Natural Engineer

Release Notes

Version 9.1.1

October 2018

ADABAS & NATURAL

Manual Order Number: NEE91-008ALL

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This document applies to Natural Engineer version 9.1 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:

document@gensystems.com

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TABLE OF CONTENTS

TABLE OF CONTENTS I

ABOUT THIS MANUAL 1

Purpose of this manual 1
Target Audience 1
Typographical Conventions used in this manual 2
How this manual is organized 3
Terminology 4
Related Literature 7

GENERAL INFORMATION 9

Chapter Overview 9
Migrating to Version 9.1.1 10
From Version 8.3.3 Base Release 10
From Version 8.3.3.1 10
From Version 8.3.4 10
From Version 8.4.1 10
Information for Upcoming Releases 11
Natural Version for Open Systems 11
SAG Installer 11
Removed Features 11
Chapter Overview 13
New Features 14
Data Masking 14
Changes & Enhancements 19
General Problem and Error Corrections 19
Batch Import of Object Documentation 20
Natural Engineer Web Interface 21
Changes and Enhancements 21
Initialization Settings 31

DOCUMENTATION 33

Chapter Overview 33
Documentation Updates 33
New Compiled HTML Help 34

ABOUT THIS MANUAL

Purpose of this manual

This manual contains the Release Notes for Natural Engineer version 9.1.1.

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 9.1.1 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.
Underlined	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.
□	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 9.1.1.

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.

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.

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.

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 (NEE91-006ALL)**

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 (NEE91-008ALL)**

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 (NEE91-010WIN)**
Natural Engineer Installation Guide for Mainframes(NEE91-010MFR)
Natural Engineer Installation Guide for Unix (NEE91-010UNX)

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

4 **Natural Engineer Administration Guide (NEE91-040WIN)**
Natural Engineer Administration Guide (NEE91-040MFR)
Natural Engineer Administration Guide (NEE91-040UNX)

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 (NEE91-020WIN)**
Natural Engineer Application Management (NEE91-020MFR)
Natural Engineer Application Management (NEE91-020UNX)

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

6 **Natural Engineer Application Documentation (NEE91-022WIN)**
Natural Engineer Application Documentation (NEE91-022MFR)
Natural Engineer Application Documentation (NEE91-022UNX)

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 (NEE91-023WIN)**
Natural Engineer Application Analysis and Modification (NEE91-023MFR)
Natural Engineer Application Analysis and Modification (NEE91-023UNX)

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.

8 **Natural Engineer Application Restructuring (NEE91-024WIN)**
Natural Engineer Application Restructuring (NEE91-024MFR)
Natural Engineer Application Restructuring (NEE91-024UNX)

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 (NEE91-080WIN)**
Natural Engineer Utilities (NEE91-080MFR)
Natural Engineer Utilities (NEE91-080UNX)

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

10 **Natural Engineer Reporting (NEE91-025ALL)**

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] (NEE91-026MFR)**
Natural Engineer Batch Processing [Unix] (NEE91-026UNX)

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

12 **Natural Engineer Messages and Codes (NEE91-060ALL)**

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

13 **Natural Engineer Web Interface Installation and Configuration Guide(NEA84-010ALL)**

The Web Interface Installation and Configuration Guide provides information on how to install and configure the Natural Engineer Web Interface.

14 **Natural Engineer Advanced Services (NEE91-017WIN)**
Natural Engineer Advanced Services (NEE91-017MFR)
Natural Engineer Advanced Services (NEE91-017UNX)

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, Business Rule processing and Data Masking.

1

GENERAL INFORMATION

Chapter Overview

This chapter covers the general information for Natural Engineer version 9.1.1.

The following topics are covered:

- Migrating to Version 9.1.1
- 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).

The most recent hotfixes and other useful information may also be found in Empower.

Migrating to Version 9.1.1

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 8.3.3, Version 8.3.3.1, Version 8.3.4 and Version 8.4.1 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 8.3.3 Base Release

If you are upgrading from Natural Engineer version 8.3.3 to Natural Engineer version 8.3.3.1 there are no conversion tasks to be performed.

From Version 8.3.3.1

If you are upgrading from Natural Engineer version 8.3.3.1 to Natural Engineer version 8.3.4 there are no conversion tasks to be performed.

From Version 8.3.4

If you are upgrading from Natural Engineer version 8.3.4, 8.3.4.1, 8.3.4.2 or 8.3.4.3 to Natural Engineer version 8.4.1 there are no conversion tasks to be performed.

From Version 8.4.1

If you are upgrading from Natural Engineer version 8.4.1, 8.4.1.1 or 8.4.4.2 to Natural Engineer version 9.1.1 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 9.1.1 requires at least Natural Version 8.3.7 for Open Systems as a pre-requisite.

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.

