PMS.NEXOSALExx Quick User Guide

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1. What is PMS.NEXOSALE

PMS.NEXOSALExx is a software based on PMS.NEXOxx libraries.

PMS.NEXOxx libraries provide an implementation of nexo Retailer embedding all messages and the ability to use them. PMS.NEXOxx currently exists in 2 versions PMS.NEXO30 (nexo Retailer v3.0) and PMS.NEXO31 (nexo Retailer v3.1). PMS.NEXOSALExx also exists based on these libraries an PMS.NEXOSALE30 for nexo Retailer v3.0 and PMS.NEXOSALE31 for nexo Retailer v3.1. Before using either PMS.NEXOxx or PMS.NEXOSALExx libraries, refer to your POI supported nexo version.

PMS.NEXOSALExx apart form embedding PMS.NEXOxx and all its functionalities, also provides a complete and easy to use nexo Retailer implementation directly inside a sale system. Integration includes:

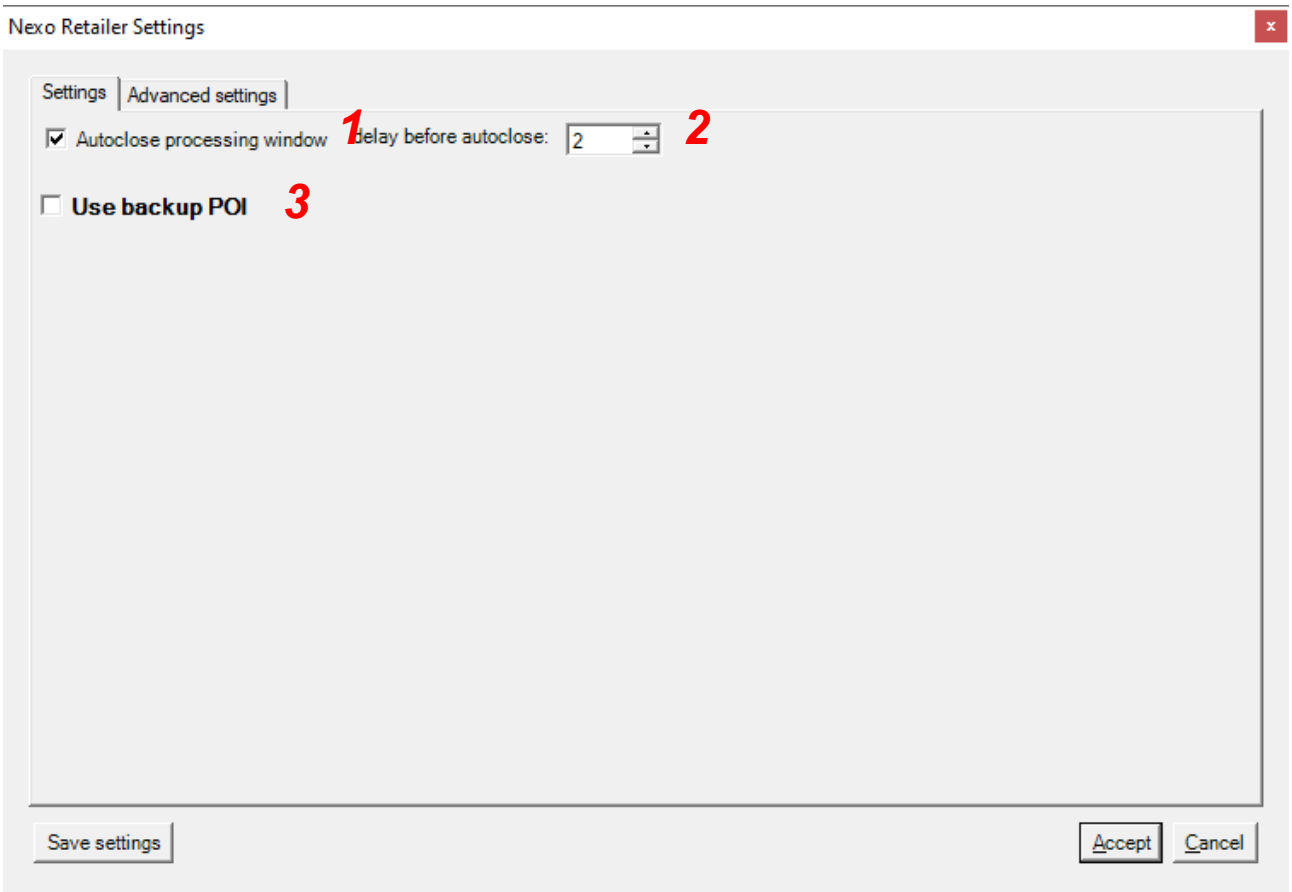
- Full settings management including:
  - Specify 2 different POI (primary and backup) with the ability to switch from one to the other
  - Specify all mandatory data to log to a POI
  - Activity tracing
- Full nexo Retailer message processing including:
  - Login & Logout
  - Payment, refund and reversal
  - Reconciliation,…

- Exchanges with the POI and simple result management

All these functionalities are available directly within dialog windows which will take care of all user interactions, as described here after.

2. Prepare settings

2.1. Minimum settings



PMS.NEXOSALExx Minimum settings window

1. **Auto close processing window**

   This flag allows specifying whether the transaction window (showing transaction progress) must be dismissed automatically when the transaction is finished, or not.

   Checking this flag will make the window disappear automatically, unchecking it will force the merchant to manually and explicitly close the window when the transaction is finished.

2. **Delay before auto close**

   If the Terminal port flag has been set (checked), this value indicates the delay (in seconds) between the end of the transaction and the moment the window is automatically closed.

   A low value might make the window disappear too fast, not giving the opportunity to the merchant to really check the transaction result.

   A high value makes the window to stay longer on the screen preventing the receipt to be printed.

   The advised value is between 1 and 5 seconds (2 preferable).

