

Natural Engineer

Release Notes

Version 8.3.3

October 2015

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This document applies to Natural Engineer version 8.3 and to all subsequent releases.

Specifications contained herein are subject to change, and these changes will be reported in subsequent revisions or editions.

Readers' comments are welcomed. Comments may be addressed to the Documentation Department at the address on the back cover. Internet users may send comments to the following e-mail address:

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ABOUT THIS MANUAL

Purpose of this manual

This manual contains the Release Notes for Natural Engineer version 8.3.3.

The information provides an overview of the new features, changes and enhancements, as well as any migration, support and product documentation issues.

In addition to the new features and enhancements, this Natural Engineer version includes all error corrections, changes and enhancements provided with previous Natural Engineer versions.

Target Audience

The target audience for this manual is intended to be any User of Natural Engineer version 8.3.3 as well as Systems Administrators responsible for installing and configuring the product.

Typographical Conventions used in this manual

The following conventions are used throughout this manual:

UPPERCASE TIMES	Commands, statements, names of programs and utilities referred to in text paragraphs appear in normal (Times) uppercase.
UPPERCASE BOLD COURIER	In illustrations or examples of commands, items in uppercase bold courier must be typed in as they appear.
< >	Items in angled brackets are placeholders for user-supplied information. For example, if asked to enter <file number>, you must type the number of the required file.
<u>Underlined</u>	Underlined parts of text are hyperlinks to other parts within the online source manual. This manual was written in MS-Word 97 using the "hyperlink" feature.

The following symbols are used for instructions:

⇒	Marks the beginning of an instruction set.
o	Indicates that the instruction set consists of a single step.
1.	Indicates the first of a number of steps.

How this manual is organized

This manual is organized to reflect the new features/enhancements, changes/modifications and documentation updates available with the release of Natural Engineer version 8.3.3.

This manual should be read carefully before installing and using the product.

Chapter	Contents
1	Provides general information for this release, including migration from previous versions, maintenance support, main features of upcoming releases and customer change/enhancement requests.
2	Provides an overview of the new features, changes and enhancements for this release along with any product highlights.
3	Provides a list of the documentation available for this release along with manual order numbers.

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Terminology

This section offers some of the terms that are specific to the Natural Engineer product.

Note: Familiarity is assumed with the general terminology of Natural, Adabas, Microsoft and Mainframe operating systems.

Analysis

The Analysis process of Natural Engineer searches application data within the Natural Engineer Repository, according to specified Search Criteria and generates reports on the search results.

Application

An Application is a library or group of related libraries, which define a complete Application. In Natural Engineer, the Application can have a one-to-one relationship with a single library of the same name, or a library of a different name, as well as related steplibs. The Application refers to all the source code from these libraries, which Natural Engineer loads into the Repository.

Browser

An Internet Browser such as Microsoft Internet Explorer or Netscape.

Category

Categories in Natural Engineer specify whether and how a Modification is applied to the Natural code. Valid categories are: Automatic change, Manual change, Reject the default Modification, No change to the data item, and the data item is in Generated Code.

A category is further broken down according to type of change (for example: Keyword, Literal, Data Item, Database Access, Definition).

Cobol

Abbreviation of Common Business Orientated Language. A programming language.

Cobol Link

A Cobol Link is the link between the individual Cobol modules and the executable Cobol program referenced in the JCL object.

Consistency

An option in the Analysis process that causes Natural Engineer to trace an Impact through the code, using left and right argument resolution to identify further code impacted by the code found.

Database Access Definition

A collective term used to identify DDMs, SQL Tables or Predict User Views.

About this manual

Data Item

A collective term used for any data fields within a programming object. These can be user-defined variables, DDM fields or System Variables. It is inter-changeable with the term 'variable'.

Environment

The Environment process is the means by which Natural Engineer generates a structured view of the application code in the Natural Engineer Repository. This provides application analysis reports and inventory information on the application and is used as the basis for Impact Analysis.

Exception

An Exception is an Item identified as impacted that does not require a Modification. Where there are a few similar Exception Items, they can be treated as Exceptions, and rejected in the Modification review process. Where there are many similar (therefore not Exceptions), consideration should be given to changing the Search Criteria so they are not identified as impacted in the first place.

Generated Code

This is code which has been generated by a Natural code generator, such as Construct, and which is not normally modified directly in the Natural editor.

Impact

An Impact is an instance of a Natural code Item; e.g., data item or statement (a "hit" scored by the Analysis process) that matches the defined Search Criteria used in the Analysis process.

Iteration

An Iteration is one examination cycle of a field identified according to the specified Search Criteria. For example, one Iteration is reading the field right to left. Multiple Iterations are performed when the option of 'Consistency' or Multi Search is requested for Analysis, and Natural Engineer performs as many Iterations as necessary to exhaust all possibilities of expressing and tracing the field, and can be limited by a setting in the NATENG.INI file.

