Predict

Installation on Windows

Version 8.4.2

October 2019

ADABAS & NATURAL

This document applies to Predict Version 8.4.2 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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Preface

This documentation describes the installation of Predict on Windows.

Predict is installed using the Software AG Installer, which you download from the Software AG Empower website at ***https://empower.softwareag.com/***.

This documentation provides product-specific instructions for installing Predict. It is intended for use with *Using the Software AG Installer*. That guide explains how to prepare your machine to use the Software AG Installer, and how to use the Software AG Installer and Software AG Uninstaller to install and uninstall your products. The most up-to-date version of *Using the Software AG Installer* is always available at ***http://documentation.softwareag.com/***.

This documentation is organized under the following headings:

System Requirements	Supported operating system platforms and prerequisites.
Important Information	Important information that you should be aware of before you start the installation.
Installing Predict	How to install Predict with the Software AG Installer.
Completing the Installation	How to proceed after the installation.
Uninstalling Predict	How to uninstall Predict.

For important last-minute information, see the readme file that is provided with Predict. You can find it in the Predict product documentation at ***http://documentation.softwareag.com/***.

1 About this Documentation

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Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
`Monospace font`	Identifies service names and locations in the format *`folder.subfolder.service`*, APIs, Java classes, methods, properties.
`Italic`	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
`Monospace font`	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
|	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the | symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

Online Information and Support

Software AG Documentation Website

You can find documentation on the Software AG Documentation website at **https://documentation.softwareag.com**.

Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to empower@softwareag.com with your name, company, and company email address and request an account.

Once you have an account, you can open Support Incidents online via the eService section of Empower at **https://empower.softwareag.com/**.

You can find product information on the Software AG Empower Product Support website at **https://empower.softwareag.com**.

To submit feature/enhancement requests, get information about product availability, and download products, go to **Products**.

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the **Knowledge Center**.

If you have any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory at **https://empower.softwareag.com/public_directory.aspx** and give us a call.

Software AG TECHcommunity

You can find documentation and other technical information on the Software AG TECHcommunity website at **http://techcommunity.softwareag.com**. You can:

- Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.
- Access articles, code samples, demos, and tutorials.
- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Link to external websites that discuss open standards and web technology.

Data Protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

2 System Requirements

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Supported Operating System Platforms

Predict supports the same operating system platforms as Natural. See the Natural documentation.

Disk Space Requirements

For the Natural programs installed with Predict, you require approximately 48 MB of disk space, plus an additional 66 MB of disk space for the installation. For the database, you require the following:

FDIC	
ASSO	1188 blocks (2kB)
DATA	1000 blocks (4kB)
Coordinator FDIC	
ASSO	1188 blocks (2kB)
DATA	1000 blocks (4kB)

Note: WORK must be at least 20 MB.

Product Requirements

The products listed below must be installed in order to use Predict 8.4.2.

Product Name (Product ID)	Requirements
Natural (NAT)	Natural for Windows Version 9.1 SP2 or above. The following parameter settings are recommended *during* the installation of Predict: ■ MADIO=0 ■ MAXCL=0 ■ MT=0 ■ RI=OFF ■ WORK: Workfile 1 must be specified in portable format. The Natural buffer pool must be available.

Product Name (Product ID)	Requirements
	For information on the recommended Natural parameter settings *after* a successful Predict installation see ***Completing the Installation***.
Adabas (ADA)	Adabas for Linux, UNIX and Windows Version 6.6 or above. The following Adabas parameter settings are recommended *during* the installation of Predict: ■ LAB=200000 or greater ■ LBP=4000000 or greater ■ LP=200 or greater ■ LS=200000 or greater ■ LWP=1000000 or greater ■ MGC=50 or greater ■ NC=200 or greater ■ NH=10000 or greater ■ NISNHQ=1000 or greater ■ NT=2 or greater ■ NU=200 or greater ■ OPTIONS=(TRUNCATION) For information on the recommended Adabas parameter settings *after* a successful Predict installation see ***Completing the Installation***.

