



AD Phonebook 2.2

Installation and configuration



Table of Contents

Introduction.....	3
AD Self Update.....	3
Technical Support.....	3
Prerequisites.....	3
Installation.....	3
Adding a service account and domain using AD Configuration	4
Accessing the AD Phonebook web page	5
Accessing the Admin page.....	5
Who is shown in the phonebook?.....	6
Viewing the phonebook	7
Active Directory and SQL cache modes.....	8
Controlling which users will be displayed in the phonebook.....	9
Customization.....	10
Simple and advanced search boxes.....	10
Column filters	11
Sorting the entries.....	12
Changing the theme	13
Enabling photos.....	14
Changing the header and footer text.....	15
Adding your logo	16
Changing the title	16
Adding and removing attributes from the home page	17
Export options	18
Using HTTPS and SSL Certificates	19
Searching across multiple domains	19
Enabling pop-up contacts.....	19
Dialing instructions page	20
Querying the phonebook from other web pages.....	20
Example	21
Simple example	21
Import files and folders explained.....	22
Troubleshooting	23
Error: 401 - Unauthorized: Access is denied due to invalid credentials.....	23

Introduction

AD Phonebook is a browser based program that provides quick and easy access to your organizations contact information stored in Active Directory.

AD Self Update

AD Self Update allows your users to update their own Active Directory contact information ensuring your phonebook is as up to date as possible. To read more about [AD Self Update](#) click [here](#). AD Self Update can be purchased separately.

Technical Support

This document will walk you through AD Phonebook installation and configuration. Should you have any questions please contact us at support@dovestones.com.

Prerequisites

The following software should be installed before installing the application:

- Windows Server 2003, 2003 R2, 2008, 2008 R2 .
- Internet Information Services (IIS) 6.0, 7.0 or 7.5 with World Wide Web Service installed.
- Under IIS 7 [enable IIS 6 Management Compatibility](#).
- Microsoft .NET Framework 3.5 Service Pack 1 ([Download here](#)).
- ASP.NET 2.0 Enabled, In IIS Manager set to 'Allow' under 'Web Service Extensions'.
 - If you don't see ASP.NET under Web Service Extensions click [here](#)

You will also need:

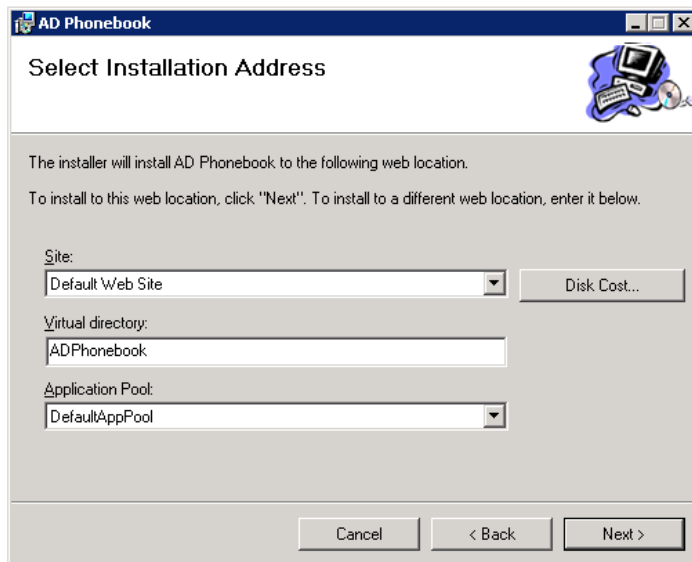
- A service account that has permissions to [read](#) Active Directory user objects, this should be a standard Active Directory user account that has a strong password and 'Password Never Expires' checked.

Installation

Please follow these steps to deploy the application:

1. Run the *ADPhonebookSetup.msi* file and click *Next* at the welcome screen
2. Select the appropriate *Site*, *Virtual Directory* and *Application Pool* (example below), in many cases the *Default Web Site* and *DefaultAppPool* are fine.

Note: Choose an application pool that supports .NET Framework 2.0.

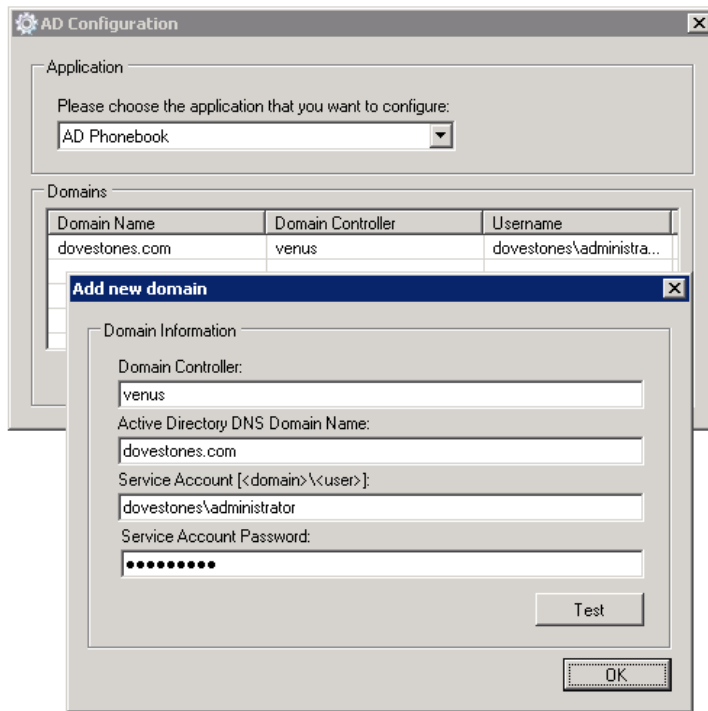


3. Wait for the installation to complete then click *Finish*.
4. Upon a successful installation, the installer should have installed the following:
 - a. Web application: The web application should be visible in IIS Manager as a Virtual Directory under the web site you chose in Step 2.
 - b. AD Configuration: A program that you will use to add the domain(s) and a service account used to read Active Directory (see below)

Adding a service account and domain using AD Configuration

Follow these steps to configure the Active Directory domain(s) that the application will use.

1. Open the *AD Configuration* utility from the *Start Menu* → *All Programs* → *Dovestones Software* → *AD Phonebook*.
2. From the *Application* drop down list, choose *AD Phonebook*.
3. Click on the *Add Domain* button.
4. Enter the required domain information (see image below) and user credentials then click *OK*.
Note: You must supply user credentials for a domain administrator that has sufficient permissions to read user and contact objects.



5. Repeat steps 3 and 4 to add more domains (optional).
6. Press 'Test' to check the username and password are valid.
7. Basic configuration is now complete close the program.

Accessing the AD Phonebook web page

When you have added your service account using the AD Configuration tool you can visit the AD Phonebook web page, the address depends on the Virtual Directory name you chose during the installation (step 2), by default this is ADPhonebook. Your URL would be the web site address followed by the Virtual Directory name.

Example URLs:

<http://servername/adphonebook/>
<http://172.168.0.100/adphonebook>
<https://intranet.dovestones.com/adphonebook/>

