

SEE/change

SEE/Change

Upgrade Guide

(All Versions)



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Many of the world leading companies use Thenon's products to change manage and test their software.

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

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2 Introduction

Upgrading SEE/Change, like any other application or package, requires careful planning and preparation. The conventional change management system has many libraries, environments and users to consider, often on multiple systems.

This document has been written to assist you in the upgrading of your SEE/Change system. It sets out a methodical upgrade approach to help you through this process and is split into 4 subsequent sections:

- Preparation
- Upgrade
- Post-upgrade cleanup
- Regression in the instance your upgrade fails

This document is calibrated to suit installations having a standard configuration. That is, one SEE/Change environment per machine / partition with the default library names of OMSSBJ, OMSSDTA and OMSSAV.

If your configuration is complex, large, a long way behind in terms of upgrades or perhaps has customisations, then please call Thenon Support Representative to discuss your particular requirements.

It is recommended that you familiarise yourself with this procedure in full before starting work to gain a more comprehensive understanding of how the process works and the steps involved.

3 Preparation

Having decided to upgrade, there are a number of activities that are necessary before the actual upgrade process itself. This section deals with these and once you have worked through this section you will be in a position to upgrade as soon as you are ready.

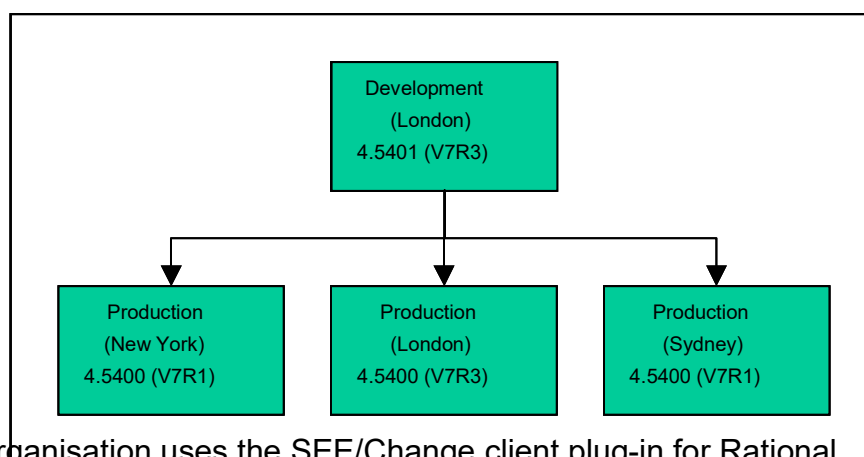
3.1 Test system

It is recommended that before installing new releases of SEE/Change on your live development and production machines, you exercise best practice by installing and testing the new software on a test rig. To do this, follow this procedure initially with your test system model in mind. Having done this, you will be best placed, when the time comes, to apply your upgrade to your live environment.

If you choose not to do this, we strongly recommend that you have a rigorous acceptance test plan. This topic is discussed more fully in section 3.15.

3.2 Mapping your configuration.

The first step to upgrading is to understand the size of the task being undertaken. It is often useful at this stage to draw a map of your SEE/Change Development and Production environments. For example:



If your organisation uses the SEE/Change client plug-in for Rational Developer, include that in your map.

3.3 Non-standard library configurations.

Most installations have one SEE/Change environment per machine (or partition) with libraries named OMSOBJ, OMSDTA and OMSSAV. This is the standard configuration and the one that this document is calibrated to suit.

If however you have some other configuration, such as multiple SEE/Change databases sharing a single SEE/Change objects library and / or library names other than OMSOBJ, OMSDTA and OMSSAV, then please contact your Thenon Support Representative to discuss your particular upgrade scenario in more detail.

3.4 Customisations.

At this point it is worth researching and documenting any customisations that you have on your system. This is because the upgrade procedure may destroy these and you will need to reinstate them afterwards.

A common customisation is the introduction of a client specific object type (file XOT).

Thenon hold details of client customisations if documented by the client and forwarded to us, so it may be worth calling us to see if we already have some information for you. If we don't, consider documenting any customisations that you do have and send them to us – it could save you time in the future!

