



AA Adaptor v1.6 User's Guide

A utility for "AA OrgChart Web Part" for
Corporate Organizational Chart

Release 1.6
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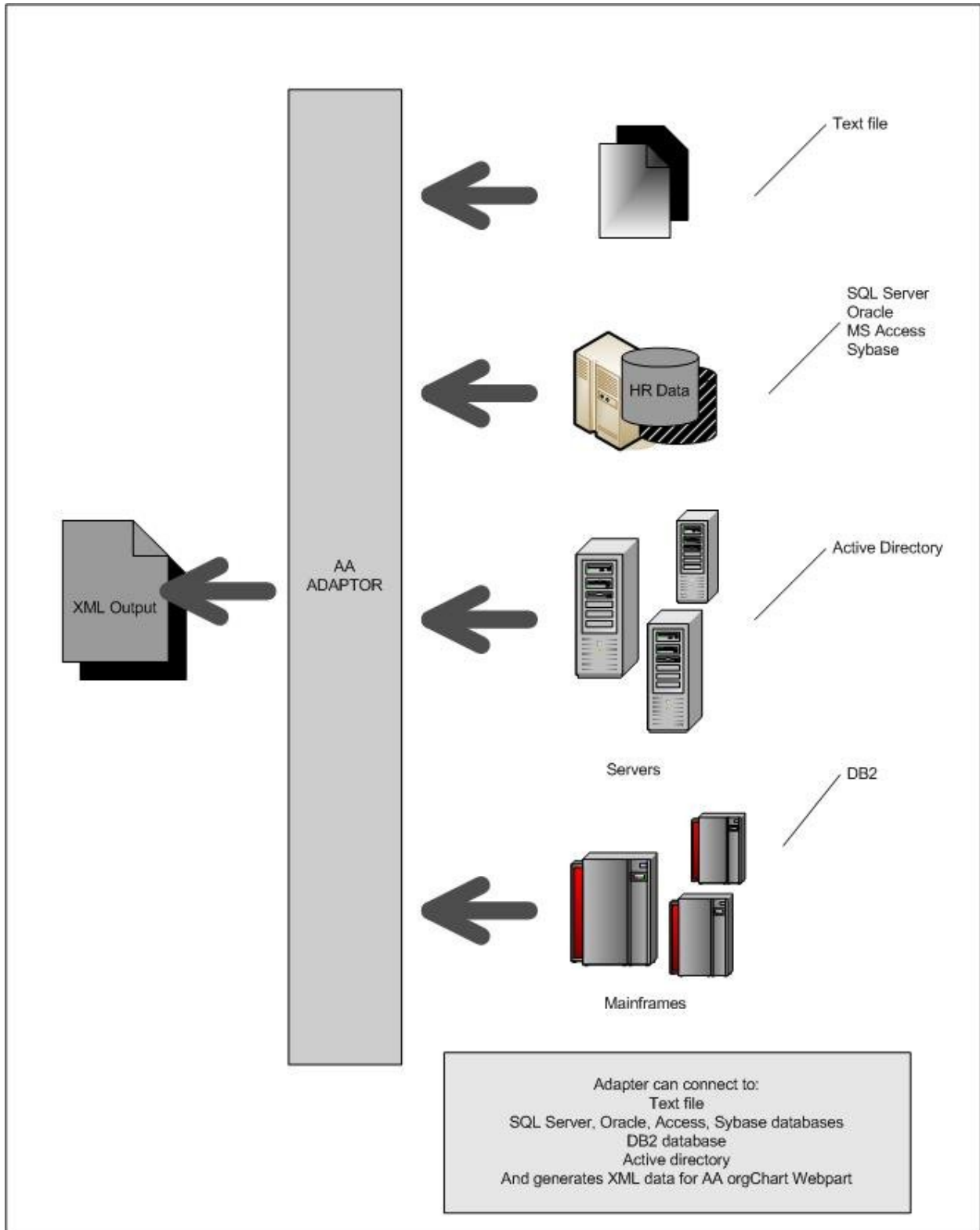
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Chapter 1: General Overview

Overview:

“AA Adapter” utility program is used to connect to the HR data in a database, Excel file, text file, active directory or SharePoint List and generates HR data in the XML format that “AA OrgChart Webpart” or “XML Organization Chart .Net” requires.



“AA Adapter” is an application program that can be scheduled to run at specific time and generates the XML required for the above programs.

Application uses AADBAdapter.Wrapper.exe.config file to get the configuration information such as connection string, data media, table and fields in the database.