Accessing the Admin page

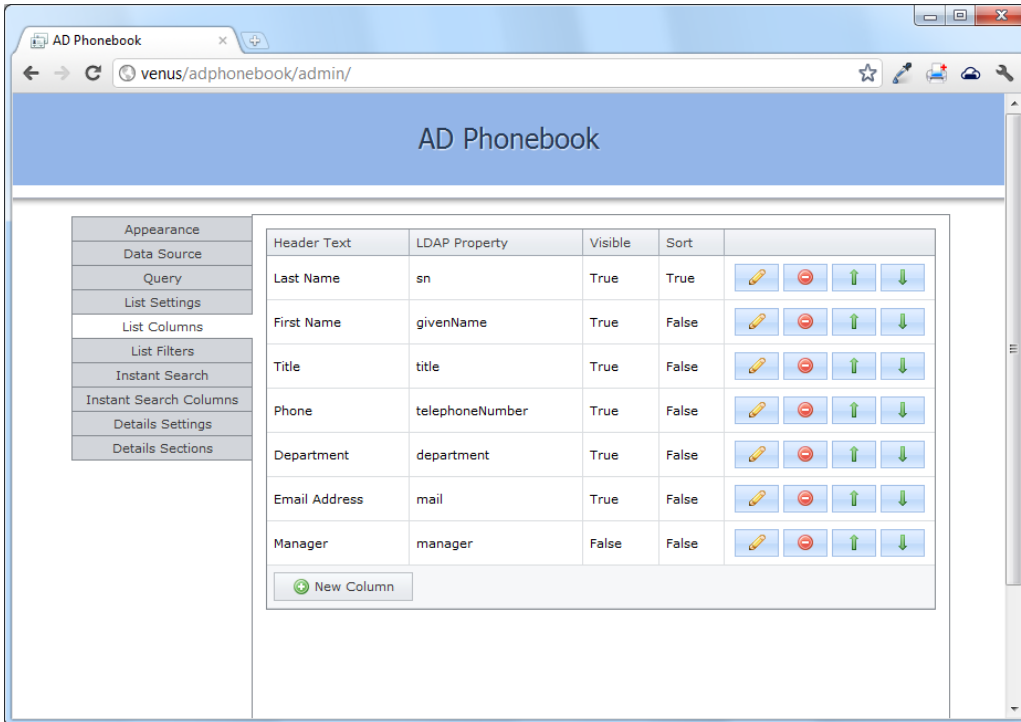
The Admin page allows you to customize the phonebook, the Admin page can be accessed by adding /Admin to the phonebook URL. Please note you will need to enable Windows Authentication on the Admin directory via the Internet Information Services (IIS) Manager console.

Example URLs:

<http://servername/adphonebook/admin/>
<http://172.168.0.100/adphonebook/admin/>
<https://intranet.dovestones.com/adphonebook/admin/>

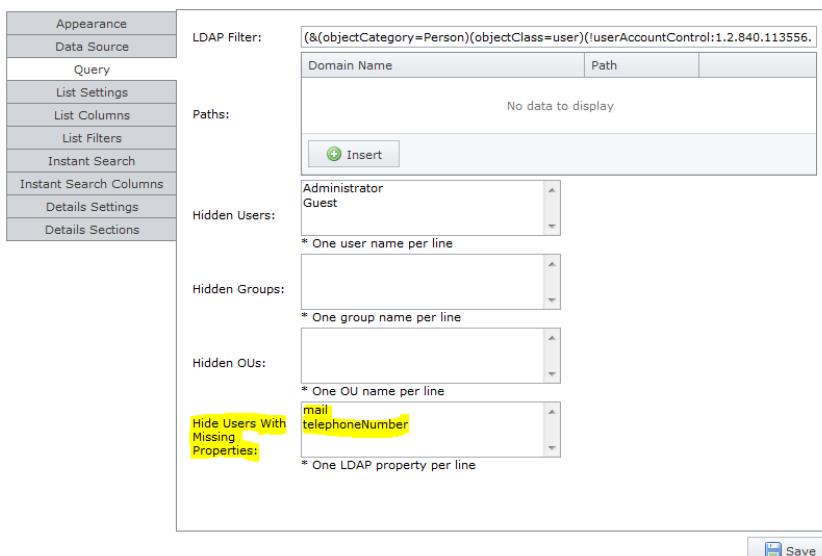
When you click 'Save' on the Admin page the changes are written to the 'Layout.xml' file which can be found in the Config folder (typically: C:\inetpub\wwwroot\ADPhonebook\Config\), please check that the group IIS_IUSRS you has write access to this file.

Below is a screen shot of the Admin page showing the **Columns** tab.



Who is shown in the phonebook?

By default if a user has a value in the telephone number (*telephoneNumber*) attribute or email address (*mail*) attribute then the user is shown in the address book. This can be changed via the Admin page You can add additional required attributes such as *facsimileTelephoneNumber* or you can remove one or both of the existing restrictions.



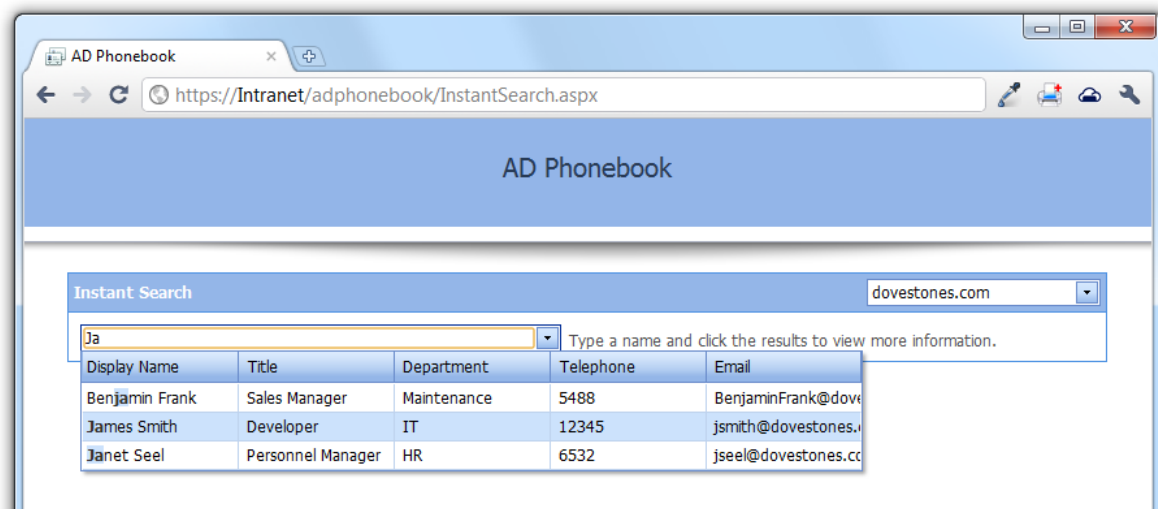
Viewing the phonebook

There are a number of ways you can customize the look of the AD Phonebook, below shows the default look.

Last Name	First Name	Title	Phone	Department	Email Address
Adams	Thomas	Technician	18 - 123 - 456	Engineering	ThomasAdams@dovestones.com
Ahearn	Thomas	PA	43 - 123 - 456	Marketing	ThomasAhearn@dovestones.com
Ale	Garrett	Engineer	63 - 123 - 456	Marketing	GarrettAle@dovestones.com
Alex	Charles	Technician	86 - 123 - 456	Exports	CharlesA@dovestones.com
Alger	Horatio	Sales Manager	69 - 123 - 456	Marketing	HoratioAlger@dovestones.com
Allan	Edgar	Engineer	125 - 123 - 456	Reprographics	EdgarAllan@dovestones.com
Ammons	Virgie	Technician	19 - 123 - 456	Engineering	VirgieAmmons@dovestones.com
Andrew	Dutton	Payroll Manager	123	Sales	ElizabethGaskell@dovestones.com
Angelou	Maya	Sales Manager	70 - 123 - 456	Marketing	MayaAngelou@dovestones.com
Anne	Katherine	Engineer	126 - 123 - 456	Reprographics	KatherineAnne@dovestones.com
Arlington	Edwin	Engineer	132 - 123 - 456	HR	EdwinArlington@dovestones.com
Ashbery	John	Sales Manager	71 - 123 - 456	Marketing	JohnAshbery@dovestones.com
Asimov	Issac	Sales Manager	72 - 123 - 456	Marketing	IssacAsimov@dovestones.com
Aspdin	Joseph	Secretary	35 - 123 - 456	Marketing	JosephAspdin@dovestones.com
Asselbergs	Edward	Secretary	54 - 123 - 456	Marketing	EdwardAsselbergs@dovestones.com

