SEE/Change

PE Notes 4.5402

(Version 4.5402)

1   Contents

2   Primary PE Enhancements

2.1   Support for Secure Shell (SSH)

SEE/Change has been enhanced to allow transfers to be accomplished using Secure Shell (SSH) over TCP/IP. This new support has been implemented seamlessly into the existing transfer process so that only some initial setup will be required.

Internally, SEE/Change will use the QShell interpreter (STRQSH) and issue Secure Shell Client and Secure Copy commands (ssh and scp) to effect the transfers.

In order to use the Secure Shell support, a user profile for SEE/Change Communications must firstly be created (usually DMS). Public-key authentication must be established for this DMS user profile on both the development and production systems. This will enable the DMS user profile to act as a SSH client on the development system and gain access to the SSH server on the production system, and vice versa to act as a SSH client on the production system and gain access to the SSH server on the development system. (Note: SEE/Change will not use password authentication).

As with FTP, SSH communications rely on the configuration of the OMS application. The data library that is configured for the OMS application production system will be used as the target library for SSH send operations. The OMS application must be correctly configured.

The *Work with Systems Configuration Details* screen has been amended to accommodate the new SSH settings.

```
THENON                SEE/Change - Change Management for IBM i
                         Work with Systems Details

 System Code  . . . . . . . . :  PRD
 System description . . . . .   Production 4.5402_____
 Machine Serial Number  . . . .  _____

 OS Version . . . . . . . . .  V 7 R 3 M 0     Version/Release/Mod lvl


 Communications Method  . . . .  *SSH____        *SNADS/*FTP/*SSH
   SNADS User ID  . . . . . .(P).  SSH_____  PRD_____
   FTP/SSH Dev Site Code  . . . .  PRD
   FTP/SSH Host Name/IP address .  123.123.123.123_____
   FTP/SSH User profile . . . . .  DMS_____
   FTP Password . . . . . . . .





 F3=Exit  F4=Prompt  F9=Cmd  F12=Cancel  F14=Ping FTP
```

To configure SEE/Change to use SSH:

a) enter '*SSH' as the communications method,

b) enter the Site Code where the OMS database can be found (this will be used to resolve the target library for SSH Send operations)

c) enter the Host Name or TCP/IP address of the target system (if a Host Name is used it must exist as a TCP/IP Host Table Entry)

d) enter the SEE/Change Communications User Profile (usually DMS)

There are no further configuration changes to make, however, in order to ensure that the QDMS subsystem will not be restricted when spawning jobs to run SSH, issue the following command:

```
CHGSBSD SBSD(OMSOBJ/QDMS) MAXJOBS(*NOMAX)
```

Also, we recommend that all the QDMS job descriptions be amended to include library QSHELL in the Initial Library List.

For more information please see the *SSH Configuration* document.

2.2   Dependency Enquiry Screen

The *Dependency Enquiry* screen (*Work with Change Requests* option *46=Dependents*) has been reworked to resolve some anomalies that have been reported.

```
THENON                   SEE/Change - Change Management for IBM i
                                  Dependency Enquiry

Application . . . : DEV   DEV Test Application
Change Request  . : 000001/03  July fixes
Environment .  (P). *LIV

CR          Dependent
Part        Object       Type       Level     Envr  Comments                      Dup?
_____
ITMMST      ITM0020R     RPGLE      *BAS      *LIV
            ITM0035      RPGLE_MOD  *BAS      *LIV
            ITM0100R     RPGLE      *BAS      *LIV
            ITM0200R     RPGLE      *BAS      *LIV
            ITM0900R     RPGLE      *BAS      *LIV
            ITM1100R     RPGLE      *BAS      *LIV
            ORD0100R     RPGLE      *BAS      *LIV
ORDDTL      ORDDTLL1     LF         *BAS      *LIV
            ORD0800R     RPGLE      *BAS      *LIV  In current CR
            ORD0900R     RPGLE      *BAS      *LIV
                                                                         More...

 F3=Exit  F4=Prompt  F9=Cmd  F10=Show duplicates  F11=Change View  F12=Cancel
```

When first displaying this screen, the initial setting for the Environment will now reflect the current status of the CR. If the CR has been promoted to Module/Integration, the screen will now show dependencies at Module/Integration; similarly, if the CR has been promoted to Acceptance, the screen will now show dependencies at Acceptance; in all other cases, the screen will show Live dependencies.

Where an object is dependent on two parts in the CR then, by default, the enquiry will only show a row for the first dependency. To view the second dependency, press *F10=Show duplicates*. The second dependency will now be displayed with a 'Y' in the *Dup?* column to indicate that this is a duplicate row.

In order to make the screen more user friendly, the Comments that are displayed have been restricted to ones that are deemed useful:

a) Live source not found

b) Unknown type and/or attribute

c) In current CR

2.3   Support for fully free-form RPG IV

SEE/Change now supports fully free-form RPG (i.e. where the first line of the RPG source contains **FREE in columns 1 to 6). This is available at version 7.3 of the operating system and via Technology Refresh at versions 7.1 and 7.2.

Regardless of the setting of the Documentation General Parameter (@DOC), SEE/Change will omit any source documentation in the body of fully free-form RPG source members (i.e. there will be no source line version numbering or nesting notation). However, if the Documentation General Parameter is set to *HIST or *ALL, SEE/Change will still include the log header banner at the top of the source showing source retrieval information. Normally this banner would start with '`/*OMS*`…' but for fully free-form RPG the banner will start with '`//*OMS*`…'.