AA Adaptor comes with a sample access database with a table (ReportTable) and sample Excel file and sample text file which all contain personal information.

You need to change application configuration (AADBAdapter.Wrapper.exe.config file) to point to your data storage and your HR table or HR View. If all your HR information doesn't exist in one table you can create a view and use the View as your HR data table to AA Adaptor.

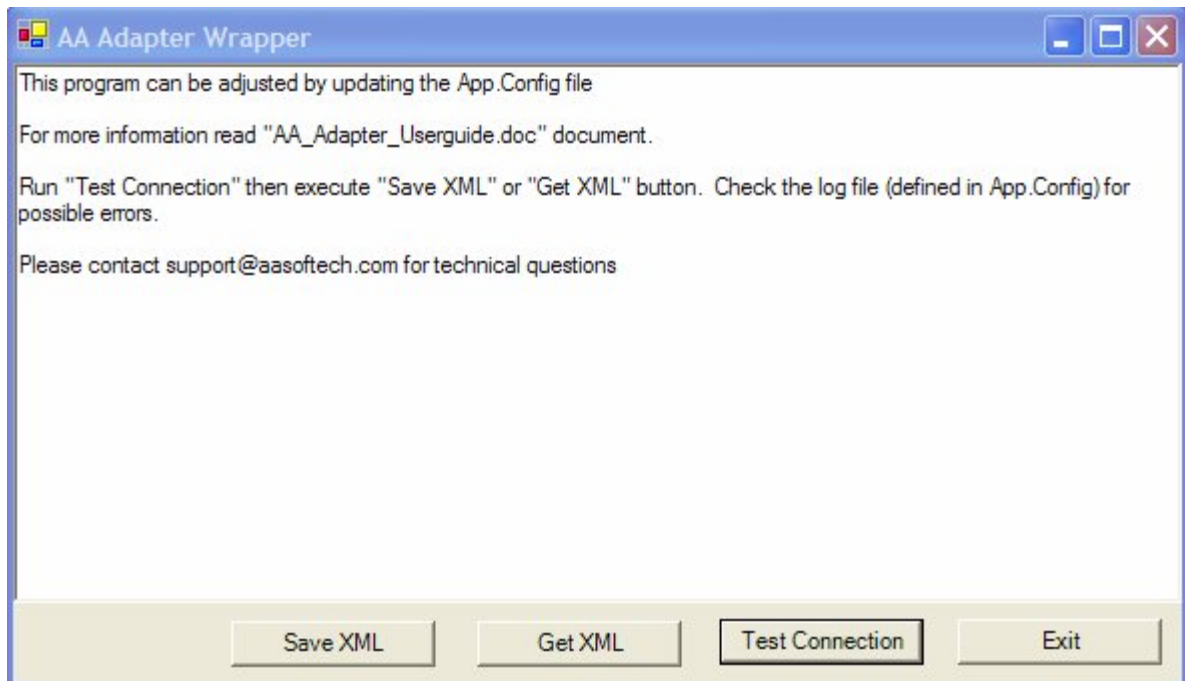
AA Adaptor has the option to log its activity in the log.file defined in the configuration file. If the log file is not available the application has the option to write the events in the event log.

AA Adaptor can be executed either as interactive mode or silent mode.

In the Interactive mode you can see the adaptor wrapper and can use the interface to:

- Test your connection to the database.
- Get the XML file extracted from the database in the memory
- Or Save XML data in the hard drive.

AA Adaptor wrapper has a simple interface to do one of the above functions as you see in below.



By changing the interactive mode in the AADBAdapter.Wrapper.exe.config file you can run the application in the silent mode.

When the application is set to run in a silent mode you can schedule the program to run at certain time.

It is recommended to test the application in the interactive mode before running it in silent mode.

How to configure AA Adaptor:

AA Adaptor use AADBAdapter.Wrapper.exe.config as the configuration file.