2

NEW FEATURES, CHANGES & ENHANCEMENTS

Chapter Overview

This chapter covers the changes, enhancements and new features that are available with Natural Engineer version 9.1.1. The following topics are covered:

New Features

- Data Masking

Changes and Enhancements

- General Problem and Error Corrections
- Batch Import of Object Documentation
- Natural Engineer Web Interface

Additional Entries in CINI and NATENG.INI file

New Features

Data Masking

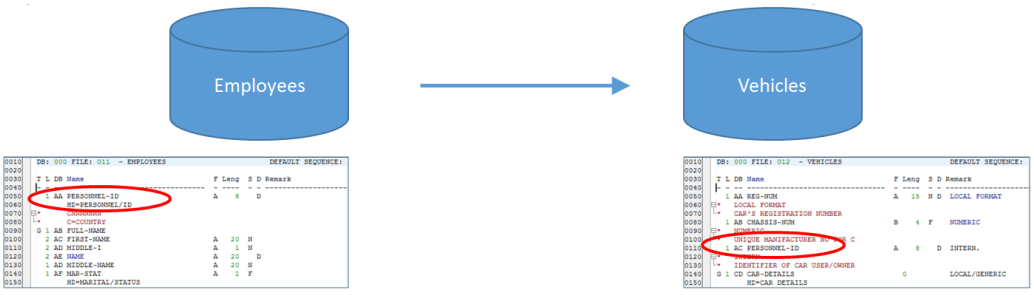
Data Masking, which is available from the Advanced Services menu and allows for the creation of Test Data on ADABAS Databases by replacing sensitive data with fictitious, but realistic data that can be used for purposes such as software testing and user training.

It allows for the definition of a Data Model containing relationships between the DDMs within the model. Data Masking Rules may then be associated with fields within the model to determine what type of masking should be applied during the execution process.

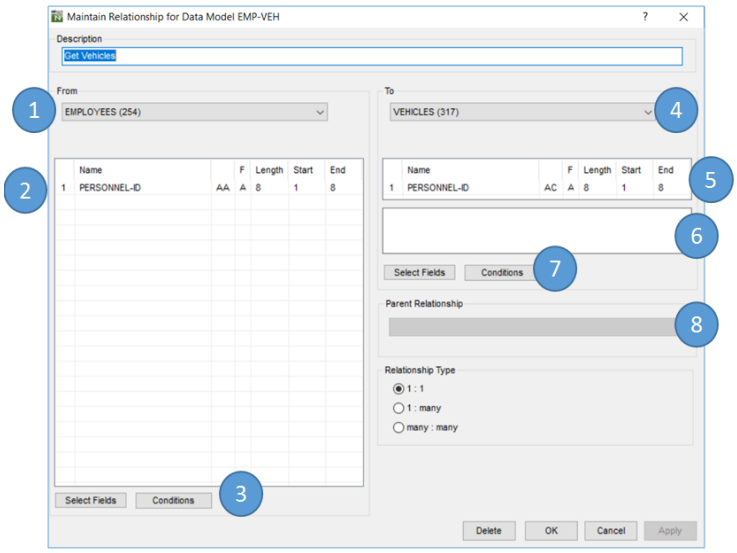
This is available on the PC, Mainframe and Unix.

Sample Process

1. Start by defining the Data Model. Simple case below is a linkage between Employees & Vehicles. An Employee can have 1:n (Zero to Many) Vehicles. The link between Employees is the Personnel-ID



2. Add this Data Model (EMP-VEH) and define relationships between DDMs within the Model e.g. Get Vehicles for Employee.



1 – From DDM

2 – Fields on From DDM to build key

3 – Condition if to execute this Relationship

4 – To DDM

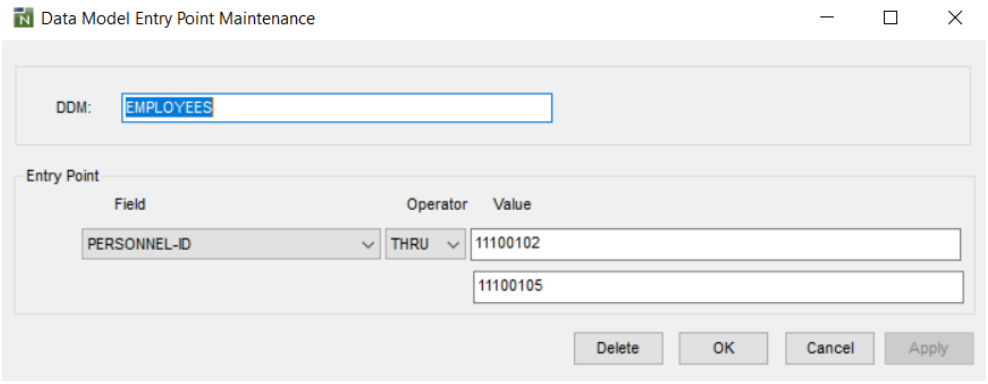
5 – Key on the To DDM

6 – Prefix/Suffix (Record Type Processing)

