Release Information for Natural Version 6.3.8

This chapter covers the following topics:

- Supported Operating Systems

- Migration from Windows XP/Vista to Windows 7

- New Features

- Changes and Enhancements

- Natural Remote Procedure Call (RPC)

- Notice of Future Changes

Supported Operating Systems

As of Natural Version 6.3.8, Windows 7 is also supported, in addition to the operating systems listed in the section *Supported Operating Systems* of the release information for Natural Version 6.3.1.

Important:
Adabas for Windows 7 and Entire Net-Work for Windows 7 will only be available by the second quarter of 2010. Therefore, when you install Natural Version 6.3.8 on Windows 7, it is currently not possible to install Natural Security or Predict.

Migration from Windows XP/Vista to Windows 7

If you want to migrate from Windows XP or Windows Vista to Windows 7 on the existing hardware, you must re-install Natural Version 6.3.8 on Windows 7. This is due to the changed directory structure as of Natural 6.3.3. An upgrade installation is not offered in this case.

If you remain on Windows XP or Windows Vista, you can use the upgrade installation.

New Features

Natural Functions for URL and Base64 Encoding

Natural now provides functions for encoding or decoding URL addresses, and for converting binary data into printable, network-compatible data (or vice versa) using Base64 encoding. For further information, see *Natural Functions* in the *System Functions* documentation.

Application Programming Interfaces

The utility SYSEXT provides the following new application programming interfaces (APIs):

API	Description
USR4217N	Send data to the webMethods Optimize for Infrastructure Data Collector.
USR4218N	Provide information on the context in which the Natural Development Server runs, for example, the version of the client.

Natural for Ajax

Natural for Ajax is now delivered in the Version 1.2.5. It is based on Application Designer Version 8.0.

Natural Web I/O Interface Client

The Natural Web I/O Interface is now delivered in the Version 1.3.6.

Support is provided for the following:

- It is now possible to define underlined, blinking, italic and bold text using style sheets. XSLT files are no longer used for this purpose. See *Using Style Sheets (J2EE only)* in *Configuring the Client* which is part of the *Natural Web I/O Interface* documentation.

Changes and Enhancements

Assigning a Floating Point Operand (Format F) to a Numeric or Packed Operand (Format N or P)

When a floating point operand (format F) is assigned to a numeric or packed operand (format N or P), the result as compared to Natural Version 6.3.7 may be different. As of Natural Version 6.3.8, the result of the COMPUTE statement will not be rounded any more if the ROUNDED option is not used. This applies regardless of whether the operand has been explicitly defined by the user or implicitly created by Natural to hold intermediate results (see example 2 below). This change has been made in the runtime and is therefore effective when executing programs with Natural Version 6.3.8. It is not necessary to recatalog the programs.

Example 1:

```
DEFINE DATA
  LOCAL
  1 #SRC (F8)
  1 #TAR (N2.6)
END-DEFINE
#SRC :=  14.9999999
COMPUTE  #TAR := #SRC
PRINT #TAR
COMPUTE  ROUNDED #TAR := #SRC
PRINT #TAR
END
```

Results in Natural Version 6.3.7:

```
15.000000
15.000000
```

Results in Natural Version 6.3.8:

```
14.999999
15.000000
```

Example 2:

```
DEFINE DATA
  LOCAL
  1 #SRC (N11.7)
  1 #TAR (N2.7)
END-DEFINE
#SRC :=  224.9999999
COMPUTE  #TAR = SQRT(#SRC)  /* INTERMEDIATE F8 FIELD
PRINT #TAR
COMPUTE  ROUNDED #TAR = SQRT(#SRC)
PRINT #TAR
END
```

Results in Natural Version 6.3.7:

```
15.0000000
15.0000000
```

Results in Natural Version 6.3.8:

```
14.9999999
15.0000000
```

Natural Studio

Workspace Options

A new workspace option, **Context menu for drag-and-drop with left mouse button**, is available. By default, this option is disabled. When you enable it, a context menu will appear when you drag and drop objects using the left mouse button. You can then choose whether to copy or move the objects. For a copy operation, it is then no longer required to press CTRL. See *Workspace Options* in *Using Natural Studio*.

Natural Remote Procedure Call (RPC)

Natural Remote Procedure Call (RPC) is available as a separate subcomponent of Natural. It has its own version number. This measure takes into account that Natural RPC is a cross-platform component and makes it possible to provide new Natural RPC versions independent of new Natural versions for the various platforms supported.

With Natural Version 6.3.8, an enhanced Natural Remote Procedure Call Version 6.3.3.3 is delivered that replaces the existing Natural RPC Versions 6.3.3.1 and 6.3.3.2.

As of Version 6.3 of Natural Remote Procedure Call (RPC), the following changes and enhancements are available.

Stub Subprograms from IDL File

If you have generated a stub subprogram from an IDL file using the **Generate Natural from Software AG IDL** command of NaturalONE or EntireX Workbench, program and library name of the IDL file are incorporated into the generated stub subprogram and passed to the RPC server. This means especially that the name of the program that is executed on the RPC server may be different to the name of the stub subprogram.

Note for Natural RPC servers:

If the Natural client calls a Natural RPC server, the library name of the IDL file is only evaluated by the Natural RPC server if the Natural client has set the **Logon** option.

Notice of Future Changes

The following changes are planned for future versions of Natural.

Adabas Records no Longer in Hold Status when Database Update is not Permitted

With a future version of Natural, Adabas records will no longer be put in hold status if the Natural profile parameter DBUPD is set to OFF (that is, when a database update is not permitted). When set to OFF, the Adabas calls L1, L2, L3, S1, S2, S3 will be generated instead of L4, L5, L6, S4, S5, S6 .