NPS Reality v15.2
Online Documentation (Revision 1)

This Documentation Note summarises the changed topics in the Revision 1 release of the NPS Reality v15.2 Online Documentation. For more detailed information, refer to the Online Documentation itself.

Reality V15.2 Service Pack #223

This Revision of the Online Documentation documents the key changes introduced up to and including Reality V15.2 SP#223, as well as taking in reported issues and Documentation Comments from our customers.

Changes to the Security System Maintenance (SSM) command

Several changes have been made to the topics that describe the SSM command.

SSM Option 4 - Define Environment Settings

With this release, *pointer* environments are now referred to as *synonym* environments. This terminological change is seen at multiple points in the ENVIRONMENT CONFIGURATION screens, but there are no functional changes other than some updated prompts.

If the user selects a synonym environment, a screen similar to the following appears (textual changes are highlighted in yellow):

```
                E N V I R O N M E N T   C O N F I G U R A T I O N
------------------------------------------------------------------------------
Environment Name :UNREALITY                                              Value


General settings:                                                       -----

  T) Environment type.                                                  Synonym
  E) Referenced Environment.                                         REALITY.V15.2





Enter setting to view/change (T,E):

R to view/change referenced environment:
EX to exit: FD to delete:
New Item to compare with ('?' to list)
```

The **R** option is a new addition, described as follows:

> Enter **R** to view the first page of settings (showing the first eight environment options) of the direct environment to which this synonym resolves.

If the user selects an existing direct environment, and it is not one of the predefined system environments (which cannot be modified), a screen similar to the following appears:

```
          E N V I R O N M E N T   C O N F I G U R A T I O N
--------------------------------------------------------------------------------
Environment Name :MY.REALITY                                            Value

Based on         :REALITY.V15.2                      Value

General settings:                                    -----               -----

  T) Environment type.                               Direct              Direct
  C) Default DataBasic Compiler                    BASIC*15.2          BASIC*15.2
  S) DOT / TCL Stacker name.                         REALITY             REALITY




Enter setting/option to view/change (T,C,S,1-51):

(CR)/N(ext) page;
EX to exit: FD to delete:
New Item to compare with ('?' to list)

```

Finally, if the user enters an unknown environment name, the command assumes they are creating a new environment.

```
          E N V I R O N M E N T   C O N F I G U R A T I O N
-------------------------------------------------------------------------------
Environment Name :NEW.REALITY














Do you want to create a synonym item? (Y/N):


```

Environment Settings

The *Environment Settings* topic is updated for the changes to the ENVIRONMENT CONFIGURATION screen described above, and also to add the following environment setting:

AUTO.BASIC.DUMPS

If set, this option allows a DataBasic application, when causing a WARN or ABORT condition, to automatically dump (save) some information about its state to a BASIC-DUMPS file. It can optionally include program variables and their contents if DUMP.BASIC.VARS is also set. AUTO.BASIC.DUMPS is clear by default.

Note   If this option is set, a program producing unexpected errors on a busy system will generate many entries in the BASIC-DUMPS file, causing it to grow rapidly. Therefore, the BASIC-DUMPS file should be monitored regularly.

Note that this is not a new setting, but it was undocumented until now.

SSM Option 6 - Define Password Definition

This topic has been extensively re-written to clarify the differences between user and account password definitions, and to reflect some updated prompts (see overleaf).

In addition, option 5 now reads:

```
5) Min num of alpha chars
```

replacing `Min num of mixed case chars`, and is documented as follows:

Min num of alpha chars

Specifies the minimum number of alphabetic characters (letters) allowed in a password.

Prompt:

```
Minimum number of alpha characters :
Must be a positive number LE maximum password length, zero to
inhibit.
```

For example, if you enter **3**, passwords must contain at least 3 letters (whether uppercase or lowercase). Enter **0** to place no restrictions on how many or how few letters are allowed.

User password definitions

The PASSWORD DEFINITION screen for user password definitions is:

```
                USER PASSWORD DEFINITION FILE MAINTENANCE
--------------------------------------------------------------------------------
User Password Definition ID >

 1) Min password length      =              2) Max password length       =

 3) Min num of upper case chars =           4) Min num of lower case chars =
 5) Min num of alpha chars    =             6) Min num of numeric chars    =
 7) Min num of symbol chars   =             8) Min num of character tests  =

 9) Definition case sensitivity =
10) Exclude USER id           =            11) Exclude USER desc words     =
12) Excluded chars            =            13) Max num of repeated chars   =
14) Max num of ascending chars =           15) Max num of descending chars =

16) Password verb prompt str    =

Enter password definition id.
Or 'CR' to exit, '?' for list, 'D' for default or '*' for current)
```

At the `Password Definition ID >` prompt, do one of the following:

- Enter the ID of a password definition to create or update.

- Enter **?** to list the defined definitions.

- Enter **D** to update the default definition.

- Enter ***** to update the current definition.

- Press RETURN to return to the SSM screen.

The cursor waits at the prompt until you respond.

- If you specify an existing definition, SSM reads the definition from the PW.DEFINITIONS file and shows it.