7 – Condition to accept record on To DDM

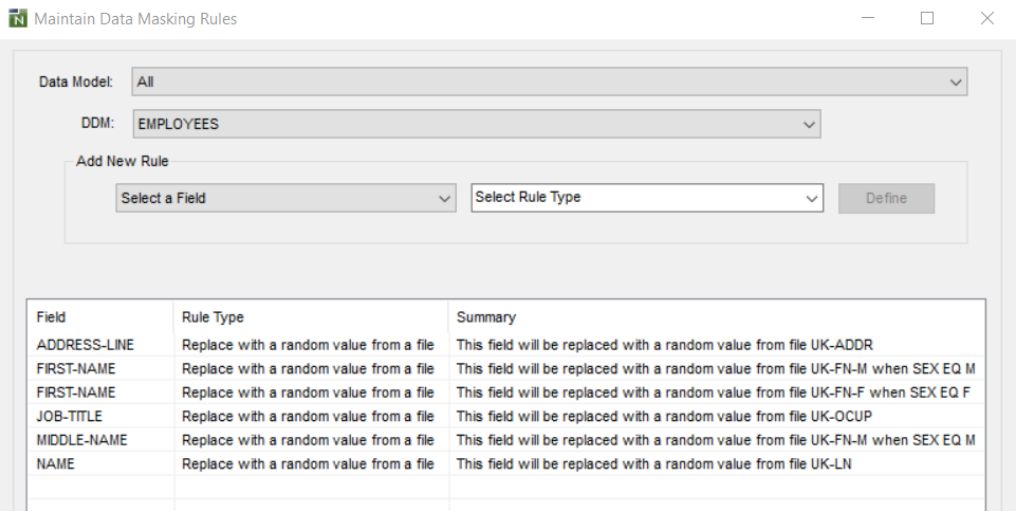
8 – Parent Relationship (Dependency)

3. Define the Entry Point i.e., the reading of the top record for a Relationship Map.



4. Define Data Masking Rules.

Masking Rules may be applied for ALL Data Models or a specific Data Model.

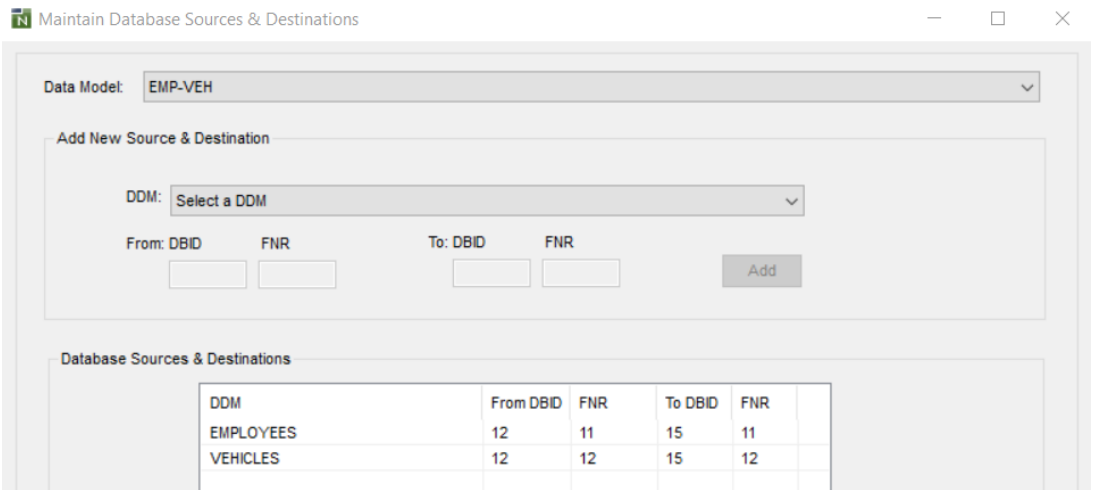


Examples of masking available with Natural Engineer.

- Replaced with a FIXED value - Will replace the field contents with a fixed value.
- Add a FIXED value - Will increment the field contents by a +/- value.
- Add a %age value - Will increment the field contents by a +/- percentage value.
- Replace with a random value from a file- Will replace the field contents with a random value from a user defined file.
- Execute a user defined subprogram - Will replace the field contents with the value generated by a user defined subprogram.
- Add a nbr of days to a date - Will increment the field contents by a random number of days.

5. Define the From/To Database ID and File Number

For each DDM in the Data Model a From Database ID/File Number e.g. Production and a To Database Id/File Number needs to be specified so the Data Masking process knows which ADABAS files to execute against.



6. The Data Masking Execution process.

Fundamental Understanding:

- The Extraction Process will read data based on the Entry Point (EPT).
- For each EPT Record returned, it will process all Relationships with Parent = 0
- As it processes a Relationship, it will recursively call any Relationship with Parent = this.Relationship (nested Relationships)
- One finished processing an EPT record (the whole set of data linked to that EPT Record), it will then process the next EPT Record.