When upgrading SEE/Change, XOT conflicts are handled as follows:

- Object types that exist in the target library (mostly native SEE/Change supplied object types) will be updated from the control file shipped with each PE. This will retain customised values in CHKOBJDFT fields.
- Object types that exist in the target library that are not native SEE/Change supplied object types and have an object ref (field OTMSGR) of F0 through to FF will be retained as they are. This range is reserved for client object types.
- Object types that fall outside of the above range may be destroyed or corrupted.
- Bespoke object types that conflict with SEE/Change supplied object types are overwritten.

3.5 Enhanced or non-standard security

SEE/Change is supplied “out of the box” with a default security regime.

It is also possible to secure SEE/Change so that restricted users are unable to update SEE/Change's own files other than by using the native functions that the user is authorised to.

Alternatively, you may have implemented some other regime.

If your security regime is any other than that supplied by default, it will be necessary to re-establish it after the upgrade is complete. Failure to do this is likely to result in unpredictable operational difficulties arising, particularly if the current regime is more secure than the default regime.

3.6 Profile to use during upgrade.

Throughout this document you will be recommended to use the QSECOFR user profile. There are two reasons for this:

- QSECOFR is set up as a SEE/Change user in the package as supplied.
- QSECOFR will not be the subject of unexpected authority problems.

If you cannot use the QSECOFR profile for some reason, or it has been modified in some way from the IBM supplied default, or has been removed from SEE/Change as a valid user, you may use a different profile, however, it must

- have *ALLOBJ special authority.
- be set up in the SEE/Change Work with User Enrolment (WRKUSRAUT) function and be authorised to all SEE/Change's functions.

3.7 Finding out what version you are on.

Next, determine what version of SEE/Change you are currently running at each environment and update your map accordingly. To do this, access each environment in turn and use the VERSION command. You will receive a window like the one below. Note on your SEE/Change map the SEE/Change version that you are running as well as the version of the operating system.

```

SEE/Change

SEE/Change Version:    4.5502
IBM i Version . . . :  V7R4M0
System Serial No. :   78384C1
Partition ID . . . :    1

HDM  Description                      Date      Time  User

      No HDM's are installed on this version

F12=Cancel

```

Where *n.nnnn* denotes the version that you are running.

To see what version of the SEE/Change client plug-in for Rational Developer you are using, access the Rational Developer work bench and view the properties of the System node where a plug-in version attribute will be shown.

3.8 Obtaining and reviewing release notes.

Use the table below to locate the release of SEE/Change that you are currently using and note all the releases that are subsequent in the list.

Current Release	Cumulative PE?	OR	Minimum operating system level
4.5100	Yes	Load the latest versions of OMSOBJ, OMSDTA and OMSSAV and convert.	V5R2
4.5101			V5R2
4.5102			V5R2
4.5103			V5R3
4.5104			V5R3
4.5200	Yes		V5R3
4.5201			V5R4
4.5300	Yes		V5R4
4.5400	Yes		V6R1
4.5401			V6R1
4.5402			V6R1
4.5403			V6R1
4.5500	Yes		V7R1
4.5501			V7R3
4.5502			V7R3
4.5503			V7R4
4.6000			V7R4

For each you should obtain the release note from the Thenon web site. To do this access www.thenon.com, click on the *Download Area* link and enter your SEE/Change web access code. Here you will find various downloadable files that are pertinent to the installation and support of SEE/Change, including the software downloads that you will need to obtain later in this procedure.

Click in turn on each of the PE notes that you need. They are named in the following format:

PENOTE $nnnnn$.PDF

where $nnnnn$ represents the unpunctuated release number, for example, the release note for release 4.6000 will be called PENOTE46000.PDF. All the PE notes can be found in the *Documents* section of the download page.

3.9 Deciding which release to upgrade to

Once you have obtained all the release notes, and before proceeding any further, review them carefully whilst deciding which version you are going to upgrade to.

Generally speaking, you are advised to upgrade to the most recent version of SEE/Change available and run the same version in all environments. If, however, whilst reviewing the PE notes, you note some restriction that inhibits your upgrade path, it may prove necessary to stop short of the very latest release. For instance, operating system requirements or release compatibility issues might result in restricted upgrade possibilities.

If applicable, also consider the version of the SEE/Change client plug-in for Rational Developer.

Charts showing compatibility between development systems, production systems and the SEE/Change plug-in for Rational Developer are included with each PE note.

