

simplanova

Data Randomizing Tool

User guide

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1. Introduction

There are a lot of cases when Dynamics NAV clients during their solution upgrade do not want or just cannot give their confidential business information for third part companies which will upgrade their solutions. Data is very important to ensure high quality in upgrades and new functionalities development. Sometimes it is possible to generate test data for client NAV solution, but it is not possible to ensure that generated data will represent all NAV solution scenarios.

“Simplanova”, company which offers efficient Microsoft Dynamics NAV upgrades for Microsoft partners, has created “Data Randomizing Tool”, which gives possibility to have correct data and helps to avoid conflicts related to confidential client business information.

Paragraphs bellow explain how to use “Data Randomizing Tool”.

Note: Data Randomizing Tool was tested on Dynamics NAV versions starting from NAV2009 R2 only. Older versions are not supported but the tool may work on older versions.

If you have older version database:

1. Create a backup file of your database. You can follow steps from “2.1. Backup client NAV database” to prepare old version database backup file.
2. Follow steps “2.2. Create new NAV database” and “2.3. Restore client NAV database to newly created database” to restore your database to NAV2009 R2 development environment.
3. Proceed to step 2.4 and follow the rest of instructions.

2. Preparation

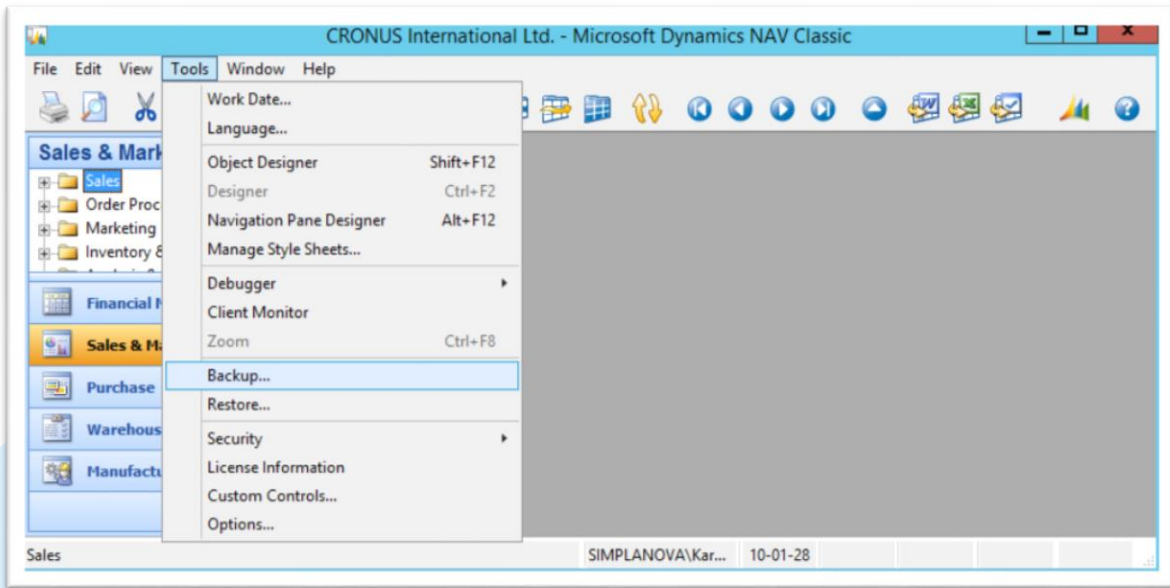
Firstly, you have to make a copy of client database.

Note: client database copy is required because there is no possibility to unencrypt data after data encryption. Data will be damaged and lost if you launch data encryption on live client database.

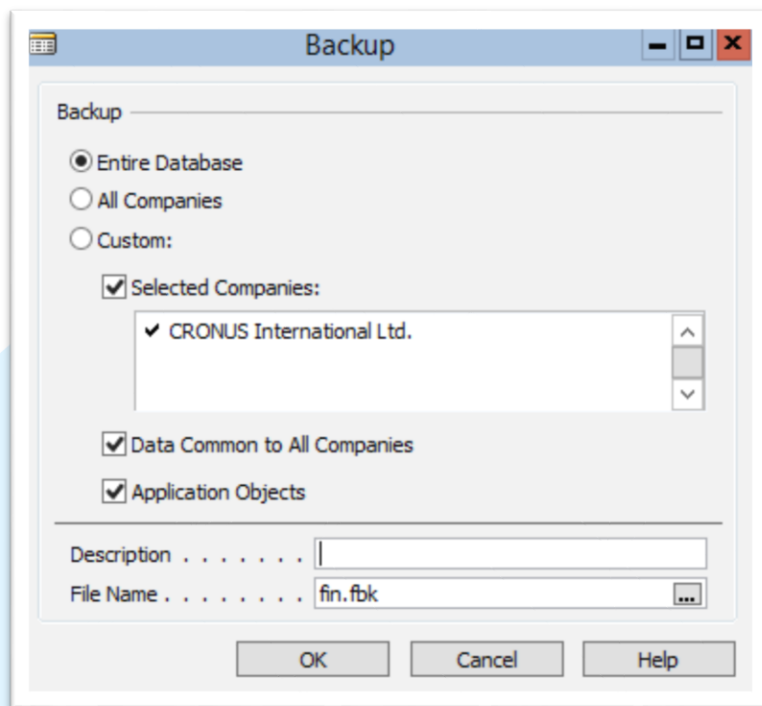
2.1. Backup client NAV database

Follow these steps:

1. Go to “Tools” menu.
2. Select “Backup” action from drop down list.



Choose backup options in Backup window: select file location and add file name(where backup file will be stored). Push “OK” after all required values are entered or selected.