3. **Use backup POI**

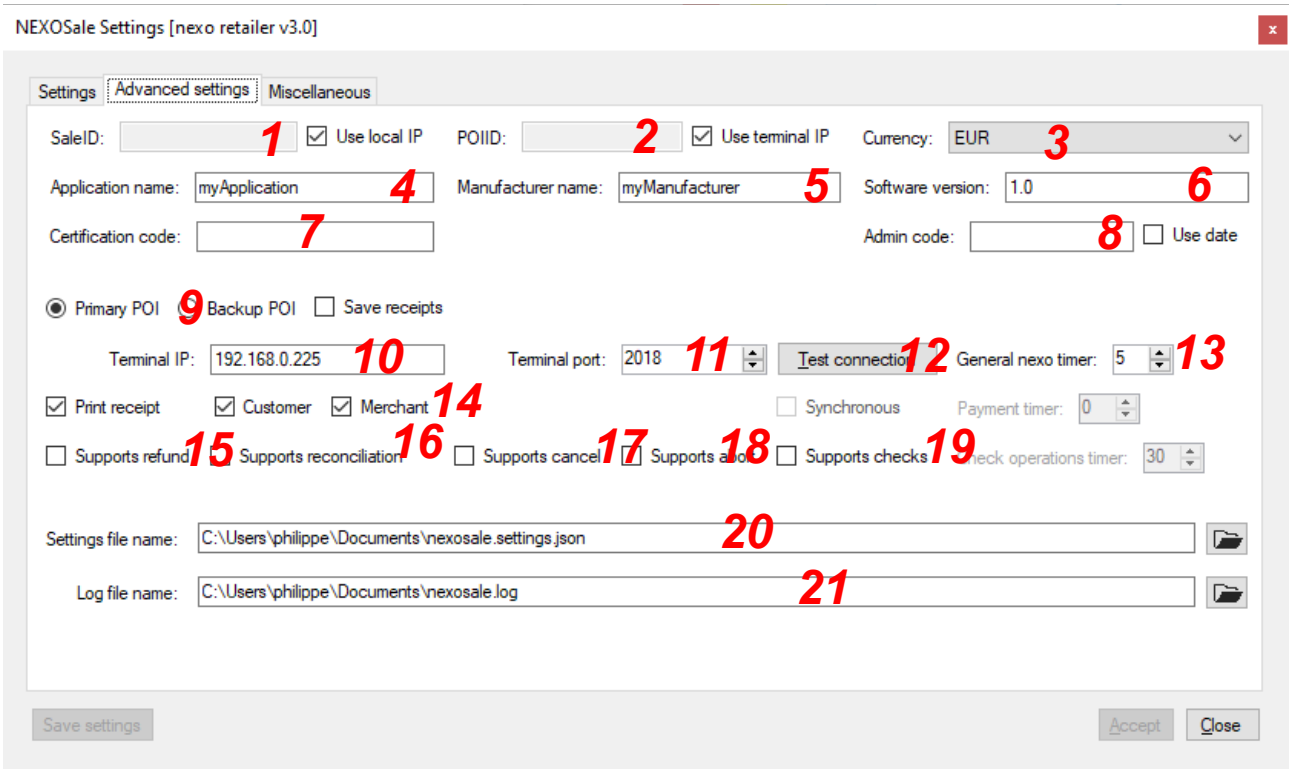
   Indicates whether the Y2 system must use the backup POI instead of the nominal one.

   This is useful if the nominal POI is not reachable.

   Terminal connection is available in the.

2.2. Advanced settings

The advanced setup are available if requested when displaying the settings and should be . It is strongly advised to not provide advanced setup to regular users.



PMS.NEXOSALExx Advanced settings window

1. **SaleID**

   Enter any ID identifying the sale.

   To easily identify the sale it is possible to let the system use the IP address making it unique on the network.

2. **POIID**

   Enter any ID identifying the POI (the terminal).

To easily identify the terminal it is possible to let the system use the IP address making it unique on the network.

3. **Currency**

   Choose the currency that will be used to perform the transactions.

4. **Application name**

   Any string identifying the application on the Y2 system.

5. **Manufacturer name**

   Any string identifying the application manufacturer on the Y2 system.

6. **Software version**

   Any string identifying the software version on the Y2 system.

7. **Certification code**

   Any string accepted by the terminal.

8. **Admin code**

   In case the terminal does not respond to a teller request, a code s requested to unlock the system. That code can be entered here. If no code is provided a date will be requested for that operation.

9. **Primary POI / Backup POI**

   Allows indicating which POI settings to display and manipulate.

10. **Terminal IP**

    The IP of the terminal to reach to perform a transaction (depends on Primary POI / Backup POI).

11. **Terminal port**

    This IP port to reach on the terminal (depends on Primary POI / Backup POI).

12. **Test connection**

    Allows to test the connection to the specified POI using the indicated IP + port data.

13. **General nexo timer**

    The timer to wait for when a non blocking operation is in progress (login, logout,…).

    The advised value is between 15 seconds.

14. **Print receipt**

    Allows indicating the Y2 system must print the transaction receipt when finished.

    If checked it is possible to indicate which receipts are to be printed (merchant and/or customer).

15. **Supports refund**

    Indicates if the terminal accepts to perform refunds.

16. **Supports reconciliation**

    Indicates if the terminal accepts to perform reconciliation.

17. **Supports abort**

    Indicates if the terminal accepts to perform abort.

18. **Supports cancel**

    Indicates if the terminal accepts to perform cancellation (reversal).

19. **Supports checks**

    Indicates if the terminal accepts to perform checks operations.