It is recommended that you use the latest versions of the above listed Software AG products. You can view all available Software AG product versions and check the dates when their maintenance ends by visiting Software AG's Empower web site at ***https://empower.softwareag.com/***. Go to **Products > Product Version Availability**.

Software Requirements for Using Related Predict Products

These products are not necessary in order to use Predict, but if they are installed, the following prerequisites must be met.

Other Related Software AG Products

Product Name (Product ID)	Requirements
Adabas SQL Server (ESQ)	Adabas SQL Server Version 1.4 SP2 or above. **Note:** To enable Predict access to Adabas SQL Server, you have to relink your Natural environment with the command Make natural esq=yes ada=dyn.
Natural Security (NSC)	The Natural Security version that corresponds to your Natural version.
Natural Business Services (NBS)	Natural Business Services Version 8.2 SP2 or above.
Entire Access (OSX)	Entire Access is required if you need to access any of the following SQL or DB2 database systems. Access to SQL databases is required for Incorporation functions. You do not need access to SQL databases to generate CREATE statements. Access to DB2 databases is required for Incorporation, Comparison or Generation functions. The following SQL database systems are supported: ■ Adabas D 11 or above ■ Informix 7.1 or above ■ Ingres II or above ■ Oracle 12.1 or above ■ Sybase 11.04 or above The following DB2 database systems are supported: ■ DB2 8 for UNIX or above ■ DB2 8 for z/OS or above ■ SQL/DS 2.2 or above

It is recommended that you use the latest versions of the above listed Software AG products. You can view all available Software AG product versions and check the dates when their maintenance ends by visiting Software AG's Empower web site at *https://empower.softwareag.com/*. Go to **Products > Product Version Availability**.

Set Adabas System Environment

The following applies when Adabas has been installed locally under Windows. It is required that you start the function **Set Adabas System Environment** before you start the installation of Predict.

Entire Net-Work

- Entire Net-Work Version 7.6 SP1 on Linux, UNIX and Windows or above

This product is required if you are using Predict in a heterogeneous environment.

When the Predict FDIC file is shared between Natural on a mainframe and Natural on a Windows or UNIX platform, Entire Net-Work must be used. For details concerning each platform, see the corresponding *Natural Installation* documentation.

License File

During the installation of Predict, the Software AG Installer prompts you to enter the path to a valid license file. The license file is an XML file which is delivered by e-mail.

Note: The Software AG Installer does not check all information in the license file. All license checks are done, however, when the product itself is started.

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Administrator Status

The person performing the installation must have administrator rights.

Installation Directory

During the installation, you are asked to specify an installation directory. The installation of Predict requires the installation of Natural. If Natural is already installed, choose the directory of your Natural installation.

You can only install Predict on a local hard drive on a Windows system. You cannot install Predict on a network-mounted drive or a SUBST drive.

Side-by-Side Installations

Predict is a Natural application. Therefore, the rules for Natural also apply for Predict. For detailed information regarding side-by-side installations, see *Installation* in the Natural for Windows documentation.

FNAT Usage

By default, a new `FNAT` system file is created in the installation directory during the installation of Natural (`<install-dir>`/*Natural/fnat*). This `FNAT` must always exist, and the global configuration file must have an entry which defines this `FNAT`.

Predict can only be installed into this `FNAT`.

Note: If you want to check or edit the settings in the global configuration file, use the Natural Configuration Utility.

The Software AG Installer maintains an internal list of installed products, which must coincide with the add-ons that are currently installed in the `FNAT`. This is important for updates and uninstallations to work correctly.

For this reason:

- Do not install products into the `FNAT` without the use of the Software AG Installer.
- Do not replace the default `FNAT` (`<install-dir>`/*Natural/fnat*) with another `FNAT`.

- Make sure to complete the installation of Predict by using the SYSPCI utility (this is explained later in this documentation).