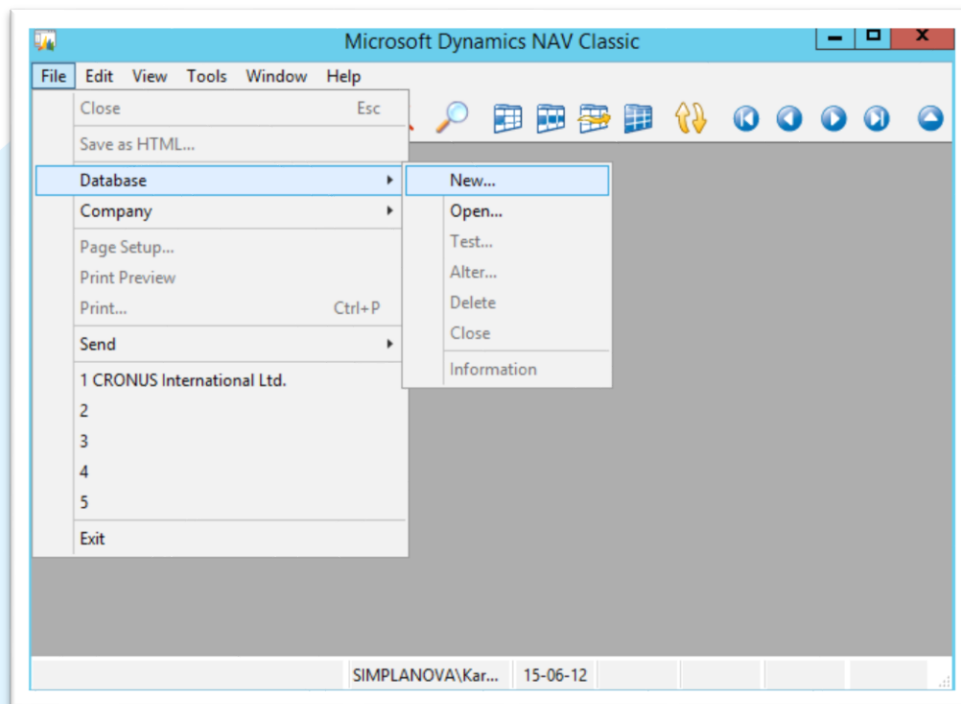


3. Wait for backup process to be finished.

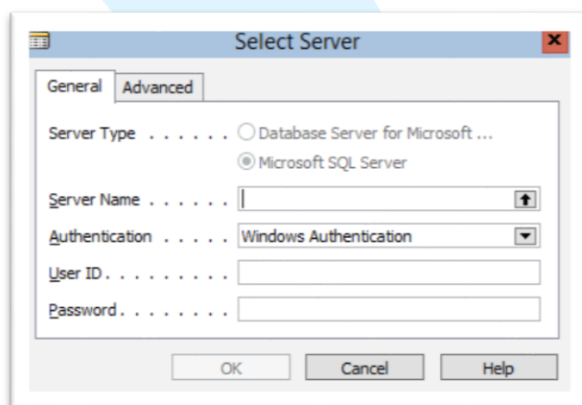
2.2. Create new NAV database

Follow these steps:

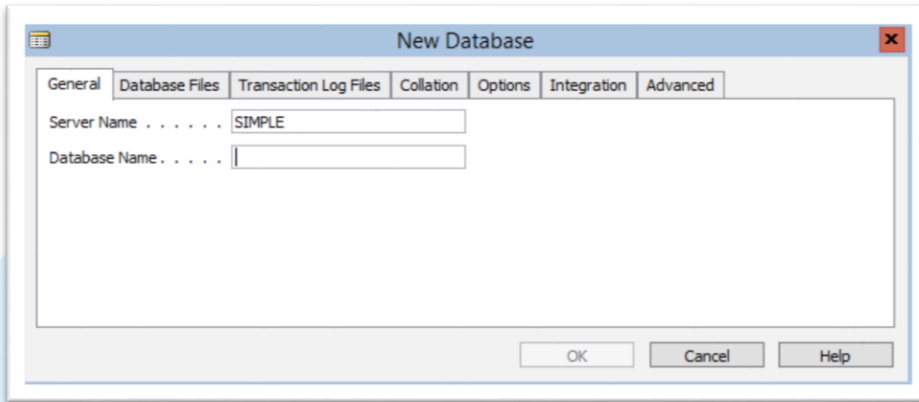
1. Open Microsoft Dynamics NAV Development Environment.
2. Go to “File” menu.
3. Select “Database” menu from drop down list.
4. Select “New” action from drop down list.



5. Enter Server Name and other values in Select Server Window. Push “OK” after all required values are entered or selected.



6. Enter or select values in New Database window, e.g. "General" tab -> "Database Name", "Collation" tab -> uncheck "Validate Collation" property, select "Collation Description" value according to your region language and etc. Push "OK" after all required values are entered or selected.