Instant search view

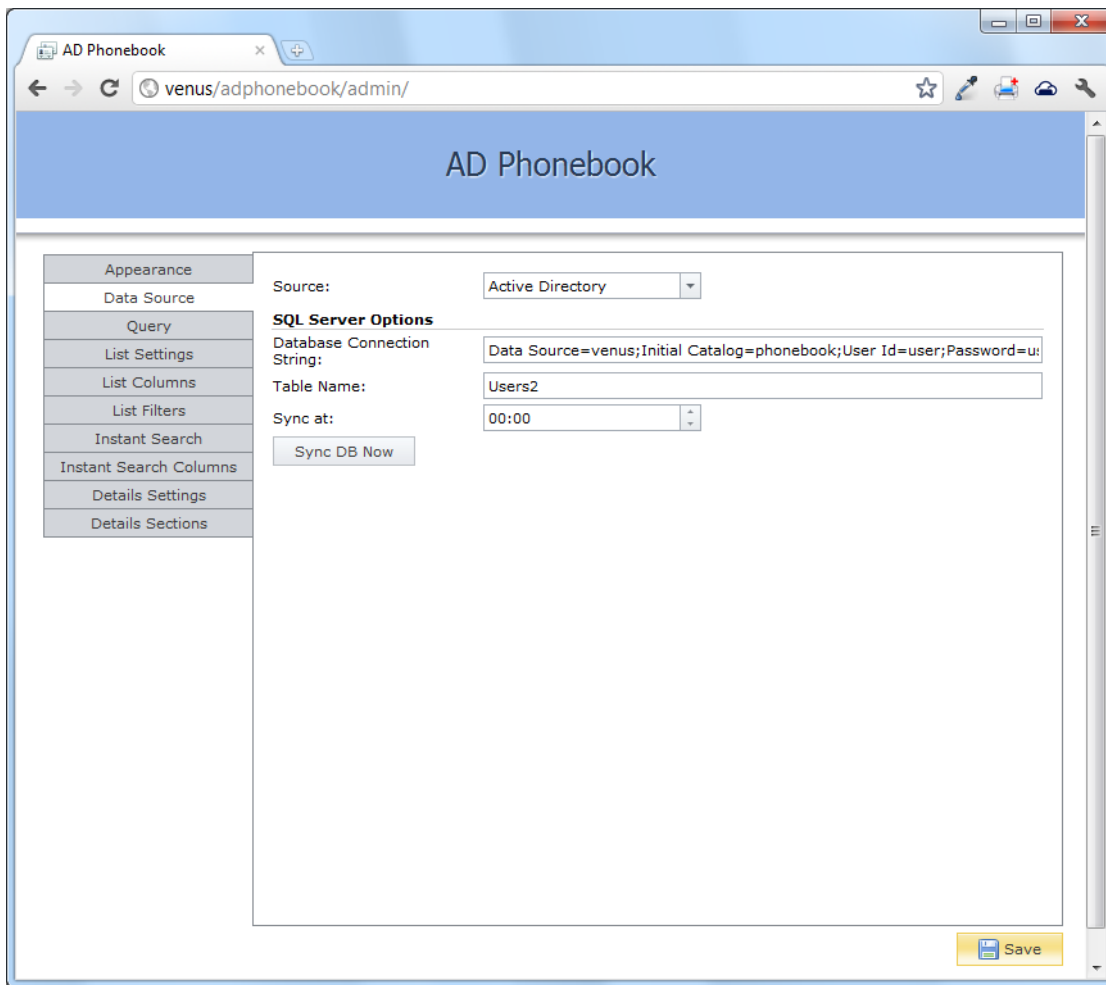
This view simply shows a search box, as you start typing results are returned. Type “Jo” and all users/contacts that contain “Jo” in the name are shown. To enable Instant simple load the page InstantSearch.aspx, in IIS you can set this page as the default.



Active Directory and SQL cache modes

By default the phonebook will query Active Directory when the page loads, in large domains the load time may not be fast enough, if this is the case then a SQL server can be used to cache the phonebook entries resulting in a significantly quicker load time. A windows service is installed with the initial installation, this windows service called 'AD Phonebook DB Updater' is responsible for updating the data in the database with the latest data from Active Directory every day at a specified time, the results of the query are stored in a single database table, only the attributes you have chosen to be displayed in the phonebook are retrieved and stored in the database.

You can change the mode from 'Active Directory' to 'SQL Server Database' via the 'Data Source' tab. When changing modes click the 'Save' button before clicking 'Sync DB Now'.



When using 'SQL Server Database' you may you need to update the 'Database Connection String' to connect to your SQL server.

If you use a full version of SQL Server (not Express) you only need to create an empty database. The application will create the required table.

Whenever the phonebook loads (in 'SQL Server Database' mode) it will check if the table exists, if it doesn't it will be created and populated with data from Active Directory (there may be a slight delay while when the page loads for the first time).

You can also force the application to refresh the data in the database by clicking 'Sync DB Now'.

SQL Connection problems

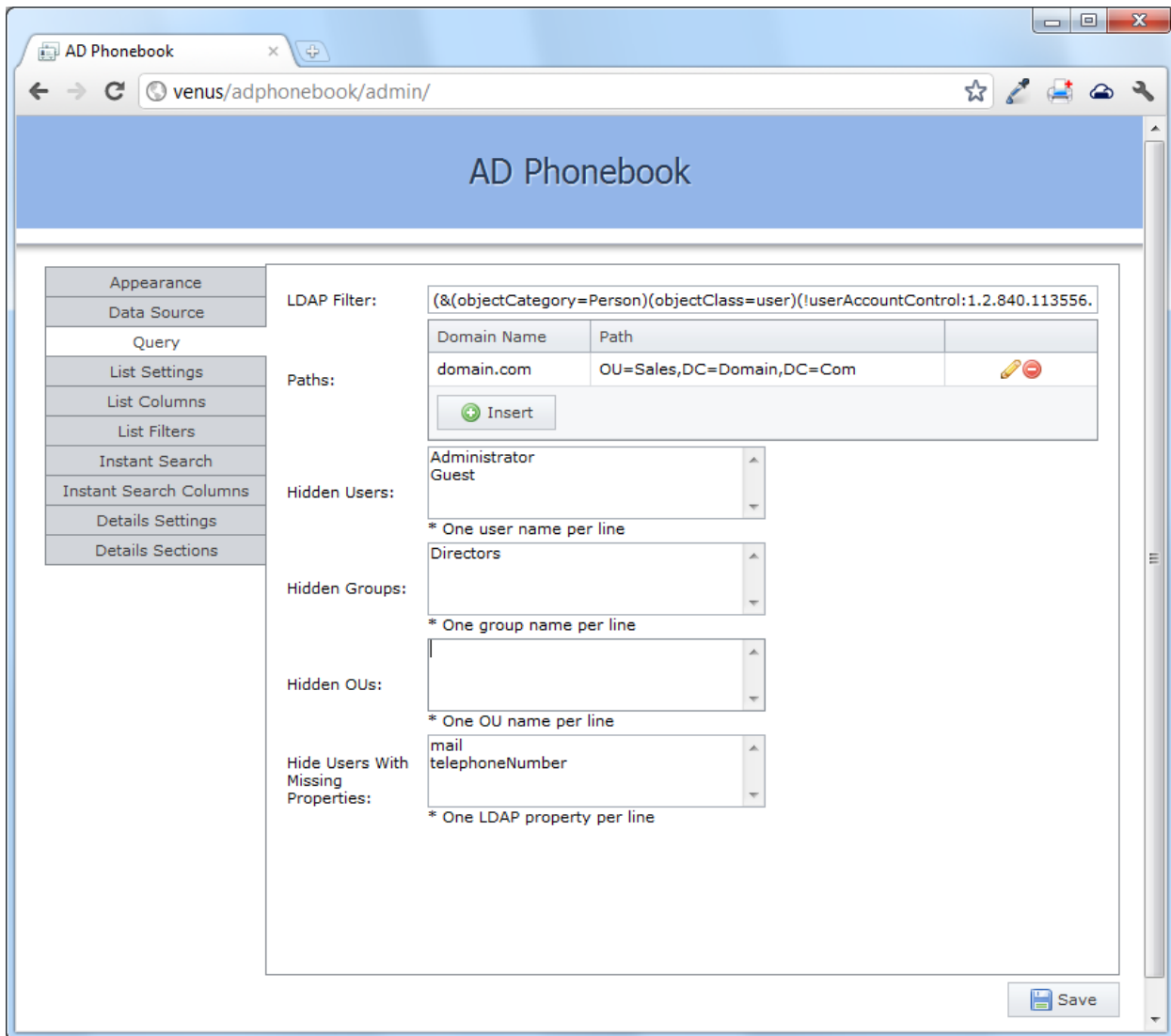
If the phonebook is unable to connect to the SQL database then a message will be shown in on the **Data Source** tab when the 'Sync DB Now' button is clicked. Also check the Windows Application Event log.