Following is the content of AADBAdapter.Wrapper.exe.config file:

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>

  <appSettings>

    <!-- Connection String for Access databases.-->
    <add key="ConnectionString"
value="Provider=Microsoft.Jet.OLEDB.4.0;Data Source=C:\Data\Chart.Mdb"/>

    <!-- Connection String for Text File-->
```

```

        <!--<add key="ConnectionString" value="C:\
Data\ReportTable.txt"/>-->

        <!--Connection String for SQL databases with Standard Security-->
        <!--<add key="ConnectionString" value="Data
Source=Your_Server_Name;Initial
Catalog=Your_Database_Name;UserId=Your_Username;Password=Your_Password;"/>-->

        <!--Connection String for SQL databases with Trusted security-->
        <!--<add key="ConnectionString" value="Data Source=JOB;Initial
Catalog=PointTracker;Integrated Security=SSPI;"/>-->

        <!--Active Directory FUTURE USE, CURRENT NOT ENABLED-->
        <!--<add key="ConnectionString" value="Provider=ADSDSOObject" />-->
->

<!--Excel Connection String-->
<!--<add key="ConnectionString" value="DRIVER=Microsoft Excel Driver
(*.xls);MaxScanRows=8;DBQ=D:\Data\OrgChart.xls;FIL=excel 8.0;HDR=Yes"/>-->

<add key="Domain" value="Your domain"/>
<add key="UserName" value="your username" />
<add key="Password" value="Your password" />
<!-- The DatabaseType
    A = Access
    O = Oracle
    S = SQL Server
    T = Text File
    E = Excel File
-->
<add key="DatabaseType" value="E"/>

<!-- Not sure what this key does-->
<add key="AutoExpand3Level" value="true"/>

<!-- The table or Excel Sheet name which contains the
Organization information -->
<add key="TableName" value="ReportTable"/>

<!-- The parent field in the organization table. -->
<add key="ParentField" value="MGR_ID"/>

<!-- The Child field in the organization table. -->
<add key="ChildField" value="ORG_ID"/>

<!-- The field to order by in the organization table. -->
<add key="OrderField" value="Name"/>

<!-- The secretary field in the organization table. -->
<add key="SecretaryField" value="Secretary"/>

<!-- One of the fields in the organization table. -->
<add key="Field0" value="Name"/>

<!-- One of the fields in the organization table. -->
<add key="Field1" value="JobTitle"/>

```

```

<!-- One of the fields in the organization table. -->
<add key="Field2" value="DeptName"/>

<!-- One of the fields in the organization table. -->
<add key="Field3" value="Email"/>

<!-- One of the fields in the organization table. -->
<add key="Field4" value="Telephone"/>

<!-- One of the fields in the organization table. -->
<add key="Field5" value="Secretary"/>

<!-- One of the fields in the organization table. -->
<add key="Field6" value="Picture"/>

<!-- One of the fields in the organization table. -->
<add key="Field7" value="Category"/>

<!-- Determines if a log of actions is output to a file.
  Y = log is created
  N = log is not created
-->
<add key="Logging" value="Y"/>

<!-- Path to the log file -->
<add key="LoggingPath" value="C:\Data\log.txt"/>

<!-- Determines if the user interface is displayed
  Possible values are;
  1. interactive : The user interface displays. [case does
not matter.  silent = Silent]
  2. silent      : The user interface does not display,
XML is automatically written out.  Uses the key 'OutputLocation' to determine
where to write the output file. [case does not matter.  interactive =
Interactive]
-->
<add key="SilentMode" value="N"/>