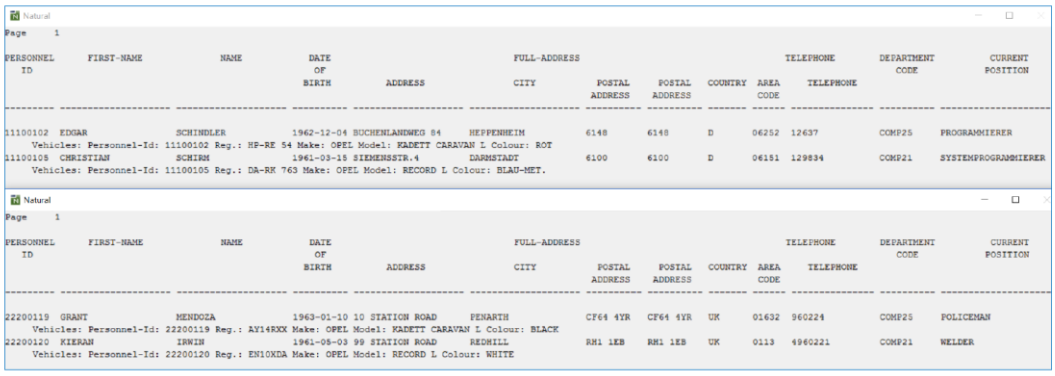
The Data Masking is applied as the records are processed **BEFORE** being written to the intermediate work file – you never see the original data.

Data is written as compressed records (Format Buffer = C.)

```
FDT00000003030001200011000150001 1," FAA□À FAB□        FAC□ □À FAE▌ □À FAD□ □À FAF@□À FAG@□À FAH¢□P□FA1 □                    FAI□
REC0000000237000120001100015000011é Î     22200119□GRANT□MENDOZA□KIERANSM□□▌▌□10      STATION ROAD  □PENARTH  CF64 4YR
REC0000000200000120001100015000011Å Î     22200120□KIERAN□IRWINÁSM□□6, □99      STATION ROAD  □REDHILL□RH1   1EB□UK□0113□4
FDT00000001350001200012000150001 2▌ □FAA´□À FAB@□B FAC¢□A□FCD□            FAD´ □À FAE□ □À FAF GaD¡À FAG□□U FAHÀ□À FAI@□À FAJ□
REC0000000077000120001200015000012J ▌ □AY14RXX5{GaD◇       22200119□OPEL□KADETT   CARAVAN L□BLACK□1983PP        19831115
REC0000000066000120001200015000012Bn □EN10XDAç▌#          22200120□OPEL     RECORD L□WHITE□1985PP     19851025□DM
```

This file is then transferred to the Test environment for Loading into the Test Database

Top Screenshot is the 'Production Data'
Bottom Screenshot is the 'Test Data' – Masked with Full Data Integrity



Natural

Page 1

PERSONNEL ID	FIRST-NAME	NAME	DATE OF BIRTH	ADDRESS	FULL-ADDRESS CITY	POSTAL ADDRESS	POSTAL ADDRESS	COUNTRY	TELEPHONE AREA CODE	TELEPHONE	DEPARTMENT CODE	CURRENT POSITION
11100102	EDGAR	SCHINDLER	1962-12-04	BUCHENLANDWEG 84	HEPPENHEIM	6148	6148	D	06252	12637	COMP25	PROGRAMMIERER
	Vehicles: Personnel-Id: 11100102 Reg.: HP-RE 54 Make: OPEL Model: KADETT CARAVAN L Colour: ROT											
11100105	CHRISTIAN	SCHIRM	1961-03-15	SIEMENSSTR.4	DARMSTADT	6100	6100	D	06151	129834	COMP21	SYSTEMPROGRAMMIERER
	Vehicles: Personnel-Id: 11100105 Reg.: DA-RK 763 Make: OPEL Model: RECORD L Colour: BLAU-MET.											

Natural

Page 1

PERSONNEL ID	FIRST-NAME	NAME	DATE OF BIRTH	ADDRESS	FULL-ADDRESS CITY	POSTAL ADDRESS	POSTAL ADDRESS	COUNTRY	TELEPHONE AREA CODE	TELEPHONE	DEPARTMENT CODE	CURRENT POSITION
22200119	GRANT	MENDOZA	1963-01-10	10 STATION ROAD	PENARTH	CF64 4YR	CF64 4YR	UK	01632	960224	COMP25	POLICEMAN
	Vehicles: Personnel-Id: 22200119 Reg.: AY14RXX Make: OPEL Model: KADETT CARAVAN L Colour: BLACK											
22200120	KIERAN	IRWIN	1961-05-03	99 STATION ROAD	REDHILL	RH1 1EB	RH1 1EB	UK	0113	4960221	COMP21	WELDER
	Vehicles: Personnel-Id: 22200120 Reg.: EN10XDA Make: OPEL Model: RECORD L Colour: WHITE											

Changes & Enhancements

General Problem and Error Corrections

This release contains general problem and error corrections as detailed in the text document 'NaturalEngineer_9-1-1-0_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.*

Batch Import of Object Documentation

Functionality has been included for the Bulk Import of Object Documentation. This is a Mainframe (and Unix) implementation. The function is available from Option ‘O’ on the Utilities menu and the User can choose multiple libraries (or all) and then choose whether they want the documentation to be overwritten or not. One combined NATRJE import job will then be submitted per execution to perform the import.

The object comments imported for the selected applications are any comments found before the first real Natural statement within a Natural object or any comments found before the Environment Division in a COBOL object.

The following Figure 2-1 shows the Bulk Import Object Documentation Selection screen.