Controlling which users will be displayed in the phonebook

By default the entire domain is queried and all users that have a value in the *mail* and *telephoneNumber* attributes (see above) are shown in the phonebook.

Note: Querying the entire domain especially in large domains can cause the phonebook to load slower than expected, in large domains use the SQL Server Database mode which returns results near instantly regardless of the number of domain users.

You can control which OUs are queried and which OUs and Groups appear in the phonebook via the Admin page **Query** tab. In the example below only Users in the 'Sales' OU would be shown in the phonebook and members of the 'Directors' group would not be shown in the phonebook.

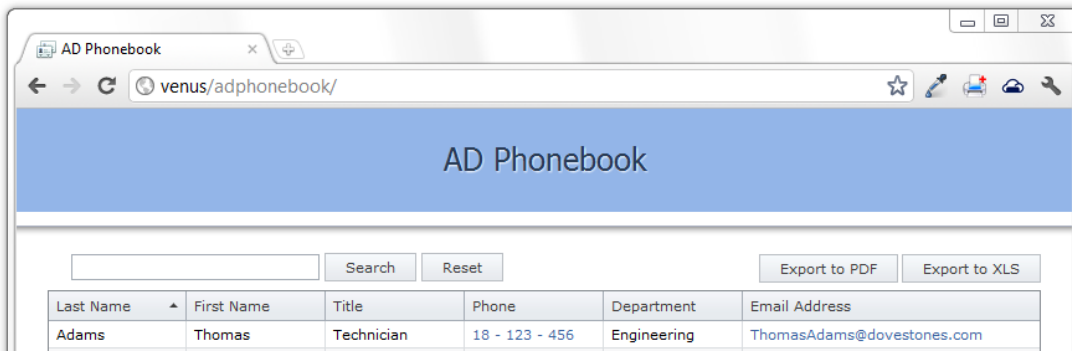


Customization

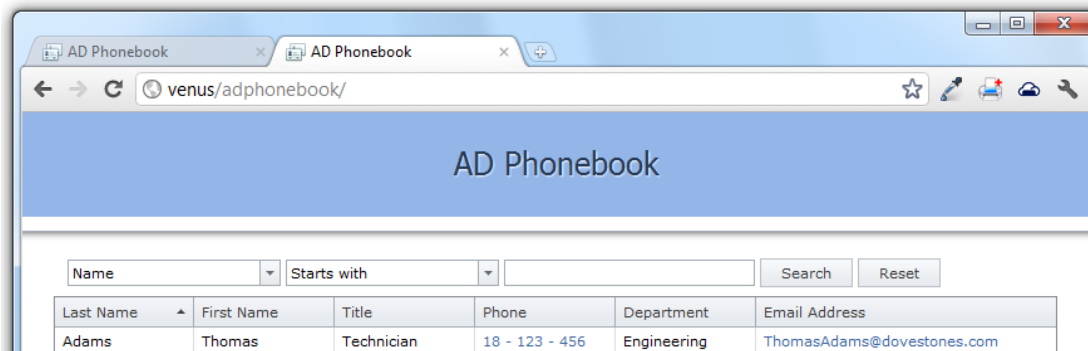
This chapter explains how you can change the look of the AD Phonebook. You can change which attributes are shown, decide who is shown in the phonebook and add a logo to the home page.

Simple and advanced search boxes

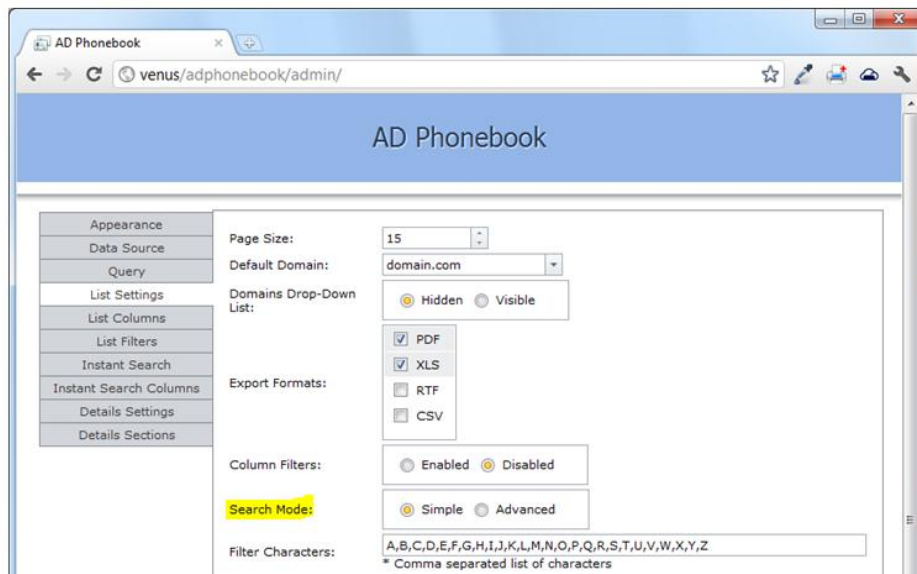
When the phonebook loads the simple search box is shown by default. When you type a search all columns are queried.



An alternative is the advanced search box, this allows users to select an operator such as 'Starts with'.



You can switch between Simple and Advanced search via the **List Settings** tab on the Admin page.



Column filters

By default column filters are turned off, you can turn on the via the **List Settings** tab on the Admin page.









The example below shows column filters enabled.

Display Name	Email Address	Department	Title	Phone
John				
John Ashbery	JohnAshbery@dovestones.c...	Sales	Sales Manager	71 - 123 - 456
John Bardeen	JohnBardeen@dovestones.c...	Finance	Secretary	50 - 123 - 456
John Cheever	JohnCheever@dovestones.c...	Purchasing	Purchasing	77 - 123 - 456
John Fitch	JohnFitch@dovestones.com	Sales	Sales Assistant	25 - 123 - 456
John Hawkes	JohnHawkes@dovestones.c...	Sales	Sales Assistant	98 - 123 - 456
John Smith	SirJohn@dovestones.com	Sales	Sales Assistant	33 - 123 - 456
John Steinbeck	JohnSteinbeck@dovestones...	Engineer	Engineer	137 - 123 - 456
John Updike	JohnUpdike@dovestones.com	Engineer	Engineer	142 - 123 - 456

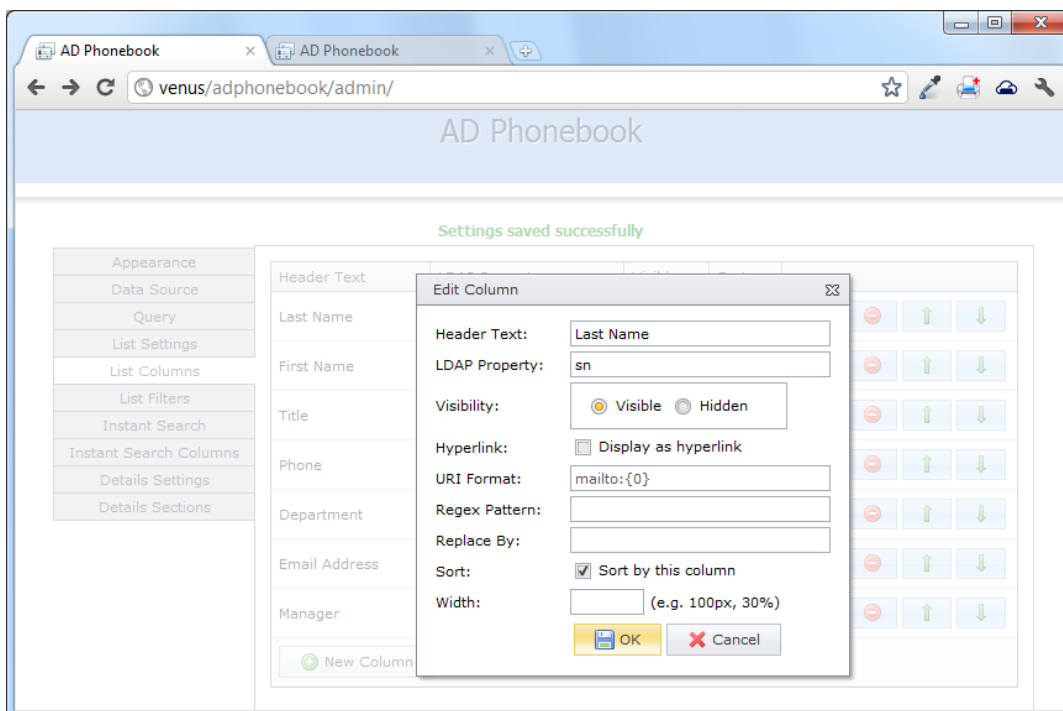
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Sorting the entries

By default when entries are retrieved from Active Directory and shown in the phonebook they are sorted by the 'Name' column which reads the 'cn' attribute from Active Directory. To sort by another column such as 'Last Name' (sn attribute) click the 'Edit' button on the 'List Columns' tab on the Admin page.