3.10 Obtaining the HDM release pack for your target release

Occasionally, it is necessary to release retrospective patches for certain SEE/Change releases. These are referred to as HDM's. Contact your Thenon Support Representative to obtain the latest pack of HDM's for the release that you intend to upgrade to. Each pack will be provided with its own set of installation instructions.

3.11 Deciding which method to use to upgrade.

Next you should consider your preferred method of upgrading. SEE/Change offers two methods as follows:

- Net Change through PE application
- One step conversion to latest release

Net Change through PE application involves the receipt of one or more SEE/Change software releases into your system. This is the same as software releases that you apply to your production systems. In essence, SEE/Change upgrades itself and your systems (development and production) are treated as production systems by our system.

This method is preferred if you only have a few PE's to apply as the PE's apply quickly and efficiently. This method is also useful if for some reason you do not want to upgrade to the latest release or wish to retain customisations that would otherwise be destroyed by the conversion method.

One-step conversion is, as its name suggests, a conversion routine that will upgrade from an earlier release of SEE/Change to whichever release your new OMSOBJ, OMSDTA and OMSSAV libraries are at. This method is preferred if you have lots of PE's to apply.

Note that the Thenon website only publishes the base libraries at the most recent version available. Check the version currently being published on the website and if you wish to upgrade to an earlier release, contact your Thenon Support Representative who will be able to arrange for you to receive the base libraries at earlier levels.

If you are unsure what method to use to perform your upgrade, contact your Thenon Support Representative to discuss your particular requirements.

To see how to upgrade the SEE/Change plug-in for Rational Developer, obtain the document *Installing the SEE/Change Plug-in for Rational Developer* and incorporate it into your upgrade activities plan.

3.12 Determining what software to download.

Once you have decided which upgrade method you wish to use, the next step is to compile a list of the software files that you need.

Refer to the relevant sub-section below to determine this.

3.12.1 Software needed for the new change PE method.

If you are using the net change through PE application method, then you will need to download one PE file for each upgrade step. This is not necessarily one file for each PE because functional PE's are cumulative of the preceding PTF PE's.

PTF PE's are ones that feature a PTF revision level and are indicated by the least significant two digits of the release number being greater than zero (e.g. 4.5304). Functional PE's are the next major release following (e.g. 4.5500). Because functional PE's are cumulative of the preceding PTF PE's, there is no need to apply intervening PTF PE's that fall within your upgrade path.

By way of an example, if upgrading from 4.5201 to 4.5403, the upgrade path would be to apply PE's 4.5300, 4.5400, 4.5401, 4.5402 and finally 4.5403. If upgrading from 4.5201 to 4.5500, the upgrade path would be to apply PE 4.5300 followed by 4.5400 followed by 4.5500.

Having determined which PE's you need, make a list of the PE files that you need to download. The files are named in the following format:

PELIBnnnnn.ZIP

where *nnnnn* represents the unpunctuated release number. For example, PE 4.6000 will be called PELIB46000.ZIP.

3.12.2 Software needed for the one stop conversion method.

If you are using the one step conversion method, you will need the following files:

OMSOBJ.ZIP
OMSDTA.ZIP
OMSSAV.ZIP

As mentioned previously, check the version that these files are published at before starting downloading. If you need a set of these at an earlier release, contact your Thenon Support Representative who will be able to make these available to you.

3.12.3 Software needed for the Rational Developer plug-in.

If you have determined that it will be necessary to upgrade your Rational Developer client plug-in software, then you will be able to do so by directing the Rational Developer software updater to the Thenon website www.thenon.com.

If this is not possible for some reason, contact your Thenon Support Representative who will be able to make a copy of the software you need available to you via some other means.

3.13 Downloading the necessary software files.

All software is available from the Thenon web site in the form of zipped save files. To access these go to www.thenon.com, click on the *Download Area* link and enter your SEE/Change web access code.

Now, for each file that you need:

- locate the file in the *Patches & Fixes* section
- click it once to initiate download
- save the file to a known location on your PC
- use a suitable de-compression utility such as WinZip to unzip the file noting its target location

It is often a good idea to locate the unzipped files to an easily addressable area of your hard disk such as C:\

3.14 Restoring the software to your System i server

The next step is to restore the software to your System i server. You can do this by using native FTP as described here or use a more sophisticated FTP client if preferred.