JCL

Job Control Language.

JCL object

A JCL object is a collection of Job Control statements in the order which they are to be executed in a mainframe batch environment. Commonly referred to as JCL.

Library

A single library of source code, which exists in the Natural system file.

Modification

A Modification is a change suggested or made to an object or data item resulting in the required compliance of that object or data item. Modifications in Natural Engineer are classified according to Category and Type.

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Refactoring

Improving a computer program by reorganizing its internal structure without altering its external behavior.

Soft Link

A Soft Link is where a link between two objects has been defined using an alphanumeric variable rather than a literal constant.

TLM

Text Logic Members are used to contain the code required to support inclusion of common code into the application. An example of this is the code to include into an application before updating a database.

Type

The Type of Modification available, for example: Data Item, Keyword and Literal.

Variable

A collective term used for any data fields within a programming object. These can be user-defined variables, DDM fields or System Variables. It is inter-changeable with the term 'data item'.

Related Literature

The complete set of Natural Engineer manuals consists of:

1 Natural Engineer Concepts and Facilities (NEE83-006ALL)

The Concepts and Facilities manual describes the many application systems problems and solutions offered by Natural Engineer, providing some guidelines and usage that can be applied to Natural applications.

2 Natural Engineer Release Notes (NEE83-008ALL)

The Release Notes describe all the information relating to the new features, upgrades to existing functions and documentation updates that have been applied to Natural Engineer.

**3 Natural Engineer Installation Guide for Windows (NEE83-010WIN)
Natural Engineer Installation Guide for Mainframes(NEE83-010MFR)
Natural Engineer Installation Guide for Unix (NEE83-010UNIX)**

The Installation Guide provides information on how to install Natural Engineer on PC, Unix and mainframe platforms.

**4 Natural Engineer Administration Guide (NEE83-040WIN)
Natural Engineer Administration Guide (NEE83-040MFR)**

The Administration Guide provides information on all the various control settings available to control the usage of the different functions within Natural Engineer.

**5 Natural Engineer Application Management (NEE83-020WIN)
Natural Engineer Application Management (NEE83-020MFR)**

The Application Management manual describes all the functions required to add Natural applications into the Repository.

**6 Natural Engineer Application Documentation (NEE83-022WIN)
Natural Engineer Application Documentation (NEE83-022MFR)**

The Application Documentation manual describes all the available functions to document a Natural application within the Repository. These functions will help enhance / supplement any existing systems documentation such as BSD / CSD / Specifications etc.

**7 Natural Engineer Application Analysis and Modification (NEE83-023WIN)
Natural Engineer Application Analysis and Modification (NEE83-023MFR)**

The Application Analysis and Modification manual describes all the available functions to carry out analysis of Natural applications; including basic keyword searches. The modification process is described and detailed to show how it can be applied to modify single selected objects within a Natural application, or the entire Natural application in one single execution.

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**8 Natural Engineer Application Restructuring (NEE83-024WIN)
Natural Engineer Application Restructuring (NEE83-024MFR)**

The Application Restructuring manual describes the analysis and modification functionality required to carryout some of the more sophisticated functions such as Object Builder.

**9 Natural Engineer Utilities (NEE83-080WIN)
Natural Engineer Utilities (NEE83-080MFR)**

The Utilities manual describes all the available utilities found within Natural Engineer and, when and how they should be used.

10 Natural Engineer Reporting (NEE83-025ALL)

The Reporting manual describes each of the reports available in detail, providing report layouts, how to trigger the report and when the report data becomes available. The various report-producing mediums within Natural Engineer are also described.

11 Natural Engineer Batch Processing [Mainframes] (NEE83-026MFR)

The Batch Processing manual describes the various batch jobs (JCL) and their functionality.

12 Natural Engineer Messages and Codes (NEE83-060ALL)

The Messages and Codes manual describes the various messages and codes produced by Natural Engineer.

13 Natural Engineer Advanced Services (NEE83-017WIN)

The Advanced Services manual describes various advanced options such as the Refactoring of Natural application source code with Natural Engineer, conversion of applications for Natural for Ajax and Business Rule processing.

GENERAL INFORMATION

Chapter Overview

This chapter covers the general information for Natural Engineer version 8.3.3.

The following topics are covered:

- [Migrating to Version 8.3.3](#)
- [Information For Upcoming Releases](#)
- [Natural Version for Open Systems](#)
- [SAG Installer](#)
- [Removed Features](#)

Due to last-minute documentation updates, it may be possible that the Natural Engineer documentation that you can download with the Software AG Installer or that the online help that you can invoke directly from the product does not yet contain the latest information. The most up-to-date Natural Engineer documentation can always be found on the Software AG documentation website at <http://documentation.softwareag.com/> (Empower login required).