Appearance	Header Text	LDAP Property	Visible	Sort	
Data Source	Last Name	sn	True	True	   
Query	First Name	givenName	True	False	   
List Settings					
List Columns					

When the Edit Column window is shown click the 'Sort by this column' button and click 'OK' then 'Save'.



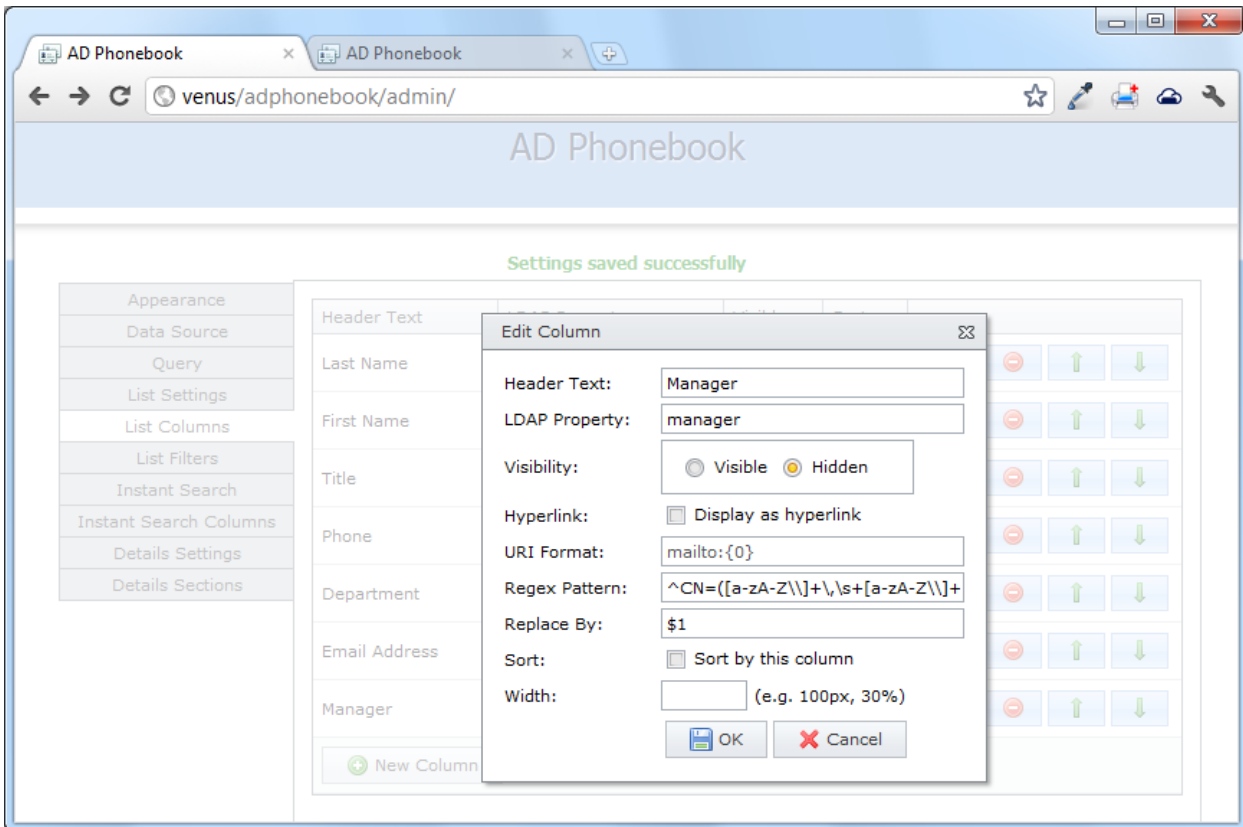
The screenshot shows the AD Phonebook Admin interface. A 'Settings saved successfully' message is displayed at the top. The 'List Columns' tab is active, and the 'Edit Column' dialog box is open for the 'Last Name' column. The dialog contains the following fields and options:

- Header Text: Last Name
- LDAP Property: sn
- Visibility: Visible Hidden
- Hyperlink: Display as hyperlink
- URI Format: mailto:{0}
- Regex Pattern: (empty)
- Replace By: (empty)
- Sort: Sort by this column
- Width: (empty) (e.g. 100px, 30%)

The 'OK' button is highlighted in yellow, and the 'Cancel' button is in red.

Using Regular Expressions to manipulate the results

Certain attributes such as 'manager' contain the full LDAP path to the managers user object (E.g. CN=John Smith,OU=Managers,DC=Domain,DC=Com), Regular Expressions can be used to remove the path and leave just the managers name (E.g. John Smith) which is easier to read. Regular expressions can be applied to any column/attribute by clicking the 'Edit' button for that column on the 'List Columns' tab.

