

SEE/change

SEE/Change

PE Notes 4.5200

(Version 4.5200)



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

1 Contents

1	CONTENTS	2
2	PRIMARY PE ENHANCEMENTS	3
2.1	Version Control on Releases	3
2.1.1	Introduction	3
2.1.2	Configuration	4
2.1.3	Packaging a Release	5
2.1.4	Installing a Release	7
2.1.5	Exclusions	7
2.2	Release Network Status	8
2.3	Production CR Status Summary	9
2.4	Release Manager User Enrolment	10
2.5	Concurrent Development and Service Programs	10
2.6	Displaying source in Display CR Parts	11
2.7	Support for IBM Rational Developer	11
2.8	CR Movement Authorisation History	12
3	SOFTWARE PERFORMANCE REPORTS	13
4	INSTALLATION	14
4.1	Warnings	14
4.2	Dependencies	14
5	PLUG-IN COMPATIBILITY CHART	15
6	SEE/CHANGE COMPATIBILITY CHART	16

2 Primary PE Enhancements

2.1 Version Control on Releases

2.1.1 Introduction

Each time an object is promoted through the life-cycle on the development system its version number is incremented so that a view of an object's history will show a sequential list of versions. However, SEE/Change does not enforce that every CR is delivered to a production system and so gaps can appear in the version sequence for an object at a production system. It has been the developer's responsibility to ensure that either:

- a) Each production system receives all eligible CRs and that they are installed in the correct sequence, or
- b) The side-effects of improper sequence are mitigated (e.g. by merging source corresponding to undelivered versions before delivery).

With PE 4.5200, SEE/Change now includes two new validation routines that allow more control of the version sequence at production systems. One routine checks for version anomalies when packaging a Release at the development system and displays a warning if any are found. The second routine runs on the production system just prior to performing an install and will prevent the install if it finds an incorrect version.

2.1.2 Configuration

The activation of the routines is governed by a new setting in Application Configuration. The *Work with Application Details* display now includes a new option – *Version control on Releases?* If this is set to 'Y' on the development system then version checks will be performed before instigating the transfer of a Release. If set to 'Y' on a production system then version checks will be performed before the install of an incoming Release.

THENON		Change Management System 4.5200	
		Work with Application Details	
ILE Remote Delivery Method	*BOTH	*PGMONLY/*MODONLY/*BOTH	
ILE Module Pool Library	ACMMODPOOL		
ILE Allow missing modules	N	(Y)es/(N)o	
Cross Referencing Utilisation . . .	*FULL	*NONE/*DATA/*FULL	
JDE Application?	N	(Y)es/(N)o	
SEE/Change Version for JDE . . .	00	(00 - 99)	
Development Prod. System . . .(P).			
Development Prod. Site(P).			
Unlock Source at Dev-Prod System .	N		
Stream file processing enabled . .	Y	Archive Library	ACMARCLIB
Stream file concurrent dev? . .	Y	(Y)es/(N)o	
Allow CCD stream file promote? .	Y	(Y)es/(N)o	
CRTCLIB to create schema?	N	(Y)es/(N)o	
Maintain existing triggers? . . .	Y	(Y)es/(N)o	
Set file attributes from CR? . . .	Y	(Y)es/(N)o	
Use CHGPF to change existing PFs?	N	(Y)es/(N)o	
Retain *PGM objects in *MDL/*ACP?	N	(Y)es/(N)o	
Version control on Releases? . . .	Y	(Y)es/(N)o	
			Bottom
F1=Help F3=Exit F4=Prompt F9=Cmd F12=Cancel F16=Update F24=Messages			

2.1.3 Packaging a Release

When packaging a Release, the version checks are performed after the transfer has been instigated by pressing *F21=Transfer* in the *Work with Release Distribution* screen. The validation routine identifies the preceding version for each object in the Release and then contacts each designated target system to check that this version has been installed. It also checks that a later version of each object has not already been installed. If no issues are found, then the transfer proceeds normally, however, if there is a version issue then a warning screen will display the CR and Release that contain the problem version.

```

THENON                      Change Management System 4.5200
                             Previous Object Versions

Release . : 00219  OPEN      Server Updates

Warning: Preceding versions of objects in this Release have not been installed
to Live on the selected Target Systems. To maintain version integrity, the
following CRs must be installed to Live before sending this Release.

5=Show object versions
Opt Target System          CR          Status          Release
-   London                 000104/05  Not installed    00218
-   Liverpool              000104/05  Not installed    00218

Bottom

F3=Exit  F12=Cancel  F21=Continue with transfer

```

Option *5=Show object versions* allows you to drill down to see the object(s) that have generated the warning.

```

THENON                      Change Management System 4.5200
                             Previous Object Versions

Release . : 00219  OPEN      Server Updates
Target sys : London

Object  Type  Attribute  - Previous version-  -- This Release ---
CR      Rel  Ver      CR      Rel  Ver
RS1023C *PGM  CLP      000104/05 00218 012  000104/06 00219 013

Bottom

F3=Exit  F12=Cancel  F21=Continue with transfer

```

If *F21=Continue with transfer* is pressed on these screens, the warnings are ignored and the transfer proceeds.