20. **Settings file name**

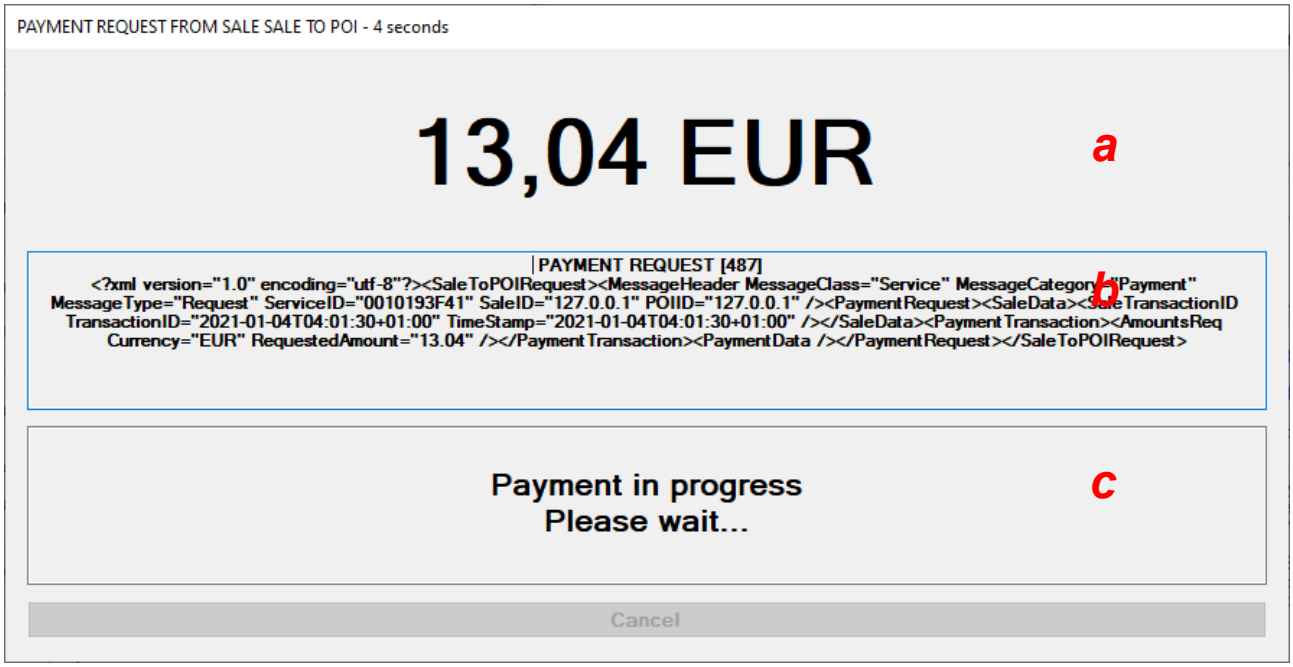
    Allows indicating where the settings file is stored. It can be stored locally or on a network.

21. **Log file name**

    Allows indicating where the log file is stored. It can be stored locally or on a network.

3. Make a purchase

1. The merchant enters or compute the amount to pay for and calls the PMS.NEXOSALExx payment procedure (the procedure for calling this functionality might vary on cash registers).
2. The amount is sent to the POI for processing.
3. Once the transaction has been initiated onto the POI the purchase processing window is displayed.



Purchase processing window: <u>purchase in progress</u>

3.a. AMOUNT

This upper part displays the amount of the transaction along with the transaction currency.

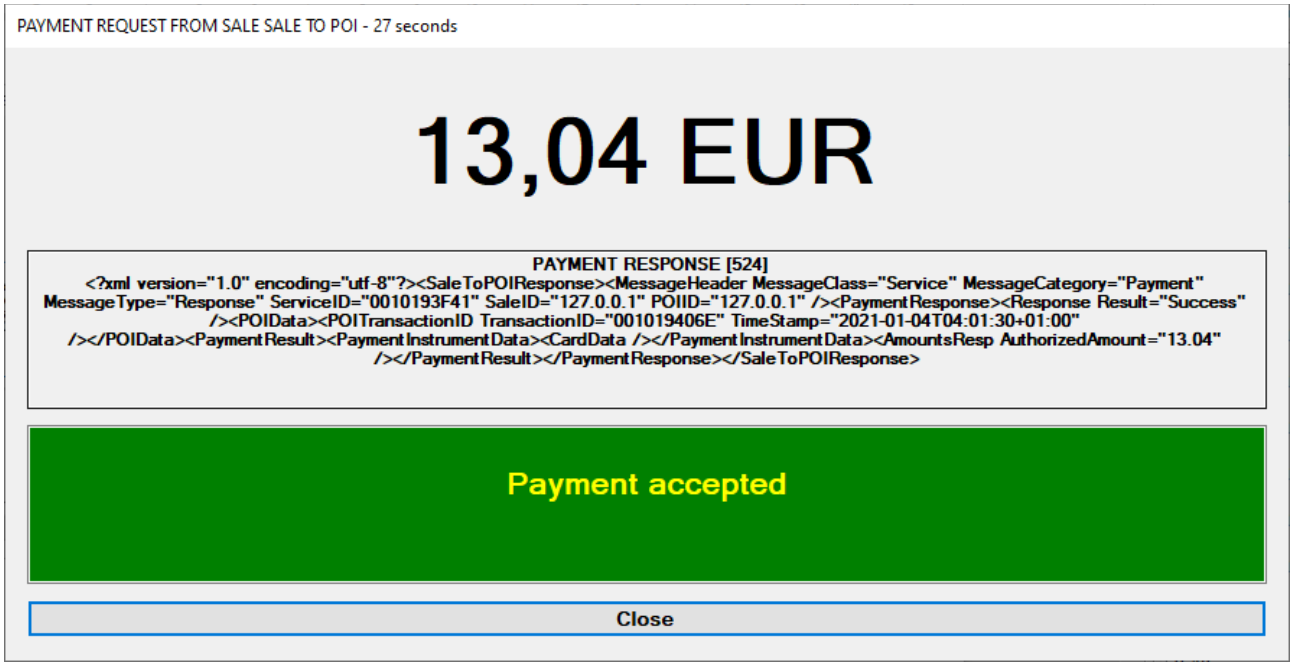
3.b. INFORMATION

The middle part displays information about how the transaction is being performed.