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Migrating to Version 8.3.3

Note: Depending on the version of Natural Engineer used as a starting point, all subsequent migration steps must be followed. For example: If the starting point is Version 8.2.2, Version 8.2.2.1, Version 8.2.2.2, Version 8.2.3, Version 8.2.3.1, Version 8.2.3.2, Version 8.3.1 and Version 8.3.2 must be addressed. If you are upgrading from a version earlier than version 8.2.2 then please refer to the relevant NEExxx Release Notes documentation.

From Version 8.2.2 Base Release

If you are upgrading from Natural Engineer version 8.2.2 to Natural Engineer version 8.2.2.1 you will need to perform the following tasks:

[i] Release the following Superdescriptor:

SQ= AA(1,8), AZ(1,1), AK(1,32), RC(1,1), AB(1,8)

[ii] Conversion is Complete

From Version 8.2.2.1 Release

If you are upgrading from Natural Engineer version 8.2.2.1 to Natural Engineer version 8.2.2.2.

[i] New field

01,NQ,65,A,NU

[ii] New Superdescriptor

ST= AA(1,8), AB(1,8), NQ(1,65)

[iii] Fields now made Null Suppressed

01, AD, 8, U, NU

01, AE, 8, U, NU

01, AV, 7, U, NU

There are two methods available to convert the repository file to the new format.

1. To keep the existing Repository File

[i] Add the following field using the DBA Workbench:

01,NQ,65,A,NU

[ii] Unload & Decompress your existing Repository file.

[iii] Compress the decompressed file using the new FDT definitions NEE-REPOSITORY-V823.FDT from the ADA directory of Natural Engineer.

[iv] Create a new Repository file using the new FDT definitions NEE-REPOSITORY-V823.FDT from the ADA directory of Natural Engineer.

[v] Load the compressed file into the newly added file.

[vi] If you wish to use the new Fields Used functions of Object Viewer and Field Viewer then you will need to re-extract and load the relevant applications within Natural Engineer.

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[vii] Conversion is complete.

2. To use a new Repository File

[i] Unload any User data from the existing Natural Engineer repository that you may wish to keep e.g., User Profiles, Soft Link, User Documentation.

[ii] Set up a new Repository file using the new FDT definitions NEE-REPOSITORY-V823.FDT from the ADA directory of Natural Engineer.

[iii] Extract and Load all applications that you wish to use with Natural Engineer.

[iv] Reload the User data previously unloaded in [i]

[v] Conversion is complete.

Users of the Natural Engineer Web Interface (NEA) will need to upgrade to Microsoft® Silverlight® 5 for this release. The browser should automatically prompt to upgrade when running this version of NEA.

From Version 8.2.2.2 Release

If you are upgrading from Natural Engineer version 8.2.2.2 to Natural Engineer version 8.2.3 and have JCL loaded then the following object needs to be run to ensure that the repository has the most comprehensive information available.

[i] To apply the necessary conversions run the following object in the SYSNEE library

NEEJXCNV

Note: This program is completely re-executable and should be executed in a Natural session invoked using the Natural Parameter file: NATENG:

[ii] Conversion is complete.

From Version 8.2.3 Base Release

If you are upgrading from Natural Engineer version 8.2.3 to Natural Engineer version 8.2.3.1 then the following object needs to be run to ensure that the extract criteria records are converted to the new format.

[i] To apply the necessary conversions run the following object in the SYSNEE library

NEEEXCNV

Note: This program is completely re-executable and should be executed in a Natural session invoked using the Natural Parameter file: NATENG:

[ii] Conversion is complete.

If you wish to utilize the Database Key Usage diagrams then the applications will need to be re-extracted and loaded in order for the relevant information to be available.

If User Exit NEEUEX5 is not present in the SYSNEE library then please rename the supplied NEEUEX5X object to be NEEUEX5 so that new applications may be created.

From Version 8.2.3.1

If you are upgrading from Natural Engineer version 8.2.3.1 to Natural Engineer version 8.2.3.2 and have COBOL Links defined then the following object needs to be run to ensure that the extract criteria records are converted to the new format.

[i] To apply the necessary conversions run the following object in the SYSNEE library

NEECLCNV

Note: This program is completely re-executable and should be executed in a Natural session invoked using the Natural Parameter file: NATENG:

[ii] Conversion is complete.

If User Exit NEEUEX6 is not present in the SYSNEE library then please rename the supplied NEEUEX6X object to be NEEUEX6 prior to running Natural Engineer v8.2.3.2.