It is also possible to explore the dependent versions for a Release before instigating a transfer. Pressing *F20=Version enq* in the *Work with Release Distribution* screen will display an enquiry screen showing the CRs that contain previous (and/or later) versions of objects and their status on the target production systems.

```

THENON                                Change Management System 4.5200
                                      Work with Release Distribution

Release . : 00219 OPEN      Server Updates
Target Environment: *LIV    Send Type . . . . . COMS (Coms/Tape/Intl)

Application . : 1 of 1 ACM ACME Application

Type 'X' to select, press Enter.
Target Systems                Dst                Target Systems                Dst
London                        X
Liverpool                     X
Glasgow                       X

                                      Bottom

F3=Exit   F7=Previous APP   F8=Next APP   F9=Cmd   F12=Cancel
F15=Select/Omit CRs   F20=Version enq   F21=Transfer   F22=Packaging   F24=Msg

```

```

THENON                                Change Management System 4.5200
                                      Previous Object Versions

Release . : 00219 OPEN      Server Updates

This screen displays the CRs that contain the preceding version of the objects
in this Release and their status on the target systems. To maintain version
integrity, these CRs should be installed to Live before sending this Release.
(Note: Emergency Fix CRs are excluded.)

5=Show object versions
Opt Target System                CR                Status                Release
- London                        000104/05   Not installed           00218
- Liverpool                     000104/05   Not installed           00218
- Glasgow                       000104/05   Live/Production         00218

                                      Bottom

F3=Exit   F11=Hide Live CRs   F12=Cancel

```

2.1.4 Installing a Release

If Version Control on Releases is set on a production machine, then the version checking is run as part of a pre-installation routine before installing a Release. If any version issues are found, then the installation is halted before the Receive Release (RCVRLS) process is started and an Error Log report is generated. This report will contain a message for each object for which a version anomaly was found. For example:

MSGID SEV MSG TYPE

OME2326 00 INFORMATION CR 000104/05 in Release 00218 must be Live at system LON before CR 000104/06 in Release 00219 can be installed...

CR 000104/06 in Release 00219 contains version 013 of object RS1023C *PGM CLP. The previous version of RS1023C *PGM CLP is version 012 from CR 000104/05 in Release 00218 which has not been installed to Live at system LON. To preserve version integrity at system LON, CR 000104/05 must be installed to Live before CR 000104/06 can be installed.

Note: If a version error on a production system causes the install to halt, then the Release Network Status that is displayed for that system on the development system will show "Install failed".

2.1.5 Exclusions

Emergency Fix CRs are excluded from the version checking. A version of an object in an Emergency Fix CR will not cause warnings or errors to be generated when the CR is packaged or installed. Similarly, when checking whether a previous version of an object has been installed to Live, previous versions in Emergency Fix CRs are ignored.

Also message files (*MSGF) are excluded from the version checking.

```

THENON                               Change Management System 4.5200
                                     Work with Releases

      2=Change      4=Delete      5=Wrk with CRs   9=Close      10=Network sts
14=Send to acpt 15=Send to live 16=Forward      17=Install COMS 18=Install tape

Opt Release      Text                                     Rls      CR
                                     Stat      Rcv-Date Stat
                                     L A R

10  TWK 00129 Plug-in emergency fixes                     OPEN
   TWK 00128 Updates for October 2010                     OPEN
   TWK 00127 Updates for September 2010                   OPEN
   TWK 00126 Updates for August 2010                      OPEN
   TWK 00125 Updates for July 2010                       OPEN
   TWK 00124 Server emergency fixes                      OPEN
   TWK 00122 Updates for June 2010                       OPEN
   TWK 00121 Updates for May 2010                        OPEN
   TWK 00120 Updates for April 2010                      OPEN
   TWK 00119 Updates for March 2010                      OPEN
   TWK 00118 Updates for February 2010                   OPEN
   TWK 00117 Updates for January 2010                    OPEN

                                     More...

F3=Exit  F4=Prompt  F5=Refresh  F6=Create  F9=Cmd  F11=Alt view  F12=Cancel
F14=Curr flt  F23=More options  F24=Messages