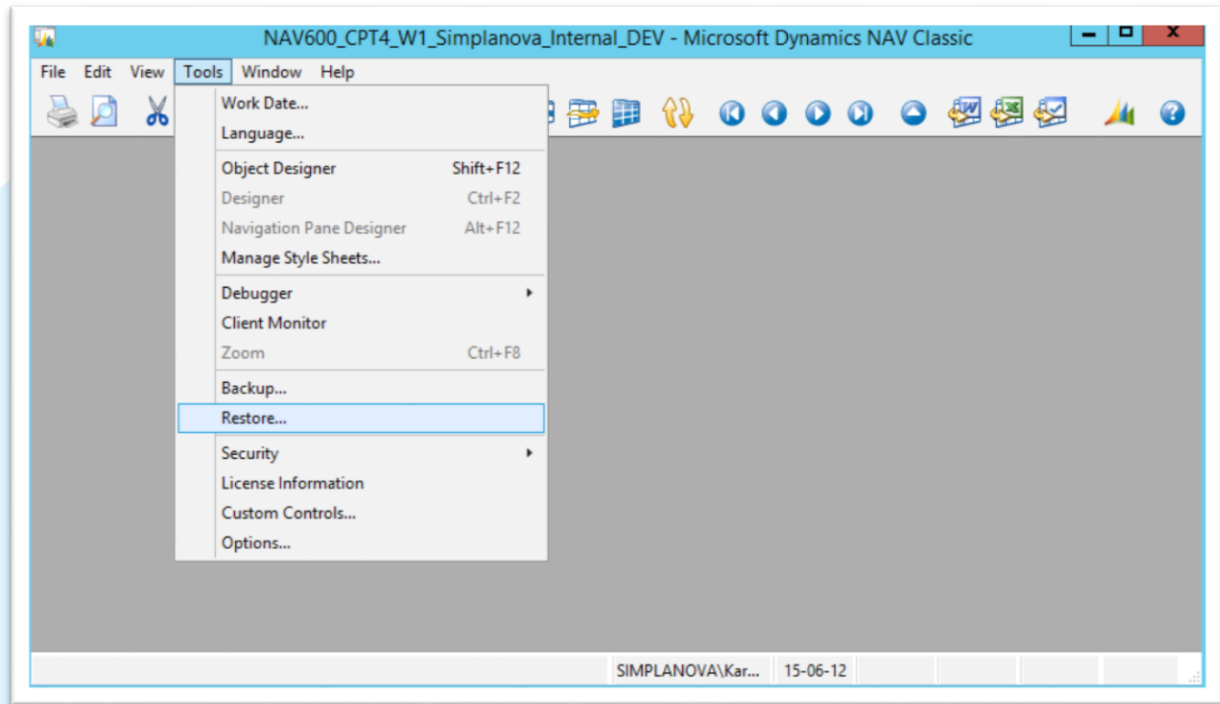


7. Wait for database creation to be finished.

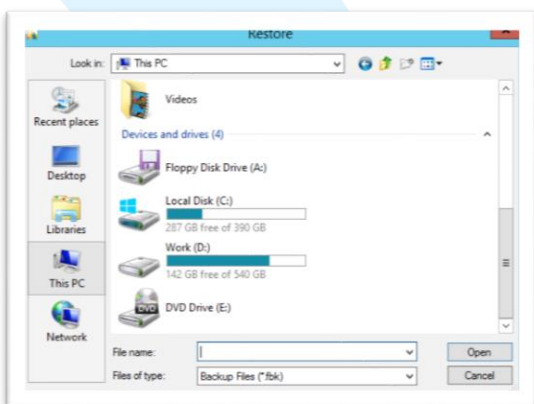
2.3. Restore client NAV database to newly created database

Follow these steps:

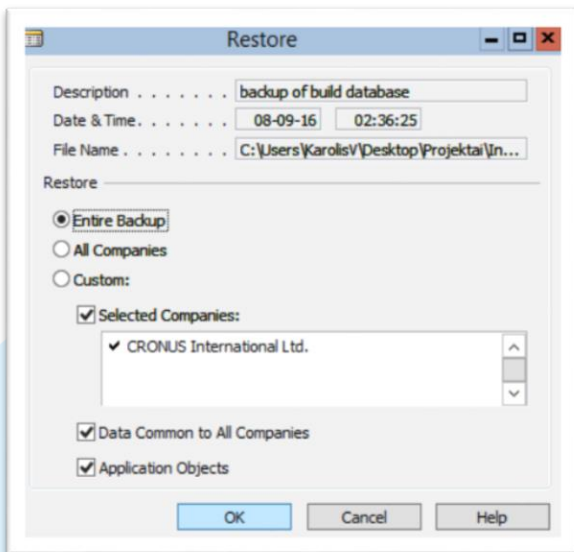
1. Open newly created database with Microsoft Dynamics NAV Development Environment.
2. Go to “Tools” menu.
3. Select “Restore” action from drop down list.