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From Version 8.2.3.2

If you are upgrading from Natural Engineer version 8.2.3.2 to Natural Engineer version 8.3.1 you will need to perform the following tasks:

[i] Invert the following Superdescriptors:

```
SU= AA (1,8), NL (1,1), AN (1,32)
SV= AA (1,8), NL (1,1), OL (1,1), AS (1,1), AN (1,32)
SW= AA (1,8), NL (1,1), OL (1,1), AN (1,32)
```

If you have soft links within your applications then the following object needs to be run to ensure that the soft link records are converted to the new format.

[i] To apply the necessary conversions run the following object in the SYSNEE library

NEESLCNV

Note: This program is completely re-executable and should be executed in a Natural session invoked using the Natural Parameter file: NATENG:

[ii] Conversion is complete.

From Version 8.3.1 Base Release

If you are upgrading from Natural Engineer version 8.3.1 to Natural Engineer version 8.3.2 there are no conversion tasks to be performed.

From Version 8.3.2 Base Release

If you are upgrading from Natural Engineer version 8.3.2 to Natural Engineer version 8.3.3 there are no conversion tasks to be performed.

Information for Upcoming Releases

This section covers any information on upcoming releases of Natural Engineer.

Natural Version for Open Systems

Natural Engineer 8.3.3 requires at least Natural Version 8.3 for Open Systems as a prerequisite.

SAG Installer

Natural Engineer for Windows and Unix is now installed using the Software AG Installer. For more information, see the relevant Installation documentation.

Removed Features

The Business Functions Option that was available in previous versions of Natural Engineer has been retired. Similar functionality is available with the new Services option.

NEW FEATURES, CHANGES & ENHANCEMENTS

Chapter Overview

This chapter covers the changes, enhancements and new features that are available with Natural Engineer version 8.3.3. The following topics are covered:

New Features

- [Global Field Usage](#)
- [Services](#)
- [ARIS Interface](#)
- [Natural Engineer APIs](#)
- [HP-UX Support](#)

Changes and Enhancements

- [General Problem and Error Corrections](#)
- [Global Object Usage Report](#)
- [JCL Text Members](#)
- [Natural Engineer Web Interface](#)

Additional Entries in CINI and NATENG.INI file

New Features

Global Field Usage

A new function has been introduced that shows a summary of which applications fields reside in. It is a global option and is applicable to all applications loaded into your repository. This is available from the Global Reports section accessed from the context menu when on the main Applications node.

The following Figure 2-1 shows a sample Global Field Usage screen.

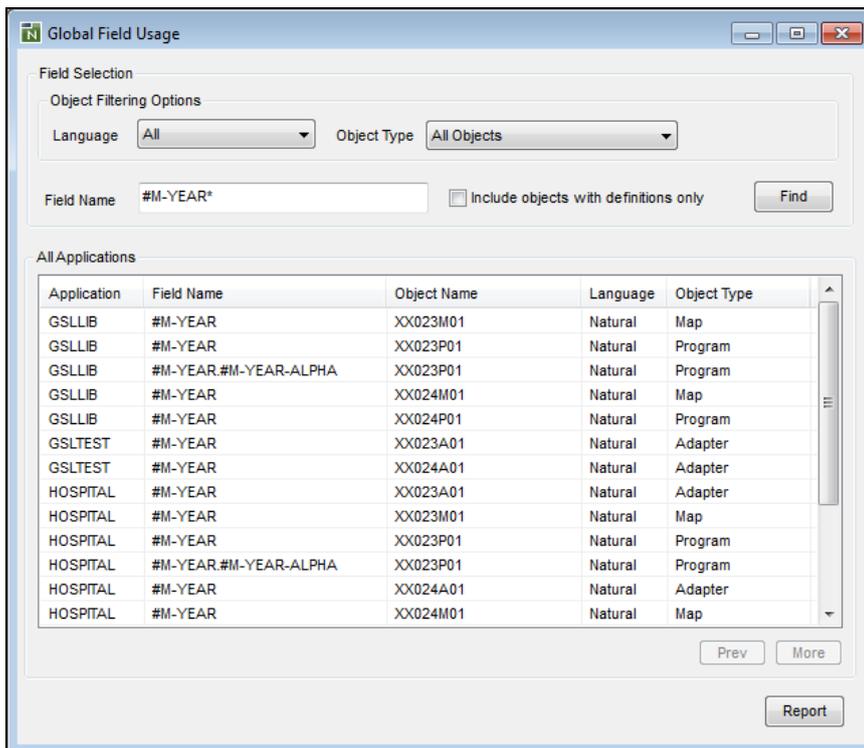


Figure 2-1 shows a sample Global Field Usage screen.

Detailed information may be output to a standard report layout which will include the attribute of the field and the keyword/line number associated with the field.

The following Figure 2-2 illustrates a Global Field Usage report.