If an error occurs due to the above-mentioned scenarios, the only way to solve the problem is a new installation. In some situations, one of the following workarounds may help:

- Workaround 1: Complete the previous installation by using the SYSPCI utility.
- Workaround 2: Uninstall the product and then start the installation once more.

Upgrading Your Predict Environment

Predict is a Natural application. Therefore, it is not possible to upgrade an existing Predict installation under Natural Version 8.4 with a Predict Version 8.4 installation.

Updating Your Predict Environment

When the first two digits of the version number remain the same and the third or fourth digit changes, we consider an installation as an update installation.

To update Predict, specify the same directory and select the same items to install.

An update installation does not prompt again for license files. The existing license files will be used.

4 Installing Predict

This installation documentation provides just a brief description on how to install Predict directly on the target machine using the Software AG Installer GUI. For detailed information on the Software AG Installer, see *Using the Software AG Installer*.

To install Predict

Software AG provides a license file for Predict; the installer requires them during a first-time installation. Copy the license files to the machine on which you want to install Predict. You can copy the license files to any temporary location. The installer will ask for the location of your license files and will then copy them to the *common/conf* directory of your installation directory.

1 Start the Software AG Installer GUI as described in *Using the Software AG Installer*.

2 When the first page of the Software AG Installer GUI (the so-called Welcome panel) is shown, choose the **Next** button repeatedly (and specify all required information on the shown panels as described in *Using the Software AG Installer*) until the panel containing the product selection tree appears. This tree lists the products you have licensed and which can be installed on the operating system of the machine on which you are installing.

3 To install Predict, expand the **Natural Products** node and select **Application Engineering > Predict 8.4 SP2**.

Predict will be installed if you have a license file for Predict. You will be prompted to provide the license file later during the installation (first-time installation only).

The installer automatically selects any additional components which are also required. If you have not yet installed the Natural development environment, it will now be selected.

4 Choose the **Next** button.

5 Read the license agreement, select the check box to agree to the terms of the license agreement, and choose the **Next** button.

Note: If you are installing other products together with Predict, several panels may appear that are not explained in this documentation. See the documentation for these products for more information.

6 First-time installation only.

Enter the full path to the Predict license file (or use the **Browse** button to select it from a dialog box).

7 Choose the **Next** button.

8 On the last panel, review the list of products and items you have selected for installation. If the list is correct, choose the **Next** button to start the installation process.

When the Software AG Installer has completed the first-time installation, additional configuration steps are required. See *Completing the Installation* for further details.

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Entries in the Start Menu

Depending on your selection in the product selection tree, some or all of the following entries have been created in the Windows **Start** menu:

- Under **All Programs > Software AG > Tools**:

  Predict *n.n*

- **All Programs > Software AG > Documentation**

where *n.n* stands for the current version number. The **Start** menu group name (by default, this is "Software AG") can be changed during the installation.

Setting Up Your Products Using the SYSPCI Utility

After you have installed your product, you need to set up a number of files, parameters and individual settings depending on your environment. These are described below. To set them up, you use the SYSPCI utility. For detailed information on this utility, see *SYSPCI Utility - Product Configuration and Initialization* in Natural's *Tools and Utilities* documentation.

Predict requires the following Adabas system file:

`FDIC`, where the logical file number (`LFILE`) is 253.

The database ID and file number of the new or existing file that you specify using the SYSPCI utility are entered into the parameter files `PRDPARM` and `NATPARM`. If applicable, database ID and file number will be entered into further parameter files like `NDVPARM`, `NSCPARM` and `NBSPARM`.

For the Predict Coordinator functions Load or Import the following Adabas system file is required:

`COORDINATOR_FDIC`, where `DBID` and `FNR` will be stored on the `FDIC` by the SYSPCI utility.

The required Adabas files can either be local or remote.

- **Remote Access**
  If the file is located in a remote database, Entire Net-Work must be active and the database must be accessible.
- **Existing Local File**
  Before you start the SYSPCI utility, make sure that the Adabas database containing the required files is active. With this version, you can continue to use your existing files. No migration of data from the previous version to the current version is necessary.