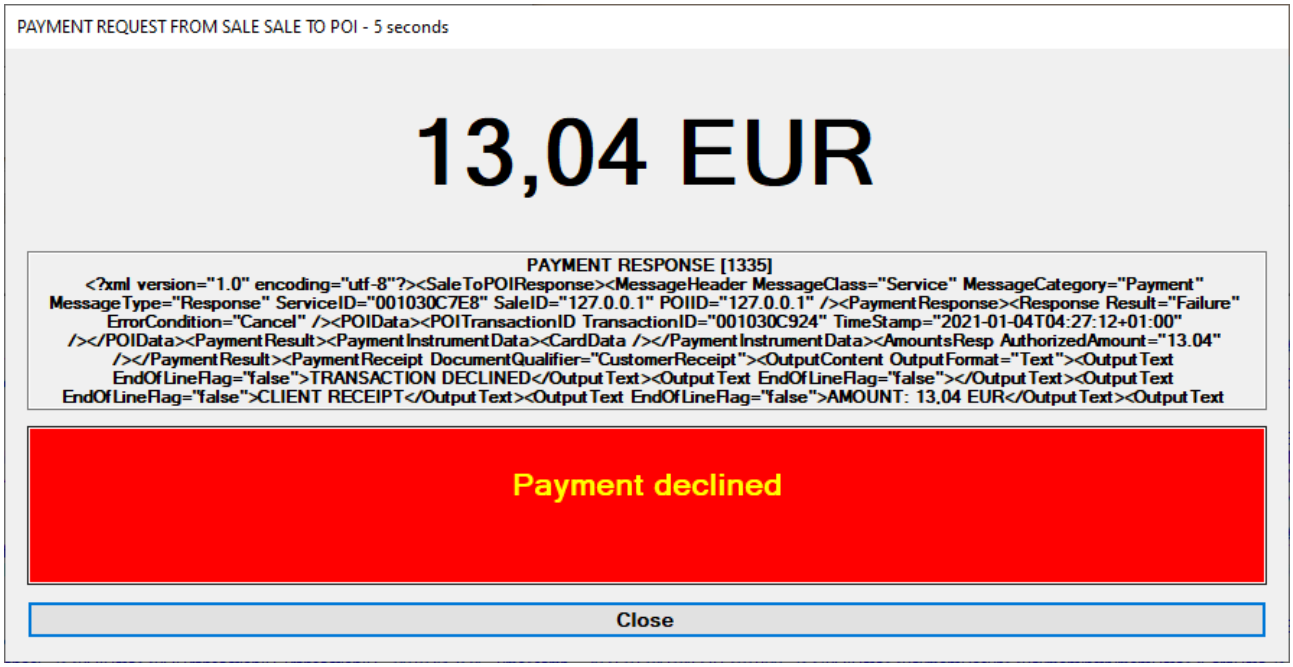
3.c. MESSAGE/RESULT

The lowest part displays messages to the merchant and the result of the transaction.

4. When the transaction is completed (accepted or not) the RESULT part indicates it with a colour code and a message indicating the final result.



This transaction has been accepted (RESULT is GREEN)



This transaction has been declined (RESULT is RED)

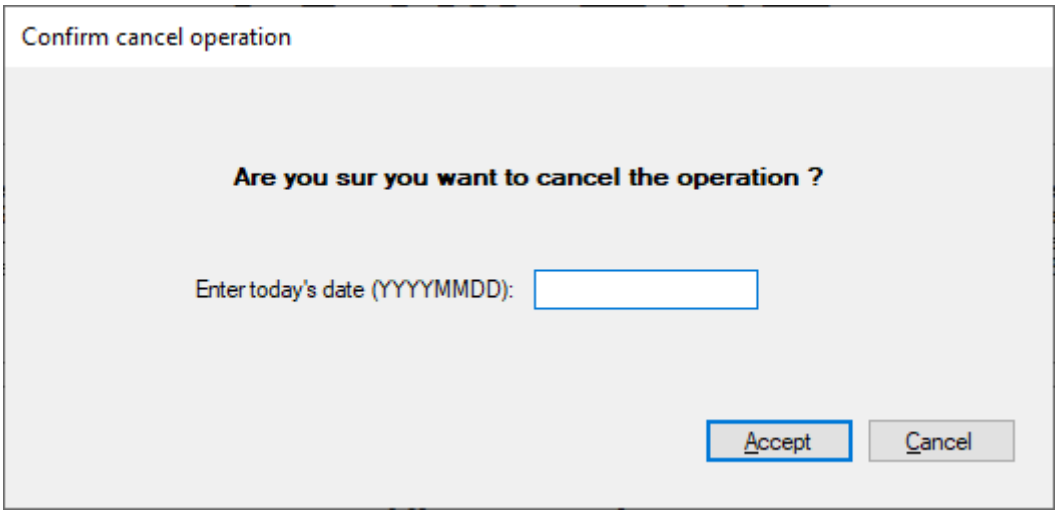
Please note that cancelling the transaction using the "***Cancel***" button will also decline the transaction (**RESULT is RED**) with a different message indicating the transaction was cancelled.

3.1.Stop processing

In case the terminal does not answer the sale system is blocked. In that case it is possible to unlock it by doing as follow:

1. Double-click on “AMOUNT” part.
2. Double-click on “INFORMATION” part.
3. Double-click on “MESSAGE/RESULT” part.

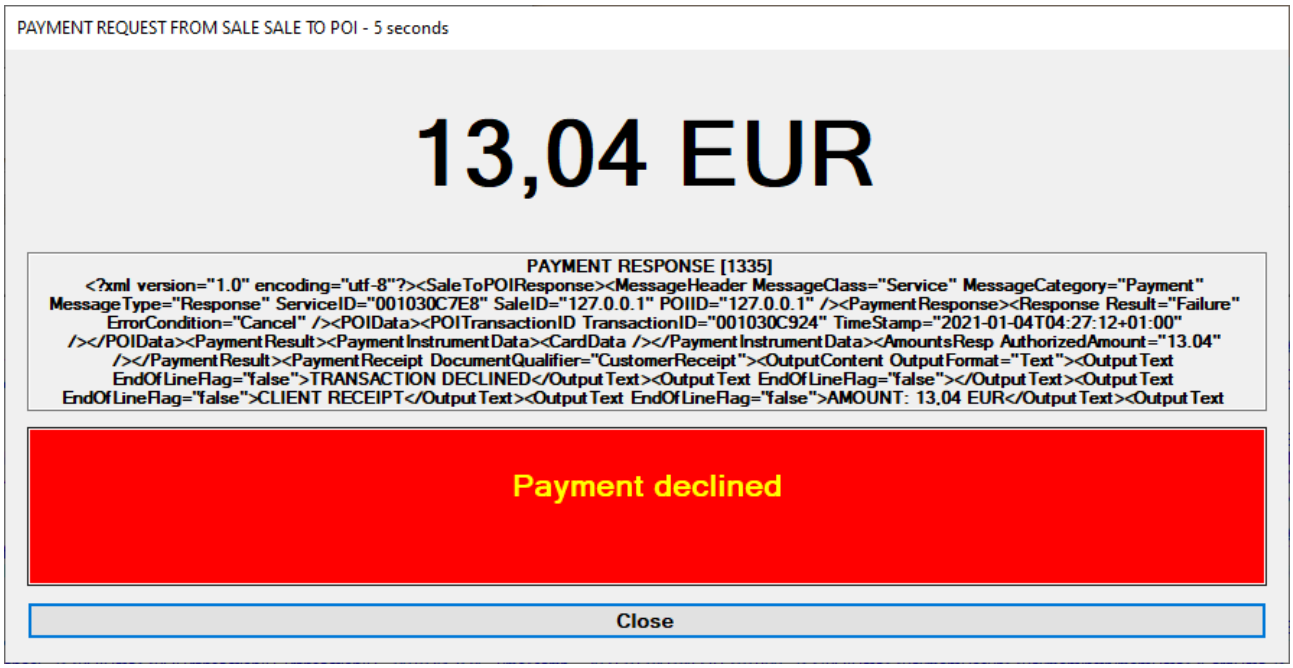
That will display a window which will allow cancelling the current processing.