4. Find and select client database backup file in file selection window. Push “Open” after file is selected.



5. Select database restore options in “Restore” window. Push “OK” after all required values are selected.

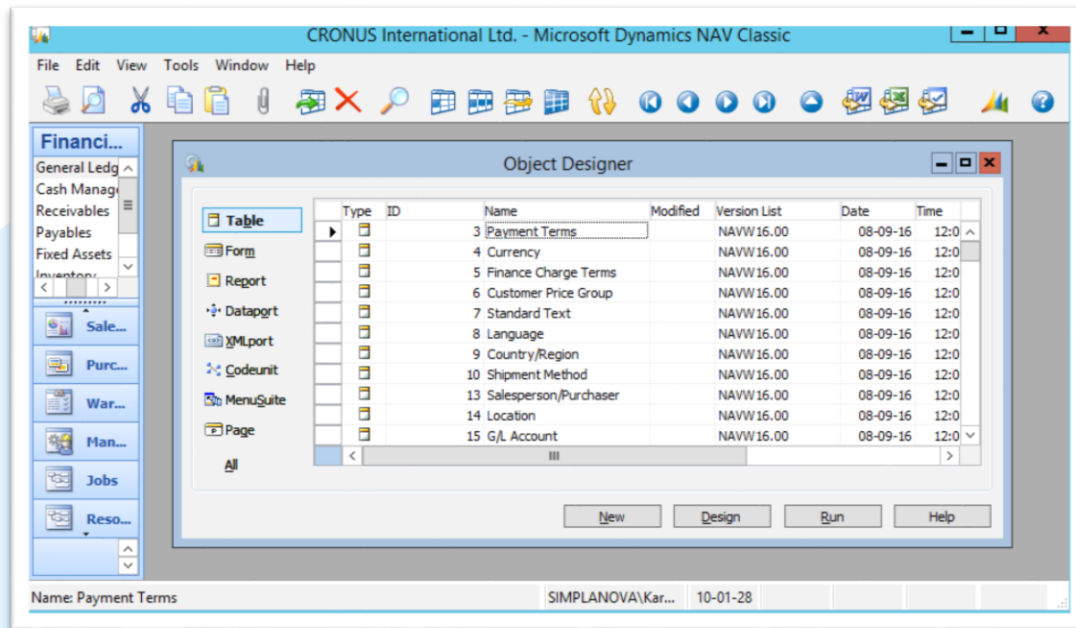


6. Wait for database restore to be finished.

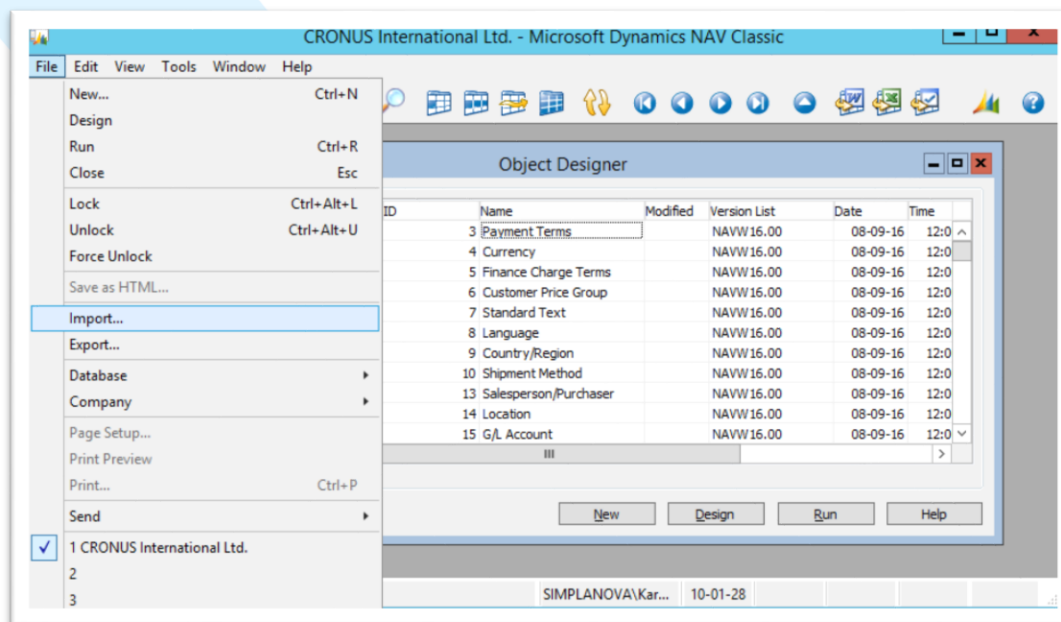
2.4. Import “Data Randomizing Tool”

Follow these steps:

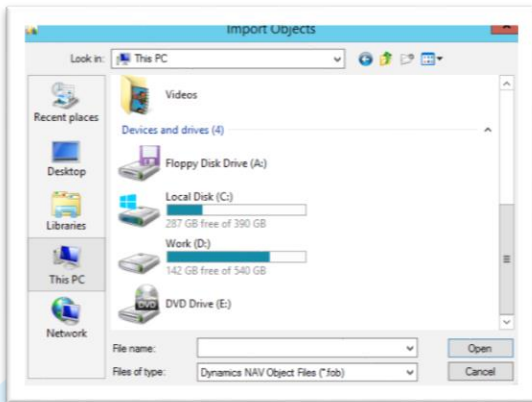
1. Open newly restored client database on Microsoft Dynamics NAV Development Environment.
2. Open object designer (shortcut key “Shitt+F12” or go to “Tools” -> “Object Designer”).



3. Go to “File” menu.
4. Select “Import” action from drop down list.



5. Find and select “Data Randomizing Tool” objects (*.fob) file. Push “Open” after file is selected.



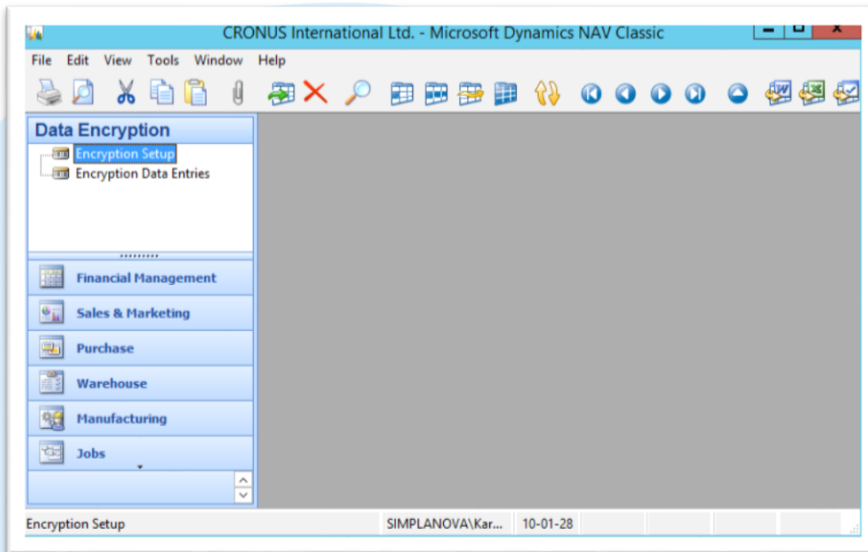
6. Push “Yes” and wait for objects import process to be finished.
7. Close and reopen restored client database with Microsoft Dynamics NAV Development Environment.