```

```

THENON
Change Management System 4.5200
Work with Releases
.....
:                                     Release Network Status          Auto refresh *OFF :
:   Release . : TWK 00129 Plug-in emergency fixes                      :
:   Type option, press Enter.                                         :
:   1=Transfer status                                                :
: Opt Production System      Release Status                          Date :
:   _ London                 Install failed                          14/10/10 :
:   _ Liverpool              Live/Production                         12/10/10 :
:   _ Glasgow                Live/Production                         12/10/10 :
:                                                                    :
:                                                                    :
:                                                                    :
:                                                                    :
:                                                                    :
:                                                                    Bottom :
:   F3=Exit      F5=Refresh      F12=Cancel      F24=Auto refresh on/off :
:                                                                    :
:.....
:                                                                    More...
:
F3=Exit  F4=Prompt  F5=Refresh  F6=Create  F9=Cmd  F11=Alt view  F12=Cancel
F14=Curr flt  F23=More options  F24=Messages

```


2.3 Production CR Status Summary

At the Development system, the *Work with Releases* screen now has a new function key – *F11=Alt view*. Pressing this will display a *Production CR Status Summary* screen which gives an overview of the progress of the Release CRs for the configured production systems. The screen shows a matrix of summary totals for the statuses of the CRs at the production systems under the categories Live, Acceptance, Redevelopment, Error, Not Installed. Each total represents the number of instances that the status has been achieved, so, for example, if a Release contains 4 CRs and it has been installed to Live on 3 production systems then the total displayed will be 12 (4 X 3).

THENON		Change Management System 4.5200						
		Work with Releases						
		Production CR Status Summary						
2=Change		4=Delete	5=Wrk with CRs		9=Close	10=Network sts		
14=Send to acpt		15=Send to live	16=Forward		17=Install COMS	18=Install tape		
		Prd	Not					
Opt	Release	CRs	Sys	Instl	Err	Rdv	Acp	Liv
		<-- Locate release						
---	TWK 00129	1	3	3				
---	TWK 00128	1	3	1				2
---	TWK 00127	2	3					6
---	TWK 00126	1	3					3
---	TWK 00125	1	3					3
---	TWK 00124	4	3					12
---	TWK 00122	1	3					3
---	TWK 00121	1	3					3
---	TWK 00120	1	3					3
---	TWK 00119	1	3					3
---	TWK 00118	1	3					3
---	TWK 00117	1	3					3
More...								
F3=Exit F4=Prompt F5=Refresh F6=Create F9=Cmd F11=Alt view F12=Cancel								
F14=Curr flt F23=More options F24=Messages								

Option *5=Wrk with CRs* on this screen will drill down to a similar summary for each CR in a Release.

```

THENON
Change Management System 4.5200
      Work with CR Allocations
      Production CR Status Summary
Release . . . . . : TWK 00127 Status .: OPEN
Release Text . . . . . : Updates for September 2010

5=Display CR      8=Display obj    9=Display IR    10=Network Sts   11=Move/promote
14=Sbm re-dev    15=Disp Err Log  27=User text   29=IS text      41=Grt mvt aut

      Prd      Not
Opt CR Nbr    Sys    Instl  Err   Rdv   Acp   Liv
— 000102/01      3
— 000102/02      3

Bottom

F3=Exit F4=Prompt F5=Refresh F9=Cmd F11=Alt view F12=Cancel
F13=Repeat F22=Status F23=More options F24=Messages

```

2.4 Release Manager User Enrolment

In order to provide finer control over the actions that a user can take in the Release Manager, new options have been included in the *Work with User Enrolment Details* screen for Work with Releases (WRKRLS). The new options allow the authorisation for changing, closing, creating and deleting Releases.

Change Management System 4.5200				Mode: *UPD	
Work with User Enrolment Details					
User/Group Profile . . . : THUSR					
Prd (P)	Function	Authorized?	Auth Level (P)	----Filter----	Allow Chg?
RLS	<--- Locate function				
RLS	CRTLSTAP Create Release Tape	Y			
RLS	STRRLSTFR Start Release Transfer	Y			
RLS	WRKRLS Work with Releases	Y			
RLS	WRKRLS Work with Releases - Change Release	Y			
RLS	WRKRLS Work with Releases - Close Release	Y			
RLS	WRKRLS Work with Releases - Create Release	Y			
RLS	WRKRLS Work with Releases - Delete Release	Y			
COM	CHGHLSTSTS Change Transfer Hold Status	Y			
COM	CHGLOGPTY Change Comms Manager Log Priority	Y			
COM	CNLTFR Cancel Comms Manager Transfer	Y			
COM	ENDDMSJOB End Comms Manager Background Jobs	Y			
COM	LSTLOG List Comms Manager Log	Y			
COM	LSTMONRQS List Monitor Request Definitions	Y	1		
					More...