<i>Global Field Usage</i>							
Field Name: #M-YEAR+							
Language: All							
Object Type: All							
Displaying all objects that use the field.							
Application	Object Name	Object Type	Field Name	Keyword	Attribute	External Object	Line No.
HOSPITAL	XX024P01	Program	#M-YEAR	STACK			0310
HOSPSET	XX023M01	Map	#M-YEAR	DEFINE	N2		0090
HOSPSET	XX023M01	Map	#M-YEAR	INPUT			0160
HOSPSET	XX023P01	Program	#M-YEAR	DEFINE	N2		0100
HOSPSET	XX023P01	Program	#M-YEAR	INPUT			0270
HOSPSET	XX023P01	Program	#M-YEAR	MOVE			0280
HOSPSET	XX023P01	Program	#M-YEAR.#M-YEAR-ALPHA	DEFINE	A2		0120
HOSPSET	XX023P01	Program	#M-YEAR.#M-YEAR-ALPHA	IF			0810

Figure 2-2 Global Field Usage report.

This is available on PC only.

Services

The site workspace in Natural Engineer has had a Services Node added to it. This will show all Services that have been input into Natural Engineer and allow the specification and maintenance of the defined Services.

The node is presented in a hierarchical structured display controlled by the top level node.

The following Figure 2-3 illustrates the Services Node.

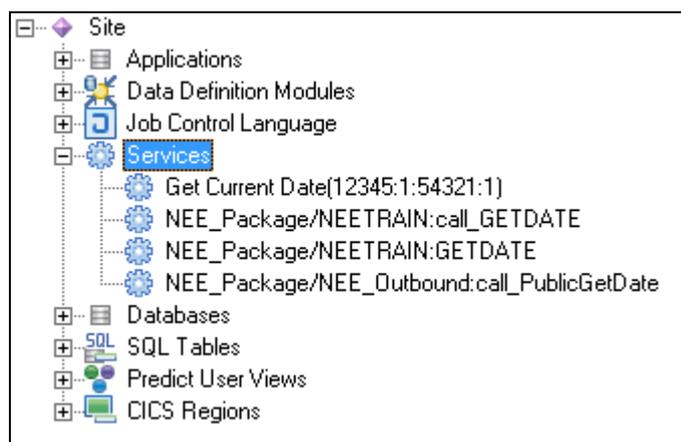


Figure 2-3 Services Node

Services are a set of related components, provided in support of one or more business or information technology processes. They are typically organized and held in a central repository such as a service catalogue.

The Service options in Natural Engineer give the ability to cross-reference the Natural and COBOL objects and database files that are utilized by the Service.

Services may be manually added into Natural Engineer or imported from a service catalogue by using the Natural Engineer API, [NEEAPI2](#). Any links between Services and objects/other services may be imported by using Natural Engineer API, [NEEAPI3](#).

Following the definition and/or import of the services a service analysis process needs to be run to create cross reference data. This may be run online, in batch if executing in a SPod environment or as a standalone job.

Two new members have been supplied.

Mainframe: SRVANAL

For z/OS the JCL is supplied in the NEEvrs.JOBS data set on the installation tape. This job may be run as a standalone batch job on the mainframe to run the service analysis.

PC: srvanal.bat.tpl

If you wish to run Natural Engineer with Windows clients communicating to a Windows Server using SPod, the BAT file needs to be renamed (by removing the suffix .tpl) and configured on the server to enable Natural Engineer to run the Service Analysis.

For installations under Natural 8.3 on the PC the BAT files reside in

<install-dir>\NaturalEngineer\Bat\

ARIS Interface

The ARIS Interface option provides the facility to create an XML file from an object within the Natural Engineer repository. This XML file may be imported into ARIS to create a Business Process Modelling Notation (BPMN) diagram for the object.

The ARIS Interface is a Natural Engineer Add-On. It will only be available depending on your Natural Engineer Licensing agreement.

The following Figure 2-4 illustrates a sample diagram in ARIS exported from Natural Engineer.