3. “Data Randomizing Tool” setup

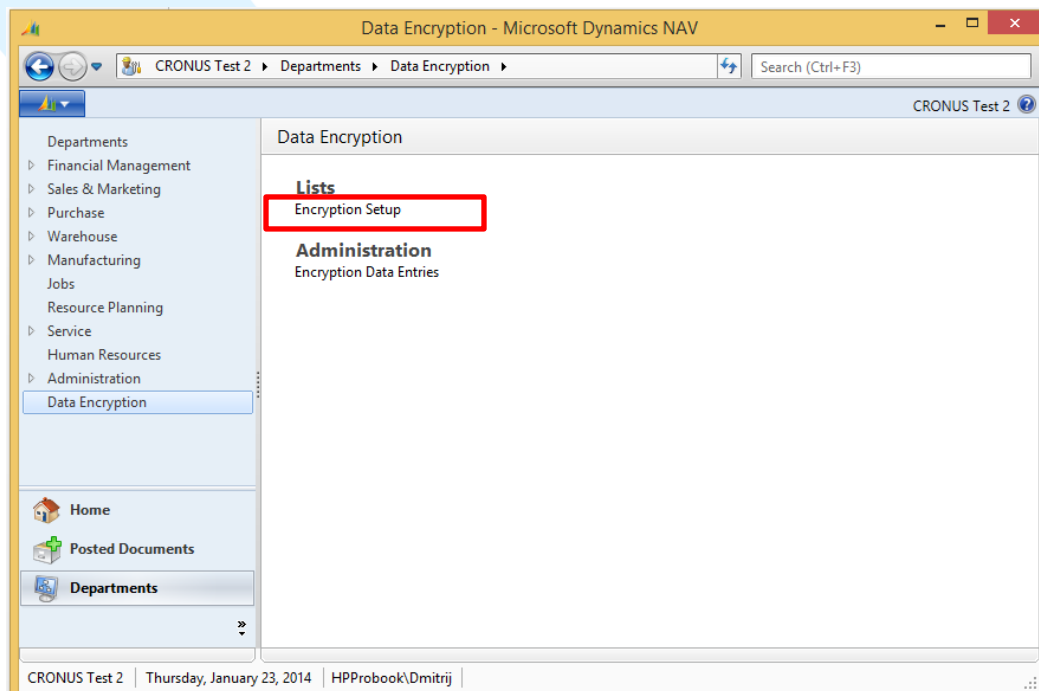
Follow these steps to prepare “Data Encryption Tool”:

1. Go to “Data Encryption” department menu in Navigation Pane.
2. Select “Encryption Setup”.

In Microsoft Dynamics NAV Classic Client:

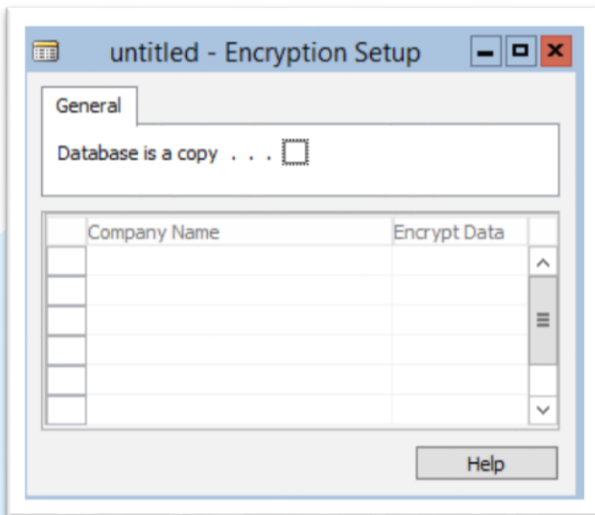


In Microsoft Dynamics NAV Role Tailored Client:

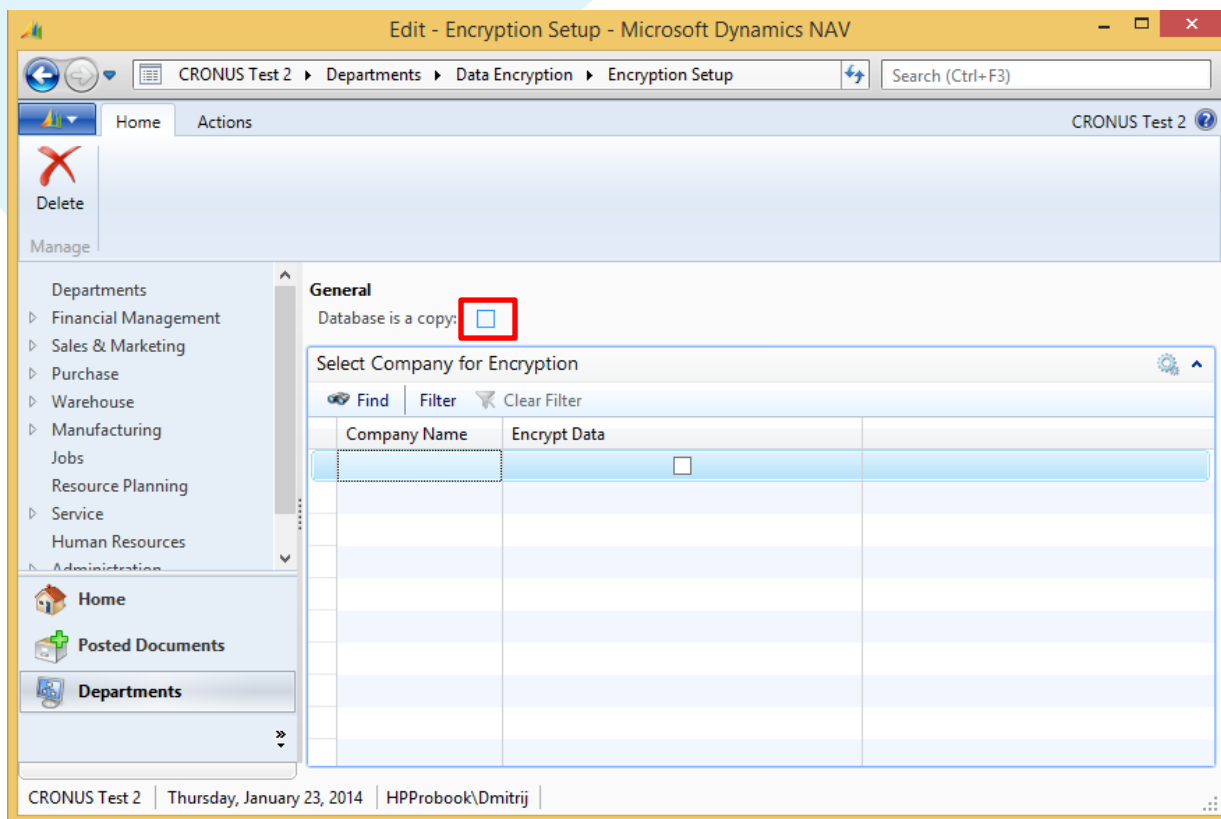


3. Check “Database is a copy” checkbox in “Encryption Setup”.

In Microsoft Dynamics NAV Classic Client:

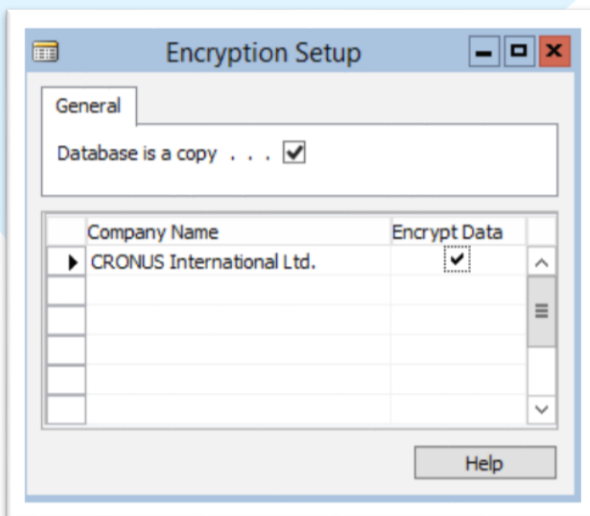
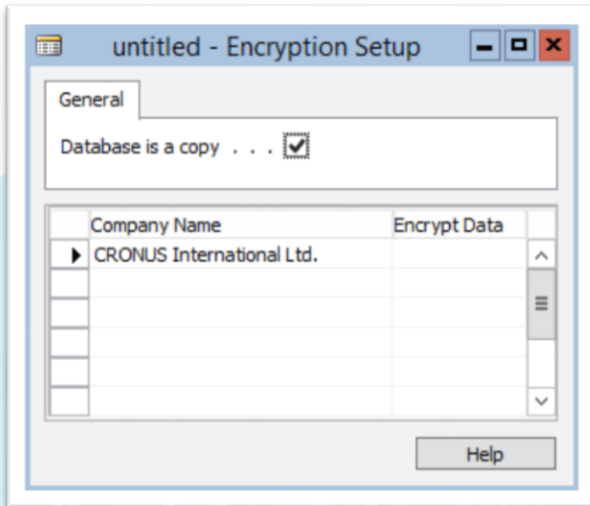


In Microsoft Dynamics NAV Role Tailored Client:



1. Existing database companies will be displayed in “Encryption Setup” subform/subpage. Check “Encrypt Data” checkbox for all companies which data should be encrypted. Close “Encryption Setup”.

In Microsoft Dynamics NAV Classic Client:



In Microsoft Dynamics NAV Role Tailored Client:

Edit - Encryption Setup - Microsoft Dynamics NAV

CRONUS Test 2 ▶ Departments ▶ Data Encryption ▶ Encryption Setup

Home Actions

CRONUS Test 2

Delete

Manage

Departments

- Financial Management
- Sales & Marketing
- Purchase
- Warehouse
- Manufacturing
- Jobs
- Resource Planning
- Service
- Human Resources
- Administration
- Data Encryption

Home

Posted Documents

Departments

CRONUS Test 2 | Thursday, January 23, 2014 | HPProbook\Dmitrij

General

Database is a copy: ☒

Select Company for Encryption

Find Filter Clear Filter

Company Name	Encrypt Data
CRONUS Test 2	<input type="checkbox"/>
CRONUS Test1	<input type="checkbox"/>
W1 company	<input type="checkbox"/>

Edit - Encryption Setup - Microsoft Dynamics NAV

CRONUS Test 2 ▶ Departments ▶ Data Encryption ▶ Encryption Setup

Home Actions

CRONUS Test 2

Delete

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Departments

- Financial Management
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- Purchase
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- Manufacturing
- Jobs
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- Administration
- Data Encryption

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Posted Documents

Departments

CRONUS Test 2 | Thursday, January 23, 2014 | HPProbook\Dmitrij

General

Database is a copy: ☒

Select Company for Encryption

Find Filter Clear Filter

Company Name	Encrypt Data
CRONUS Test 2	<input type="checkbox"/>
CRONUS Test1	<input checked="" type="checkbox"/>
W1 company	<input type="checkbox"/>

2. Open "Encryption Data Entries" from department menu "Data Encryption".

In Microsoft Dynamics NAV Classic Client:

The screenshot shows a window titled "Encryption Data Entries". It contains a table with the following columns: Entry Type, ID, Table ID, Name, Confidential Information, Information Encrypted, Is a Key. The first row has "Table" under Entry Type, an empty ID field, an upward arrow icon under Table ID, and an empty Name field. Below the table are three buttons: "Generate De...", "Import/Expo...", and "Encrypt data". A "Help" button is located at the bottom right.

Entry Type	ID	Table ID	Name	Confidential Information	Information Encrypted	Is a Key
*▶ Table		↑				

Generate De...
Import/Expo...
Encrypt data
Help

In Microsoft Dynamics NAV Role Tailored Client:

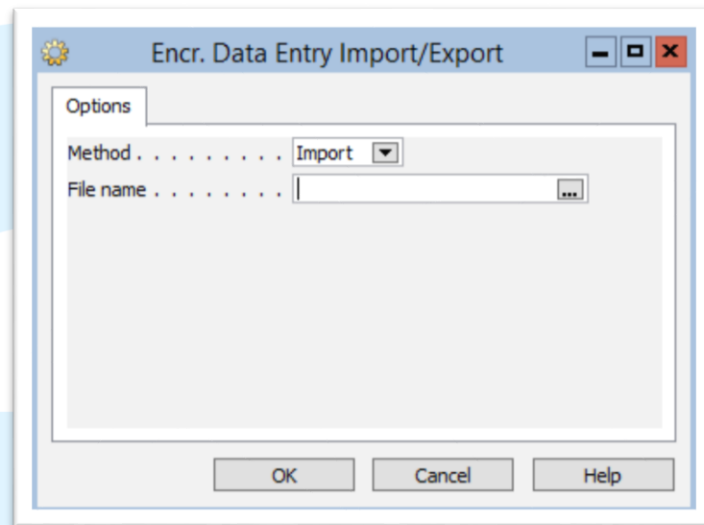
- ✓ “Entry type” – choose table or field.
- ✓ “ID” – select table or field depending on chosen “Entry type”.
- ✓ “Confidential Information” – check for fields which should be encrypted.