If you follow these instructions you should execute them for each file that you have downloaded to each of the servers on which you are to apply the upgrade. Throughout the following instructions:

- *aaaaaa* represents the decompressed file name on the PC and the file name on the System i to upload to.
- *bbbbbb* represents the library name on the System i to restore to

Entity being processed	Zipped PC file name	Unzipped PC file name (aaaaaa)	Restore as library (bbbbbb)
PE 4.5100	PELIB45100	O#THN45100	O#THN45100
PE 4.5101	PELIB45101	O#THN45101	O#THN45101
PE 4.5102	PELIB45102	O#THN45102	O#THN45102
PE 4.5103	PELIB45103	O#THN45103	O#THN45103
PE 4.5104	PELIB45104	O#THN45104	O#THN45104
PE 4.5200	PELIB45200	O#THN45200	O#THN45200
PE 4.5201	PELIB45201	O#THN45201	O#THN45201
PE 4.5300	PELIB45300	O#THN45300	O#THN45300
PE 4.5400	PELIB45400	O#THN45400	O#THN45400
PE 4.5401	PELIB45401	O#THN45401	O#THN45401
PE 4.5402	PELIB45402	O#THN45402	O#THN45402
PE 4.5403	PELIB45403	O#THN45403	O#THN45403
PE 4.5500	PELIB45500	O#THN45500	O#THN45500
PE 4.5501	PELIB45501	O#THN45501	O#THN45501
PE 4.5502	PELIB45502	O#THN45502	O#THN45502
PE 4.5503	PELIB45503	O#THN45503	O#THN45503
PE 4.6000	PELIB6000	O#THN46000	O#THN46000
OMSOBJ	OMSOBJ	OMSOBJ	OMSOBJNEW
OMSDTA	OMSDTA	OMSDTA	OMSDTANEW
OMSSAV	OMSSAV	OMSSAV	OMSSAVNEW

Firstly, sign on to your System i as QSECOFR and enter the following command:

```
CRTSAVF QGPL/aaaaaa
```

Now you will need to upload the file from your PC to your System i. To do this run the FTP (File Transfer Protocol) program on your PC. This is usually done by selecting the "Start" button, then selecting "Run" and entering the following command:

```
FTP ssssssss
```

Where ssssssss is your System i host name or IP address. This will start an FTP session and you will firstly be prompted for a username and password. Use the QSECOFR profile / password.

Next, at the FTP prompt, enter the following commands:

```
BIN
```

```
PUT C:\aaaaaa. QGPL/aaaaaa
```

```
QUIT
```

Note that the “PUT” command may take several minutes to complete. When the upload has completed, return to your System i session and, still signed on as QSECOFR, enter the following command:

```
RSTLIB aaaaaa DEV(*SAVF) SAVF(QGPL/aaaaaa) RSTLIB(bbbbbbb)
```

This step may also take some time to complete. Ensure the restore completes without any errors. If you prefer you can submit the restore operation to batch.

Once you have completed the above procedure for all the files / servers you will have successfully got all the necessary upgrade software onto your System i server(s).

3.15 Preparing an acceptance test plan

Assuring a clean, acceptable upgrade is a critical part of any upgrade project and so, the next step is to prepare an acceptance test plan. The purpose of this is to ensure that, having upgraded your system, you can continue to operate without hindrance on the new release. The plan should therefore concentrate on a small number of typical operations that you perform regularly rather than attempt to test new functionality that you have not previously employed.

A typical plan might consist of the creation of a new IR and CR, the retrieval of new and changed parts and subsequent promotion to live (development and production) through all the intermediate environments. This is typically followed by a full reversion test.

It is important to craft your test in such a way that should you decide to scratch the upgrade and revert to backup, that you have not created any inconsistencies between your original OMSDTA and the objects on your system. Therefore, if you DO decide to revert the upgrade, it is important that you also revert AND delete any CR's that you have created to facilitate the your testing OR, at the very least, delete any work libraries created as a result of your testing. Note that these can be CR work libraries and archive libraries and may exist either as libraries or as save files in your application configured archive library.

If you use the SEE/Change client plug-in for Rational Developer and will be upgrading that too, then you are recommended to perform the acceptance test with a spare PC. That way, should you decide to revert the upgrade, developers will be able to continue working using their existing software.