F1=Help F3=Exit F4=Prompt F9=Cmd F12=Cancel F21=Filters
F21=Filters F24=Messages

2.5 Concurrent Development and Service Programs

If a CR containing a service program has been promoted to Module/Integration and the service program also exists in a second CR at development, then SEE/Change concurrent development validation prevents the second CR from also being promoted to Module/Integration. However, the developers of the second CR may have been working on different constituent modules than the developers of the first CR so that no concurrent development of modules has occurred. The promotion is being prevented simply because the modules that they have compiled are bound to the same service program.

With PE 4.5200, this treatment of service programs (and multi-module bound ILE programs) has changed. Provided that concurrent development of modules has not occurred, SEE/Change will now allow the promotion of the second CR to the same environment. The service program from the first CR will be superseded, and the constituent modules from both CRs will be rebound to the new object. If the second CR is subsequently promoted or reverted for redevelopment, then the service program from the first CR will be reinstated.

2.6 Displaying source in Display CR Parts

When choosing Option 5=Display against an item in the *Display CR Parts* screen, there has been confusion about which version of the source member is actually displayed. The pop-up selection window has been amended to clarify the versions of source that are available.

```

Change Management System 4.5200
Display CR Parts
Envr: *LIV
CR   : TWK 000102 / 03      Miscellaneous bug fixes
Appl : AP1 Test Appli      Contact Ref:
Status: *ACP 1/10/10       Assigned to: THUSER      Pty: *MEDM  Rls: 00209
5= : ..... S
25= :
Opt :                      Select source
   : The following source is available to view.
5   : Enter any char to select
   : - Source in CR 000102/03 (V007)
   : - Source archived to library A000000251 (V005)
   : - Current live source (V006)
   : F12=Cancel
   : .....
Bottom
F3=Exit F5=Refresh F9=Cmd F11=Change view F12=Cancel F19=Stream files

```

2.7 Support for IBM Rational Developer

IBM Rational Developer for i RDi 7.5 and IBM Rational Developer for Power Systems Software RDP 7.6 are supported with version 4.5200 of SEE/Change. Version 1.3.2 of the SEE/Change plug-in is also required.

(Note: Version 1.3.2 of the plug-in does not support WDSc, however if you are using WDSc and version 1.3.1 of the plug-in, you can upgrade to version 4.5200 of SEE/Change.)

Version 1.3.2 of the SEE/Change plug-in includes some minor enhancements:

- The *Show in Table* action on a CR now allows a subset of the Source Register or Non Source Objects to be loaded to the table view so that the retrieval of existing objects can be made without having to search the tree.
- New actions for an object - *Show referenced parents* and *Show referenced children* - allow the SEE/Change cross-reference database to be queried.
- A new action for an object - *Show object overrides* - allows object override information to be viewed in the table view.
- The plug-in now supports ALTER TABLE statements for SQL tables.

2.8 CR Movement Authorisation History

In order to allow easier access to the Movement Authorisation History, a new option *50=Cr Auth Hist* has been added to the *Work with Change Requests* screen.

Change Management System 4.5200		Filter: *NONE
Work with Change Requests		
50=CR Auth Hist 65=Chk CR Log 66=Mvt Reports 67=List Mvt Err		
Opt	IR No/CR Text	Applicatn Status
000102	Updates for September 2010	Test Appli Live/Prod
01	Service programs rework	Test Appli Live/Prod
02	Movement changes	Test Appli Live/Prod
000101	Updates for August 2010	Test Appli Live/Prod
01	HDM 5319	Test Appli Live/Prod
02	HDM 5320	Test Appli Live/Prod
03	HDM 5321	Test Appli Live/Prod
50	04 HDM 5326	Test Appli Live/Prod
05	HDM 5331	Test Appli Live/Prod
06	HDM 5332	Test Appli Live/Prod
07	HDM 5335	Test Appli Live/Prod
08	HDM 5336	Test Appli Live/Prod
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		

Movement Authorisation History				
CR: 000101/04 HDM 5326				
50=CR Auth Hist	Date	Time	Movement Type	Granted By
	27/09/10	15:00:09	Live	THADMIN
	31/08/10	10:12:23	Acceptance	THADMIN
Opt	IR No/CR	Te		
000102	Up			
01	Se			
02	Mo			
000101	Up			
01	HD			
02	HD			
03	HD	F1=Help F12=Previous		
50	04	HD		
05	HD			
06	HDM 5332	Test Appli Live/Prod		
07	HDM 5335	Test Appli Live/Prod		
08	HDM 5336	Test Appli Live/Prod		
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				