Window to cancel processing in progress

The operator must then enter either (i) the Admin code If defined or (ii) the current date in the indicated format (YYYYMMDD), then validate (entering the date has no effect if an admin code has been defined).

4. If a valid admin code or date has been entered the transaction is aborted and the sale system is released.



Beware, aborting the transaction that way does not abort the transaction on the POI. The operator must use that option only in specific cases (terminal does not answer, no more network,…).

4. Any other service

Windows will be as for a purchase but according to the requested service (Refund, Abort,...).

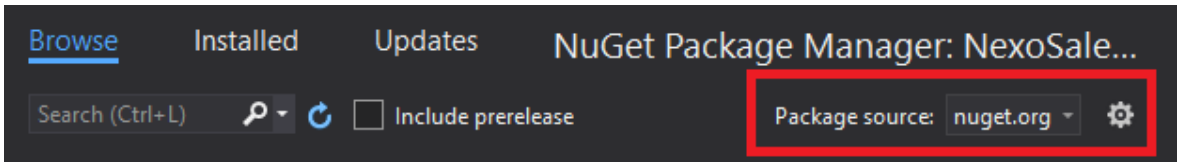
5. Implement PMS.NEXOSALE

5.1. In a .NET project

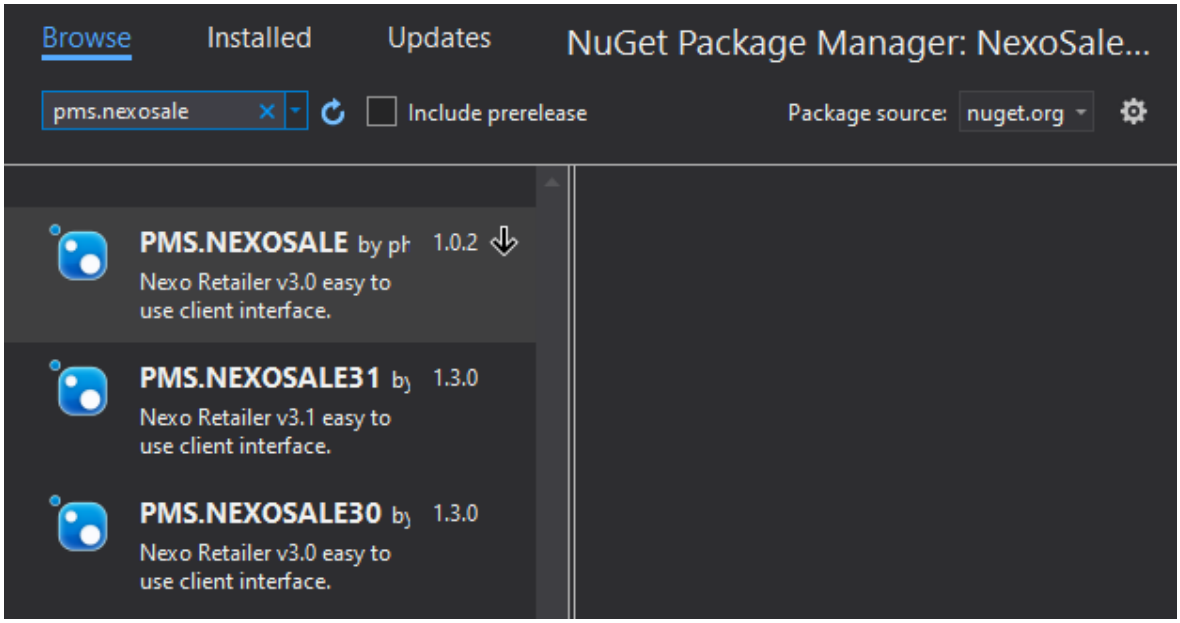
PMS.NEXOSALExx is available for downloading in https://www.nuget.org.

To import it inside your own .NET project, inside Visual Studio:

1. Right click on your project and select "Manage nuget pachages…" and make sure to use "nuget.org" as a source.



2. In the Browse pane, enter "pms.nexosale" in the search widget



That will display all PMS.NEXOSALExx packages available.

Forget PMS.NEXOSALE which has been deprecated and select the one you want to use (PMS.NEXOSALE30 for nexo Retailer v3.0, PMS.NEXOSALE31 for nexo Retailer v3.1).

5.1.1. VB

- Create the object

```
Imports NEXOSALE
Private Nxo As New NEXOSALE.NEXOSALE
```

- Display the settings window

```
Nxo.DisplaySettings(trueOrfalse)
```

with `trueOrfalse` is:

- true: display Advanced settings
- false: Advanced settings are not made available

- Display the processing window

```
Public Enum Action
   _none
   _begin
   Login
   Logout
   Payment
   _base
   Refund
   Reversal
   Reconciliation
   Abort
   _checks
   ReadCheck
   PrintCheck
_end
End Enum
Dim operation as Action = Action.Payment
Dim result As ActionResult = Nxo.DisplayProcessing(operation)
lblResult.Text = result.ToString
lblBrand.Text = Nxo.Brand
Select Case result
   Case ActionResult.success
      Select Case ComboBox1.SelectedItem
         Case Action.Payment
            Nxo.OriginalPOITransactionID = Nxo.POITransactionID
            Nxo.OriginalPOITransactionTimestamp = Nxo.POITransactionTimestamp
         Case Action.Refund
            Nxo.OriginalPOITransactionID = "AAA" 'Nothing
            Nxo.OriginalPOITransactionTimestamp = Nothing
         Case Action.Reversal
            Nxo.OriginalPOITransactionID = Nothing
            Nxo.OriginalPOITransactionTimestamp = Nothing
         Case Action.Reconciliation
      End Select
End Select
```

5.1.2. C#

- Create the object

```
using NEXOSALE;
NEXOSALE  Nxo = new NEXOSALE();
```

- Display the settings window

```
Nxo.DisplaySettings(trueOrfalse);
```

with `trueOrfalse` is:

- true: display Advanced settings
- false: Advanced settings are not made available

- Display the processing window

```
Action operation = Action.Payment;
ActionResult result = Nxo.DisplayProcessing(operation);
lblResult.Text = result.ToString();
lblBrand.Text = Nxo.Brand;
switch (result)
{
  case ActionResult.success:
    switch (operation)
    {
      case Action.Payment:
        Nxo.OriginalPOITransactionID = Nxo.POITransactionID;
        Nxo.OriginalPOITransactionTimestamp = Nxo.POITransactionTimestamp;
        break;
      case Action.Refund:
        Nxo.OriginalPOITransactionID = "AAA";
        Nxo.OriginalPOITransactionTimestamp = null;
        break;
      case Action.Reversal:
        Nxo.OriginalPOITransactionID = null;
        Nxo.OriginalPOITransactionTimestamp = null;
        break;
      case Action.Reconciliation:
        break;
    }
    break;
}
```

5.2. Using a non .NET language

The component is available as a COM object for non .NET languages (Delphi,…).

