**Setting Up an ActiveNet Development Environment**

**Previously :** <https://activexperience.active.local/sites/sbs/Products/an/DevTeam/Procedures/Lists/SBS%20Documents/DispForm.aspx?ID=10>

This page contains a basic procedure for setting up a new ActiveNet development environment.

**This page is not 100% complete and things change.  If you have to figure out stuff which wasn't documented well or at all,** **please add it or fix it.**

**Collaboration rules ! !**

DC: (2011.4.19) I just made a major upgrade to this page, since I was getting my IDE going for the first time in quite a while. Much of the content here was quite old. However, I'm sure this isn't all complete or accurate, since I already had various tools and databases configured. Plus, the necessary configuration changes over time as the tools and code do.

NK: (2011.10.17) Updated some sections with more details

So -- the next developer or tester who follows this process -- please follow the above instructions. If you have to figure out something that's not documented, think about the next person, and fix the documentation. If you don't have edit rights to SBS yet, talk to your lead and get them.

**Tools We Use**

* SUN JDK 1.6.0
* NetBeans IDE 7.0.1 (Web & Java EE version)
* TortoiseSVN for version control outside Netbeans
* MS SQL Server 2008 (express)
* Visual Studio .NET 2005
* ActiveReport Module for .NET 2.0 (SP1)
* IIS
* Visio Enterprise Architect (Optional  needed for maintaining ERD)
* ServletExec + Hotfix for Dec 2005 (Optional)

**Install tools needed for servlet development**

**Install JDK**

* Download most recent Java 1.6 JDK from <http://www.oracle.com/technetwork/java/javase/downloads/index.html>
* Install with defaults

AR : I had issues running NetBeans 7.0.1 with JDK 1.8 & had to install JDK 1.7

Cannot load C:\Java\jdk1.8.0\_20\jre\bin\server\jvm.dll. is not a valid Win32 application. (193)

Falling back to running Java in a separate process; DLL cannot be loaded (64-bit DLL?).

<https://netbeans.org/bugzilla/show_bug.cgi?id=200324>

<https://netbeans.org/bugzilla/show_bug.cgi?id=229191>

<http://stackoverflow.com/questions/22944588/bug-can-not-start-netbeans-with-jdk-8>

**Install NetBeans & GlassFish**

* Download Netbeans 7.01 Java bundle from <http://netbeans.org/downloads/> or <https://netbeans.org/downloads/7.0.1/index.html>
* Install with defaults

**Install SQL Server**

* Login to Active Network MSDN account and install SQL Server.

          NK installed SQL Server 2008 R2 Express (SQL Server 2008 can be installed too). Depending upon your system download 32-bit or 64-bit Database and Management Tools with defaults.

**Install TortoiseSVN**

This is a convenient tool for initially setup up your local repository, and otherwise accessing the repo outside of Netbeans.

* Download and install from <http://tortoisesvn.net/downloads.html>

**Install Visio Enterprise Architects**

* If not installed on your machine then install it from [\\dsfiler01\apps\oldMicrosoft\Visual](https://activexperience.active.local/docs/DOC-133419)Studio 2005 Developer Team Edition\visio.
* NK: It was already installed on my machine

**Setup and configure servlet development environment**

**Check out Source Code & Database**

* Create a folder for the ActiveNet trunk -- mine is C:\SVN\ActiveNet\trunk
* The first time, you'll need to enter your SVN credentials. If you don't have them already, you can get them from IT through Service-Now. Make sure you specify you need write access to the ActiveNet repository.
* You can do an an entire checkout of the trunk into this folder -- in SVN this is at <https://fndsvn.dev.activenetwork.com/ActiveNet/trunk>. In the rest of this documentation, this will be called <trunk>.
* This is ~3GB of download. It's safer to have the enter repository local, to make sure you're not missing anything. But alternatively, you can create subfolders of trunk for just what is needed, and check them out individually.Here are the required folders for developers:
  + ActiveNetPackage
  + ActiveNetServlet
  + Databases
  + DBSchema
  + PassProduction
  + PointOfSale
  + RServerII
  + ServletAP
  + Third Party Stuff

**Create SQL Server databases**

If it is a new SQL Server install create Database Engine. Note that if you're using SQL Express, the engine name must end with \SQLExpress

**Database**

* Create user in SQL Server, normally we use (user: recware / passwd: safari)
* Create a folder for your own databases -- mine is C:\SqlData
* Unzip the cdb6 database from SVN folder trunk/QA Documents/Regression DB/Mini\_Regression\_Reg\_Ins\_Tax\_Lea\_Res.zip to your data folder
* Use SSMS to create a new database by restoring it from Mini\_Regression\_Reg\_Ins\_Tax\_Lea\_Res.bak file.
* Run AnUpsizer.exe from SVN folder trunk\DBSchema\AnUpsizer.exe
  + Select the data dictionary ActiveNetErd.xml from the SVN folder trunk\DBSchema.
  + Enter the server credentials as shown below. Note that if you're using SQL Express, the server name is localhost\SQLExpress
  + Leave the checkboxes defaulted as shown below

**ActiveNetSites**

* Create a new database called ActiveNetSites.
* Use AnUpsizer to create the necessary schema objects
  + Change Data Dictionary to <trunk>\DBSchema\ActiveNetSites.xml.
  + Change the database to ActiveNetSites.
  + Then click Upsize.
* DC: This likely requires additional steps to either setup data, or attach a populated database. I can't tell because I already have a populated database. NK: No additional steps were required for me.