- **New File**
  Before you start the SYSPCI utility, make sure that the Adabas database which will contain the required files is active. The SYSPCI utility will load and initialize these files. This should be also done if another file is required for your product.

Before you create new files with the SYSPCI utility, make sure that the ASSO and DATA sizes of your Adabas database are appropriate for these files. It is therefore recommended that you check the Adabas *.fdu* files in the *<install-dir>*/*<product>*/*INSTALL*/*<product-code>* directory for the used sizes. If required, change your database setup so that the files can be created.

For Predict, the SYSPCI utility offers the following optional functions:

Option	Description
Convert FDIC data	If marked the Data on the Predict System File are converted to 8.4 Format, see *Convert the Data on the Predict System File to 8.4 Format* in *Optional Steps* below.
Load FDIC description	If marked, the Predict Description of the Predict System File is loaded.
Load example data	If marked, the Predict example data is loaded.

Invoking the SYSPCI Utility

In order to invoke the SYSPCI utility, you must first invoke Natural. You can then invoke the SYSPCI utility using the command line.

To invoke the SYSPCI utility

1 From the Windows **Start** menu, choose **All Programs > Software AG > Tools > Natural** *n.n* to invoke Natural.

2 From the **View** menu, choose **Command Line** to switch on the display of the command line.

3 Enter the following command in the command line:

```
SYSPCI
```

For more information, see *SYSPCI Utility - Product Configuration and Initialization* in Natural's *Tools and Utilities* documentation.

Optional Steps

SYSPCI may perform the optional steps **Initialize product**, **Assign Coord. FDIC**, **Load FDIC description** or **Load example data**.

If the optional installation steps are not performed by SYSPCI or if Natural Security (NSC) is installed, perform the following steps:

- Convert the Data on the Predict System File to 8.4 Format
- Update the Predict Metadata
- Define the Coordinator FDIC in the New SYSDIC Manually
- Define the Predict Libraries to Natural Security Manually
- Load the Predict Description of the Predict System File
- Load the Predict Example Data
- Adapt the Text Modules in Library SYSEXT

Perform the steps in the given order unless mentioned otherwise. Please observe the notes where available.

Convert the Data on the Predict System File to 8.4 Format

Note: This step is not required for first-time installations.

This step must be performed manually by starting Natural with `PARM=PRDPARM`.

This step converts Predict Version 4.6, Version 8.2 or Version 8.3 data to Version 8.4 format. If the data on your Predict system file already is in Version 8.4 format, a corresponding message is returned.

Note: We recommend you save your Predict system file in Version 4.6, Version 8.2 or 8.3 format before proceeding with the steps below.

To set up your environment so you can use the Coordinator, start a Predict 8.4 online session (using the newly installed FDIC file) and perform the following:

- Log on to the library SYSDICCO
- Call the Function Main Menu by entering MENU at the NEXT prompt
- Call the function C > Version 4.6 (or Version 8.2 or Version 8.3) data

When you execute this step in batch mode, the CMSYNIN file should contain the following:

```
LOGON SYSDICCO
MENU
CONVERT VERSION84
FIN
```

Now the data is in Version 8.4 format.

Update the Predict Metadata

This step is optional.

Start a Predict 8.4 online session or perform the following batch mode commands:

```
LOGON SYSDIC
MENU
NEWGEN1
FIN
```

Define the Coordinator FDIC in the New SYSDIC Manually

Note: This step is not required for upgrade installations. This step can also be performed by SYSPCI if the options **Initialize product** or **Assign Coord. FDIC** have been selected.

This step must be performed manually by starting Natural with `PARM=PRDPARM`.

To set up your environment so you can use the Coordinator, start a Predict 8.4 online session (using the newly installed FDIC file) and perform the following:

- Log on to the library SYSDIC
- Call the Function Main Menu by entering MENU at the NEXT prompt
- Call the function Defaults > Coordinator Defaults
- Specify the parameters Coordinator FDIC DBID/FNR with the file number and database ID of the Coordinator FDIC.