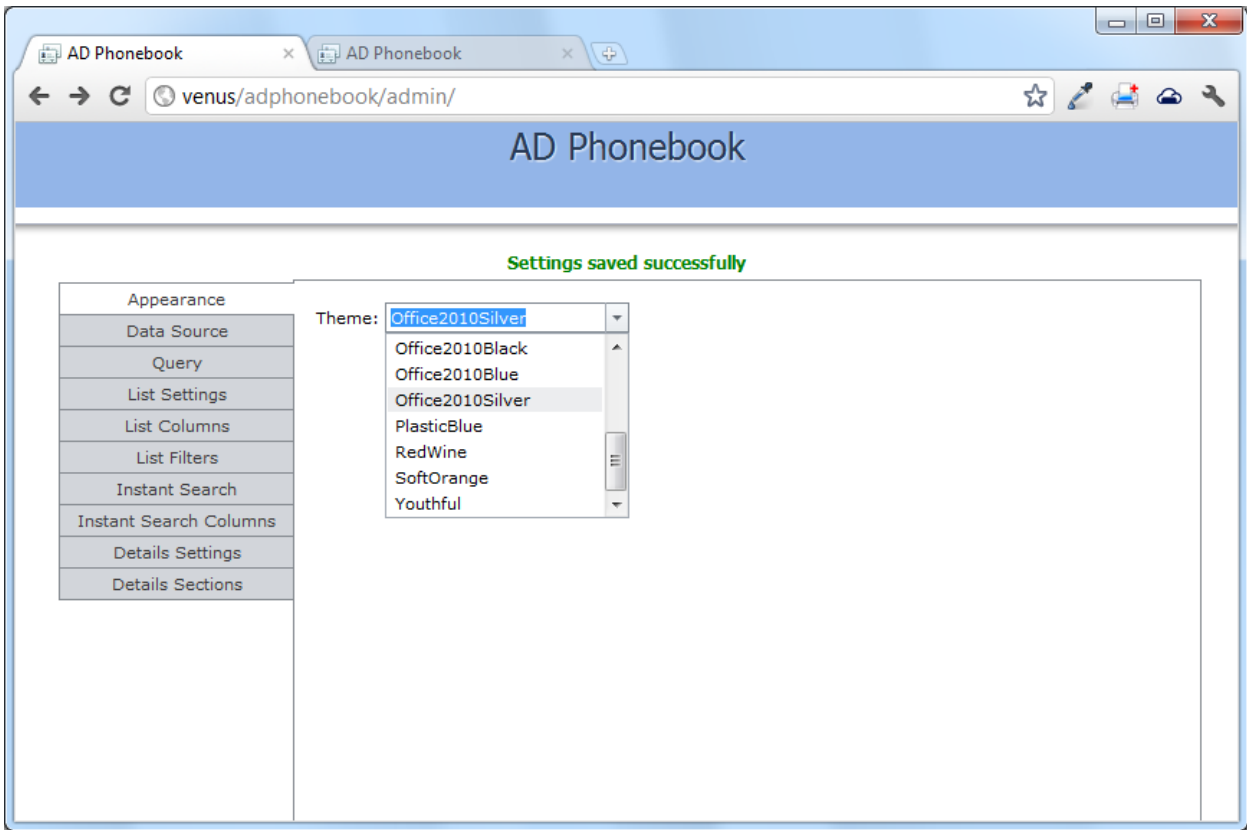


Hyperlinks for phones numbers, web pages and email

Phone numbers, mobile numbers, web URLs and email addresses shown in the phonebook are hyperlinks by default. This can be turned off if needed via the List Columns tab, then click the 'Edit' button for that column you want to change then check or uncheck 'Display as hyperlink'. The URI Format value supports most protocols such as: http://, mailto: and tel:.

Changing the theme

You can now apply several different colour schemes to the AD Phonebook, the default colour scheme is called Office2010Silver, other colour schemes such as Aqua, BlackGlass, Glass, Office2003Olive, Office2010Blue, PlasticBlue, RedWine and more are available. You can change the colour scheme via the 'Appearance' tab on the Admin page.



Enabling photos

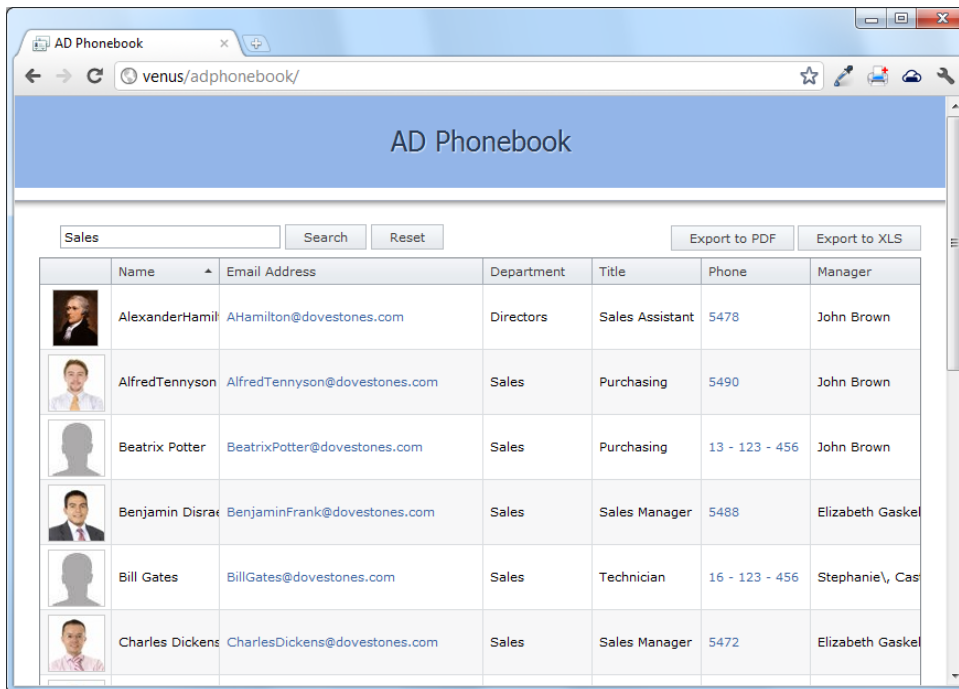
By default photos are not displayed in the users list but they are displayed when you click on an entry to see the detailed contact details.

You can display photos in the users list by changing the 'User Photos' option on the 'List Settings' tab. Change the 'User Photo' option to 'Visible' to display the photos. By default photos are read from the thumbnailPhoto attribute but you can use the jpegPhoto attribute if you prefer.

Photo Settings

User Photo:	<input checked="" type="radio"/> Visible <input type="radio"/> Hidden
LDAP Property:	<input type="text" value="thumbnailPhoto"/>
Not Found Image:	<input type="text" value="~/App_Themes/[THEME_NAME]/Images/no_photo_small.jpg"/>
Maximum Width:	<input type="text" value="50"/> Pixels
Maximum Height:	<input type="text" value="50"/> Pixels

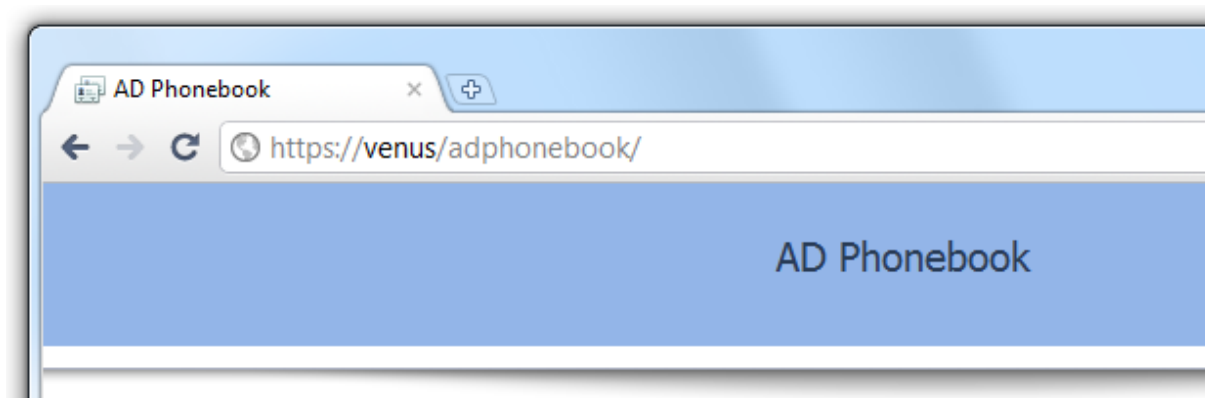
Photos being shown alongside the phonebook entries.



Changing the header and footer text

You can change the header of the phonebook (the blue banner and the text 'AD Phonebook') by editing the Masterpage.master file found in the root of the site.

Example tab showing the page title and header:



To change the text open the MasterPage.Master file in a text editor such as notepad and locate the highlighted line below.

```
<div id="header">  
    <asp:Label ID="lblHeader" runat="server" CssClass="title" meta:resourcekey="lblHeader" />  
</div>
```

Replace this line with something similar to the following:

```
<div id="header">  
    <font size="4" face="arial">Acme Company Phonebook</font>  
</div>
```

To edit the footer text locate the following line:

```
<div id="footer">  
    <asp:HyperLink ID="lnkDialingInstructions" NavigateUrl="~/DialingInstructions.html"  
Target="_blank" runat="server" meta:resourcekey="lnkDialingInstructions" />  
    <asp:Label ID="lblFooter" runat="server" meta:resourcekey="lblFooter" />  
</div>
```

Replace this line with something similar to the following:

```
<div id="footer">  
    <font size="4" face="arial">New footer text</font>  
</div>
```

Adding your logo

To add your logo to the phonebook home page open the MasterPage.Master file in a text editor such as notepad and locate the section `<div class="header">`, replace the text found inside the header tag with the `` or similar. Place your logo in the same directory as the MasterPage.Master file.

```
<div id="header">  
      
</div>
```

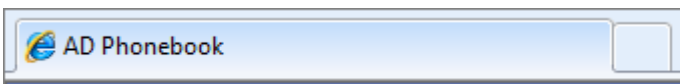
Alternatively you could specify a URL to the image.

```
<div id="header">  
      
</div>
```

Changing the title

The title is shown in the 'tab' in most browsers. You can change the title of the phonebook by editing a line in the MasterPage.Master file.