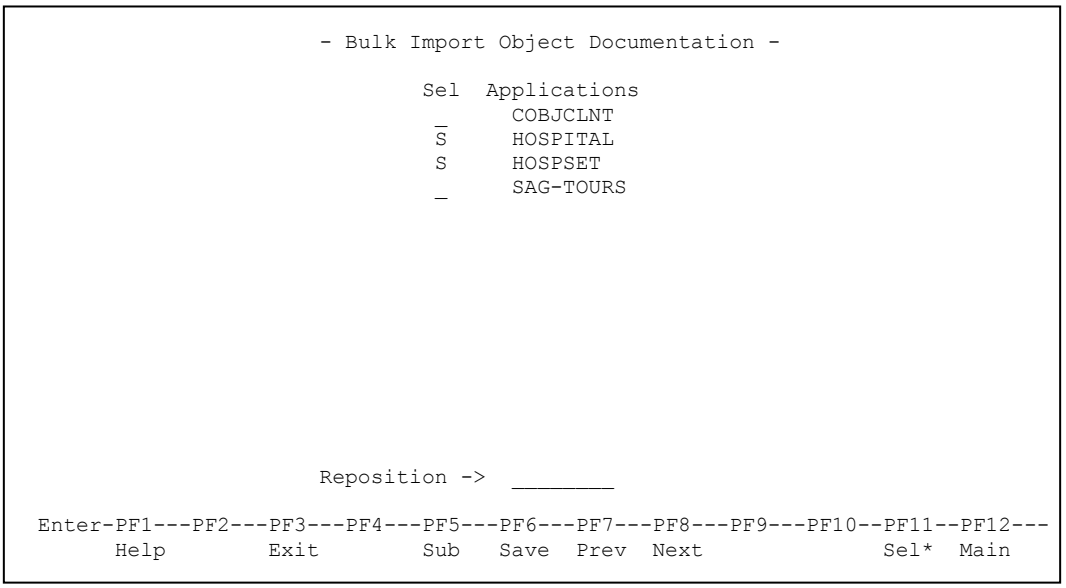


Figure 2-1 Bulk Import Object Documentation Selection screen.

This is available on Mainframe and Unix only.

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

- Maintenance Functions
- Silverlight Version
- Security
- List Environment
- ADABAS Live Databases - Data Browser
- ADABAS Live Databases - DDMs
- ADABAS Live Databases - Show DB Access
- Show Object for JCL

Changes & Enhancements

Maintenance Functions

The ability for certain User's to run the Maintenance options of Natural Engineer e.g., Extract, Load and Impact Analysis has been introduced.

If Maintenance functions are to be allowed in an organization from within the Natural Engineer Web Interface then Security needs to be implemented to control which User's have access to what functions.

These functions utilize BAT files which are supplied as template files .tpl.The BAT files need to be renamed (by removing the suffix .tpl) and configured on the server to enable Natural Engineer to run these maintenance batch functionality.

For installations under Natural 9.1 the BAT files reside in

<install-dir>\NaturalEngineer\Nea\Bat\

This is currently available on the PC only.

Silverlight Version

As previously announced the Silverlight version of the Natural Engineer Web Interface has been discontinued as Microsoft have dropped Silverlight support. As such the IIE directory is no longer packaged within the Natural Engineer Web Interface.

Security

A User Profile system has been introduced to give the ability for a Master User to control User Profiles which determine if Maintenance functions are available or not. This is achieved by using the Login Maintenance function from the site node.

Security settings may be controlled by the LOGIN and SECURITY values within the ##ADMIN-SECTION of the Initialization File.