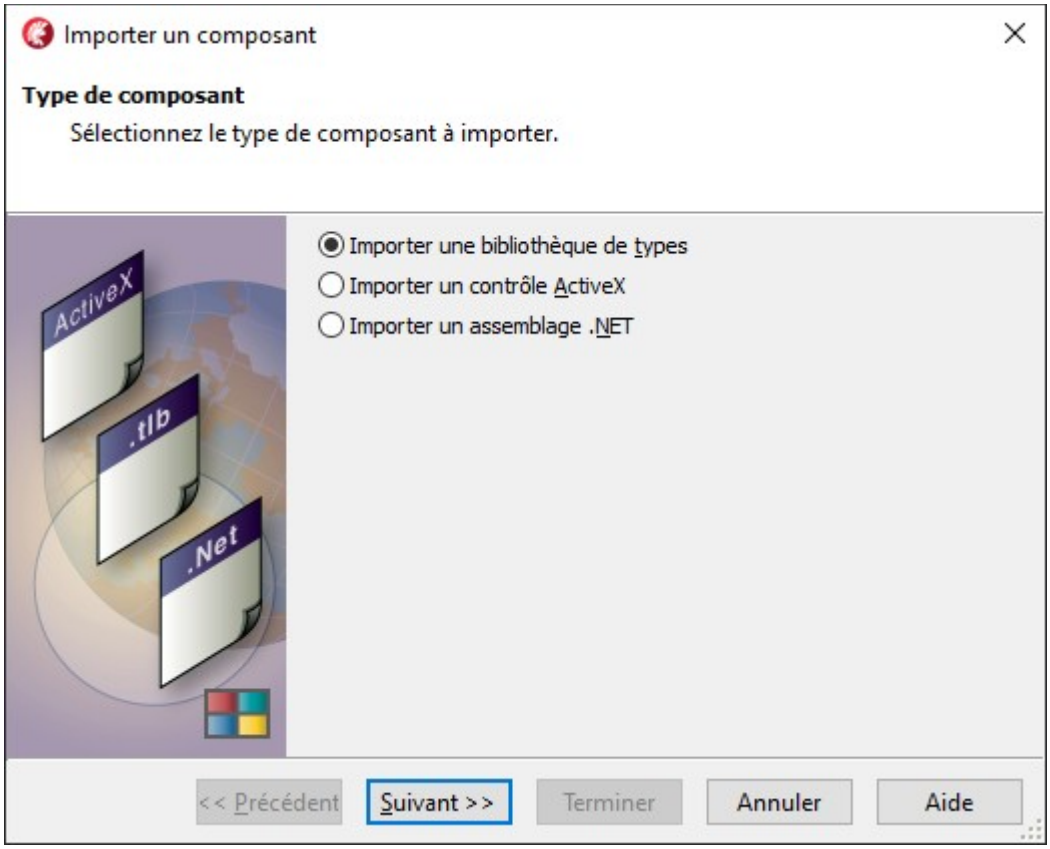
To use in Delphi the component must be registered on the computer (PMS.COMMON.dll, PMS.NEXOxx.dll & PMS.NEXOSALExx.dll) using the following command:

```
Regasm.exe <dll to register> /codebase
```

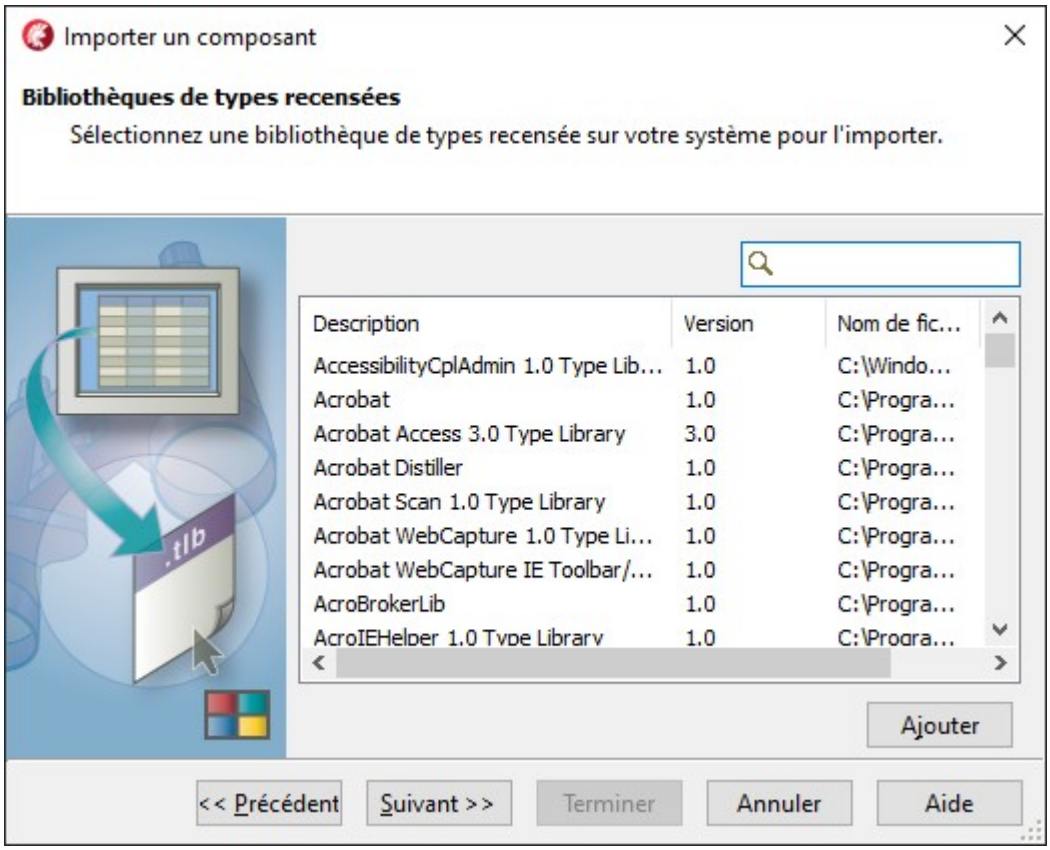
5.2.1. Delphi

To use the component inside Delphi:

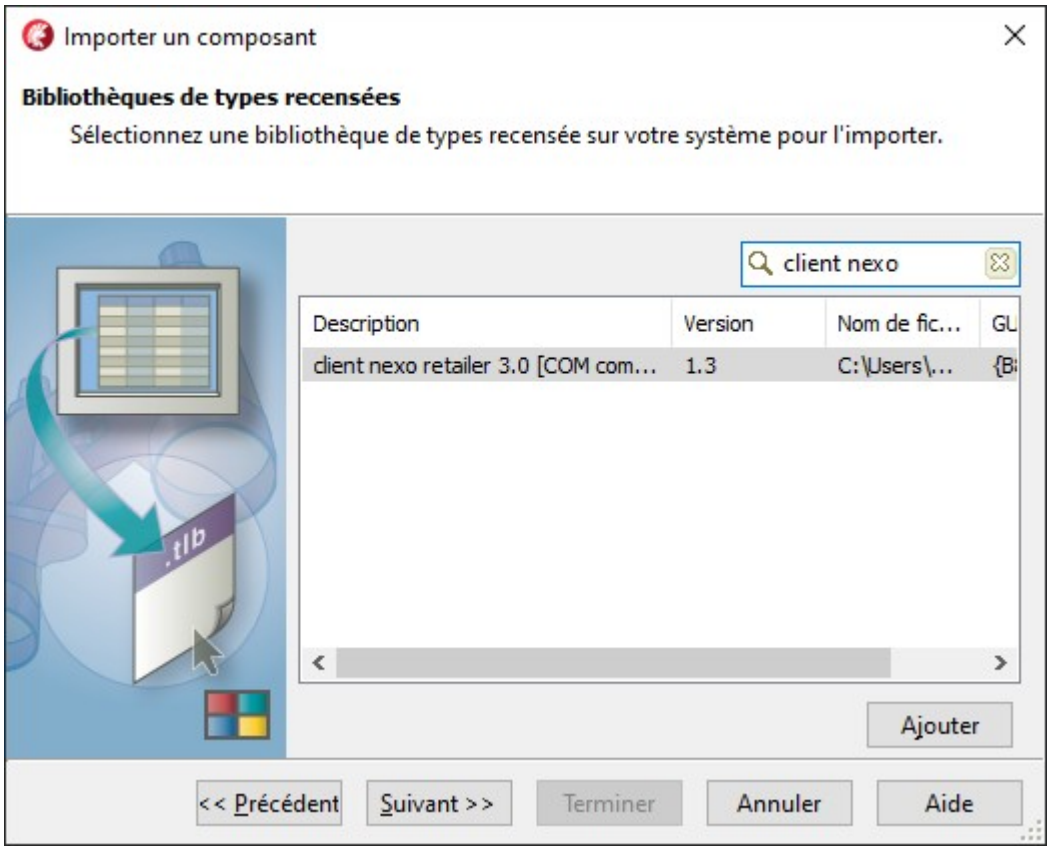
1. In the menu, select: “Component→Import component”, then choose “Import a type library” and click “Next”



2. Select the right type library to import:

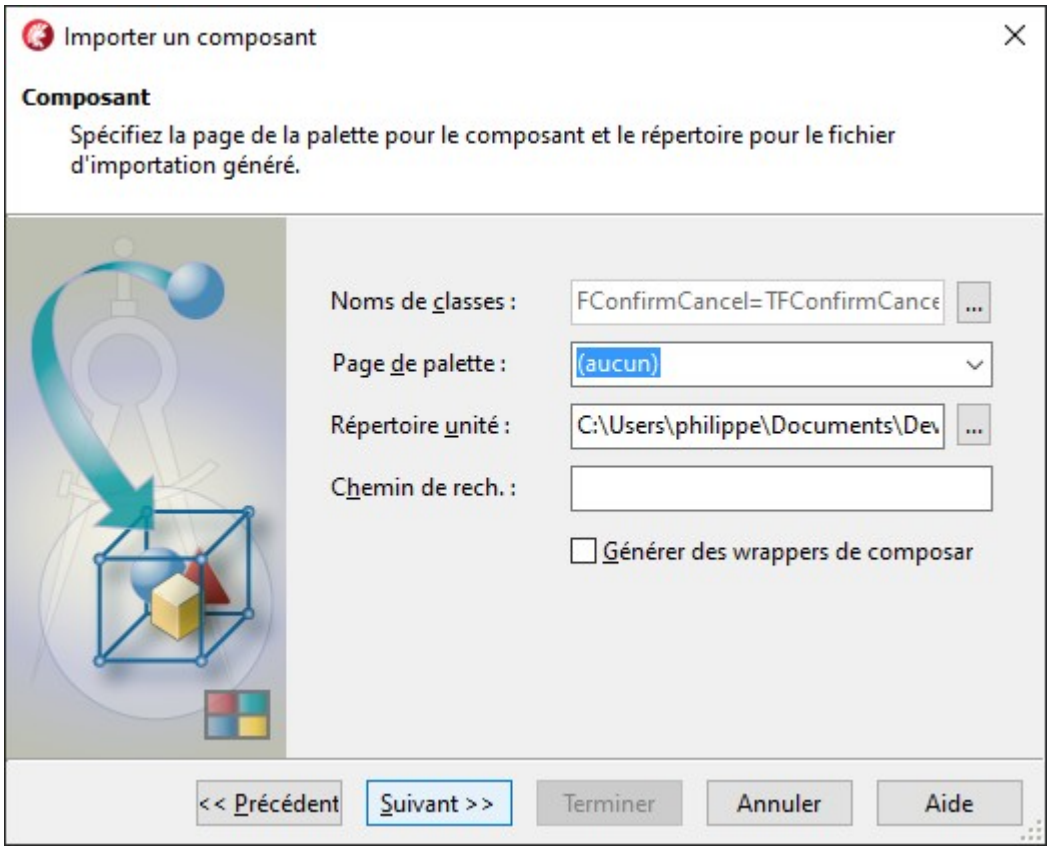


Type “client nexo retailer”