Note: it is not recommended to encrypt table primary key fields data.

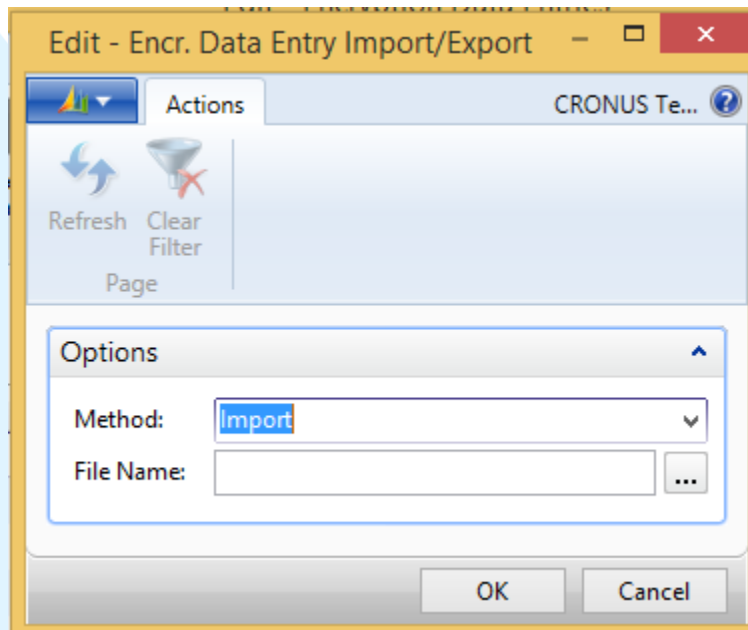
- Push “Generate Default Entries”. It will generate related entries by rules created by “Simplanova”. You can adjust new data manually after it is generated.

- Import/export “Encryption Data Entries” data form/to *.xml file by using “Import/Export Data Encryption Setup” action. Select required values in opened window:
 - ✓ “Method” – import or export
 - ✓ “File name” – file name for data import or export
 - ✓ Push “OK”

In Microsoft Dynamics NAV Classic Client:



In Microsoft Dynamics NAV Role Tailored Client:



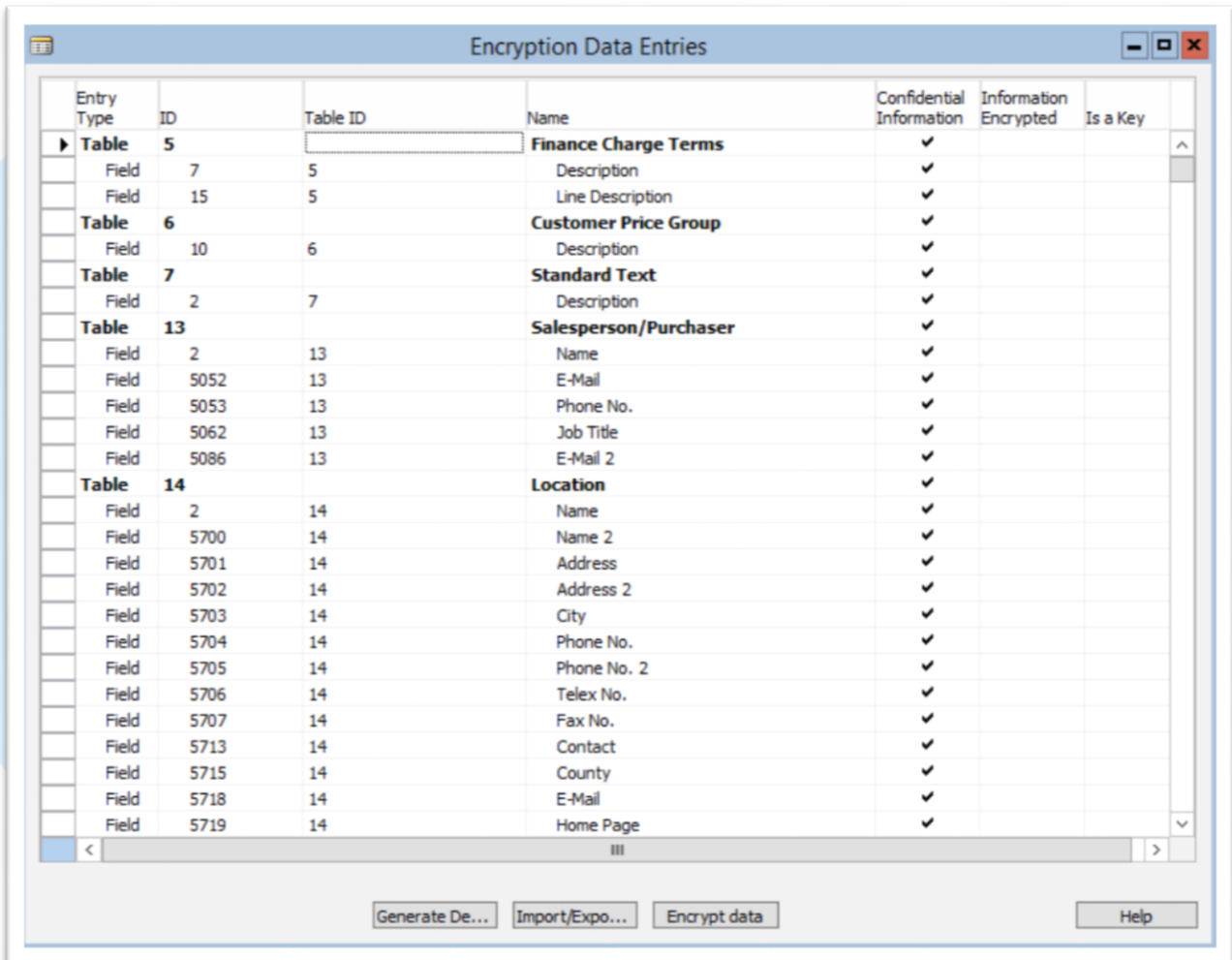
Note: before generating or importing “Encryption Data Entries” all existing records will be deleted.