SEE/Change will still support compilation parameter override directives in fully free-form RPG source, however, each statement must be at the top of the source and begin with '`//*CPL*`…' instead of '`/*CPL*`…'.

e.g.

```
**  FREE
//*CPL* DBGVIEW(*SOURCE)
```

SEE/Change will still support pre-compile execution statements in fully free-form RPG source, however, each statement must be at the top of the source and start with '`//*OMX*`…' instead of '`/*OMX*`…'.

e.g.

```
**FREE
//*OMX* OVRDBF FILE(INPUTPF)   TOFILE(MODELPF)
//*OMX* OVRDBF FILE(OUTPUTPF)  TOFILE(MODELPF)
```

2.4   Support for embedded CL commands in SQL source

Since version 6.1 of the operating system, it has been possible to embed a CL command into a SQL source member and the RUNSQLSTM command will run the source member without error. (The CL command must be prefixed with the escape characters 'CL: ').

SEE/Change currently rejects such a source member as having a syntax error. With PE 4.5402, the SEE/Change SQL syntax checker has been amended to allow embedded CL commands.

2.5   SEE/Change Authorisation Code and secondary LPARs

Prior to PE 4.5402 the permanent Authorisation Code needed to use the SEE/Change product was dependent on the machine serial number. After upgrading to PE 4.5402, the SEE/Change authorisation process has changed so that now a different Authorisation Code is required for an instance of SEE/Change running in a secondary LPAR (logical partition) on the same machine.

If you do not use logical partitions or you are upgrading an instance of SEE/Change that is running in the primary logical partition, then there will be no change and you can continue using the product with your current SEE/Change Authorisation Code.

If you are running an instance of SEE/Change in a secondary LPAR, then after you upgrade to PE 4.5402 you will find that you will no longer be authorised to use SEE/Change using your existing Authorisation Code. Please contact your supplier for a new Authorisation Code. You will need to supply the Partition ID of the LPAR along with the System Serial Number – you can discover these by running the VERSION command from the command line in SEE/Change after you upgrade.

```
   SEE                   SEE/Change - Change Management for IBM i    System: THENON
                              (Development)
Fast track SEE/Change options:
                21. Work with Change Requests
                22. Work with Change Request Development
                23. Work with Releases
                24 .............................. oing
                25 :            SEE/Change           : ming
                26 :                                  :
                27 : SEE/Change Version:    4.5402 : ion
                   : IBM i Version . . :    V7R3M0 :
-------------------- : System Serial No. :  123456A : ----------------------
SEE/Change menus:    : Partition ID . . :        3 :
   1. Problem Manage :                              : ation Manager - Software
   2. Change Manager :   F12=Cancel                 : ation Manager - Network
   3. Development Ma  :                             : nager
   4. Release Manage :..............................: ation Manager

Selection or command
===> VERSION

F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel
F13=Information Assistant   F16=System main menu
```

3 Software Performance Reports

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

SPR Log Number	Description
5850	Support for fully free-form RPG source
5849	ALTER TABLE statement fails when QDECFMT > 1
5847	Error OME4037 when promoting SQLPROC (7.2)
5846	MCH3601 error when deleting CR object
5845	Error parsing XML after 4.5401 upgrade (O#MDL record missing)
5843	Concurrent development errors not displayed on MOVR pop-up
5839	Registered folder permissions corrupted after CR promotion
5837	REVERSE SQLDML statement run on forward promotion
5834	Cross-referencing *E11 error has no description displayed
5833	Refresh CR Library process copies System objects
5830	MCH0603 error creating ILE pgm if BNDDIR has > 500 srvpgms
5827	Include IASP name in SAV path for stmf check-in
5826	Support for SQL "FOR SYSTEM NAME" clause (7.1)
5825	Include TGTRLS for RUNSQLSTM
5824	Release Allocation process loops ('N/K' record found in XOB)
5823	CRTPGM fails if BNDSRVPGM parameter has double parentheses
5820	CRTLF in CR fails due to invalid parameter value SHARE(*SAME)
5819	Source line version number missing for User Defined Object
5810	Create SQLVIEW fails if source contains a parenthesis within a literal
5744	Filter not applied in Release Manager after 4.5200 upgrade

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 4.5401.

- SEE/Change 4.5402 will run on IBM i 6.1 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	
	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

Note: Minimum 1.4.2 (201409200835)

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
Production	4.5100	Yes	Yes	Yes	Yes	Yes	1	1,2	1,2,3	1,2,3	1,2,3	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
	4.5102	No	No	Yes	Yes	Yes	1	1,2	1,2,3	1,2,3	1,2,3	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
	4.5104	No	No	No	No	Yes	1	1,2	1,2,3	1,2,3	1,2,3	1,2,3,4
	4.5200	No	No	No	No	No	Yes	2	2,3	2,3	2,3	2,3,4
	4.5201	No	No	No	No	No	No	Yes	3	3	3	3,4
	4.5300	No	No	No	No	No	No	No	Yes	Yes	Yes	4
	4.5400	No	No	No	No	No	No	No	No	Yes	Yes	4
	4.5401	No	No	No	No	No	No	No	No	No	Yes	4
	4.5402	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

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