<!-- Determines the location of the XML file when the
ExecutionMode='silent'-->
<add key="OutputLocation" value="C:\ Data\OrgChart.xml"/>

```

</appSettings>

</configuration>

Following are the setting in the AADBAdapter.Wrapper.exe.config file that can be modified for each site.

Key	Purpose	Example														
ConnectionString	Define the location of the source data.	<add key="ConnectionString" value="Provider=Microsoft.Jet.OLEDB.4.0;Data Source=C:\Chart.Mdb"/>														
DatabaseType	The type of datasource defined by the ConnetionString key.	<p><add key="DatabaseType" value="A"/></p> <table border="1"> <thead> <tr> <th>Accepted Values</th> <th>Purpose</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Access</td> </tr> <tr> <td>O</td> <td>Oracle</td> </tr> <tr> <td>S</td> <td>SQL Server</td> </tr> <tr> <td>T</td> <td>Text File</td> </tr> <tr> <td>E</td> <td>Excel File</td> </tr> <tr> <td>P</td> <td>SharePoint List</td> </tr> </tbody> </table>	Accepted Values	Purpose	A	Access	O	Oracle	S	SQL Server	T	Text File	E	Excel File	P	SharePoint List
Accepted Values	Purpose															
A	Access															
O	Oracle															
S	SQL Server															
T	Text File															
E	Excel File															
P	SharePoint List															

TableName	The name of the Organization table or view in the data source or The sheet name of Excel file or The name of SharePoint list.	<add key="TableName" value="ReportTable"/>						
ParentField	The parent field in the Organization table.	<add key="ParentField" value="MGR_ID"/>						
ChildField	The child field in the Organization table.	<add key="ChildField" value="ORG_ID"/>						
OrderField	How the XML data is ordered when output. The data is always ordered ascending.	<add key="OrderField" value="Name"/>						
SecretaryField	The secretary field in the Organization table.	<add key="SecretaryField" value="Secretary"/>						
Field0, Field1, Field2, Field3...Field7	Any eight fields defined in the Organization table.	<add key="Field0" value="Name"/> <add key="Field7" value="Category"/>						
Logging	Determines if a log file is written.	<add key="Logging" value="N"/> <table border="1" data-bbox="1033 1127 1656 1385"> <thead> <tr> <th>Accepted Values</th> <th>Purpose</th> </tr> </thead> <tbody> <tr> <td>N</td> <td>Log file is not written.</td> </tr> <tr> <td>Y</td> <td>Log file is written.</td> </tr> </tbody> </table>	Accepted Values	Purpose	N	Log file is not written.	Y	Log file is written.
Accepted Values	Purpose							
N	Log file is not written.							
Y	Log file is written.							

LoggingPath	The location to place the log file when the Logging key equals "Y".	<add key="LoggingPath" value="C:\Adapterlog.txt"/>						
SilentMode	Determines if the user interface displays when running the program.	<p><add key="SilentMode" value="N"/></p> <table border="1"> <thead> <tr> <th>Accepted Values</th> <th>Purpose</th> </tr> </thead> <tbody> <tr> <td>N</td> <td>User interface does NOT display.</td> </tr> <tr> <td>Y</td> <td>User interface does display.</td> </tr> </tbody> </table>	Accepted Values	Purpose	N	User interface does NOT display.	Y	User interface does display.
Accepted Values	Purpose							
N	User interface does NOT display.							
Y	User interface does display.							
OutputLocation	The location to place the XML file when the SilentMode key equals "Y".	<add key="OutputLocation" value="C:\OrgChart.xml"/>						

By changing the connection string you can point to your own database. There are several examples to connect to access, sql server, excel or text file in the AADBAdapter.Wrapper.exe.config file.

Examples:

ConnectionString example:

Condition	Sample
Connect to MSAccess (.Net 1.0)	<pre><add key="ConnectionString" value="Provider=Microsoft.Jet.OLEDB.4.0;Data Source=C:\AADBAdaptor\Chart.Mdb"/>--></pre>
Connect to MSAccess (.Net 2.0)	<pre><add key="ConnectionString" value="DRIVER={Microsoft Access Driver (*.mdb)};DBQ=C:\Projects\Data\Chart.Mdb"/></pre>
Connect to SQL Server	<pre><add key="ConnectionString" value="Provider=SQLOLEDB;Data Source=local;Initial Catalog=ChartSQL;UserId=WSS2DEV\abcd;Password=123456;"/></pre>
Connect to Excel	<pre><add key="ConnectionString" value="DRIVER=Microsoft Excel Driver (*.xls);MaxScanRows=8;DBQ=C:\Data\OrgChart.xls;FIL=excel 8.0;HDR=Yes"/></pre>
Connect to Text	<pre><add key="ConnectionString" value="C:\Projects\Data\ReportTable.txt"/></pre>
Connect to SharePoint List	<pre><add key="ConnectionString" value="http://your SharePoint Server/" /></pre>

Table Name example:

Accepted Values	Purpose
Connect to MSAccess	<pre><add key="TableName" value="ReportTable"/></pre>
Connect to SQL Server	<pre><add key="TableName" value="ReportTable"/></pre>

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Connect to Text	<code><add key="TableName" value="ReportTable"/></code>
Connect to Excel	<code><add key="TableName" value="[Sheet1\$]"/></code>
Connect to SharePoint List	<code><add key="TableName" value="List1"/></code>

Chapter 2: How to use "AA Adaptor" Utility program

1- Please test the adapter first with the access database coming with the kit.

First change C:\Data\Chart.Mdb to the location where the access database is located.

Use the sample path for logging file at the end of AADBAdaptor.Wrapper.exe.config file.