4. Launch Data Encryption Process

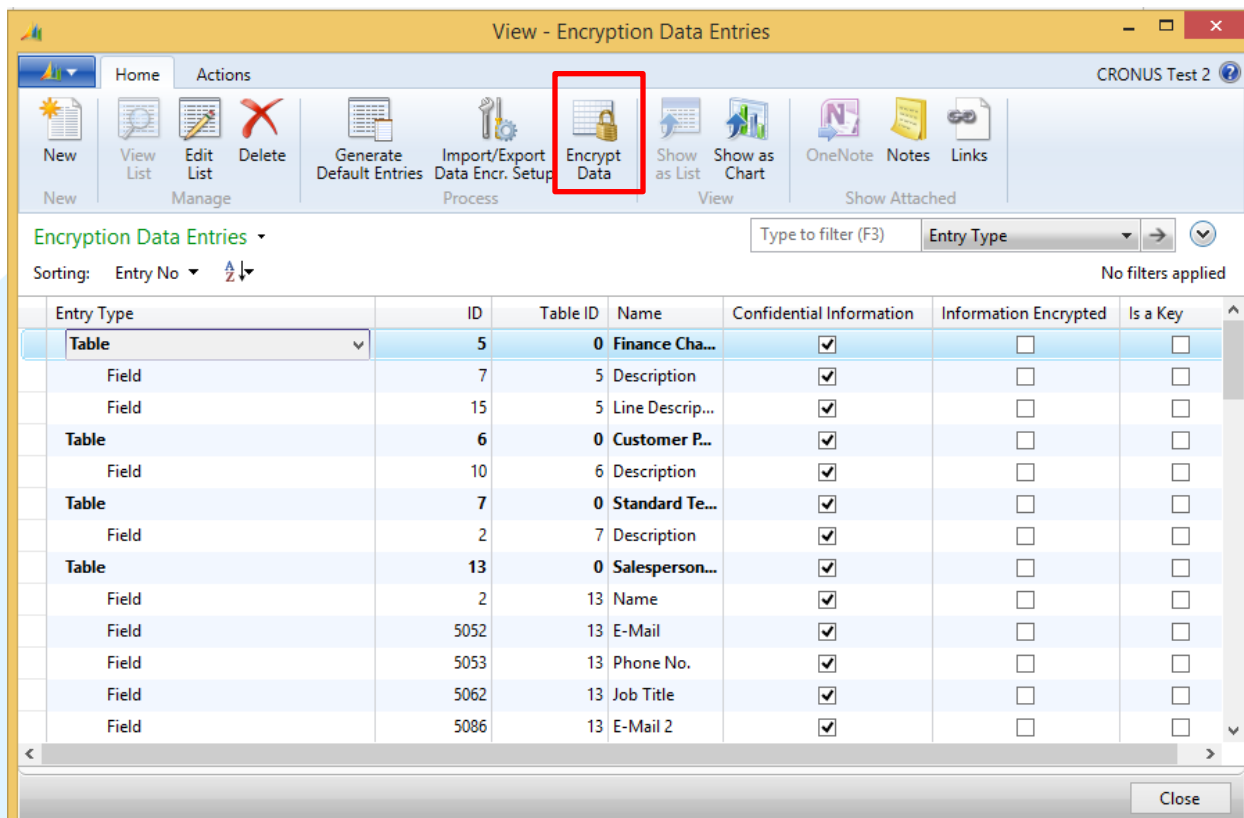
Follow these steps:

1. Push “Encrypt data” after “Encryption Data Entries” are added and configured

In Microsoft Dynamics NAV Classic Client:



In Microsoft Dynamics NAV Role Tailored Client:



2. Wait for data encryption process to be finished.

In Microsoft Dynamics NAV Classic Client:

Encryption Data Entries							
Entry Type	ID	Table ID	Name	Confidential Information	Information Encrypted	Is a Key	
Table	5		Finance Charge Terms	✓	✓		^
Field	7	5	Description	✓	✓		
Field	15	5	Line Description	✓	✓		
Table	6		Customer Price Group	✓	✓		
Field	10	6	Description	✓	✓		
Table	7		Standard Text	✓	✓		
Field	2	7	Description	✓	✓		
Table	13		Salesperson/Purchaser	✓	✓		
Field	2	13	Name	✓	✓		
Field	5052	13	E-Mail	✓	✓		
Field	5053	13	Phone No.	✓	✓		
Field	5062	13	Job Title	✓	✓		
Field	5086	13	E-Mail 2	✓	✓		
Table	14		Location	✓	✓		
Field	2	14	Name	✓	✓		
Field	5700	14	Name 2	✓	✓		
Field	5701	14	Address	✓	✓		
Field	5702	14	Address 2	✓	✓		
Field	5703	14	City	✓	✓		
Field	5704	14	Phone No.	✓	✓		
Field	5705	14	Phone No. 2	✓	✓		
Field	5706	14	Telex No.	✓	✓		
Field	5707	14	Fax No.	✓	✓		
Field	5713	14	Contact	✓	✓		
Field	5715	14	County	✓	✓		
Field	5718	14	E-Mail	✓	✓		
Field	5719	14	Home Page	✓	✓		

In Microsoft Dynamics NAV Role Tailored Client:

Entry Type	ID	Table ID	Name	Confidential Information	Information Encrypted	Is a Key
Table	5	0	Finance Cha...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field	7	5	Description	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field	15	5	Line Descrip...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Table	6	0	Customer P...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field	10	6	Description	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Table	7	0	Standard Te...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field	2	7	Description	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Table	13	0	Salesperson...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field	2	13	Name	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field	5052	13	E-Mail	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field	5053	13	Phone No.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field	5062	13	Job Title	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field	5086	13	E-Mail 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3. Backup database(as in paragraph 2.1.) after data encryption is finished.
4. Solution is prepared for testing without confidential client business information.