003/12. CR
000003/12 was promoted to Live/Production after CR 000001/19 was promoted
out of Development. If you continue with the promotion of CR 000001/19 to
Live, the Live version of TESTCCDCL *PGM CLP from CR 000003/12 will be
overwritten.

Bottom

Press Enter to continue.

F3=Exit   F6=Print   F9=Display message details
F10=Display messages in job log   F12=Cancel   F21=Select assistance level
```

2.3 Concurrent Development Enquiry

To help to identify potential concurrent development promotion conflicts, PE 4.5500 includes a new enquiry screen – *Concurrent Development Enquiry*. This can be accessed from the *Work with Change Requests* screen via option 51=CCD Objects.

```

THENON Change Management System 4.5500  Filter: *NONE
Work with Change Requests

50=CR Auth Hist  51=CCD Objects  65=Chk CR Log  66=Mvt Reports  67=List Mvt Err

Opt IR No/CR Text                                     Applicatn Status
-----
51      11 External SQLPROC                             Test Appli Rdy/Release
        12 CCD demonstration 2                         Test Appli Integr/Tst

Bottom

F1=Help  F3=Exit  F4=Prompt  F5=Refresh  F6=Create  F9=Cmd  F11=Change view
F12=Cancel  F14=Curr flt  F21=Filter  F22=Status  F23=More options  F24=Msgs

```

```

THENON Change Management System 4.5500
Concurrent Development Enquiry

Application . . . : AP1          Test Application
Change Request . : 000003/12    CCD demonstration 2
Environment . (P). *ALL
Type options, press Enter.
20=Movements  21=History

Opt Object      Type      CCD CR      Envr  Rtv Date  Comments
-----
   TESTCCDCL    CLP       000001/19  *MDL   5/07/20  Superseded
                000001/04  *ACP   28/04/20