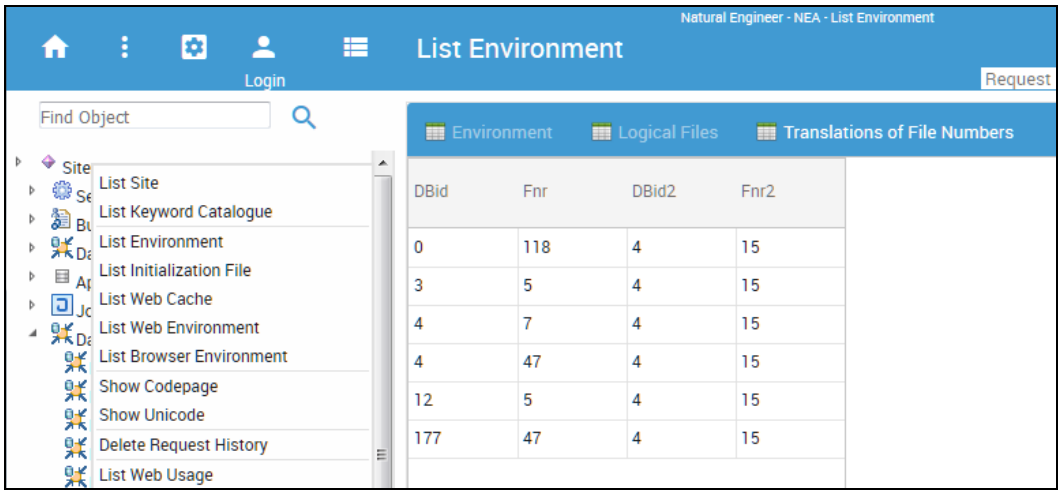
##ADMIN-SECTION Group

Parameter	Notes
LOGIN =	Determines if security is to be used to control access to particular functions. Valid Values='Y' ,'N'(Default), 'O' Y= User is required to signon and a signon screen will be presented upon invoking the Natural Engineer Web Interface. N= User is not required to signon O= Optional to signon. Users may choose to logon by selecting the User Login icon from the Banner Menu. *Note: User Profiles are stored within a text member in the SYSNEEI library LOGIN-T. This member should not be manually changed as the passwords are encrypted. Any User Profile Maintenance should be undertaken by using the Login Maintenance function from the Site menu. There is 1 default user profile provided ADMIN pwd ADMIN, it is recommended that the password is changed to a site standard(Max 8 bytes).* *This is provided as LOGIN-TX. If this is a new installation, rename this object to LOGIN-T .* *There are three user types available* *Master - can manage login users. These have access to Login Maintenance function.* *Admin - can execute maintenance functions* *blank - can signin and view system(just in case sites wants all users to signon only)*

Parameter	Notes
SECURITY =	Determines if security is to be used to control access to particular functions. Default = 'NEA'. Valid Values='NEA'

List Environment

The List Environment function, available from the site node, now shows Logical File and Translation of File Number information.



ADABAS Live Databases – Data Browser

A Data Browser is available to browse files in an ADABAS Live Database once that database has been activated. Data may be browsed by a key by entering a starting value, Periodic Groups(PE) and Multiple Value fields (MU) are supported as well as MU inside a PE.

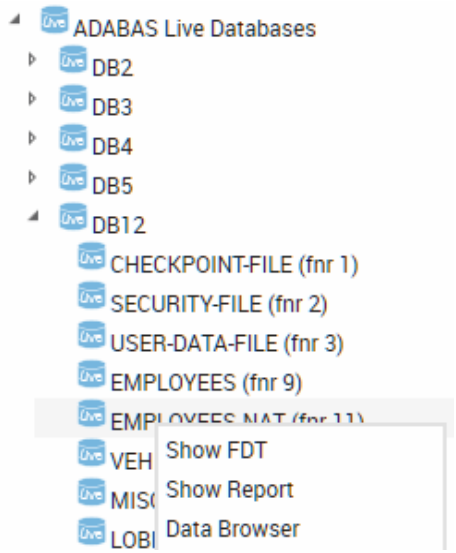
To activate the Natural Engineer Web Interface Initialization file must be updated with the ##ADA-SECTION.

##ADA-SECTION Group

Group Header / Parameter	Notes
BIN =	The full directory name where ADABAS is installed e.g., C:\SoftwareAG_9.12\Adabas. *Note: This is only applicable to the PC (INIPC-N).*
DBRANGES =	Determines the range of Databases to be shown in the Adabas Live Databases treeview section. Entries may be singular or a range e,g,, 1-5,7,9-12 will show databases 1 2 3 4 5 7 9 10 11 12.
FILERANGES =	Determines the range of Files to be shown in the Adabas Live Databases treeview section. Entries may be singular or a range e,g, 1-5,7,9-12 will show files 1 2 3 4 5 7 9 10 11 12. Default 1-255.

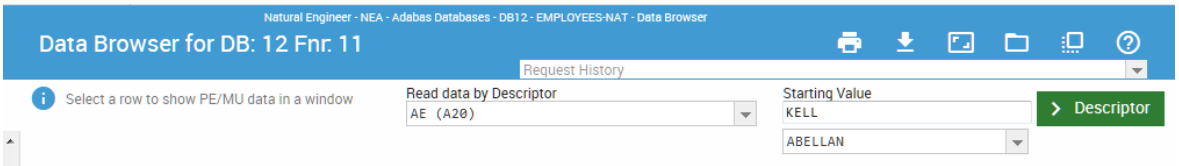
Example

The following example shows browsing data using DB 12 File 11.

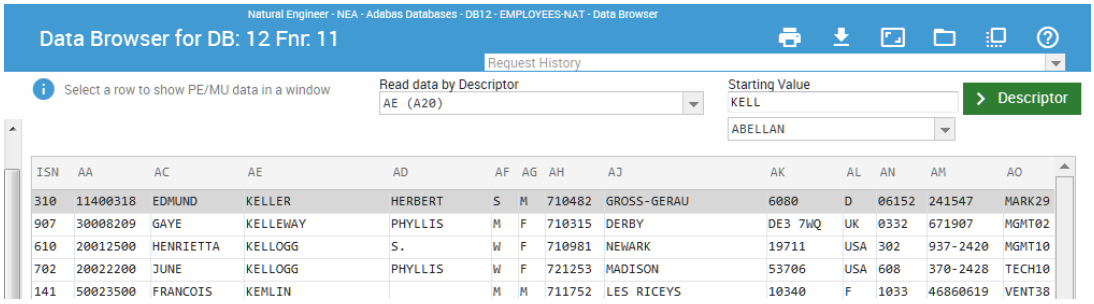


Select the descriptor and enter an optional starting value.