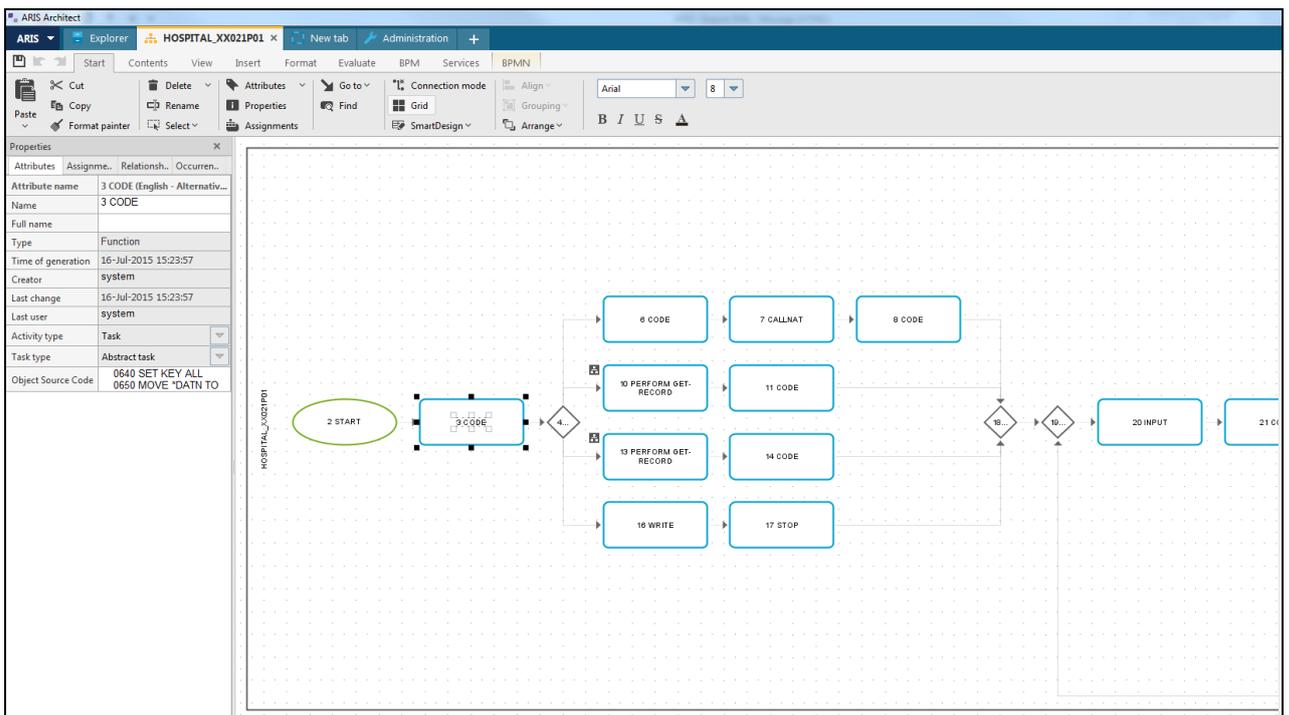


Figure 2-4 Sample ARIS Diagram

Natural Engineer APIs

Two new Application Programming Interfaces have been introduced, [NEEAPI2](#) and [NEEAPI3](#). These are used in conjunction with [Services](#).

NEEAPI2 - Extract and Load Services Data

This allows the user to Extract data from a list of Services & add Services to the NEE Repository. An example program, NEEAPI2P is provided to illustrate how to call the API.

NEEAPI3 - Add Links to Services

This allows the user to add links between objects and the services that they call.

An example program, NEEAPI3P is provided to illustrate how to call the API.

Further details are available in the Natural Engineer Concepts and Facilities manual or in the source of the example programs themselves which are located in the SYSNEE library.

HP-UX Support

Natural Engineer has introduced support for HP-UX platforms. This allows Natural Engineer to be run natively on HP-UX machines or HP-UX machines to run Natural Engineer in a client/server configuration.

Changes & Enhancements

General Problem and Error Corrections

This release contains general problem and error corrections as detailed in the text document 'NaturalEngineer_8-3-3-0_READMEFIX'.

Note: You can find it in the Natural Engineer product documentation at <http://documentation.softwareag.com/> (Empower login required), or when you have chosen to download the documentation during the installation of Natural Engineer - in a central directory named `_documentation` in your main installation directory.

Global Object Usage Report

The Global Object Usage Report which is a detailed report that is generated from the Global Object Usage screen has been enhanced to show where the object is called from.

Figure 2-5 shows Global Object Usage Report

<i>Global Object Usage</i>							
Object Name: XX*							
Language: All							
Object Type: All							
Application	Object Name	Object Type	Call Type	Object Call Type	Calling Object	Ext. Calling Object	Line No.
HOSPITAL	XX002P01	Program	Nat. Call	Fetch Program	XX001P01		0190
HOSPITAL	XX002P01	Program	Nat. Call	Fetch Program	XX021P01		1100
HOSPITAL	XX002P01	Program	Nat. Call	Fetch Program	XX024P01		0210
HOSPITAL	XX021A01	Adapter					
HOSPITAL	XX021L01	Local Data Area	Nat. Include	Local Data Area	AX021P01		0040
HOSPITAL	XX021L01	Local Data Area	Nat. Include	Local Data Area	BX021P01		0040
HOSPITAL	XX021L01	Local Data Area	Nat. Include	Local Data Area	XX021P01		0040
HOSPITAL	XX021L01	Local Data Area	Nat. Include	Local Data Area	XX022P01		0020
HOSPITAL	XX021L01	Local Data Area	Nat. Include	Local Data Area	XX023P01		0040

Figure 2-5 Global Object Usage Report.