3 Software Performance Reports

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

SPR Log Number	Description
5584	Revert SQLDML from *LIV fails at production if *ACP configured
5583	*E11 when promoting ALTER TABLE if NOT NULL omitted
5580	Wrong LF deleted when reverting with CHGPF set on
5578	*E10 when reverting SQLDML a second time
5573	Retrieval not searching Additional libraries
5571	Release forwarding fails if it contains an object secured by *AUTL
5570	Amend processing sequence for SQLPROC and SQLFUNC
5565	Error reverting *MSGF at production system
5561	Reset OUTQ when exiting a CR in SEE/Change
5558	XOB programmer field wrongly updated
5557	MCH3610 when sending SQLTABLE with ref constraint to production
5547	Authorisation requests issued for levels already achieved
5545	SQLDML promotion fails if source contains more than 9999 lines
5544	Large SQLDML source fails CHKCR with RNX0100
5543	ALTER TABLE source cannot include LABEL statements
5541	Temporary work library left behind after revert of new SQLTABLE
5538	APYOBJAUT fails for *TBL object
5534	*MSGF cannot be re-promoted after being reverted
5533	SYNON objects cannot be re-promoted after being reverted
5532	Re-registration of stream files not working correctly
5523	Service program delivered in wrong sequence
5512	Include support for LANSa v12 new object types
5509	Trigger pointing at wrong library after xref recompile of trigger pgm
5507	SQLTABLE referential constraint lost after re-promotion
5494	Miscellaneous stream file issues after upgrade to V6R1
5493	Include support for SQL Sequence
5490	Object attributes lost after IMPORT
5489	New CRTPGM BNDSRVPGM parm (*IMMED/*DEFER) at V6R1
5464	Movement error causes LF to be delivered with no members
5453	*E13 packaging SQLVIEW where based-on table in different library

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 web site 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 4.5100.
- SEE/Change 4.5200 will run on i5/OS version V5R3M0 or higher.
- Must be applied to all remote sites? **See compatibility chart.**

5 Plug-in Compatibility Chart

SEE/Change Plug-in Compatibility

SEE/Change Server Version	IDE Version		
	WDSc 7.0.x.x	RDi 7.5.x.x	RDP 7.6.x.x
4.5103	1.3.1	U/C	U/C
4.5104	1.3.1	U/C	U/C
4.5200	1.3.1	1.3.2	1.3.2

U/C: Unsupported Combination

6 SEE/Change Compatibility Chart

SEE/Change Release Compatibility Chart

		Development											
		4.5000	4.5001	4.5002	4.5003	4.5004	4.5005	4.5100	4.5101	4.5102	4.5103	4.5104	4.5200
Production	4.5000	Yes	Yes	1	1,2	1,2	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3,4
	4.5001	No	Yes	1	1,2	1,2	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3,4
	4.5002	No	No	Yes	2	2	2,3	2,3	2,3	2,3	2,3	2,3	2,3,4
	4.5003	No	No	No	Yes	Yes	3	3	3	3	3	3	3,4
	4.5004	No	No	No	No	Yes	3	3	3	3	3	3	3,4
	4.5005	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	4
	4.5100	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	4
	4.5101	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	4
	4.5102	No	No	No	No	No	No	No	No	Yes	Yes	Yes	4
	4.5103	No	No	No	No	No	No	No	No	No	Yes	Yes	4
	4.5104	No	No	No	No	No	No	No	No	No	No	Yes	4
	4.5200	No	No	No	No	No	No	No	No	No	No	No	Yes

Notes

Note 1: Yes, unless wishing to use the new file attribute support or the new ILE remote delivery mechanism

Note 2: Yes, unless wishing to use stream file support distribution

Note 3: Yes, however CHGPF will revert to compile or duplicate on production machine

Note 4: Yes, however Version Control on Releases will be ignored on production machine

Minimum i5/OS Levels

4.5000	V5R1 or V5R2 if using WDSc plug-in
4.5001	V5R1 or V5R2 if using WDSc plug-in
4.5002	V5R1 or V5R2 if using WDSc plug-in
4.5003	V5R1 or V5R2 if using WDSc plug-in
4.5004	V5R2
4.5005	V5R2
4.5100	V5R2
4.5101	V5R2
4.5102	V5R2
4.5103	V5R2
4.5104	V5R3
4.5200	V5R3

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