Below the input data is a sample of the first 100 values in the file, which is selectable.

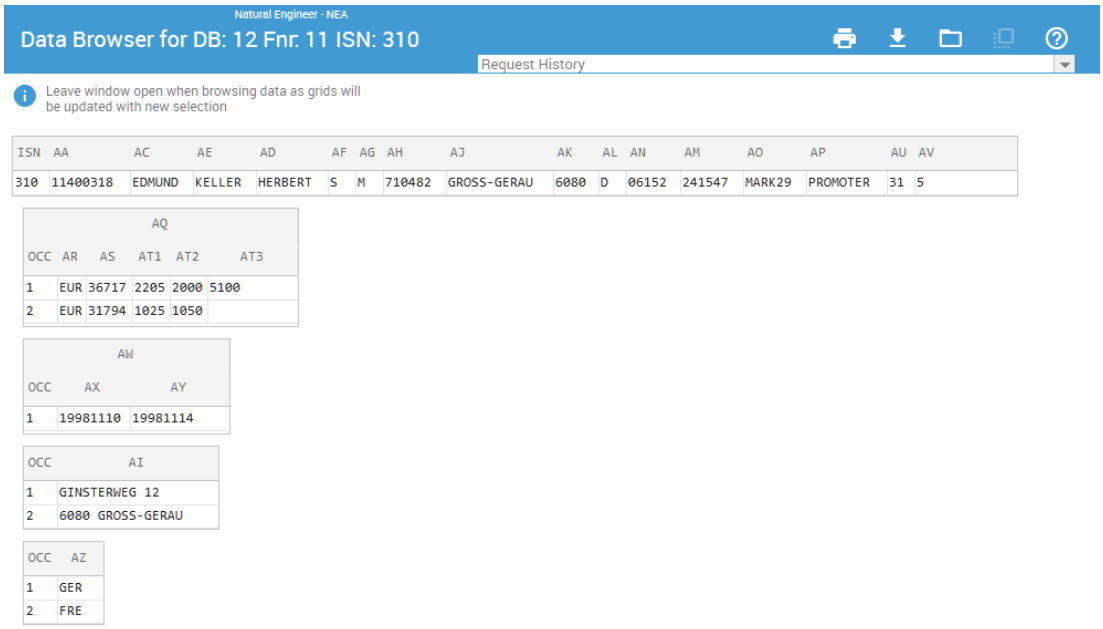


Select row to show repeating group data (PE and MU)



ISN	AA	AC	AE	AD	AF	AG	AH	AJ	AK	AL	AN	AM	AO
310	11400318	EDMUND	KELLER	HERBERT	S	M	710482	GROSS-GERAU	6080	D	06152	241547	MARK29
907	30008209	GAYE	KELLEWAY	PHYLLIS	M	F	710315	DERBY	DE3 7WQ	UK	0332	671907	MGMT02
610	20012500	HENRIETTA	KELLOGG	S.	W	F	710981	NEWARK	19711	USA	302	937-2420	MGMT10
702	20022200	JUNE	KELLOGG	PHYLLIS	W	F	721253	MADISON	53706	USA	608	370-2428	TECH10
141	50023500	FRANCOIS	KEMLIN		M	M	711752	LES RICEYS	10340	F	1033	46860619	VENT38

Gives output with repeating groups in separate grids.



ISN	AA	AC	AE	AD	AF	AG	AH	AJ	AK	AL	AN	AM	AO	AP	AU	AV
310	11400318	EDMUND	KELLER	HERBERT	S	M	710482	GROSS-GERAU	6080	D	06152	241547	MARK29	PROMOTER	31	5

AQ

OCC	AR	AS	AT1	AT2	AT3
1	EUR	36717	2205	2000	5100
2	EUR	31794	1025	1050	

AW

OCC	AX	AY
1	19981110	19981114

OCC	AI
1	GINSTERWEG 12
2	6080 GROSS-GERAU

OCC	AZ
1	GER
2	FRE

ADABAS Live Databases – DDMs

If ADABAS Live Databases have been activated then the Data Browser will also be available for a DDM, instead of the 2 byte ADABAS Field Names you can use the DDM Field Names. Access is from the Data Definition Modules global node or DDMS from within an Application node.

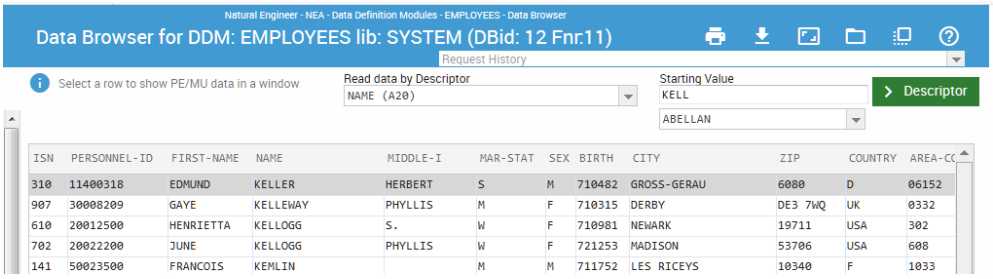
It is possible to use the Natural Translate File facility for the Natural session used in the Natural Engineer Web Interface to alter which actual Database and file number the DDM access is against.