3.16 System LIBL check

Finally, check that there are no SEE/Change libraries in the system library list because this will cause the upgrade to fail. You can check this by issuing the following command and inspecting the resulting display:

```
DSPSYSVAL SYSVAL(QSYSLIBL)
```

If any SEE/Change libraries do feature in this display, remove them, after having taken steps to understand the implications of doing this and applying a suitable remedy.

3.17 SEE/Change environment preparation

Before upgrading any SEE/Change environment it is recommended that all CR's in that environment be promoted to live or reverted to development. This guards against changes in the way the movement mechanism processes movement transactions causing problems post-upgrade.

Whilst every effort is made to ensure that CR's that are at live pre-upgrade will revert post upgrade, we recommend planning the upgrade to occur at a time when this is less likely to happen, for instance, during a period of application software stability.

If it is not possible for you to promote or revert all your CR's, contact your Thenon Support Representative to discuss your circumstances.

3.18 SEE/Change configuration check

Before upgrading SEE/Change it is important that you review the configuration of the OMS application, since SEE/Change will deliver the upgraded objects based on this configuration. To access this, enter the following command from within the SEE/Change environment that you intend to run the upgrade in:

```
WRKAPPCFG
```

Then, press *F21=Include Thenon app* to reveal the OMS application. Review the configuration screens for accuracy and make corrections where necessary. When leaving the Work with Application Configuration panel, you may be prompted to run the update parameter data process. If so, please say "Y".

It is beyond the scope of this document to discuss the panels in the Work with Application Configuration program in detail. If you are in doubt about any of the settings, please contact your support representative.

3.19 SEE/Change general parameters check

Access the SEE/Change General Parameters maintenance program by entering the following command:

```
WRKPRMDTA
```

Review the following parameters for accuracy. Ensure these are specified in UPPER CASE:

- @DTL
- @OBL

- @SVL

These parameters should not be wrong. If they are there may be something wrong with your configuration already and you are advised to seek advice from your Thenon Support Representative. If so directed, make corrections as necessary and have SEE/Change run the parameters update procedure if prompted to do so on leaving the program.

You are now ready to proceed to the upgrade phase.

3.20 SEE/Change Authorisation Code

When upgrading from a SEE/Change version prior to 4.5403 to 4.5403 or above you will need a replacement software Authorisation Code. This is because authorisation codes have been updated to handle LPAR configurations.

A Temporary Authorisation Code can be acquired by emailing support at thenon.com.

Replacement permanent Authorisation Code can be obtained by emailing support at thenon.com. There are no cost implications for a replacement “like for like” Authorisation Code. We will need to know the following

- System serial number
- if the installation is for Development or Production
- The LPAR number SEE/Change is on an LPAR machine
- Processor group of the system.

System information can be found using

- CALL QCMD
- CALL QSYS/QLZARCAPI

Once you have upgraded to 4.5403 or above, you will need to update the General Parameter @AUT with the new temporary or permanent Authorisation Code. Remember, once the Authorisation Code (@AUT) has been updated you should sign off and sign back on again.

4 Upgrading SEE/Change

This section details the upgrade procedure. Before starting this section, ensure that you have completed all the preparatory tasks detailed in section 3, then execute the steps detailed here for each SEE/Change environment that you are upgrading.

The instructions here include steps that ensure regression is possible should you encounter problems (i.e. a backup).

As mentioned earlier, it is strongly recommended that you familiarise yourself with the entire procedure before starting work.

4.1 Excluding users.

The first step in the upgrade procedure is to obtain exclusive use of the SEE/Change environment. First, ensure the communications subsystem is ended (subsystem QDMS). To do this access SEE/Change and execute the following command:

```
ENDDMSJOB
```

or

```
ENDSBS your_dms_subsystem_name *IMMED
```

Next, exit SEE/Change and ensure that all users sign off and stay out of SEE/Change. You must ensure that no one uses, or attempts to use, SEE/Change whilst the upgrade is in progress.

To help ensure that no one is using the system, execute the following commands:

```
WRKOBJLCK OMSSBJ *LIB
```

```
WRKOBJLCK OMSDTA *LIB
```

```
WRKOBJLCK OMSSAV *LIB
```

You should observe no locks.