Define the Predict Libraries to Natural Security Manually

This step must be performed manually by starting Natural with `PARM=PRDPARM`.

If Natural Security is installed, define the following libraries to Natural Security:

SYSDIC, SYSDICBE, SYSDICCO, SYSDICH and SYSDICMA.

Load the Predict Description of the Predict System File

Note: This step can also be performed by SYSPCI if the option **Load FDIC description** has been selected.

This step is optional.

To load the Predict description of the Predict system file, enter:

```
setenv WRKF1
<install-dir>/Predict/INSTALL/data/ALLDATA.DAT
```

Start Natural with `PARM=PRDPARM`.

When you execute this step in batch mode, the CMSYNIN file should contain the following:

```
LOGON SYSDICBE
MENU
LOAD OBJECTTYPE ALL,REPLACE=Y,ADA=N
FIN
```

If a previous import operation with the Coordinator terminated abnormally for any reason, the Coordinator FDIC is locked and a corresponding message is returned. Enter the following commands to clear the Coordinator FDIC in batch mode:

```
LOGON SYSDIC
MENU
SPECIAL REFRESH
FIN
```

Load the Predict Example Data

Note: This step can also be performed by SYSPCI if the option **Load example data** has been selected.

This step is optional.

To load the Predict example data, enter:

```
setenv WRKF1
<install-dir>/Predict/INSTALL/data/ALLDEMO.DAT
```

Start Natural with `PARM=PRDPARM`.

When you execute this step in batch mode, the CMSYNIN file should contain the following:

```
LOGON SYSDICBE
MENU
LOAD OBJECTTYPE ALL,REPLACE=Y,ADA=N
FIN
```

If a previous import operation with the Coordinator terminated abnormally for any reason, the Coordinator FDIC is locked and a corresponding message is returned. Enter the following commands to clear the Coordinator FDIC in batch mode:

```
LOGON SYSDIC
MENU
SPECIAL REFRESH
FIN
```

Adapt the Text Modules in Library SYSEXT

This step is optional.

Start a Predict 8.4 online session or perform the following batch mode commands:

```
LOGON SYSDIC
MENU
NEWEXGEN
FIN
```

Note: If you execute this function in batch, please ensure that you have set Batch execution to N (No) on the Natural Security Modify Library screen of library SYSEXT.

Upgrading from Predict Version 4.5 or below

Caution: For users of Predict Version 4.5 or below:
If you are using Predict Version 4.5 or below and want to migrate to a newer version, it is necessary to perform the following actions in the order given below.

1. Perform a Predict Unload operation using Predict Version 4.5 or below.

   The following data need to be unloaded:

   - If user-defined object-types (UDEs) exist, then their metadata must be unloaded using `UNLOAD METADATA <UDE-name> <parameters>`. Specify the unload parameters that meet your requirements.
   - All documented objects using `UNLOAD OBJECTTYPE ALL CODE=Y,INTERNAL-ID=Y <parameters>`. Specify the unload parameters that meet your requirements.
   - If XRef data are to be transfered to the new FDIC, then they must be unloaded using `UNLOAD OBJECTTYPE XR <parameters>`. Specify the unload parameters that meet your requirements.

- If user-defined Retrieval Models exist, then these must be unloaded using `UNLOAD RETRIEVALMODEL <object type> <parameters>`. Specify the unload parameters that meet your requirements.

2. Install Predict Version 8.4.
3. Perform a Predict Load operation using Predict Version 8.4.

6 Uninstalling Predict

You uninstall Predict using the Software AG Uninstaller. For detailed information on how to use the uninstaller, see the *Using the Software AG Installer* guide.

In short, you uninstall Predict using the standard uninstall functionality of the Windows. The Control Panel offers the following entry: **Software AG Products:** `<installation-directory>`. When you choose to uninstall this entry, the Software AG Uninstaller is invoked.