- If you specify an ID that is not on file, SSM notes that "*definition-id* `is a new ID`" and prompts as follows:

      ```
      Enter an existing ID to use as a template;
      Or 'CR' to exit, '?' for list, 'D' for default or '*' for current)
      ID =
      ```

  At the `ID =` prompt, do one of the following:

  - Enter the ID of a password definition to use as a template. This can save you having to enter much of the definition again.

  - Enter **?** to list the defined definitions.

  - Enter **D** to use the default definition as the template.

  - Enter ***** to use the current definition as the template.

    If there is no current definition you are told "`Current definition not defined`" and re-prompted for a template.

- Press RETURN to abandon the new password definition return to the SSM screen.

Account password definitions

The PASSWORD DEFINITION screen for account password definitions is:

```
              ACCOUNT PASSWORD DEFINITION FILE MAINTENANCE
--------------------------------------------------------------------------------
Account Password Definition ID >

 1) Min password length      =            2) Max password length      =

 3) Min num of upper case chars =         4) Min num of lower case chars =
 5) Min num of alpha chars    =            6) Min num of numeric chars   =
 7) Min num of symbol chars   =            8) Min num of character tests =

 9) Definition case sensitivity =
10) Exclude ACCOUNT id        =
11) Excluded chars            =           12) Max num of repeated chars   =
13) Max num of ascending chars =          14) Max num of descending chars =

15) Password verb prompt str  =

Enter password definition id.
Or 'CR' to exit, '?' for list, 'D' for default or '*' for current)
```

At the `Password Definition ID >` prompt, do one of the following:

- Enter the ID of a password definition to create or update. This should be the same name as the account.

- Enter **?** to list the defined definitions.

- Enter **D** to update the default definition.

- Enter ***** to update the current definition.

- Press RETURN to return to the SSM screen.

The cursor waits at the prompt until you respond.

- If you specify an existing definition, SSM reads the definition from the PW.DEFINITIONS file and shows it.

- If you specify an ID that is not on file, SSM notes that "*definition-id* `is a new ID`" and prompts as follows:

      ```
      (CR) to create a definition, "S" to create a Synonym:
      ```

   Press RETURN if you want to create an entirely new definition. Alternatively, enter **S** if this new definition is to be a pointer to an existing definition.

- If you are creating a synonym definition, SSM prompts as follows:

      ```
      Enter existing ID for synonym to reference;
      Or 'CR' to exit, '?' for list, 'D' for default or '*' for current)
      ID =
      ```

At the `ID =` prompt, do one of the following:

- Enter the ID of the password definition to which this new definition will point (the target).

- Enter **?** to list the defined definitions.

- Enter **D** to use the default definition as the target.

- Enter ***** to use the current definition as the target.

  If there is no current definition you are told "`Current definition not defined`" and re-prompted for a target.

- Press RETURN to abandon the new password definition return to the SSM screen.

Miscellaneous changes

In no particular order:

VARVALTYPE function (DataBasic)

Updated to clarify that the function returns 2-byte characters (0401 to 0406) only for Reality v15.1 or later. Prior to this release, only 04 is returned for these types.

COPY-LIST command (English)
COPY command (TCL)

Updated to clarify that if either the **T** or **P** option is used the `TO:` destination prompt is superfluous and is automatically suppressed. Also corrected some small inaccuracies in the examples.

MOVE-FILE and RENAME-FILE commands (TCL)

Updated to remove the (premature) statement that these commands are applicable to hyper files.

HYPER-CREATE command (TCL)

Updated to reflect a small change to one of the command's prompts. Also reflected in the *Example of Creating a Hyper File* topic.

SAVE-LIST command (English)

Corrected to include *account-name* as part of the command syntax.

> **SAVE-LIST** {*list-name* {*account-name*}}

list-name	The name under which a select list is to be saved. If not specified, the default list is used.
account-name	The name of the account where the list is to be saved. If you do not specify an account, the system assumes the current account.

DO command (TCL)

Updated with the following note (which replaces the existing note):

Note	**DO** should not be used with commands that require user input, such as SP-JOBS.

PRECISION statement (DataBasic)

Corrected to specify 127 as the maximum number of decimal places of precision.

PRECISION *precision-value*

precision-value   The number (from 0 to 127) of decimal places to which values are calculated (other than those returned by some mathematical functions) and to which all values are truncated.

Licences

In the discussion on licences, the section on extending your licences by a grace period is updated to include Windows as well as UNIX information.

Extending your licences - grace period

If for any reason, your licences expire before you receive the new ones, you can enable a licence extension (grace period) for any user licences that have expired or are about to expire, starting immediately. This is done by running the **killreal** host command with the **-g** option, and then restarting the central daemon (UNIX) or Reality services (Windows) ...

To instantiate grace on UNIX:

```
$killreal
$killreal -g
$runrealcd
```

To instantiate grace on Windows:

```
>killreal -g
>realserv -e
>realserv -s
```

The extension ends after 20 days, or 10 days after the licences expire, whichever is the sooner. Therefore if the keys have already expired you only have 10 days from the expiry date in order to invoke the grace period. Unexpired licences are not affected.