```
<add key="LoggingPath" value="C:\Log\TestAdapter\log.txt"/>
```

2- Run "AADBAdaptor.Wrapper.exe" program .

First click on TestConnection to make sure you can connect to the database. Then click on SaveXML Data. Choose where you want to save the XML file and create it in that exact location. If you get an error, look at the log file. If the log file is not created, look at the event log.

3- Configure "AADBAdaptor.Wrapper.exe.config" program to point to your database.

Within AA Adaptor zip file there are several sample AADBAdaptor.Wrapper.exe.config files that are pointing to:

Access: ("Sample_Access_AADBAdaptor.Wrapper.exe.config")

Text file: ("Sample_ConnectToText_AADBAdaptor.Wrapper.exe.config")

Excel: ("Sample_ConnectToExcel_AADBAdaptor.Wrapper.exe.config")

SharePoint List: ("Sample_ConnectToSharePoint_AADBAdaptor.Wrapper.exe.config")

Based on which data source you would like to connect AA Adaptor, rename the corresponding config file to AADBAdaptor.Wrapper.exe.config.

Scheduling AA Adaptor utility program:

To generate XML data used by "AA Adaptor Orgchart" you can use windows scheduler program to schedule "AADBAdaptor.Wrapper.exe".

Chapter 3: How to connect to SharePoint 2007 database

First create a view using the script CreateSharePointView.SQL submit in this kit in Sharepoint database.

Following is the script to generate the View.

```
--Create View in SharePoint Shared Services Database (default name is SharedServices1_DB)
```

```
USE [SharedServices1_DB]
```

```
GO
```

```
/****** Object: View [dbo].[vu_Chart] Script Date: 02/20/2007 21:52:38 *****/
```

```
SET ANSI_NULLS ON
```

```
GO
```

```
SET QUOTED_IDENTIFIER ON
```

```
GO
```

```
CREATE View [dbo].[vu_Chart] AS
```

```
SELECT aa.PreferredName as 'Name', bb.Title as 'JobTitle', bb.Department as 'DeptName',  
aa.ORG_ID, aa.MGR_ID, '<Img src=' + '/wpresources/HRWebparts/HRData/images/not_img.jpg>'  
as Picture, '' + aa.Email + '' as Email, bb.Telephone, '0' as 'Secretary', 'Employee' as 'Category'
```

```
FROM
```

```
(SELECT UserProfile_Full.RecordID, UserProfile_Full.RecordID AS 'ORG_ID',  
UserProfile_Full.NTName, UserProfile_Full.PreferredName, UserProfile_Full.Email,  
UserProfile_Full.Manager, UserProfile_Full.DataSource, UserProfile_Full_1.RecordID AS 'MGR_ID',
```

```
(CASE WHEN UserProfile_Full.Manager IS NULL THEN 0 ELSE 1 END) AS 'HasParent',
```

```
(CASE WHEN b.childcount IS NULL THEN 0 ELSE b.childcount END) AS childcount
```

```
FROM UserProfile_Full
```

```
LEFT OUTER JOIN UserProfile_Full AS UserProfile_Full_1
```

```
ON UserProfile_Full.Manager = UserProfile_Full_1.NTName
```

```
LEFT OUTER JOIN
```

```
(SELECT Manager, COUNT(Manager) AS 'ChildCount' FROM UserProfile_Full AS  
UserProfile_Full_2 WHERE (Email LIKE '%aa%') AND (Manager IS NOT NULL) GROUP BY
```

```
Manager) AS b
```

```
ON UserProfile_Full.NTName = b.Manager
```

```
WHERE (UserProfile_Full.Email LIKE '%aa%')) AS aa
```

```
LEFT OUTER JOIN (
```

```
SELECT a_1.RecordID, a_1.PropertyVal AS 'Telephone', CAST(b_1.PropertyVal AS varchar(250)) AS
'Title', CAST(c.PropertyVal AS varchar(250)) AS 'Department'
FROM
    (SELECT RecordID, PropertyVal FROM UserProfileValue WHERE (PropertyID = 8)) AS a_1
INNER JOIN (SELECT RecordID, PropertyVal FROM UserProfileValue AS UserProfileValue_2 WHERE
(PropertyID = 13))
    AS b_1
ON a_1.RecordID = b_1.RecordID
INNER JOIN
    (SELECT RecordID, PropertyVal FROM UserProfileValue AS UserProfileValue_1 WHERE (PropertyID
= 14)) AS c ON a_1.RecordID = c.RecordID) AS bb ON aa.RecordID = bb.RecordID
```

Then change the connection string of this file to point to your sharepoint database:

```
<add key="ConnectionString" value="Server=WSS2DEV;Database=SharedServices1_DB;Integrated
Security=SSPI;"/>
```

Run "AADBAdapter.Wrapper.exe" . First click on TestConnection to make sure you can connect to the database. Then click on SaveXML Data. And Choose where you want to save the XML file. The XML file should be created where you have chosen. Make sure the file name is Data.XML.

When Data XML is created. Move the XML file into the directory where sample Data.XML exist. It should be under \wpresources\HRWebParts\HRData\Data.XML directory. Reset IIS server and refresh the page.

Chapter 4: How to connect to Active Directory to extract personal information.

You can either import Active Directory to SharePoint 2007 database or from SQL server link to active directory.

Either way you need to connect to the database (either SharePoint database or SQL server) to get Active Directory information. Previous sections describes to connect to SQL server or SharePoint database.

To link to Active directory from SQL server follow instruction written in the link in below:

http://articles.techrepublic.com.com/5100-6345_11-5259887-2.html

Basically you need to link to Active Directory using the following SQL Script:

```
EXEC
```

```
sp_addlinkedserver 'ADSI', 'Active Directory Services 2.5',  
'ADSDSOObject', 'adsdatasource'
```

Following is the View that can be used by AA Adaptor to get Active directory data.

```
SELECT
```

```
* FROM OpenQuery(ADSI, 'SELECT title, displayName, sAMAccountName,  
givenName, telephoneNumber, facsimileTelephoneNumber, sn FROM  
"LDAP://DEVDC" where objectClass = "User"')
```

Generate the above SQL as View and pass as TableName to AADBAdapter.Wrapper.exe.config of "AA. Adaptor"

Chapter 5: XML data format used in "AA OrgChart WebPart" Web Parts.

"AA OrgChart WebPart" uses XML data as input file.

Following is the XML data used in "AA OrgChart WebPart".

- <RS>

```
<ROW ChildCount="20" HasParent="0" Name="RAMZI,SARA" JobTitle="VP"
DeptName="HR" ORG_ID="81" MGR_ID="1111" Picture="<Img
src='/images/15.jpg'>" Email="<a
href='mailto:sales@asoftech.com'>sales@asoftech.com</a>" Telephone="123-456-
7890" Secretary="False" Category="Employee" />
```

```
<ROW ChildCount="0" HasParent="1" Name="LOMBARDO,KAREN"
JobTitle="STAFF SPEC II" DeptName="Communication Analysis" ORG_ID="8"
MGR_ID="81" Picture="<Img src='/images/2.jpg'>" Email="<a
href='mailto:sales@asoftech.com'>sales@asoftech.com</a>" Telephone="123-456-
7890" Secretary="False" Category="Employee" />
```

```
<ROW ChildCount="0" HasParent="1" Name="SETZLER,DONALD" JobTitle="MGR
III" DeptName="Admin & Analysis" ORG_ID="10" MGR_ID="81" Picture="<Img
src='/images/3.jpg'>" Email="<a
href='mailto:sales@asoftech.com'>sales@asoftech.com</a>" Telephone="123-456-
7890" Secretary="False" Category="Employee" />
```

```
<ROW ChildCount="0" HasParent="1" Name="WOOD,DEBRA" JobTitle="MGR III"
DeptName="Process & Performance Management" ORG_ID="12" MGR_ID="81"
Picture="<Img src='/images/3.jpg'>" Email="<a
href='mailto:sales@asoftech.com'>sales@asoftech.com</a>" Telephone="123-456-
7890" Secretary="False" Category="Employee" />
```

```
<ROW ChildCount="1" HasParent="1" Name="FAGAN,THOMAS" JobTitle="MGR
III" DeptName="Software Development Support" ORG_ID="11565" MGR_ID="2"
Picture="<Img src= '/wpresources/HRWebparts/HRData/images /3.jpg'>"
Email="<a href='mailto:sales@asoftech.com'>sales@asoftech.com</a>"
Telephone="123-456-7890" Secretary="False" Category="Employee" />
```

</RS>

Elements used in the XML data.

MGR_ID: SupervisorID field used within the application.

ORG_ID: EmployeeID field used within the application.

Name: Employee Name

Secretary: Set to either true or false to define if the employee is a secretary

JobTitle: Employee Job Title

DeptName: Employee Department Name

Email: Employee Email

Telephone: Employee Telephone

Picture: html image tag to reference Employee Picture, such as : “”

Category: Employee Type in the Organization.

ChildCount: Value 1 or 0 to show if the employee is a manager.

HasParent: Value 1 or 0 to show if the employee has a manager.