Example tab showing the page title:



Open the MasterPage.Master file in a text editor such as notepad and locate the following line:

```
<title> <asp:Localize ID="locTitle" runat="server" meta:resourcekey="locTitle" /> </title>
```

Add your title between the <title> </title> tags, for example:

<title> Paper Company Phonebook </title>

Adding and removing attributes from the home page

You can add or remove columns from the phonebook page via the **List Columns** tab on the Admin page.

In the example below you can see the columns that are currently being displayed in phonebook, from this tab you can add and remove columns, edit existing columns and change the order of the columns.

AD Phonebook

Settings saved successfully

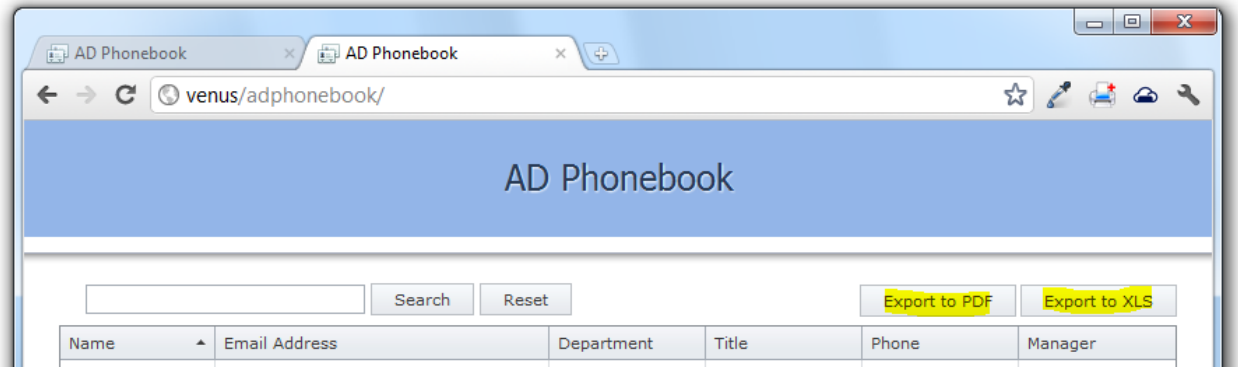
Header Text	LDAP Property	Visible	Sort	
Last Name	sn	True	True	
First Name	givenName	True	False	
Title	title	True	False	
Phone	telephoneNumber	True	False	
Department	department	True	False	
Email Address	mail	True	False	
Manager	manager	False	False	

New Column

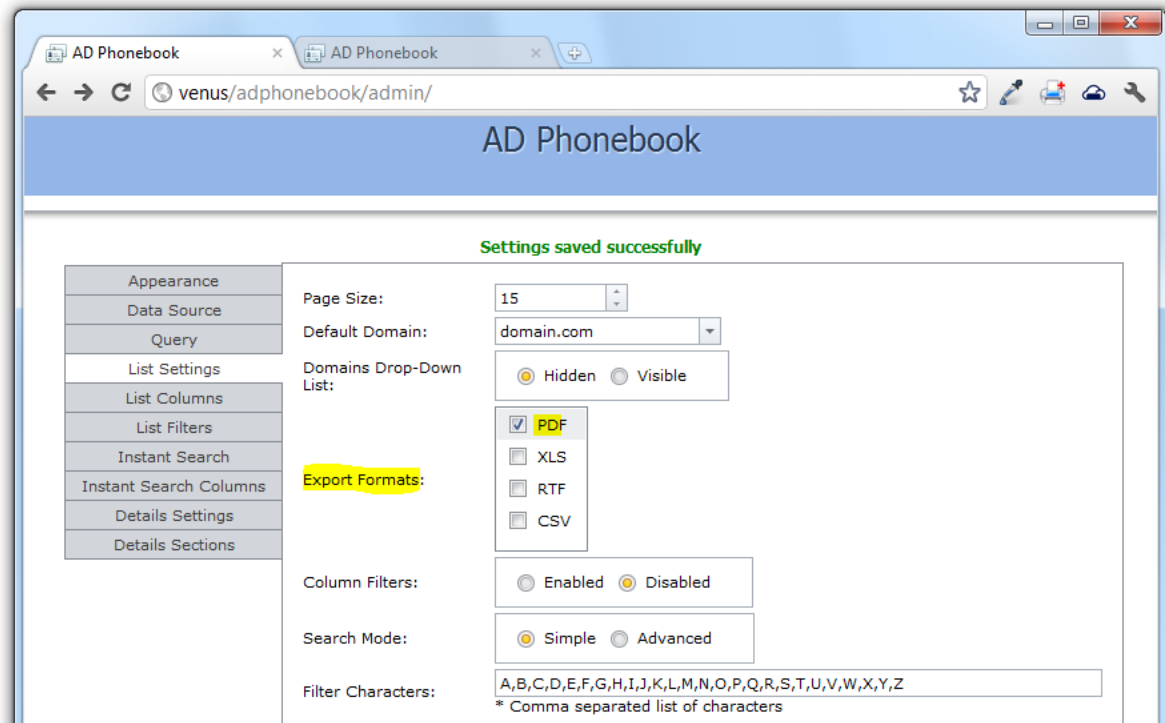
Save

Export options

The phonebook can be exported to PDF, CSV, XLS or RTF formats, by default the 'Export to PDF' and 'Export to XLS' buttons are shown.



You can add or remove the Export buttons via the 'List Settings' tab on the Admin page. Check or uncheck the 'Export Formats' you want available.



When exporting to PDF you can add a header and footer (text only) and set the page orientation via the 'List Settings' tab on the Admin page. Below you can see the PDF Export Settings.

PDF Export Settings

Page Orientation: Portrait Landscape

Auto-Fit Width: Yes No

Page Header:

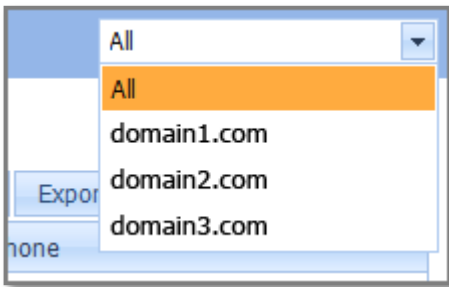
Page Footer:

Using HTTPS and SSL Certificates

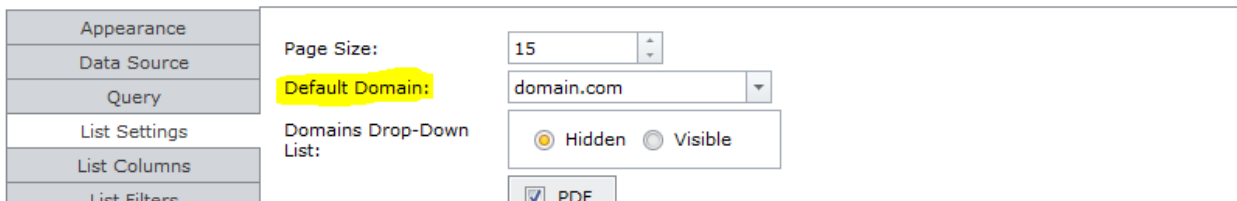
You can test the program using HTTP if you are testing internally but when live we do recommend you install a SSL certificate so the web site is accessible using HTTPS.

Searching across multiple domains

If more than one domain has been specified using the AD Config utility, the domains drop-down list in the phonebook will contain 'All', when 'All' is selected users from all the domains are shown in the grid.



By default 'All' is used when searching the phonebook, you can set the default domain via the 'List Settings' tab on the Admin page.