Sometimes it is appropriate to secure the SEE/Change application libraries from your users by setting the library to *PUBLIC *EXCLUDE and removing any authorisation list that it may be associated to. If this is appropriate for you then note the library security settings first for each of the three SEE/Change libraries and secure the libraries now.

4.2 CR's status during upgrade

If possible, ensure that all CR's are either reverted to development or promoted to live.

4.3 Development during upgrade

It is recommended that developers be excluded from the system until you deem the upgrade process to be complete, irrespective of its outcome. However, it is possible for developers to continue working on their source code should they so desire by accessing their CR work libraries using PDM. This is because SEE/Change upgrades do not, at this time, affect CR work libraries (those usually prefixed 'O#'). If your developers choose to do this they should only work with (i.e. edit) source they find already in their CR's. All other activities (retrieval, compilation, program creation and so on) should be deferred until SEE/Change is back on-line.

4.4 Backing up SEE/Change.

Having ensured exclusive use of the SEE/Change environment it is necessary to secure a clean backup. This can be taken to tape if preferred but the procedure below uses save files in a purposefully created temporary library.

Sign on with QSECOFR and, without accessing SEE/Change, execute the following commands:

```
CRTLIB SEECHGBAK TEXT('Pre-upgrade SEE/Change backup')

CRTSAVF SEECHGBAK/OMSOBJ

CRTSAVF SEECHGBAK/OMSDTA

CRTSAVF SEECHGBAK/OMSSAV

SAVLIB OMSOBJ DEV(*SAVF) SAVF(SEECHGBAK/OMSOBJ)

SAVLIB OMSDTA DEV(*SAVF) SAVF(SEECHGBAK/OMSDTA)

SAVLIB OMSSAV DEV(*SAVF) SAVF(SEECHGBAK/OMSSAV)
```

Ensure each command completes successfully. In particular ensure the SAVLIB commands successfully save all objects from the SEE/Change libraries. Sign off when you have finished.

4.5 Upgrading

You are now ready to upgrade SEE/Change. Refer to the appropriate sub-section below depending on what method you have chosen to use to effect the upgrade.

4.5.1 Upgrading by PE application

You will have determined in section 3.12 a list of PEs to apply. Repeat the steps in this procedure once for each PE before moving on to the next section.

Sign onto a fresh session using the QSECOFR user profile and password and access the SEE/Change environment. You can do this by entering the following commands:

```
ADDLIBLE OMSOBJ
```

```
CHANGE DTALIB(OMSDTA)
```

Before continuing, verify that QTEMP is at the top of your library list by using any of the following commands:

```
EDTLIBL
```

```
DSPLIB
```

Review any special instructions associated with the PE and, if there are any, execute them accordingly.

Now submit the upgrade job by entering the following command:

```
SBMJOB CMD(RCVRLS SYSM(THN) RLNO(nnnnn) DMSLIB(bbbbbbb)
RMVLIB(*NO)) JOB(THNnnnnn) LOG(4 00 *SECLVL) LOGCLPGM(*YES)
HOLD(*YES) JOBMSGQFL(*PRTWRAP)
```

substituting *nnnnn* for the unpunctuated release number (e.g. 46000) and *bbbbbb* for the PE library value as per the table in section 3.14.

It is critical that you run the upgrade job in batch. If run interactively, or whilst you are still signed on, it will fail.

Next, signoff and sign back on as QSECOFR once more.

Do not access SEE/Change with this new session.

Locate and release the upgrade job THNnnnnn. Thereby allowing the upgrade to commence. Monitor the job's progress but do not access SEE/Change.

Once the upgrade job has completed, inspect the spool files. In particular inspect the OMS4400 and the PACK reports. You should find at the bottom of the OMS4400 report a message like the one shown below:

```
xxx *OK Movement completed OK
```

You should not see any movements completing with codes other than *OK.

The subsequent "PACK" report should commence with a message like the one shown below:

```
Installing Release nnnnn from system THN.
```

And conclude with a message similar to:

```
CR nnnnnn/nn mov't to *ILV ended normally: 1 *OK, 0 *CHK. Current status is *LIV.
```

Finally, confirm that the upgrade has been successful by accessing SEE/Change and executing the following command:

```
VERSION
```

You should see a window similar to the one below

```

SEE/Change

SEE/Change Version:    4.5503
IBM i Version . . :    V7R4M0
System Serial No. :    ABCDEFG
Partition ID . . :      1

HDM  Description              Date    Time    User

No HDM's are installed on this version

F12=Cancel

```

With *n.nnnn* now showing the version that you have just installed.