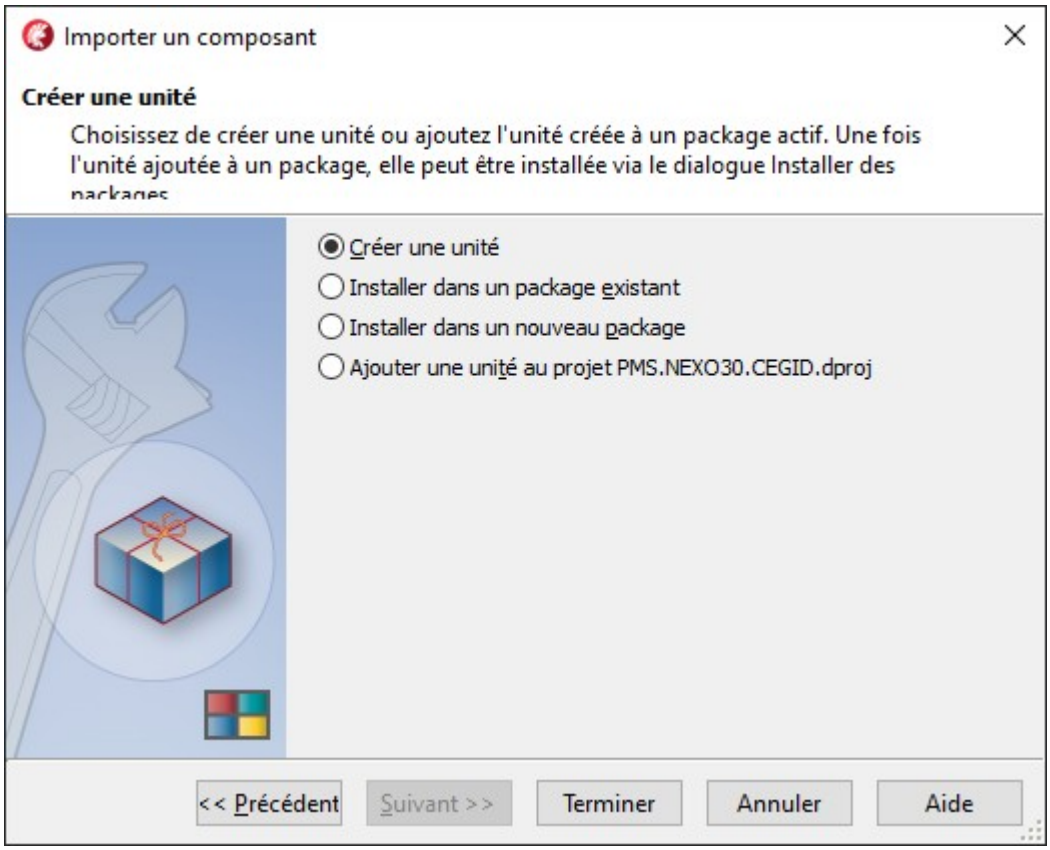


The nexo Retailer component is displayed, select it and click on “Next”

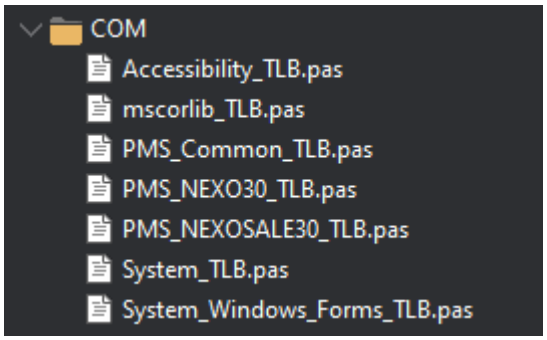
3. Select where to put the the component and click on “Next”



4. Select “Create a unit” and click “Terminate”



5. That will create a set of units you must add to your project.



6. Now go somewhere in your app and put the following statements:

```
// create the PMS.NEXOSALE object
myNexo := CoNEXOSale.create;
// associate your main form to the object (to prevent window
   disappearing)
myNexo.MainWindow := Application.MainFormHandle;
…
// call settings window (fFullSettinigs = true to display Advanced
   settings)
myNexo.DisplaySettings(fFullSettings);
…
// make a purchase
// set amount as expected
myNexo.amount := 100; // always expressed in cents
// set some specific settings
myNexo.MerchantReferenceID := "MYREF";
myNexo.Login.RequestOperatorID := "MY NAME";
…
dlgp := Action_payment;
dlgpres := myNexo.DisplayProcessing(dlgp);

// test transaction result
case dlgpres of
  ActionResult_success:
    begin
      processedAmount := myNexo.Payment.ReplyAuthorizedAmount;
      txnBrand := myNexo.Brand;
      txnAuthNumber :=
  myNexo.Payment.ReplyData.PaymentResult.PaymentAcquirerData.ApprovalCod
  e;
      if myNexo.Payment.ReplyData.PaymentResult.OnlineFlag then
        txnMode := TXN_MODE_ONLINE
      else
        txnMode := TXN_MODE_OFFLINE;
```

```
        txnCard :=
    myNexo.Payment.ReplyData.PaymentResult.PaymentInstrumentData.CardData.
    MaskedPAN;
      end;
  else
    begin
      processedAmount := myNexo.Payment.RequestRequestedAmount;
      case dlgpres of
        ActionResult_decline:
          begin
            // payment has been declined
            dlgpresText := TXN_RESULT_DECLINED;
          end;
        ActionResult_incomplete:
          begin
            // payment is incomplete (has been stopped)
            dlgpresText := TXN_RESULT_INCOMPLETE;
          end;
        ActionResult_cancel:
          begin
            // cancelled by user while processing
            dlgpresText := TXN_RESULT_CANCELLED_BY_USER;
          end;
        ActionResult_timeout:
          begin
            // timeout waiting the answer
            dlgpresText := TXN_RESULT_TIMEOUT;
          end;
        ActionResult_exception:
          begin
            // an exception has occurred
            dlgpresText := TXN_RESULT_EXCEPTION;
          end
      else
        begin
          dlgpresText := TXN_RESULT_UNKNOWN_ERROR;
        end;
      end;
    end;
  end;
```

7. And you're all set !