This is available on PC only.

JCL Text Members

The following JCL text members that were used for RJE job submission have been merged into one generic member JCLEXEC.

JCLJCEAN
JCLLOGDL
JCLMETRC
JCLSOFT

If you have modified any of these members you will need to reapply your changes to the new supplied JCLEXEC.

This is applicable to Mainframe and Unix environments.

NB: JCL is used as a generic term; under Unix the members will contain the relevant Unix scripts.

Natural Engineer Web Interface

The Natural Engineer Web Interface (NEA) is a graphical interface for reporting data stored in a Natural Engineer repository.

Changes and Enhancements

- [Find Object](#)
- [Services](#)
- [List Map Messages](#)
- [Missing Objects Report](#)

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Changes & Enhancements

Find Object

Locates applications where the object is used and shows references. Available from the context menu for 'Applications'.

Enter Object name to locate and the data list will show Applications containing the object and identify objects referencing the object. Context menu exists to link to other diagrams.

The screenshot shows a software window titled "Object Usage for XX021P01". At the top right, there are navigation icons for pan, zoom, and reset, with a "Zoom: 100%" indicator. Below the title bar, there is a search input field containing "xx021p01" and a "Find" button. To the right of the search field is a tip: "Tip Enter 'Name' of object to find".

The main area contains a table with the following columns: Application, Object, Object Type, Called by, Stt No, and Comment. The table lists various applications and their references to the object XX021P01. A context menu is open over the table, showing options: "Show Object", "List Source", and "Popup Source".

Application	Object	Object Type	Called by	Stt No	Comment
GSLLIB	XX021P01	Natural Program	XX025P01	1080	
GSLLIB	XX021P01	Natural Program	XX002P01	0250	
HOSDEMO	XX021P01	Natural Program	XX023P01	1170	
HOSDEMO	XX021P01	Natural Program	XX002P01	0220	
HOSDEMO	XX021P01	Natural Program	XX025P01	1180	
HOSP-A	XX021P01	Natural Program	XX002P01	0250	
HOSP-A	XX021P01	Natural Program	XX025P01	1080	
HOSP-J	XX021P01	Natural Program	XX002P01	0260	
HOSP-J	XX021P01	Natural Program	XX025P01	1120	
HOSPITAL	XX021P01	Natural Program	XX025P01	1080	
HOSPITAL	XX021P01	Natural Program	XX002P01	0250	
HOSSERVX	XX021P01	Natural Program	XX023P01	2370	
HOSSERVX	XX021P01	Natural Program	XX025P01	2250	
HOSSERVX	XX021P01	Natural Program	XX002P01	0560	

Services

New tree view entry shows Services defined to Natural Engineer.

Services are a set of related components, provided in support of one or more business or information technology processes. They are typically organized and held in a central repository such as a service catalogue.

Summary information available from context menu:

Services Summary
The report provides an overview of Services

Services Summary

[show Service link](#)
Select any row with the mouse left hand button to show the Service in more detail or right click for context menu.

Name	Entry Point Application	Entry Point Object	Flow Type
Get Current Date(12345:1:54321:1)	NEETRAIN	GETDATE	
NEE_Package/NEETRAIN	NEETRAIN	GETDATE	
NEE_Package/NEETRAIN			Y
NEE_Package/NEE_Outl			Y

Context menu options:
 Show Service
 Show Entry Point Object
 Objects Called

Services are listed on tree view:

Tree view structure:
 Site
 Services
 Get Current Date(12345:1:54321:1)
 NEE_Package/NEETRAIN/GETDATE
 Show Service
 Objects called
 Show Object
 Business Rules
 Data Models
 Applications
 Data Definition Modules
 Predict User Views
 SQL Tables
 Databases
 Predict
 Predict Xref Libraries
 Predict Xref DDMs
 Predict Xref DBs
 Samples

You have opened **Services** on the Treeview
 Right hand mouse options for an entry are:

- Show Service**
Shows application and external documentation for the service
- Objects Called**
Identifies, for an object, all uses of it by all other objects within an application (and any Steplib libraries), for both internal and external routines
- Show Object**
This shows an overview of the objects that are use or are used by this object

2

Natural Engineer Version 8.3.3 Release Notes

Context menu entry Show Service provides details for the service, including Entry Point object in the Application, the Objects called and Show Object diagram.