If you have more PE's to apply, repeat the steps in this section for the next PE.

4.5.2 Upgrading by conversion

If you are upgrading by conversion you will only need to execute the steps detailed in this section once per SEE/Change environment.

Start by signing onto a fresh session as QSECOFR and, without accessing SEE/Change, ensure the following libraries do not exist on your system:

```

OMSOBJX
OMSDTAX
OMSSAVX
OMSOBJZ
OMSDTAZ
OMSSAVZ

```

Now, execute the following commands sequentially.

```

RNMOBJ QSYS/OMSOBJ *LIB OMSOBJX

RNMOBJ QSYS/OMSDTA *LIB OMSDTAX

```

```
RNMOBJ QSYS/OMSSAV *LIB OMSSAVX
```

```
RNMOBJ QSYS/OMSOBJNEW *LIB OMSOBJ
```

```
RNMOBJ QSYS/OMSDTANew *LIB OMSDTA
```

```
RNMOBJ QSYS/OMSSAVNEW *LIB OMSSAV
```

You are now ready to run the conversion routine. Still signed on as QSECOFR (but without having accessed SEE/Change) enter the following commands. You *must* run this part interactively.

```
ADDLIBLE OMSOBJ
```

```
ADDLIBLE OMSDTA
```

```
CVTOMSDTA
```

The migration of data from your old database (OMSDTAX) to your new database (OMSDTA) will now take place. The time taken to complete this step will depend on the size of your Change Management database.

When the migration is complete, your previous release libraries (those renamed earlier to have an X suffix) will have been renamed to have a Z suffix. They are left on disk to enable reversion to the old release should you need to.

4.6 Applying the HDM release pack

If your Thenon Support Representative has given you an HDM release pack, follow the instructions supplied with it to apply this now.

4.7 Upgrading the SEE/Change client plug-in for Rational Developer

If you use the SEE/Change client plug-in for Rational Developer and have determined that you need to upgrade the version in use, apply the new plug-in to your test PC now.

4.8 Acceptance.

Once you have upgraded all your environments it is time to run the acceptance test that you devised in section 3.15. This is the point at which you will decide whether you will adopt the new release for your on-going operations or whether you will revert back to your old release.

If you determine that regression is necessary, be careful to leave no trace of the acceptance testing in terms of objects on the system. In other words, delete any newly created CR work libraries, archive libraries and so on. If CR reversion is possible then this should be easy. If not, simply delete the objects manually since the integrity in your new SEE/Change database will not matter. What is important is the integrity of your system objects with your old SEE/Change database.

To see how to regress following a failed upgrade, please refer to section 6.

If you have decided that you will adopt the new release, then you can set about commissioning the new software. Some users like to perform another backup at this point so as to establish a starting point. Other outstanding tasks include restoration of your library authorities (if you adjusted them in step 4.1), applying the new SEE/Change client plug-in for Rational Developer to developers' PCs, if applicable, and a small amount of consequential post-upgrade clean-up work that is summarised in section 5. Aside of these tasks, you have now completed your upgrade of SEE/Change.

5 Cleanup.

5.1 Redundant files / objects

Having successfully completed the upgrade of SEE/Change, it is appropriate to revisit any work files / libraries that are created in pursuance of the upgrade. The following list of items can be reviewed and deleted at your leisure.

On the PC:

ZIP files (PELIB* and / or OMS*)

Decompressed (unzipped) save files for upload (as above)

PE Notes in PDF format. (You may wish to keep these in a shared area.)

On the iSeries:

O#THN prefixed save files

O#THN prefixed libraries

Save files OMSSOBJ, OMSSDTA and OMSSAV

Libraries OMSSOBJZ, OMSSDTAZ and OMSSAVZ

Library SEECHGBAK

5.2 Thenon SEE/Change release history

You may like to remove the release installation history that becomes visible in the Release Manager following upgrades. Execute the following command to tidy these files up:

```
RMVTHNDTA
```

5.3 Advise Thenon of your current release

Finally, it is always a good idea to send an email to your Thenon Support Representative advising them of your successful upgrade. Please advise the version of SEE/Change and the operating system level that you are running on and email to support@thenon.com.