Bottom

F3=Exit  F9=Cmd  F12=Cancel

```

For a selected CR, the *Concurrent Development Enquiry* will show a list of objects (if any) that are currently also checked out to other CRs and the current environment of those CRs along with the date that the part was retrieved.

The enquiry allows the returned results to be filtered by CR Environment. The default value is *ALL, but this can be changed to *DEV (Development), *MDL (Mdl/Integration), *ACP (Acceptance) or *LIV (Live).

Normally, only CRs that are in development or testing will be shown (i.e. *DEV, *MDL, *ACP), however, if a version of an object has been delivered to Live since the selected CR was moved out of Development, then this Live CR version (i.e. *LIV) will also be shown (this will correspond with the new warning described in section 2.2 - *New warning when delivering Live part*).

The Comments area may show one of the following:

Superseded	Only one version of an object can exist in each testing environment. If two CRs that contain an object are both promoted to the same environment, then one version will be superseded.
Delivered Date	If a version of the object was promoted to Live after the selected CR was moved out of Development, then this will show the date the object was delivered to Live.
Emergency Fix	If the CCD version of the object is in an Emergency Fix CR then this will be shown.

The enquiry includes options *20=Movements* and *21=History* to allow you to drill down to examine the CCD CR part's movement logs and retrieval history.

2.4 SEE/Change Authorisation Code

In *Work with General Parameters* in the Configuration Manager, the *Work with Parameter Data* screen for the SEE/Change Authorisation Code parameter (@AUT) has changed. The screen now allows more than one Authorisation Code to be entered. This will permit, for example, the entry of Authorisation Codes for both a Production machine and also for a disaster recovery machine that mirrors the SEE/Change Production environment. SEE/Change's internal validation will check whether either of the entered Authorisation Codes is valid.

A new sequence field has been included to label each Authorisation Code - this sequence can take a value between 1 and 9. Normally, there will only be one Authorisation Code, and this will be assigned to Sequence 1. Secondary Authorisation Codes should be assigned to a different Sequence Number.

THENON Change Management System 4.5500	
Work with Parameter Data	
Attr: *LEN: 1 / 20 A	*VLD: *STD
*DSP: *STD	*VL1:
*EDT: *STD	*VL2:
Enter/update parameter table: @AUT : Authorisation Code - SEE/Change	
Parameter Var	Parameter Value
Seq (1-9)	Authrstrn Code
1	ABC12AB12345678
2	CBA98CB98765432
More...	
F1=Help F3=Exit F9=Cmd F12=Cancel	

Note: Similar changes have been made to the screens for the Authorisation Codes for @AU1 - SEE/One and @AU2 - SEE/Job (if installed).

3 Software Performance Reports

The following table lists software performance reports that have been resolved in this PE.

SPR Log Number	Description
5909	THNNETF loops if user not authorised to DMSLOG msgq
5908	Ensure execution messages use THNSTRSEU instead of STRSEU
5905	ILE program not stamped *EMG in Emergency Fix CR
5902	REVERSE SQLDML not handling embedded CL correctly
5901	*E36 for SQL procedure with long SPECIFIC name
5899	Allow Additional Library name to be specified in BLDILEREF
5898	*E10 when reverting SQLDML from Acceptance at Production (*IAC)
5897	Select Target Libraries pop-up not displayed for some user profiles
5896	OME2243 error sending SQLVIEW to Acceptance at Production
5895	TFRCROBJ does not work for target CR 99
5894	Support for CREATE RECURSIVE VIEW statement
5892	RD Create IR/CR wizard fails if > 230 Applications configured
5891	Support for DR Authorisation Code to be stored

4 Installation

4.1 Warnings

To ensure a successful upgrade please use the SEE/Change upgrade guide. This comprehensive guide is available from the thenon.com website Download Area or from the support line.

Steps must be taken to preserve any customised code especially if upgrading by reinstalling the product libraries and running a conversion.

4.2 Dependencies

- Must be applied after 4.5400.
- SEE/Change 4.5500 will run on IBM i 7.1 or higher.
- Must be applied to all remote sites? **See compatibility chart.**

5 RDi Plug-in Compatibility Chart

SEE/Change Plug-in Compatibility

SEE/Change Server Version	<u>IDE Version</u>	
	RDP 8.x.x.x	RDP 9.x.x.x
4.5401	1.4.2	1.4.2
4.5402	1.4.2	1.4.2
4.5403	N/A	1.4.3
4.5500	N/A	1.4.3

6 SEE/Change Compatibility Chart

SEE/Change Release Compatibility Chart

		Development												
		4.5100	4.5101	4.5102	4.5103	4.5104	4.5200	4.5201	4.5300	4.5400	4.5401	4.5402	4.5403	4.5500
Production	4.5100	Yes	Yes	Yes	Yes	Yes	1	1,2	1,2,3	1,2,3	1,2,3	1,2,3,4	1,2,3,4	1,2,3,4
	4.5101	No	Yes	Yes	Yes	Yes	1	1,2	1,2,3	1,2,3	1,2,3	1,2,3,4	1,2,3,4	1,2,3,4
	4.5102	No	No	Yes	Yes	Yes	1	1,2	1,2,3	1,2,3	1,2,3	1,2,3,4	1,2,3,4	1,2,3,4
	4.5103	No	No	No	Yes	Yes	1	1,2	1,2,3	1,2,3	1,2,3	1,2,3,4	1,2,3,4	1,2,3,4
	4.5104	No	No	No	No	Yes	1	1,2	1,2,3	1,2,3	1,2,3	1,2,3,4	1,2,3,4	1,2,3,4
	4.5200	No	No	No	No	No	Yes	2	2,3	2,3	2,3	2,3,4	2,3,4	2,3,4
	4.5201	No	No	No	No	No	No	Yes	3	3	3	3,4	3,4	3,4
	4.5300	No	No	No	No	No	No	No	Yes	Yes	Yes	4	4	4
	4.5400	No	No	No	No	No	No	No	No	Yes	Yes	4	4	4
	4.5401	No	No	No	No	No	No	No	No	No	Yes	4	4	4
	4.5402	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes
	4.5403	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes
	4.5500	No	No	No	No	No	No	No	No	No	No	No	No	Yes

Notes

Note 1: Yes, however Version Control on Releases will be ignored on production machine

Note 2: Yes, however the Alternative ALTER TABLE support will be ignored on production machine

Note 3: Yes, however changes to the default object delivery sequence will be ignored on production machine

Note 4: Yes, however SSH distribution is not supported.

Minimum i5/OS Levels

4.5100	V5R2
4.5101	V5R2
4.5102	V5R2
4.5103	V5R2
4.5104	V5R3
4.5200	V5R3
4.5201	V5R4
4.5300	V5R4
4.5400	V6R1
4.5401	V6R1
4.5402	V6R1
4.5403	V6R1
4.5500	V7R1

Disclaimer: Every effort has been made to ensure accuracy however we cannot take responsibility for any errors caused by using this information