**Update sdi.ini**

* Copy the sdi\_template.ini from the SVN folder Activenet\trunk\ini to the Glassfish domain1 folder (generally, C:\Program Files\glassfish-3.0.1\glassfish\domains\domain1\config) and rename as sdi.ini

NK: It was C:\Program Files\glassfish-3.1.1\glassfish\domains\domain1 for me. Also, ensure that the file permission is set correctly. I had to give Full Control to the Users for it to work for me.

AR: I had to copy the files to my user folder in order for the application to run C:\Users\arao\.netbeans\7.0\config\GF3\domain\sd.ini

* Update the copied sdi.ini file up with correct hostname and database connection values. The settings that may need to be changed are:
  + jdbc\_url: If you're using SQL Express, change "localhost:1433" to "localhost\sqlexpress"; if database is other than ActiveNetSmallQA, change that.
  + ansites\_jdbc\_url: Set it to ActiveNetSites. jdbc:sqlserver://localhost:1433;DatabaseName=ActiveNetSites
  + db\_user:
  + db\_password: What you see is the encrypted version of the development password "safari". If you used a different password, you can enter it here, unencrypted, and the servlet will auto-encrypt it on first use.
  + html\_path: Should point to your <trunk>\ActiveNetServlet\web folder. Make sure to replace \ with \\ throughout the path.
  + writefiledata: Should point to your <trunk>\ActiveNetServlet\filedata folder. Make sure to replace \ with \\ throughout the path.
  + Also, comment out static\_files

**Test load of ActiveNetServlet project**

* Open Netbeans
* File / Open Project for ActiveNetServlet; make sure open required projects is chosen.
* The project name should be black. If it's red, there are unresolved references which need to be fixed.
* On the Projects tab, right-click on ActiveNetServlet, open Properties, select Run, and check that server is Glassfish.
* On the Projects tab, right-click on ActiveNetServlet, and make it the main project.
* At this point, it should be possible to run project without compile errors
  + (DC) In fact, I had bundle resolution errors until I restarted my PC, but they cleared up
* In a browser, open <http://localhost:8080/ActiveNetServlet/adminLogin.sdi>
  + Application should load up in the browser.
  + Log in with default username and password to try out (recware / safari)

**Open projects**

* Add new  library, called 'JDBC' and from ActiveNetSource\Third Party Stuff\Files  add sqljdbc.jar, msbase.jar, mssqlserver.jar and msutil.jar to that  library
* Add another new library called 'Servlet' and point to ActiveNetSource\ServletAPI\servlet-api.jar
* Resolve server problems if there is  add and set to Sun App server
* Right click the ActiveNetServlet project / Properties / Run / Server

**Setup and configure report execution environment**

The following steps are necessary to execute reports, which are built with a .Net-based tool called ActiveReports.

**Install Microsoft .NET Framework 2.0 (or installing MS Visual Studio 2005 without SQL Server 2005)**

* The .Net Framework is necessary for running the reports. However, you can skip ahead and install Visual Studio 2005, which will include the installation of the framework. However, in order to simply run reports, all you need is the framework.

**Install Data Dynamics ActiveReports for .NET 3.0**

ActiveReports is a 3rd-party reporting add-on to .NET which aids in reports creation similar to functionality which Crystal Reports provides.

Get the latest version of Active Reports at <http://www.datadynamics.com/Forums/72/ShowForum.aspx>

**Configure IIS**

* Add/remove Windows Components.
* Select IIS.
* If you don't have the Windows XP CD(s), download ISO disk image from our MSDN subscription and create CD.
* Internet Information Services.
* RServerWeb:

NOTE: If you subsequently get a security error when trying to start the RServerWeb application from Visual Studio (such as 'Access to the path C:\WINDOWS\Microsoft.NET\Framework\ \Temporary ASP.NET Files\  is denied' you may need to run aspnet\_regiis (found in the root of c:\WINDOWS\Microsoft.NET\Framework\  'Edit' button) have Integrated Windows Authentication enabled.

**Install Visual Studio 2005**

ds1\APPLICATIONS\Microsoft\Visual Studio 2005 Developer Team Edition

Solution file RServerII.sln is under CVS Repo: ActiveNetSource\RServerII

Set the RServerWeb as the startup project and RServer.aspx as the starup page

Before starting Visual Studio, go to SVN and look in the ActiveNetSource\Utilities directory.

There   is a new folder called Active Reports License Generator.   In it you   will find 2 files ï¿½ the license generator and a  ReadMe.txt file that   explains how to register this new version of  Active Reports on your   machine.

**Edit Hosts**

\WINDOWS\system32\drivers\etc\hosts

Add entries

63.150.144.125 RNWS01

172.25.8.154 test1.recware.com

172.25.8.154 testactivenet1.recware.com

activenetls.active.com

**Modify activenet.ini**

For Netbeans, here is what I have for the sdi.ini.

filedata=/ActiveNetServlet

writefiledata=D:  
ActiveNet  
ActiveNetSource  
ActiveNetServlet  
build  
web

For local IIS, here is what I have for the sdi.ini

filedata=filedata

writefiledata=C:

Program Files  
New Atlanta  
ServletExec ISAPI  
webapps  
default  
activenet  
filedata

**Installing Optional Applications**

Install ServletExec & Configure IIS for local deployment

ServletExec configuration settings can be copied from <http://jacksu/servletexec/admin>