6 Regression.

This section details the steps necessary to restore your system should your upgrade process fail.

There are two regression methods and the one you use will depend on the upgrade method you used.

6.1 Regression following failed PE application

In essence, the method is to delete the [failed] upgraded SEE/Change environment and restore the one saved at the beginning of the upgrade procedure. Execute the following commands for each environment ensuring each completes successfully before moving on:

```
DLTLIB OMSOBJ
```

```
DLTLIB OMSDTA
```

```
DLTLIB OMSSAV
```

```
RSTLIB OMSOBJ DEV(*SAVF) SAVF(SEECHGBAK/OMSOBJ)
```

```
RSTLIB OMSDTA DEV(*SAVF) SAVF(SEECHGBAK/OMSDTA)
```

```
RSTLIB OMSSAV DEV(*SAVF) SAVF(SEECHGBAK/OMSSAV)
```

The jobs may be submitted to batch if preferred but it is critical that each of the old libraries is successfully deleted before the corresponding restore operation commences. Do not allow a library to restore on top of an existing library, as the resulting library is likely to be corrupt, unusable and unsupportable.

Once the restores have completed successfully, you will be able to access and continue using SEE/Change as before.

6.2 Regression following failed conversion

In essence, the method is to delete the [failed] upgraded SEE/Change environment and restore the one that was renamed at the beginning of this procedure. Execute the following commands for each environment ensuring each completes successfully before moving on:

```
DLTLIB OMSOBJ
```

```
DLTLIB OMSDTA
```

```
DLTLIB OMSSAV
```

```
RNMOBJ OMSOBJZ *LIB OMSOBJ
```

```
RNMOBJ OMSDTAZ *LIB OMSDTA
```

```
RNMOBJ OMSSAVZ *LIB OMSSAV
```

Depending on the severity of the problem that occurred during the upgrade, it is possible that a Z suffixed library (or libraries) is (or are) not present. If this is the case, they will still exist with the X suffix, in which case these should be renamed instead.

The jobs may be submitted to batch if preferred.

Once the restores have completed successfully, you will be able to access and continue using SEE/Change as before.

7 CVTOMSDTA – use with non-standard libraries

If you are upgrading SEE/Change by conversion and for some reason have non-standard library names, then you will need to adopt the procedure outlined here. This is because CVTOMSDTA assumes certain library names in its processing.

This procedure is not standalone; it should be read and executed in consideration with the preceding sections.

7.1 What does CVTOMSDTA do?

CVTOMSDTA converts a given SEE/Change system at one release to another installed set of libraries at another, more recent, release level. In doing this it assumes that the source libraries for the upgrade (i.e. your old version of SEE/Change) will be named OMSOBJX, OMSDTAX and OMSSAVX. This cannot be changed.

CVTOMSDTA also assumes that the target libraries for the upgrade (i.e. the new version of SEE/Change) are named OMSOBJ, OMSDTA and OMSSAV. This however can be changed and if your libraries are not named so, then this procedure is applicable to you.

7.2 CVTOMSDTA for non-standard library names

Assuming your SEE/Change install library names to be MYLIBOBJ, MYLIBDTA and MYLIBSAV:

```
RNMOBJ QSYS/MYLIBOBJ *LIB OMSOBJX
RNMOBJ QSYS/MYLIBDTA *LIB OMSDTAX
RNMOBJ QSYS/MYLIBSAV *LIB OMSSAVX
RNMOBJ QSYS/OMSOBJNEW *LIB MYLIBOBJ
RNMOBJ QSYS/OMSDTANew *LIB MYLIBDTA
RNMOBJ QSYS/OMSSAVNEW *LIB MYLIBSAV
```

Next, run the upgrade:

```
ADDLIB MYLIBOBJ
ADDLIB MYLIBDTA

CHGDTAARA DTAARA (CONFIG (1 10)) VALUE (MYLIBOBJ)
CHGDTAARA DTAARA (CONFIG (11 10)) VALUE (MYLIBDTA)
CHGDTAARA DTAARA (CONFIG (21 10)) VALUE (MYLIBSAV)

CVTOMSDTA OBJ (MYLIBOBJ) DTA (MYLIBDTA) SAV (MYLIBSAV)
```

Now complete the upgrade as documented in the preceding sections.