This information is accessed using List Environment under the Site node.

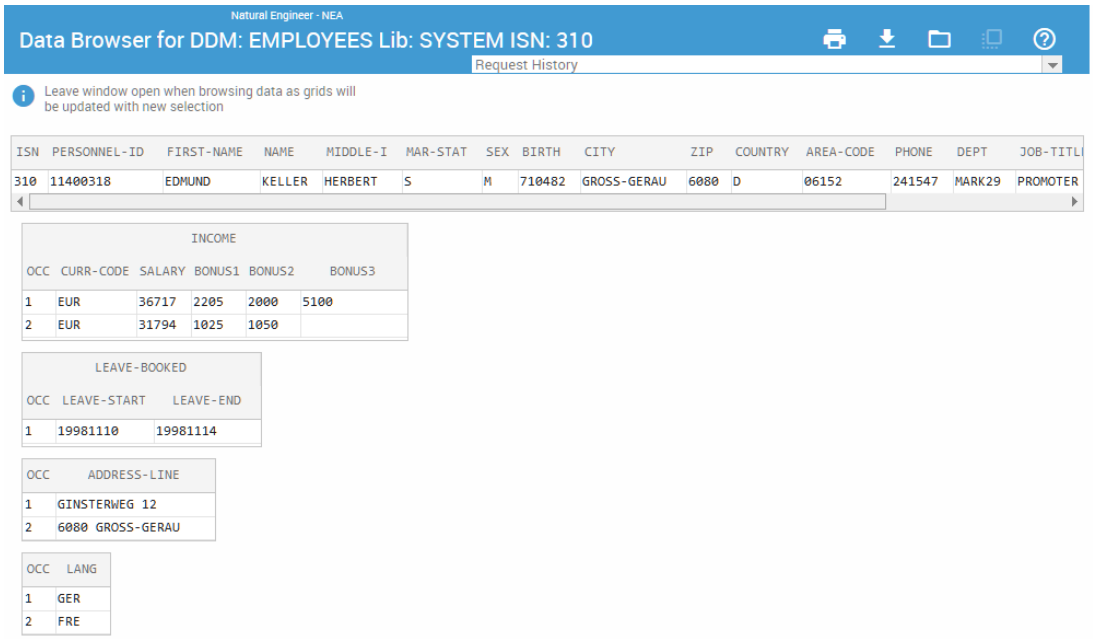
Example

The following example shows browsing data using EMPLOYEES DDM.

Below the input data is a sample of the first 100 values in the file, which is selectable.



Select row to show repeating group data (PE and MU)



ADABAS Live Databases – Show DB Access

If ADABAS Live Databases have been activated then Natural Engineer will run the first part of the access database statement for multiple descriptors and present the data the same as the Data Browser output. Statements that have this facility will be been marked as 'Live' on the Show DB Access diagram.

This should assist in diagnosing a database statement and the data returned to the programming object as well as providing further understanding of the data that exists in the test database to support the application.

Show Object for JCL

The ability to invoke the Show Object diagram has now been added for JCL type objects in applications and JCL at global level.

Initialization Settings

The following changes have been made to the INI and CINI files for Natural Engineer version 9.1.1. 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

DATA-MASKING Group

Group Header / Parameter	Notes
[DATA-MASKING]	
MASK-LOCATION=	Default=MASKDATA
	The location of text files containing masking sets, for example lists of male/female forenames, cities, phone numbers etc. These would typically reside on the FUSER of the Natural installation.
DDM-LOCATION=	Default=SYSTEM
	The location of the DDMS for use within the Data Masking process.

3

DOCUMENTATION

Chapter Overview

This chapter covers the documentation changes made for Natural Engineer version 9.1.1.

Documentation Updates

The documentation set for Natural Engineer has been updated to reflect the changes and additions provided with Natural Engineer version 9.1.1. 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.

INDEX

B

Batch Import of Object Documentation, 20

C

Changes & Enhancements
- Batch Import of Object Documentation, 20
- General Problem and Error Corrections, 19
- Natural Engineer Web Interface, 21

D

Data Masking, 14
Documentation
- Compiled HTML Help, 34
- Documentation Updates, 33

G

General Information
- Future Releases, 11
- Migration, 10
- Natural Version for Open Systems, 11
- Removed Features, 11

General Problem and Error Corrections, 19

I

Initialization Settings, 31
- DATA-MASKING Group, 31

N

Natural Engineer Web Interface
- Changes & Enhancements, 22
  - ADABAS Live Databases – Data Browser, 25
  - ADABAS Live Databases – DDMs, 28
  - ADABAS Live Databases – Show DB Access, 30
  - List Environment, 24
  - Maintenance Functions, 22
  - Security, 23
  - Show Object for JCL, 30
  - Silverlight Version, 22

New Features
- Data Masking, 14