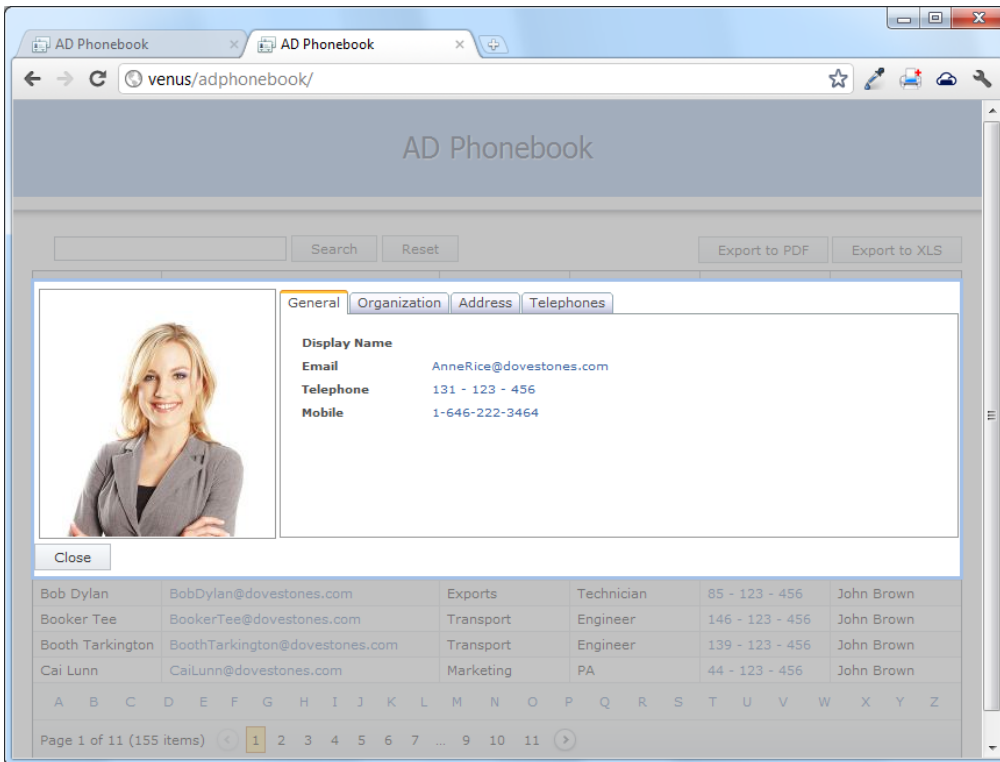


Users can still select a single domain from the drop-down list. If only one domain is setup, the drop-down list will not show the 'All' item and the grid will only display users from that domain.

By default the drop down box containing the domain(s) that AD Phonebook will query is displayed, you can hide this via the 'List Settings' tab on the Admin page.

Enabling pop-up contacts

By default when you click an entry in the phonebook additional contact details pop-up as shown below.



You can change this so additional contact details are displayed under the phonebook users. You can make this change via the 'Details Settings' tab. Check or uncheck the 'Show details in popup'.

Appearance	Tab Container Height: <input type="text" value="175"/> Pixels
Data Source	Popup: <input checked="" type="checkbox"/> Show details in a popup
Query	Photo Settings
List Settings	User Photo: <input checked="" type="radio"/> Visible <input type="radio"/> Hidden
List Columns	LDAP Property: <input type="text" value="thumbnailPhoto"/>
List Filters	Not Found Image: <input type="text" value="~/App_Themes/[THEME_NAME]/Images/no_photo.jpg"/>
Instant Search	Maximum Width: <input type="text" value="200"/> Pixels
Instant Search Columns	Maximum Height: <input type="text" value="200"/> Pixels
Details Settings	
Details Sections	

Dialing instructions page

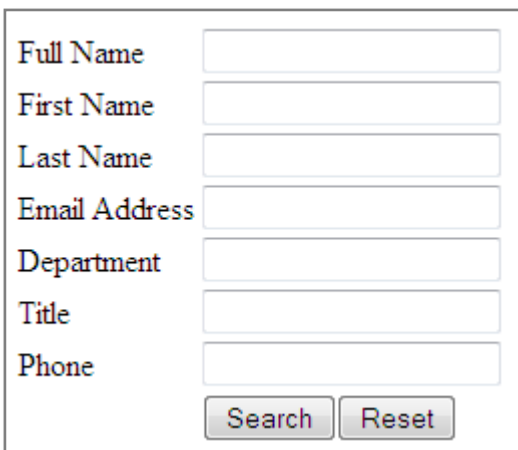
At the bottom of the default.aspx page there is a link called 'Dialing Instructions', this links to a page called 'dialinginstructions.html' which can be found in root of the ADPhonebook site. The link text can be changed in a file called 'MasterPage.Master.resx' file under the 'App_LocalResources' directory, the dialinginstructions.html page can be customized using a web page editor as it contains no code relating to the phonebook.

Querying the phonebook from other web pages

The AD Phonebook can take queries passed from another web page such as an intranet page. Below is an example html form that will query the phonebook. Form elements can be added or removed.

Example

```
<html>
<head>
  <title>Example</title>
</head>
<body>
  <form action="Default.aspx" method="get">
    <table>
      <tr><td>Full Name</td><td><input type="text" name="Full Name" /></td></tr>
      <tr><td>First Name</td><td><input type="text" name="First Name" /></td></tr>
      <tr><td>Last Name</td><td><input type="text" name="Last Name" /></td></tr>
      <tr><td>Email Address</td><td><input type="text" name="Email Address" /></td></tr>
      <tr><td>Department</td><td><input type="text" name="Department" /></td></tr>
      <tr><td>Title</td><td><input type="text" name="Title" /></td></tr>
      <tr><td>Phone</td><td><input type="text" name="Phone" /></td></tr>
      <tr><td></td><td><input type="submit" value="Search" />
        <input type="reset" value="Reset" /></td>
      </tr>
    </table>
  </form>
</body>
</html>
```



A screenshot of a web form rendered from the provided HTML code. The form is enclosed in a light gray border and contains seven text input fields stacked vertically, each with a label to its left: 'Full Name', 'First Name', 'Last Name', 'Email Address', 'Department', 'Title', and 'Phone'. At the bottom of the form, there are two buttons: 'Search' and 'Reset', both with a light gray background and dark text.

Simple example

```
<html>
<head>
  <title>Example</title>
</head>
<body>
  <form action="Default.aspx" method="get">
    <table>
      <tr><td>Full Name</td><td><input type="text" name="Full Name" /></td></tr>
      <tr><td>Department</td><td><input type="text" name="Department" /></td>
      <td></td><td><input type="submit" value="Search" /></td>
    </tr>
    </table>
  </form>
</body>
```

</html>



A screenshot of a search form. It features two text input fields: the first is labeled 'Full Name' and the second is labeled 'Department'. To the right of the 'Department' field is a button labeled 'Search'.

Import files and folders explained

Whilst it is possible to edit some of the files used by the phonebook we suggest you only change files that you have created a backup copy of first. If you have any questions please contact us.

Admin – Contains files related to the 'Admin' page

Web.config – Configuration settings for the Admin page.

App_Data – Database files for use with SQL Express.

App_LocalResources – Contains resource files for the Default.aspx, InstantSearch.aspx and Masterpage.Master files.

Default.aspx.resx – Resource values for buttons and other page elements.

InstantSearch.aspx.resx - Resource values for buttons and other page elements.

MasterPage.Master.resx - Resource values for page elements that apply to all aspx pages.

App_Themes – Contains the files (images and style sheets) related to each theme.

Bin – Contains the program application files.

Config – Contains the settings file Layout.xml.

Layout.xml – All phonebook settings are stored in this file, changes made via the Admin page are written to this file.

Scripts – Contains Javascripts relating to browser compatibility.

Default.aspx – The main page that shows the phonebook datagrid.

InstantSearch.aspx – An alternative to the Default.aspx page, this page shows a simple search box with no datagrid.

MasterPage.Master – Contains page elements that apply to both pages above.

PhotoHandler.ashx – Used by the program to load code that handles the photos.

Search.htm – An example form that shows how to query the phonebook from an external page.

Favicon.ico – The icon displayed in the browsers tab when the phonebook is loaded.

Web.config – Configuration settings for the phonebook.

Troubleshooting

Error: 401 - Unauthorized: Access is denied due to invalid credentials

This error can be shown when accessing the Admin page using Anonymous authentication, you will need to enable Windows Authentication on the Admin directory via the Internet Information Services (IIS) Manager console.

Help and Support

If you require any help installing or configuring AD Phonebook contact support@dovestones.com.