Getting started with
Habari XB Client

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A short guide for the first steps with the xmlBlaster client library

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How Can I Use It?

Habari XB Client is a client component for the xmlBlaster Open Source MOM (message-oriented middleware). With this component and xmlBlaster, it is possible to exchange data between clients written in Delphi, PHP, Perl, Python, C, C++, C#, Visual Basic.net, Flash, J2ME, Java (applications, servlets, applets).

Features

● Publish and subscribe messages

● Messages are asynchronous accessed with the subscribe() method

● Clients receive asynchronous messages with the update() method

● Synchronous message access with the get() method

● Subscribers can use XPath expressions to filter the messages they wish to receive

About xmlBlaster

xmlBlaster is a publish/subscribe and point to point 100% Java based MOM server (message-oriented middleware) which exchanges messages between publishers and subscribers. The message is described with XML-encoded meta information. Messages may contain everything, GIF images, Java objects, Python scripts, XML data, a word document, plain text - just anything. Communication with the server is based on socket, CORBA (using JacORB), RMI, XmlRpc, HTTP or email, clients are free to choose their preferred protocol. Other protocols like SOAP may be plugged in. The xmlBlaster server is pure Java and under LGPL. Read more: http://www.xmlblaster.org/whatis.html

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Installation

Requirements

Development Environment

- CodeGear Delphi
- Indy 10

Message Broker

- XmlBlaster 1.5 (or higher)

Upgrades

If you upgrade from older versions, make a backup of your existing version and make sure that you also have a backup of your own source codes.

If you upgrade from old versions, component properties may have changed and this could cause error messages when you open existing projects with the new version installed.

Starting xmlBlaster

java -jar lib\xmlblaster.jar -cluster.node.id heron

Publish Messages

Example

```
program PublisherTool;

{$APPTYPE CONSOLE}

uses
  btHabariXBExpress,
  JclSysInfo,
  BTLog,
  SysUtils;
```

JclSysInfo is part of the Jedi Code Library (JCL) and contains the GetIPAddress and GetLocalComputerName functions.

In many cases the IP addresses 'localhost' and '127.0.0.1' won't work so these utility functions help to get the current IP address. Note however that these methods could fail if more than one network adapter card is installed.

The BTLog unit contains the declaration of ILogging, an interface which will be used for the logging of debug messages to console.

```
const
  NUM_MESSAGES = 10000;

var
  I: Integer;
```

The demo will publish 10000 messages.

```
begin
  with THabariXBExpress.Create(nil) do
  try
    Host := JclSysInfo.GetIPAddress(GetLocalComputerName);
    UserName := 'SimpleReader';
    PassWord := 'secret';
    OptionsDestination.DestinationName := 'PublisherToolTopic';
    Connect;
    for I := 0 to NUM_MESSAGES - 1 do
    begin
      if ((I+1) mod 100) = 0 then
      begin
        WriteLn(Format('Message %d', [I + 1]));
      end;
      // send the message
      try
        Publish(Format('Message %d', [I + 1]));
      except
        on E: Exception do
        begin
          WriteLn('Exception: ' + E.Message);
        end;
      end;
    end;
    Disconnect;
  finally
    Free;
  end;
  WriteLn('Press any key');
  ReadLn;
end.
```

Subscribe Messages

Example

```
program SubscriberTool;

{$APPTYPE CONSOLE}

uses
  btHabariXBExpress,
  xbQosInterfaces,
  xbQosTypes,
  BTLog,
  JclSysInfo,
  SysUtils;

const
  NUM_MESSAGES = 1000;

var
  SubscribeKey: ISubscribeKey;
  SubscribeQos: ISubscribeQos;
```

```
type
  THabariExpressSubscribeDemo = class(THabariXBExpress)
  private
    procedure MyOnUpdate(const SessionID, Key, Content, Qos:
string);
  end;
```

```
{ THabariExpressSubscribeDemo }

procedure THabariExpressSubscribeDemo.MyOnUpdate(const SessionID,
Key, Content,
  Qos: string);
begin
  Logger.Info(Content);
end;
```

```
begin
  with THabariExpressSubscribeDemo.Create(nil) do
  try
    Host := JclSysInfo.GetIPAddress(GetLocalComputerName);
    UserName := 'SimpleReader';
    PassWord := 'secret';
    OnUpdate := MyOnUpdate;
    Connect;
    SubscribeKey := TSubscribeKey.Create;
    SubscribeKey.Oid := 'PublisherToolTopic';
    SubscribeQos := TSubscribeQos.Create;
    Subscribe(SubscribeKey, SubscribeQos);
    Sleep(10000);
    Disconnect;
  finally
    Free;
  end;
  WriteLn('Press any key');
  ReadLn;
end.
```

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Reference