The show Service diagram is shown below:

NEE_Package/NEETRRAIN:GETDATE Service

Service Title
NEE_Package/NEETRRAIN:GETDATE

Entry Point (Application/Object)
NEETRRAIN/GETDATE

Comments
Integration Server - Adppter Service calling GETDATE from NEETRRAIN

Keywords
ADAPTER
SERVICE

External Documents (select to view in separate window)

Objects which use
NEE_Package/
NEETRRAIN:call_G
ETDATE

View Calls

Zoom: 100%

The “View Calls” button will show a cross reference diagram of objects used:



List Map Messages

List Map messages may now be shown by default when map is selected.

The interface, titled "Map XX002M01", displays a patient administration menu. The menu text is as follows:

```

XX002M01          Patient Administration Menu          *DATI
*USER
*****
Option           Option Description
=====
A                Add New Patient
M                Modify Existing Patient
D                Delete a Patient
-----
X                Please Enter Required Option

PF3/15 to Return                                PF12/24 to Exit
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
    
```

Below the menu is a "Tip" and a "Show Messages" button. The "Show Messages" button is checked. A table below the button lists messages:

Messages	Data Item	Data Defn.	IO Type
	#M-MESSAGE	A70	Output
	#M-OPTION	A1	InOut

On the right side of the interface, there is a "Objects which use" panel showing a yellow box labeled "XX002P01" with "0120" below it.

2

Natural Engineer Version 8.3.3 Release Notes

Currently when a map is shown a button is available to show any 'reinput' messages, you can make this step automatic by changing the entry in the ini file by setting the value for listMapshowMessagesAuto to be 'Y'.

```

2290  +-----+
2300  DEFINE SUBROUTINE ##REQUESTS-SECTION
2310  +-----+
2320  DECIDE ON FIRST VALUE OF #KEYWORD
2330  VALUE 'listLiteralsLimit'
2340  +   ASSIGN #VALUE = '10000'
2350  ASSIGN #VALUE = '5000'
2360  VALUE 'listMapShowMessagesAuto'
2370  ASSIGN #VALUE = 'N'
2380  NONE VALUES
2390  IGNORE
2400  END-DECIDE
2410  END-SUBROUTINE
2420  F*
  
```

Messages identified below:

Map XX002M01

100% Zoom: 100%

```

XX002M01      Patient Administration Menu      *DATI
*USER
*****
Option        Option Description
=====
A             Add New Patient
M             Modify Existing Patient
D             Delete a Patient
-----
X             Please Enter Required Option

PF3/15 to Return                                PF12/24 to Exit
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
  
```

Objects which use

XX002P01

0120

Tip Move the mouse over a field on the map above to see the name and format information. Select a field to view backtracking.

Messages	Data Item	Data Defn.	IO Type
	#M-MESSAGE	A70	Output
✓	#M-OPTION	A1	InOut

Missing Object Report

The Missing Objects report has been updated to show 'Valid Missing' objects as defined in Natural Engineer.

Missing Objects for HOSPITAL

Options: All

Object	Description	System	Valid Missing
XX003P01	Natural Program		Yes

List Missing Objects
Shows a list of missing objects for the application. The user can then determine if they need to be located and loaded into the application. [Show me more](#)

Tip
Select any column name with the mouse to sort ascending or descending (alternate mouse click for each).

show Object link
Select any row with the mouse left hand button to view the showObject diagram to see where the object is used.

Zoom: 100%

Initialization Settings

The following changes have been made to the INI and CINI files for Natural Engineer version 8.3.3. Please review the appropriate section of the Natural Engineer User Guide for a detailed explanation about each entry in the INI file. On the PC, the NATENG.INI file may be maintained via the Options → Administration → Initialization Settings option from the main menu.

New and Modified Settings

REPORTER Group

Group Header / Parameter	Notes
[REPORTER]	
VISIO =	Set to N to disable output options that use Microsoft Visio if e.g., a customer does not have a licence for Microsoft Visio. If this parameter is not found, or not set to N, then Visio is available as usual.

DOCUMENTATION

Chapter Overview

This chapter covers the documentation changes made for Natural Engineer version 8.3.3.

Documentation Updates

The documentation set for Natural Engineer has been updated to reflect the changes and additions provided with Natural Engineer version 8.3.3. All manuals have been reformatted and changed for this release.

New Compiled HTML Help

Natural Engineer now supplies online help for the PC in compiled HTML format. If you encounter an error message when invoking online help for the first time, you probably require an update to your Windows help system. Please check the following Microsoft web page for the appropriate update file:

<http://msdn.microsoft.com/library/default.asp?url=/library/en-us/htmlhelp/html/hwMicrosoftHTMLHelpDownloads.asp>

You can find further information about HTML help:

<http://msdn.microsoft.com/library/default.asp?url=/library/en-us/htmlhelp/html/vsconHH1Start.asp?frame=true>

Note: In order to access HTML Help, the underlying components of Microsoft Internet Explorer 4.x (or later) must be installed.

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